

# Initial Application Part I

Received 8/9/21

*This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete*

RECEIVED: 8/9/21	REVIEWER:	TYPE: PMX	APP NO: pBL2125654765
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Tarco Energy, LC OGRID Number: 279579  
 Well Name: Brad State No. 6 API: 30-015-00719  
 Pool: Empire Yates-Seven Rivers Pool Code: 22230

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) TYPE OF APPLICATION: Check those which apply for [A]

A. Location - Spacing Unit - Simultaneous Dedication

NSL       NSP (PROJECT AREA)       NSP (PRORATION UNIT)       SD

PMX-305

B. Check one only for [ I ] or [ II ]

[ I ] Commingling - Storage - Measurement

DHC     CTB     PLC     PC     OLS     OLM

[ II ] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

WFX     PMX     SWD     IPI     EOR     PPR

2) NOTIFICATION REQUIRED TO: Check those which apply.

- A.  Offset operators or lease holders
- B.  Royalty, overriding royalty owners, revenue owners
- C.  Application requires published notice
- D.  Notification and/or concurrent approval by SLO
- E.  Notification and/or concurrent approval by BLM
- F.  Surface owner
- G.  For all of the above, proof of notification or publication is attached, and/or,
- H.  No notice required

**FOR OCD ONLY**

- Notice Complete
- Application Content Complete

3) CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

David Catanach

7/29/2021  
Date

Print or Type Name

(505) 690-9453  
Phone Number

David Catanach

catanach\_david@comcast.net  
e-mail Address

Signature

July 29, 2021

**Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505**

**Attention: Ms. Adrienne Sandoval  
Division Director**

**Re: Form C-108  
Brad State No. 6  
API No. (30-015-00719)  
990' FNL & 1980' FWL, Lot 3/Unit C  
Section 2, T-18S, R-27E, NMPM,  
Eddy County, New Mexico**

**Dear Ms. Sandoval,**

**By Order No. R-13680 dated February 14, 2013 the Oil Conservation Division approved the Tarco Energy, LC ("Tarco") Russell C Lease Pressure Maintenance Project authorizing injection into the Yates-Seven Rivers formation (Empire Yates-Seven Rivers Pool) within the Russell C Well No. 3 located in Unit O of Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico.**

**The Russell C Lease Pressure Maintenance Project currently comprises the following described acreage:**

**Township 17 South, Range 27 East, NMPM  
Section 35: SE/4, NE/4 SW/4, SW/4 SW/4, SE/4 SW/4, and**

**Township 18 South, Range 27 East, NMPM  
Section 2: NW/4 NE/4, NE/4 NW/4**

**By Administrative Order No. PMX-280 dated February 18, 2019 the Oil Conservation Division authorized Tarco to expand the Russell C Lease Pressure Maintenance Project by converting its Brad State No. 1, located in Lot 3/Unit C of Section 2, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico, to injection into the Empire Yates-Seven Rivers Pool through perforations from approximately 411'-451'.**

**Tarco respectfully requests authority to further expand its Russell C Lease Pressure Maintenance Project by re-entering and converting to injection the plugged and abandoned Riverwolf Unit Well No. 5 (API No. 30-015-00719) located 990 feet from the North line and 1980 feet from the West line (Lot 3/Unit C) of Section 2, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico. This well, to be redesignated the Brad State No. 6, was previously a producing well**

Tarco Energy, LC  
Form C-108, PMX Expansion  
Brad State No. 6  
July 29, 2021

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**in the Empire-Abo Pool, and was plugged and abandoned in 2008 by BP America Production Company. Tarco is seeking administrative approval to expand the Russell C Lease Pressure Maintenance Project in order to complete an efficient injection/production well pattern in this project, thereby increasing the ultimate recovery of oil from the Empire-Yates Seven Rivers Pool.**

**Enclosed please find a copy of Oil Conservation Division Form C-108 (Application for Authorization to Inject) for the Brad State No. 6.**

**I believe that all the information necessary to approve the application is enclosed. If additional information is needed, please contact me at (505) 690-9453.**

Sincerely,



**David Catanach (Agent)  
Tarco Energy, LC  
3805 109<sup>th</sup> Street  
Lubbock, Texas 79423**

**Xc: OCD-Artesia  
New Mexico State Land Office**

**Tarco Energy, LC**  
**Brad State No. 6**  
**List of Attachments to C-108 Application**

1. Division Orders No. R-13680 & PMX-280
2. Division Form C-108
3. Data Relative to C-108 Parts I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, & XIII
4. Original C-102 for the Brad State No. 6 Dated July 1, 1959
5. Current C-102
6. Injection Well Data Sheet (Pages 1 & 2)
7. Wellbore Diagram-Brad State No. 6 Showing Current Configuration
8. Form C-103 Showing Plugging Detail for the Brad State No. 6 (Plugged 12/2008)
9. Wellbore Diagram-Brad State No. 6 Proposed Configuration
10. Map: Russell C Lease PMX Project Area & Injection & Production Well Pattern
11. Map: ½ Mile Area of Review: Brad State No. 6
12. Map: 2-Mile Radius Lease/Well: Brad State No. 6
13. List of AOR Wells Previously Submitted to the OCD
14. Supplemental AOR Well List (Well Data not Previously Provided to OCD)
15. AOR Wellbore Diagrams & C-103's Showing Plugging Detail
16. State Engineer Water Well Search Results (Pages 1-3)
17. C-108 Affirmative Statement
18. Offset Operator/Surface Owner Notification Letter
19. Map: ½-Mile Notice Area
20. Offset Operator Identification
21. Affidavit of Publication (Published on July 22, 2021)
22. Proof of Notice: Certified Mail Receipts

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery  Pressure Maintenance \_\_\_\_\_ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval?  Yes \_\_\_\_\_ No
- II. OPERATOR: Tarco Energy, LC (279579)  
ADDRESS: 3805 109<sup>th</sup> Street, Lubbock, Texas 79423  
CONTACT PARTY: David Catanach (Agent) PHONE: (505) 690-9453
- 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: R-13680 issued in Case No. 14931 on 2/14/2013
- 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: David Catanach TITLE: Agent for Tarco Energy, LC

SIGNATURE:  DATE: 07/29/2021

E-MAIL ADDRESS: catanach\_david@comcast.net

\* 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: Case No. 14931 heard by OCD on 11/29/2012; PMX Application dated 2/14/2014. PMX Application resulting in Order No. PMX-280 dated 2/18/2019.

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 St. 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.**

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**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.**

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

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

APPLICATION OF TARCO ENERGY, L.C. FOR APPROVAL OF A PRESSURE  
MAINTENANCE PROJECT IN THE YATES AND SEVEN RIVERS  
FORMATIONS, EDDY COUNTY, NEW MEXICO.

CASE NO. 14931  
ORDER NO. R-13680

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on November 29, 2012, at Santa Fe, New Mexico, before Examiner Richard I. Ezeanyim.

Now, on this 14<sup>th</sup> day of February, 2013, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) Tarco Energy, L.C. ("Tarco" or "Applicant"), seeks approval to institute a lease Pressure Maintenance Project into the Yates and Seven Rivers formations, Empire-Yates-Seven Rivers Pool (Code 22230) through its Russell C Well No .3 (API No. 30-015-37783) located 990 feet from the South line and 2225 feet from the East line in Unit O of Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico.
- (3) Tarco submitted to the Division in October of 2012 an administrative application for salt water disposal. The Division directed Tarco to set the matter for hearing due to the presence of producing wells within one half mile of the proposed well in the proposed disposal interval. Applicant did not find water wells within one mile of the proposed well. Any possible fresh waters will be protected by surface casing and cement.

(4) The lease acreage consists of the following lands:

**Township 17 South, Range 27 East, NMPM**

Section 35: SE/4, NE/4 SW/4, SW/4 SW/4, SE/4 SW/4, and

**Township 18 South, Range 27 East, NMPM**

Section 2: NW/4 NE/4 and NE/4 NW/4

(5) Applicant has indicated that the proposed well located in Unit O of Section 35 is the only well it intends to use for injection purposes at this time. Therefore, the approved Project Area would be the above described lands contained in Section 35, Township 17 South, Range 27 East, and Section 2, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(6) Within one half mile from the proposed injection well, there are 86 total wells drilled to this depth. Forty-nine of those are plugged and abandoned, and one is temporarily abandoned. All of these Area of Review wells are cased, cemented, and/or plugged to adequately isolate the intended injection interval within the Yates and Seven Rivers formations and to protect any underground fresh waters.

(7) Notice was provided by Applicant in this case of its intent to inject. Applicant notified all "affected persons" as defined in Rule 19.15.26.7A, NMAC. The surface owner at the well site of Russell C Well No. 3 is the Bureau of Land Management which was notified. The State Land Office was also notified of this application. There were no objections to the proposed Pressure Maintenance project.

(8) No other parties appeared at the hearing to oppose this application.

(9) Applicant (**OGRID 279579**) is the operator of this well located on the above described acreage. Applicant is now in compliance with Division Rule 19.15.5.9 NMAC and therefore eligible for approval of disposal and injection permits.

(10) Water from outside the Russell C lease should not be injected into this well. The operator should monitor the oil and water production from the producing area of review wells and report these productions to the Division on a quarterly basis.

(11) The proposed project should be called the Russell C Lease Pressure Maintenance Project. The Project Area to be affected by this Pressure Maintenance operation should consist of the lands described in Finding Paragraph (4), contained in Section 35, Township 17 South, Range 27 East, and Section 2, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(12) Applicant should be approved to inject into the Russell C Well No. 3 (**API 30-015-37783**) located in Unit O of Section 35, into the Yates and Seven Rivers formations from perforated depths of 418 feet to 460 feet.

**IT IS THEREFORE ORDERED THAT:**

(1) The Applicant, Tarco Energy, L.C is hereby authorized to implement Lease Pressure Maintenance operations within the project area of its Russell C Lease by water injection into the Yates and Seven Rivers formations, Empire-Yates-Seven Rivers Pool (Code 22230).

(2) The project shall be called the Russell C Lease Pressure Maintenance Project and the Project Area shall consist of the above described lands contained in Section 35, Township 17 South, Range 27 East, and Section 2, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(3) Injection is approved within the Russell C Well No. 3 (API No. 30-015-37783), located 990 feet from the South line and 2225 feet from the East line in Unit O of Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico. Injections shall be through perforations from a depth interval from 418 feet to 460 feet, and through lined tubing and a packer set no higher than 100 feet above the injection interval.

(4) **Water from outside the Russell C lease shall not be injected into this well. The operator shall monitor the oil and water production from the producing area of review wells and report these productions to the Division on a quarterly basis.**

(5) The operator shall take all steps necessary to ensure that the injected water enters only the permitted injection intervals and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(6) The casing-tubing annulus shall be filled with an inert fluid, and a gauge or approved leak-detection device shall be attached to the annulus in order to detect any leakage in the casing, tubing or packer.

(7) The injection well or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the maximum surface injection pressure to 84 psi.

(8) The Division Director may administratively authorize a pressure limitation in excess of the above, upon a showing by the operator, supported by approved Step Rate Tests that such higher pressure will not result in the fracturing of the injection formation or confining strata or damage to the reservoir.

(9) In accordance with Division Rule 19.15.26.11A. NMAC, the operator shall test the approved injection well for mechanical integrity prior to commencing injection into that well and prior to resuming injection each time the packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule

19.15.26.11A. NMAC. The Division Director retains the right to require at any time wire-line verification of completion and packer setting depths in this well.

(10) The operator shall provide notice 72 hours in advance, to the supervisor of the Division's District II office of the date and time of the installation of injection equipment, and of any mechanical integrity test so that the same may be inspected and witnessed.

(11) The operator shall provide written notice of the date of commencement of injection to the Division's District II office. In accordance with Division rules, the operator shall submit monthly reports of the injection operations on Division Form C-115.

(12) Without limitation on the duties of the operator as provided in Division rules, or otherwise, the operator shall immediately notify the Division's District II office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from or around any producing or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

(13) The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

(14) The Division may revoke this injection permit after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

(15) The injection authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the permitted injection well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

(16) One year after all injection into the project area has ceased (or not reported), the Division shall consider the project abandoned, and the authority to inject shall terminate ipso facto. The Division, upon written request mailed by the operator prior to that termination date, may grant an extension thereof for good cause.

(17) Compliance with this order does not relieve the operator of the obligation to comply with other applicable State, local, or Federal rules, or to exercise due care for the protection of fresh water, public health and safety, and the environment.

