



## Well Operations Report

**Well Name:** NETLA K-77  
**UWI:** 300/K-77-60.50-122.30/00  
**License #:** WID1862  
**Field:** FT LIARD (5501)  
**Profile:** Directional  
**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. This well still has a SCVF that CNRL is monitoring with a Vent Nanny with the goal that the SCVF will die out from the remedial attempts performed. 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 if the SCVF dies out.

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

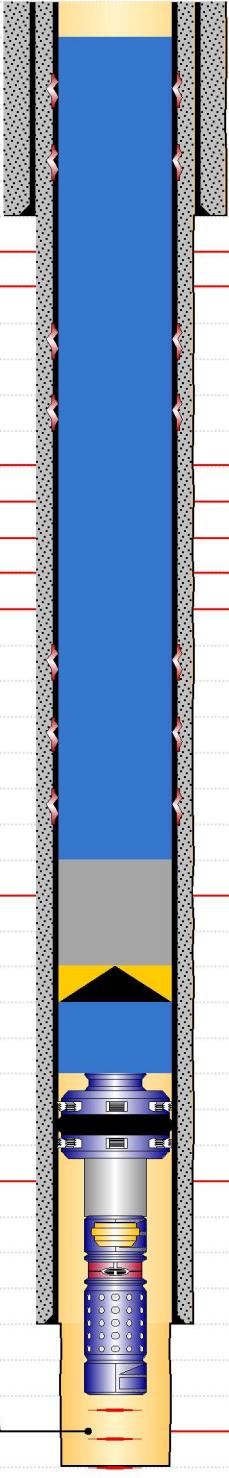
**Canadian Natural Resources Limited**

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**Canadian Natural****Downhole Schematic (Gov't Submission)****SUNCOR NETLA K-77**

Current Event (UWI)	Surface Legal Location	License #	Field Name	Province												
300/K-77-60.50-122.30/00	I-77-60-50-122-30	NT001862	FT LIARD	N.W.T												
Well Profile Directional	Fluid Type Deep Gas	Original KB Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)											
		625.20	6.30	6.45												
Latitude (°)	Longitude (°)	Orig Spud Date 2/7/1999	Orig RR Date 3/2/1999	C&C Date	GW Protected? No	BGWP (mKB)	Oilsand Area No									
Directions To Well North from Ft.Liard on NWT Hwy #7 to KM Marker #92, right (easet) 40km to location on winter road.						H2S Classification Sour										
Directional - Original Hole, 3/6/2023 10:39:27 AM			<b>SCVF &amp; GM Tests (Last 2 Records)</b>													
MD (mKB)	TVD (mKB)	Vertical schematic (actual)		Test Date	Test Type	Failed?										
5.3	5.3			7/29/2020	SCVF	Yes										
8.0	8.0			9/12/2022	SCVF	Yes										
<b>Openhole Information</b>																
Section Des		Size (mm)		Top (mKB)		Bottom (mKB)										
Surface		311.2		5.30		535.00										
Intermediate 1		222.2		535.00		1,988.40										
Main 1		155.6		1,988.40		2,118.00										
<b>Casing Strings</b>																
Csg Des		OD (mm)	Wt/Len (kg/m)	Grade	Top (mKB)	Set Depth (MD) (mKB)										
Surface		244.5	53.574	J-55	5.30	535.00										
Production		177.8	34.228	L-80	5.30	1,988.40										
<b>Cement Stages</b>																
Description		Cementing Start Date	Top Depth (mKB)	Btm (mKB)	Vol Cement Re...											
Production Cement			5.30	1,988.40	8.00											
Comment																
43.0 tonnes 1-1-2 G + 0.3% D65 + 0.2% D46 + 0.1% B71 tailed with 12.0 tonnes RFC + 38.0% D-066 (silica) + 0.1% D136 + 0.4% B71 + 0.2% D46 + 1.0% D160 + 0.75% D65, Top of tail cement est'd at 1800mKB, 8.0m3 fill cement to surface.																
Description		Cementing Start Date	Top Depth (mKB)	Btm (mKB)	Vol Cement Re...											
Surface Cement			5.30	535.00	5.00											
Comment																
35.0 tonnes RFC + 1.0% CaCl2, 5.0m3 cement returns																
<b>Perforations</b>																
Zone		Top (mKB)	Btm (mKB)	Current Status												
Slave Point, Original Hole		1,988.40	2,118.00	Abandoned												
<b>Tubing Strings</b>																
<b>Tubing - Production set at 1,989.99mKB on 3/22/1999 00:00</b>																
Tubing Description		String Max N...		Wt (kg/m)	String Grade											
Tubing - Production		88.9		13.840	J-55											
Comment																
Permanent Packer Pressure tested to 21 MPa for 15 minutes - 13-Mar-1999.																
Tubing dry. Dumped 40 litres of inhibitor - 10-May-1999																
<b>Tubing Components</b>																
Item #	Jts	Item Des	OD (mm)	ID (mm)	Len (m)	Top (mKB)	Btm (mKB)									
1-1	1	Chrome Baker E-22 Anchor Seal As...	88.9	72.8	0.25	1,981.80	1,982.05									
1-2	1	Chrome Baker FB-1 Perm Packer	152.4	101.0	0.89	1,982.05	1,982.94									
1-3	1	Chrom Proficient VAM Tubing Pup J...	88.9	76.0	2.86	1,982.94	1,985.80									
1-4	1	Chrome Proficient VAM QX Nipple 6...	88.9	69.9	0.33	1,985.80	1,986.13									
1-5	1	Chrome Baker VAM Underbalance...	88.9	76.0	0.33	1,986.13	1,986.46									
1-6	1	Chrome Proficient VAM Perforated P...	88.9	76.0	3.15	1,986.46	1,989.61									
1-7	1	Proficient QXN Nipple 69.85 x 66.9...	88.9	66.9	0.38	1,989.61	1,989.99									
<b>Other In Hole</b>																
Des		Run Date	Pull Date	Top (mKB)	Btm (mKB)											
BPV (for visual)		5/9/1999	2/1/2023	5.00	5.20											
Inhibited Water		3/13/1999	2/1/2023	5.30	1,982.10											
Fresh water		2/1/2023		8.00	1,982.00											
Casing Expansion #7		2/8/2023		519.40	520.00											
Casing Expansion #6		2/8/2023		529.40	530.00											
Casing Expansion #5		2/8/2023		639.40	640.00											
Casing Expansion #4		2/8/2023		649.40	650.00											
Casing Expansion #3		2/8/2023		1,275.40	1,276.00											
Casing Expansion #2		2/8/2023		1,889.40	1,890.00											
Casing Expansion #1		2/8/2023		1,899.40	1,900.00											
Cement plug		2/3/2023		1,932.00	1,980.00											
Bridge Plug - Permanent 10K		2/2/2023		1,978.80	1,980.20											
Open Hole; 1,988.40- 2,118.00 mKB; Zone: Slave Point, Original Hole																
Current Status: Abandoned																
Shot Dens: Calculated Shot Total: 1																
Phasing:																

