

**STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION**

**APPLICATION OF ARMSTRONG ENERGY
CORPORATION FOR REINSTATEMENT OF
AUTHORIZATION TO INJECT FOR
WATERFLOOD OPERATIONS,
LEA COUNTY, NEW MEXICO**

Case No. _____

APPLICATION

Pursuant to Sections 70-7-1 through 70-7-21, NMSA, 19.15.26.8 NMAC and Oil Conservation Division (“Division”) Order No. R-12496, Armstrong Energy Corporation (“Armstrong”) applies for an order reinstating injection authority for certain injection wells within its Trinity Burrus Abo Unit waterflood project, comprised of portions of Sections 15, 22, 23, 26, and 27, Township 12 South, Range 38 East NMPM in Lea County, New Mexico. In support of its Application, Armstrong states the following.

1. On January 24, 2006, the Division issued Order No. R-12496 approving the statutory unitization of the Trinity Burrus Abo Unit (“Unit”) for secondary recovery. The Unit is comprised of the following described 1,720 acres, more or less, of federal, state and fee lands located in Township 12 South, Range 38 East, NMPM, Lea County, New Mexico:

Section 15: SW/4SE/4
Section 22: E/2, E/2W/2
Section 23: W/2, W/2E/2
Section 26: W/2W/2, NE/4NW/4, SE/4SW/4
Section 27: E/2, E/2W/2

2. In accordance with Order No. R-12496, the unitized interval is 9,063’ to 9,131’ measured depth.

3. On April 28, 2006, the Division issued Order No. R-12496-A to confirm that at least seventy-five percent of the working interest owners in the Unit approved the plan for Unit operations and that the Unit could then become effective pursuant to Order No. R-12496.

4. Armstrong acquired the Unit in 2017 and has maintained waterflood operations within the Unit. However, Armstrong’s injection authority inadvertently lapsed in May 2020 for the wells listed below (“Wells”):

Well Name (API: 30-025-)	Location within T12S-R38E	Injection interval
Trinity Burrus Abo Unit #004 (35817)	2310 FSL & 1210 FEL, UL I, Sec. 22	9050’- 9098’
Trinity Burrus Abo Unit #005 (36451)	2310 FNL & 1650 FWL, UL F, Sec 23	9055’- 9115’
Trinity Burrus Abo Unit #006 (35937)	330 FSL & 2310 FWL, UL N, Sec 22	9046’- 9108’
Trinity Burrus Abo Unit #011 (36038)	1650 FSL & 2310 FWL, UL K, Sec 22	9045’- 9102’
Trinity Burrus Abo Unit #013 (36018)	2310 FNL & 990 FEL, UL H, Sec 22	9051’- 9110’
Trinity Burrus Abo Unit #016 (36251)	1980 FSL & 660 FWL, UL L, Sec 23	9014’- 9084’
Trinity Burrus Abo Unit #018 (36450)	1650 FSL & 2200 FEL, UL J, Sec 23	9141’- 9209’
Trinity Burrus Abo Unit #021 (30106)	330 FSL & 1650 FWL, UL N, Sec 23	9107’- 9167’
Trinity Burrus Abo Unit #025 (36248)	2310 FSL & 330 FEL, UL I, Sec 27	9083’- 9152’
Trinity Burrus Abo Unit #026 (35985)	330 FNL & 2000 FEL, UL B, Sec 27	9048’- 9117’
Trinity Burrus Abo Unit #028 (37254)	2240 FSL & 2310 FWL, UL K, Sec 27	9078’- 9126’

5. All of the Wells were initially producers in the Trinity; Wolfcamp pool within the Wolfcamp formation.

6. In 2006, the Trinity Burrus Abo Unit #013, #018, and #21 wells were converted to injection under the authorization of Order No. R-12496 establishing the Unit waterflood project. In 2007, the Trinity Burrus Abo Unit #004H well was converted to injection and included within the waterflood project under Administrative Order WFX-830. In 2007, the Trinity Burrus Abo Unit #016 and Trinity Burrus Abo Unit #028 wells were also converted to injection and included in the waterflood project under Administrative Order WFX-831. In 2010, the Trinity Burrus Abo Unit #026 well was converted to injection and included in the waterflood project under Administrative Order WFX-878. In 2011, the Trinity Burrus Abo Unit #005 and Trinity Burrus

Abo Unit #011 wells were converted to injection and included in the waterflood project under Administrative Order IPI-398.

7. Armstrong proposes to reinstate injection into the wells for waterflood operations and plans to inject water through a closed system through perforations at depths of 9,045' to 9,209' within the Wolfcamp formation.

8. The proposed average injection rate through the Wells is expected to be 100 psig.

9. The expected maximum injection pressure is 1,800 psig or as permitted by the Division.

10. The proposed average injection rate is expected to be 500 barrels of water per day.

11. The maximum daily injection rate will be 1,000 barrels of water per day or as permitted by the Division.

12. The source of the water to be injected will be produced water from other Wolfcamp formation wells drilled on the leases within the Unit.

13. Armstrong's proposed injection operations can be conducted in a safe and responsible manner without causing waste, impairing correlative rights or endangering fresh water, public health or the environment.

14. Granting Armstrong's application will protect correlative rights and prevent waste.

15. A copy of Armstrong's C-108 Application for Authorization to Inject is attached as Exhibit A.

WHEREFORE, Applicant requests this Application be set for hearing before a duly appointed examiner of the Oil Conservation Division on August 5, 2021, and that after notice and hearing as required by law, the Division enter an Order reinstating injection authority for the Wells at the intervals, pressures, volumes and rates indicated.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Dana S. Hardy

Dana S. Hardy

Michael Rodriguez

P.O. Box 2068

Santa Fe, NM 87504-2068

Phone: (505) 982-4554

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Counsel for Armstrong Energy Corporation



APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? Yes No

II. OPERATOR: Armstrong Energy Corporation

ADDRESS: PO Box 1973 Roswell, NM 88202

CONTACT PARTY: Kyle Alpers PHONE: 575-625-2222

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? Yes No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Kyle Alpers TITLE: VP Engineering

SIGNATURE: [Signature] DATE: 3/26/21

E-MAIL ADDRESS: kalpers@aecn.m.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: X - logs were submitted at various times when wells were drilled

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South S Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

APPLICATION FOR AUTHORIZATION TO INJECT
Armstrong Energy Corporation
Lea County, New Mexico

LIST OF WELLS FOR THIS APPLICATION

Trinity Burrus Abo Unit #004H
API # 30-025-35817
2310' FSL & 1210' FWL
UL I, Sec 22, T12S R38E

Trinity Burrus Abo Unit #005
API # 30-025-36451
2310' FNL & 1650' FWL
UL F, Sec 23, T12S R38E

Trinity Burrus Abo Unit #006
API # 30-025-35937
330' FSL & 2310' FWL
UL N, Sec 22, T12S R38E

Trinity Burrus Abo Unit #011
API # 30-025-36038
1650' FSL & 2310' FWL
UL K, Sec 22, T12S R38E

Trinity Burrus Abo Unit #013
API # 30-025-36018
2310' FNL & 990' FEL
UL H, Sec 22, T12S R38E

Trinity Burrus Abo Unit #016
API # 30-025-36251
1980' FSL & 660' FWL
UL L, Sec 23, T12S R38E

Trinity Burrus Abo Unit #018
API # 30-025-36450
1650' FSL & 2200' FEL
UL J, Sec 23, T12S R38E

Trinity Burrus Abo Unit #021
API # 30-025-30106
330' FSL & 1650' FWL
UL N, Sec 23, T12S R38E

Trinity Burrus Abo Unit #025
API # 30-025-36248
2310' FSL & 330' FEL
UL I, Sec 27, T12S R38E

Trinity Burrus Abo Unit #026
API # 30-025-35985
330' FNL & 2000' FEL
UL B, Sec 27, T12S R38E

Trinity Burrus Abo Unit #028
API # 30-025-37254
2240' FSL & 2310' FWL
UL H, Sec 27, T12S R38E

Requirements Per Form C-108

ITEM I

The purpose of this application is secondary recovery.

ITEM II

Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
Kyle Alpers (575) 625-2222 ext. 305

ITEM III

See data sheets attached.

ITEM IV

This is not an expansion of an existing project.

ITEM V

See maps attached.

ITEM VI

See data sheets attached.

ITEM VII

1. Proposed average injection rate is expected to be 500 BWPD. Maximum daily injection rate would be approximately 1,000 BWPD.
2. The system will be closed.
3. The proposed average injection pressure is expected to be 100 psig, and the maximum pressure is expected to be 1800 psig.
4. The source of water to be injected is produced water and occasionally fresh water for remedial purposes only.
5. Injection is not for disposal purposes.

ITEM VIII

The TrinityWolfcamp pool is located in Southeastern Lea County, New Mexico. The top and depth to the bottom of the Wolfcamp is indicated below for each well in this application. The fresh water for the area is from the Ogallala with depth from the surface at approximately 35' and the total depth at around 125'.

<u>Well Name</u>	<u>Top of Wolfcamp</u>	<u>Bottom of Wolfcamp</u>
Trinity Burrus Abo Unit #00411	9050'	9098'
Trinity Burrus Abo Unit #005	9055'	9115'
Trinity Burrus Abo Unit #006	9046'	9108'
Trinity Burrus Abo Unit #011	9045'	9102'
Trinity Burrus Abo Unit #013	9051'	9110'
Trinity Burrus Abo Unit #016	9014'	9084'
Trinity Burrus Abo Unit #018	9141'	9209'
Trinity Burrus Abo Unit #021	9107'	9167'
Trinity Burrus Abo Unit #025	9083'	9152'
Trinity Burrus Abo Unit #026	9048'	9117'
Trinity Burrus Abo Unit #028	9078'	9126'

ITEM IX

There is not a proposed stimulation program.

ITEM X

Logs for each well were sent to the Oil Conservation Division when the wells were drilled.

ITEM XI

See water analyses attached, for two freshwater wells within 1 mile of injection wells, and for unit produced water which will be the injection water for this project.

ITEM XII

This application is not for a saltwater disposal well.

ITEM XIII

The "Proof of Notice" as required with this application is attached.

INJECTION WELL DATA SHEET

Side 1

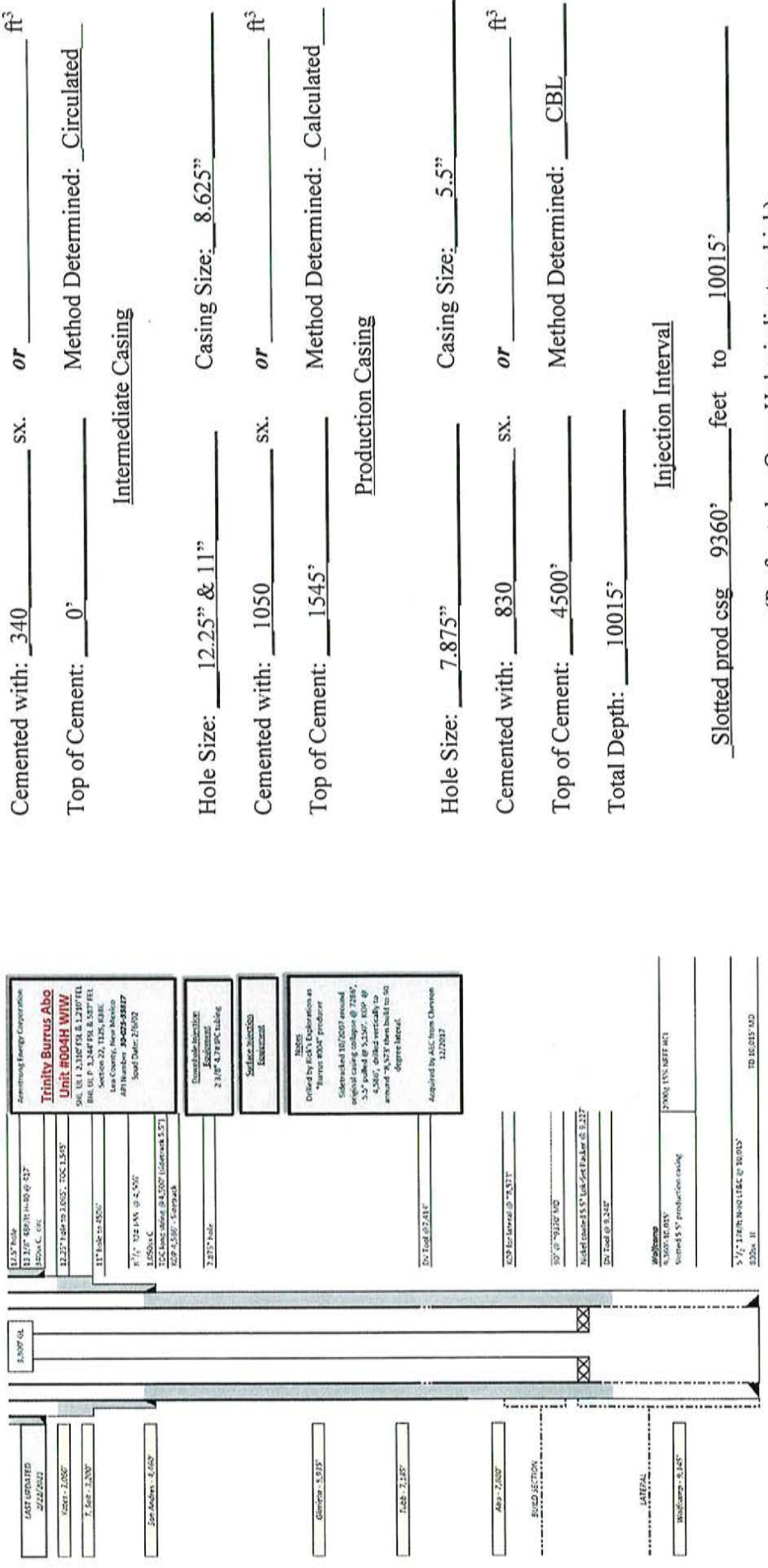
OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #004H 30-025-35817

WELL LOCATION: SHL 2310' FSL & 1210' FEL BHL 1244' FSL & 587' FEL SHL ULI BHL ULP 22 12S 38E
UNIT LETTER SECTION TOWNSHIP RANGE

FOOTAGE LOCATION

WELLBORE SCHEMATIC
WELL CONSTRUCTION DATA



(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Nickel-coated Lok-Set

Packer Setting Depth: 9227'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes No

If no, for what purpose was the well originally drilled? Well was originally drilled as the Burrus #4 Producer by Rick's Exploration

2. Name of the Injection Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

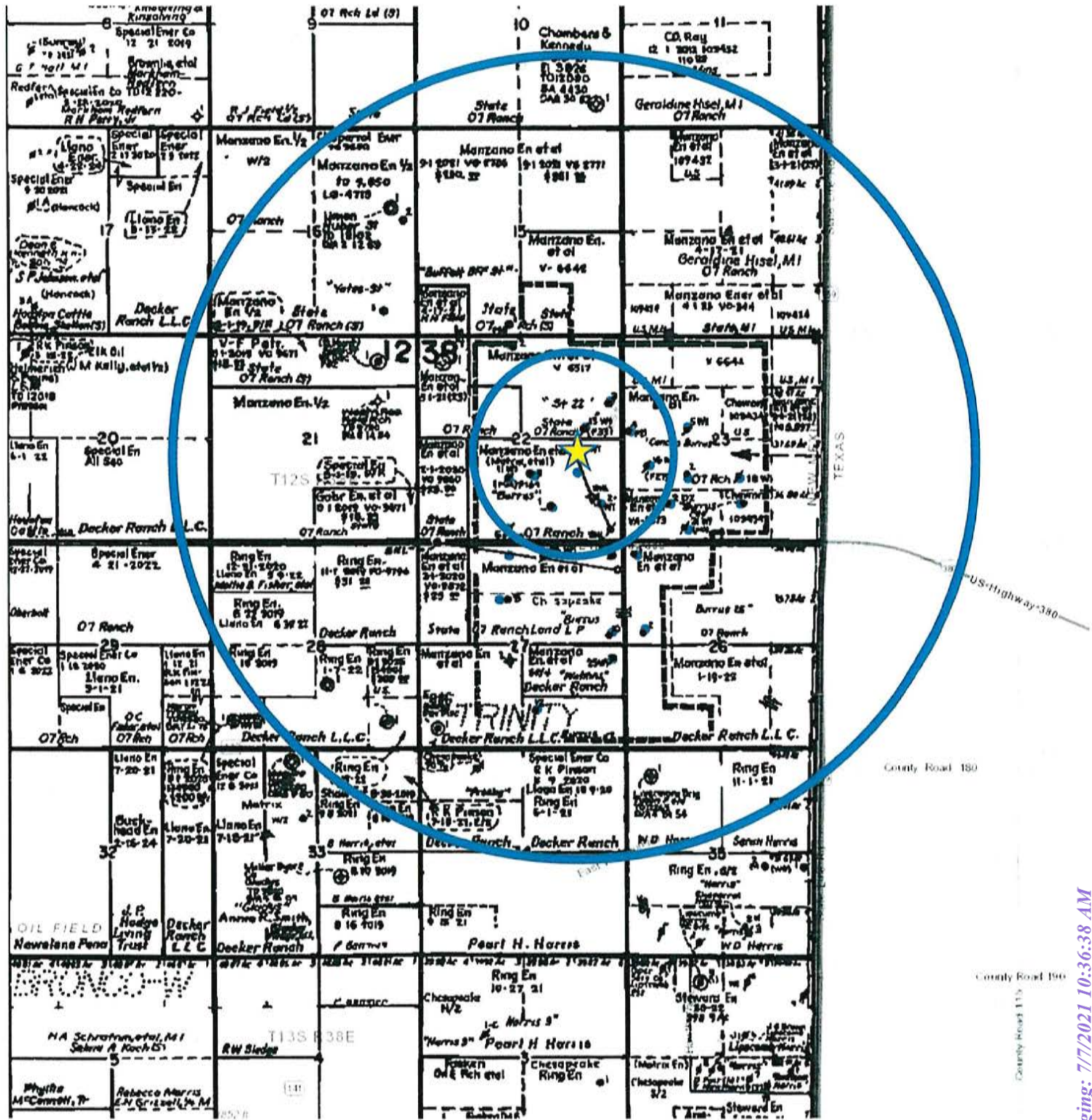
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Devonian 12020' , Abo 7840' , Tubb 7150' , Glorieta 5370' , San Andres 4460'

TBAU #004H AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #004H WIW

Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #015	OIL	10/03/04	1645' FNL & 354' FEL UL H, Sec 22, T12S R38E	9265'
TBAU #013	INJ	10/19/02	2310' FNL & 990' FEL UL H, Sec 22, T12S R38E	9250'
TBAU #003	OIL	07/03/01	1720' FSL & 2310' FEL UL J, Sec 22, T12S R38E	9184'
TBAU #011	INJ	11/13/02	1650' FSL & 2310' FWL UL K, Sec 22, T12S R38E	9240'
TBAU #001	OIL	04/11/00	900' FSL & 1859' FEL UL O, Sec 22, T12S R38E	12036'
TBAU #002H	INJ	03/02/01	990' FSL & 600' FEL UL P, Sec 22, T12S R38E	9549'
TBAU #019	OIL	04/09/05	2431' FNL & 175' FWL UL E, Sec 23, T12S R38E	9330'
TBAU #016	INJ	05/23/03	1980' FSL & 660' FWL UL L, Sec 23, T12S R38E	9235'
TBAU #006	INJ	07/13/06	330' FSL & 2310' FWL UL N, Sec 22, T12S R38E	9254'

INJECTION WELL DATA SHEET

Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #005 30-025-36451

WELL LOCATION: 2310' FNL & 1650' FWL UNIT LETTER F SECTION 23 TOWNSHIP 12S RANGE 38E

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA

Hole Size: 17.5" Casing Size: 13.375" ft³

Cemented with: 390 sx. or 0' Method Determined: Circulated

Top of Cement: 0' Intermediate Casing

Hole Size: 12.25" Casing Size: 8.625" ft³

Cemented with: 1275 sx. or 0' Method Determined: Circulated

Top of Cement: 0' Production Casing

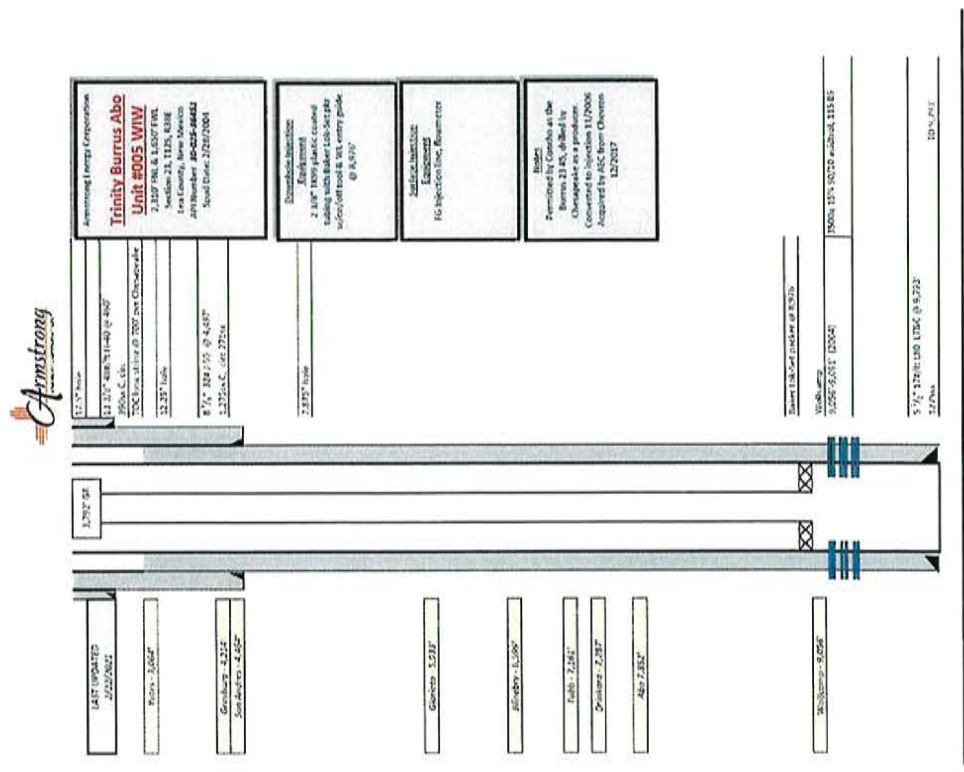
Hole Size: 7.875" Casing Size: 5.5" ft³

Cemented with: 1275 sx. or 0' Method Determined: CBL

Total Depth: 9793' Injection Interval

Perforated 9056' feet to 9091'

