Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

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.

HOBBSOCD

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

FEB 12 2015

RECEIVED

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMLC031670A
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA/Agreement, Name and/or No. 892000321E
	8. Well Name and No. SEMU 243
2. Name of Operator CONOCOPHILLIPS COMPANY Contact: SUSAN B MAUNDER E-Mail: Susan.B.Maunder@conocophillips.com	9. API Well No. 30-025-42015-00-X1
3a. Address MIDLAND, TX 79710 3b. Phone No. (include area code) Ph: 281-206-5281	10. Field and Pool, or Exploratory SKAGGS
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)* Sec 19 T20S R38E SWSE 0150FSL 2341FEL 32.330620 N Lat, 103.111266 W Lon	11. County or Parish, and State LEA COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall 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 Company respectfully requests approval to change our original plan for this well. We are requesting approval to proceed with completion of this well, including stimulating with acid.

During drilling and running casing operations proceeded normally. Cement was returned to surface. However, following drilling, pressure was observed on the 8-5/8" X 5-1/2" casing annulus. Diagnostic tests were performed and results are included in the attachment.

Our proposal for proceeding is attached.

Thank you for your time spent reviewing this request.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #287541 verified by the BLM Well Information System
For CONOCOPHILLIPS COMPANY, sent to the Hobbs
Committed to AFMSS for processing by CHRISTOPHER WALLS on 02/04/2015 (15CRW0044SE)

Name *(Printed/Typed)* SUSAN B MAUNDER — Title SENIOR REGULATORY SPECIALIST

Signature (Electronic Submission) — Date 01/09/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

Approved By _____ Title _____ Date FEB 5 2015

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

/s/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD 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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

FEB 16 2015

ConocoPhillips

Request to proceed with stimulation operations on SEMU 243:

SEMU 243 is an injection well located in Lea County, New Mexico Federal Unit in Section 19, Township 20S and Range 30E. The most recent 24-hr shut in test, performed on 11/11/14, indicated a pressure of 280 psi on the 8-5/8" x 5-1/2" surface by production casing annulus. A 7 day shut-in test, performed 11/18/14 – 11/24/24, indicated a pressure buildup of 650 psi. ConocoPhillips is requesting BLM approval to proceed with acid stimulation of the Grayburg formation prior to remediation, given that there is cement isolation of the target interval.

During the SEMU 243 cement job, drilling operations proceeded as normal, the ACP was set with no issues, and 95 bbls of cement was returned to surface. Following drilling, pressure was initially observed on the 8-5/8" x 5-1/2" surface by production casing annulus. A gas analysis was performed on the SEMU 243 and is included as Figure A of the Appendix. The gas was identified as >94% nitrogen, with trace amounts of methane. No H2S is present. After sampling the gas, pressure on the SEMU 243 surface by production casing annulus was monitored. The results of the monitoring period are included in Figure B of the Appendix.

Following gas testing and pressure monitoring, a CBL was run (0 psi and 1,000 psi pressure passes from PBTD to surface) to evaluate the cement quality on the SEMU 243 (see Appendix, Figure C for complete CBL). The production interval for this well is the Grayburg, identified from 3,768 to 4,002 feet. The SEMU 243 CBL results show >1,000 feet of competent cement above the target injection interval. It is believed that micro-annulus is responsible for the pressure on the backside of the SEMU 243, with the Yates serving as the gas source.

Based on the results of the gas analysis, pressure monitoring, and CBL, ConocoPhillips is requesting approval to proceed with acid stimulation operations on the production interval of the SEMU 243. Prior to perforating the SEMU 243, the 5-1/2" production casing will be tested 2,500 psi to verify casing integrity. If casing integrity is not verified, operations will be suspended. If casing integrity is successfully verified, ConocoPhillips will proceed with stimulation operations. Throughout the acid job, pressure on the 8-5/8" x 5-1/2" surface by production casing annulus will be monitored, per standard BLM requirements (including proper scale). Following stimulation operations, ConocoPhillips will submit the pressure charts to the BLM for review.

