

February 7, 2023

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

VIA Email Only

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

**Cover Letter for Cut/Cap Operation as part of the Well Abandonment  
PARAMOUNT ET AL ARROWHEAD, ACW-2022 & 2023 PAR-N-65-WID1833**

Please find attached for submission the required documents for Well Termination (Abandonment) of the 300/N-65/6040-12245/00 well, WID1833

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.

Sincerely,



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. ARROWHEAD N-65	Operator	PARAMOUNT RESOURCES LTD.
Well Identifier (WID)	1833	Unique Well Identifier (30xx...)	300/N-65/6040--12245/00


### STATUS INFORMATION

Effective Date: February 3, 2023

Well Type:	Other
If other, specify:	Well never produced
Well Mode:	Abandoned
If other, specify:	
Other:	
If other, specify:	

Fluid Production:	(choose all applicable)
Not applicable	Steam
Crude Oil	Air
X Gas	Carbon Dioxide
Water	Nitrogen
Brine	Liquefied Petroleum Gas
Acid Gas	Bitumen
Solvent	Other

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

Name	John Hawkins, P. Eng.	Phone	(403) 817 Ext 5074
Title	Director Asset Management	E-Mail	<a href="mailto:john.hawkins@paramountres.com">john.hawkins@paramountres.com</a>
Operator	Paramount Resources Ltd.		
Signature	 Responsible Officer of Company	Date	2023-02-07

## 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. ARROWHEAD N-65	Operator	Paramount Resources Ltd.
Well Type	Exploratory Well (if Other, specify _____)	Contractor	Precision Well Servi
Well Identifier	N-65	Current Well Status	Abandoned

### RELATED LICENCES AND AUTHORIZATIONS

Operating Licence No.	NWT-OL-2014-14	Operations Authorization	OA - 2020-001-PAR
PRA Licence No.	Exploration Licence NWT-OL-2014-14	Approval to Alter Condition of Well	ACW - 2022-& 2023-PAR-N-65-WID1833

### LOCATION INFORMATION

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

Surface	Lat 60 ° 34 ' 46 "	Long 122 ° 5724 ' W "
Bottom Hole	Lat 60 ° 57 ' 95 "	Long 122 ° 9567 ' W "

Region: Dehcho Unit N Section 65 Grid 60-40 122-45

### ACTIVITY INFORMATION

Target Formation(s)	Nahanni, Sulphur Pt, <del>Slope Point</del>	Field/Pool(s)	/
Elevation KB/RT	574.6 m	Ground Level / Seafloor	567.9 m
Spud/Re-entry Date	1997-12-22	Total Depth	2925.0 m KB
Rig Release Date	February 26, 1998	Total Vertical Depth	2865.0 m KB

### CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing (m³)
339	81.1	J55	480	47
177.8	38.7	L80	2529	12.7
139.7	25.3	L-80	2856	5.25

**PLUGGING PROGRAM**

Type of Plug	Interval (m KB)	Felt	Setting Depth (m KB)	Cementing (m <sup>3</sup> )
Other	2510.0-2551.0	No	2560.0	41 metres
Bridge	2247.0-2287.0	No	2287.0	30 metres
Bridge	1674.0-1715.0	No	1715.0	41 metres
Select	-	No		

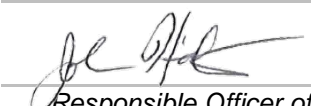
**PERFORATION**

Interval (m KB)	Comments
2818.0-2819.0	Cement Squeezed
2777.0-2792.0	Isolated with bridge plug
2614.0-2640.5	Isolated with various bridge plugs and cement retainer
2779.0-2601.0	packer was topped with 9 m sand and 40 meters cement

**OTHER**

Lost Circulation/Overpressure Zones	No
Equipment Left on Site (Describe)	Wellhead Sign/Tombstone
Provision for Re-entry (Describe and attach sketch)	
Other Downhole Completion/Suspension	Well was suspended in 2006
Additional Comments	Abandonment approved by OROGO

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

Name	John Hawkins, P. Eng	Phone	(403) 817 Ext 5074
Title	Director Asset Management	E-Mail	john.hawkins@paramountres.com
Operator	Paramount Resources Ltd.		
Signature	 Responsible Officer of Company	Date	2023-02-07



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL. ARROWHEAD N-65**

Well Header					
API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	License # N1833	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/15/1998	Rig Release Date 3/22/1965

### Daily Operations

Start Date	Summary
1/3/2023	<p>HSE Summary: No incident, accidents, or spills.</p> <p>Operations Summary:            - Arrange contractors as per job scope and program for operations to commence on 4-Jan-2022.            - Travel to Ft St John in preparation for project kick off meeting scheduled for 07:00 hrs.            - PWS 830 rig crew travel to Ft St John.            - End report for day.</p>
1/4/2023	<p>HSE Summary: No incident, accidents, or spills.</p> <p>Operations Summary:            Attend project kick off meeting in Ft St John. Review job scope and operations with contractors.            PWS 830 and support equipment travel to Ft St John. Ideal Production Testing travel to Ft St John            Supervisor travel to site. Inspect and review access road, site and camp with CNRL representatives.            End of report for day.</p>
1/5/2023	<p>HSE Summary: No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p>Operations Summary:            - Mobilize PWS 830 to BC / NWT Border. Load and wheel rig to KM 72 lease access. Unload rig. Travel rig to site. Tree slashes travel in front of rig to ensure road way clear.            - Supervisor inspect site prior to start of operations. No signs of hydrocarbon staining on site. No signs of LEL of H2S at wellhead. Grating around wellhead. Shut in casing pressure 0 KPa. Perform 15 minute surface casing vent flow bubble test. No signs of bubbles. Unable to confirm surface casing vent open to wellhead. Will remove surface casing vent assembly on 6-Jan-2023 to confirm open.            - Spot on site as per spacing requirements rig matting, catwalk, pipe rack, (2) insulated 63 m³ tanks, 5 MPa x 12 m³ test vessel, 19 m flare stack, 10 m³ diesel tank, light tower, bathroom, and garbage bin, Spot PWS Rig # 830 on matting at wellhead.  <b>**NOTE**</b> Bed truck tow equipment on to site due to steep incline as enter site.            - Setup cell tower, flare stack and light tower. Rig in boiler and lines to wellhead and 63 m³ tank. Haul in 37 m³ fresh water and put in 63 m³ tank.            - Night boiler hand to start boiler and heat wellhead and tank for night.            - End report for day.</p>

## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL. ARROWHEAD N-65**

Well Header					
API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	License # N1833	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/15/1998	Rig Release Date 3/22/1965

### Daily Operations

Start Date	Summary
1/6/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Rig up PWS Rig # 830 and equipment on site as per industry, government, contractor and PRL spacing rules and regulations. Rig in pump and return lines from rig pump and tank. Tie in 5 MPa x 12 m<sup>3</sup> test vessel to wellhead. Perform ongoing CAODC inspection as use equipment.</li> <li>- Travel and unload (rental) 279.4 mm Class III x 34.5 MPa BOP, accumulator building, generator building and rental fittings.</li> <li>- Setup pipe racks. Unload (PRL Stock) 190 = Yellow Band Joints Tubing 73 mm x 1886 m L-80 9.67 kg/m. Unload 12 = 88.9 mm (OD) x 60.3 mm (ID) x IF Thread Drill Collars,</li> <li>- Confirm the surface casing vent is open into wellhead. Perform 30 minute surface casing vent bubble test. No bubbles observe</li> <li>- Install Annular Bag onto BOP. Run accumulator lines to BOP. Setup remote control stand. Change BOP Tubing Rams to 88.9 mm. Stump function test BOP's. Working properly.</li> <li>- Warm up 34.5 MPa - Class III BOP stack. Charge system. Shut off pump. Stump function BOP's. Start pressure 21 MPa. Close blind rams in 17 secs. Close pipe rams in 15 secs. Close Annular 22 secs. End pressure 13.2 MPa. Start system and recharge to 21 MPa in 4:56 minutes.</li> <li>- Stump pressure test blind rams and tubing rams to 1.4 MPa (low) and 21 MPa (high). Held each test 10 minutes. No leaks. Test Annular Bag to 1.4 MPa (low) and 10 MPa (high). held each test 10 minutes. No leaks.</li> <li>- Remove upper wellhead assembly with Dual 89 mm x 34.5 MPa Master Valves from 179.4 mm x 21.0 MPa Tubing Head.</li> <li>- Install 279.4 mm x Class III - 34.5 MPa BOP on wellhead. Rig in work floor.</li> <li>- Close blind rams. Pressure test blind rams, wellhead connection and casing to 1.4 MPa (low) and 21 MPa (high). Held each test 10 minutes. No leak. 21 turns to lock blind rams. 22 turns to lock tubing rams.</li> <li>- Tarp in, heat and secure wellhead</li> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- End report for day.</li> </ul>
1/7/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- Rig in Long Stroke Rig Assist 34.5 MPa x 177.8 mm Snub Unit with 177.8 mm x 279.4 mm Adapter Flange as per contractor specifications and regulations. Strip in (1) TriCone 0.25 m x 215.9 mm Bit, (1) Cross Over Sub Reg Box x IF Box 0.61 m x 148 mm, 98 mm Cross Over Sub IF Pin x Reg Box 0.34 m x 98 mm, (1) Motor 95.25 mm x 5.72 m, (1) Cross Over Sub reg Pin x IF Box 0.42 m x 98 mm and (1) Dual Check Valve Flow Back Sub 0.38 mm x 86 mm. Blanket wrap and heat up unit. Setup Fox Hole escape tube. Circulate 40°C fresh water thru unit to heat.</li> <li>- Function test Snub Unit. Start pressure 12.6 MPa. Close lower QRC Rams 3 sec's. Close upper QRC Rams 3 secs. Close Annular secs. End pressure 7.35 MPa. Start system and recharge to 12.6 MPa in 5 sec's. Lock lower QRC ram 17 turns. Lock upper QRC ram 17 turns.</li> <li>- Rig in pump line, circulation lines and equalizer line</li> <li>- Pressure test lower and upper QRC Ram 1.4 MPa (low) and 21 MPa (high). Held each test 10 minutes. No leaks. Test Annular 1.4 MPa (low) and 10.0 MPa (high). Held 10 minutes. No leak.</li> <li>- Test mud motor. Rate 500 L/min x 4.5 MPa. Full fresh water returns.</li> <li>- Run in 215.9 mm Drilling BHs and (5) Drill Collars, 88.9 mm x 47.13 m, IF Thread. Tag PBP 50 mKB.</li> <li>- Start drill PBP. Forward circulate fresh water at 500 L/min x 4500 KPa. String weight 2000 daN. Weight on tri cone bit 250 daN. Drill from 50 mKB to 50.2 mKB in 1.5 hours. Returns show small metal filings. No signs of gas. No signs of fluid loss.</li> <li>- Pull and lay down (1) Drill Collar 88.9 mm. Position tubing bottom at 44 mKB for night.</li> <li>- Secure and winterize 34.5 MPa Rig BOP, 34.5 MPa Snub Unit Stack, wellhead, lines and rig pump.</li> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- End report for day.</li> </ul>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL. ARROWHEAD N-65**