(Perforated or Open Hole; indicate which)



Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Nickel-coated Lok-Set

Packer Setting Depth: 8976'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes X No

If no, for what purpose was the well originally drilled? Well was originally drilled as the Burrus 23 #5 Producer by Concho

2. Name of the Injection Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

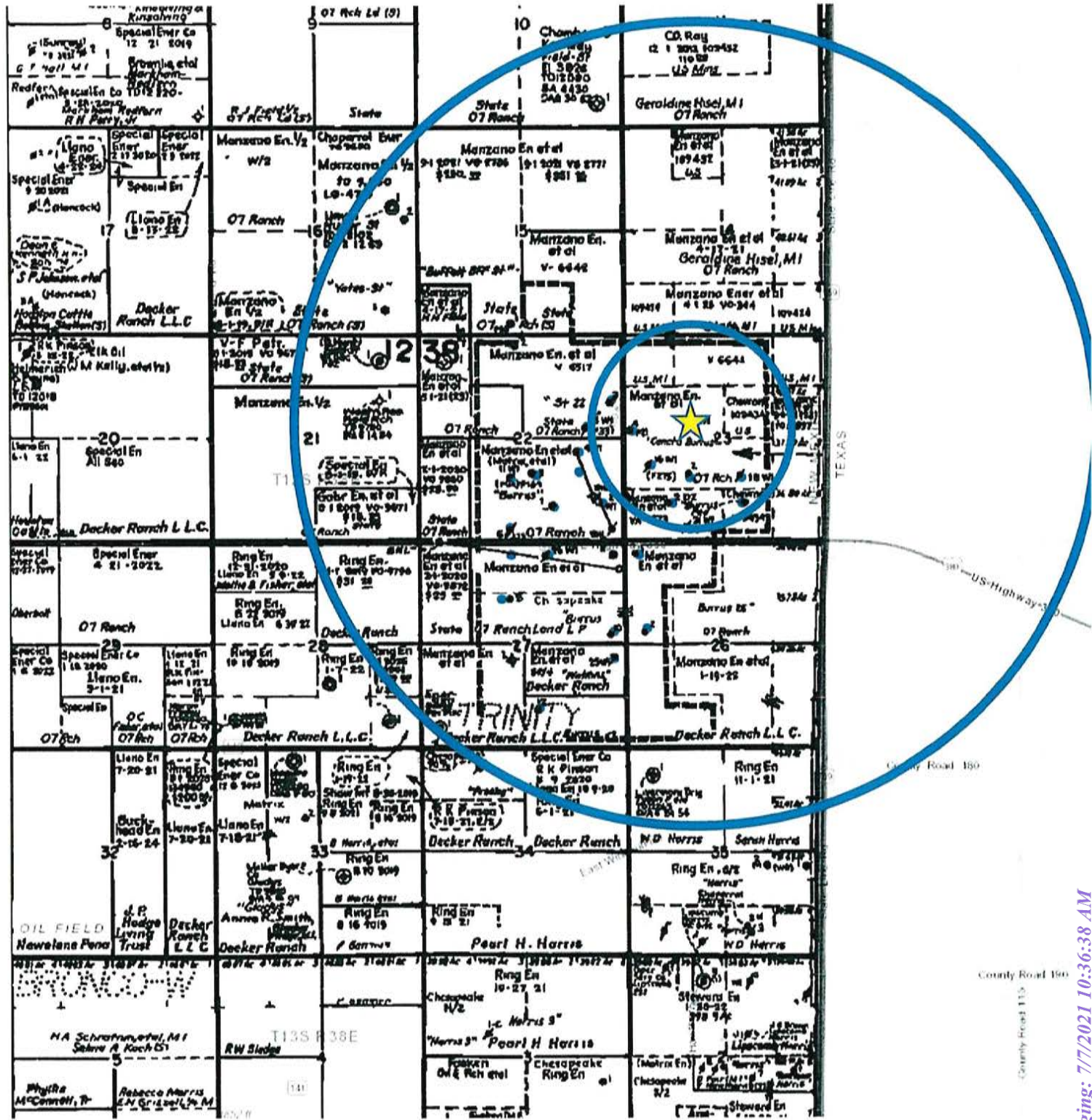
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

Devonian 12020' , Abo 7840' , Tubb 7150' , Glorieta 5370' , San Andres 4460'

TBAU #005 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #005 WIW

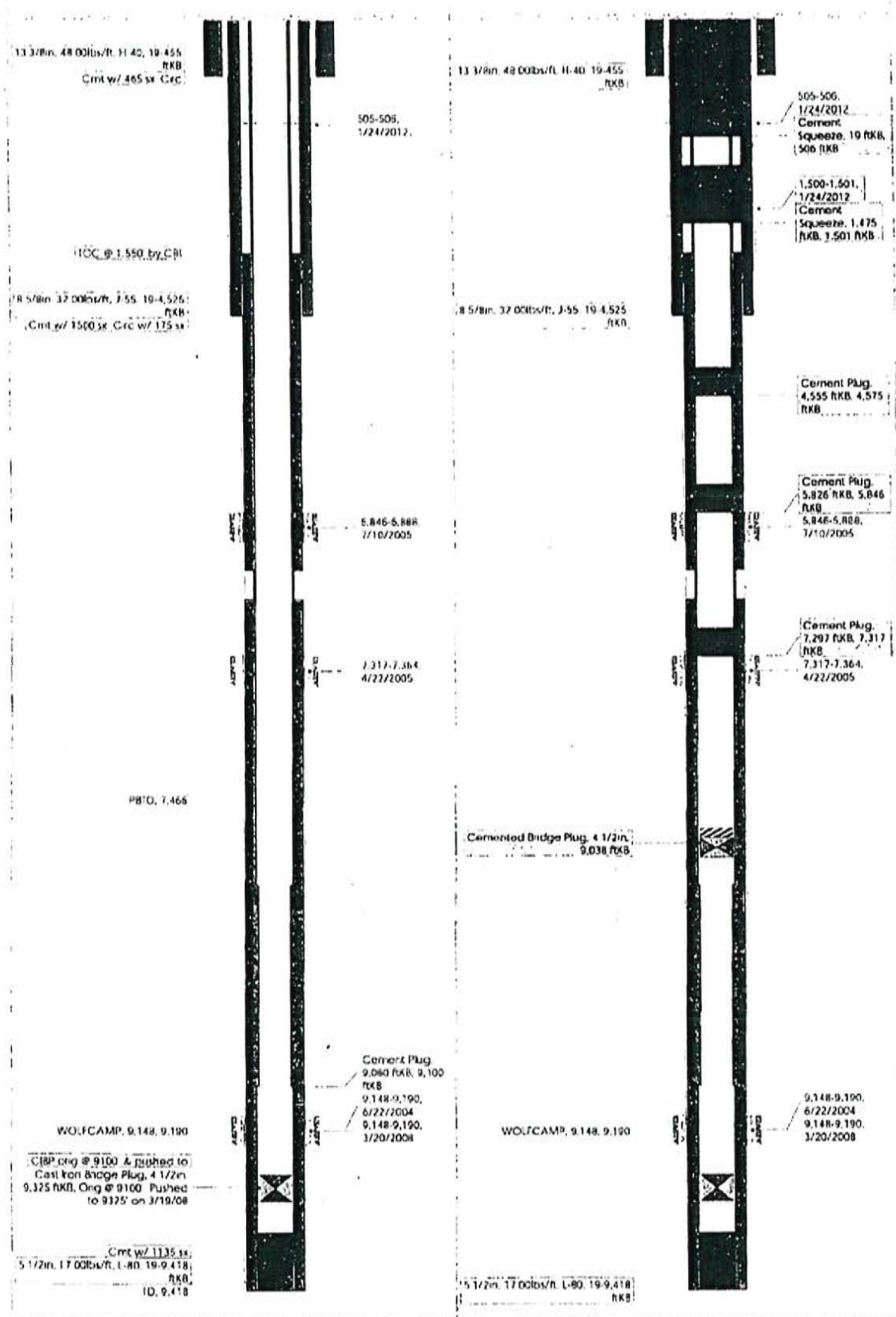
Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #015	OIL	10/03/04	1645' FNL & 354' FEL UL H, Sec 22, T12S R38E	9265'
TBAU #019	OIL	04/09/05	2431' FNL & 175' FWL UL E, Sec 23, T12S R38E	9330'
TBAU #016	INJ	05/23/03	1980' FSL & 660' FWL UL L, Sec 23, T12S R38E	9235'
TBAU #017	OIL	10/03/03	1650' FSL & 1650' FWL UL K, Sec 23, T12S R38E	9265'
TBAU #018	INJ	01/28/04	1650' FSL & 2200' FEL UL J, Sec 23, T12S R38E	9800'
TBAU #022	OIL	08/26/03	990' FSL & 1200' FWL UL M, Sec 23, T12S R38E	9225'
TBAU #021	INJ	11/02/87	330' FSL & 1650' FWL UL N, Sec 23, T12S R38E	12650'
TBAU #020 (SEE P&A WBD BELOW)	P&A	05/11/04	990' FSL & 2170' FEL UL O, Sec 23, T12S R38E	9418'

Well Config: VERTICAL - Original Hole, 1/26/2012 2:58:51 PM

Schematic - Actual

Schematic - Proposed



INJECTION WELL DATA SHEET

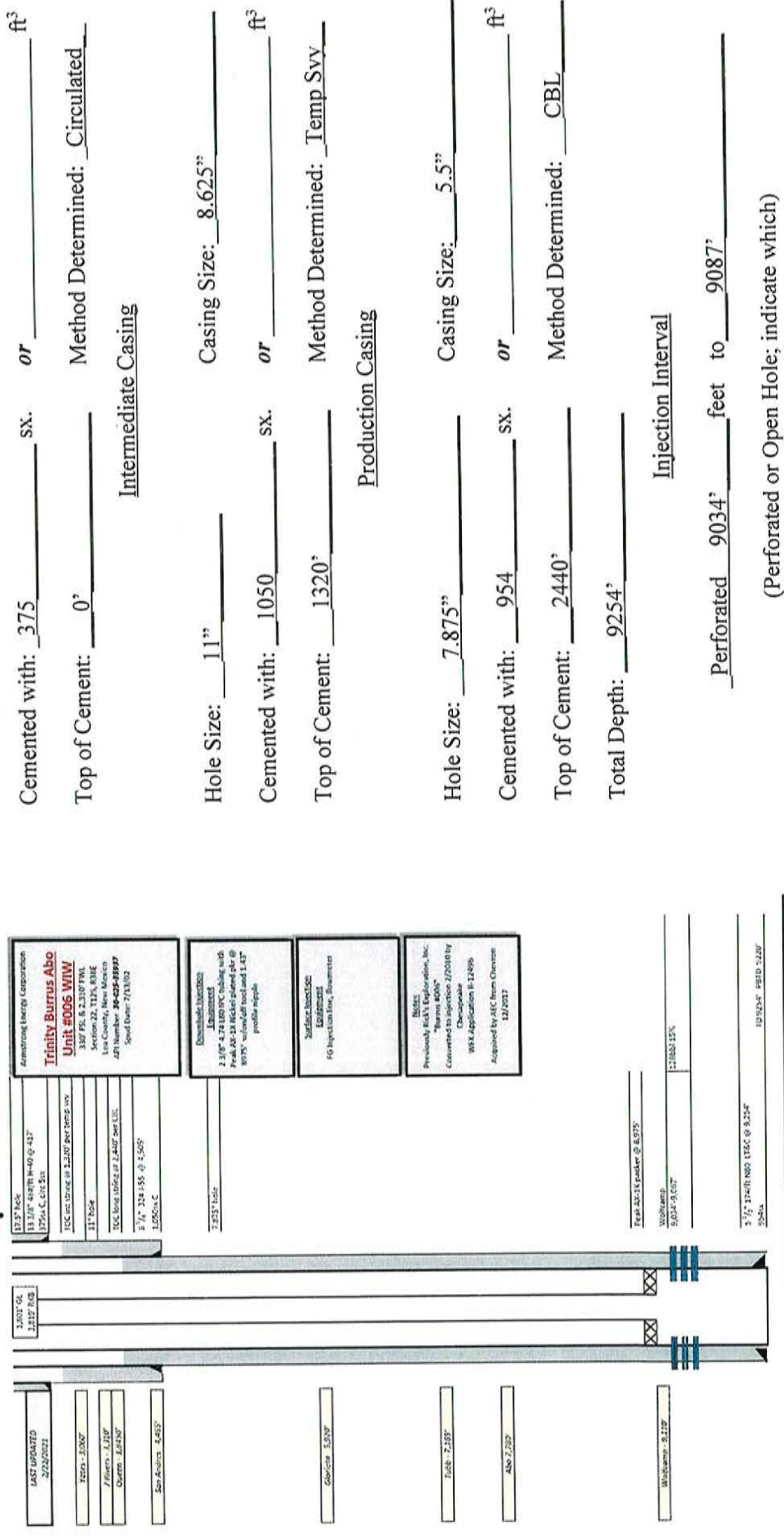
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #006 30-025-35937

WELL LOCATION: 330' FSL & 2310' FWL N 22 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



13 3/8" NOK
13 3/8" x 14.75" 14-40 @ 417'
1575# 4.11' 5.2'

Trinity Burrus Abo
Armstrong Energy Corporation
Unit #006 WIW
100' PS & 2.310' FWL
Section 22, 12S, 38E
Line County, Kern, Mexico
API Number: 30-025-35937
Spud Date: 7/13/02

2 1/2" Hole
2 1/2" x 2.75" 14-40 @ 417'
1575# 4.11' 5.2'

Equipment/Instruments
Equipment
2 1/2" x 2.75" 14-40 @ 417'
1575# 4.11' 5.2'

Surface/Instruments
Equipment
16 Injection Line, Pressure

Notes:
Previously E&S Exploration, Inc.
Trinity #006 - 2000'
Committed to injection 2/7/01 by
W&S Application E-12896
Acquired by AEC from Chevron
12/2017

11-1/2" 11-1/2" 14-40 @ 417'
1575# 4.11' 5.2'

11-1/2" 11-1/2" 14-40 @ 417'
1575# 4.11' 5.2'

11-1/2" 11-1/2" 14-40 @ 417'
1575# 4.11' 5.2'

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Peak AX-1X

Packer Setting Depth: 8975'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes No

If no, for what purpose was the well originally drilled? Well was originally drilled as the Burrus #6 Producer by Rick's Exploration

2. Name of the Injection Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

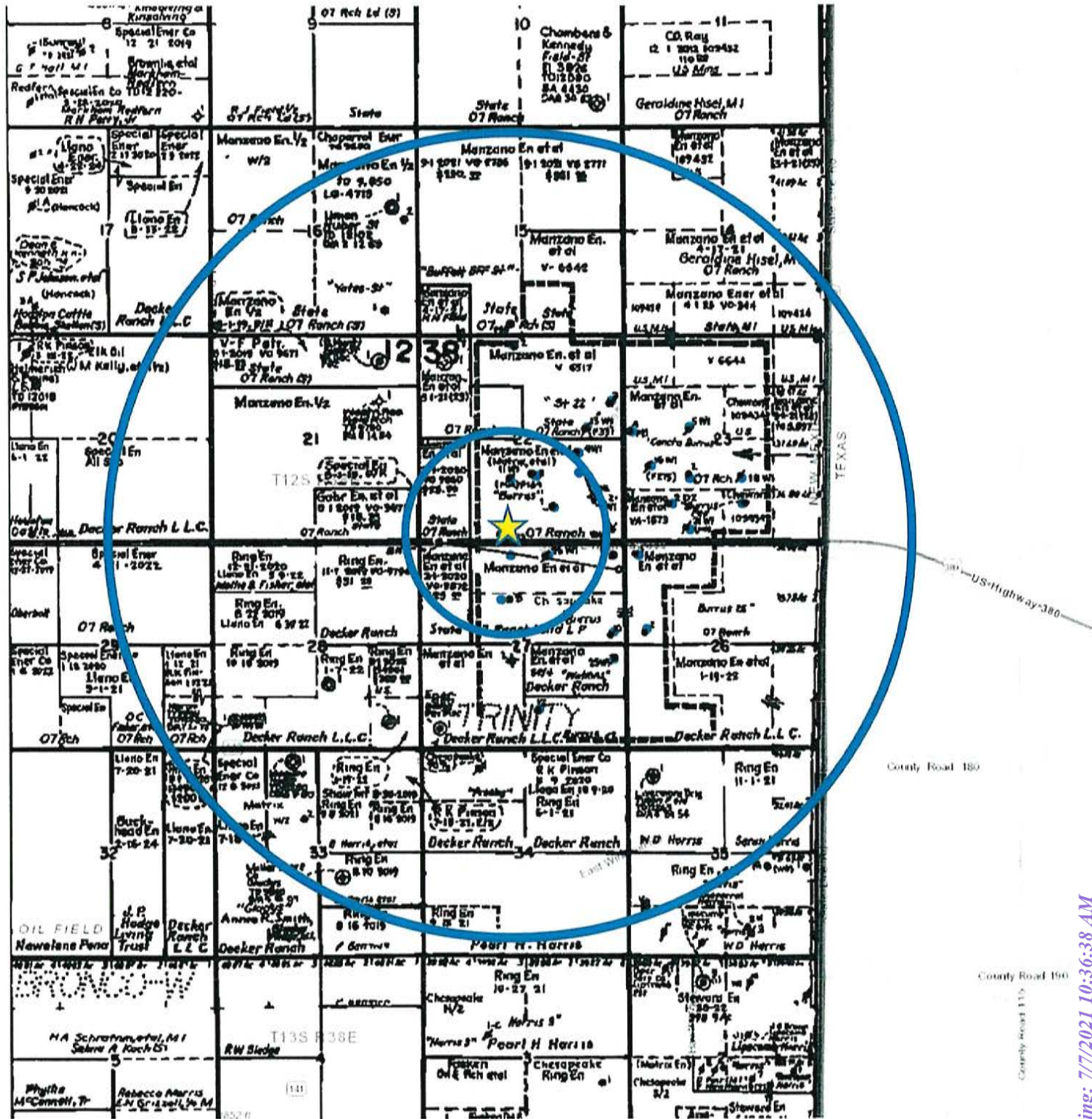
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Devonian 12020' , Abo 7840' , Tubb 7150' , Glorieta 5370' , San Andres 4460'

