

DATE IN 9/3/08	SUSPENSE	ENGINEER W. Jones	LOGGED IN 9/4/08	TYPE WFX	APP NO. PKR0824828943
-------------------	----------	----------------------	---------------------	-------------	--------------------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- 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

Application Acronyms:

[NSL-Non-Standard Location] **[NSP-Non-Standard Proration Unit]** **[SD-Simultaneous Dedication]**
[DHC-Downhole Commingling] **[CTB-Lease Commingling]** **[PLC-Pool/Lease Commingling]**
[PC-Pool Commingling] **[OLS - Off-Lease Storage]** **[OLM-Off-Lease Measurement]**
[WFX-Waterflood Expansion] **[PMX-Pressure Maintenance Expansion]**
[SWD-Salt Water Disposal] **[IPI-Injection Pressure Increase]**
[EOR-Qualified Enhanced Oil Recovery Certification] **[PPR-Positive Production Response]**

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☒ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
- [A] ☒ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☒ Offset Operators, Leaseholders or Surface Owner
- [C] ☒ Application is One Which Requires Published Legal Notice
- [D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached
- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **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.

Josh Hegg _____
 Print or Type Name Signature Title Reservoir Engineer I Date 8/20/2008

 e-mail Address josh.hegg@apachecorp.com

APACHE
North American Royalty Services
#511, 515



August 11, 2008

Mr. William V. Jones
New Mexico Oil Conservation Division
20 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: WFX Application
North Monument Grayburg San Andres Waterflood Unit
Two wells to convert from Production to Injection
NMGSAU Well #s 511, 515

RECEIVED
2008 AUG 18 PM 3 01

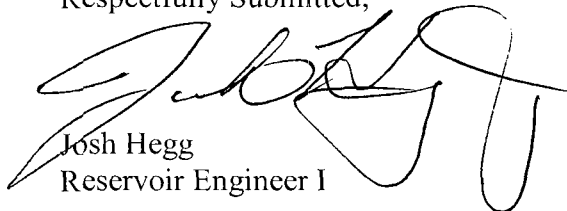
Mr. Jones,

You should find attached a complete copy of Apache Corporation's NMOC form C-108 "Application to Inject" for two (2) wells in the reference waterflood unit. It is necessary to convert these two wells from production to injection in order to better balance injection patterns and pattern voidage.

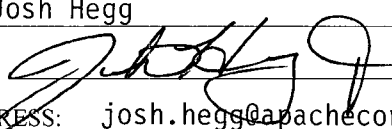
Notifications are being mailed today. Copies of return receipts and affidavit of publication will be forwarded as they are returned to Apache.

Thank you in advance for your attention to this matter. If you have any questions or comments please contact me at (918) 491-4918 or e-mail at josh.hegg@apachecorp.com.

Respectfully Submitted,


Josh Hegg
Reservoir Engineer I

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Apache Corporation
ADDRESS: 6120 S. Yale Ave., Suite 1500, Tulsa, OK 74136
CONTACT PARTY: Josh Hegg PHONE: (918) 491-4918
- 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: WFX-716
- 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: Josh Hegg TITLE: Reservoir Engineer I
SIGNATURE:  DATE: August 11, 2008
E-MAIL ADDRESS: josh.hegg@apachecorp.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:

