

KERR-MCGEE OIL AND GAS ONSHORE LP
SEC FOUR 12-4
NE SW 4 1N 68W 1,731' FSL 1,588' FWL
LAT: 40.07780 LONG: -105.01210
WELD,COLORADO

09/09/2013

AREA: S3 ROUTE: S37 Spud: 07/03/2009 WINS No.: 94272 AFE/WO#: 88414124 API#: 0512329459

GL: 5045 KB: 5060 MTD: 8469 TVD: 8374 LOG MD: 6337 PBMD: 8424 PBTVD: 8329

Directions: WCR 12 & WCR 5, E 5/10, N INTO

<u>TUBULARS</u>	<u>Tool Type</u>	<u>Joints</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Condition</u>	<u>Top D</u>	<u>Bottom D</u>
SURFACE CASING									
	Casing	17	8.63	24.00	J-55	ST&C	NEW	15	772
	Latch Down Baffle	1	8.63		J-55			772	773
	Shoe Joint	1	8.63	24.00	J-55	ST&C	NEW	773	818
	Casing Guide Shoe	1	8.63		J-55			818	819
PRODUCTION CASING									
	Casing	201	4.50	11.60	I-80	8RD LTC	NEW	15	8425
	Latch Down Baffle	1	4.50		I-80			8425	8425
	Shoe Joint	1	4.50	11.60	I-80	8RD LTC	NEW	8425	8459
	Casing Float Shoe	1	4.50		I-80			8459	8461
	Tubing	249	2.38	4.70	J-55	External-Ups		15	7862
	Wellbore Equipment		2.38					7862	7863
	Wellbore Equipment		2.38					7863	7863

<u>CEMENT TYPE</u>	<u>Stage</u>	<u>Sacks</u>	<u>Cement Type</u>		<u>Top D</u>	<u>Btm D</u>	<u>cbl</u>	<u>est</u>	<u>Comments</u>
SURFACE CASING CEMENT									
	PRIM CMT 1ST STAGE	520	LEAD	PREMIUM LITE	15	820	No		FULL 8.00
PRODUCTION CASING CEMENT									
	PRIM CMT 1ST STAGE	505	LEAD	PREMIUM LITE	3762	7120	Yes	No	
	PRIM CMT 1ST STAGE	225	TAIL	50/50 POZ-MIX	7120	8462	Yes	No	

<u>PERFORATIONS</u>									
<u>Formation</u>	<u>Zone</u>	<u>Top</u>	<u>Btm</u>	<u>spf</u>	<u>Shots</u>	<u>Date</u>	<u>Reason</u>	<u>Comments</u>	<u>Producing</u>
NIOBRARA	B			3		09/03/2009	PRODUCTION		Yes
NIOBRARA	A	7553	7555	3	6	09/03/2009	PRODUCTION		Yes
NIOBRARA	B	7664	7674	3	30	09/03/2009	PRODUCTION		Yes
NIOBRARA	C	7762	7772	3	30	09/03/2009	PRODUCTION		Yes
CODELL		7892	7910	3	54	08/13/2009	PRODUCTION		Yes

Comments: The SEC Four 12-4 needs bradenhead repairs. The NPV is >\$300,000, so I propose we repair the issue instead of P & A the well.
 WO# 88414124

