



## Well Operations Report

**Well Name:** NETLA C-07  
**UWI:** 300/C-07-60.50-122.45/00  
**License #:** WID0191  
**Field:** FT LIARD (5501)  
**Profile:** Vertical  
**Zone:** Slave Point  
**Class:** Level I

CNRL has performed the well abandonment operations within the last 30 days for this well as outlined in the approved program. Included in this document are the daily reports, and a wellbore schematic of the current state of the well. Additional documentation will follow in the summer once a gas migration test is complete with a change of well status form, and pictures of the cut and capped wellbore.

Please advise if any additional information is required

Thank you,  
Canadian Natural Resources Limited

A handwritten signature in black ink, appearing to read "T. Bernhard".

Terran Bernhard, P.Eng.  
Abandonment Engineer



## Canadian Natural

## Downhole Schematic (Gov't Submission)

## SUN NETLA C-07

Current Event (UWI) 300/C-07-60.50-122.45/00		Surface Legal Location 300/C-07-60.50-122.45		License # NT000191		Field Name FT LIARD			Province N.W.T										
Well Profile Vertical		Fluid Type Deep Gas		Original KB Elevation (m) 615.40		KB-Ground Distance (m) 4.40	KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)											
Latitude (°) 64° 15' 27" N	Longitude (°) 122° 46' 17.713" W	Orig Spud Date 1/20/1961		Orig RR Date 3/22/1961	C&C Date 2/11/2023	GW Protected? No	BGWP (mKB) 604.40	Oilsand Area No											
Directions To Well North of Ft. Liard on NWT Hwy #7 to KM Marker #92, right (east) 40 km to location on winter road. From Ft. Nelson, North on Alaska hwy to mile 317 turnoff. Right to Ft. Liard. 67 km North on Ft. Simpson Hwy #7. Right and follow seismic line 33 km								H2S Classification Sour											
Vertical - Original Hole, 3/3/2023 2:20:25 PM					SCVF & GM Tests (Last 2 Records)														
MD (mKB)	TVD (mKB)	Vertical schematic (actual)			Test Date 1/31/2023	Test Type SCVF	Failed?												
					2/3/2023	SCVF	No												
Openhole Information																			
Section Des		Size (mm)		Top (mKB)		Bottom (mKB)													
Surface		444.5		4.40		294.00													
Intermediate 1		229.0		294.00		2,369.80													
Casing Strings																			
Csg Des			OD (mm)	Wt/Len (kg/m)	Grade	Top (mKB)	Set Depth (MD) (mKB)												
Surface			339.7	81.105	J-55	6.40	296.00												
Production			139.7	23.067	J-55	6.40	2,268.00												
Cement Stages																			
Description		Cementing Start Date		Top Depth (mKB)		Btm (mKB)	Vol Cement Re...												
Surface Cement		2/3/2023		6.40		294.00	0.10												
Comment																			
800 sxs A + 2.0% CaCl2, cement to surface																			
Description		Cementing Start Date		Top Depth (mKB)		Btm (mKB)	Vol Cement Re...												
Production Cement		2/2/2023		1,425.00		2,266.00	0.00												
Comment																			
700 sxs A , TOC est'd at 1425mKB.																			
Description		Cementing Start Date		Top Depth (mKB)		Btm (mKB)	Vol Cement Re...												
Thermal Cement Plug		2/2/2023		1,845.80		1,925.80													
Comment																			
Circulated 1m3 (80 Lineal Meters) Thermal 40 Cement On Bridge Plug																			
Description		Cementing Start Date		Top Depth (mKB)		Btm (mKB)	Vol Cement Re...												
Thermal Cement Plug		2/3/2023		581.80		596.80													
Comment																			
200L (15 Lineal Meters) Thermal 40 Cement On Retainer																			
Description		Cementing Start Date		Top Depth (mKB)		Btm (mKB)	Vol Cement Re...												
Remedial Cement		2/3/2023		604.00		605.00													
Comment																			
13.80 m3 Pumped																			
Perforations																			
Zone			Top (mKB)		Btm (mKB)		Current Status												
Remedial, Original Hole			604.00		605.00		Squeezed												
Slave Point, Original Hole			1,950.40		1,962.00		Abandoned												
Slave Point, Original Hole			1,953.10		1,966.60		Abandoned												
Slave Point, Original Hole			2,113.40		2,121.30		Abandoned												
Slave Point, Original Hole			2,194.40		2,203.60		Abandoned												
Tubing Strings																			
Tubing - Production set at 1,943.28mKB on 2/14/1999 00:00																			
Tubing Description					String Max N...	Wt (kg/m)	String Grade												
Tubing - Production					73.0	9.673	L-80												
Comment																			
Extended neck tubing hanger tested to 21 MPa - 04-Feb-1999																			
Packer pressure tested to 14 MPa for 15 minutes - 14-Feb-1999																			
Tubing Components																			
Item #	Jts	Item Des	OD (mm)	ID (mm)	Len (m)	Top (mKB)	Btm (mKB)												
1-1	1	Tubing - NSCT L-80	88.9	76.0	0.70	1,927.46	1,928.16												
1-2	1	Cross Over 88.9 x 73.0mm - NSCT...	88.9	62.0	0.15	1,928.16	1,928.31												
1-3	1	Tubing Pup Joint L-80	73.0	62.0	3.10	1,928.31	1,931.41												
1-4	1	X Nipple 58.75mm L-80	73.0	58.8	0.37	1,931.41	1,931.78												
1-5	1	Tubing Pup Joint - L-80	73.0	62.0	2.89	1,931.78	1,934.67												
1-6	1	Baker L-80 VAM Cross Over 73 x 60...	73.0	62.0	0.14	1,934.67	1,934.81												
1-7	1	Baker L-10 On-Off Tool 58.75mm X	114.3	58.8	0.71	1,934.81	1,935.52												
1-8	1	E-22 Seal Assembly	101.6	62.0	0.23	1,935.52	1,935.75												
1-9	1	Baker FB-1 Packer	115.2	76.3	0.75	1,935.75	1,936.50												
1-10	1	Tubing Pup Joint	73.0	62.0	2.90	1,936.50	1,939.40												

