ŧ	Submit 1 Copy To Appropriate District Office		ite of New Mexi		e		C-103
	<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> – (575) 748-1283		nerals and Natural		WELL API NO. 30-015-40112	Revised July	18, 2013
	811 S. First St., Artesia, NM 88210		SERVATION D	5. Indicate Type of	of Lease		
	District III - (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410		South St. Franci		FEE [		
	District IV – (505) 476-3460 – 1220 S. St. Francis Dr., Santa Fe, NM		nta Fe, NM 8750	)5	6. State Oil & Ga X0-0647-0411	s Lease No.	
	87505						
	SUNDRY-:NO _(DO NOT-USE THIS FORM FOR PROI  =DIFFERENT RESERVOIR="USE:"APP		O DEEPEN OR PLUG		<ol><li>Lease Name or WASHINGTON 33</li></ol>	_	
	PROPOSALS.)  1. Type of Well: Oil Well	Gas Well  Otl	4		8. Well Number	62	
	Name of Operator     Apache Corporation				9. OGRID Number 873	er	
- '	3. Address of Operator				10. Pool name or	Wildcat	
	303 Veterans Airpark Lane, Suite	1000 Midland, TX 7	9705		[96830] ARTESIA	; GLORIETA-YES	60 (0)
	4. Well Location Unit Letter M	: 330 feet fro	m the SOUTH	line and	feet fror	n the WEST	line
	Section 33			e 28E	NMPM	County EDDY	
			how whether DR, R. 3673 <u>'</u> GL	KB, RT, GR, etc.)			
	12 Charl	. Ammonniata Day	to Indiana Nisa	CNI-4! !	D O4l	D-4:	
		Appropriate Box		•	•		
		INTENTION TO			SEQUENT REI		
	PERFORM REMEDIAL WORK [ TEMPORARILY ABANDON [	=	<del>-</del> 1	REMEDIAL WORK COMMENCE DRII		ALTERING CAS	
				CASING/CEMENT	<del></del>	P AND A	
	DOWNHOLE COMMINGLE			ASING/CLIVILINI	30B 🗆		
	CLOSED-LOOP SYSTEM [	<u>-</u>				٠	
	OTHER: DO CIBP &	ACIDIZE		THER:			
	<ol> <li>Describe proposed or cor of starting any proposed proposed completion or r</li> </ol>	work). SEE RULE 1					
А	spache is requesting permission to	drill out the CIBP and	35' of cement & ac	idize the Glorieta	/Paddock/Blinebry		
٧	VELLBORE DIAGRAMS AND PRO	CEDURES ENCLOS	ED			R	ECEIVED
						AU	ig <b>2 0</b> 20
						DICTOICE	TI-ARTESU
					÷ ,	ישוחופוט	
						<del></del>	
· · · · · · · · · · · · · · · · · · ·	Spud Date: -06/13/2012		Rig Release Date:	06/18/2012			•
	00/10/2012		_				
, J 154	I hereby certify that the information	on above is true and c	omplete to the best	of my knowledge	and belief.		
	and the chine of	Atau : 3	ment to Bog Analy	ro <b>t</b>		9/15/2010	
	<del></del>	ulton	_ TITLE Reg Analy			TE 8/15/2019	
	Type or print name Alicia For State Use Only		E-mail address: 2	alicia.fulton@apach	ecorp.com PH	ONE: (432) 818-	1088
	APPROVED BY	of 3 Follow	FITLE Geo/	na U	DA	re 8-21-/	9
	Conditions of Approval (if any):	7		y Juli	DA	· ~	



AFE: 11-19-0858

Well name:

Washington 33 State #62

API Number:

30-015-40112

County, State:

Eddy, NM

Legals:

SEC-33 TWP-17S RGE-28E

Depths:

5095

MD

**PBTD** 

Producing Interval:

3535'-4287' (Glorietta-Yeso)

CSG

OD

Wt/Ft

Cap (bbl/ft)

4390

Top

Surface

8.625"

