

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2014

**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.**

5. Lease Serial No.  
NMLC057210

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

☐ Oil Well ☐ Gas Well ☒ Other

2. Name of Operator  
ConocoPhillips Company

3a. Address  
P. O. Box 51810 Midland TX 79710

3b. Phone No. (include area code)  
(432)688-9174

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.  
MCA Unit 480

9. API Well No.  
30-025-39766

10. Field and Pool or Exploratory Area  
Maljamar, Grayburg-San Andres

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
UL O, 1310 FSL & 1995 FEL, Sec 28, 17S, 32E

11. County or Parish, State  
Lea NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

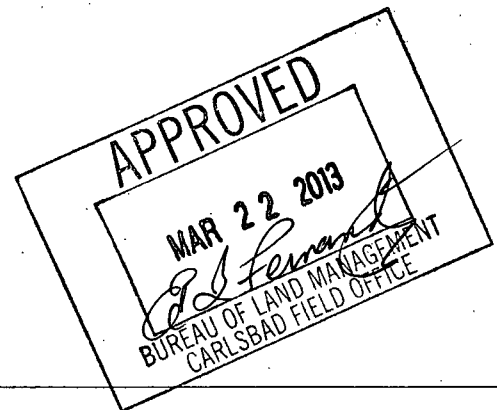
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>stimulate</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

ConocoPhillips request to stimulate this injection well per attached procedures.

SUBJECT TO LIKE  
APPROVAL BY STATE

HOBBS OCD  
MAR 22 2013  
RECEIVED



14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Rhonda Rogers

Title Staff Regulatory Technician

Signature

Date 02/13/2013

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

APR 09 2013



API #30-025-39766  
MCA 480: Grayburg Frac  
Maljamar Field  
Lea County, New Mexico

The subject workover consists of frac-treating the Grayburg gross completion interval: 3858-3932 w/ 22,500 gal 20# x-link gel w/ 48,000# 16/30 sand & 22,000# 16/30 resin-coated sand.

MCA 480W was drilled during September 2010 and initially completed as an injection well. MCA 480W was not frac-treated on initial completion. The well remained shut-in until well was placed in injection service during 3<sup>rd</sup> qtr 2011.

#### WELL CATEGORY, BOP CLASS AND EXCEPTIONS

##### Well Category One:

H2S: 0 ppm (water injection well).  
Well Rate: P&A  

H2S	ROE- ft.
100 ppm	0
500 ppm	0

**BOPE Class One:** Hydraulic BOP recommended.

#### PROCEDURE

- Spot 3 clean 500 bbl frac tanks. Load tanks w/ 2% KCl water prior to frac date. Water to be biocide-treated by frac-service provider.
- MI & RU service unit. The following is a well file source summary of current well configuration (last well service: 03.2012):

MCA 480W (30-025-39766)	Depth (RKB): ft.		
1310 FSL & 1995 FEL, 28 O-17S-32E	KB - GL: 14 ft.		
Elev.: 3959 KB; 3945 GL	top	btm	
8-5/8", 24#, J-55 in 12-1/4" hole	surface	914	09.13.10: Cmt w/ 570 sx (163 bbl). Circ 241 sx (75 bbl) to surface
5-1/2", 17#, J-55 in 7-7/8" hole	surface	832	09.18.10: Cmt w/ 760 sx (282 bbl). Circ 103 sx (47 bbl) to surface
5-1/2", 17#, J-55 w/ ECP	839	856	09.22.10: per SLB cased-hole GR/CNL/CCL log
5-1/2", 17#, J-55 in 7-7/8" hole	868	4159	
Downhole Equipment:			
Tbg: 2-3/8", 4.7#, J-55 IPC	surface	3806	03.29.12:
OFT w/ 1.875" XN Profile	3806	3807	03.29.12:
PKR: 2-3/8" x 5-1/2", 17#	3807	3815	03.29.12:
Completion Intervals:			
Grayburg	3858	3869	09.28.10: 11 ft @ 3 spf ( 33 holes)
	3875	3917	09.28.10: 42 ft @ 3 spf (126 holes)

