

RECEIVED: <u>1/16/2019</u>	REVIEWER: <u>MAM</u>	TYPE: <u>PMX</u>	APP NO: <u>PMAM19017 56827</u>
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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. 1 API: 30-015-40618  
 Pool: Empire Yates-Seven Rivers Pool 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

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.

Joe Tarver

Print or Type Name

Signature

1/15/19

Date

(806) 787-5138

Phone Number

joe@tarcosupply.com

e-mail Address

**January 15, 2019**

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

**Attention: Division Director**

**Re: Form C-108  
Brad State No. 1  
API No. (30-015-40618)  
330' FNL & 2300' FWL, Unit C  
Section 2, T-18S, R-27E, NMPM,  
Eddy County, New Mexico**

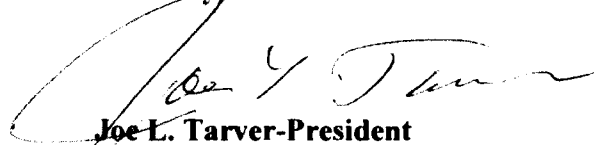
**Dear Sir,**

**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 the Russell C Well No. 3 located in Unit O of Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico.**

**Tarco Energy, LC ("Tarco") is seeking administrative approval to 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. 1. Tarco proposes to convert the Brad State No. 1 from a producing well to an injection well, injection to occur into the Yates-Seven Rivers formation through the perforated interval from approximately 411 feet to 451 feet.**

**I believe that all the information necessary to approve the application is enclosed. If additional information is needed, please contact me at (806) 787-5138.**

**Sincerely,**

  
**Joe L. Tarver-President  
Tarco Energy, LC  
12403 CR 2300  
Lubbock, Texas 79423**

**Xc: OCD-Artesia**

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery X Pressure Maintenance Disposal Storage  
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Tarco Energy, LC  
ADDRESS: 12403 Cr 2300, Lubbock, Texas 79423  
CONTACT PARTY: Joe Tarver, President PHONE: (806) 787-5138
- 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? X Yes No  
If yes, give the Division order number authorizing the project: R-13680 issued in Case No. 14931 on 2/14/2003
- 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: Joe Tarver TITLE: President  
SIGNATURE: [Signature] DATE: 01/15/2019  
E-MAIL ADDRESS: joe@tarcosupply.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: Case No. 14931 dated 11/29/2012; PMX Application dated 2/14/2014

### 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.

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
511 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Bravo Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number <b>30-015-40618</b>	Pool Code <b>96836</b>	Pool Name <b>Rancho, BL-450</b>
Property Code <b>39400</b>	Property Name <b>BRAD STATE</b>	
OGRIID No. <b>279579</b>	Operator Name <b>TARCO ENERGY, L.C.</b>	
		Well Number <b>1</b>
		Elevation <b>3592.4'</b>

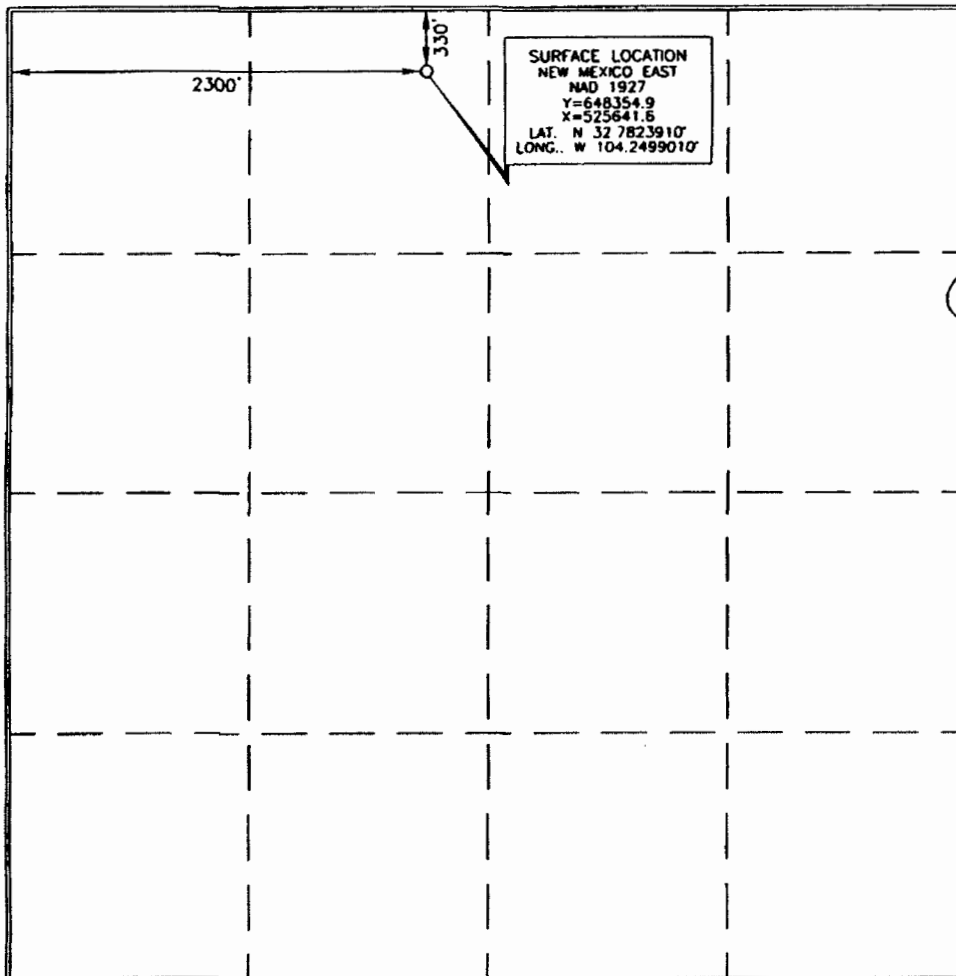
**Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	2	18 SOUTH	27 EAST, N.M.P.M.		330'	NORTH	2300'	WEST	EDDY

**Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code	Order No.					

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



**OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with the owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature *Joe L. Tarver* Date **8/13/12**  
Printed Name **JOE L. TARVER**  
E-mail Address **JOE@TARCOSUPPLY.COM**

**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

Date of Survey **MAY 21, 2012**  
Signature and Seal of Professional Surveyor *Tracy A. Paul*  
Certificate Number **15079**

C-108 Application  
Tarco Energy, LC  
Brad State No. 1  
330' FNL & 2300' FWL (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 converting the Brad State No. 1 from a producing well to an injection well in the Yates-Seven Rivers formation, (Empire Yates-Seven Rivers Pool; 22230).
- II. Tarco Energy, LC ("Tarco")  
12403 CR 2300  
Lubbock, Texas 79423  
Contact Party: Joe L. Tarver (806) 787-5138
- III. Injection well data sheet and wellbore schematic diagram showing the proposed wellbore configuration of the Brad State No. 1 is attached. The Brad State No. 1 was drilled in in August, 2012 and was completed as a producing well.
- 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. By Order R-13680, the Division 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. The Russel C Well No. 3 is currently the only injection well within the approved project area, described as follows:

**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 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 master well list that shows all wells within a ½-mile radius of the Brad State No. 1. There are 91 total wells within the AOR. Of the 91 wells, 28 wells are plugged and abandoned, 59 are active, and 4 are new wells not yet drilled.

A detailed examination of AOR wells shows that there are approximately six (6) plugged and abandoned wells and five (5) active wells within the AOR that either have surface casing and/or production casing cement tops at or below the proposed injection interval, or questionable surface casing cement tops due to the fact that the well files do not indicate cement volumes associated with the setting of surface casing. While it appears unlikely that surface casing was set in these wells without cement, that does remain a possibility. More likely however, is that the cement volumes were not reported as required.

A further examination of AOR wells shows that there are two (2) wells that have no well records associated with the drilling, completion and/or possible plugging of these wells. These wells are located in Units J and O of Section 35. Tarco has attempted to obtain well records for these wells from sources outside the Division, but has been unable to locate any further information.

With regards to the AOR wells that have questionable annular cement tops and/or inadequate well records, Tarco believes that these wells will not provide a conduit for the migration of injected fluid into any fresh water sources, nor provide a conduit for the migration of fluid into other producing intervals due to Tarco's proposed operation, which will be discussed in the following section.

VII. **Tarco's Proposed Operation**

1. The average injection rate into the Brad State No. 1 is anticipated to be approximately 90 BWPD. During 2018 Tarco injected water into the Russell C Well No. 3 at a rate of approximately 141 BWPD. This rate is far below what the original injection rate was anticipated to be within this project. 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 does not anticipate injection to occur into the Brad State No. 1 at a surface pressure greater than 0 psi., however if necessary, a pressure limit of 0.2 psi/ft. or 82 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 recently 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 No. 1;
- 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. 1 (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. Perforation logs have been run on the Brad State No. 1. 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. 1.
- XII. Affirmative statement is enclosed.
- XIII. Proof of Notice is enclosed. Affidavit of Publication is attached.

**Tarco Energy, LC**  
**PMX Application: Brad State No. 1**

**Order No. R-13680**  
**Russell C Lease Pressure Maintenance Project**

**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 a 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.

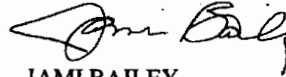
(17) Compliance with this order does not relieve the operator of the obligation to comply with other applicable State, local, or Federal rules, or to exercise due care for the protection of fresh water, public health and safety, and the environment.

(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



SEAL

**Tarco Energy, LC**  
**PMX Application: Brad State No. 1**

**Injection Well Data Sheet/Wellbore Schematic**



**INJECTION WELL DATA SHEET**

OPERATOR: Tarco Energy, LC

WELL NAME & NUMBER: Brad State No. 1 (API No. 30-015-40618)

WELL LOCATION: 330' FNL & 2300' FWL C 2 18 South 27 East  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

**WELLBORE SCHEMATIC**

*See Attached Wellbore Schematic*

**WELL CONSTRUCTION DATA**

**Surface/Production Casing**

Hole Size: 7 7/8" Casing Size: 4 1/2" @ 525'  
Cemented with: 105 Sx. or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: Surface Method Determined: Calculated

**Production Casing (N/A)**

Hole Size: \_\_\_\_\_ Casing Size: \_\_\_\_\_  
Cement with: \_\_\_\_\_ or \_\_\_\_\_ ft<sup>3</sup>  
Top of Cement: \_\_\_\_\_ Method Determined: \_\_\_\_\_

Total Depth: 525'

**Injection Interval**

**Perforated Interval -411'-451' (Perforated)**

## INJECTION WELL DATA SHEET

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

Type of Packer: Baker Tension Type

Packer Setting Depth: 360' 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: Production Well

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.

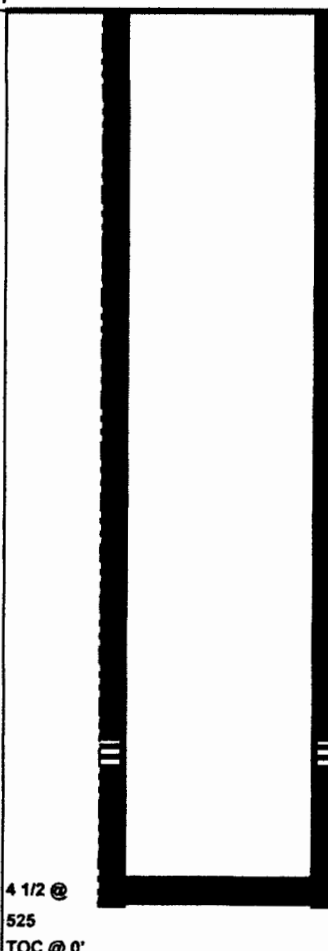
None

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')

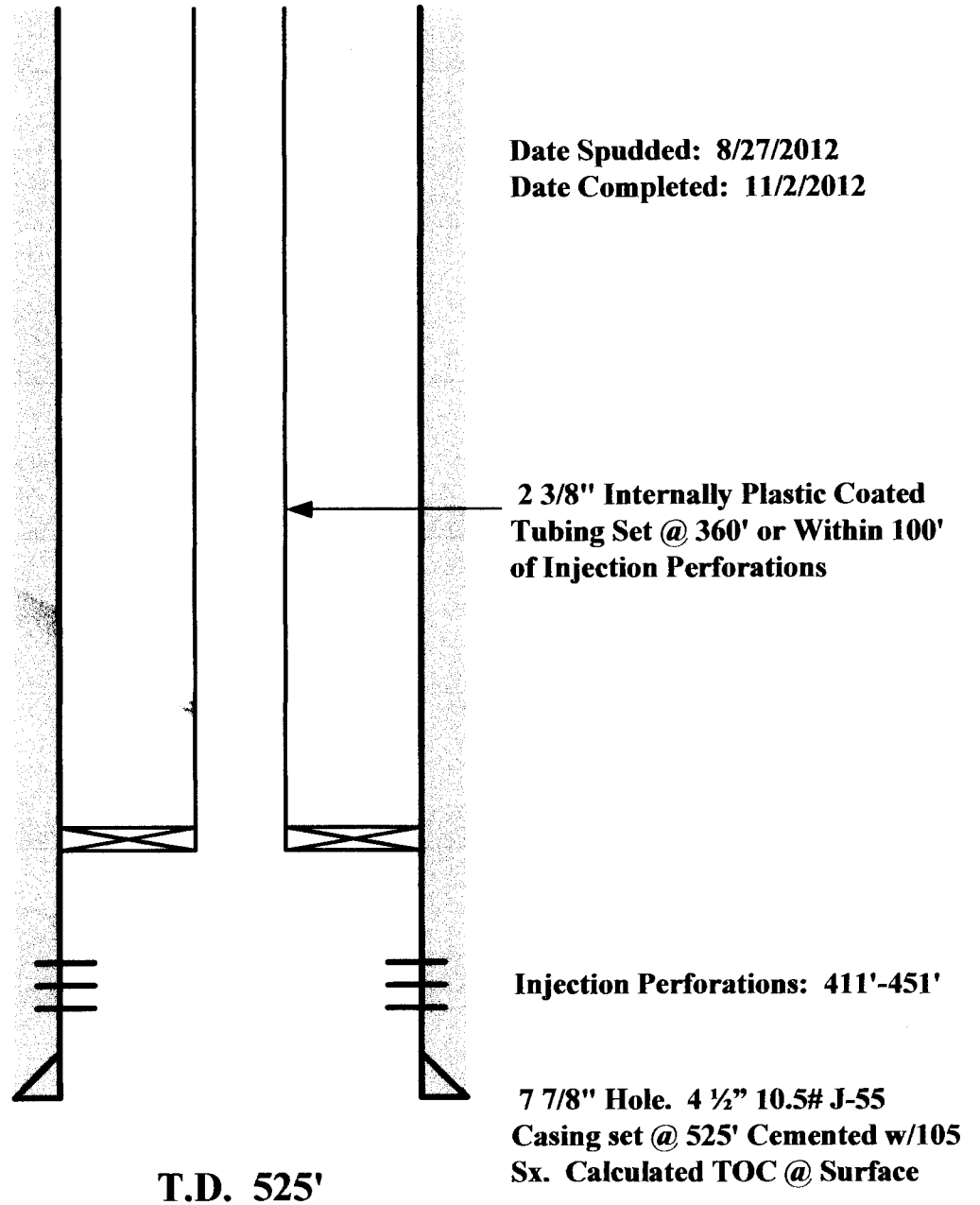
"Current"

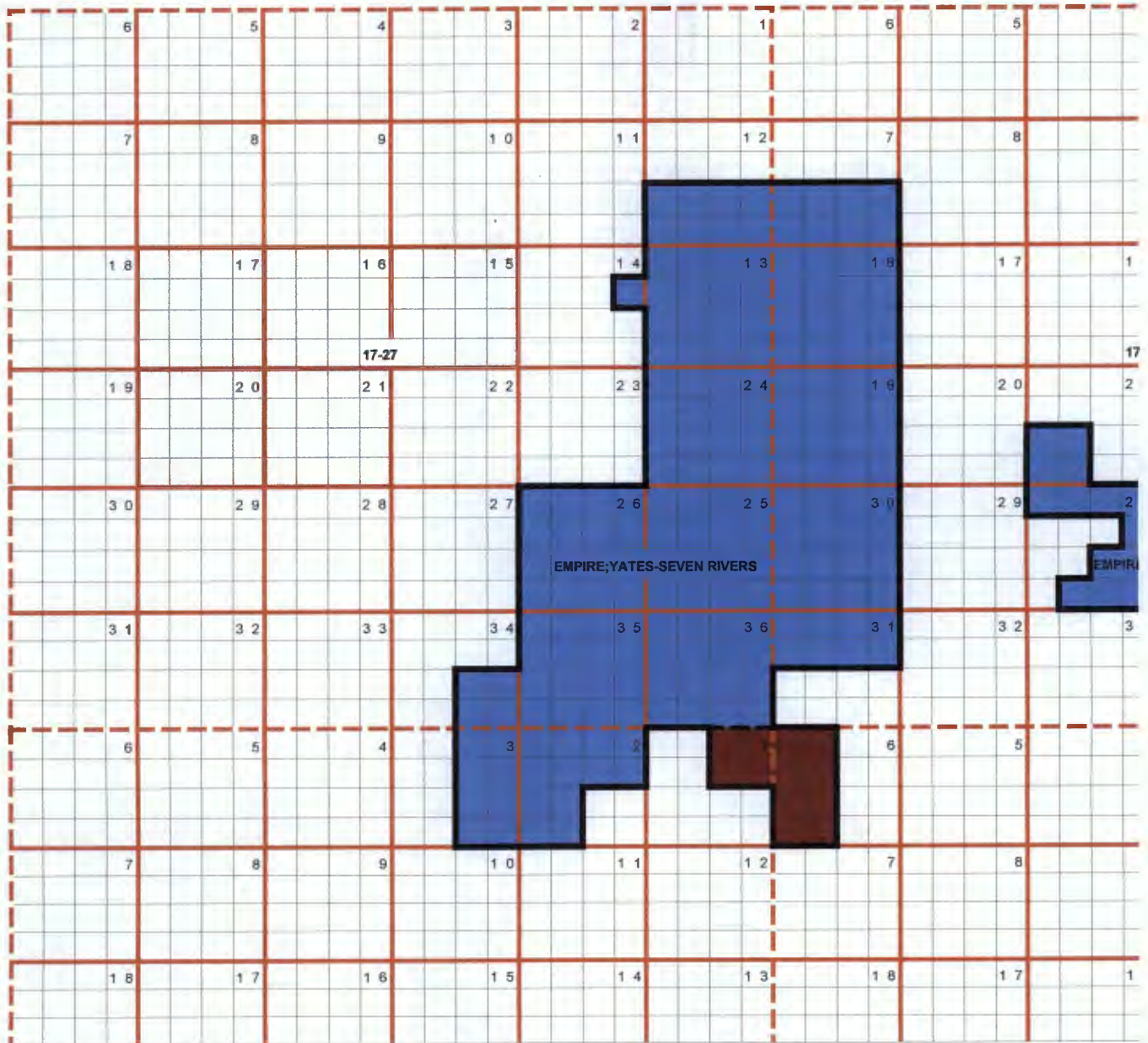
# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40618																																												
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																																												
	370		LEASENAME: BRAD STATE		WELL NO. 1																																										
			SURF LOC: UL: C SEC: 2 TWN: 18S RNG: 27E		330 FNL 1650 FWL																																										
			BH LOC: UL: C SEC: 2 TWN: 18S RNG: 27E		330 FNL 1650 FWL																																										
			TD 525 PBD 520 KB DF		GL																																										
			POOL		PERFS 411-451																																										
			EMPIRE; YATES-SEVEN RIVERS		Open Hole																																										
			POOL		PERFS																																										
					Open Hole																																										
<table border="1"><thead><tr><th colspan="6">CASING RECORD</th></tr><tr><th></th><th>SIZE</th><th>DEPTH</th><th>CMT</th><th>HOLE SIZE</th><th>TOC</th></tr></thead><tbody><tr><td>PROD</td><td>4.5</td><td>525</td><td>105 sxs</td><td>7.875</td><td>0' Circ</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>						CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	PROD	4.5	525	105 sxs	7.875	0' Circ																								
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7 RVRS	370																																														
			SPUD: 08/27/2012																																												
			COMP: 11/02/2012																																												
4 1/2 @ 525 TOC @ 0'			PBTD 520' TD 525																																												
Queen																																															
			PREPARED BY: Eddie Seay																																												
			UPDATED 01/20/14																																												

**Tarco Energy, LC**  
**Russell C Lease Pressure Maintenance Expansion**  
**Brad State No. 1 (API No. 30-015-40618)**  
**330' FNL & 2300' FWL (Unit C)**  
**Section 2, T-18S, R-27E, NMPM, Eddy County, NM**

**Proposed Wellbore Schematic**



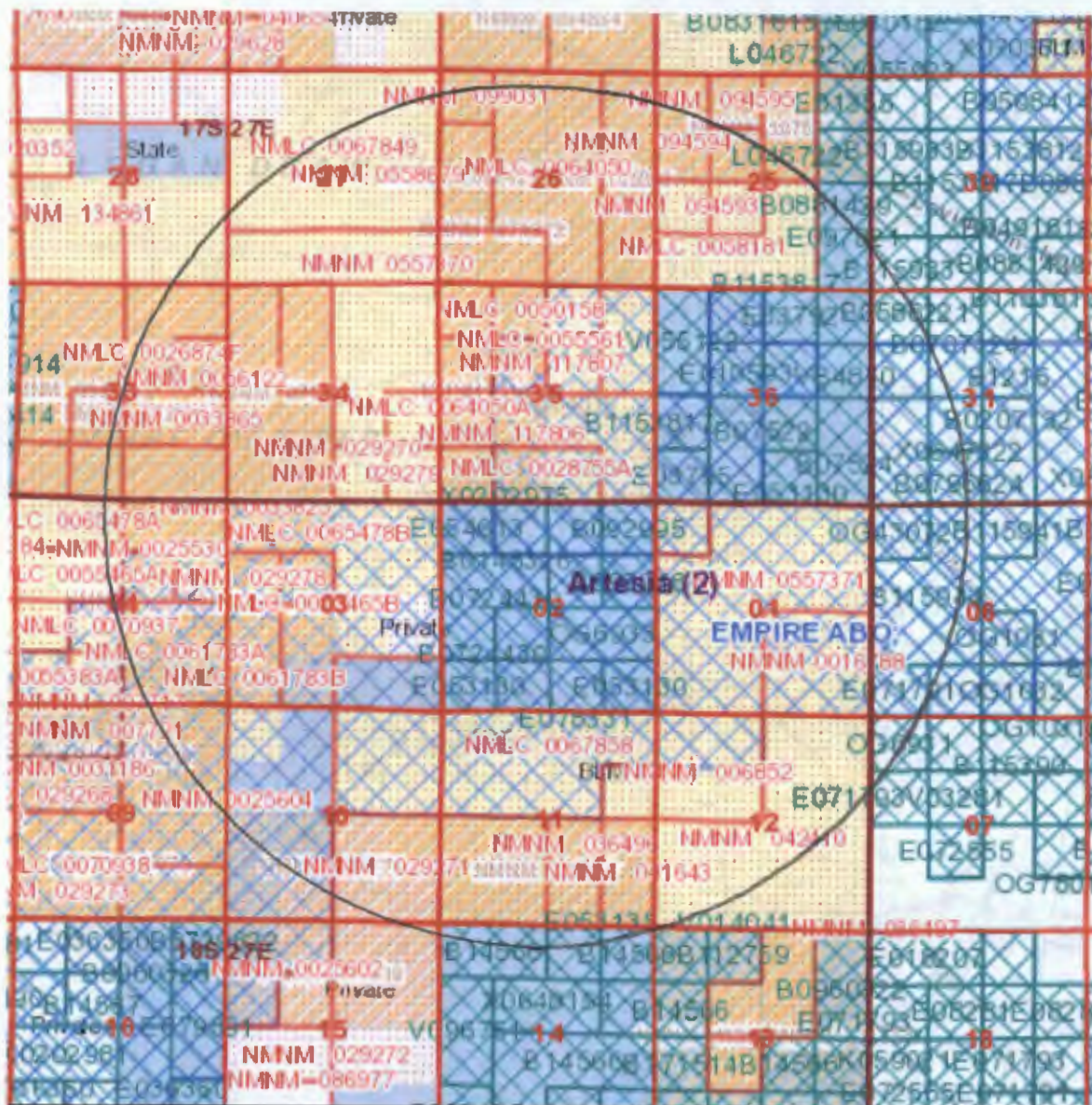


Tarco Energy, LC  
C-108 Application: Brad State # 1  
Empire Yates-Seven Rivers Pool Map

