

Paramount et al SE Fort Liard N-01 60 10 123 15

WID 1902

Report on Well Abandonment Operations

20170202 - 20170311

Richard Heenan  
Heenan Energy Services  
20170413

## Executive Summary

The Para et al SE Fort Liard N-01 well, was initially completed as a Mattson, and subsequently, as a Fantasque sweet gas well. It was one of three connected to the Liard gathering system and the Shiha pipeline. Due to low gas production, the field was shut in and the pipeline suspended in 2008. It was decided to abandon the N-01 well, along with two other former producing wells (O-35 and F-36) and two wells that had never been placed on production (I-46 and A-01). The required land use permit and water license were obtained, and requests for Approval to Alter the Condition of a Well were made to abandon all five wells.

The Mattson perforations had been previously suspended with a bridge plug and sand. The Fantasque had been suspended by setting an FSG plug in the on-off connector above the existing packer assembly @ 1439mKB and a collar stop, G pack-off and slip stop @ 57mKB.

A check of the surface casing vent on 20170202 indicated "no bubbles" in 15 minutes (consistent with previous shut-in well inspections). The top plug was removed with slickline. It was not possible to remove the lower plug and the tubing was punched (mechanically perforated) at 1430mKB to facilitate pulling the tubing "dry".

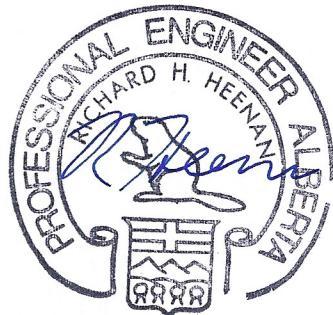
The Savanna service rig was moved in on 20170221 and BOPs installed and tested without incident. A refractometer test indicated the water in the well had a salinity from 28,000 to 42,000 ppm, exceeding the 4,000 ppm limit for fluids left in an abandoned well. The packer was released and pulled to surface with the tubing. Due to partially collapsed casing at surface it was not possible to remove the packer. It was run back into the well and set at 1527mKB (bottom of tailpipe calculated at 1557mKB). The tubing was released at the on-off connector immediately above the packer and pulled from the well. The well was circulated to fresh water and a feed rate of 100lpm at 6MPa was obtained into the Fantasque perforations. A plug of 4.2 tonnes class G cement was spotted across the perforations from 1527mKB to 1371mKB. A total of 230 liters of cement was squeezed into the Fantasque perforations with a final squeeze pressure of 8MPa. The cement was allowed to set overnight and then pressure tested to 7MPa for 10 minutes. The cement top was tagged at 1387.5mKB.

A final 10 minute bubble test on the surface casing vent on 20170311 showed "no bubbles". Surface and production casing were cut 1.2 meters below ground level and steel caps stitch welded (non-sealing) on the casing stubs. The hole around the casing was back filled to grade with the original excavated material. A well sign was installed 1 meter north of the casing stub.

A Change of Well Status Form was submitted 20170313.



PERMIT TO PRACTICE	
HEENAN ENERGY SERVICES LTD.	
Signature	R. Heenan
Date	2017/04/13
PERMIT NUMBER: P 027	
NT/NU Association of Professional	
Engineers and Geoscientists	



