

September 11, 2023

Office of the Regulator of Oil & Gas Operations  
Government of the Northwest Territories  
PO Box 132  
Yellowknife NT X1A 2L9

**Attention: Ms. Pauline de Jong**  
Executive Director

**Cover Letter for Cut/Cap Operation as part of the Well Abandonment PARAMOUNT  
ET AL LIARD, ACW-2022-PAR-2K-29-WID1980**


Please find attached for submission the required documents for Well Termination  
(Abandonment) of the 302/K-29/6030-12330/02 well, Licence # 1980

Attachments include:

1. Change of Well Status
2. Well Termination Record
3. Summary of Cut/Cap Well Operations
4. Cut/Cap Daily Reports
5. Picture of capped wellbore
6. Downhole Schematic

Non-Saline Water was placed in the wellbore as part of the suspension and no problems were encountered with this operation.

Respectively,



John Hawkins, P. Eng.  
Director Asset Management  
Paramount Resources Ltd.  
403-817-5074

## CHANGE OF WELL STATUS

This form must be filed with the Office of the Regulator of Oil and Gas Operations within 30 days of a change in well status.

### INSTRUCTIONS:

Send one electronic copy of this form by email to [orogo@gov.nt.ca](mailto:orogo@gov.nt.ca). If you wish to communicate with OROGO in hard copy, please do so using the courier address found at [www.orogo.gov.nt.ca](http://www.orogo.gov.nt.ca).

### WELL INFORMATION

Well Name	PARAMOUNT ET AL LIARD 2K-29	Operator	Paramount Resources Ltd.
Well Identifier (WID)	1980	Unique Well Identifier (30xx...)	302/K-29/6030/12330/02

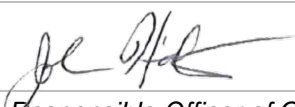
### STATUS INFORMATION

Effective Date: August 27, 2023

Well Type:	Producer
If other, specify:	
Well Mode:	Abandoned
If other, specify:	
Other:	
If other, specify:	

Fluid Production: (choose all applicable)	
Not applicable <input type="checkbox"/>	Steam <input type="checkbox"/>
Crude Oil <input type="checkbox"/>	Air <input type="checkbox"/>
Gas <input checked="" type="checkbox"/>	Carbon Dioxide <input type="checkbox"/>
Water <input type="checkbox"/>	Nitrogen <input type="checkbox"/>
Brine <input type="checkbox"/>	Liquefied Petroleum Gas <input type="checkbox"/>
Acid Gas <input type="checkbox"/>	Bitumen <input type="checkbox"/>
Solvent <input type="checkbox"/>	Other <input type="checkbox"/>

***"I certify that the information provided on this form is true and correct"***

Name	John Hawkins, P. Eng.	Phone	403- 817 - 5074
	Director Asset Management	E-Mail	<a href="mailto:john.hawkins@paramountres.com">john.hawkins@paramountres.com</a>
Operator	Paramount Resources Ltd.		
Signature		Date	September 11, 2023
	Responsible Officer of Company		

## WELL TERMINATION RECORD

**INSTRUCTIONS:**

1. Complete both pages.
2. Send one electronic copy of this form and supporting technical documentation by email to [orogo@gov.nt.ca](mailto:orogo@gov.nt.ca). If you wish to communicate with OROGO in hard copy, please do so using the courier address found at [www.orogo.gov.nt.ca](http://www.orogo.gov.nt.ca).

**WELL INFORMATION**

Well Name	PARAMOUNT ET AL LIARD 2K-29	Operator	Paramount Resources Ltd.
Well Type	Exploratory Well (if Other, specify _____)	Contractor	Precision Well Servicing
Well Identifier	1980	Current Well Status	Abandoned

**RELATED LICENCES AND AUTHORIZATIONS**

Operating Licence No.	NWT-OL-2014-014	Operations Authorization	OA - 2020-001-PAR
PRA Licence No.	Exploration Licence NWT-OL-2014-014	Approval to Alter Condition of Well	ACW - 2022-PAR-2K-29-WID1980

**LOCATION INFORMATION**

**Coordinates**      Datum: NAD83 (if Other, please specify \_\_\_\_\_)

<i>Surface</i>	Lat 60 ° 28 ' 40.831 "	Long 123 ° 35 ' 05.338 "
<i>Bottom Hole</i>	Lat 60 ° 29 ' 41 "	Long 123 ° 36 ' 4.363 "

Region: Dehcho    Unit 0    Section 15    Grid 60-30 123-30

**ACTIVITY INFORMATION**

Target Formation(s)	Nahanni	Field/Pool(s)	Liard / Wesr
Elevation KB/RT	416.6 m	Ground Level / Seafloor	409.9 m
Service Rig Start Date	June 21, 2023	Total Depth	3599.0 m KB
Service Rig Release Date	August 27, 2023	Total Vertical Depth	2619.0 m KB

**CASING AND CEMENTING PROGRAM**

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing (m³)
244.5	59.5	K55	734.0	8.0
177.8	38.7	L80	3074.0	2.5

**PLUGGING PROGRAM**

Type of Plug	Interval (m KB)	Felt	Setting Depth (m KB)	Cementing (m <sup>3</sup> )
Cement Retainer	-	Yes	3028.0	
Cement	3041.0-3045.0	Yes		12.0
Cement	2991.5-3028.0	Yes		0.50
Bridge	-	Yes	2987.5	

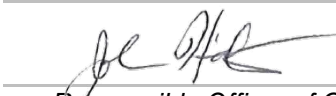
**PERFORATION**

Interval (m KB)	Comments
2854.0-2856.0	remedial perfs
1350.0 -1352.0	remedial perfs
736.0-738.0	remedial perfs
-	

**OTHER**

Lost Circulation/Overpressure Zones	No
Equipment Left on Site (Describe)	Wellhead/Tombstone Sign
Provision for Re-entry (Describe and attach sketch)	No
Other Downhole Completion/Suspension	Well was zonally abandoned in July/Aug 2023
Additional Comments	

**"I certify that the information provided on this form is true and correct"**

Name	John Hawkins, P.Eng	Phone	(403) 817 - 5074
Title	Director Asset Management	E-Mail	john.hawkins@paramountres.com
Operator	Paramount Resources Ltd.		
Signature		Date	September 11, 2023
	Responsible Officer of Company		

## 2K-29 EXTRA DETAILS – TERMINATION RECORD Page 2

### PLUGGING PROGRAM

TYPE OF PLUG	INTERVAL (mKB)	FELT	SETTING DEPTH (Mkb)	CEMENTING (m3)
Cement Plug	2950.0 – 2987.5	Yes		1.0
Cement Retainer		Yes	2850.0	
Cement Squeeze	2854.0 – 2856.0			0.8
Cement Plug	2790.0 – 2850.0	Yes		1.2
Cement Squeeze	1311.3 – 1368.0	Yes		2.3
Cement Squeeze	736.0 – 738.0			500.0 litres
Cement Plug	686.0 – 753.0	Yes		2.0

### OTHER

INTERVAL	COMMENTS
2854.0 – 2856.0	Acid Treatment prior to cementing
1350.0 – 1352.0	Acid Treatment prior to cementing
736.0 – 738.0	Acid Treatment prior to cementing



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
6/21/2023	<p>HSE Summary: No incidents, accidents or spills.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- XDI Energy (coil) units start travel from GP to Ft Nelson.</li> <li>- Inspect and review travel operations across Ft Laird River.</li> <li>- Travel to site. Review removal of surface piping and supports. Area cleared for coil and rig operations.</li> <li>- Function (2) ABB Vetco Gray 130.1 mm x 34.5 MPa Master Valves. Shut In tubing pressure of 0 KPa.</li> <li>- Review operations and materials with contractors.</li> <li>- Function (2) ABB Vetco Gray 53 mm x 34.5 Mpa Casing Valves. Shut In casing 0 KJpa.</li> <li>- Inspect Surface Casing electronic monitoring equipment review. The electronic cable from monitor to flow meter has been bitten and severed by a animal. Equipment should still of shown pressure but possible not flow. Remove Surface Casing Vent monitoring system 1130 hrs. No signs of pressure buildup in Surface Casing. Send equipment to Surface Solutions to extract and review data ASAP.</li> <li>- Perform 15 minute SCVF Bubble Test. Observe 1 bubble every 2 seconds. Failed SCVF Bubble test.</li> <li>- End of report.</li> </ul>
6/22/2023	<p>HSE Summary: No incidents, accidents or spills.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- XDI Services 60.3 mm coil unit support equipment and rentals continue to travel to area</li> <li>- Setup (2) 63 m³ tank temporary fluid containment farm. Install (2) 63 m³ tanks for dirty fluid storage. Ground tanks farm. Install cross over stairway.</li> <li>- XDI Services 60.3 mm coil unit support equipment and rentals travel to barge stage area.</li> <li>- Held water way safety and operational meeting. Review associated hazards of barging and personal transportation on jet boat.</li> <li>- Barge across Ft Laird river XDI 60.3 mm coil unit, support unit, twin plumper and work unit. Barge across 45' man lift genie, fluid filter skid unit, 45 ton picker, (3) 63 m³ test tanks, rental containment blocks and liner.</li> <li>- End report for day.</li> </ul>
6/23/2023	<p>HSE Summary: No incidents, accidents or spills.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Barge across Ft Laird river, 60 m³ test vessel, flare stack, SABA unit, rig matting, water truck, vac unit, office trailers, tool trailer, fire suppression units, pickup trucks, filter unit, and misc wellhead spools. All personal cross river via jet boat.</li> <li>- Setup tank farm containment at KM # 18 staging area for (2) 63 m³ tanks and (1) 45 m³ floc tank.</li> <li>- Travel and spot 60.3 mm - 0.190" Coil units, test units and safety equipment on site as per industry, OROGO, PRL and contractor rules and regulations.</li> <li>- Perform ongoing inspection of equipment as rigged in for use. Rig in 60 m³ test unit and 18 m Flare Stack. Rig in debris catcher and 34.5 MPa return line to wellhead. Spot (2) 63 m³ tanks with filter unit. Rig in pressure unit suction line to tanks. Run 50.8 mm pressure pump line to wellhead. Spot rig matting and 45 ton picker.</li> <li>- Shut In tubing pressure 0 KPa. Shut In casing pressure 0 KPa.</li> <li>- Remove Upper 130.1 mm x 34.5 MPa Master Valve and wellhead assembly. Extra time to remove rusty wellhead bolts with hydraulic wrench.</li> <li>- Install 130.1 mm x 34.5 MPa - 179.4 mm x 34.5 MPa adapter spool. Install 179.4 mm x 34.5 MPa x 130.1 mm x 69 MPa adapter spool. Install 69 MPa work spool and (prior pressure test and charted) Quad 69 MPa Coil BOP.</li> <li>- Secure wellhead and equipment for night.</li> <li>- All personal cross river via jet boat.</li> <li>- End report for day.</li> </ul>

## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
6/24/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. Qwest # QW421</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Function test Quad 69 MPa BOP. Working within specifications.</li> <li>- Pressure test Quad 69 MPa Coil BOP and surface lines against 130 mm x 34.5 MPa Master Valve to 1.4 MPa (low) and 28.0 MPa (high). Held each 10 minutes.</li> <li>- Open Master Valve. Pressure test 114 mm tubing and PBP at 50 mKB to 7.0 MPa. Held pressure 10 minutes.</li> <li>- Cut and dress GT-90 x 4.83 mm - 5.81 mm x 814 m of 60.3 mm coil. Install dimple connector on coil. Pull test connector 7,000 daN and 21,000 daN. OK. Pressure test coil connector 1.4 MPa (low) and 28 MPa (high). Held test 10 minutes each.</li> <li>- Makeup inside lubricator 73 mm Dual Flapper Check Valve, 73 mm Hydraulic Disconnect, 73 mm Circulation Sub, 73 mm Motor and Valvco 95.25 mm Tricone Bit, 73 mm Motor</li> <li>- Install 130 mm lubricator BOP. Pressure test bowen connections to 1.4 MPa (low) and 28 MPa (high). Held 10 min each.</li> <li>- Open master valve. Held BOP drill. Review drill operations.</li> <li>- Run 60.3 mm coil and 95.25 mm Tricone Bit. Function motor at 20 mKB. Tag PBP at 49.0 mKB. Start drill 14:15 hrs. Rate 400 L/min x 11 MPa. RPM 325. Weight on bit 4000 daN. No signs H2S. Recover small metal and rubber debris. Drill thru PBP 16:45 hrs. Work Tricone Bit from 48-52 mKB multiple times to ensure clear.</li> <li>- Run 60.3 mm coil with 95.25 mm Tricone Bit to 150 mKB while continue to circulate 300 L/m x fresh water. Slight signs of pushing PBP ahead of bit. No signs H2S, oil or gas. No fluid loss.</li> <li>- Pull 60.3 mm coil with 95.25 mm Tricone Bit to surface. Remove lubricator from on top of 69 MPa Quad Coil BOP. Lay down 95.25 mm Tri Cone Bit and 73 mm motor assembly. Found pieces of rubber in bit and outer cone wear. Lay down 130 mm lubricator. Land injector in coil saddle for night.</li> <li>- Pressure test 114 mm tubing 7.0 MPa. Held 10 minutes. No leak</li> <li>- Secure wellhead and equipment for night.</li> <li>- End report for day.</li> </ul>
6/25/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. Qwest # QW421</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Rig down Quad 69 MPa - 130 mm BOP. Remove 130 mm x 69 MPa to 130 mm x 34.5 MPa adapter working spools.</li> <li>- Install and torque 130 mm x 34.5 MPa Upper Wellhead assembly. Ensure all valve are closed and outlets are capped. Move rig matting from wellhead.</li> <li>- Drain and rig down pump and return surface lines. Rig down pump unit, picker unit and coil units.</li> <li>- Clean and secure wellhead.</li> <li>- Equipment to move and perform operations to move on site to 303/K-29-6030-12330/1</li> <li>- End report for day.</li> </ul>
7/31/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Level ground around wellhead. Spot matting</li> <li>- Perform 15 minute SCVF Bubble Test. Test failed due to continous bubbles.</li> <li>- Spot and rig up PWS # 829, Fire Suppression unit, hydraulic catwalk, pipe racks, and support equipment on site as per industry, government, contractor and PRL spacing rules and regulations. Perform ongoing CAODC inspection as use equipment.</li> <li>- Run remote accumulator lines to 179.4 mm Class III BOP. Function BOP's. Start pressure 13,000 KPa. Close blind rams 4 sec. Close 60.3 mm pipe rams 4 sec. Close annular 25 secs. Final pressure 10,500 KPa. Recharge system in 42 secs. Lock rams 25 turns.</li> <li>- Stump test blind rams and pipe rams 1.4 MPa and 30 MPa. Held 10 min. Test annular bag 1.4 MPa and 10 MPa. Held 10 min.</li> <li>- Remove Dual 130 mm x 34.5 MPa Master Valves and Upper Wellhead assembly. Extra time to remove rusty bolts.</li> <li>- Install 179.4 mm - 34.5 MPa - Class III BOP and tubing handling equipment.</li> <li>- Pressure test wellhead connection against cement plug in 114 mm tubing and blind rams to 1.4 MPa and 21 MPa. Held 10 minutes.</li> <li>- Clean and secure wellhead, site and equipment</li> <li>- SDFN.</li> </ul>

## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
8/1/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Complete rig in of PWS # 829 and support equipment. Perform ongoing CAODC inspection as use equipment. OROGO on site for field inspection of equipment.</li> <li>- Held BOP drill. Review drill operations and contractor responsibilities.</li> <li>- Tally, drift, pickup and run in hole L-2 Varel Tri-Cone Bit 92 mm x 0-.08 m, Reg Thread x EUE Thread Cross Over Sub 73 mm x 0.46 m, "X" Profile Nipple 60.3 mm x 0.28 m, (1) Joint Tubing 60.3 mm x 9.5 m L-80 6.99 kg/m, (1) Pup Joint 60.3 mm x 0.66 m L-80 6.99 kg/m and (280) Joints Tubing 60.3 mm x 2671 m L-80 6.99 kg/m.</li> <li>- Tag obstruction 2674.5 mKB. Obstruction holds 4,000 dan weight. Rig in circulation lines. Reverse circulate 6.0 m³ fresh water at 500 L/min x 9.0 MPa. Recover 6.0 m³ inhibited water. No fluid loss, No signs oil or H2S. Rig down circulation lines. Able to freely run past obstruction at 2674.5 mKB.</li> <li>- Run in (23) Joints Tubing 60.3 mm x 218 m L-80 6.99 kg/m. Pushing and tag obstruction 2890 mKB. Obstruction holds 4,000 dan weight.</li> <li>- Rig in circulation lines. Reverse circulate 6.0 m³ fresh water at 500 L/min x 9.0 MPa. Recover 6.0 m³ inhibited water. No fluid loss, No signs oil or H2S. Rig down circulation lines. Able to freely run past obstruction at 2890 mKB.</li> <li>- Run in (13) Joints Tubing 60.3 mm x 123.5 m L-80 6.99 kg/m. Tag cement top 3008 mKB (not correlated).</li> <li>- Rig in pack off head, circulation lines, static lines and 85 tonne power swivel. Prepare equipment for drill out operations.</li> <li>- Clean and secure wellhead, site and equipment.</li> <li>- **NOTE** PWS # 829 crew change on 2-Aug-2023.</li> <li>- SDFN.</li> </ul>
8/2/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Crew travel across Ft Laird River delayed due to fog.</li> <li>- Review site operations and equipment with new crew.</li> <li>- Rig in pack off head, circulation lines, static lines and 85 tonne power swivel.</li> <li>- Tag obstruction 3008 mKB. Break reverse circulation 400 L/min x 7 MPa. Max torque on bit of 2150 ft lbs. Work tubing string from 3005 mKB to 3008 mKB due to rotation loss when tubing not moving. Continue to reverse circulate 400 L/min x 14 MPa while moving pipe to clear debris from side of tri-cone bit. Returns show slight cement and scale. No fluid loss. Pressure increase to 24 MPa on casing. Work pipe for 2 hrs to clear possible debris on side of tool string and inside tri-cone bit. Stop reverse circulation</li> <li>- Forward circulate 425 L/min x 13 MPa. RPM 80-100. Weight on bit vary 500 to 2500 daN. Work tubing string up and down to breakup cement and debris from previous 49 PBP Bull Nose. Drill out cement from 3008 mKB to 3012.5 mKB in 6 hrs. No fluid loss. No signs hydrocarbons, well gas or H2S. Returns are fine cement and small metal filings.</li> <li>- Loosen static lines. Lay down tubing joint # 316, power swivel and circulation lines. Position tubing bottom 3009 mKB for night.</li> <li>- Clean and secure wellhead, site and equipment.</li> <li>- SDFN.</li> </ul>
8/3/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Rig in pack off head, circulation lines, static lines and 85 tonne power swivel.</li> <li>- Held BOP drill. Review contractor individual responsibilities for drill.</li> <li>- Lower tubing string and tag obstruction 3012.5 mKB. Forward circulate 425 L/min x 13 MPa. RPM 80-100. Weight on bit vary 500 to 2500 daN. Work tubing string up and down to breakup cement and debris from previous 49 PBP Bull Nose. Drill out cement from 3012.5 mKB to 3015.0 mKB in 1.5 hrs. No fluid loss. No signs hydrocarbons, well gas or H2S. Returns are fine cement and small metal filings.</li> <li>- Start drill on BD10 - PBP. Forward circulate 425 L/min x 13 MPa. RPM 80-100. Weight on bit vary 500 to 2500 daN. Work tubing string up and down to breakup BD10 - PBP Returns are small metal debris. No signs hydrocarbons, gas or H2S.</li> <li>- Lost circulation at 1200 hrs. Work string for 2 hrs. Rotate and dry drill while forward injecting 300 L/min x 1.0 MPa fresh water into formation to push drilled out BD10K - PBP to 3023 mKB. Fresh water fluid loss to formation 36 m³.</li> <li>- Rig down pack off head, circulation lines, static lines and 85 tonne power swivel.</li> <li>- Pickup and run in (8) Joints Tubing 60.3 mm L-80 6.99 kg/m. Tag obstruction 3091 mKB inside 156 mm Nahanni Open Hole.</li> <li>- Position tubing bottom 3088 mKB. Rig in circulation lines. Forward inject 14 m³ fresh water at 400 L/min x 2.0 MPa into Nahanni Formation. No signs returns from casing. Lower tubing string and tag obstruction 3091 mKB. **NOTE** Unable to drill out or circulate out obstruction at 3091 mKB.</li> <li>- Pull 92 mm Tri-Cone Bit back into 114 mm tubing string. Tubing bottom 3085 mKB.</li> <li>- Establish Nahanni Formation feed rate 400 L/min x 0.5 MPa for 15 m³ fresh non-saline water. No signs return from annulus.</li> <li>- Clean and secure wellhead, site and equipment.</li> <li>- SDFN</li> </ul>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
8/4/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Bleed off shut in tubing and shut in casing pressures to 0 KPa.</li> <li>- Rig in circulation lines. Pump 6.0 m<sup>3</sup> fresh non-saline water down casing at 400 L/min x 0.5 MPa. No returns from casing. Pump 4.0 m<sup>3</sup> fresh non-saline water down casing at 400 L/min x 0.5 MPa. No returns from tubing.</li> <li>- Pull and lay down (7) Joints Tubing 60.3 mm L-80 6.99 kg/m</li> <li>- Pull and stand in derrick (316) joints Tubing 60.3 mm L-80 6.99 kg/m</li> <li>- Remove (1) Pup Joint 60.3 mm x 0.66 m L-80 6.99 kg/m, (1) "X" Profile Nipple 60.3 mm x 0.28 m, Reg Thread x EUE Thread Cross Over Sub 73 mm x 0.46 m and (1) L-2 Varel Tri-Cone Bit 92 mm x 0.08 m</li> <li>- **NOTE** Trickle pump 12 m<sup>3</sup> fresh non-saline water into casing as pull tubing string to maintain well control. No teeth missing from bit cones. Medium bearing wear on bit cones.</li> <li>- Rig in Wire Line equipment. Purge lubricator prior to each run. Run CCL / 93.7 mm Gauge Ring. Tag "R" Nipple w/ 96/65 mm Profile at 3033.9 mKB. Pull out CCL / 93.7 mm Gauge Ring. Secure on site communications. Run CCL / Setting Tool and Weatherford - Direct 10K - 114.1 mm Cement Retainer. Correlate on depth to previous CCL / Gauge Ring. Set Weatherford - Direct 10K Cement Retainer (top) 3028.0 mKB x 1634 hrs. Pull out CCL / Setting Tool. Rig down wire line equipment.</li> <li>- Pump 1.3 m<sup>3</sup> fresh non-saline water to fill casing. Pressure test 114.3 mm casing and 114.3 mm Weatherford - Direct Cement Retainer to 7.0 MPa. Held 10 minutes. No leak off. Bleed off pressure.</li> <li>- Makeup and run in hole (1) Weatherford - Direct Cement Retainer Stinger, (1) Centralizer, 114.3 mm x 0.3 m, (1) Pup Joint 60.3 mm x 1.48 m L-80 and (20) Joints Tubing 60.3 mm x 190 m L-80 6.99 kg/m. Position tubing bottom 192 mKB for night.</li> <li>- Clean and secure wellhead, site and equipment.</li> <li>- SDFN</li> </ul>
8/5/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Continue to run in hole (1) Weatherford - Direct Cement Retainer Stinger, (1) Centralizer, 114.3 mm x 0.3 m, (1) Pup Joint 60.3 mm x 1.48 m L-80 and (287) Joints Tubing 60.3 mm x 190 m L-80 6.99 kg/m</li> <li>- Rig in cement unit and bulk. Test pump line 16.0 MPa. Held 5 minutes.</li> <li>- Sting tubing string into cement retainer. Pressure test tubing and retainer to 7.0 MPa. held pressure 10 minutes.</li> <li>- Inject 11.1 m<sup>3</sup> fresh non-saline water at 400 L/min x 5.4 MPa into Nahanni Formation.</li> <li>- Mix and pump 13 m<sup>3</sup> Charger Thermal-40+1.0% CHGC-H-2 x 1850 kg/m<sup>3</sup> cement slurry. Slurry Yield 0.87 m<sup>3</sup>/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4.0 MPa. Pressure start 4.0 MPa</li> <li>- Displace cement slurry with 5.0 m<sup>3</sup> fresh non-saline water x 400 L/min x 2.1 MPa. Temp 20°C. Pressure start to climb.</li> <li>- Slow rate displace 0.60 m<sup>3</sup> - 80 L/min cement slurry into formation with 0.60 m<sup>3</sup> fresh non-saline water. Pressure climb to 6.2 MPa.</li> <li>- Sting tubing out of cement retainer. Position tubing bottom 3027.9 mKB. Total cement into formation of 12.0 m<sup>3</sup>.</li> <li>- Forward circulate and balance 0.50 m<sup>3</sup> Thermal Cement slurry from 2988 mKB to 3028 mKB. Stop pump. Rig down pump lines.</li> <li>- Slowly pull and lay down (4) Joints Tubing 60.3 mm L-80. Position tubing bottom 2987 mKB.</li> <li>- Reverse circulate 9.0 m<sup>3</sup> fresh non-saline water at 500 L/min x 10 MPa. Return show 150 L cement water. Clean fresh non-saline water at end of circulation.</li> <li>- Pressure test tubing, 114 mm casing and cement plug to 8.0 MPa. Held pressure 10 minutes. No leak off.</li> <li>- Rig down cement pump lines. Park on side of location cement unit and bulk.</li> <li>- Pull and stand (20) Joints Tubing 60.3 mm L-80 6.99 kg/m. Position tubing bottom 2836 mKB for night.</li> <li>- Rig perform scheduled maintenance.</li> <li>- Clean and secure wellhead, site and equipment.</li> <li>- SDFN.</li> </ul>

## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
8/6/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Run in (21) Joints Tubing 60.3 mm L-80. Tag cement 2990 mKB with 1800 daN weight.</li> <li>- Lay down (1) Joints Tubing 60.3 mm L-80, Pull stand in derrick (314) Joints Tubing 60.3 mm L-80 6.99 kg/m. Break apart and lay down Pup Joint 60.3 mm L-80, Centralizer 114.3 mm x 0.3 m and Weatherford - Direct Cement Retainer Stinger.</li> <li>- Change 179.4 mm Class III BOP tubing rams to 114 mm. Function test 114 mm tubing rams. Open and close in 5 seconds.</li> <li>- Install 114 mm Pup Joint with 130 mm Stab Valve. Close tubing rams. Pressure test tubing rams against cement tubing plug to 1.4 MPa (low) and 25 MPa (high). Held each test 10 minutes.</li> <li>- Pressure test annulus, 114 mm tubing, 178 mm casing, Baker 177.8 mm "FAB-1" Packer to 14.0 MPa. Held 10 min</li> <li>- Run 104 mm x 106 mm Spear with CCL / 92 mm Jet Cutter. Sting into Hydril 513 - 127 mm x 1.0 m Pup Joint below tubing hanger. Pull 114 mm tubing string into 5000 daN tension. Tubing string at 58,000 daN.</li> <li>- Run CCL / 92 mm Jet Cutter. Tag cement top 2991.5 mKB. Correlate to Reliance Cement Retainer log dated 4-Aug-2023. Cut 114 mm tubing at 2990.0 mKB at 1445 hrs. 5,000 daN weight loss. Pull out CCL / fired jet cutter. Rig down wire line equipment from wellhead.</li> <li>- Rig 114 mm tubing equipment. Pickup and lay down 127 mm tubing hanger, Pup Joint 127 mm x 0.96 m Hydril 513 and Cross Over Sub 127 mm - Hydril 513 x 114 mm Hydril 533 x 0.37 m. Able to freely move tubing string. Tubing bottom 2989 mKB.</li> <li>- Rig in circulation lines. Forward circulate 40 m³ fresh non-saline water at 450 L/min x 5.0 MPa. Return 38 m³ inhibited water. Last 2.0 m³ returns are fresh non-saline water. Complete wellbore is changed to fresh non-saline water.</li> <li>- Lay down (1 ea) Pup Joints Tubing 114 mm x 2.95 m, 2.33 m, 1.13 m, 0.50 m L-80 LHydril 533 and (2) Joints Tubing 114 mm L-80 Hydril 533. Tubing bottom 2976.5 mKB.</li> <li>- Clean and secure wellhead and equipment</li> <li>- SDFN</li> </ul>
8/7/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Pull and lay down: (309) Joints Tubing 114.3 mm - Hydril 533 - L-80 18.97 kg/m x 2980 m (1) Cut Joint Tubing - Hydril 533 - L-80 18.97 kg/m x 1.0 m</li> <li>- Rig in wire line equipment on top of 179.4 mm Class III BOP. Run CCL / 145 mm Gauge Ring. Fluid level 340 mKB. Tag top of cut 114.3 mm tubing at 2990.0 mKB. Pull CCL / 145 mm Gauge Ring.</li> <li>- Secure wellhead, site and equipment.</li> <li>- End of operations for day.</li> </ul>
8/8/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Rig in wire line equipment on top of 179.4 mm Class III BOP. Secure onsite communications. Run CCL / Setting Tool / Weatherford Viton 10 K-PBP. Correlate on depth to 145 mm Gauge Ring run dated 7-Aug-2023. Tag top of 114.3 mm cut tubing at 2990.0 mKB. Set (top) of Weatherford 178 mm Viton 10K Permanent Bridge Plug at 2987.5 mKB x 0814 hrs. Pull CCL / Setting tool out of hole.</li> <li>- Pump 7.0 m³ fresh non-saline water to fill 178 mm casing. Pressure test 178 mm casing and Weatherford 10K Viton PBP to 7.0 MPa. Held pressure 10 minutes. No leak off. Bleed off pressure.</li> <li>- Run RBL log from 2987.5 mKB ( top PBP ) to surface. Send logs to Calgary for interpretation. Rig down wire line equipment from wellhead.</li> <li>- Run in (1) Regular Tubing Collar 60.3 mm x 0.15 m and (313) Joints Tubing 60.3 mm L-80 6.99 kg/m. Tag top of Weatherford 10K Viton PBP at 2987.5 mKB. Position tubing bottom 2987 mKB.</li> <li>- Rig in Cement Unit. Test line 16.0 MPa. Held 5 minutes. Pump 1.0 m³ Charger Thermal 40 + 1.0% CHGC-2 x 1800 kg/m³ cement slurry. Slurry Yield 0.80 m³/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4 MPa. Displace behind cement slurry 5.7 m³ fresh (non-saline) water 20°C. Circulated and balance cement plug from 2937.5 mKB to 2987.5 mKB. Rig down pump line.</li> <li>- Lay down (6) Joints Tubing 73 mm L-80 6.99 kg/m. Position tubing bottom 2930.5 mKB.</li> <li>- Reverse circulate 10 m³ (total) fresh (non-saline) water at 500 L/min x 3.0 MPa. End returns are clean fresh (non-saline) water. Entire hole displaced to non-saline (fresh) water. Release cement units to side of location.</li> <li>- Lay down (2) Joints Tubing 73 mm L-80 6.99 kg/m. Position tubing bottom 2911 mKB for night.</li> <li>- Clean and secure wellhead and site. Travel to base.</li> <li>- End report for day.</li> </ul>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
8/9/2023	<p>HSE Summary: No incidents, accidents or spills. ERP # QW423</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Run (3) Joints Tubing 60.3 mm L-80. Tag cement top 2950 mKB with 1800 daN weight. ( uncorrelated depth )</li> <li>- Pull and lay down (8) Joints Tubing 60.3 mm L-80. Pull and stand in derrick (300) Joints Tubing 60.3 mm L-80.</li> <li>- Pump 3.2 m³ fresh non-saline water to fill casing to surface.</li> <li>- Perform scheduled rig maintenance.</li> <li>- Clean and secure wellhead, site and equipment.</li> <li>- SDFN.</li> </ul>
8/10/2023	<p>HSE Summary: No incidents, accidents or spills. ERP # QW423</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Rig in wire line equipment on top of 179.4 mm - 34.5 MPa - Class III BOP. Program tools string. Run in CCL / Noise - Temperature Logging Tool at 10 m/min to 2957 mKB. Pull up and stop every 5 m for 30 seconds from 2957 mKB to 2000 mKB. Continue to pull up and stop every 10 m for 30 seconds from 2000 mKB to surface. Lay down CCL / Noise - Temperature Log Tool. Send data into Calgary ASAP for analysis.</li> <li>"NOTE" During wire line operations load and haul to Cooper Trucking yard in Ft Nelson (216) Joints Tubing 114 mm 18.75 kg/m L-80 Hydrill 533.</li> <li>- Secure equipment and wellhead for night.</li> <li>- End report for day.</li> </ul>
8/11/2023	<p>HSE Summary: No incidents, accidents or spills. ERP # QW423</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Wait for government approval to perform remedial abandonment operations.</li> <li>- Rig in 179.4 mm x 34.5 MPa Wire Line BOP on top of 179.4 mm Class III BOP.</li> <li>Makeup inside lubricator CCL / Perforating Gun ERHSC 127 mm x 1.0 m x 20 SPM x 60° Phase x 25 gram SDP. Total shots 20. Purge air from lubricator with N2. Run in and correlate on depth to CBL log dated 8-Aug-23. Perforate Besa River formation interval 2855.0 - 2856.0 mKB at 15:54 hrs. No reaction at surface. Pull CCL / Setting Tool. Surface inspection shows all shots fired and center of scallop.</li> <li>Makeup inside lubricator CCL / Perforating Gun ERHSC 127 mm x 1.0 m x 20 SPM x 60° Phase x 25 gram SDP. Total shots is 20. Purge air from lubricator with N2. Run in and correlate on depth to CBL log dated 8-Aug-23. Perforate Besa river formation interval 2854.0 - 2855.0 mKB at 17:09 hrs. No reaction at surface. Pull CCL / Setting Tool. Surface inspection shows all shots fired and center of scallop.</li> <li>Lay down lubricator. Secure wire line BOP on wellhead for night.</li> <li>- Perform injection test on Besa River formation.</li> <li>Slowest rig pump rate 60 L/min. Pump 0.40 m³ fresh non-saline water. Pressure continous climb slowly to 21.0 MPa. Stop pump. Pressure bleed down to 18.1 MPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen any debris in perforations.</li> <li>Slowest rig pump rate 60 L/min. Pump 0.50 m³ fresh non-saline water. Pressure continous climb slowly to 21.0 MPa. Stop pump. Pressure bleed down to 18.3 MPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen debris in perforations</li> <li>Slowest rig pump rate 60 L/min. Pump 0.45 m³ fresh non-saline water. Pressure continous climb slowly to 21.0 MPa. Stop pump. Pressure bleed down to 18.2 MPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen debris in perforations</li> <li>- Clean and secure wellhead, site and equipment.</li> <li>- End report for day.</li> </ul>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
8/12/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Rig in wire line equipment. Run CCL / Kappa WHM 10K 177.8 mm Cement Retainer. Correlate on depth to Reliance RBL log dated 8-Aug-2023. Set top of Cement Retainer 2850.0 mKB (top) x 08:57 hrs. Pull CCL / Setting tool. Rig down wire line.</li> <li>- Pressure test 178 mm casing and Cement Retainer 7.0 MPa. Held 10 min.</li> <li>- Run Cement Retainer Stinger and (297) Joints Tubing 60.3 mm L-80.</li> <li>- Sting into Cement Retainer 2850 mKB. Pressure up annulus 8.0 MPa. No communication from tubing. Sting out Cement Retainer.</li> <li>- Tie in cement unit. Pressure test line 21 MPa. Displace 1.0 m³ Enviro-Syn HCR-7000-10 acid followed by 4.8 m³ fresh non-saline water. Sting into Cement Retainer. Stage squeeze 0.9 m³ Enviro-Syn HCR-7000-10 acid into Besa River formation in 68 minutes. No feed rate established. Slowly pressure up tubing at 17 L/min to 22 MPa. Stop pump. Pressure bleed down to 16.0 MPa in 3 minutes. Repeat process 5 times. Total acid into formation 456 liters.</li> <li>- Sting out cement retainer. Reverse circulate out 544 liters Enviro-Syn HCR-7000-10 acid and 6.9 m³ fresh non-saline water.</li> <li>- Pump 2.3 t of 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1800 kg/m³ cement slurry to bottom tubing. Slurry Yield 0.87 m³/t. Thick time 1.5 hrs.</li> <li>- Sting into cement retainer. Hesitate squeeze 0.815 m³ - 60 L/min cement slurry into formation in 29 minutes. Max pressure 19.7 MPa. Stop pumps. Record 16.6 MPa flat line for 10 minutes. Total cement into formation 0.815 m³. Sting tubing out of cement retainer. Tubing bottom 2849 mKB.</li> <li>- Forward circulate and balance 1.2 m³ Thermal Cement. Estimated slurry 2790 mKB to 2850 mKB.</li> <li>- Pull and position tubing bottom 2736 mKB.</li> <li>- Reverse circulate 9.0 m³ fresh non-saline water. Return show 150 L cement water. Complete wellbore circulated to fresh non-saline water.</li> <li>- Pull and position tubing bottom 2356 mKB.</li> <li>- Clean and secure site and equipment.</li> <li>- End report for day.</li> </ul>
8/13/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Electrical issue with rig. Change out starter.</li> <li>- Run in (46) Joints Tubing 60.3 mm L-80. Tag cement top 2790 mKB with 1800 daN weight.</li> <li>- Pull and stand (140) Joints Tubing 60.3 mm L-80</li> <li>- Pull and lay down (157) Joints Tubing 60.3 mm L-80, (1) Pup Joint 60.3 mm L-80, (1) Centralizer 178 mm and (1) Cement Retainer Stinger.</li> <li>- Rig in wire line 34.5 MPa BOP. Run CCL / Perforating Gun ERHSC 127 mm x 2.0 m x 20 SPM x 60° Phase x 25 gram Good Hole. Total shots is 41. N2. Correlate to CBL log dated 8-Aug-23. Perforate shale interval 1350.0 - 1352.0 mKB at 15:13 hrs. No reaction at surface. Pull CCL / Setting Tool. Surface inspection shows all shots fired and center of scallop. Fluid level prior and after perforating interval at 120 mKB. Release wire line unit for day.</li> <li>- Try establish feed rate 3 times. Slowest rig pump rate 60 L/min. Pump 0.40 m³ fresh non-saline water. Pressure continuous climb slowly to 14,120 KPa. Stop pump. Pressure bleed down to 14,060 KPa in 10 minutes. No feed rate achieved.</li> <li>- Run in (141) Joints Tubing 60.3 mm L-80 6.99 kg/m. Tubing bottom 1354 mKB.</li> <li>- Pump and spot 1.0 m³ Enviro-Syn HCR-7000-10 acid into tubing followed by 2.5 m³ fresh non-saline water at 450 L/min x 4.0 MPa. Balance acid from 1354 mKB to 1304 mKB. Pressure up well bore to 10,000 KPa at 18:04 hrs. Shut in wellhead and secure. Rig down pump pressure line.</li> <li>- Secure site and equipment.</li> <li>- End report for day.</li> </ul>

## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
8/14/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b>            - SITP 8237 KPa. SICP 8257 KPa. Monitor Surface Casing Vent for 30 minutes. Observe 0 bubbles. Bleed down casing and tubing pressure to 0 KPa. Monitor Surface Casing Vent for 10 minutes. Observe 150 bubbles. Rate of 1 bubble every 4 seconds.            - Try to squeeze 1.0 m³ Enviro-Syn HCR-7000-10 acid into perforations at 1350.0 - 1352.0 mKB. Pressure up casing to 14,030 KPa. Stop pump. Wait 10 minutes. Pressure drop to 13,950 KPa. Repeat this process 6 times. No signs of feed rate. No change in bleed down pressure. Estimate 50 liters fluid squeezed into formation.            - Pull and stand (140) Joints Tubing 60.3 mm L-80 6.99 kg/m            - Wait for government approval to perform remedial abandonment operations.            - Run in (143) Joints Tubing 60.3 mm L-80. Position tubing bottom 1368 mKB.            - Rig in cement pump unit. At 16:21 hrs mix and pump 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1850 kg/m³ cement slurry. Slurry Yield 0.87 m³/t. Thick time 1.5 hrs. Pump rate 400 L/min x 5.0 MPa. Pump behind cement slurry 2.3 m³ fresh non-saline water x 450 L/min x 5.0 MPa to balance cement plug from 1268 mKB to 1368 mKB. Stop pump.            - Pull and lay down (12) Joints Tubing 60.3 mm L-80. Position tubing bottom 1245 mKB.            - Reverse circulate 9.0 m³ fresh non-saline water at 500 L/min x 7 MPa. Return show 150 L cement water then clean fresh non-saline water.            - Pull and lay down (2) Joints Tubing 60.3 mm L-80. Position tubing bottom 1226 mKB.            - Try to squeeze cement into perforations at 1350.0 mKB to 1352.0 mKB. Pressure up tubing / casing to 13,020 KPa with 200 liters fresh non-saline water. Wait 10 minutes. Pressure drop to 12,715 KPa. Pressure up tubing / casing to 14,056 KPa with 50 liters fresh non-saline water. Wait 10 minutes. Pressure drop to 13,972 MPa. Leave well shut in with 13,972 KPa pressure on it at 18:00 hrs.            - Secure wellhead.            - End report for day.</p>
8/15/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b>            - SICP 11,539 KPa. Monitor SCVF 15 minutes. 0 bubbles. Bleed down well bore to 0 KPa. Monitor SCVF 45 minutes. Observe 0 bubbles. Monitor SCVF 30 minutes. Observe 1 bubble / 4 seconds            - Run in (7) Joints Tubing 60.3 mm L-80. Tag cement top 1311.29 mKB with 1800 daN weight.            - Wait remedial abandonment approvals.            - Lay down (54) Joints Tubing 60.3 mm L-80. Pull and stand (76) Joints Tubing 60.3 mm L-80            - Run CCL / Perforating Gun ERHSC 127 mm x 2.0 m x 20 SPM x 30° Phase x 25 gram SDP. Total shots is 40. Correlate to CBL log dated 8-Aug-23. Perforate shale interval 736.0 - 738.0 mKB at 12:58 hrs. Slight blow at surface. Pull CCL / Setting Tool. Inspection shows all shots fired.            - Perform injection test. Pump 0.24 m³ fresh non-saline water x 60 L/m down casing. Pressure 8113 KPa. Stop pump. Pressure bleed down to 6590 KPa in 5 minutes. No feed rate achieved. Repeat 3 times.            - Run (77) Joints Tubing 60.3 mm L-80. Tubing bottom 739 mKB.            - Spot 1.0 m³ Enviro-Syn HCR-7000-10 acid at end of tubing string. Hesitate squeeze acid 14:28 to 17:00 hrs. Max pressure 7.5 MPa. Wait 5 to 10 minutes between 19 stages. Acid squeezed into perfs 626 liter. Back wash 374 liter acid.            - Position tubing bottom 753 mKB.            - Pump 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1850 kg/m³ cement slurry at 17:15 hrs. Slurry Yield 0.87 m³/t. Thick time 1.5 hrs. Pump rate 400 L/min x 3.0 MPa. Pump behind cement slurry 1.1 m³ fresh non-saline water. Circulate cement plug from 678 mKB to 753 mKB.            - Lay down (12) Joints Tubing 60.3 mm L-80. Tubing bottom 639 mKB.            - Reverse circulate 5 m³ fresh non-saline water. Return show 150 L cement water then clean fresh non-saline water.            - Pump fresh non-saline water down casing to hesitate squeeze 500 liter total cement total into formation in 3 x 10 min stages. Leave 4.707 KPa on wellhead for night.            - Secure wellhead and site.            - End report for day.</p>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL LIARD 2K-29**

