

## **WELL COMPLETION PROGRAM**

**PARA et al CAMERON K-74**

**AREA 60° 10' 117° 15'**

**AFE NUMBER: 02N320149**

**WID:**

**1972**

**UWI:**

**300K746010117150**

**File:**

**9211-P33-20-2**

**Prepared By: Dave Block**

**February 13, 2003**

## WELL INFORMATION:

Well Name: Para et al Cameron K-74  
Area: 60° 10' N, 117° 15' W  
Location: Latitude: 60° 03' 40.733"  
Longitude: 117° 29' 27.326"  
UWI: 300K7446010117150  
ADW: 1972  
Spud Date: January 24, 2003  
Rig Release Date: February 6, 2003  
Well Status: Potential Sulphur Point oil well.

KB Elevation: 782.64 m  
Ground Elevation: 777.60 m  
PBSD: 1456 mKB  
TD: 1465 mKB

Surface Hole: 311 mm to 431 mKB  
Surface Casing: 219.1 mm, 35.7 kg/m, J-55, ST&C set at 431 mKB. Cemented with 34 t class 'G' cement plus 2% CaCl<sub>2</sub>. 7.0 m<sup>3</sup> cement returns to surface.

Main Hole: 200 mm to 1465 mKB  
Production Casing: 139.7 mm, 20.83 kg/m, J-55, ST&C set at 1461 mKB.  
Cemented with 20 t Fill Lite 2-125 + 3% A-9 + 0.6% R-3 and 5 t 'G' cement + 0.1% R-3 + 0.4% FL-77. 5.0 m<sup>3</sup> cement returns to surface.

Cores: #1: Sulphur Point 1420.5 – 1438.5 mKB.  
Cut: 18 m.  
Rec: 18 m

DST's: None

Proposed Perforated Zone: Sulphur Point Dolomite: 1431.0 – 1434.0 mKB  
Estimated BHP: Approximately 10500 kPa  
H<sub>2</sub>S Content: Approximately 1 - 2%.

**PROJECT OVERVIEW:**

To complete and test the well as a Sulphur Point Dolomite oil well.

**SAFETY: REFER TO THE AREA "EMERGENCY RESPONSE PLAN"**

All operations are to be carried out in accordance with government regulations and recognized safety procedures. Operations are to be conducted in a manner that results in the greatest degree of protection possible for the public, on-site personnel and the environment.

Service Rig Manager and Wellsite Supervisor are to have valid PITS "Well Service Blowout Prevention" and "H2S alert" certificate on site.

***THIS WELL IS EXPECTED TO ENCOUNTER H<sub>2</sub>S.*****BOP EQUIPMENT:**

Use a 179 mm 21 MPa BOP complete with blind rams, pipe rams, and annular to meet NEB requirements. Function test and pressure test BOPs to 21 MPa.

**RECORD KEEPING:**

Show on daily reports a complete inventory of all fluids hauled to and away from wellsite including manifest and ticket numbers for all fluid hauling. Keep a detailed record of all load fluid on the daily reports. Fill out material transfer forms for all equipment transferred to and from the lease.

## WORKOVER PROCEDURE

1. Move in and RUSR c/w pump and clean tank. Rig up safety equipment.
2. Cut and dress casing stub. Install and pressure test the tubing spool. Install and pressure test the BOP's.
3. Run in hole with a bit and scraper on 73 mm tubing to PBTD at approximately 1456 mKB. Circulate the hole clean with 3% KCl water.
4. Rig in a wireline unit and run a cement bond log from TD to 1200 meters. If the bond looks questionable do a pressure pass at 7000 kPa. Watch for cement top while running in the hole and if one is seen log a pass over cement top on the way out.
5. Casing swab the fluid level down to approximately 1000 meters to leave the Sulphur Point underbalanced by approximately 5000 kPa. Run in hole with 121 mm casing guns loaded with 36 gram charges at 17 spm and 60° phasing. Perforate from 1431.0 – 1434.0 mKB
6. Kill the well as required. Run the tubing with an 'R' nipple one joint off bottom and land in the dognut at approximately 1415 mKB. Remove the BOP's and install the wellhead.
7. Swab/flow the zone on cleanup and determine an initial production rate.
8. If required, a 3.5 m<sup>3</sup> 15% HCl acid squeeze will be performed with ball sealers as a diverting agent. Details to follow.
9. Release the service rig.
10. Contact the Calgary office to discuss testing details.
11. When buildups are complete pull recorders as required.
16. Turn the well over to production operations.