Well Header					
API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	License # N1833	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/15/1998	Rig Release Date 3/22/1965

### Daily Operations

Start Date	Summary
1/8/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- SICP 0 KPa. SICP 0 KPa. Pickup and run in (1) Drill Collar 88.9 mm. Tag PBP 50.2 mKB.</li> <li>- Resume drill out of PBP at 50.2 mKB. Forward circulate 550 L/min fresh water x 5500 KPa. String weight 2000 daN. Weight on tri cone bit 250 daN. Drill from 50.2 - 50.5 mKB in 1.0 hours. Return small metal filings and black rubber. Observe slight ( none LEL ) gas in returns. Continue to drill out PBP. Gas pressure in returns stop after 5 minutes. Fluid loss thru bridge plug of 11.4 m³ fresh water. Continue to mill PBP fro 30 minutes to 50.6 mKB. No fluid losses. No gas in returns. Able push PBP down hole. Stop drill activities.</li> <li>- **NOTE** Potential improper hole fill in last operations is possible reason 11.4 m³ fresh water loss during drill out activities</li> <li>- Pickup and run in (3) Drill Collars 88.9 mm x 27.8 m IF Thread. Able to freely run in hole with no obstruction from PBP. Bit depth 77.8 mKB.</li> <li>- Forward circulate well with fresh water x 30 min at 550 L/min x 5500 KPa while ream drill bit from 50.0 mKB to 52.0 mKB. No fluid loss. Returns clear of debris.</li> <li>- Pressure test casing 7000 KPa with fresh (non saline) water. Held 15 min. Casing pressure slowly drop and level out at 6500 KPa for last 5 minutes of test.</li> <li>- Pull and lay down (8) Drill Collars.</li> <li>- Rig down Fox Hole escape unit. Strip off wellhead Snub Unit and 215.9 mm Tri Cone drill Bit BHA assembly.</li> <li>- Change tubing rams to 73 mm.</li> <li>- Pressure test tubing rams and casing to 1.4 MPa (low). Held 10 minutes. Test to 7000 KPa (high). Held 15 minutes. Pressure stable at 6900 KPa. Test to 14 MPa. Held 10 minute. No leak off.</li> <li>- Pickup and run in 215.9 mm Tri Cone Bit, 148 mm Cross Over Sub and (40) Joints Yellow Band 73 mm Tubing. Tubing bottom 396 mKB</li> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- End report for day</li> </ul>
1/9/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- Continue to tally, drift, pickup and run in hole: (133) Yellow Band Joints Tubing (from derrick), 73 mm L-80 9.67 kg/m. Tag cement top at 1697 mKB. Position tubing bottom 1696.8 mKB.</li> <li>- Reverse circulate 7 m³ fresh (non-saline) water at 500 L/min x 2.5 MPa. Obtain samples and test for salinity the first 7 m³ return fluid from tubing. Salinity in hole is 58,000 ppm. Continue to reverse circulate 63 m³ fresh (non saline) water at 500 L/min x 2.5 MPa. Last returns of fresh water with 0 salinity. Stop pumping.</li> <li>- **NOTE** Displaced entire wellbore to non-saline (fresh) water.</li> <li>- Rig in Cement Unit. Tie in pump line to tubing. Forward circulate 1.0 m³ non-saline (fresh) water. Pressure test pump line 14.0 MPa. Held 5 minutes.</li> <li>- Mix and pump 1.0 m3 Cement Slurry of Class 'G' Cement at 1800 kg/m3. Pump rate 300 L/min x 3 MPa. Displace behind cement slurry 4.8 m³ non-saline (fresh) water 25°C. Maintain 3.0 MPa back pressure. Circulated and balance cement plug from 1672.0 mKB to 1697.0 mKB. Stop pump. Bleed down casing to 0 KPa. No signs of activity from SCVF bubble tester. Rig down pump line. Wash up and release cement units.</li> <li>- Slowly pull and stand (6) Joints Tubing 73 mm L-80 6.99 kg/m. Position tubing bottom 1640 mKB.</li> <li>- Rig in circulation lines. Reverse circulate 10 m³ (total) - 25° non-saline (fresh) water at 500 L/min x 3.0 MPa. Returns show salinity 0 ppm. Slight grayish water after return 5.1 m³ non-saline (fresh) water for 250 liters. The last 4.65 m³ of returns are clean non-saline (fresh) water. Rig down circulation lines.</li> <li>- Pull out of hole (2) Joints Tubing 73 mm L-80. Tubing bottom 1622 mKB.</li> <li>- Secure and winterize 34.5 MPa BOP, wellhead, lines and rig pump.</li> <li>- SDFN rig crew.</li> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- End report for day.</li> </ul>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL. ARROWHEAD N-65**

Well Header					
API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	License # N1833	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/15/1998	Rig Release Date 3/22/1965

Daily Operations	
Start Date	Summary
1/10/2023	<p>HSE Summary: No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- Pressure up and test casing to 7260 KPa with fresh water. Held 15 minutes. Final pressure 7018 KPa. Good test. Bleed off pressure.</li> <li>- Run in hole (4) Yellow Band Joints Tubing L-80 9.67 kg/m. Tag cement top 1674 mKB with 15000 daN (string) weight. Entire wellbore is displaced to non-saline (fresh) water.</li> <li>- Pull and stand in derrick (52) Yellow Band Joints Tubing 73 mm L-80 9.67 kg/m</li> <li>- Pull and lay down (121) Yellow Band Joints Tubing 73 mm L-80 9.67 kg/m, Cross Over Subs 148 mm x 0.7 m and TriCone 215.9 mm 0.25 m Bit.</li> <li>- Run in 73 mm Bow Plug and (52) Yellow Band Joints Tubing L-80 9.67 kg/m. Tubing bottom at 501 mKB.</li> <li>- Pull and lay down (52) Yellow Band Joints Tubing and 73 mm Bow Plug.</li> <li>- Rig down work floor and tubing handling equipment. Break apart and rig down 279.4 mm Annular Bag and 34.5 MPa Class III BOP.</li> <li>- Install Upper Wellhead assembly with Dual 65 mm x 34.5 MPa Master Valves from 179.4 mm x 21.0 MPa Tubing Head. Chain closed wellhead master valves and remove casing valve handles. Wellhead secured.</li> <li>- Rig down Ideal Testing 34.5 MPa x 12 m³ test vessel, return lines and 18 m flare stack Start rig down PWS # 830 and support equipment.</li> <li>- SDFN rig crew.</li> <li>- Night boiler hand to maintain heat on boiler and tank for night so fluids can be trucked off site tomorrow.</li> <li>- End report for day.</li> </ul>
1/11/2023	<p>HSE Summary: No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Night boiler hand to maintain heat on wellhead and tank for night.</li> <li>- Cool down, drain and winterize boiler. Drain rig tank and (2) 63 m³ tanks. Complete rig down of PWS # 830 and support equipment. Haul off location produced water from operations. Prepare equipment for transport to Paramount Berkley W Arrowhead C-02 upon completion of access road.</li> <li>- Clean and secure wellhead. Ensure no garbage on location.</li> <li>- End of report for day.</li> </ul>
1/12/2023	<p>HSE Summary: No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Contractor travel to location.</li> <li>- Load and haul rental 88.9 mm Drill Collars, 88.9 mm Motors and 215.9 mm Drill Out Equipment</li> <li>- Contractor travel back to and unload rentals in Ft St John.</li> <li>- End report for day.</li> </ul>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL. ARROWHEAD N-65**

Well Header					
API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	License # N1833	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/15/1998	Rig Release Date 3/22/1965

### Daily Operations

Start Date	Summary
1/14/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Load and travel track hoe from Ft Laird to site. Unload track hoe.</li> <li>- No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Intermediate Casing # 1 and Surface Casing for LEL. None detected. Confirm reading with welder 4 Head Monitor.</li> <li>- Track hoe dig bellhole around wellhead to depth of 2.7 m. Ensure proper slopping, stairway exit and spoil pile spacing from bellhole. Casing protectors, sawdust bags, wood, rags and slight soil contamination around well centre to depth of 2.0 m. Separat possible contaminated soil on site for future testing</li> <li>- Cut and remove 508 mm conductor at 2.5 m below surface casing flange. Chip away cement between conductor and surface casing.</li> <li>- Cut window in 339.7 mm Surface Casing and 244.5 mm Intermediate Casing #1. No surface cement between Surface Casing and Intermediate Casing #1 at surface. Cut 244.5 mm Intermediate Casing #1 at 2.2 m (9.8 mKB) and Surface Casing at 2.4 m (10.0 mKB) depth below surface casing flange.</li> <li>- Remove wellhead from bellhole. Stitch (vent) weld 6.3 mm plate on top of Intermediate Casing # 1 and Surface Casing. Weld write 1833 on 244.5 mm Intermediate Casing # 1 cap.</li> <li>- Back fill and tamp bellhole. Rough level surface ground.</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 1883 + Paramount Res Ltd + 60°34'45.897" + 122°57'18.623" + NAD 27</li> <li>- Cut n Cap job completed. Release contractors.</li> <li>- Haul track hoe to camp and unload. Travel support unit back to Ft Laird.</li> </ul> <p>*** Adjust final costs as received***</p>
1/25/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Supervisor inspect site prior to start of operations. No signs of hydrocarbon staining on site. No signs of LEL of H2S at tombstone well marker</li> <li>- Load and travel track hoe from to site. Unload track hoe.</li> <li>- Track hoe dig bell hole around wellhead to depth of 3.0 m. Locate well centre. Remove tombstone marker. Ensure proper slopping, stairway exit and spoil pile spacing from bell hole. Swept area around capped casings for LEL. None detected. None detected. Confirm reading with welder 4 Head Monitor.</li> <li>- "B" Certified Welder to perform operations. Cut away stitched (vent) weld 6.3 mm cap plate on top of Intermediate Casing # 1 and Surface Casing.</li> <li>- Re-dress Intermediate Casing # 1 stub and Surface Casing stub. Weld and centralize 224.5 mm Casing Collar on Intermediate Casing # 1.</li> <li>- Install bell hole perimeter flagging. Winterize and secure equipment on site for night.</li> <li>- SDFN</li> </ul>
1/26/2023	<p><b>HSE Summary:</b> No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p><b>Operations Summary:</b></p> <ul style="list-style-type: none"> <li>- Supervisor inspect site prior to start of operations. No signs of hydrocarbon staining, LEL or H2S at well centre in bell hole.</li> <li>- Picker load and travel complete C-02 wellhead with 244.5 mm x 3.0 m 64.73 kg/m L-80 casing and 339.7 mm x 3.0 m 81.10 kg/m J-55 casing. Ideal testing crew assist for day as labour crew.</li> <li>- Weld and level 244.5 mm x 2.2 m 64.73 kg/m L-80 Intermediate Casing # 1, Surface Casing 339.7 mm x 2.4 m 81.10 kg/m J-55 with Cameron 34.5 MPa Surface Casing Flange. Field estimate surface casing flange is same elevation as before cut n cap.</li> <li>- Backfill and tamp bell hole around well head.</li> <li>- Land primary seals in surface casing. Install and torque 339.7 mm x 244.5 mm Adapter Spool on wellhead. Test Primary Seals to 1.4 MPa (low) and 10 MPa (high). Held both 10 minutes.</li> <li>- Pump 2.2 m³ non-saline (fresh) water to fill 244.5 mm casing. Pressure test casing to 1.4 MPa (low) and 21 MPa (high). Held both tests 10 minutes.</li> <li>- Rig in wireline equipment on 244.5 mm flange. Picker on site to hold sheave.</li> <li>- Run in hole CCL / Radial Cement Evaluation Tool. Correlate on depth to surface casing shoe at 480 mKB. Tag obstruction 1586.9 mKB. Log well from 1586.9 mKB to surface. Send log into Calgary for further evaluation and correlation. Rig down electric line adapter flange and well control equipment. Rig down electric line unit.</li> <li>- Install 244.5 mm x 34.5 MPa x 177.8 mm x 34.5 MPa Tubing Head and Dual Master 65 mm Upper Wellhead assembly.</li> <li>- Secure wellhead.</li> <li>- SDFN.</li> </ul>