	3922	3932	09.28.10: 10 ft @ 3 spf ( 30 holes)
San Andres	3952	3975	09.28.10: 23 ft @ 3 spf ( 69 holes)
	3976	3999	09.28.10: 23 ft @ 3 spf ( 69 holes)
	4019	4064	09.28.10: 45 ft @ 3 spf (135 holes)
	4066	4090	09.28.10: 24 ft @ 3 spf ( 72 holes)
PBD	4108	4159	09.22.10: Cased-hole logger PBD: 4108 (Driller PBD: 4114)
			03.29.12: GR/CBL Logger PBD 4082 (possible 26 ft fill)
TD	4159	4176	09.17.10: TD 7-7/8" hole

3. Note & record SITP.

RU wireline unit. NU lubricator. Test @ 500# over SITP.

Open well. RIH & set plug in XN profile nipple (1.791" No-Go ID x 1.875" packing bore).

Test plug @ 500# over SITP.

Bleed down pressure & check for flowback.

RD wireline unit.

	Workover: Obtain CBL
04.02.12	SITP: 500# (test BHP: 2350# @ 0 RMSL). Attempt to set plug in OFT w/ 1.875" XN nipple. Unable to pass through master valve
	" ...master valve was heavy duty w/ plastic coating ID....too small for tbg plug"
	Kill well w/ 10# brine. ND well. NU BOP. Rel from OFT. Circ 10 bbl 10# brine. Engage OFT. Rel PKR. POOH w/ tbg & PKR.

4. ND well. NU BOP. POOH w/ 2-3/8", 4.7#, IPC tbg & PKR.

PU & RIH w/ 2-7/8", 6.5#, N-80 workstring w/ csg scraper & 4-3/4" bit (5-1/2", 17# ID: 4.892"; Drift ID: 4.767"). Clean out to below lowermost perforation: 4090; PBD: 4108).

POOH w/ tbg, csg scraper & bit.

5. PU & RIH w/ 2-7/8", 6.5#, N-80 tbg string w/ PKR & RBP. Test tbg below slips @ 8500# while RIH (2-7/8", 6.5#, N-80 Internal Yield Prs: 10570#).

Acidize perforated intervals w/ total of 6000 gal (142.9 bbl) 15% NE Fe HCl:

NOTE:

Initial stimulation efforts of 09.29.10 suggest Grayburg & San Andres completion intervals may be in communication behind 5-1/2" csg. However, CBL of 04.03.12 indicates excellent bond over interval: 2050-4082.

09.29.10	PU & RIH w/ tbg, PKR & RBP. Set RBP @ 4097. Test @ 500#. Set PKR @ 4007.
	Open PKR by-pass. Displace tbg to PKR w/ acid (23.2 bbl: 20% HCl). Close by-pass.
	Acid SA7L (4019-4090): Breakdown @ 4306#. Pump cum total of 30 bbl 20% HCl: 4 BPM-2008#. Comm. Flush w/ 5 BW.
	Re-set PKR @ 3944. Acid SA7U & SA7L (3952-4090). Pump cum total of 95 bbl 20% HCl: 4 BPM-1800#. Comm. Flush w/ 5 BW
	Re-set PKR @ 3847. Acid Grbg & SA (3858-4090). Pump cum total of 274 bbl (11,500 gal) 20% HCl & 3200 gal 15% HCl
	Flush w/ 42 bbl (fresh wtr). P(avg): 1700#. AIR: 4 BPM. ISIP: 1380# (grad.: 0.8 psi/ft).

Open well. Well on vac. Rel PKR. RIH & retrieve RBP. Start out of hole.

NOTE: Grayburg & San Andres may be in communication behind 5-1/2" casing

04.03.12	RU wireline. Install lubricator. RIH w/ GR/CBL. Tag @ 4082 (btm perf: 4090; PBD 4108). Log from 4080 to surface. RD wireline.
	surf-1300: excellent bond
	1300-2050: poor to very poor (no) bond
	<b>2050-4082: excellent bond</b>
	NOTE: CBL-indicated ECP @ 839-856

Perforated Interval 4019-4090: Acidize w/ 2500 gal (59.5 bbl) 15% NEFE HCl

Set RBP @ 4450 (between lowermost perforation @ 4090 & PBD @ 4108).

Set PKR 4010 (between perforations: 3999-4019; csg collars: 3986 & 4029).