## PERSONNEL & EMERGENCY CONTACTS

An 0800 hour status morning report and daily cost summary will be faxed in to Paramount Resources Ltd. office at 266-6032, by the company representative

	OFFICE	CELLULAR	RESIDENCE	BUS. FAX
<b>COMPLETION</b>				
Dave Block	206-3834	804-8089	253-8976	266-6032(office) 253-8976(home)
Phil Christie	290-3627	861-8476	290-1574	266-6032
<b>GEOLOGIST</b>				
Llew Williams	206-3837	870-8949		290-3614
<b>COMPLETION SUPERVISOR</b>				
TBD				
<b>AREA COO</b>				
Lloyd Doyle	290-3673	620-8303	254-8334	266-6032
<b>LAND OCCUPANT</b>				
CROWN				

<b>NEB</b>	Chris Knoechel, Calgary (403) 299-3866 – Residence (403) 241-0047
	Rick Fisher Calgary (403) 299-2798
	Terry Baker Calgary (403) 299-2792 - Residence (403) 239-5032

### EMERGENCY PHONE NUMBERS

RCMP:	(867) 874-6555	Hay River, N.W.T.
HOSPITAL:	(867) 874-6831	Hay River, N.W.T.
AMBULANCE:	(867) 873-2222	Yellowknife, N.W.T.
AIR AMBULANCE:	1-800-661-3822	Northern Dispatch

## SUPPLIES AND SERVICES

SERVICE	COMPANY / CONTACT/LOCATION	PHONE
SERVICE RIG	Concord Well Servicing Rig # 42	(780) 524-2113
CAMP	Travers Food Services	(780) 437-5665
WELL SITE TRAILER		
SATELLITE		
KILL FLUID	HL Powell	
WELLHEAD	ABB Vetco Gray	(403) 264-4146
ELECTRIC WIRELINE	Computalog - High Level	(780) 926-4481
SLICKLINE, TESTING & RECORDERS	IPS – Zama Opsco - Rainbow	(780) 683-2205 (780) 956-2766
STIMULATION	BJ – High Level	(780) 926-3823
COIL TUBING	BJ – High Level	(780) 926-3823
TUBING	NUSCO - Calgary	(403)-266-3449
PACKERS, BP, PROFILES	Weatherford (Cardium) - High Level	(780) 926-4046
SAFETY	IROC – Red Deer - Hay River	(403) 346-9710 (867) 874-1011
First Aid	IROC – Red Deer - Hay River	(403) 346-9710 (867) 874-1011
TANK RENTAL	Total Energy – High Level	(780) 841-7220

**NOTE:**Services that are “Field Bid” must have a minimum of two (2) bids and company selected shown on Daily Cost Log.

## **GENERAL**

Full co-operation by field personnel is to be maintained with the NEB and other government agencies.

Under no circumstances will the possession and use of alcoholic beverages or illegal drugs be permitted on the wellsite or campsite.

Any accidents involving personnel are to be reported immediately to the Calgary Drilling Department. Access to the lease is to be restricted to authorized personnel only.

Safety meetings to discuss program are to be held prior to commencing well completion, perforating, stimulation and testing.

Material Transfers **MUST** be filled out on all tangible materials such as tubing. Note on the daily report when movement occurs. Tallies should be with "threads on" for inventory purposes.

Purchase order numbers are not used by Paramount.