If additional actions are needed, based on results of pressure monitoring during completion, we will submit proposals at that time. We will check the pressure on the production casing-surface casing annulus daily and bleed down whenever the pressure reaches at least 500 psi. The maximum allowable working pressure, where we will have to perform remedial operations, for the production casing-surface casing annulus is 885 psi.

Please see the attached Appendix on the following pages. Thank you for reviewing this information, and please let me know if you have questions regarding this proposal.

Emily L. Heskin
Associate Completions Engineer
ConocoPhillips – Offices at Park 10, #5008
Office: 281.206.5153 I Cell: 713.569.3505

Dean Bendele
Reservoir Engineer
ConocoPhillips – Offices at Park 10, #4009A
Office: 281.206.5249 I Cell: 832.547.9748

APPENDIX

FIGURE A: Gas analysis for SEMU 243 8-5/8" x 5-1/2" casing annulus

FIGURE B: Results for pressure monitoring on SEMU 243 8-5/8" x 5-1/2" casing annulus

FIGURE C: SEMU 243 CBL

ConocoPhillips

FIGURE A: Gas analysis for SEMU 243 8-5/8" x 5-1/2" casing annulus sample

www.permianls.com

575.397.3713 2609 W Marland . Hobbs NM 88240

For:	ConocoPhillips	Sample:	Casing
	Attention: Vernon Mackey	Identification:	SEMU #243
	1410 West County Road	Company:	ConocoPhillips
	Hobbs, New Mexico 88240	Lease:	
		Plant:	

Sample Data:	Date Sampled	9/30/2014	1:53 PM		
	Analysis Date	10/1/2014			
	Pressure-PSIA			Sampled by:	Dustin Armstrong
	Sample Temp F			Analysis by:	Vicki McDaniel
	Atmos Temp F	87			

H2S =

Component Analysis

		Mol Percent	GPM
Hydrogen Sulfide	H2S		
Nitrogen	N2	94.401	
Carbon Dioxide	CO2	0.000	
Methane	C1	5.322	
Ethane	C2	0.218	0.058
Propane	C3	0.059	0.016
I-Butane	IC4	0.000	0.000
N-Butane	NC4	0.000	0.000
I-Pentane	IC5	0.000	0.000
N-Pentane	NC5	0.000	0.000
Hexanes Plus	C6+	0.000	0.000
		100.000	0.074

REAL BTU/CU.FT.	
At 14.65 DRY	58.9
At 14.65 WET	57.9
At 14.696 DRY	59.1
At 14.696 WET	58.1
At 14.73 DRY	59.3
At 14.73 Wet	58.2

Specific Gravity Calculated	0.9457
Molecular Weight	27.3903
Z Factor (DRY)	0.9997
Z Factor (WET)	0.9995

FIGURE B: Results for pressure monitoring on SEMU 243 8-5/8" x 5-1/2" casing annulus

Date	Shut-In Pressure (psi)	Shut-In Time (hr)
9/30/2014	900	24
10/1/2014	400	24
10/2/2014	400	24
10/3/2014	50	26
10/6/2014	750	48
10/7/2014	450	24
10/8/2014	450	24
10/9/2014	450	24
10/13/2014	750	72
10/14/2014	700	24
10/15/2014	700	24
10/16/2014	660	24
10/17/2014	660	24
10/20/2014	800	72
10/21/2014	550	24
10/22/2014	540	24
10/23/2014	525	24
10/24/2014	500	24
10/27/2014	700	72
10/28/2014	500	24
10/29/2014	350	24
10/30/2014	350	24
10/31/2014	380	48
11/3/2014	300	24
11/4/2014	280	24
11/5/2014	280	24
11/6/2014	270	24
11/7/2014	250	24
11/10/2014	300	48
11/11/2014	280	24
11/18/2014	650	7 days

FIGURE C: SEMU 243 CBL

Schlumberger

Company: ConocoPhillips Company

Well: SEMU 243

Field: New Mexico Federal Unit

County: Lea State: New Mexico

Cement Bond Log

GR-CCL

County: Lea
Field: New Mexico Federal Unit
Location: 150' FSL & 2341' FEL
Well: SEMU 243
Company: ConocoPhillips Company