## ARO Daily Op Summary

**Well Name: PARAMOUNT ET AL. ARROWHEAD N-65**

Well Header					
API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	License # N1833	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	Spud Date 1/15/1998	Rig Release Date 3/22/1965

### Daily Operations

Start Date	Summary
2/3/2023	<p>HSE Summary: No incident, accidents, or spills. Qwest Air medi-vac # QW410.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> <li>- Load and travel track hoe from PRL 300/B-41-6040-12245/0 to site. Unload track hoe.</li> <li>- No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Intermediate Casing # 1 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 1 m of 508 mm conductor. Cement between conductor and surface casing. Cut window in 339.7 mm Surface Casing and 244.5 mm Intermediate Casing #1. No surface cement between Surface Casing and Intermediate Casing #1 at surface. Cut 244.5 mm Intermediate Casing #1 at 3.2 m (10.8 mKB) and Surface Casing at 3.4 m (11.0 mKB) depth below surface casing flange.</li> <li>- Remove wellhead from bellhole. Stitch (vent) weld 6.3 mm plate on top of Intermediate Casing # 1 and Surface Casing. Weld write 1833 on 244.5 mm Intermediate Casing # 1 cap.</li> <li>- Back fill and tamp bellhole. Rough level surface ground.</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 1883 + Paramount Res Ltd + 60°34'45.897" + 122°57'18.623" + NAD 27</li> <li>- Cut n Cap job completed. Release contractors.</li> <li>- Job completed.</li> </ul> <p>*** Adjust final costs as received***</p>

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/3/2023**  
**Report #: 1**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	





Job Information / AFE	
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up	
Target Formation Arnica	

Daily Pressures	
Subtype	P (kPa)

Operation Summary	
Operations Next Report Period Attend project kick off meeting in Ft St John. PWS 830 start to travel to location.	
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	08:00	8.00	8.00	No Job Activity	PP		No activity on site
08:00	18:00	10.00	18.00	RU/RD	PP		Arrange contractors as per job scope and program for operations to commence on 4-Jan-2022.  Travel to Ft St John in preparation for project kick off meeting scheduled for 07:00 hrs.  PWS 830 rig crew travel to Ft St John.  End report for day
18:00	00:00	6.00	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	07:00	7.00			PP		Wait on daylight

Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Non-Saline (fresh) Water		222.5	6.70	1,674.00	1/10/2023 14:00
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

Other In Hole - Pulled					
Des	OD (mm)	Top Depth (mKB)	Btm (mKB)	Mill/Pull Date	Pull Reason
Bridge Plug - Permanent	222.5	50.00	51.00	1/8/2023	Pulled for suspension/ abandonment.

Bill 30 Requirements (Head Count Only)	
Type	Count
Day Shift	1

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



## Daily ARO Operations

Well: PARAMOUNT ET AL. ARROWHEAD N-65  
 Pad: N-65/6040-12245  
 Business Unit: Central and Other  
 Rig: Precision Well Servicing 830

Report Date: 1/3/2023  
 Report #: 1

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBDT (All) (mKB) Original Hole - 2,840.00		
Flaring Volumes					
Type	Subtype	Des	Amount	Units	
		No Gas Flared			
Weather & Road Condition					
Weather		T (°C)	Road Cond		
Partly Cloudy		-10	Ice/Snow		

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/4/2023**  
**Report #: 2**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBTD (All) (mKB) Original Hole - 2,840.00		

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	





Job Information / AFE	
Objective	Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up
Target Formation	Arnica

Daily Pressures	
Subtype	P (kPa)

Operation Summary	
Operations Next Report Period	PWS 830 and rental equipment travel to site. Spot PWS # 830, rental equipment and communications tower.
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	10:00	3.00	10.00	SMTG	PP		Attend project kick off meeting in Ft St John. Review job scope and operations with contractors. Discuss safety policies and procedures.
10:00	19:00	9.00	19.00	Rig Mob	PP		PWS 830 and support equipment travel to Ft St John. Ideal Production Testing travel to Ft St John.  Supervisor travel to site. Inspect and review access road, site and camp with CNRL representatives.  End of 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
Non-Saline (fresh) Water		222.5	6.70	1,674.00	1/10/2023 14:00
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

Other In Hole - Pulled					
Des	OD (mm)	Top Depth (mKB)	Btm (mKB)	Mill/Pull Date	Pull Reason
Bridge Plug - Permanent	222.5	50.00	51.00	1/8/2023	Pulled for suspension/ abandonment.

Bill 30 Requirements (Head Count Only)	
Type	Count
Day Shift	7



## Daily ARO Operations

Well: PARAMOUNT ET AL. ARROWHEAD N-65  
 Pad: N-65/6040-12245  
 Business Unit: Central and Other  
 Rig: Precision Well Servicing 830

Report Date: 1/4/2023  
 Report #: 2

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBTD (All) (mKB) Original Hole - 2,840.00		
<b>Contractor Hours (Head Count &amp; Hours)</b>					
Type			Count	Reg Work Time (hr)	
<b>Flaring Volumes</b>					
Type	Subtype	Des	Amount	Units	
		No Gas Flared			
<b>Weather &amp; Road Condition</b>					
Weather		T (°C)	Road Cond		
Partly Cloudy		-10	Ice/Snow		

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/5/2023**  
**Report #: 3**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBSD (All) (mKB) Original Hole - 2,840.00					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	

Job Information / AFE	
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up	
Target Formation Arnica	

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period Rig up PWS # 830. Pressure test and install 279.4 mm x 34.5 MPa Class III BOP	
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	13:00	7.00	13.00	Rig Mob	PP		<p>Mobilize PWS 830 to BC / NWT Border. Load and wheel rig to KM 72 lease access. Unload rig. Travel rig to site. Tree slashers travel in front of rig to ensure road way clear.</p> <p>While rig in transport. Supervisor inspect site prior to start of operations. No signs of hydrocarbon staining on site. No signs of LEL of H2S at wellhead. Grating around wellhead. Shut in casing pressure 0 KPa. Perform 15 minute surface casing vent flow bubble test. No signs of bubbles. Unable to confirm surface casing vent open to wellhead. Will remove surface casing vent assembly on 6-Jan-2023 to confirm open.</p>
13:00	13:30	0.50	13.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. review contractor JSA for operations. Qwest Air medi-vac # QW410.
13:30	18:30	5.00	18.50	RU/RD	PP		<p>Spot on site as per spacing requirements rig matting, catwalk, pipe rack, (2) insulated 63 m³ tanks, test vessel, flare stack, 10 m³ diesel tank, light tower, bathroom, and garbage bin, Spot PWS Rig # 830 on matting at wellhead.</p> <p><b>**NOTE**</b> Bed truck tow equipment on to site due to steep incline as enter site.</p> <p>Setup cell tower, flare stack and light tower. Rig in boiler and lines to wellhead and 63 m³ tank. Haul in 37 m³ fresh water and put in 63 m³ tank.</p> <p>Construction continue to water and freeze in lease access road. Slow travel on all lease roads due to icy conditions and</p>
18:30	00:30	6.00	24.50	WOD	PP		<p>Night boiler hand to start boiler and heat wellhead and tank for night.</p> <p>End report for day.</p>



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/5/2023**  
**Report #: 3**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					
<b>6:00 Update</b>											
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	07:00	7.00		PP		Night boiler hand to boiler and heat wellhead and tank for night. Wait on daylight for rig operations.					
<b>Other In Hole</b>											
Des				Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date			
Non-Saline (fresh) Water					222.5	6.70	1,674.00	1/10/2023 14:00			
Vented Steel Plate					222.5	10.80	10.86	2/3/2023 12:00			
Glacier (dirt) Tile					222.5	5.70	10.80	2/3/2023 12:00			
Glacier (dirt) Tile					339.7	5.70	10.80	2/3/2023 12:00			
<b>Other In Hole - Pulled</b>											
Des				OD (mm)	Top Depth (mKB)	Btm (mKB)	Mill/Pull Date	Pull Reason			
Bridge Plug - Permanent				222.5	50.00	51.00	1/8/2023	Pulled for suspension/ abandonment.			
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						17					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<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)				
Fresh Water	37.00		37.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Partly Cloudy				-10		Ice/Snow					



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/6/2023**  
**Report #: 4**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories		Working Interest (%) 50		License # N1833		
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00			
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	
Zones / Event Sequence									
Zone Name		Zone Code				Current Status			
Slave Point		/00							
Sulphur Point		/00							
Watt Mountain		/00							
Nahanni		/00							
Arnica		/00							
Job Information / AFE									
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up									
Target Formation Arnica									
Daily Pressures									
Subtype					P (kPa)				
SICP					0				
Operation Summary									
Operations Next Report Period Rig in 34.5 MPa Snub Unit. Pressure test snub unit ontop of 34.5 MPa x 279 mm BOP.									
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		Night boiler hand to boiler and heat wellhead and tank for night.  Wait on daylight for rig operations.		
07:00	07:30	0.50	7.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. review contractor JSA for operations. Qwest Air medi-vac # QW410.		
07:30	10:30	3.00	10.50	RU/RD	PP		Rig up PWS Rig # 830 and support equipment on site as per industry, government, contractor and PRL spacing rules and regulations. Rig in pump and return lines from rig pump and tank. Tie in 5 MPa x 12 m³ test vessel to wellhead. Perform ongoing CAODC inspection as use equipment.  Travel and unload McClelland 279.4 mm Class III x 34.5 MPa BOP, accumulator building, generator building and rental fittings.  Setup pipe racks. Unload (PRL Stock) 190 = Yellow Band Joints Tubing 73 mm x 1886 m L-80 9.67 kg/m. Unload 12 = 88.9 mm (OD) x 60.3 mm (ID) x IF Thread Drill Collars,  Remove and confirm open the surface casing vent assembly to wellhead. Perform 30 minute SCVF Bubble Test. Observe no bubbles.  Longstroke Energy Services Ltd (snub unit) continue to travel to camp from Nisku. Dan's Rental Tool hand travel from Ft St John to camp.		
10:30	12:30	2.00	12.50	RU/RD	PP		Install Annular Bag onto BOP. Run accumulator lines to BOP. Setup remote control stand. Change BOP Tubing Rams to 88.9 mm.		
12:30	14:30	2.00	14.50	BOPT	PP		Steam warm up 34.5 MPA - Class III BOP stack. Charge system. Shut off pump. Stump function BOP's. Start pressure 21 MPa. Close blind rams in 17 secs. Close pipe rams in 15 secs. Close Annular 22 secs. End pressure 13.2 MPa. Start system and recharge to 21 MPa in 4:56 minutes.  Stump pressure test blind rams and tubing rams to 1.4 MPa (low) and 21 MPa (high). Held each test 10 minutes. No leaks. Test Annular Bag to 1.4 MPa (low) and 10 MPa (high). Held each test 10 minutes. No leak		