The following are attached to this report

Wellbore Diagrams

As abandoned

Prior to operations

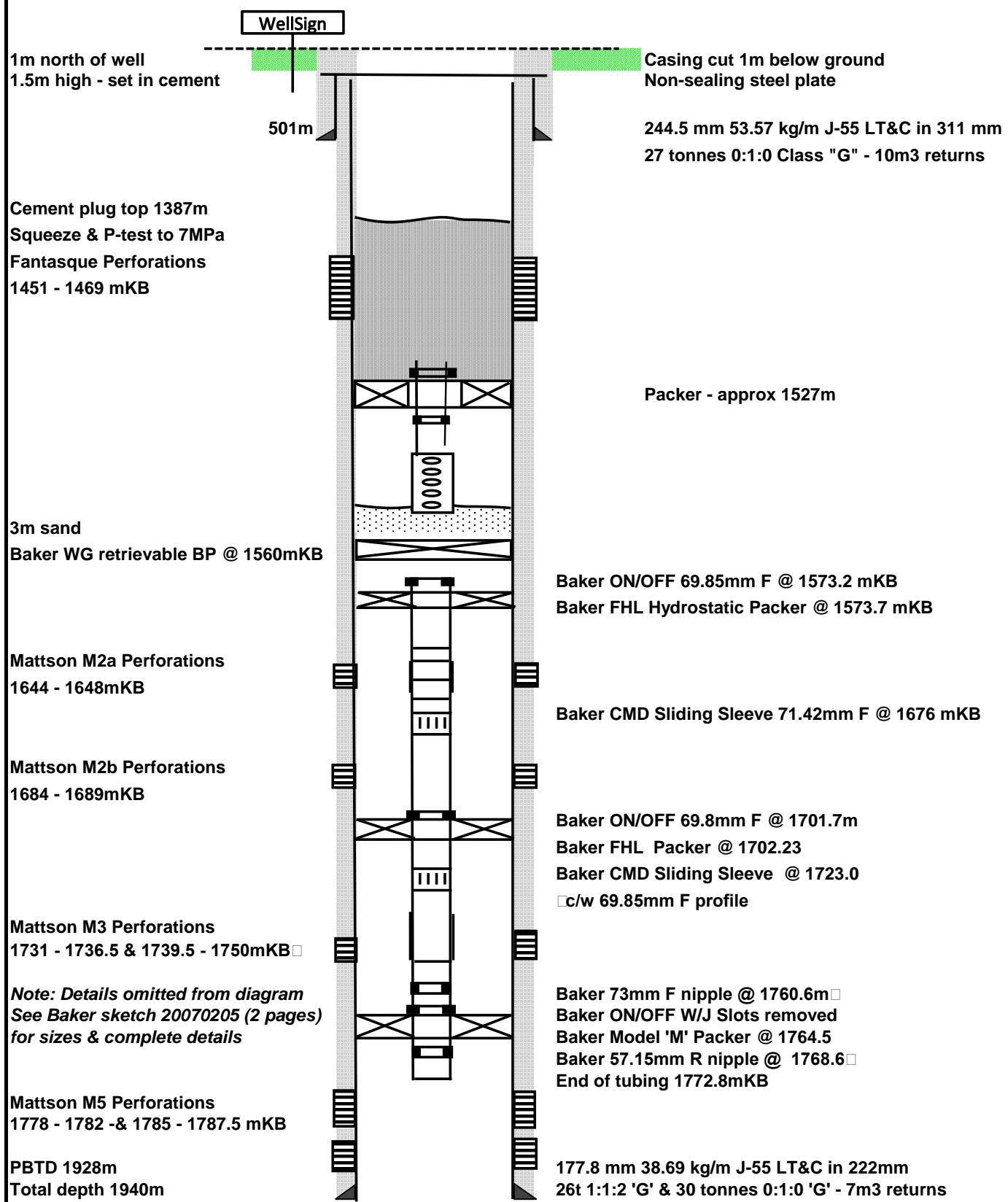
Daily Completion Reports – 20170202 - 20170311