**Canadian Natural****Downhole Schematic (Gov't Submission)****SUN NETLA C-07**

Current Event (UWI)	Surface Legal Location	License #	Field Name	Province						
300/C-07-60.50-122.45/00	300/C-07-60.50-122.45	NT000191	FT LIARD	N.W.T						
Well Profile	Fluid Type	Original KB Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)						
Vertical	Deep Gas	615.40	4.40	KB-Tubing Head Distance (m)						
<hr/>										
<b>Vertical - Original Hole, 3/3/2023 2:20:27 PM</b>										
MD (mKB)	TVD (mKB)	Vertical schematic (actual)								
6.3										
10.0										
296.0										
581.8										
597.3										
604.0										
605.0										
625.0										
1,039.0										
1,167.4										
1,816.4										
1,901.0										
1,926.3										
1,928.2										
1,930.0										
1,931.8										
1,934.7										
1,935.5										
1,935.8										
1,939.4										
1,940.1										
1,943.3										
1,953.1										
1,966.6										
2,103.4										
2,113.4										
2,142.6										
2,154.1										
2,203.6										
2,265.5										
2,268.0										
2,369.8										
<hr/>										
<b>Tubing Components</b>										
Item #	Jts	Item Des	OD (mm)	ID (mm)	Len (m)	Top (mKB)	Btm (mKB)			
1-11	1	QX Nipple	73.0	58.8	0.32	1,939.40	1,939.72			
1-12	1	Underbalance Disk	73.0	62.0	0.34	1,939.72	1,940.06			
1-13	1	Perforated Pup Joint	73.0	62.0	2.89	1,940.06	1,942.95			
1-14	1	QXN Nipple & Re-Entry Guide	82.0	56.0	0.33	1,942.95	1,943.28			
<hr/>					<b>Other In Hole</b>					
Des	Run Date	Pull Date	Top (mKB)	Btm (mKB)						
Cameron BPV (for visual)	3/20/2002	1/30/2023	4.10	4.30						
Inhibited Water (0.6% Baker MEP 426)		1/31/2023	4.40	1,935.75						
Steel plate welded to centralizer	2/11/2023		6.35	6.40						
Fresh Water	1/31/2023		10.00	1,845.80						
Thermal Cement Plug	2/3/2023		581.80	596.80						
Cement Retainer	2/3/2023		596.80	597.30						
Thermal Cement Plug	2/2/2023		1,845.80	1,925.80						
Cement Plug	3/21/1990	2/7/1999	1,915.00	1,925.00						
Guib Charger BP - Perm - tested 14 MPa 15 mins	3/21/1990	2/7/1999	1,925.00	1,925.50						
Kappa 10k Permanent Bridge Plug	2/1/2023		1,925.80	1,926.30						
2.31" PX Plug	3/30/2002		1,934.60	1,935.60						
Cement Plug	3/14/1990		2,092.30	2,103.40						
Baker FB-1 Packer - pushed	2/7/1999	2/12/1999	2,098.11	2,099.00						
Bridge Plug - Permanent	3/14/1990		2,103.40	2,104.10						
Cement Plug	3/14/1990		2,142.60	2,153.40						
Bridge Plug - Permanent	3/14/1990		2,153.40	2,154.10						
Plug Back	3/21/1961		2,260.00	2,266.00						
Cement Plug	3/15/1961		2,338.10	2,369.80						
<hr/>					<b>Formation Tops</b>					
Formation Name	Top (mKB)	Com								
Glaucconitic Ss.	494.00	porous 494-516 mKB, 529-537 mKB								
Banff	601.00	Tight								
Base Ground Water	604.40	OROGO default								
Exshaw	621.80	Tight								
Kotcho	625.00	Tight								
Tetcho	972.99	Tight								
Trout River	1,039.00	Tight								
Kakisa	1,140.00	Tight								
Fort Simpson	1,167.40	Tight								
Muskwa	1,901.00	Tight								
Slave Point	1,930.00	Porous								
Pre-Devonian Quartzite	2,265.50	Tight								



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## Daily Service Report (Gov't Submissions)

