Form 3160-5 (March 2012)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED

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

5. Lease Serial No. NMLC031620A

Do not use this:	NOTICES AND REPOR form for proposals to Use Form 3160-3 (AP	drill or to re-enter as	6. If Indian, Allottee	or Tribe Name		
SUBMI	T IN TRIPLICATE – Other in	structions on page 2.	7. If Unit of CA/Agre	ement, Name and/or No.		
1. Type of Well						
X Oil Well Gas V	Vell Other		8. Well Name and No SEMU 158			
2. Name of Operator ConocoPhillips Company		· · · · · · · · · · · · · · · · · · ·	9. API Well No. 30-025-35539			
3a. Address	31	o, Phone No. (include area co				
P. O. Box 51810 Midland	ΓX 79710	(432)688-9174	Skaggs; Grayl	ourg		
4. Location of Well (Footage, Sec., T, UL M, 660' FSL & 660' FW	R.,M., or Survey Description)	7	11. County or Parish,	State		
OE W, 000 1 3E & 000 1 W	/L, Oct 24, 200, 57 L	<i></i>	LEA			
12. CHEC	CK THE APPROPRIATE BOX	(ES) TO INDICATE NATUR	E OF NOTICE, REPORT OR OTH	ER DATA		
TYPE OF SUBMISSION		TY	PE OF ACTION			
Notice of Intent	Acidize	Deepen	Production (Start/Resume)	Water Shut-Off		
Notice of fraction	Alter Casing		Reclamation	Well Integrity		
Subsequent Report	Casing Repair	New Construction	X Recomplete	Other		
	Change Plans	Plug and Abandon	Temporarily Abandon			
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal			
testing has been completed. Final determined that the site is ready for ConocoPhillips would like t 6700' & spot 35' cmt on top on top of CIBP (if dump ba Attached is a procedures a	r final inspection.) o recomplete the Skago o of CIBP (if dump baile iller used, tag cmt cap a	gs; Grayburg (57380) r used, tag cmt cap a	terwards). Set 2nd CIBP (	(ar) w/2 CIBP sat @ @ 6400' pot 35' cmt		
		•	SEE ATTACHED FO	n p		
SUBJEC	T TO LIKE			,		
APPROV	AL BY STATE		CONDITIONS OF A	APPROVAL		
•						
			· 3			
4. I hereby certify that the foregoing is tr	ue and correct. Name (Printed/T)	pped)				
Rhonda Rogers	63.7	Title Staff R	egulatory Technician			
Signature Meny	3 Dogen	Date 12/03/2	012	ADDDOVE		
· · · · · · · · · · · · · · · · · · ·	THIS SPACE FO	R FEDERAL OR ST	ATE OFFICE USE	APPRUVEU		

Title

that the applicant holds legal or equitable title to these Office entitle the applicant to conduct on a done thereon 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 of Agency of the United States.

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Approved by

HOBBS OCD

State of New Mexico

Form C-102 Revised March 17, 1999

1625 N. French Dr., Hobbs, NK 88240 BIL South First, Artesia, NM 88270

Energy, Minerals and Natural Resources Department

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT I

1000 Rio Brazos Rd., Axtec, NM 87 SECENTION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87505

☐ AMENDED REPORT

DISTRICT IV 2040 South Pacheco, Santa Pa, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-0:	Number 25-35	1539	5	Pool Code	0	S	Kagas.	Pool Name	burg		
Property 134	Code					MU	re / / /		Well N		
2/78	8L7		Céna	eroPh	llip	or Nam	moan	/	Elevation 3525'		
					Surface	Loca	ation /	`			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from		North/South line	Feet from the	East/West line	County	
M	24	20 S	37 E	<u> </u>	660		SOUTH	660	WEST	LEA	
			Bottom	Hole Loc	ation If	Diffe	rent From Sur	face			
UL or lot No.	Section .	Township	Range	Lot Idn	Feet from	the ·	North/South line	Feet from the	East/West line	County	
Dedicated Acres	Joint o	r Infill Con	solidation (	ode Oro	ier No.						
NO ALLO	WABLE W						NTIL ALL INTER APPROVED BY T		EN CONSOLIDA	TED	
						+		OPERATO  I hereby contained herein best of my jonoul  Eignafur-  Printed Name  Title  Date	10 mg	ormation to to the	
								on this plat was actual surveys of supervisor, and correct to the	that the well location plotted from field made by we or that the same is best of my belief.	notes of inder my	
560		T - N32*33' NG - W103*						Professional WO	2977 No. 1176	7977	