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/6/2023**  
**Report #: 4**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
14:30	16:30	2.00	16.50	RWHD	PP		Remove upper wellhead assembly with Dual 34.5 MPa 89 mm Master Valves and 34.5 MPa 179.4 mm x 279.4 mm Tubing Head. Use of hydraulic wrench to break apart tight bolts.
16:30	17:30	1.00	17.50	BOPI	PP		Install 279.4 mm x Class III - 34.5 MPa BOP on wellhead. Rig in work floor. Tarp in BOP Stack.
17:30	18:30	1.00	18.50	BOPT	PP		Close blind rams. Pressure test blind rams, wellhead connection and casing to 1.4 MPa (low) and 21 MPa (high). Held each test 10 minutes. No leak. 21 turns to lock blind rams. 22 turns to lock tubing rams.
18:30	19:00	0.50	19.00	SDFN	PP		Tarp in, heat, winterize and secure wellhead and pumping equipment.
19:00	00:00	5.00	24.00	WOD	PP		Night boiler hand to maintain heat on wellhead and tank for night.  End report for day.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Night boiler hand to boiler and heat wellhead and tank for night.  Wait on daylight for rig operations.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Non-Saline (fresh) Water		222.5	6.70	1,674.00	1/10/2023 14:00
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

**Other In Hole - Pulled**

Des	OD (mm)	Top Depth (mKB)	Btm (mKB)	Mill/Pull Date	Pull Reason
Bridge Plug - Permanent	222.5	50.00	51.00	1/8/2023	Pulled for suspension/ abandonment.

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

Type	Count
Day Shift	19

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

Type	Count	Reg Work Time (hr)

**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)
Fresh Water	37.00		37.00				

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Partly Cloudy	-10	Ice/Snow

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/7/2023**  
**Report #: 5**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	

Job Information / AFE	
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up	
Target Formation Arnica	

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period Mill out PBP at 50 mKB. Push to 77 mKB. Pressure test casing 7.0 MPa. Pull and lay down 88.9 mm Drill Collars and 148 mm Tricone Bit Drilling assembly. Rig out and release Snub Unit.	
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		Night boiler hand to boiler and heat wellhead and tank for night.  Wait on daylight for rig operations.
07:00	07:30	0.50	7.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. Review contractor JSA for snubbing operations. Qwest Air medi-vac # QW410.
07:30	13:30	6.00	13.50	RU/RD	PP		Rig in Long Stroke Rig Assist 34.5 MPa x 177.8 mm Snub Unit with 177.8 mm x 279.4 mm Adapter Flange as per contractor specifications and regulations.  Strip in (1) TriCone 0.25 m x 215.9 mm Bit, (1) Cross Over Sub Reg Box x IF Box 0.61 m x 148 mm, 98 mm Cross Over Sub IF Pin x Reg Box 0.34 m x 98 mm, (1) Motor 95.25 mm x 5.72 m, (1) Cross Over Sub reg Pin x IF Box 0.42 m x 98 mm and (1) Dual Check Valve Flow Back Sub 0.38 mm x 86 mm.  Blanket wrap and heat up unit. Setup Fox Hole escape tube. Circulate 40°C fresh water thru unit to heat. Connect equalization line to rig tank / test vessel.
13:30	15:00	1.50	15.00	PRESS	PP		Function test Snub Unit. Start pressure 12.6 MPa. Close lower QRC Rams 3 sec's. Close upper QRC Rams 3 secs. Close Annular secs. End pressure 7.35 MPa. Start system and recharge to 12.6 MPa in 5 sec's. Lock lower QRC ram 17 turns. Lock upper QRC ram 17 turns.  Pressure test lower and upper QRC Ram 1.4 MPa (low) and 21 MPa (high). Held each test 10 minutes. No leaks.  Test Annular 1.4 MPa (low) and 10.0 MPa (high). Held 10 minutes. no leak.

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/7/2023**  
**Report #: 5**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					





**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
15:00	16:00	1.00	16.00	RIH	PP		Run in Drilling BHA and 88.9 mm Drill Collars as: (1) TriCone 0.25 m x 215.9 mm Bit (1) Cross Over Sub Reg Box x IF Box 0.61 m x 148 mm (1) 98 mm Cross Over Sub IF Pin x Reg Box 0.34 m x 98 mm (1) Motor 95.25 mm x 5.72 m, (1) Cross Over Sub reg Pin x IF Box 0.42 m x 98 mm. Motor operations range 450 L/min - 680 L/min (1) Dual Check Valve Flow Back Sub 0.38 mm x 86 mm. (5) Drill Collars, 88.9 mm x 47.13 m, IF Thread
16:00	17:30	1.50	17.50	Tub Drill	PP		Tag PBP 50 mKB. Forward circulation fresh water rate 500 L/min x 4500 KPa. String weight 2000 daN. Weight on tri cone bit 250 daN. Drill from 50 mKB to 50.2 mKB in 1.5 hours. Returns show small metal filings. No signs of gas. No signs of fluid loss.
17:30	18:00	0.50	18.00	POOH	PP		Pull and lay down (1) Drill Collar 88.9 mm. Position tubing bottom at 44 mKB for night.
18:00	19:00	1.00	19.00	SDFN	PP		Secure and winterize 34.5 MPa Rig BOP, 34.5 MPa Snub Unit Stack, wellhead, lines and rig pump.
19:00	00:00	5.00	24.00	WOD	PP		Night boiler hand to maintain heat on wellhead and tank for night.  End report for day.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Night boiler hand to boiler and heat wellhead and tank for night.  Wait on daylight for rig operations.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Non-Saline (fresh) Water		222.5	6.70	1,674.00	1/10/2023 14:00
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

**Other In Hole - Pulled**

Des	OD (mm)	Top Depth (mKB)	Btm (mKB)	Mill/Pull Date	Pull Reason
Bridge Plug - Permanent	222.5	50.00	51.00	1/8/2023	Pulled for suspension/ abandonment.

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

Type	Count
Day Shift	14

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

Type	Count	Reg Work Time (hr)

**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)
Fresh Water	67.00		65.00	2.00	0.00	2.00	

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Clear	-20	Ice/Snow

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/8/2023**  
**Report #: 6**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833									
Original KB Elevation (m) 574.60			Ground Elevation (m) 567.90			Casing Flange Elevation (m) 567.90			Tubing Head Elevation (m)			Well Configuration Type Vertical							
KB-Ground Distance (m) 6.70				KB-Tubing Head Distance (m)				Total Depth (mKB) 2,925.00				PBTD (All) (mKB) Original Hole - 2,840.00							
Casing Strings																			
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)		Len (m)		OD (mm)		ID (mm)		Wt/Len (kg/m)		Grade		Top Thread	
Surface		1/31/1998		480.00		6.70		473.30		339.7		320.3		81.105		J-55			
Intermediate		2/28/1998		1,890.00		6.70		1,883.30		244.5		222.5		64.735		L-80			
Prod Lnr 2		3/20/1998		2,856.00		2,300.00		556.00		139.7		124.2		25.299		L-80			
Open Hole		3/20/1998		2,925.00		2,856.00		69.00		152.4									
Prod Lnr 1		3/20/1998		2,529.00		1,723.00		806.00		177.8		159.5		38.692		N-80			
Zones / Event Sequence																			
Zone Name				Zone Code						Current Status									
Slave Point				/00															
Sulphur Point				/00															
Watt Mountain				/00															
Nahanni				/00															
Arnica				/00															
Job Information / AFE																			
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up																			
Target Formation Arnica																			
Daily Pressures																			
Subtype SICP								P (kPa) 0											
Operation Summary																			
Operations Next Report Period Run in bit and tubing tag plug back. Circulate and sample returns to determine if wellbore is filled with fresh water or if complete circulation to fresh water is require. Circulate and spot 1.0 m³ cement plug at plug back. Pull up tubing 50 m and back wash tubing clean. Shut down to allow cement to cure.																			
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		Night boiler hand to boiler and heat wellhead and tank for night.  Wait on daylight for rig operations.												
07:00	07:30	0.50	7.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. Review contractor JSA for snubbing operations. Qwest Air medi-vac # QW410.												
07:30	11:30	4.00	11.50	Tub Drill	PP		Pickup and run in (1) Drill Collar 88.9 mm. Tag PBP 50.2 mKB.  Resume drill out of PBP at 50.2 mKB. Forward circulate 550 L/min fresh water x 5500 KPa. String weight 2000 daN. Weight on tri cone bit 250 daN. Drill from 50.2 - 50.5 mKB in 1.0 hours. Return small metal filings and black rubber. Observe slight ( none LEL ) gas in returns. Continue to drill out PBP. Gas pressure in returns stop after 5 minutes. Fluid loss thru bridge plug of 11.4 m³ fresh water. Continue to mill PBP fro 30 minutes to 50.6 mKB. No fluid losses. No gas in returns. Able push PBP down hole. Stop drill activities.  **NOTE** Potential improper hole fill in last operations is possible reason 11.4 m³ fresh water loss during drill out activities  Pickup and run in (3) Drill Collars 88.9 mm x 27.8 m IF Thread. Able to freely run in hole with no obstruction from PBP. Bottom of Drill Bit 77.8 mKB.												
11:30	12:00	0.50	12.00	Circulating	PP		Forward circulate well 30 min with fresh water at 550 L/min x 5500 KPa while move up and down drill bit from 50.0 mKB to 52.0 mKB. No fluid loss. Returns clear of debris.												
12:00	12:30	0.50	12.50	PRESS	PP		Pressure test casing 7000 KPa with fresh water. Held 15 minutes. Casing pressure slowly drop and level out at 6500 KPa for last 5 minutes of test.												
12:30	13:30	1.00	13.50	POOH	PP		Pull and lay down (8) Drill Collars.												
13:30	16:15	2.75	16.25	RU/RD	PP		Rig down Fox Hole escape unit and tarps. Strip off wellhead Snub Unit and 148 mm Tri Cone drill Bit BHA assembly. Break apart Drill BHA. No signs excessive wear on Drill BHA.												