## SUN NETLA C-07

## Job: Abandonment Report #: 1.0

1/23/2023 07:12 to

Current Event (UWI) 300/C-07-60.50-122.45/00		Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T	
WI (%) 100.00	Objective				Plug Back Depth (mKB)	
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa)	Tubing Pressure (kPa)	Set Depth (MD) (mKB)
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Road Condition	Weather	Temperature (°C)

## Daily Activities

## Morning Ops @ 7am

## Daily Operations Summary

## Time Log

Start Time	Dur (hr)	Com

## Perforations Summary

## Daily Fluids Summary



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## Daily Service Report (Gov't Submissions)

## SUN NETLA C-07

Job: Abandonment  
Report #: 2.0

1/30/2023 08:30 to 1/30/2023 18:00

Current Event (UWI) 300/C-07-60.50-122.45/00		Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective				Plug Back Depth (mKB)
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 14,000	Tubing Pressure (kPa) 14,000
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Road Condition Rough	Set Depth (MD) (mKB)

## Daily Activities

Morning Ops @ 7am

WL: Jet Cut Tubing

Daily Operations Summary

Move in rig and equipment from A-68 Pad. Spotted 400 bbl tank, P-Tank, flare Stack, tubing catwalk and boiler. Spot rig matting and rig up PD 829 service rig, Rig in pump / tank and testers. Unloaded 50 m3 fresh water in 400 bbl tank. Check Wellhead Pressures, Bleed Casing Down Through Testers (14,000 kpa) Flare Off, Remove BPV, Bleed tubing Off Through Testers (14,000 kpa) Flare Off, Stump Test BOPs, Remove Wellhead, Install BOPs, PT Casing And Packer To 7 Mpa (Good), PT Tubing To 7 Mpa (Good), Rig In Working Floor And Pipe Handling Equipment. Multiple Attempts Made To Release On/Off Without Success.

## Time Log

Start Time	Dur (hr)	Com
08:30	1.50	08:30 - 10:00 Hrs - Move rig and equipment from A-68 Pad, spot equipment at lease entrance, complete lease walk around and check for hazards (Good). Talley from well center and move in 1 piece of equipment at a time. Spot doghouse and WSS shack, move in and spot pump / tank and 400 bbl, spot boiler, P-tank and flare stack.
10:00	3.00	10:00 - 13:00 Hrs - Pack up qualified worker and air hand, check well pressures ( 14,000 kpa tbg - 14,000 kap csg) No signs of H2S. Spot tubing catwalk and rig matting. Rig in pump & tank, boiler, P-tank and flare stack. Back in and spot rig 829 on jacks. Complete level 1 inspection on mast raising components, stand and scope mast. Ensure all OROGO, CNRL, OHS and company specific regulations are followed. Complete site supervisor walk around.
13:00	1.00	13:00 - 14:00 Hrs - Hold PJSM with Streamflo, Rig in kill line from casing to P-Tank and stack, bleed back and flare off casing gas (0.50 Dec), Back in and spot streamflo unit. Rig in stream flow, remove BPV from tubing, Rig out stream flo, tie kill line onto tubing, bleed and flare off tubing gas (2.0 Dec). Well dead.
14:00	2.50	14:00 - 16:30 Hrs - Back in and spot 5 ton to well. Tie pump line into test stump, complete pressure test pipe rams, blind rams, annular, working spool and stabbing valve (1.4 Mpa low - 34 Mpa High), all tests good 10 mins each. Break down and remove wellhead, install strip on pup c/w stabbing valve, pickup and strip on BOPs. Secure BOPs to wellhead. Tie pump line into working spool, fill hole and pressure test casing and packer to 7 Mpa for 10 mins (start 7111 kpa - finish 7009 kpa), Tie into tubing, fill and PT to 7 Mpa for 10 mins (start 7202 kps - finish 7188 kpa) Good test. Rig out pump line. ****Shut In Well And Monitored Buildup While P-Testing And Installing BOPs, No Buildup****
16:30	1.00	16:30 - 17:30 Hrs - Rig in working floor, handrails, tongs and pipe handling equipment. Rig up catwalk stairs to working floor. Function test ram saver, crown saver, air horn and e-kills. Remove leg screws and pull tubing hanger free @ 24 dan. Make multiple attempts to release On/Off without success. Re-land tubing hanger.
17:30	0.50	17:30 - 18:00 Hrs - Install tarps and heater on BOPs, shut, cap and secure well. Clean up tools, winterize equipment. SDFN.

## Perforations Summary

Date	Zone	Top (mKB)	Btm (mKB)	Type	Com
4/1/1961 00:00	Slave Point, Original Hole	1,950.40	1,962.00	Perforated	
2/13/1999 00:00	Slave Point, Original Hole	1,953.10	1,966.60	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,113.40	2,121.30	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,194.40	2,203.60	Perforated	

## Daily Fluids Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
Fresh Water				Jeffrey Willick	Abandonment Ops Mgr.
				Dale Duffy	Superintendent
				Mike Hamer	Wellsite Supervisor
				Contractor Precision Well Servicing	Rig Number 829
				Rig Manager Anthony Klimm	



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## Daily Service Report (Gov't Submissions)