SEMU 158 API#: 30-025-35539 Hardy North (Strawn) Field Lea County, New Mexico

Currently a Blinebry/Tubb producer with low production. It is being review for a recompletion to the Grayburg. The Grayburg formation became a subject of interest after the initial success of the SEMU #151 Grayburg recompletion.

#### WELL CATEGORY, BOP CLASS AND EXCEPTIONS

Well Category One:

H2S:

0 ppm.

Well Rate:

<u>H2S</u> <u>ROE- ft.</u> 100 ppm 0 500 ppm 0

BOPE Class One: Hydraulic BOP recommended per Projects Group.

#### **PROCEDURE**

- 1. Prior to service unit MI & RU, dump 20 bbl xylene down 2-7/8" x 5-1/2" annulus. Pump back xylene (contact time: 7.2 hrs at current surface displacement of 79 BPD). Test anchors. Last well service 5.19.2011.
- 2. Spot 6 clean 500 bbl frac tanks. Load tanks w/ fresh water prior to frac date. Water to be biocide-treated by Service Company.
- 3. MI & RU service unit. Un-seat pump. POOH w/ rods & pump. ND well. NU hydril 1 X 7-1/16" 5K Blowout Preventer (Double BOP: blind ram & pipe ram) and environmental tray. Scan 2-7/8", 6.5# J-55 production tbg out of hole.
- 4. The following is a summary of the current well configuration:

Spud Date: 10.13.01 Rls Date: 11.2.01	Depth RKB		Elev.: 3525 KB; 3536 GL (KB - GL: 11 ft.)
	top	btm	
8-5/8",8.097, 24#, J-55	0	1520	Lead: 465 Sxs , Class C @ 12.4 ppg
Hole Size: 12.25, Shoe Jt length: 40Ft			Tail : 200 sxs, Class C @ 14.8 ppg
			TOC @ Surface
5-1/2", 17# L80 , Hole: 7 7/8"	0	5795	1 <sup>st</sup> Stage: Lead: 565 sxs, class C @ 11.85 ppg
5-1/2", 17# L80 , Marker Joint	5795	5809.5	Tail: 425 sxs , Class C @ 13.6 ppg
5-1/2", 17# L80	5809.5	.7848.7	
5-1/2", 17# L80 , Float Collar	7848.7	7886.4	
5-1/2", 17# L80	7886.4	7943	
5-1/2", 17# L80, Float shoe	7943	7975	

		1	
Mud weight : 10.1 ppg @ TD ( 8059')			·
Bridge Plug :	7215	7217	7/27/2007
Bottom Up:			
Drinkard Perforated Intervals	6780	6788	Perforated @ 2 Spf_1.15.2002
Gun: 4" HSC csg guns, 60 deg, .41" diam, 24" Penetration	6806	6810	Perforated @ 2 Spf 1.15.2002
Effective footage 37', Total shots: 79	6817	6822	Perforated @ 2 Spf 1.15.2002
	6842	6848	Perforated @ 2 Spf 1.15.2002
	6854	6868	Perforated @ 2 Spf 1.15.2002
Tubb Perforated Intervals Gun: 4" HSC csg guns, 60 deg, .41" diam, 24" Penetration	6458	6462	Perforated @ 4 Spf 1.17.2002
Effective footage: 16, Total Shots: 40	6474	6486	Perforated @ 2 Spf 1.17.2002
•			
		}	·
			·

Tops	MD
Tansil	2560
Yates	2704
Seven Rivers	2954
Queen	3520
Penrose	3646
Grayburg	3730
San Andres	3956
Glorieta	5282
Blinebry	5896
Tubb	6400
Drinkard	6724
Abo	7026

