Form 3160-5 (August 2007)	UNITED STATES		Hobbs	OMB N	APPROVED 0. 1004-0135		
	SUREAU OF LAND MANAGEMI	12000	ocd	5 Lease Serial No.	July 31, 2010		
SUNDRY Do not use th	NMLC063458 6. If Indian, Allottee or Tribe Name						
	is form for proposals to drill on the drill of the drill	• • •	3 2011	o. Ir indian, Anotee o	or Tribe Iname		
SUBMIT IN TR	IPLICATE - Other instructions	on reverse side. RECE	IVED	7 If Unit or CA/Agree	ement, Name and/or No		
1. Type of Well ☐ Gas Well ☐ Ot		/		8 Well Name and No WARREN UNIT E	BLINEBRY-TUBB 93		
2 Name of Operator	Contact JALY	N N FISKE		9. API Well No			
CONOCOPHILLIPS 3a. Address	E-Mail: jalyn.fiske@cono	cophillips.com Phone No. (include area code	<u></u>	30-025-27584	Fyploratory		
330 NORTH "A" STREET BL MIDLAND, TX 79705	DG 6 Ph:	432-688-6813	-)	WARREN BLIN	EBRY/TÚBB O&G		
4. Location of Well (Footage, Sec., 2	× •	11. County or Parish, and State					
Sec 33 T20S R38E SESW 66		LEA COUNTY, NM					
	W .						
	ROPRIATE BOX(ES) TO IND	ICATE NATURE OF	NOTICE, RE	PORT, OR OTHER	R DATA		
TYPE OF SUBMISSION	TYPE OF SUBMISSION TYPE OF ACTION						
Notice of Intent	Deepen		on (Start/Resume)	Water Shut-Off			
☐ Subsequent Report	- Subsequent Percet		Construction Reclamation		□ ^{Well} Integrity □ Other		
Final Abandonment Notice				rily Abandon			
	Plug Back	U Water Di					
Warren #93 is currently on the After $\frac{8-15-11}{5-11}$ the or plans to P & A mus	e Inactive List and planned for m e well must be online at be submitted.	eactivation. See attach	ned procedure				
NOT: FY within Solay o	of well Being Places	l on froducts	801				
14. Thereby certify that the foregoing is	Electronic Submission #106162	verified by the BLM We HILLIFS, sent to the Ho	II Information :	System			
Name(Printed/Typed) JALYN N	FISKE	Title REGUL	Title REGULATORY SPECIALIST				
Signature (Electronic S	ubmission)	Date 04/08/2	Date 04/08/2011				
	THIS SPACE FOR FE	DERAL OR STATE	OFFICE US	E			
Approved By J. D. 2 htt	ook 2	Title LPE	7	. 1	Date 7/14/14		
Conditions of approval, if any, are attached certify that the applicant holds legal or equivient would entitle the applicant to condu- which would entitle the applicant to condu-	d. Approval of this notice does not wan utable title to those rights in the subject		>	L.			
Title 18 U S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	U.S C. Section 1212, make it a crime f tatements or representations as to any i	or any person knowingly and matter within its jurisdiction	d willfully to mak	te to any department or	agency of the United		
** OPERAT	OR-SUBMITTED ** OPERA	TOR-SUBMITTED *	* OPERATO		**		
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Warren Unit #93

Reactivate as Grayburg-San Andres Water Supply Well

API Number 30-025-27584

Location 660' FSL & 1980' FWL; Sec. 33, T-20-S, R-38-E, Lea County, NM

Depths TD = 7000' PBTD = 5750'

Elevation GL = 3496' DF = 3506' KB = 3507' (reference datum)

Casing Data

Existing & Proposed Casing, Tubing and Packer Information

	OD (in)	Depth (ft)	ID/Drift (inches)	Weight (#/ft)	Grade	Burst (psi)	Burst w/ 1.15 D.F.	Collapse (psi)	Collapse w/ 1.05 D.F.	Volume (Bbls/Ft)
Surf. Csg	9%	1400	8.921/8.765	36	K-55	3520	3061	2020	1924	.0773
Prod. Csg	7	6995	6.276/6.151	26	K-55	4980	4330	4320	4114	.0382
Prod. Tbg	21/8	4300±	2.441/2.347	6.5	J-55	7260	6313	7680	7314	.00579

Top of Cement: 2050' by temperature survey on 3/2/1982

Casing Fluid: Fresh Water (0.433 psi/ft)

Proposed Perforations

Formation	Perforations (MD)	Frac Grad	Perf Feet	SPF	Phase	Zero Hole	Holes	Anticipated Reservoir Pressure	Anticipated Reservoir Temperature
Grayburg	4032-4037'	.75	6	2	60°	No	12	2070 psi	102°
Grayburg	4045-4059'	.75	15	2	60°	No	30	2070 psi	102°
Grayburg	4064-4088'	.75	25	2	60°	No	50	2070 psi	102°
Grayburg	4100-4104'	.75	5	2	60°	No	10	2070 psi	102°
San Andres	4115-4140'	.75	26	2	60°	No	52	2070 psi	102°
San Andres	4234-4271'	.75	38	2	60°	No	76	2070 psi	103°
San Andres	4308-4353'	.75	46 [·]	2	60°	No	92	2070 psi	103°
San Andres	4359-4398'	.75	40	2	60°	No	80 ⁻	2070 psi	103°
San Andres	4430-4470'	.75	41	2	60°	No	82	2070 psi	103°
Total			242			•	484	· · · · · · · · · · · · · · · · · · ·	

Correlation Log: Dresser Atlas Compensated Densilog/Compensated Neutron/Gamma Ray Log dated 2/28/1982

