#### Form 3160-5 (August 2007)

# OCD-HOBBS

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

5. Lease Serial No. LC031695B

6. If Indian, Allottee or Tribe Name

# 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

abandoned well. U	Jse Form 3160-3 (AP	PD) for such	proposals.					
	IN TRIPLICATE - Other in	nstructions on pa	ige 2.		7. If Unit of CA/Agreen Warren Unit	ment, Name and/or No.		
1. Type of Well  Oil Well  Gas W	ell Other	/			8. Well Name and No. Warren Unit #6			
2. Name of Operator ConocoPhillips Company					9. API Well No. 30-025-07853			
3a. Address PO Box 51810 Midland, Texas 79710		3b. Phone No. (mo	clude area code)		10. Field and Pool or E Warren: McKee	xploratory Area		
4. Location of Well (Footage, Sec., T, K 660 FSL & 1980 FWL, Section 29, T20S, R38E	.,M., or Survey Description)	/			11. Country or Parish, S Lea, NM	State		
12. CHEC	K THE APPROPRIATE BOX	K(ES) TO INDICA	TE NATURE C	F NOTIC	CE, REPORT OR OTHE	ER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION						
✓ Notice of Intent	Acidize Alter Casing Casing Repair	Deepen Fracture New Con		Recla	uction (Start/Resume) amation mplete	Water Shut-Off Well Integrity Other		
Subsequent Report	Change Plans		Abandon		porarily Abandon			
Final Abandonment Notice	Convert to Injection	Plug Bac	k	Wate	r Disposal			
following completion of the involve testing has been completed. Final A determined that the site is ready for ConocoPhillips respectfully submits the new procedure attached outlines.  Based on the POD submitted the reco	Abandonment Notices must be final inspection.)  and amended recompletion a Blinebry/Tubb recomplet completion on this well will be a second to the second to	e filed only after an program for the tion with the inte	Il requirements, in the Warren Unit # Int to commingle	including 6. The centre pro	APPR NOV /s/ Chris	for a Blinebry recompletion, but is complete.		
SUBJECT TO LIKE APPROVAL BY STATE			-		BUREAU OF LAN CARLSBAD F	ID MANAGEMENT FIELD OFFICE		
14. I hereby certify that the foregoing is true and correct. Name Justin C . Firkins			tle Regulatory	Speciali	st			
Signature Justic	Tille	Da	ate 10/20/2009	)				
	THIS SPACE F			TE OF	FICE USE			
Approved by	Υ	WB-OCD 11-17-200	7		D	oate (		
Conditions of approval, if any, are attached that the applicant holds legal or equitable to entitle the applicant to conduct operations to	tle to those rights in the subject							
Title 18 U S C Section 1001 and Title 43 U fictitious or fraudulent statements or repres			n knowingly and	willfully t	o make to any department	or agency of the United States any false,		

# **WARREN UNIT #6**

# WBS ELEMENT - WA5.CNM.

WellView Well Name - WARREN UNIT 006

Re-Completion Procedure

October 2, 2009

Objective: Recomplete to the Blinebry and Tubb

**COPC WI: 37.5%** 

COPC NRI: 32.55%

Well Status: TA'd

Well Type: Oil Well

Field: Warren

County: Lea Team: Permian Oil

Area: Permian

Flaring: Permit not required

H<sub>2</sub>S:

Venting: Permit not required

Well Control: Class 2 Category 1 (post perforating & post stimulation)

Possible

**IMPORTANCE OF SAFETY** 

Safe operations are of utmost importance at all ConocoPhillips properties and facilities. To further this goal, the ConocoPhillips Supervisor at the location shall request tailgate safety meetings prior to initiation of work and also prior to any critical operations. All company, contract, and service personnel then present shall attend these tailgate safety All parties shall review the proposed upcoming steps. meetings at the location. procedures, and potentially hazardous situations. Occurrence of these meetings shall be recorded in the WellView daily report.

#### **History / Justification**

The purpose of the proposed project is to recomplete the Warren Unit #0006, a temporarily abandoned well, to the Blinebry and Tubb formations. The subject well was originally drilled to 9160' in 1950 and completed in the McKee from 9011-9116'. The McKee produced 783,037 BO, 542,948 MCFG with 857,424 BW during its lifetime. The well was TA'd in June 1994 with an RBP set at 8680'.