- 5. PU & RIH w/ 2-7/8", 6.5#, J55 work string tbg w/ 4-3/4" bit & 5-1/2", 17# csg scraper to 7210. Circulate bottoms up. POOH w 2 7/8", 6.5 #, J55 WS and bit.
- 6. MI-RU cased hole logging services w\ a packoff (or 1000 psi shop tested lubricator, if required). PU RIH w\ a combination GR/CCL/CBL tool from 7000'± to surface.
- 7. PU CIBP & packer. RIH w/ tbg, packer & CIBP-1. Set CIBP-1 @ 6700. Pressure test against CIBP @ 2500 #. POOH w/ tbg & packer. Spot 35 ft of cement on top of CIBP (if dump bailer is to be used tag cement cap afterwards).

- 8. PU CIBP. RIH w/ tbg, packer & CIBP-2. Set CIBP-2 @ 6400. Pressure Test against CIBP @ 2500 # .POOH w/ tbg. Spot 35 ft of cement on top of CIBP (if dump bailer is to be used tag cement cap afterwards).
- 9. RU SLB. NU lubricator & test @ 500#.

Perforate following intervals at 2 spf @ 60-degree phasing w/ 3-3/8", HSD Power Jet 3406, HMX, 22.8 gm. (EHD: 0.37 in.; Penetration: 37 in.)...

	top	btm	ft.	SPF	Perfs
Grayburg	3780	3785	5	2	10
	3801	3806	5	2	10
	3837	3849	12	2	24
	3869 🧎	3875	6	2	12
	3881	3887	6	2	12
	3895	3900	5	2	10
	3906	3911	5	2	10
	3915	3921	6	2	12 ·
	. 3926	3932	6	2	12
	3947	3951	4	2	8
,					
			-		
			64		124

Correlate to previous GR/CBL from step 6.

RIH w/ tbg, PKR & RBP. Acidize Grayburg perforations w/ total 160 bbl (6720 gal) 15%
 NE Fe HCI:

#### Acidize Gross Interval:

- a. Set RBP @ 4100
- b. Pull EOT to 3730. Pump 15% NE Fe HCl using 1.1 SG, 5/8" bio balls followed by 4.3 bbl 2% KCl.
- c. SD and allow well to equalize.
- e. Pump 23 bbl 2% KCl to flush to bottom perf.
- f. Record ISIP, SITP (5 min), SITP (10 min) & SITP (15 min).

POOH w/ PKR on Ws. LD 2 7/8" WS.

11. PU & RIH w/ 3-1/2", 9.3#, N-80 tbg w/ PKR (5-1/2", 17#). Test tbg @ 8500# while RIH (3-1/2", 9.3#, N-80 Internal Yield Prs: 10,160#).

Set PKR @ 3720 Test 3-1/2" x 5-1/2" annulus & PKR @ 500#.

12. RU SLB. Set treating line pop-off to release @ 8500#.

Set pump trips @ 8000#.

Install spring-operated relief valve on csg-tbg annulus. Pre-set @ 500#. Load 3-1/2" x 5-1/2" annulus. Note annulus fills volume. Place 200# on csg. Test surface lines @ 9000#.

ProTechnic to tag frac (Ir-192 @ 0.425 mCi per 1000# 20/40 Brown & Sb-124 @ 0.4 miC per 1000# resin-coated 20/40 Brown)

Frac 3780-3955 down 3-1/2", 9.3#, N-80 tbg w/ 89,000 gal YF120ST w/ 68,250# 20/40 Brown sand & 57,750# resin-coated 20/40 Brown sand. Mark flush @ 1#. Flush w/ 1360 gal WF110 (capacity to uppermost perforation: 1393 gal ;). Anticipated treating rate: **30 BPM @ 6000#:** 