(18) Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable

waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing (or without prior notice and hearing in case of emergency), terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

JAMI BAILEY  
Director

State of New Mexico  
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham  
Governor

Sarah Cottrell Propst  
Cabinet Secretary

Todd E. Leahy, JD, PhD  
Deputy Secretary

Gabriel Wade, Acting Director  
Oil Conservation Division



Administrative Order PMX-280  
February 18, 2019

ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-13680, as amended, Tarco Energy, LC (OGRID No. 279579) has made application to the Division for permission to add an additional injection well to its Russell C Pressure Maintenance Project located within the Red Lake; Glorieta-Yeso, Northeast; Pool (96836) in Eddy County, New Mexico. This well, Brad State Well No. 1 is being proposed for injection of water within this project.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of 19.15.26.8B NMAC and may be approved administratively by the Division Director without notice and hearing, per Ordering Paragraph (1) of Division Order No. R-13680 dated February 14, 2013. The proposed well is eligible for conversion to injection under the terms of that rule and Ordering paragraph (1). The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

The proposed expansion of the above-referenced pressure maintenance project, will prevent waste, is in the best interests of conservation, will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED THAT:

Tarco Energy, LC, as operator, is hereby authorized to inject water into the following well for the purpose of secondary recovery through plastic-lined tubing set into a packer:

API Number	Well Name	Lot/ Unit	Sec	Twp	Rng	Footage F/S	Footage E/W	Injection Interval; Type of Interval
30-015-40618	Brad State Well No. 1	3/C	2	18S	27E	330' FNL	2300' FWL	411'-451''; perfs

The wellhead injection pressure on the well shall be limited to **no more than 82 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable

pressure for this well. The operator shall set the injection packer no more than 100 feet above the shallowest perforation for the permitted injection interval for the well in the application.

**IT IS FURTHER ORDERED THAT:**

The operator shall take all steps necessary to ensure that the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing injection and prior to resuming injection each time any injection packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on this well shall be limited as listed above. In addition, the injection well or header system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressures to the maximum allowable pressures for this well.

Subject to the limitations within the hearing order permitting this project, the Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluids from the approved injection interval. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District II office of the date and time of the installation of injection equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of injection to the District I office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the District II office of any failure of the tubing, casing or packer in the approved injection well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

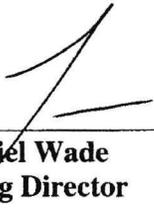
The injection authority granted under this order is not transferable except upon division approval. The division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein. The subject well shall be governed by all provisions of Division Order No. R-13680 and associated administrative orders.

The injection authority granted herein shall terminate one (1) year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator received prior to the one-year deadline, may grant an extension thereof for good cause shown.



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**Gabriel Wade**  
**Acting Director**

GW/mam

cc: New Mexico Oil Conservation Division – Artesia  
New Mexico State Land Office – Oil, Gas, and Minerals  
Well File – 30-015-40618  
Case File 14931



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*New Mexico Office of the State Engineer*  
**Water Column/Average Depth to Water**

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(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

**PLSS Search:**

**Section(s):** 34-36

**Township:** 17S

**Range:** 27E

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The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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4/7/21 9:25 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



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*New Mexico Office of the State Engineer*  
**Water Column/Average Depth to Water**

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(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

No records found.

**PLSS Search:**

**Section(s):** 1-3

**Township:** 18S

**Range:** 27E

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The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

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4/7/21 9:24 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 1	Q 2	Q 3	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
<a href="#">RA 03917</a>		RA	LE	4	1	2	10	18S	27E		569019	3625660*	130	50	80

Average Depth to Water: **50 feet**

Minimum Depth: **50 feet**

Maximum Depth: **50 feet**

**Record Count:** 1

**PLSS Search:**

**Section(s):** 10-12

**Township:** 18S

**Range:** 27E

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

4/7/21 9:20 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Form C-108  
Affirmative Statement  
Tarco Energy, LC  
Brad State No. 6  
Section 2, T-18 South, R-27 East, NMPM,  
Eddy County, New Mexico

Available geologic and engineering data has been examined and no evidence of open faults or hydrological connection between the injection zone and any underground sources of drinking water has been found.



\_\_\_\_\_  
David Catanach  
Agent for Tarco Energy, LC



\_\_\_\_\_  
Date

Well Location and Acreage Dedication Plat

Section A.

Date July 1, 1959

**Carper Drilling Co., Inc. & T. J. Sivley**

Operator Carper Drilling Co., Inc. & T. J. Sivley Lease State "AB"  
 Well No. 5 Unit Letter C Section 2 Township 18 S Range 27 E NMPM  
 Located 1900 Feet From West Line, 990 Feet From North Line  
 County Eddy G. L. Elevation 3585 Dedicated Acreage 40.60 Acres  
 Name of Producing Formation Abc Pool Empire Abc

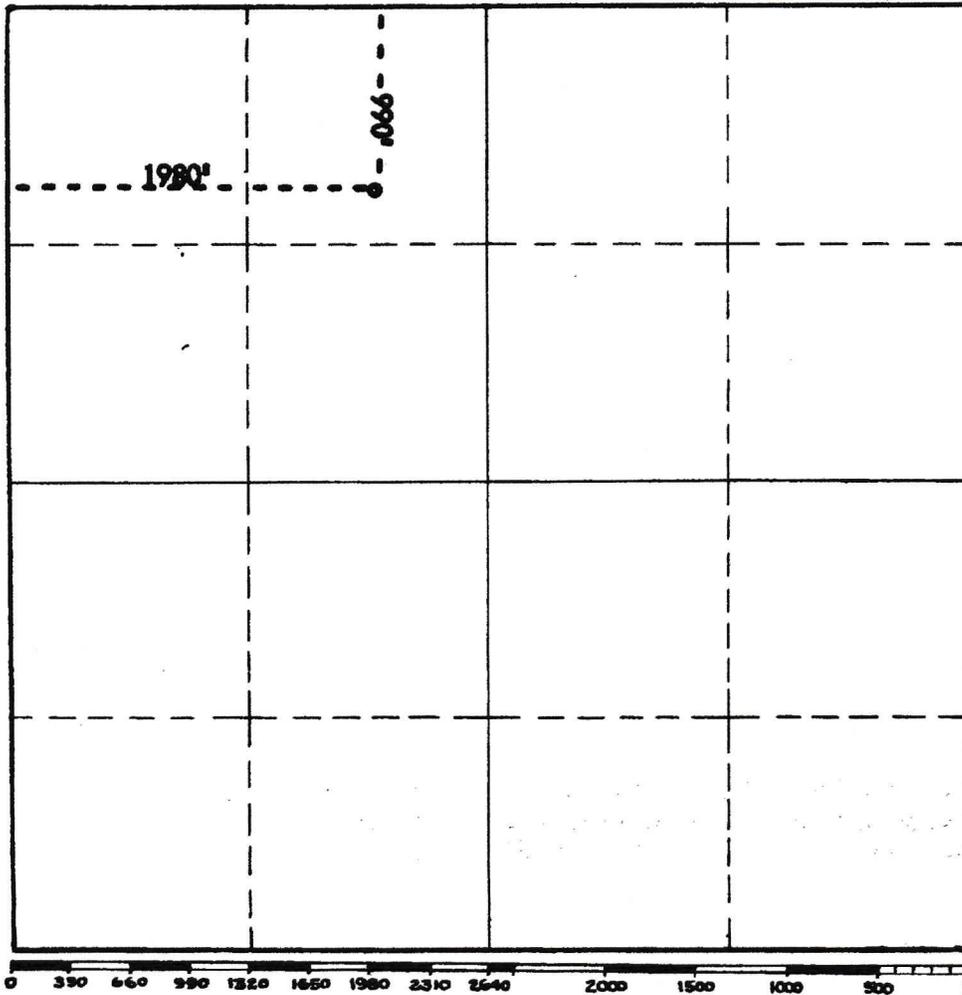
1. Is the Operator the only owner\* in the dedicated acreage outlined on the plat below?  
 Yes  No
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes  No . If answer is "yes," Type of Consolidation \_\_\_\_\_
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner

Land Description

<u>Owner</u>	<u>Land Description</u>

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

**Carper Drilling Co., Inc. & T. J. Sivley**

(Operator)

*Stanley Leason*  
 (Representative)

**Artesia, New Mexico**

Address

This is to certify that the well location shown on the plat in Section B 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 knowledge and belief.

Date Surveyed 6-27-59

*Clark E. Starn*  
 Registered Professional Engineer and/or Land Surveyor.

Certificate No. 1083





INJECTION WELL DATA SHEET

Tubing Size: 2 3/8" Lining Material: Internally Plastic Coated

Type of Packer: Baker Tension Type

Packer Setting Depth: 330' or within 100' of the uppermost injection perforations

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: Producing well in the Empire-Abo Pool

2. Name of the Injection Formation: Yates-Seven Rivers

3. Name of Field or Pool (if applicable): Empire Yates-Seven Rivers Pool (22230)

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.

Empire-Abo Pool perforations: 5,627'-5,731' (Squeezed); 5,500'-5,530' (Squeezed w/100 Sx.); 5,253'-5,443' (Isolated w/CIBP @ 5,200' + 25 Sx. Cement Plug.

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

Red Lake Queen-Grayburg-San Andres Pool (1,800'); Northeast Red Lake Glorieta-Yeso Pool (4,000'); Empire-Abo Pool (6,200'); Logan Draw-Wolfcamp Pool (6,700'); Scoggin Draw-Atoka Gas Pool (9,380'); Scoggin Draw-Morrow Gas Pool (9,494')

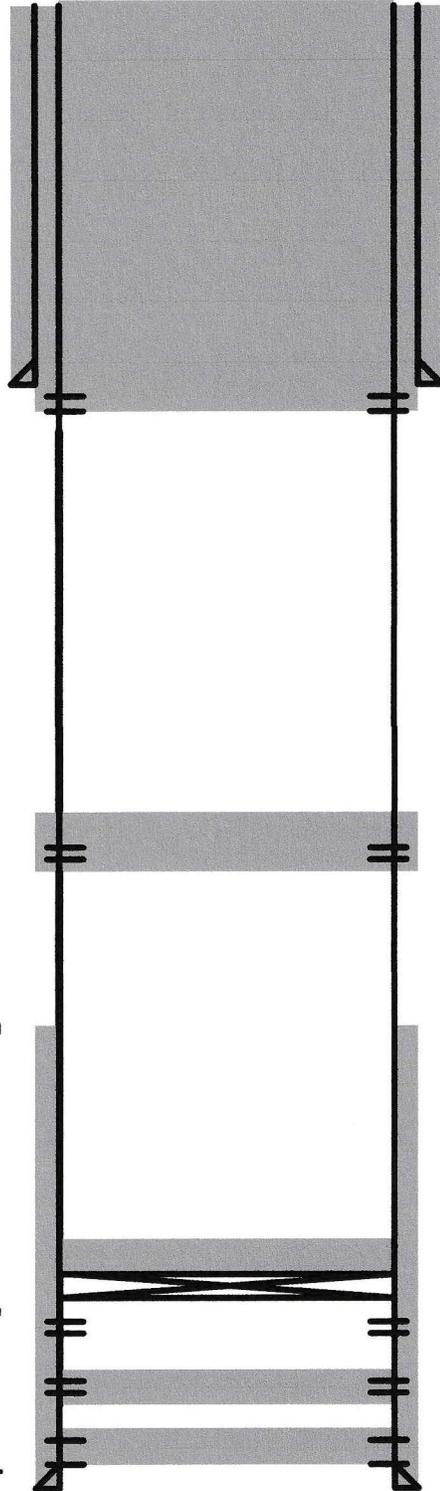
**Brad State No. 6: Current Configuration**

BP America Production Company  
Riverwolf Unit No. 5 (API No. 30-015-00719)  
990' FNL & 1980' FWL (Unit C)  
Section 2, T-18S, R-27E, NMPM, Eddy County, NM

Well Drilled: 7/1959  
Well PA'd: 12/2008

Cemented from 30' to Surface

11" Hole. Set 8 5/8" Csg. @ 963'.  
Cemented with 425 Sx. Cement  
Circulated to surface.



Perforate 5 1/2" Csg. @ 1,020'. Squeeze w/  
255 Sx. Cement. Tagged TOC @ 30'

Perforate 5 1/2" Csg. @ 3,060'.  
Squeeze w/50 Sx. Cement. Tagged  
TOC @ 2,830'

TOC @ 4,164' by Calculation

Set 25 Sx. Cement plug @ 5,200'

Set CIBP @ 5,200'

Abo Perfs: 5,253'-5,443'

Abo Perfs: 5,500'-5,530'. Squeezed  
w/100 Sx. Cmt.

Abo Perfs: 5,627'-5,731'. Squeezed.

7 7/8" Hole. Set 5 1/2" Csg. @ 5,764'.  
Cemented with 300 Sx. TOC @ 4,164'  
by calculation.

T.D. 5,765'

Submit 3 Copies To Appropriate District Office  
 District I  
 1625 N French Dr, Hobbs, NM 87240  
 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  
 May 27, 2004

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

WELL API NO. 30-015-00719
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. 2029-63
7. Lease Name or Unit Agreement Name: Riverwolf Unit
8. Well Number 5
9. OGRID Number 00778
10. Pool name or Wildcat Empire Abo

**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  
 BP America Production Company

3. Address of Operator  
 P.O. Box 1089 Eunice, NM 88231

4. Well Location  
 Unit Letter C : 990 feet from the N line and 1980 feet from the W line  
 Section 2 Township 18S Range 27E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
 3585' GR

Pit or Below-grade Tank Application  or Closure

Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_

Pit Liner Thickness: \_\_\_\_\_ mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

**S**  
**DEC 29 2008**  
**OCD-ARTESIA**

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

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

12/12/08: RU PU. NIPPLE UP BOP. BOTTOM RUBBER WAS WORE OUT HAD TROUBLE GETTING IT OUT OF THE WELL HEAD.  
 12/15/08: POH WITH TUBING AND LAYDOWN 172 JOINTS AND SEAT NIPPLE. TALLY PIPE AND GET READY TO PICKUP WORK STRING. PICKUP 175 JOINT OF TUBING AND BIT AND SCRAPER DOWN TO 5300. POH WITH TUBING AND START IN WITH CIBP.  
 12/16/08: RIH WITH TUBING AND SET CIBP AT 5200. TIGHT SPOT AT 3680. LOAD AND TEST TO 500 PSI FOR 1 HR NO LEAK TEST GOOD. WAIT ON MUD.