TBAU #006 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #006 WIW

Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

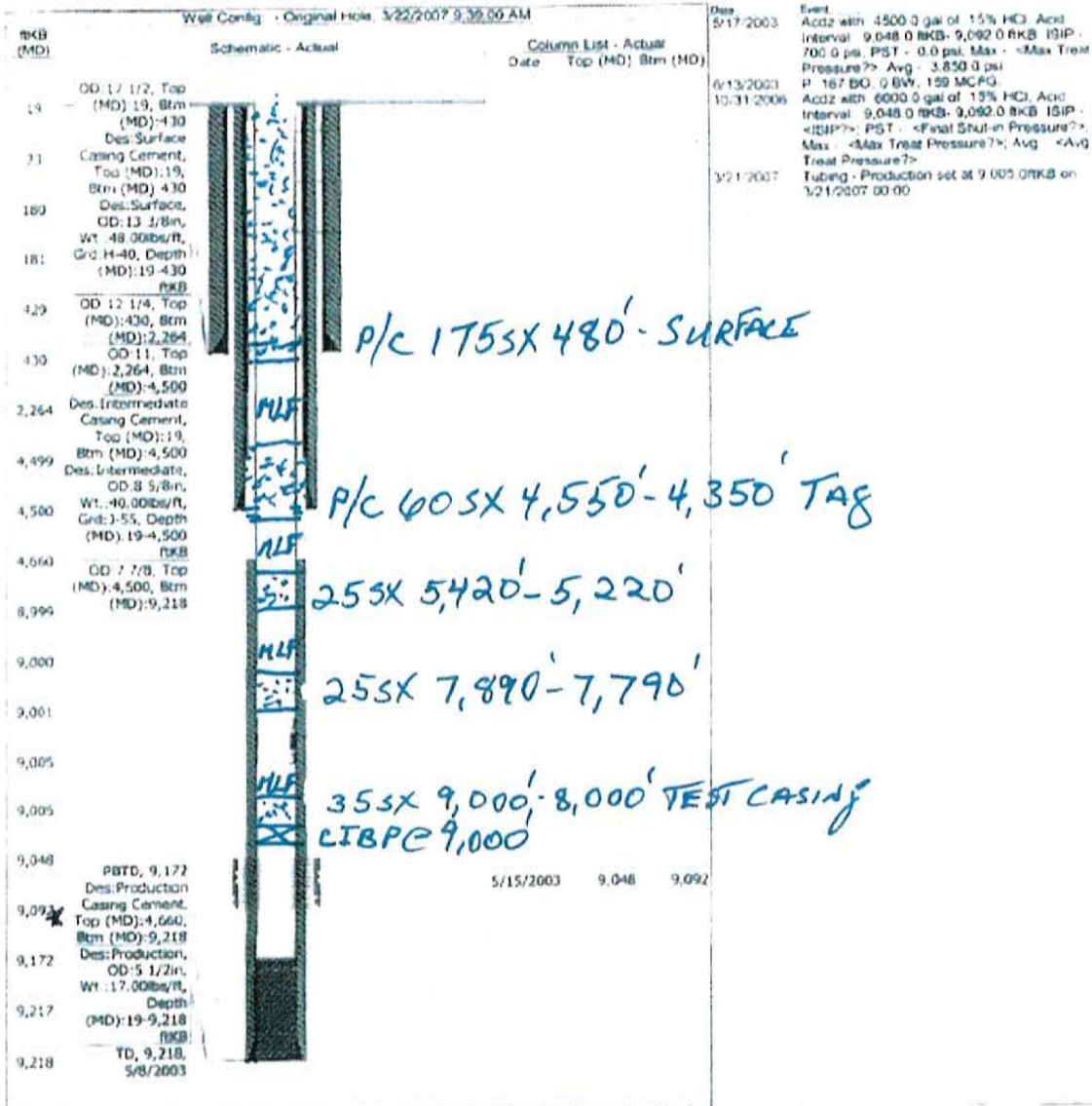
WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #011	INJ	11/13/02	1650' FSL & 2310' FWL UL K, Sec 22, T12S R38E	9240'
TBAU #001	OIL	04/11/00	900' FSL & 1859' FEL UL O, Sec 22, T12S R38E	12036'
TBAU #002H	INJ	03/02/01	990' FSL & 600' FEL UL P, Sec 22, T12S R38E	9549'
TBAU #009	OIL	08/07/04	1473' FNL & 2056' FWL UL F, Sec 27, T12S R28E	9800'
TBAU #026	INJ	09/19/02	330' FNL & 2000' FEL UL B, Sec 27, T12S R38E	9260'
TBAU #004H	INJ	02/06/02	2310' FSL & 1210' FEL UL I, Sec 22, T12S R38E	10015'
TBAU #003	OIL	07/03/01	1720' FSL & 2310' FEL UL J, Sec 22, T12S R38E	9184'
TBAU #007 (SEE P&A WBD BELOW)	P&A	04/17/03	330' FNL & 2310' FWL UL C, Sec 27, T12S R38E	9218'

Wellbore Schematic
TBAU 7



Field: Trinity
 County: LEA
 State: NEW MEXICO
 Location: SEC 27-12S-38E, 330 FNL & 2310 FWL
 Elevation: GL 3,799.00 KB 3,818.00
 KB Height: 19.00

Spud Date: 4/17/2003
 API #: 3002536187
 CHK Property #: 890682
 1st Prod Date: 5/19/2003
 PBTD: Original Hole - 9172.0
 TD: 9,218.0



Start Date	String	Wellbore	Log No.	Fluid	Amount (bbl)	Class	Yield (lb/bbl)	Density (lb/gal)	Comment
4/19/2003	Surface, 430.0 RBK	Original Hole			440	C			2% CaCl ₂ , 25 pps CF
4/26/2003	Intermediate, 4,500.0 RBK	Original Hole		Lead	1,350	C			50/50 POZ, 5% salt, 10% gel, 3# Gilscoite, 25# CF
4/26/2003	Intermediate, 4,500.0 RBK	Original Hole		Tail	200	C			1% CaCl ₂
5/11/2003	Production, 9,218.0 RBK	Original Hole		Lead	425	H			50/50 POZ, 5% salt, 2% gel, 4% D167, 2% D65
5/11/2003	Production, 9,218.0 RBK	Original Hole		Tail	175	H			50/50 POZ, 5% salt, 2% gel, 4% D167, 2% D65

INJECTION WELL DATA SHEET

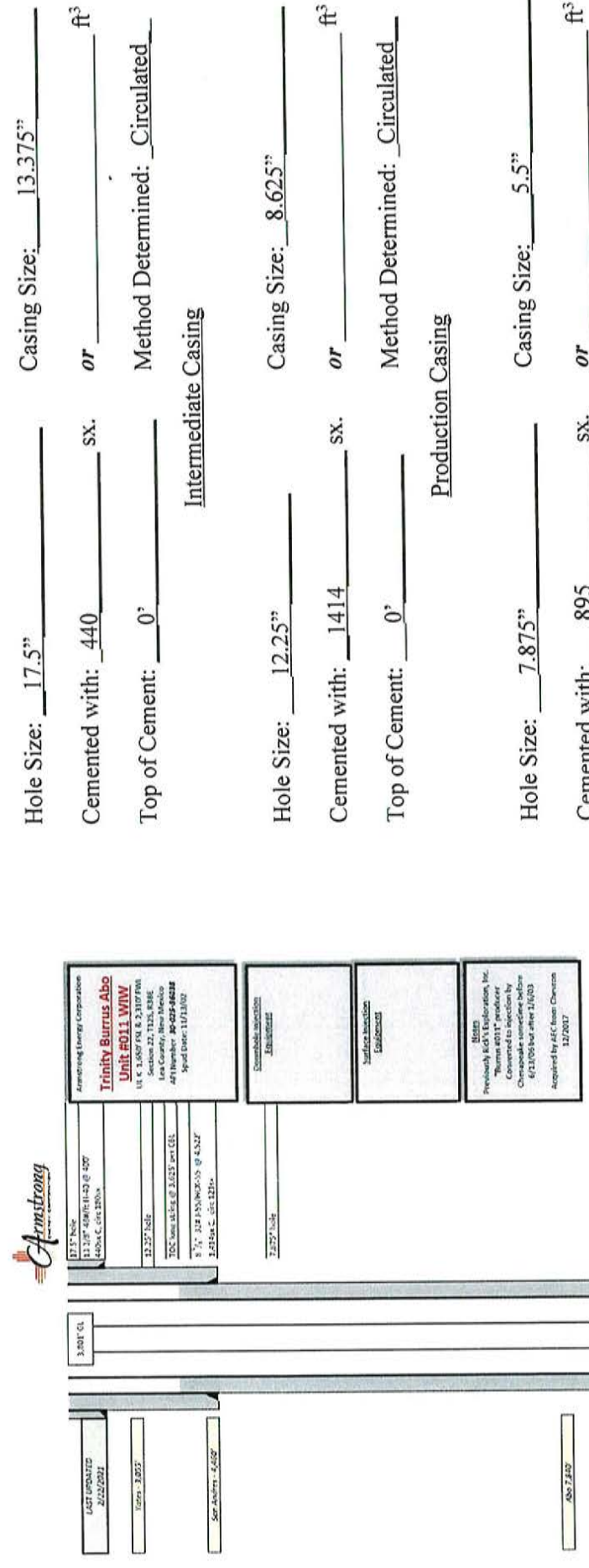
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #011 30-025-36038

WELL LOCATION: 1650' FSL & 2310' FWL K 22 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



Notes:
 1. This well is being drilled by Trinity Burrus Abo Unit #011 WIV
 2. UIC # 1-6807 FW & 2-3107 FW
 3. Section 22, Twp 12S, Rng 38E
 4. Well Category: Injection
 5. Well ID: 30-025-36038
 6. Spud Date: 11/13/02

Perforation Details:
 Perforated 9030' feet to 9080'

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Baker Lok-Set

Packer Setting Depth: 8963'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes No

If no, for what purpose was the well originally drilled? Well was originally drilled as the Burrus #11 Producer by Rick's Exploration

2. Name of the Injection Formation: Wolfcamp

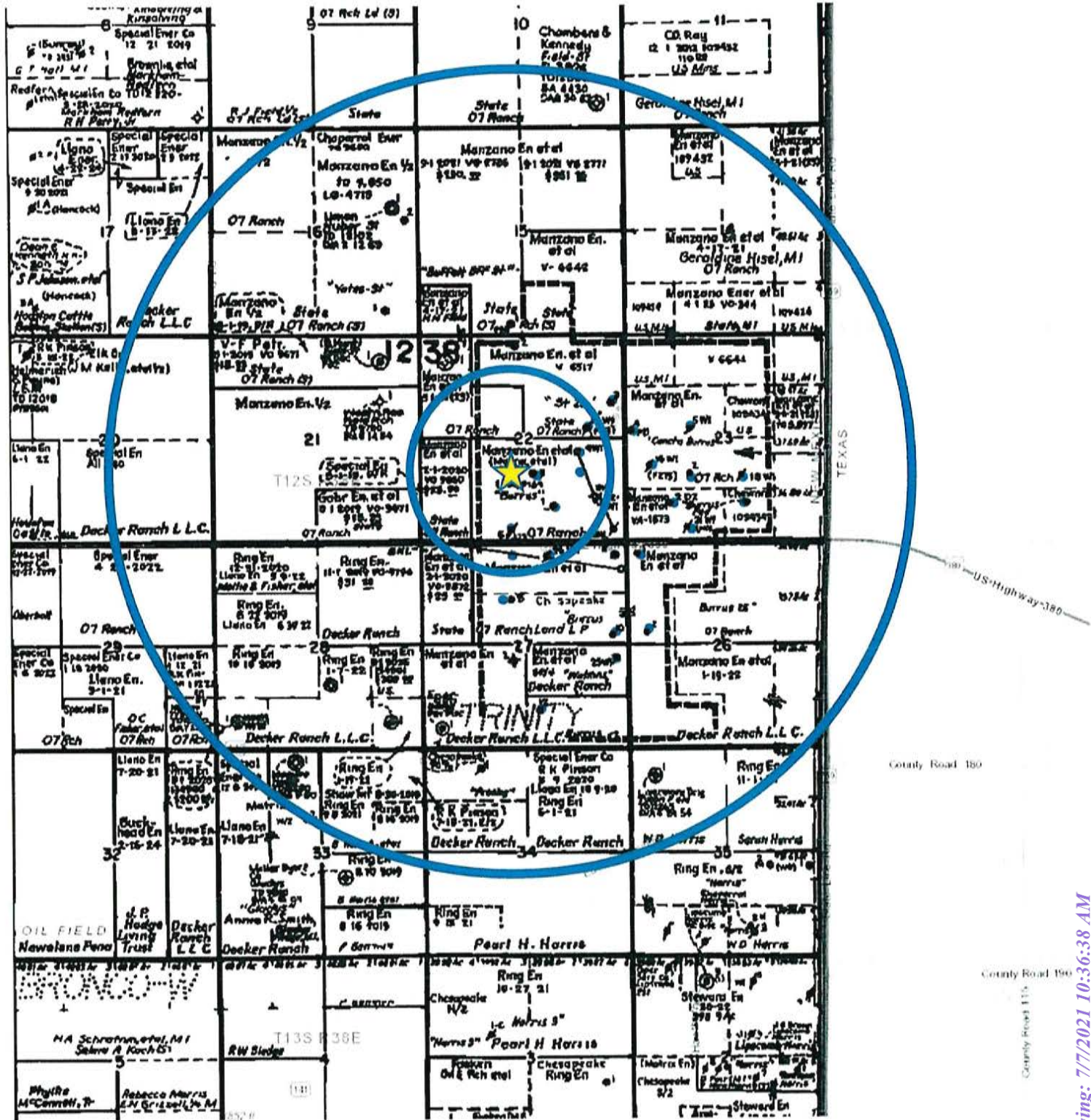
3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
Devonian 12020' . Abo 7840' . Tubb 7150' . Glorieta 5370' . San Andres 4460'

TBAU #011 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #011 WIW

Application for Authorization to Inject list of wells within 1/2 mile radius that penetrate injection zone, form C-108 Item #VI.

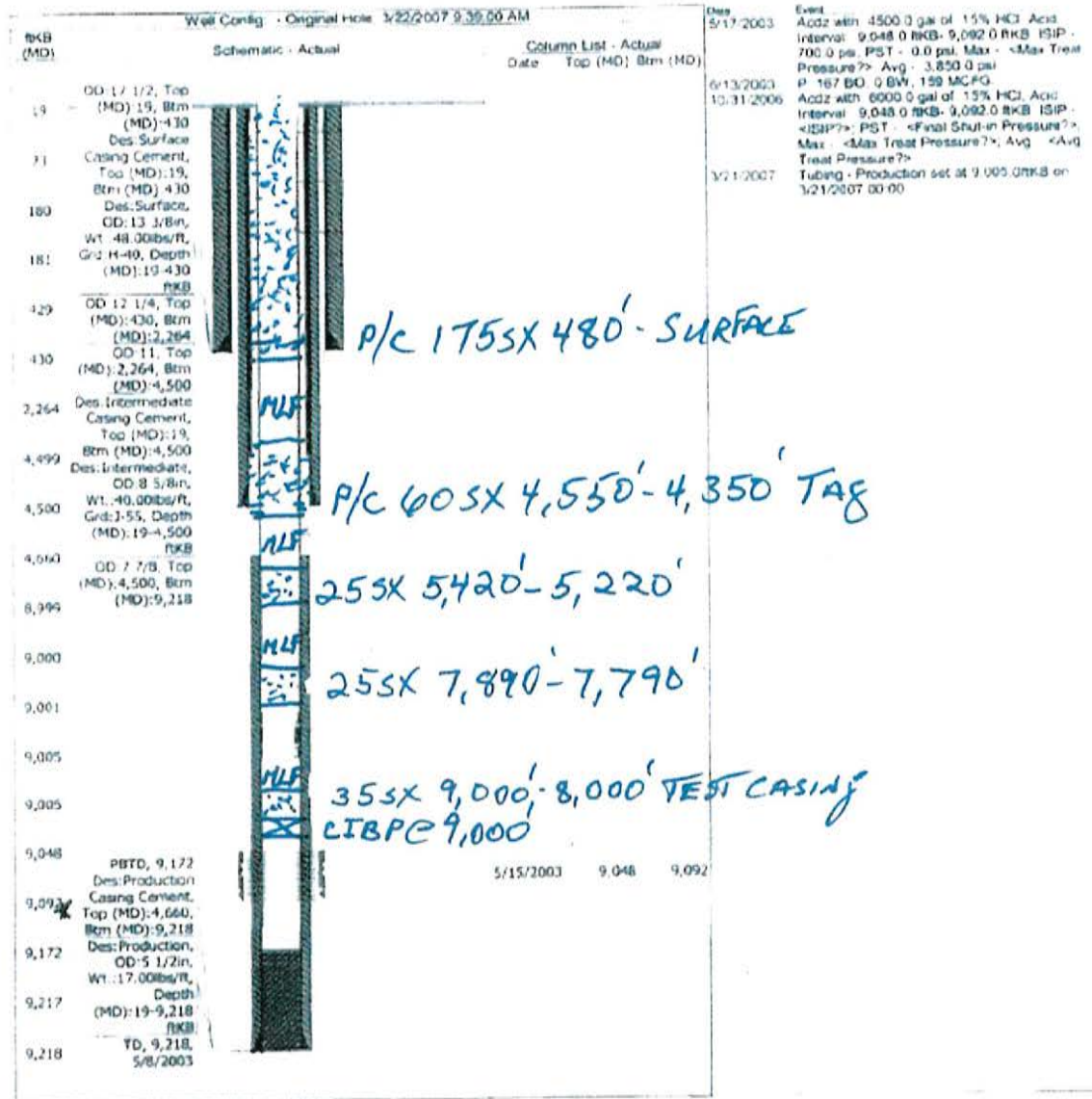
WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #006	INJ	07/13/02	330' FSL & 2310' FWL UL N, Sec 22, T12S R38E	9254'
TBAU #001	OIL	04/11/00	900' FSL & 1859' FEL UL O, Sec 22, T12S R38E	12036'
TBAU #002H	INJ	03/02/01	990' FSL & 600' FEL UL P, Sec 22, T12S R38E	9549'
TBAU #003	OIL	07/03/01	1720' FSL & 2310' FEL UL J, Sec 22, T12S R38E	9184'
TBAU #026	INJ	09/19/02	330' FNL & 2000' FEL UL B, Sec 27, T12S R38E	9260'
TBAU #004H	INJ	02/06/02	2310' FSL & 1210' FEL UL I, Sec 22, T12S R38E	10015'
TBAU #013	INJ	10/19/02	2310' FNL & 990' FEL UL H, Sec 22, T12S R38E	9250'
TBAU #007 (SEE P&A WBD BELOW)	P&A	04/17/03	330' FNL & 2310' FWL UL C, Sec 27, T12S R38E	9218'

PTA
Wellbore Schematic bac
TBAU 7

Chesapeake

Field: Trinity
County: LEA
State: NEW MEXICO
Location: SEC 27-12S-38E, 330 FNL & 2310 FWL
Elevation: GL 3,799.00 KB 3,818.00
KB Height: 19.00

Spud Date: 4/17/2003
API #: 3002536187
CHK Property #: 890682
1st Prod Date: 5/19/2003
PBTD: Original Hole - 9172.0
TD: 9,218.0



Start Date	String	Wellbore	Sig. No.	Plan	Amount (cub/ft)	Class	Yield (lb/cu ft)	Density (lb/gal)	Cement
4/19/2003	Surface, 430.0RKB	Original Hole			440 C				2% CaCl ₂ , 25 pps CF
4/26/2003	Intermediate, 4,500.0RKB	Original Hole	Lead		1,350 C				50/50 POZ, 5% salt, 10% gel, 38 Gilsonte, 25# CF
4/26/2003	Intermediate, 4,500.0RKB	Original Hole	Tail		200 C				1% CaCl ₂
5/11/2003	Production, 9,218.0RKB	Original Hole	Lead		425 H				50/50 POZ, 5% salt, 2% gel, 4% D167, 2% D65
5/11/2003	Production, 9,218.0RKB	Original Hole	Tail		375 H				50/50 POZ, 5% salt, 2% gel, 4% D167, 2% D65

INJECTION WELL DATA SHEET

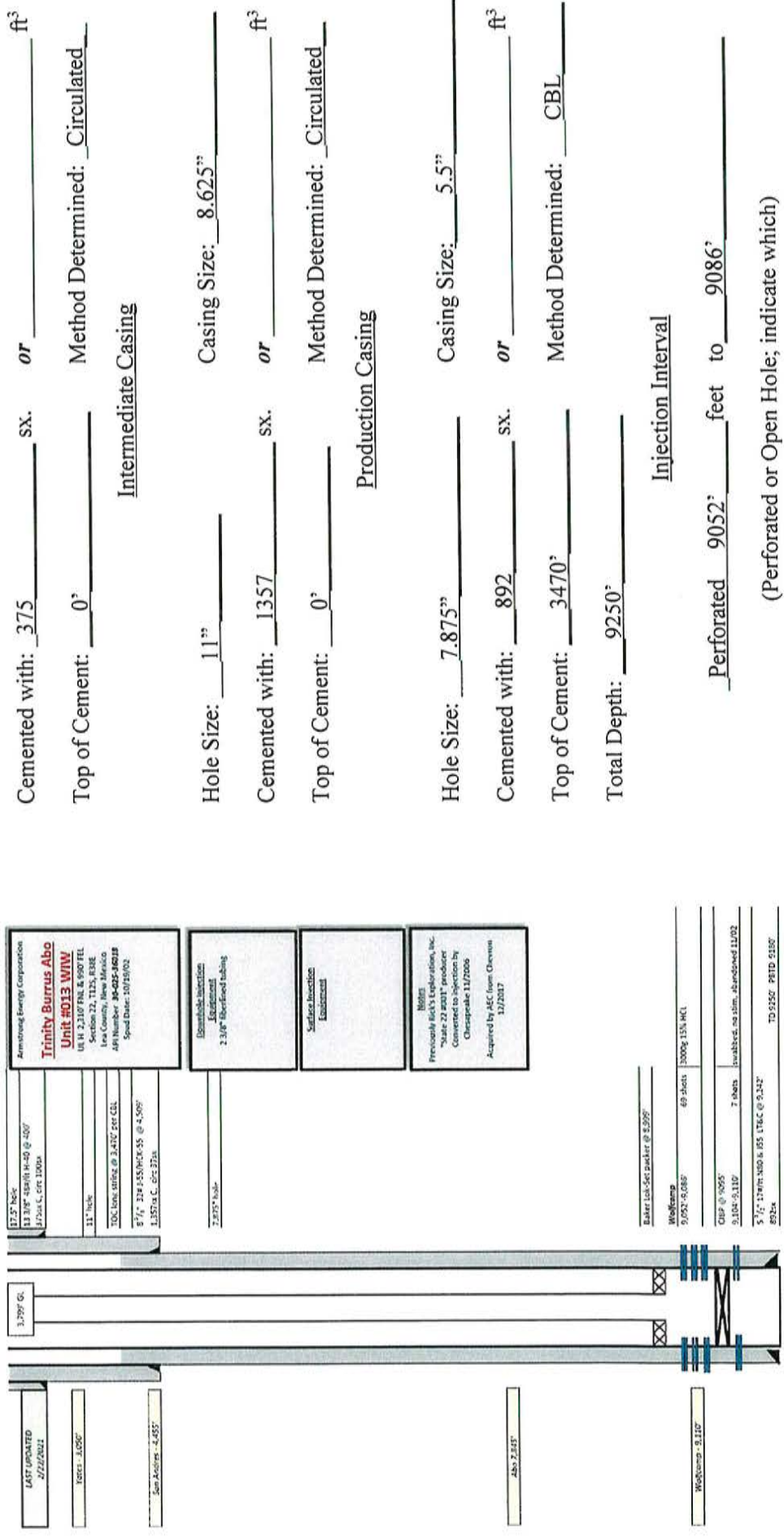
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #013 30-025-36018

WELL LOCATION: 2310' FNL & 990' FEL H 22 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