Well Header					
API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	License # N1980	State/Province NorthWest Territories	Well Configuration Type Deviated
Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/26/2003	Rig Release Date 3/16/2003

### Daily Operations

Start Date	Summary
8/16/2023	<p><b>HSE Summary:</b> No incidents, accidents or spills. ERP # QW423</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- SICP 942 KPa. Bleed off pressure to 0 KPa. Continue to monitor Surface Casing Vent for possible bubbles. None observed.</li> <li>- Run in (6) Joints Tubing 60.3 mm L-80. Tag cement top 686 mKB with 1800 daN weight.</li> <li>- Pressure test casing and cement to 5010 KPa. Monitor 10 min. Pressure 5001 KPa. Bleed off pressure.</li> <li>- Lay down (71) Joints Tubing 60.3 mm L-80. Well bore fluid level 30 mKB.</li> <li>- Rig down 34.5 MPa - Class III BOP and tubing handling equipment.</li> <li>- Install 34.5 MPa - 130 mm Master Valve with Dual 79 mm Upper Master Valves. Secure wellhead outlets.</li> <li>- Rig down PWS # 829. Rig down pump and return lines. All equipment to move to PRL 300/K-29-6030-12330. Onsite transfer 100 m³ fresh non-saline water for operations on PRL 300/K-29-6030-12330.</li> <li>- Clean and secure wellhead.</li> <li>- End report for day.</li> </ul>
8/27/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Production Casing and Surface Casing for LEL. None detected.</li> <li>- Confirm no existence of underground lines near well centre.</li> <li>- Track hoe dig bellhole around wellhead to depth of 4.0 m. Ensure proper slopping, stairway exit and spoil pile spacing from bellhole.</li> <li>- Cut away 3.3 m ( 10.0 mKB ) of 660 mm conductor. Cement between conductor and surface casing. Cut window in 244.5 mm Surface Casing and 177.8 mm Production Casing.</li> <li>- No cement between Surface Casing and Production Casing. Cut 177.8 mm Production Casing, 3.1 m ( 9.8 mKB) and Surface Casing at 3.2 m ( 9.9 mKB) depth below surface casing flange.</li> <li>- Remove wellhead from bellhole. Stitch (vent) weld 6.3 mm plate on top of Production Casing and Surface Casing. Weld write 2K-29 / N1980 on 177.8 mm Production Casing cap.</li> <li>- Back fill and tamp bellhole. Level and slop bell hole.</li> <li>- Install (orange) Tombstone Surface Marker onto 73 mm pipe. Pipe is anchored and located 1.0 m x North of well centre. Weld write on tombstone marker N1980 + Paramount Res Ltd + 60°28' 40.831" N + 123° 35' 5.338" W + NAD 83</li> <li>- Job completed.</li> </ul>



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/21/2023**  
**Report #: 1**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)		

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Lower Besa River	/00	Flowing



Job Information / AFE	
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.	
Target Formation Nahanni	

Daily Pressures	
Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary	
Operations Next Report Period Wait for coil operations.	
Operation at 6am Wait on daylight.	

24 Hr Operational Comments						
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT
00:00	11:30	11.50	11.50	No Job Activity	PP	
11:30	14:00	2.50	14.00	RU/RD	PP	
<p>No activity on site.</p> <p>XDI Energy (coil) units start travel from GP to Ft Nelson.</p> <p>Inspect and review travel operations across Ft Laird River.</p> <p>Travel to site. Review removal of surface piping and supports. Area cleared for coil and rig operations.</p> <p>Function (2) ABB Vetco Gray 130.1 mm x 34.5 MPa Master Valves. Shut In tubing pressure of 0 KPa.</p> <p>Review operations and materials with contractors.</p> <p>Function (2) ABB Vetco Gray 53 mm x 34.5 Mpa Casing Valves. Shut In casing 0 KJpa.</p> <p>Inspect Surface Casing electronic monitoring equipment review. The electronic cable from monitor to flow meter has been bitten and severed by a animal. Equipment should still of shown pressure but possible not flow. Remove Surface Casing Vent monitoring system 1130 hrs. No signs of pressure buildup in Surface Casing. Send equipment to Surface Solutions to extract and review data ASAP.</p> <p>Perform 15 minute SCVF Bubble Test. Observe 1 bubble every 2 seconds. Failed SCVF Bubble test.</p> <p>End of report.</p>						
14:00	00:00	10.00	24.00	WOD	PP	

6:00 Update						
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Wait on daylight.













Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		97.3	3,028.00	3,028.20	8/4/2023 00:00
Thermal Cement		97.3	2,991.50	3,028.00	8/5/2023 14:30



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/21/2023**  
**Report #: 1**









API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Other In Hole</b>											
Des		Icon	OD (mm)	Top Depth (mKB)		Btm (mKB)		Run Date			
Bridge Plug - Permanent			157.0	2,987.50		2,987.80		8/8/2023 08:14			
Thermal Cement			157.0	2,987.80		3,599.00		8/8/2023 08:15			
Thermal Cement			157.0	2,950.00		2,987.50		8/8/2023 18:30			
Cement Retainer			157.0	2,850.00		2,850.30		8/12/2023 08:57			
Fresh Non-Saline Water			157.0	2,850.30		2,950.00		8/12/2023 18:55			
Thermal Cement			157.0	2,850.30		2,856.00		8/12/2023 18:59			
Thermal Cement			157.0	2,790.00		2,850.00		8/12/2023 19:00			
Thermal Cement			157.0	1,311.29		1,368.00		8/14/2023 18:00			
Fresh Non-Saline Water			157.0	1,368.00		2,790.00		8/14/2023 18:01			
Fresh Non-Saline Water			157.0	753.00		1,311.29		8/15/2023 18:14			
Thermal Cement			157.0	686.00		753.00		8/15/2023 18:15			
Fresh Water (Permanent)			157.0	32.00		686.00		8/16/2023 18:16			
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						1					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Weather &amp; Road Condition</b>											
Weather Overcast				T (°C) 20		Road Cond Good					



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/22/2023**  
**Report #: 2**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980			
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated		
KB-Ground Distance (m) 6.70				KB-Tubing Head Distance (m) 6.25				Total Depth (mKB) 3,599.00			PBTD (All) (mKB)		
Casing Strings													
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread	
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000			
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C	
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX	
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6					
Zones / Event Sequence													
Zone Name				Zone Code					Current Status				
Lower Besa River				/00					Flowing				
Job Information / AFE													
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.													
Target Formation Nahanni													
Daily Pressures													
Subtype							P (kPa)						
SICP							0						
SITP							0						
Operation Summary													
Operations Next Report Period Travel and setup flare stack, test unit, coil unit, fluid unit, rentals, and fluids to site. Install prior stump tested coil 69 MPa Quad BOP stack on wellhead.													
Operation at 6am Wait on daylight.													
24 Hr Operational Comments													
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details						
00:00	07:00	7.00	7.00	WOD	PP		Wait on daylight.						
07:00	10:45	3.75	10.75	TTLY	PP		XDI Services 60.3 mm coil unit support equipment and rentals continue to travel to area						
10:45	11:00	0.25	11.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards to setup tank farm containment. Discuss Injured Worker Transportation Plan and ERP.						
11:00	13:00	2.00	13.00	RU/RD	PP		Setup (2) 63 m³ tank temporary fluid containment farm. Install (2) 63 m³ tanks for dirty fluid storage. Ground tanks farm. Install cross over stairway.						
13:00	14:00	1.00	14.00	TTLY	PP		XDI Services 60.3 mm coil unit support equipment and rentals travel to barge stage area.						
14:00	14:30	0.50	14.50	Safety Mtg	PP		Held water way safety and operational meeting. Review associated hazards of barging and personal transportation on jet boat.						
14:30	19:00	4.50	19.00	TTLY	PP		Barge across Ft Laird river XDI 60.3 mm coil unit, support unit, twin pumper and work unit. Barge across 45' man lift genie, fluid filter skid unit, 45 ton picker, (3) 63 m³ test tanks, rental containment blocks and liner.  Haul (2) 63 m³ test tanks, 45' man lift genie and fluid filter skid unit to K-29 site. Tow tractor assist trucks up lease access road due to steep incline.  End report for day.						
19:00	00:00	5.00	24.00	WOD	PP		Wait on daylight.						
6:00 Update													
Start Time	End Time	Dur (hr)	Time Code		Ops Category	NPT	Operation Details						
00:00	06:30	6.50			PP		Wait on daylight.						
Other In Hole													
Des					Icon	OD (mm)		Top Depth (mKB)		Btm (mKB)		Run Date	
Cement Retainer						97.3		3,028.00		3,028.20		8/4/2023 00:00	
Thermal Cement						97.3		2,991.50		3,028.00		8/5/2023 14:30	
Bridge Plug - Permanent						157.0		2,987.50		2,987.80		8/8/2023 08:14	
Thermal Cement						157.0		2,987.80		3,599.00		8/8/2023 08:15	
Thermal Cement						157.0		2,950.00		2,987.50		8/8/2023 18:30	
Cement Retainer						157.0		2,850.00		2,850.30		8/12/2023 08:57	
Fresh Non-Saline Water						157.0		2,850.30		2,950.00		8/12/2023 18:55	
Thermal Cement						157.0		2,850.30		2,856.00		8/12/2023 18:59	



## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29  
 Pad: L-29/6030-12330  
 Business Unit: Central and Other  
 Rig: Rigless

Report Date: 6/22/2023  
 Report #: 2

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)		
<b>Other In Hole</b>					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16
<b>Bill 30 Requirements (Head Count Only)</b>					
Type	Count				
Day Shift	23				
<b>Contractor Hours (Head Count &amp; Hours)</b>					
Type	Count	Reg Work Time (hr)			
<b>Flare Permit</b>					
Contract # C03040 C	Agreement Start Date 1/31/2020	Agreement End Date			
<b>Weather &amp; Road Condition</b>					
Weather	T (°C)	Road Cond			
Overcast	23	Good			

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/23/2023**  
**Report #: 3**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)			
Casing Strings												
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000		
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6				
Zones / Event Sequence												
Zone Name				Zone Code					Current Status			
Lower Besa River				/00					Flowing			
Job Information / AFE												
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.												
Target Formation Nahanni												
Daily Pressures												
Subtype							P (kPa)					
SICP							0					
SITP							0					
Operation Summary												
Operations Next Report Period Pressure test wellhead. Makeup drilling BHA to 60.3 mm coil. Mill 114 mm PBP.												
Operation at 6am Wait on daylight.												
24 Hr Operational Comments												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.					
06:30	07:00	0.50	7.00	Safety Mtg	PP		Held safety and operational meeting. Discuss water way transportation hazards and controls. Review contractor and PRL JSA for operations and hazards for setup of coil operaitons. Discuss Injured Worker Transportation Plan and ERP.					
07:00	10:00	3.00	10.00	TTLY	PP		Barge across Ft Laird river, 60 m³ test vessel, flare stack, SABA unit, rig matting, water truck, vac unit, office trailers, tool trailer, fire suppression units, pickup trucks, filter unit, and misc wellhead spools. All personal cross river via jet boat.  Setup tank farm containment at KM # 18 staging area for (2) 63 m³ tanks and (1) 45 m³ floc tank.  Travel and spot 60.3 mm - 0.190" Coil units, test units and safety equipment on site as per industry, OROGO, PRL and contractor rules and regulations.					
10:00	15:00	5.00	15.00	RU/RD	PP		Perform ongoing inspection of equipment as rigged in for use. Rig in 60 m³ test unit and 18 m Flare Stack. Rig in debris catcher and 34.5 MPa return line to wellhead. Spot (2) 63 m³ tanks with filter unit. Rig in pressure unit suction line to tanks. Run 50.8 mm pressure pump line to wellhead. Spot rig matting and 45 ton picker.					
15:00	16:30	1.50	16.50	NU/ND WH/XT	PP		Shut In tubing pressure 0 KPa. Shut In casing pressure 0 KPa.  Remove Upper 130.1 mm x 34.5 MPa Master Valve and wellhead assembly. Extra time in removing rusty bolts with hydraulic wrench					
16:30	17:30	1.00	17.50	BOPS	PP		Install 130.1 mm x 34.5 MPa - 179.4 mm x 34.5 MPa adapter spool. Install 179.4 mm x 34.5 MPa x 130.1 mm x 69 MPa adapter spool. Install 69 MPa work spool and (prior pressure test and charted) Quad 69 MPa Coil BOP.					
17:30	18:30	1.00	18.50	SDFN	PP		Secure wellhead and equipment for night. Contractors travel boat launch.  All personal cross river via jet boat.  End report for day.					
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight					
6:00 Update												
Start Time	End Time	Dur (hr)	Time Code		Ops Category	NPT	Operation Details					
00:00	06:30	6.50			PP		Wait on daylight.					



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/23/2023**  
**Report #: 3**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Other In Hole</b>											
Des		Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date					
Cement Retainer			97.3	3,028.00	3,028.20	8/4/2023 00:00					
Thermal Cement			97.3	2,991.50	3,028.00	8/5/2023 14:30					
Bridge Plug - Permanent			157.0	2,987.50	2,987.80	8/8/2023 08:14					
Thermal Cement			157.0	2,987.80	3,599.00	8/8/2023 08:15					
Thermal Cement			157.0	2,950.00	2,987.50	8/8/2023 18:30					
Cement Retainer			157.0	2,850.00	2,850.30	8/12/2023 08:57					
Fresh Non-Saline Water			157.0	2,850.30	2,950.00	8/12/2023 18:55					
Thermal Cement			157.0	2,850.30	2,856.00	8/12/2023 18:59					
Thermal Cement			157.0	2,790.00	2,850.00	8/12/2023 19:00					
Thermal Cement			157.0	1,311.29	1,368.00	8/14/2023 18:00					
Fresh Non-Saline Water			157.0	1,368.00	2,790.00	8/14/2023 18:01					
Fresh Non-Saline Water			157.0	753.00	1,311.29	8/15/2023 18:14					
Thermal Cement			157.0	686.00	753.00	8/15/2023 18:15					
Fresh Water (Permanent)			157.0	32.00	686.00	8/16/2023 18:16					
<b>Bill 30 Requirements (Head Count Only)</b>											
Type				Count							
Day Shift				23							
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type				Count		Reg Work Time (hr)					
<b>Flare Permit</b>											
Contract # C03040 C			Agreement Start Date 1/31/2020				Agreement End Date				
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Water	45.00	0.00	45.00								
<b>Weather &amp; Road Condition</b>											
Weather			T (°C)			Road Cond					
Clear			23			Good					

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/24/2023**  
**Report #: 4**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980				
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated					
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)						
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				
Zones / Event Sequence									
Zone Name		Zone Code			Current Status				
Lower Besa River		/00			Flowing				
Job Information / AFE									
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.									
Target Formation Nahanni									
Daily Pressures									
Subtype			P (kPa)						
SICP			0						
SITP			0						
Operation Summary									
Operations Next Report Period Rig down Coil Quad BOP. Install Upper Production wellhead assembly. Secure wellhead. Rig out coil units, pump units and surface lines. Equipment to move to PRL 303/K-29-6030-12330/0.									
Operation at 6am Wait on daylight.									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.		
06:30	06:45	0.25	6.75	Safety Mtg	PP		Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest. Discuss water way transportation hazards and controls. Review contractor and PRL JSA for operations and hazards for setup of coil operaitons. Discuss Injured Worker Transportation Plan and ERP.		
06:45	07:30	0.75	7.50	TTLY	PP		All personal cross river via jet boat. Travel to site.		
07:30	07:45	0.25	7.75	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for setup of coil operaitons. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW421		
07:45	10:45	3.00	10.75	BOPS	PP		Function test Quad 69 MPa BOP. Start pressure 19,600 KPa. Stop pump. Close Blinds 17 sec. Close top pipe 12 sec. Close bottom pipes 12 secs. Close slips 14 secs. Open blinds 4 secs. Open top pipes 12 secs. Open bottom pipes 14 secs. Open slips 14 secs. Remaining pressure 16100 KPa. Rebuild time 35 secs.  Pressure test 130 mm x 69 MPa Quad Coil BOP and surface lines against 130 mm x 34.5 MPa Master Valve to 1.4 MPa (low) and 28.0 MPa (high). Held each 10 minutes.  Open 130 mm x 34.5 MPa Master Valve. Pressure test 114 mm tubing and PBP at 50 mKB to 7.0 MPa. Held pressure 10 minutes. No leaks.		
10:45	11:45	1.00	11.75	RU/RD	PP		Position 100 micron filter unit on site. Tie in return lines from test vessel.  Position 45 ton picker for coil operations.  Cut and dress GT-90 x 4.83 mm - 5.81 mm x 814 m of 60.3 mm coil. Max pull 45,000 daN. Max weight -8000 daN. Volume 1.8 m³.  Install dimple connector on coil. Pull test connector 7,000 daN and 21,000 daN. OK.  Purge coil of air with fresh water. Pressure test coil connector 1.4 MPa (low) and 28 MPa (high). Held test 10 minutes each.		
11:45	12:45	1.00	12.75	RU/RD	PP		Makeup inside 130 mm lubricator on coil connector a 73 mm Dual Flapper Check Valve, 73 mm Hydraulic Disconnect, 73 mm Circulation Sub, 73 mm Motor and Valvco 95.25 mm Tricone Bit (s/n 14035).		



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/24/2023**  
**Report #: 4**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
12:45	13:45	1.00	13.75	BOPS	PP		Install 130 mm lubricator with 95.25 mm Bit assembly on Quad BOP. Pressure test bowen connections to 1.4 MPa (low) and 28 MPa (high). Held 10 min each.
13:45	14:00	0.25	14.00	Safety Mtg	PP		Open master valve. Held BOP drill. Review operations and contractor responsibilities.
14:00	17:15	3.25	17.25	Milling	PP		Run in 60.3 mm coil with 95.25 mm Tricone Bit to 15 mKB. Perform motor function test with testers holding 5.0 MPa back pressure. At 250 L/min pressure was 8.5 MPa. At 300 L/min pressure was 9.5 MPa. At 400 L/min pressure was 10.7 MPa. Test completed.  Continue to run in hole 60.3 mm coil and 95.25 mm Tricone Bit. Tag top of PBP at 49.0 mKB. Start drilling 14:15 hrs. Rate 400 L/min x 11 MPa. RPM 325. Weight on bit 1500 daN. No signs H2S. Recover small metal and rubber debris. Drill thru PBP at 16:45 hrs. Work Tricone Bit from 48-52 mKB multiple times to ensure clear.  Run 60.3 mm coil with 95.25 mm Tricone Bit to 150 mKB while continue to circulate 300 L/m x fresh water. Slight signs of pushing PBP ahead of bit. No signs H2S, oil or gas.  Pull 60.3 mm coil with 95.25 mm Tricone Bit to surface.
17:15	17:30	0.25	17.50	PRESS	PP		Pressure test 114 mm tubing 7.0 MPa. Held pressure 10 minutes. No leaks. Bleed off pressure.
17:30	18:30	1.00	18.50	RU/RD	PP		Remove lubricator from ontop of 69 MPa - 130 mm Quad Coil BOP.  Break apart and laydown 95.25 mm Tricone Bit and 73 mm motor assembly. Found peices of rubber in bit and outer cone wear.  Lay down 130 mm lubricator. Land injector in coil saddle for night.
18:30	19:30	1.00	19.50	TTLTY	PP		Secure wellhead and equipment for night. Contractors travel boat launch.  All personal cross river via jet boat.  End report for day.
19:30	00:00	4.50	24.00	WOD	PP		Wait on daylight.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:30	6.50		PP		Wait on daylight.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		97.3	3,028.00	3,028.20	8/4/2023 00:00
Thermal Cement		97.3	2,991.50	3,028.00	8/5/2023 14:30
Bridge Plug - Permanent		157.0	2,987.50	2,987.80	8/8/2023 08:14
Thermal Cement		157.0	2,987.80	3,599.00	8/8/2023 08:15
Thermal Cement		157.0	2,950.00	2,987.50	8/8/2023 18:30
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16

**Bill 30 Requirements (Head Count Only)**

Type	Count
Day Shift	20

**Contractor Hours (Head Count & Hours)**

Type	Count	Reg Work Time (hr)

**Flare Permit**

Contract # C03040 C	Agreement Start Date 1/31/2020	Agreement End Date
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## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29

Pad: L-29/6030-12330

Business Unit: Central and Other

Rig: Rigless

Report Date: 6/24/2023

Report #: 4

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)		

### Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

### Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	45.00	0.00	45.00				










### Weather & Road Condition

Weather	T (°C)	Road Cond
Drizzle / Mist	23	Good

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/25/2023**  
**Report #: 5**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated				
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)						
Casing Strings												
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000		
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6				
Zones / Event Sequence												
Zone Name				Zone Code				Current Status				
Lower Besa River				/00				Flowing				
Job Information / AFE												
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.												
Target Formation Nahanni												
Daily Pressures												
Subtype						P (kPa)						
SICP						0						
SITP						0						
Operation Summary												
Operations Next Report Period Wait on service rig operations.												
Operation at 6am Wait for service rig operations												
24 Hr Operational Comments												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.					
06:30	06:45	0.25	6.75	Safety Mtg	PP		Held safety and operational meeting. Discuss water way transportation hazards and controls. Review contractor and PRL JSA for operations and hazards for setup of coil operaitons. Discuss Injured Worker Transportation Plan and ERP. Qwest # QW421					
06:45	07:15	0.50	7.25	TTLTY	PP		All personal cross river via jet boat. Travel to site.					
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for setup of coil operaitons. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW421					
07:30	08:00	0.50	8.00	BOPS	PP		Rig down Quad 69 MPa - 130 mm BOP. Remove 130 mm x 69 MPa to 130 mm x 34.5 MPa adapter working spools.					
08:00	08:30	0.50	8.50	NU/ND WH/XT	PP		Install and torque 130 mm x 34.5 MPa Upper Wellhead assembly. Ensure all valve are closed and outlets are capped. Move rig matting from wellhead.					
08:30	09:00	0.50	9.00	RU/RD	PP		Drain and rig down pump and return surface lines. Rig down pump unit, picker unit and coil units.  Equipment to move and perform operations to move on site to 303/K-29-6030-12330/1  Clean and secure wellhead and site.  End report for day.					
09:00	00:00	15.00	24.00	WOD	PP		Wait on daylight and service rig operations.					
Other In Hole												
Des				Icon	OD (mm)		Top Depth (mKB)		Btm (mKB)		Run Date	
Cement Retainer					97.3		3,028.00		3,028.20		8/4/2023 00:00	
Thermal Cement					97.3		2,991.50		3,028.00		8/5/2023 14:30	
Bridge Plug - Permanent					157.0		2,987.50		2,987.80		8/8/2023 08:14	
Thermal Cement					157.0		2,987.80		3,599.00		8/8/2023 08:15	
Thermal Cement					157.0		2,950.00		2,987.50		8/8/2023 18:30	
Cement Retainer					157.0		2,850.00		2,850.30		8/12/2023 08:57	
Fresh Non-Saline Water					157.0		2,850.30		2,950.00		8/12/2023 18:55	
Thermal Cement					157.0		2,850.30		2,856.00		8/12/2023 18:59	
Thermal Cement					157.0		2,790.00		2,850.00		8/12/2023 19:00	





## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig: Rigless**

**Report Date: 6/25/2023**  
**Report #: 5**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Other In Hole</b>											
Des		Icon	OD (mm)	Top Depth (mKB)		Btm (mKB)		Run Date			
Thermal Cement		■	157.0	1,311.29		1,368.00		8/14/2023 18:00			
Fresh Non-Saline Water		■	157.0	1,368.00		2,790.00		8/14/2023 18:01			
Fresh Non-Saline Water		■	157.0	753.00		1,311.29		8/15/2023 18:14			
Thermal Cement		■	157.0	686.00		753.00		8/15/2023 18:15			
Fresh Water (Permanent)		■	157.0	32.00		686.00		8/16/2023 18:16			
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						18					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Water	45.00	45.00	0.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Overcast				18		Good					

## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29


Pad: L-29/6030-12330

Business Unit: Central and Other

Rig:

Report Date: 7/31/2023

Report #: 6

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980				
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)					
Casing Strings														
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread		
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000				
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C		
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX		
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6						
Zones / Event Sequence														
Zone Name				Zone Code					Current Status					
Lower Besa River				/00					Flowing					
Job Information / AFE														
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.														
Target Formation Nahanni														
Daily Pressures														
Subtype							P (kPa)							
SICP							0							
SITP							0							
Operation Summary														
Operations Next Report Period Run in 60.3 mm tubing string with Varel 92 mm Tri-Cone Bit.														
Operation at 6am Wait on daylight.														
24 Hr Operational Comments														
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details							
00:00	12:30	12.50	12.50	WOD	PP		Wait on daylight.							
12:30	13:00	0.50	13.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig up, testing and tubing operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW423							
13:00	14:00	1.00	14.00	RU/RD	PP		Level ground around wellhead. Spot matting  Perform 15 minute SCVF Bubble Test. Test failed due to continous bubbles.  Spot and rig up PWS # 829, Fire Suppression unit, hydraulic catwalk, pipe racks, and support equipment on site as per industry, government, contractor and PRL spacing rules and regulations. Perform ongoing CAODC inspection as use equipment.							
14:00	15:15	1.25	15.25	BOPS	PP		Run remote accumulator lines to 179.4 mm Class III BOP. Function BOP's. Start pressure 13,000 KPa. Close blind rams 4 sec. Close 60.3 mm pipe rams 4 sec. Close annular 25 secs. Final pressure 10,500 KPa. Recharge system in 42 secs. Lock rams 25 turns.  Stump test blind rams and pipe rams 1.4 MPa and 30 MPa. Held 10 min. Test annular bag 1.4 MPa and 10 MPa. Held 10 min.							
15:15	16:15	1.00	16.25	NU/ND WH/XT	PP		Remove Dual 130 mm x 34.5 MPa Master Valves and Upper Wellhead assembly. Extra time to remove rusty bolts.							
16:15	17:00	0.75	17.00	BOPS	PP		Install 179.4 mm - 34.5 MPa - Class III BOP and tubing handling equipment.							
17:00	18:00	1.00	18.00	PRESS	PP		Pressure test wellhead connection against cement plug in 114 mm tubing and blind rams to 1.4 MPa and 21 MPa. Held 10 minutes.							
18:00	18:30	0.50	18.50	SDFN	PP		Clean and secure wellhead.  End report for day.							
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight							
6:00 Update														
Start Time	End Time	Dur (hr)	Time Code		Ops Category	NPT	Operation Details							
00:00	06:30	6.50			PP		Wait on daylight.							
Other In Hole														
Des					Icon		OD (mm)		Top Depth (mKB)		Btm (mKB)		Run Date	
Cement Retainer							97.3		3,028.00		3,028.20		8/4/2023 00:00	



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 7/31/2023**  
**Report #: 6**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Other In Hole</b>											
Des		Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date					
Thermal Cement			97.3	2,991.50	3,028.00	8/5/2023 14:30					
Bridge Plug - Permanent			157.0	2,987.50	2,987.80	8/8/2023 08:14					
Thermal Cement			157.0	2,987.80	3,599.00	8/8/2023 08:15					
Thermal Cement			157.0	2,950.00	2,987.50	8/8/2023 18:30					
Cement Retainer			157.0	2,850.00	2,850.30	8/12/2023 08:57					
Fresh Non-Saline Water			157.0	2,850.30	2,950.00	8/12/2023 18:55					
Thermal Cement			157.0	2,850.30	2,856.00	8/12/2023 18:59					
Thermal Cement			157.0	2,790.00	2,850.00	8/12/2023 19:00					
Thermal Cement			157.0	1,311.29	1,368.00	8/14/2023 18:00					
Fresh Non-Saline Water			157.0	1,368.00	2,790.00	8/14/2023 18:01					
Fresh Non-Saline Water			157.0	753.00	1,311.29	8/15/2023 18:14					
Thermal Cement			157.0	686.00	753.00	8/15/2023 18:15					
Fresh Water (Permanent)			157.0	32.00	686.00	8/16/2023 18:16					
<b>Bill 30 Requirements (Head Count Only)</b>											
Type				Count							
Day Shift				15							
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type				Count		Reg Work Time (hr)					
<b>Flare Permit</b>											
Contract # C03040 C			Agreement Start Date 1/31/2020				Agreement End Date				
<b>Flaring Volumes</b>											
Type	Subtype	Des	Amount	Units							
		No Gas Flared									
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Water	133.00	45.00	88.00								
<b>Weather &amp; Road Condition</b>											
Weather			T (°C)		Road Cond						
Overcast			23		Good						

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/1/2023**  
**Report #: 7**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)			
Casing Strings												
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000		
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6				
Zones / Event Sequence												
Zone Name				Zone Code					Current Status			
Lower Besa River				/00					Flowing			
Job Information / AFE												
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.												
Target Formation Nahanni												
Daily Pressures												
Subtype							P (kPa)					
SICP							0					
SITP							0					
Operation Summary												
Operations Next Report Period Drill out cement and DB-10 PBP at 3015 mKB.												
Operation at 6am Wait on daylight												
24 Hr Operational Comments												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.					
06:30	06:45	0.25	6.75	Safety Mtg	PP		Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.					
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.					
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW423					
07:30	09:30	2.00	9.50	RU/RD	PP		Complete rig in of PWS # 829 and support equipment. Perform ongoing CAODC inspection as use equipment. OROGO on site for field inspection of equipment.  Held BOP drill. Review drill operations and contractor responsibilities.					
09:30	14:45	5.25	14.75	RIHPOOH	PP		Tally, drift, pickup and run in hole L-2 Varel Tri-Cone Bit 92 mm x 0-.08 m, Reg Thread x EUE Thread Cross Over Sub 73 mm x 0.46 m, "X" Profile Nipple 60.3 mm x 0.28 m, (1) Joint Tubing 60.3 mm x 9.5 m L-80 6.99 kg/m, (1) Pup Joint 60.3 mm x 0.66 m L-80 6.99 kg/m and (280) Joints Tubing 60.3 mm x 2671 m L-80 6.99 kg/m.					
14:45	15:15	0.50	15.25	Circulating	PP		Tag obstruction 2674.5 mKB. Obstruction holds 4,000 dan weight. Rig in circulation lines. Reverse circulate 6.0 m³ fresh water at 500 L/min x 9.0 MPa. Recover 6.0 m³ inhibited water. No fluid loss, No signs oil or H2S. Rig down circulation lines. Able to freely run past obstruction at 2674.5 mKB.					
15:15	16:00	0.75	16.00	RIHPOOH	PP		Run and work in (23) Joints Tubing 60.3 mm x 218 m L-80 6.99 kg/m. Pushing and tag obstruction 2890 mKB. Obstruction holds 4,000 dan weight.					
16:00	16:30	0.50	16.50	Circulating	PP		Rig in circulation lines. Reverse circulate 6.0 m³ fresh water at 500 L/min x 9.0 MPa. Recover 6.0 m³ inhibited water. No fluid loss, No signs oil or H2S. Rig down circulation lines. Able to freely run past obstruction at 2890 mKB.					
16:30	17:00	0.50	17.00	RIHPOOH	PP		Run in (13) Joints Tubing 60.3 mm x 123.5 m L-80 6.99 kg/m. Tag cement top 3008 mKB (not correlated).					
17:00	18:00	1.00	18.00	RU/RD	PP		Rig in pack off head, circulation lines, static lines and 85 tonne power swivel. Prepare equipment for drill out operations.					
18:00	18:30	0.50	18.50	SDFN	PP		Clean and secure wellhead, site and equipment. **NOTE** PWS # 829 crew change on 2-Aug-2023.  SDFN.					



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/1/2023**  
**Report #: 7**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>24 Hr Operational Comments</b>											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details				
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight.				
<b>6:00 Update</b>											
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50			PP		Wait on daylight.				
<b>Other In Hole</b>											
Des		Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date					
Cement Retainer			97.3	3,028.00	3,028.20	8/4/2023 00:00					
Thermal Cement			97.3	2,991.50	3,028.00	8/5/2023 14:30					
Bridge Plug - Permanent			157.0	2,987.50	2,987.80	8/8/2023 08:14					
Thermal Cement			157.0	2,987.80	3,599.00	8/8/2023 08:15					
Thermal Cement			157.0	2,950.00	2,987.50	8/8/2023 18:30					
Cement Retainer			157.0	2,850.00	2,850.30	8/12/2023 08:57					
Fresh Non-Saline Water			157.0	2,850.30	2,950.00	8/12/2023 18:55					
Thermal Cement			157.0	2,850.30	2,856.00	8/12/2023 18:59					
Thermal Cement			157.0	2,790.00	2,850.00	8/12/2023 19:00					
Thermal Cement			157.0	1,311.29	1,368.00	8/14/2023 18:00					
Fresh Non-Saline Water			157.0	1,368.00	2,790.00	8/14/2023 18:01					
Fresh Non-Saline Water			157.0	753.00	1,311.29	8/15/2023 18:14					
Thermal Cement			157.0	686.00	753.00	8/15/2023 18:15					
Fresh Water (Permanent)			157.0	32.00	686.00	8/16/2023 18:16					
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						15					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Water	133.00	45.00	88.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Overcast				22		Good					

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/2/2023**  
**Report #: 8**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Lower Besa River	/00	Flowing

Job Information / AFE	
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.	
Target Formation Nahanni	

Daily Pressures	
Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary	
Operations Next Report Period Drill out cement and DB-10 PBP at 3015 mKB.	
Operation at 6am Wait on daylight.	

24 Hr Operational Comments							
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.
06:30	07:15	0.75	7.25	Safety Mtg	PP		Crew travel across Ft Laird River delayed 30 minutes due to fog.  Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.
07:15	07:45	0.50	7.75	TTLTY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.
07:45	08:00	0.25	8.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425
08:00	10:00	2.00	10.00	RU/RD	PP		Review site operations and equipment with new crew. Function test BOP's and safety equipment on rig.  Rig in pack off head, circulation lines, static lines and 85 tonne power swivel.
10:00	12:00	2.00	12.00	Drill Cement	PP		Lower tubing string and tag obstruction 3008 mKB. Break reverse circulation 400 L/min x 7 MPa. Max torque on bit of 2150 ft lbs. Work tubing string from 3005 mKB to 3008 mKB due to rotation loss when tubing not moving.  Continue to reverse circulate 400 L/min x 14 MPa while moving pipe to clear debris from side of tri-cone bit. Returns show slight cement and scale. No fluid loss. Pressure increase to 24 MPa on casing. Work pipe for 2 hrs to clear possible debris on side of tool string and inside tri-cone bit. Stop reverse circulation
12:00	18:00	6.00	18.00	Drill Cement	PP		Forward circulate 425 L/min x 13 MPa. RPM 80-100. Weight on bit vary 500 to 2500 daN. Work tubing string up and down to breakup cement and debris from previous 49 PBP Bull Nose. Drill out cement from 3008 mKB to 3012.5 mKB in 6 hrs. No fluid loss. No signs hydrocarbons, well gas or H2S. Returns are fine cement and small metal filings.
18:00	19:00	1.00	19.00	RU/RD	PP		Loosen static lines. Lay down tubing joint # 316, power swivel and circulation lines. Position tubing bottom 3009 mKB for night.  Clean and secure wellhead, iste and equipment.  SDFN.
19:00	00:00	5.00	24.00	WOD	PP		Wait on daylight.



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/2/2023**  
**Report #: 8**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:30	6.50		PP		Wait on daylight.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		97.3	3,028.00	3,028.20	8/4/2023 00:00
Thermal Cement		97.3	2,991.50	3,028.00	8/5/2023 14:30
Bridge Plug - Permanent		157.0	2,987.50	2,987.80	8/8/2023 08:14
Thermal Cement		157.0	2,987.80	3,599.00	8/8/2023 08:15
Thermal Cement		157.0	2,950.00	2,987.50	8/8/2023 18:30
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16

**Bill 30 Requirements (Head Count Only)**

Type	Count
Day Shift	15

**Contractor Hours (Head Count & Hours)**

Type	Count	Reg Work Time (hr)

**Flare Permit**

Contract # C03040 C	Agreement Start Date 1/31/2020	Agreement End Date
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**Flaring Volumes**

Type	Subtype	Des	Amount	Units
		No Gas Flared		

**Report Fluids Summary**

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	163.00	45.00	118.00				

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Partly Cloudy	26	Good



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/3/2023**  
**Report #: 9**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)			
Casing Strings												
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000		
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6				
Zones / Event Sequence												
Zone Name				Zone Code					Current Status			
Lower Besa River				/00					Flowing			
Job Information / AFE												
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.												
Target Formation Nahanni												
Daily Pressures												
Subtype							P (kPa)					
SICP							0					
SITP							0					
Operation Summary												
Operations Next Report Period Pull and stand 60.3 mm L-80 Tubing String.												
Operation at 6am Wait on daylight.												
24 Hr Operational Comments												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.					
06:30	06:45	0.25	6.75	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.					
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.					
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425					
07:30	08:00	0.50	8.00	RU/RD	PP		Function test BOP's and safety equipment on rig. Rig in pack off head, circulation lines, static lines and 85 tonne power swivel.					
08:00	08:15	0.25	8.25	Safety Mtg	PP		Held BOP drill. Review contractor individual responsibilities for drill.					
08:15	09:45	1.50	9.75	Drill Cement	PP		Lower tubing string and tag obstruction 3012.5 mKB. Forward circulate 425 L/min x 13 MPa. RPM 80-100. Weight on bit vary 500 to 2500 daN. Work tubing string up and down to breakup cement and debris from previous 49 PBP Bull Nose. Drill out cement from 3012.5 mKB to 3015.0 mKB in 1.5 hrs. No fluid loss. No signs hydrocarbons, well gas or H2S. Returns are fine cement and small metal filings.					
09:45	12:00	2.25	12.00	Milling	PP		Start drill on BD10 - PBP at 1000 hrs. Forward circulate 425 L/min x 13 MPa. RPM 80-100. Weight on bit vary 500 to 2500 daN. Work tubing string up and down to breakup BD10 - PBP Returns are small metal debris. No signs hydrocarbons, gas or H2S.					
12:00	14:00	2.00	14.00	Milling	PP		Lost circulation. Work string for 2 hrs. Rotate and dry drill while forward injecting 300 L/min x 1.0 MPa fresh water into formation to push drilled out BD10K - PBP to 3023 mKB. Fresh water fluid loss to formation 36 m³.					
14:00	14:30	0.50	14.50	RU/RD	PP		Rig down pack off head, circulation lines, static lines and 85 tonne power swivel.					
14:30	15:00	0.50	15.00	RIHPOOH	PP		Pickup and run in (8) Joints Tubing 60.3 mm L-80 6.99 kg/m. Tag obstruction 3091 mKB inside 156 mm Nahanni Open Hole.					
15:00	17:00	2.00	17.00	Milling	PP		Position tubing bottom 3088 mKB. Rig in circulation lines. Forward inject 14 m³ fresh water at 400 L/min x 2.0 MPa into Nahanni Formation. No signs returns from casing. Lower tubing string and tag obstruction 3091 mKB. Max weight on obstruction of 5,000 daN.  **NOTE** Unable to drill out or circulate out obstruction at 3091 mKB.					
17:00	17:15	0.25	17.25	RIHPOOH	PP		Pull 92 mm Tri-Cone Bit back into 114 mm tubing string. Tubing bottom 3085 mKB.					
17:15	18:00	0.75	18.00	INJECT	PP		Establish Nahanni Formation feed rate 400 L/min x 0.5 MPa for 15 m³ fresh non-saline water. No signs return from annulus.					





## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/3/2023**  
**Report #: 9**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated				
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)						
<b>24 Hr Operational Comments</b>												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
18:00	18:30	0.50	18.50	SDFN	PP		Clean and secure wellhead, site and equipment.					
							SDFN					
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight.					
<b>6:00 Update</b>												
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details						
00:00	06:30	6.50			PP		Wait on daylight.					
<b>Other In Hole</b>												
Des		Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date						
Cement Retainer			97.3	3,028.00	3,028.20	8/4/2023 00:00						
Thermal Cement			97.3	2,991.50	3,028.00	8/5/2023 14:30						
Bridge Plug - Permanent			157.0	2,987.50	2,987.80	8/8/2023 08:14						
Thermal Cement			157.0	2,987.80	3,599.00	8/8/2023 08:15						
Thermal Cement			157.0	2,950.00	2,987.50	8/8/2023 18:30						
Cement Retainer			157.0	2,850.00	2,850.30	8/12/2023 08:57						
Fresh Non-Saline Water			157.0	2,850.30	2,950.00	8/12/2023 18:55						
Thermal Cement			157.0	2,850.30	2,856.00	8/12/2023 18:59						
Thermal Cement			157.0	2,790.00	2,850.00	8/12/2023 19:00						
Thermal Cement			157.0	1,311.29	1,368.00	8/14/2023 18:00						
Fresh Non-Saline Water			157.0	1,368.00	2,790.00	8/14/2023 18:01						
Fresh Non-Saline Water			157.0	753.00	1,311.29	8/15/2023 18:14						
Thermal Cement			157.0	686.00	753.00	8/15/2023 18:15						
Fresh Water (Permanent)			157.0	32.00	686.00	8/16/2023 18:16						
<b>Bill 30 Requirements (Head Count Only)</b>												
Type					Count							
Day Shift					15							
<b>Contractor Hours (Head Count &amp; Hours)</b>												
Type					Count	Reg Work Time (hr)						
<b>Flare Permit</b>												
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date				
<b>Flaring Volumes</b>												
Type	Subtype	Des	Amount	Units								
		No Gas Flared										
<b>Report Fluids Summary</b>												
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)					
Water	163.00	45.00	53.00	65.00		65.00						
<b>Weather &amp; Road Condition</b>												
Weather			T (°C)			Road Cond						
Partly Cloudy			26			Good						

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/4/2023**  
**Report #: 10**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980									
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated								
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)										
Casing Strings																			
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)		Len (m)		OD (mm)		ID (mm)		Wt/Len (kg/m)		Grade		Top Thread	
Conductor		1/26/2003		20.00		6.70		13.30		660.0				11.000					
Surface		1/31/2003		734.00		6.70		727.30		244.5		224.3		59.527		K-55		LT&C	
Production		3/25/2003		3,074.00		6.25		3,067.75		177.8		159.5		38.692		L-80		Hydrill SLX	
Open Hole		3/25/2003		3,599.00		3,074.00		525.00		155.6									
Zones / Event Sequence																			
Zone Name				Zone Code						Current Status									
Lower Besa River				/00						Flowing									
Job Information / AFE																			
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.																			
Target Formation Nahanni																			
Daily Pressures																			
Subtype								P (kPa)											
SICP								8											
SITP								2,825											
Operation Summary																			
Operations Next Report Period Run in 60.3 mm L-80 Tubing String with Cement Stinger. Cement Nahanni Formation.																			
Operation at 6am Wait on daylight.																			
24 Hr Operational Comments																			
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details												
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.												
06:30	06:45	0.25	6.75	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.												
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.												
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425												
07:30	08:30	1.00	8.50	BULLCIR	PP		Bleed off shut in tubing and shut in casing pressures to 0 KPa. Slight gas bubbles only.  Rig in circulation lines. Pump 6.0 m³ fresh non-saline water down tubing at 400 L/min x 0.5 MPa. No returns from casing. Pump 4.0 m³ fresh non-saline water down casing at 400 L/min x 0.5 MPa. No returns from tubing.												
08:30	12:00	3.50	12.00	POOH	PP		Pull and lay down (7) Joints Tubing 60.3 mm L-80 6.99 kg/m  Pull and stand in derrick (316) joints Tubing 60.3 mm L-80 6.99 kg/m  Remove (1) Pup Joint 60.3 mm x 0.66 m L-80 6.99 kg/m, (1) "X" Profile Nipple 60.3 mm x 0.28 m, Reg Thread x EUE Thread Cross Over Sub 73 mm x 0.46 m and (1) L-2 Varel Tri-Cone Bit 92 mm x 0.08 m  **NOTE** Trickle pump 12 m³ fresh non-saline water into casing as pull tubing string to maintain well control. No teeth misising from cones. Medium bearing wear on cones.												
12:00	17:00	5.00	17.00	ELECL	PP		Rig in Wire Line equipment. Purge lubricator prior to each run. Run CCL / 93.7 mm Gauge Ring. Tag "R" Nipple w/ 96/65 mm Profile at 3033.9 mKB. Pull out CCL / 93.7 mm Gauge Ring. Fluid level 160 mKB. Secure on site communications. Run CCL / Setting Tool and Weatherford - Direct 10K - 114.1 mm Cement Retainer. Correlate on depth to previous CCL / Gauge Ring. Set Weatherford - Direct 10K Cement Retainer (top) 3028.0 mKB x 1634 hrs. Pull out CCL / Setting Tool. Rig down wire line equipment.												
17:00	17:30	0.50	17.50	PRESS	PP		Pump 1.3 m³ fresh non-saline water to fill casing. Pressure test 114.3 mm casing and 114.3 mm Weatherford - Direct Cement Retainer to 7.0 MPa. Held 10 minutes. No leak off. Bleed off pressure.												



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/4/2023**  
**Report #: 10**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					















**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
17:30	18:00	0.50	18.00	RIHPOOH	PP		Makeup and run in hole (1) Weatherford - Direct Cement Retainer Stinger (1) Centralizer, 114.3 mm x 0.3 m (1) Pup Joint 60.3 mm x 1.48 m L-80 (20) Joints Tubing 60.3 mm x 190 m L-80 6.99 kg/m  Position tubing bottom 192 mKB for night.
18:00	18:30	0.50	18.50	SDFN	PP		Clean and secure wellhead, site and equipment.  SDFN
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:30	6.50		PP		Wait on daylight.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		97.3	3,028.00	3,028.20	8/4/2023 00:00
Thermal Cement		97.3	2,991.50	3,028.00	8/5/2023 14:30
Bridge Plug - Permanent		157.0	2,987.50	2,987.80	8/8/2023 08:14
Thermal Cement		157.0	2,987.80	3,599.00	8/8/2023 08:15
Thermal Cement		157.0	2,950.00	2,987.50	8/8/2023 18:30
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16

**Bill 30 Requirements (Head Count Only)**

Type	Count
Day Shift	15

**Contractor Hours (Head Count & Hours)**

Type	Count	Reg Work Time (hr)

**Flare Permit**

Contract # C03040 C	Agreement Start Date 1/31/2020	Agreement End Date
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**Flaring Volumes**

Type	Subtype	Des	Amount	Units
		Total Gas Flared		

**Report Fluids Summary**

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	163.00	45.00	31.00	87.00	0.00	87.00	

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Fog	25	Good

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/5/2023**  
**Report #: 11**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)			
Casing Strings												
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000		
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6				
Zones / Event Sequence												
Zone Name				Zone Code					Current Status			
Lower Besa River				/00					Flowing			
Job Information / AFE												
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.												
Target Formation Nahanni												
Daily Pressures												
Subtype							P (kPa)					
SICP							0					
SITP							0					
Operation Summary												
Operations Next Report Period Tag cement top with 1800 dan weight.												
Operation at 6am Wait on daylight												
24 Hr Operational Comments												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.					
06:30	06:45	0.25	6.75	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.					
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.					
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425					
07:30	11:30	4.00	11.50	RIHPOOH	PP		Continue to run in hole (1) Weatherford - Direct Cement Retainer Stinger, (1) Centralizer, 114.3 mm x 0.3 m, (1) Pup Joint 60.3 mm x 1.48 m L-80 and (287) Joints Tubing 60.3 mm x 190 m L-80 6.99 kg/m					
11:30	13:00	1.50	13.00	Cmt	PP		Rig in cement unit and bulker. Test pump line 16.0 MPa. Held 5 minutes.  Sting tubing string into cement retainer. Pressure test tubing and retainer to 7.0 MPa. held pressure 10 minutes.  Inject 11.1 m³ fresh non-saline water at 400 L/min x 5.4 MPa into Nahanni Formation.  Mix and pump 13 m³ Charger Thermal-40+1.0% CHGC-H-2 x 1850 kg/m3 cement slurry. Slurry Yield 0.87 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4.0 MPa. Pressure start 4.0 MPa  Displace cement slurry with 5.0 m³ fresh non-saline water x 400 L/min x 2.1 MPa. Temp 20°C. Pressure start to climb.  Slow rate displace 0.60 m³ - 80 L/min cement slurry into formation with 0.60 m³ fresh non-saline water. Pressure climb to 6.2 MPa.  Sting tubing out of cement retainer. Position tubing bottom 3027.9 mKB.  Forward circulate and balance 0.50 m³ Thermal Cement slurry from 2988 mKB to 3028 mKB. Stop pump. Rig down pump lines.  Total cement into formation of 12.0 m³.					
13:00	13:15	0.25	13.25	POOH	PP		Slowly pull and lay down (4) Joints Tubing 60.3 mm L-80. Position tubing bottom 2987 mKB.					

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/5/2023**  
**Report #: 11**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
13:15	13:45	0.50	13.75	Circulating	PP		Reverse circulate 9.0 m³ fresh non-saline water at 500 L/min x 10 MPa. Return show 150 L cement water. Clean fresh non-saline water at end of circulation.
13:45	14:00	0.25	14.00	PRESS	PP		Pressure test tubing, 114 mm casing and cement plug to 8.0 MPa. Held pressure 10 minutes. No leak off.
14:00	14:45	0.75	14.75	RU/RD	PP		Rig down cement pump lines. Flush clean pump unit. Park on side of location cement unit and bulker.
14:45	15:30	0.75	15.50	POOH	PP		Pull and stand (20) Joints Tubing 60.3 mm L-80 6.99 kg/m. Position tubing bottom 2836 mKB for night.
15:30	18:00	2.50	18.00	Rig Serv	PP		Operations stopped to allow cement to harden overnight.  Perform scheduled rig maintenance.
18:00	18:30	0.50	18.50	SDFN	PP		Clean and secure wellhead, site and equipment.  SDFN.
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:30	6.50		PP		Wait on daylight.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Thermal Cement	■	97.3	2,991.50	3,028.00	8/5/2023 14:30
Bridge Plug - Permanent	■	157.0	2,987.50	2,987.80	8/8/2023 08:14
Thermal Cement	■	157.0	2,987.80	3,599.00	8/8/2023 08:15
Thermal Cement	■	157.0	2,950.00	2,987.50	8/8/2023 18:30
Cement Retainer	■	157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water	■	157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement	■	157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement	■	157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement	■	157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water	■	157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water	■	157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement	■	157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)	■	157.0	32.00	686.00	8/16/2023 18:16

**Bill 30 Requirements (Head Count Only)**

Type	Count
Day Shift	15

**Contractor Hours (Head Count & Hours)**

Type	Count	Reg Work Time (hr)

**Flare Permit**

Contract # C03040 C	Agreement Start Date 1/31/2020	Agreement End Date
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**Flaring Volumes**

Type	Subtype	Des	Amount	Units
		No Gas Flared		

**Report Fluids Summary**

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	163.00	45.00	8.00	110.00	0.00	110.00	

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Smoke	30	Good

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/6/2023**  
**Report #: 12**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)			
Casing Strings												
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000		
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6				
Zones / Event Sequence												
Zone Name				Zone Code					Current Status			
Lower Besa River				/00					Flowing			
Job Information / AFE												
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.												
Target Formation Nahanni												
Daily Pressures												
Subtype							P (kPa)					
SICP							0					
SITP							0					
Operation Summary												
Operations Next Report Period Pull and laydown 114 mm Hydrill 333 L-80 tubing string.												
Operation at 6am Wait on daylight.												
24 Hr Operational Comments												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.					
06:30	06:45	0.25	6.75	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.					
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.					
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425					
07:30	08:00	0.50	8.00	RIHPOOH	PP		Run in (21) Joints Tubing 60.3 mm L-80. Tag cement 2990 mKB with 1800 daN weight.					
08:00	12:00	4.00	12.00	POOH	PP		Lay down (1) Joints Tubing 60.3 mm L-80, Pull stand in derrick (314) Joints Tubing 60.3 mm L-80 6.99 kg/m. Break apart and lay down Pup Joint 60.3 mm L-80, Centralizer 114.3 mm x 0.3 m and Weatherford - Direct Cement Retainer Stinger.					
12:00	12:30	0.50	12.50	BOPS	PP		Change 179.4 mm Class III BOP tubing rams to 114 mm. Function test 114 mm tubing rams. Open and close in 5 seconds.					
12:30	13:00	0.50	13.00	PRESS	PP		Install 114 mm Pup Joint with 130 mm Stab Valve. Close tubing rams. Pressure test tubing rams against cement tubing plug to 1.4 MPa (low) and 25 MPa (high). Held each test 10 minutes.					
13:00	13:15	0.25	13.25	PRESS	PP		Pressure test annulus, 114 mm tubing, 178 mm casing, Baker 177.8 mm "FAB-1" Packer to 14.0 MPa. Held 10 min					
13:15	16:00	2.75	16.00	FISHPLN	PP		Run 104 mm x 106 mm Spear with CCL / 92 mm Jet Cutter. Sting into Hydril 513 - 127 mm x 1.0 m Pup Joint below tubing hanger. Pull 114 mm tubing string into 5000 daN tension. Tubing string at 58,000 daN.  Run CCL / 92 mm Jet Cutter. Tag cement top 2991.5 mKB. Correlate to Reliance Cement Retainer log dated 4-Aug-2023. Cut 114 mm tubing at 2990.0 mKB at 1445 hrs. 5,000 daN weight loss. Pull out CCL / fired jet cutter. Rig down wire line equipment from wellhead.					
16:00	17:00	1.00	17.00	POOH	PP		Rig 114 mm tubing equipment. Pickup and lay down 127 mm tubing hanger, Pup Joint 127 mm x 0.96 m Hydril 513 and Cross Over Sub 127 mm - Hydril 513 x 114 mm Hydril 533 x 0.37 m. Able to freely move tubing string. Tubing bottom 2989 mKB.					
17:00	18:15	1.25	18.25	Circulating	PP		Rig in circulation lines. Forward circulate 40 m³ fresh non-saline water at 450 L/min x 5.0 MPa. Return 38 m³ inhibited water. Last 2.0 m³ returns are fresh non-saline water. Complete wellbore is changed to fresh non-saline water.					
18:15	18:30	0.25	18.50	POOH	PP		Lay down (1 ea) Pup Joints Tubing 114 mm x 2.95 m, 2.33 m, 1.13 m, 0.50 m L-80 LHydrill 533 and (2) Joints Tubing 114 mm L-80 Hydril 533. Tubing bottom 2976.5 mKB.					



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/6/2023**  
**Report #: 12**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>24 Hr Operational Comments</b>											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details				
18:30	19:00	0.50	19.00	SDFN	PP		Clean and secure wellhead and equipment				
							SDFN				
19:00	00:00	5.00	24.00	WOD	PP		Wait on daylight.				
<b>6:00 Update</b>											
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:30	6.50		PP		Wait on daylight.					
<b>Other In Hole</b>											
Des		Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date					
Bridge Plug - Permanent			157.0	2,987.50	2,987.80	8/8/2023 08:14					
Thermal Cement			157.0	2,987.80	3,599.00	8/8/2023 08:15					
Thermal Cement			157.0	2,950.00	2,987.50	8/8/2023 18:30					
Cement Retainer			157.0	2,850.00	2,850.30	8/12/2023 08:57					
Fresh Non-Saline Water			157.0	2,850.30	2,950.00	8/12/2023 18:55					
Thermal Cement			157.0	2,850.30	2,856.00	8/12/2023 18:59					
Thermal Cement			157.0	2,790.00	2,850.00	8/12/2023 19:00					
Thermal Cement			157.0	1,311.29	1,368.00	8/14/2023 18:00					
Fresh Non-Saline Water			157.0	1,368.00	2,790.00	8/14/2023 18:01					
Fresh Non-Saline Water			157.0	753.00	1,311.29	8/15/2023 18:14					
Thermal Cement			157.0	686.00	753.00	8/15/2023 18:15					
Fresh Water (Permanent)			157.0	32.00	686.00	8/16/2023 18:16					
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						15					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count	Reg Work Time (hr)				
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type	Subtype	Des		Amount		Units					
		No Gas Flared									
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Water	193.00	45.00	38.00	110.00	0.00	110.00					
<b>Weather &amp; Road Condition</b>											
Weather			T (°C)			Road Cond					
Smoke			30			Good					



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/7/2023**  
**Report #: 13**












API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980			
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated		
KB-Ground Distance (m) 6.70				KB-Tubing Head Distance (m) 6.25				Total Depth (mKB) 3,599.00			PBTD (All) (mKB)		
Casing Strings													
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread	
Conductor		1/26/2003		20.00		6.70	13.30	660.0		11.000			
Surface		1/31/2003		734.00		6.70	727.30	244.5	224.3	59.527	K-55	LT&C	
Production		3/25/2003		3,074.00		6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX	
Open Hole		3/25/2003		3,599.00		3,074.00	525.00	155.6					
Zones / Event Sequence													
Zone Name				Zone Code					Current Status				
Lower Besa River				/00					Flowing				
Job Information / AFE													
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.													
Target Formation Nahanni													
Daily Pressures													
Subtype							P (kPa)						
SICP							0						
SITP							0						
Operation Summary													
Operations Next Report Period Set 10K - Permanent Bridge Plug in 178 mm Casing at 2988 mKB. Perform RBL Log from top of PBP to surface.													
Operation at 6am Wait on daylight.													
24 Hr Operational Comments													
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details						
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.						
06:30	06:45	0.25	6.75	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.						
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.						
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425						
07:30	16:00	8.50	16.00	POOH	PP		Pull and lay down: (309) Joints Tubing 114.3 mm - Hydrill 533 - L-80 18.97 kg/m x 2980 m (1) Cut Joint Tubing - Hydrill 533 - L-80 18.97 kg/m x 1.0 m						
16:00	18:00	2.00	18.00	ELECL	PP		Rig in wire line equipment on top of 179.4 mm Class III BOP. Run CCL / 145 mm Gauge Ring. Tag top of cut 114.3 mm tubing at 2990.0 mKB. Pull CCL / Gauge Ring.						
18:00	18:30	0.50	18.50	SDFN	PP		Secure wellhead, site and equipment.						
							End of operations for day.						
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight.						
6:00 Update													
Start Time	End Time	Dur (hr)	Time Code			Ops Category	NPT	Operation Details					
00:00	06:30	6.50				PP		Wait on daylight.					
Tubing String Pulled													
Tubing Description Tubing					Set Depth (mKB) 3,087.76		Pull Date 8/7/2023		Pull Reason Pulled for suspension/ abandonment.				
Item Des		Jts		Len (m)		OD (mm)		Com					
Compression		1		-0.25				5,000 daN					
Tubing Hanger		1		0.24		179.4							
Crossover - Pin x Pin		1		0.96		127.0							
Crossover - Pin x Box		1		0.37		127.0							
Tubing Pup Joint		4		6.91		114.3							
Tubing Pup Joint		314		3,012.20		114.3							
Tubing Pup Joint		1		3.06		114.3							
Seal Assembly		1		0.30		114.3							



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/7/2023**  
**Report #: 13**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00	PBTD (All) (mKB)
Item Des	Jts	Len (m)	OD (mm)	Com	
Packer	1	1.01	177.8		
Tubing Pup Joint	1	2.82	114.3		
Profile Nipple	1	0.47	114.3		
Tubing Pup Joint	1	2.82	114.3		
Profile Nipple	1	0.36	114.3		
Crossover - Pin x Box	1	0.28	114.3		
Tubing Pup Joint	1	2.77	114.3		
Centralizer	1	0.20	152.0		
Seal Assembly	1	0.40	152.0		
Packer	1	1.75	177.8		
Tubing Pup Joint	1	3.08	114.3		
Profile Nipple	1	0.38	114.3		
Tubing Pup Joint	1	2.05	114.3		
Perforated Joint	1	3.10	114.3		
Tubing	4	35.72	114.3		
Profile Nipple	1	0.51	114.3		
Tubing String Run					
Tubing Description Tubing - Production		Run Date 8/7/2023		Set Depth (mKB) 3,087.76	
Tubing Components					
Item Des	Jts	Len (m)	OD (mm)	Com	
Tubing	1	8.70	114.3	Jet Cut joint Tubing	
Tubing	3	29.04	114.3		
Tubing Pup Joint	1	2.00	114.3		
Seal Assembly	1	0.30	114.3		
Packer	1	1.01	177.8		
Tubing Pup Joint	1	2.82	114.3		
Profile Nipple	1	0.47	114.3		
Tubing Pup Joint	1	2.82	114.3		
Profile Nipple	1	0.36	114.3		
Crossover - Pin x Box	1	0.28	114.3		
Tubing Pup Joint	1	2.77	114.3		
Centralizer	1	0.20	152.0		
Seal Assembly	1	0.40	152.0		
Packer	1	1.75	177.8		
Tubing Pup Joint	1	3.08	114.3		
Profile Nipple	1	0.38	114.3		
Tubing Pup Joint	1	2.05	114.3		
Perforated Joint	1	3.10	114.3		
Tubing	4	35.72	114.3		
Profile Nipple	1	0.51	114.3		
Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Bridge Plug - Permanent		157.0	2,987.50	2,987.80	8/8/2023 08:14
Thermal Cement		157.0	2,987.80	3,599.00	8/8/2023 08:15
Thermal Cement		157.0	2,950.00	2,987.50	8/8/2023 18:30
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15



## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29  
 Pad: L-29/6030-12330  
 Business Unit: Central and Other  
 Rig:

Report Date: 8/7/2023  
 Report #: 13

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980		
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)				
<b>Other In Hole</b>							
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date		
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16		
<b>Bill 30 Requirements (Head Count Only)</b>							
Type	Count						
Day Shift	15						
<b>Contractor Hours (Head Count &amp; Hours)</b>							
Type	Count		Reg Work Time (hr)				
<b>Flare Permit</b>							
Contract # C03040 C	Agreement Start Date 1/31/2020		Agreement End Date				
<b>Flaring Volumes</b>							
Type	Subtype	Des	Amount	Units			
		No Gas Flared					
<b>Report Fluids Summary</b>							
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	193.00	45.00	38.00	110.00	0.00	110.00	
<b>Weather &amp; Road Condition</b>							
Weather		T (°C)	Road Cond				
Smoke		30	Good				

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/8/2023**  
**Report #: 14**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980				
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated					
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)						
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				
Zones / Event Sequence									
Zone Name		Zone Code				Current Status			
Lower Besa River		/00				Flowing			
Job Information / AFE									
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.									
Target Formation Nahanni									
Daily Pressures									
Subtype						P (kPa)			
SICP						0			
Operation Summary									
Operations Next Report Period Tag cement top with tubing string. Pull 60.3 mm tubing string.									
Operation at 6am Wait on daylight.									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.		
06:30	06:45	0.25	6.75	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.		
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.		
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425		
07:30	09:00	1.50	9.00	ELECL	PP		Rig in wire line equipment on top of 179.4 mm Class III BOP. Secure onsite communications. Run CCL / Setting Tool / Weatherford Viton 10 K-PBP. Correlate on depth to 145 mm Gauge Ring run dated 7-Aug-2023. Tag top of 114.3 mm cut tubng at 2990.0 mKB. Set (top) of Weatherford 178 mm Viton 10K Permanant Bridge Plug at 2987.5 mKB x 0814 hrs. Pull CCL / Setting tool out of hole.		
09:00	09:15	0.25	9.25	PRESS	PP		Pump 7.0 m³ fresh non-saline water to fill 178 mm casing. Pressure test 178 mm casing and Weatherford 10K Viton PBP to 7.0 MPa. Held pressure 10 minutes. No leak off. Bleed off pressure.		
09:15	14:30	5.25	14.50	ELECL	PP		Run RBL log from 2987.5 mKB ( top PBP ) to surface. Send logs to Calgary for interpretation. Rig down wire line equipment from wellhead.		
14:30	17:30	3.00	17.50	RIHPOOH	PP		Run in (1) Regular Tubing Collar 60.3 mm x 0.15 m and (313) Joints Tubing 60.3 mm L-80 6.99 kg/m. Tag top of Weatherford 10K Viton PBP at 2987.5 mKB. Position tubing bottom 2987 mKB.		
17:30	18:30	1.00	18.50	Cmt	PP		Rig in Cement Unit. Test line 16.0 MPa. Held 5 minutes. Pump 1.0 m³ Charger Thermal 40 + 1.0% CHGC-2 x 1800 kg/m3 cement slurry. Slurry Yield 0.80 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4 MPa. Displace behind cement slurry 5.7 m³ fresh (non-saline) water 20°C. Circulated and balance cement plug from 2937.5 mKB to 2987.5 mKB. Rig down pump line.		
18:30	18:45	0.25	18.75	POOH	PP		Slowly pull and lay down (6) Joints Tubing 73 mm L-80 6.99 kg/m. Position tubing bottom 2030.5 mKB.		
18:45	19:15	0.50	19.25	Circulating	PP		Rig in circulation lines. Reverse circulate 10 m³ (total) - fresh (non-saline) water at 500 L/min x 3.0 MPa. Returns show salinity 0 ppm. End returns are clean fresh (non-saline) water. Entire hole displaced to non-saline (fresh) water. Rig down circulation lines. Release cement units to side of location.		
19:15	19:30	0.25	19.50	POOH	PP		Lay down (2) Joints Tubing 73 mm L-80 6.99 kg/m. Position tubing bottom 2911 mKB for night.		
19:30	20:00	0.50	20.00	SDFN	PP		Clean and secure wellhead and site. Travel to base.		
						End report for day.			



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/8/2023**  
**Report #: 14**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
20:00	00:00	4.00	24.00	WOD	PP		Wait on daylight.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:30	6.50		PP		Wait on daylight.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Bridge Plug - Permanent		157.0	2,987.50	2,987.80	8/8/2023 08:14
Thermal Cement		157.0	2,987.80	3,599.00	8/8/2023 08:15
Thermal Cement		157.0	2,950.00	2,987.50	8/8/2023 18:30
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16

**Bill 30 Requirements (Head Count Only)**

Type	Count
Day Shift	15

**Contractor Hours (Head Count & Hours)**

Type	Count	Reg Work Time (hr)

**Flare Permit**

Contract #	Agreement Start Date	Agreement End Date
C03040 C	1/31/2020	

**Flaring Volumes**

Type	Subtype	Des	Amount	Units
		No Gas Flared		

**Report Fluids Summary**

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	253.00	45.00	98.00	110.00	0.00	110.00	

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Smoke	28	Good

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/9/2023**  
**Report #: 15**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Lower Besa River	/00	Flowing










Job Information / AFE	
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.	
Target Formation Nahanni	

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period Perform Noise Temp log on wellbore.	
Operation at 6am Wait on daylight.	

24 Hr Operational Comments							
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:30	6.50	6.50	WOD	PP		Wait on daylight.
06:30	06:45	0.25	6.75	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.
06:45	07:15	0.50	7.25	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.
07:15	07:30	0.25	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425
07:30	07:45	0.25	7.75	RIHPOOH	PP		Run (3) Joints Tubing 60.3 mm L-80. Tag cement top 2950 mKB ( un-correlated depth ) with 1800 daN weight.
07:45	11:00	3.25	11.00	RIHPOOH	PP		Pull and lay down (8) Joints Tubing 60.3 mm L-80. Pull and stand in derrick (300) Joints Tubing 60.3 mm L-80.
11:00	12:00	1.00	12.00	Circulating	PP		Pump 3.2 m³ fresh non-saline water to fill casing to surface.
12:00	18:00	6.00	18.00	Rig Serv	PP		Perform scheduled rig maintenance.
18:00	18:30	0.50	18.50	SDFN	PP		Clean and secure wellhead, site and equipment.
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight.

6:00 Update						
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:00	6.00		PP		Wait on daylight.

Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16



## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29  
 Pad: L-29/6030-12330  
 Business Unit: Central and Other  
 Rig:








Report Date: 8/9/2023  
 Report #: 15

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980					
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated							
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBDT (All) (mKB)									
<b>Bill 30 Requirements (Head Count Only)</b>															
Type						Count									
Day Shift						15									
<b>Contractor Hours (Head Count &amp; Hours)</b>															
Type						Count		Reg Work Time (hr)							
<b>Flare Permit</b>															
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date							
<b>Flaring Volumes</b>															
Type		Subtype		Des		Amount		Units							
				No Gas Flared											
<b>Report Fluids Summary</b>															
Fluid		Cum to Lease (m³)		Cum fm lease (m³)		Lease Bal (m³)		Cum to Well (m³)		Cum from Well (m³)		Left to recover (m³)		Cum Non-recov (m³)	
Water		253.00		45.00		98.00		110.00		0.00		110.00			
<b>Weather &amp; Road Condition</b>															
Weather				T (°C)				Road Cond							
Rain				21				Good							

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/10/2023**  
**Report #: 16**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980									
Original KB Elevation (m) 416.60			Ground Elevation (m) 409.90			Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35			Well Configuration Type Deviated							
KB-Ground Distance (m) 6.70				KB-Tubing Head Distance (m) 6.25				Total Depth (mKB) 3,599.00			PBTD (All) (mKB)								
Casing Strings																			
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)		Len (m)		OD (mm)		ID (mm)		Wt/Len (kg/m)		Grade		Top Thread	
Conductor		1/26/2003		20.00		6.70		13.30		660.0				11.000					
Surface		1/31/2003		734.00		6.70		727.30		244.5		224.3		59.527		K-55		LT&C	
Production		3/25/2003		3,074.00		6.25		3,067.75		177.8		159.5		38.692		L-80		Hydrill SLX	
Open Hole		3/25/2003		3,599.00		3,074.00		525.00		155.6									
Zones / Event Sequence																			
Zone Name				Zone Code						Current Status									
Lower Besa River				/00						Flowing									
Job Information / AFE																			
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.																			
Target Formation Nahanni																			
Daily Pressures																			
Subtype								P (kPa)											
SICP								0											
Operation Summary																			
Operations Next Report Period Wait for operations instructions from Calgary.																			
Operation at 6am Wait on daylight.																			
24 Hr Operational Comments																			
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details												
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight.												
06:00	06:15	0.25	6.25	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.												
06:15	06:45	0.50	6.75	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.												
06:45	07:00	0.25	7.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425												
07:00	22:45	15.75	22.75	ELECL	PP		Rig in wire line equipment on top of 179.4 mm - 34.5 MPa - Class III BOP. Program tool string. Run in CCL / Noise - Temperature Logging Tool at 10 m/min to 2957 mKB. Pull up and stop every 5 m for 30 seconds from 2957 mKB to 2000 mKB. Continue to pull up and stop every 10 m for 30 seconds from 2000 mKB to surface. Lay down CCL / Noise - Temperature Log Tool. Send data into Calgary ASAP for analysis.  NOTE: During wire line operations load and haul to Cooper Trucking yard in Ft Nelson (216) Joints Tubing 114 mm 18.75 kg/m L-80 Hydrill 533.												
22:45	23:00	0.25	23.00	SDFN	PP		Secure equipment and wellhead for night.  End report for day.												
23:00	00:00	1.00	24.00	WOD	PP		Wait on daylight.												
6:00 Update																			
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details													
00:00	06:00	6.00		PP		Wait on daylight.													
Other In Hole																			
Des				Icon		OD (mm)		Top Depth (mKB)		Btm (mKB)		Run Date							
Cement Retainer						157.0		2,850.00		2,850.30		8/12/2023 08:57							
Fresh Non-Saline Water						157.0		2,850.30		2,950.00		8/12/2023 18:55							
Thermal Cement						157.0		2,850.30		2,856.00		8/12/2023 18:59							
Thermal Cement						157.0		2,790.00		2,850.00		8/12/2023 19:00							
Thermal Cement						157.0		1,311.29		1,368.00		8/14/2023 18:00							
Fresh Non-Saline Water						157.0		1,368.00		2,790.00		8/14/2023 18:01							
Fresh Non-Saline Water						157.0		753.00		1,311.29		8/15/2023 18:14							





## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/10/2023**  
**Report #: 16**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Other In Hole</b>											
Des			Icon	OD (mm)		Top Depth (mKB)		Btm (mKB)		Run Date	
Thermal Cement			■	157.0		686.00		753.00		8/15/2023 18:15	
Fresh Water (Permanent)			■	157.0		32.00		686.00		8/16/2023 18:16	
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						20					
Safety						5					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Water	253.00	45.00	98.00	110.00	0.00	110.00					
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Rain				22		Good					

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/11/2023**  
**Report #: 17**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Casing Strings</b>											
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread		
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000				
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C		
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX		
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6						
<b>Zones / Event Sequence</b>											
Zone Name		Zone Code					Current Status				
Lower Besa River		/00					Flowing				
<b>Job Information / AFE</b>											
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.											
Target Formation Nahanni											
<b>Daily Pressures</b>											
Subtype						P (kPa)					
SICP						0					
<b>Operation Summary</b>											
Operations Next Report Period Wire line set cement retainer 2850 mKB. Run in 60.3 mm L-80 tubing string. Cement off Besa River formation perforations 2854-2856 mKB.											
Operation at 6am Wait on daylight.											
<b>24 Hr Operational Comments</b>											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details				
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight.				
06:00	06:15	0.25	6.25	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.				
06:15	06:45	0.50	6.75	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.				
06:45	07:00	0.25	7.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425				
07:00	14:30	7.50	14.50	WOG	PP		Wait for government approval to perform remedial abandonment operations.				
14:30	18:00	3.50	18.00	ELECL	PP		Rig in 179.4 mm x 34.5 MPa Wire Line BOP ontop of 179.4 mm Class III BOP.				
							<p>Makeup inside lubricator CCL / Perforating Gun ERHSC 127 mm x 1.0 m x 20 SPM x 60° Phase x 25 gram SDP. Total shots is 20. Purge air from lubricator with N2. Run in and correlate on depth to CBL log dated 8-Aug-23. Perforate Besa river formation interval 2855.0 - 2856.0 mKB at 15:54 hrs. No reation at surface. Pull CCL / Setting Tool. Surface inspection shows all shots fired and center of scallop.</p> <p>Makeup inside lubricator CCL / Perforating Gun ERHSC 127 mm x 1.0 m x 20 SPM x 60° Phase x 25 gram SDP. Total shots is 20. Purge air from lubricator with N2. Run in and correlate on depth to CBL log dated 8-Aug-23. Perforate Besa river formation interval 2854.0 - 2855.0 mKB at 17:09 hrs. No reation at surface. Pull CCL / Setting Tool. Surface inspection shows all shots fired and center of scallop.</p> <p>Lay down lubricator. Secure wire line BOP on wellhead for night.</p>				

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/11/2023**  
**Report #: 17**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					










**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
18:00	18:30	0.50	18.50	INJECT	PP		Perform injection test on Besa River formation.  Slowest rig pump rate 60 L/min. Pump 0.40 m³ fresh non-saline water. Pressure continuous climb slowly to 21.0 MPa. Stop pump. Pressure bleed down to 18.1 MPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen any debris in perforations.  Slowest rig pump rate 60 L/min. Pump 0.50 m³ fresh non-saline water. Pressure continuous climb slowly to 21.0 MPa. Stop pump. Pressure bleed down to 18.3 MPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen debris in perforations.  Slowest rig pump rate 60 L/min. Pump 0.45 m³ fresh non-saline water. Pressure continuous climb slowly to 21.0 MPa. Stop pump. Pressure bleed down to 18.2 MPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen debris in perforations.
18:30	19:00	0.50	19.00	SDFN	PP		Clean and secure wellhead, site and equipment.  End report for day.
19:00	00:00	5.00	24.00	WOD	PP		Wait on daylight.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:00	6.00		PP		Wait on daylight.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16

**Bill 30 Requirements (Head Count Only)**

Type	Count
Day Shift	15

**Contractor Hours (Head Count & Hours)**

Type	Count	Reg Work Time (hr)

**Flare Permit**

Contract # C03040 C	Agreement Start Date 1/31/2020	Agreement End Date
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**Flaring Volumes**

Type	Subtype	Des	Amount	Units
		No Gas Flared		

**Report Fluids Summary**

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	253.00	131.00	12.00	110.00	0.00	110.00	

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Rain	20	Good



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/12/2023**  
**Report #: 18**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Lower Besa River	/00	Flowing

Job Information / AFE	
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.	
Target Formation Nahanni	

Daily Pressures	
Subtype	P (kPa)
SICP	2,532

Operation Summary	
Operations Next Report Period Run in tubing string. Tag cement top with 1800 daN weight. Pull tubing string.	
Operation at 6am Wait on daylight.	

24 Hr Operational Comments							
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight.
06:00	06:15	0.25	6.25	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.
06:15	06:45	0.50	6.75	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.
06:45	07:00	0.25	7.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425
07:00	10:00	3.00	10.00	ELECL	PP		Rig in wire line equipment on top of 179.4 mm - 34.5 MPa - Class III BOP. Run CCL / Kappa WHM 10K 177.8 mm Cement retainer. Correlate on depth to Reliance RBL log dated 8-Aug-2023. Set top of Kappa WHM 10K Cement Retainer 2850.0 mKB (top) at 08:57 hrs. Pull CCL / Setting tool. Rig down wire line equipment from on top of BOP. Leave wire line unit on site.
10:00	10:15	0.25	10.25	PRESS	PP		Pressure test 178 mm casing and Cement Retainer 7.0 MPa. Held 10 min.
10:15	11:00	0.75	11.00	RIHPOOH	PP		Observe cement film inside the bottom (15) Joints Tubing 60.3 mm L-80.  Run (15) Joints Tubing 60.3 mm L-80. No further signs cement film in tubing string  Lay down (15) Joints Tubing 60.3 mm L-80.
11:00	14:00	3.00	14.00	RIHPOOH	PP		Run (1) Cement Retainer Stinger, (1) 178 mm Centralizer, (1) Pup Joint 60.3 mm x 1.52 m J-55 and (197) Joints Tubing 60.3 mm L-80. Tag cement retainer and space out tubing string for cementing operations.

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/12/2023**  
**Report #: 18**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)		









### 24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
14:00	16:30	2.50	16.50	INJECT	PP		<p>Sting tubing string into Cement Retainer at 2850 mKB. Pressure up annulus to 8.0 MPa. No communication from tubing. Sting out of Cement Retainer and position tubing bottom 2849.8 mKB. Reverse circulate 2.0 m³ fresh non-saline water at 600 L/min x 7.0 MPa to confirm tubing and stinger are clear.</p> <p>Tie in cement unit pressure line. Pressure test line 25 MPa. Held. Pump 1.0 m³ Enviro-Syn HCR-7000-10 acid into tubing followed by 4.8 m³ fresh non-saline water at 400 L/min x 6.3 MPa to displace acid to 2850 mKB. Lower and sting tubing string into Cement Retainer.</p> <p>Stage squeeze 0.9 m³ Enviro-Syn HCR-7000-10 acid into Besa River formation in 68 minutes. No feed rate established. Slowly pressure up tubing at 17 L/min to 22 MPa. Stop pump. Pressure bleed down to 16.0 MPa in 3 - 4 minutes. Repeat process 5 times. Total acid into formation 456 liters. Stop.</p> <p>Sting out of cement retainer. Position tubing bottom 2849 mKB. Reverse circulate 7.5 m³ fresh non-saline water at 600 L/min x 7.0 MPa.</p> <p>Recover 544 liters Enviro-Syn HCR-7000-10 acid and 6.9 m³ fresh non-saline water.</p>
16:30	18:00	1.50	18.00	Cmt	PP		<p>Mix and pump 2.3 t of 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1800 kg/m³ cement slurry. Slurry Yield 0.87 m³/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4.0 MPa. Pressure start 4.0 MPa. Displace cement slurry with 3.65 m³ fresh non-saline water x 450 L/min x 7.0 MPa to bottom of tubing string. Temp 20°C.</p> <p>Lower tubing string and sting into cement retainer. Hesitate squeeze 0.815 m³ - 60 L/min cement slurry into formation with 0.815 m³ fresh non-saline water in 29 minutes. Max pressure 19.7 MPa. Stop pumps. Record 16.6 MPa flat line for 10 minutes. Total cement into formation 0.815 m³. Sting tubing out of cement retainer. Position tubing bottom 2849 mKB.</p> <p>Forward circulate and balance 1.2 m³ Thermal Cement slurry from 2790 mKB to 2850 mKB. Stop pump. Rig down and clean cement tubs and pump lines.</p>
18:00	18:30	0.50	18.50	RIHPOOH	PP		Slowly pull and lay down (12) Joints Tubing 60.3 mm L-80. Position tubing bottom 2736 mKB.
18:30	19:00	0.50	19.00	Circulating	PP		Reverse circulate 9.0 m³ fresh non-saline water at 500 L/min x 7 MPa. Return show 150 L cement water. Clean fresh non-saline water at end of circulation.
19:00	19:30	0.50	19.50	RIHPOOH	PP		Pull and stand (40) Joints Tubing 60.3 mm L-80. Position tubing bottom 2356 mKB for night.
19:30	20:00	0.50	20.00	SDFN	PP		Clean and secure wellhead, site and equipment.
20:00	00:00	4.00	24.00	WOD	PP		End report for day. Wait on daylight.

### 6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:00	6.00		PP		Wait on daylight.

### Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55
Thermal Cement		157.0	2,850.30	2,856.00	8/12/2023 18:59
Thermal Cement		157.0	2,790.00	2,850.00	8/12/2023 19:00
Thermal Cement		157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water		157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water		157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement		157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16

### Bill 30 Requirements (Head Count Only)

Type		Count	
Day Shift			15
Contractor Hours (Head Count & Hours)			
Type		Count	Reg Work Time (hr)



## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29  
 Pad: L-29/6030-12330  
 Business Unit: Central and Other  
 Rig:

Report Date: 8/12/2023  
 Report #: 18

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Acid			-0.45	0.45	0.00	0.45					
Other			-0.80	0.80	0.00	0.80					
Water	253.00	131.00	12.00	110.00	0.00	110.00					
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Smoke				22		Good					

## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29

Pad: L-29/6030-12330

Business Unit: Central and Other

Rig:

Report Date: 8/13/2023

Report #: 19






API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Casing Strings</b>											
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread		
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000				
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C		
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX		
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6						
<b>Zones / Event Sequence</b>											
Zone Name		Zone Code				Current Status					
Lower Besa River		/00				Flowing					
<b>Job Information / AFE</b>											
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.											
Target Formation Nahanni											
<b>Daily Pressures</b>											
Subtype						P (kPa)					
SICP						0					
<b>Operation Summary</b>											
Operations Next Report Period Try establish feed rate into shale rock at 1350-1352.0 mKB.											
Operation at 6am Wait on daylight.											
<b>24 Hr Operational Comments</b>											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details				
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight.				
06:00	06:15	0.25	6.25	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.				
06:15	06:45	0.50	6.75	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.				
06:45	07:00	0.25	7.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425				
07:00	09:00	2.00	9.00	WOE	PP		Electrical issue with rig. Change out starter. Start rig.				
09:00	10:00	1.00	10.00	RIHPOOH	PP		Run in (46) Joints Tubing 60.3 mm L-80. Tag cement top 2790 mKB with 1800 daN weight.				
10:00	14:15	4.25	14.25	RIHPOOH	PP		Pull and stand (140) Joints Tubing 60.3 mm L-80  Pull and lay down (157) Joints Tubing 60.3 mm L-80, (1) Pup Joint 60.3 mm L-80, (1) Centralizer 178 mm and (1) Cement Retainer Stinger.				
14:15	15:45	1.50	15.75	ELECL	PP		Rig in 179.4 mm x 34.5 MPa Wire Line BOP ontop of 179.4 mm Class III BOP.  Makeup inside lubricator CCL / Perforating Gun ERHSC 127 mm x 2.0 m x 20 SPM x 60° Phase x 25 gram Goodhole. Total shots is 41. Purge air from lubricator with N2. Run in and correlate on depth to CBL log dated 8-Aug-23. Perforate shale interval 1350.0 - 1352.0 mKB at 15:13 hrs. No reaction at surface. Pull CCL / Setting Tool. Surface inspection shows all shots fired and center of scallop. Fluid level prior and after peforating interval at 120 mKB.  Lay down lubricator. Remove wire line BOP and sheaves. Leave electric line unit on side of locaiton for night.				