An initial rate of 25 BOPD with 50 MCFD is projected based upon offset production. Economics were performed using an exponential decline rate of 25% per year, a recompletion cost of \$580,000, a facilities cost of \$100,520, and an operating cost of \$7.92/BOE per year. ConocoPhillips owns a 37.5% WI and an NRI of 32.55% in the Blinebry formation. This project yields an ATAX ROR of 41.4% with an NPV of \$99M at 13%.

#### **GENERAL NOTES**

- 1. No project or task is to be performed unless it can be done safely and without harm to the environment. All work must comply with all State and Federal regulations and with COPC Safety and Environmental Policies.
- 2. Conduct daily safety meetings and review all procedures with all contractors prior to performing the operation.
- 3. Report all activity on the WellView Daily Completion Work-Over Report.
- 4. Insure contractors are familiar with and comply with all relevant COPC safety/environmental policies.
- 5. Spills are to be prevented. Utilize a vacuum truck as necessary.
- 6. Throughout the entire completion process, any fluids from the well-bore that are displaced or produced must be sent through the flow-back equipment so that the fluids can be properly disposed.
- 7. Verify that all pressured lines and fittings meet or exceed the MPSP (Maximum Predicted Surface Pressure) for the treatment lines of **5500** psi for the pressure test during stimulation operations. Maximum treatment pressure during the frac jobs will be **5500** psi. MPSP from the zone should not be greater than 2000 psi before & after stimulation operations of the Blinebry and Tubb zones.
- 8. Well control for this well will be Class 2, Category 1 before and after stimulation. Expected Shut in Casing Pressures (SICP) before & after stimulation should not exceed 600 psi.

#### Mid-Continent / Permian / Hobbs East Contact List:

Reservoir Engineer:	D. Pecore	832-486-2145
Geologist:	V. Leon	832-486-2478
Production Engineer:	J. Lowder	432-368-1609
Facilities Engineer Tech:	L. Johansen	432-368-1223
Operations Supervisor:	J. Coy	575-391-3127
Projects Planner:	D. Garrett	432-368-1410
Production Foreman:	V. Mackey	575-391-3129

Prepared by: David McPherson:

Contract Production Engineer, Panhandle/Permian Group Mobile: 1 (903) 316-4272 Home: 1 (903) 894-3547

#### Warren Unit #6 Re-Complete to the Blinebry and Tubb formations

AFE Number:

WA5.CNM.\_\_\_\_

**API Number:** 

30-025-07853

Field:

Warren

Location:

660' FSL & 1980' FWL, Sec. 29, T-20-S, R-38-E, Lea County, NM

Depths:

TD = 9160

PBTD = 8680'

Elevation:

GR = 3515' DF = 3527' KB = 3528'

#### Casing Data:

**Existing & Proposed Casing, Tubing and Packer Information** 

	OD (in)	Depth (ft)	ID/Drift (inches)	Weight (#/ft)	Grade	Burst	Burst w/ 1.15 D.F.	Collapse (psi)	Collapse w/ 1.05 D.F.	Volume (Bbls/Ft)
Int. Csg.	75/8	2893'	7.025/6.900	24#	H-40	2750	2391	2040	1943	.0479
Prod Csg	5½"	9159'	4.950/4.825	15.5#/ 17#	J-55/ <b>N</b> -80	4800	4174	4040	3847	.0238
Prod	21/8"	6719'±	2.441/2.347	6.5#	J-55	7260	6313	7680	7314	00579

