Submit ³ Copies To Áppropriate District State of New Me Office Energy, Minerals and Natu			Form C-103 June 19, 2008	
District I 1625 N. French Dr., Hobbs, NM 87240 District II 1301 W. Grand Ave., Artesia, NM 88210 District II 1301 W. Grand Ave., Artesia, NM 88210 District II 1220 South St. Fra	+ [WELL API NO.		
District II 1301 W. Grand Ave. Artesia NM 88210 OIL CONSERVATION	N DIVISION	<u>30-025-0</u> 5. Indicate Type of		
	AVE., AICESIA, NM 88210 Is Rd., Aztec, NM 87APR 17 2012 1220 South St. Francis Dr. Santa Fe, NM 87505			
DISHCITY		STATE X 6. State Oil & Gas I	FEE	
1220 S. St. Francis Dr., Santa Fe, NM 87505		o. blate on te das i	Leuse Ivo.	
SUNDRY NOTICES AND REPORTS ON WEL (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN O DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-10 PROPOSALS.)	OR PLUG BACK TO A	7. Lease Name or U Arrowhead Graybu	nit Agreement Name: ·· rg Unit	
1. Type of Well: Oil Well X Gas Well Other		8. Well Number 172		
2. Name of Operator		9. OGRID Number		
XTO Energy, Inc. 3. Address of Operator		00538 10. Pool name or W		
200 N. Loraine, Ste. 800 Midland, TX 79701		Arrowhead: Grayb		
4. Well Location			/	
Unit Letter L : 2310' feet from the Sou	ith line and	990' feet from	the West line	
Section 2 Township 22S 11. Elevation (Show whether	Range36EDR, RKB, RT, GR, etc.	NMPM	County Lea	
12. Check Appropriate Box to Indicate	Natura of Nation P	anart or Other D		
12. Check Appropriate Box to indicate	Induite of Induite, K	eport, or Other D	ala	
NOTICE OF INTENTION TO:	SUBS	EQUENT REP	ORT OF:	
PERFORM REMEDIAL WORK D PLUG AND ABANDON	REMEDIAL WORK			
TEMPORARILY ABANDON	COMMENCE DRILLIN	IG OPNS. 🔲	P AND A	
PULL OR ALTER CASING MULTIPLE COMPL	CASING/CEMENT JO	B 🗌		
OTHER: REACTIVATE WELL	OTHER:			
13. Describe proposed or completed operations. (Clearly state all pe of starting any proposed work). SEE RULE 1103. For Multiple or recompletion.				
XTO Energy, Inc REQUESTS TO REACTIVATE, SQZ, PERF & 1. DO CIBP @ 3650', (2) SET CICR @ 3680', (3) SQZ O CMT. WAIT ON CMT., (4) DO CMT TO +/- 3850', (5) PER 90/10, (7) PUT WELL ON PROD	H INTERVAL FROM 370	2'-4058' W/ 40 SX	KS (MIN) CLASS C	
Spud Date: Rig Relea	ase Date:			
I hereby certify that the information above is true and complete to the	e best of my knowledge	and belief.		
SIGNATURE Alephanie Rabadue III	LERegulatory	y AnalystI	DATE 04/16/2012	
	stephanie_rabadue@x nail address:	toenergy.com F	PHONE <u>432-620-6714</u>	
For State Use Only			/	
	TLE STRAT	nae_D	ATE 4-18-2012	
Conditions of Approval (if any):				
\bigcirc			APR 1 8 2012	



Arrowhead Grayburg Unit #172 Reactivation Procedure Lea County, New Mexico April 2, 2012

ELEVATION:	GL — 3589' KB — 3589'	TD – 4100' PBTD – 4058'		
WELL DATA:				
Current Status:	Temporarily Ab	andoned.		
Last Well Test:	1995 – 4 BO / 500 BW / 30 Mcf			
Surface Casing:	8-5/8" set at 344 surface.	' cemented with 200 sx. TOC circ to		
Prod. Casing:	5-1/2" 15.5ppf s 1894' by calc.	et at 3702' cemented with 200 sx. TOC at		

COMPLETION: CIBP at 3650'.

Тор	Bottom	Length	Туре	Formation	SPF	Shots	Date	Comments
3702	4058	356	OH	AGU/Grayburg	0	0	1940	Open Hole

OBJECTIVE: Reactivate, Squeeze, Perforate and Stim before RWTP.

RECOMMENDED PROCEDURE

(Verify that anchors have been set and tested per NMOCD and OSHA guidelines) This is a STATE well.

- 1. MIRU PU. MI and rack 4300' of 2-7/8" 6.5ppf, J-55 work string. ND WH. NU BOP.
- PU and RIH with 4-3/4" bit, bit sub and drill collars on 2-7/8" WS to CIBP at 3650'. DO CIBP. RIH to PBTD and reverse circulate hole clean. POOH and LD bit, bit sub and DC's.
- 3. RIH with 5-1/2" CICR on 2-7/8" WS to 3680'. Set CICR at 3680'. Load and test TCA with fresh water to 500 psig.