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/13/2023**  
**Report #: 19**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>24 Hr Operational Comments</b>											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details				
15:45	16:15	0.50	16.25	INJECT	PP		Perform injection test on shale rock located 1350.0 - 1352.0 mKB.  Slowest rig pump rate 60 L/min. Pump 0.25 m³ fresh non-saline water. Pressure continous climb slowly to 8960 KPa. Stop pump. Pressure bleed down to 8881 KPa in 10 minutes. Bleed off pressure to 0 KPa quickly to try loosen any debris in perforations. No feed rate achieved.  Slowest rig pump rate 60 L/min. Pump 0.30 m³ fresh non-saline water. Pressure continous climb slowly to 11,381 KPa. Stop pump. Pressure bleed down to 10,979 KPa in 10 minutes. Bleed off pressure to 0 KPa quickly to try loosen debris in perforations. No feed rate achieved.  Slowest rig pump rate 60 L/min. Pump 0.40 m³ fresh non-saline water. Pressure continous climb slowly to 14,120 KPa. Stop pump. Pressure bleed down to 14,060 KPa in 10 minutes. Bleed off pressure to 0 KPa quickly to try loosen debris in perforations. No feed rate achieved.				
16:15	17:15	1.00	17.25	RIHPOOH	PP		Run in (141) Joints Tubing 60.3 mm L-80 6.99 kg/m. Position tubing bottom 1354 mKB.				
17:15	18:15	1.00	18.25	Squeeze	PP		Rig in pump unit. Pressure test surface line 21 MPa. Held.  Pump and spot 1.0 m³ Enviro-Syn HCR-7000-10 acid into tubing followed by 2.5 m³ fresh non-saline water at 450 L/min x 4.0 MPa. Balance acid from 1354 mKB to 1304 mKB. Pressure up well bore to 10,000 KPa at 18:04. Shut in wellhead and secure.  Rig down pump pressure line.				
18:15	18:30	0.25	18.50	SDFN	PP		Secure site and equipment.				
18:30	00:00	5.50	24.00	WOD	PP		End report for day. Wait on daylight				
<b>6:00 Update</b>											
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	06:00	6.00		PP		Wait on daylight.					
<b>Other In Hole</b>											
Des		Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date					
Thermal Cement			157.0	1,311.29	1,368.00	8/14/2023 18:00					
Fresh Non-Saline Water			157.0	1,368.00	2,790.00	8/14/2023 18:01					
Fresh Non-Saline Water			157.0	753.00	1,311.29	8/15/2023 18:14					
Thermal Cement			157.0	686.00	753.00	8/15/2023 18:15					
Fresh Water (Permanent)			157.0	32.00	686.00	8/16/2023 18:16					
<b>Bill 30 Requirements (Head Count Only)</b>											
Type					Count						
Day Shift					15						
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type					Count		Reg Work Time (hr)				
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type	Subtype	Des	Amount	Units							
		No Gas Flared									
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Acid			-0.45	0.45	0.00	0.45					
Other			-0.80	0.80	0.00	0.80					
Water	313.00	131.00	72.00	110.00	0.00	110.00					
<b>Weather &amp; Road Condition</b>											
Weather			T (°C)			Road Cond					
Windy			25			Good					

## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29

Pad: L-29/6030-12330

Business Unit: Central and Other

Rig:

Report Date: 8/14/2023

Report #: 20

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980					
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated						
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)							
Casing Strings										
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread	
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000			
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C	
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX	
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6					
Zones / Event Sequence										
Zone Name		Zone Code				Current Status				
Lower Besa River		/00				Flowing				
Job Information / AFE										
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.										
Target Formation Nahanni										
Daily Pressures										
Subtype			P (kPa)							
SICP			8,257							
Operation Summary										
Operations Next Report Period Monitor Surface Casing vent for bubbles. Tag cement top. Pull tubing string.										
Operation at 6am Wait on daylight.										
24 Hr Operational Comments										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details			
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight.			
06:00	06:15	0.25	6.25	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.			
06:15	06:45	0.50	6.75	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.			
06:45	07:00	0.25	7.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425			
07:00	08:00	1.00	8.00	SCVF	PP		SITP 8237 KPa. SICP 8257 KPa.  Monitor Surface Casing Vent for 30 minutes. Observe 0 bubbles.  Bleed down casing and tubing pressure to 0 KPa.  Monitor Surface Casing Vent for 10 minutes. Observe 3 bubbles in total.  Monitor Surface Casing Vent for 10 minutes. Observe 150 bubbles. Rate of 1 bubble every 4 seconds.  Review operations with Calgary.			
08:00	09:00	1.00	9.00	INJECT	PP		Connect pressure line to wellhead. Try to squeeze 1.0 m³ Enviro-Syn HCR-7000-10 acid into perforations at 1350.0 - 1352.0 mKB. Pressure up casing to 14,030 KPa. Stop pump. Wait 10 minutes. Pressure drop to 13,950 KPa. Repeat this process 6 times. No signs of feed rate. No change in bleed down pressure. Estimate 50 liters fluid squeezed into formation.			
09:00	09:45	0.75	9.75	Circulating	PP		Reverse circulate 7.0 m³ fresh non-saline water at 600 L/min x 5.0 MPa. Recover spent acid and fresh non-saline water.			
09:45	11:15	1.50	11.25	RIHPOOH	PP		Pull and stand (140) Joints Tubing 60.3 mm L-80 6.99 kg/m			
11:15	14:45	3.50	14.75	WOG	PP		Wait for government approval to perform remedial abandonment operations.			
14:45	15:45	1.00	15.75	RIHPOOH	PP		Run in (143) Joints Tubing 60.3 mm L-80. Position tubing bottom 1368 mKB.			
15:45	16:15	0.50	16.25	Cmt	PP		Rig in cement pump unit. Pressure test surface line 21 MPa. Held. At 16;21 hrs mix and pump 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1850 kg/m3 cement slurry. Slurry Yield 0.87 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 5.0 MPa. Pump behind cement slurry 2.3 m³ fresh non-saline water x 450 L/min x 5.0 MPa to balance cement plug from 1268 mKB to 1368 mKB. Stop pump. Remove pump line from wellhead.			
16:15	16:45	0.50	16.75	RIHPOOH	PP		Pull and lay down (12) Joints Tubing 60.3 mm L-80. Position tubing bottom 1245 mKB.			



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/14/2023**  
**Report #: 20**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
16:45	17:15	0.50	17.25	Circulating	PP		Reverse circulate 9.0 m³ fresh non-saline water at 500 L/min x 7 MPa. Return show 150 L cement water. Clean fresh non-saline water at end of circulation.
17:15	17:30	0.25	17.50	RIHPOOH	PP		Pull and lay down (2) Joints Tubing 60.3 mm L-80. Position tubing bottom 1226 mKB.
17:30	18:15	0.75	18.25	Cmt	PP		Rig in rig pump line. Try to squeeze cement into perforations at 1350.0 mKB to 1352.0 mKB.  Pressure up tubing / casing to 13,020 KPa with 200 liters fresh non-saline water. Wait 10 minutes. Pressure drop to 12,715 KPa  Pressure up tubing / casing to 14,056 KPa with 50 liters fresh non-saline water. Wait 10 minutes. Pressure drop to 13,972 MPa  Leave well shut in with 13,972 KPa pressure on it at 18:00 hrs.
18:15	18:30	0.25	18.50	SDFN	PP		Clean and secure wellhead, site and equipment  End of reprot for day.
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:00	6.00		PP		Wait on daylight.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Thermal Cement	■	157.0	1,311.29	1,368.00	8/14/2023 18:00
Fresh Non-Saline Water	■	157.0	1,368.00	2,790.00	8/14/2023 18:01
Fresh Non-Saline Water	■	157.0	753.00	1,311.29	8/15/2023 18:14
Thermal Cement	■	157.0	686.00	753.00	8/15/2023 18:15
Fresh Water (Permanent)	■	157.0	32.00	686.00	8/16/2023 18:16

**Bill 30 Requirements (Head Count Only)**

Type	Count
Day Shift	15

**Contractor Hours (Head Count & Hours)**

Type	Count	Reg Work Time (hr)

**Flare Permit**

Contract # C03040 C	Agreement Start Date 1/31/2020	Agreement End Date
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**Flaring Volumes**

Type	Subtype	Des	Amount	Units
		No Gas Flared		

**Report Fluids Summary**

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Acid			-0.45	0.45	0.00	0.45	
Other			-0.80	0.80	0.00	0.80	
Water	313.00	131.00	72.00	110.00	0.00	110.00	

**Weather & Road Condition**

Weather Windy	T (°C) 25	Road Cond Good
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## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**




**Report Date: 8/15/2023**  
**Report #: 21**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	Field Name Liard	State/Province NorthWest Territories	Working Interest (%) 88.41	License # N1980				
Original KB Elevation (m) 416.60	Ground Elevation (m) 409.90	Casing Flange Elevation (m) 409.90	Tubing Head Elevation (m) 410.35	Well Configuration Type Deviated					
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25	Total Depth (mKB) 3,599.00	PBTD (All) (mKB)						
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				
Zones / Event Sequence									
Zone Name		Zone Code				Current Status			
Lower Besa River		/00				Flowing			
Job Information / AFE									
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.									
Target Formation Nahanni									
Daily Pressures									
Subtype						P (kPa)			
SICP						11,539			
Operation Summary									
Operations Next Report Period Monitor Surface Casing vent for bubbles. Tag cement top. Pull tubing string.									
Operation at 6am Wait on daylight.									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight.		
06:00	06:15	0.25	6.25	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.		
06:15	06:45	0.50	6.75	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.		
06:45	07:00	0.25	7.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425		
07:00	08:00	1.00	8.00	SCVF	PP		SITP 11,534 KPa. SICP 11,539 KPa.  Monitor Surface Casing Vent for 15 minutes. Observe 0 bubbles. Bleed down casing and tubing pressure to 0 KPa.  Monitor Surface Casing Vent for 45 minutes. Observe 0 bubbles.  Monitor for 30 minutes and observe 1 bubble every 4 seconds		
08:00	08:30	0.50	8.50	RIHPOOH	PP		Run in (7) Joints Tubing 60.3 mm L-80. Tag cement top 1311.29 mKB with 1800 daN weight.		
08:30	10:30	2.00	10.50	WOG	PP		Wait for government approval to perform remedial abandonment operations.		
10:30	12:00	1.50	12.00	POOH	PP		Pull out and lay down (54) Joints Tubing 60.3 mm L-80  Pull and stand (76) Joints Tubing 60.3 mm L-80		
12:00	13:00	1.00	13.00	ELECL	PP		Rig in 179.4 mm x 34.5 MPa Wire Line BOP ontop of 179.4 mm Class III BOP.  Makeup inside lubricator CCL / Perforating Gun ERHSC 127 mm x 2.0 m x 20 SPM x 30° Phase x 25 gram SDP. Total shots is 40. Purge air from lubricator with N2. Run in and correlate on depth to CBL log dated 8-Aug-23. Perforate shale interval 736.0 - 738.0 mKB at 12:58 hrs. ("NOTE" Collar at 735.6 mKB.) Slight blow at surface. Pull CCL / Setting Tool. Surface inspection shows all shots fired and center of scallop.  Lay down lubricator. Remove wire line BOP and sheaves. Leave electric line unit on side of locaiton for night.		

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/15/2023**  
**Report #: 21**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980		
Original KB Elevation (m) 416.60				Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90			Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated	
KB-Ground Distance (m) 6.70				KB-Tubing Head Distance (m) 6.25			Total Depth (mKB) 3,599.00			PBTD (All) (mKB)		
24 Hr Operational Comments												
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
13:00	13:30	0.50	13.50	INJECT	PP		Perform injection test on shale rock located 736.0 - 738.0 mKB.  Slowest rig pump rate 60 L/min. Pump 0.2 m³ fresh non-saline water. Pressure continous climb slowly to 7105 KPa. Stop pump. Pressure bleed down to 5705 KPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen any debris in perforations. No feed rate achieved.  Slowest rig pump rate 60 L/min. Pump 0.2 m³ fresh non-saline water. Pressure continous climb slowly to 7504 KPa. Stop pump. Pressure bleed down to 6203 KPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen any debris in perforations. No feed rate achieved.  Slowest rig pump rate 60 L/min. Pump 0.2 m³ fresh non-saline water. Pressure continous climb slowly to 8113 KPa. Stop pump. Pressure bleed down to 6590 KPa in 5 minutes. Bleed off pressure to 0 KPa quickly to try loosen any debris in perforations. No feed rate achieved.					
13:30	14:30	1.00	14.50	RIHPOOH	PP		Run (77) Joints Tubing 60.3 mm L-80. Position tubing bottom 738.5 mKB.					
14:30	17:00	2.50	17.00	Squeeze	PP		Rig in pump line to wellhead.  Spot 1.0 m³ Enviro-Syn HCR-7000-10 acid at end of tubing string. Hesitate squeeze acid 14:28 to 17:00 hrs. Max pressure 7.5 MPa. Wait 5 to 10 minutes between 19 stages. For 15 stages the bleed down between stages averaged 1 MPain 10 minutes. The last 4 stages the bleed down increased to 3.4 MPa in 5 minutes. Acid squeezed into perms 626 liter. Back wash 374 liter acid.  Remove pump line from wellhead.					
17:00	17:15	0.25	17.25	RIHPOOH	PP		Run in (2) Joints Tubing 60.3 mm L-80. Position tubing bottom 753 mKB.					
17:15	17:30	0.25	17.50	Cmt	PP		Rig in cement pump line.  Pump 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1850 kg/m3 cement slurry at 17:15 hrs. Slurry Yield 0.87 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 5.0 MPa. Pump behind cement slurry 1.1 m³ fresh non-saline water x 450 L/min x 3.0 MPa to balance cement plug from 678 mKB to 753 mKB.  Rig down cement pump line.					
17:30	17:45	0.25	17.75	POOH	PP		Lay down (12) Joints Tubing 60.3 mm L-80. Tubing bottom 639 mKB.					
17:45	18:15	0.50	18.25	Circulating	PP		Reverse circulate 5 m³ fresh non-saline water. Return show 150 L cement water then clean fresh non-saline water.					
18:15	18:45	0.50	18.75	Cmt	PP		Pump fresh non-saline water down casing to hesitate squeeze 500 liter cement total into formation in 3 x 10 min stages. Leave 4.707 KPa on wellhead for night.  Stage Summary:  Stage #1: Rate 60 L/min. Volume inject 240 liters cement. Max pressure 3.0 MPa. Wait 10 minutes. Pressure drop to 700 KPa.  Stage #2: Rate 60 L/min. Volume inject 140 liters cement. Max pressure 3.0 MPa. Wait 10 minutes. Pressure drop to 2.8 MPa.  Stage #3: Rate 60 L/min. Volume inject 120 liters cement. Max pressure 4.7 MPa. Wait 10 minutes. No drop in pressure.					
18:45	19:00	0.25	19.00	SDFN	PP		Secure wellhead, site and equipment.					
19:00	00:00	5.00	24.00	WOD	PP		End report for day.  Wait on daylight.					
6:00 Update												
Start Time	End Time	Dur (hr)	Time Code		Ops Category	NPT	Operation Details					
00:00	06:00	6.00			PP		Wait on daylight.					
Other In Hole												
Des					Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date			
Fresh Non-Saline Water						157.0	753.00	1,311.29	8/15/2023 18:14			
Thermal Cement						157.0	686.00	753.00	8/15/2023 18:15			
Fresh Water (Permanent)						157.0	32.00	686.00	8/16/2023 18:16			



## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/15/2023**  
**Report #: 21**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBDT (All) (mKB)					
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						15					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Acid			-0.45	0.45	0.00	0.45					
Other			-0.80	0.80	0.00	0.80					
Water	313.00	131.00	72.00	110.00	0.00	110.00					
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Overcast				22		Good					

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/16/2023**  
**Report #: 22**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Lower Besa River	/00	Flowing

Job Information / AFE	
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.	
Target Formation Nahanni	

Daily Pressures	
Subtype	P (kPa)
SICP	942

Operation Summary	
Operations Next Report Period Wait on cut n cap operations.	
Operation at 6am Wait on daylight.	

24 Hr Operational Comments							
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight.
06:00	06:15	0.25	6.25	Safety Mtg	PP		Crew travel across Ft Laird River. Held safety and operational meeting. Discuss water way transportation hazards and controls. Ensure all contractor wearing life vest.
06:15	06:45	0.50	6.75	TTLY	PP		Travel contractors across Ft Laird river via jet boat. Travel to locaiton via trucks.
06:45	07:00	0.25	7.00	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP. QWEST # QW425
07:00	07:15	0.25	7.25	SCVF	PP		SICP 942 KPa. Bleed off pressure to 0 KPa. Continue to monitor Surface Casing Vent for possible bubbles throughtour day.
07:15	08:00	0.75	8.00	RIHPOOH	PP		Run in (6) Joints Tubing 60.3 mm L-80. Tag cement top 686 mKB with 1800 daN weight.
08:00	08:15	0.25	8.25	PRESS	PP		Pressure test casing and cement to 5010 KPa. Monitor 10 min. Pressure 5001 KPa. Bleed off pressure.
08:15	09:00	0.75	9.00	POOH	PP		Lay down (71) Joints Tubing 60.3 mm L-80. Well bore fluid level 30 mKB.
09:00	09:45	0.75	9.75	BOPS	PP		Rig down 34.5 MPa - Class III BOP and 60.3 mm tubing handling equipment.
09:45	10:15	0.50	10.25	NU/ND WH/XT	PP		Install 34.5 MPa - 130 mm Master Valve with Dual 79 mm Upper Master Valves. Secure wellhead outlets.
10:15	11:00	0.75	11.00	RU/RD	PP		Rig down PWS # 829. Rig down pump and return lines. All equipment to move to PRL 300/K-29-6030-12330. Onsite transfer 100 m³ fresh non-saline water for operaitons on PRL 300/K-29-6030-12330  Clean and secure wellhead.  End report for day.
11:00	00:00	13.00	24.00	WOD	PP		Wait on daylight.

Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Fresh Water (Permanent)		157.0	32.00	686.00	8/16/2023 18:16

Bill 30 Requirements (Head Count Only)	
Type	Count
Day Shift	15





## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/16/2023**  
**Report #: 22**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Acid			-0.45	0.45	0.00	0.45					
Other			-0.80	0.80	0.00	0.80					
Water	313.00	318.00	-115.00	110.00	0.00	110.00					
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Clear				23		Good					

## Daily ARO Operations

**Well: PARAMOUNT ET AL LIARD 2K-29**  
**Pad: L-29/6030-12330**  
**Business Unit: Central and Other**  
**Rig:**

**Report Date: 8/27/2023**  
**Report #: 23**

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/26/2003	20.00	6.70	13.30	660.0		11.000		
Surface	1/31/2003	734.00	6.70	727.30	244.5	224.3	59.527	K-55	LT&C
Production	3/25/2003	3,074.00	6.25	3,067.75	177.8	159.5	38.692	L-80	Hydrill SLX
Open Hole	3/25/2003	3,599.00	3,074.00	525.00	155.6				

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Lower Besa River	/00	Flowing

Job Information / AFE	
Objective Well Abandonment. Program will commence after access and camp are prepared. It is expected that 7 wells will be abandoned and costs will be shared where possible.	
Target Formation Nahanni	

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period Job completed.	
Operation at 6am Job completed.	

24 Hr Operational Comments							
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	10:00	10.00	10.00	WOD	PP		Wait on daylight.
10:00	10:30	0.50	10.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor and PRL JSA for operations and hazards for rig operations. Discuss Injured Worker Transportation Plan and ERP.
10:30	14:00	3.50	14.00	Cut/Cap	PP		<p>No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Production Casing and Surface Casing for LEL. None detected.</p> <p>Confirm no existence of underground lines near well centre.</p> <p>Track hoe dig bellhole around wellhead to depth of 4.0 m. Ensure proper slopping, stairway exit and spoil pile spacing from bellhole.</p> <p>Cut away 3.3 m ( 10.0 mKB ) of 660 mm conductor. Cement between conductor and surface casing. Cut window in 244.5 mm Surface Casing and 177.8 mm Production Casing.</p> <p>No cement between Surface Casing and Production Casing. Cut 177.8 mm Production Casing, 3.1 m ( 9.8 mKB ) and Surface Casing at 3.2 m ( 9.9 mKB ) depth below surface casing flange.</p> <p>Remove wellhead from bellhole. Stitch (vent) weld 6.3 mm plate on top of Production Casing and Surface Casing. Weld write 2K-29 / N1980 on 177.8 mm Production Casing cap.</p> <p>Back fill and tamp bellhole. Level and slop bell hole.</p> <p>Install (orange)Tombomstone Surface Marker onto 73 mm pipe. Pipe is anchored and located 1.0 m x North of well centre. Weld write on tombstone marker N1980 + Paramount Res Ltd + 60°28' 40.831" N + 123° 35' 5.338" W + NAD 83</p> <p>Job completed **Final costs to be adjusted when received**</p>
14:00	00:00	10.00	24.00	No Job Activity	PP		Wait on daylight.

Bill 30 Requirements (Head Count Only)	
Type	Count
Day Shift	4

Contractor Hours (Head Count & Hours)		
Type	Count	Reg Work Time (hr)



## Daily ARO Operations

Well: PARAMOUNT ET AL LIARD 2K-29  
 Pad: L-29/6030-12330  
 Business Unit: Central and Other  
 Rig:

Report Date: 8/27/2023  
 Report #: 23

API/UWI 302/K-29/6030-12330/02		Surface Legal Location K-29/6030-12330		Field Name Liard		State/Province NorthWest Territories		Working Interest (%) 88.41		License # N1980	
Original KB Elevation (m) 416.60		Ground Elevation (m) 409.90		Casing Flange Elevation (m) 409.90		Tubing Head Elevation (m) 410.35		Well Configuration Type Deviated			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m) 6.25		Total Depth (mKB) 3,599.00		PBTD (All) (mKB)					
<b>Flare Permit</b>											
Contract # C03040 C				Agreement Start Date 1/31/2020				Agreement End Date			
<b>Flaring Volumes</b>											
Type		Subtype		Des		Amount		Units			
				No Gas Flared							
<b>Report Fluids Summary</b>											
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)				
Acid			-0.45	0.45	0.00	0.45					
Other			-0.80	0.80	0.00	0.80					
Water	313.00	318.00	-115.00	110.00	0.00	110.00					
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Clear				27		Good					





2K29  
N1980

A circular metal marker, possibly brass or aluminum, is embedded in a concrete slab. The marker has a raised, circular border with a decorative, fluted pattern. The center of the marker is a smooth, circular disc with the text '2K29' embossed in the upper half and 'N1980' embossed in the lower half. The concrete slab is surrounded by a rough, gravelly surface.