Proposed Completion Procedure

1. Level location for base beam equipped rig.
2. Call Foreman or Field Coordinator before rig up to catch plunger, isolate production equipment, and ask if replacement parts/equipment are requested. Operations need to hook up the Bradenhead through hardline to a tank and bleed off the pressure before the rig gets on location.
3. Check and report surface casing pressure prior to bleeding off. If surface casing is not accessible at ground level, re-plumb so valve is at ground level.
4. If the tubinghead is not rated to 5000 psi then replace the wellhead and all the valves and fittings to make the tubinghead good to 5000 psi.
5. Spot a minimum of 12 jts of 2-3/8", 4.7#, J-55, EUE tbg for replacement and 125 jts 1-1/4", 2-33#/ft, J-55, 10rd IJ for annular cement job.
6. MIRU WO rig. Kill well, as necessary, with freshwater treated with biocide. ND wellhead. NU BOP.
7. PUH with tubing string to break any possible sand bridges, unseat landing joint and lay down. Do not exceed tubing tensile strength of 57,384 lbs.
8. MIRU "EMI". TOOH with 2-3/8" tubing. EMI tubing while TOOH. Lay down joints with wall loss or penetrations >35%. Replace joints as necessary. **Keep yellow & blue band tubing. Note joint number and depth of tubing leak(s) on PRODUCTION EQUIPMENT FAILURE REPORT IN OPEN WELLS. Clearly mark all junk (red band) tubing sent to the yard.

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9. TIH with 2-3/8" tbg and 4.6" RBP and packer (4.5" csg 11.6#,I-80). Set RBP @ +/-4290', (collars are at 4270' and 4312). Pressure test the RBP and casing to 5000 psi. spot 2 sx of sand on top of RBP and trip out of the hole with Packer.
10. Bleed off pressure. ND BOP's. ND wellhead. Un-land 4 1/2" casing string. NU double entry flange. NU BOP.
11. PU 1-1/4" 2.3#/ft J-55 10rd IJ tubing, and TIH outside 4-1/2" casing in open hole to 3350' (Estimated TOC). Circulate with freshwater treated with biocide to clean up annulus while TIH.
12. MIRU cement services and water truck containing fresh water for cementing. Circulate on bottom with freshwater treated with biocide until returns clean up with rig pump.
13. Rig up cement trucks.
14. Pump 150 Bbls of drilling mud followed with 5 Bbls. freshwater and cement job consisting of 20 Bbls Sodium Metasilicate followed by 560 sx 15.8 ppg neat Class G cement with 1/4 #/sx cello-flake. The cement to be retarded for 125 degree Fahrenheit for six hour pump time.
15. TOH with 88 joints to ~600' and reverse circulate 2 times the tubing volume with drilling mud or until the cement cleans up.
16. Rig down cementing company.
17. Trip out of the hole with 1-1/4" tubing and shut well in overnight.
18. Rig up wireline truck and run a CCL-GR-CBL-VDL from 3350' to 600' or the top of cement. If cement isn't above 819' then get with the Engineer on further cement work.
19. ND BOP. ND double entry flange and crossover. Pick up and land 4-1/2" casing in slips. NU tubing head. NU BOP SDFN to WOC.
20. PU and TIH with 2-3/8" tbg and retrieving head. Circulate sand off RBP at @ +/-4290'. TOOH with RBP and standing back tubing.
21. Bail if the need be.
22. TIH 2-3/8" NC, 2-3/8" SN, and 2-3/8" 6.5# J-55 EUE 8rd tubing. Land tubing at +/- 7863' or 1 joint above the top Codell perforation (7892'-7910').
23. Broach tubing to seating nipple. ND BOPs. NU master valve and tubing head adaptor and install 3' pup joint above master valve. Hydrotest tubinghead assembly to 3000 psi for 15 mins. RDMO WO Rig.
24. RDMO WO Rig.
25. Clean location and swab well back to production, if necessary. Notify Foreman/Field Coordinator of finished work and turn well over to production team.

Proposed Perforation Intervals

Top	Btm	Zone	Comments

Engineer: MICHAEL SCHWARZ: 832-623-8140

Foreman: PHIL WAGNER: 970-301-1551

Lead Pumper: JESSE SPRADLIN: 970-301-1638

Authorized By: CORY EIKENBERG: 970-590-6234



BRADENHEAD TEST REPORT

- Step 1. Record all tubing and casing pressures as found.
 Step 2. Sample now, if intermediate or surface casing pressure > 25 psi. In sensitive areas, 1 psi.
 Step 3. Conduct Bradenhead test.
 Step 4. Conduct intermediate casing test.
 Step 5. Send report to BLM within 30 days and to OGCC within 10 days. Include wellbore diagram if not previously submitted or if wellbore configuration has changed since prior program. Attach gas and liquid analysis if sampled.