Location: 150' FSL & 2341' FEL
Sec: 19, Twn: 20S, Rng: 38E

Elev.: K.B. 3545.00 ft
G.L. 3532.00 ft
D.F. 3544.00 ft

Permanent Datum: Ground Level Elev.: 3532.00 f
Log Measured From: Kelly Bushing 13.00 ft above Perm.Datum
Drilling Measured From: Kelly Bushing

API Serial No.	Section:	Township:	Range:
30-025-42015	19	20S	38E

Logging Date	23-Oct-2014	
Run Number	2A	
Depth Driller	4134.00 ft	
Schlumberger Depth	4134.00 ft	
Bottom Log Interval	4130.00 ft	
Top Log Interval	200.00 ft	
Casing Fluid Type	Fresh Water	
Salinity		
Density	8.33 lbm/gal	
Fluid Level	8.00 ft	
BIT/CASING/TUBING STRING		
Bit Size	7.88 in	
From	0.00 ft	
To	4134.00 ft	
Casing/Tubing Size	5.5 in	
Weight	17 lbm/ft	
Grade	L80	
From	0.00 ft	
To	4130.00 ft	
Max Recorded Temperatures	89 degF	
Logger on Bottom Time	23-Oct-2014 11:41:08	
Unit Number Location:	2132	
Recorded By	Adriana Rodriguez	
Witnessed By	Jerry Thurman	

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

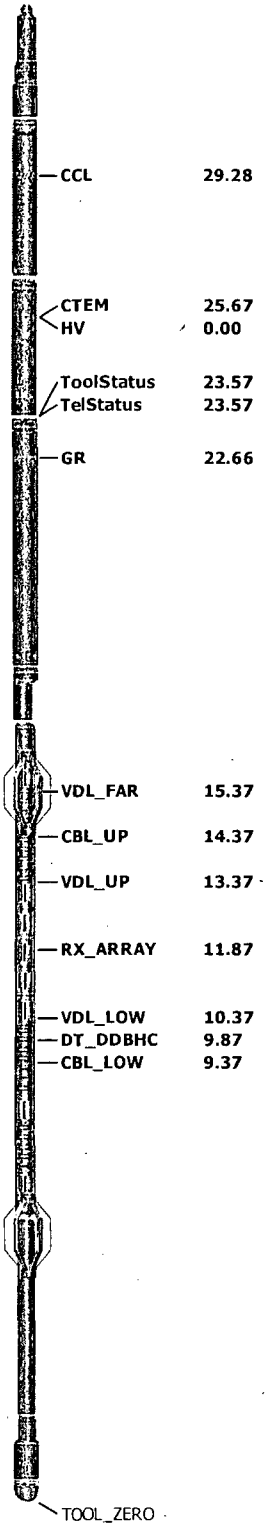
Contents

8. 2A Repeat Analysis 5" = 100' @ 0 PSI
   8.1 Composite Summary
   8.2 Log (CH CBL VDL RA)
9. Tail

Remarks and Equipment Summary

2A: Toolstring

Equip name	Length	MP name	Offset
LEH-QC	**32.53**		
CAL-YA:50	**30.07**		
CAL-YA:50		**CCL**	**29.28**
DTC-H:8898	**26.57**		
ECH-KC:9974		**CTEM**	**25.67**
DTC-H:8898		**HV**	**0.00**
		ToolStatus	**23.57**
		TelStatus	**23.57**
SGT-N:10392	**23.57**		
SGH-K:3170		**GR**	**22.66**
SGD-TAA:21897			
SGC-TB:10392			
AH-198:632001	**18.07**		
SSLT-B:8027	**16.93**		
SSAS-BB:8027			
SSLH-BA:8027		**VDL_FAR**	**15.37**
SSLC-BA:8027		**CBL_UP**	**14.37**
		VDL_UP	**13.37**
		RX_ARRAY	**11.87**
		VDL_LOW	**10.37**
		DT_DDBHC	**9.87**
		CBL_LOW	**9.37**
AH-197:62722	**1.64**		
BNS-STD	**0.46**		
		TOOL_ZERO	



Lengths are in ft
Maximum Outer Diameter = 6.250 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

