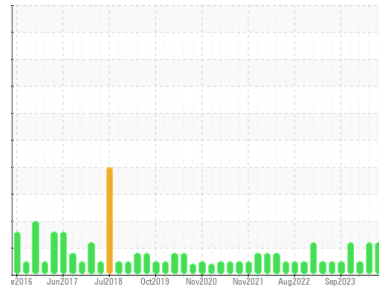




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

MP-105

Machine Id

B52525 - PUMP VACUUM BUSCH RA0630 HAM LINE 1 (TOP) (S/N U093504072)

Component

Top Pump

Fluid

PETRO CANADA PURITY FG SYNTHETIC 100 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

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		WC0907929	WC0894943	WC0880531
Sample Date	Client Info		16 Apr 2024	08 Mar 2024	29 Dec 2023
Machine Age	yrs	Client Info	0	0	0
Oil Age	yrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	9	12	12
Chromium	ppm	ASTM D5185m >5	0	<1	<1
Nickel	ppm	ASTM D5185m >5	0	0	<1
Titanium	ppm	ASTM D5185m >3	<1	0	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >7	<1	<1	2
Lead	ppm	ASTM D5185m >12	0	0	<1
Copper	ppm	ASTM D5185m >30	<1	1	<1
Tin	ppm	ASTM D5185m >9	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	7
Molybdenum	ppm	ASTM D5185m	0	<1	<1
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	<1	0	<1
Calcium	ppm	ASTM D5185m	2	0	1
Phosphorus	ppm	ASTM D5185m	556	574	629
Zinc	ppm	ASTM D5185m	8	5	2
Sulfur	ppm	ASTM D5185m	1755	1651	1638

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >60	3	3	3
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	0	0	<1

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 36750	▲ 42753	583
Particles >6µm	ASTM D7647	>2500	▲ 6515	▲ 8170	196
Particles >14µm	ASTM D7647	>320	77	97	17
Particles >21µm	ASTM D7647	>80	8	6	4
Particles >38µm	ASTM D7647	>20	1	0	0
Particles >71µm	ASTM D7647	>4	1	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	▲ 22/20/13	▲ 23/20/14	16/15/11

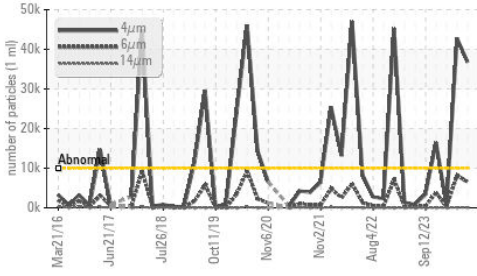
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.5	0.14	0.241	0.16

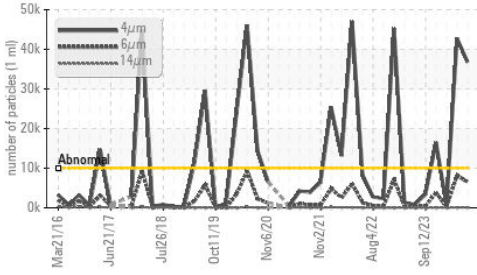


OIL ANALYSIS REPORT

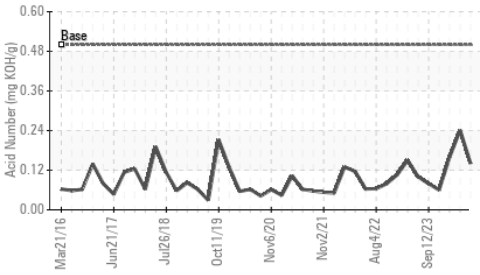
▲ Particle Trend



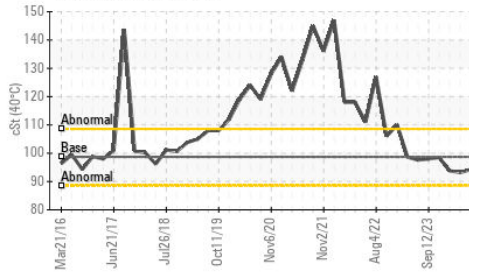
▲ Particle Trend



Acid Number



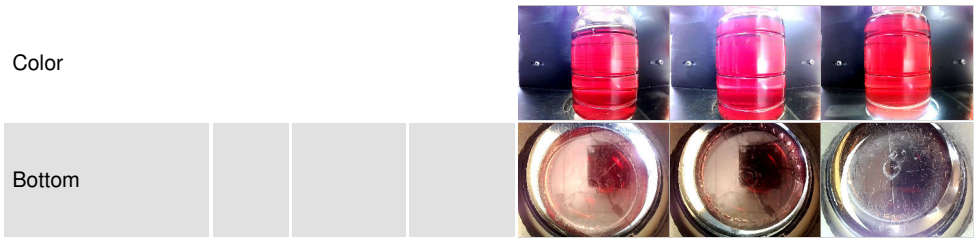
Viscosity @ 40°C



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	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

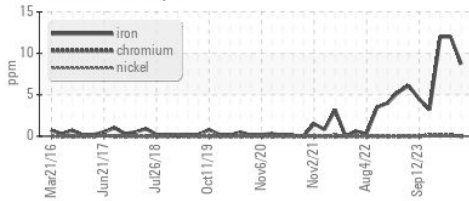
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	98.7	94.2	93.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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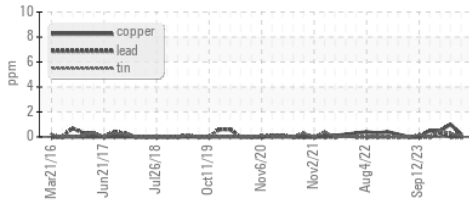


GRAPHS

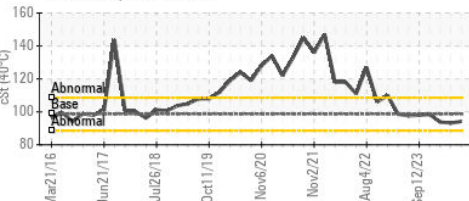
Ferrous Alloys



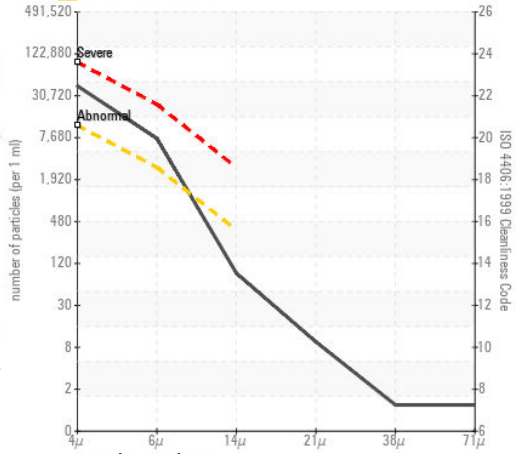
Non-ferrous Metals



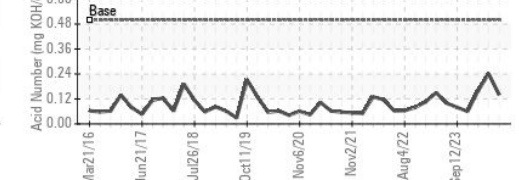
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0907929 **Received** : 22 Apr 2024
Lab Number : 06155840 **Tested** : 23 Apr 2024
Unique Number : 10991263 **Diagnosed** : 24 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: PrtCount)

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 AUSTIN, MN
 US 55912
 Contact: RYAN LOWE
 rslowe@hormel.com
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 F: (507)437-9805

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)