Top of Cement: 4650 by temp survey

Casing Fluid: Fresh Water

### **Proposed Cased Hole Perforations**

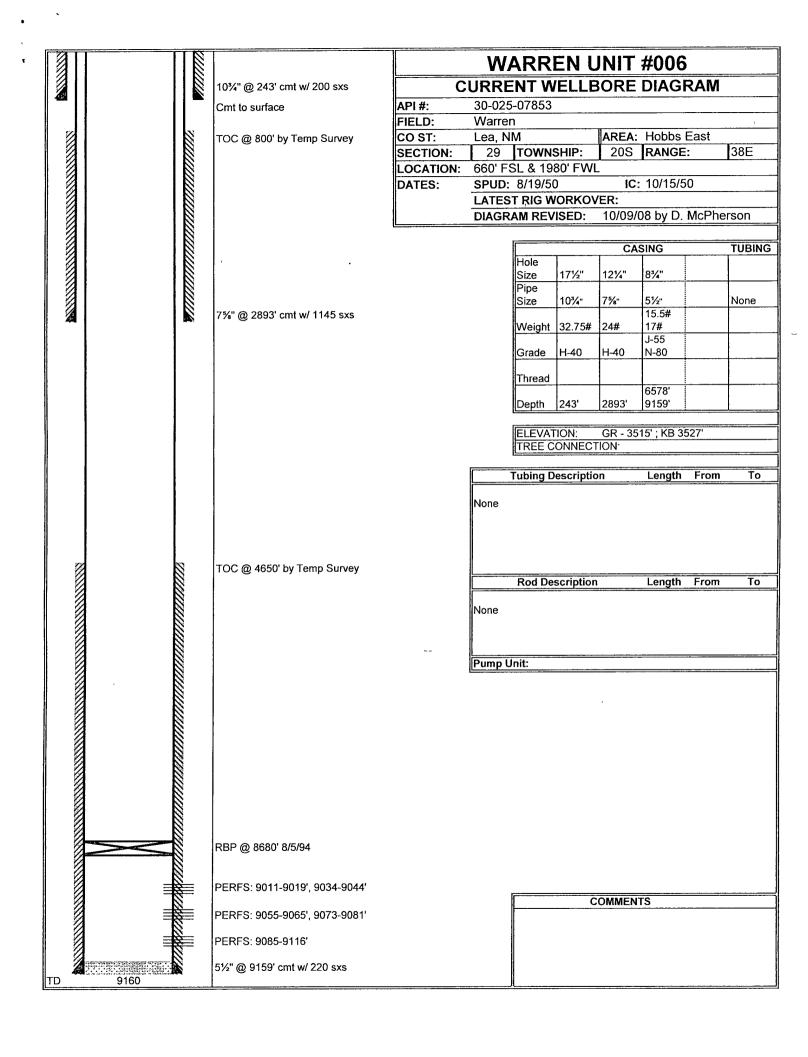
Formation	Perforations (MD)	Frac Grad	Perf Feet	SPF	Phase	Zero Hole	Holes	Anticipated Reservoir Pressure	Reservoir Temp
Blinebry	5782-5786'	.84	4	2	60°	No	8	2689	104°
	5816-5820'	.84	4	2	60°	No	8	2704	104°
	5845-5848'	.84	3	2	60°	No	6	2718	104°
	5864-5867'	.84	3	2	60°	No	6	2727	104°
	5879-5784'	.84	5	2	60°	No	10	2734	104°
	5902-5905'	.84	3	2	60°	No	6	2744	104°
	5924-5927'	.84	3	2	60°	No	6	2755	104°
	5945-5947'	.84	2	2	60°	No	4	2764	104°
	5980-5984'	.84	4	2	60°	No	8	2781	104°
Tubb	6488-6492'	.84	4	2	60°	No	8	3017	106°
	6541-6546'	.84	5	2	60°	No	10	3042	106°
	6568-6573'	.84	5	2	60°	No	10	3071	106°
	6604-6609'	.84	5	2	60°	No	10	3071	106°
	6616-6619'	.84	3	2	60°	No	6	3084	106°
	6632-6637'	.84	5	2	60°	No	10	3084	106°
	6657-6660'	.84	3	2	60°	No	6	3096	106°
	6685-6689'	.84	4	2	60°	No	8	3109	106°