INJECTION WELL DATA SHEET

OPERATOR: Apache Corporation

WELL NAME & NUMBER: NMGSAU 511

WELL LOCATION: 1980' FWL 1980' FSL

K

Section 19

19S

37E

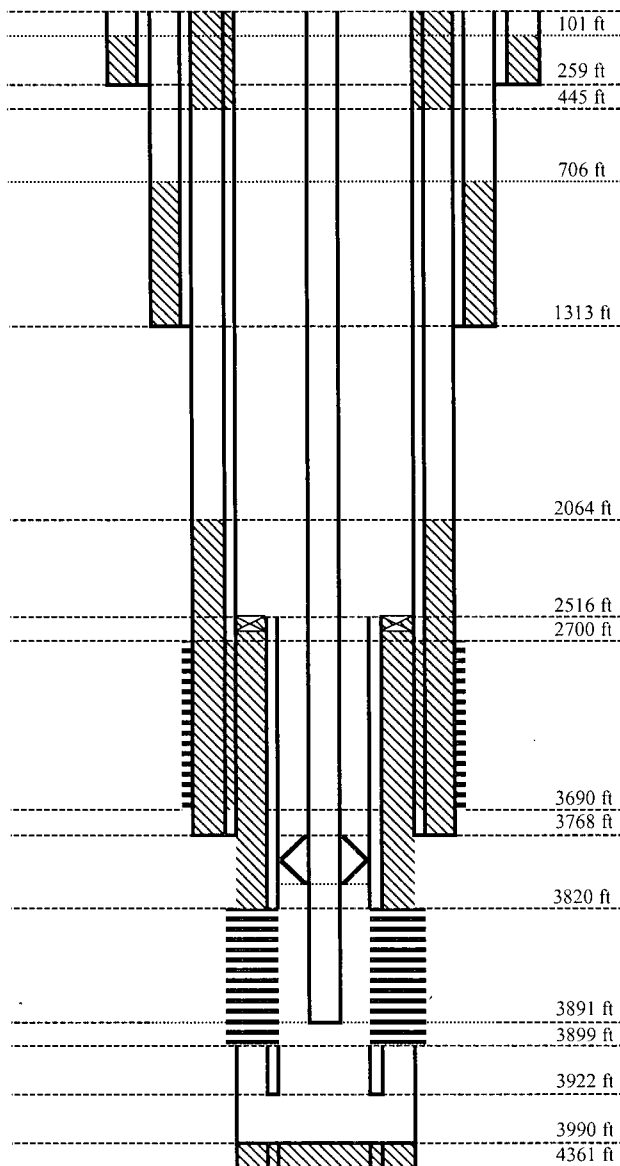
Footage Location

Unit Letter

Township

Range

WELLBORE SCHEMATIC



Perforated and circulated cement between both intermediate casing strings to repair casing leak from 445' to the surface.

WELL CONSTRUCTION DATA

Surface Casing
Hole Size: 17" Casing Size: 13.325"
Cemented with: 200 sx or 236 ft³
Top of Cement: 101 Method Det: Calculated

Intermediate Casing
Hole Size: 12.5" Casing Size: 9.625"
Cemented with: 425 sx or 502 ft³
Top of Cement: 706' Method Det: Calculated

Intermediate Casing
Hole Size: 8.625" Casing Size: 7"
Cemented with: 200 sx or 236 ft³
Top of Cement: Surface Method Det: Top of Casing Squeeze

Production Casing
Hole Size: 6.25" Casing Size: 5.5"
Cemented with: or
Top of Cement: 2.516' Method Det: Top of Liner
Total Depth: 3990'

INJECTION WELL DATA SHEET
Tubing Size: 2.875 Lining: Plastic
Type of Packer: Tubing Anchor
Packer Depth: 3778'
Other type of Tubing/Casing Seal (if applicable):

Injection Interval
3797' TO 3899'
(Perforated or Open Hole; indicated which)
Additional Data

1 Is this a new drill for injection? Yes X No
If no, for what purpose was the well originally drilled? Drilled as a Producing Well

2 Name of Injecting Formation: Grayburg/San Andres

3 Name of Field of Pool (if applicable): North Monument

4 Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, ie sacks of cement or plugs. Perforated from 2700'-3690' and squeezed with cement

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

Note: All calculations assume a 25% excess diameter in openhole due to borehole washouts and irregularities. Also Cement volumetrics are based upon 1.18ft³/sx unless otherwise mentioned

INJECTION WELL DATA SHEET

OPERATOR: Apache Corporation

WELL NAME & NUMBER: NMGSAU 515

WELL LOCATION: 1320' FEL 660' FSL

0

19

19S

37E

Footage Location

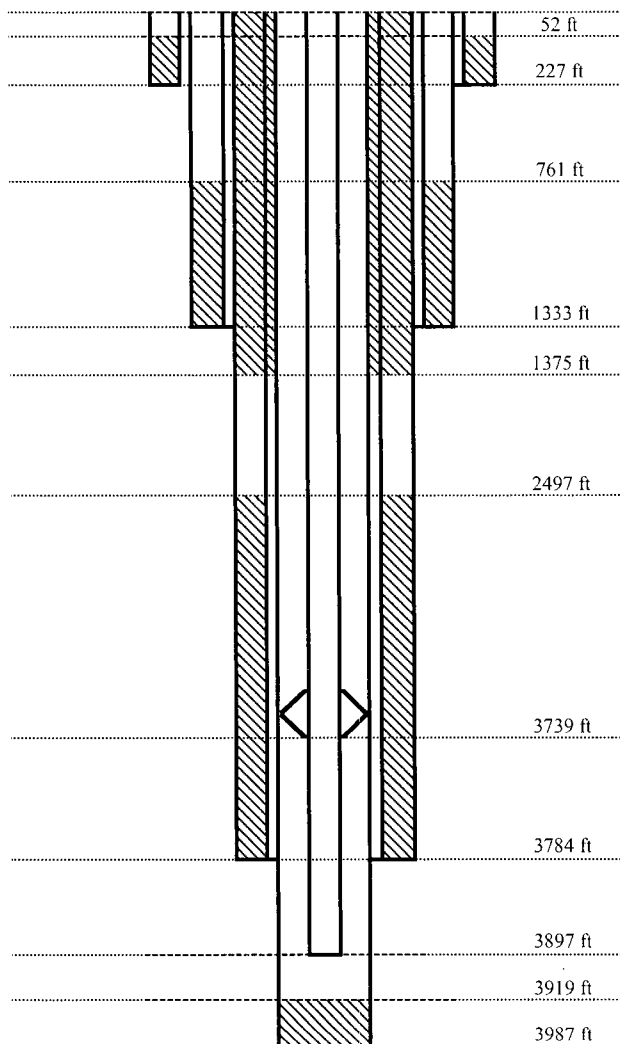
Unit Letter

Section

Township

Range

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing
Hole Size: 17.5" Casing Size: 13"
Cemented with: 250 sx or 295 ft³
Top of Cement: 52' Method Det: Calculated

