



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**NB650-4**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KFS0001666</b>	KFS0001681	---
Sample Date		Client Info		<b>09 Jan 2024</b>	11 Jul 2023	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>6</b>	4	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	0	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>20	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

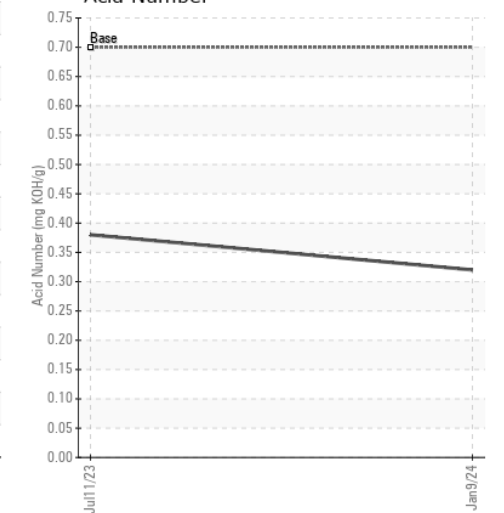
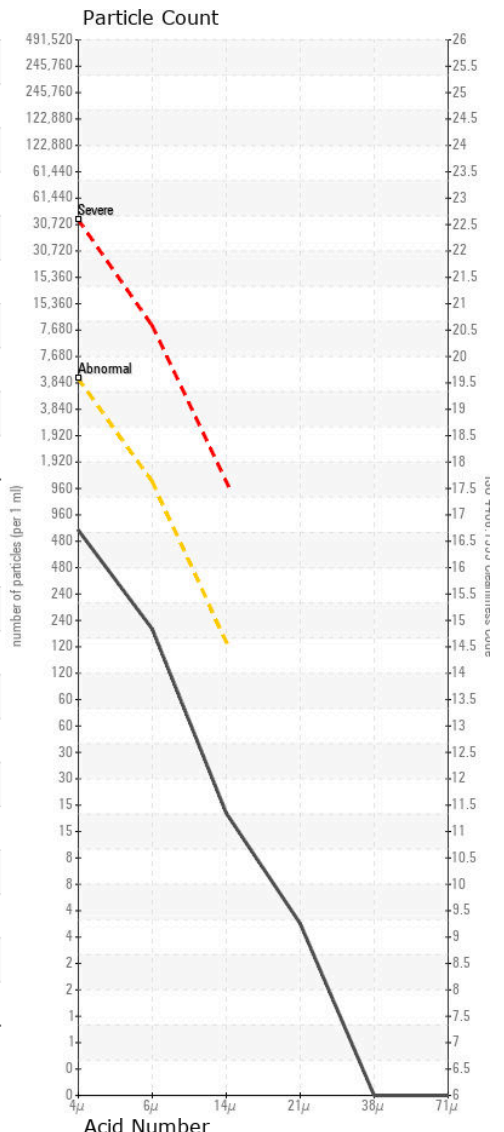
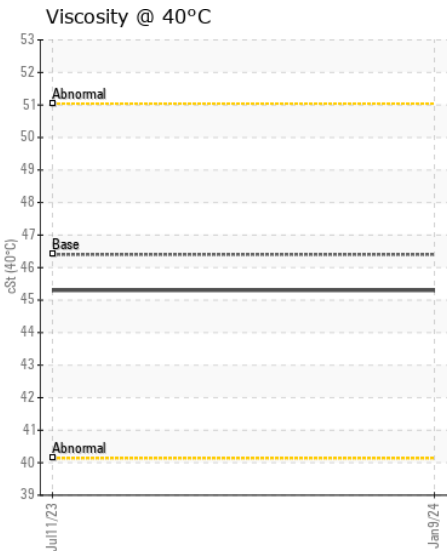
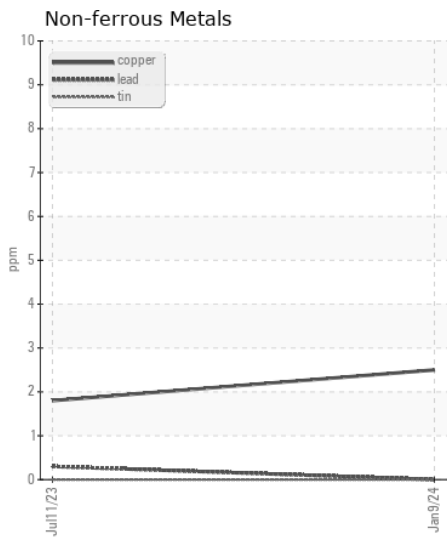
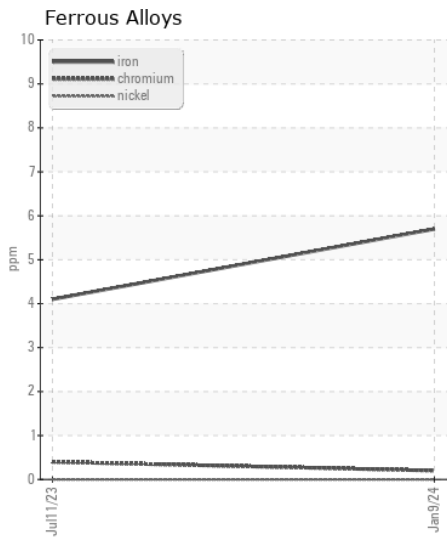
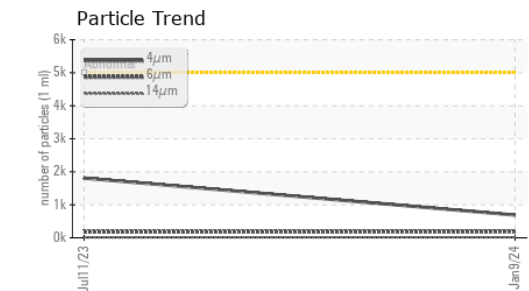
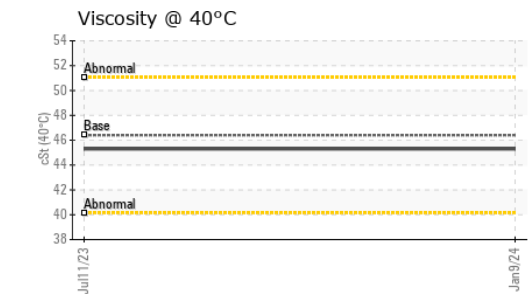
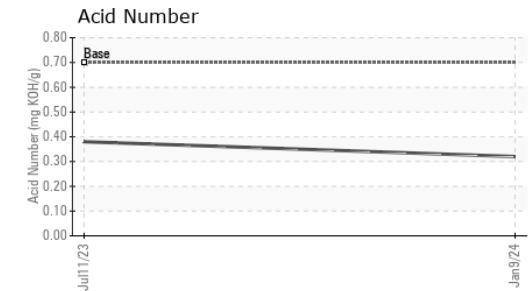
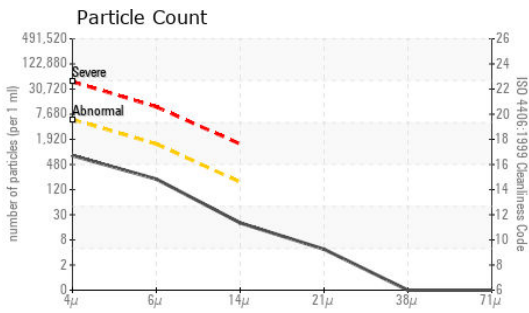
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	---
Water	%	ASTM D6304	>0.05	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>5000	<b>689</b>	1809	---
Particles >6µm		ASTM D7647	>1300	<b>189</b>	179	---
Particles >14µm		ASTM D7647	>160	<b>17</b>	12	---
Particles >21µm		ASTM D7647	>40	<b>4</b>	3	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/15/11</b>	18/15/11	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	NEG	---

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	---
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	0	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	0	<b>1</b>	1	---
Calcium	ppm	ASTM D5185m	50	<b>73</b>	75	---
Phosphorus	ppm	ASTM D5185m	330	<b>446</b>	379	---
Zinc	ppm	ASTM D5185m	430	<b>545</b>	541	---
Sulfur	ppm	ASTM D5185m	760	<b>2738</b>	2770	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	<b>0.32</b>	0.38	---
Visc @ 40°C	cSt	ASTM D445	46.4	<b>45.3</b>	45.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : KFS0001666 Recieved : 12 Jan 2024  
 Lab Number : 06060186 Diagnosed : 16 Jan 2024  
 Unique Number : 10831568 Diagnostician : Jonathan Hester  
 Test Package : PLANT

**MARELLI**  
 181 BENNETT DR  
 PULASKI, TN  
 US 38478  
 Contact: Service Manager

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:  
F: