

# **Final Operational/Workover Report Completion**

**Para et al Cameron A-03**

**Well ID # 2047**

**UWI: 300A036010117301**



On March 1, 2007 Paramount Resources Ltd. moved Concord Well Servicing rig # 19 onto Para et al Cameron A-03 to perform a completion operation to evaluate the Keg River for water disposal capacity. Service rig operations were completed on March 6, 2007. A chronological summary of the operations follows.

- 1/3/2007:** Moved service rig onto location and rigged up service rig and ancillary equipment.
- 2/3/2007:** Unable to start service rig. Wait on mechanic.
- 3/3/2007:** Repair rig. Remove wellhead and install the BOP's. Ran in the hole with a bit and scraper on 60 mm tubing. Tagged PBTD at 1562 mKB.
- 4/3/2007:** Circulated the well clean with 3% KCl water. Pull out of the hole with the tubing and recovered the bit and scraper. Rigged in an electric wireline unit and ran a cement bond log. Perforated the Keg River from 1523.0 – 1542.0 mKB. Well went on vacuum. Ran and set a permanent packer and tailpipe at 1511 mKB.
- 5/3/2007:** Ran in the hole with an on-off connector overshot on 73 mm internally coated tubing. Tagged the packer, displaced the annulus to inhibited water, and latched onto the packer. Pressure tested the annulus to 7 MPa. Pressured up to 17 MPa to release the plug from the tailpipe.
- 6/3/2007:** Rigged out service rig and equipment. Performed a 10 m<sup>3</sup> 15% HCl acid squeeze using ball sealers as a diverting agent. The final squeeze rate was 0.51 m<sup>3</sup>/min at 8 MPa.
- 8/3/2007:** Rigged in electric wireline unit. Ran base temperature log. Rigged in pumping unit. Performed injection test with produced water. Final injection rate was 0.85 m<sup>3</sup>/min at 12.6 MPa. Ran temperature passes on cool down to confirm containment within the zone.

## ACID TREATMENT REPORT

[illegible]

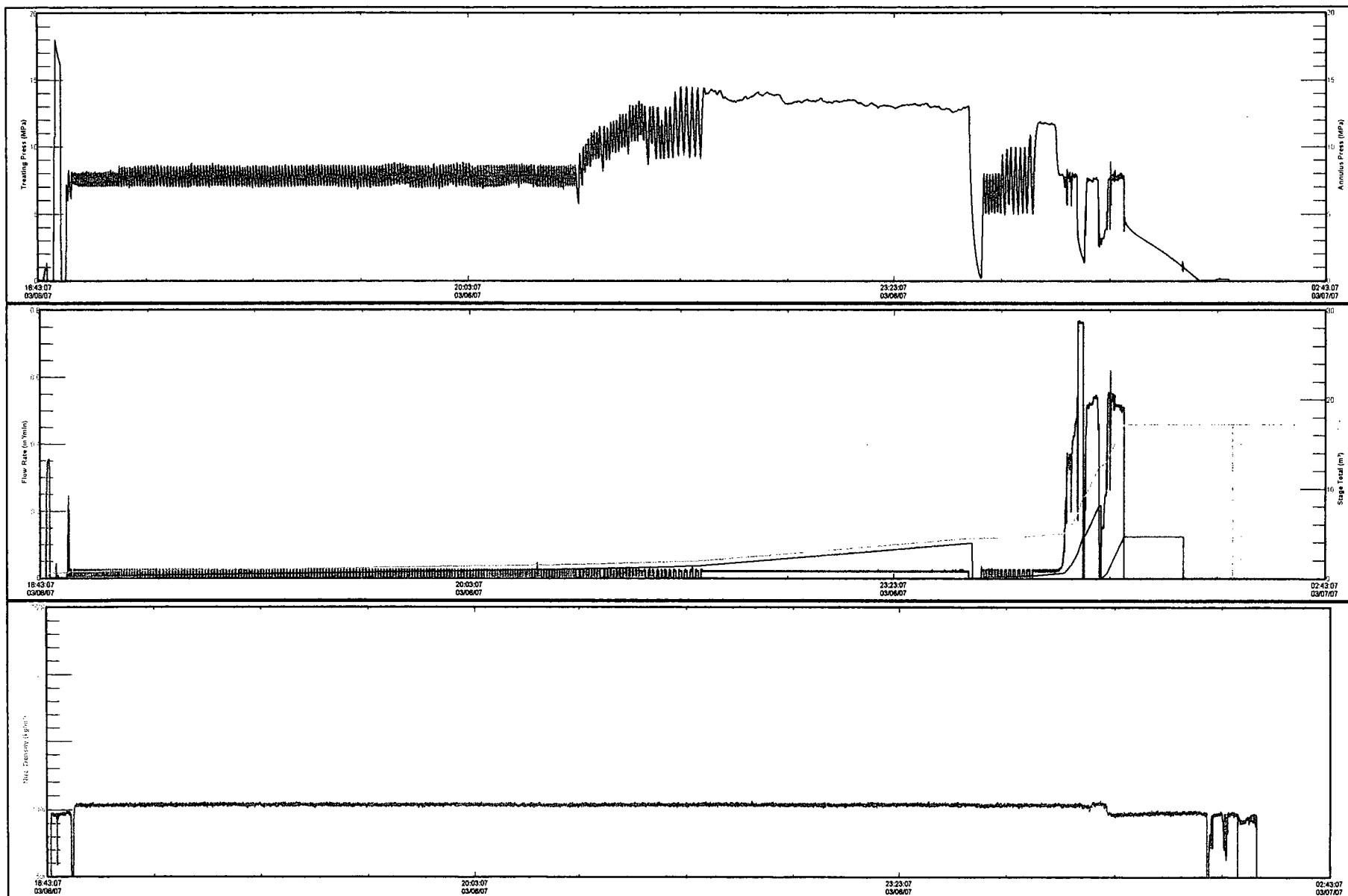


BJ Services JobMaster Program Version 3.10

Job Number: S273392

Customer: PARAMOUNT RESOURCES LTD

Well Name: PARA ET AL CAMERON A-3 A-03 60, 10' N/117, 30' W



**ACID TREATMENT REPORT**

Owner PARAMOUNT RESOURCES LIMITED					Service Order Number: S273393		Date: 8-Mar-2007	
Address #4700, 888 - 3rd Street S.W. CITY CALGARY Province AB					Well Name And Number: PARA ET AL CAMERON A-C		Job Status:	
Program No.:					UWI: 60° 10 min - 117° 30 min			
					Job Type: INJECTIVITY TEST			
					Rig: NO RIG			
					Formation Treated: KEG RIVER			
					Well Type: New		Reservoir Fluid: Injection	
	O.D.	WT.	Depth	Vol.	MPa	Treating Materials		Treating Materials
Tubing	73.00	9.87	1519.00	4.60		60 M3	Water	
Casing	139.70	23.07						
Open Hole								
Total				4.60				
Packer:		1513	m	PBTD:	m			
Perforations Interval	From (m)	To (m)	TYPE					
	1523.0	1542.0	Perforations					
Bottom Hole Temperature:		60	°C					
Ambient Temperature:			°C					
BJ Service Representative WATSON,STEVE					Customer Representative KIM MacLEOD			
Time	Press. (MPa)		Volume (m³)		In Form	Rate (m³/min)	Ratio CO2/N2 (scm)	Arrived on Location
	Casing	Tubing	Out Of Tanks	Stage				Left Location
8:00								8-Mar-2007 08:00 Hours
8:10								08:00 Hours
8:45								
9:00			0.50	0.50		0.17		Tailgate meeting
9:03		21.0						Rig in BJ, Note: 60 M3 PRODUCED WATER IN 400 TANK
9:07		1.0	2.50	2.00		0.33		Prejob meeting
9:13			3.00	0.50		0.06		Fill Lines, NOTE: Well on Vacuum
9:21		-0.1	7.00	4.00		0.07		Pressure test lines
10:21		0.8	8.13	1.13		0.07		Fill well
10:36		1.7	9.63	1.50		0.10		Rate on pump, 0.025 M3/min, well on vac
10:51		2.3	11.50	1.88		0.13		Using 0.05M3/min for base line of 1 hour, 57 M3 fluid in Tank
11:06		2.8	13.75	2.25		0.15		Pump rate, 0.075 m3/min
11:21		3.2	16.38	2.63		0.18		Pump rate, 0.100 m3/min
11:36		3.5	19.38	3.00		0.20		Pump rate, 0.125 m3/min
11:51		3.8	22.75	3.38		0.23		Pump rate, 0.150 m3/min
12:06		4.1	26.50	3.75		0.25		Pump rate, 0.175 m3/min
12:21		4.4	30.63	4.13		0.27		Pump rate, 0.200 m3/min
12:36		4.7	35.13	4.50		0.30		Pump rate, 0.225 m3/min
12:51		5.0	40.00	4.88		0.33		Pump rate, 0.250 m3/min
13:06		5.2	45.25	5.25		0.35		Pump rate, 0.275 m3/min
13:21		12.0	50.25	5.00		0.63		Pump rate, 0.300 m3/min
13:29		12.6	55.65	5.40		0.90		Pump rate, 0.325 m3/min
13:35		4.2						Pump rate, 0.350 m3/min
13:40								Max rate , 0.825 m3/min at 12 Mpa
								Pump rate, 0.850 m3/min
								Stop Pumps
								Rig out BJ Services
								NOTE: trace of oil in last produced water



BJ Services JobMaster Program Version 3.10

Job Number: S273393

Customer: PARAMOUNT RESOURCES LTD

Well Name: PARA ET AL CAMERON A-3 A-03 60, 10' N/117, 30' W

