

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

15-129-21699-0000

FORM APPROVED
Budget Bureau No. 1001-0135
Expires July 31, 1996

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		WATER INJECTION WELL	
2. Name of Operator Anadarko Petroleum Corporations			
3a. Address 701 S Taylor, Suite 400 Amarillo, TX 79101		3b. Phone No. (include area code) 806.457.4600	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 215 FNL & 2163 FWL OF SEC. 4-33S-40W		5. Lease Serial No. KSNM 67921	
		6. If Indian, Allottee or Tribe Name	
		7. If Unit or CA/Agreement, Name and/or No.	
		8. Well Name and No. SERU 13-1	
		9. API Well No. 1512921699-00-00	
		10. Field and Pool, or Exploratory Area STIRRUP	
		11. County or Parish, State MORTON KS	

12. CHECK 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"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete
	<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
			<input type="checkbox"/> Water Shut-Off
			<input type="checkbox"/> Well Integrity
			<input checked="" type="checkbox"/> Other <u>Completion Procedure</u>

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 90 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 logging 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 final site is ready for final inspection.)

SEE ATTACHMENT FOR THE COMPLETION PROCEDURE.

RECEIVED
AUG 11 2003
KCC WICHITA

2003 JUL 23 P 12:57
BLM-CKFO-TULSA

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) <u>John M. Vigil</u>	Title JOHN VIGIL, DIVISION DRILLING COORDINATOR
	Date 7/23/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <u>[Signature]</u>	Title <u>Field Manager</u>	Date <u>8/7/03</u>
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 these rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office <u>Amarillo Field office</u>	

Title 18 U.S.C. Section 1001, makes 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.



RECEIVED

AUG 11 2003

KCC WICHITA

COMPLETION PROCEDURE

FOREMAN:	Kenny Parks	(M)806-595-0980	(P)620-626-9162
	Steve Bartel	(M)806-595-0979	(P)620-626-1908
ENGINEER:	John Vigil	(M)806-679-8244	(O)806-457-4623

WELL NAME:	SERU 13-1	AFE #:	29948
SPOT:	215' FNL & 2163.1' FWL	TD:	5420' GL
LOCATION:	Sec. 4, T33S, R40W	PBTD:	5378' GL
COUNTY, ST.:	Morton Co. KS.	KB ELEV:	3352.1'
FIELD:	Stirrup	GL ELEV:	3341.1'
APC WI:	0.8336	KB:	11'

Objectives:

- Verify adequate cement isolation across Morrow 'D' interval
- Perforate Morrow 'D' and stimulate down work string.
- Run and test injection packer and lined tubing.
- Turn well to production dept for injection as soon as possible.

Current Status:

Wait on completion.

- **Note:** Full circulation during the primary cement job.
- **Note:** Top plug was bumped with treated 4% KCL.
- **Note:** Plug held. Casing has been tested to 2000 psi.

<u>Work String:</u>		<u>Planned Perforations:</u>	
Size:	2 7/8"	Morrow 'D':	5262' - 5290' [28']
Weight:	6.5 #/ft		
Grade:	N-80		
Capacity:	0.00579 bbl/ft		
Capacity:(b/w 2 7/8" & 5 1/2")	0.0158 bbl/ft		
Burst @100%:	10,570 psi		
Collapse @ 100%:	11,170 psi		
Joint Strength:	145,000 lbs		
Pipe Body Yield:	145,000 lbs		
I.D.:	2.441 in		
Drift ID:	2.347 in		
2 7/8" SN: (ID / CON)	N/A		

RECEIVED
AUG 11 2003
KCC WICHITA

<u>Casing / Cement:</u>		<u>Production:</u>		<u>Surface:</u>		<u>Tubing Head</u>	
Size:	5 1/2"	5 1/2"	8 5/8"	Type:	Huber-Independent		
Weight:	15.5 #/ft	15.5 #/ft	22.81 #/ft	MWP:	2000 psi		
Grade:	J-55	J-55	ISW-42	Min. Bore:			
Depth:	0'-5420' (Est)	0'-5420' (Est)	1'-1585'				
Capacity:	0.0238 bbl/ft	0.0238 bbl/ft	0.0636 bbl/ft				
Burst @100%	4810 psi	4810 psi	2130 psi				
I.D.	4.950"	4.950"	7.972"				
Drift ID:	4.825"	4.825"	8.125"				
Landing Depth:	5420' (Est)	5420' (Est)	1585'				
Port Collar Depth:	N/A	N/A					
TOC Stage 1 :	4900' (Est.)	4900' (Est.)	Surface				

NOTE: Daily safety and environmental checks are to be performed on location through out the completion process!!

Completion Procedure:

- 1) Dress location level – prepare for completion unit. Set rig anchors. Pull test same to 16,000 lbs. Tag anchors and chart pull test for records.
- 2) MIRU Well Service 300 Series completion unit. [Dead pull rated: 120,000 lbs w/ 4 lines, 180,000 lbs w/ 6 lines]
- 3) Spot flow back frac tank +/-100 from well head. Lay 2" (hammer union connections and ball valves \geq 2M psi) flow lines from tubing head annulus. Manifold line to frac tank and reserve pit.
- 4) N/U 5 1/2" x 11" 2M Flange P/O. N/U 5 1/2" Huber Tbg Head. M/U screw-on companion flange. N/U 7 1/8" 3M manual BOP dressed w/ blind rams and 2 7/8" pipe rams. Function test both sets of BOP rams. Place 2 7/8" 3M psi 'TIW' valve & closing key on rig floor.