**Canadian Natural****Downhole Schematic (Gov't Submission)****SUNCOR NETLA K-77**

Current Event (UWI)	Surface Legal Location	License #	Field Name	Province	
300/K-77-60.50-122.30/00	I-77-60-50-122-30	NT001862	FT LIARD	N.W.T	
Well Profile Directional	Fluid Type Deep Gas	Original KB Elevation (m)	KB-Ground Distance (m)	KB-Casing Flange Distance (m)	
		625.20	6.30	6.45	
Directional - Original Hole, 3/6/2023 10:39:28 AM			Other In Hole		
MD (mKB)	TVD (mKB)	Vertical schematic (actual)	Des	Run Date	Pull Date
5.3	5.3		Plug and Prong	5/9/1999	1,985.85
8.0	8.0				1,986.05
519.4	519.4		Formation Tops		
520.0	520.0		Formation Name	Top (mKB)	Com
529.4	529.4		Base Ground Water	606.30	OROGO default
530.0	530.0		Exshaw	639.00	Tight
535.0	535.0		Kotcho	652.00	Tight
606.3	606.3		Tetcho	990.00	Tight
639.0	639.0		Trout River	1,068.00	Tight
639.4	639.4		Kakisa	1,156.00	Tight
640.0	640.0		Fort Simpson	1,184.00	Tight
649.4	649.4		Muskwa	1,955.00	Tight
650.0	650.0		Slave Point	1,983.00	Porous
652.0	652.0		Fort Vermilion	2,052.00	Tight
990.0	989.9				
1,068.0	1,067.8				
1,156.0	1,155.5				
1,184.0	1,183.0				
1,275.4	1,268.2				
1,276.0	1,268.8				
1,889.4	1,830.1				
1,890.0	1,830.7				
1,899.4	1,840.1				
1,900.0	1,840.7				
1,932.0	1,872.7				
1,955.0	1,895.7				
1,978.8	1,919.5				
1,980.0	1,920.7				
1,980.2	1,920.9				
1,981.8	1,922.5				
1,982.0	1,922.7				
1,982.1	1,922.8				
1,982.9	1,923.6				
1,983.0	1,923.7				
1,985.8	1,926.5				
1,986.1	1,926.8				
1,986.5	1,927.2				
1,988.4	1,929.1				
1,989.6	1,930.3				
1,990.0	1,930.7				
2,052.0	1,992.7				
2,118.0	2,058.7				
Open Hole; 1,988.40- 2,118.00 mKB; Zone: Slave Point, Original Hole Current Status: Abandoned Shot Dens: Calculated Shot Total: 1 Phasing:					