Intermediate Casing
Hole Size: 12.25 Casing Size: 9.625
Cemented with: 375 sx or 442.5 ft³
Top of Cement: 761' Method Det: Calculated

Intermediate Casing
Hole Size: NA Casing Size: NA
Cemented with: NA or NA
Top of Cement: NA Method Det: NA

Production Casing
Hole Size: 8.625" Casing Size: 7"
Cemented with: 400 sx or 472 ft³
Top of Cement: Surface Method Det: Cmt circulated through perms
Total Depth: 3987'

INJECTION INTERVAL

3784' TO 3919' (Open Hole)
(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2.875 Lining: Plastic
Type of Packer: Tubing Anchor
Packer Depth: 3739'
Other type of Tubing/Casing Seal (if applicable):

Additional Data

1 Is this a new drill for injection? Yes X No
If no, for what purpose was the well originally drilled? Drilled as a Producing Well

2 Name of Injecting Formation: Grayburg/SanAndres

3 Name of Field of Pool (if applicable): North Monument

4 Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, ie sacks of cement or plugs.

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

Well was perforated at 1375' and 250 sx were circulated to the surface to repair casing leaks

Note: All calculations assume a 25% excess diameter in openhole due to borehole washouts and irregularities. Also Cement volumetrics are based upon 1.18ft³/sx unless otherwise mentioned

INJECTION WELL DATA SHEET

OPERATOR: Amerada Hess Corporation

WELL NAME & NUMBER: State O #4 (PLUGGED AND ABANDON)

WELL LOCATION: 660' FEL 660' FNL

Footage Location

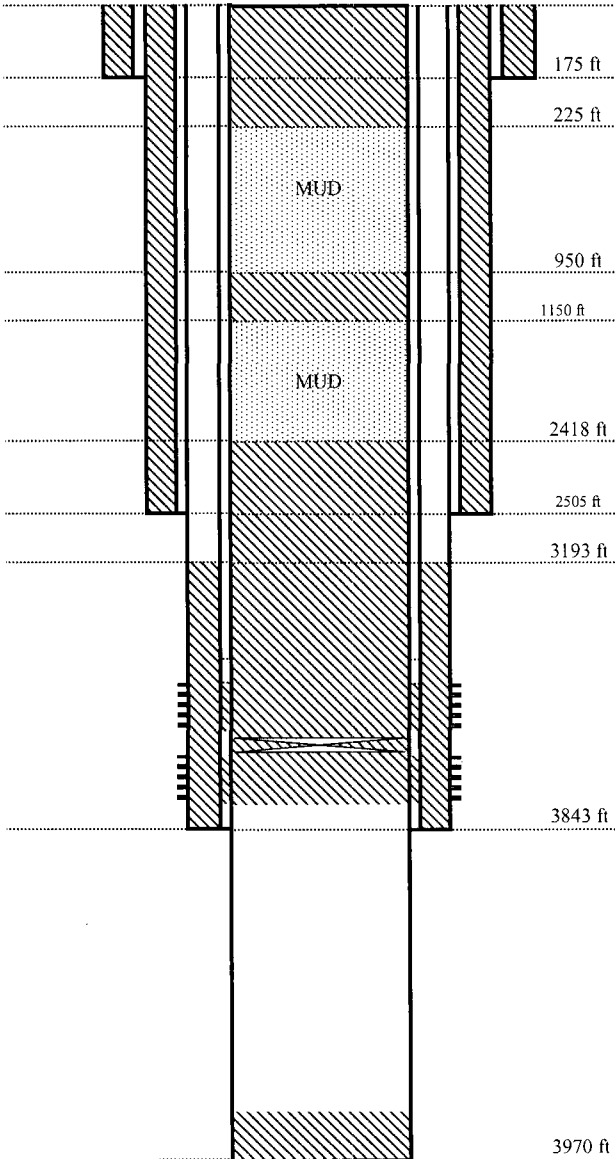
Unit Letter

Section

Township

Range

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing
Hole Size: 17.5" Casing Size: 12.5"
Cemented with: 100 sxs or 118 ft3
Top of Cement: Surface Method Det: Circulated

Intermediate Casing
Hole Size: 11" Casing Size: 8.625
Cemented with: 500 sxs or 590 ft3
Top of Cement: 1562' Method Det: Circ. w/ CSG repair

Intermediate Casing
Hole Size: NA Casing Size: NA
Cemented with: NA or NA
Top of Cement: NA Method Det: NA

Production Casing
Hole Size: 7.75 Casing Size: 6.625
Cemented with: 150 sxs or 177 ft3
Top of Cement: 3193' Method Det: Calculated
Total Depth: 3970'

INJECTION WELL DATA SHEET

Tubing Size: _____ Lining: _____
Type of Packer: _____
Packer Depth: _____
Other type of Tubing/Casing Seal (if applicable): _____

Additional Data

1 Is this a new drill for injection? Yes No
If no, for what purpose was the well originally drilled? Drilled as a producing well

2 Name of Injecting Formation: _____

3 Name of Field of Pool (if applicable): North Monument

4 Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, ie sacks of cement or plugs.