Pump down tbg w/ 10 bbl 2% KCl water. Check for communication

If no communication:

Acidize 4019-4090 w/ 2500 gal 15% NE HCl.

Flush w/ 35 bbl 2% KCl water (anticipated treating prs: 2500# @ 3 BPM)

Record ISIP & SITP(5 min).

Perforated Interval 3952-3999: Acidize w/ 1750 gal (41.7 bbl) 15% NEFE HCl

Set RBP @ 4010 (between perforations: 3999 & 4019).

Set PKR 3940 (between perforations: 3932 & 3952; csg collars: 3901, 3943 & 3986).

Pump down tbg w/ 10 bbl 2% KCl water. Check for communication.

If no communication:

Acidize 3952-3999 w/ 1500 gal 15% NE HCl.

Flush w/ 35 bbl 2% KCl water (anticipated treating prs: 2500# @ 3 BPM)

Record ISIP & SITP(5 min).

Perforated Interval 3858-3932: Acidize w/ 1750 gal (41.6 bbl) 15% NEFE HCl

Set RBP @ 3940 (between perforations: 3932 & 3952; collars: 3901, 3943 & 3986)

Set PKR @ 3800 (above uppermost perforation @ 3858; csg collars: 3772 & 3816)

Obtain PIR w/ 10 bbl 2% KCl.

Acidize 3858-3952 w/ 2000 gal 15% NE HCl

Flush w/ 35 bbl 2% KCl water (anticipated treating prs: 2500# @ 3 BPM)

Record ISIP & SITP(5 min)

Re-set PKR @ 2470 (csg collars: 2405 & 2448).

Load 2-7/8" x 5-1/2" annulus & prs up to 500#. Check for communication w/ tbg.

6. RU HES. Set treating line pop-off to release @ 8000#.  
Set pump trips @ 7500#  
Install spring-operated relief valve on csg-tbg annulus. Pre-set @ 500#.  
Load 2-7/8" x 5-1/2" annulus. Note annulus fill volume. Place 200# on csg.  
Test surface lines @ 8500#.

Frac 3858-3932 down 2-7/8", 6.5#, N-80 tbg w/ 22,500 gal 20# x-link w/ 48,000 16/30 sand & 22,000 resin-coated 16/30. Mark flush @ 2#. Flush w/ 1900 gal linear gel (capacity to uppermost perforation: 1956 gal; 46.5 bbl). Anticipated treating rate: 25 BPM @ 5000#.

			Clean Vol.			Proppant			Slurry Vol			Pump Time @ 25 BPM	
	Fluid	Proppant	gal	bbl	Cum bbl	ppg	lbs	Cum lbs	gal	bbl	Cum bbl	min.	cum min.
Pre-Pad			1,000	23.8	23.8	0.00	0	0	1,000	23.8	23.8	1.0	1.0
Pad			10,000	238.1	261.9	0.00	0	0	10,000	238.1	261.9	9.5	10.5
Stage		16/30	1,500	35.7	297.6	0.50	750	750	1,534	36.5	298.4	1.5	11.9
Stage		16/30	1,750	41.7	339.3	1.00	1,750	2,500	1,829	43.6	342.0	1.7	13.7
Stage		16/30	2,000	47.6	386.9	1.50	3,000	5,500	2,136	50.9	392.8	2.0	15.7
Stage		16/30	2,250	53.6	440.5	2.00	4,500	10,000	2,454	58.4	451.3	2.3	18.1
Stage		16/30	2,500	59.5	500.0	2.50	6,250	16,250	2,783	66.3	517.5	2.7	20.7
Stage		16/30	2,750	65.5	565.5	3.00	8,250	24,500	3,124	74.4	591.9	3.0	23.7
Stage		16/30	3,000	71.4	636.9	3.50	10,500	35,000	3,476	82.8	674.7	3.3	27.0
Stage		16/30	3,250	77.4	714.3	4.00	13,000	48,000	3,839	91.4	766.1	3.7	30.6
Stage		CRC 16/30	3,500	83.3	797.6	4.00	22,000	70,000	4,497	107.1	873.1	4.3	34.9
Flush			1,900	45.2	842.9	0.00	0	70,000	1,900	45.2	918.4	1.8	36.7
			35,400	842.9			70,000		38,571	918.4		36.7	

Report ISIP, SITP(5 min), SITP(10 min) & SITP(15 min). RD frac services.