## SUN NETLA C-07

Job: Abandonment  
Report #: 3.0

1/31/2023 07:00 to 1/31/2023 17:30

Current Event (UWI) 300/C-07-60.50-122.45/00		Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective				Plug Back Depth (mKB)
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0	Tubing Pressure (kPa) 0
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Road Condition Good	Set Depth (MD) (mKB) -20 Weather Clear Temperature (°C) -20

## Daily Activities

Morning Ops @ 7am
WL: RT Gauge Ring, Run / Set / Test PBP, Complete RBL
Daily Operations Summary MIRUWL, RT Gauge Ring To 1928 mkb (88.9 mm - 73.0 mm XO), RIH Jet Cutter, Correlate Onto Depth, Cut Tubing @ 1927.50 mkb. ROMOWL. Tubing Pulling Free @ 28 Dan. Break Out Tubing Hanger, Circulate To Fresh With 28 m3 Fresh Water, POOH 204X88.9 mm Coated Tubing To Catwalk. Change Over To 73.0 mm Pipe Handling Equipment And Pipe Rams.

## Time Log

Start Time	Dur (hr)	Com
07:00	0.50	07:00 - 07:30 Hrs - Complete a detailed Safety MTG with PWS (Service Rig Crew), Skyline, and United safety. Review CNRL, PWS, Skyline, United Safety Policy's & Procedures, Review Transportation of injured worker Plan. Fire & Explosion Plan, Medic Locations, Ensure OROGO, OHS, CNRL, Policies are followed. Review CNRL 4-Pillars/KPI's, Review site specific Job details/JSA's, Detailed discussion on Focus on safety (Line Of Fire). Sweep lease and wellhead area for LEls and H2S, lease clear.
07:30	0.50	07:30 - 08:00 Hrs - Pack up tester and air hand. Check wellhead pressures ( 0 kpa tbg - 0 kpa csg), No signs of H2S. No pressure buildup on either side overnight. Heat wellhead and pump lines, open well, function test ram saver, crown saver, air horn, e-kills and all safety devices. Prep for wireline.
08:00	2.50	8:00 - 10:30 Hrs - Hold PJSM with Eclipse Wireline. MU 70 mm gauge ring, lower blocks and pull 4 dan over string (32 Dan total) rig in wireline BOP and lube. RIH gauge ring to 1928 mkb(top of 88.9 mm - 73.0 mm XO). Surfaced wireline and gauge ring. OROGO approval confirmed for cutting depth and BP setting depth. MU 60.3 mm jet cutter, Pickup, RIH and corolate onto dept @ 1927.50 mkb, Set off charges and cut tubing. Surface wireline and cutter, rig out lube and BOP laying out on catwalk. ROMOWL. Pull up on tubing string, pulling free at 28 dan.  ****Tools jumped after firing charge, pulled heavy for 50 m, Wireline was kinked upon surfacing tools, cut off 100 m of line and replaced cable head****
10:30	1.50	10:00 - 11:30 Hrs - Rig pump line onto casing and testers to tubing. Spot tanker and tie into P-Tank. Pumped a total of 28 m3 reverse circulating well to fresh water. Rig out pump lines and tanker. Recovered 28 m3 back to tanker. Complete 10 min bubble test, no bubbles detected. Perform GM testing as per CNRL procedure. No GM detected at time of testing.
12:00	5.50	11:30 - 17:00 Hrs - POOH production tubing string to catwalk as follows: 1X88.9 mm Coated tubing, 4X88.9 mm Coated pups, 202X88.9 mm Coated tubing + 8.64 m of cut off Coated tubing. Clear working floor. Change over pipe handling equipment and piupe rams to 73 mm.
17:30	0.50	17:00 - 17:30 Hrs - Shut, cap and secure well, clean up tools and work area, winterize equipment. SDFN.

## Perforations Summary

Date	Zone	Top (mKB)	Btm (mKB)	Type	Com
4/1/1961 00:00	Slave Point, Original Hole	1,950.40	1,962.00	Perforated	
2/13/1999 00:00	Slave Point, Original Hole	1,953.10	1,966.60	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,113.40	2,121.30	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,194.40	2,203.60	Perforated	

## Daily Fluids Summary

Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Operational Supervisors	
				Contact	Title
Fresh Water	28.00	0.00	28.00	Jeffrey Willick	Abandonment Ops Mgr.
Other	0.00	28.00	-28.00	Dale Duffy	Superintendent
				Mike Hamer	Wellsite Supervisor
				Contractor Precision Well Servicing	Rig Number 829
				Rig Manager Anthony Klimm	



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## Daily Service Report (Gov't Submissions)

## SUN NETLA C-07

Job: Abandonment  
Report #: 4.0

2/1/2023 07:00 to 2/1/2023 18:30

Current Event (UWI) 300/C-07-60.50-122.45/00	Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Tubing Pressure (kPa) 0

## Daily Activities

Morning Ops @ 7am

SR: Finish Running Work String

Daily Operations Summary

MIRUWL, RT 128 mm Gauge Ring To 1927.50 mkb (cut tubing top), MU And RIH Kappa 10k PBP, Correlate Onto Depth, Set With CE @ 1926 mkb, Surface Setting Tool, PT PBP To 7 Mpa 10 Mins (Start 7323 kpa - Finish 7288 kpa), Good Test. Complete RBL From 1925 mkb To Surface, Send Logs To Calgary For Interpretation, ROMOWL, Land Tubing Hanger, PT Pipe Rams, RIH 130X73.0 mm Tubing.