Continued on page 2.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines  , a general permit  or an (attached) alternative OCD-approved plan

SIGNATURE Barry C. Price TITLE Area Operations Team Lead DATE 12/23/08  
 E-mail address: barry.price@bp.com  
 Type or print name Barry C. Price Telephone No. 575-394-1648

**For State Use Only**  
 APPROVED BY \_\_\_\_\_  
 Conditions of Approval, if any:

**Accepted for record**  
**NMOCD** *A*

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 DATE 12/29/08  
 Forms, www.cmnr.state.nm.us/oecd.

Form C-103  
Riverwolf Unit #5  
30-015-00719  
Continued from Page 1

12/17/08: SPOT 25 SX PLUG ON CIBP AT 5200, POH AND LAYDOWN 10 JOINTS. CIRC WELL WITH 140 BBLs OF 9.5 # MUD. POH WITH 70 JOINT OF TUBING, LAYDOWN. STAND BACK 2600' , LAYDOWN SETTING TOOL. JSA NIPPLE DOWN STRIPPER HEAD AND RIGUP WIRELINE. RIH WITH PERF GUN WITH 4 SHOTS TO 3060 AND PERF CASING. POH WITH WIRELINE AND NIPPLE DOWN WIRELINE PRESSURE EQUIPMENT AND NIPPLE UP STRIPPER HEAD. PICKUP PACKER AND RIH WITH TUBING.

12/18/08: RIH WITH PACKER AND SET AT 2591' TEST BACK SIDE TO 500# GOOD TEST. SQUEEZE WELL WITH 50 SX CEMENT DISPLACE WITH 16 BBL BRINE, MAX PSI 1900 SHUT IN 500#. RIG DOWN CEMENT TRUCK. WOC.

12/19/08: HAD 320 PSI ON CASING AND 20 ON TUBING. RELEASE PACKER AND POH WITH TUBING AND LAYDOWN PACKER. RIH WITH TUBING AND TAG UP AT 2830. POH WITH TUBING AND LAYDOWN ALL JOINTS. RIGUP WIRE LINE TRUCK AND RIH TO 1020 AND PERF CASING WITH 4 SHOTS. POH WITH WIRELINE AND RIGDOWN. RIGUP PUMP AND CIRC WELL WITH 20 BBLs. RIG DOWN FLOOR AND NIPPLE DOWN BOP AND NIPPLE UP FLANGE TO PUMP CEMENT. PUMP 255 SXS OF CEMENT AND CLEAN UP AROUND WELL.

12/22/08: PICKUP 1 JOINT AND TAG CEMENT 30' DOWN LAYDOWN JOINT. WELL WAS TOPPED OFF WITH CEMENT TO SURFACE. RIG DOWN PULLING UNIT. WELL P&A'D.

12/23/08: DIG OUT AND CUT OFF WELLHEAD, WELD IN PLATE, 1" NIPPLE & VALVE, DRY HOLE MARKER, DIG OUT AND CUT OFF ALL ANCHORS, BACK FILL AND LEVEL LOCATION.

## Brad State No. 6: Proposed Configuration

Drill out Cement Plug from Surface-550'. Tag Plug. Perforate 8 5/8" & 5 1/2" Csg. 430'-550'. Set 2 3/8" IPC Tubing in a Baker Tension Type Packer @ approximately 330'

Perfs: 430'-550'

11" Hole. Set 8 5/8" Csg. @ 963'. Cemented with 425 Sx. Cement Circulated to surface.

Perforate 5 1/2" Csg. @ 1,020'. Squeeze w/ 255 Sx. Cement. Tagged TOC @ 30'

Perforate 5 1/2" Csg. @ 3,060'. Squeeze w/50 Sx. Cement. Tagged TOC @ 2,830'

TOC @ 4,164' by Calculation

Set 25 Sx. Cement plug @ 5,200'  
Set CIBP @ 5,200'

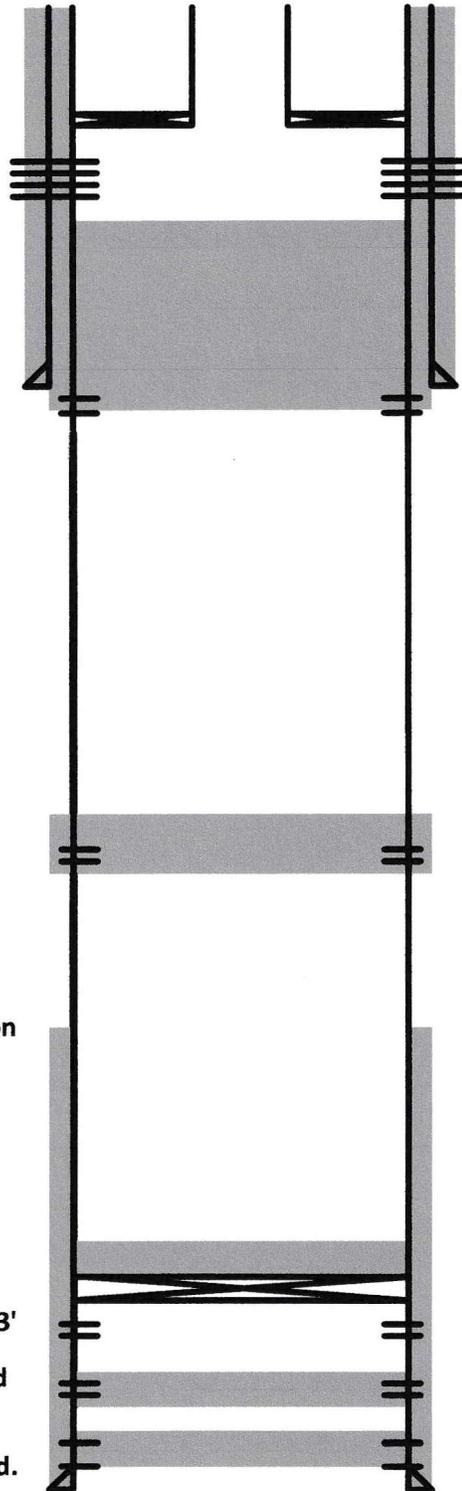
Abo Perfs: 5,253'-5,443'

Abo Perfs: 5,500'-5,530'. Squeezed w/100 Sx. Cmt.

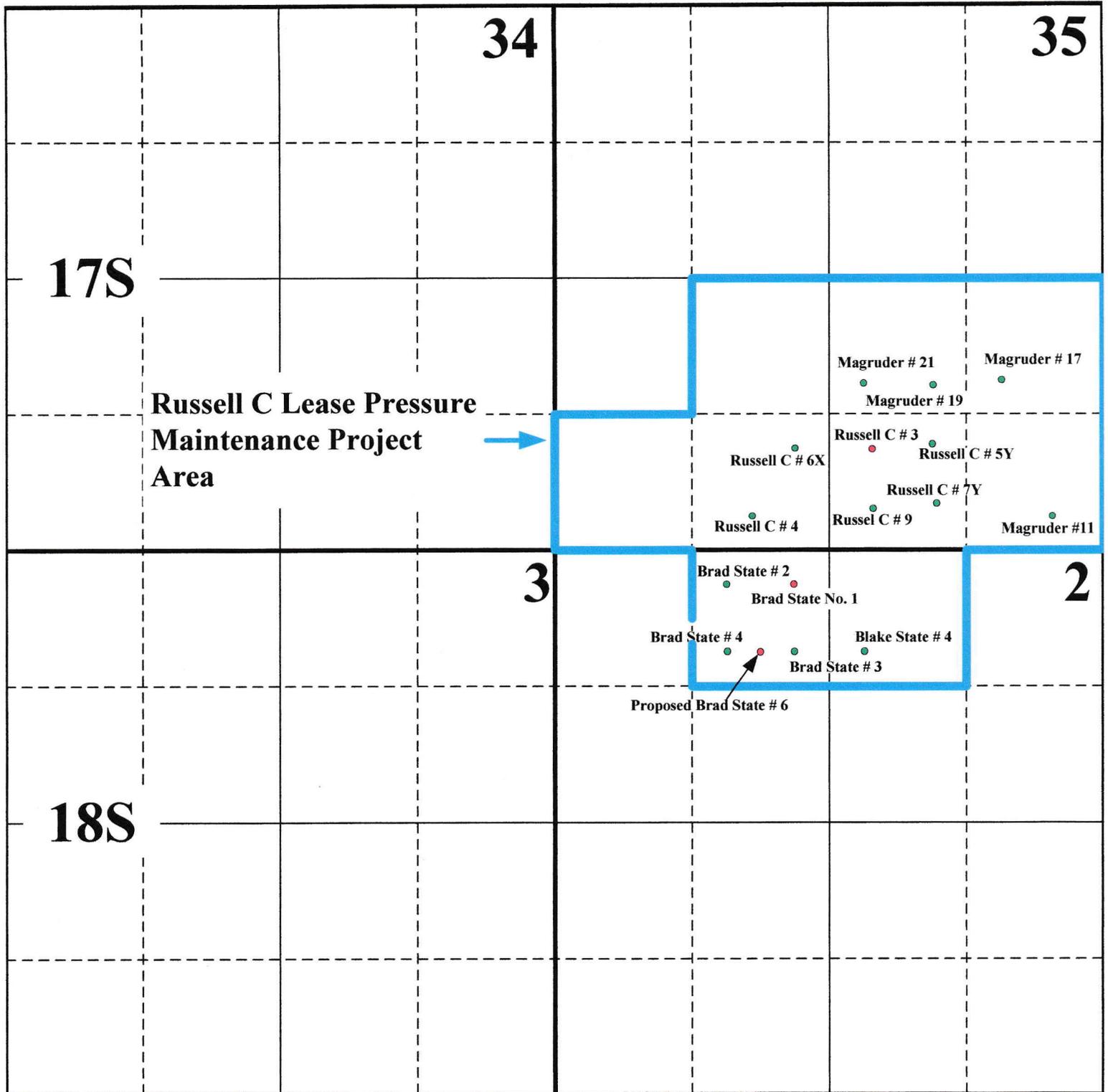
Abo Perfs: 5,627'-5,731'. Squeezed.

7 7/8" Hole. Set 5 1/2" Csg. @5,764'. Cemented with 300 sx. TOC @ 4,164' by calculation.

T.D. 5,765'



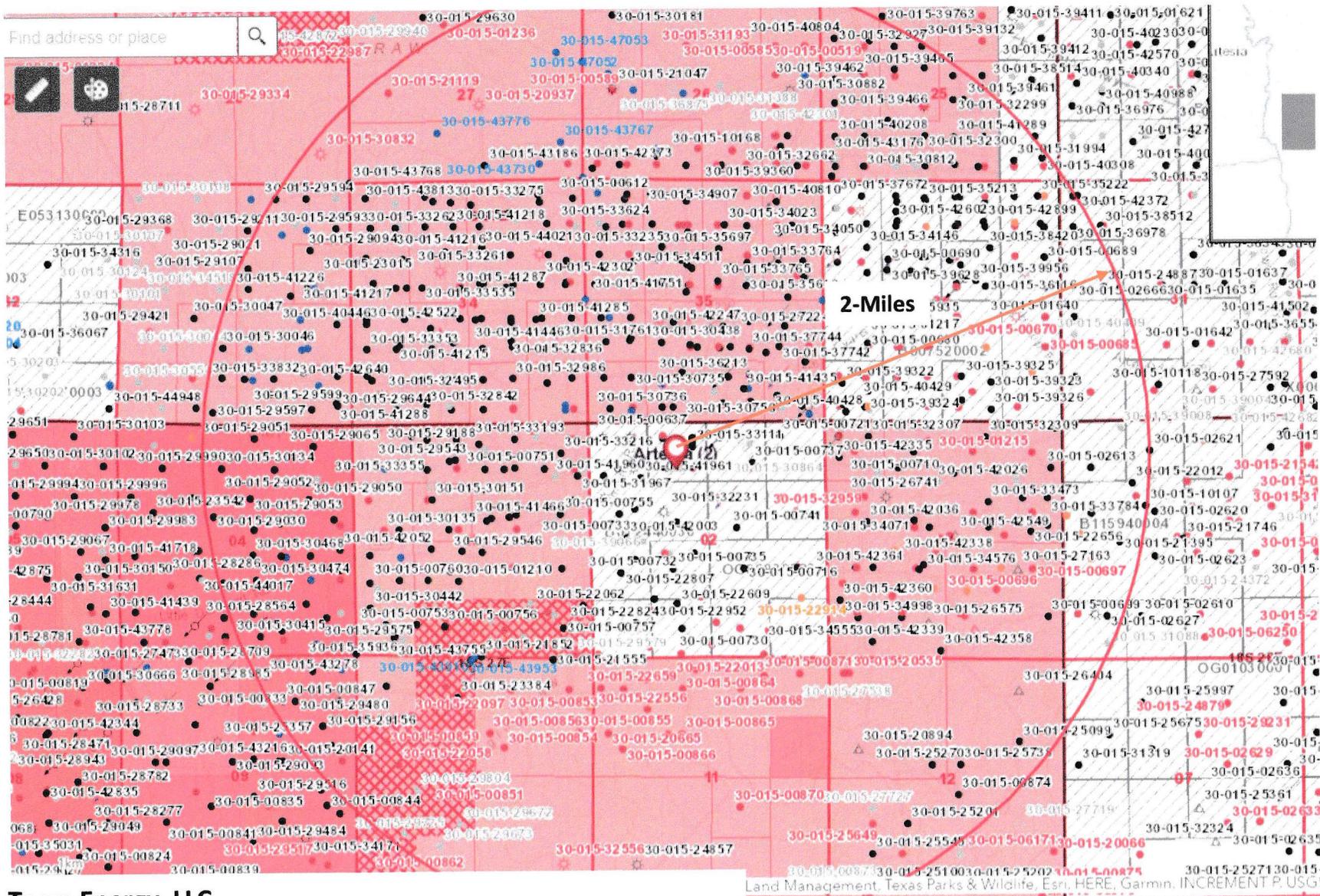
# 27E



**Tarco Energy, LC**  
**PMX Application: Brad State No. 6**  
**Injection/Production Well Pattern**

-  Existing or Proposed Injection Well
-  Existing Producing Well





**Tarco Energy, LLC**  
**Russell C Lease Pressure Maintenance Project**  
**Brad State No. 6**  
**2-Mile Radius Lease/Well Map**