				Clean Vo	<u>l.</u>		<u>Proppant</u>			Slurry V	<u>'ol</u>	Pump Time @ 30 BPM	
	Fluid	Proppant	gal	<u>bbl</u>	cum bbl	ppg	<u>lbs</u>	cum lbs	gal	<u>bbl</u>	cum bbl	min.	cum min.
Pad	YF120ST	-	35000	833.3	833.3	0.00	0	.0	35000	833.3	833.3	27.8	27.8
Stage	YF120ST	20/40 Brown	3000	71.4	904.8	0.25	750	750	3034	72.2	905.6	2.4	30.2
Stage	YF120ST	20/40 Brown	3000	71.4	976.2	0.50	1500	2250	3068	73.0	978.6	2.4	32.6
Stage	YF120ST	20/40 Brown	3000	71.4	1047.6	0.75	2250	4500	3102	73.9	1052.5	2.5	35.1
Stage	YF120ST	20/40 Brown	3000	71.4	1119.0	1.00	3000	7500	3136	74.7	1127.1	2.5	37.6
Stage	YF120ST	20/40 Brown	3000	71.4	1190.5	1.25	3750	11250	3170	75.5	1202.6	2.5	40.1
Stage	YF120ST	20/40 Brown	3000	71.4	1261.9	1.50	4500	15750	3204	76.3	1278.9	2.5	42.6
Stage	YF120ST	20/40 Brown	3000	71.4	1333.3	1.75	5250	21000	3238	77.1	1356.0	2.6	45.2
Stage	YF120ST	20/40 Brown	3000	71.4	1404.8	2.00	6000	27000	3272	77.9	1433.9	2.6	47.8
Stage	YF120ST	20/40 Brown	3000	71.4	1476.2	2.25	6750	33750	3306	78.7	1512.6	2.6	50.4
Stage	YF120ST	20/40 Brown	3000	71.4	1547.6	2.50	7500	41250	3340	79.5	1592.1	2.7	53.1
Stage	YF120ST	20/40 Brown	3000	71.4	1619.0	2.75	8250	49500	3374	80.3	1672.4	2.7	55.7
Stage	YF120ST	20/40 Brown	3000	71.4	1690.5	3.00	9000	58500	3408	81.1	1753.6	2.7	58.5
Stage	YF120ST	20/40 Brown	3000	71.4	1761.9	3.25	9750	68250	3442	81.9	1835.5	2.7	61.2
Stage	YF120ST	RC 20/40 Brown	3000	71.4	1833.3	3.50	10500	78750	3476	82.8	1918.3	2.8	63.9
Stage	YF120ST	RC 20/40 Brown	3000	71.4	1904.8	3.75	11250	90000	3510	83.6	2001.8	2.8	66.7
Stage	YF120ST	RC 20/40 Brown	3000	71.4	1976.2	4.00	12000	102000	3544	84.4	2086.2	2.8	69.5
Stage	YF120ST	RC 20/40 Brown	3000	71.4	2047.6	4.00	12000	114000	3544	84.4	2170.6	2.8	72.4
Stage	YF120ST	RC 20/40 Brown	3000	71.4	2119.0	4.00	12000	126000	3544	84.4	2255.0	2.8	75.2
Flush	WF110	·	1400	<u>33.3</u>	<u>2152.4</u>	<u>0</u>	0	126000	1400	<u>33.3</u>	2288.3	1.1	<u>76.3</u>
			90400	2152			126000		96108	2288		76.3	

Report ISIP, SITP (5 min), SITP (10 min) & SITP (15 min). RD SLB. SDON.

- 13. SION to allow resin-coated sand to cure. Flow back well until dead. POOH & LD 3-1/2", 9.3#, N-80 frac string & PKR.
- RU ProTechnic. NU lubricator. RIH w/ ProTechnic post-frac SpectraScan Spectral Gamma Ray memory tool. Log from 4050 to 3750. POOH. ND & LD lubricator.
- 15. RIH. w / 2 7/8". NDBOP. NUWH and run with. Space pump, hang well, load tubing and check pump action. RDMO. Handover to Operations.

	Сара	icity	Internal I	Diam. : in.	Internal Yield (Burst): psi		
	bbl / ft	gal /ft	nom.	drift	100%	80%	
2-7/8", 6.5#, J-55	0.00579	0.2431	2.441	2.347	7260	. 5808	
3-1/2", 9.3#, N-80	0.0087	0.3652	2.992	2.867	10160	8128	
5-1/2", 17#, J-55	0.02324	0.9764	4.892	4.767	5320	4256	

2-7/8" x 5-1/2", 17#	0.0152	0.6392		
3-1/2" x 5-12/", 17#	0.0113	0.4766		

.