Field tickets are to be completed in detail with the **Well Name and Number, A.F.E. No., and AFE Sub Item Number (i.e.: 22737-324 for Stimulation)** and details of the service work. Tickets are to be signed by the company representative and entered on daily cost log. (Note: Do not include GST on cost log)

All field tickets and copies of rental sheets must be submitted to the Calgary office weekly

**Invoices are to be mailed to:**

PARAMOUNT RESOURCES LIMITED  
#4700, 888-3<sup>rd</sup> Street S.W.  
Calgary, Alberta  
T2P 5C5

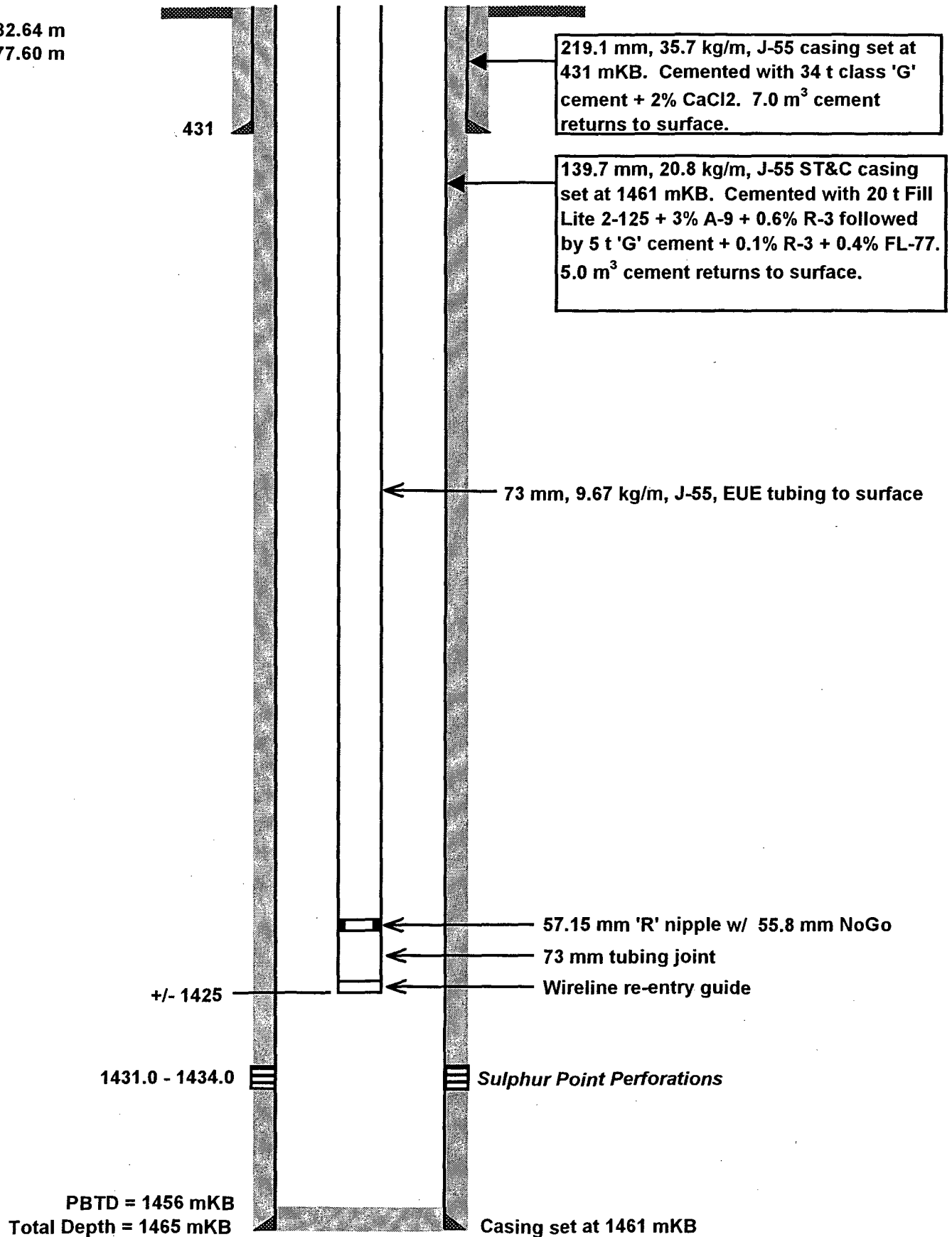
**ATTENTION: ACCOUNTS PAYABLE**

# PARA ET AL CAMERON K-74

60° 10' N, 117° 15' W

## Proposed Bottomhole Diagram

KB: 782.64 m  
GL: 777.60 m



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