Armstrong Energy Corporation
Trinity Burrus Abo
Unit #013 WIW
 US W 2.310' FNL & 990' FEL
 Section 22, T12S, R38E
 Lea County, New Mexico
 API Number: **30-025-36018**
 Spud Date: 10/15/02

17.5" hole
 13 3/8" 45400 H-40 @ 400'
 17.5" O.C. circ 1000x
 11" hole
 TOC 1000' setting @ 3.47% per CCL
 8 1/4" 21# P-55/NOCK-55 @ 4,500'
 1.357% O.C. circ 372x

Electric Submersible
 Equipment
 3.34" Fiberglass tubing

Surface Injection
 Equipment

Notes
 Previously Sealed Exploration, Inc.
 "Date 22 2001" producer
 Converted to injection by
 Chesapeake 11/2008
 Acquired by AEC from Chevron
 1/2017

3.75" GL
 LAST UPDATED
 2/22/2021
 Notes - 4.00'
 San Antonio - 4.45'

2.875" hole
 2.875" hole

4.5" 2.245'

Baker Lab-Set packer @ 2,995'
 Wolfcamp
 9,052'-9,085' 49 slots 3000g 15% HCL
 GEP @ 9,055'
 9,104'-9,110' 7 slots (wall-toe, no sim, abandoned 11/02
 9,117'-17' 17" MSB & 185' 1" BC @ 9,342'
 820x TD: 9,500' PRTD: 9,150'

Hole Size: 17.5" Casing Size: 13.375"
 Cemented with: 375 SX. or 5.5" ft³
 Top of Cement: 0' Method Determined: Circulated
Intermediate Casing
 Hole Size: 11" Casing Size: 8.625"
 Cemented with: 1357 SX. or 5.5" ft³
 Top of Cement: 0' Method Determined: Circulated
Production Casing
 Hole Size: 7.875" Casing Size: 5.5" ft³
 Cemented with: 892 SX. or 5.5" ft³
 Top of Cement: 3470' Method Determined: CBL
 Total Depth: 9250'
Injection Interval
Perforated 9052' feet to 9086'
 (Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Baker Lok-Set

Packer Setting Depth: 8999'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes X No

If no, for what purpose was the well originally drilled? Well was originally drilled as the State "22" #001 Producer by Rick's Exploration

2. Name of the Injection Formation: Wolfcamp

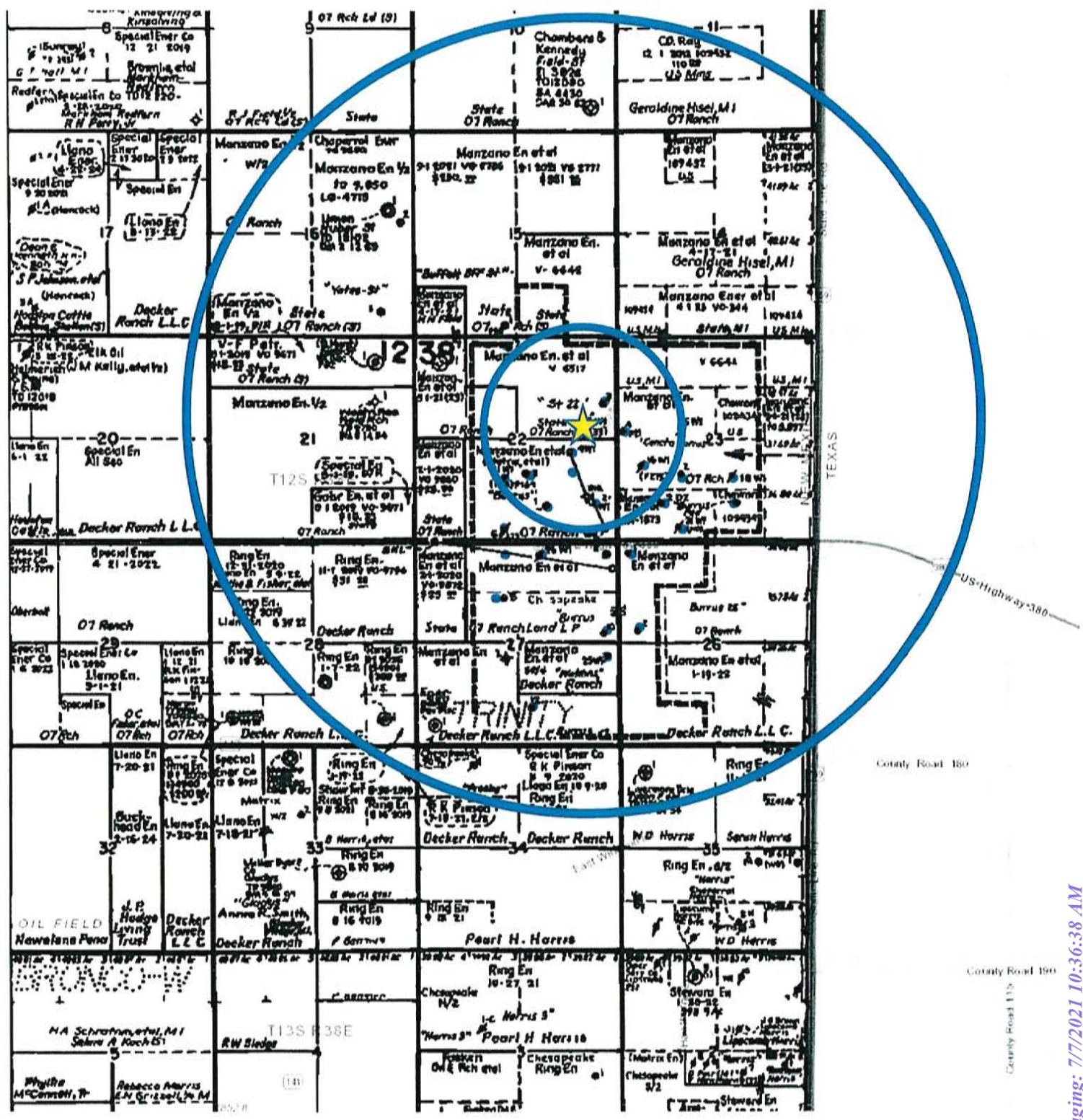
3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No
Original Wolfcamp perfs @ 9104'-9110' abandoned under CIBP @ 9095'

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
Devonian 12020' . Abo 7840' . Tubb 7150' . Glorieta 5370' . San Andres 4460'

TBAU #013 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #013 WIW

Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #015	OIL	10/03/04	1645' FNL & 354' FEL UL H, Sec 22, T12S R38E	9265'
TBAU #005	INJ	02/29/04	2310' FNL & 1650' FWL UL F, Sec 23, T12S R38E	9793'
TBAU #003	OIL	07/03/01	1720' FSL & 2310' FEL UL J, Sec 22, T12S R38E	9184'
TBAU #011	INJ	11/13/02	1650' FSL & 2310' FWL UL K, Sec 22, T12S R38E	9240'
TBAU #001	OIL	04/11/00	900' FSL & 1859' FEL UL O, Sec 22, T12S R38E	12036'
TBAU #002H	INJ	03/02/01	990' FSL & 600' FEL UL P, Sec 22, T12S R38E	9549'
TBAU #019	OIL	04/09/05	2431' FNL & 175' FWL UL E, Sec 23, T12S R38E	9330'
TBAU #016	INJ	05/23/03	1980' FSL & 660' FWL UL L, Sec 23, T12S R38E	9235'
TBAU #004H	INJ	02/06/02	2310' FSL & 1210' FEL UL I, Sec 22, T12S R38E	10015'

INJECTION WELL DATA SHEET

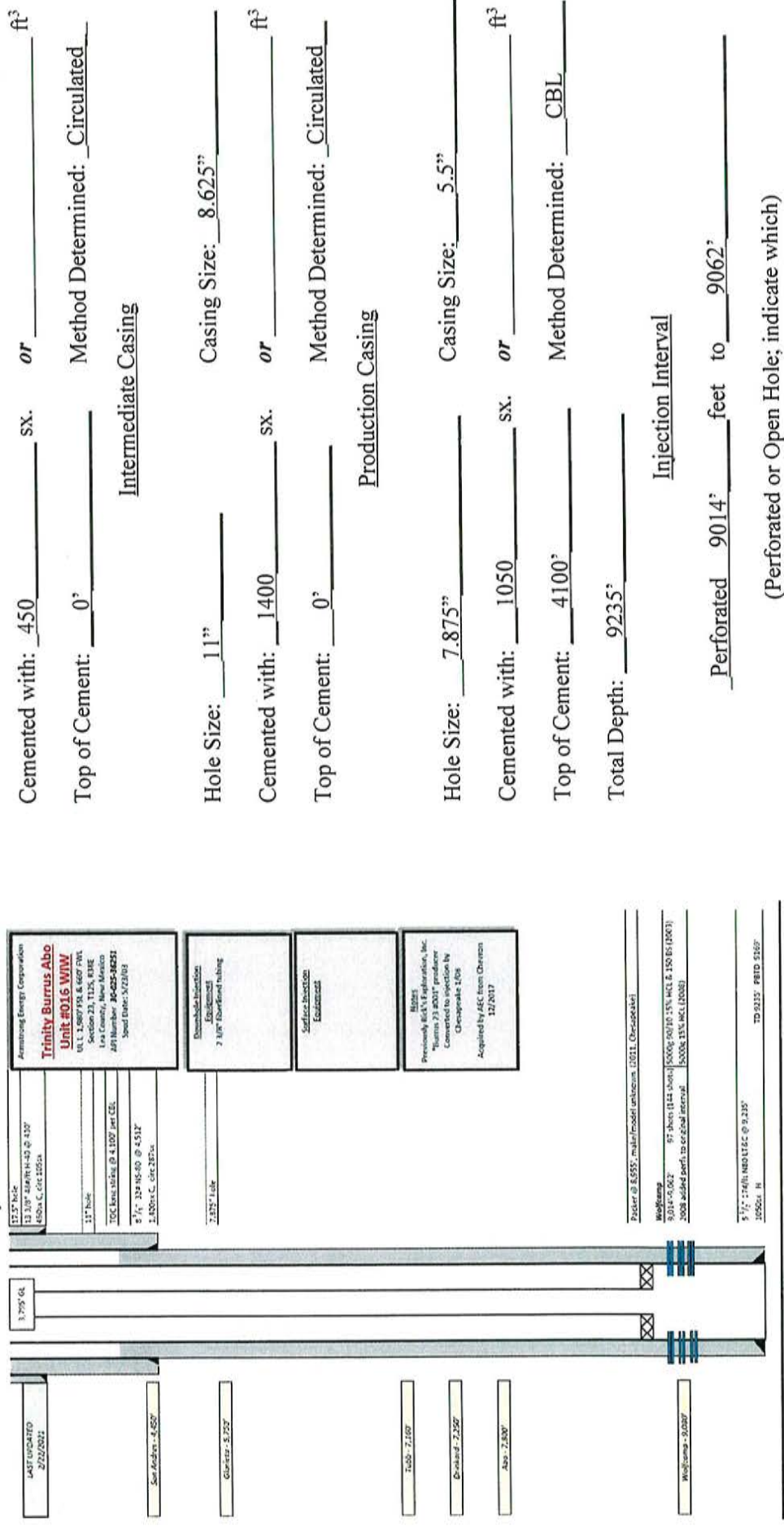
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #016 30-025-36251

WELL LOCATION: 1980' FSL & 660' FWL L 23 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



Armstrong Energy Corporation
Trinity Burrus Abo Unit #016 WIW
 U/L 1,980' FSL & 660' FWL
 Section 23, T12S, R38E
 Lea County, New Mexico
 API Number: **30-025-36251**
 Spud Date: 3/22/03

Drumstick Injection Equipment
 2 1/2" (Bore) fluid handling

Surface Injection Equipment

Notes
 Previously well completion, Inc. (Form 7) 2007
 Completion
 Completion by Chesapeake EOR
 12/2017
 Acquired by AEC from Chevron

17.5" hole
 13,300' 3/4" NPT H-40 @ 430'
 4500' H.C. COT 10524

11" hole
 TOC hole string @ 4,100' just CBL
 5 1/2" 139 H6-90 @ 4,517'
 1,400' H.C. COT 2874

7.875" hole
 1,050' H.C. COT 2874

5.5" 1746N M80114C @ 9,235'
 1050' H

TD 9235' RBTD 5165'

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Baker Lok-Set

Packer Setting Depth: 8955'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes No

If no, for what purpose was the well originally drilled? Well was originally drilled as the Burrus "23" #001 Producer by Rick's Exploration

2. Name of the Injection Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

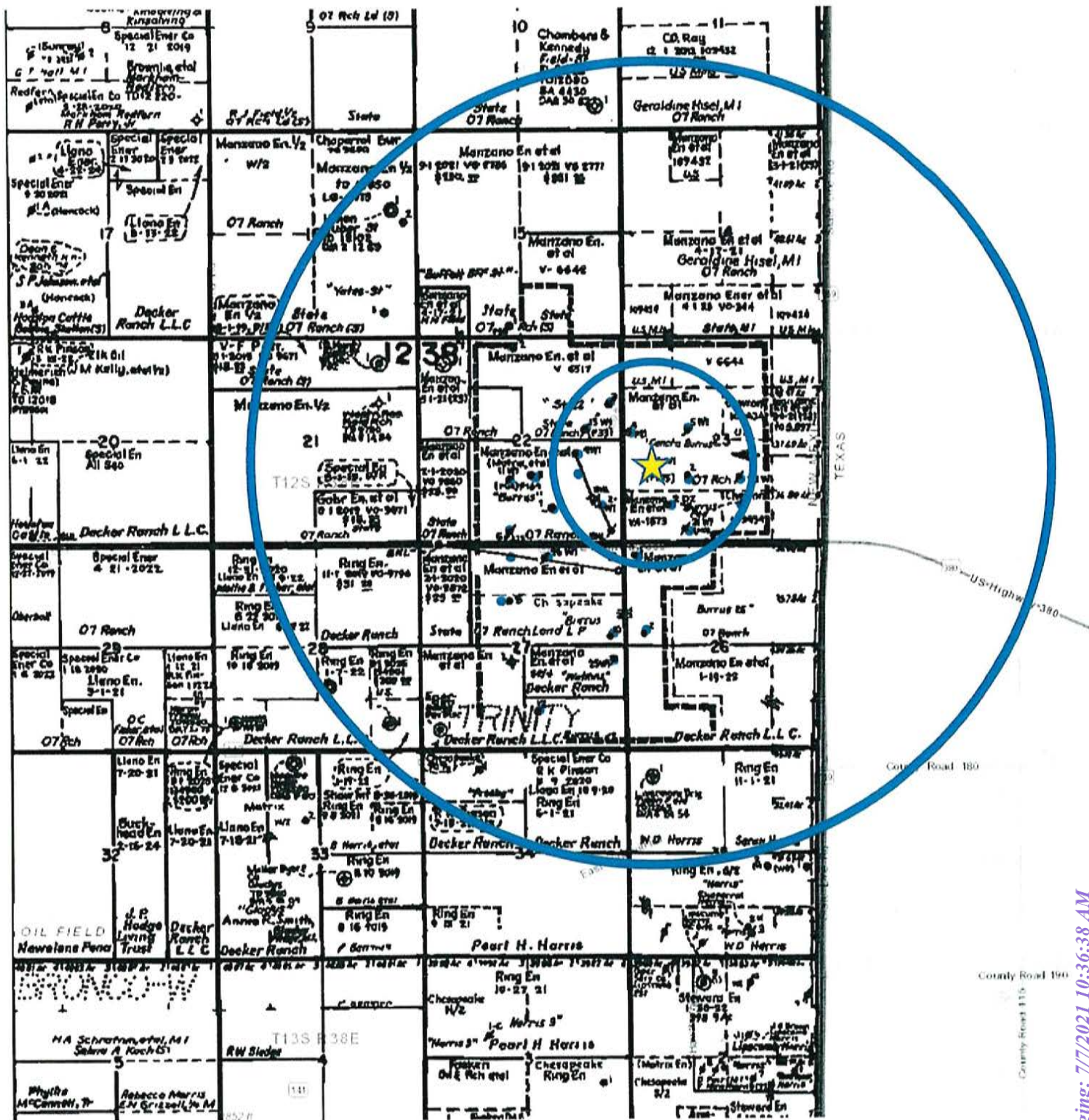
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

Devonian 12020', Abo 7840', Tubb 7150', Glorieta 5370', San Andres 4460'

TBAU #016 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #016 WIW

Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

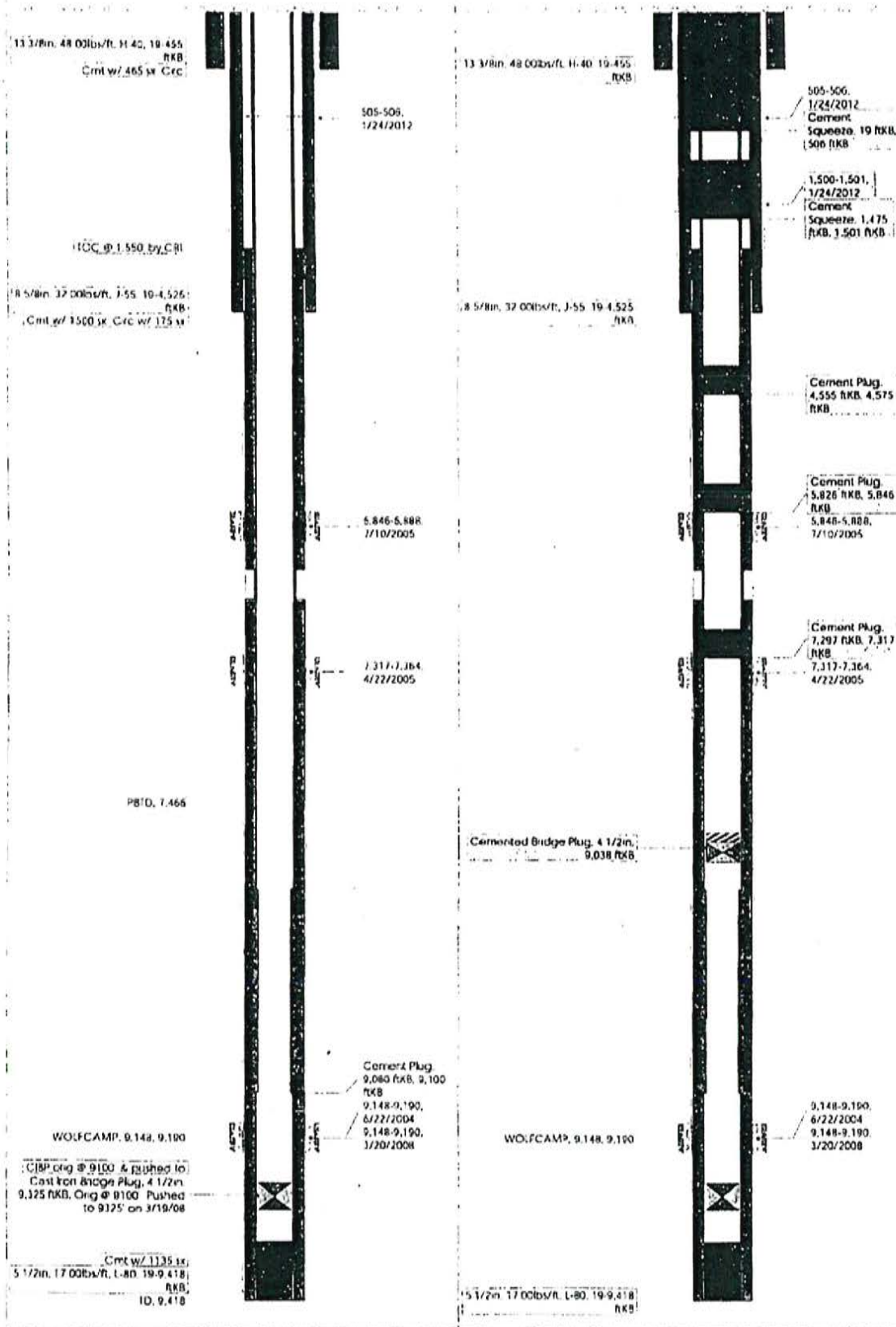
WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #015	OIL	10/03/04	1645' FNL & 354' FEL UL H, Sec 22, T12S R38E	9265'
TBAU #019	OIL	04/09/05	2431' FNL & 175' FWL UL E, Sec 23, T12S R38E	9330'
TBAU #005	INJ	02/29/04	2310' FNL & 1650' FWL UL F, Sec 23, T12S R38E	9793'
TBAU #017	OIL	10/03/03	1650' FSL & 1650' FWL UL K, Sec 23, T12S R38E	9265'
TBAU #018	INJ	01/28/04	1650' FSL & 2200' FEL UL J, Sec 23, T12S R38E	9800'
TBAU #022	OIL	08/26/03	990' FSL & 1200' FWL UL M, Sec 23, T12S R38E	9225'
TBAU #021	INJ	11/02/87	330' FSL & 1650' FWL UL N, Sec 23, T12S R38E	12650'
TBAU #002H	INJ	03/02/01	990' FSL & 600' FEL UL P, Sec 22, T12S R38E	9549'
TBAU #003	OIL	07/03/01	1720' FSL & 2310' FEL UL J, Sec 22, T12S R38E	9184'
TBAU #004H	INJ	02/06/02	2310' FSL & 1210' FEL UL I, Sec 22, T12S R38E	10015'
TBAU #013	INJ	10/19/02	2310' FNL & 990' FEL UL H, Sec 22, T12S R38E	9250'
TBAU #023	OIL	09/08/03	330' FNL & 330' FWL UL D, Sec 26, T12S R38E	9260'