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/8/2023**  
**Report #: 6**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					





**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
16:15	17:00	0.75	17.00	BOPT	PP		Change 34.5 MPa BOP Tubing Rams to 73 mm.  Pressure test tubing rams and casing with fresh water to 1.4 MPa (low). Held 10 minutes. No leak off.  Pressure test casing and pipe rams to 7000 KPa with fresh water. Held test 15 minutes. Pressure drop to and stay at 6900 KPa. Good test.  Pressure test casing and tubing rams to 14.0 MPa with fresh water. Held 10 minutes. No leak off. Good test.
17:00	18:15	1.25	18.25	RIH	PP		Tally, drift, pickup and run in hole: (1) TriCone 0.25 m x 215.9 mm Bit (1) Cross Over Sub Reg Box x IF Box 0.61 m x 148 mm (1) 98 mm Cross Over Sub IF Pin x Reg Box 0.34 m x 98 mm (40) Yellow Band Joints Tubing, 73 mm x 392.98 m, L-80 9.67 kg/m  Position tubing bottom at 396 mKB for night.
18:15	19:00	0.75	19.00	SDFN	PP		Secure and winterize 34.5 MPa BOP, wellhead, lines and rig pump.  SDFN rig crew.
19:00	00:00	5.00	24.00	WOD	PP		Night boiler hand to maintain heat on wellhead and tank for night.  End report for day.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Night boiler hand to boiler and heat wellhead and tank for night.  Wait on daylight for rig operations.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Non-Saline (fresh) Water		222.5	6.70	1,674.00	1/10/2023 14:00
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

**Other In Hole - Pulled**

Des	OD (mm)	Top Depth (mKB)	Btm (mKB)	Mill/Pull Date	Pull Reason
Bridge Plug - Permanent	222.5	50.00	51.00	1/8/2023	Pulled for suspension/ abandonment.

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

Type	Count
Day Shift	14

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

Type	Count	Reg Work Time (hr)

**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)
Fresh Water	87.00		73.60	13.40	0.00	13.40	

**Weather & Road Condition**

Weather	T (°C)	Road Cond
Overcast	-20	Ice/Snow

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/9/2023**  
**Report #: 7**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833		
Original KB Elevation (m) 574.60			Ground Elevation (m) 567.90			Casing Flange Elevation (m) 567.90			Tubing Head Elevation (m)		Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70			KB-Tubing Head Distance (m)			Total Depth (mKB) 2,925.00			PBTD (All) (mKB) Original Hole - 2,840.00			
Casing Strings												
Csg Des		Run Date		Set Depth (mKB)		Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface		1/31/1998		480.00		6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate		2/28/1998		1,890.00		6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2		3/20/1998		2,856.00		2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole		3/20/1998		2,925.00		2,856.00	69.00	152.4				
Prod Lnr 1		3/20/1998		2,529.00		1,723.00	806.00	177.8	159.5	38.692	N-80	
Zones / Event Sequence												
Zone Name				Zone Code					Current Status			
Slave Point				/00								
Sulphur Point				/00								
Watt Mountain				/00								
Nahanni				/00								
Arnica				/00								
Job Information / AFE												
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up												
Target Formation Arnica												
Daily Pressures												
Subtype							P (kPa)					
SICP							0					
Operation Summary												
Operations Next Report Period Tag cement top. Pressure test casing to 7 MPa. Pull and stand 500 m x 73 mm L-80 tubing in derrick. Pull and lay down remaining tubing string. Run in bow plugged 73 mm tubing string to 500 mKB to displace fresh water from 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	07:00	7.00	7.00	WOD	PP		Night boiler hand to boiler and heat wellhead and tank for night.  Wait on daylight for rig operations.					
07:00	07:30	0.50	7.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. Review contractor JSA for tripping tubing and cementing operations. Qwest Air medi-vac # QW410.					
07:30	11:45	4.25	11.75	RIH	PP		Continue to tally, drift, pickup and run in hole: (133) Yellow Band Joints Tubing (from derrick), 73 mm L-80 9.67 kg/m  Tag cement top at 1697 mKB. Put 15,000 daN string weight on plug back. Position tubing bottom 1696.8 mKB.					
11:45	14:15	2.50	14.25	Circulating	PP		Heat up and tie in circulation lines. Reverse circulate 7 m³ Non-saline (fresh) water at 500 L/min x 2.5 MPa.  Obtain samples and test for salinity the first 7 m³ return fluid from tubing as follows: Fluid Return (m³) = Salinity (ppm) 2 m³ = 40,000 ppm 3 m³ = 2000 ppm 4 m³ = 22,000 ppm 5 m³ = 72,000 ppm **NOTE** Tubing volume = 5.1 m³ 6 m³ = 58,000 ppm 7 m³ = 58,000 ppm  Continue to reverse circulate 43 m³ non-saline (fresh) water at 500 L/min x 2.5 MPa. Returns of water with 50,000 ppm salinity. Stop pumping.					



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/9/2023**  
**Report #: 7**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					





**24 Hr Operational Comments**

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
14:15	17:15	3.00	17.25	WOE	PP		Drain and winterize pump and lines. Cover in and secure wellhead. Maintain heat on wellhead.  Wait on non-saline (fresh) water truck to arrive on location.
17:15	18:00	0.75	18.00	Circulating	PP		Continue to reverse circulate 20 m³ non-saline (fresh) water at 600 L/min x 3.0 MPa. Check returns to confirm non-saline (fresh) water returning to surface. Return water salinity 250 ppm. <b>**NOTE**</b> Entire hole has been circulated over to non-saline (fresh) water.
18:00	18:30	0.50	18.50	Cement	PP		Original tag plug back at 1697.0 mKB. Position tubing bottom 1696.8 mKB.  Rig in Cement Unit and Bulker. Tie in pump line to tubing. Forward circulate 1.0 m³ non-saline (fresh) water to warm up pump. Pressure test pump line 14.0 MPa. Held 5 minutes.  Mix up 0.866 m3 fresh water at 25 C with 1,200 kg cement. Pump down tubing 1.0 m3 Cement Slurry of Class 'G' at 1800 kg/m3. Pump rate 300 L/min x 3 MPa. Displace behind cement slurry 4.8 m³ non-saline (fresh) water at 25°C. Maintain 3.0 MPa back pressure on annulus. Stop pump. Bleed down casing to 0 KPa. No signs of activity from SCVF bubble tester. Cement plug circulated and balanced from 1672.0 mKB to 1697.0 mKB. Rig down pump line from tubing. Wash up and release cement units.  Cement Information: Type = Charger Thermal 40 + 1% CaCL2 Slurry Yield ( m3/t) = 0.830 Mix Water ( m3/t) = 0.480 Density (kr/m3) = 1800 Fluid loss ( cc/30 min) = 35 Thickening Time = 3.0 hrs Working Time = 1.5 hrs.
18:30	18:45	0.25	18.75	POOH	PP		Slowly pull and stand (6) Joints Tubing 73 mm L-80 6.99 kg/m. Position tubing bottom 1640 mKB.
18:45	19:30	0.75	19.50	Circulating	PP		Rig in circulation lines. Reverse circulate 10 m³ (total) - 25° non-saline (fresh) water at 500 L/min x 3.0 MPa. Returns show salinity 0 ppm. Slight grayish sign of water for 250 L after return 5.1 m³ non-saline (fresh) water. The last 4.65 m³ of returns are clean non-saline (fresh) water. Rig down circulation lines.
19:30	19:45	0.25	19.75	POOH	PP		Pull out of hole and lay down (2) Joints Tubing 73 mm L-80.  Position tubing bottom 1622 mKB for night.
19:45	20:30	0.75	20.50	SDFN	PP		Secure and winterize 34.5 MPa BOP, wellhead, lines and rig pump.  SDFN rig crew.
20:30	00:00	3.50	24.00	WOD	PP		Night boiler hand to maintain heat on wellhead and tank for night.  End report for day.

**6:00 Update**

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Night boiler hand to boiler and heat wellhead and tank for night. Wait on daylight for rig operations.

**Other In Hole**

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Non-Saline (fresh) Water		222.5	6.70	1,674.00	1/10/2023 14:00
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

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

Type	Count
Day Shift	16

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

Type	Count	Reg Work Time (hr)





## Daily ARO Operations

Well: PARAMOUNT ET AL. ARROWHEAD N-65  
 Pad: N-65/6040-12245  
 Business Unit: Central and Other  
 Rig: Precision Well Servicing 830

Report Date: 1/9/2023  
 Report #: 7

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					
<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)				
Fresh Water	122.00	0.00	23.60	98.40	0.00	98.40					
Other			-1.00	1.00	0.00	1.00					
Produced Water	0.00	38.00	-38.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Overcast				-25		Ice/Snow					

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/10/2023**  
**Report #: 8**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833				
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical					
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBTD (All) (mKB) Original Hole - 2,840.00						
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	
Zones / Event Sequence									
Zone Name		Zone Code			Current Status				
Slave Point		/00							
Sulphur Point		/00							
Watt Mountain		/00							
Nahanni		/00							
Arnica		/00							
Job Information / AFE									
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up									
Target Formation Arnica									
Daily Pressures									
Subtype			P (kPa)						
SICP			0						
Operation Summary									
Operations Next Report Period Complete rig down of PWS 830 and support equipment. Haul fluids off site. Release crews till 18-Jan-2023.									
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		Night boiler hand to boiler and heat wellhead and tank for night. Wait on daylight for rig operations.		
07:00	07:30	0.50	7.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. Review contractor JSA for tripping tubing operations. Qwest Air medi-vac # QW410.		
07:30	08:00	0.50	8.00	PTST	PP		Pressure up and test casing to 7260 KPa with fresh water. Held 15 minutes. Final pressure 7018 KPa. Good test. Bleed off pressure.		
08:00	08:30	0.50	8.50	RIH	PP		Run in hole (4) Yellow Band Joints Tubing L-80 9.67 kg/m. Tag cement top 1674 mKB with 15000 daN (string) weight. Annulus is full of fresh ( non - saline ) water.		
08:30	11:00	2.50	11.00	POOH	PP		Pull and stand in derrick: (52) Yellow Band Joints Tubing 73 mm L-80 9.67 kg/m  Pull and lay down: (121) Yellow Band Joints Tubing 73 mm L-80 9.67 kg/m (2) Cross Over Subs 148 mm x 0.7 m (1) TriCone 215.9 mm 0.25 m Bit.		
11:00	11:45	0.75	11.75	RIH	PP		Run in 73 mm Bow Plug and (52) Yellow Band Joints Tubing L-80 9.67 kg/m. Tubing bottom at 501 mKB.		
11:45	13:15	1.50	13.25	POOH	PP		Pull and lay down (52) Yellow Band Joints Tubing and 73 mm Bow Plug.		
13:15	15:15	2.00	15.25	BOPR	PP		Rig down work floor and tubing handling equipment. Break apart and rig down 279.4 mm Annular Bag and 34.5 MPa Class III BOP.		
15:15	16:15	1.00	16.25	IWHD	PP		Install Upper Wellhead assembly with Dual 65 mm x 34.5 MPa Master Valves and 179.4 mm x 21.0 MPa Tubing Head. Chain closed wellhead master valves and remove casing valve handles. Wellhead secured.		
16:15	18:45	2.50	18.75	RU/RD	PP		Rig down Ideal Testing 34.5 MPa x 12 m³ test vessel, return lines and 18 m flare stack.  Start rig down PWS # 830 and support equipment.		