SION to allow resin-coated sand to cure.

- Flow back well until dead. POOH w/ 2-7/8", 6.5#, N-80 frac string & PKR.
- RIH w/ 2-7/8" tbq & RBP retrieving tool. Wash sand off RBP. POOH & LD 2-7/8" tbq & RBP.
- RIH w/ 2-3/8", 4.7#, J-55 IPC tbq w/ OFT & re-dressed injection PKR (5-1/2", 17#) w/ pump-out plug.

NOTE:

04.02.12	SITP: 500#. Attempt to set plug in OFTw/ 1.875" XN nipple. Unable to pass through master valve
	"...master valve was heavy duty w/ plastic coating ID....too small for tbq plug"

Set PKR @ approximately 3800

uppermost perforation: 3858  
previous PKR placement: 3807-3815  
csg collars: 3772, 3815, 3858

Release from OFT. Circ well w/ PKR fluid (2-3/8" x 5-1/2", 17# capacity to 3800: 67.6 bbl). Engage OFT.

- ND BOP. NU well. Shear pump-out plug. RD

- Place well on injection @ 500 BWIPD WIC-rate. Confirm XSPOC recording of rates & pressures

	Internal Yield Prs: psi		ID: in.	Drift ID: in.	Capacity	
	100%	80%			bbl/ ft	gal/ft
2-3/8", 4.7#, J-55	7700	6160	1.995	1.901	0.00387	0.1624
2-7/8", 6.5#, N-80	10570	8456	2.441	2.347	0.00579	0.2431
5-1/2", 17#, J-55	5320	4256	4.892	4.767	0.0232	0.9764
2-3/8" x 5-1/2", 17#					0.0178	0.7463
2-7/8" x 5-1/2", 17#					0.0152	0.6392

	MCA 480 (API: 30-025-39766)	
	1310 FSL & 1995 FEL, 28(O)-17S-32E	
	Elev.: 3959 KB; 3945 GL (KB - GL: 14 ft.)	
09.13.10	Spud. Drl 12-1/4" hole to 925. Lost 600 bbl fresh water. SD. Reported water flow: 1.25 BPM (8.3 ppg...fresh water)	
	Set 8-5/8", 24#, J-55 csg @ 914. Cmt w/ 570 sx (163 bbl). Circ 241 sx (75 bbl) to surface.	
09.14.10	Drl 7-7/8" hole: 925-935. Run FIT. EMW: 15.7 ppg (Rustler).	
	Drl 7-7/8" hole: 935-1070	
09.15.10	Drl 7-7/8" hole: 1070-2775	
09.16.10	Drl 7-7/8" hole: 2775-3629	
09.17.10	Drl 7-7/8" hole: 3629-4176 TD. Reported 10 BPH water flow ( @ TD???...depth not reported)	
09.18.10	Set 5-1/2", 17#, J-55 csg @ 4159 w/ ECP positioned @ 839-856. Cmt w/ 760 sx (282 bbl). Circ 103 sx (47 bbl) to surface.	
09.22.10	Run cased-hole logs. PBD: 4108 (ECP: 832-868 w/ pack-off: 840-856)	
	Initial Completion.	
09.28.10	Perforate @ 3 spf:	
	Grayburg (Grbg6): 3858-3869 (11 ft.: 33 holes)	
	3875-3917 (42 ft.: 126 holes)	
	3922-3932 (10 ft.: 30 holes)	
	Upper San Andres (SA7U): 3952-3975 (23 ft.: 69 holes)	
	3976-3999 (23 ft.: 69 holes)	
	Upper San Andres (SA7L): 4019-4064 (45 ft.: 135 holes)	
	4066-4090 (24 ft.: 72 holes)	
09.29.10	PU & RIH w/ tbq, PKR & RBP. Set RBP @ 4097. Test @ 500#. Set PKR @ 4007.	
	Open PKR by-pass. Displace tbq to PKR w/ acid (23.2 bbl: 20% HCl). Close by-pass.	
	Acid SA7L (4019-4090): Breakdown @ 4306#. Pump cum total of 30 bbl 20% HCl: 4 BPM-2008#. Comm. Flush w/ 5 BW.	
	Re-set PKR @ 3944. Acid SA7U & SA7L (3952-4090). Pump cum total of 95 bbl 20% HCl: 4 BPM-1800#. Comm. Flush w/ 5 BW	
	Re-set PKR @ 3847. Acid Grbg & SA (3858-4090). Pump cum total of 274 bbl (11,500 gal) 20% HCl & 3200 gal 15% HCl	
	Flush w/ 42 bbl (fresh wtr). P(avg): 1700#. AIR: 4 BPM. ISIP: 1380# (grad.: 0.8 psi/ft).	
	Open well. Well on vac. Rel PKR. RIH & retrieve RBP. Start out of hole.	
	NOTE: Grayburg & San Andres in communication behind 5-1/2" casing	
09.30.10	Fin POOH w/ tbq, PKR & RBP. RIH w/ inj PKR w/ POP & 2-3/8", 4.7#, J-55 IPC inj tbq w/ OFT (1.875" XN).	
	Set PKR @ 3807. Rel from OFT. SION.	
10.01.10	Circ well w/ 100 bbl PKR fluid. ND BOP. NU well. Chart tbq-csg annulus @ 550#-40 min. RD.	
	Workover: Data Acquisition	