TBAU #008	OIL	07/16/03	330' FNL & 330' FEL UL A, Sec 27, T12S R38E	9164'
TBAU #020 (SEE P&A WBD BELOW)	P&A	05/11/04	990' FSL & 2170' FEL UL O, Sec 23, T12S R38E	9418'

Well Config: VERTICAL - Original Hole, 1/25/2012 2:58:51 PM

Schematic - Actual

Schematic - Proposed



INJECTION WELL DATA SHEET

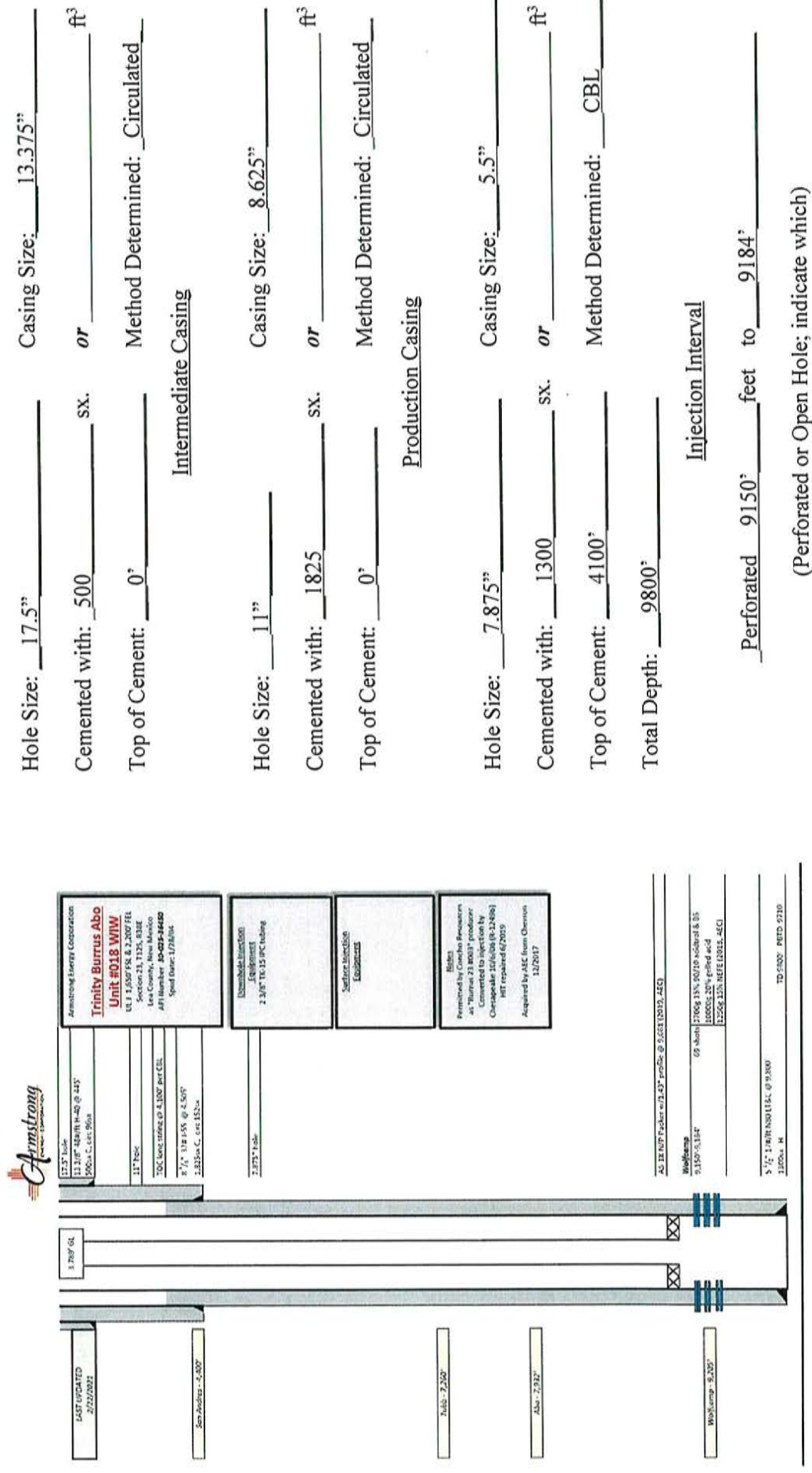
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #018 30-025-36450

WELL LOCATION: 1650' FSL & 2200' FEL J 23 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: AS-IX

Packer Setting Depth: 9081'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

- 1. Is this a new well drilled for injection? Yes X No
 If no, for what purpose was the well originally drilled? Well was originally drilled as the Burrus "23" #003 Producer by Rick's Exploration

2. Name of the Injection Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

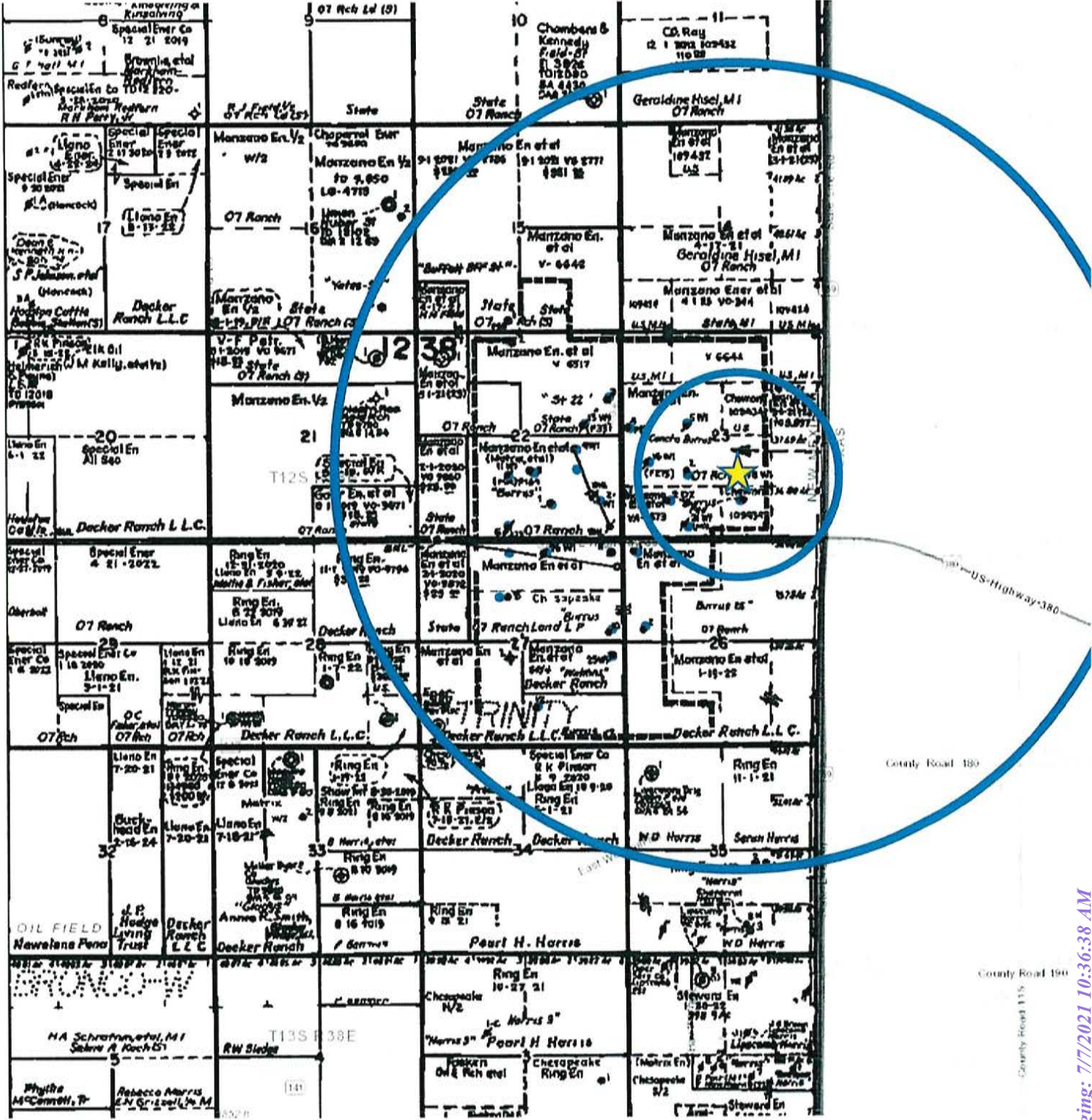
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Devonian 12020'. Abo 7840'. Tubb 7150'. Glorieta 5370'. San Andres 4460'

TBAU #018 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #018 WIW

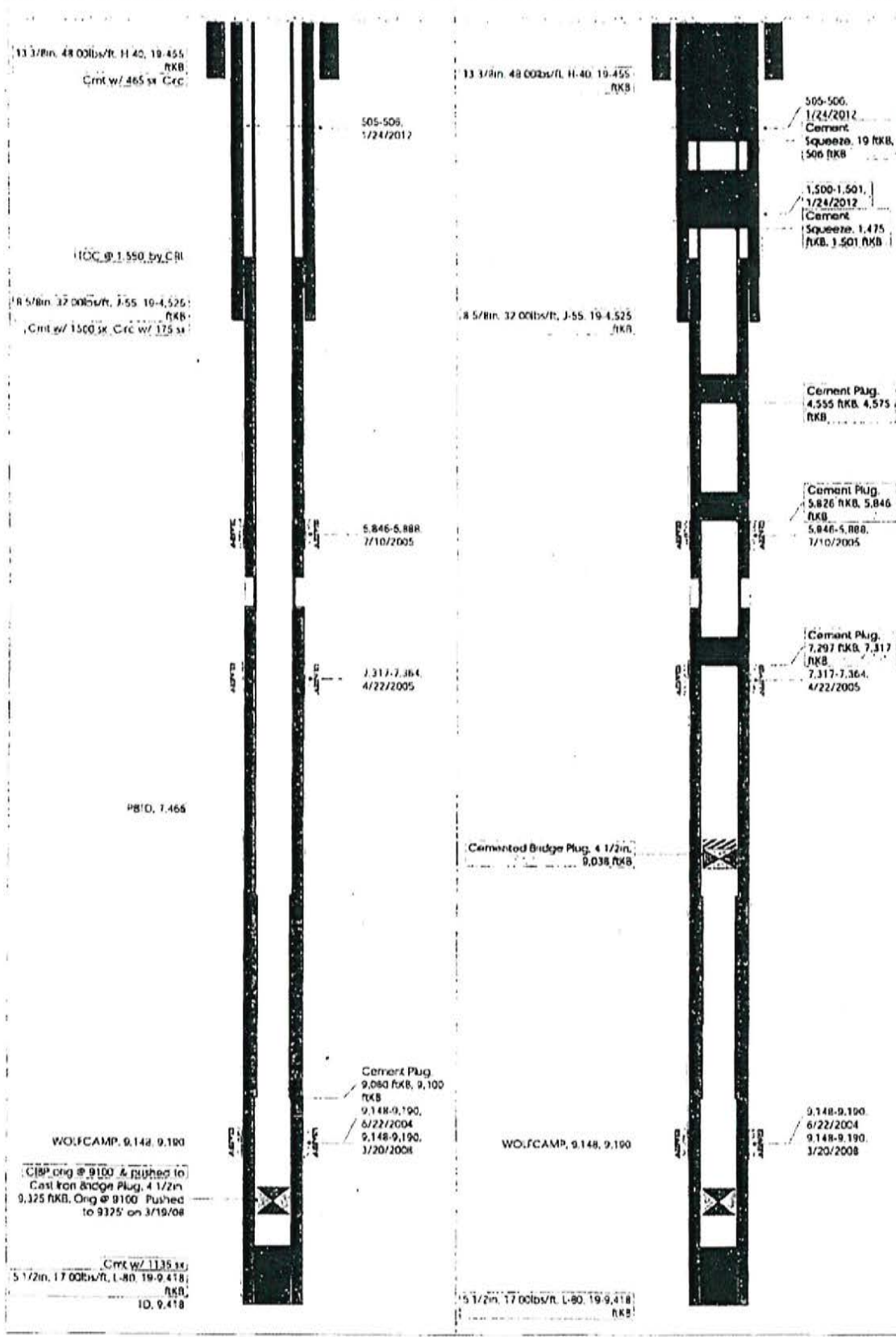
Application for Authorization to Inject list of wells within 1/2 mile radius that penetrate injection zone, form C-108 Item #VI.

WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #005	INJ	02/29/04	2310' FNL & 1650' FWL UL F, Sec 23, T12S R38E	9793'
TBAU #017	OIL	10/03/03	1650' FSL & 1650' FWL UL K, Sec 23, T12S R38E	9265'
TBAU #022	OIL	08/26/03	990' FSL & 1200' FWL UL M, Sec 23, T12S R38E	9225'
TBAU #021	INJ	11/02/87	330' FSL & 1650' FWL UL N, Sec 23, T12S R38E	12650'
TBAU #016	INJ	05/23/03	1980' FSL & 660' FWL UL L, Sec 23, T12S R38E	9235'
TBAU #020 (SEE P&A WBD BELOW)	P&A	05/11/04	990' FSL & 2170' FEL UL O, Sec 23, T12S R38E	9418'

Well Config: VERTICAL - Original Hole, 1/28/2012 2:58:51 PM

Schematic - Actual

Schematic - Proposed



INJECTION WELL DATA SHEET

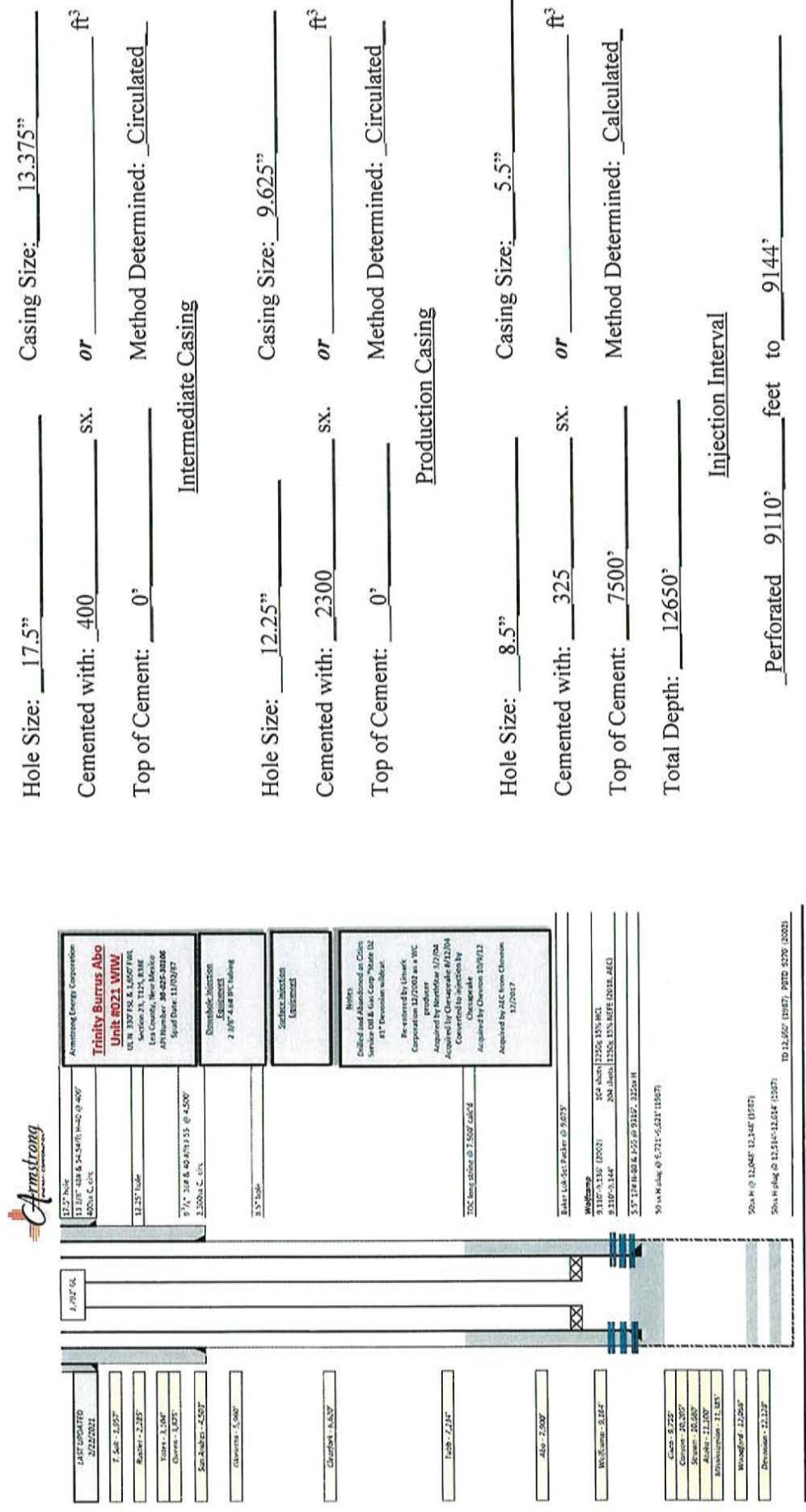
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #021 30-025-30106

WELL LOCATION: 330' FSL & 1650' FWL N 23 12S 38E
FOOTAGE LOCATION SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Baker Lok-Set

Packer Setting Depth: 9075'

Other Type of Tubing/Casing Seal (if applicable): None

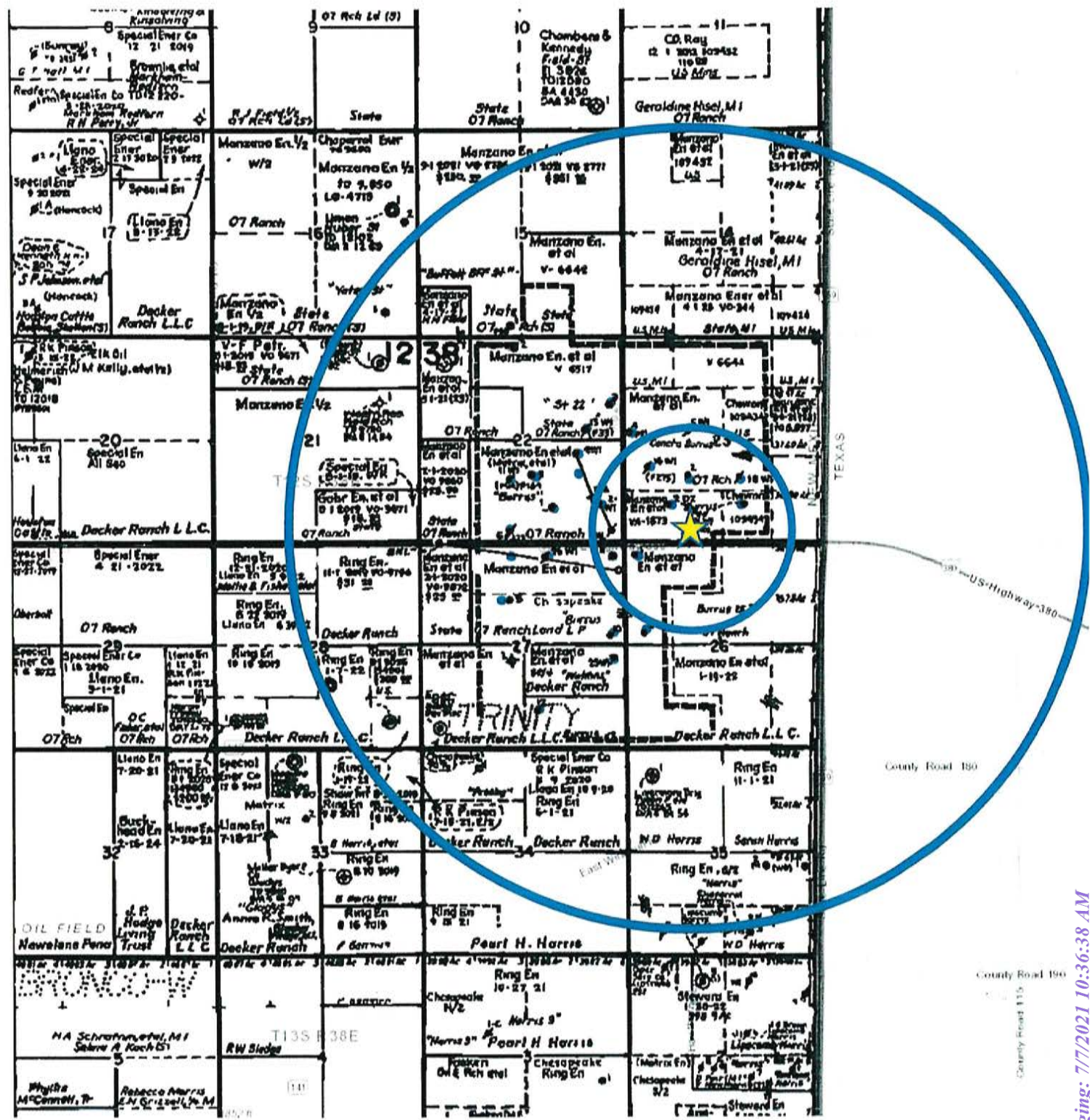
Additional Data

1. Is this a new well drilled for injection? Yes No

If no, for what purpose was the well originally drilled? Well was originally drilled and abandoned as the State DZ #001 Devonian wildcat by Cities Services Oil & Gas Corp.
2. Name of the Injection Formation: Wolfcamp
3. Name of Field or Pool (if applicable): Trinity; Wolfcamp
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No, the well was drilled to the Devonian but pipe was not run.
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Devonian 12020' , Abo 7840' , Tubb 7150' , Glorieta 5370' , San Andres 4460'