**Tarco Energy, LC**  
**PMX Application: Brad State No. 1**

**2-Mile Lease Map**  
**½ Mile Area of Review Map**  
**Injection/Production Pattern Map**





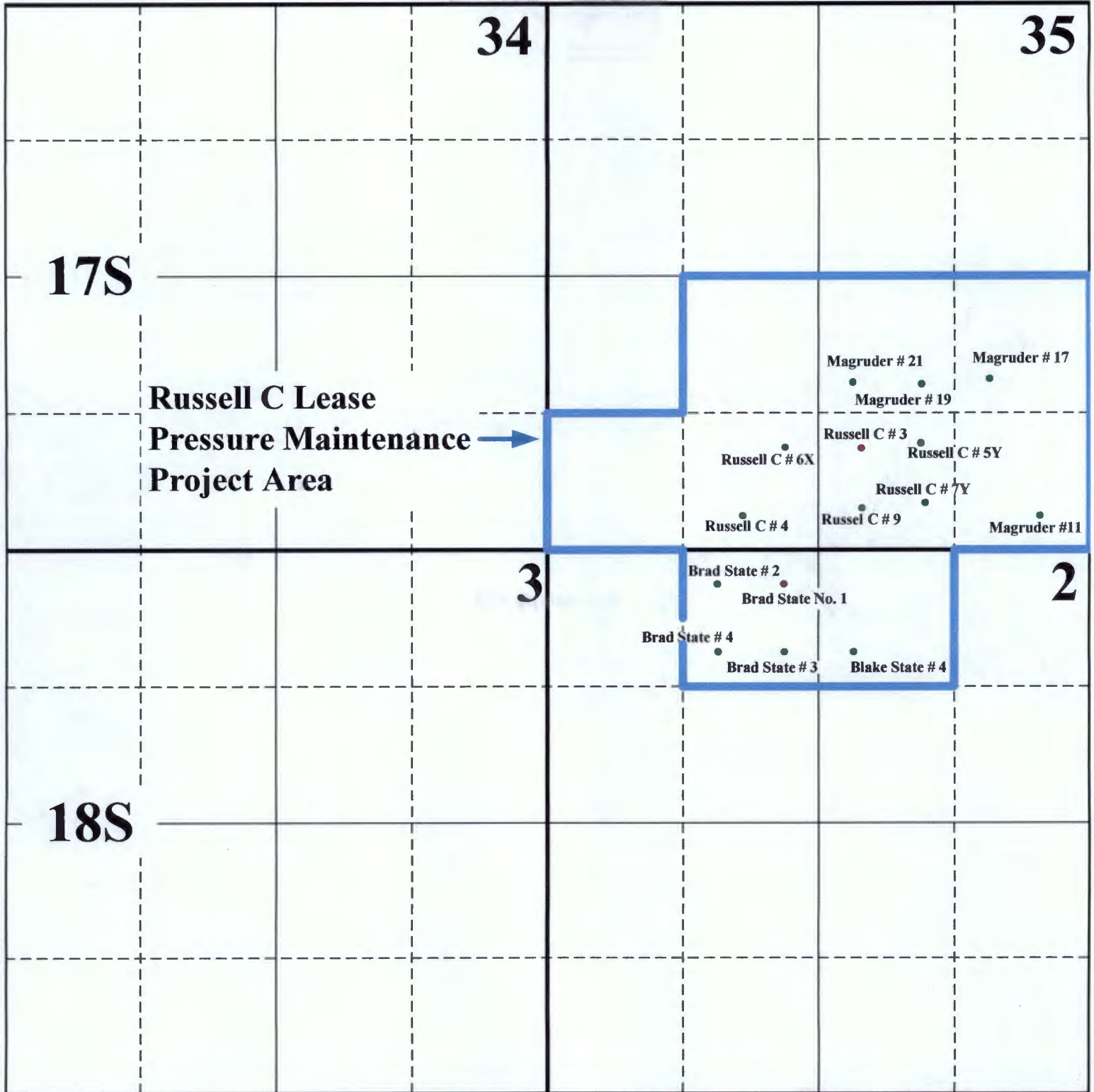
**Tarco Energy, LC: Form C-108: Brad State No. 1  
Russell C Lease Pressure Maintenance Project  
2-Mile Lease Map**







27E



Tarco Energy, LC  
PMX Application: Brad State No. 1  
Injection/Production Well Pattern

- Existing or Proposed Injection Well
- Existing Producing Well

**Tarco Energy, LC**  
**PMX Application: Brad State No. 1**

**½ Mile Area of Review Master Well List**

## Tarco Energy, LC; Brad State No. 1: 1/2 Mile Area of Review Well List

API	Well Name	Well Number	Type	Status	Section	Township	Range	OCD Unit Letter	Plugged On	Current Operator
30-015-00625	MAGRUDER A	#001	Oil	Plugged, Site Released	35	175	27E	J	4/21/1986	[37594] JOE L TARVER
30-015-00626	MAGRUDER	#006	Oil	POSSIBLE PA	35	175	27E	J		PATON BROTHERS
30-015-00628	MAGRUDER C	#015	Oil	Plugged, Site Released	35	175	27E	K		CITIES SERVICE OIL COMPANY
30-015-00629	MAGRUDER	#011	Oil	Active	35	175	27E	P		[279579] TARCO ENERGY, LC
30-015-00631	MAGRUDER A	#003	Oil	Plugged, Site Released	35	175	27E	K	2/11/1977	[37594] JOE L TARVER
30-015-00632	SOUTH RED LAKE II UNIT	#025	Oil	Active	35	175	27E	K		[370922] REMNANT OIL OPERATING, LLC
30-015-00633	RIVERWOLF UNIT	#014	Oil	Plugged, Site Released	35	175	27E	M	1/12/2009	[778] BP AMERICA PRODUCTION COMPANY
30-015-00635	MAGRUDER A	#004	Oil	Plugged, Site Released	35	175	27E	P	2/11/1977	[37594] JOE L TARVER
30-015-00636	MAGRUDER	#005	Oil	Plugged, Site Released	35	175	27E	P		PATON BROTHERS
30-015-00637	RUSSELL C	#004	Oil	Active	35	175	27E	N		[279579] TARCO ENERGY, LC
30-015-00638	RUSSELL C	#006	Oil	Plugged, Site Released	35	175	27E	N	2/21/2009	[279579] TARCO ENERGY, LC
30-015-00639	RUSSELL C	#009	Oil	Active	35	175	27E	O		[279579] TARCO ENERGY, LC
30-015-00640	RUSSELL A	#008	Oil	POSSIBLE PA	35	175	27E	O		PATON BROTHERS
30-015-00641	RUSSELL C	#007	Oil	Plugged, Site Released	35	175	27E	O	2/17/1977	[279579] TARCO ENERGY, LC
30-015-00642	RUSSELL C	#005	Oil	Plugged, Site Released	35	175	27E	O	2/15/1977	[37594] JOE L TARVER
30-015-00643	SOUTH RED LAKE II UNIT	#026	Oil	Plugged, Site Released	35	175	27E	O	9/17/2008	[241598] FAIRWAY RESOURCES OPERATING, LLC
30-015-00644	SOUTH RED LAKE II UNIT	#031	Oil	Plugged, Site Released	35	175	27E	N	1/19/2007	[241598] FAIRWAY RESOURCES OPERATING, LLC
30-015-00645	SOUTH RED LAKE II UNIT	#032	Oil	Active	35	175	27E	N		[370922] REMNANT OIL OPERATING, LLC
30-015-00718	State	#002	Oil	Plugged, Site Released	2	185	27E	A	4/9/1942	Brainard & Guy
30-015-00719	RIVERWOLF UNIT	#005	Oil	Plugged, Site Released	2	185	27E	C	12/23/2008	[778] BP AMERICA PRODUCTION COMPANY
30-015-00720	RIVERWOLF UNIT	#004	Oil	Plugged, Site Released	2	185	27E	B	12/12/2008	[778] BP AMERICA PRODUCTION COMPANY
30-015-00721	SOUTH RED LAKE II UNIT	#036	Oil	Active	2	185	27E	A		[370922] REMNANT OIL OPERATING, LLC
30-015-00725	SOUTH RED LAKE II UNIT	#034	Oil	Active	2	185	27E	C		[370922] REMNANT OIL OPERATING, LLC
30-015-00728	Hudson State	#001	Oil	Plugged, Site Released	2	185	27E	F		[214263] PRE-ONGARD WELL OPERATOR
30-015-00729	EMPIRE ABO UNIT	#013A	Oil	Active	2	185	27E	D		ARCO Oil & Gas Company
30-015-00733	EMPIRE ABO UNIT	#013C	Oil	Active	2	185	27E	E		[873] APACHE CORPORATION
30-015-00734	EMPIRE ABO UNIT	#014A	Oil	Active	2	185	27E	F		[873] APACHE CORPORATION
30-015-00736	State BZ	#004	Oil	Plugged, Site Released	2	185	27E	C		CITIES SERVICE OIL COMPANY
30-015-00737	SOUTH RED LAKE II UNIT	#038	Oil	Active	2	185	27E	B		[370922] REMNANT OIL OPERATING, LLC
30-015-00738	State BZ	#002	Oil	Plugged, Site Released	2	185	27E	B		CITIES SERVICE OIL COMPANY
30-015-00739	SPUROK D STATE	#001	Oil	Plugged, Site Released	2	185	27E	E		MALCO REFINERIES, INC.
30-015-00740	SOUTH RED LAKE GRABURG UNIT	#040	Injection	Plugged, Site Released	2	185	27E	G	7/10/2002	[185130] MCQUADRANGLE, LC
30-015-00741	EMPIRE ABO UNIT	#015B	Oil	Active	2	185	27E	G		[873] APACHE CORPORATION
30-015-00742	SOUTH RED LAKE GRABURG UNIT	#039	Oil	Plugged, Site Released	2	185	27E	H		S & J OPERATING, LLC
30-015-00759	MALCO	#001	Oil	Plugged, Site Released	3	185	27E	A	9/16/2003	[785] AMTEX ENERGY INC
30-015-01211	SOUTH RED LAKE II UNIT	#035	Injection	Active	2	185	27E	B		[370922] REMNANT OIL OPERATING, LLC
30-015-01213	SOUTH RED LAKE GRABURG UNIT	#033	Oil	Plugged, Site Released	2	185	27E	C		S & J OPERATING, LLC
30-015-01222	SOUTH RED LAKE II UNIT	#030	Oil	Plugged, Site Released	35	175	27E	O	2/21/2009	[241598] FAIRWAY RESOURCES OPERATING, LLC
30-015-10623	HONDO C STATE	#001	Oil	Plugged, Site Released	2	185	27E	D		ATLANTIC REFINING COMPANY
30-015-20104	SOUTH RED LAKE II UNIT	#041	Injection	Plugged, Site Released	35	175	27E	P	1/18/2007	[241598] FAIRWAY RESOURCES OPERATING, LLC
30-015-20105	SOUTH RED LAKE GRABURG UNIT	#042	Oil	Plugged, Site Released	35	175	27E	N		S & J OPERATING, LLC
30-015-21358	RIVERWOLF UNIT	#011	Injection	Plugged, Site Released	35	175	27E	N	5/8/2002	[778] BP AMERICA PRODUCTION COMPANY
30-015-27224	CHALK BLUFF 35 FED	#001	Gas	Active	35	175	27E	J		[14744] MEWBOURNE OIL CO
30-015-29633	EAGLE 35 L FEDERAL	#002	Oil	Active	35	175	27E	L		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30406	LOGAN 2 STATE	#002	Oil	Active	2	185	27E	C		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30409	LOGAN 35 B FEDERAL	#009	Oil	Active	35	175	27E	O		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30437	LOGAN 35 FEDERAL	#004	Oil	Active	35	175	27E	J		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30438	LOGAN 35 FEDERAL	#006	Oil	Active	35	175	27E	K		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30439	LOGAN 35 B FEDERAL	#007	Oil	Active	35	175	27E	N		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30440	LOGAN 35 B FEDERAL	#008	Oil	Active	35	175	27E	N		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30475	LOGAN 35 FEDERAL	#005	Oil	Active	35	175	27E	K		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30735	LOGAN 35 FEDERAL	#013	Oil	Active	35	175	27E	M		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30736	LOGAN 35 FEDERAL	#014	Oil	Active	35	175	27E	M		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-30750	LOGAN 35 FEDERAL	#012	Oil	Active	35	175	27E	P		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-31967	BPO STATE COM	#001	Gas	Active	2	185	27E	4		[873] APACHE CORPORATION
30-015-32071	MJ STATE	#001	Gas	Active	2	185	27E	4		[873] APACHE CORPORATION
30-015-32179	MJ STATE	#002	Gas	Active	2	185	27E	D		[873] APACHE CORPORATION
30-015-32218	SB STATE	#001	Gas	Active	2	185	27E	E		[873] APACHE CORPORATION

## Tarco Energy, LC; Brad State No. 1: 1/2 Mile Area of Review Well List (Cont.)

API	Well Name	Well Number	Type	Status	Section	Township	Range	OCD Unit Letter	Plugged On	Current Operator
30-015-32231	TDF STATE	#001	Gas	Active	2	18S	27E	F		[873] APACHE CORPORATION
30-015-32899	BM STATE	#001	Oil	Active	2	18S	27E	K		[873] APACHE CORPORATION
30-015-32900	TDF STATE	#002	Oil	Active	2	18S	27E	F		[873] APACHE CORPORATION
30-015-33111	LOGAN 2C STATE	#003	Oil	Active	2	18S	27E	C		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-36073	RUSSELL C	#006X	Oil	Active	35	17S	27E	N		[279579] TARCO ENERGY, LC
30-015-36081	LOGAN 35 FEDERAL	#001	Oil	Active	35	17S	27E	I		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-36213	RUSSELL C	#005Y	Oil	Active	35	17S	27E	O		[279579] TARCO ENERGY, LC
30-015-37744	MAGRUDER	#019	Oil	Active	35	17S	27E	J		[279579] TARCO ENERGY, LC
30-015-37746	MAGRUDER	#021	Oil	Active	35	17S	27E	J		[279579] TARCO ENERGY, LC
30-015-37762	RUSSELL C	#007Y	Oil	Active	35	17S	27E	O		[279579] TARCO ENERGY, LC
30-015-37783	RUSSELL C	#003	Injection	Active	35	17S	27E	O		[279579] TARCO ENERGY, LC
30-015-39009	EMPIRE ABO UNIT	#415	Oil	Plugged, Site Released 2/4	2	18S	27E	G	3/20/2015	[873] APACHE CORPORATION
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
30-015-40679	BLAKE STATE	#004	Oil	Active	2	18S	27E	B		[279579] TARCO ENERGY, LC
30-015-40783	LOGAN 2C STATE	#004	Oil	Active	2	18S	27E	C		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-40806	LOGAN 35 M FEDERAL	#016	Oil	Active	35	17S	27E	M		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-40807	LOGAN B 35 N FEDERAL	#018	Oil	Active	35	17S	27E	N		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-40808	LOGAN 35 P FEDERAL	#019	Oil	Active	35	17S	27E	P		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-41119	LOGAN 2C STATE	#005	Oil	Active	2	18S	27E	C		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-41434	LOGAN 35 K FEDERAL	#015	Oil	Active	35	17S	27E	K		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-41435	LOGAN 35 O FEDERAL	#010	Oil	Active	35	17S	27E	O		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-41441	EAGLE 35 L FEDERAL	#023	Oil	Active	35	17S	27E	L		[277558] LIME ROCK RESOURCES II-A, L.P.
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
30-015-42002	SB STATE	#002	Oil	Active	2	18S	27E	E		[873] APACHE CORPORATION
30-015-42247	LOGAN 35 J FEDERAL	#020	Oil	Active	35	17S	27E	J		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-43066	LOGAN B 35 N FEDERAL	#024	Oil	New	35	17S	27E	N		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-43252	LOGAN 35 O FEDERAL	#022	Oil	New	35	17S	27E	O		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-43728	LOGAN 35 M FEDERAL	#021	Oil	New	35	17S	27E	M		[277558] LIME ROCK RESOURCES II-A, L.P.
30-015-44784	LOGAN 35 P FEDERAL	#023	Oil	New	35	17S	27E	P		[277558] LIME ROCK RESOURCES II-A, L.P.

**Tarco Energy, LC**  
**PMX Application: Brad State No. 1**

**Area of Review Well Data Previously Submitted**  
**In Case No. 14931 dated 11/29/2012**  
**and/or PMX Application for Brad State No. 5**  
**Submitted February, 2014**  
**(Well Data Updated as Necessary)**

# WELLBORE SCHEMATIC AND HISTORY

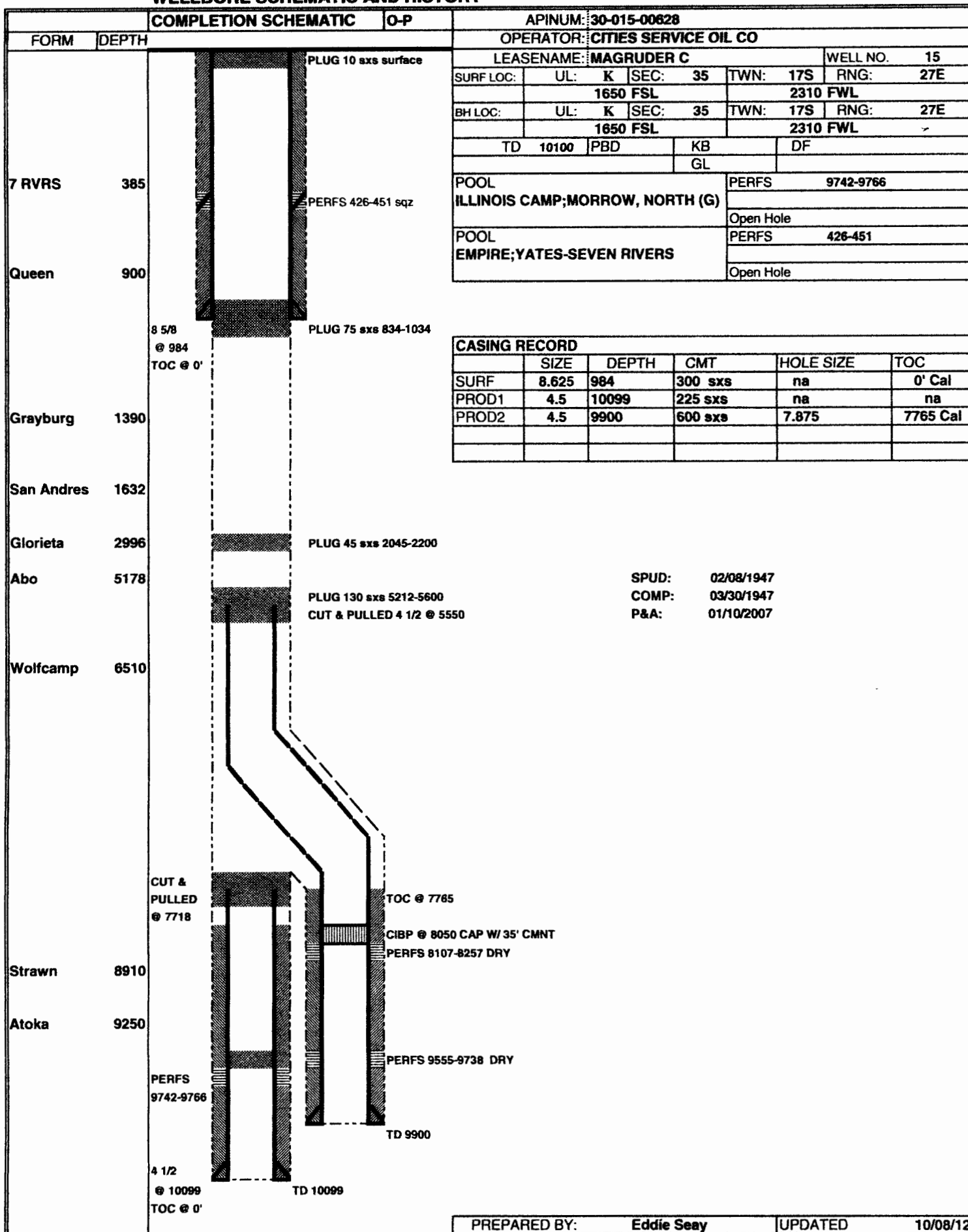
COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00625				
FORM	DEPTH	OPERATOR: JOE L TARVER					
<div style="display: flex; align-items: center;"> <div style="flex: 1; border-left: 1px dashed black; border-right: 1px dashed black; position: relative; margin: 0 10px;"> <div style="background-color: green; width: 100%; height: 100%;"></div> <div style="position: absolute; top: 0; right: 0; text-align: right; font-size: small;">           PLUG 150 sxs 0-410'         </div> <div style="position: absolute; bottom: 0; right: 0; text-align: right; font-size: small;">           TOC @ 325         </div> </div> <div style="flex: 1; padding-left: 10px;"> <div style="margin-bottom: 10px;">           7 RVRS         </div> <div style="margin-bottom: 10px;">           445 TOC @ 325         </div> <div style="margin-bottom: 10px;">           50 sxs Plug 465-410'         </div> <div style="margin-bottom: 10px;">           TD 465         </div> </div> </div>		LEASENAME: MAGRUDER A				WELL NO. 1	
		SURF LOC:		UL: J SEC: 35		TWN: 17S RNG: 27E	
				1630 FSL		1645 FEL	
		BH LOC:		UL: J SEC: 35		TWN: 17S RNG: 27E	
				1630 FSL		1645 FEL	
		TD		465		PBD	
				KB		DF	
				GL			
		POOL				PERFS	
		EMPIRE;YATES-7 RVRS				Open Hole 401-456	
POOL				PERFS			
				Open Hole			
CASING RECORD							
	SIZE	DEPTH	CMT	HOLE SIZE	TOC		
PROD	10	400	20 sxs	na	325 est		
SPUD: 09/07/1941 COMP: 09/16/1941 P&A: 04/21/1985							
Queen		945					