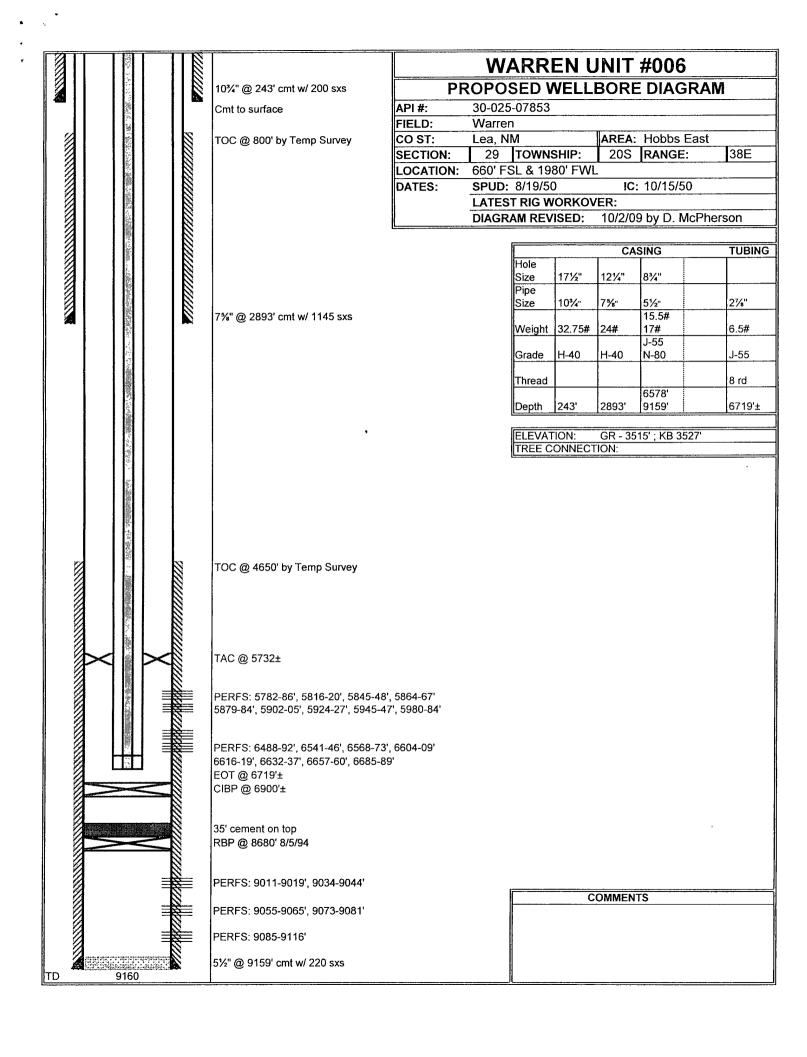
Correlation Log: Schlumberger Compensated Neutron Log dated 12/09/08 Gun Type: Schlumberger's 3%" SLB Power Jet 3406 HMX, 22.7 gm

# **Recommended Procedure**

- 1. MIRU well service unit. ND wellhead and NU BOP's and test. Load casing with 9 ppg brine, test to 700 psi, and hold for 30 minutes. Haul in 21/8", 6.5# production tubing for use as a workstring.
- 2. PU and RIH with 4¾" bit on 2½", 6.5# production tubing as workstring to 6950'±, circulating well clean with fresh water. POOH with 2½" workstring and bit. Lay down drill bit.
- 3. MIRU Schlumberger wireline. RU 1000 psi lubricator. Run GR-CBL-CCL log from 6900'± to 3500'±. Correlate to Schlumberger Compensated Neutron Log dated 12/09/08. Call engineer with top of cement per CBL log. Dump bail 35' of cement on top of RBP @ 8680'. TIH and set CIBP @ 6900'±.
- 4. Perforate the Tubb from 6488-6492', 6541-6546', 6568-6573', 6604-6609', 6616-6619', 6632-6637', 6657-6660', and 6685-6689' with 2 SPF, 60° phasing (68 holes), using Schlumberger's 3%" SLB Power Jet 3406 HMX, 22.7 gm.
- 5. RDMO wireline and lubricator.
- 6. PU 3½" workstring and RIH with 5½" packer. Test 3½" workstring to 8,000 psi while RIH. Set packer at 6400'±.
- 7. Spot three 500 bbl clean, lined frac tanks and fill frac tanks with fresh water. Add biocide to the first load of each tank.
- 8. MIRU Schlumberger pumping services equipment. RU and test all lines to 7,500 psi and monitor for 5 min. Make sure the pressure does not decrease more that 300 psi over the 5 min. Pressure up casing / tubing annulus to 300 psi and monitor during job.
- 9. Perform acid ballout with 1700 gals of 15% HCl acid at 6-to-10 BPM with 75± 1.1 SG Bioballs as per schedule. Surge the well 2-3 times to dislodge balls. Shut down for 30 minutes to allow balls to fall.
  - Note: It is a ConocoPhillips policy to have shower facilities on location when using acid.
- 10. Fracture treat the Tubb with 45,000 gal of YF120ST containing 100,000 lbs of 20/40 sand coated with propnet as per attached treating schedule. Set treating line pop off at 7000 psi. Set pump trips at 6500 psi. Set annulus pop off at 700 psi. Frac at 30-35± BPM with maximum wellhead treating pressure of 5500 psi.
- 11. Obtain ISIP and 5 minute, 10 minute, and 15 minute shut-in pressures. Close Hydraulic Master Valve. RD Schlumberger Iron.
- 12. Unseat packer. Tag for fill, reverse out any excess sand from tubing if flush volume not achieved. POOH with 5½" packer and 3½" workstring. Stand back 3½" workstring and packer.
- 13. MIRU Schlumberger wireline. TIH and set 5K composite plug @ 6200'±. Perforate the Blinebry from 5782-5786', 5816-5820', 5845-5848', 5864-5867', 5879-5884', 5902-5905', 5924-5927', 5945-5947', and 5980-5984' with 2 SPF, 60° phasing (62 holes), using Schlumberger's 3¾" SLB Power Jet 3406 HMX, 22.7 gm.

