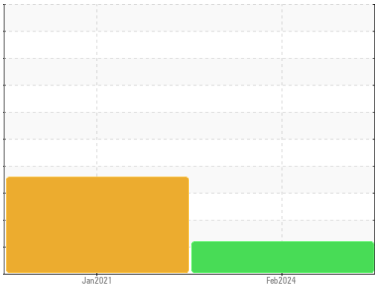
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
OE1025
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 46 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0080531**	PC0036278	---
Sample Date		Client Info		**23 Feb 2024**	13 Jan 2021	---
Machine Age	hrs	Client Info		**1506**	715	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Not Changd**	Not Changd	---
Sample Status				**ATTENTION**	SEVERE	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**2**	3	---
Chromium	ppm	ASTM D5185(m)	>10	**0**	<1	---
Nickel	ppm	ASTM D5185(m)	>10	**<1**	<1	---
Titanium	ppm	ASTM D5185(m)		**0**	<1	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	<1	---
Lead	ppm	ASTM D5185(m)	>10	**<1**	<1	---
Copper	ppm	ASTM D5185(m)	>75	**2**	3	---
Tin	ppm	ASTM D5185(m)	>10	**0**	0	---
Antimony	ppm	ASTM D5185(m)		**0**	<1	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**<1**	<1	---

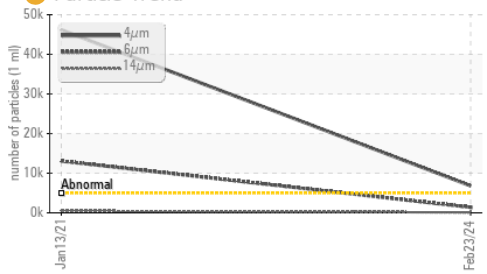
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**26**	92	---
Barium	ppm	ASTM D5185(m)	0	**0**	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	**0**	<1	---
Manganese	ppm	ASTM D5185(m)	1	**0**	<1	---
Magnesium	ppm	ASTM D5185(m)	0	**5**	18	---
Calcium	ppm	ASTM D5185(m)	50	**980**	3159	---
Phosphorus	ppm	ASTM D5185(m)	330	**528**	1012	---
Zinc	ppm	ASTM D5185(m)	430	**636**	1328	---
Sulfur	ppm	ASTM D5185(m)	760	**2443**	6212	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	**4**	14	---
Sodium	ppm	ASTM D5185(m)		**<1**	4	---
Potassium	ppm	ASTM D5185(m)	>20	**<1**	1	---

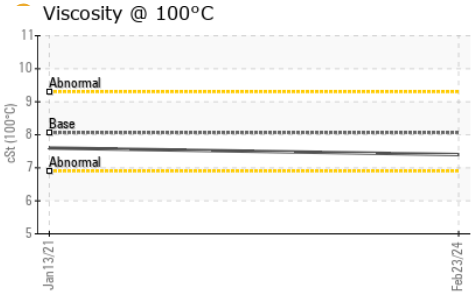
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**6813**	46188	---
Particles >6µm		ASTM D7647	>1300	**1385**	13066	---
Particles >14µm		ASTM D7647	>160	**85**	495	---
Particles >21µm		ASTM D7647	>40	**27**	91	---
Particles >38µm		ASTM D7647	>10	**4**	4	---
Particles >71µm		ASTM D7647	>3	**1**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**20/18/14**	23/21/16	---