Change of Well Status Form

# PARA ET AL FORT LIARD N-01

60deg 10' N, 123deg 15' W

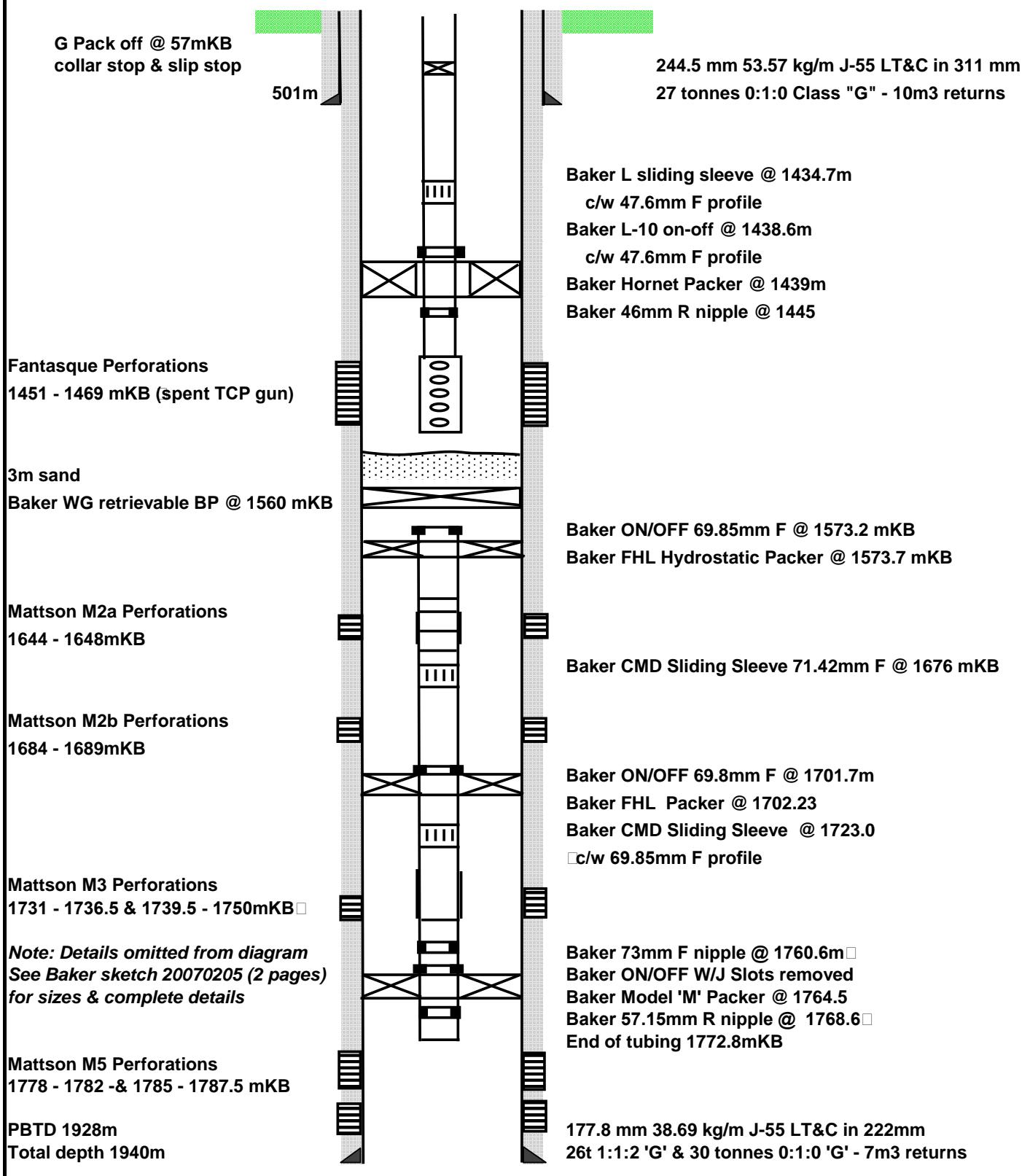
As Abandonned



# PARA ET AL FORT LIARD N-01

60deg 10' N, 123deg 15' W

(as completed 20070206)





# Daily Completion and Workover

Report Date: 2017-02-02  
Report # 1.0

## PARA ET AL SOUTHEAST FORT LIAR...

Rig:

Business Unit: NORTHERN COU

Total AFE Amount: 798,170.00  
AFE Number: 17N770030  
Daily Cost Total: 16,560  
Cum Cost to Date: 16,560

API/UWI 300N01601012315	Surface Legal Location 300N016010123153	Field Name Para et al Southeast Fort Liard N-01	License # 1902
Well Configuration Type Vertical	Casing Flange Elevation (m) 487.00	Ground Elevation (m) 487.00	Original KB Elevation (m) 492.10
Last Casing String		PBTD (All) (mKB)	

Objective  
Abandon Well

Operation at 6am

Well shut in waiting on service rig.

Operations Summary

MIRU slickline - RIH and recovered the collar stop; G-pack-off; slip stop; prong and FWG plug - punched hole in the 60 mm tubing string at 1430 mCF.

Operations Next Report Period

MIRU service rig.

Road Condition Fair	Weather Snow	Report Start Date 2017-02-02	Report End Date 2017-02-02
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Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
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### Daily Contacts

Title	Job Contact	Mobile
Area Operations Manager	Patrick Kelly, Area Operations Manager	403-519-1780
Consultant	Dick Heenan, Consultant	403-818-4408
Consultant	Terry Pollard, Consultant	780-361-5962

### Time Log

Start Time	End Time	Dur (hr)	Code 1	Code 2	Com
07:30	08:00	0.50	SMTG	Safety Meeting	Held safety meeting with all personnel discussing lease road; lease; overhead lifts; tag lines; high pressure and slickline hazards. Oriented 2 workers as required; completed Field Level Risk Assessment and Safe Work Permits.
08:00	16:00	8.00	SLine	Slickline Wireline	Checked the well pressures and observed SITP at 390 kPa and SICP at 2290 kPa; performed a 15 minute bubble test on the surface casing vent and observed no bubbles. Rigged in Bonnett Wireline Services crossover; slickline BOP's and full lubricator onto the wellhead top section; pressure tested the crossover; BOP's and lubricator to 4,000 kPa with N2. RIH and recovered the collar stop; G-pack-off and slip stop from 56 mCF in 4 runs. RIH with SB pulling tools to 190 mCF and tagged solid; POOH and observed the tool string covered in wax; RIH with 60 mm tubing wax knife and worked through wax from 190 mCF down to 193 mCF then free to 700 mCF; POOH with wax knife; RIH with RB pulling tools and latched onto the FSG prong at 1442 mCF; note: equalized the tubing and casing pressures; jarred up 3 times and sheared off; POOH; removed the RB pulling tool and RIH with SB pulling tool to 1442 mCF; latched onto and recovered the equalizing prong from the FSG plug; RIH with RB pulling tools - unable to latch into the FSG plug; POOH and changed the stabilizer prong inside the pulling tools and re-ran the tool string to 1442 mCF and unable to latch onto the plug; POOH and put a short stabilizer prong inside the pulling tools and re-ran to 1442 mCF latch onto and recovered a Baker FWG plug ( not FSG ) RIH with RB pulling tools and tools appeared to latch at 1443.5 mCF; but would pull off at 900 - 950 lbs over pull - POOH tools not sheared - made two additional runs with the same result. RIH with 60 mm hole punch; tagged the top of the sliding sleeve at 1431.5 mCF; sheared the tool and perforated the 60 mm tubing at 1430.0 mCF; POOH and observed the tubing punch had sheared putting a hole into the tubing. Rigged out Bonnett Wireline equipment. Installed the wellhead cap.
16:00	16:30	0.50	CLLS	Clean & Secure Lease	Shut in and secured the well; cleaned up the lease.