**Form C-108; Brad State No. 6: Tarco Energy, LC**

**List of Area of Review Wells Whose Construction & Plugging Data were Previously Submitted to OCD**

API	Well Name	Well Number	Type	Status	Section	Township	Range	OCD Unit Letter	Plugged On	Current Operator
30-015-21358	RIVERWOLF UNIT	#011	Injection	Plugged, Site Released	35	17S	27E	N	5/3/2002	[778] BP AMERICA PRODUCTION COMPANY
30-015-00633	RIVERWOLF UNIT	#014	Oil	Plugged, Site Released	35	17S	27E	M	1/12/2009	[778] BP AMERICA PRODUCTION COMPANY
30-015-00643	SOUTH RED LAKE II UNIT	#026	Oil	Plugged, Site Released	35	17S	27E	O	9/17/2008	[241598] FAIRWAY RESOURCES OPERATING, LLC
30-015-01222	SOUTH RED LAKE II UNIT	#030	Oil	Plugged, Site Released	35	17S	27E	O	2/21/2009	[241598] FAIRWAY RESOURCES OPERATING, LLC
30-015-00644	SOUTH RED LAKE II UNIT	#031	Oil	Plugged, Site Released	35	17S	27E	N	1/19/2007	[241598] FAIRWAY RESOURCES OPERATING, LLC
30-015-00642	RUSSELL C	#005	Oil	Plugged, Site Released	35	17S	27E	O	2/15/1977	[37594] JOE L TARVER
30-015-30439	LOGAN 35 B FEDERAL	#007	Oil	Active	35	17S	27E	N		[330211] Redwood Operating, LLC
30-015-30440	LOGAN 35 B FEDERAL	#008	Oil	Active	35	17S	27E	N		[330211] Redwood Operating, LLC
30-015-30409	LOGAN 35 B FEDERAL	#009	Oil	Active	35	17S	27E	O		[330211] Redwood Operating, LLC
30-015-30735	LOGAN 35 FEDERAL	#013	Oil	Active	35	17S	27E	M		[330211] Redwood Operating, LLC
30-015-30736	LOGAN 35 FEDERAL	#014	Oil	Active	35	17S	27E	M		[330211] Redwood Operating, LLC
30-015-40806	LOGAN 35 M FEDERAL	#016	Oil	Active	35	17S	27E	M		[330211] Redwood Operating, LLC
30-015-43728	LOGAN 35 M FEDERAL	#021	Oil	New	35	17S	27E	M		[330211] Redwood Operating, LLC
30-015-41435	LOGAN 35 O FEDERAL	#010	Oil	Active	35	17S	27E	O		[330211] Redwood Operating, LLC
30-015-43252	LOGAN 35 O FEDERAL	#022	Oil	Cancelled APD	35	17S	27E	O		[330211] Redwood Operating, LLC
30-015-40807	LOGAN B 35 N FEDERAL	#018	Oil	Active	35	17S	27E	N		[330211] Redwood Operating, LLC
30-015-43066	LOGAN B 35 N FEDERAL	#024	Oil	New	35	17S	27E	N		[330211] Redwood Operating, LLC
30-015-00640	PRE-ONGARD WELL	#008	Oil	Plugged, Site Released	35	17S	27E	O		[214263] PRE-ONGARD WELL OPERATOR
30-015-20105	PRE-ONGARD WELL	#042	Oil	Plugged, Site Released	35	17S	27E	N	2/12/1988	[214263] PRE-ONGARD WELL OPERATOR
30-015-00645	SOUTH RED LAKE II UNIT	#032	Oil	Active	35	17S	27E	N		[370922] REMNANT OIL OPERATING, LLC
30-015-37783	RUSSELL C	#003	Injection	Active	35	17S	27E	O		[279579] TARCO ENERGY, LC
30-015-00637	RUSSELL C	#004	Oil	Active	35	17S	27E	N		[279579] TARCO ENERGY, LC
30-015-36213	RUSSELL C	#005Y	Oil	Active	35	17S	27E	O		[279579] TARCO ENERGY, LC
30-015-00638	RUSSELL C	#006	Oil	Plugged, Site Released	35	17S	27E	N	2/21/2009	[279579] TARCO ENERGY, LC
30-015-36073	RUSSELL C	#006X	Oil	Active	35	17S	27E	N		[279579] TARCO ENERGY, LC
30-015-00641	RUSSELL C	#007	Oil	Plugged, Site Released	35	17S	27E	O	3/15/2011	[279579] TARCO ENERGY, LC
30-015-37762	RUSSELL C	#007Y	Oil	Active	35	17S	27E	O		[279579] TARCO ENERGY, LC
30-015-00639	RUSSELL C	#009	Oil	Active	35	17S	27E	O		[279579] TARCO ENERGY, LC
30-015-32899	BM STATE	#001	Oil	Active	2	18S	27E	K		[873] APACHE CORPORATION
30-015-31967	BPO STATE COM	#001	Gas	Active	2	18S	27E	4		[873] APACHE CORPORATION
30-015-00729	EMPIRE ABO UNIT	#013A	Oil	Active	2	18S	27E	D		[873] APACHE CORPORATION
30-015-00733	EMPIRE ABO UNIT	#013C	Oil	Active	2	18S	27E	E		[873] APACHE CORPORATION
30-015-00734	EMPIRE ABO UNIT	#014A	Oil	Active	2	18S	27E	F		[873] APACHE CORPORATION
30-015-00741	EMPIRE ABO UNIT	#015B	Oil	Active	2	18S	27E	G		[873] APACHE CORPORATION
30-015-39009	EMPIRE ABO UNIT	#415	Oil	Plugged, Site Released	2	18S	27E	G	3/20/2015	[873] APACHE CORPORATION
30-015-32071	MJ STATE	#001	Gas	Active	2	18S	27E	4		[873] APACHE CORPORATION
30-015-32179	MJ STATE	#002	Gas	Active	2	18S	27E	D		[873] APACHE CORPORATION
30-015-41960	MJ STATE	#003	Oil	Active	2	18S	27E	D		[873] APACHE CORPORATION
30-015-41961	MJ STATE	#004	Oil	Active	2	18S	27E	D		[873] APACHE CORPORATION
30-015-32218	SB STATE	#001	Gas	Active	2	18S	27E	E		[873] APACHE CORPORATION
30-015-42002	SB STATE	#002	Oil	Active	2	18S	27E	E		[873] APACHE CORPORATION
30-015-32231	TDF STATE	#001	Gas	Active	2	18S	27E	F		[873] APACHE CORPORATION
30-015-32900	TDF STATE	#002	Oil	Active	2	18S	27E	F		[873] APACHE CORPORATION

**Form C-108: Tarco Energy, LC:**  
**List of Area of Review Wells Whose Construction & Plugging Data were Previously Submitted to OCD**

API	Well Name	Well Number	Type	Status	Section	Township	Range	OCD Unit Letter	Plugged On	Current Operator
30-015-00720	RIVERWOLF UNIT	#004	Oil	Plugged, Site Released	2	18S	27E	B	12/4/2008	[778] BP AMERICA PRODUCTION COMPANY
30-015-00719	RIVERWOLF UNIT	#005	Oil	Plugged, Site Released	2	18S	27E	C	12/23/2008	[778] BP AMERICA PRODUCTION COMPANY
30-015-30406	LOGAN 2 STATE	#002	Oil	Active	2	18S	27E	C		[330211] Redwood Operating, LLC
30-015-33111	LOGAN 2C STATE	#003	Oil	Active	2	18S	27E	C		[330211] Redwood Operating, LLC
30-015-40783	LOGAN 2C STATE	#004	Oil	Active	2	18S	27E	C		[330211] Redwood Operating, LLC
30-015-41119	LOGAN 2C STATE	#005	Oil	Active	2	18S	27E	C		[330211] Redwood Operating, LLC
30-015-00739	PRE-ONGARD WELL	#001	Oil	Plugged, Site Released	2	18S	27E	E		[214263] PRE-ONGARD WELL OPERATOR
30-015-10623	PRE-ONGARD WELL	#001	Oil	Plugged, Site Released	2	18S	27E	D	5/11/1948	[214263] PRE-ONGARD WELL OPERATOR
30-015-00728	PRE-ONGARD WELL	#001	Oil	Plugged, Site Released	2	18S	27E	F	6/14/1988	[214263] PRE-ONGARD WELL OPERATOR
30-015-00718	PRE-ONGARD WELL	#002	Oil	Plugged, Site Released	2	18S	27E	B	4/9/1942	[214263] PRE-ONGARD WELL OPERATOR
30-015-00738	PRE-ONGARD WELL	#002	Oil	Plugged, Site Released	2	18S	27E	B	2/15/1977	[214263] PRE-ONGARD WELL OPERATOR
30-015-00736	PRE-ONGARD WELL	#004	Oil	Plugged, Site Released	2	18S	27E	C	2/17/1977	[214263] PRE-ONGARD WELL OPERATOR
30-015-01213	PRE-ONGARD WELL	#033	Oil	Plugged, Site Released	2	18S	27E	C	1/14/1993	[214263] PRE-ONGARD WELL OPERATOR
30-015-00742	PRE-ONGARD WELL	#039	Oil	Plugged, Site Released	2	18S	27E	H	11/9/1990	[214263] PRE-ONGARD WELL OPERATOR
30-015-00725	SOUTH RED LAKE II UNIT	#034	Oil	Active	2	18S	27E	C		[370922] REMNANT OIL OPERATING, LLC
30-015-01211	SOUTH RED LAKE II UNIT	#035	Injection	Active	2	18S	27E	B		[370922] REMNANT OIL OPERATING, LLC
30-015-00721	SOUTH RED LAKE II UNIT	#036	Oil	Active	2	18S	27E	A		[370922] REMNANT OIL OPERATING, LLC
30-015-00737	SOUTH RED LAKE II UNIT	#038	Oil	Active	2	18S	27E	B		[370922] REMNANT OIL OPERATING, LLC
30-015-40679	BLAKE STATE	#004	Oil	Active	2	18S	27E	B		[279579] TARCO ENERGY, LC
30-015-40618	BRAD STATE	#001	Oil	Active	2	18S	27E	C		[279579] TARCO ENERGY, LC
30-015-40619	BRAD STATE	#002	Oil	Active	2	18S	27E	C		[279579] TARCO ENERGY, LC
30-015-40620	BRAD STATE	#003	Oil	Active	2	18S	27E	C		[279579] TARCO ENERGY, LC
30-015-40621	BRAD STATE	#004	Oil	Active	2	18S	27E	C		[279579] TARCO ENERGY, LC
30-015-00759	MALCO	#001	Oil	Plugged, Site Released	3	18S	27E	A	9/16/2003	[785] AMTEX ENERGY INC