PROCEDURE BY JWP

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Arrowhead Grayburg Unit #172 Reactivation Procedure Lea County, New Mexico April 2, 2012

4. RU cement company. Establish injection rate with fresh water, then squeeze open-hole interval from 3702' – 4058'. Mix and pump (50 sx minimum) of class 'C' cement with 2% CaCl₂ (14.8 -lb/gal density). Displace cement slurry with fresh water to 1 bbl above CICR. Squeeze slurry into open-hole until 1000 psig is reached. Wait ~15 minutes and walk pressure up to 1000 psig again, or until a successful squeeze is obtained. If max pressure is reached, sting out of CICR and reverse circulate tbg clean. RD cement company. POOH with 2-7/8" J-55 tubing and LD stinger. WOC over night.

Note: Do not mix CaCl₂ on the fly, have dry mixed beforehand.

- RU reverse unit. RIH with 4-3/4" bit, bit sub and drill collars on 2-7/8" J-55 tubing to 3680'. DO cement to +/- 3850'. Circulate hole clean. POOH and LD bit, bit sub and drill collars. RD reverse unit.
- 6. RU wireline company. RIH with 2-1/8" casing gun loaded with premium charges with 2 SPF at 180 degree phasing to 3809' while correlating to the "Spectral Density, Gamma Ray, CCL" dated 9/15/1995 from Computalog and perforate the following intervals:

Тор	Bottom	Length	Type	Formation	SPF	Shots	Date	Comments
3702	3704	2	Perf	AGU	2	4	2012	Open Hole
3709	3713	4	Perf	AGU	2	8	2012	Open Hole
3724	3726	2	Perf	AGU	2	4	2012	Open Hole
3732	3733	1	Perf	AGU	2	2	2012	Open Hole
3736	3737	1	Perf	AGU	2	2	2012	Open Hole
3741	3744	3	Perf	AGU	2	6	2012	Open Hole
3746	3747	1	Perf	AGU	2	2	2012	Open Hole
3750	3751	1	Perf	AGU	2	2	2012	Open Hole
3761	3763	2	Perf	AGU	2	4	2012	Open Hole
3766	3768	2	Perf	AGU	2	4	2012	Open Hole
3769	3773	4	Perf	AGU	2	8	2012	Open Hole
3778	3780	2	Perf	AGU	2	4	2012	Open Hole
3783	3787	4	Perf	AGU	2	8	2012	Open Hole
3804	3809	5	Perf	AGU	2	10	2012	Open Hole
	Total Holes =				68			

POOH and LD casing gun. RD wireline company.

 RIH with 5-1/2" treating packer on 2-7/8" WS. Set 5-1/2" packer at +/- 3650'. Load and test TCA with fresh water to 500 psig. Monitor TCA pressure during acid treatment.



Arrowhead Grayburg Unit #172 Reactivation Procedure Lea County, New Mexico April 2, 2012

- MIRU acid company. Test lines to 4000 psig. Treat open hole with 3500 gals of 20% NEFE 90/10 in 3 stages dropping rock salt for block between each stage. Use the following pump schedule, but adjust the volumes as necessary to achieve good block action:
 - a. Load tubing with fresh water
 - b. 1000 gals acid
 - c. 1500 lbs rock salt at 1ppg in 10ppg brine
 - d. 1250 gals acid
 - e. 1500 lbs rock salt at 1ppg in 10ppg brine
 - f. 1250 gals acid
 - g. Over flush with 30 bbls fresh water

(flush with 100 bbls FW if unoble to sweb at least 2 hrs lbs rock salt order out 3500 lbs before 500x)

[Total of 3,500 gals of 20% 90/10 acid and 3,000 lbs rock salt; order out 3,500 lbs] $^{-b}$

Note: Max treating pressure is **1,000 psig** on tubing. **Do not exceed 3 BPM** even if treating pressure is below 1,000 psig. Max pressure on casing is 500 psig.

- 9. RDMO acid company. Shut well in for two hours for acid spend.
- 10. RU swab and swab back acid load. Determine flow rate and oil cut. Report results to Midland.

Note: Flush with 100 bbls FW if not able to swab before SDON.

- 11. Release packer. RHH to 3908 before POOH with 2-7/8" WS and LD 5-1/2" packer.
 - RIH with notch coller on 27/8 WS to PBTD C3850', Reverse circ. Note: If unable to reach PBTD, RIH with 4-3/4" bit and circulate hole clean. hole clean PCH 27/8" WS, with FW.

12. RWTP. RDMO PU. Put well in test.

Prepared by: Joseph Patterson

Approved by:

Houte Date

PROCEDURE BY JWP

AGU #172 WELLBORE DIAGRAM



AGU #172 WELLBORE DIAGRAM