24#

0.0609

0'

Set@ 4931

Production

5.500"

17#

0.0232

O'

50951

Engineer:

Evan Roback

432-818-1186 (o)

evan.roback@apachecorp.com

Assistant Foreman:

David Pedroza

575-910-3283 (c)

david.pedroza@apachecorp.com

Production Foreman: Javier Berdoza

575-441-5755 (c)

javier.berdoza@apachecorp.com

## What's New:

- 1) Drill out cast iron bridge plug w/ 35' cmt @ 4295'
- 2) Acidize Blinebry perforations (4450'-4850') w/ 9,000 gallons of 15% HCl and 6,000 lbs salt.
- Acidize Glorietta/Paddock perforations (3535'-4287') w/ 12,000 gallons of 15% HCl and 8,000 lbs salt.
- 4) Lower SN to 4880'.
- 5) Install 1-1/2" rod pump w/ 2-stage, HVR, brass Ni-carb bbl and brass pull tube, alternate (California) ball
- 6) Inspect and replace rods with customer owned as necessary.
- Inspect and replace tubing with customer owned as necessary.

## **WELL HISTORY**

The Washington 33 State #62 is a vertical well completed in the Blinebry with 210 klbs of 16/30 sand and 155,000 gallons of water in 8/2012. Due to offset wells seeing higher productivity from the Glorietta & Paddock, the Blinebry was isolated via CIBP in 1/2013 after approximately 4 months of production. The Glorietta/Paddock were then fracked with 250 klbs sand and 189,000 gallons of water. Production increased from 6 BOPD in the Blinebry to 68 BOPD in the Glorietta/Paddock.

. This well was pulled in 5/2017 due to suspected HIT. The workover found bad tubing due to corrosion/wear, 2 holes in the blast joint, and two joints plugged with frac sand. In 4/2018 the well was pulled due to suspected HIT again. The workover found a hole in the blast joint.

## **WORKOVER SUMMARY:**

The objective of this AFE is to POOH w/ rods and pump. TOOH w/ tubing while scanning. TIH w/ tubing and bit to DO CIBP and 35' cmt, continue CO to TD. Acidize Blinebry & Glorietta/Paddock w/ 21,000 gal 15% HCl with 14,000 lbs salt. TIH w/ tubing while hydro-testing, RIH w/ pump and rods. RTP.



AFE: 11-19-0858

### PROCEDURE:

- 1. MIRU workover rig.
- 2. POOH w/ rods and pump. Report preliminary findings of the pump and rods (paraffin, scale, sand, rod wear, etc.).
- 3. Pump produced water as necessary to ND pumping tee. NU 5k double BOP (2-7/8" rams on top and blinds on bottom) and function test. Release TAC (if not set, please note in WellView).
- 4. TOOH w/ tubing and BHA while scanning.
- 5. MIRU foam air unit. TIH w/ tubing & 4-3/4" bit to PBTD. DO 35' of cement and CIBP. Continue CO to TD @ 5095'. TOOH w/ bit and tubing.
- 6. TIH w/ RBP, packer, and tubing while hydro-testing. Set RBP at +/- 4900'. Pull up hole and set packer at +/- 4350', test backside.
- 7. MIRU acid crew. Verify acid concentration is 15% +/- 1% (titrate). If possible request additives such as inhibitors, surfactants, and iron sequesterant are mixed on location to verify they are present. Verify iron concentration is less than 100 ppm in acid. Circulate tank for 15 minutes to mix additives into solution.
- 8. Acidize the Blinebry. Test lines to 4,500 psi (MSTP = 3500 psi), bleed off. Set pressure safety valve at 4,500. Establish rate at 3-5bbl/min with brine water. Acidize with 9,000 gallons of NEFE 15% HCl acid with 6,000 lbs rock salt in six stages as follows. We may adjust salt volumes based on pressure responses.

