

DAVID R. GLASS
PETROLEUM ENGINEER

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

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29. Disposition of Gas (Sold, used for fuel, vented, etc.)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth

32. Additional remarks (include plugging procedure):

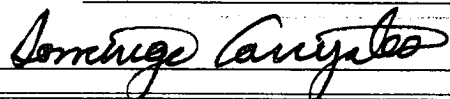
33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☐ Directional Survey
☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) **Domingo Carrizales**Title **Sr. Petroleum Engineer**

Signature

Date **03/24/2005**

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.

WELLBORE SCHEMATIC AND HISTORY

CURRENT COMPLETION SCHEMATIC		LEASE NAME Cooper Jal Unit		WELL NO. 403																																												
Surface Csg Hole Size: 12 1/4 in Csg. Size: 8 5/8 in Set @: 400 ft Sxs Cmt: 600 Circ: Yes TOC @: surf TOC by: circ		STATUS: Active (11-16-98) Oil		API# 30-025-32286																																												
		LOCATION: 150 FNL & 100 FWL, Sec 19, T - 24S, R - 37E, Lee County, New Mexico																																														
		SPUD DATE: 11/13/93 TD 3750 KB 3,319' DF																																														
		INT. COMP. DATE: 02/11/94 PBDT 3694 GL 3,308'																																														
		ELECTRIC LOGS: GR-DLL-MSFL (11-20-93 Halliburton) GR-SDL-DSN-CSNG (11-20-93 Halliburton) GR-FWS (11-20-93 Halliburton) Computer Analyzed Log (11-20-93 Halliburton) GR-CCL (11-28-93 Halliburton) GR-CCL (10-9-97 Schlumberger)																																														
		GEOLOGICAL DATA CORES, DST'S or MUD LOGS: Core 1: 2995 - 3055' (60' recovery) Core 2: 3055 - 3115' (60' recovery) Core 3: 3115 - 3175' (60' recovery) Core 4: 3175 - 3225' (60' recovery)																																														
		HYDROCARBON BEARING ZONE DEPTH TOPS: Yates @ 3008' Seven Rivers @ 3234' Queen @ 3641'																																														
		CASING PROFILE SURF. 8 5/8" - 24#, WC-50, ST&C set @ 400'. Cmt'd w/250 sxs - circ cmt to surface. PROD. 5 1/2" - 15.5#, WC-50, LT&C set @ 3750'. Cmt'd w/950 sxs - circ cmt to surface. LINER. None																																														
Production Csg. Hole Size: 7 7/8 in Csg. Size: 5 1/2 in Set @: 3750 ft Sxs Cmt: 950 Circ: Yes TOC @: surface TOC by: circ		CURRENT PERFORATION DATA																																														
		CSG. PERFS: 3010 - 21', 3024 - 40', 3051 - 80', 3091 - 3109', 3450 - 58', 3480 - 92', 3501 - 11', 3541 - 43', 3553 - 55', 3587 - 91', 3625 - 27', 3644 - 51', 3119 - 21', 3126 - 29', 3139 - 44', 3148 - 50', 3153 - 55', 3157 - 62', 3178 - 80', 3212 - 18', 3228 - 31', 3282 - 87' & 3290 - 92' w/ 2 spf (222 holes total)																																														
		OPEN HOLE :																																														
		3450 - 58', 3480 - 92', 3501 - 11', 3541 - 43', 3553 - 55', 3587 - 91', 3625 - 27', 3644 - 51' & 3655 - 63' w/ 2 spf (110 holes total)																																														
TUBING DETAIL 12/17/2004		ROD DETAIL 12/17/2004																																														
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WELL HISTORY SUMMARY																																																
24-Nov-93 Initial completion: Perf'd 3450 - 58', 3480 - 92', 3501 - 11', 3541 - 43', 3553 - 55', 3587 - 91', 3625 - 27', 3644 - 51', & 3655 - 63' w/ 2 spc. (110 holes total) Frac'd w/29,000 gals XLG 2% KCL carrying 138,000#s 16/30 brady sand. Pump test 24 hours - 1 BOPD, 114 BWPD, and 24 MCFPD. Perf'd 3010 - 21', 3024 - 40', 3051 - 80', 3091 - 3109', 3119 - 21', 3126 - 29', 3139 - 44', 3148 - 50', 3153 - 55', 3157 - 62', 3178 - 80', 3212 - 18', 3228 - 31', 3282 - 87' & 3290 - 92' w/ 2 spf (222 holes total). Frac'd w/43,000 gals XLG 2% KCL carrying 220,000# 12/20/ sand. Pump test 24 hours - 32 bopd, 183 bwpd, & 11 Mcfcpd. Commingled all perfs - IP=33 bopd, 287 bwpd, & 23 MCFPD.																																																