## Daily ARO Operations

Well: PARAMOUNT ET AL. ARROWHEAD N-65  
 Pad: N-65/6040-12245  
 Business Unit: Central and Other  
 Rig: Precision Well Servicing 830

Report Date: 1/10/2023  
 Report #: 8

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					
<b>24 Hr Operational Comments</b>											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details				
18:45	19:00	0.25	19.00	SDFN	PP		Winterize clean and secure wellhead and equipment.  SDFN rig crew.				
19:00	00:00	5.00	24.00	WOD	PP		Night boiler hand to maintain heat on boiler and tank for night so fluids can be trucked out tomorrow. Boiler hand to start cool down in morning.  End report for day.				
<b>6:00 Update</b>											
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details					
00:00	07:00	7.00		PP		Night boiler hand to boiler and heat wellhead and tank for night. Wait on daylight for rig operations.					
<b>Other In Hole</b>											
Des		Icon		OD (mm)		Top Depth (mKB)		Btm (mKB)		Run Date	
Non-Saline (fresh) Water				222.5		6.70		1,674.00		1/10/2023 14:00	
Vented Steel Plate				222.5		10.80		10.86		2/3/2023 12:00	
Glacier (dirt) Tile				222.5		5.70		10.80		2/3/2023 12:00	
Glacier (dirt) Tile				339.7		5.70		10.80		2/3/2023 12:00	
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						10					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<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)				
Fresh Water	122.00	0.00	24.30	98.40	0.70	97.70					
Other			-1.00	1.00	0.00	1.00					
Produced Water	0.00	38.00	-38.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Overcast				-16		Ice/Snow					

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/11/2023**  
**Report #: 9**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	




Job Information / AFE	
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up	
Target Formation Arnica	

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period Load and travel off site rental drill out equipment and drill collars.	
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		Night boiler hand to boiler and heat wellhead and tank for night. Wait on daylight for rig operations.
07:00	07:30	0.50	7.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. Review contractor JSA for travelling and rig out operations. Qwest Air medi-vac # QW410.
07:30	15:00	7.50	15.00	RU/RD	PP		Night boiler hand to maintain heat on wellhead and tank for night.  Cool down, drain and winterize boiler. Drain rig tank and (2) 63 m³ tanks. Complete rig down of PWS # 830 and support equipment. Haul off location produced water from operations. Prepare equipment for transport to Paramount Berkley W Arrowhead C-02 upon completion of access road.  Clean and secure wellhead. Ensure no garbage on location.  End of report for day.
15:00	00:00	9.00	24.00	WOD	PP		Wait on day light.

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 for operations.	

Other In Hole						
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00	
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00	
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00	

Bill 30 Requirements (Head Count Only)	
Type	Count
Day Shift	10



## Daily ARO Operations

Well: PARAMOUNT ET AL. ARROWHEAD N-65  
 Pad: N-65/6040-12245  
 Business Unit: Central and Other  
 Rig: Precision Well Servicing 830

Report Date: 1/11/2023  
 Report #: 9

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<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)				
Fresh Water	122.00	10.00	14.30	98.40	0.70	97.70					
Other			-1.00	1.00	0.00	1.00					
Produced Water	0.00	100.00	-100.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Overcast				-17		Ice/Snow					



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/12/2023**  
**Report #: 10**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	

Job Information / AFE	
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up	
Target Formation Arnica	

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period Wait for construction equipment to perform Cut n Cap on 14-Jan-2023.	
Operation at 6am Wait for Cut n Cap on 14-Jan-2023	

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 for operations.
07:00	07:30	0.50	7.50	SMTG	PP		Discuss job scope and program Review contractor JSA, and Emergency Transportation Plan. Ensure contractors have CSO or PRL 2023 orientation. Inspect work site for potential hazards. Review contractor JSA for travelling and lifting operations. Qwest Air medi-vac # QW410.
07:30	19:00	11.50	19.00	RU/RD	PP		Contractor travel to location.  Load and haul rental 88.9 mm Drill Collars, 88.9 mm Motors and 215.9 mm Drill Out Equipment  Contractor travel back to and unload rentals in Ft St John.  End report for day.
19:00	00:00	5.00	24.00	WOE	PP		Waiting for Cut n Cap operations scheduled for 14-Jan-2023.

Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

Bill 30 Requirements (Head Count Only)	
Type	Count
Day Shift	2

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

Flaring Volumes				
Type	Subtype	Des	Amount	Units
		No Gas Flared		



## Daily ARO Operations

Well: PARAMOUNT ET AL. ARROWHEAD N-65

Pad: N-65/6040-12245

Business Unit: Central and Other

Rig: Precision Well Servicing 830

Report Date: 1/12/2023

Report #: 10

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBTD (All) (mKB) Original Hole - 2,840.00		

### 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)
Fresh Water	122.00	10.00	14.30	98.40	0.70	97.70	
Other			-1.00	1.00	0.00	1.00	
Produced Water	0.00	100.00	-100.00				

### Weather & Road Condition

Weather	T (°C)	Road Cond
Overcast	-14	Ice/Snow



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/14/2023**  
**Report #: 11**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBTD (All) (mKB) Original Hole - 2,840.00		

### Casing Strings

Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

### Zones / Event Sequence

Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	

### Job Information / AFE

Objective  
Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up

Target Formation  
Arnica

### Daily Pressures

Subtype	P (kPa)
SICP	0

### Operation Summary

Operations Next Report Period  
Wait on construction to test soil and reclaim site.

Operation at 6am  
Wait on construction to reclaim site.

### 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	07:30	0.50	7.50	Safety Mtg	PP		Held safety and operational meeting. Discuss job scope and program with all personal. Document & discuss expected daily operations, hazards & control measures. Review Site ERP and service providers JSA's.






## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/14/2023**  
**Report #: 11**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

24 Hr Operational Comments							
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	17:00	9.50	17.00	Cut/Cap	PP		<p>Load and travel track hoe from Ft Laird to site. Unload track hoe.</p> <p>No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test intermediate casing # 1 and surface casing for LEL. None detected. Confirm reading with welder 4 Head Monitor.</p> <p>Track hoe dig bellhole around wellhead to depth of 2.7 m. Ensure proper slopping, stairway exit and spoil pile spacing from bellhole. Casing protectors, sawdust bags, wood, rags and slight soil contamination around well centre to depth of 2.0 m. Separator possible contaminated soil on site for future testing</p> <p>Cut and remove 508 mm conductor at 2.5 m below surface casing flange. Chip away cement between conductor and surface casing.</p> <p>Cut window in 339.7 mm Surface Casing and 244.5 mm Intermediate Casing #1. No surface cement between Surface Casing and Intermediate Casing #1 at surface. Cut 244.5 mm Intermediate Casing #1 at 2.2 m (9.8 mKB) and Surface Casing at 2.4 m (10 mKB) depth below surface casing flange.</p> <p>Remove wellhead from bellhole. Stitch (vent) weld 6.3 mm plate on top of Intermediate casing # 1 and Surface Casing. Weld write 1833 on 244.5 mm Intermediate Casing # 1 cap.</p> <p>Back fill and tamp bellhole. Rough level surface ground.</p> <p>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 1883 + Paramount Res Ltd + 60° 34'45.897" + 122°57'18.623" + NAD 27</p> <p>Cut n Cap job completed. Release contractors.</p> <p>Haul track hoe to camp and unload. Travel support unit back to Ft Laird.</p> <p>*** Adjust final costs as received***</p>
17:00	00:00	7.00	24.00	WOD	PP		Wait on construction to test soil and reclaim site.

Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

Bill 30 Requirements (Head Count Only)	
Type	Count
Day Shift	3

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

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)
Fresh Water	122.00	10.00	14.30	98.40	0.70	97.70	
Other			-1.00	1.00	0.00	1.00	
Produced Water	0.00	100.00	-100.00				

Weather & Road Condition		
Weather	T (°C)	Road Cond
Overcast	-15	Ice/Snow

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/25/2023**  
**Report #: 12**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	

Job Information / AFE	
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up	
Target Formation Arnica	

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period Complete welded installation of wellhead. Install and pressure test wellhead seals. Pressure test Intermediate Casing # 1 to 1.4 MPa (low) and 21 MPa (high). Perform Cement Bond Log to determine cement top.	
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	13:00	13.00	13.00	WOE	PP		Wait on equipment.
13:00	13:30	0.50	13.50	Safety Mtg	PP		Held safety and operational meeting. Discuss job scope and program with all personal. Document & discuss expected daily operations, hazards & control measures. Review Site ERP and service providers JSA's.
13:30	19:00	5.50	19.00	WH / XT Ops	PP		Supervisor inspect site prior to start of operations. No signs of hydrocarbon staining on site. No signs of LEL of H2S at tombstone well marker.  Load and travel track hoe from to site. Unload track hoe.  Track hoe dig bell hole around wellhead to depth of 3.0 m. Locate well centre. Remove tombstone marker. Ensure proper slopping, stairway exit and spoil pile spacing from bell hole. Swept area around capped casings for LEL. None detected. None detected. Confirm reading with welder 4 Head Monitor.  "B" Certified Welder to perform operations. Cut away stitched (vent) weld 6.3 mm cap plate on top of Intermediate Casing # 1 and Surface Casing.  Re-dress Intermediate Casing # 1 stub and Surface Casing stub. Weld and centralize 224.5 mm Casing Collar on Intermediate Casing # 1.  Install bell hole perimeter flagging. Winterize and secure equipment on site for night.  SDFN
19:00	00:00	5.00	24.00	WOD	PP		Wait on daylight.




6:00 Update				
Start Time	End Time	Dur (hr)	Time Code	Operation Details
00:00	08:30	8.50		Wait on daylight.



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/25/2023**  
**Report #: 12**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					
<b>Other In Hole</b>											
Des			Icon	OD (mm)		Top Depth (mKB)		Btm (mKB)		Run Date	
Vented Steel Plate				222.5		10.80		10.86		2/3/2023 12:00	
Glacier (dirt) Tile				222.5		5.70		10.80		2/3/2023 12:00	
Glacier (dirt) Tile				339.7		5.70		10.80		2/3/2023 12:00	
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						5					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<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)				
Fresh Water	122.00	10.00	14.30	98.40	0.70	97.70					
Other			-1.00	1.00	0.00	1.00					
Produced Water	0.00	100.00	-100.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Partly Cloudy				-2		Ice/Snow					

## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/26/2023**  
**Report #: 13**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBTD (All) (mKB) Original Hole - 2,840.00		

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	

Job Information / AFE	
Objective	Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up
Target Formation	Arnica

Daily Pressures	
Subtype	P (kPa)
SICP	0

Operation Summary	
Operations Next Report Period	Wait on bond log interpretation to determine next step 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	08:30	8.50	8.50	WOD	PP		Wait on daylight.
08:30	09:00	0.50	9.00	Safety Mtg	PP		Held safety and operational meeting. Discuss job scope and program with all personal. Document & discuss expected daily operations, hazards & control measures. Review Site ERP and service providers JSA's.
09:00	15:00	6.00	15.00	WH / XT Ops	PP		Supervisor inspect site prior to start of operations. No signs of hydrocarbon staining, LEL or H2S at well centre in bell hole.  Picker load and travel complete C-02 wellhead with 244.5 mm x 3.0 m 64.73 kg/m L-80 casing and 339.7 mm x 3.0 m 81.10 kg/m J-55 casing. Ideal Testing crew assist thru day as labour crew.  Weld and level 244.5 mm x 2.2 m 64.73 kg/m L-80 Intermediate Casing # 1, Surface Casing 339.7 mm x 2.4 m 81.10 kg/m J-55 with Cameron 34.5 MPa Surface Casing Flange. Field estimate surface casing flange is same elevation as before cut n cap.  Backfill and tamp bell hole around well head.
15:00	16:00	1.00	16.00	PRESS	PP		Land primary seals in surface casing. Install and torque 339.7 mm x 244.5 mm Adapter Spool on wellhead. Test Primary Seals to 1.4 MPa (low) and 10 MPa (high). Held both 10 minutes.  Pump 2.2 m³ non-saline (fresh) water to fill 244.5 mm casing. Pressure test casing to 1.4 MPa (low) and 21 MPa (high). Held both tests 10 minutes.
16:00	20:30	4.50	20.50	WL Logs	PP		Rig in wireline equipment on 244.5 mm flange. Picker on site to hold sheave. Run in hole CCL / Radial Cement Evaluation Tool. Correlate on depth to surface casing shoe at 480 mKB. Ttag obstruction 1586.9 mKB. Log well from 1586.9 mKB to surface. Send log into calgary for further evaluation and correlation. Rig down electric line adapter flange and well control equipment. Rig down electric line unit.