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## Daily Service Report (Gov't Submissions)

## SUNCOR NETLA K-77

Job: Abandonment  
Report #: 1.0

1/15/2023 12:00 to 1/15/2023 17:00

Current Event (UWI) 300/K-77-60.50-122.30/00	Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa)
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Tubing Pressure (kPa) Rough
				Set Depth (MD) (mKB) 20

## Daily Activities

Morning Ops @ 7am

SR: MIRUSR

Daily Operations Summary

Move wellhead crew to location. Swept location with 4 head gas monitor with no LEL'S or H2S detected. Bubble test SCV = No Bubbles. SITP 20 KpaDW. Rig in wellhead equipment Sting into BPV & equalize 12.5 Mpa below BPV & Stuck. Lower master valve started leaking through valve stem. Pull out of BPV & Shut in well. Bleed Pressure down to 0 Kpa above BPV (HOLDING) Shut in & secure well. Rig out all equipment. Travel to Camp.

Jan 16 - Move in ROKE & set up SCV vent nanny flow meter and test satelite system (good)

## Time Log

Start Time	Dur (hr)	Com
12:00	0.50	Travel from A-77 to above location. Move in Stream Flo, United Safety air hand,
12:30	0.50	Review CNRL hazard assessment and TIW plan. Service providers complete HA & JSA for tasks today. Held safety meeting with all personal reviewed hazards of spotting equipment and pulling BPV. Slips, trips, line to fire, pinch points, backing up using spotters,
13:00	3.00	Moved in and spotted Stream flo unit. Check for hazards around wellhead. Had safety hand don air pack and checked for any H2S on tbg. No H2S. SITP 20 KpaDW. Make up 50.8mm Lubricator & screw into BPV. Discover 12.5 Mpa below BPV & Stuck. Discover lower master valve started leaking through valve stem. Notify Calgary of well status. Decide to let SR pull BPV. Screw out of BPV & Lubricate out stinger. Shut in & secure well. Rig out Stream Flo crew. Bleed down pressure above BPV to 0 Kpa (holding) Shut in & secure well.
16:00	1.00	Travel to camp.
17:00		Jan 16 - Move in ROKE and set up vent nanny flow meter on SCV and Satellite system to record flow & test (good)

## Perforations Summary

## Daily Fluids Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
				Jeffrey Willick	Abandonment Ops Mgr.
				Dale Duffy	Superintendent
				Phil Millard	Wellsite Supervisor
				Contractor	Rig Number
				Rig Manager	



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## Daily Service Report (Gov't Submissions)

## SUNCOR NETLA K-77

Job: Abandonment  
Report #: 2.0

1/31/2023 12:00 to 1/31/2023 19:00

Current Event (UWI) 300/K-77-60.50-122.30/00	Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Tubing Pressure (kPa) 0

## Daily Activities

Morning Ops @ 7am  
SR: Remove BPV

## Daily Operations Summary

Moved rig and equipment including testers from A77. Spotted and rigged all equipment to CNRL and OROGOO rules and regulations. Checked tbg and csg zero pressure. No H2S on tbg. Poured penetrating oil on top of BPV. Secured well. Tarpred in bop's and wellhead.