### Report Fluids Summary

Fluid	To well (bbl)	From well (bbl)	Cum from Well (bbl)	Left to recover (bbl)

### Perforations

Time	Linked Zone	Top (mKB)	Blm (mKB)	Current Status

### Tubing Components

Item Des	Top (mKB)

### Casing Strings

Csg Des	Grade	Wt/Len (lb/ft)	Set Depth (mKB)



# Daily Completion and Workover

Report Date: 2017-02-21  
Report # 2.0

## PARA ET AL SOUTHEAST FORT LIAR...

Rig:

Business Unit: NORTHERN COU

Total AFE Amount: 798,170.00  
AFE Number: 17N770030  
Daily Cost Total: 39,381  
Cum Cost to Date: 55,941

API/UWI 300N01601012315	Surface Legal Location 300N016010123153	Field Name Para et al Southeast Fort Liard N-01	License # 1902
Well Configuration Type Vertical	Casing Flange Elevation (m) 487.00	Ground Elevation (m) 492.10	Original KB Elevation (m)
Last Casing String		PBTD (All) (mKB)	

Objective Abandon Well
Operation at 6am
Start up on Feb. 27/17
Operations Summary MIRU service rig; boiler; pump and tank.
Operations Next Report Period Kill well; N/U BOP's; release packer and POOH.

Road Condition Fair	Weather Overcast	Report Start Date 2017-02-21	Report End Date 2017-02-21
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Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
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Daily Contacts		Job Contact	Mobile
Area Operations Manager	Patrick Kelly, Area Operations Manager	403-519-1780	
Consultant	Dick Heenan, Consultant	403-818-4408	
Consultant	Terry Pollard, Consultant	780-361-5962	
Rig Manager	Craig Hewlett, Rig Manager	780-402-8678	

Start Time	End Time	Dur (hr)	Code 1	Code 2	Com
07:30	08:00	0.50	SMTG	Safety Meeting	Held safety meeting with all personnel discussing Mind on Task; winter driving; spotting and rigging up equipment; overhead lifts; two men carrying line pipe; lease and lease road hazards. Completed Safe Work Agreement and Field Risk Assessment forms.
08:00	09:00	1.00	RMOV	Rig Move	Moved Savanna service rig and equipment from 300/A-01-6010-12315 to location.
09:00	12:30	3.50	SRIG	Rig Up/Down	Spotted and rigged up Savanna service rig #126; boiler; pump and tank to Paramount Resources; OH&S; Northwest Territories and OROGO regulations. Note rig tank; boiler and 400 bbl tanks placed on rig matting.
12:30	13:00	0.50	DFIT	Record well pressures	Check the SITP = 1900 kPa; SICP = 600 kPa.
13:00	16:00	3.00	CLLS	Clean & Secure Lease	Shut in and secured the well. Rig crew traveled with Cooper Barge equipment to O-35; spotted the rig matting and swamp mats to prepare for the rig when finished on N-01. Crews shut down for break.  Note: Cooper Barge loaded the 73 mm rental pipe and returned it to McClelland Oilfield Rentals, Grand Prairie yard

Report Fluids Summary	Fluid	To well (bbl)	From well (bbl)	Cum from Well (bbl)	Left to recover (bbl)

Perforations	Time	Linked Zone	Top (mKB)	Btm (mKB)	Current Status

Tubing Components	Item Des	Top (mKB)

Casing Strings	Csg Des	Grade	Wt/Len (lb/ft)	Set Depth (mKB)



# Daily Completion and Workover

Report Date: 2017-02-27

Report # 3.0

## PARA ET AL SOUTHEAST FORT LIAR...

Rig:

Business Unit: NORTHERN COU

Total AFE Amount: 798,170.00

AFE Number: 17N770030

Daily Cost Total: 60,673

Cum Cost to Date: 116,614

API/UWI 300N01601012315	Surface Legal Location 300N016010123153	Field Name Para et al Southeast Fort Liard N-01	License # 1902
Well Configuration Type Vertical	Casing Flange Elevation (m)	Ground Elevation (m) 487.00	Original KB Elevation (m) 492.10
Last Casing String		PBTD (All) (mKB)	

Objective

Abandon Well

Operation at 6am

Heat BOP's and kill fluids

Operations Summary

Kill well; pressure test BOP's; removed wellhead; installed and tested BOP's; released the packer and POOH with packer to casing bowl - RIH with packer to 12.5 mKB.

Operations Next Report Period

RIH with packer

Road Condition Ice/Snow	Weather Clear	Report Start Date 2017-02-27	Report End Date 2017-02-27
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Head Count

Personnel Total Hours (hr)

Cum Personnel Total Hours (hr)

### Daily Contacts

Title	Job Contact	Mobile
Area Operations Manager	Patrick Kelly, Area Operations Manager	403-519-1780
Consultant	Dick Heenan, Consultant	403-818-4408
Consultant	Terry Pollard, Consultant	780-361-5962
Rig Manager	Craig Hewlett, Rig Manager	780-402-8678