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

Note: All calculations assume a 25% excess diameter in openhole due to borehole washouts and irregularities. Also Cement volumetrics are based upon 1.18ft3/sx unless otherwise mentioned

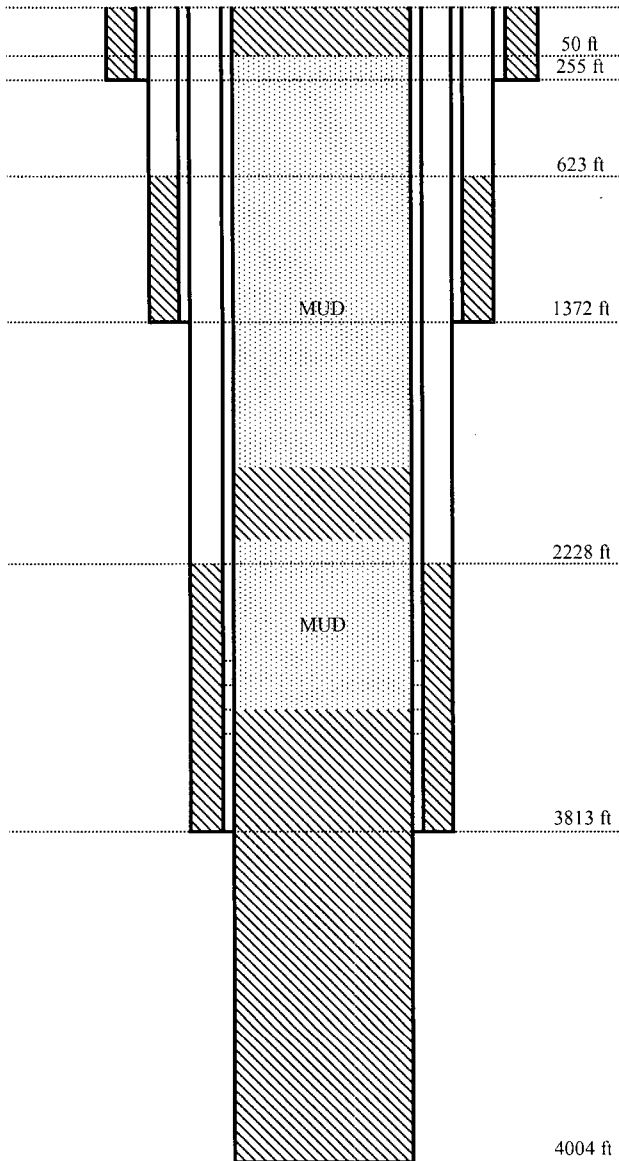
INJECTION WELL DATA SHEET

OPERATOR: Gulf Oil Corporation

WELL NAME & NUMBER: Graham State NCT D 2 (PLUGGED AND ABANDON)

WELL LOCATION: 660' FEL 660' FSL P 19 19S 37E
Footage Location Unit Letter Section Township Range

WELLBORE SCHEMATIC



WELL CONSTRUCTION DATA

Surface Casing
Hole Size: 13.75 Casing Size: 10.75
Cemented with: 200 sxs or 236 ft3
Top of Cement: Surface Method Det: Circulated

Intermediate Casing
Hole Size: 9.625 Casing Size: 7.625
Cemented with: 300 sxs or 354 ft3
Top of Cement: 623' Method Det: Calculated

Intermediate Casing
Hole Size: NA Casing Size: NA
Cemented with: NA or NA
Top of Cement: NA Method Det: NA

Production Casing
Hole Size: 6.75 Casing Size: 5.5
Cemented with: 300 sxs or 356 ft3
Top of Cement: 2228' Method Det: Calculated
Total Depth: 4004'

INJECTION WELL DATA SHEET

Tubing Size: _____ Lining: _____
Type of Packer: _____
Packer Depth: _____
Other type of Tubing/Casing Seal (if applicable): _____

Additional Data

1 Is this a new drill for injection? Yes No
If no, for what purpose was the well originally drilled? Drilled as a producing well

2 Name of Injecting Formation: _____

3 Name of Field of Pool (if applicable): North Monument

4 Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, ie sacks of cement or plugs. _____

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

Note: All calculations assume a 25% excess diameter in openhole due to borehole washouts and irregularities. Also Cement volumetrics are based upon 1.18ft3/sx unless otherwise mentioned

ITEM VII OF NEW MEXICO OCD FORM C-108
DATA ON PROPOSED OPERATIONS
NMGSAU #511 & #515

- 1) Proposed average initial injection rate is 600 bwpd.
Maximum injection rate should not exceed 1,000 bwpd.
- 2) The injection system will be operated as a closed system.
- 3) Proposed average initial injection pressure is 750 psi (0.2 psi/ft).
Proposed maximum pressure will not exceed the pressure limitations ordered by the Division.
- 4) Source water will come from the San Andres Formation via the NMGSAU injection system.
- 5) Not Applicable.