## Time Log

Start Time	Dur (hr)	Com
12:00	0.50	Moved rig and equipment including testers from A77 to location 1km. Unload and spotted equipment.
12:30	0.25	Filled out hazard assessment. Filled out JSA's for tasks today and discussed hazards of each operation and reviewed sop's. Hazards Line of fire, swing path, over head loads, high pressure lines, hot steam lines. Reviewed hazards of standing derrick. Use spotters at all times.
12:45	6.25	Spotted rig on matting stood derrick and secured. Rigged in testers equipment, accumulator lines, boiler lines, pump, tank and pump lines. Grounded and bonded all equipment. Fired up boiler. Checked SITP 0 kpa, SICP 0 kPa. No H2S on tbg. Poured penetrating oil down on top of BPV and secured well. Trapped in bop's and wellhead. Spotted and rigged catwalk/piperacks. 19:00hrs SDFN

## Perforations Summary

## Daily Fluids Summary

Fluid	To well (m³)	From well (m³)	Left to recover (m³)
Fresh Water			

## Operational Supervisors

Contact	Title
Roy Craft	Wellsite Supervisor
Dale Duffy	Superintendent
Jeffrey Willick	Abandonment Ops Mgr.
Ashley Marshall	Rig Manager
Contractor Precision Well Servicing	Rig Number 119
Rig Manager Ashley Marshall	



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## Daily Service Report (Gov't Submissions)

## SUNCOR NETLA K-77

Job: Abandonment  
Report #: 3.0

2/1/2023 07:30 to 2/1/2023 19:00

Current Event (UWI) 300/K-77-60.50-122.30/00		Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective				Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0	Tubing Pressure (kPa) 12,000
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Road Condition Rough	Set Depth (MD) (mKB) -30

## Daily Activities

Morning Ops @ 7am  
SR: Run PBP, PT, LOG

## Daily Operations Summary

Pulled BPV 12000kPa below. Bled off tbg to flare 0.40e3m3 sweet gas. Filled tbg 8.5m3 pressure tested 7000kPa 10 min solid. Pressure tested csg 7000kPa 10 min solid. Checked precharge pressure accumulator function tested bop's. Stump tested blind rams 1400kPa low and 34000kPa high 10 min each. N/D WLHD. N/U BOP'S PT pipe rams 1400kPa low and 34000kPa high, annular 1400kPa low and 7000kPa high all 10 min each. Come off packer with on/off circulated over to fresh water with total 38.0m3. POOH laying down 89mm eue tbg 140 jts. Top off well 1.5m3 drained equipment secured well

## Time Log

Start Time	Dur (hr)	Com
07:30	0.50	07:30hrs. Serviced and started equipment. Filled out JSA'S for tasks today and discussed hazards of each operation and reviewed sop's. Hazards Line of fire, swing path, over head loads, high pressure lines, hot steam lines. Discussed muster points dog house and lease entrance or up wind.
08:00	1.00	Rigged in stream flo on wellhead with stinger and 50.2mm lubricator screwd in to BPV had 12000kPa below. Removed BPV no issues. Shut in well bled off lubricator and rigged out stream flo.
09:00	1.00	Rigged testers line into tbg. SITP 12000kPa bled down to zero and monitored for 10min plug holding. No H2S. Filled tbg with 8.5m3 of fresh water pressure tested plug to 7000kPa 10 min solid test. Pressure tested csg to 7000kPa 10min solid test.
10:00	2.50	Checked all precharge pressures on accumulator function tested bop's. Changed all handling equipment over to 89mm. Stump tested blind rams 1400kPa low and 34000kPa high 10min each. Removed top section of wellhead install 89mm pup jt and safety valve. Stripped on bop's, rigged in floor, stairs, handrailings. Pressure tested ring gasket and pipe rams 1400kPa low and 34000kPa high and annular 1400kPa low and 7000kPa all 10 min each.
12:30	1.50	Picked up on tbg hanger string weight 24000dAN'S come off packer with on/off tool. Rigged testers into csg and pumpline into tbg. Circulated wellover to fresh water at 450L/min at 4000kPa total of 29.0m3
14:00	4.50	POOH laying down 140 jts with 2 pup jts. Top well with 1.50m3 drain equipment and seured well. Held bop drill 1min to secure well.

## Perforations Summary

## Daily Fluids Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
Fresh Water	38.00	0.00	38.00	Roy Craft	Wellsite Supervisor
Produced Water				Dale Duffy	Superintendent
				Jeffrey Willick	Abandonment Ops Mgr.
				Ashley Marshall	Rig Manager
				Contractor Precision Well Servicing	Rig Number 119
				Rig Manager Ashley Marshall	

**Canadian Natural****Daily Service Report (Gov't Submissions)****SUNCOR NETLA K-77**Job: Abandonment  
Report #: 4.0

2/2/2023 07:30 to 2/2/2023 19:00

Current Event (UWI) 300/K-77-60.50-122.30/00		Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective				Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0	Tubing Pressure (kPa) 0
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Road Condition Rough	Set Depth (MD) (mKB) -28