TBAU #021 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #021 WIW

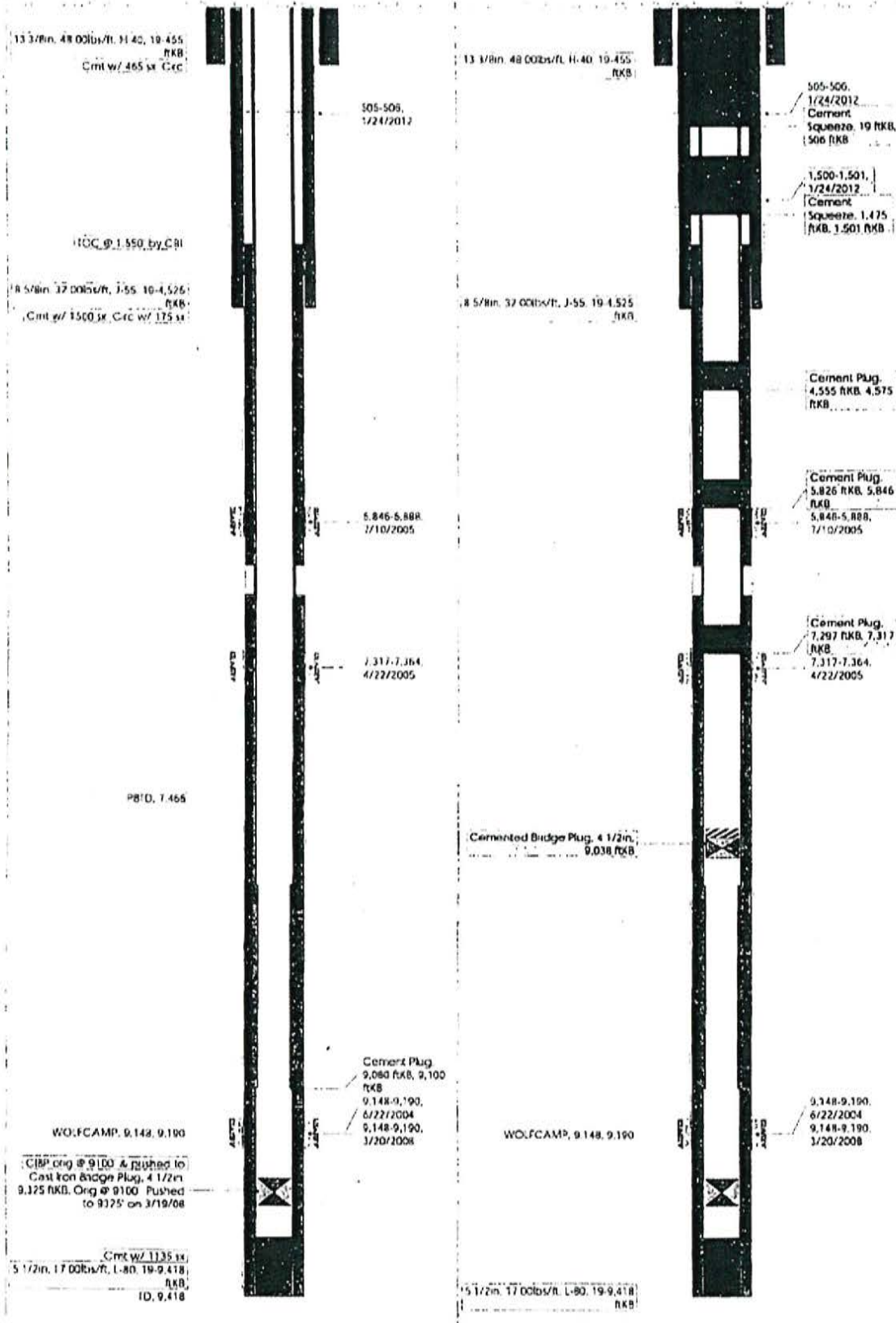
Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #005	INJ	02/29/04	2310' FNL & 1650' FWL UL F, Sec 23, T12S R38E	9793'
TBAU #017	OIL	10/03/03	1650' FSL & 1650' FWL UL K, Sec 23, T12S R38E	9265'
TBAU #018	INJ	01/28/04	1650' FSL & 2200' FEL UL J, Sec 23, T12S R38E	9800'
TBAU #022	OIL	08/26/03	990' FSL & 1200' FWL UL M, Sec 23, T12S R38E	9225'
TBAU #002H	INJ	03/02/01	990' FSL & 600' FEL UL P, Sec 22, T12S R38E	9549'
TBAU #023	OIL	09/08/03	330' FNL & 330' FWL UL D, Sec 26, T12S R38E	9260'
TBAU #008	OIL	07/16/03	330' FNL & 330' FEL UL A, Sec 27, T12S R38E	9164'
TBAU #016	INJ	05/23/03	1980' FSL & 660' FWL UL L, Sec 23, T12S R38E	9235'
TBAU #020 (SEE P&A WBD BELOW)	P&A	05/11/04	990' FSL & 2170' FEL UL O, Sec 23, T12S R38E	9418'

Well Config: VERTICAL - Original Hole, 1/25/2012 2:58:51 PM

Schematic - Actual

Schematic - Proposed



INJECTION WELL DATA SHEET

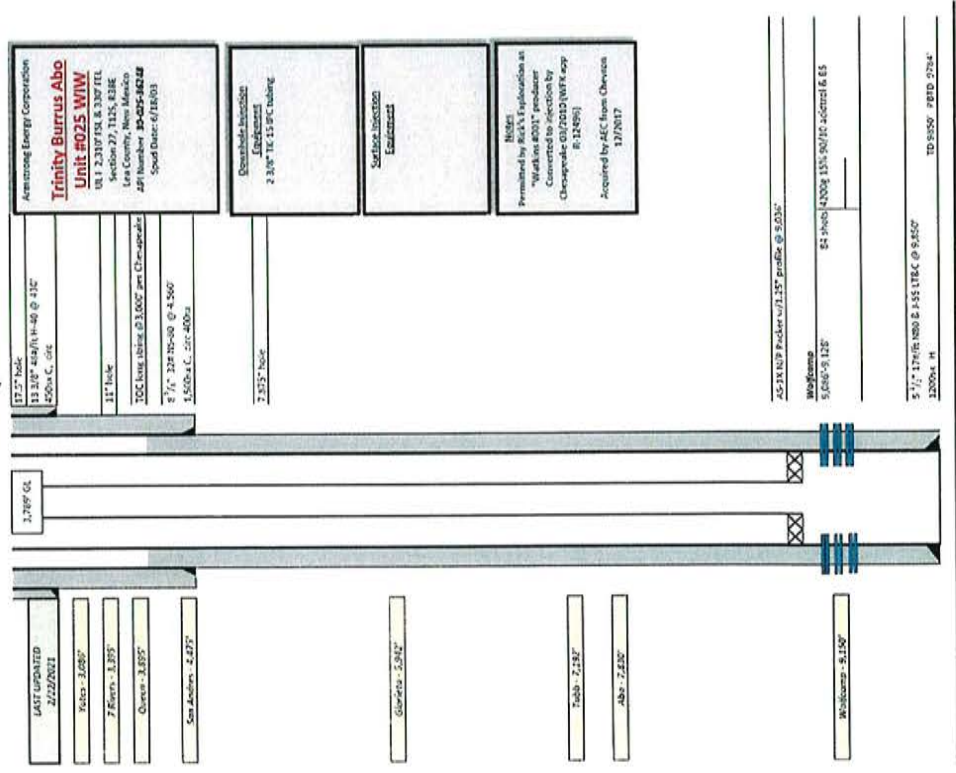
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #025 30-025-36248

WELL LOCATION: 2310' FSL & 330' FEL I 27 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



Hole Size: 17.5" Casing Size: 13.375"

Cemented with: 450 sx. or ft³

Top of Cement: 0' Method Determined: Circulated

Intermediate Casing

Hole Size: 11" Casing Size: 8.625"

Cemented with: 1500 sx. or ft³

Top of Cement: 0' Method Determined: Circulated

Production Casing

Hole Size: 7.875" Casing Size: 5.5"

Cemented with: 1200 sx. or ft³

Top of Cement: 3000' Method Determined: CBL

Total Depth: 9850'

Injection Interval

Perforated 9086' feet to 9128'

(Perforated or Open Hole; indicate which)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: AS-IX

Packer Setting Depth: 9036'

Other Type of Tubing/Casing Seal (if applicable): None

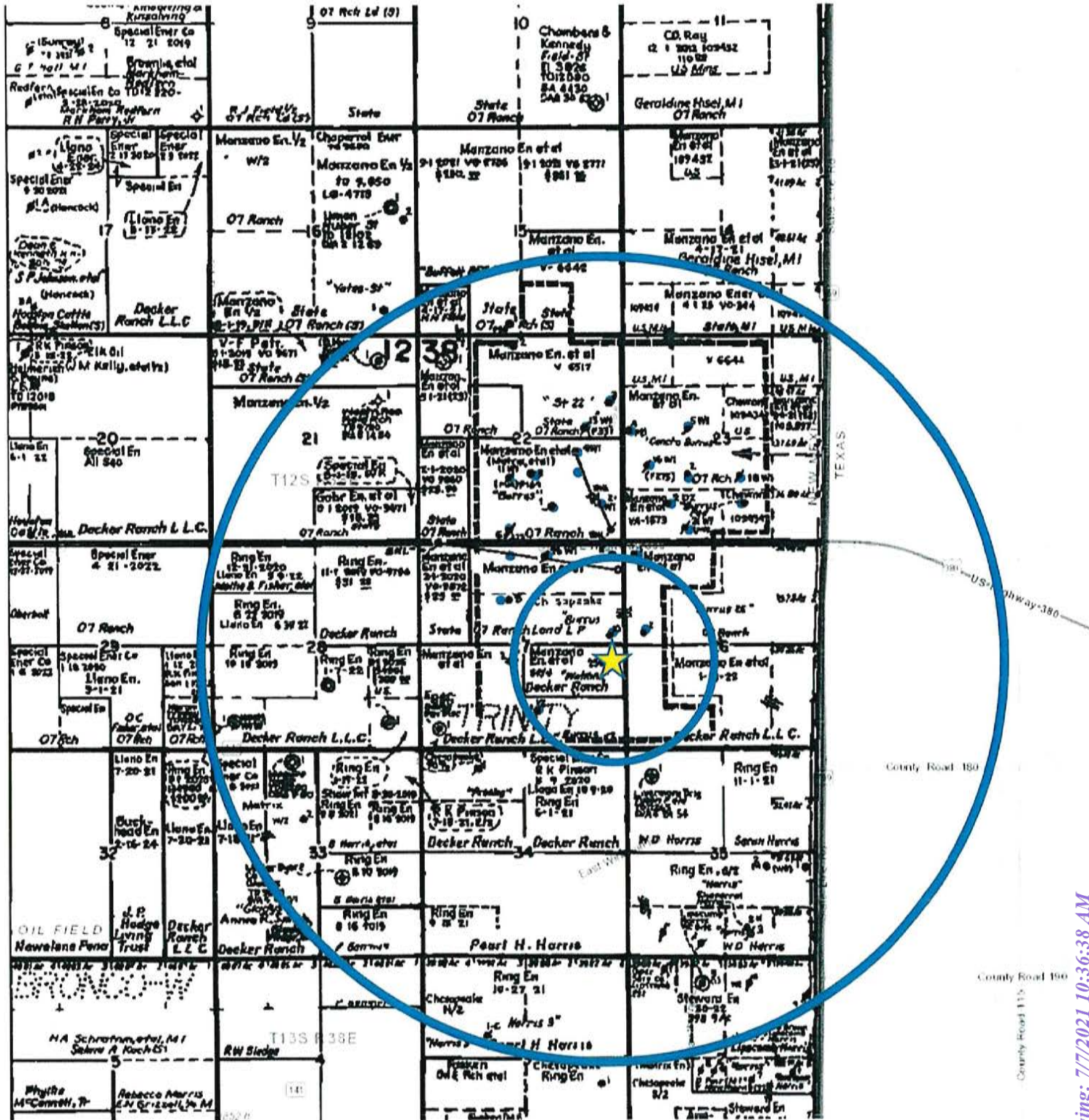
Additional Data

1. Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? Well was originally drilled as the Watkins #001 producer by Rick's Exploration
2. Name of the Injection Formation: Wolfcamp
3. Name of Field or Pool (if applicable): Trinity; Wolfcamp
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

Devonian 12020'. Abo 7840'. Tubb 7150'. Glorieta 5370'. San Andres 4460'

TBAU #025 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

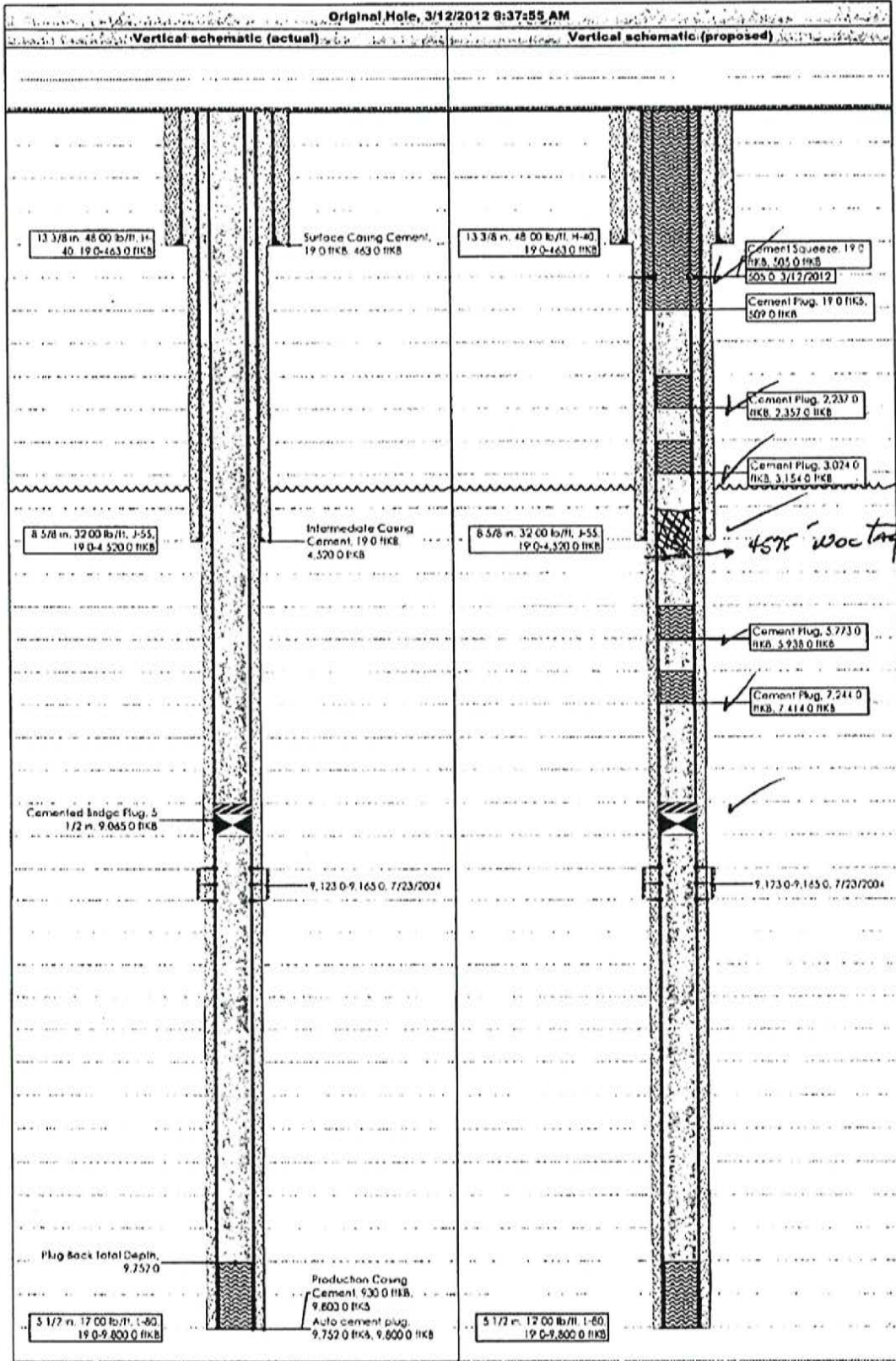
Trinity Burrus Abo Unit #025 WIW

Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #027	OIL	10/30/03	2310' FNL & 330' FEL UL H, Sec 27, T12S R38E	9275'
TBAU #028	INJ	06/12/05	2240' FSL & 2310' FWL UL K, Sec 27, T12S R38E	9814'
TBAU #012	OIL	03/17/05	990' FSL & 2270' FEL UL O, Sec 27, T12S R38E	9404'
TBAU #024 (SEE P&A WBD BELOW)	P&A	06/12/04	2228' FNL & 524' FWL UL 3, Sec 26, T12S R38E	9800'

Well ID: 819507
Well Name: TBAU 24
Location: SEC 26-12S-38E, 2228 FNL & 524 FWL
County: LEA State: NEW MEXICO
District: PERMIAN

Wellbore Schematic



INJECTION WELL DATA SHEET

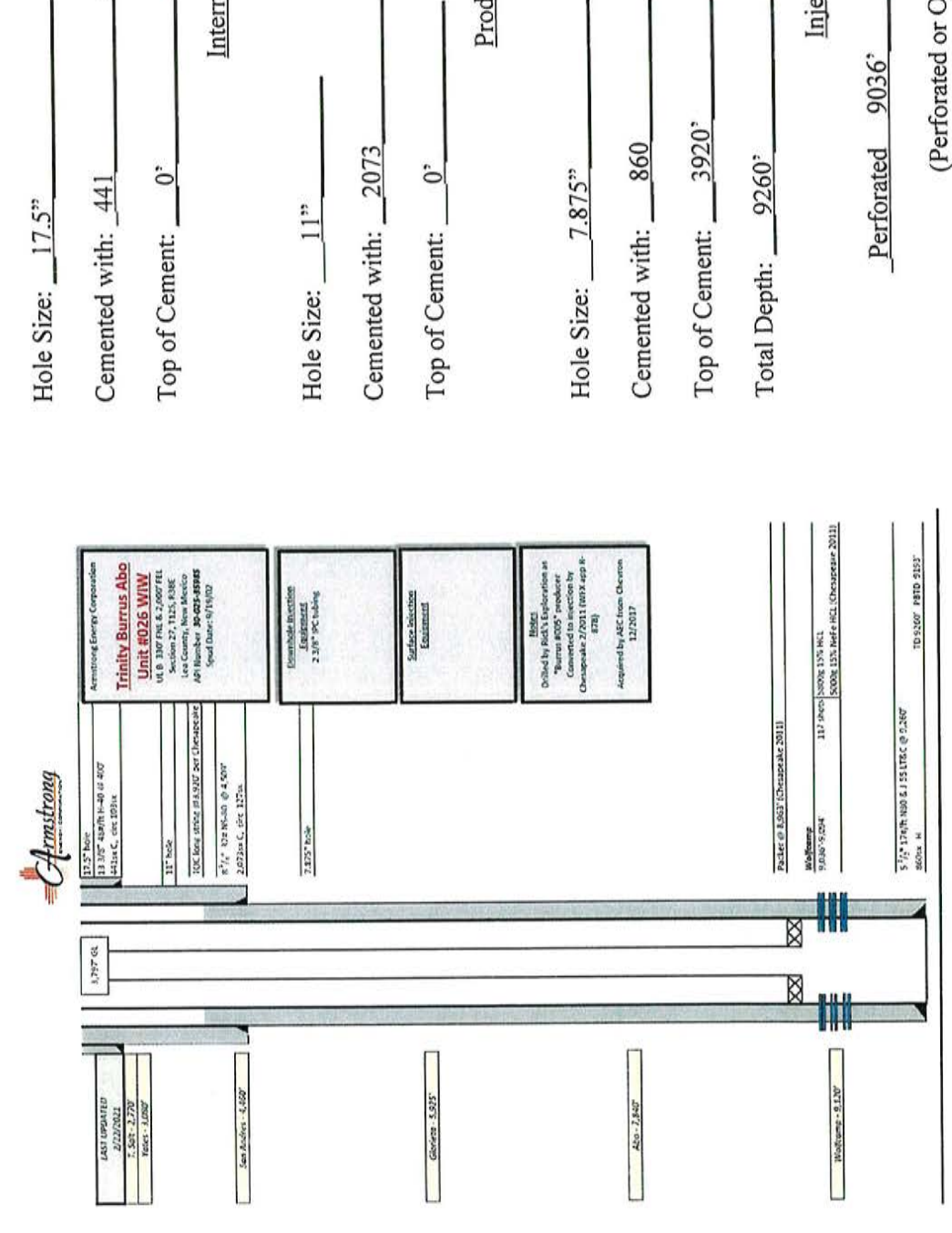
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #026 30-025-35985

WELL LOCATION: 330' FNL & 2000' FEL B 27 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC
WELL CONSTRUCTION DATA



Hole Size: 17.5" Casing Size: 13.375"

Cemented with: 441 SX. or 0' ft³

Top of Cement: 0' Method Determined: Circulated

Intermediate Casing

Hole Size: 11" Casing Size: 8.625"

Cemented with: 2073 SX. or 0' ft³

Top of Cement: 0' Method Determined: Circulated

Production Casing

Hole Size: 7.875" Casing Size: 5.5"

Cemented with: 860 SX. or 0' ft³

Top of Cement: 3920' Method Determined: CBL

Total Depth: 9260'

Injection Interval

Perforated 9036' feet to 9094'

(Perforated or Open Hole; indicate which)