## Time Log

Start Time	Dur (hr)	Com
07:00	0.50	07:00 - 07:30 Hrs - Complete a detailed Safety MTG with PWS (Service Rig Crew), Skyline, and United safety. Review CNRL, PWS, Skyline, United Safety Policy's & Procedures, Review Transportation of injured worker Plan. Fire & Explosion Plan, Medic Locations, Ensure OROGO, OHS, CNRL, Policies are followed. Review CNRL 4-Pillars/KPI's, Review site specific Job details/JSA's, Detailed discussion on Focus on safety (Line Of Fire) and working in cold weather. Sweep lease and wellhead area for LELs and H2S, lease clear.
07:30	0.50	07:30 - 08:00 Hrs - Pack up tester and air hand. Check wellhead pressures ( 0 kpa tbg - 0 kpa csg), No signs of H2S. No pressure buildup on either side overnight. Heat wellhead and pump lines, open well, function test ram saver, crown saver, air horn, e-kills and all safety devices. Prep for wireline.
08:00	2.75	08:00 - 10:45 Hrs - Hold pre-job safety meeting with Eclipse wireline. Spot equipment. install flange and BOPs. Make up 128 mm Gauge ring. Pick up, place in hole and Install lubricator. Flag and cone off No Go zones. RIH gauge ring to 1927.50 mkb (cut tubing top). Pull strip to correlate to Baker Gamma Log dated Feb 9 1999. Surface gauge ring, Make up, arm and RIH 125.9 mm Kappa Permanent 10k BP. RIH to 1927.50 mkb, Pull pass and Coorolate plug onto depth, set BP with CE @ 1926 mkb (top @ 1925.80 mkb - Bottom @ 1926.30 mkb), surface wireline, Rig out BOP, flange and wireline unit.
10:45	0.50	10:45 - 11:15 Hrs - Tie pump line into working spool, fill hole with 3m3 fresh water. Pressure up to 7 MPa for 10 mins. Start 7323 kpa - finish 7288 mkb. Good test. Bleed back pressure, remove pump line. blow lines dry and winterize.
11:15	4.00	11:15 - 15:15 Hrs - Make up multiplex RBL tool. Pick up, place in hole and Install lubricator. Flag and cone off No Go zones. RIH RBL tool high speed pass to 1925.80 mkb (top of Bridge plug), pull pass and correlate to Baker gamma CCL log dated Feb 9 1993. Actual depth is 1925 mkb, Perform main pass out of hole from 1925 mkb to surface @ 13 m/min. BH Temp is 115 degrees. Rig out BOP, flange, lube and wireline unit. Logs sent to Calgary for Interpretation.
15:15	0.50	15:15 - 15:45 Hrs - Pick up tubing hanger complete with 10 foot 73 mm pup joint, land hanger, tie pump line into working spool. Complete pressure test on pipe rams. (1.4 Mpa low - 21 Mpa high) 10 mins each. Good tests. Bleed back pressure, Open rams and remove tubing hanger.
15:45	2.75	15:45 - 18:30 Hrs - Talley work string off catwalk. RIH open ended with 130X73 mm tubing. Started displacing on joint 30, tie in pump line and suck back while tripping remaining tubing.
18:30	0.50	18:30 - 19:00 Hrs - Install TIW valve, shut cap and secure well, clean tools, plug in and winterize equipment. SDFN.

## Perforations Summary

Date	Zone	Top (mKB)	Btm (mKB)	Type	Com
4/1/1961 00:00	Slave Point, Original Hole	1,950.40	1,962.00	Perforated	
2/13/1999 00:00	Slave Point, Original Hole	1,953.10	1,966.60	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,113.40	2,121.30	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,194.40	2,203.60	Perforated	

## Daily Fluids Summary

Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Operational Supervisors	
				Contact	Title
Fresh Water	3.00	0.00	31.00	Jeffrey Willick	Abandonment Ops Mgr.
Other	0.00	0.00	-28.00	Dale Duffy	Superintendent
				Mike Hamer	Wellsite Supervisor
				Contractor Precision Well Servicing	Rig Number 829
				Rig Manager Anthony Klimm	



Canadian Natural

## Daily Service Report (Gov't Submissions)

## SUN NETLA C-07

Job: Abandonment  
Report #: 5.0

2/2/2023 07:00 to 2/2/2023 15:00

Current Event (UWI) 300/C-07-60.50-122.45/00		Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective				Plug Back Depth (mKB)
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0	Tubing Pressure (kPa) 0
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Road Condition Good	Weather Cloudy

## Daily Activities

Morning Ops @ 7am
WL: Shoot Perf Interval
Daily Operations Summary
RIH Remaining 72X73 mm Tubing Off Catwalk, Tag PBP And Pull Up 0.50 m, MIRU C&A Unit. Pre-Flush 500L Fresh Water, Pressure Test Surface Equipment to 14 Mpa, Batch Mix And Pump 1m3 Thermal 40 Blend @1800 kg/m3. Circulated To Bottom With 5.2 m3 Fresh Water To Balance. (80 Lineal meters) TOC = 1845.80 mkb, Pulled 10 Joints And Backwash Tubing With 1.5XTubing Volume. POOH 140X73mm Tubing To Catwalk, Stand 31 Stands In Tubing Board.