**Daily Activities**

Morning Ops @ 7am  
SR: RIH with 73mm tbg

## Daily Operations Summary

Pull and lay down 89mm eue tbg 66 jts with on/off tool. total of 206jts. MIRU wireline. RIH with 147.0mm gauge ring junk basket to 1981.0mKB. POOH. RIH with 161.7mm 10K PBP set c/e at 1980.0mKB. PT plug and csg to 7180kPa 10 min solid test. RIH with RBL to 1980.0mKB and log to surface zero pressure. Ran back down 1980.0mKB and log 7000kPa pressure pass to surface. Bled off pressure layed down tools. Rig out and release e-line. Land tbg hanger and pressure tested 73mm pipe rams 1400kPa low and 34000kPa high 10 min each. Pull hanger drained equipment secured well.

**Time Log**

Start Time	Dur (hr)	Com
07:30	0.50	07:30hrs. Serviced and started equipment. Filled out JSA's for tasks today and discussed hazards of each operation and reviewed sop's. Hazards Line of fire, swing path, over head loads, high pressure lines, hot steam lines. Discussed muster points dog house and lease entrance or up wind. Dress for weather watch for frost bite.
08:00	1.00	Checked well zero pressure. Continued to pull and lay down 89mm eue tbg 66 jts with on/off tool. total of 206jts. Rigged out testers and released move equipment to camp
09:00	10.50	MIRU wireline. Installed flange, wireline bop's and lubricator. RIH with 147.0mm gauge ring junk basket to 1981.0mKB. POOH. RIH with 161.7mm 10K PBP set c/e at 1980.0mKB. PT plug and csg to 7180kPa 10 min solid test. RIH with RBL to 1980.0mKB and log to surface zero pressure. Ran back down 1980.0mKB and log 7000kPa pressure pass to surface. Bled off pressure layed down tools. Rig out and release e-line. Land tbg hanger and pressure tested 73mm pipe rams 1400kPa low and 34000kPa high 10 min each. Pull hanger drained equipment secured well. 19:00hrs SDFN

**Perforations Summary****Daily Fluids Summary**

Fluid	To well (m³)	From well (m³)	Left to recover (m³)
Fresh Water	0.00	0.00	38.00
Produced Water			

**Operational Supervisors**

Contact	Title
Roy Craft	Wellsite Supervisor
Dale Duffy	Superintendent
Jeffrey Willick	Abandonment Ops Mgr.
Ashley Marshall	Rig Manager
Contractor Precision Well Servicing	Rig Number 119
Rig Manager Ashley Marshall	



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## Daily Service Report (Gov't Submissions)

## SUNCOR NETLA K-77

Job: Abandonment  
Report #: 5.0

2/3/2023 07:30 to 2/3/2023 19:00

Current Event (UWI) 300/K-77-60.50-122.30/00	Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa)
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Tubing Pressure (kPa) Rough

## Daily Activities

Morning Ops @ 7am

SR: POOH laying down tbg

Daily Operations Summary

Tally in hole with 211 jts and 2 pup jts tagged PBP at 1980.0mKB. Picked up 0.50m3 above plug. Waited on cementers over on C 7 well. MIRU C/A unit rigged line on to tbg. Filled lines broke circulation with 0.50m3 fresh water @ 400L/min 3000kPa. Mixed up 1.0m3 of 1800kg/m Thremal 40. Pumped cement @ 500L/min 4000kPa. Displaced with 5.4m3 of fresh water and balanced plug. Rigged off iron cleaned up C/A unit. Pulled and layed down 10 jts tbg. Back washed tbg with 10.0m3 fresh water. Cement top at 1932.0mKB. Shut in tbg and pressured up well to 7000kPa. Secured well. Drained all equipment transferred all clean fluid to 64m3 tank. Rigged out 1 pump line.