### Time Log

Start Time	End Time	Dur (hr)	Code 1	Code 2	Com
07:00	07:30	0.50	SMTG	Safety Meeting	Held safety meeting with all personnel discussing cold weather; steam heating; well kill; high pressure; N/U BOP's and tripping tubing hazards
07:30	11:00	3.50	BOPT	Pressure Test BOP's	Fired up the boiler; put steam heat on the BOP's; checked the well pressures; SITP - 1900 kPa; SICP = 600 kPa; stump tested the class III BOP's blind rams and 60 mm pipe rams to 1400 kPa and 21,000 kPa for 10 minutes each and the annular preventors to 1400 kPa and 10,000 kPa for 10 minutes each. Bled off the tubing and casing pressures to the rig degasser and observed the well dead. Removed the wellhead top section and installed the class III BOP's. Pressure tested the 60 mm pipe rams and ring gaskets to 1400 kPa and 21,000 kPa for 10 minutes each.
11:00	12:00	1.00	WKLL	Kill Well	Released the Baker Hornet packer; pumped 5.0 m <sup>3</sup> of fresh water down the casing with returns up the tubing; checked the returns and observed a salinity of 22,000 ppm and pH- 7.5; stopped pumping and observed the well dead.
12:00	12:30	0.50	PULT	Pull Tubing	Pulled 1 joint of 60 mm 6.99 kg/m J-55 EUE tubing; 5 60 mm 6.99 kg/m J-55 EUE pup joints and 2 joints of 60 mm 6.99 kg/m J-55 EUE tubing and observed the tubing start to flow; shut in and secured the well.
12:30	14:00	1.50	WKLL	Kill Well	Pumped 22.0 m <sup>3</sup> of fresh water down the tubing with returns up the annulus to the 60 m <sup>3</sup> tank - observed the salinity of the water at 42,000 ppm and pH-8 while circulating; then fresh water. Stopped circulating and observed the well dead.
14:00	17:00	3.00	PULT	Pull Tubing	Pulled 149 joints of 60 mm 6.99 kg/m J-55 EUE tubing; 1 - 3.0 m x 60 mm 6.99 kg/m J-55 EUE tubing; 60 mm EUE Baker L sliding sleeve and 1 joint of 60 mm 6.99 kg/m J-55 EUE tubing and observed the packer hanging up; worked the packer up and down; rotated several right hand turns and unable to work the packer past the tight spot in the casing. Stripped up the BOP's and observed the casing collapsed just below the casing bowl not allowing the packer to be removed from the well; stripped the BOP's back onto the casing bowl; worked the packer down and RIH with 1 joint of 60 mm tubing.
17:00	17:30	0.50	CLLS	Clean & Secure Lease	Shut in and secured the well for night. Boiler man to heat kill fluids and BOP's overnight.

### Report Fluids Summary

Fluid	To well (bbl)	From well (bbl)	Cum from Well (bbl)	Left to recover (bbl)

### Perforations

Time	Linked Zone	Top (mKB)	Btm (mKB)	Current Status

### Tubing Components

Item Des	Top (mKB)

### Casing Strings

Csg Des	Grade	Wt/Len (lb/ft)	Set Depth (mKB)



# Daily Completion and Workover

Report Date: 2017-02-28

Report # 4.0

## PARA ET AL SOUTHEAST FORT LIAR...

Rig:

Business Unit: NORTHERN COU

Total AFE Amount: 798,170.00

AFE Number: 17N770030

Daily Cost Total: 25,250

Cum Cost to Date: 141,864

API/UWI 300N01601012315	Surface Legal Location 300N016010123153	Field Name Para et al Southeast Fort Liard N-01	License # 1902
Well Configuration Type Vertical	Casing Flange Elevation (m) 487.00	Ground Elevation (m) 492.10	Original KB Elevation (m)
Last Casing String		PBTD (All) (mKB)	

Objective

Abandon Well

Operation at 6am

Heat BOP's and kill fluids

Operations Summary

RIH with packer; set and test packer at  $\pm$ 1527 mKB; circulated to fresh water; established feed rate of 100 liters / minute at 6.0 MPa.

Operations Next Report Period

Cement off Fantasque perforations.

Road Condition Ice/Snow	Weather Light snow	Report Start Date 2017-02-28	Report End Date 2017-02-28
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Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
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### Daily Contacts

Title	Job Contact	Mobile
Area Operations Manager	Patrick Kelly, Area Operations Manager	403-519-1780
Consultant	Dick Heenan, Consultant	403-818-4408
Consultant	Terry Pollard, Consultant	780-361-5962
Rig Manager	Craig Hewlett, Rig Manager	780-402-8678

### Time Log

Start Time	End Time	Dur (hr)	Code 1	Code 2	Com
07:00	07:30	0.50	SMTG	Safety Meeting	Held safety meeting with all personnel discussing overhead lifts; running tubing; possible ice plugs in the tubing; circulating; high pressure; winter driving; lease and lease road hazards.
07:30	11:00	3.50	RUTB	Run Tubing	Tallied and ran 1 - 3.0 m x 60 mm 6.99 kg/m J-55 EUE pup joint; 159 joints of 60 mm 6.99 kg/m J-55 EUE tubing and tagged solid at 1557.0 mKB.
11:00	13:00	2.00	PTST	Pressure Test	Set the Baker 177.8 mm Hornet packer at $\pm$ 1527.0 mKB; filled the 60 mm tubing with 0.5 m <sup>3</sup> of fresh water and pressurized up to 7.0 MPa ( this tested the tubing; packer and casing from 1527 mKB down to sand top at 1557 mKB and bridge plug at 1560 mKB ); held solid for 10 minutes - no returns up the annulus. Bled off the tubing. Released the on-off connector from the packer; picked up 5 m; rotated the tubing to the right and confirmed the packer was released from the on-off connector. Lowered the tubing to 1526.5 mKB and reverse circulated with 8.0 m <sup>3</sup> of fresh water; observed produced water on bottom's up after 3.5 m <sup>3</sup> pumped then clean fresh water returns. Shut in the returns and established a feed rate of 100 liters / minute with 6,000 kPa.
13:00	16:30	3.50	CLLS	Clean & Secure Lease	Bled off the well pressures; drained the pump and lines. Put heat on the 60 m <sup>3</sup> tanks and BOP'S. Prepared for cementing. Boiler man to heat BOP's and fluids overnight.