ITEM VIII OF NEW MEXICO OCD FORM C-108
GEOLOGIC DATA ON THE INJECTION ZONE & UNDERGROUND DRINKING
WATER
NMGSAU #511 & #515

The Formation being targeted for water injection is the Grayburg at depths ranging from approximately 3784' to 3990'. The formation is Guadalupian in age and is a sequence of shallow marine carbonates, which have for the most part been dolomatized. A six percent porosity cut off is used to determine "pay" as porosity less than this is considered non-productive at the existing and proposed reservoir pressures and reservoir fluid regimes. Net pay isopach maps show the areal extent of the targeted reservoir. The vertical extent of the reservoir is limited top and bottom by impermeable shales and carbonates. All injected fluids should remain in the reservoir with the exception of cycling to the surface through producing wellbores in the same formation.

Based on communications with the New Mexico States Engineer's Roswell office and a review of online files there are 46 fresh water wells (see attached) in the area of review. The deepest of these wells is 150', which is the assumed base of fresh water. All wellbores involved with the proposed injection program are constructed to not allow injection water into this fresh water source.

ITEMS IX THROUGH XII OF NEW MEXICO OCD FORM C-108
NMGSAU #511 & #515

IX The NMGSAU #511 wellbore is perforated from 3820'-3891' and openhole completed from 3922'-3990' and has been acidized numerous times since completion. The NMGSAU #515 wellbore is openhole completed from 3784'-3919'. The openhole sections will be cleaned out and acidized again during conversion.

X All logging and test data for the existing wellbores already exists on file with the State of New Mexico Oil Conservation Division and will not be resubmitted with this application.

XI It appears the only strata within one mile of our proposed unit which contains water of possible drinking quality is confined to 150' and shallower. No contamination of this drinking water should occur as all existing wellbores which penetrate the Grayburg are constructed as to not allow injection water to escape the system. As a result, no chemical analysis is submitted with this application.

XII After reviewing the geology in a one and one-half mile radius around the proposed injector there appears no evidence of fractures or any hydrologic connection between the zone of injection and any overlying or underlying strata.