## Time Log

Start Time	Dur (hr)	Com
07:30	0.50	07:30hrs. Serviced and started equipment. Filled out JSA'S for tasks today and discussed hazards of each operation and reviewed sop's. Hazards Line of fire, swing path, over head loads, high pressure lines, hot steam lines and hazards of picking up pipe from cat walk. Discussed muster points dog house and lease entrance or up wind.
08:00	4.50	Tally in hole with 211 jts and 2 pup jts tagged PBP at 1980.0mKB. Picked up 0.50m3 above plug. Rigged in circulating equipment circulate well while waiting on cementers.
12:30	1.75	Wait on cementers was on C-7 doing cement squeeze.
14:15	0.25	Held safety meetig with all personal. Filled out JSA and reveiwed hazards of doing cement job. Line fire, high pressure line, slips, trips, pinch points, swing path. Reviewed cement program for balancing 1.0m3 of cement.
14:30	2.50	MIRU C/A unit rigged line on to tbg. Filled lines broke circulation with 0.50m3 fresh water @ 400L/min 3000kPa. Mixed up 1.0m3 of 1800kg/m Thremal 40 with CHRT-H 0.5%, CHFL-1 0.3%, CHFR-1 0.05%, CHDF-P 0.2%, CHGC-2 1%. Pumped cement @ 500L/min 4000kPa. Displaced with 5.4m3 of fresh water and balanced plug. Rigged off iron cleaned up C/A unit. Cement top at 1932.0mKB. Pulled and layed down 10 jts tbg. Back washed tbg with 10.0m3 fresh water. Shut in tbg and pressured up well to 7000kPa. Secured well. Drained all equipment transferred all clean fluid to 64m3 tank. Rigged out 1 pump line. Tarppe in tbg. 16:00hrs SDFN

## Perforations Summary

## Daily Fluids Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
Fresh Water	0.00	0.00	38.00	Roy Craft	Wellsite Supervisor
Produced Water	0.00	0.00		Dale Duffy	Superintendent
				Jeffrey Willick	Abandonment Ops Mgr.
				Ashley Marshall	Rig Manager
				Contractor Precision Well Servicing	Rig Number 119
				Rig Manager Ashley Marshall	

**Canadian Natural****Daily Service Report (Gov't Submissions)****SUNCOR NETLA K-77**Job: Abandonment  
Report #: 6.0

2/4/2023 07:30 to 2/4/2023 19:00

Current Event (UWI) 300/K-77-60.50-122.30/00	Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa)
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Tubing Pressure (kPa) Rough

**Daily Activities**

Morning Ops @ 7am

SR: Load rig equipment haul out

Daily Operations Summary

Checked csg 7000kPa bled off. POOH laying down 201 jts. Rigged out floor remove bop's top off well with 0.50m3 well with fresh water. Fluid level down 5m. Installed wellhead rigged out rig and all equipment. Secured well. Had picker set tbg on ground from pipe racks. Move rig to camp.

**Time Log**

Start Time	Dur (hr)	Com
07:30	0.50	07:30hrs. Serviced and started equipment. Filled out JSA'S for tasks today and discussed hazards of each operation and reviewed sop's. Hazards Line of fire, swing path, over head loads, hazards of laying down tbg on cat walk. Discussed muster points dog house and lease entrance or up wind.
08:00	4.00	Checked SICP 7000kPa bled pressure off. POOH laying 201 jts 73mm tbg. Held bop drill 1min to secure well.
12:00		Rigged out tongs, floor and bop's. Topped off well with 0.50m3 fresh water 5m from surface. Installed wellhead rigged out rig and all equipment. Cleaned up location and secured well. Move rig and equipment to camp. Have picker place tbg on ground. Had tank truck empty 64m3 tank and boiler haul to tank farm.

**Perforations Summary****Daily Fluids Summary**

Fluid	To well (m³)	From well (m³)	Left to recover (m³)
Fresh Water			38.00
Produced Water	0.00	0.00	

**Operational Supervisors**

Contact	Title
Roy Craft	Wellsite Supervisor
Dale Duffy	Superintendent
Jeffrey Willick	Abandonment Ops Mgr.
Ashley Marshall	Rig Manager
Contractor Precision Well Servicing	Rig Number 119
Rig Manager Ashley Marshall	

**Canadian Natural****Daily Service Report (Gov't Submissions)****SUNCOR NETLA K-77**Job: Abandonment  
Report #: 7.0

2/5/2023 07:00 to 2/5/2023 16:00

Current Event (UWI) 300/K-77-60.50-122.30/00	Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa)
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Road Condition Rough

**Daily Activities**

Morning Ops @ 7am

WL: Wait on wireline

Daily Operations Summary

Moved rig and equipment to fort nelson. Had trucks load boiler, matting, catwalk, 64m3 tank junkbox. Hauled to Coopers yard in fort nelson. Reset crew fire up on feb 13.

**Time Log**

Start Time	Dur (hr)	Com
07:00	9.00	Moved rig and equipment from camp to fort nelson. Had trucks load aux equipment haul to fort nelson.