**TARCO ENERGY, LC**  
**FORM C-108: BRAD STATE NO. 6**  
**SUPPLEMENTAL AREA OF REVIEW WELL LIST**

API NUMBER	OPERATOR	LEASE NAME	WELL NO.	WELL TYPE	STATUS	FTG. N/S	FTG. E/W	E/W	UNIT	SEC.	TSH.P.	RNG.	DATE DRILLED	TOTAL DEPTH	HOLE SIZE	CSG. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	HOLE SIZE	CSG. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	COMPLETION	REMARKS									
30-015-00735	Apache Corporation	Empire Abo Unit	14B	Oil	Active	1980	S	1830'	W	K	2	18S	27E	Nov-58	6,676'	12 1/4"	8 5/8"	987'	775	Surface	Circ.	7 7/8"	5 1/2"	6176'	175' **1150'	Surface	Circ.	6,074'-6,110' Empire-Abo Completion	*5 1/2" Squeezed with 1150 Sx. from 5,436' to Surface. Cmt. Circ. to Surface.								
30-015-22896	Apache Corporation	Empire Abo Unit	143A	Oil	Active	1820'	S	2550'	W	K	2	18S	27E	Apr-79	6,108'	11"	8 5/8"	1000'	600	Surface	Circ.	7 7/8"	5 1/2"	6,107'	1225'	Surface	Circ.	5,581'-5,914' Empire-Abo Completion	2-Stage Cement Job. DV Tool @ 3,975' 1st-375 Sx. 2nd-850 Sx.								
30-015-33158	Apache Corporation	NMBP State	1	Oil	Active	2185'	S	990'	W	L	2	18S	27E	Jun-04	3,950'	12 1/4"	8 5/8"	364'	600	Surface	Circ.	7 7/8"	5 1/2"	3,939'	850'	Surface	Circ.	2,039'-2,956' 3,196'-3,604'	DHC Completion: Red Lake Qn-Gb-SA & NE Red Lake Glorieta-Yeso Pools								
30-015-30389	Devon Energy Prod. Co. L.P.	Logan 2 State	1	N/A	N/A	500'	N	2310'	W	C	2	18S	27E		Cancelled APD. Well Never Drilled																						
30-015-30864	Devon Energy Prod. Co. L.P.	Logan 2 State	4	N/A	N/A	990'	N	2110'	E	B	2	18S	27E		Cancelled APD. Well Never Drilled																						
30-015-00743	Malco Refineries, Inc.	State E	1	Oil	PA	2310'	S	1650'	W	J	2	18S	27E	Mar-44	442'	8 5/8"	5 3/16"	395'	25											Well PA'd. See Attached Schematic							
30-015-00726	Malco Refineries, Inc.	Hudson B State	1	Oil	PA	2310'	S	990'	W	L	2	18S	27E	Sep-43	2,337'	10"	7"	435'	125	Surface	Calc.								395'-425'	Empire Yates-Seven Rivers Pool Well PA'd. See Attached Schematic							
30-015-30926	Redwood Operating, LLC	Logan 2 State	3	N/A	N/A	474'	N	1650'	E	B	2	18S	27E		Cancelled APD. Well Never Drilled																						
30-015-31965	Amtex Energy, Inc.	Malco A	5	Oil	Active	330'	N	420'	E	A	3	18S	27E	Apr-03	2,629'	12 1/4"	8 5/8"	362'	200	Surface	Circ.	7 7/8"	5 1/2"	2,629'	560'	Surface	Circ.	1982'-2,320'	Red Lake Qn-Gb-SA Pool Completion								
30-015-00749	Apache Corporation	Empire Abo Unit	12A	Oil	PA	982'	N	330'	E	A	3	18S	27E	Oct-59	5,861'	11"	8 5/8"	1496'	700	Surface	Circ.	7 7/8"	4 1/2"	5661'	850'	1988'	Well File	5,412'-5,630'	Empire-Abo Completion. Well PA'd. See Attached Schematic								
30-015-43754	Redwood Operating, LLC	Falcon 3A Federal	40	Oil	Active	1175'	N	250'	E	A	3	18S	27E	Feb-18	4,882'	12 1/4"	8 5/8"	350'	350	Surface	Circ.	7 7/8"	5 1/2"	4,860'	900'	Surface	Circ.	3,200'-4,721'	NE Red Lake Glorieta-Yeso Pool								
30-015-29545	Redwood Operating, LLC	Falcon 3H Federal	10	Oil	Active	1687'	N	378'	E	H	3	18S	27E	Jul-97	2,793'	12 1/4"	8 5/8"	1176'	600	Surface	Circ.	7 7/8"	5 1/2"	2,793'	525'	Surface	Circ.	1,681'-2,486'	Red Lake Qn-Gb-SA Pool Completion								

Apache Corporation  
Empire Abo Unit No. 014B (API No. 30-015-00735)  
1980' FSL & 1830' FWL (Unit K)  
Section 2, T-18S, R-27E, NMPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Well Drilled: 11/1958  
Status: Active Empire-  
Abo Pool Completion

12 1/4" Hole. Set 8 5/8" Csg. @ 987'.  
Cemented with 675 Sx. Cemented Casing  
w/1" @ 86' with 100 Sx. Cement  
Circulated to surface.

987'

Perforate 5 1/2" Csg. @ 1200'-1,202".  
Squeeze w/300 Sx. Cement. Cement  
Circulated to Surface.

Perforate 5 1/2" Csg. @ 4,200'-4,202'.  
Squeezed w/850 Sx. TOC @ 1,235'

TOC @ 5,743'

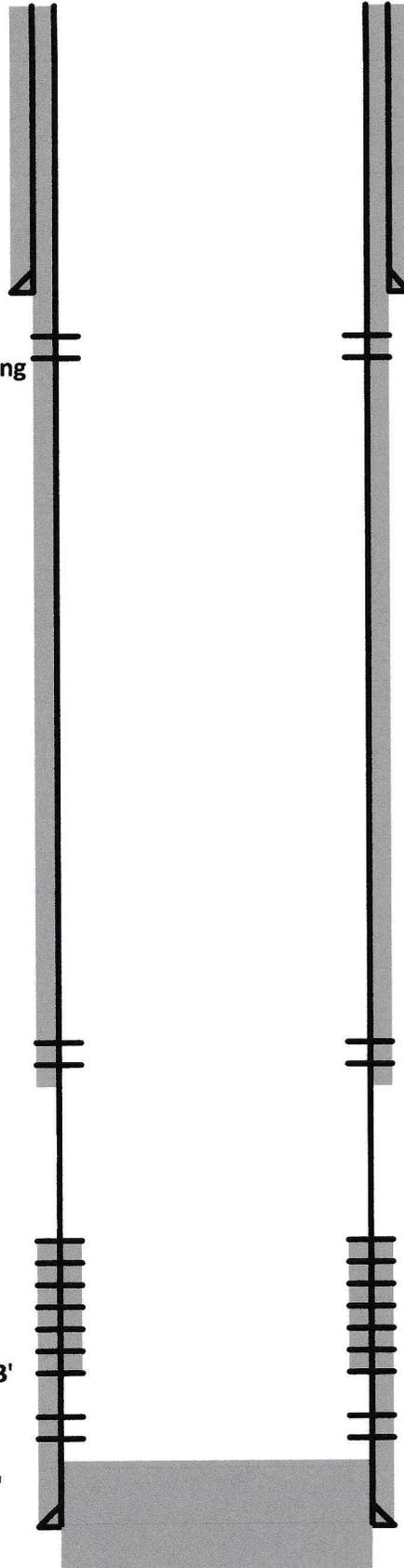
Abo Total Perforated Interval:  
5,410'-5,997' Squeezed w/550 Sx.

7 7/8" Hole. Set 5 1/2" Csg. @ 6,176'.  
Cemented with 175 sx. TOC @ 5,743'  
by calculation.

Open Abo Perforations: 6,074'-6,110'  
Plug back to 6,176' w/160 Sx. Cement

6,176'

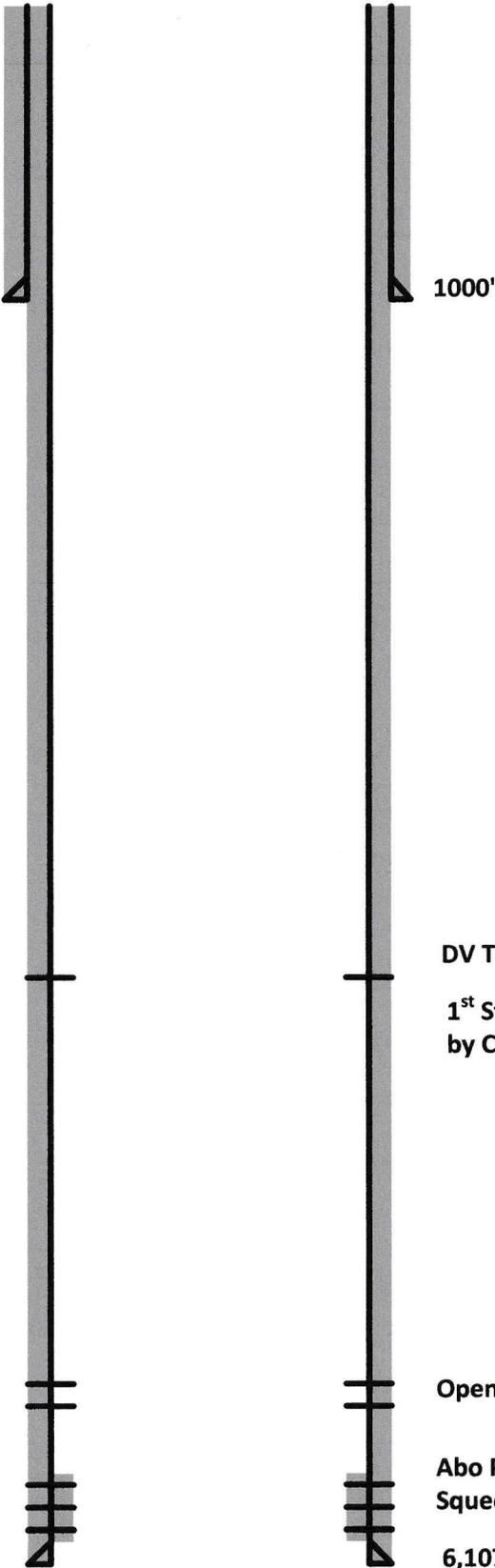
T.D. 6,676'



Apache Corporation  
Empire Abo Unit No. 143A (API No. 30-015-22896)  
1820' FSL & 2550' FWL (Unit K)  
Section 2, T-18S, R-27E, NMPPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Well Drilled: 4/1979  
Status: Active Empire-  
Abo Pool Completion



11" Hole. Set 8 5/8" Csg. @ 1000'.  
Cemented with 600 Sx. Cement  
Circulated to surface.

1000'

7 7/8" Hole. Set 5 1/2" Csg. @ 6,107'.  
Cemented 1<sup>st</sup> Stage w/375 sx.  
Cemented 2<sup>nd</sup> Stage w/850 Sx.  
DV Tool @ 3,975' Cement Circulated  
to Surface.

DV Tool @ 3,975'  
1<sup>st</sup> Stage Cement Top @ 4,000'  
by Calculation.

Open Abo Perforations: 5,581'-5,914'

Abo Perforation: 5,910'-6,090'  
Squeezed w/250 Sx.

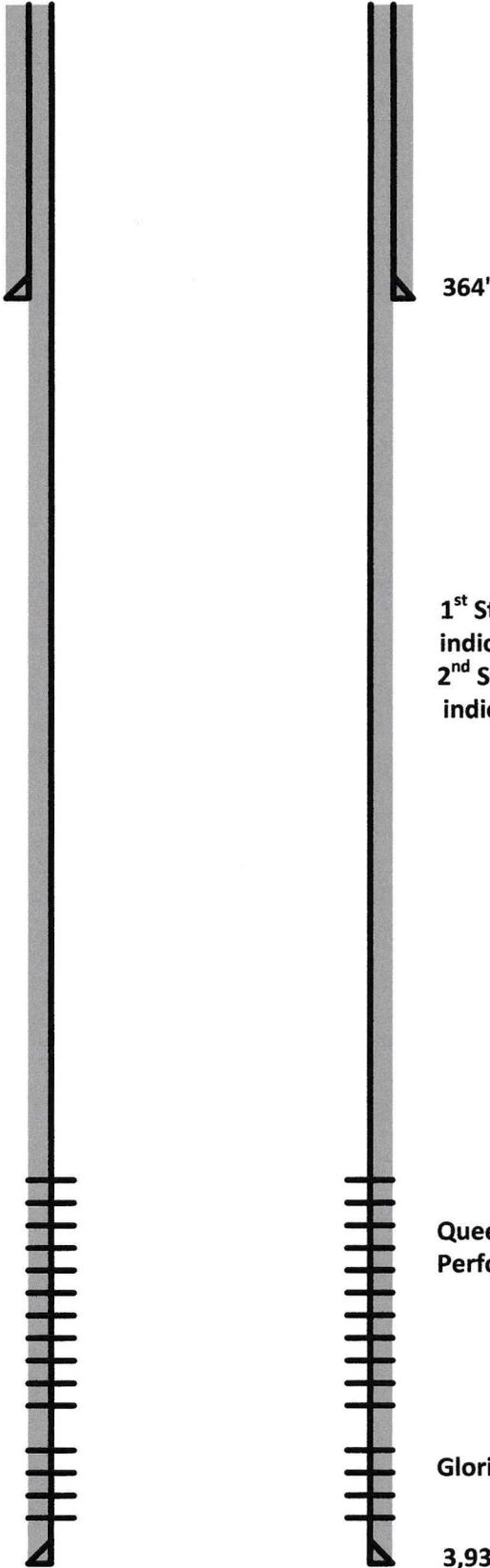
6,107'

T.D. 6,108'

Apache Corporation  
NMBP State No. 1 (API No. 30-015-33158)  
2185' FSL & 990' FWL (Unit L)  
Section 2, T-18S, R-27E, NMPPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Well Drilled: 6/2004  
Status: Active Red Lake  
Qn-Gb-SA & Northeast  
Red Lake Glorieta-Yeso  
Pools Completion.



12 1/4" Hole. Set 8 5/8" Csg. @ 364'.  
Cemented with 300 Sx. Cement Casing  
w/1" @ 128' w/300 Sx. Cement  
Circulated to surface.

1<sup>st</sup> Stage Cemented w/200 Sx. Well file  
indicates cement circulated to DV Tool.  
2<sup>nd</sup> Stage Cemented w/650 Sx. Well file  
indicates cement circulated to surface.