STAGE													
PARAMETERS	1		2		3	3		4			6		Total
Rate (bbl/min)	4.5	4.5 4.		4.5 4.5		4.5 4.5		5	4.5				
Max Surface Pressure (psi)	3,500	3,500		3,500		3,500		00	3,500		3,500		
FLUID/STAGE	1 in Carlo		200		. 7.1		e die			200749	1000		
Acid - 15% HCl (gal)	1,500		1,500		1,500		1,500		1,500	12.5	1,500	10755.54	9,000
Salt / Concentration (#, #/bbl)**	500		500	200	500		1,000		1,500		2,000		6,000
Brine Spacer (bbls)	<b>建筑</b> 类	51		51	94	51	74 100	51	10.00	51		51	253
Total Volume (bbls)	86				86		86		86		86		431
Total Time (min)	19		19		19		19		19		19		96

- 9. Release packer, TIH to release RBP. Come up hole and set RPB at +/- 4320'. Pull up hole and set packer at +/- 3500', test backside.
- 10. Acidize the Glorietta/Paddock. Test lines to 4,500 psi (MSTP = 3500 psi), bleed off. Set pressure safety valve at 4,500. Establish rate at 3-5bbl/min with brine water. Acidize with 12,000 gallons of NEFE 15% HCl acid with 8,000 lbs rock salt in six stages as follows. We may adjust salt volumes based on pressure responses.



AFE: 11-19-0858

STAGE												
PARAMETERS	<b>7-1-</b>	2	3	4	5	6	Total					
Rate (bbl/min)	, 4.5	4.5	4.5	4.5	4.5	4.5						
Max Surface Pressure (psi)	3,500	3,500	3,500	3,500	3,500	3,500						
FLUID/STAGE	Allerin	治僧域,遂										
Acid - 15% HCl (gal)	2,000	2,000	2,000 📜 🛴	2,000	2,000	2,000	12,000					
Salt / Concentration (#, #/bbl)**		1,000	1,000	1,500 💝 🕏	2,000	2,000	8,000					
Brine Spacer (bbls)	51	51	51	51	51	51	253					
Total Volume (bbls)	98	98	98	98	98	98	491					
Total Time (min)	22	22	22	22	22	22	109					

- 11. Release packer, TIH to release RPB, TOOH w/ tubing, packer, and RBP.
- 12. TIH w/ production BHA and tubing while hydro-testing. Lower SN to 4880'.
- 13. RIH w/ pump and rods.
- 14. RTP.

#### Apache Corporation DO CIBP & Acidize Work Objective

CURRENT

Region Office Permian / Midland

District /Field Office AFE Type

Start Date -	- TBD	End Date	TBD
Lease	Washington 33 State	KB/GL	3684'/3673'
Well Name	Washington 33 St #62	Well No.	#62
Field	Empire (BP)	TD @	5095'
County	Eddy	PBTD @	4390'
State	New Mexico	ETD @	*.*
AFE #	11-19-0858	API#	30-015-40112
Gross AFE	113,000	Spud Date	6/13/2012
Apache WI	100.000000%	Comp. Date	8/21/2012

AI E Type													
Description	O.D.	Grade	Weight	Depth	Cmt Sx	TOC							
Surface Csg	8 5/8"	J-55	24#	493'	350 sx	Circ 50 sx to surf							
Inter Csg													
Prod Csg	5 1/2"	J-55	17#	5095'	790 sx	Circ 65 bbl cmt to surf							
Casing Liner													