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00626																																											
FORM	DEPTH	OPERATOR: PRE-ONGARD WELL OPERATOR																																												
		LEASENAME: PRE-ONGARD WELL		WELL NO. 6																																										
		SURF LOC:	UL: J	SEC: 35	TWN: 17S																																									
		1650 FSL		2310 FEL																																										
		BH LOC:	UL: J	SEC: 35	TWN: 17S																																									
		1650 FSL		2310 FEL																																										
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CASING RECORD																																														
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																									
SURF																																														
PROD		NO WELL FILE FOR THIS																																												
7 RVRS	440	<p>SPUD:</p> <p>COMP:</p> <p>P&amp;A:</p>																																												
Queen	940	<p>Well Name: Magruder No. 6</p> <p>Operator: Paton Brothers</p>																																												
		<p>PREPARED BY: Eddie Seay</p> <p>UPDATED: 10/08/12</p>																																												



# WELLBORE SCHEMATIC AND HISTORY





### COMPLETION SCHEMATIC

1-P

APINUM: 30-015-00629

OPERATOR: TARCO ENERGY LLC

LEASENAME: MAGRUDER

WELL NO.	11
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SURF LOC:					UL:	P	SEC:	35	TWN:	17S	RNG:	27E
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	330 FSL	480 FEL
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BH LOC:	UL: P	SEC: 35	TWN: 17S	RNG: 27E
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	330 FSL	480 FEL
--	---------	---------

TD	5840	PBD	KB	DF
----	------	-----	----	----

GL	
----	--

POOL	PERFS	5750-5804 P
EMPIRE:ABO		

Open Hole

POOL	PERFS	448-536	A
------	-------	---------	---

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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<b>EMPIRE;YATES-SEVEN RIVERS</b>	Open Hole
----------------------------------	-----------

**SQZ TO REPAIR CASING LEAK**

**Perfs 448-536**

## CASING RECORD

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
--	------	-------	-----	-----------	-----

SURF	8.625	1067	400 sxs	na	54 Cal
------	-------	------	---------	----	--------

PROD	5.5	5840	800 sxs	na	952 Cal
------	-----	------	---------	----	---------

**CIBP PBTD 700'**

TOC 5 1/2 @ 952

**PLUG 25 sxs 940-1181**

**SPUD: 03/09/1960**

**COMP: 03/28/1960**

**P&A:** 01/06/2009

RE-COMP: 12/21/2011

**PLUG 25 sxs @ 1200**

7"  
@ 1295  
TOC 420

## 7 RVRS

380

**Queen**

984

## Grayburg

1398

## San Andres

1730

## Glorieta

3100

**Abo**

5170

5 1/2 @  
5840

TOC @ 952'

**TD 5840**

PREPARED BY: **Eddie Seay**

UPDATED	01/18/14
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# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00631																																													
FORM	DEPTH	OPERATOR: JOE L TARVER																																														
<div style="display: flex; align-items: center;"> <div style="flex: 1; border-left: 1px dashed black; border-right: 1px dashed black; position: relative; height: 300px; margin: 0 10px;"> <div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; background-color: black; opacity: 0.5;"></div> </div> <div style="flex: 1; padding-left: 10px;"> <p>PLUG 285 xxs 0-441'</p> <p>TOC @ 265</p> <p>TD 441</p> </div> </div>		LEASENAME: MAGRUDER A				WELL NO. 3																																										
		SURF LOC: UL: K SEC: 35 TWN: 17S RNG: 27E		2310 FSL		2313 FEL																																										
		BH LOC: UL: K SEC: 35 TWN: 17S RNG: 27E		2300 FSL		2313 FEL																																										
		TD 441		PBD		KB																																										
				GL		DF																																										
		POOL				PERFS																																										
		EMPIRE; YATES- 7 RVRS				Open Hole 405-441																																										
		POOL				PERFS																																										
						Open Hole																																										
		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6" style="text-align: left;">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>PROD</td> <td>8</td> <td>405</td> <td>25 sxs</td> <td>na</td> <td>265 est</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	PROD	8	405	25 sxs	na	265 est																						
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
PROD	8	405	25 sxs	na	265 est																																											
7 RVRS	385	<div style="display: flex; justify-content: space-between;"> <span>8 @ 405</span> <span>TOC @ 265</span> </div>																																														
Queen	900																																															

Spud: 11/10/41  
 Comp.: 11/14/41  
 P & A: 2/11/77

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00632																																													
FORM	DEPTH		OPERATOR: LEGACY RESERVES OPERATING LP																																													
7 RVRS	385		LEASENAME: SOUTH RED LAKE II UNIT		WELL NO. 25																																											
			SURF LOC: UL: K SEC: 35 TWN: 17S RNG: 27E		1703 FSL 2310 FWL																																											
			BH LOC: UL: K SEC: 35 TWN: 17S RNG: 27E		1703 FSL 2310 FWL																																											
			TD 2350 PBD KB DF		GL																																											
			POOL RED LAKE;QUEEN-GB-SAN ANDRES		PERFS 2140-2204 1590-1617																																											
			POOL		Open Hole																																											
					PERFS																																											
					Open Hole																																											
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.625</td> <td>513</td> <td>100 sxs</td> <td>na</td> <td>0 est</td> </tr> <tr> <td>PROD</td> <td>5.5</td> <td>2348</td> <td>330 sxs</td> <td>na</td> <td>829 est</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	513	100 sxs	na	0 est	PROD	5.5	2348	330 sxs	na	829 est																		
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	513	100 sxs	na	0 est																																											
PROD	5.5	2348	330 sxs	na	829 est																																											
Queen	900		TOC 5 1/2 @ 829 est																																													
Grayburg	1390		<p>SPUD: 09/14/1957</p> <p>COMP: 09/30/1957</p> <p><b>New Operator: Remnant Oil Operating, LLC</b></p>																																													
San Andres	1630		PERFS 1590-1617																																													
Glorieta	2996		PERFS 2140-2204																																													
Abo	5170		TD 2350																																													



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00635																																													
FORM	DEPTH		OPERATOR: JOE L TARVER																																													
		<div style="border: 1px solid black; width: 150px; height: 150px; background-color: black; margin: 0 auto;"></div> <div style="text-align: center;">           PLUG            150 sxs            0-504'         </div> <div style="text-align: right; margin-top: 20px;">           TOC @ 310         </div> <div style="text-align: right; margin-top: 20px;">           TD 504         </div>	LEASENAME: MAGRUDER A		WELL NO. 4																																											
			SURF LOC:	UL: P	SEC: 35	TWN: 17S	RNG: 27E																																									
			332 FSL		990 FEL																																											
			BH LOC:	UL: P	SEC: 35	TWN: 17S	RNG: 27E																																									
			332 FSL		990 FEL																																											
			TD	504	PBD	KB	DF																																									
					GL																																											
			POOL EMPIRE; YATES-SEVEN RIVERS			PERFS																																										
						Open Hole 453-502																																										
			POOL			PERFS																																										
			Open Hole																																													
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CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
PROD	8	471	25 sxs	na	330 est																																											
7 RVRS	380	8 @ 471 TOC @ 330																																														
Queen	980																																															
			SPUD: 12/15/1941 COMP: 12/23/1941 P&A: 02/11/1977																																													
			PREPARED BY: Eddie Seay      UPDATED: 01/18/14																																													

### COMPLETION SCHEMATIC

**O-P**

APINUM: 30-015-00636

**OPERATOR: PATON BROTHERS**

LEASENAME: MAGRUDER

WELL NO.	5
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SURF LOC:	UL: P	SEC: 35	TWN: 17S	RNG: 27E
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**990 FSL**

**970 FEL**

100

BH LOC:	UL: P	SEC: 35	TWN: 17S	RNG: 27E
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99

970 FEL

100

TD	502	PBD	KB	DF
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	GL	
--	----	--

POOL  
EMPIRE; YATES-SEVEN RIVERS

PERFS

Open Hole	453-502
-----------	---------

POOL	
------	--

PERFS	
-------	--

Open Hole

PLUG  
0-450'

**TOC @ 330**

7 RVRS

380

8 @ 453

**TOC @ 330**

**TD 502**

**SPUD: 12/15/1941**

COMP: 12/23/1941

**P&A: 05/14/1948**

**CASING RECORD**

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
PROD	8.25	453	25 sxs	na	330 est

PROD	8.25	453	25 sxs	na	330 est
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--	--	--	--	--	--

## Queen

980

PREPARED BY: **Eddie Seay**

**UPDATED**

01/18/14

## WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00637					
FORM	DEPTH		OPERATOR: TARCO ENERGY, LC					
7 RVRS	280		LEASENAME: RUSSELL C			WELL NO. 4		
			SURF LOC:	UL: N	SEC: 35	TWN: 17S	RNG: 27E	
			330 FSL			1900 FWL		
			BH LOC:	UL: N	SEC: 35	TWN: 17S	RNG: 27E	
			330 FSL			1900 FWL		
			TD	5630	PBD	KB	DF	
						GL		
			POOL			PERFS	5504-5550	
			EMPIRE;ABO			5326-5476		
						Open Hole		
Queen	880		PERFS 404-444					
			CIBP @ 538					
			Drilled cmnt out to 540					
			Casing Record					
Grayburg	1307		SIZE	DEPTH	CMT	HOLE SIZE	TOC	
			SURF	8.625	984	325 sxs	11	0' Cal
			PROD	5.5	5629	800 sxs	7.875	1869 Cal
San Andres	1620		SPUD: 04/20/1960					
			COMP: 05/06/1960					
			Perf @ 1034 Circ out w/275 sxs					
			TOC 0					
Glorieta	2974		TOC 5 1/2 @ 1940					
			PLUG 25 sxs top @ 2833					
			CIBP @ 5325 CAP W/ 25 sxs					
			PERFS 5326-5476					
Abo	5150		PERFS 5504-5550					
			5 1/2 @ 5629					
			TOC @ 1869'					
			TD 5630					
<div> <div>PREPARED BY: Eddie Seay</div> <div>UPDATED: 01/18/14</div> </div>								

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00638	
FORM	DEPTH		OPERATOR: TARCO ENERGY, LC	
			LEASENAME: RUSSELL C	WELL NO. 6
			SURF LOC: UL: N SEC: 35 TWN: 17S RNG: 27E	
			1009 FSL	2297 FWL
			BH LOC: UL: N SEC: 35 TWN: 17S RNG: 27E	
			1009 FSL	2297 FWL
			TD 431 PBD KB DF	
			GL	
			POOL	PERFS
			EMPIRE; YATES-SEVEN RIVERS	
			Open Hole 380-431	
			POOL	PERFS
			Open Hole	

CASING RECORD					
	SIZE	DEPTH	CMT	HOLE SIZE	TOC
PROD	8	380	25 sxs	10	340 est

FORM	DEPTH	DESCRIPTION
7 RVRS	280	PLUG 0-431' 1) 25 sxs Class C 2) Ready mix to surf
		TOC @ 340
		8 @ 380 TOC @ 340
		TD 431
Queen	880	

SPUD: 11/29/1941

COMP.: 12/6/1941

PA: 2/21/2009

PREPARED BY:	UPDATED
Eddie Seay	01/18/14



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00639			
FORM	DEPTH		OPERATOR: TARCO ENERGY, LC			
			LEASENAME: RUSSELL C			WELL NO. 9
			SURF LOC:	UL: 0	SEC: 35	TWN: 17S
						RNG: 27E
			410 FSL			2235 FEL
			BH LOC:	UL: 0	SEC: 35	TWN: 17S
						RNG: 27E
			410 FSL			2235 FEL
			TD 5680	PBD	KB	DF
				GL		
			POOL EMPIRE;ABO			PERFS 5550-5626
						5248-5540
						Open Hole
			POOL EMPIRE;YATES-SEVEN RIVERS			PERFS 418-458
						Open Hole
7 RVRS	313					
			PERFS 418-458			
Queen	913					
			8 5/8" @ 984 TOC 0			
			Drilled cmnt out to 540			
			SQZ Casing hole 1100-1150 w/ 150 sxs circ to surface			
			Plug 1200-540'			
Grayburg	1372					
			SPUD: 05/08/1960			
			COMP: 05/27/1960			
			SQZ Casing hole 1570 w/ 150 sxs			
San Andres	1659					
			TOC 5 1/2 @ 1666			
			SQZ Casing hole 1952-1992 w/ 150 sxs			
Glorieta	3000					
			PLUG 25 sxs top @ 2871			
Abo	5180					
			CIBP @ 5200 CAP W/ 25 sxs			
			PERFS 5248-5540			
			CIBP @ 5540			
			PERFS 5550-5626			
			5 1/2 @ 5677			
			TOC @ 1666'			
			TD 5680			

CASING RECORD					
	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF	8.625	968	350 sxs	12.25	0' Cal
PROD	5.5	5677	800 sxs	7.875	1666' CBL

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00640																																											
FORM	DEPTH	OPERATOR: PRE-ONGARD WELL OPERATOR																																												
7 RVRS	310	LEASENAME: PRE-ONGARD WELL		WELL NO. 8																																										
		SURF LOC:	UL: 0 SEC: 35	TWN: 17S RNG: 27E																																										
		450 FSL 7.4		1650 FEL 27.1																																										
		BH LOC:	UL: 0 SEC: 35	TWN: 17S RNG: 27E																																										
		450 FSL		1650 FEL																																										
		TD	NA	PBD	KB																																									
				GL	DF																																									
		POOL		PERFS																																										
				Open Hole																																										
		POOL		PERFS																																										
		Open Hole																																												
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CASING RECORD																																														
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																									
SURF																																														
PROD		NO WELL FILE FOR THIS																																												
<p>SPUD:</p> <p>COMP:</p> <p>P&amp;A:</p> <p>Well Name: Russel A No. 8</p> <p>Operator: Paton Brothers</p>																																														
Queen	910																																													
<p>PREPARED BY: Eddie Seay</p> <p>UPDATED: 10/08/12</p>																																														

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00641																																																			
FORM	DEPTH		OPERATOR: TARCO ENERGY, LC																																																			
			LEASENAME: RUSSELL C			WELL NO. 7																																																
			SURF LOC:	UL: 0	SEC: 35	TWN: 17S																																																
						RNG: 27E																																																
			395 FSL			1622 FEL																																																
			BH LOC:	UL: 0	SEC: 35	TWN: 17S																																																
						RNG: 27E																																																
			395 FSL			1622 FEL																																																
			TD 477	PBD	KB	DF																																																
				GL																																																		
			POOL			PERFS																																																
			EMPIRE;YATES-SEVEN RIVERS																																																			
						Open Hole 432-477																																																
			POOL			PERFS																																																
						Open Hole																																																
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CASING RECORD																																																						
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																																	
PROD	8.25	432	25 sxs	na	440 est																																																	
7 RVRS	305		<div>PLUG 10-477' 150 sxs</div> <div>TOC @ 440</div> <div>8 1/4 @ 432 TOC @ 440</div> <div>TD 477</div>																																																			
Queen	915																																																					
			SPUD: 12/14/1942 COMP: 12/30/1942 P&A: 02/17/1977																																																			
			PREPARED BY: Eddie Seay      UPDATED 01/18/14																																																			

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00642				
FORM	DEPTH		OPERATOR: JOE L TARVER				
			LEASENAME: RUSSELL C			WELL NO. 5	
			SURF LOC:	UL: 0	SEC: 35	TWN: 17S	
						RNG: 27E	
			1002 FSL				
			BH LOC:	UL: 0	SEC: 35	TWN: 17S	
						RNG: 27E	
			1002 FSL				
			1633 FEL				
			TD 476	PBD	KB	DF	
				GL			
			POOL			PERFS	
			EMPIRE;YATES-SEVEN RIVERS				
						Open Hole 402-476	
			POOL			PERFS	
						Open Hole	
			Casing Record				
				SIZE	DEPTH	CMT	HOLE SIZE
				8	402	25 sxs	10
							365 Cal
7 RVRS	305		PLUG 0-476' 150 sxs				
			TOC @ 365				
			8 @ 402 TOC @ 365				
			TD 476				
Queen	915						
			Spud: 10/8/1941 Comp.: 10/17/1941 PA: 2/15/1977				
			PREPARED BY: Eddie Seay				
			UPDATED 01/18/14				

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		I-A	APINUM: 30-015-00643					
FORM	DEPTH		OPERATOR: FAIRWAY RESOURCES OPERATING LLC					
7 RVRS	305		SURF LOC:		UL: 0	SEC: 35	TWN: 17S	RNG: 27E
					990 FSL		2310 FEL	
			BH LOC:		UL: 0	SEC: 35	TWN: 17S	RNG: 27E
					990 FSL		2310 FEL	
			TD		1624	PBD	KB	DF
					GL			
			POOL				PERFS	
			RED LAKE;QU-GB-SA				Open Hole na-1624	
			POOL				PERFS	
							Open Hole	
Queen	915		TOC ????					
			Perf 4 1/2 @ 600' SQZ 50 sxs circ to surface fell back 57'					
			TOC ????					
			Perf @ 503 sqz 250 sxs circ to surf on annulus					
			PERF & sqz					
			25 sx TOC					
			Plug @ 670					
			TOC @ 890					
			SPUD: 10/19/1927					
			COMP: na					
P&A: 09/17/2008								
Grayburg	1375		8 1/4"					
			@ 948					
			TOC 890					
			PERF @ 998 SQZ 40 sxs TAG top of plug @ 824					
			TOC PLUG @ 1258					
			TOC UNKNOWN					
			CIBP @ 1460 cap w/ 55' cmnt					
			SETTING DEPTH 6 5/8 UNKNOWN (Probably top of shot hole)					
			6 5/8 @					
			NA					
San Andres	1660		TOC @ NA'					
			TD 1624					
			PREPARED BY: Eddie Seay					
			UPDATED: 01/18/14					

COMPLETION SCHEMATIC		I-A	APINUM: 30-015-00644																																					
FORM	DEPTH		OPERATOR: FAIRWAY RESOURCES OPERATING LLC																																					
7 RVRS	280		LEASENAME: SOUTH RED LAKE II UNIT																																					
			WELL NO. 31																																					
			SURF LOC: UL: N SEC: 35 TWN: 17S RNG: 27E																																					
			330 FSL 2310 FWL																																					
			BH LOC: UL: N SEC: 35 TWN: 17S RNG: 27E																																					
			330 FSL 2310 FWL																																					
			TD 1623 PBD KB DF																																					
			GL																																					
			POOL RED LAKE;QUEEN-GB-SAN ANDRES																																					
			PERFS																																					
Open Hole 947-1623																																								
POOL																																								
PERFS																																								
Open Hole																																								
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>10</td> <td>460</td> <td>No cmnt</td> <td>na</td> <td>0</td> </tr> <tr> <td>PROD</td> <td>8.25</td> <td>947</td> <td>No cmnt</td> <td>na</td> <td>0</td> </tr> <tr> <td colspan="6">USED NO CMNT WHILE SETTING CASING IN 1927</td> </tr> <tr> <td colspan="6">Circ cmnt on all strings when well plugged circ 20 sxs</td> </tr> </tbody> </table>					CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	10	460	No cmnt	na	0	PROD	8.25	947	No cmnt	na	0	USED NO CMNT WHILE SETTING CASING IN 1927						Circ cmnt on all strings when well plugged circ 20 sxs					
CASING RECORD																																								
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SURF	10	460	No cmnt	na	0																																			
PROD	8.25	947	No cmnt	na	0																																			
USED NO CMNT WHILE SETTING CASING IN 1927																																								
Circ cmnt on all strings when well plugged circ 20 sxs																																								
Tag TOP cmnt plug @ 106'																																								
<p>SPUD: 08/08/1927</p> <p>COMP: 09/13/1927</p> <p>P&amp;A: 01/19/2007</p>																																								
Queen	880																																							
Grayburg	1310																																							
San Andres	1620	TD 1623																																						

PREPARED BY: Eddie Seay      UPDATED: 01/18/14

PREPARED BY:	Eddie Seay	UPDATED	01/18/14
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### COMPLETION SCHEMATIC

1-A

APINUM: 30-015-00645

**OPERATOR: LEGACY RESERVES OPERATING LP**

LEASENAME: SOUTH RED LAKE II UNIT

WELL NO. 32

SURF LOC:	UL: N	SEC: 35	TWN: 17S	RNG: 27E
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**330 FSL**

1650

0 FWL

BH LOC:	UL: N	SEC: 35	TWN: 17S	RNG: 27E
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330 FSL

1650 FWL

TD	1630	PBD	KB	DF
----	------	-----	----	----

DF

GL

POOL

RED LAKE;QUEEN-GB-SAN ANDRES

PERFS

Open Hole	1217-1630
-----------	-----------

POOL	
------	--

PERFS

**Open Hole**

### CASING RECORD

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
--	------	-------	-----	-----------	-----

SURF	12.5	713	No cmnt	na	na
------	------	-----	---------	----	----

PROD	10	1217	No cmnt	na	na
------	----	------	---------	----	----

**NO CMNT REPORTED WHEN SETTING CASING IN 1926**

**1991 MIT annulus would not hold pressure**

**12 1/2"**

713

**SPUD: 05/15/1926**

COMP: 07/01/1926

**Queen**

880

**New Operator: Remnant Oil  
Operating, LLC**

10 @

1217

## Grayburg

1310

## San Andres

1620

**TD 1630**

PREPARED BY: **Eddie Seay**

**UPDATED**

01/18/14

## COMPLETION SCHEMATIC

**O-A**

OPERATOR: BRAINARD & GUY

LEASENAME:	STATE
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WELL NO.	2
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SURF LOC:	UL: A	SEC: 35	TWN: 17S	RNG: 27E
-----------	-------	---------	----------	----------

	<b>330 FNL</b>	<b>610 FEL</b>
--	----------------	----------------

BH LOC:	UL: A	SEC: 35	TWN: 17S	RNG: 27E
---------	-------	---------	----------	----------

	330 FNL		610 FEL	
13	310	330	13	25

TD	512	PBD	KB	DF
			CI	

	GL	
POOL		PERES

FOOL	PERFS
------	-------

<b>DRY &amp; ABANDONED</b>	Open Hole	<b>478-512</b>
----------------------------	-----------	----------------

POOL	PERFS
------	-------

--	--

	Open Hole
--	-----------

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
--	------	-------	-----	-----------	-----

PROD	7	478	NA	8	NA
------	---	-----	----	---	----




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330

7 @ 478  
TOC @ 0'