7 7/8" Hole. Set 5 1/2" Csg. @ 3,939'.  
Cemented 1<sup>st</sup> Stage w 200 sx.  
Cemented 2<sup>nd</sup> Stage w/650 Sx.  
Unknown DV Tool Depth.  
Cement Circulated to Surface.

Queen-Grayburg-San Andres  
Perforations: 2,039'-2,956'

Glorieta-Yeso Perforations: 3,196'-3,604'

T.D. 3,950'

3,939'

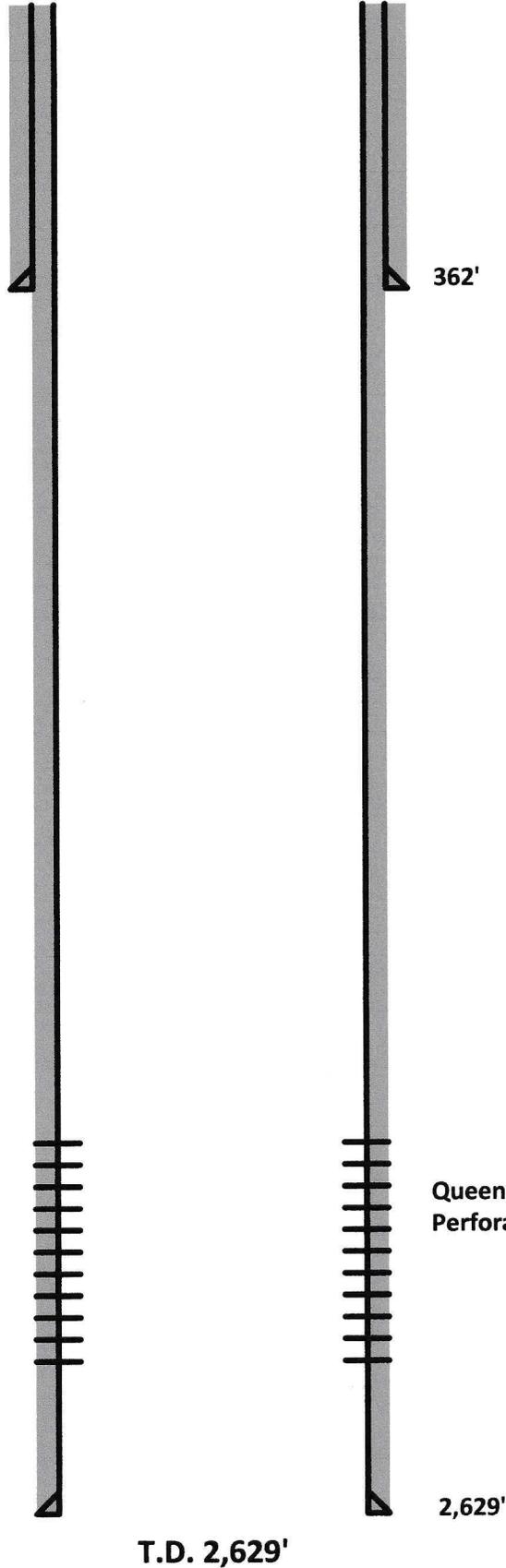
Amtex Energy, Inc.  
Malco A No. 5 (API No. 30-015-31965)  
330' FNL & 420' FEL (Unit A)  
Section 3, T-18S, R-27E, NMPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Well Drilled: 4/2003  
Status: Active Red Lake  
Qn-Gb-Sa Pool  
Completion.

12 1/4" Hole. Set 8 5/8" Csg. @ 362'.  
Cemented with 200 Sx. Cement  
Circulated to surface.

7 7/8" Hole. Set 5 1/2" Csg. @ 2,629'.  
Cemented w/560 Sx. Cement.  
Cement Circulated to Surface.



Queen-Grayburg-San Andres  
Perforations: 1,982'-2,320'

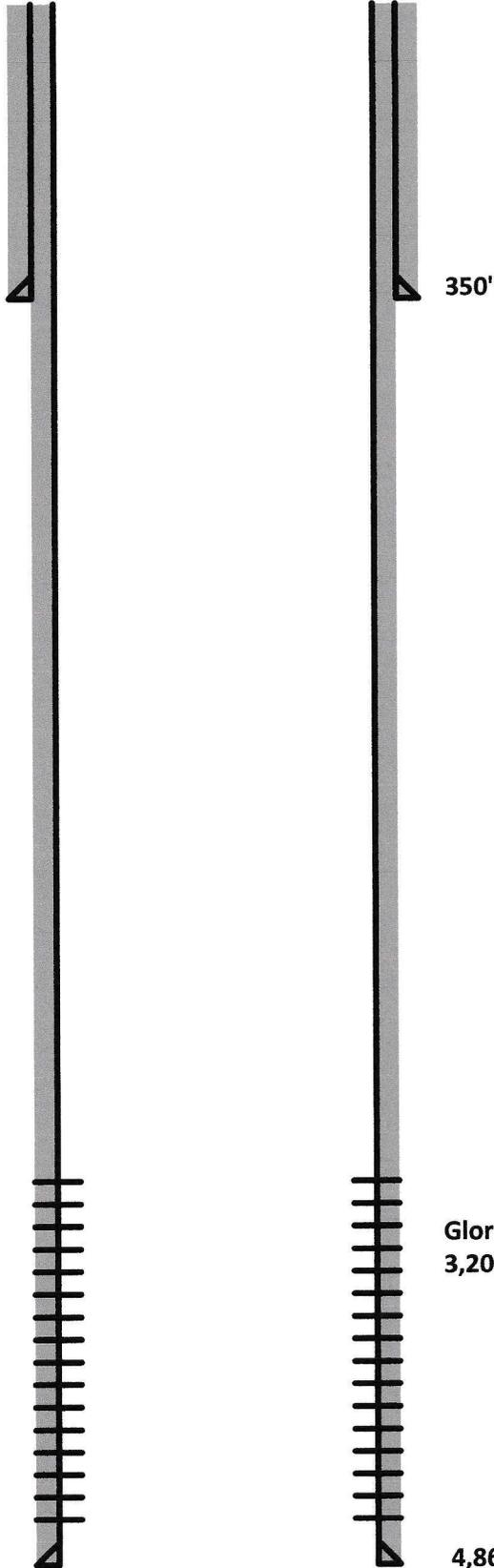
T.D. 2,629'

2,629'

Redwood Operating, LLC  
Falcon 3A Federal No. 40 (API No. 30-015-43754)  
1175' FNL & 250' FEL (Unit A)  
Section 3, T-18S, R-27E, NMPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Well Drilled: 2/2018  
Status: Active  
Northeast Red Lake  
Glorieta-Yeso Pool  
Completion.



12 1/4" Hole. Set 8 5/8" Csg. @ 350'.  
Cemented with 350 Sx. Cement  
Circulated to surface.

7 7/8" Hole. Set 5 1/2" Csg. @ 4,860'.  
Cemented w/900 Sx. Cement.  
Cement Circulated to Surface.

Glorieta-Yeso Perforations:  
3,200'-4,721'

4,860'

T.D. 4,882'

Redwood Operating, LLC  
Falcon 3H Federal No. 10 (API No. 30-015-29545)  
1687' FNL & 376' FEL (Unit H)  
Section 3, T-18S, R-27E, NMPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Well Drilled: 7/1997  
Status: Active Red Lake  
Qn-Gb-SA Pool  
Completion.

12 1/4" Hole. Set 8 5/8" Csg. @ 1176'.  
Cemented with 600 Sx. Cement  
Circulated to surface.



1176'

Queen-Grayburg-San Andres  
Perforations: 1,681'-2,486'

7 7/8" Hole. Set 5 1/2" Csg. @ 2,793'.  
Cemented w/525 Sx. Cement.  
Cement Circulated to Surface.

2,793'

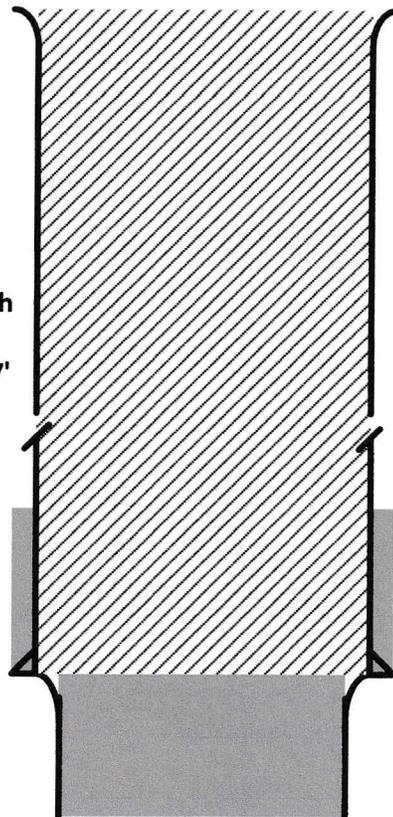
T.D. 2,793'

Malco Refineries, Inc.  
State E No. 1 (API No. 30-015-00743)  
2310' FSL & 1650' FWL (Unit K)  
Section 2, T-18S, R-27E, NMPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Drilled 8 5/8" hole to a total depth of 442'. Set 5 3/16" Csg. @ 395'. Cemented with 25 Sx. TOC @ 357' by calculation.

TOC @ 357' by calculation



T.D. 442'

Well Drilled: 3/1944  
Well PA'd: 5/1948

PA'd 1980. Cut & pulled 5 3/16" casing from 0-300'. Filled hole with mud to surface & set regulation marker in cement.

395'

Set cement plug from 395'-442'

RECEIVED  
FEB 10 1949

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

MISCELLANEOUS REPORTS ON WELLS

Oil Cons. Comm.

Artesia Office

Submit this report in triplicate to the Oil Conservation Commission or its proper agent within ten days after the work specified is completed. It should be signed and sworn to before a notary public for reports on beginning drilling operations, results of shooting well, results of test of casing shut off, result of plugging of well, and other important operations, even though the work was witnessed by an agent of the Commission. Reports on minor operations need not be signed and sworn to before a notary public. See additional instructions in the Rules and Regulations of the Commission.

Indicate nature of report by checking below.

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF SHOOTING OR CHEMICAL TREATMENT OF WELL		REPORT ON PULLING OR OTHERWISE ALTERING CASING	
REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON DEEPENING WELL	
REPORT ON RESULT OF PLUGGING OF WELL	X		

June 21, 1948

Artesia, New Mexico

Date

Place

OIL CONSERVATION COMMISSION,  
SANTA FE, NEW MEXICO.

Gentlemen:

Following is a report on the work done and the results obtained under the heading noted above at the \_\_\_\_\_

Malco Refineries, Inc. B-8914 Well No. E-1 in the \_\_\_\_\_  
Company or Operator Lease  
N2 1/4 SW 1/4 of Sec. 2, T. 18-South, R. 27-East, N. M. P. M.,  
Empire Field, Eddy County.

The dates of this work were as follows: May 17, 1948.

Notice of intention to do the work was (~~written~~) submitted on Form C-102 on May 10, 1948. 19\_\_\_\_  
and approval of the proposed plan was (~~written~~) obtained. (Cross out incorrect words.)

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

We ran cement plug from 442' to 395', knocked off 7" casing and recovered 300'. Filled hole with mud to top and set regulation marker in cement. Work was done by Ackerman Well Service.

Witnessed by Bill Hudson Operator  
Name Company Title

Subscribed and sworn before me this 21 I hereby swear or affirm that the information given above is true and correct

day of June, 1948 Name W. Hudson

William Hudson Position Superintendent  
Notary Public Representing William Hudson, Operator for Malco Refineries, Inc.  
Company or Operator

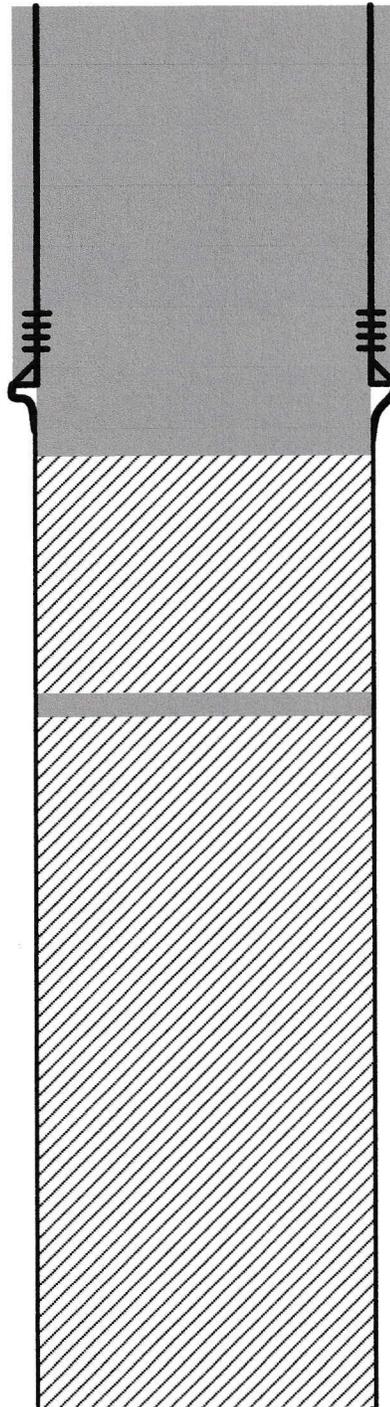
My commission expires 4/3/52 Address Artesia Hotel Bldg., Artesia, N. M.