### Report Fluids Summary

Fluid	To well (bbl)	From well (bbl)	Cum from Well (bbl)	Left to recover (bbl)

### Perforations

Time	Linked Zone	Top (mKB)	Btm (mKB)	Current Status

### Tubing Components

Item Des	Top (mKB)

### Casing Strings

Csg Des	Grade	Wt/Len (lb/ft)	Set Depth (mKB)



# Daily Completion and Workover

Report Date: 2017-03-01  
Report # 5.0

## PARA ET AL SOUTHEAST FORT LIAR...

Rig:

Business Unit: NORTHERN COU

Total AFE Amount: 798,170.00  
AFE Number: 17N770030  
Daily Cost Total: 53,365  
Cum Cost to Date: 195,229

API/UWI 300N01601012315	Surface Legal Location 300N016010123153	Field Name Para et al Southeast Fort Liard N-01	License # 1902
Well Configuration Type Vertical	Casing Flange Elevation (m)	Ground Elevation (m) 487.00	Original KB Elevation (m) 492.10
Last Casing String	PBTD (All) (mKB)		

Objective  
Abandon Well

Operation at 6am

Heat BOP's and kill fluids

Operations Summary

MIRU cementers; broke circulation; mixed and spotted 3.2 m<sup>3</sup> of cement around the bottom of the tubing; pulled the tubing above the cement top; back washed the tubing; pulled 1 joint of tubing; squeezed 230 liters of cement into the perforations.

Operations Next Report Period

Tag and pressure test cement top. POOH laying down tubing. Rig out rig and equipment.

Road Condition Ice/Snow	Weather Clear	Report Start Date 2017-03-01	Report End Date 2017-03-01
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Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
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### Daily Contacts

Title	Job Contact	Mobile
Area Operations Manager	Patrick Kelly, Area Operations Manager	403-519-1780
Consultant	Dick Heenan, Consultant	403-818-4408
Consultant	Terry Pollard, Consultant	780-361-5962
Rig Manager	Craig Hewlett, Rig Manager	780-402-8678

### Time Log

Start Time	End Time	Dur (hr)	Code 1	Code 2	Com
09:00	09:30	0.50	SMTG	Safety Meeting	Held safety meeting with all personnel discussing cold weather; frost bite; steam heating and winter driving hazards. Held Man Down Drill and discussed observations with all personnel.
09:30	11:30	2.00	Testing	Record Well Pressures	Checked the well pressures SITP = 0 kPa; SICP = 0 kPa. General clean up and maintenance while waiting on cementers. Conducted a 10 minute bubble test on the surface casing vent and observed no bubbles.
11:30	12:00	0.50	SMTG	Safety Meeting	Moved in with Stingray Well Solutions - cement equipment and Energetic - vacuum and tank trucks. Held safety meeting with all personnel discussing high pressure; spotting; rigging in equipment; steam heating; circulating; pulling tubing and back-washing hazards. Checked MSDS for cement and chemicals on location. Safety orientated 3 - Stingray employees to Paramount Safety Awareness.
12:00	16:00	4.00	CEMT	Cement Squeeze	Rigged up Stingray cement pump lines onto the 60 mm tubing; thawed out the Stingray's pump and lines; pumped 2.0 m <sup>3</sup> of fresh water down the tubing with returns to the rig tank after 1.5 m <sup>3</sup> pumped; shut in the master valve and pressure tested the pump lines to 21 MPa; mixed and pumped 4.2 tonnes of 0:1:0 Class G cement containing + 1% SCFR-2 + 0.4% FSL-3 ( 3.2 m <sup>3</sup> of slurry at 1900 kg/m <sup>3</sup> ); followed by 2.4 m <sup>3</sup> of fresh water to place a balanced plug around the bottom of the tubing. Stopped pumping.
16:00	16:30	0.50	PULT	Pull Tubing	Pulled 18 joints of 60 mm 6.99 kg/m J-55 EUE tubing to place the bottom of the tubing at 1371.3 mKB; back-washed with 5.0 m <sup>3</sup> of fresh water and observed a small amount of contaminated cement water on bottom's up then clean fresh water. Stopped pumping. Pulled 1 joint on tubing to place the bottom of the tubing at 1361.70 mKB.
16:30	18:00	1.50	CEMT	Cement Squeeze	Rigged in Stingray onto the casing; closed the tubing and pipe rams; pumped / squeezed 230 liters of cement into the perforations at 50 liters / minute and observed the pump pressure slowly increase to 8,000 kPa; stopped squeezing and obtained a flat line at 8,000 kPa for 10 minutes. Left the pressure on the well. Rigged out and released Stingray cementing equipment.
18:00	18:30	0.50	CLLS	Clean & Secure Lease	Well shut in and secured. Boiler man to heat BOP's and kill fluids overnight.