## Time Log

Start Time	Dur (hr)	Com
07:00	0.50	07:00 - 07:30 Hrs - Complete a detailed Safety MTG with PWS (Service Rig Crew). Review CNRL, PWS Safety Policy's & Procedures, Review Transportation of injured worker Plan. Fire & Explosion Plan, Medic Locations, Ensure OROGO, OHS, CNRL, Policies are followed. Review CNRL 4-Pillars/KPI's, Review site specific Job details/JSA's, Detailed discussion on working in cold weather. Sweep lease and wellhead area for LEls and H2S, lease clear.
07:30	0.50	07:30 - 08:00 Hrs - Check pressures on well. (0 kpa tbg - 0 kpa csg) No signs of H2S, Function test ram saver, crown saver, air horn, e-kills and all safety equipment. Heat up wellhead and pump lines. Prep equipment to continue RIH.
08:00	1.50	08:00 - 09:30 Hrs - Pick up and RIH off catwalk remaining 70X73 mm tubing, lightly tag bridge plug confirming depth @ 1925.80 mkb, space out tubing and land string 0.5 m above plug. Install stabbing valve and close pipe rams.
09:30	1.50	09:30 - 11:00 Hrs - Hold PJSM with Charger Cementers. Rig in C&A Unit, bulker and pump lines, batch mix 1m3 Thermal 40 Blend @ 1800 kg/m3, preflush with 500L fresh water, pressure test surface lines to 14 Mpa, pump 1m3 thermal cement and displace plug with 5.2 m3 fresh water to balance. Rig out cementers. TOC is @ 1845.80 mkb , pull and lay out 10 tubing to catwalk. Tie in rig pump and line, backwash tubing with 9 m3 fresh water. Rig out pump lines and winterize.
11:00	3.50	11:00 - 14:30 Hrs - POOH to catwalk with 140X73 mm tubing. Rig in escape line and buggy. POOH and stand remaining 31 stands in tubing board (62 tubing), Change over equipment and prep for wireline in morning.
14:30	0.50	14:30 - 15:00 Hrs - Shut, cap and secure well, clean up tools and work area, winterize equipment. SDFN.

## Perforations Summary

Date	Zone	Top (mKB)	Btm (mKB)	Type	Com
4/1/1961 00:00	Slave Point, Original Hole	1,950.40	1,962.00	Perforated	
2/13/1999 00:00	Slave Point, Original Hole	1,953.10	1,966.60	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,113.40	2,121.30	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,194.40	2,203.60	Perforated	

## Daily Fluids Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
Fresh Water	14.00	10.00	35.00	Jeffrey Willick	Abandonment Ops Mgr.
Other	0.00	0.00	-28.00	Dale Duffy	Superintendent
				Mike Hamer	Wellsite Supervisor
				Contractor Precision Well Servicing	Rig Number 829
				Rig Manager Anthony Klimm	

**Daily Service Report (Gov't Submissions)****SUN NETLA C-07**Job: Abandonment  
Report #: 6.0

2/3/2023 07:00 to 2/3/2023 16:30

**Canadian Natural**

Current Event (UWI) 300/C-07-60.50-122.45/00		Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective				Plug Back Depth (mKB)
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0	Tubing Pressure (kPa) 0
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Road Condition Good	Set Depth (MD) (mKB) -21 Weather Sunny Temperature (°C) -21

**Daily Activities**Morning Ops @ 7am  
SR: ROMOSR

Daily Operations Summary

MIRUWL, RIH Perf Gun To 620 mkb, Pull Pass And Corolate To RBL Log, Shoot Interval 604 mkb - 605 mkb, Rig in Pump Line, Pumped And Acheived Feed Rate Of 250L/Min @ 5.5 Mpa, Bubbles On SCV, Pumped 20 m3 With No Returns, RIH Retainer. Set @ 597 mkb. Established feed-rate 250 liters/min @ 5.5 Mpa. Pressured Tested Retainer. Pressure Tested Tubing, RU C&A Unit, Pumped 1m3 Fresh Water, 1m3 Scavenger, followed with 14 m3 Thermal Cement (1800 kg/m3), Spotted 15 m TVD Above Retainer (TOC=581.80 mkb), Reverse Circulated 3 m3 Fresh Water, POOH With 62 Tubing To Catwalk, Complete SCVF Test, No Bubbles.