## Tubing and Rods (Schematic)

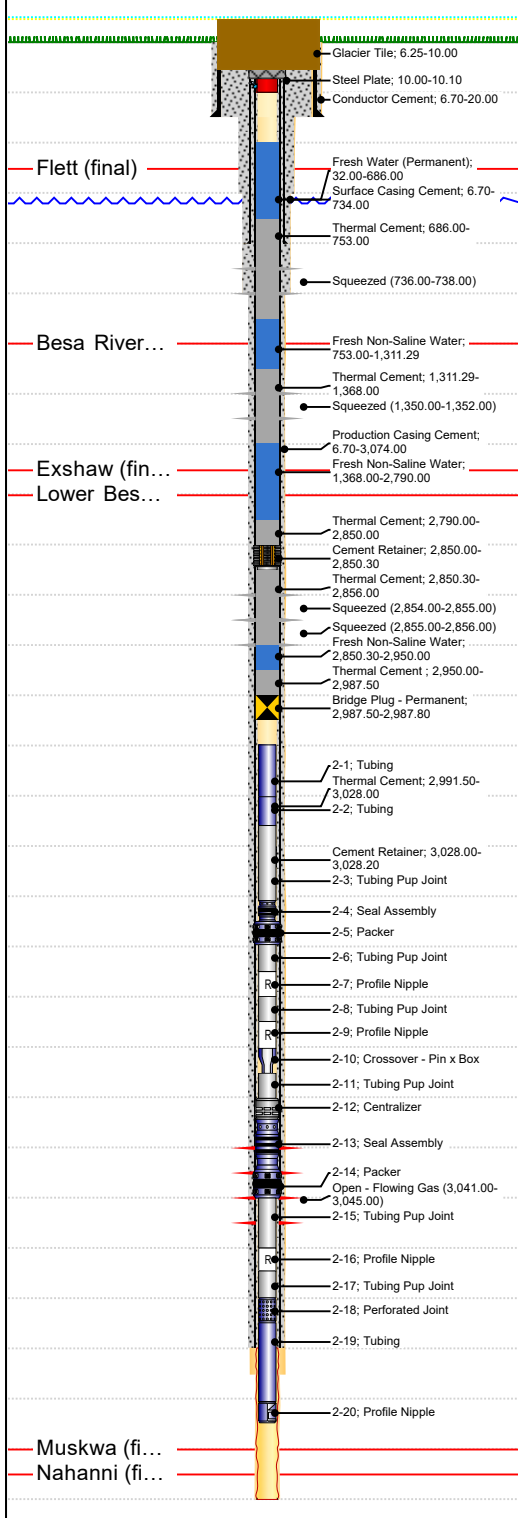
**Paramount**  
resources ltd.

Well Name: **PARAMOUNT ET AL LIARD 2K-29**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	License # N1980	Field Name Liard	State/Province NorthWest Territories
Well Configuration Type Deviated	Original KB Elevation (m) 416.60	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25

Deviated, Original Hole, 9/1/2023 8:36:43 AM

Vertical schematic (actual)



### Tubing - Production set at 3,087.76mKB on 8/7/2023 16:00

Des Tubing - Production		Set Depth (mKB) 3,087.76	Run Date 8/7/2023	Lateral Position		Pull Date		Cut/Pull Date		Depth Cut/Pull (...)	
Item # 2-1	Item Description Tubing	Joints 1	Length (m) 8.70	OD (mm) 114.3	ID (mm) 0.0	Wt (kg/m) 18.974	Grade L-80	Top (mKB) 2,990.00	Btm (mKB) 2,998.70		
Comment Jet Cut joint Tubing											
Item # 2-2	Item Description Tubing	Joints 3	Length (m) 29.04	OD (mm) 114.3	ID (mm) 0.0	Wt (kg/m) 18.974	Grade L-80	Top (mKB) 2,998.70	Btm (mKB) 3,027.74		
Comment											
Item # 2-3	Item Description Tubing Pup Joint	Joints 1	Length (m) 2.00	OD (mm) 114.3	ID (mm) 100.5	Wt (kg/m) 18.974	Grade L-80	Top (mKB) 3,027.74	Btm (mKB) 3,029.74		
Comment											
Item # 2-4	Item Description Seal Assembly	Joints 1	Length (m) 0.30	OD (mm) 114.3	ID (mm)	Wt (kg/m)	Grade	Top (mKB) 3,029.74	Btm (mKB) 3,030.04		
Comment											
Item # 2-5	Item Description Packer	Joints 1	Length (m) 1.01	OD (mm) 177.8	ID (mm) 114.3	Wt (kg/m)	Grade	Top (mKB) 3,030.04	Btm (mKB) 3,031.05		
Comment											
Item # 2-6	Item Description Tubing Pup Joint	Joints 1	Length (m) 2.82	OD (mm) 114.3	ID (mm) 100.5	Wt (kg/m) 18.751	Grade	Top (mKB) 3,031.05	Btm (mKB) 3,033.87		
Comment											
Item # 2-7	Item Description Profile Nipple	Joints 1	Length (m) 0.47	OD (mm) 114.3	ID (mm) 96.9	Wt (kg/m)	Grade	Top (mKB) 3,033.87	Btm (mKB) 3,034.34		
Comment											
Item # 2-8	Item Description Tubing Pup Joint	Joints 1	Length (m) 2.82	OD (mm) 114.3	ID (mm) 100.5	Wt (kg/m) 18.751	Grade	Top (mKB) 3,034.34	Btm (mKB) 3,037.16		
Comment											
Item # 2-9	Item Description Profile Nipple	Joints 1	Length (m) 0.36	OD (mm) 114.3	ID (mm) 96.9	Wt (kg/m)	Grade	Top (mKB) 3,037.16	Btm (mKB) 3,037.52		
Comment											
Item # 2-10	Item Description Crossover - Pin x Box	Joints 1	Length (m) 0.28	OD (mm) 114.3	ID (mm)	Wt (kg/m)	Grade L-80	Top (mKB) 3,037.52	Btm (mKB) 3,037.80		
Comment											
Item # 2-11	Item Description Tubing Pup Joint	Joints 1	Length (m) 2.77	OD (mm) 114.3	ID (mm) 100.5	Wt (kg/m) 18.751	Grade	Top (mKB) 3,037.80	Btm (mKB) 3,040.57		
Comment											
Item # 2-12	Item Description Centralizer	Joints 1	Length (m) 0.20	OD (mm) 152.0	ID (mm)	Wt (kg/m)	Grade	Top (mKB) 3,040.57	Btm (mKB) 3,040.77		
Comment											
Item # 2-13	Item Description Seal Assembly	Joints 1	Length (m) 0.40	OD (mm) 152.0	ID (mm)	Wt (kg/m)	Grade	Top (mKB) 3,040.77	Btm (mKB) 3,041.17		
Comment											
Item # 2-14	Item Description Packer	Joints 1	Length (m) 1.75	OD (mm) 177.8	ID (mm)	Wt (kg/m)	Grade	Top (mKB) 3,041.17	Btm (mKB) 3,042.92		
Comment											
Item # 2-15	Item Description Tubing Pup Joint	Joints 1	Length (m) 3.08	OD (mm) 114.3	ID (mm) 100.5	Wt (kg/m) 18.751	Grade	Top (mKB) 3,042.92	Btm (mKB) 3,046.00		
Comment											
Item # 2-16	Item Description Profile Nipple	Joints 1	Length (m) 0.38	OD (mm) 114.3	ID (mm) 96.9	Wt (kg/m)	Grade	Top (mKB) 3,046.00	Btm (mKB) 3,046.38		
Comment											

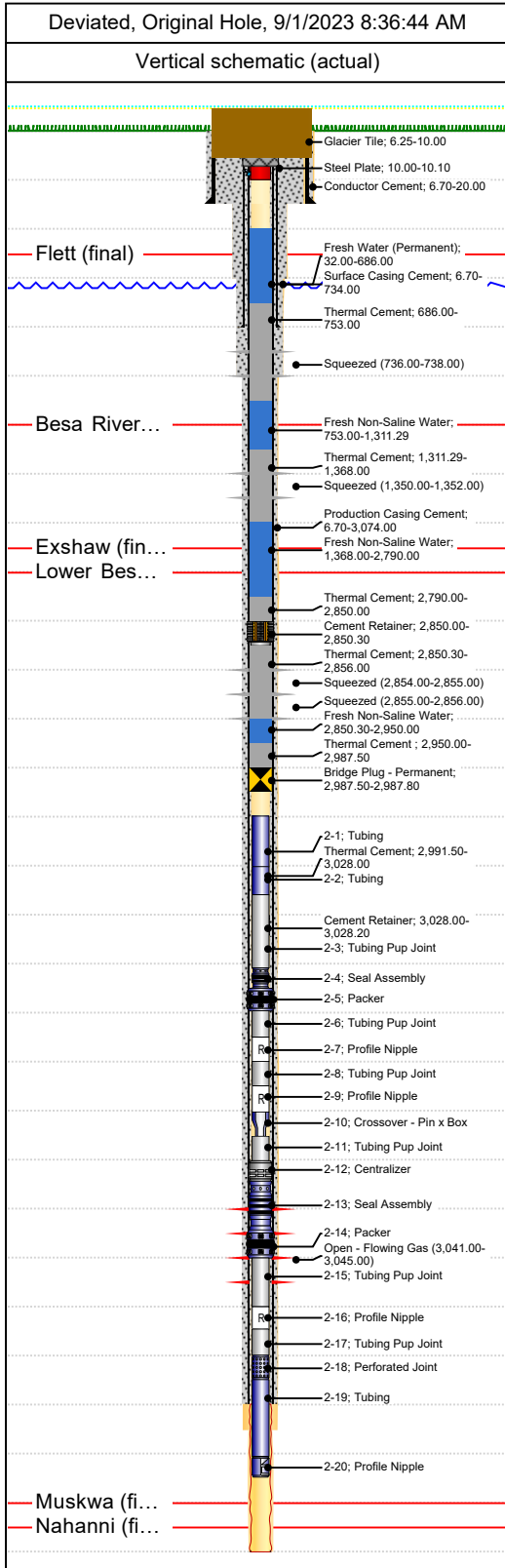








## Tubing and Rods (Schematic)

**Paramount**  
resources ltd.

Well Name: **PARAMOUNT ET AL LIARD 2K-29**

API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	License # N1980	Field Name Liard	State/Province NorthWest Territories
Well Configuration Type Deviated	Original KB Elevation (m) 416.60	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25



Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
2-17	Tubing Pup Joint	1	2.05	114.3	100.5	18.751		3,046.38	3,048.43
Comment									
Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
2-18	Perforated Joint	1	3.10	114.3	100.5	18.751		3,048.43	3,051.53
Comment									
Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
2-19	Tubing	4	35.72	114.3	100.5	18.751		3,051.53	3,087.25
Comment									
Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
2-20	Profile Nipple	1	0.51	114.3	96.9			3,087.25	3,087.76
Comment									
Other In Hole									
Description		OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date			
Cement Retainer		97.3	3,028.00	3,028.20	8/4/2023 00:00				
Comment									
Set Weatherford - Direct 10K Cement Retainer (top) 3028.0 mKB x 1634 hrs.									
Description		OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date			
Thermal Cement		97.3	2,991.50	3,028.00	8/5/2023 14:30				
Comment									
<p>- Rig in cement unit and bulker. Test pump line 16.0 MPa. Held 5 minutes.</p> <p>- Sting tubing string into cement retainer. Pressure test tubing and retainer to 7.0 MPa. held pressure 10 minutes.</p> <p>- Inject 11.1 m³ fresh non-saline water at 400 L/min x 5.4 MPa into Nahanni Formation.</p> <p>- Mix and pump 13 m³ Charger Thermal-40+1.0% CHGC-H-2 x 1850 kg/m3 cement slurry. Slurry Yield 0.87 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4.0 MPa. Pressure start 4.0 MPa.</p> <p>- Displace cement slurry with 5.0 m³ fresh non-saline water x 400 L/min x 2.1 MPa. Temp 20°C. Pressure start to climb.</p> <p>- Slow rate displace 0.60 m³ - 80 L/min cement slurry into formation with 0.60 m³ fresh non-saline water. Pressure climb to 6.2 MPa.</p> <p>- Sting tubing out of cement retainer. Position tubing bottom 3027.9 mKB.</p> <p>- Forward circulate and balance 0.50 m³ Thermal Cement slurry from 2988 mKB to 3028 mKB. Stop pump. Rig down pump lines.</p> <p>- Total cement into formation of 12.0 m³.</p>									
Description		OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date			
Bridge Plug - Permanent		157.0	2,987.50	2,987.80	8/8/2023 08:14				
Comment									
Run CCL / Setting Tool / Weatherford Viton 10 K-PBP. Correlate on depth to 145 mm Gauge Ring run dated 7-Aug-2023. Tag top of 114.3 mm cut tubng at 2990.0 mKB. Set (top) of Weatherford 178 mm Viton 10K Permanent Bridge Plug at 2987.5 mKb x 0814 hrs. Pull CCL / Setting tool out of hole.									
Description		OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date			
Thermal Cement		157.0	2,950.00	2,987.50	8/8/2023 18:30				
Comment									
Rig in Cement Unit. Test line 16.0 MPa. Held 5 minutes. Pump 1.0 m³ Charger Thermal 40 + 1.0% CHGC -2 x 1800 kg/m3 cement slurry. Slurry Yield 0.80 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4 MPa. Displace behind cement slurry 5.7 m³ fresh (non-saline) water 20°C. Circulated and balance cement plug from 2937.5 mKB to 2987.5 mKB. Rig down pump line.									
Description		OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date			
Cement Retainer		157.0	2,850.00	2,850.30	8/12/2023 08:57				
Comment									
Set top of Kappa WHM 10K Cement Retainer 2850.0 mKB (top) at 08:57 hrs.									
Description		OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date			
Fresh Non-Saline Water		157.0	2,850.30	2,950.00	8/12/2023 18:55				
Comment									
Fresh Non -Saline Wsater									



## Tubing and Rods (Schematic)

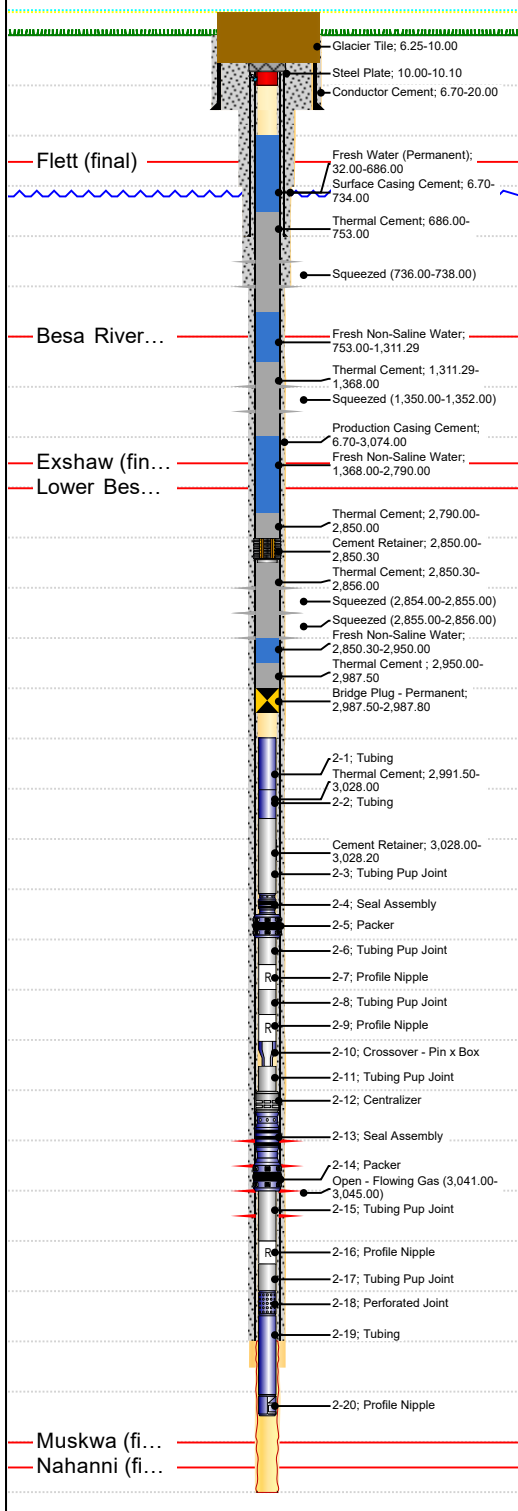
**Paramount**  
resources ltd.

Well Name: **PARAMOUNT ET AL LIARD 2K-29**










API/UWI 302/K-29/6030-12330/02	Surface Legal Location K-29/6030-12330	License # N1980	Field Name Liard	State/Province NorthWest Territories
Well Configuration Type Deviated	Original KB Elevation (m) 416.60	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	KB-Tubing Head Distance (m) 6.25

Deviated, Original Hole, 9/1/2023 8:36:45 AM

Vertical schematic (actual)



### Other In Hole

Description Thermal Cement		OD (mm) 157.0	Top Depth (mKB) 2,850.30	Btm (mKB) 2,856.00	Run Date 8/12/2023 18:59	Mill/Pull Date
<div>Comment</div> <div>Mix and pump 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1800 kg/m3 cement slurry. Slurry Yield 0.87 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 4.0 MPa. Pressure start 4.0 MPa. Displace cement slurry with 3.65 m³ fresh non-saline water x 450 L/min x 7.0 MPa to bottom of tubing string. Temp 20°C.</div> <div>Lower tubing string and sting into cement retainer. Hesitate squeeze 0.815 m³ - 60 L/min cement slurry into formation with 0.815 m³ fresh non-saline water in 29 minutes. Max pressure 19.7 MPa. Stop pumps. Record 16.6 MPa flat line for 10 minutes. Total cement into formation 0.815 m³. Sting tubing out of cement retainer. Position tubing bottom 2849 mKB.</div>						
Description Thermal Cement		OD (mm) 157.0	Top Depth (mKB) 2,790.00	Btm (mKB) 2,850.00	Run Date 8/12/2023 19:00	Mill/Pull Date
<div>Comment</div> <div>Forward circulate and balance 1.2 m³ Thermal Cement slurry from 2775 mKB to 2850 mKB. Stop pump. Rig down and clean cement tubs and pump lines.</div>						
Description Thermal Cement		OD (mm) 157.0	Top Depth (mKB) 1,311.29	Btm (mKB) 1,368.00	Run Date 8/14/2023 18:00	Mill/Pull Date
<div>Comment</div> <div>Rig in cement pump unit. Pressure test surface line 21 MPa. Held. Mix and pump 2.0 m³ Charger Thermal-40+1.0% CHGC-2 x 1850 kg/m3 cement slurry. Slurry Yield 0.87 m3/t. Thick time 1.5 hrs. Pump rate 400 L/min x 5.0 MPa. Pump behind cement slurry 2.3 m³ fresh non-saline water x 450 L/min x 5.0 MPa to balance cement plug from 1268 mKB to 1368 mKB. Stop pump. Remove pump line from wellhead.</div>						
Description Fresh Non- Saline Water		OD (mm) 157.0	Top Depth (mKB) 1,368.00	Btm (mKB) 2,790.00	Run Date 8/14/2023 18:01	Mill/Pull Date
<div>Comment</div> <div>Fresh Non-Saline Water.</div>						
Description Fresh Non- Saline Water		OD (mm) 157.0	Top Depth (mKB) 753.00	Btm (mKB) 1,311.29	Run Date 8/15/2023 18:14	Mill/Pull Date
<div>Comment</div> <div>Fresh Non-Saline Water</div>						
Description Thermal Cement		OD (mm) 157.0	Top Depth (mKB) 686.00	Btm (mKB) 753.00	Run Date 8/15/2023 18:15	Mill/Pull Date
<div>Comment</div> <div>Pump fresh non-saline water down casing to hesitate squeeze 500 liter cement total into formation in 3 x 10 min x 170 L stages. Leave 4.707 KPa on wellhead for night.</div>						
Description Fresh Water (Permanent)		OD (mm) 157.0	Top Depth (mKB) 32.00	Btm (mKB) 686.00	Run Date 8/16/2023 18:16	Mill/Pull Date
<div>Comment</div> <div>Fresh Non-Saline Water</div>						
Description Steel Plate		OD (mm) 244.5	Top Depth (mKB) 10.00	Btm (mKB) 10.10	Run Date 8/27/2023 13:00	Mill/Pull Date
<div>Comment</div>						
Description Glacier Tile		OD (mm) 660.0	Top Depth (mKB) 6.25	Btm (mKB) 10.00	Run Date 8/27/2023 13:01	Mill/Pull Date
<div>Comment</div>						
Perforation Statuses						
Top (mKB)	Top (TVD) (mKB)	Btm (mKB)	Btm (TVD) (mKB)	Date	Status	
736.00	695.99	738.00	697.58	8/15/2023	Squeezed	
1,350.00	1,204.71	1,352.00	1,206.30	8/13/2023	Squeezed	
2,854.00	2,400.52	2,855.00	2,401.28	8/11/2023	Squeezed	
2,855.00	2,401.28	2,856.00	2,402.03	8/11/2023	Squeezed	
3,041.00	2,517.28	3,045.00	2,519.11	4/1/2003	Open - Flowing Gas	