### Report Fluids Summary

Fluid	To well (bbl)	From well (bbl)	Cum from Well (bbl)	Left to recover (bbl)

### Perforations

Time	Linked Zone	Top (mKB)	Blm (mKB)	Current Status

### Tubing Components

Item Des	Top (mKB)

### Casing Strings

Csg Des	Grade	Wt/Len (lb/ft)	Set Depth (mKB)



**Paramount**  
resources ltd.

## Daily Completion and Workover

Report Date: 2017-03-02  
Report # 6.0

### PARA ET AL SOUTHEAST FORT LIAR...

Rig:

Business Unit: NORTHERN COU

Total AFE Amount: 798,170.00  
AFE Number: 17N770030  
Daily Cost Total: 23,170  
Cum Cost to Date: 218,399

API/UWI 300N01601012315	Surface Legal Location 300N016010123153	Field Name Para et al Southeaxt Fort Liard N-01	License # 1902
Well Configuration Type Vertical	Casing Flange Elevation (m) 487.00	Ground Elevation (m) 487.00	Original KB Elevation (m) 492.10
Last Casing String	PBTD (All) (mKB)		

Objective Abandon Well
Operation at 6am
Prepare to move
Operations Summary
RIH tag cement top at 1387.48mKB; P/T'd cement top and casing to 7.0 MPa; POOH laying down tubing; rigged out and service rig and equipment.
Operations Next Report Period
Well ready to cut and cap.

Road Condition Ice/Snow	Weather Light snow	Report Start Date 2017-03-02	Report End Date 2017-03-02
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Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
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Daily Contacts		Job Contact	Mobile
Area Operations Manager	Patrick Kelly, Area Operations Manager	403-519-1780	
Consultant	Dick Heenan, Consultant	403-818-4408	
Consultant	Terry Pollard, Consultant	780-361-5962	
Rig Manager	Craig Hewlett, Rig Manager	780-402-8678	

Start Time	End Time	Dur (hr)	Code 1	Code 2	Com
07:00	07:30	0.50	SMTG	Safety Meeting	Held safety meeting with all personnel discussing high pressure; tripping tubing; BOP removal; cold weather and rigging out hazards.
07:30	08:30	1.00	PTST	Pressure Test	Checked the surface cement samples and observed them set up; checked the well pressures and observed SITP and SICP at 100 kPa. Pressure tested the wellbore and cement top to 7.0 MPa for 10 minutes. Held good. Bled off the pressure.
08:30	09:00	0.50	RUTB	Run Tubing	RIH with 5 joints of tubing and tagged solid (3,000 daN) at 1387.48 mKB.
09:00	12:00	3.00	PULT	Pull Tubing	Pulled and laid down 148 joints of 60 mm 6.99 kg/m J-55 EUE tubing; 3.0 m x 60 mm 6.99 kg/m J-55 EUE pup joint; 1 joint of 60 mm 6.99 kg/m J-55 EUE tubing; 1 - 3.0 m x 60 mm 6.99 kg/m J-55 EUE pup joint and Baker L-10 on-off connector.
12:00	13:30	1.50	BOPR	Remove BOP's	Rigged out the work floor; removed the class III BOP's and installed a cap over the top of the casing bowl.
13:30	16:00	2.50	SRIG	Rig Up/Down	Rigged out Savanna rig; pump and tank. Continued to heat kill fluids in the rig's tank and 60 m <sup>3</sup> tank.
16:00	17:00	1.00	CLLS	Clean & Secure Lease	Cleaned up the lease and prepared to move in AM. Boiler man to heat fluids overnight.

Report Fluids Summary				
Fluid	To well (bbl)	From well (bbl)	Cum from Well (bbl)	Left to recover (bbl)

Perforations				
Time	Linked Zone	Top (mKB)	Blm (mKB)	Current Status

Tubing Components				
Item Des		Top (mKB)		

Casing Strings				
Csg Des	Grade	Wt/Len (lb/ft)	Set Depth (mKB)	



# Daily Completion and Workover

Report Date: 2017-03-11

Report # 7.0

## PARA ET AL SOUTHEAST FORT LIAR...

Rig:

Business Unit: NORTHERN COU

Total AFE Amount: 798,170.00

AFE Number: 17N770030

Daily Cost Total: 13,130

Cum Cost to Date: 233,829

API/UWI 300N01601012315	Surface Legal Location 300N016010123153	Field Name Para et al Southeaxt Fort Liard N-01	License # 1902
Well Configuration Type Vertical	Casing Flange Elevation (m) 487.00	Ground Elevation (m) 487.00	Original KB Elevation (m) 492.10
Last Casing String		PBTD (All) (mKB)	