POD / SURFACE DATA REPORT 08/02/2007

DB File Nbr	Use	Division	Owner	POD Number	Source	Yrs	Rng	Sec	q	g	g	UTM Zone	Eastings	Northings	Start Date	Finish Date	Depth (m)	Depth (ft)
L 00156	IND	0	VERSADO GAS PROCESSORS, LLC	L 00156	Shallow	195	37E	18	3	1	13	13	659659	3614218				
L 00157	IND	0	VERSADO GAS PROCESSORS, LLC	L 00157	Shallow	195	37E	18	3	2	13	13	659659	3614218				
L 01248	PRO	0	GULF OIL CORPORATION	L 01248	Shallow	195	37E	18	1	1	13	13	659672	3613411				
L 01277	MUL	0	GULF OIL CORPORATION	L 01277	Shallow	195	37E	18	2	4	13	13	660840	3615027				
L 02033	DOH	0	ROUNDELT WATER USERS	L 02033	Shallow	195	37E	18	1	1	13	13	659640	3615428	09/11/1947	09/12/1947	134	35
L 02036	PRO	3	MAKIN DRILLING COMPANY	L 02036	Shallow	195	37E	18	1	1	13	13	661800	3611317	07/20/1954	07/20/1954	50	20
L 02036	PRO	3	MAKIN DRILLING COMPANY	L 02036	Shallow	195	37E	18	1	1	13	13	661800	3611317	07/20/1954	07/20/1954	50	20
L 02613	IND	0	VERSADO GAS PROCESSORS, LLC	L 02613	Shallow	195	37E	18	3	2	13	13	659653	3614621				
L 02917	DOM	3	J.A. RIZE	L 02917	Shallow	195	37E	18	3	2	13	13	661101	3611004				
L 02917	DOM	3	J.A. RIZE	L 02917	Shallow	195	37E	18	3	2	13	13	661101	3611004				
L 03903	DOM	3	LILLIE B. LONGNECKER	L 03903	Shallow	195	37E	18	4	4	13	13	661002	3610905	08/12/1958	08/12/1958	35	20
L 03906	DOM	3	ROBERT P. III SHORT	L 03906	Shallow	195	37E	18	4	4	13	13	661002	3610905	08/12/1958	08/12/1958	35	20
L 03922	DOM	3	LEON DICKENSON	L 03922	Shallow	195	37E	18	4	4	13	13	661002	3610905	08/11/1958	08/11/1958	35	20
L 03922	DOM	3	LEON DICKENSON	L 03922	Shallow	195	37E	18	4	4	13	13	661002	3610905	08/11/1958	08/11/1958	35	20
L 03936	DOM	3	JOY DEE HCNIGHT	L 03936	Shallow	195	37E	18	4	4	13	13	662007	3611513	08/11/1958	08/11/1958	42	22
L 03936	DOM	3	JOY DEE HCNIGHT	L 03936	Shallow	195	37E	18	4	4	13	13	662007	3611513	08/11/1958	08/11/1958	42	22
L 03949	DOM	3	ROY L. WHEELER	L 03949	Shallow	195	37E	18	4	4	13	13	662007	3611513	08/11/1958	08/12/1958	36	18
L 03954	DOM	3	K. W. LITTLE	L 03954	Shallow	195	37E	18	4	4	13	13	662007	3611513	08/11/1958	08/12/1958	36	18
L 03956	DOM	3	DENNIS C. SMITH	L 03956	Shallow	195	37E	18	4	4	13	13	661002	3610905	08/10/1958	08/10/1958	35	20
L 03956	DOM	3	DENNIS C. SMITH	L 03956	Shallow	195	37E	18	4	4	13	13	661002	3610905	08/10/1958	08/10/1958	35	20
L 03976	DOM	3	JIMMY T. COOPER	L 03976	Shallow	195	37E	18	4	4	13	13	662007	3611513	08/12/1958	08/13/1958	40	20
L 03976	DOM	3	JIMMY T. COOPER	L 03976	Shallow	195	37E	18	4	4	13	13	662007	3611513	08/12/1958	08/13/1958	40	20
L 03995	DOM	3	H. E. COPELAND	L 03995	Shallow	195	37E	18	4	4	13	13	661002	3610905	09/26/1958	09/26/1958	35	20
L 04313	PRO	3	HCAY AND STAFFORD DRILLING CO	L 04313	Shallow	195	37E	18	4	4	13	13	659767	3613715	10/23/1959	10/23/1959	116	52
L 04313	PRO	3	HCAY AND STAFFORD DRILLING CO	L 04313	Shallow	195	37E	18	4	4	13	13	659767	3613715	10/23/1959	10/23/1959	116	52
L 04799	DOM	3	W.V. WHITAKER	L 04799	Shallow	195	37E	18	4	4	13	13	662611	3610926	08/16/1962	08/16/1962	150	150
L 04887	SAN	0	HOBBS MUNICIPAL SCHOOLS	L 04887	Shallow	195	37E	18	4	4	13	13	662710	3611025	12/04/1964	12/05/1964	55	55
L 05000	DOM	3	FIRST BAPTIST CHURCH	L 05000	Shallow	195	37E	18	4	4	13	13	659640	3615428				
L 05445	DOM	0	FED HANSHARGER	L 05445	Shallow	195	37E	18	4	4	13	13	662007	3611513				
L 05611	MUN	0	ROUNDELT WATER USERS COOP.	L 05611	Shallow	195	37E	18	4	4	13	13	661101	3610804	08/03/1966	08/04/1966	40	23
L 05790	EXP	0	ROUNDELT WATER USERS COOP.	L 05790	Shallow	195	37E	18	4	4	13	13	661101	3610804	04/16/1969	04/17/1969	50	27
L 05995	DOM	3	H. L. STEPHENS	L 05995	Shallow	195	37E	18	4	4	13	13	662454	3614443	04/11/1972	04/12/1972	100	65
L 06496	DOM	3	O. E. GROVE	L 06496	Shallow	195	37E	18	4	4	13	13	662454	3614443				
L 06933 (E)	PRO	0	GULF OIL CORPORATION	L 06933 (E)	Shallow	195	37E	18	4	4	13	13	662202	3613322				
L 09631 (A)	PRO	0	L. L. ROBINETT	L 09631 (A)	Shallow	195	37E	18	4	4	13	13	662202	3613322				
L 09632 (A)	PRO	0	L. L. ROBINETT	L 09632 (A)	Shallow	195	37E	18	4	4	13	13	662202	3613322				
L 09633 (A)	PRO	0	L. L. ROBINETT	L 09633 (A)	Shallow	195	37E	18	4	4	13	13	662202	3613322				
L 10271 EXPL	EXP	0	INC. SNYDER RANCHES	L 10271 EXPL	Shallow	195	37E	18	4	4	13	13	659640	3615428	07/10/1992	07/13/1992	137	70
L 10277	STK	3	INC. SNYDER RANCHES	L 10277	Shallow	195	37E	18	4	4	13	13	661070	3613016	07/08/1992	07/10/1992	70	40
L 10498	STK	3	COOPER JIMMIE T	L 10498	Shallow	195	37E	18	4	4	13	13	662007	3611513				

Record Count: 46

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Director of **THE LOVINGTON LEADER**, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Legal Notice

was published in a regular and entire issue of **THE LOVINGTON LEADER** and not in any supplement thereof, for one (1) day, beginning with the issue of August 14, 2008 and ending with the issue of August 14, 2008.