Ļ

# **Conditions of Approval**

## Conoco Phillips Company SEMU 158 API 30-025-35539 T20S-R37E, Sec 24

January 2, 2013

Notify BLM at 575-393-3612 a minimum of 24 hours prior to commencing work.

Work to be completed by April 2, 2013.

- 1. Recompletion not in current Plan of Development (POD) dated 2/28/2012.
- 2. Operator shall indicate on POD their plans to further develop the Grayburg formation.
- 3. A commercial well determination shall be done on this well after 6 to 8 months of production from the Grayburg formation.
- 4. Tag and verify CIBP is at 7215'. If CIBP is at 7215' a minimum of 25 sx of Class C cement shall be placed on top of the CIBP.
- 5. If CIBP is not tagged at 7215' operator shall place a balance cement plug at 7020' and shall be 171' in length to isolate the Abo formation. The plug shall be set at approximately 7020'-7192'. Tag required. If this is not feasible contact the BLM.
- 6. CIBP shall be set at 6700' (80' above the top perforation). A minimum of 35' of Class C cement shall be placed on top of the CIBP. Tag required if dump bailer is used.
- 7. CIBP shall be set at 6400' (58' above the top perforation). A minimum of 35' of Class C cement shall be placed on top of the CIBP. Tag required if dump bailer is used.
- 8. A balanced cement plug shall be set at 5306' and shall be 154' in length to isolate the Glorietta formation. The plug shall be set at approximately 5306'-5152'. Tag required.
- 9. Due to being within the Lesser Prairie Chicken habitat, this workover activity will be restricted to the hours of 9:00am through 3:00am for the period of March 1 through June 15. Exceptions to these restrictions may be granted by BLM's Johnny Chopp <i hep-th/96/johnnychop 
  <i href="mailto:chop@blm.gov">chop@blm.gov</a> 575.234.2227 or Bob Ballard <a href="mailto:bballard@blm.gov">bballard@blm.gov</a> 575.234.5973.
- 10. Functional H<sub>2</sub>S monitoring equipment shall be on location.
- 11. Subject to like approval by the New Mexico Oil Conservation Division.
- 12. Notify BLM 575-200-7902 before plug back procedures. The procedures are to be witnessed. If no answer, leave a voice mail with the API#, workover purpose, and a call back phone number. If there is no response, 575-361-2822. Note the contact, time, & date in your subsequent report.
- 13. Surface disturbance beyond the originally approved pad must have prior approval.
- 14. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.

- 16. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
- 17. The BLM PET witness is to run tbg tally and agree to cement placement. Sample each plug for cement curing time and tag and/or pressure test (WOC time of 4 hours recommended) as requested by BLM PET witness.
- 18. Class H > 7,500' & Class C < 7,500') cement plugs(s) will be necessary. The minimum pumped volume of 25 sacks of cement slurry is to exceed a 100' cement plug across the drilled wellbore. Add 10% to the 100' slurry volume for each 1,000' of plug depth when calculations indicate the need. For any plug that requires a tag or pressure test a minimum WOC time of 4 hours(C) & 8 hours(H) is recommended. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 ft³/sx, 6.3gal/sx water and "H" to be mixed 15.6#/gal, 1.18ft³/sx, 5.2gal/sx water.
- 19. Minimum requirement for mud placed between plugs is 25 sacks of salt water gel per 100 barrels in 9 lb/gal brine.
- 20. File intermediate **subsequent sundry** Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry. File the subsequent sundry for the frac separately if it is delayed as much as 20 days.
- 21. Submit the BLM Form 3160-4 Completion Report for the Grayburg within 30 days of the date all BLM approved procedures are complete. Include all formation tops.
- 22. Workover approval is good for 90 days (completion to be within 90 days of approval). A detailed justification is necessary for extension of that date.
- 23. Submit evidence to support your determination that the well has been returned to active "beneficial use" for BLM approval on the Sundry Notice Form 3160-5 (the original and 3 copies).
- 24. Should "beneficial use" not be achieved submit for BLM approval a plan for plug and abandonment.

JAM 010213