05-Jan-94 NMOC Potential test: 32 bopd, 183 bwpd, & 11 Mcfcpd																																																
29-Apr-94 Replaced rod pump.																																																
21-May-94 Replaced rod pump.																																																
03-Mar-94 Replaced rod pump. Tst bkg. Good tst.																																																
18-Aug-94 C/O 30' of fill. Replaced rod pump.																																																
21-Jan-95 Repaired rod part - replaced rod pump, 47 - 3/4" boxes, 40 - 7/8" boxes, & 38 - 1" boxes. Tst bkg. Good tst.																																																
23-Sep-96 Repaired rod part - replaced rod pump and 6 - 3/4" rods.																																																
10-Oct-97 Set CIBP @ 3420' & dump'd 35' of cmt on top. TOC @ 3388'. Repaired rod part - replaced rod pump and ran new string of rods.																																																
12-Nov-98 Set CIBP @ 2950' & dump'd 35' of cmt on top. TOC @ 2915'. Displaced csg with pkv fluid & 1st csg to 550 psi. Good tst. Well TA'd 11-16-98.																																																
11-Nov-02 Re-enter T/A'd Well. RIH with 4 3/4" bit and 6 - 2 1/2" Drill Collars on 2 7/8" tubing. Tagged cement at 2933'. Test casing to 550# - held. Drilled cement and CIBP at 3048'. Tagged cement of second plug at 3382', drilled cement and CIBP at 3421'. Drilled and pushed CIBP to 3896' circ. well clean. 2790 bbls of water to complete job. Used 5 gallons Corrosion inhibitor, and ran production equipment. Status change: T/A'd to producing!																																																
18-Nov-02 Lay 1150' of 2" poly flowline from CJU #403 to CJU #202 and tie in.																																																
27-Dec-02 POOH with rods and pump. Pump was stuck. POOH with 2 7/8" tubing. Bailed out sand to 3685'. RIH with production string.																																																
08-Jan-03 R/P body break 114 rods from surface. Change rd design to reduce rod load & slow down unit spm. Pump was good.																																																
23-May-03 POOH with rods, pump, and tubing. Changed out pump. Hydrotest tubing in hole - busted 3 joints. Tagged bottom at 3692'.																																																
29-Jul-03 tally out of hole. RIH with pump, rods, and tubing. Added 13 joints to tubing string.																																																
04-Dec-03 POOH and laid down sub pump. RIH with new 114 joints 2 7/8" tubing and tagged at 2704'. Set TAC with 12,000#. RIH with pump and rods. Placed well on production.																																																
26-May-04 POOH with rods and pump. Tagged fill at 3696' and tally out of hole. Hydrotest tubing in hole to 7,000#. Set TAC with 16,000#.																																																
16-Dec-04 RIH with pump and rods. Laid down 6 joints due to outside corrosion. Changed out 12 - 7/8" & 18 - 3/4" boxes due to wear. PWOP.																																																
16-Dec-04 POOH with rods without stucked pump. POOH with 2 7/8" tubing. Hydrotest tubing in hole - found 1 split 94th joint. Laid down both 12 joints due to pits. RIH with production string with Super Max blast joint. PWOP.																																																
8-Jan-05 Unseat pump, pumped 40 bbls water with soap. PWOP.																																																
PREPARED BY: Larry S. Adams D. Carrizales UPDATED: 07-Feb-05																																																