**Time Log**

Start Time	Dur (hr)	Com
07:00	0.50	07:00 - 07:30 Hrs - Complete a detailed Safety MTG with PWS (Service Rig Crew). Review CNRL, PWS Safety Policy's & Procedures, Review Transportation of injured worker Plan. Fire & Explosion Plan, Medic Locations, Ensure OROGO, OHS, CNRL, Policies are followed. Review CNRL 4-Pillars/KPI's, Review site specific Job details/JSA's, Detailed discussion on working in cold weather. Sweep lease and wellhead area for LEls and H2S, lease clear.
07:30	0.50	07:30 - 08:00 Hrs - Check pressures on well. (0 kpa tbg - 0 kpa csg) No signs of H2S, Function test ram saver, crown saver, air horn, e-kills and all safety equipment. Heat up wellhead and pump lines. Prep equipment for wireline.
08:00	1.25	08:00 - 09:15 Hrs - Hold PJSM with Eclipse wireline. Back in and spot wireline unit. Rig in sheaves, flange BOPs and lube. Arm and RIH with 1m 20 spm 25 gram perf gun to 620 mkb, pull pass and corolate to RBL log, log onto depth and shoot interval from 604 mkb - 605 mkb, surface wireline. Rig out lube, BOP and wireline truck. SCV on slight vac.
09:15	0.50	09:15 - 09:45 Hrs - Close blind rams, tie in pump line. Begin pumping to fill casing while monitoring SCV, steady bubbles. Gained feed rate of 250 L/Min @ 5.5 Mpa. Pumped 20 m3 total. Still steady bubbles on SCV while pumping, No returns to surface. Rig out pump lines.
09:45	1.00	09:45 - 10:45 Hrs - Hold PJSM with Dans Rental toolhand. MU cement retainer. RIH with retainer 62 tubing, 10 foot pup. Picked casing collars @ 590 mkb and 599.25 mkb. Pulled up and set retainer @ 597 mkb. Tie in pump line, pressure test retainer to 7 Mpa. (start - 7280 mkb - finish 7199 mkb). Good test.
10:45	3.00	10:45 - 13:45 Hrs - Spot and RU C&A Unit as per CNRL, OROGO and OH&S requirements. RU SCV for returns. Pumped 1m3 fresh water, surface test lines to 14 Mpa, pump 1m3 scavenger pumping 380 liters/min @ 5 Mpa. Mixed and pumped Thermal blend CaCL2 - 1.2% + CHFL-1 0.30% + CHFR-1 - 0.05% + CHDF-P - 0.2% + CHGC-2 - 1% density 1800 kg/m3 pumped 13.5 m3, shut down pressure 1.5 Mpa. Slow-rate to 100L/Min for remaining 0.5 m3 cement and 1.3 m3 fresh water, final pressure 4.5 Mpa, pulled to neutral, bled off pressure, stung out of retainer, balanced cement, pulled 2 joints, spotted 15 m TVD cement plug (200L). Reverse circulated tubing clean. 13.70 m3 cement below retainer,
13:45	1.50	13:45 - 15:15 Hrs - Prep equipment to POOH. POOH with 60 tubing laying out on catwalk. Break out and lay down setting tool / Stinger.
15:15	0.75	15:15 -16:00 Hrs - Rig out pump, tank and lines, clean out rig tank with vac, back in and spot junk truck, rig out pipe handling equipment, tongs and remove handrails from working floor.
16:00	0.50	16:00 - 16:30 Hrs - Shut, cap and secure well, clean up tools and work area, winterize equipment. SDFN.

**Perforations Summary**

Date	Zone	Top (mKB)	Btm (mKB)	Type	Com
2/3/2023 00:00	Remedial, Original Hole	604.00	605.00	Perforation	All Shots Fired
4/1/1961 00:00	Slave Point, Original Hole	1,950.40	1,962.00	Perforated	
2/13/1999 00:00	Slave Point, Original Hole	1,953.10	1,966.60	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,113.40	2,121.30	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,194.40	2,203.60	Perforated	

**Daily Fluids Summary**

Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Operational Supervisors	
				Contact	Title
Fresh Water	35.50	0.00	70.50	Jeffrey Willick	Abandonment Ops Mgr.
Other	0.00	0.00	-28.00	Dale Duffy	Superintendent
				Mike Hamer	Wellsite Supervisor
				Contractor Precision Well Servicing	Rig Number 829
				Rig Manager Anthony Klimm	



Canadian Natural

## Daily Service Report (Gov't Submissions)

## SUN NETLA C-07

Job: Abandonment  
Report #: 7.0

2/4/2023 07:00 to 2/4/2023 11:30

Current Event (UWI) 300/C-07-60.50-122.45/00		Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective				Plug Back Depth (mKB)
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0	Tubing Pressure (kPa) 0
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Road Condition Good	Weather Cloudy

## Daily Activities

Morning Ops @ 7am

C&amp;C: Well Ready To Cut And Cap

Daily Operations Summary

Rig Out Boiler And Boiler Lines, ND BOPs, NU Wellhead, Clean Up Work String, ROSR And Equipment. Prep To Move

## Time Log

Start Time	Dur (hr)	Com
07:00	0.50	07:00 - 07:30 Hrs - Complete a detailed Safety MTG with PWS (Service Rig Crew). Review CNRL, PWS Safety Policy's & Procedures, Review Transportation of injured worker Plan. Fire & Explosion Plan, Medic Locations, Ensure OROGO, OHS, CNRL, Policies are followed. Review CNRL 4-Pillars/KPI's, Review site specific Job details/JSA's, Detailed discussion on rig moving equipment, use of radios and staying in convoy. Sweep lease and wellhead area for LEls and H2S, lease clear.
07:30	0.50	07:30 - 08:00 Hrs - Check pressures on well. (0 kpa tbg - 0 kpa csg). Remove heater from BOPs, open wellbore. Remove BOP hoses and accumulator lines.
08:00	3.50	08:00 - 11:30 Hrs - Raise and chain working floor. Remove rig BOPs and annular, winterize and install wellhead c/w chain and lock. Complete visual inspection of mast lowering equipment. Scope down top section and Lower mast, take rig off jacks, rig out service rig, boiler and support equipment. Complete tubing cleanup, load 400 bbl on bed truck, Have picker load rig matting and handling equipment. Hook up to doghouse. Complete wellhead cleanup. Prep equipment for rig move.