05.11.11	SITP: 180#. MI & RU slickline & lubricator. RIH w/ prs recorder. Make following 2 min. gradient stops:				
	Depth	psig	psig/ft	T(F)	T(F)/ft
	surf	179.84		86.51	
	500	183.63	0.0076	75.51	-0.0220
	1000	186.36	0.0055	73.25	-0.0045
	1500	235.28	0.0978	76.56	0.0066
	2000	466.21	0.4619	79.09	0.0051
	2500	700.21	0.4680	81.50	0.0048
	3000	939.82	0.4792	84.07	0.0051
	3200	1030.48	0.4533	85.19	0.0056
	3400	1124.58	0.4705	86.19	0.0050
	3500	1172.02	0.4744	86.76	0.0057
	3600	1218.91	0.4689	87.30	0.0054
	3700	1266.27	0.4736	87.92	0.0062
	3800	1313.21	0.4694	88.47	0.0055
	3900	1359.26	0.4605	88.71	0.0024
	RIH to 3975 to clear PKR (PKR @ 3807; PBD: 4108). POOH & RD slickline. Leave well SI.				
	Workover: Obtain CBL				
04.02.12	SITP: 500# (est BHP: 2350# @ 0 RMSL). Attempt to set plug in OFTw/ 1.875" XN nipple. Unable to pass through master valve				
	" ...master valve was heavy duty w/ plastic coating ID....too small for tbg plug"				
	Kill well w/ 10# brine. ND well. NU BOP. Rel from OFT. Circ 10 bbl 10# brine. Engage OFT. Rel PKR. POOH w/ tbg & PKR.				
04.03.12	RU wireline. Install lubricator. RIH w/ GR/CBL. Tag @ 4082 (btm perf: 4090; PBD 4108). Log from 4080 to surface. RD wireline.				
	surf-1300: excellent bond				
	1300-2050: poor to very poor (no) bond				
	2050-4082: excellent bond				
	NOTE: CBL-indicated ECP: 831-867; pack-off: 839-856				
	RIH w/ new PKR w/ POP & 2-3/8", 4.7#, J-55 IPC inj tbg w/ OFT. Test tbg below slips @ 3000#. Set PKR @ 3807. Rel from PKR. SION.				
04.04.12	Circ well w/ 110 bbl fr wtr PKR fluid. Engage OFT. Chart tbg-csg annulus @ 540#-30 min. Prs tbg & shear POP @ 2000#.				
	Perform mini-step rate test:				
	Pump 3 min. @ 0.25 BPM. P(init): 400#. P(3 min): 500#				
	Pump 3 min. @ 0.50 BPM. P(init): 500#. P(3 min): 600#				
	Pump 3 min. @ 1.00 BPM. P(init): 570#. P(3 min): 740#				
	Average Injection:				
10.2012	26 BWIPD @ 2145#				
11.2012	34 BWIPD @ 2114#				
12.2012	35 BWIPD @ 2096#				
01.2013	28 BWIPD @ 1745#				