1. OGCC Operator Number: 47120
 2. Name of Operator: Kerr-McGee Oil and Gas Onshore LP
 3. BLM Lease No: _____
 4. API Number: 0512329459
 5. Multiple Completion? Yes No
 6. Well Name: SEC FOUR 12-4
 Number: _____
 7. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWNW 4 1N 68W
 8. County: Weld
 9. Field Name: WATTENBERG
 10. Minerals: Fee State Federal Indian

11. Date of Test: 09/05/2013
 12. Well Status: Flowing Shut In
 Gas Lift Pumping Injection
 Clock/Intermittent
 Plunger Lift
 13. Number of Casing Strings:
 Two Three Liner?

14. **STEP 1: EXISTING PRESSURES**

Record all pressures as found	Tubing: 631 Fm: _____	Tubing: Fm: _____	Prod. Casing: 701 Fm: _____	Intermediate Csg: Fm: _____	Surface Casing: 127
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15. **STEP 2: See instructions above.**

16. **STEP 3: BRADENHEAD TEST**

Buried Valve? Yes No Confirmed Open? Yes No
 With gauges monitoring production, intermediate casing and tubing pressures, open surface casing (bradenhead) valve (if no intermediate casing, monitor only the production casing and tubing pressures.) Record pressures at five minute intervals. Define characteristics of flow in "Bradenhead Flow" column using letter designations below:
 0 = No Flow; C = Continuous; D = Down to 0; V = Vapor
 H = Water H2O; M = Mud; W = Whisper; S = Surge; G = Gas

Elapsed Time (Min:Sec)	Fm: Tubing:	Fm: Tubing:	Production Casing PSIG	Intermediate Casing PSIG	Bradenhead Flow:
00:	631		701		127,g
05:	631		700		54,g
10:	632		700		13,g
15:	632		701		w,g
20:	633		702		w,g
25:	635		702		14,g
30:	636		702		2,g

BRADENHEAD SAMPLE TAKEN?
 Yes No Gas Liquid

Character of Bradenhead fluid: Clear Fresh
 Sulfur Salty Black
 Other (describe): _____

Sample cylinder number: _____

Note instantaneous Bradenhead PSIG at end of test: > 2

17. **STEP 4: INTERMEDIATE CASING TEST**

Buried Valve? Yes No Confirmed Open? Yes No
 With gauges monitoring production, intermediate casing and tubing pressures, open the intermediate casing valve. Record pressures at five minute intervals. Characterize flow in "Intermediate Flow" column using letter designations below:
 0 = No Flow; C = Continuous; D = Down to 0; V = Vapor
 H = Water H2O; M = Mud; W = Whisper; S = Surge; G = Gas

Elapsed Time (Min:Sec)	Fm: Tubing:	Fm: Tubing:	Production Casing PSIG	Intermediate Casing PSIG	Bradenhead Flow:
00:					
05:					
10:					
15:					
20:					
25:					
30:					

INTERMEDIATE SAMPLE TAKEN?
 Yes No Gas Liquid

Character of Intermediate fluid: Clear Fresh
 Sulfur Salty Black
 Other (describe): _____

Sample cylinder number: _____

Note instantaneous Intermediate Casing PSIG at end of test: >

18. Comments: Surface casing produced no fluids during the form 17 test.

19. **STEP 5:** See instructions above.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Test Performed By: Dustin Lauer Title: Non-Employee Job Phone: 970-324-7442
 Signed: _____ Title: Non-Employee Job Date: 09/05/2013
 WITNESSED BY: _____ Title: _____ Agency: _____