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 1/26/2023**  
**Report #: 13**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					
<b>24 Hr Operational Comments</b>											
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details				
20:30	21:30	1.00	21.50	NU/ND WH/XT	PP		Install 244.5 mm x 34.5 MPa x 177.8 mm x 34.5 MPa Tubing Head and Dual Master 65 mm Upper Wellhead assembly.  Secure wellhead.  SDFN.				
21:30	00:00	2.50	24.00	WOD	PP		Wait on daylight.				
<b>Other In Hole</b>											
Des					Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date		
Vented Steel Plate						222.5	10.80	10.86	2/3/2023 12:00		
Glacier (dirt) Tile						222.5	5.70	10.80	2/3/2023 12:00		
Glacier (dirt) Tile						339.7	5.70	10.80	2/3/2023 12:00		
<b>Bill 30 Requirements (Head Count Only)</b>											
Type						Count					
Day Shift						12					
<b>Contractor Hours (Head Count &amp; Hours)</b>											
Type						Count		Reg Work Time (hr)			
<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)				
Fresh Water	124.20	10.00	14.30	100.60	0.70	99.90					
Other			-1.00	1.00	0.00	1.00					
Produced Water	0.00	100.00	-100.00								
<b>Weather &amp; Road Condition</b>											
Weather				T (°C)		Road Cond					
Partly Cloudy				-18		Ice/Snow					



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 2/3/2023**  
**Report #: 14**

API/UWI 300/N-65/6040-12245/00		Surface Legal Location N-65/6040-12245		Field Name Arrowhead		State/Province NorthWest Territories		Working Interest (%) 50		License # N1833	
Original KB Elevation (m) 574.60		Ground Elevation (m) 567.90		Casing Flange Elevation (m) 567.90		Tubing Head Elevation (m)		Well Configuration Type Vertical			
KB-Ground Distance (m) 6.70		KB-Tubing Head Distance (m)		Total Depth (mKB) 2,925.00		PBTD (All) (mKB) Original Hole - 2,840.00					

Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Surface	1/31/1998	480.00	6.70	473.30	339.7	320.3	81.105	J-55	
Intermediate	2/28/1998	1,890.00	6.70	1,883.30	244.5	222.5	64.735	L-80	
Prod Lnr 2	3/20/1998	2,856.00	2,300.00	556.00	139.7	124.2	25.299	L-80	
Open Hole	3/20/1998	2,925.00	2,856.00	69.00	152.4				
Prod Lnr 1	3/20/1998	2,529.00	1,723.00	806.00	177.8	159.5	38.692	N-80	

Zones / Event Sequence		
Zone Name	Zone Code	Current Status
Slave Point	/00	
Sulphur Point	/00	
Watt Mountain	/00	
Nahanni	/00	
Arnica	/00	

Job Information / AFE	
Objective Well Abandonment. Level II OROGO well that is compliant. Plan is to abandon this well bore when access to Arrowhead is opened up	
Target Formation Arnica	

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	08:00	8.00	8.00	WOD	PP		Wait on daylight.
08:00	08:30	0.50	8.50	Safety Mtg	PP		Held safety and operational meeting. Discuss job scope and program with all personal. Document & discuss expected daily operations, hazards & control measures. Review Site ERP and service providers JSA's.



## Daily ARO Operations

**Well: PARAMOUNT ET AL. ARROWHEAD N-65**  
**Pad: N-65/6040-12245**  
**Business Unit: Central and Other**  
**Rig: Precision Well Servicing 830**

**Report Date: 2/3/2023**  
**Report #: 14**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	Field Name Arrowhead	State/Province NorthWest Territories	Working Interest (%) 50	License # N1833
Original KB Elevation (m) 574.60	Ground Elevation (m) 567.90	Casing Flange Elevation (m) 567.90	Tubing Head Elevation (m)	Well Configuration Type Vertical	
KB-Ground Distance (m) 6.70	KB-Tubing Head Distance (m)	Total Depth (mKB) 2,925.00	PBTD (All) (mKB) Original Hole - 2,840.00		

### 24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
08:30	14:00	5.50	14.00	Cut/Cap	PP		<p>Load and travel track hoe from PRL 300/B-41-6040-12245/0 to site. Unload track hoe.</p> <p>No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Intermediate Casing # 1 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 1 m of 508 mm conductor. Cement between conductor and surface casing. Cut window in 339.7 mm Surface Casing and 244.5 mm Intermediate Casing #1. No surface cement between Surface Casing and Intermediate Casing #1 at surface. Cut 244.5 mm Intermediate Casing #1 at 3.2 m (10.8 mKB) and Surface Casing at 3.4 m (11.0 mKB) depth below surface casing flange.</p> <p>Remove wellhead from bellhole. Stitch (vent) weld 6.3 mm plate on top of Intermediate Casing # 1 and Surface Casing. Weld write 1833 on 244.5 mm Intermediate Casing # 1 cap.</p> <p>Back fill and tamp bellhole. Rough level surface ground.</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 1883 + Paramount Res Ltd + 60° 34'45.897" + 122°57'18.623" + NAD 27</p> <p>Cut n Cap job completed. Release contractors.</p> <p>Job completed.</p> <p>*** Adjust final costs as received***</p>
14:00	00:00	10.00	24.00	No Job Activity	PP		<p>Job completed.</p> <p>""NOTE" All final costs to be adjusted as received.</p>

### Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Vented Steel Plate		222.5	10.80	10.86	2/3/2023 12:00
Glacier (dirt) Tile		222.5	5.70	10.80	2/3/2023 12:00
Glacier (dirt) Tile		339.7	5.70	10.80	2/3/2023 12:00

### Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	3
Safety	3

### Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

### 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)
Fresh Water	124.20	10.00	14.30	100.60	0.70	99.90	
Other			-1.00	1.00	0.00	1.00	
Produced Water	0.00	100.00	-100.00				

### Weather & Road Condition

Weather	T (°C)	Road Cond
Partly Cloudy	-16	Ice/Snow









## Tubing and Rods (Schematic)

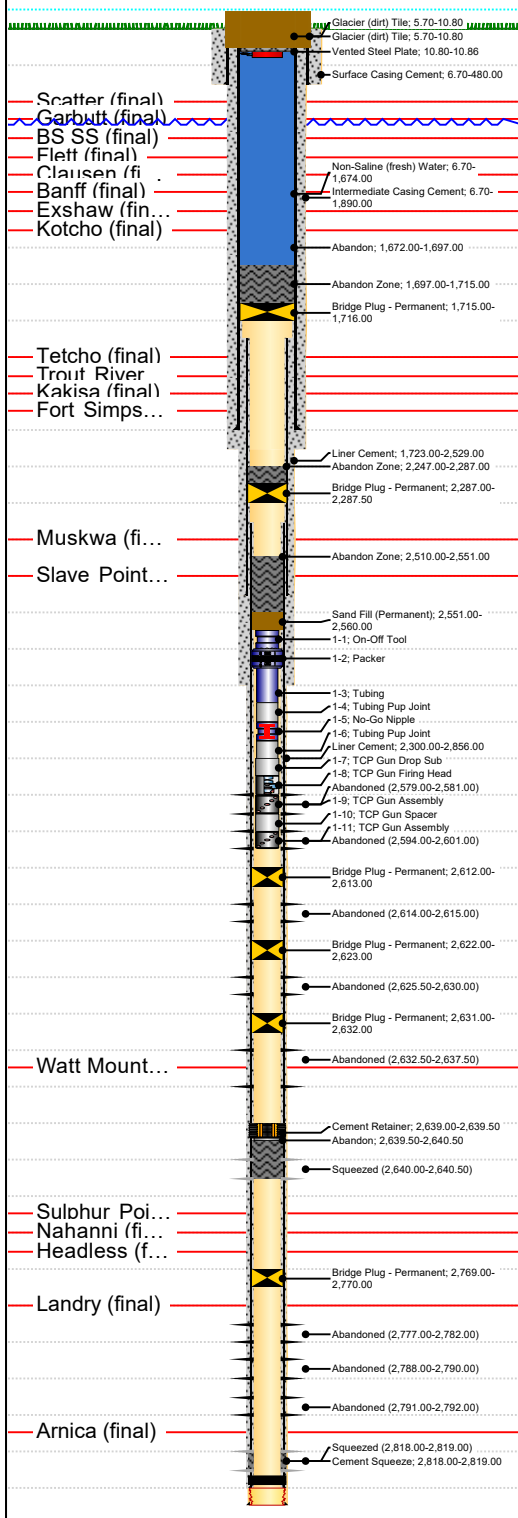
**Paramount**  
resources ltd.