And that the cost of publishing said notice is the sum of \$ 35.83 which sum has been (Paid) as Court Costs.

Joyce Clemens
Subscribed and sworn to before me this 20th day of August 2008

Debbie Schilling
Debbie Schilling

Notary Public, Lea County, New Mexico

My Commission Expires June 22, 2010

LEGAL NOTICE

NOTICE OF APPLICATION FOR FLUID INJECTION WELL PERMIT

APACHE
CORPORATION
6120 S. Yale Ave., Suite
1500
Tulsa, OK 74136
ATTN: Josh Hogg
(918) 491-4900

has applied to the State of New Mexico, Oil Conservation Division, Santa Fe, New Mexico, for a permit to inject fluid into a formation that is produc-

tive of oil or gas. The application proposes to inject fluid into the Grayburg formation in the North Monument GSA Waterflood Unit. The proposed injection wells are the NMGSAU 511 and 515 located 1980' FWL and 1980' FSL and 1320' FEL and 660' FSL of Section 19, Township 19S, Range 37E respectively. Fluid will be injected into the NMGSAU 511 strata correlative to sub-surface depth interval from 3,820 feet to 3,891 and 3,922 feet to 3,990 feet. Fluid will be injected into the NMGSAU 515 strata correlative to sub-surface depth interval from 3,784 feet to 3,919 feet. Fluid will be injected at a maximum injection rate of 1,000 barrels of water per day and at a maximum surface injection pressure of 700 psi.

Interested parties must file objections or requests for hearing with the State of New Mexico, Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3486, within 15 days of publication. Published in the Lovington Leader August 14, 2008.

7007 2680 0001 1843 8050

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To NEW MEXICO OIL CONSERVATION DIVISION
 Street, Apt. No.,
 or PO Box No.
 City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

New Mexico Oil Conservation Div.
 20 S. St. Francis Drive
 Santa Fe, NM 87505

ATTN: William V. Jones

COMPLETE THIS SECTION ON DELIVERY

A. Signature *William V. Jones* ☐ Agent
☒ Addressee

B. Received by (Printed Name) C. Date of Delivery
8-18

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☒ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

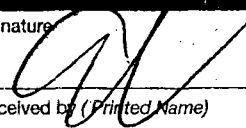
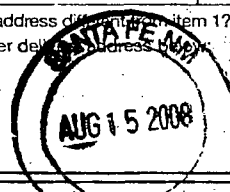
4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
 (Transfer from service label)

7007 2680 0001 1843 8050

7007 2680 0001 1843 8043

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage \$ Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees \$	Postmark Here
Sent To <i>NEW MEXICO STATE LAND OFFICE</i> Street, Apt. No., or PO Box No. City, State, ZIP+4	
PS Form 3800, August 2006 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: New Mexico State Land Office 310 Old Santa Fe Trail P.O. Box 1148 Santa Fe, NM 87504-1148 ATTN: Joe Mraz	COMPLETE THIS SECTION ON DELIVERY A. Signature <i>X</i>  <input type="checkbox"/> Agent <input type="checkbox"/> Addressee B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below <input type="checkbox"/> No  3. Service Type <input checked="" type="checkbox"/> Certified Mail <input checked="" type="checkbox"/> Express Mail <input checked="" type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. 4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
2. Article Number (Transfer from service label) 7007 2680 0001 1843 8043	

7007 2680 0001 1843 8012

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$
Sent To: DAVID H. ARRINGTON Street, Apt. No., or PO Box No. City, State, ZIP+4	
PS Form 3800, August 2006 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

David H. Arrington Oil & Gas
 P.O. Box 2071
 Midland, TX 79702-2071

COMPLETE THIS SECTION ON DELIVERY

A. Signature

x **S. Zachary**

☒ Agent
☐ Addressee

B. Received by (Printed Name)

S. Zachary

C. Date of Delivery

08/15/08

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☒ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

2. Article Number

(Transfer from service label)

7007 2680 0001 1843 8012

7007 2680 0001 1843 8005

U.S. Postal ServiceTM
CERTIFIED MAILTM RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To Oxy ATTN: LAND DEPT.

Street, Apt. No.,
or PO Box No. P.O. Box 4294

City, State, ZIP+4 HOUSTON, TX 77210-4294

PS Form 3800, August 2005 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete Items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Oxy
 P.O. Box 4294
 Houston, TX 77210-4294

ATTN: Land Dept.

COMPLETE THIS SECTION ON DELIVERY

A. Signature [Signature] ☐ Agent ☒ Addressee

B. Received by (Printed Name) James Berry C. Date of Delivery

D. Is delivery address different from item 1? ☒ Yes ☐ No
 If YES, enter delivery address below:

3. Service Type

- ☒ Certified Mail ☐ Express Mail
☒ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number

(Transfer from service label)

7007 2680 0001 1843 8005

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark
Here

Sent To	<i>XTO ENERGY</i>
Street, Apt. No., or PO Box No.	
City, State, ZIP+4	

PS Form 3800, August 2006 See Reverse for Instructions

7007 2680 0001 1843 8036

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

XTO Energy, Inc.
810 Houston Street
Fort Worth, TX 76102-6298
ATTN: Land Dept.