**PLUG 3 sxs**

**PLUG 5 sxs**  
**TD 512**

**SPUD: 01/10/1942**

COMP: 03/18/1942

**P&A: 04/09/1942**

## Queen

845

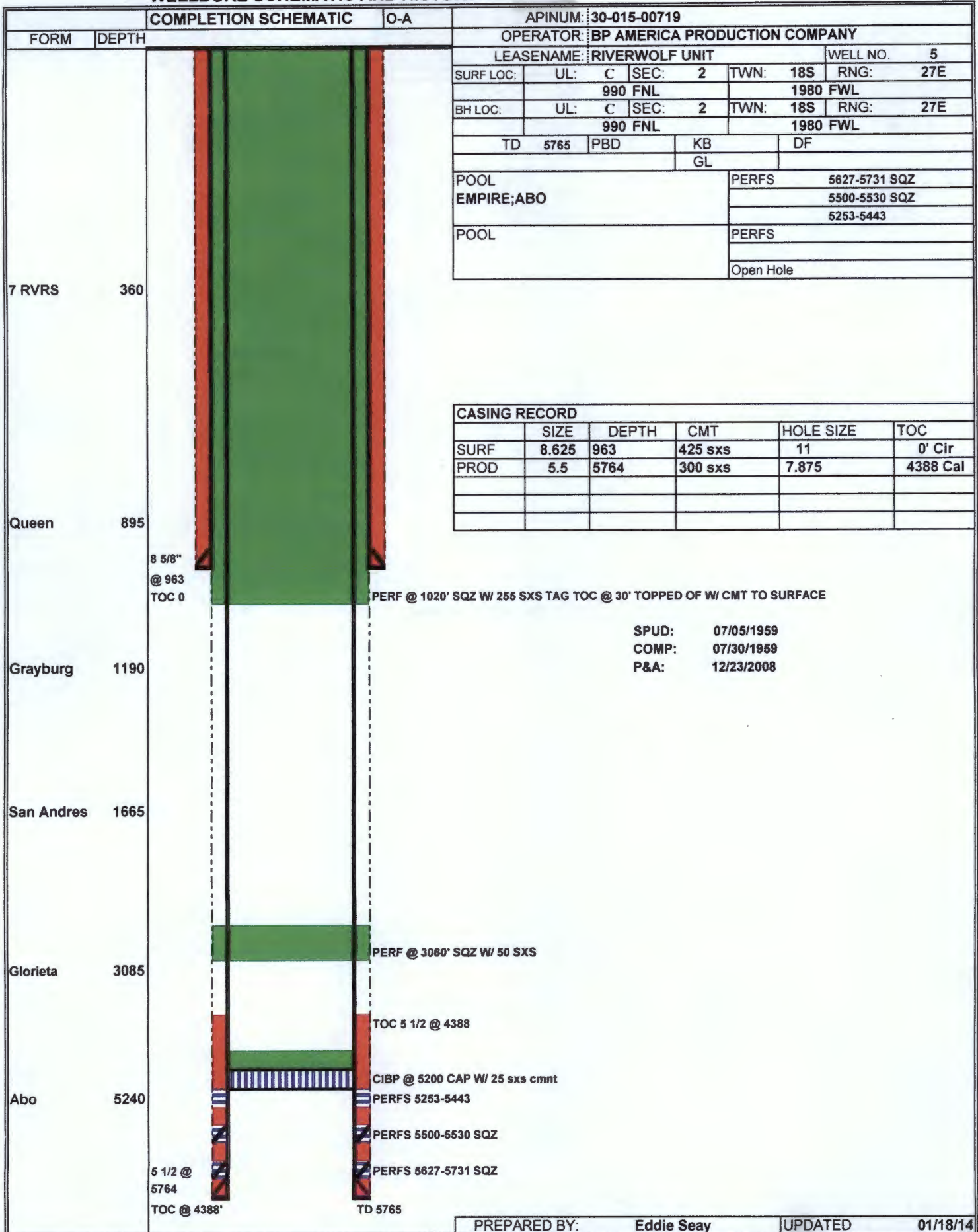
**PREPARED BY: Eddie Seay**

**UPDATED**

10/08/12



# WELLBORE SCHEMATIC AND HISTORY



## COMPLETION SCHEMATIC

**O-A**

APINUM: 30-015-00720

OPERATOR: BP AMERICA PRODUCTION COMPANY

LEASENAME: RIVERWOLF UNIT

WELL NO.	4
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SURF LOC:	UL: B	SEC: 2	TWN: 18S	RNG: 27E
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	990 FNL	1650 FEL
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BH LOC:	UL: B	SEC: 2	TWN: 18S	RNG: 27E
---------	-------	--------	----------	----------

	990 FNL	1650 FEL
--	---------	----------

TD	5881	PBD	KB	DF
----	------	-----	----	----

GL	
----	--

POOL	PERFS	5672-5742
EMPIRE;ABO		

POOL	PERFS
------	-------

Open Hole

7 RVRS 360

Queen	800
-------	-----

San Andres 1715

<b>Glorieta</b>	<b>3128</b>
-----------------	-------------

Abo	5240
-----	------

8 5/8"  
@ 967  
TOC 0

**PLUG 30 SXS 805-1100' THEN FILL UP CASING TO SURFACE**

SPUD: 09/02/1959  
COMP: 10/01/1959  
P&A: 12/12/2008

**PLUG 25 SXS 2525-2275**

**PERF @ 3130' SQZ W/ 50 SXS**

**TOC 5 1/2 @ 4504**

CIBP @ 5200 CAP W/ 25 sxs cmnt

**CIBP @ 5590 CAP W/ 25 sxs cmnt**

PERFS 5672-5742 SQZ

5 1/2 @  
5880

TOC @ 4504'

**TD 5881**

## CASING RECORD

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF	8.625	963	425 sxs	11	0' Cir
PROD	5.5	5880	300 sxs	7.875	4504 Cal

PREPARED BY: **Eddie Seay**

UPDATED	01/18/14
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## WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A		APINUM: 30-015-00721																																					
FORM	DEPTH	OPERATOR: LEGACY RESERVES OPERATING, LP																																							
7 RVRS	330	LEASENAME: SOUTH RED LAKE II UNIT			WELL NO. 12																																				
		SURF LOC:	UL: A	SEC: 2	TWN: 18S	RNG: 27E																																			
		330 FNL			990 FEL																																				
		BH LOC:	UL: A	SEC: 2	TWN: 18S	RNG: 27E																																			
		330 FNL			990 FEL																																				
		TD 1707	PBD	KB	DF																																				
					GL																																				
		POOL EMPIRE;YATES-SEVEN RIVERS			PERFS																																				
					Open Hole 457-512																																				
		POOL RED LAKE;QUEEN-GB-SA			PERFS																																				
			Open Hole 1229-1707																																						
		Casing Record																																							
		<table border="1"><thead><tr><th></th><th>SIZE</th><th>DEPTH</th><th>CMT</th><th>HOLE SIZE</th><th>TOC</th></tr></thead><tbody><tr><td>SURF</td><td>8.625</td><td>457</td><td>25 sxs</td><td>12.25</td><td>426 Cal</td></tr><tr><td>PROD</td><td>7</td><td>1707</td><td>26 sxs</td><td>8</td><td>1059 Cal</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>					SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	457	25 sxs	12.25	426 Cal	PROD	7	1707	26 sxs	8	1059 Cal																		
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SURF	8.625	457	25 sxs	12.25	426 Cal																																				
PROD	7	1707	26 sxs	8	1059 Cal																																				
Queen	845																																								
Grayburg	1278	SPUD: 10/21/1941 COMP(1): 11/13/1941 DEEPEN: ????? COMP(2): ?????																																							
San Andres	1596	New Operator: Remnant Oil Operating, LLC Correct Well No.: 36																																							
Glorieta																																									
Yeso																																									
		PREPARED BY: Eddie Seay      UPDATED: 01/18/14																																							

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00725																																													
FORM	DEPTH		OPERATOR: LEGACY RESERVES OPERATING LP																																													
7 RVRS	320		LEASENAME: SOUTH RED LAKE II UNIT			WELL NO. 34																																										
			SURF LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			330 FNL			2310 FWL																																										
			BH LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			330 FNL			2310 FWL																																										
			TD 1630	PBD 1630	KB	DF																																										
						GL																																										
			POOL			PERFS																																										
			RED LAKE;QUEEN-GRAYBURG-SA			Open Hole 1588-1630																																										
			POOL			PERFS																																										
			Open Hole																																													
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PROD	7	1588	na	na	na																																											
Queen	910		TOC UNKNOWN																																													
Grayburg	1346																																															
San Andres	1656		<p>7 @ 1558</p> <p>TOC @ NA'</p> <p>TD 1630</p>																																													
<p>NO FORMS IN OCD WELL FILE PRIOR TO 1957</p> <p>SPUD: na</p> <p>COMP: 03/1927</p> <p>New Operator: Remnant Oil Operating, LLC</p>																																																

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00728																																													
FORM	DEPTH		OPERATOR: ARCO OIL AND GAS CO																																													
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>7 RVRS</p> <p>305</p> <p>8 5/8 @ 406 TOC @ UNK</p> <p>Queen</p> <p>915</p> </div> <div style="width: 5%; border-left: 1px dashed black; border-right: 1px dashed black; background-color: green; height: 400px; position: relative;"> <div style="position: absolute; top: 0; left: 0; right: 0; height: 100%;"></div> <div style="position: absolute; bottom: 0; left: 0; right: 0; height: 100%;"></div> </div> <div style="width: 45%;"> <p>PLUG 70 sxs 0-230</p> <p>TOC UNK</p> <p>PLUG 60 sxs 230-440</p> <p>PLUG 0-441 75 SXS</p> <p>TD 440</p> </div> </div>			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">LEASENAME: HUDSON D STATE</td> <td colspan="2">WELL NO. 1</td> </tr> <tr> <td>SURF LOC:</td> <td>UL: F SEC: 2</td> <td>TWN: 18S</td> <td>RNG: 27E</td> </tr> <tr> <td colspan="2">1650 FNL</td> <td colspan="2">2310 FWL</td> </tr> <tr> <td>BH LOC:</td> <td>UL: F SEC: 2</td> <td>TWN: 18S</td> <td>RNG: 27E</td> </tr> <tr> <td colspan="2">1650 FNL</td> <td colspan="2">2310 FWL</td> </tr> <tr> <td>TD 440</td> <td>PBD</td> <td>KB</td> <td>DF</td> </tr> <tr> <td colspan="2"></td> <td>GL</td> <td></td> </tr> <tr> <td colspan="2">POOL EMPIRE;YATES-SEVEN RIVERS</td> <td colspan="2">PERFS</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">Open Hole 406-440</td> </tr> </table>				LEASENAME: HUDSON D STATE		WELL NO. 1		SURF LOC:	UL: F SEC: 2	TWN: 18S	RNG: 27E	1650 FNL		2310 FWL		BH LOC:	UL: F SEC: 2	TWN: 18S	RNG: 27E	1650 FNL		2310 FWL		TD 440	PBD	KB	DF			GL		POOL EMPIRE;YATES-SEVEN RIVERS		PERFS				Open Hole 406-440							
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			Open Hole 406-440																																													
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PROD	8.625	406	78 sxs	NA	UNK																																											
<div style="display: flex; justify-content: space-between;"> <div> <p>SPUD: 1945</p> <p>COMP: 1945</p> <p>P&amp;A: 06/14/1988</p> </div> </div>																																																
<div style="display: flex; justify-content: space-between;"> <div> <p>PREPARED BY: Eddie Seay</p> </div> <div> <p>UPDATED 01/22/14</p> </div> </div>																																																

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00734																																													
FORM	DEPTH		OPERATOR: APACHE CORP																																													
7 RVRS	381		LEASENAME: EMPIRE ABO UNIT			WELL NO. 14A																																										
			SURF LOC:	UL: F	SEC: 2	TWN: 18S	RNG: 27E																																									
			2180 FNL			1905 FWL																																										
			BH LOC:	UL: F	SEC: 2	TWN: 18S	RNG: 27E																																									
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			TD	6133	PBD	KB	DF																																									
						GL																																										
			POOL EMPIRE;ABO			PERFS 5620-5640 sqz																																										
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Grayburg	1366																																															
San Andres	1690																																															
Glorieta	3089																																															
Abo	4940		<div>TOC @ 4921</div> <div>PERFS 5620-5640 sqz</div> <div>PKR @ 5536 WELL TA</div> <div>PERFS 5748-5776</div>																																													
			<div>5 1/2 @</div> <div>6133</div> <div>TOC @ 4921'</div>																																													
			<div>TD 6133</div>																																													
			SPUD: 01/23/1959																																													
			COMP: 1959																																													
			TA: 11/27/2002																																													
PREPARED BY: Eddie Seay						UPDATED 01/22/14																																										

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00736																																												
FORM	DEPTH		OPERATOR: CITIES SERVICE OIL CO																																												
7 RVRS	305	[REDACTED]	LEASENAME: STATE BZ			WELL NO. 4																																									
			SURF LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																								
			990 FNL			2310 FWL																																									
			BH LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																								
			990 FNL			2310 FWL																																									
			TD 441	PBD	KB	DF																																									
						GL																																									
			POOL EMPIRE; YATES-SEVEN RIVERS			PERFS																																									
						Open Hole NA-441																																									
			POOL			PERFS																																									
			Open Hole																																												
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PROD	7	Illegible	25 sxs	NA	UNK																																										
			TOC UNK PLUG 0-441 75 SXS TD 441																																												
			SPUD: 02/02/1944 COMP: 03/12/1944 P&A: 1977																																												
Queen	915																																														

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00737																																													
FORM	DEPTH		OPERATOR: LEGACY RESERVES OPERATING, LP																																													
7 RVRs	330		LEASENAME: SOUTH RED LAKE II UNIT		WELL NO. 38																																											
			SURF LOC:	UL: B	SEC: 2	TWN: 18S	RNG: 27E																																									
			905 FNL		1610 FEL																																											
			BH LOC:	UL: B	SEC: 2	TWN: 18S	RNG: 27E																																									
			905 FNL		1610 FEL																																											
			TD	1722	PBD	KB	DF																																									
					GL																																											
			POOL			PERFS																																										
			RED LAKE; QUEEN-GB-SA			Open Hole 1480-1722																																										
			POOL			PERFS																																										
			Open Hole																																													
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.25</td> <td>976</td> <td>NONE</td> <td>na</td> <td>na</td> </tr> <tr> <td>PROD</td> <td>7</td> <td>1480</td> <td>75 sxs</td> <td>8</td> <td>837 Cal</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.25	976	NONE	na	na	PROD	7	1480	75 sxs	8	837 Cal																		
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.25	976	NONE	na	na																																											
PROD	7	1480	75 sxs	8	837 Cal																																											
Queen	845		TOC @ 837																																													
		8 1/4" @ 976'																																														
Grayburg	1278																																															
		7 @ 1480 TOC @ 837'																																														
San Andres	1596																																															
			TD 1707																																													
Glorieta																																																
Yeso																																																
			SPUD: 04/20/1948																																													
			COMP: 05/23/1948																																													
			New Operator: Remnant Oil Operating, LLC																																													



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-P	APINUM: 30-015-00738																																													
FORM	DEPTH		OPERATOR: CITIES SERVICE OIL CO																																													
7 RVRS	360	[REDACTED]	LEASENAME: STATE BZ		WELL NO. 2																																											
			SURF LOC:	UL: B	SEC: 2	TWN: 18S	RNG: 27E																																									
			990 FNL		2310 FEL																																											
			BH LOC:	UL: B	SEC: 2	TWN: 18S	RNG: 27E																																									
			990 FNL		2310 FEL																																											
			TD 440	PBD	KB	DF																																										
					GL																																											
			POOL EMPIRE;YATES-SEVEN RIVERS			PERFS																																										
						Open Hole 412-440																																										
			POOL			PERFS																																										
			Open Hole																																													
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>PROD</td> <td>7</td> <td>412</td> <td>NA</td> <td>NA</td> <td>UNK</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	PROD	7	412	NA	NA	UNK																								
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
PROD	7	412	NA	NA	UNK																																											
			<div> <div>7 @ 412</div> <div>TOC @ UNK</div> </div> <div> <div>PLUG 0-440 30 SXS</div> <div>TD 440</div> </div> <div> <div>SPUD: 03/16/1944</div> <div>COMP: 03/29/1944</div> <div>P&amp;A: 1977</div> </div>																																													
Queen	915																																															



COMPLETION SCHEMATIC		I-A	APINUM: 30-015-00740																															
FORM	DEPTH		OPERATOR: MCQUADRANGLE, LC																															
7 RVRs	380		LEASENAME: SOUTH RED LAKE GB UNIT																															
			WELL NO. 40																															
			SURF LOC:	UL: G SEC: 2 TWN: 18S RNG: 27E																														
			1650 FNL 2197 FEL																															
			BH LOC:	UL: G SEC: 2 TWN: 18S RNG: 27E																														
			1650 FNL 2197 FEL																															
			TD 1707	PBD KB DF																														
			GL																															
			POOL RED LAKE;QUEEN-GB-SAN ANDRES																															
			PERFS																															
Open Hole 1644-1707																																		
POOL																																		
PERFS																																		
Open Hole																																		
PLUG 200 SXS TOP @ 37' CUT & PULL @ 260																																		
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>7</td> <td>1542</td> <td>50 sxs</td> <td>na</td> <td>NA</td> </tr> <tr> <td>PROD</td> <td>4.5</td> <td>1644</td> <td>50 sxs</td> <td>na</td> <td>NA</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	7	1542	50 sxs	na	NA	PROD	4.5	1644	50 sxs	na	NA						
CASING RECORD																																		
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																													
SURF	7	1542	50 sxs	na	NA																													
PROD	4.5	1644	50 sxs	na	NA																													
Queen	900		TOC 7" @ ????																															
Grayburg	1370		TOC 4 1/2 @ ???																															
San Andres	1644		PLUG 25 SXS TAG @ 1292																															
SPUD: 4/16/48 PA: 7/10/02																																		
TD 1707																																		
<table border="1"> <thead> <tr> <th colspan="2">PREPARED BY: Eddie Seay</th> <th colspan="2">UPDATED 01/18/14</th> </tr> </thead> </table>					PREPARED BY: Eddie Seay		UPDATED 01/18/14																											
PREPARED BY: Eddie Seay		UPDATED 01/18/14																																

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00741																																													
FORM	DEPTH		OPERATOR: APACHE CORP																																													
7 RVRS	381		LEASENAME: EMPIRE ABO UNIT			WELL NO. 15B																																										
			SURF LOC:	UL: G	SEC: 2	TWN: 18S	RNG: 27E																																									
			2310 FNL			1980 FEL																																										
			BH LOC:	UL: G	SEC: 2	TWN: 18S	RNG: 27E																																									
			2310 FNL			1980 FEL																																										
			TD 5880		PBD	KB	DF																																									
						GL																																										
			POOL EMPIRE;ABO			PERFS 5405-5715																																										
						5762-5788																																										
			POOL			PERFS																																										
			Open Hole																																													
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.625</td> <td>1216</td> <td>650 sxs</td> <td>na</td> <td>0 Circ</td> </tr> <tr> <td>PROD</td> <td>5.5</td> <td>5884</td> <td>254 sxs</td> <td>na</td> <td>4550 Est</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	1216	650 sxs	na	0 Circ	PROD	5.5	5884	254 sxs	na	4550 Est																		
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	1216	650 sxs	na	0 Circ																																											
PROD	5.5	5884	254 sxs	na	4550 Est																																											
Queen	932																																															
		8 5/8"																																														
		@ 1216																																														
		TOC 0'																																														
Grayburg	1375																																															
San Andres	1720																																															
Glorieta	3170																																															
Abo	5403																																															
			TOC @ 4550																																													
			PERFS 5705-5715																																													
			PERFS 5762-5788																																													
			TD 5880																																													
		5 1/2 @ 5884																																														
		TOC @ 4550'																																														
			SPUD: 04/29/1959		COMP: 06/19/1959																																											
			PREPARED BY: Eddie Seay		UPDATED 01/24/14																																											

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-00742				
FORM	DEPTH		OPERATOR: S & J OPERATING LLC				
			LEASENAME: SOUTH RED LAKE GRAYBURG UT WELL NO. 39				
		PLUG 115 sxs	SURF LOC:	UL: H	SEC: 2	TWN: 18S	RNG: 27E
			1650 FNL		990 FEL		
		PLUG 50 sxs	BH LOC:	UL: H	SEC: 2	TWN: 18S	RNG: 27E
			1650 FNL		990 FEL		
			TD	1742	PBD	KB	DF
					GL		
		SQZ 75 sxs @ 250' TOP PLUG @ 150'					
		POOL				PERFS	
		RED LAKE;QUEEN-GB-SA				Open Hole 1693-1742	
		CASING RECORD					
			SIZE	DEPTH	CMT	HOLE SIZE	TOC
		SURF	7	1411	30 sxs	8	1179 Cal
		PROD	4.5	1693	50 sxs	na	1290 Est
7 RVRS	360						
Queen	930		PERF @ 1002-1005 SQZ 25 SXS TOP PLUG @ 800'				
			TOC @ 1179				
			PLUG 40 SXS 1100-1640				
			TOC @ 1290				
Grayburg	1330						
		7 @ 1411					
		TOC @ 1179'					
		4 1/2 @ 1693					
San Andres	1720						
		TOC @ 1290'					
			CIBP @ 1640 CAP W/ 2 SXS CMNT				
			TD 1742				
Glorieta							
Yeso							
			PREPARED BY: Eddie Seay		UPDATED 01/18/14		

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-01211																																											
FORM	DEPTH		OPERATOR: LEGACY RESERVES OPERATING, LP																																											
7 RVRS	330		LEASENAME: SOUTH RED LAKE II UNIT																																											
			WELL NO. 35																																											
			SURF LOC: UL: B SEC: 2 TWN: 18S RNG: 27E																																											
			330 FNL 2310 FEL																																											
			BH LOC: UL: B SEC: 2 TWN: 18S RNG: 27E																																											
			330 FNL 2310 FEL																																											
			TD NA PBD KB DF																																											
			GL																																											
			POOL RED LAKE; QUEEN-GB-SA																																											
			PERFS																																											
Open Hole 1949-NA																																														
POOL																																														
PERFS																																														
Open Hole																																														
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CASING RECORD																																														
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																									
SURF	10	446	na	na	426 Cal																																									
PROD1	8.5	1707	na	na	1059 Cal																																									
PROD2	4.5	1515	50 sxs		1350 Cal																																									
Queen	845		<p>SPUD: 11/12/1926</p> <p>COMP: 01/01/1927</p>																																											
Grayburg	1278		<p>New Operator: Remnant Oil Operating, LLC</p>																																											
San Andres	1596																																													
Glorieta																																														
Yeso																																														

## COMPLETION SCHEMATIC

OPERATOR: S J OPERATING CO

WELL NO.	33
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	280 FNL	1650 FWL
--	---------	----------

	280 FNL	1650 FWL
--	---------	----------

	GL	
--	----	--

RED LAKE:QU-GB-SA

Open Hole	1601-1630
-----------	-----------

POOL	PERFS
------	-------

[illegible]

Open Hole

380

Perf 4 1/2 @ 425' SQZ 45 sxs TOC @ 350

10"  
@ 435  
TOC ???

Perf @ 485 sqz 40 sxs circ TOC @ 280

## CASING RECORD

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF	10	448	na	na	na
INT1	8.25	849	na	na	na
PROD	4.5	1601	50 sxs	na	na

1952	1953	1954	1955	1956
No indications in well file of cmnt run on surface & intermediate				

**SPUD: 11/12/1926**

COMP: 01/01/1927

**P&A:** 01/14/1993

## Queen

900

8 1/4"  
@ 849  
TOC ???