Well Name: **PARAMOUNT ET AL. ARROWHEAD N-65**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	License # N1833	Field Name Arrowhead	State/Province NorthWest Territories
Well Configuration Type Vertical	Original KB Elevation (m) 574.60	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	KB-Tubing Head Distance (m)

Vertical, Original Hole, 2/7/2023 8:38:23 AM

Vertical schematic (actual)



### Tubing - Secondary Production set at 2,601.00mKB on 3/22/1998 00:00

Des Tubing - Secondary Production	Set Depth (mKB) 2,601.00	Run Date 3/22/1998	Lateral Position	Pull Date	Cut/Pull Date	Depth Cut/Pull (...)
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Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-1	On-Off Tool		0.50	98.0	58.7		L-80	2,560.00	2,560.50

Comment  
On/Off with 58.7 mm "X" Profile

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-2	Packer		2.12	124.2	62.0		L-80	2,560.50	2,562.62

Comment  
PQDH Double Grip Packer

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-3	Tubing	1	9.40	88.9	62.0		L-80	2,562.62	2,572.02

Comment  
Joint Tubing

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-4	Tubing Pup Joint	1	3.10	88.9	62.0		L-80	2,572.02	2,575.12

Comment  
Pup Joint Tubing

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-5	No-Go Nipple		0.40	88.9	57.4		L-80	2,575.12	2,575.52

Comment  
57.4 mm "XN" No-Go Nipple

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-6	Tubing Pup Joint	1	2.48	88.9	62.0		L-80	2,575.52	2,578.00

Comment  
Pup Joint Tubing

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-7	TCP Gun Drop Sub		0.50	98.0	62.0			2,578.00	2,578.50

Comment  
TCP Drop Sub

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-8	TCP Gun Firing Head		0.50	98.0	62.0			2,578.50	2,579.00

Comment  
TCP Fire Head

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-9	TCP Gun Assembly		2.00	98.0	62.0			2,579.00	2,581.00

Comment  
TCP Gun Assembly

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-10	TCP Gun Spacer		13.00	98.0	62.0			2,581.00	2,594.00

Comment  
TCP Gun Spacer

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-11	TCP Gun Assembly		7.00	98.0	62.0			2,594.00	2,601.00

Comment  
TCP Gun Assembly

Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade	Top (mKB)	Btm (mKB)
1-12	TCP Gun Assembly		7.00	98.0	62.0			2,601.00	2,608.00

Comment  
TCP Gun Assembly

### Other In Hole

Description	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date
Sand Fill (Permanent)		124.2	2,551.00	2,560.00	3/22/1998 00:00	

Comment  
OK

Description	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date	Mill/Pull Date
Bridge Plug - Permanent		124.2	2,769.00	2,770.00	3/22/1998 12:00	

Comment  
OK



## Tubing and Rods (Schematic)

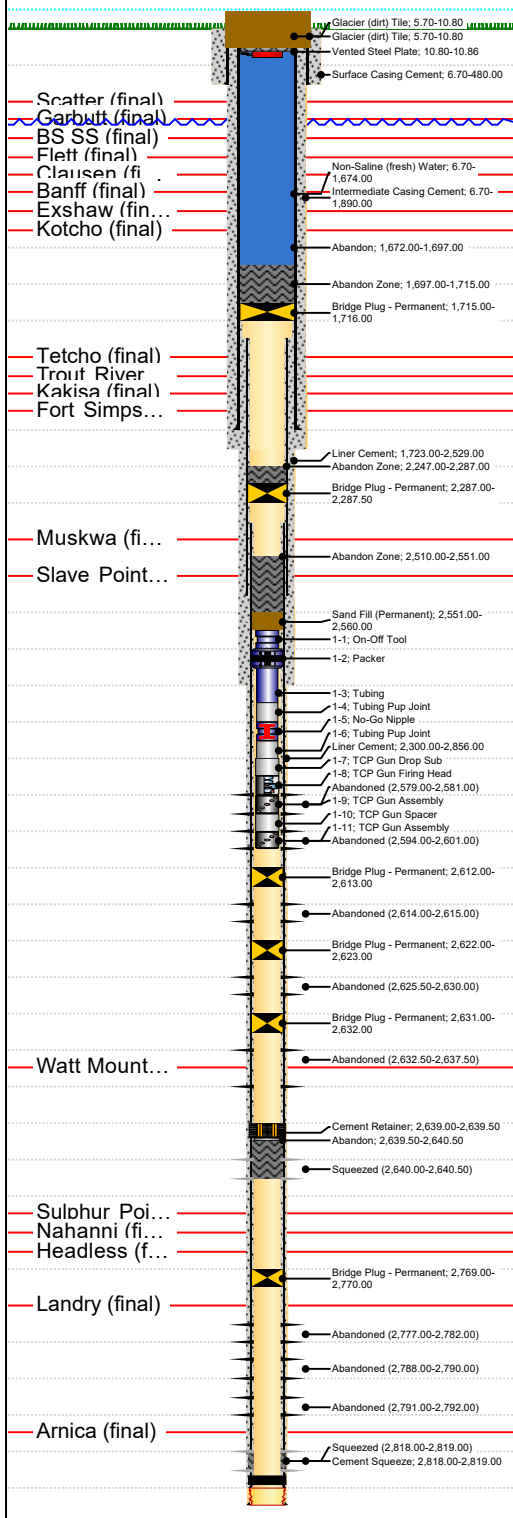
**Paramount**  
resources ltd.

Well Name: **PARAMOUNT ET AL. ARROWHEAD N-65**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	License # N1833	Field Name Arrowhead	State/Province NorthWest Territories
Well Configuration Type Vertical	Original KB Elevation (m) 574.60	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	KB-Tubing Head Distance (m)

Vertical, Original Hole, 2/7/2023 8:38:26 AM

Vertical schematic (actual)



### Other In Hole

Description Bridge Plug - Permanent		OD (mm) 124.2	Top Depth (mKB) 2,631.00	Btm (mKB) 2,632.00	Run Date 3/22/1998 12:00	Mill/Pull Date
Comment OK						
Description Bridge Plug - Permanent		OD (mm) 124.2	Top Depth (mKB) 2,622.00	Btm (mKB) 2,623.00	Run Date 3/22/1998 12:00	Mill/Pull Date
Comment OK						
Description Cement Retainer		OD (mm) 124.2	Top Depth (mKB) 2,639.00	Btm (mKB) 2,639.50	Run Date 3/22/1998 12:00	Mill/Pull Date
Comment OK						
Description Bridge Plug - Permanent		OD (mm) 124.2	Top Depth (mKB) 2,612.00	Btm (mKB) 2,613.00	Run Date 3/22/1998 12:00	Mill/Pull Date
Comment OK						
Description Bridge Plug - Permanent		OD (mm) 159.0	Top Depth (mKB) 2,287.00	Btm (mKB) 2,287.50	Run Date 3/22/1998 12:00	Mill/Pull Date
Comment OK						
Description Bridge Plug - Permanent		OD (mm) 222.5	Top Depth (mKB) 1,715.00	Btm (mKB) 1,716.00	Run Date 2/13/2009 16:00	Mill/Pull Date
Comment OK						
Description Non-Saline (fresh) Water		OD (mm) 222.5	Top Depth (mKB) 6.70	Btm (mKB) 1,674.00	Run Date 1/10/2023 14:00	Mill/Pull Date
Comment OK						
Description Vented Steel Plate		OD (mm) 222.5	Top Depth (mKB) 10.80	Btm (mKB) 10.86	Run Date 2/3/2023 12:00	Mill/Pull Date
Comment OK						
Description Glacier (dirt) Tile		OD (mm) 222.5	Top Depth (mKB) 5.70	Btm (mKB) 10.80	Run Date 2/3/2023 12:00	Mill/Pull Date
Comment OK						
Description Glacier (dirt) Tile		OD (mm) 339.7	Top Depth (mKB) 5.70	Btm (mKB) 10.80	Run Date 2/3/2023 12:00	Mill/Pull Date
Comment OK						

### Perforation Statuses

Top (mKB)	Top (TVD) (mKB)	Btm (mKB)	Btm (TVD) (mKB)	Date	Status
2,579.00		2,581.00		1/10/2023	Abandoned
2,594.00		2,601.00		1/10/2023	Abandoned
2,614.00		2,615.00		1/10/2023	Abandoned
2,625.50		2,630.00		1/10/2023	Abandoned
2,632.50		2,637.50		1/10/2023	Abandoned
2,640.00		2,640.50		3/22/1998	Squeezed
2,777.00		2,782.00		1/9/2023	Abandoned
2,788.00		2,790.00		1/9/2023	Abandoned
2,791.00		2,792.00		1/9/2023	Abandoned
2,818.00		2,819.00		3/20/1998	Squeezed



## Tubing and Rods (Schematic)

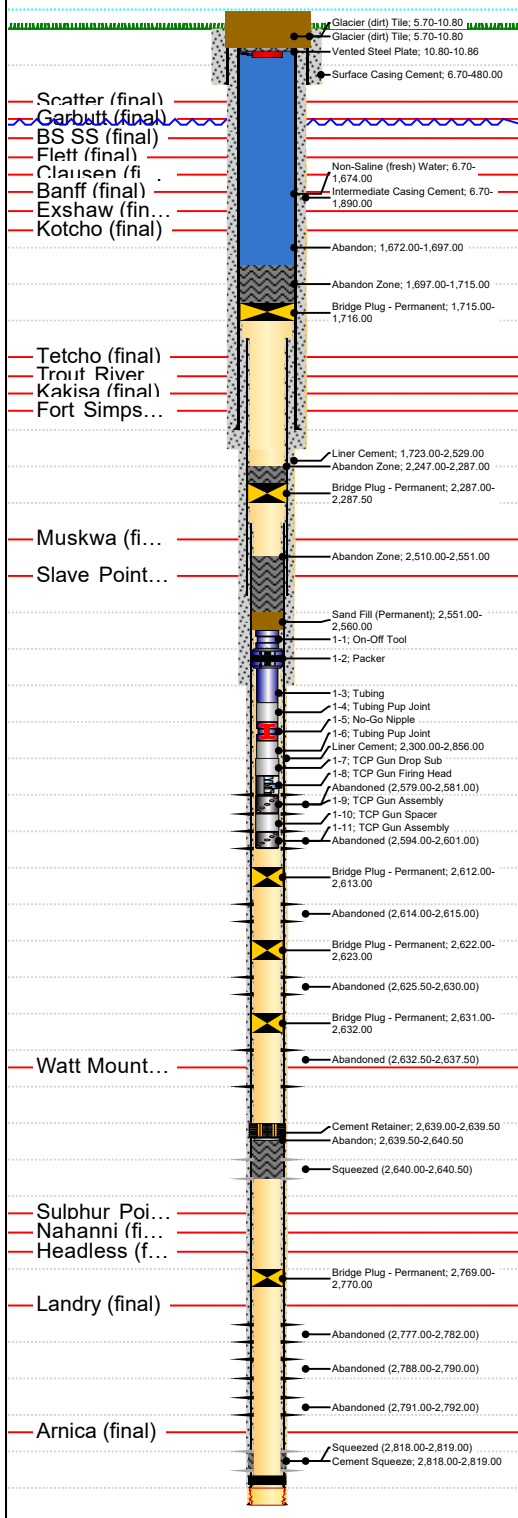
**Paramount**  
resources ltd.

**Well Name: PARAMOUNT ET AL. ARROWHEAD N-65**

API/UWI 300/N-65/6040-12245/00	Surface Legal Location N-65/6040-12245	License # N1833	Field Name Arrowhead	State/Province NorthWest Territories
Well Configuration Type Vertical	Original KB Elevation (m) 574.60	KB-Ground Distance (m) 6.70	KB-Casing Flange Distance (m) 6.70	KB-Tubing Head Distance (m)

Vertical, Original Hole, 2/7/2023 8:38:28 AM

Vertical schematic (actual)



### Cement Stages

Type	Subtype	String	Des	End Date	Top (mKB)	Btm (mKB)
Squeeze		Prod Lnr 2, 2,856.00mKB	Cement Squeeze		2,818.00	2,819.00
Plug		Prod Lnr 1, 2,529.00mKB	Abandon Zone		2,247.00	2,287.00
Plug		Intermediate, 1,890.00mKB	Abandon Zone		1,697.00	1,715.00
Plug		Prod Lnr 2, 2,856.00mKB	Abandon Zone		2,510.00	2,551.00
Plug		Prod Lnr 2, 2,856.00mKB	Abandon Zone		2,639.50	2,640.50
Plug		Intermediate, 1,890.00mKB	Abandon Zone		1,672.00	1,697.00