Armstrong Energy Corporation

Trinity Burrus Abo Unit #026 WNW
 US B 330' FNL & 2000' FEL
 Sections 27, 12S, R38E
 Lee County, New Mexico
 APN Number: 30-025-35985
 Spot Count: 17400

Wellbore Construction Details:

- 17.5" Hole: 13 3/8" 4847ft 1-40 @ 400' (441ft @ 100' C, sec 1031x)
- 11" Hole: 2073ft @ 4.500' (2073ft @ 115ft)
- 2.310" 90' tubing
- Surface Injection Equipment
- 5.5" Hole: 860ft @ 8.625' (860ft @ 115ft)

Wellbore Completion:

- Perforated @ 9036' (Chaparral 2011)
- Wellbore: 9036-9094' (11' open) 500ft 15% HCL (Chaparral 2011)
- 5 1/2" 1740ft 160 & 11 5/16ft @ 2.600' (860ft @ 115ft)

Acquired by AEC from Chevron 11/2011

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Baker Lok-Set

Packer Setting Depth: 8963'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes X No

If no, for what purpose was the well originally drilled? Well was originally drilled as the Burrus #005 producer by Rick's Exploration

2. Name of the Injection Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity: Wolfcamp

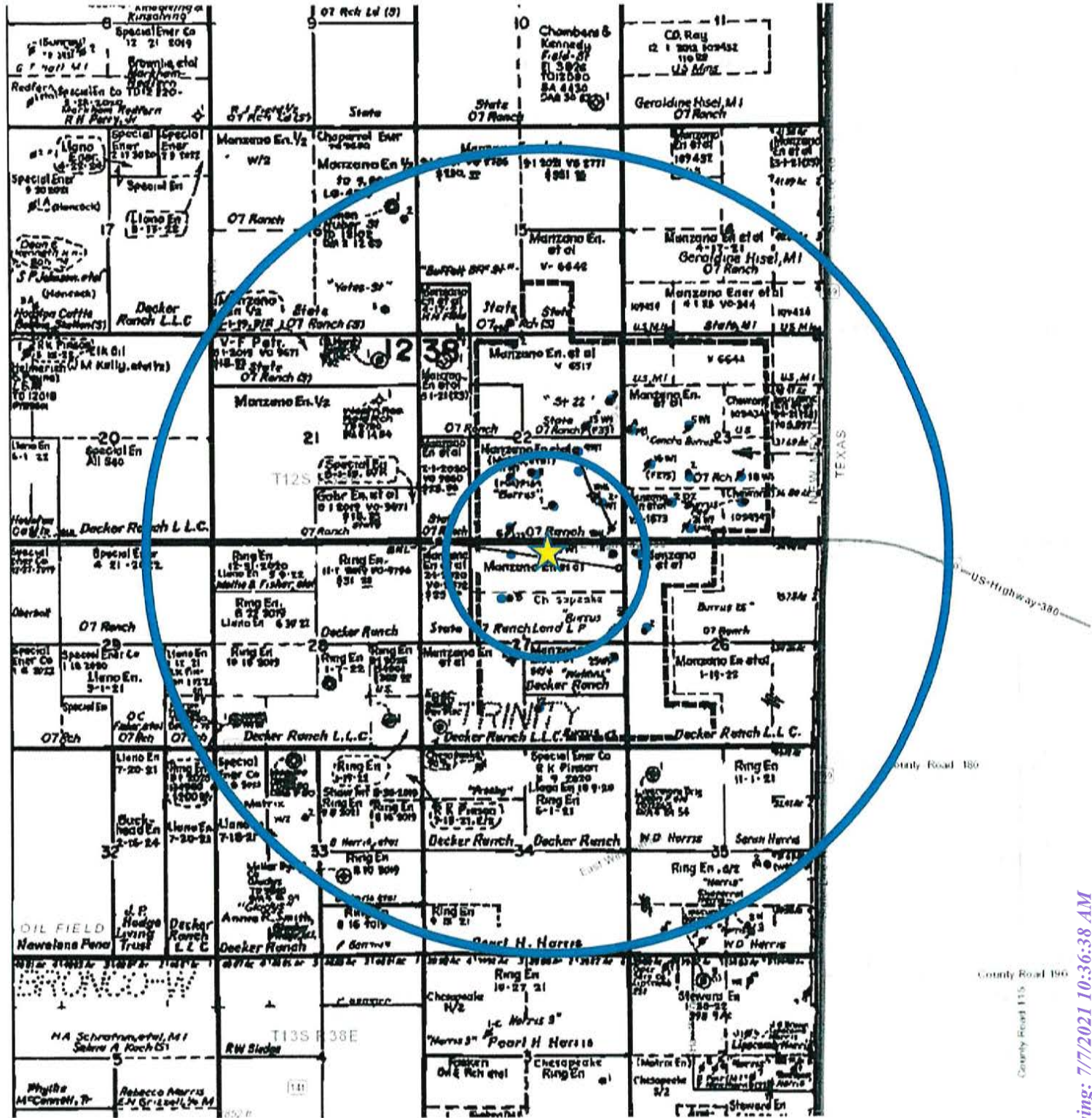
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Devonian 12020', Abo 7840', Tubb 7150', Glorieta 5370', San Andres 4460'

TBAU #026 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
 PO Box 1973
 Roswell, NM 88202
 575-625-2222

Trinity Burrus Abo Unit #026 WIW

Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

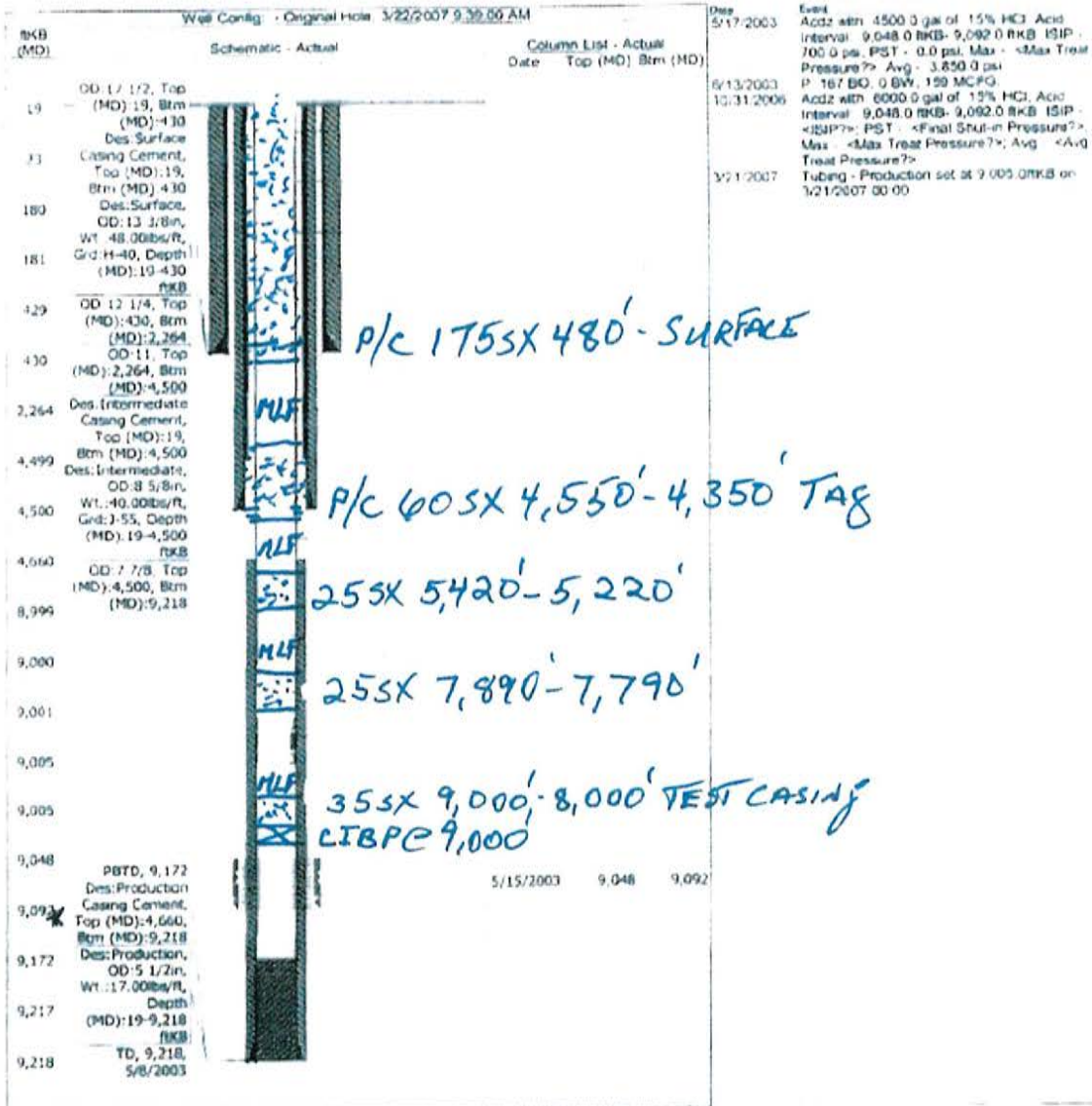
WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #011	INJ	11/13/02	1650' FSL & 2310' FWL UL K, Sec 22, T12S R38E	9240'
TBAU #001	OIL	04/11/00	900' FSL & 1859' FEL UL O, Sec 22, T12S R38E	12036'
TBAU #002H	INJ	03/02/01	990' FSL & 600' FEL UL P, Sec 22, T12S R38E	9549'
TBAU #009	OIL	08/07/04	1473' FNL & 2056' FWL UL F, Sec 27, T12S R28E	9800'
TBAU #003	OIL	07/03/01	1720' FSL & 2310' FEL UL J, Sec 22, T12S R38E	9184'
TBAU #008	OIL	07/16/03	330' FNL & 330' FEL UL A, Sec 27, T12S R38E	9164'
TBAU #023	OIL	09/08/03	330' FNL & 330' FWL UL D, Sec 26, T12S R38E	9260'
TBAU #027	OIL	10/30/03	2310' FNL & 330' FEL UL H, Sec 27, T12S R38E	9275'
TBAU #007 (SEE P&A WBD BELOW)	P&A	04/17/03	330' FNL & 2310' FWL UL C, Sec 27, T12S R38E	9218'

Wellbore Schematic
TBAU 7



Field: Trinity
 County: LEA
 State: NEW MEXICO
 Location: SEC 27-12S-38E, 330 FNL & 2310 FWL
 Elevation: GL 3,799.00 KB 3,818.00
 KB Height: 19.00

Spud Date: 4/17/2003
 API #: 3002536187
 CHK Property #: 896682
 1st Prod Date: 5/19/2003
 PBTD: Original Hole - 9172.0
 TD: 9,218.0



Start Date	String	Wellbore	Log No.	Plant	Amount (mcsk)	Class	Yield (lb/mcsk)	Density (lb/gal)	Comments
4/19/2003	Surface, 430.0ftKB	Original Hole			440	C			2% CaCl ₂ , 25 pps CF
4/26/2003	Intermediate, 4,500.0ftKB	Original Hole		Lead	1,350	C			50/50 POZ, 5% salt, 10% gel, 38 Gilsomite, 25W CF
4/26/2003	Intermediate, 4,500.0ftKB	Original Hole		Tail	200	C			1% CaCl ₂
5/11/2003	Production, 9,218.0ftKB	Original Hole		Lead	425	H			50/50 POZ, 5% salt, 2% gel, 4% D167, 2% D65
5/11/2003	Production, 9,218.0ftKB	Original Hole		Tail	175	H			50/50 POZ, 5% salt, 2% gel, 4% D167, 2% D65

INJECTION WELL DATA SHEET

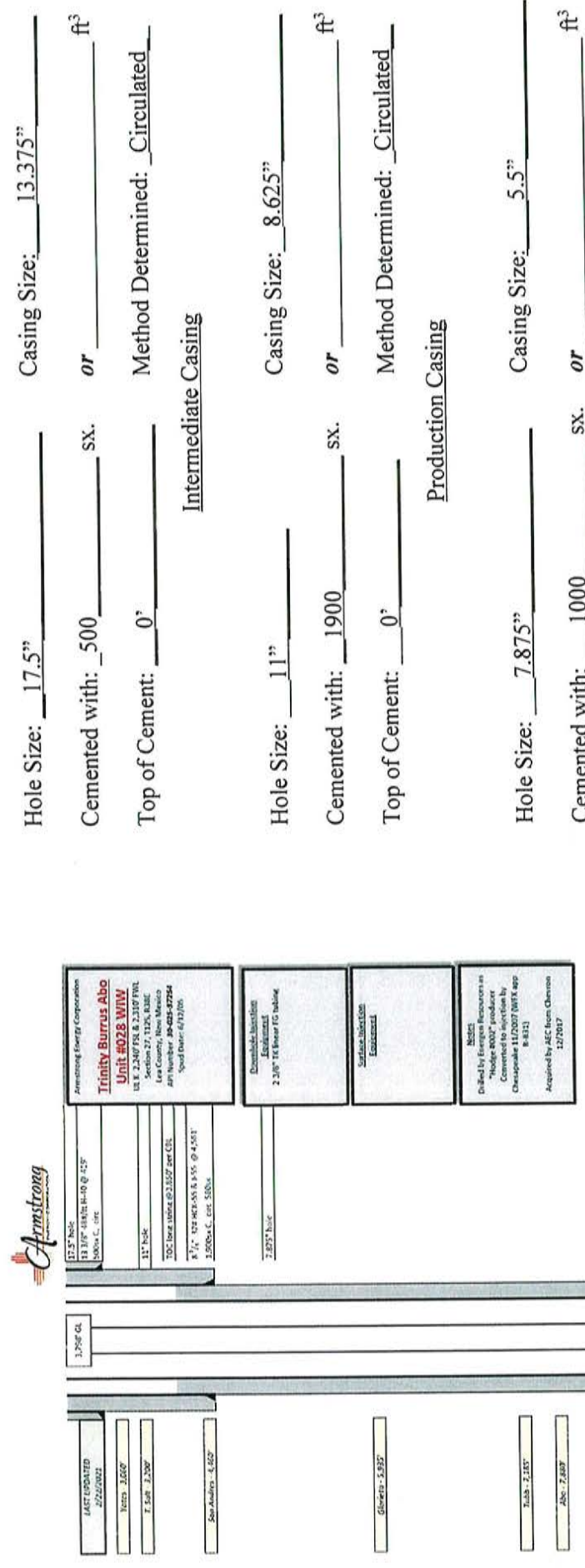
Side 1

OPERATOR: Armstrong Energy Corporation

WELL NAME & NUMBER: Trinity Burrus Abo Unit #028 30-025-37254

WELL LOCATION: 2240' F&L & 2310' FWL K 27 12S 38E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC WELL CONSTRUCTION DATA



Side 2

INJECTION WELL DATA SHEET

Tubing Size: 2.375" Lining Material: Plastic

Type of Packer: Baker Lok-Set

Packer Setting Depth: 9016'

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

1. Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled? Well was originally drilled as the Hodge #002 producer by Energen Resources

2. Name of the Injection Formation: Wolfcamp

3. Name of Field or Pool (if applicable): Trinity; Wolfcamp

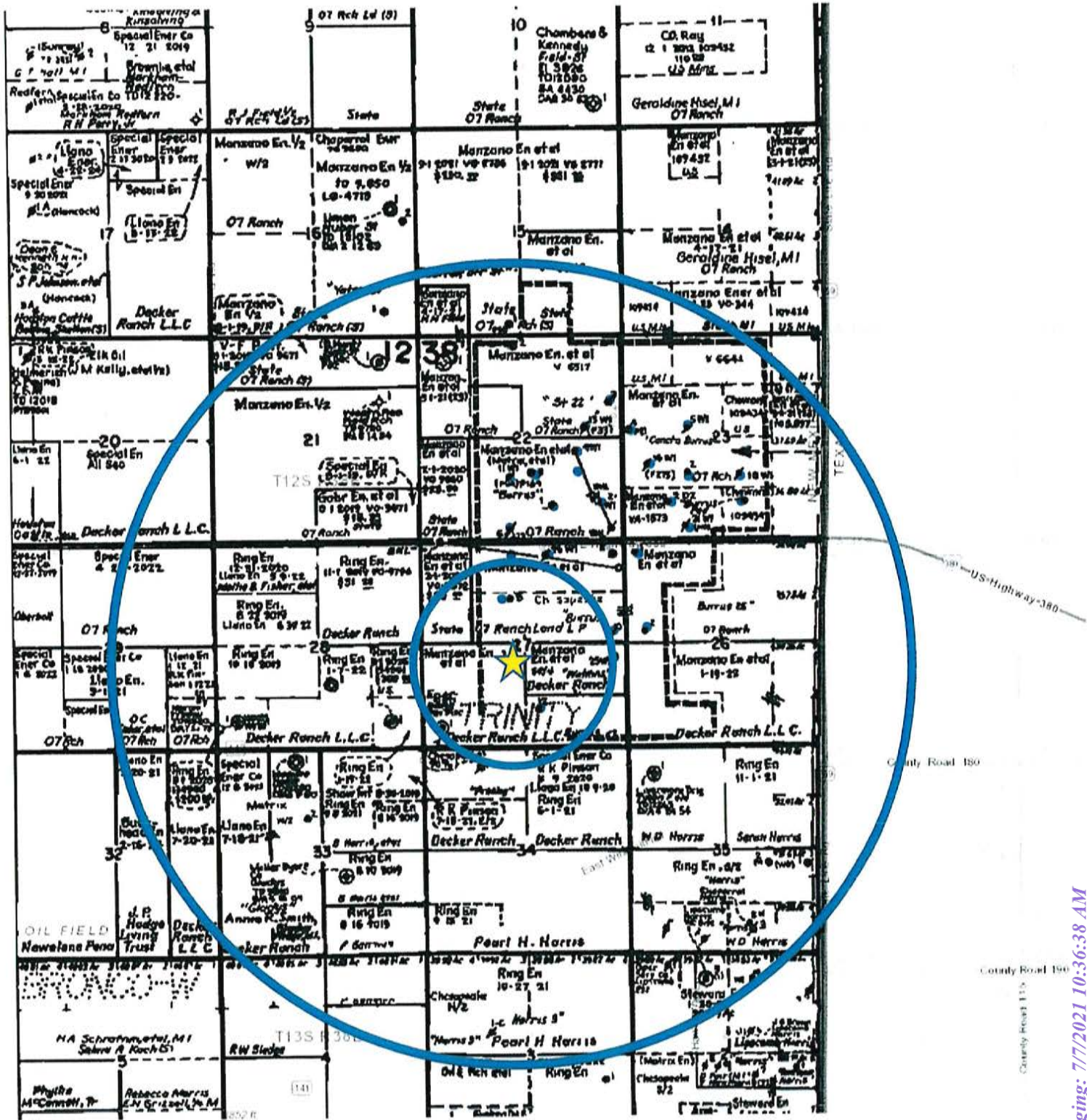
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

Devonian 12020' ; Abo 7840' ; Tubb 7150' ; Glorieta 5370' ; San Andres 4460'

TBAU #028 AOI

0.5 mile radius and 2 mile radius



Armstrong Energy Corporation
PO Box 1973
Roswell, NM 88202
575-625-2222

Trinity Burrus Abo Unit #028 WIW

Application for Authorization to Inject list of wells within ½ mile radius that penetrate injection zone, form C-108 Item #VI.