**PERF @ 1000 Pump 25 sxs TAG top of plug @ 1000**

**PLUG 15 sxs 1150-1370**

## Grayburg

1370

**TOC 4 1/2 UNKNOWN**

4 1/2 @  
1601  
TOC @ NA'

TD 1638

## San Andres

1640

PREPARED BY: **Eddie Seay**

UPDATED	01/18/14
---------	----------



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		I-A	APINUM: 30-015-01222																																					
FORM	DEPTH		OPERATOR: FAIRWAY RESOURCES OPERATING LLC																																					
			LEASENAME: SOUTH RED LAKE II UNIT WELL NO. 30																																					
			SURF LOC: UL: 0 SEC: 35 TWN: 17S RNG: 27E																																					
			330 FSL 2310 FEL																																					
			BH LOC: UL: 0 SEC: 35 TWN: 17S RNG: 27E																																					
			330 FSL 2310 FEL																																					
			TD 1638 PBD KB DF																																					
			GL																																					
			POOL RED LAKE;QU-GB-SA PERFS																																					
			Open Hole na-1624																																					
			POOL PERFS																																					
			Open Hole																																					
7 RVRs	305		Plug 50 sxs 0-100																																					
			Perf 4 1/2 @ 600' SQZ 50 sxs circ to surface fell back 57'																																					
			10" @ 435 TOC ??? Perf @ 485 sqz 40 sxs circ TOC @ 280																																					
			<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>10</td> <td>435</td> <td>na</td> <td>na</td> <td>na</td> </tr> <tr> <td>INT1</td> <td>8.25</td> <td>948</td> <td>na</td> <td>na</td> <td>na</td> </tr> <tr> <td>PROD</td> <td>6.625</td> <td>na</td> <td>na</td> <td>na</td> <td>na</td> </tr> <tr> <td colspan="6">No indications in well file of cmnt run on surface &amp; intermediate</td> </tr> </tbody> </table>		CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	10	435	na	na	na	INT1	8.25	948	na	na	na	PROD	6.625	na	na	na	na	No indications in well file of cmnt run on surface & intermediate					
CASING RECORD																																								
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																			
SURF	10	435	na	na	na																																			
INT1	8.25	948	na	na	na																																			
PROD	6.625	na	na	na	na																																			
No indications in well file of cmnt run on surface & intermediate																																								
Queen	915		SPUD: 02/14/1927 COMP: 03/12/1927 P&A: 02/05/2009																																					
			8 1/4" @ 948 TOC ??? PERF @ 999 SQZ 40 sxs TAG top of plug @ 780																																					
Grayburg	1375		PLUG 25 sxs 1309-1624																																					
			TOC 6 5/8 UNKNOWN																																					
			6 5/8 @ NA TOC @ NA' SETTING DEPTH 6 5/8 UNKNOWN (Probably top of shot hole)																																					
San Andres	1660		TD 1638																																					



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		I-A	APINUM: 30-015-10623					
FORM	DEPTH		OPERATOR: ATLANTIC REFINING CO					
7 Rivers	380		LEASENAME: HONDO C STATE		WELL NO. 1			
			SURF LOC:	UL: D	SEC: 2	TWN: 18S	RNG: 27E	
			330 FNL		990 FWL			
			BH LOC:	UL: D	SEC: 2	TWN: 18S	RNG: 27E	
Queen	900		330 FNL		990 FWL			
			TD 8725		PBD	KB	DF	
					GL			
			POOL RED LAKE;QU-GB-SA				PERFS	
Grayburg	1370		Open Hole		1604-1624			
San Andres	1640		CUT & PULL @ 1734 SPOT 160 SXS PLUG 1304-1765					
Glorieta	3040		CASING RECORD					
			SIZE	DEPTH	CMT	HOLE SIZE	TOC	
			SURF	8.625	938	Mudded in	na	na
			INT1	7	3700	25 sxs	8	3562 Cal
Abo	5100		PROD					
Wolfcamp	6500		PLUG 4297-4340 8 sxs					
			PLUG 4483-4720 14 sxs					
			PLUG 8168-8270 19 sxs					
HOLE 6 1/4		TD 8725		SPUD: 12/10/1926		COMP: 01/23/1927 DEEPEN: 10/03/1943 P&A: Date unknown		
PREPARED BY: Eddie Seay		UPDATED		01/18/14				

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		I-P	APINUM: 30-015-20104																																													
FORM	DEPTH		OPERATOR: FAIRWAY RESOURCES OPERATING LLC																																													
7 RVRS	380		LEASENAME: SOUTH RED LAKE II UNIT		WELL NO. 41																																											
			SURF LOC: UL: P SEC: 35 TWN: 17S RNG: 27E		990 FSL 990 FEL																																											
			BH LOC: UL: P SEC: 35 TWN: 17S RNG: 27E		990 FSL 990 FEL																																											
			TD 1630 PBD KB DF		GL																																											
			POOL RED LAKE;QUEEN-GB-SAN ANDRES		PERFS 1679-1688																																											
			POOL		Open Hole																																											
					PERFS																																											
					Open Hole																																											
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CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	10.75	100	No cmnt	17	na																																											
PROD	4.5	1712	445 sxs	7.875	0 Circ																																											
			<p>PLUG 25 sxs @ 700 tag top @ 382</p> <p>Original TOC 4 1/2 @ 197' sqz 328 sxs circ</p> <p>SPUD: 11/17/1967 COMP: 12/02/1967 P&amp;A: 01/18/2007</p>																																													
Queen	980																																															
Grayburg	1400																																															
San Andres	1730	<p>4 1/2 @ 1712 TOC @ 0</p> <p>TD 1712</p>	<p>CIBP @ 1600 cap w/ 25 sxs</p> <p>PERFS 1679-1688</p>																																													

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		I-P	APINUM: 30-015-20105			
FORM	DEPTH		OPERATOR: S & J OPERATING, LLC			
7 RVRs	280		LEASENAME: SOUTH RED LAKE GB UNIT			
			WELL NO. 42			
			SURF LOC: UL: N SEC: 35 TWN: 17S RNG: 27E			
			990 FSL 1650 FWL			
			BH LOC: UL: N SEC: 35 TWN: 17S RNG: 27E			
			990 FSL 1650 FWL			
			TD 1630 PBD KB DF			
			GL			
			POOL RED LAKE; QUEEN-GB-SAN ANDRES			
			PERFS 1584-1595			
Open Hole						
POOL						
PERFS						
Open Hole						

CASING RECORD					
	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF	7	456	535 sxs	9.875	0 Circ
PROD	4.5	1626	700 sxs	6.25	912 Cal

Queen	880	7"		
		@ 456	PLUG sqz 25 sxs 400-500	
		TOC @ 0'		
			PLUG 25 sxs 712-772	
			PERF @ 885 PLUG 20 sxs 795-895	
			TOC @ 912	
			PLUG 15 sxs 1170-1270	
Grayburg	1340			
			PLUG 55 sxs 1539-1617	
			PERFS 1584-1595	
			PBTD 1623	
San Andres	1620	4 1/2 @		
		1626		
		TOC @ 912'	TD 1630	

SPUD:	11/24/1967
COMP:	12/02/1967
P&A:	02/24/1988

PREPARED BY:	Eddie Seay	UPDATED	01/18/14
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# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		I-P	APINUM: 30-015-21358																																													
FORM	DEPTH		OPERATOR: BP AMERICA PRODUCTION COMPANY																																													
7 RVRS	280		LEASENAME: RIVERWOLF UNIT		WELL NO. 11																																											
			SURF LOC: UL: N SEC: 35 TWN: 17S RNG: 27E		990 FSL 1880 FWL																																											
			BH LOC: UL: N SEC: 35 TWN: 17S RNG: 27E		990 FSL 1880 FWL																																											
			TD 5600 PBD KB DF		GL																																											
			POOL EMPIRE;ABO		PERFS 5482-5532																																											
			POOL		Open Hole																																											
					PERFS																																											
					Open Hole																																											
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.625</td> <td>1010</td> <td>535 sxs</td> <td>12.25</td> <td>Cir</td> </tr> <tr> <td>PROD</td> <td>4.5</td> <td>5600</td> <td>700 sxs</td> <td>7.875</td> <td>2090 TS</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	1010	535 sxs	12.25	Cir	PROD	4.5	5600	700 sxs	7.875	2090 TS																		
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	1010	535 sxs	12.25	Cir																																											
PROD	4.5	5600	700 sxs	7.875	2090 TS																																											
Queen	890	8 5/8" @ 1010 TOC 0	Perf & Sqz PLUG 35 sxs 960-1060		SPUD: 12/22/1974 COMP: 06/16/1975 P&A: 06/08/2002																																											
Grayburg	1330																																															
San Andres	1638																																															
			TOC 5 1/2 @ 2090																																													
Glorieta	3030		PLUG 25 sxs @ 3150																																													
Abo	5150		CIBP @ 5382 CAP W/ 35 sxs																																													
			PERFS 5482-5532																																													
		5 1/2 @ 5600	TD 5600																																													
		TOC @ 2090'																																														

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-27224																																													
FORM	DEPTH		OPERATOR: MEWBOURNE OIL CO																																													
			LEASENAME: CHALK BLUFF 35 FEDERAL			WELL NO. 1																																										
			SURF LOC:	UL: J	SEC: 35	TWN: 17S																																										
						RNG: 27E																																										
			1980 FSL			1980 FEL																																										
			BH LOC:	UL: J	SEC: 35	TWN: 17S																																										
						RNG: 27E																																										
			1980 FSL			1980 FEL																																										
			TD 9963	PBD	KB	DF																																										
				GL																																												
			POOL			PERFS 9700-9752																																										
			ILLINOIS CAMP; MORROW, NORTH			Open Hole																																										
			POOL			PERFS 6714-7180																																										
			LOGAN DRAW; WOLFCAMP			Open Hole																																										
			<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>13.375</td> <td>385</td> <td>600 sxs</td> <td>17.5</td> <td>0 Circ</td> </tr> <tr> <td>INT1</td> <td>9.625</td> <td>2600</td> <td>1100 sxs</td> <td>12.25</td> <td>0 Circ</td> </tr> <tr> <td>PROD</td> <td>5.5</td> <td>9963</td> <td>2345 sxs</td> <td>8.75</td> <td>0 Circ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	13.375	385	600 sxs	17.5	0 Circ	INT1	9.625	2600	1100 sxs	12.25	0 Circ	PROD	5.5	9963	2345 sxs	8.75	0 Circ												
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	13.375	385	600 sxs	17.5	0 Circ																																											
INT1	9.625	2600	1100 sxs	12.25	0 Circ																																											
PROD	5.5	9963	2345 sxs	8.75	0 Circ																																											
7 RVRS	380																																															
			13 3/8" @ 385' TOC 0																																													
Queen	900																																															
Grayburg	1337																																															
San Andres	1730																																															
			9 5/8 @ 2600																																													
Glorieta	3015																																															
			SPUD: 07/08/1993																																													
			COMP(1): 08/20/1993																																													
			COMP(2): 09/11/1993																																													
			DV TOOL @ 6656 STG1: 825 SXS, STG2 1520 sxs																																													
Wolfcamp	6785		PERFS 6714-7180																																													
Penn	7540																																															
Canyon	7975																																															
Strawn	8735																																															
Atoka	9245																																															
Morrow	9468																																															
			RPP @ 9600																																													
			PERFS 9700-9752																																													
			5 1/2 @ 9963																																													
			TOC @ 0'																																													
			TD 9963																																													
			PREPARED BY: Eddie Seay		UPDATED 01/18/14																																											

## COMPLETION SCHEMATIC

**O-A**

APINUM: 30-015-29633

OPERATOR: **LIME ROCK RESOURCES II-A, LP**

LEASENAME:	EAGLE 35 L FEDERAL
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WELL NO. 2

SURF LOC:	UL: L	SEC: 35	TWN: 17S	RNG: 27E
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	1820 FSL	960 FWL
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BH LOC:	UL: L	SEC: 35	TWN: 17S	RNG: 27E
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	<b>1820 FSL</b>	<b>960 FWL</b>
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TD	2700	PBD	KB	DF
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GL	
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POOL	PERFS	1953-2368
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**RED LAKE;QUEEN-GRAYBURG-SA**

Open Hole

POOL

PERFS

Open Hole

### CASING RECORD

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF	8.625	1171	650 sxs	12.25	0' Circ
PROD	5.5	2699	500 sxs	7.875	0' Circ

**SPUD: 09/02/1997**

COMP1: 09/19/1997

**PERFS 1953-2368**

**TD 2700**

PREPARED BY: **Eddie Seay**

UPDATED
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10/08/12

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30406																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
7 RVRS	320		LEASENAME: LOGAN 2 STATE		WELL NO. 2																																											
			SURF LOC: UL: C SEC: 2 TWN: 18S RNG: 27E		990 FNL 1750 FWL																																											
			BH LOC: UL: C SEC: 2 TWN: 18S RNG: 27E		990 FNL 1750 FWL																																											
			TD 3710 PBD KB DF		GL																																											
			POOL RED LAKE;GLORIETA-YESO, NE		PERFS 3198-3459																																											
					CIBP @ 3100																																											
			Open Hole																																													
			POOL RED LAKE;QUEEN-GRAYBURG-SA		PERFS 2072-2450																																											
					2812-2944																																											
			Open Hole																																													
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	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	1170	650 sxs	12.25	0' Circ																																											
PROD	5.5	3710	950 sxs	7.875	0' Circ																																											
Queen	910		SPUD: 10/02/1999																																													
		8 5/8"	COMP1: 10/21/1999																																													
		@ 1150'	COMP2: 03/19/2000																																													
		TOC 0																																														
Grayburg	1346																																															
San Andres	1656																																															
			PERFS 2072-2450																																													
			PERFS 2812-2944																																													
Glorieta	3049		CIBP @ 3100																																													
Yeso	3172		PERFS 3198-3459																																													
		5 1/2 @ 3710																																														
		TOC @ 0'	TD 3710																																													

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30409																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
7 RVRS	320		LEASENAME: LOGAN 35 B FEDERAL		WELL NO. 9																																											
			SURF LOC:	UL: 0	SEC: 35	TWN: 17S	RNG: 27E																																									
			990 FSL		2100 FEL																																											
			BH LOC:	UL: 0	SEC: 35	TWN: 17S	RNG: 27E																																									
			990 FSL		2100 FEL																																											
			TD	3397	PBD	KB	DF																																									
					GL																																											
			POOL			PERFS		3140-3172																																								
			RED LAKE;GLORIETA-YESO, NE			CIBP @ 3050																																										
			POOL			PERFS		2036-2434																																								
RED LAKE;QUEEN-GRAYBURG-SA			2780-2894																																													
			Open Hole																																													
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CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	1147	650 sxs	12.25	0' Circ																																											
PROD	5.5	3397	670 sxs	7.875	0' Circ																																											
Queen	913																																															
		8 5/8"																																														
		@ 1147'																																														
		TOC 0																																														
Grayburg	1372																																															
San Andres	1659																																															
			PERFS 2036-2434																																													
			PERFS 2780-2894																																													
Glorieta	3042		CIBP @ 3050																																													
Yeso	3119		PERFS 3140-3172																																													
		5 1/2 @																																														
		3397																																														
		TOC @ 0'	TD 3397																																													
			SPUD: 11/07/1998 COMP1: 12/02/1998 COMP2: 12/02/1999																																													
			PREPARED BY: Eddie Seay      UPDATED: 01/18/14																																													



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30437																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
7 RVRS	320		LEASENAME: LOGAN 35 FEDERAL		WELL NO. 4																																											
			SURF LOC:	UL: J	SEC: 35	TWN: 17S	RNG: 27E																																									
			1650 FSL		2050 FEL																																											
			BH LOC:	UL: J	SEC: 35	TWN: 17S	RNG: 27E																																									
			1650 FSL		2050 FEL																																											
			TD	4400	PBD	KB	DF																																									
					GL																																											
			POOL			PERFS 3122-3244																																										
			RED LAKE;GLORIETA-YESO, NE			Open Hole																																										
			POOL			PERFS 2004-2420																																										
RED LAKE;QUEEN-GRAYBURG-SA			2703-2828																																													
			Open Hole																																													
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SURF	8.625	1152	550 sxs	12.25	0' Circ																																											
PROD	5.5	4400	1030 sxs	7.875	0' Circ																																											
Queen	914																																															
		8 5/8" @ 1152 TOC 0																																														
Grayburg	1111																																															
San Andres	1651																																															
			PERFS 2004-2420																																													
			PERFS 2703-2828																																													
Glorieta	3007																																															
Yeso	3109																																															
			PERFS 3122-3244																																													
		5 1/2 @ 4400 TOC @ 0'																																														
			TD 4400																																													
			SPUD: 08/24/1999																																													
			COMP1: 09/17/1999																																													
			COMP2: 10/15/2000																																													
<table border="1"> <thead> <tr> <th>PREPARED BY:</th> <th>Eddie Seay</th> <th>UPDATED</th> <th>01/18/14</th> </tr> </thead> </table>							PREPARED BY:	Eddie Seay	UPDATED	01/18/14																																						
PREPARED BY:	Eddie Seay	UPDATED	01/18/14																																													

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30438																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
			LEASENAME: LOGAN 35 FEDERAL			WELL NO. 6																																										
			SURF LOC:	UL: K	SEC: 35	TWN: 17S																																										
						RNG: 27E																																										
			1750 FSL			1680 FWL																																										
			BH LOC:	UL: K	SEC: 35	TWN: 17S																																										
						RNG: 27E																																										
			1750 FSL			1680 FWL																																										
			TD 3597	PBD	KB	DF																																										
					GL																																											
			POOL RED LAKE;GLORIETA-YESO, NE			PERFS 3075-3288																																										
						Open Hole																																										
			POOL RED LAKE;QUEEN-GRAYBURG-SA			PERFS 2134-2759																																										
						Open Hole																																										
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CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	1135	420 sxs	12.25	0' Circ																																											
PROD	5.5	3596	597 sxs	7.875	0' Circ																																											
7 RVRS	320																																															
Queen	879																																															
		8 5/8" @ 1135 TOC 0																																														
Grayburg	1330																																															
San Andres	1610																																															
			PERFS 2134-2759																																													
Glorieta	2962																																															
Yeso	3047		PERFS 3075-3288																																													
		5 1/2 @ 3596 TOC @ 0'	TD 3597																																													

SPUD: 12/04/1998

COMP1: 06/04/1999

COMP2: 04/18/2007

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30439																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
7 RVRS	290		LEASENAME: LOGAN 35 B FEDERAL			WELL NO. 7																																										
			SURF LOC:	UL: N	SEC: 35	TWN: 17S	RNG: 27E																																									
			1090 FSL			2120 FWL																																										
			BH LOC:	UL: N	SEC: 35	TWN: 17S	RNG: 27E																																									
			1090 FSL			2120 FWL																																										
			TD	3800	PBD	KB	DF																																									
						GL																																										
			POOL			PERFS 3123-3356																																										
			RED LAKE;GLORIETA-YESO, NE			Open Hole																																										
			POOL			PERFS 2016-2404																																										
RED LAKE;QUEEN-GRAYBURG-SA			2747-2798																																													
			Open Hole																																													
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CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	1144	500 sxs	11	0' Circ																																											
PROD	5.5	3797	900 sxs	7.875	0' Circ																																											
Queen	889																																															
		8 5/8" @ 1144 TOC 0																																														
Grayburg	1318																																															
San Andres	1625																																															
			PERFS 2016-2404																																													
			PERFS 2747-2798																																													
Glorieta	2998																																															
Yeso	3086		PERFS 3123-3356																																													
		5 1/2 @ 3797 TOC @ 0'	TD 3800																																													
			SPUD: 12/16/2000 COMP1: 01/12/2001 COMP2: 07/25/2001																																													

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30440																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
7 RVRS	300		LEASENAME: LOGAN 35 B FEDERAL		WELL NO. 8																																											
			SURF LOC: UL: N SEC: 35 TWN: 17S RNG: 27E		650 FSL 1800 FWL																																											
			BH LOC: UL: N SEC: 35 TWN: 17S RNG: 27E		650 FSL 1800 FWL																																											
			TD 3710 PBD KB DF		GL																																											
			POOL RED LAKE;GLORIETA-YESO, NE		PERFS 3126-3262																																											
					CIBP @ 3000																																											
			Open Hole																																													
			POOL RED LAKE;QUEEN-GRAYBURG-SA		PERFS 2024-2410																																											
					2768-2952																																											
			Open Hole																																													
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.625</td> <td>1150</td> <td>650 sxs</td> <td>12.25</td> <td>0' Circ</td> </tr> <tr> <td>PROD</td> <td>5.5</td> <td>3710</td> <td>825 sxs</td> <td>7.875</td> <td>0' Circ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	1150	650 sxs	12.25	0' Circ	PROD	5.5	3710	825 sxs	7.875	0' Circ																		
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SURF	8.625	1150	650 sxs	12.25	0' Circ																																											
PROD	5.5	3710	825 sxs	7.875	0' Circ																																											
Queen	894		<div>8 5/8"</div> <div>@ 1150'</div> <div>TOC 0</div>																																													
Grayburg	1326		<div>SPUD: 09/21/1999</div> <div>COMP1: 10/16/1999</div> <div>COMP2: 06/09/2000</div>																																													
San Andres	1630		<div>PERFS 2024-2410</div>																																													
Glorieta	3004		<div>PERFS 2768-2952</div> <div>CIBP @ 3000</div>																																													
Yeso	3099		<div>PERFS 3126-3262</div>																																													
			<div>5 1/2 @ 3710</div> <div>TOC @ 0'</div> <div>TD 3710</div>																																													

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30475																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
			LEASENAME: LOGAN 35 FEDERAL			WELL NO. 5																																										
			SURF LOC:	UL: K	SEC: 35	TWN: 17S																																										
						RNG: 27E																																										
			2210 FSL			1950 FWL																																										
			BH LOC:	UL: K	SEC: 35	TWN: 17S																																										
						RNG: 27E																																										
			2210 FSL			1950 FWL																																										
			TD	3800	PBD	KB																																										
						DF																																										
						GL																																										
			POOL			PERFS 3061-3274																																										
			RED LAKE;GLORIETA-YESO, NE																																													
						Open Hole																																										
			POOL			PERFS 1989-2922																																										
			RED LAKE;QUEEN-GRAYBURG-SA																																													
						Open Hole																																										
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.625</td> <td>1142</td> <td>650 sxs</td> <td>12.25</td> <td>0' Circ</td> </tr> <tr> <td>PROD</td> <td>5.5</td> <td>3795</td> <td>875 sxs</td> <td>7.875</td> <td>0' Circ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	1142	650 sxs	12.25	0' Circ	PROD	5.5	3795	875 sxs	7.875	0' Circ																		
CASING RECORD																																																
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	1142	650 sxs	12.25	0' Circ																																											
PROD	5.5	3795	875 sxs	7.875	0' Circ																																											
7 RVRS	325																																															
Queen	886																																															
		8 5/8"																																														
		@ 1142																																														
		TOC 0																																														
Grayburg	1306																																															
San Andres	1618																																															
Glorieta	2960		PERFS 1989-2922																																													
Yeso	3040		PERFS 3061-3274																																													
		5 1/2 @																																														
		3795																																														
		TOC @ 0'																																														
			TD 3800																																													
			SPUD:		12/27/2000																																											
			COMP1:		01/25/2001																																											
			COMP2:		05/02/2007																																											
			PREPARED BY:		Eddie Seay																																											
			UPDATED		10/08/12																																											