Objective

Abandon Well

Operation at 6am

### Operations Summary

Dug bell hole around the wellhead; removed the wellhead; cut and capped casings; back-filled bellhole; placed well sign 1.0 m on the north side of the cut casings. FINAL REPORT

Operations Next Report Period

Well cut and capped

Road Condition Ice/Snow	Weather Clear	Report Start Date 2017-03-11	Report End Date 2017-03-11
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Head Count	Personnel Total Hours (hr)	Cum Personnel Total Hours (hr)
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### Daily Contacts

Title	Job Contact	Mobile
Area Operations Manager	Patrick Kelly, Area Operations Manager	403-519-1780
Consultant	Dick Heenan, Consultant	403-818-4408
Consultant	Terry Pollard, Consultant	780-361-5962
Rig Manager	Craig Hewlett, Rig Manager	780-402-8678

### Time Log

Start Time	End Time	Dur (hr)	Code 1	Code 2	Com
12:30	13:00	0.50	SMTG	Safety Meeting	Conducted a 10 minute bubble test on the surface casing vent and observed no bubbles. Moved in with Zedi back-hoe and welder; held safety meeting with all personnel discussing digging bellhole; cutting off wellhead and casings; welding; overhead lifts and back-filling hazards. Completed Safe Work Agreement and Ground Disturbance Checklist.
13:00	17:30	4.50	Cut and cap casing	Cut and cap	Back-hoe dug a 1.5 m bell hole around the wellhead / casings c/w stairs down one side; checked the bellhole for LEL's and observed 0% LEL readings; secured the wellhead with the back-hoe; cut three windows in the 244.5 mm surface casing; cut the 177.8 mm casing; then the 244.5 mm casing and removed the wellhead to the edge on the lease. Cut both casings 1.2 m below ground level; stitch welded steel caps on the 177.8 mm casing and 244.5 mm casing and welded SE Ft Laird N-01 onto the top cap. Back filled the bellhole with dirt in the same order it was removed - installed a well sign 1 meter north of the cut casings ( sign post cemented in a 22 liter pail and buried 1 meter below ground level with 1.6 m above ground level c/w N-01 - 6010 - 123- 15 and to-day's date welded onto the sign ).

FINAL REPORT

### Report Fluids Summary

Fluid	To well (bbl)	From well (bbl)	Cum from Well (bbl)	Left to recover (bbl)

### Perforations

Time	Linked Zone	Top (mKB)	Btm (mKB)	Current Status

### Tubing Components

Item Des	Top (mKB)

### Casing Strings

Csg Des	Grade	Wt/Len (lb/ft)	Set Depth (mKB)

# Office of the Regulator of Oil and Gas Operations (OROGO)



## Change of Well Status

This form must be filed with the Office of the Regulator of Oil and Gas Operations within 14 days of a change in well status.

### 1. WELL IDENTIFICATION

**Well Name**

Paramount et al SE Fort Liard N-01

**Grid**

60°	10'	N	123°	15'	W
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**WID**

1902

**Date**

March 13, 2017

First Filing for this Well

**Interest Identifier**

### 2. WELL LICENSEE / OPERATOR IDENTIFICATION

**Filing Company Name**

Paramount Resources Ltd.

**Contact Name (PRINT)**

Pat Kelly

**Telephone No.**

(403) 290-3600

**Fax No.**
**Email**

Patrick.Kelly@paramountres.com

### 3. NEW STATUS INFORMATION

**Status Effective Date**

Year	Month	Day
2017	3	11

**Field Code**


**Pool Code**


**Seq Code**
**Field Name**

Liard

**Pool Name**

Fantasque

Issuance of new pool codes will be made after receipt of this application.

### 4. WELL TYPE

<input checked="" type="checkbox"/> 1 Producer	<input type="checkbox"/> 4 Steam-Assisted Gravity Drain
<input type="checkbox"/> 2 Injection	<input type="checkbox"/> 5 Injection - Drilling Discharge
<input type="checkbox"/> 3 Observation	<input type="checkbox"/> 6 Other

### 5. WELL FLUID PRODUCTION

<input type="checkbox"/> 0 Not Applicable	<input type="checkbox"/> 5 Acid Gas	<input type="checkbox"/> 10 Nitrogen
<input type="checkbox"/> 1 Crude Oil	<input type="checkbox"/> 6 Solvent	<input type="checkbox"/> 11 Liquefied Petroleum Gas
<input checked="" type="checkbox"/> 2 Gas	<input type="checkbox"/> 7 Steam	<input type="checkbox"/> 12 Bitumen
<input type="checkbox"/> 3 Water	<input type="checkbox"/> 8 Air	
<input type="checkbox"/> 4 Brine	<input type="checkbox"/> 9 Carbon Dioxide	

### 6. WELL MODE

<input type="checkbox"/> 1 Pumping	<input type="checkbox"/> 3 Suspended	<input type="checkbox"/> 5 Shut-in (if > 60 days)
<input type="checkbox"/> 2 Flowing	<input type="checkbox"/> 4 Gas Lift	<input checked="" type="checkbox"/> 6 Abandoned

### 7. OTHER

<input type="checkbox"/> # Other	Details _____
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