OIL ANALYSIS REPORT

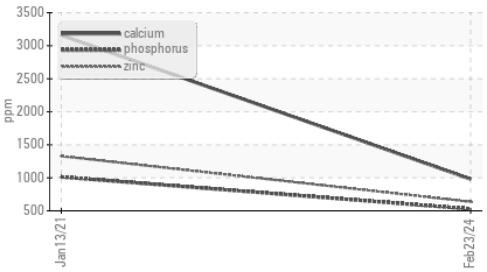
Particle Trend



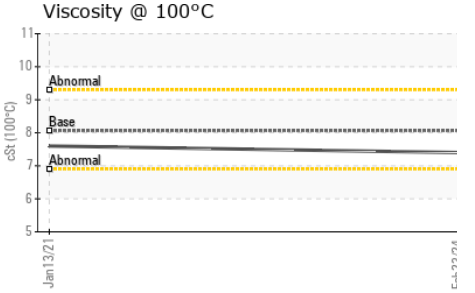
Viscosity @ 100°C



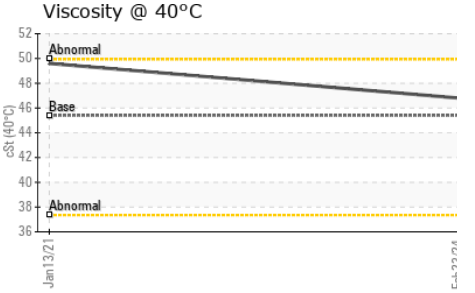
Additives



Viscosity @ 100°C



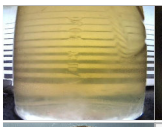
Viscosity @ 40°C



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	**0.59**	1.84	---

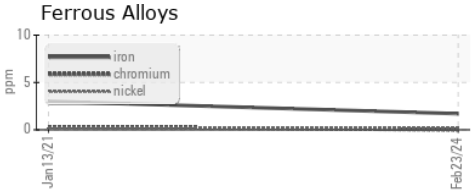
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**NONE**	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	---
Appearance	scalar	Visual*	NORML	**NORML**	NORML	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	---
Free Water	scalar	Visual*		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	45.4	**46.8**	49.6	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.06	**7.4**	7.6	---
Viscosity Index (VI)	Scale	ASTM D2270*	151	**121**	117	---

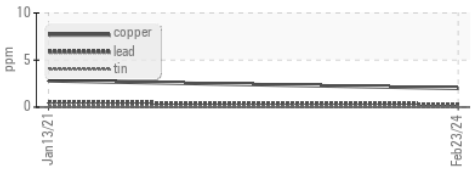
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom				*no image*	*no image*

GRAPHS

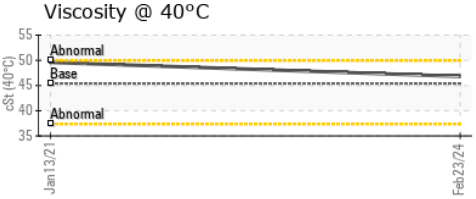
Ferrous Alloys



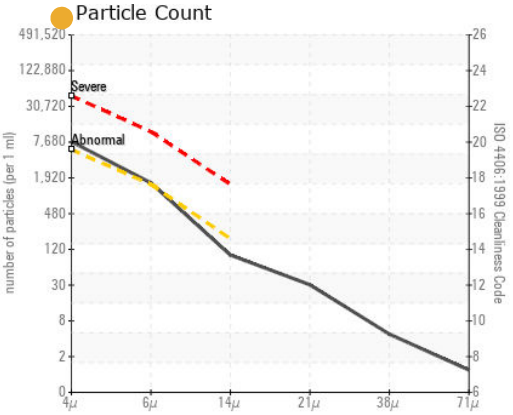
Non-ferrous Metals



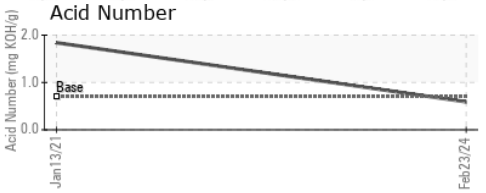
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080531
Lab Number : 02619279
Unique Number : 5736389
Test Package : IND 2 (Additional Tests: KV100, VI)

Received : 01 Mar 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Kevin Marson

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
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CA L4A 2G8
Contact: Bill Acton
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T:
F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.