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30735																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
			LEASENAME: LOGAN 35 FEDERAL		WELL NO. 13																																											
			SURF LOC:	UL: M SEC: 35	TWN: 17S	RNG: 27E																																										
			990 FSL		990 FWL																																											
			BH LOC:	UL: M SEC: 35	TWN: 17S	RNG: 27E																																										
			990 FSL		990 FWL																																											
			TD 3800	PBD	KB	DF																																										
					GL																																											
			POOL RED LAKE;GLORIETA-YESO, NE		PERFS 3061-3274																																											
					Open Hole																																											
			POOL RED LAKE;QUEEN-GRAYBURG-SA		PERFS 1989-2922																																											
					Open Hole																																											
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PROD	5.5	3795	700 sxs	7.875	0' Circ																																											
7 RVRS	320																																															
Queen	879																																															
		8 5/8" @ 1141 TOC 0																																														
Grayburg	1330																																															
San Andres	1610																																															
			PERFS 1989-2922																																													
Glorieta	2962																																															
Yeso	3047		PERFS 3061-3274																																													
		5 1/2 @ 3795 TOC @ 0'																																														
			TD 3800																																													
			SPUD: 12/27/2000		COMP1: 01/03/2001																																											
			COMP2: 05/02/2007																																													
			PREPARED BY: Eddie Seay		UPDATED 10/08/12																																											

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30736																																																			
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																																			
<div style="display: flex; flex-direction: column; align-items: center;"> <div>7 RVRS</div> <div>310</div> <div style="height: 100px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> <div>Queen</div> <div>904</div> <div style="height: 100px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> <div>Grayburg</div> <div>1324</div> <div style="height: 100px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> <div>San Andres</div> <div>1624</div> <div style="height: 100px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> <div>Glorieta</div> <div>2988</div> <div style="height: 100px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> <div>Yeso</div> <div>3087</div> <div style="height: 100px; border: 1px solid black; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px);"></div> </div>			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">LEASENAME: LOGAN 35 FEDERAL</td> <td colspan="2">WELL NO. 14</td> </tr> <tr> <td>SURF LOC:</td> <td>UL: M SEC: 35</td> <td>TWN: 17S</td> <td>RNG: 27E</td> </tr> <tr> <td colspan="2">330 FSL</td> <td colspan="2">500 FWL</td> </tr> <tr> <td>BH LOC:</td> <td>UL: M SEC: 35</td> <td>TWN: 17S</td> <td>RNG: 27E</td> </tr> <tr> <td colspan="2">330 FSL</td> <td colspan="2">500 FWL</td> </tr> <tr> <td>TD 3700</td> <td>PBD</td> <td>KB</td> <td>DF</td> </tr> <tr> <td colspan="2"></td> <td>GL</td> <td></td> </tr> <tr> <td colspan="3">POOL RED LAKE;GLORIETA-YESO, NE</td> <td>PERFS 3104-3374</td> </tr> <tr> <td colspan="3"></td> <td>Open Hole</td> </tr> <tr> <td colspan="3">POOL RED LAKE;QUEEN-GRAYBURG-SA</td> <td>PERFS 2000-2423</td> </tr> <tr> <td colspan="3"></td> <td>2743-2872</td> </tr> <tr> <td colspan="3"></td> <td>Open Hole</td> </tr> </table>				LEASENAME: LOGAN 35 FEDERAL		WELL NO. 14		SURF LOC:	UL: M SEC: 35	TWN: 17S	RNG: 27E	330 FSL		500 FWL		BH LOC:	UL: M SEC: 35	TWN: 17S	RNG: 27E	330 FSL		500 FWL		TD 3700	PBD	KB	DF			GL		POOL RED LAKE;GLORIETA-YESO, NE			PERFS 3104-3374				Open Hole	POOL RED LAKE;QUEEN-GRAYBURG-SA			PERFS 2000-2423				2743-2872				Open Hole
	LEASENAME: LOGAN 35 FEDERAL		WELL NO. 14																																																			
	SURF LOC:	UL: M SEC: 35	TWN: 17S	RNG: 27E																																																		
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	POOL RED LAKE;GLORIETA-YESO, NE			PERFS 3104-3374																																																		
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PROD	5.5	3700	800 sxs	7.875	0' Circ																																																	
		<div style="display: flex; justify-content: space-between;"> <div> <p>8 5/8" @ 1150' TOC 0</p> <p>5 1/2 @ 3700 TOC @ 0'</p> </div> <div> <p>SPUD: 10/12/1999</p> <p>COMP1: 11/03/1999</p> <p>COMP2: 08/12/2000</p> </div> </div>																																																				
		<div style="display: flex; justify-content: space-between;"> <div> <p>PERFS 2020-2423</p> <p>PERFS 2743-2872</p> <p>CIBP @ 3000</p> <p>PERFS 3104-3374</p> </div> <div> <p>TD 3700</p> </div> </div>																																																				

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-30750				
FORM	DEPTH	OPERATOR: LIME ROCK RESOURCES II-A, LP					
7 RVRs	320	LEASENAME: LOGAN 35 FEDERAL				WELL NO. 1	
		SURF LOC:		UL: P	SEC: 35	TWN: 17S	RNG: 27E
				580 FSL		1030 FEL	
		BH LOC:		UL: P	SEC: 35	TWN: 17S	RNG: 27E
				580 FSL		1030 FEL	
		TD		3800	PBD	KB	DF
				GL			
		POOL RED LAKE;GLORIETA-YESO, NE				PERFS 3216-3334	
						Open Hole	
		POOL RED LAKE;QUEEN-GRAYBURG-SA				PERFS 2266-2506	
				2796-3002			
				Open Hole			
Casing Record							
	SIZE	DEPTH	CMT	HOLE SIZE	TOC		
SURF	8.625	1145	420 sxs	12.25	0' Circ		
PROD	5.5	3798	597 sxs	7.875	0' Circ		
Queen	947	8 5/8" @ 1145 TOC 0					
Grayburg	1358	SPUD: 11/30/2000 COMP1: 12/15/2000 COMP2: 08/23/2001					
Correct Well Number: 12							
San Andres	1678	PERFS 2266-2506					
		PERFS 2796-3002					
Glorieta	3030	PERFS 3216-3334					
Yeso	3105	5 1/2 @ 3798 TOC @ 0'					
		TD 3800					
PREPARED BY:		Eddie Seay		UPDATED		01/18/14	



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-31967																																													
FORM	DEPTH		OPERATOR: APACHE CORP																																													
			LEASENAME: BPO STATE COM			WELL NO. 1																																										
			SURF LOC:	UL: D	SEC: 2	TWN: 18S																																										
						RNG: 27E																																										
			990 FNL			990 FWL																																										
			BH LOC:	UL: D	SEC: 2	TWN: 18S																																										
						RNG: 27E																																										
			990 FNL			990 FWL																																										
			TD 10172	PBD 10118	KB	DF																																										
				GL																																												
			POOL			PERFS 9613-9797																																										
			SCOGGIN DRAW;MORROW (GAS)			Open Hole																																										
			POOL			PERFS 9334-9489																																										
			SCOGGIN DRAW;ATOKA (GAS)			Open Hole																																										
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SURF	13.375	340	350 sxs	17.5	0 Circ																																											
INT1	9.625	1738	750 sxs	12.25	0 Circ																																											
PROD	5.5	10166	3450 sxs	8.75	0 Circ																																											
7 RVRS	386	13 3/8" @ 340' TOC 0																																														
Queen	924																																															
Grayburg	1340																																															
San Andres	1664	9 5/8 @ 1738 TOC @ 0																																														
Glorieta	3048																																															
Wolfcamp	6517																																															
Penn	8213																																															
Atoka	9242																																															
Morrow	9597	5 1/2 @ 10166 TOC @ 0'																																														
			PERFS 9334-9489																																													
			CIBP @ 9515 CAP W/ 35' CMNT																																													
			PERFS 9613-9797																																													
			PBD 10118																																													
			TD 10172																																													
			SPUD: 09/18/2001		COMP(1): 10/31/2001																																											
			COMP(2): 08/01/2007																																													
			PREPARED BY: Eddie Seay		UPDATED 01/21/14																																											

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-32179																																											
FORM	DEPTH	OPERATOR: APACHE CORP																																												
7 RVRS	384	LEASENAME: MJ STATE			WELL NO. 2																																									
		SURF LOC:	UL: D SEC: 2	TWN: 18S	RNG: 27E																																									
		330 FNL			915 FWL																																									
		BH LOC:	UL: D SEC: 2	TWN: 18S	RNG: 27E																																									
		330 FNL			915 FWL																																									
		TD: 3923	PBD 3915	KB	DF																																									
		GL																																												
		POOL RED LAKE;QUEEN-GRAYBURG-SA			PERFS 2034-2846																																									
		POOL RED LAKE;GLORIETA-YESO, NE			PERFS 3162-3454																																									
					Open Hole																																									
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.625</td> <td>353</td> <td>350 sxs</td> <td>12.25</td> <td>0' Circ</td> </tr> <tr> <td>PROD</td> <td>5.5</td> <td>3922</td> <td>725 sxs</td> <td>7.875</td> <td>0' Circ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	353	350 sxs	12.25	0' Circ	PROD	5.5	3922	725 sxs	7.875	0' Circ																		
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SURF	8.625	353	350 sxs	12.25	0' Circ																																									
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Glorieta	3030	PERFS 2034-2846																																												
Yeso		PERFS 3162-3454																																												
	3922	PBD 3915																																												
	TOC @ 0'	TD 3923																																												
		SPUD: 05/04/2002																																												
		COMP: 06/08/2002																																												
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PREPARED BY: Eddie Seay		UPDATED 01/21/14																																												

PREPARED BY:	Eddie Seay	UPDATED	01/21/14
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# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-32231																																													
FORM	DEPTH		OPERATOR: APACHE CORP																																													
7 RVRS	366	8 5/8" @ 360 TOC 0'	LEASENAME: TDF STATE		WELL NO. 1																																											
			SURF LOC:	UL: F	SEC: 2	TWN: 18S	RNG: 27E																																									
			1960 FNL		1650 FWL																																											
			BH LOC:	UL: F	SEC: 2	TWN: 18S	RNG: 27E																																									
			1960 FNL		1650 FWL																																											
			TD 4022	PBD	KB	DF																																										
					GL																																											
			POOL RED LAKE;QUEEN-GRAYBURG-SA			PERFS 2021-2948																																										
						Open Hole																																										
			POOL RED LAKE;GLORIETA-YESO, NE			PERFS 3210-3516																																										
			Open Hole																																													
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PROD	5.5	4021	900 sxs	7.875	0 Circ																																											
Queen	920																																															
Grayburg	1366																																															
San Andres	1670																																															
Glorieta	3084		PERFS 2021-2948 CIBP @ 3100 PERFS 3210-3516																																													
		5 1/2 @ 4021 TOC @ 0'	TD 4022																																													
Abo	4981																																															
SPUD: 08/08/2002 COMP: 09/07/2002																																																
<table border="1"> <thead> <tr> <th>PREPARED BY:</th> <th>Eddie Seay</th> <th>UPDATED</th> <th>01/22/14</th> </tr> </thead> </table>							PREPARED BY:	Eddie Seay	UPDATED	01/22/14																																						
PREPARED BY:	Eddie Seay	UPDATED	01/22/14																																													

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-32899																																													
FORM	DEPTH		OPERATOR: APACHE CORP																																													
<div style="display: flex; flex-direction: column; align-items: center;"> <div>7 RVRS</div> <div>367</div> <div>Queen</div> <div>911</div> <div>Grayburg</div> <div>1350</div> <div>San Andres</div> <div>1700</div> <div>Glorieta</div> <div>3122</div> <div>Abo</div> <div>Abo Reef</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div>8 5/8"</div> <div>@ 362</div> <div>TOC 0'</div> <div style="height: 100px; border: 1px solid black; background-color: black;"></div> <div>5 1/2 @</div> <div>3864</div> <div>TOC @ 0'</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="height: 100px; border: 1px solid black; background-color: black;"></div> <div>TD 3868</div> </div>	LEASENAME: BM STATE				WELL NO. 415																																									
			SURF LOC:		UL: K	SEC: 2	TWN: 18S	RNG: 27E																																								
					2310 FSL		2310 FWL																																									
			BH LOC:		UL: K	SEC: 2	TWN: 18S	RNG: 27E																																								
					2310 FSL		2310 FWL																																									
			TD 3868		PBD	KB	DF																																									
					GL																																											
			POOL				PERFS 3295-3590																																									
			RED LAKE;GLORIETA-YESO				Open Hole																																									
			POOL				PERFS 2051-2879																																									
RED LAKE;QUEEN-GRAYBURG-SA				Open Hole																																												
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PROD	5.5	3864	800 sxs	7.875	0 Circ																																											
SPUD: 03/14/2005 COMP: 04/26/2005																																																
Correct Well No.: 1																																																
<div style="display: flex; justify-content: space-between;"> <div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; margin-right: 5px;"></div> <div>PERFS 2051-2879</div> </div> <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background-color: black; margin-right: 5px;"></div> <div>PERFS 3295-3590</div> </div> </div> </div>																																																
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# WELLBORE SCHEMATIC AND HISTORY

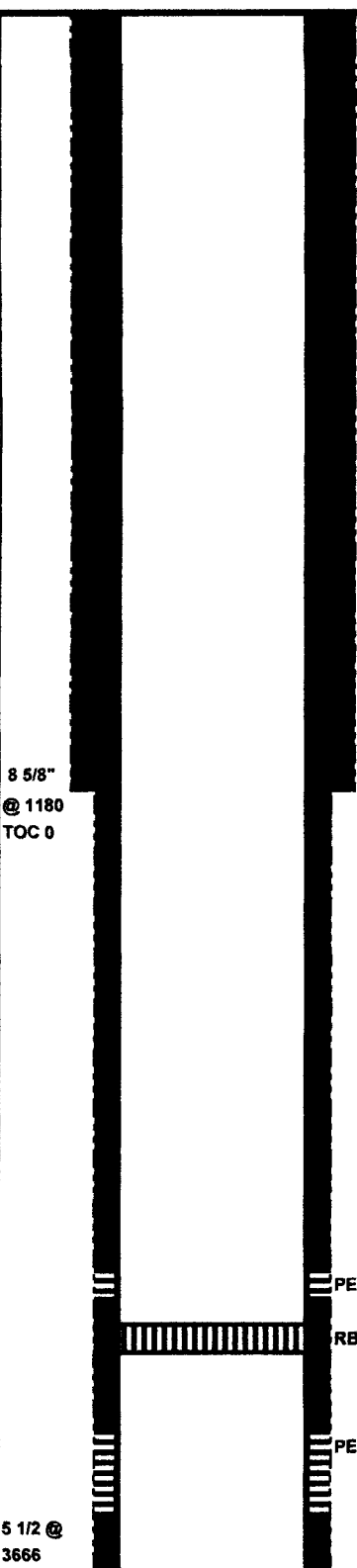
COMPLETION SCHEMATIC		O-A	APINUM: 30-015-32900																																													
FORM	DEPTH		OPERATOR: APACHE CORP																																													
7 RVRs	372	<div>8 5/8" @ 360 TOC 0'</div>	LEASENAME: TDF STATE		WELL NO. 1																																											
			SURF LOC:	UL: F	SEC: 2	TWN: 18S	RNG: 27E																																									
			1650 FNL		2305 FWL																																											
			BH LOC:	UL: F	SEC: 2	TWN: 18S	RNG: 27E																																									
			1650 FNL		2305 FWL																																											
			TD	4000	PBD	KB	DF																																									
					GL																																											
			POOL RED LAKE; QUEEN-GRAYBURG-SA			PERFS 2024-2933																																										
						Open Hole																																										
			POOL RED LAKE; GLORIETA-YESO, NE			PERFS 3237-3512																																										
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Grayburg	1366																																															
San Andres	1674																																															
Glorieta	3092																																															
			PERFS 2024-2933																																													
			PERFS 3237-3512																																													
			5 1/2 @ 3980 TOC @ 0'																																													
Abo			TD 4000																																													

SPUD: 10/06/2003

COMP: 10/31/2003

Correct Well No.: 2

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-33111																																													
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																													
7 RVRS	368		LEASENAME: LOGAN 2 C STATE		WELL NO. 3																																											
			SURF LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			530 FNL		2310 FWL																																											
			BH LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			530 FNL		2310 FWL																																											
			TD	3666	PBD	KB	DF																																									
					GL																																											
			POOL RED LAKE; GLORIETA-YESO, NE			PERFS 3047-3459																																										
			POOL RED LAKE; QUEEN-GRAYBURG-SA			PERFS 2060-2387																																										
						Open Hole																																										
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SURF	8.625	1180	420 sxs	12.25	0' Circ																																											
PROD	5.5	3585	597 sxs	7.875	0' Circ																																											
Queen	909		<p>8 5/8" @ 1180 TOC 0</p>																																													
Grayburg	1368																																															
San Andres	1657																																															
Glorieta	3037		<p>PERFS 2060-2387</p> <p>RBP @ 2600</p>																																													
Yeso	3153		<p>PERFS 3047-3459</p> <p>5 1/2 @ 3666 TOC @ 0'</p> <p>TD 3666</p>																																													
<p>SPUD: 05/11/2004</p> <p>COMP1: 05/28/2004</p> <p>COMP2: 02/26/2010</p>																																																
<p>PREPARED BY: Eddie Seay      UPDATED 01/18/14</p>																																																

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-36073																																															
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																																															
<div style="display: flex; justify-content: space-between;"> <span>7 RVRS</span> <span>300</span> </div> <div style="margin-top: 200px;"> <div style="display: flex; justify-content: space-between;"> <span>Queen</span> <span>845</span> </div> </div>			<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">LEASENAME: RUSSELL C</td> <td colspan="2">WELL NO. 6X</td> </tr> <tr> <td>SURF LOC:</td> <td>UL: N SEC: 35</td> <td>TWN: 17S</td> <td>RNG: 27E</td> </tr> <tr> <td colspan="2">999 FSL</td> <td colspan="2">2297 FWL</td> </tr> <tr> <td>BH LOC:</td> <td>UL: N SEC: 35</td> <td>TWN: 17S</td> <td>RNG: 27E</td> </tr> <tr> <td colspan="2">999 FSL</td> <td colspan="2">2297 FWL</td> </tr> <tr> <td>TD 520</td> <td>PBD</td> <td>KB</td> <td>DF</td> </tr> <tr> <td colspan="2"></td> <td>GL</td> <td></td> </tr> <tr> <td colspan="3">POOL</td> <td>PERFS 403-442</td> </tr> <tr> <td colspan="3">EMPIRE; YATES-SEVEN RIVERS</td> <td>Open Hole</td> </tr> <tr> <td colspan="3">POOL</td> <td>PERFS</td> </tr> <tr> <td colspan="3"></td> <td>Open Hole</td> </tr> </table>				LEASENAME: RUSSELL C		WELL NO. 6X		SURF LOC:	UL: N SEC: 35	TWN: 17S	RNG: 27E	999 FSL		2297 FWL		BH LOC:	UL: N SEC: 35	TWN: 17S	RNG: 27E	999 FSL		2297 FWL		TD 520	PBD	KB	DF			GL		POOL			PERFS 403-442	EMPIRE; YATES-SEVEN RIVERS			Open Hole	POOL			PERFS				Open Hole
	LEASENAME: RUSSELL C		WELL NO. 6X																																															
	SURF LOC:	UL: N SEC: 35	TWN: 17S	RNG: 27E																																														
	999 FSL		2297 FWL																																															
	BH LOC:	UL: N SEC: 35	TWN: 17S	RNG: 27E																																														
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	TD 520	PBD	KB	DF																																														
			GL																																															
	POOL			PERFS 403-442																																														
	EMPIRE; YATES-SEVEN RIVERS			Open Hole																																														
POOL			PERFS																																															
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<div style="display: flex; justify-content: space-between; align-items: flex-end; padding: 10px;"> <div style="width: 40%;"> <div style="display: flex; justify-content: space-between;"> <span>4 1/2 @</span> <span>520'</span> </div> <div>TOC @ 0'</div> </div> <div style="width: 40%; text-align: center;"> <div style="display: flex; justify-content: space-between;"> <span>TD 520</span> <span>PERFS 403-442'</span> </div> </div> <div style="width: 20%; text-align: right;"> <div>SPUD: 06/01/2008</div> <div>COMP: 07/29/2008</div> <div>P&amp;A:</div> </div> </div>																																																		
<div style="display: flex; justify-content: space-between; align-items: center; padding: 5px;"> <div>PREPARED BY: Eddie Seay</div> <div>UPDATED 01/18/14</div> </div>																																																		

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-36081			
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP			
			LEASENAME: LOGAN 35 FEDERAL			WELL NO. 1
			SURF LOC:	UL: I	SEC: 35	TWN: 17S
			1520 FSL			RNG: 27E
			1280 FEL			
			BH LOC:	UL: I	SEC: 35	TWN: 17S
			1520 FSL			RNG: 27E
			1280 FEL			
			TD	3505	PBD	KB
						DF
						GL
			POOL			PERFS 3041-3453
			RED LAKE;GLORIETA-YESO, NE			
						Open Hole
			POOL			PERFS 2056-2345
			RED LAKE;QUEEN-GRAYBURG-SA			
						Open Hole

CASING RECORD					
	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF	8.625	1180	420 sxs	11	0' Circ
PROD	5.5	3585	597 sxs	7.875	0' Circ

FORMATION	DEPTH	LOG	LOG
7 RVRS	330		
Queen	945	8 5/8" @ 1180 TOC 0	
Grayburg	1370		
San Andres	1696		
Glorieta	3060		
Yeso	3164	5 1/2 @ 3585 TOC @ 0'	

SPUD: 04/15/2008

COMP1: 04/19/2008

COMP2: 02/25/2010

PERFS 2056-2345

PERFS 3041-3453

TD 3585



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-36213			
FORM	DEPTH		OPERATOR: TARCO ENERGY LC			
			LEASENAME: RUSSELL C			WELL NO. 5Y
			SURF LOC:	UL: 0	SEC: 35	TWN: 17S
				1052 FSL		1643 FEL
			BH LOC:	UL: 0	SEC: 35	TWN: 17S
				1052 FSL		1643 FEL
			TD 530	PBD	KB	DF
				GL		
			POOL			PERFS 442-514
			EMPIRE; YATES-SEVEN RIVERS			Open Hole
			POOL			PERFS
						Open Hole

CASING RECORD					
	SIZE	DEPTH	CMT	HOLE SIZE	TOC
PROD	4.5	530	75 sxs	6.75	0' Circ

7 RVRs      280

4 1/2 @  
530  
TOC @ 0'

Queen

PERFS 442-514'