**Perforations Summary****Daily Fluids Summary**

Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Operational Supervisors	
				Contact	Title
Fresh Water	0.00	0.00	38.00	Roy Craft	Wellsite Supervisor
Produced Water	0.00	0.00		Dale Duffy	Superintendent
				Jeffrey Willick	Abandonment Ops Mgr.
				Ashley Marshall	Rig Manager
				Contractor Precision Well Servicing	Rig Number 119
				Rig Manager Ashley Marshall	



Canadian Natural

## Daily Service Report (Gov't Submissions)

## SUNCOR NETLA K-77

Job: Abandonment  
Report #: 8.0

2/7/2023 13:30 to 2/7/2023 17:30

Current Event (UWI) 300/K-77-60.50-122.30/00	Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Tubing Pressure (kPa) Road Condition Weather Temperature (°C) Set Depth (MD) (mKB) Overcast -18

## Daily Activities

Morning Ops @ 7am

WL: Run Expansion Tools

Daily Operations Summary

SICP = 0 kpa. Remove 179.2mm 5K THF. Install 3K Orbit valve & bolt down. Heat Expansion tools with Conley Max heater over night. RIH w/ 152.4mm Gauge ring below lowest Expansion interval. POOH with Gauge ring. Rig down W/L. SIW. SDFN.

## Time Log

Start Time	Dur (hr)	Com
13:30	0.25	Travel from A-77 to location. Move in Eclipse E-line truck #MM013 c/w 177.8mm Lubricator. Move in Poorboy Picker & Renegade tool hand. Move in Stream Flo wellhead crew.
13:45	0.25	Hold Pre-Job Safety meeting with all Services, Review Hazard Assessment, TIWP and Fire & Explosion, 4-Pillars of safety, Ensure personal have CNRL CSO Orientation. All workers fit for duty, Review JSA's and sign off on services Hazard Assessment, Review Procedures for Expansion tool. All required PPE. Check pressures, Line of fire, swing path, Crush Zones, high overhead loads, steam lines. Slips & Trips. Know muster points and plan escape routes. Use 3 point contact at all times. Traffic Moving Equip Blind Spots and Spotters. Good Communication at all time.
14:00	0.50	SICP 0 Kpa. Remove 5K Tubing head flange. Install 3K Orbit valve c/w step studs. Install Eclipse W/L 5K flange.
14:30	2.00	Rig up Eclipse Wireline check all connections with Renegade expansion tool (good) Make up 152.4mm Gauge ring c/w Pack-off. RIH with 152.4mm Gauge ring below lowest Expansion interval (good) POOH with 152.4mm Gauge ring. Shut in & secure well. Leave Conley Max heater on Expansion tools all night. SDFN.
16:30	1.00	Travel to Camp.

## Perforations Summary

## Daily Fluids Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
Fresh Water	0.00	0.00	38.00	Jeffrey Willick	Abandonment Ops Mgr.
Produced Water	0.00	0.00		Dale Duffy	Superintendent
				Phil Millard	Wellsite Supervisor
				Contractor	Rig Number
				Rig Manager	



Canadian Natural

## Daily Service Report (Gov't Submissions)

## SUNCOR NETLA K-77

Job: Abandonment  
Report #: 9.0

2/8/2023 06:30 to 2/8/2023 19:00

Current Event (UWI) 300/K-77-60.50-122.30/00	Surface Legal Location I-77-60-50-122-30	License # NT001862	Field Name FT LIARD	Province N.W.T
WI (%) 100.00	Objective			Plug Back Depth (mKB)
Job Start Date 1/15/2023	Ground Elevation (m) 618.90	Tubing Head Elevation (m)	KB-TH (m)	Casing Pressure (kPa) 0
Job End Date	Original KB Elevation (m) 625.20	Casing Flange Elevation (m) 618.75	KB-Casing Flange Distance (m) 6.45	Tubing Pressure (kPa) Road Condition Weather Temperature (°C) Set Depth (MD) (mKB) Overcast -13

## Daily Activities

Morning Ops @ 7am

SCVF: Monitor

Daily Operations Summary

SICP = 0 kpa. Heat Expansion tools with Conley Max heater over night. RIH 177.8mm Expansion tool &amp; log onto depth to RBL main pass.

Interval #1 - 3 Expansions @ 1900.0 mKB, 1899.4 mKB, 1899.7 mKB.