- 14 RDMO wireline and lubricator.
- 15. PU 3½" workstring and RIH with 5½" packer. Test 3½" workstring to 8,000 psi while RIH. Set packer at 6400'±.
- 16. Fill three 500 bbl clean, lined frac tanks and fill frac tanks with fresh water. Add biocide to the first load of each tank.
- 17. MIRU Schlumberger pumping services equipment. RU and test all lines to 7,500 psi and monitor for 5 min. Make sure the pressure does not decrease more that 300 psi over the 5 min. Pressure up casing / tubing annulus to 300 psi and monitor during job.
- 18. Perform acid ballout with 1,600 gals of 15% HCl acid at 6-to-10 BPM with 68± 1.1 SG Bioballs as per schedule.. Surge the well 2-3 times to dislodge balls. Shut down for 30 minutes to allow balls to fall.
  - Note: It is a ConocoPhillips policy to have shower facilities on location when using acid.
- 19. Fracture treat the Blinebry with 40,000 gal of YF120ST containing 94,000 lbs of 20/40 sand coated with propnet as per attached treating schedule. Set treating line pop off at 7000 psi. Set pump trips at 6500 psi. Set annulus pop off at 700 psi. Frac at 30-35± BPM with maximum wellhead treating pressure of 5500 psi.
- 20. Obtain ISIP and 5 minute, 10 minute, and 15 minute shut-in pressures. Close Hydraulic Master Valve. RD Schlumberger Iron.
- 21. Unseat packer. Tag for fill, reverse out any excess sand from tubing if flush volume not achieved. POOH with 5½" packer and 3½" workstring. Lay down 3½" workstring and packer.
- 22. TIH with 4¾" bit on 2½" workstring to composite plug @ 6200'±; drill out plug and continue TIH to CIBP @ 6900'±. Circulate out any excess sand from frac job. When wellbore is clean, POOH with 2½" workstring.
- 23. RIH with the 2½ production tubing (per tubing design in Well View). Place the EOT at 6719'± with the tubing anchor at 5732'±. Maintain a dynamic fluid column (DFC) while running tubing. (Trickle some fresh water down the tubing head valve.)
- 24. ND BOP's and NU wellhead. RIH with pump and rods (per rod design in WellView). Space and hang well on. Load tubing and check pump action.
- 25. RDMO well service rig. Release any ancillary equipment. Clean up location.
- 26. Turn well over to Operations. Place well on production. Report well tests on morning report. Place stabilized well test in Field View. Contact chemical representative to place well on corrosion inhibition and scale squeeze program if needed. Submit change of status report





# Warren Unit #6 30-025-07853 Conoco Phillips Company November 9, 2009 Conditions of Approval

- 1. Surface disturbance beyond the existing pad must have prior approval.
- 2. Closed loop system required.
- 3. Operator to have H2S monitoring equipment on location as H2S has been reported from wells in the surrounding area.
- 4. A minimum of a 2M BOP is required and must be tested prior to beginning work.
- 5. Contact BLM 575-393-3612 a minimum of 24 hours prior to resetting RBP above McKee.
- 6. The RBP must be removed and a CIBP set between 50' and 100' above the top McKee perforations with 35' of cement bailed on top.
- 7. Spot 25 sxs Class H neat at 8,100'. Top of Fusselman at 8,050'.
- 8. Spot 25 sxs Class H neat at 7,805'. Top of Devonian at 7,755'.
- 9. Work to be completed by 12/31/09.
- 10. A commercial well determination must be submitted after 6 months of production, based on outcome the Participating Area for this well may be expanded.
- 11. Subsequent sundry and completion report required.

**CRW 110909**