TD 530

SPUD: 01/16/2006  
COMP: 01/22/2006

PREPARED BY: Eddie Seay	UPDATED: 01/18/14
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# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-37744																									
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																									
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>7 RVRS</p> <p>440</p> <p>8 5/8 @ 360 TOC @ 0</p> <p>5 1/2 @ 540 TOC @ 0'</p> <p>Queen</p> </div> <div style="width: 45%;"> <p>PERFS 446-487</p> <p>TD 540</p> </div> </div>		LEASENAME: MAGRUDER																										
		SURF LOC: UL: J SEC: 35 TWN: 17S RNG: 27E		WELL NO. 19																								
		1610 FSL		1645 FEL																								
		BH LOC: UL: J SEC: 35 TWN: 17S RNG: 27E																										
		1610 FSL		1645 FEL																								
		TD 540 PBD KB DF																										
				GL																								
		POOL EMPIRE;YATES-SEVEN RIVERS		PERFS 446-487																								
		POOL		Open Hole																								
				PERFS																								
		Open Hole																										
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CASING RECORD																												
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																							
SURF	8.625	360	70 sxs	12.25	0																							
PROD	5.5	540	95 sxs	7.875	0																							
			SPUD: 11/14/2010																									
			COMP: 08/24/2011																									
<table border="1"> <thead> <tr> <th>PREPARED BY:</th> <th>Eddie Seay</th> <th>UPDATED</th> <th>01/18/14</th> </tr> </thead> </table>					PREPARED BY:	Eddie Seay	UPDATED	01/18/14																				
PREPARED BY:	Eddie Seay	UPDATED	01/18/14																									

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015- 37746																											
FORM	DEPTH	OPERATOR: TARCO ENERGY LC																												
<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>7 RVRS</p> <p>440</p> <p>8 5/8 @ 380 TOC @ 0</p> <p>5 1/2 @ 540 TOC @ 0'</p> <p>Queen</p> </div> <div style="width: 45%;"> <p>PERFS 421-461</p> <p>TD 540</p> </div> </div>		LEASENAME: MAGRUDER				WELL NO. 21																								
		SURF LOC: UL: J SEC: 35		TWN: 17S		RNG: 27E																								
		1624 FSL		2306 FEL																										
		BH LOC: UL: I SEC: 35		TWN: 17S		RNG: 27E																								
		1610 FSL		1645 FEL																										
		TD 540		PBD	KB	DF																								
				GL																										
		POOL EMPIRE; YATES-SEVEN RIVERS				PERFS 421-461																								
						Open Hole																								
		POOL				PERFS																								
				Open Hole																										
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CASING RECORD																														
	SIZE	DEPTH	CMT	HOLE SIZE	TOC																									
SURF	8.625	380	70 sxs	12.25	0																									
PROD	5.5	540	95 sxs	7.875	0																									
			SPUD:	07/22/2011																										
			COMP:	02/14/2012																										
			<div style="display: flex; justify-content: space-between;"> <div>PREPARED BY: Eddie Seay</div> <div>UPDATED 10/08/12</div> </div>																											



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-37783																																													
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																																													
7 RVRS	280		LEASENAME: RUSSELL C		WELL NO. 3																																											
			SURF LOC: UL: 0 SEC: 35 TWN: 17S RNG: 27E	990 FSL 2225 FEL																																												
			BH LOC: UL: 0 SEC: 35 TWN: 17S RNG: 27E	990 FSL 2225 FEL																																												
			TD 530 PBD 518 KB	DF																																												
					GL																																											
			POOL		PERFS 418-460																																											
			EMPIRE; YATES-SEVEN RIVERS		Open Hole																																											
			POOL		PERFS																																											
					Open Hole																																											
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	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
SURF	8.625	364	142 sxs	12.25	0' Circ																																											
PROD	4.5	528	110 sxs	7.875	0' Circ																																											
8 5/8 @ 364 TOC @ 0'	<div style="display: flex; justify-content: space-between;"> <div> <p>PLASTIC COATED TBNG W/ PKR SET WITHIN 100' OF TOP PERF</p> <p>PERFS 418-460</p> <p>PBTD 518</p> <p>TD 530</p> </div> <div> <p>SPUD: 03/23/2012</p> <p>COMP: 09/11/2012</p> </div> </div>																																															
4 1/2 @ 530 TOC @ 0'																																																

Queen

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40619																																																			
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																																																			
			LEASENAME: BRAD STATE			WELL NO. 2																																																
			SURF LOC:	UL: C	SEC: 2	TWN: 18S																																																
			330 FNL		1650 FWL																																																	
			BH LOC:	UL: C	SEC: 2	TWN: 18S																																																
			330 FNL		1650 FWL																																																	
			TD 530	PBD 514	KB	DF																																																
			GL																																																			
			POOL			PERFS 413-454																																																
			EMPIRE; YATES-SEVEN RIVERS			Open Hole																																																
			POOL			PERFS																																																
						Open Hole																																																
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	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																																	
PROD	4.5	530	105 sxs	7.875	0' Circ																																																	
7 RVRS	370																																																					
			PERFS 413-454'																																																			
			PBD 514																																																			
			TD 530																																																			
			4 1/2 @ 530 TOC @ 0'																																																			
Queen																																																						
			SPUD: 08/20/2012		COMP: 11/02/2012																																																	
			PREPARED BY: Eddie Seay		UPDATED 01/20/14																																																	

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40620																																													
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																																													
7 RVRS	370		LEASENAME: BRAD STATE		WELL NO. 3																																											
			SURF LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			968 FNL		2300 FWL																																											
			BH LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			968 FNL		2300 FWL																																											
			TD 530	PBD 527	KB	DF																																										
					GL																																											
			POOL			PERFS 416-459																																										
			EMPIRE; YATES-SEVEN RIVERS			Open Hole																																										
			POOL			PERFS																																										
			Open Hole																																													
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PROD	4.5	530	110 sxs	7.875	0' Circ																																											
<div style="display: flex; justify-content: space-between;"> <div> <p>SPUD: 10/10/2012</p> <p>COMP: 11/02/2012</p> </div> <div> <p>PERFS 416-459'</p> <p>PSTD 527 TD 530</p> <p>4 1/2 @ 530 TOC @ 0'</p> </div> </div>																																																
<div style="display: flex; justify-content: space-between;"> <div> <p>Queen</p> </div> <div> <p>PREPARED BY: Eddie Seay</p> </div> <div> <p>UPDATED 01/20/14</p> </div> </div>																																																

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40621																																													
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																																													
7 RVRS	370		LEASENAME: BRAD STATE		WELL NO. 4																																											
			SURF LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			968 FNL		1650 FWL																																											
			BH LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E																																									
			968 FNL		1650 FWL																																											
			TD	550	PBD	529	KB	DF																																								
					GL																																											
			POOL			PERFS 415-458																																										
			EMPIRE; YATES-SEVEN RIVERS			Open Hole																																										
			POOL			PERFS																																										
			Open Hole																																													
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	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
PROD	4.5	524	110 sxs	7.875	0' Circ																																											
SPUD: 09/26/2012 COMP: 11/02/2012																																																
		4 1/2 @ 550 TOC @ 0'	PBD 529 TD 550																																													
Queen																																																
			PREPARED BY: Eddie Seay      UPDATED: 01/20/14																																													



# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40679																																													
FORM	DEPTH		OPERATOR: TARCO ENERGY LC																																													
			LEASENAME: BLAKE STATE			WELL NO. 4																																										
			SURF LOC:	UL: B	SEC: 2	TWN: 18S																																										
			968 FNL		2300 FEL																																											
			BH LOC:	UL: B	SEC: 2	TWN: 18S																																										
			968 FNL		2300 FEL																																											
			TD 530	PBD 523	KB	DF																																										
			GL																																													
			POOL			PERFS 417-463																																										
			EMPIRE; YATES-SEVEN RIVERS			Open Hole																																										
			POOL			PERFS																																										
						Open Hole																																										
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	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																											
PROD	4.5	524	100 sxs	7.875	0' Circ																																											
7 RVRs	350																																															
			PERFS 417-463'																																													
			PBD 523																																													
			TD 530																																													
			4 1/2 @ 524																																													
			TOC @ 0'																																													
<div> <div>SPUD: 12/03/2012</div> <div>COMP: 01/23/2013</div> </div>																																																
Queen																																																

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40783																																											
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																											
7 RVRS	320	<div>8 5/8"</div> <div>@ 353'</div> <div>TOC 0</div>	LEASENAME: LOGAN 2C STATE																																											
			WELL NO. 4																																											
			SURF LOC:	UL: C SEC: 2 TWN: 18S RNG: 27E																																										
			990 FNL																																											
			BH LOC:	UL: C SEC: 2 TWN: 18S RNG: 27E																																										
			946 FNL																																											
			1668 FWL																																											
			MD: 4776	PBD KB DF																																										
			GL																																											
			POOL RED LAKE;GLORIETA-YESO, NE		PERFS 3498-3844																																									
		3900-4226																																												
		4293-4620																																												
POOL		PERFS																																												
		Open Hole																																												
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	SIZE	DEPTH	CMT	HOLE SIZE	TOC																																									
SURF	8.625	353	280 sxs	12.25	0' Circ																																									
PROD	5.5	4776	900 sxs	7.875	0' Circ																																									
Queen	910																																													
Grayburg	1346																																													
San Andres	1656																																													
Glorieta	3049																																													
Yeso	3172																																													
Tubb	4679	<div>5 1/2 @ 3710</div> <div>TOC @ 0'</div>	<div>PERFS 3498-3844</div> <div>PERFS 3900-4226</div> <div>PERFS 4293-4620</div> <div>TD 4776</div>																																											

SPUD: 10/12/2012  
COMP: 11/06/2012

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40807																																											
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																											
7 RVRS	370	<div>8 5/8"</div> <div>@ 350</div> <div>TOC 0</div>	LEASENAME: LOGAN B 35 N FEDERAL																																											
			WELL NO. 18																																											
			SURF LOC:	UL: N SEC: 35 TWN: 17S RNG: 27E																																										
			330 FSL																																											
			BH LOC:	UL: N SEC: 35 TWN: 17S RNG: 27E																																										
			1678 FSL																																											
			2282 FWL																																											
			MD 3918	PBD 3960 KB DF																																										
			GL																																											
			POOL		PERFS 3032-3265																																									
RED LAKE;GLORIETA-YESO, NE		3326-3910																																												
		Open Hole																																												
POOL		PERFS																																												
		Open Hole																																												
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PROD	5.5	3966	800 sxs	7.875	0' Circ																																									
Queen	899																																													
Grayburg	1332																																													
San Andres	1638																																													
Glorieta	3030	==	PERFS 3032-3265																																											
Yeso	3120	==	PERFS 3326-3910																																											
		==	PBD 3960																																											
		5 1/2 @ 3966	TD 4000																																											
		TOC @ 0'																																												
<div>SPUD: 01/17/2013</div> <div>COMP: 02/04/2013</div>																																														
<div>PREPARED BY: Eddie Seay</div> <div>UPDATED: 01/20/14</div>																																														

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-40808			
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP			
			LEASENAME: LOGAN 35 P FEDERAL			WELL NO. 19
			SURF LOC:	UL: P	SEC: 35	TWN: 17S
						RNG: 27E
			970 FSL			990 FEL
			BH LOC:	UL: P	SEC: 35	TWN: 17S
						RNG: 27E
			970 FSL			990 FEL
			MD 4000	PBD 3990	KB	DF
						GL
			POOL			PERFS 3128-3304
			RED LAKE; GLORIETA-YESO, NE			3362-3890
						Open Hole
			POOL			PERFS
						Open Hole
7 RVRs	400					
		8 5/8"				
		@ 413				
		TOC 0				
Queen	968					
Grayburg	1389					
San Andres	1722					
Glorieta	3098					
Yeso	3197					
			PERFS 3128-3304			
			PERFS 3362-3890			
			PBD 3990			
			TD 4000			
		5 1/2 @				
		3994				
		TOC @ 0'				

CASING RECORD					
	SIZE	DEPTH	CMT	HOLE SIZE	TOC
SURF	8.625	413	335 sxs	12.25	0' Circ
PROD	5.5	3994	650 sxs	7.875	0' Circ

SPUD: 11/26/2012

COMP: 12/17/2012

## COMPLETION SCHEMATIC

APINUM: 30-015-41119

OPERATOR: LIME ROCK RESOURCES II-A, LP

LEASENAME: LOGAN 2C STATE

WELL NO.	5
----------	---

SURF LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E
-----------	-------	--------	----------	----------

	430 FNL	2300 FWL
--	---------	----------

BH LOC:	UL: C	SEC: 2	TWN: 18S	RNG: 27E
---------	-------	--------	----------	----------

	430 FNL	2300 FWL
--	---------	----------

TD: 4851	PBD 4851	KB	DF
----------	----------	----	----

GL

POOL RED LAKE;GLORIETA-YESO, NE	PERFS	3130-3856
		3930-4560

POOL	PERFS
------	-------

---

Open Hole

7 RVRS 366

8 5/8"  
@ 436'  
TOC 0

Queen 906

Grayburg	1342
----------	------

San Andres	1650
------------	------

<b>Glorieta</b>	<b>3055</b>
-----------------	-------------

Yeso	3180
------	------

**PERFS 3130-3856**

Tubb	4624	5 1/2 @ 4840 TOC @ 0'
------	------	-----------------------------

**PERFS 3930-4560**

**TD 4851**

**CASING RECORD**

	SIZE	DEPTH	CMT	HOLE SIZE	TOC
--	------	-------	-----	-----------	-----

SURF	8.625	436	280 sxs	12.25	0' Circ
------	-------	-----	---------	-------	---------

PROD	5.5	4840	900 sxs	7.875	0' Circ
------	-----	------	---------	-------	---------

**SPUD: 10/12/2012**

COMP: 11/06/2012

PREPARED BY: **Eddie Seay**

UPDATED	01/21/14
---------	----------

# WELLBORE SCHEMATIC AND HISTORY

COMPLETION SCHEMATIC		O-A	APINUM: 30-015-41434		DD																																										
FORM	DEPTH		OPERATOR: LIME ROCK RESOURCES II-A, LP																																												
7 RVRS	370		LEASENAME: LOGAN 35 K FEDERAL		WELL NO. 15																																										
			SURF LOC:	UL: K SEC: 35	TWN: 17S	RNG: 27E																																									
			1650 FSL		2460 FWL																																										
			BH LOC:	UL: K SEC: 35	TWN: 17S	RNG: 27E																																									
			1678 FSL		2282 FWL																																										
			MD 3918	PBD	KB	DF																																									
					GL																																										
			POOL		PERFS	3098-3303																																									
			RED LAKE;GLORIETA-YESO, NE			3648-3890																																									
			POOL		Open Hole																																										
		PERFS																																													
		Open Hole																																													
<table border="1"> <thead> <tr> <th colspan="6">CASING RECORD</th> </tr> <tr> <th></th> <th>SIZE</th> <th>DEPTH</th> <th>CMT</th> <th>HOLE SIZE</th> <th>TOC</th> </tr> </thead> <tbody> <tr> <td>SURF</td> <td>8.625</td> <td>396</td> <td>350 sxs</td> <td>12.25</td> <td>0' Circ</td> </tr> <tr> <td>PROD</td> <td>5.5</td> <td>3910</td> <td>700 sxs</td> <td>7.875</td> <td>0' Circ</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						CASING RECORD							SIZE	DEPTH	CMT	HOLE SIZE	TOC	SURF	8.625	396	350 sxs	12.25	0' Circ	PROD	5.5	3910	700 sxs	7.875	0' Circ																		
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San Andres	1631																																														
Glorieta	2999		PERFS 3098-3303																																												
Yeso	3088		PERFS 3648-3890																																												
			PBD 3900																																												
			TD 3918																																												
<p>SPUD: 07/22/2013</p> <p>COMP: 08/14/2013</p>																																															
<table border="1"> <thead> <tr> <th>PREPARED BY:</th> <th>Eddie Seay</th> <th>UPDATED</th> <th>01/20/14</th> </tr> </thead> </table>						PREPARED BY:	Eddie Seay	UPDATED	01/20/14																																						
PREPARED BY:	Eddie Seay	UPDATED	01/20/14																																												

**Tarco Energy, LC**  
**PMX Application: Brad State No. 1**

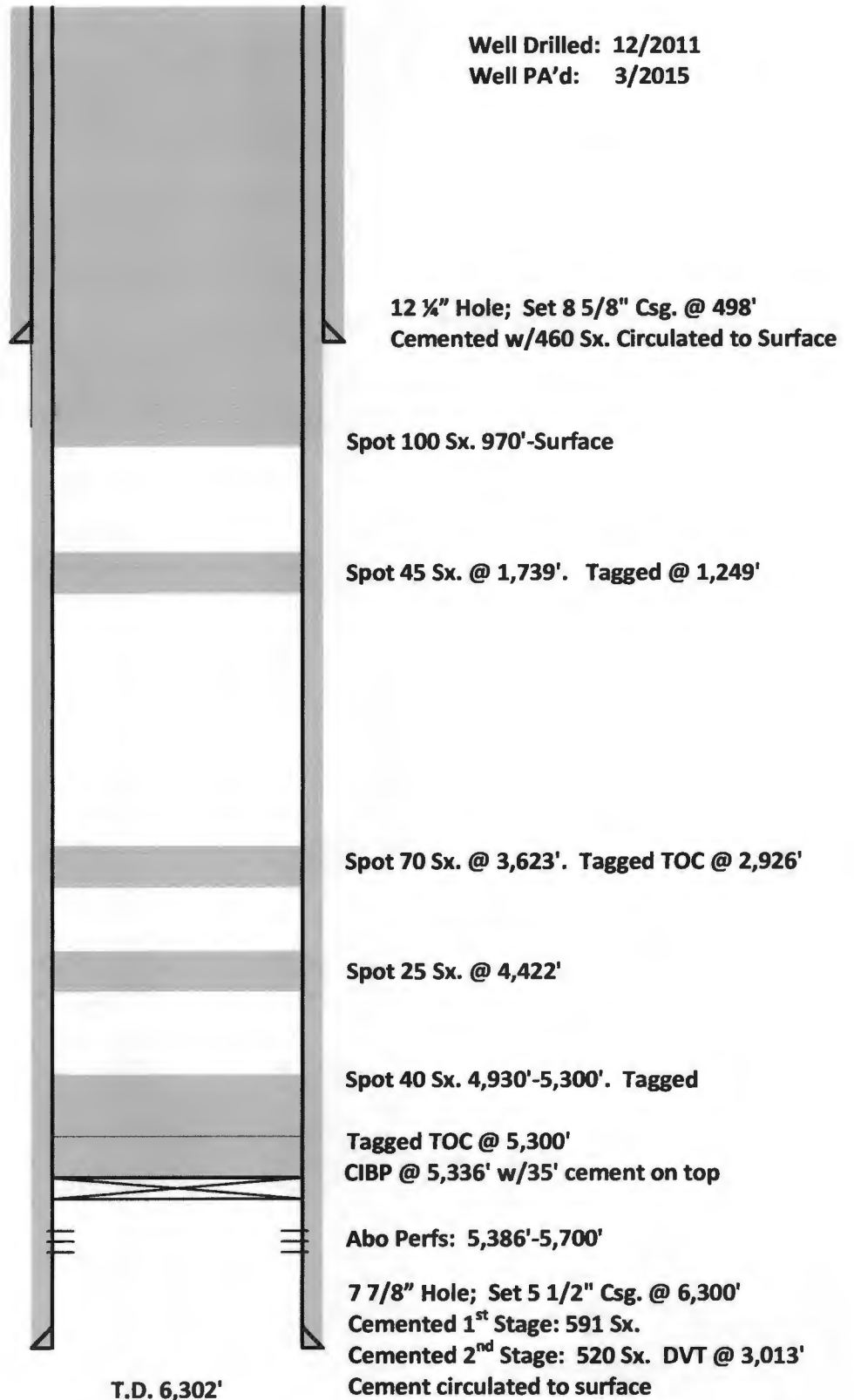
**Supplemental Area of Review Well Data**  
**Not Previously Submitted**  
**(PA Schematics Included)**

**TARCO ENERGY, LC**  
**FORM C-108: BRAD STATE NO. 1**  
**SUPPLEMENTAL AREA OF REVIEW WELL LIST**

API NUMBER	OPERATOR	LEASE NAME	WELL NO.	WELL TYPE	STATUS	FTG. N/W	N/S	FTG. E/W	EW	UNIT	SEC.	T8HP	RNG.	DATE DRILLED	TOTAL DEPTH	HOLE SIZE	CSQ. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	HOLE SIZE	CSQ. SIZE	SET AT	SX. CMT.	CMT. TOP	MTD.	COMPLETION	REMARKS	
30-015-00729	Apache Corporation	Empire Abo Unit "I"	13	Oil	Active	990'	N	660'	W	D	2	18S	27E	Sep-59	5,895'	11"	8 5/8"	1,480'	900'	Surface	Circ.	7 7/8"	4 1/2"	5,695'	750'	975'	T.S.	5,508'-5,654'	Abo Completion	
30-015-00733	Apache Corporation	Empire Abo Unit "J"	13	Oil	Active	1980'	N	660'	W	E	2	18S	27E	Nov-59	6,131'	12 1/4"	8 5/8"	1006'	675'	Surface	Circ.	7 7/8"	5 1/2"	6,131'	**225'	5,050'	Surface	Circ.	5,382'-5,784'	*5 1/2" Squeezed with 475 Sx. @ 5,020' & 525 Sx. @ 2,300' Cmt Circ. to surface.
30-015-00759	Amtex Energy, Inc.	Malco	1	Oil	PA	330'	N	330'	E	A	3	18S	27E	Oct-53	442'	6 1/2"	5 1/2"	427'	15'	125'	Calc.							427'-442' Open Hole	SR Completion See Attached Schematic	
30-015-32071	Apache Corporation	MJ State	1	Oil	Active	330'	N	330'	W	D	2	18S	27E	Nov-01	3,875'	12 1/4"	8 5/8"	370'	350'	Surface	Circ.	7 7/8"	5 1/2"	3,859'	685'	1000'	Well File	1969'-2899', 3,137'-3,670'	Glor-Yeso Qn-GB-SA Commingle	
30-015-32218	Apache Corporation	SB State	1	Oil	Active	1650'	N	330'	W	E	2	18S	27E	May-02	3,912'	12 1/4"	8 5/8"	354'	350'	Surface	Circ.	7 7/8"	5 1/2"	3,912'	800'	Surface	Circ.	1,943'-2,925', 3,141'-3,437'	Glor-Yeso Qn-GB-SA Commingle	
30-015-39009	Apache Corporation	Empire Abo Unit	415	Gas	PA	1650'	N	2430'	E	G	2	18S	27E	Dec-11	6,300'	12 1/4"	8 5/8"	498'	460'	Surface	Circ.	7 7/8"	5 1/2"	6,300'	1275'	Surface	Circ.	5,388'-5,700'	Abo Completion See Attached Schematic	
30-015-40806	Lime Rock Resources II-A, LP	Logan 35 M Federal	16	Oil	Active	990'	S	370'	W	M	35	17S	27E	Jan-13	3,900'	12 1/4"	8 5/8"	348'	335'	Surface	Circ.	7 7/8"	5 1/2"	3,897'	675'	Surface	Circ.	2,975'-3,880'	Glor-Yeso Completion	
30-015-41435	Lime Rock Resources II-A, LP	Logan 35 O Federal	10	Oil	Active	720'	S	1770'	E	O	35	17S	27E	Apr-14	3,800'	12 1/4"	8 5/8"	354'	325'	Surface	Circ.	7 7/8"	5 1/2"	3,580'	625'	Surface	Circ.	3,272'-3,534'	Glor-Yeso Completion	
30-015-41441	Lime Rock Resources II-A, LP	Eagle 35 L Federal	23	Oil	Active	1860'	S	990'	W	L	35	17S	27E	Feb-14	4,917'	12 1/4"	8 5/8"	353'	325'	Surface	Circ.	7 7/8"	5 1/2"	4,910'	965'	Surface	Circ.	3,044'-4,818'	Glor-Yeso Completion	
30-015-41960	Apache Corporation	MJ State	3	Oil	Active	1160'	N	330'	W	D	2	18S	27E	Mar-14	4,012'	11"	8 5/8"	330'	300'	Surface	Circ.	7 7/8"	5 1/2"	4,012'	750'	Surface	Circ.	3,058'-3,853'	Glor-Yeso Completion	
30-015-41961	Apache Corporation	MJ State	4	Oil	Active	1200'	N	1140'	W	D	2	18S	27E	Mar-14	4,001'	11"	8 5/8"	331'	325'	Surface	Circ.	7 7/8"	5 1/2"	4,001'	750'	Surface	Circ.	3,071'-3,809'	Glor-Yeso Completion	
30-015-42002	Apache Corporation	SB State	2	Oil	Active	1900'	N	990'	W	E	2	18S	27E	Mar-14	4,115'	11"	8 5/8"	330'	325'	Surface	Circ.	7 7/8"	5 1/2"	4,115'	750'	Surface	Circ.	3,075'-3,906'	Glor-Yeso Completion	
30-015-42247	Lime Rock Resources II-A, LP	Logan 35 J Federal	20	Oil	Active	2110'	S	2225'	E	J	35	17S	27E	Oct-14	4,537'	12 1/4"	8 5/8"	378'	325'	Surface	Circ.	7 7/8"	5 1/2"	4,533'	860'	Surface	Circ.	3,164'-4,468'	Glor-Yeso Completion	
30-015-43066	Lime Rock Resources II-A, LP	Logan B 35 N Federal	24	Oil	NYD	870'	S	1640'	W	N	35	17S	27E	NYD	3,900'	11"	8 5/8"	350'	300'	Surface	Circ.	7 7/8"	5 1/2"	3,900'	620'	Surface	Circ.	Proposed Completion	Glor-Yeso	
30-015-43252	Lime Rock Resources II-A, LP	Logan 35 O Federal	22	Oil	NYD	720'	S	1670'	E	O	35	17S	27E	NYD	3,540'	11"	8 5/8"	350'	300'	Surface	Circ.	7 7/8"	5 1/2"	3,540'	625'	Surface	Circ.	Proposed Completion	Glor-Yeso	
30-015-43728	Lime Rock Resources II-A, LP	Logan 35 M Federal	21	Oil	NYD	240'	S	985'	W	M	35	17S	27E	NYD	5,208'	12 1/4"	8 5/8"	350'	300'	Surface	Circ.	7 7/8"	5 1/2"	5,207'	1000'	Surface	Circ.	Proposed Completion	Glor-Yeso	
30-015-44784	Lime Rock Resources II-A, LP	Logan 35 P Federal	23	Oil	New	190'	S	480'	E	P	35	17S	27E	NYD	4,029'	11"	8 5/8"	350'	350'	Surface	Circ.	7 7/8"	5 1/2"	4,029'	800'	Surface	Circ.	Proposed Completion	Glor-Yeso	