Remarks:

Just Nelson Name  
ARTESIA REPRESENTATIVE  
Title

Malco Refineries, Inc.  
Hudson B State No. 1 (API No. 30-015-00726)  
2310' FSL & 990' FWL (Unit L)  
Section 2, T-18S, R-27E, NMPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6



Well Drilled: 9/1943  
Well PA'd: 8/1980

PA'd 1980. Dumped 3.5 yds. Redi-Mix  
from 0'-435' Inside 7" casing.

Perforations: 395'-425'

7" Csg.set @ 435'. Cemented with 125 Sx.  
TOC @ Surface by Calculation

Set 5 Sx. Cement plug @ 450'

Filled hole with mud to 450'

Set 5 Sx. Cement plug @ 715'

Well drilled with a 10" hole to a Total  
Depth of 2,337'. Well record indicates well  
was plugged back with mud to a depth 715'

T.D. 2,337'

NO. OF COPIES RECEIVED	3
DISTRIBUTION	
SANTA FE	1
FILE	1 ✓
U.S.G.S.	
LAND OFFICE	
OPERATOR	1

AUG 25 1980

O. C. D.

5a. Indicate Type of Lease  
State  For

5. State Oil & Gas Lease No.  
B-7244

SUNDRY NOTICES AND REPORTS ON WELLS ARTESIA OFFICE

(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. OIL WELL  P & A GAS WELL  OTHER

7. Unit Agreement Name

2. Name of Operator ARCO Oil & Gas Company  
Division of Atlantic Richfield Company

8. Farm or Lease Name  
Hudson "B" State

3. Address of Operator  
P. O. Box 1710, Hobbs, New Mexico 88240

9. Well No.  
1

4. Location of Well  
UNIT LETTER L FEET FROM THE 2310 South LINE AND 990 FEET FROM  
THE West LINE, SECTION 2 TOWNSHIP 18S RANGE 27E N.M.P.M.

10. Field and Pool, or Wildcat  
Empire Yates 7 Rivers

15. Elevation (Show whether DF, RT, CR, etc.)  
3541' GR

12. County  
Eddy

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. Rigged up on 8-18-80. POH w/ comp assy.
2. Dumped 3.5 yds Redi-mix cmt 435'-0' inside 7" csg.
3. Cut 7" csg below ground level, installed regulation dry hole marker, clean & level location. P & A eff: 8-18-80.

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

SIGNED Jerry W. Schmidt TITLE Dist. Drlg. Supt. DATE 8/20/80

APPROVED BY Mike Sturpfield TITLE OIL AND GAS INSPECTOR DATE OCT 27 1980

CONDITIONS OF APPROVAL, IF ANY:

Apache Corporation  
Empire Abo Unit No. 12A (API No. 30-015-00749)  
982' FNL & 330' FEL (Unit A)  
Section 3, T-18S, R-27E, NMPM, Eddy County, NM

Form C-108 Application  
Tarco Energy, LC  
Brad State No. 6

Well Drilled: 10/1959  
Well PA'd: 9/2012

Perforate @ 200'. Squeeze 85 sx.  
Cmt. from 200' to surface.

11" Hole. Set 8 5/8" Csg. @ 1,496'.  
Cemented with 700 Sx. Cement  
circulated to surface.

Perforate @ 940'. Could not pump  
into perms. Set 25 Sx. Cmt. Plug. Tag  
TOC @ 633'

TOC @ 1,968 (Well File)

Perforate 4 1/2" Csg. @ 1,668'. Could not  
pump into perms. Set 30 Sx. Cmt. Plug.  
Tag TOC @ 1,262'

Set 25 Sx. Cement plug @ 3,055'

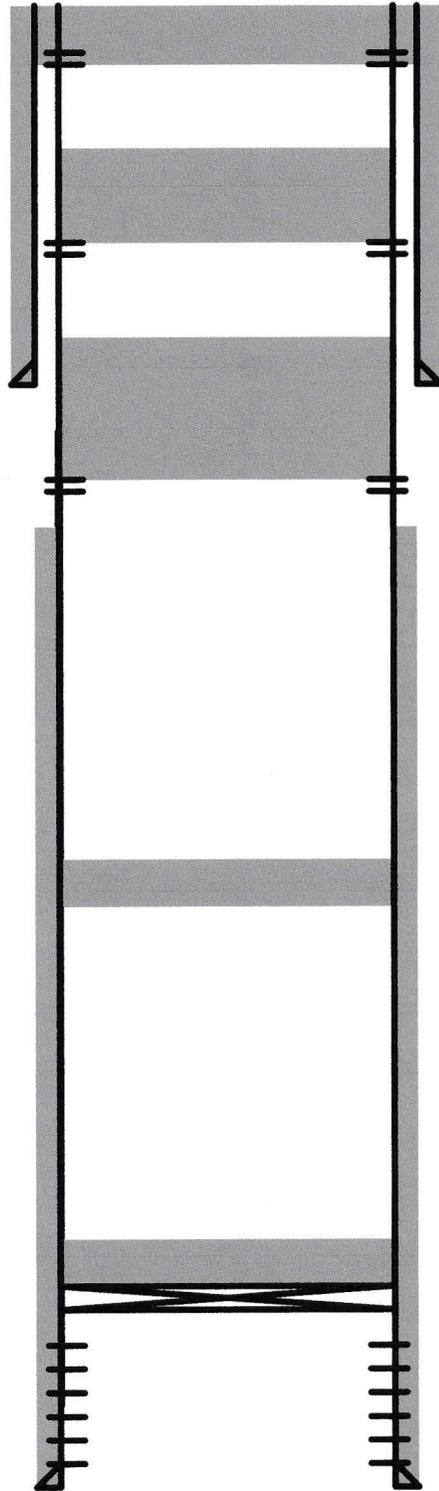
Set 25 Sx. Cement plug @ 5,350'

Set CIBP @ 5,350'

Abo Perforation: 5,412'-5,630'

7 7/8" Hole. Set 4 1/2" Csg. @ 5,661'.  
Cemented with 850 sx. TOC @ 1,968'  
by well file.

T.D. 5,661'



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED  
OMB No 1004-0137  
Expires March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1 Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5 Lease Serial No LC 065478B
2 Name of Operator Apache Corporation		6 If Indian, Allottee or Tribe Name
3a Address 303 Veterans Airpark Lane, Ste 3000	3b Phone No (include area code) 432-818-1106	7 If Unit or CA/Agreement, Name and/or No NM70945
4 Location of Well (Footage, Sec., T., R., M., or Survey Description) UL "A", 982' FNL & 330' FEL, Sec 3, T18S, R27E		8 Well Name and No Empire Abo Unit "I" #12
		9 API Well No 30-015-00749
		10 Field and Pool, or Exploratory Area Empire Abo
		11 County or Parish, State Eddy, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

9/11/12 Notify Sheryl (BLM) of MIRU on 9/12/12  
 9/12/12 Bleed off well. LD 93 7/8" rods and 133 3/4" rods. POH LD 164 jts 2 3/8" tbg. RIH set 4 1/2 CIBP @ 5350'.  
 9/13/12 RIH tag CIBP @ 5350'. Circ well w/80bbls MLF. Pressure test casing to 1000psi, 10 min ok. Spot 25x class "c" Cmt. PUH to 3055'. Spot 25x class c PUH to 1068', perf @ 1668'. Couldn't pump into perms. RIH to 1718', spot 30x class c, woc 4hrs RIH tag toc @ 1262'. PUH to 700', perf @ 940', Could not pump into perms. RIH to 990', load well spot 25x class c woc 4hrs RIH tag toc @ 633'. PUH to 90', perf @ 200', sqz 85x class c from 200' to surf. Cmt circulated behind 4 1/2 casing. (Cutoff wellhead, anchors, clean location. Install dryhole marker.) 9/14/12

RECLAMATION  
DUE 3-14-13

**RECEIVED**  
OCT 16 2012  
NMOCD ARTESIA

Accepted as to plugging of the well bore.  
Liability under bond is retained until  
face restoration is completed.

14 I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Jimmy Bagley

Title Manager - Sunset Well Serv.

Signature

*[Handwritten Signature]*

Date

9-17-12

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Office

Date

ACCEPTED FOR RECORD

OCT 13 2012

Title 18 USC Section 1001 and Title 43 USC Section 1212. make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

*At 10/17/2012*

Accepted for record  
NMOCD

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

C-108 Application  
Tarco Energy, LC  
Brad State No. 6  
990' FNL & 1980' FWL (Lot 3/Unit C)  
Section 2, T-18S, R-27E, NMPM  
Eddy County, New Mexico

- I. The purpose of the application is to request approval to expand the Russell C Lease Pressure Maintenance Project by re-entering and converting the Brad State No. 6 (formerly the Riverwolf Unit No. 5) to an injection well in the Yates-Seven Rivers formation, (Empire Yates-Seven Rivers Pool; 22230).
- II. Tarco Energy, LC (“Tarco”)  
3805 109<sup>th</sup> Street  
Lubbock, Texas 79423  
Contact Party: Joe L. Tarver (806) 787-5138 or David Catanach (Agent)  
(505) 690-9453
- III. Injection well data sheet and wellbore schematic diagram showing the proposed wellbore configuration of the Brad State No. 6 is attached. The Brad State No. 6 was previously a producing well in the Empire-Abo Pool, and was plugged and abandoned in 2008 by BP America Production Company.
- IV. This is an expansion of the Russell C Lease Pressure Maintenance Project. This project was approved by Order No. R-13680, issued in Case No. 14931 on February 14, 2013. That order authorized Tarco Energy, LC to utilize its Russel C Well No. 3 (API No. 30-015-37783) located in Unit O of Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico as an injection well, injection to occur into the Yates-Seven Rivers formation (Empire Yates-Seven Rivers Pool; 22230) through the perforated interval from 418 feet to 460 feet. Also, the project was further expanded by Order No. PMX-280 dated February 18, 2019 by authorizing Tarco to convert its Brad State No. 1 (API No. 30-015-40618) located in Lot 3/Unit C of Section 2, Township 18 South, Range 27 East, NMPM, to injection.

**Russel C Lease Pressure Maintenance Project Area**

**Township 17 South, Range 27 East, NMPM**

Section 35: SE/4, E/2 SW/4 & SW/4 SW/4

**Township 18 South, Range 27 East, NMPM**

Section 2: NW/4 NE/4 & NE/4 NW/4

- V. Attached is a map that identifies all leases and wells within a 2-mile radius of the proposed injection well and a map that identifies all wells within the 1/2-mile "Area of Review" ("AOR"). Also attached is a map that shows the injection/production well pattern within the project area. Tarco will basically utilize a five-spot injection pattern to efficiently and effectively produce the remaining reserves in the Empire Yates-Seven Rivers Pool underlying the project area.

VI. **Area of Review Well Discussion:**

Attached is a well list that identifies wells within the area of review whose construction and plugging data were previously submitted to the Division in either the initial pressure maintenance application (Case No. 14931), a PMX application dated 2/14/2014, or a PMX application resulting in Order No. PMX-280 dated 2/18/2019. This list is comprised of twenty-two (22) plugged and abandoned wells, forty-two (42) active wells, and two new wells that have not yet been drilled. The well data has been reviewed to assure that the construction or status of these wells has not changed. **Please note that in Orders No. R-13680 and PMX-280, the Division did not require Tarco Energy, LC to perform any remedial work on any active or plugged and abandoned well within the aforesaid area of reviews for either the Russell C Well No. 3 or the Brad State No. 1.**

Also attached is a list of wells within the area of review of the Brad State No. 6 whose construction and/or plugging data has not previously been submitted to the Division. This list is comprised of 3 plugged and abandoned wells, 6 active wells and 3 wells that were never drilled. An analysis of this well data indicates that all wells are adequately constructed and/or plugged and abandoned to prevent migration of fluid from the proposed injection well to any producing zones or underground sources of drinking water.

VII. **Tarco's Proposed Operation**

1. The average injection rate into the Brad State No. 6 is anticipated to be approximately 90 BWPD. Tarco has found that a low injection rate combined with low injection pressure provides better response in its producing wells. If this rate increases in the future, the Division will be notified.
2. This will be a closed system.
3. Tarco currently does not inject into the Russell C Well No. 3 at a surface pressure greater than 0 psi. As previously mentioned, Tarco has found that injection at hydrostatic pressure at the formation face (approximately

178 psi) provides sufficient reservoir energy to maintain adequate producing rates in offset producing wells, and should provide Tarco the opportunity to recover additional oil and gas from the project area that may otherwise not be recovered, thereby preventing waste. Tarco has not yet commenced injection into the Brad State No. 1. Tarco does not anticipate injection to occur into the Brad State No. 6 at a surface pressure greater than 0 psi., however if necessary, a pressure limit of 0.2 psi/ft. or 86 psi, which is in compliance with Division regulations, will be utilized.

4. Injected fluid will be re-injected water from the Empire Yates-Seven Rivers Pool. No compatibility issues are anticipated.
5. N/A. Injection will be into the productive Empire Yates-Seven Rivers Pool for the purpose of increasing the ultimate recovery of oil within the project area.