COMPLETE THIS SECTION ON DELIVERY

A. Signature *[Signature]* ☐ Agent
☒ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☒ Registered ☒ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
(Transfer from service label)

7007 2680 0001 1843 8036

Hegg, Josh

From: Hanson, Michelle
Sent: Wednesday, September 03, 2008 9:54 AM
To: Hegg, Josh
Subject: Confirmation of Conoco's receipt of Apache's C-108 packet

Michelle,

ConocoPhillips Company is in receipt of Apache's C-108 application regarding the North Monument GSA Unit # 511 and # 515 wells. Our technical team has reviewed the C-108 and has no opposition to this application.

Please let me know if you have additional questions in this regard.

Tom Scarbrough, CPL
 Staff Landman
 ConocoPhillips Company
 600 N. Dairy Ashford, 3WL-14066
 Houston, Texas 77079
 Phone: 832-486-2338
 Fax: 832-486-2674
 Tom.Scarbrough@ConocoPhillips.Com

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
<i>(Domestic Mail Only; No Insurance Coverage Provided)</i>	
For delivery information visit our website at www.usps.com	
OFFICIAL USE	
Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$
Postmark Here	
Sent To <i>CONOCO PHILLIPS</i>	
Street, Apt. No., or PO Box No.	
City, State, ZIP+4	
PS Form 3800, August 2006	
See Reverse for Instructions	

7007 2680 0001 1843 8029



Track & Confirm

Search Results

Label/Receipt Number: 7007 2680 0001 1843 8029
 Status: Delivered

Your item was delivered at 8:22 AM on August 15, 2008 in HOUSTON, TX 77079.

Notification Options

Track & Confirm by email
 Get current event information or updates for your item sent to you or others by email.

[Go >](#)

Track & Confirm
Enter Label/Receipt Number
<input type="text"/>
Go >

Injection Permit Checklist (7/8/08)

Case _____ R- _____ SWD 044 WFX _____ PMX _____ IPI _____ Permit Date 11/18/08 UIC Qtr OCT/NOV/Dec
 # Wells 2 Well Name: North Mount Grayby, SA #1, #15
 API Num: (30-) _____ Spud Date: _____ New/Old: 0 (UIC primacy March 7, 1982)
 Footages _____ Unit 10 Sep 19 Tsp 195 Rge 37E County Lea
 Operator: Apache Corp. Contact Josh Hagg
 OGRID: 873 RULE 40 Compliance (Wells) 5/1003 (Finan Assur) OK
 Operator Address: 6120 S. Yale Ave Suite 1500, Tulsa OK, 74136

Current Status of Well: _____

Planned Work to Well: _____

Planned Tubing Size/Depth: _____

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing _____ Surface				
Existing _____ Intermediate				
Existing _____ Long String	<u>7"</u>			

DV Tool _____ Liner 5.5" Open Hole _____ Total Depth _____ PBTD _____

Well File Reviewed _____

Diagrams: Before Conversion _____ After Conversion _____ Elogs in Imaging File: _____

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)			
Injection.....	<u>(511) (515)</u>		
Interval TOP:	<u>3797 (3784)</u>	<u>GSA</u>	
Injection.....	<u>(6H) (6H)</u>		
Interval BOTTOM:	<u>3899 (3919)</u>	<u>GSA</u>	
Below (Name and Top)			

A-9596
Ennis Mount GSA

PSI Max. WHIP

Open Hole (Y/N)

Deviated Hole?

Sensitive Areas: Capitan Reef _____ Cliff House _____ Salt Depths _____

.... Potash Area (R-111-P) _____ Potash Lessee _____ Noticed? _____

Fresh Water: Depths: 0-150' Wells (Y/N) Yes Analysis Included (Y/N): _____ Affirmative Statement ✓

Salt Water: Injection Water Types: SA RE-CYCLED Analysis? _____

Injection Interval.....Water Analysis: _____ Hydrocarbon Potential _____

Notice: Newspaper (Y/N) _____ Surface Owner SFO Mineral Owner(s) _____

RULE 701B(2) Affected Parties: Arroyo/OXY/XTO/CO. PHILIPS

Area of Review: Adequate Map (Y/N) _____ and Well List (Y/N) _____

Active Wells 36 Num Repairs _____ Producing in Injection Interval in AOR Yes

..P&A Wells 26 Num Repairs 0 All Wellbore Diagrams Included? Yes

Questions to be Answered:

Send new FW analysis for nearby these wells

Required Work on This Well: _____ Request Sent _____ Reply: _____

AOR Repairs Needed: _____ Request Sent _____ Reply: _____

Request Sent _____ Reply: _____