	<b>F</b>		Total	Date	Zone	Actual Perforations	JSPF	Total Perfs
,				8/21/2012	Yeso	4450, 60, 70, 80, 90, 4500, 10, 20, 30, 40, 50, 60, 70, 80, 90, 4600, 4750, 60, 70, 80, 90, 4800, 10, 20, 30, 40, 50	1	27
				1/18/2013	Glorieta-Yeso	3535, 51, 63, 80, 93, 3639, 49, 72, 3702, 32, 41, 58, 73, 82, 3802, 12, 23, 36, 61, 77, 95, 3920, 31, 57, 72, 4006, 38, 48, 60, 76, 4200, 35, 70, 87	1	30
12 1/4" hole								
				Date	Zone	Stimulation / Producing Interval		Amount
	79			8/21/2012	Yeso	Stimulate 4450-4850' w/ 3500 gal 15% HCL; frac w/ 210 klbs 16/30 WHT & 3700 bbls water		
·				1/18/2013	Glorieta-Yeso	Stimulate 3535-4287' w/ 3652 gal 15% HCL; frac w/ 250 klbs 16/30 WHT & 4500 bbls water		
							ļ	-
-							<u> </u>	
	[6] [2]		3535'				<u> </u>	
	- 100 100	<u> </u>	Glorieta- Yeso	ll				
	149	1	4287'			Well History / Failure		
			1			perf and stim Glorietta/Paddock		
	1/4			5/17 - HIT, found pa	raffin & corrosion			
	2		CIBP 4390'	4/18 - HIT				
		No.	1					
		75	1					
		35	4450'					
			Yeso					
		<u>\$6.00</u>	4850'					
			-	Apache Repres	entative	Contract Rig/Number		
7 7/8" hole			TD: 5095'	Apache Engine	er	Evan Roback Operator		

# **Apache Corporation**

Work Objective DO CIBP & Acidize PROPOSED

Region Office Permian / Midland District

•	
t /Field Office	W Distric
AFF Tons	

Start Date	— =- `—TBD—∵——	End Date	TBD
Lease	Washington 33 State	KB/GL	3684'/3673'
Well Name	Washington 33 St #62	Well No.	- #62
Field	Empire (BP)	TD @	. 5095'
County	. Eddy	. PBTD @	. 4390'
State	- New Mexico	ETD @	
AFE#	. 11-19-0858	API#	30-015-40112
Gross AFE	113,000	Spud Date	6/13/2012
Anacho MI	100.000000%	Como Date	8/21/2012

			7 11 EL 13 PC			
Description	O.D.	Grade	Weight	Depth	Cmt Sx	TOC
Surface Csg	8 5/8"	J-55	24#	493'	350 sx	Circ 50 sx to surf
Inter Csg						
Prod Csg	5 1/2"	J-55	17#	5095'	790 sx	Circ 65 bbl cmt to surf
Casing Liner						

			14 2 201	Date	Zone	Actual	Perforations	JSPF	Total Perfs
•				: 8/21/2012	Yeso		. 20, 30, 40, 50, 60, 70, 80, 90, 4600, 0, 4800, 10, 20, 30, 40, 50	1	27
				1/18/2013	Glorieta-Yeso		72, 3702, 32, 41, 58, 73, 82, 3802, 12, 72, 4006, 38, 48, 60, 76, 4200, 35, 70, 87	1	30
12 1/4" hole									
									•
				Date	Zone	Stimulation /	Producing Interval		Amount
				8/21/2012	Yeso	Stimulate 4450-4850' w/ 3500 ga WHT & 3700 bbls water	l 15% HCL; frac w/ 210 klbs 16/30		
	8			1/18/2013	Glorieta-Yeso	Stimulate 3535-4287' w/ 3652 ga WHT & 4500 bbls water	al 15% HCL; frac w/ 250 klbs 16/30		
	Ø								
								<u></u>	
	4					<del> </del>			
	100	\$		•					
		\$3 \$2	3535'						
	<u> </u>	71	Glorieta- Yeso	<u>L</u>					
	1.7		4287'			Well History	/ Failure		
	<b>F</b> 3	68	•			erf and stim Glorietta/Paddock			- :
	. W			5/17 - HIT, found p	araffin & corrosion				
	<u> </u>			4/18 - HIT					
		22A 24.1		-			-		
						·			
	<u> </u>		4450' Yeso					***	
	100	Æ	4850'						
*	15	24	•		•				
				Apache Repre	sentative		Contract Rig/Number		
7 7/8" hole			TD: 5095'	Apache Engine	eer	Evan Roback	Operator		