2A: Remarks

2A: Remarks
Logging objective: PBTD to surface
Toolstring run as per toolsketch (2x Gemcos used for centralization).
Main and Repeat passes correlated to CNL log by SLB on 25-SEP-14.
Max. recorded temperature from 89 deg F.
Casing: 5.5" 175# L80.
PBTD = 4134 ft; SLB TD = 4130ft.
Repeat pass performed 300 ft off bottom.
Main pass logged at 1000 psi. Repeat pass logged at 0 psi.
Expected free pipe amplitude: 71mV.
CBL normalized to expected free pipe value of 71 mV.
Short joint found at depth 3000 ft.
Schlumberger estimated top of cement:
| Schlumberger Wireline | Well Integrity | Midland, TX | (432) 694-0000
Schlumberger Crew: Adriana, Bug, Andrae.

Depth Summary

Depth Summary

	2A		
Depth Measuring Device			
Type	IDW-JA		
Serial Number	3438		
Calibration Date	05-Aug-2014		
Calibrator Serial Number	999		
Calibration Cable Type	7-39P-LXS		
Wheel Correction 1	-2		
Wheel Correction 2	-2		
Tension Device			
Type	CMTD-B/A		
Serial Number			
Calibration Date	02-Oct-2014		
Calibrator Serial Number	694		
Number of Calibration Points	10		
Calibration Root Mean Square Error	21		
Calibration Peak Error	34		
Logging Cable			
Type	7-46NT-XS		
Serial Number	U711137		
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type	Crane		

2A:Depth Control Parameters		Depth Control Remarks
Log Sequence	Subsequent Trip To the Well	All Schlumberger current depth control procedures followed.
Reference Log Name		Main and Repeat passes correlated to CNL log by SLB on 25-SEP-14.
Reference Log Run Number		IDW used as primary depth control.
Reference Log Date		Z-Chart used as secondary depth control.
Subsequent Trip Down Log Correction		

2A

Main Pass 5" = 100' @ 0 PSI

Software Version

Acquisition System	Version
MaxWell	4.0.9163.3000
Application Patch	Patch-SP-10767_18214-4.0.9163.3001
	Patch-Hotfix_USIT_SP2-21846-4.0.9434.3002

Tool Elements	Description	Software Version	Firmware Version
CAL-YA	Casing Anomaly Locator 3-3/8 in 31 Pin Heads	4.0.9360.3000	
SSAS-BB	Slim Sonic Array Sonde Segment - BB	4.0.9401.3000	
SGC-TB	Scintillation Gamma Cartridge	4.0.9360.3000	

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
2A	Repeat[2]:Up	Up	99.78 ft	4133.06 ft	23-Oct-2014 11:53:54 AM	23-Oct-2014 12:36:28 PM	ON	-0.59 ft	No

All depths are referenced to toolstring zero

Log

Company:ConocoPhillips Company Well:SEMU 243

2A: Repeat[2]:Up:S009

Description: CBL_VDL Format: Log (CH CBL VDL 5) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 23-Oct-2014 13:53:51

Channel	Source	Sampling

TT	SSLT-B:SSAS-BB:SSAS-BB	6in
BIEP	SSLT-B:SSAS-BB:SSAS-BB	6in
CBL	SSLT-B:SSAS-BB:SSAS-BB	6in
CCL	CAL-YA:CAL-YA:CAL-YA	1in
GR_CAL	SGT-N:SGT-N:SGC-TB	2in
TENS	WLWorkflow	1in
TIME_1900	WLWorkflow	0.1in

TIME_1900 - Time Marked every 60.00 (s)

BIEP - Bond Index Event Pips SSLT-B

Transit Time for CBL (TT) SSLT-B

400 us 200

Casing Collar Locator Amplitude (CCL) CAL-YA

-19 1

Calibrated Gamma Ray (GR_CAL) SGT-N

0 gAPI 150

Cable Tension (TENS)

10000 lbf 0

CBL Amplitude (CBL) SSLT-B

0 mV 100

CBL Amplitude (CBL) SSLT-B

0 mV 10

Good Bond (GOBO)

0 mV 10

GoodBond From ACBL to GOBO

Min Amplitude Max

Variable Density Log (VDL) SSLT-B

200 us 1200