Perforating System: 3%" HSD PowerJet 3406 HMX, (API RP 19B: Pen - 36.5", EHD - 0.37")

Recommended Procedure

- 1. Haul in and set pumping unit.
- MIRU well service unit. ND wellhead and NU shop tested, Class 2 Hydraulic BOP and environmental tray. Set frac tank. Load casing with fresh water, test to 800 psi, and hold for 30 minutes. Haul in 4300'<u>+</u> of 2⁷/₈", 6.5#/ft, J-55 production tubing and enough rental 2⁷/₆", 6.5#/ft, J-55 workstring to spot cement at 5750'<u>+</u> in Step #3. Use production tubing as a workstring during well work.
- 3. PU and TIH with 2^{*}/₈", 6.5 lb/ft, J-55 workstring open ended to 5750'±. Dump 35' of cement on top of RBP at 5750'. Pull up and spot cement plug from 5430-5280'. TOOH with 2^{*}/₈" workstring. Stand back enough 2^{*}/₈" workstring for bit trip to 4600'± in Step #4. LD and haul out remaining 2^{*}/₈" rental workstring.

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- 4. TIH with 6¹/₈" bit on 2²/₈" workstring to 4600'±, circulating well clean with fresh water. TOOH with 2²/₈" workstring and 6¹/₈" bit. Stand back 2²/₈" workstring in derrick. LD 6¹/₈" bit.
- 5. MIRU Schlumberger wireline/perforating unit. RU 5000 psi lubricator w/ grease injector. Test lubricator to 4500 psi. Run GR-CCL log from 4600' to 3800' for correlation. Correlate to Dresser Atlas Compensated Densilog/Compensated Neutron/Gamma Ray Log dated 2/28/1982 (log section attached). Perforate the Grayburg from 4032-4037', 4045-4059', 4064-4088', 4100-4104', the San Andres from 4115-4140', 4234-4271', 4308-4353', 4359-4398', and 4430-4470' with 2 SPF, 60° phasing (484 holes, 0.37" diameter, 60 degree phasing), using Schlumberger 3³/₈" HSD PowerJet 3406 HMX perforating system. Verify that all shots have fired after each perforating run. RDMO lubricator and wireline/perforating unit.
- 6. PU and TIH with 7" RBP (with ball catcher) and 7" treating packer on 2^{*}/₈" workstring to 4500'<u>+</u>. Test workstring to 5000 psig while TIH. Set RBP at 4500'<u>+</u>. Set packer at 4190'+.
- 7. MIRU pumping services equipment. RU and test all lines to 5000 psi and monitor for 5 min. Make sure pressure loss does not exceed 200 psi over 5 minutes. Monitor casing/tubing annulus pressure during treatment.
- 8. Set treating line pop-off at 4500 psi. Set pump trips at 4200 psi. Set annulus pop-off at 700 psi. Acidize San Andres perforations 4234-4470' with 4116 gals (98 bbls) of 15% NEFE HCI (25+ gals per perforated foot) at 6-10 BPM using 392 1.1 SG, MR Bio-Balls spaced out evenly in the acid (4 balls per bbl acid). When acid is on perfs, bring rate up to 15 BPM. Acidize with maximum wellhead treating pressure of 4000 psi. Flush to 4470' with fresh water (27+ bbls). Record ISIP. Attempt to surge balls off perforations three times and allow 30 minutes for balls to fall.
 - NOTE: It is ConocoPhillips policy to have shower facilities on location when using acid.
- Unset treating packer, retrieve RBP, and set RBP at 4180'<u>+</u>. If unable to retrieve RBP and well will circulate, reverse circulate balls off of RBP to retrieve RBP. Set packer at 4000'<u>+</u>. Pressure up casing/tubing annulus to 300 psi and monitor casing/tubing annulus pressure during treatment.
- 10. Set treating line pop-off at 5200 psi. Set pump trips at 5000 psi. Set annulus pop-off at 700 psi. Acidize Grayburg perforations 4032-4104' and San Andres perforations 4115-4140' with 3864 gals (92 bbls) 15% NEFE HCl acid (50+ gals per perforated foot) at 6-10 BPM with 184 1.1 SG, MR Bio-Balls spaced out evenly in the acid (2 balls per bbl acid). When acid is on perfs, bring rate up to 15 BPM. Acidize with maximum wellhead treating pressure of 4000 psi. Flush to 4140' with fresh water (21+ bbls). Record ISIP. Attempt to surge balls off perforations three times and allow 30 minutes for balls to fall. Close Hydraulic master valve. RDMO pumping services equipment.
- 11. RU swab equipment and swab test. RD swab equipment.
- 12. Unset treating packer, retrieve RBP, and TOOH w/ RBP, packer, and 2⁷/₈" workstring. Stand back 2⁷/₈" production tubing used as workstring in derrick. LD RBP, treating packer and 2⁷/₈" rental workstring. Haul in rods as per rod design in WellView. Haul out remaining 2⁷/₈" rental workstring.

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- 13. TIH with 2%, 6.5 lb/ft, J-55 tubing per tubing design in WellView. Place the EOT at 4300'± with the tubing anchor set at 4000'±. Maintain a dynamic fluid column as needed while running tubing.
- 14. ND BOP and NU wellhead. RIH with pump and rods as per pump and rod design in WellView. Space out pump and hang well on. Load tubing and check pump action.
- 15. RDMO well service unit. Release ancillary surface equipment.
- 16. Turn well over to Operations and place well on production. Report well tests on morning report. Place stabilized well test in Avocet. Contact chemical representative to place well on corrosion inhibition program if needed. Submit change of status report.

Jack T. Lowder 2/22/2011