Interval #2 - 3 Expansions @ 1890.0 mKB, 1889.4 mKB, 1899.7 mKB. Comptor shut down. Pull up to 1075 mKB marker to get on depth &amp; check (good)

Interval #3 - 3 Expansions @ 1276.0 mKB, 1275.4 mKB, 1275.7 mKB. Pull to surface and grease tool.

Interval #4 - 3 Expansions @ 650.0 mKB, 649.4 mKB, 649.7 mKB.

Interval #5 - 3 Expansions @ 640.0 mKB, 639.4 mKB, 639.7 mKB.

Interval #6 - 3 Expansions @ 530.0 mKB, 529.4 mKB, 529.7 mKB.

Interval #7 - 3 Expansions @ 520.0 mKB, 519.4 mKB, 519.7 mKB.

POOH w/ Expansion tool &amp; break down &amp; service. P/test Casing to 7 Mpa 10 min. Start 7000 Kpa, End 7000 Kpa (good test) Bleed off &amp; ND Orbit valve. NU 5K THF &amp; secure. SIW. Tarp in &amp; leave heater on wellhead to monitor SCVF.

## Time Log

Start Time	Dur (hr)	Com
06:30	1.25	Travel from Camp to location. Move in Eclipse E-line truck #MM013 c/w 177.8mm Lubricator. Move in Poorboy Picker & Renegade tool hand. Stream Flo crew & Combo Vac truck. Move in Trojan medic.
07:45	0.50	Hold Pre-Job Safety meeting with all Services, Review Hazard Assessment, TIWP and Fire & Explosion, 4-Pillars of safety, Ensure personal have CNRL CSO Orientation. All workers fit for duty, Review JSA's and sign off on services Hazard Assessment, Review Procedures for Expansion tool. All required PPE. Check pressures, Line of fire, swing path, Crush Zones, high overhead loads, steam lines. Slips & Trips Know muster points and plan escape routes. Use 3 point contact at all times. Traffic Moving Equip Blind Spots and Spotters Good Communication at all time.
08:15	9.25	Rig up Eclipse Wireline check all connections with Renegade expansion tool (good) Make up 177.8mm Expansion tool & function test (good) RIH with Casing Expansion tool 60 M minute in hole to 1920 mKB. Pull CCL strip & Correlate to RBL log, get on depth. OROGO on site to watch Expansion procedure. Interval #1 - 3 Expansions @ 1900.0 mKB, 1899.4 mKB, 1899.7 mKB. Interval #2 - 3 Expansions @ 1890.0 mKB, 1889.4 mKB, 1899.7 mKB. Comptor shut down. Pull up to 1075 mKB marker to get on depth & check (good) Pull CCL Strip through 2 lower intervals. Interval #3 - 3 Expansions @ 1276.0 mKB, 1275.4 mKB, 1275.7 mKB. Pull CCL strip through interval. Pull to surface and grease tool. Interval #4 - 3 Expansions @ 650.0 mKB, 649.4 mKB, 649.7 mKB. Interval #5 - 3 Expansions @ 640.0 mKB, 639.4 mKB, 639.7 mKB. Interval #6 - 3 Expansions @ 530.0 mKB, 529.4 mKB, 529.7 mKB. Interval #7 - 3 Expansions @ 520.0 mKB, 519.4 mKB, 519.7 mKB. **Note: Total 21 Expansion dents in Casing. Drop down to 675 mKB & pull CCL strip through all upper Expansions on log. POOH with 177.8mm Expansion tools & lay down. Service tools & grease. Lay down Eclipse W/L & rig out equipment. Rig out Renegade Expansion tools.
17:30	0.25	Fill hole to surface with Combo valve truck fresh water. P/test casing to 7 Mpa 10 min: Start 7000 Kpa, End 7000 Kpa (good test) Bleed off back to vac truck.
17:45	1.25	Stream Flo crew Remove 179.2mm x 3K Orbit valve. Install 179.2mm x 5K Tubing head flange & bolt down. Close all valves on wellhead. Tarp in wellhead & continue heating with Conley Max dry heater to monitor SCVF vent nanny. Travel to camp.

## Perforations Summary

Daily Fluids Summary				Operational Supervisors	
Fluid	To well (m³)	From well (m³)	Left to recover (m³)	Contact	Title
Fresh Water	0.00	0.00	38.00	Jeffrey Willick	Abandonment Ops Mgr.
Produced Water	0.00	0.00		Dale Duffy	Superintendent
				Phil Millard	Wellsite Supervisor
				Contractor Eclipse E-line Services Inc	Rig Number MM013
				Rig Manager Kevin Cage	