## Perforations Summary

Date	Zone	Top (mKB)	Btm (mKB)	Type	Com
2/3/2023 00:00	Remedial, Original Hole	604.00	605.00	Perforation	All Shots Fired
4/1/1961 00:00	Slave Point, Original Hole	1,950.40	1,962.00	Perforated	
2/13/1999 00:00	Slave Point, Original Hole	1,953.10	1,966.60	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,113.40	2,121.30	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,194.40	2,203.60	Perforated	

## Daily Fluids Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
Fresh Water			70.50	Jeffrey Willick	Abandonment Ops Mgr.
Other	0.00	0.00	-28.00	Dale Duffy	Superintendent
				Mike Hamer	Wellsite Supervisor
				Contractor Precision Well Servicing	Rig Number 829
				Rig Manager Anthony Klimm	



Canadian Natural

## Daily Service Report (Gov't Submissions)

## SUN NETLA C-07

Job: Abandonment  
Report #: 8.0

2/11/2023 07:00 to 2/11/2023 12:30

Current Event (UWI) 300/C-07-60.50-122.45/00	Surface Legal Location 300/C-07-60.50-122.45	License # NT000191	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/30/2023	Ground Elevation (m) 611.00	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0
Job End Date 2/11/2023	Original KB Elevation (m) 615.40	Casing Flange Elevation (m)	KB-Casing Flange Distance (m)	Tubing Pressure (kPa) Set Depth (MD) (mKB) Road Condition Rough Weather Clear Temperature (°C) -8

## Daily Activities

Morning Ops @ 7am

RR: Ready for Reclamation

Daily Operations Summary

Conduct SCV/ GM test, both good. Dig up 2.5 M around well. Welder cut off wellhead. Weld vented plate between Surface & Production Casings. Weld on vented cap with ID #0191. Push in 5 M 73mm Jnt 1 M North of well centre. Back-fill hole with clean dirt. Make up sign with ID #, Company name, Date of Cut & Cap, Coordinates with NAD 83. Production casing cut 2 M below original ground level, Lease is ready for reclamation.

## Time Log

Start Time	Dur (hr)	Com
07:00	0.50	Checked with GM tester no ppm's. Conduct Gas Migration test; Take 4 readings at 90° around casing, at a 2 meter radius and at a 6 m radius around well as per CNRL SCVF & GM Testing - Operational Procedures (July 2011). Recorded 0 ppm readings at all locations.  SCVF/GM testing done as per CNRL SCVF & GM Testing – Operational Procedure: No issues.  Ensure vent is clear. Bubble test SCV for 15 min (No Bubbles)
07:30	5.00	Travel to location Sweep work area with bump tested LEL monitor 0 - LEL's & 0 - PPM H2S. Conduct pre job safety meeting with services complete and review, Hazard Assessment, TIW and OROGO Regulations. Ensure all personnel have had CSO or PST Orientation. Review Beaver Enterprises & Nahanni Hazard Assessment. Dig down 2.5 M below GL. Weld vented plate between Surface & Production Casings. Weld on 139.7mm vented cap with ID #0191. Push in 5 M 73mm Jnt 1 M North of well centre. Back-fill hole with clean dirt. Make up sign with ID #, Company name, Date of Cut & Cap, Coordinates with NAD 83. Spray paint Sign & post Orange. Well cut 2 M below original ground level  Ensure pictures of operations are in attachments. No Grd Dist as confirm no under ground lines in this field. Lease is cleaned up. Well is Cut & Capped Feb 11 2023 Well is now ready for reclamation.

## Perforations Summary

Date	Zone	Top (mKB)	Btm (mKB)	Type	Com
2/3/2023 00:00	Remedial, Original Hole	604.00	605.00	Perforation	All Shots Fired
4/1/1961 00:00	Slave Point, Original Hole	1,950.40	1,962.00	Perforated	
2/13/1999 00:00	Slave Point, Original Hole	1,953.10	1,966.60	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,113.40	2,121.30	Perforated	
3/22/1961 00:00	Slave Point, Original Hole	2,194.40	2,203.60	Perforated	

## Daily Fluids Summary

Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Operational Supervisors	
				Contact	Title
Fresh Water	0.00	0.00	70.50	Jeffrey Willick	Abandonment Ops Mgr.
Other	0.00	0.00	-28.00	Dale Duffy	Superintendent
				Phil Millard	Wellsite Supervisor
				Contractor	Rig Number
				Rig Manager	