WELL NAME	TYPE	DATE DRILLED	LOCATION	DEPTH
TBAU #009	OIL	08/07/04	1473' FNL & 2056' FWL UL F, Sec 27, T12S R28E	9800'
TBAU #012	OIL	03/17/05	990' FSL & 2270' FEL UL O, Sec 27, T12S R38E	9404'
TBAU #025	INJ	04/30/03	2310' FSL & 330' FEL UL I, Sec 27, T12S R38E	13720'
HODGE SWD #1	SWD	09/18/97	495' FSL & 495' FWL UL M, Sec 27, T12S R38E	12190'



Catalyst Oilfield Services
 11999 E Hwy 158
 Gardendale, TX 79758
 (432) 563-0727
 Fax: (432) 224-1038

Water Analysis Report

Customer: Armstrong Energy Sample #: 153888
 Area: Permian Analysis ID #: 131250
 Lease: TBAU
 Location: Water Well 0
 Sample Point: SE Water Well #1

Sampling Date:	3/10/2021	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	3/18/2021	Chloride:	210.0	5.92	Sodium:	86.6	3.77
Analyst:	Catalyst	Bicarbonate:	168.4	2.76	Magnesium:	20.5	1.69
TDS (mg/l or g/m3):	640.8	Carbonate:			Calcium:	88.4	4.41
Density (g/cm3):	1.003	Sulfate:	60.0	1.25	Potassium:	2.9	0.08
Hydrogen Sulfide:	BDL	Borate*:	2.8	0.02	Strontium:	1.0	0.02
Carbon Dioxide:	0	Phosphate*			Barium:	0.2	0.
Comments:		*Calculated based on measured elemental boron and phosphorus.			Iron:	0.0	0.
		pH at time of sampling:		7.5	Manganese:	0.004	0.
		pH at time of analysis:			Conductivity (micro-ohms/cm):		2148
		pH used in Calculation:		7.5	Resistivity (ohm meter):		4.6555
		Temperature @ lab conditions (F):		75			

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.15	1.75	-1.78	0.00	-1.85	0.00	-2.01	0.00	0.38	0.00
100	0.28	3.85	-1.77	0.00	-1.78	0.00	-1.98	0.00	0.25	0.00
120	0.42	6.31	-1.76	0.00	-1.68	0.00	-1.95	0.00	0.14	0.00
140	0.56	9.11	-1.73	0.00	-1.57	0.00	-1.90	0.00	0.05	0.00
160	0.72	12.26	-1.70	0.00	-1.43	0.00	-1.85	0.00	-0.01	0.00
180	0.87	15.76	-1.67	0.00	-1.28	0.00	-1.79	0.00	-0.05	0.00
200	1.03	19.27	-1.62	0.00	-1.12	0.00	-1.73	0.00	-0.07	0.00
220	1.19	23.12	-1.58	0.00	-0.95	0.00	-1.66	0.00	-0.08	0.00



Catalyst Oilfield Services
 11999 E Hwy 158
 Gardendale, TX 79758
 (432) 563-0727
 Fax: (432) 224-1038

Water Analysis Report

Customer: Armstrong Energy Sample #: 153889
 Area: Permian Analysis ID #: 131251
 Lease: TBAU
 Location: Water Well 0
 Sample Point: SE Water Well #2

Sampling Date:	3/10/2021	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	3/18/2021	Chloride:	164.9	4.65	Sodium:	91.0	3.96
Analyst:	Catalyst	Bicarbonate:	283.0	4.64	Magnesium:	22.6	1.86
TDS (mg/l or g/m3):	722	Carbonate:			Calcium:	93.1	4.64
Density (g/cm3):	1.003	Sulfate:	60.0	1.25	Potassium:	3.2	0.08
Hydrogen Sulfide:	BDL	Borate*:	2.9	0.02	Strontium:	1.1	0.02
Carbon Dioxide:	0	Phosphate*			Barium:	0.2	0.
Comments:		*Calculated based on measured elemental boron and phosphorus.			Iron:	0.0	0.
					Manganese:	0.003	0.
		pH at time of sampling:		7.5	Conductivity (micro-ohms/cm):		1038
		pH at time of analysis:			Resistivity (ohm meter):		9.6339
		pH used in Calculation:		7.5			
		Temperature @ lab conditions (F):		75			

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.39	8.76	-1.77	0.00	-1.84	0.00	-1.98	0.00	0.37	0.00
100	0.52	12.26	-1.77	0.00	-1.77	0.00	-1.95	0.00	0.23	0.00
120	0.65	16.46	-1.75	0.00	-1.68	0.00	-1.92	0.00	0.12	0.00
140	0.80	21.02	-1.73	0.00	-1.57	0.00	-1.87	0.00	0.04	0.00
160	0.95	26.27	-1.70	0.00	-1.43	0.00	-1.82	0.00	-0.02	0.00
180	1.11	31.52	-1.67	0.00	-1.29	0.00	-1.76	0.00	-0.06	0.00
200	1.27	36.78	-1.63	0.00	-1.13	0.00	-1.70	0.00	-0.09	0.00
220	1.43	42.03	-1.59	0.00	-0.96	0.00	-1.63	0.00	-0.09	0.00



Catalyst Oilfield Services
 11999 E Hwy 158
 Gardendale, TX 79758
 (432) 563-0727
 Fax: (432) 224-1038

Water Analysis Report

Customer: Armstrong Energy Sample #: 154351
 Area: Permian Analysis ID #: 131342
 Lease: TBAU
 Location: Battery 0
 Sample Point: Line

Sampling Date: 3/15/2021 Analysis Date: 3/23/2021 Analyst: Catalyst TDS (mg/l or g/m3): 93232.6 Density (g/cm3): 1.065 Hydrogen Sulfide: 0 Carbon Dioxide: 0 Comments:	Anions Chloride: 55876.8 mg/l 1576.08 meq/l Bicarbonate: 163.5 mg/l 2.68 meq/l Carbonate: mg/l meq/l Sulfate: 900.0 mg/l 18.74 meq/l Borate*: 485.0 mg/l 3.06 meq/l Phosphate* *Calculated based on measured elemental boron and phosphorus. pH at time of sampling: 7.35 pH at time of analysis: pH used in Calculation: 7.35 Temperature @ lab conditions (F): 75	Cations Sodium: 30400.0 mg/l 1322.33 meq/l Magnesium: 877.4 mg/l 72.18 meq/l Calcium: 3841.0 mg/l 191.67 meq/l Potassium: 539.7 mg/l 13.8 meq/l Strontium: 116.0 mg/l 2.65 meq/l Barium: 1.6 mg/l 0.02 meq/l Iron: 28.3 mg/l 1.02 meq/l Manganese: 3.255 mg/l 0.12 meq/l Conductivity (micro-mhos/cm): 138134 Resistivity (ohm meter): .0724
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Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.78	10.55	-0.40	0.00	-0.43	0.00	-0.14	0.00	1.11	0.96
100	0.81	12.15	-0.45	0.00	-0.41	0.00	-0.15	0.00	0.93	0.64
120	0.83	14.07	-0.48	0.00	-0.36	0.00	-0.15	0.00	0.77	0.64
140	0.86	15.99	-0.51	0.00	-0.29	0.00	-0.14	0.00	0.64	0.64
160	0.89	18.23	-0.52	0.00	-0.21	0.00	-0.13	0.00	0.52	0.64
180	0.94	20.79	-0.53	0.00	-0.11	0.00	-0.11	0.00	0.42	0.64
200	0.99	23.03	-0.54	0.00	0.01	6.08	-0.09	0.00	0.35	0.64
220	1.05	25.59	-0.54	0.00	0.13	103.94	-0.06	0.00	0.28	0.32

[[p	Depths	Owner type	Lease Number	Name	Street Address	City	State	Zip	Date of Address	County Posting Date	State/Fed Posting Date	Comments
NW4	All	UL	N/A	07 Ranch Mineral Limited Partnership	P.O. Box 1090	Plains	TX	79355	2018	44287	N/A	No current address found in Lea County Clerk's Office or on Accrunt
NE4SW4	All	SIT	Fee	Allan L. Mangun	3100 Mahogany Run Circle NW	North Canton	OH	44720	2017	44287	No current address was found in Lea County Clerk's Office or on Accrunt	
NE4SW4	All	UL	Fee	Ann D. Allison	5115 2nd Street Unit 6	Lubbock	TX	79416	2020	44287	44287	
NE4SW4	All	SIT	Fee	Ann Mangun	7156 Andiron Circle NW	Canton	OH	44718	2007	44287	No current address was found in Lea County Clerk's Office or on Accrunt	
All	All	SIT	N/A	Apache Corporation	2000 Post Oak Boulevard Suite 500	Oklahoma City	OK	73104	2020	44287	N/A	
Lot 1	All Depths	WI	NMNM 109434	Armstrong Energy Corporation	P.O. Box 1973	Roswell	NM	88202	2021	44287	44307	
Lots 2-4	All	WI	Fee	Axis Energy Corporation	P.O. Box 2107	Roswell	NM	88202	2020	44298	N/A	Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/826 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
Lot 1	All Depths	SIT	NMNM 109434	B & A Bradford Family Limited Partnership	P.O. Box 600070	Dallas	TX	75360	2019	44287	44307	No current address was found in the Lea County Clerk's Office or on Accrunt
All	All	SIT	N/A	Bea Etta Stephens, Trustee of the Bea H. Stephens Trust, dated 10/07/1991	1665 Caille Court	Fort Mill	SC	29708	2018	44287	N/A	No current address found in Lea County Clerk's Office or on Accrunt
Lot 1	All Depths	WI	NMNM 109434	Blake Arnold Working Interest Oil & Gas Properties LLC	6816 North Robinson Avenue	Oklahoma City	OK	73116	2020	44287	44307	
		MIN		Bureau of Land Management	301 Dinosaur Trail	Santa Fe	NM	87508				
NE4SW4	All	SIT	Fee	Bruce Burns	425 Market Street Suite 220	San Francisco	CA	94105	2007	44287	No current address was found in Lea County Clerk's Office or on Accrunt	
SE4NW4	All	SIT	Fee	Carl Edward Oberholzer, Jr. Successor Trustee of the Oberholzer Family Trust f/b/o Carl Edward Oberholzer, Jr.	4516 Lovers Lane Apartment 417	Dallas	TX	78225	2019	44287	No current address was found in Lea County Clerk's Office or on Accrunt	
Lots 2-4	All	SIT	Fee	Carol Ann Cantrell, Successor Trustee of the Oberholzer Family Trust f/b/o Carol Ann Cantrell	8602 Baltimore Drive Apartment 3	Dallas	TX	75225	2020	44298	N/A	
NE4	All	UL	Fee	CBR Oil Properties LLC	P.O. Box 1518	Roswell	NM	88202	2017	44287	No current address was found in Lea County Clerk's Office or on Accrunt	
Lot 1	All Depths	WI	NMNM 109434	Chimney Rock Oil & Gas, LLC	P.O. Box 1973	Roswell	NM	88202	2020	44287	44307	
NW4	All	UL	N/A	Cry Bank, Successor Trustee of the Anita Field Irrevocable Trust, dated 4/03/1986	P.O. Box 2307	Lubbock	TX	79408	2021	44287	N/A	
NE4SW4	All	SIT	Fee	Claire Olsen Pieri	775 Berkshire Drive	Millbrae	CA	94030	2021	44287	44287	
Lots 2-4	All	WI	Fee	Claude C. Arnold Working Interest Oil & Gas Properties, LLC	5600 North May Avenue Suite 125	Oklahoma City	OK	73116	2020	44298	N/A	Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/826 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.

SE4NW4	All	SIT	Fee	Claudia Sue Means, Successor Trustee of the Oberholtzer Family Trust f/b/o Claudia Sue Means	30341 Calle Sonora	Temecula	CA	92951	2019	44287	Accruint	No current address was found in Lea County Clerk's Office or on	
Lots 2-4	All	UL	Fee	Clint Field Burrus	2630 Beaver Lane	New Braunfels	TX	78132	2021	44288	N/A	Leased at LCR 2132/703 for 3 years from 3/01/2018 and included a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.	
NE4SW4	All	UL	Fee	COG Operating, LLC	600 West Illinois Avenue	Midland	TX	79701	2021	44287			
NE4SW4	All	UL	Fee	Commissioner of Public Lands	PO Box 1148	Santa Fe	NM	87501	2021	44287			
Lots 2-4	All	SIT	Fee	Concho Oil & Gas LLC	600 West Illinois Avenue	Midland	TX	79701	2021	44287			
	All	SIT	Fee	Cynthia Lynn Anderson, Successor Trustee of the Oberholtzer Family Trust f/b/o Cynthia Lynn Anderson	2056 Brook Way	Montrose	CO	81403	2021	44288	N/A		
NW4	All	UL	N/A	Danglade/Speight Family Oil & Gas L.P., a Texas limited liability company	P.O. Box 35367	Midland	TX	79702	2020	44287	N/A		
NE4SW4	All	SIT	Fee	Darlene Olsen Hecomovich	P.O. Box 90	Cobb	CA	95426	2021	44287			
NE4SW4	All	UL	Fee	Diane M. Landen	6121 Abraham Road/Apartment 1027	Dallas	TX	75231	2020	44287			
NE4SW4	All	UL	Fee	Estate of Dr. L. W. Bruce	2664 4th Avenue	San Diego	CA	92101	1954	44287		No current address was found in Lea County Clerk's Office or on	
NE4SW4	All	UL	Fee	Estate of Einar Peterson	2423 Filbert Street	San Francisco	CA	94103	1953	44287			
NE4SW4	All	UL	Fee	Estate of Gudmund Olsen	167 Dolores Street	San Francisco	CA	94103	1953	44287		No current address was found in Lea County Clerk's Office or on	
NE4SW4	All	UL	Fee	Estate of Harold Muller	241 California Street	San Francisco	CA	94111	1953	44287			
NE4SW4	All	UL	Fee	Estate of Jens Feragen	222 Second Street	San Francisco	CA	94105	1950	44287		No current address was found in Lea County Clerk's Office or on	
NE4SW4	All	UL	Fee	Estate of Kathryn Hannifin McCormick	2705 Westwind Road	Las Cruces	NM	88007	2021	44287			
NE4SW4	All	UL	Fee	Estate of Lonnie Walker	Address Unknown					44287		No address of record was found in Lea County Clerk's Office or on	
NE4SW4	All	UL	Fee	Estate of Myrtle Bruce	2664 4th Avenue	San Diego	CA	92101	1954	44287		No current address was found in Lea County Clerk's Office or on	
NE4SW4	All	UL	Fee	Estate of P.G. Gundlach	4157 Utah Street	San Diego	CA	92104	1943	44287		No current address was found in Lea County Clerk's Office or on	

NE4SW4	All	UL	Fee	Estate of Ragnhild Marie Poulsen Levine	12 Idlewood Road	Kentfield	CA	94904	1953		No current address was found in Lea County Clerk's Office or on Accrunt	
NE4	All	UL	Fee	Field Minerals LLC	P.O. Box 1105	Lovington	NM	88268	2020	44287	No current address found in Lea County Clerk's Office or on Accrunt	
NE4SW4	All	SIT	Fee	First Church of Christ Scientist First Roswell Company	605 South Riverside Drive	Palm Springs	CA	92264	2020	44287	No current address found in Lea County Clerk's Office or on Accrunt	
NE4	All	UL	Fee		P.O. Box 1797	Roswell	NM	88202	2021	44287	No current address found in Lea County Clerk's Office or on Accrunt	
NW4	All	UL	N/A	Geraldine Hise Trustee of the Hise Family Revocable Living Trust, dated 5/22/1997	621 Anthony Drive	Clovis	NM	88101	2018	44287	No current address found in Lea County Clerk's Office or on Accrunt	
Lots 2-4	All	UL	Fee	GHML, LLC	5901 Sarah Court	Austin	TX	78757	2019	44287	Leased at LCR 2132/702 for 3 years from 3/01/2018 and included a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023: No current address was found in the Lea County Clerk's Office or on Accrunt.	
NE4SW4	San Andres Formation to All Depths	WI	Fee	Gunsight Limited Partnership	P.O. Box 1973	Roswell	NM	88202	2021	44298	N/A	
NW4	All	UL	N/A	Guy Field Inwin, SSP	7645 Ponderosa Road	Three Forks	MT	59752	2021	44287	N/A	
Lots 2-4	All	WI	Fee	Hanagan Petroleum Corporation	P.O. Box 1737	Roswell	NM	88202	2020	44298	N/A	Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/826 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
NE4SW4	All	UL	Fee	Hannifin Family Trust	P.O. Box 218	Midland	TX	79702	2014		No current address was found in Lea County Clerk's Office or on Accrunt	
NW4	All	UL	N/A	Holly Jan Senetra, SSP	5130 Fairfax Drive, NW	Albuquerque	NM	87114	2021	44287	N/A	
Lots 2-4	All	WI	Fee	Hutchings Oil Company	P.O. Box 1216	Albuquerque	NM	87103	2019		Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/826 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023: No current address was found in the Lea County Clerk's Office or on Accrunt.	
NE4SW4	All	UL	Fee	James Presley Hooge Living Trust	P.O. Box 565	Lovington	NM	88260	2017		No current address was found in Lea County Clerk's Office or on Accrunt	
NW4	All	UL	N/A	Janet Leigh Montoya	14537 West 73rd Street	Boynton	OK	74422	2015	44287	N/A	No current address was found in the Lea County Clerk's Office or on Accrunt
NW4	All	UL	N/A	Jo Nell Ingram	310 Keyes Drive	Ruidoso	NM	88945	2015	44287	N/A	No current address was found in the Lea County Clerk's Office or on Accrunt
NE4SW4	All	SIT	Fee	Kari Burns Rader	425 Market Street Suite 220	San Francisco	CA	94105	2007		No current address was found in Lea County Clerk's Office or on Accrunt	
NE4SW4	San Andres Formation to All Depths	WI	Fee	Kyle A. Armstrong	P.O. Box 1973	Roswell	NM	88202	2021	44287		

Lot 1	All Depths	SIT	NMNM 109434	Lavana Sue Pruitt	749 North Fountain Road	Wellington	KS	67152	2004	44287	44307	No current address was found in the Lea County Clerk's Office or on Accruint
NE45W4	All	SIT	Fee	Lee Ann Laffler	1699 Southwest Dyer Point Road	Palm City	FL	34990	2007	44287	44307	No current address was found in Lea County Clerk's Office or on Accruint
NW4	All	UL	N/A	Levi Herschel Irwin, SSP	118 North 5th Avenue	Clayton	NM	88415	2021	44287	N/A	
NE45W4	All	UL	Fee	Linda Marie Harton	2011 Borulph Road Suite 200	Santa Fe	NM	87505	2018	44287	44307	No current address was found in Lea County Clerk's Office or on Accruint
Lots 2-4	All	WI	Fee	Lieno Energy, LLC	P.O. Drawer 369	Stillwater	OK	74076	2020	44287	44307	Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/825 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
Lots 2-4	All	WI	Fee	Manzano Energy Partners III, LLC	P.O. Box 1737	Roswell	NM	88202	2020	44298	N/A	Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/825 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
NE45W4	All	UL	Fee	Margot Brown	6237 Southwest 24th Terrace	Topoka	KS	66614	2021	44287	44307	
NE45W4	All	SIT	Fee	Mary Gundlach	4157 Utah Street	San Diego	CA	92104	1953	44287	44307	No current address was found in Lea County Clerk's Office or on Accruint
Lots 2-4	All	SIT	Fee	McCormick, LLC	2715 Westwind Road	Las Cruces	NM	88007	2019	44298	N/A	No current address was found in the Lea County Clerk's Office or on Accruint
NE45W4	All	UL	Fee	Melissa Brown	38 Robinson Road Apartment 5B	Mid Levels	Hong Kong	China	2014	44287	44307	No current address was found in Lea County Clerk's Office or on Accruint
NE45W4	All	SIT	Fee	Melvin P. Gundlach	4157 Utah Street	San Diego	CA	92104	1953	44287	44307	No current address was found in Lea County Clerk's Office or on Accruint
NE45W4	All	UL	Fee	Michael H. Moore	7025 Belcrest Drive	Plano	TX	75024	2021	44287	44307	
Lot 1	All Depths	SIT	NMNM 109434	NH Minerals, LLC	4925 Greenville Avenue Suite 1100	Dallas	TX	75206	2021	44287	44307	
NE45W4	All	UL	Fee	Nuevo Sies, LP	P.O. Box 2588	Roswell	NM	88202	2020	44287	44307	
NE45W4	All	UL	Fee	P.J. Hannifin Family Trust	1225 Gabriel Lane	Fort Worth	TX	76116	2021	44287	44307	
Lots 2-4	All	UL	Fee	Parachute Energy, Ltd	1916 Aberdeen Avenue	Lubbock	TX	79407	2021	44298	N/A	Leased at LCR 2132/154 for 3 years from 3/01/2018 and included a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
NE45W4	All	UL	Fee	Peter C. Brown	10925 Wayzata Boulevard Apartment 207	Minnetonka	MN	55305	2021	44287	44307	
Lots 2-4	All	SIT	Fee	Pitts, LLC	2715 Westwind Road	Las Cruces	NM	88007	2019	44298	N/A	No current address was found in the Lea County Clerk's Office or on Accruint
NW4	All	WI	N/A	Ring Energy, a Nevada corporation	901 West Wall Street, Third Floor	Midland	NM	79701	2021	44287	N/A	
NE45W4	All	SIT	Fee	Robert Burns	425 Market Street Suite 220	San Francisco	CA	94105	2007	44287	44307	No current address was found in Lea County Clerk's Office or on Accruint

NE4SW4	All	SIT	Fee	Robert L. Gundlach	4157 Utah Street	San Diego	CA	92104	1953		No current address was found in Lea County Clerk's Office or on Account	
NE4SW4	All	UL	Fee	Robert Thomas Hartley	P.O. Box 1024	Clavis	NM	88102	2020	44287	44287	
Lots 2-4	All	UL	Fee	Sally Ann Burrus Doherty	4604 102nd Street	Lubbock	TX	79424	2021	44298	N/A	Leased at LCR 2132/701 for 3 years from 3/01/2018 and included a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
Lots 2-4	All	UL	Fee	Sarah K. Burrus	P.O. Box 1090	Plains	TX	79355	2021	44298	N/A	Leased at LCR 2132/704 for 3 years from 3/01/2018 and included a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
Lots 2-4	All	WI	Fee	Scott-Winn, LLC	P.O. Box 1834	Roswell	NM	88202	2021			Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/826 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
Lots 2-4	All	SIT	Fee	Sharon Kay Compton, Successor Trustee of the Oberholzer Family Trust f/b/o Sharon Kay Compton	4374 East 135th Way	Thornton	CO	80241	2020	44298	N/A	
Lots 2-4	All	WI	Fee	Slash Exploration Limited Partnership	P.O. Box 1973	Roswell	NM	88202	2020			Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/826 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.
NE4SW4	All	Operator UL	Fee	Special Energy Corp Teddy Lowe Hartley	PO Drawer 369 P.O. Box 845	Stillwater Clavis	OK NM	74076 88102	2020	44287	44287	
NE4SW4	All	SIT	Fee	Todd Burns	425 Market Street Suite 220	San Francisco	CA	94105	2007			No current address was found in Lea County Clerk's Office or on Account
NE4SW4	All	UL	Fee	Universal Royalty & Mineral Fund I, LP	P.O. Box 12822	Dallas	TX	75225	2020	44287	44287	
NE4SW4	All	UL	Fee	William M. Wygocki II, Trustee of the Margaret Wygocki Trust No. 1	721 Robins Road	Lansing	MI	48917	2014			No current address was found in Lea County Clerk's Office or on Account
Lots 2-4	All	WI	Fee	Worrall Investment Corporation	P.O. Box 1834	Roswell	NM	87103	2020	44298	N/A	Leases at LCR 2132/153, 2132/154, 2132/155, 2132/701, 2132/702, 2132/703, 2132/704, 2133/826 were for 3 years from 3/01/2018 and include a 2 year option, unclear if option was exercised and extended primary term until 3/01/2023.