- 5) MIRU Schlumberger wireline. N/U 7" 8rd flange on top of BOP. (Note: Record length, caliper, and retrieving neck dimensions of all in-hole wireline tools prior to running in hole). M/U gauge ring/junk basket/GR/CCL. Utilize standard w/ pack-off. RIH to PBTD (Est @ +/- 5378'). POOH. L/D gr & jb. Record fluid level and WL - PBTD.
- 6) M/U CMT/GR/CCL. RIH. R/U kill truck with steal lines to annulus. Pressure casing to 1000 psi. Correlate to Schlumberger Z-D/CN/GR dated 07/20/03. Run bond log f/ PBTD to +/- 200' above apparent TOC under 1000 psi. Record PBTD, TOC, & maker joint.
- 7) Release pressure. POOH. L/D bond tools.
- 8) Verify adequate isolation across primary zone - Morrow (5250'-5300'). Minimum 50' above and 50' below zone. Fax bond-log to 806-457-4696 (log-fax). E-mail bond log to john_vigil@anadarko.com Note: Calibrate CMT tool to cement compressive strength of 1600 - 1900 psi.
- 9) If cement is adequate, RU full lubricator. M/U GR/CCL. RIH w/ Schlumberger's 3 3/8" casing csg gun w/ power-jet, 6 spf, 120 deg. Correlate (w/ Gamma Ray) to Schlumberger Z-PD/CN/GR open-hole log dated 07/20/03. Perforate Morrow 'D' f/ 5262' - 5290' [28']. POOH. Record changes in fluid level and/or surface pressure. RDMO.wireline.
- 10) M/U Baker Model "R" packer, 1 jt 2-7/8" tubing, standard SN (ID = 2.25") & 2-7/8" tubing.
- 11) Strap, drift, & P/U +/- 5200' of 2 7/8", 6.5#/ft, N-80, 8rd EUE WORK STRING. Set packer @ +/- 5200' w/ 22,000 lbs. (NOTE: Do not set pkr in casing collar. See depths CCL log). Position 2-7/8" TIW valve (and closing key) on rig floor while TIH.
- 12) Set packer on top of BOP. Set slips and close pipe rams. M/U 2 7/8" TIW valve on tbg.
- 13) R/U swab w/ no-go. Swab fluid to S/N. Record IFL, EFL, total fluid recovery, and all shows of hydrocarbon. If possible, identify fluid entry and obtain samples for analysis and compatibility tests. Send water and oil samples to HES for analysis and for acid compatibility test.
- 14) MIRU HES acid crew and equipment. No isolation tool necessary. N/U HES to TIW (or other master w/ MWP > 3M) valve. Hold operations/safety meeting. Pressure test surface lines 3500 psi. Bled. Set Pmax for treatment @ 3000 psi. Monitor annulus w/ pressure transducer. Load tubing < 2 bpm. Pump breakdown as follows:

4000 gal 10% Acetic: (Adds: 1 gal/M MSA II, 1 gal/M Losurf-300 + 2 gal/M Cla-Sta XP + 175 Bio-Ball Sealers)

Note: See attached pump schedule

- 15) Record breakdown pressure. Increase to full rate +/- 8-10 bpm. Displace w/ treated 4% KCL to top perforation (HES to provide displacement - verify on job call out.) Record ISIP, ATP, ATR, and 5 min, 10 min, & 15 min Shut-in tubing pressure. RDMO HES.
- 16) RU swab. Recover load.
- 17) Shut in well overnight. R/U slickline. Obtain SBHP @ MPP. Leave bomb on bottom minimum one hour. Record dead weight SITP and FL during test. Fax and/or e-mail test result to john.vigil@anadarko.com. RDMO slickline testers.
- 18) Contact area production foreman. Communicate intentions and timing for well completion. If necessary, coordinate production facilities, pumping unit, and pipeline.
- 19) If necessary, kill down tbg. with treated 4% KCL. Unseat packer. P/U on tubing. Open packer by-pass and equalize across same. Note: If tubing is dry prior to opening by-pass, load tubing with 10 bbl treated 4%.
- 20) R/U swab. Swab down annular volume. R/D swab.
- 21) TOH L/D packer & work string. Report lost rubber and /or slip elements.
- 22) M/U & TIH w/ BOT WL entry guide (OD: 3.668", ID 2.00"), 1 jt 2 7/8" Duoline-20 tbg, BOT 10K Coated Hornet-2 pkr (OD: 4.656", ID: 1.978"), and 2 7/8" Duoline-20 (ID: 2.195") to surface. Note: Run Duoline-20 tbg according to manufactures specs.
- 23) Set pkr @ +/- 5200'. Note: Do not set pkr in casing collar (see Cmt bond log for location of collars).
- 24) N/D BOP and companion flange. Set 2 7/8" slips in Huber head and PO. N/U 2M brass injection-head valve and lined 2 7/8" XO nipple.
- 25) Slowly load annulus w/ pkr fluid (2% KCL w/ 10 gal/M Unichem Corrosion Inhibitor).
- 26) Pressure test annulus in stages to 500 psi. Hold 15 min. and record.
- 27) Release rig and all rental equipment.

28) Turn well to production department for final KCC annular test and establish injection in Morrow 'D'.