Apache Corporation  
Empire Abo Unit No. 415 (API No. 30-015-39009)  
1650' FNL & 2430' FEL (Unit G)  
Section 2, T-18S, R-27E, NMPM, Eddy County, NM



Submit 1 Copy To Appropriate District Office  
District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

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

Form C-103  
Revised August 1, 2011

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-39009
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Apache Corporation		6. State Oil & Gas Lease No. B0-6869-0050
3. Address of Operator 303 Veterans Airpark Lane, Ste. 3000, Midland, TX 79705		7. Lease Name or Unit Agreement Name Empire Abo Unit
4. Well Location Unit Letter G 1650 feet from the N line and 2430 feet from the E line Section 2 Township 18S Range 27E NMPM County Eddy		8. Well Number 415
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3565' GR		9. OGRID Number 873
		10. Pool name or Wildcat Empire; Abo (22040)

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

NOTICE OF INTENTION TO:  
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:  
REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS ☐ P AND A ☒  
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

- 3/18/15 - Notify OCD of MIRU. RH w/2-3/8" tag to 2583'.
- 3/19/15 - RH tag TOC @ 5300' pressure test casing to 1000 psi ok. Circ well w/120 bbls MLF. Spot 40 x class "c" cmt @ 5300' WOC 4 hrs. RH tag TOC @ 4930' PUH to 4422' spot 25 x class "c" cmt PUH to 3623' spot 70 x class "c" cmt.
- 3/20/15 - RH tag TOC @ 2926' PUH to 1739' spot 45 x class "c" cmt WOC 4 hrs. RH tag TOC @ 1249' PUH to 970' spot 100 x class "c" cmt to surf. RD P&A equip, cut anchors, wellhead and cleaned location. P&A completed. *Installed dry hole marker.*

Submit Subsequent  
C-103

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

Spud Date:

Rig Release Date:

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

SIGNATURE

TITLE

Agent

DATE 03/20/2015

Type or print name Jimmy Bagley

E-mail address: [sunsetwellservice@yahoo.com](mailto:sunsetwellservice@yahoo.com)

PHONE: 432-561-8600

For State Use Only

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

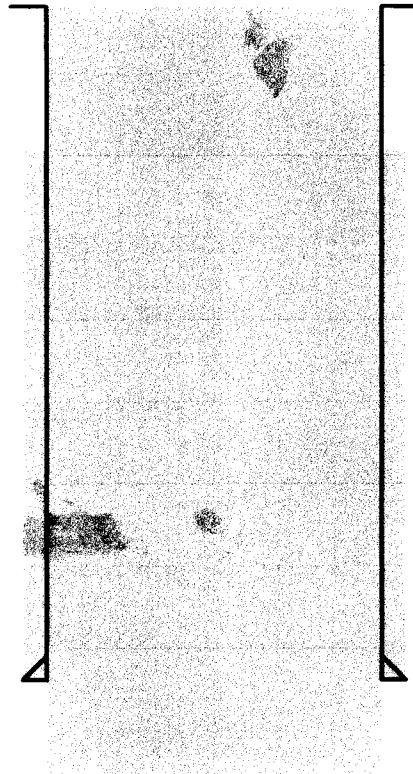
APPROVED BY Quinn Buda - Sr. Reclamation Foreman - Apache CBPP.

**Amtex Energy, Inc.**

**Malco "A" No. 1 (API No. 30-015-00759)**

**330' FNL & 330' FEL (Unit A)**

**Section 3, T-18S, R-27E, NMPPM, Eddy County, NM**



**T.D. 442'**

**Well Drilled: 10/1953**

**Well PA'd: 9/2003**

**TOC @ 302' by Calc.**

**9/16/2003: Filled hole from T.D. to Surface  
w/ 2.7 Cubic Yards of Cement**

**6 ½" Hole; Set 5 ½" 17# Csg. @ 427'  
Cemented w/15 Sx. TOC @ 302' by Calc.**

**7 Rivers Open-Hole Completion  
427'-442'**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Oil Cons.  
N.M. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

FORM APPROVED  
OMB No. 1004-0135  
Expires January 31, 2004

**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**

<b>1. Type of Well</b> <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		<b>RECEIVED</b> <b>DEC 9 2003</b> <b>OGD-ARTESIA</b>	<b>5. Lease Serial No.</b> LC 065478-B
<b>2. Name of Operator</b> Amtex Energy, Inc.			<b>6. If Indian, Allottee or Tribe Name</b>
<b>3a. Address</b> P. O. Box 3418, Midland, TX 79702	<b>3b. Phone No. (include area code)</b> 432/686-0847		<b>7. If Unit or CA/Agreement, Name and/or No.</b>
<b>4. Location of Well (Footage, Sec., T., R., M., or Survey Description)</b> 330 FNL, 330 FEL Sec. 3, T18S, R27E			<b>8. Well Name and No.</b> Malco A #1
			<b>9. API Well No.</b> 30-015-00759
			<b>10. Field and Pool, or Exploratory Area</b> Empire Yates S/R
			<b>11. County or Parish, State</b> Eddy

**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 checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<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
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input type="checkbox"/> Other

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 recompletes 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 3160-5 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.)

- Well records indicate 427' of 5.5", 17# casing with 15 sacks cement.
- Total depth (TD) is 442'.
- No fresh water is in the area. Approval to plug well with Readymix sk 3/8" peagravel was granted.
- MIRU Pulling Unit x POH w 16, 3/4" rods x lay down rods, 9/8/03.
- POH and lay down 14 joints of 2 3/8" Tbg.
- PU 15 joints of 2 3/8" Tbg. and tag TD at 440'.
- RU swab and swab well dry and wait 1 hr. x made last swab run and had no fluid recovered, therefore no fluid entry.
- POH and LD 15 joints of 2 3/8" Tbg. and prepare to pour in readymix cement.
- Pour readymix slowly from TD back to surface. Well required 2.5 cu. yds. and approximately 2.75 cu. yds. of cement was put into 5.5" CSG and filled well up to surface.
- Set dry hole marker, 9/16/03.
- Clean and level location.
- Remove Tubing and Pipe.

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

William J. Savage

Title President

Signature

*William J. Savage*

Date

12/9/03

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

(ORIG. SGD.) ALEXIS C. SWOBODA

PETROLEUM ENGINEER

Date DEC 17 2003

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.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1312, 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 reverse)

**Addendum to Form C-108  
Affirmative Statement  
Tarco Energy, LC  
Brad State No. 1  
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.**

**In addition to the Russel C Well No. 3 (30-015-37783) located in Section 35, Township 17 South, Range 27 East, NMPM, Tarco Energy, LC has drilled 13-14 additional wells in this area. These wells are air-drilled, and to date, there has been no evidence during drilling operations that fresh water exists in this area.**

**Well logs for the Brad State No. 1 were submitted to the Artesia District Office of the Division in late January, 2019.**

  
\_\_\_\_\_  
**David Catanach-Agent  
Tarco Energy, LC**

2/5/19  
\_\_\_\_\_  
**Date**



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

---

(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

---

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.

---

12/18/18 8:22 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



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

---

(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

---

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

---

12/18/18 8:23 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

January 15, 2019

**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. 1: API No. (30-015-40618)  
330' FNL & 2300' FWL, Unit C, Section 2, T-18S, R-27E, NMPM,  
Eddy County, New Mexico**

**Ladies & Gentlemen:**

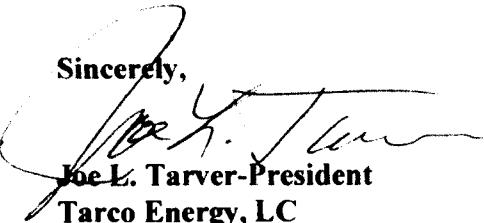
**By Order No. R-13680 dated February 14, 2013 the Oil Conservation Division approved the Tarco Energy, LC Russell C Lease Pressure Maintenance Project authorizing injection into the Yates-Seven Rivers formation (Empire Yates-Seven Rivers Pool) within its Russell C Well No. 3 located in Unit O of Section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

**Tarco Energy, LC ("Tarco") is seeking administrative approval to 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. 1. 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 convert the Brad State No. 1 from a producing well to an injection well, injection to occur into the Yates-Seven Rivers formation through the perforated interval from approximately 411 feet to 451 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 (806) 787-5138.**

**Sincerely,**

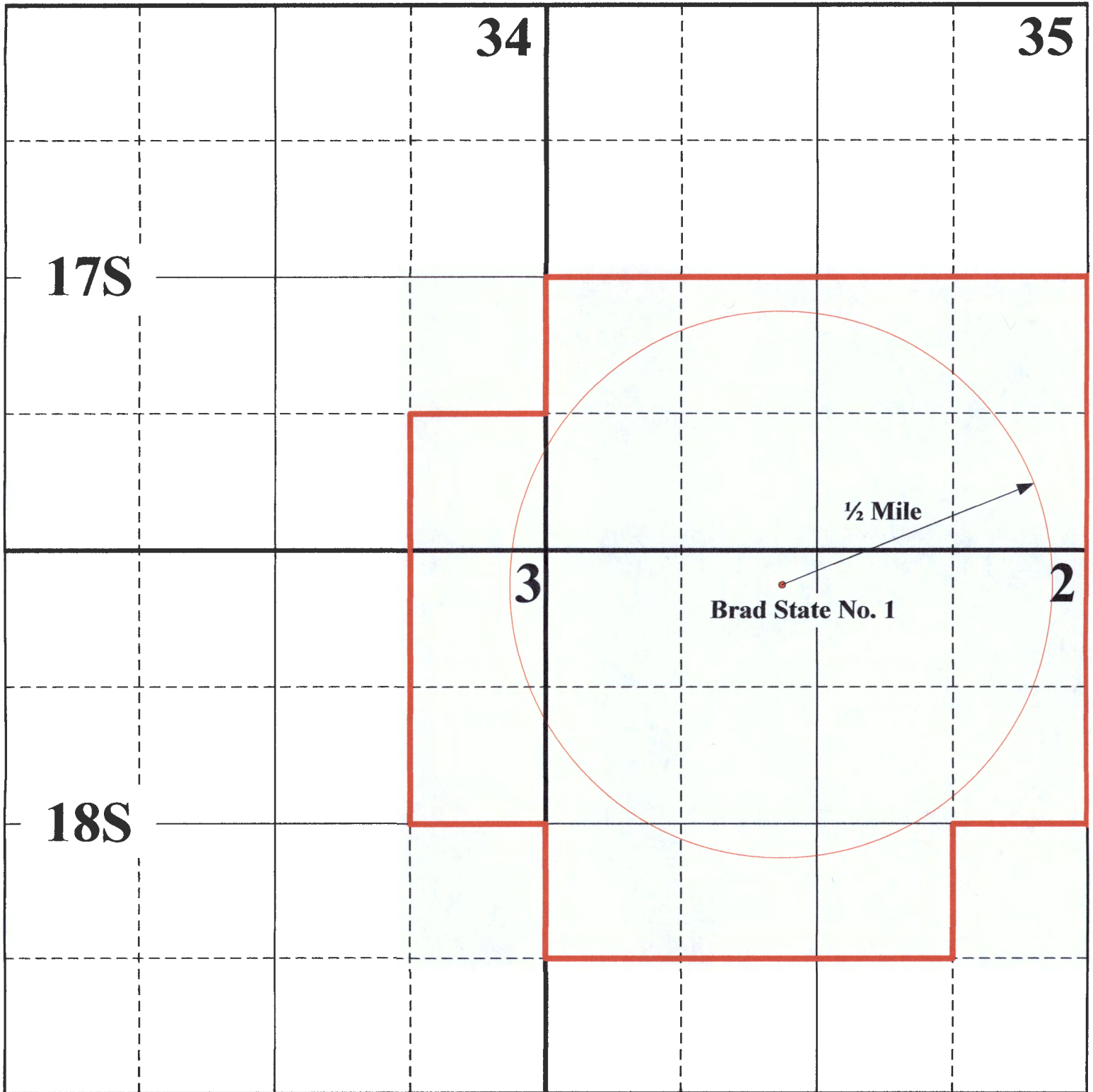


**Joe L. Tarver-President  
Tarco Energy, LC  
12403 CR 2300  
Lubbock, Texas 79423**

**Enclosure**



**27E**



**Tarco Energy, LC**  
**PMX Application: Brad State No. 1**  
**1/2 Mile Notice Area**

**Notice Area**  
**(See Attached Notice List)**

**Form C-108: Pressure Maintenance Expansion  
Russel C Lease Pressure Maintenance Project  
Brad State No. 1 (API No. 30-015-40618)  
Section 2, Township 18 South, Range 27 East, NMPM  
Notice List (Offset Operators)**

<u>Operator</u>	<u>Operated Acreage</u>
Lime Rock Resources II-A, LP 1111 Bagby Street Suite 4600 Houston, Texas 77002	Section 35-17S-27E: Units I, J, K, L, M, N, O, P Section 2-18S-27E: Units C & H Section 34-17S-27E: Unit P Section 3-18S-27E: Units A & H
Remnant Oil Operating, LLC P.O. Box 5375 Midland, Texas 79704	Section 35-17S-27E: Units I, K, N, P Section 2-18S-27E: Units A, B, C
Apache Corporation 303 Veterans Airpark Lane Suite 1000 Midland, Texas 79705	Section 2-18S-27E: Units A, C, D, E, F, G, J, K, L Section 3-18S-27E: Unit H
Amtex Energy, Inc. P.O. Box 3418 Midland, Texas 79702	Section 3-18S-27E: Unit A
Mewbourne Oil Company P.O. Box 5270 Hobbs, New Mexico 88241	Section 35-17S-27E: Units I, J, K, L, M, N, O, P

**Additional Notice**

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. 24959

State of New Mexico

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 January 6, 2019

Second Publication \_\_\_\_\_

Third Publication \_\_\_\_\_

Fourth Publication \_\_\_\_\_

Fifth Publication \_\_\_\_\_

Sixth Publication \_\_\_\_\_

Seventh Publication \_\_\_\_\_

Subscribed and sworn before me this

7th day of January 2019



OFFICIAL SEAL  
Latisha Romine  
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2019

*Latisha Romine*

Latisha Romine

Notary Public, Eddy County, New Mexico

# Copy of Publication:

## Legal Notice

Tarco Energy, LC, 12403 CR 2300, 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 converting its Brad State No. 1 (API No. 30-015-40618) located 330 feet from the North line and 2300 feet from the West line (Unit C) of Section 2, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico from a producing well to an injection well. Injection is to occur into the Yates-Seven Rivers formation (Empire Yates-Seven Rivers Pool) through the perforated interval from approximately 411 feet to 451 feet.

Produced water from the Yates-Seven Rivers formation will be injected into the Brad State No. 1 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 82 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.

Published in the Artesia Daily Press, Artesia, N.M., Jan. 6, 2019 Legal No. 24959.

7018 0360 0001 7020 3734

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Sent To  
 Street Lime Rock Resources, LP  
 Suite 4600  
 City, State Houston, Texas 77002

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7018 0360 0001 7020 3727

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Sent To  
 Street Remnant Oil Operating, LLC  
 P.O. Box 5375  
 City, State Midland, Texas 79704

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Sent To  
 Street Apache Corporation  
 303 Veterans Affairs Lane  
 Suite 1000  
 City, State Midland, Texas 79705

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 \$  
 Total \$14.95

Sent To  
 Street Amtex Energy, Inc.  
 P.O. Box 3418  
 City, State Midland, Texas 79702

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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 Total \$13.90

Sent To  
 Street Mewbourne Oil Company  
 P.O. Box 5270  
 City, State Hobbs, New Mexico 88241

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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 \$  
 Total \$13.45

Sent To  
 Street New Mexico State Land Office  
 P.O. Box 1148  
 City, State Santa Fe, New Mexico 87504

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



C-108 Review Checklist: Received 1/14/2014 Add. Request: N/A Reply Date: \_\_\_\_\_ Suspended: \_\_\_\_\_ [Ver 15]

ORDER TYPE: WFX / PMX / SWD Number: \_\_\_\_\_ Order Date: \_\_\_\_\_ Legacy Permits/Orders: R-13680

Well No. 4 Well Name(s): BNAJ State

API: 30-0 15-4628 Spud Date: 8-27-2012 New or Old: N (UIC Class II Primacy 03/07/1982)

Footages 330 FNL 230 FNL Lot 3 or Unit C Sec 2 Tsp 18 S Rge 27 E County Eddy

General Location: 3 miles SE/Antesio Pool: Red Lake GLUCIA JESU warehouse Pool No.: 96836

BLM 100K Map: Antesio Operator: TARCO Energy, LC OGRID: 275379 Contact: DAVID CATCHICK, Agent

COMPLIANCE RULE 5.9: Total Wells: 15 Inactive: 0 Final Assur. \_\_\_\_\_ Compl. Order? \_\_\_\_\_ IS 5.9 OK? Y Date: 2-15-2014

WELL FILE REVIEWED ☐ Current Status: Active

WELL DIAGRAMS: NEW: Proposed ☐ or RE-ENTER: Before Conv. ☐ After Conv. ☐ Logs in Imaging: N/A

Planned Rehab Work to Well: \_\_\_\_\_

Well Construction Details	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Cement Sx or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Surface	<u>7 7/8" / 4 1/2"</u>	<u>520</u>	<u>105</u>	<u>Surface</u>
Planned ___ or Existing ___ Interm/Prod				
Planned ___ or Existing ___ Interm/Prod				
Planned ___ or Existing ___ Prod/Liner				
Planned ___ or Existing ___ Liner				
Planned ___ or Existing ___ OH / <u>PERF</u>	<u>4 1/2" / 4 1/2"</u>		<u>Inj Length</u> <u>40'</u>	

Injection Lithostratigraphic Units:	Depths (ft)	Injection or Confining Units	Tops	Completion/Operation Details:
Adjacent Unit: Litho. Struc. Por.				Drilled TD <u>525'</u> PBTD <u>520'</u>
Confining Unit: Litho. Struc. Por.				NEW TD _____ NEW PBTD _____
Proposed Inj Interval TOP:				NEW Open Hole <input type="radio"/> or NEW Perfs <input checked="" type="radio"/>
Proposed Inj Interval BOTTOM:				Tubing Size <u>2 3/8"</u> in. Inter Coated? <input type="radio"/>
Confining Unit: Litho. Struc. Por.				Proposed Packer Depth <u>36'</u>
Adjacent Unit: Litho. Struc. Por.				Min. Packer Depth _____ (100-ft limit)
				Proposed Max. Surface Press. <u>82</u> psi
				Admin. Inj. Press. <u>82</u> (0.2 psi per ft)

#### AOR: Hydrologic and Geologic Information

POTASH: R-111-P N/A Noticed? ☐ BLM Sec Ord ☐ WIPP ☐ Noticed? ☐ Salt/Salado T: B NW: Cliff House fm

FRESH WATER: Aquifer Butterfly Max Depth 50' (2 miles away) HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: ROSILLI/ANTESIO CAPITAN REEF: thru adj NA No. Wells within 1-Mile Radius? 0 FW Analysis N/A

Disposal Fluid: Formation Source(s) \_\_\_\_\_ Analysis? \_\_\_\_\_ On Lease ☐ Operator Only ☐ or Commercial ☐

Disposal Int: Inject Rate (Avg/Max BWPD): 40 BWPD Protectable Waters? N/A Source: Produced H<sub>2</sub>O System: Closed or Open

HC Potential: Producing Interval? Y Formerly Producing? \_\_\_\_\_ Method: Logs/DST/P&A/Other \_\_\_\_\_ 2-Mile Radius Pool Map ☐

AOR Wells: 1/2-M Radius Map? \_\_\_\_\_ Well List? \_\_\_\_\_ Total No. Wells Penetrating Interval: 87 Horizontals? N/A 54 miles away

Penetrating Wells: No. Active Wells 54 Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? \_\_\_\_\_

Penetrating Wells: No. P&A Wells 28 Num Repairs? \_\_\_\_\_ on which well(s)? \_\_\_\_\_ Diagrams? 28 04 wells no well file

NOTICE: Newspaper Date 1-10-2011 Mineral Owner NMSLD Surface Owner 10 miles away N. Date 1-15-2014

RULE 26.7(A): Identified Tracts? \_\_\_\_\_ Affected Persons: Apulh, Limburg, Antes, manbayan N. Date 1-15-2014

Order Conditions: Issues: require Applicant to submit logs CD/Antesio

Add Order Cond: \_\_\_\_\_