**Discussion:**

- A. Tarco previously conducted a fluid level analysis on the Brad State Wells No. 2 and 4, both located in Unit C of Section 2, Township 18 South, Range 27 East, NMPM. After a shut-in period of several days, both wells showed a fluid level of 363 feet, or 50 feet above the perforated intervals of 413 feet and 415 feet, respectively. This indicates a reservoir pressure within the Empire Yates-Seven Rivers Pool of approximately 22 psi;
- B. By maintaining pumped-off conditions within Tarco's thirteen producing wells within the project area, a negligible reservoir pressure will be sustained during the period of injection into the Russell C Well No. 3 and the Brad State Wells No. 1 and 6;
- C. Given the low injection rates and pressures, Tarco believes that the reservoir pressure in the Empire Yates-Seven Rivers Pool will not be sufficient to cause any significant upward migration of fluid from the proposed injection interval. Consequently, area of review wells will not be affected by injection; and
- D. Injection into the Russell C No. 3 well has been ongoing since approximately April, 2013. There is currently no evidence to indicate that injection has caused migration of fluid from the injection interval, or has otherwise affected any deeper producing zones.

VIII. Geologic Formation:	Yates-Seven Rivers
Estimated Top:	350'
Thickness:	180'

Lithology: Sand or Sandy Dolomite.  
Description: The productive intervals in the Yates-Seven Rivers formation are approximately 3-7 feet thick and are separated by either dense dolomite or anhydrite zones. Porosity in the "B", "C", "D" and "E" intervals is approximately 15% or greater.

USDW's: According to data obtained from the New Mexico State Engineer ("OSE"), there are no fresh water wells located within one mile of the Brad State No. 6 (See attached OSE report). On a more regional basis, OSE data indicates that there are numerous fresh water wells in Townships 17 & 18 South, Range 28 East, NMPM. This data indicates that the average depth to fresh water ranges from 13 feet to 145 feet, with an average depth to water of 52 feet. Given the reservoir pressures in the Empire Yates-Seven Rivers Pool, the parameters of operation as outlined above, and the depth of fresh water in this area, it is highly unlikely that the proposed injection will cause migration of injected fluid into any underground source of fresh water via any plugged or active area of review wells.

- IX. No stimulation is currently planned.
- X. Neutron/Gamma Ray Logs were previously submitted to the Division for the Brad State No. 6. If additional logs are required by the Division, Tarco will run these logs.
- XI. There are no fresh water wells located within a one-mile radius of the Brad State No. 6.
- XII. Affirmative statement is enclosed.
- XIII. Proof of Notice is enclosed. Affidavit of Publication is attached.

July 29, 2021

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

**TO: See Attached Notice List**

**Re: Tarco Energy, LC  
Form C-108 (Application for Authorization to Inject)  
Brad State No. 6: API No. (30-015-00719)  
990' FNL & 1980' FWL, Lot 3/Unit C, Section 2, T-18S, R-27E, NMPM,  
Eddy County, New Mexico**

**Ladies & Gentlemen:**

**By Order No. R-13680 dated February 14, 2013 the Oil Conservation Division approved the Tarco Energy, LC Russell C Lease Pressure Maintenance Project authorizing injection into the Yates-Seven Rivers formation (Empire Yates-Seven Rivers Pool) within its Russell C Well No. 3 located in Unit O of Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico. This project was further expanded by Order No. PMX-280 dated February 18, 2019 by authorizing injection into the Brad State No. 1, located in Unit C of Section 2, Township 18 South, Range 27 East, NMPM.**

**Tarco Energy, LC ("Tarco") is seeking administrative approval to further expand the Russell C Lease Pressure Maintenance Project by adding an additional injection well within the approved project area. Enclosed please find a copy of Oil Conservation Division Form C-108 (Application for Authorization to Inject) for the Brad State No. 6 (previously the Riverwolf Unit Well No. 5). You are being provided a copy of the application as an offset operator/leaseholder or as the owner of the surface where the well is located. Tarco proposes to re-enter the plugged and abandoned Riverwolf Unit No. 5 and convert the well to an injection well, injection to occur into the Yates-Seven Rivers formation through the perforated interval from approximately 430 feet to 550 feet.**

**Objections must be filed with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days.**

**If you should have any questions, please contact me at (505) 690-9453.  
Sincerely,**

Tarco Energy, LC  
Application to Inject  
Brad State No. 6  
July 29, 2021

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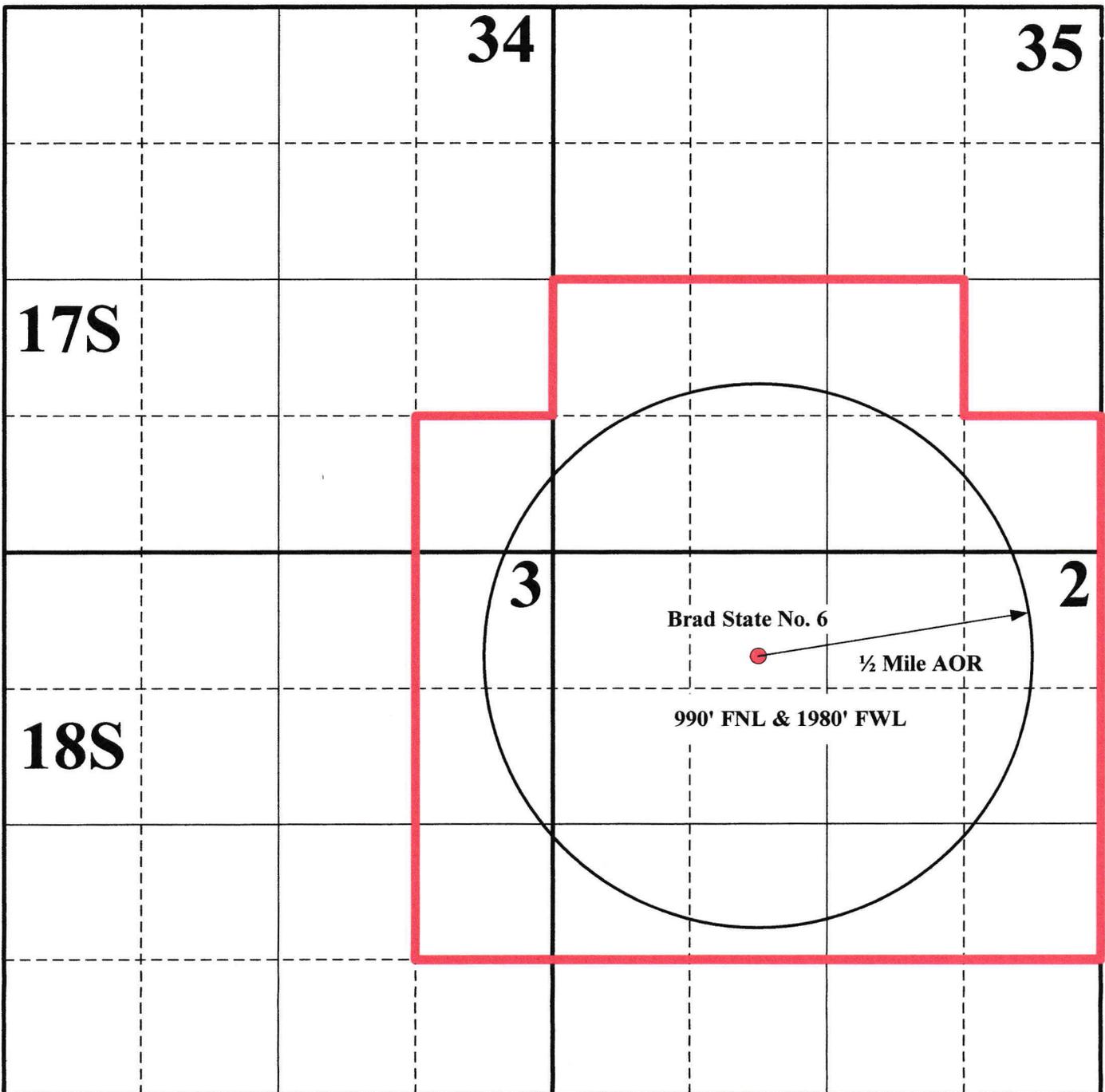
**David Catanach (Agent)**  
**Tarco Energy, LC**  
**3805 109<sup>th</sup> Street**  
**Lubbock, Texas 79423**

**Enclosure**

**Tarco Energy, LC  
PMX Application  
Brad State No. 6**

 **½ Mile Notice Area**  
(See Corresponding Operator Description)

**27E**



**Form C-108: Pressure Maintenance Expansion  
Russel C Lease Pressure Maintenance Project  
Brad State No. 6 (API No. 30-015-00719)  
Section 2, Township 18 South, Range 27 East, NMPM  
Notice List (Offset Operators)**

<u>Operator</u>	<u>Operated Acreage</u>
<b>Redwood Operating, LLC P.O. Box 1370 Artesia, New Mexico 88211</b>	<b>Section 35-17S-27E: Units J, K, L, M, N, O, P Section 2-18S-27E: Units C &amp; H Section 34-17S-27E: Unit P Section 3-18S-27E: Units A &amp; H</b>
<b>Remnant Oil Operating, LLC P.O. Box 5375 Midland, Texas 79704</b>	<b>Section 35-17S-27E: Units K, N, P Section 2-18S-27E: Units A, B, C</b>
<b>Apache Corporation 303 Veterans Airpark Lane Suite 1000 Midland, Texas 79705</b>	<b>Section 2-18S-27E: Units A, D, E, F, G, I, J, K, L Section 3-18S-27E: Unit H, I</b>
<b>Amtex Energy, Inc. P.O. Box 470158 Fort Worth, Texas 76147</b>	<b>Section 3-18S-27E: Unit A</b>
<b>Mewbourne Oil Company P.O. Box 5270 Hobbs, New Mexico 88241</b>	<b>Section 35-17S-27E: Units J, K, L, M, N, O, P</b>

**Additional Notice**

**(Surface Owner)**

**New Mexico State Land Office  
P.O. Box 1148  
Santa Fe, New Mexico 87504**

**Oil Conservation Division  
811 S. First Street  
Artesia, New Mexico 88210**

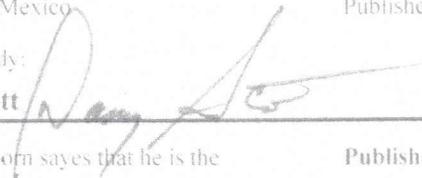
# Affidavit of Publication

No. 25827

State of New Mexico \_\_\_\_\_ Publisher

County of Eddy:

Danny Scott



being duly sworn says that he is the \_\_\_\_\_ Publisher

of the Artesia Daily Press, a daily newspaper of General circulation, published in English at Artesia, said county and state, and that the hereto attached

### Legal Ad

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for 1 Consecutive weeks/day on the same day as follows:

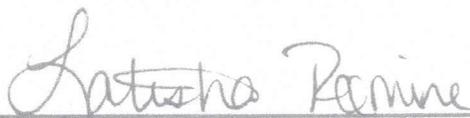
- First Publication July 22, 2021
- Second Publication \_\_\_\_\_
- Third Publication \_\_\_\_\_
- Fourth Publication \_\_\_\_\_
- Fifth Publication \_\_\_\_\_
- Sixth Publication \_\_\_\_\_
- Seventh Publication \_\_\_\_\_

Subscribed and sworn before me this 22nd day of July 2021



OFFICIAL SEAL  
Latisha Romine  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2023



Latisha Romine

Notary Public, Eddy County, New Mexico

# Copy of Publication:

## Legal Notice

Tarco Energy, LC, 3805 109th Street, Lubbock, Texas 79423 has filed a Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division ("Division") seeking administrative approval to expand its Russell C Lease Pressure Maintenance Project by re-entering and converting to an injection well the plugged and abandoned Riverwolf Unit No. 5 (API No. 30-015-00719) located 990 feet from the North line and 1980 feet from the West line (Lot 3/Unit C) of Section 2, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico. The well will be designated as the Brad State No. 6. Injection is to occur into the Yates-Seven Rivers formation (Empire Yates-Seven Rivers Pool) through the perforated interval from approximately 430 feet to 550 feet. Produced water from the Yates-Seven Rivers formation will be re-injected into the Brad State No. 6 at average and maximum rates of 100 and 300 barrels of water per day, respectively. The initial surface injection pressure for the well is anticipated to be at or below 86 psi, which is in compliance with Division regulations. The maximum surface injection pressure will be determined by step rate injection test. Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days of the date of this publication. Additional information can be obtained by contacting Mr. Joe Tarver at (806) 787-5138 or David Catanach (Agent) at (505) 690-9453.

Published in the Artesia Daily Press, Artesia, N.M., July 22, 2021 Legal No. 25827.

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**Hobbs, New Mexico 88241**

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**Santa Fe, New Mexico 87504**

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Sent **Apache Corporation**  
**303 Veterans Airpark Lane**  
**Suite 1000**  
**Midland, Texas 79705**

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**P.O. Box 5375**  
**Midland, Texas 79704**

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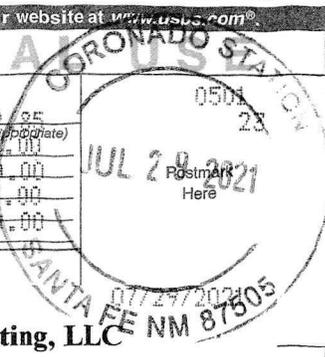
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