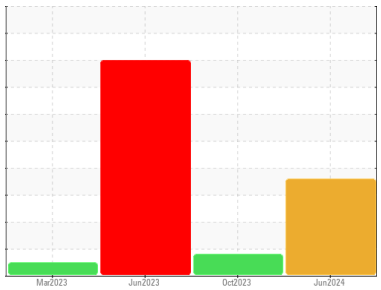
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
[172360]
Machine Id
OVEN 3
Component
Hydraulic System
Fluid
PETRO CANADA PURITY FG AW HYDRAULIC 32 (5 GAL)

DIAGNOSIS

Recommendation
Check seals and/or filters for points of contaminant entry. We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Wear
All component wear rates are normal.

Contamination
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. There is a moderate concentration of water present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0898873**	WC0850461	WC0789530
Sample Date		Client Info		**11 Jun 2024**	02 Oct 2023	15 Jun 2023
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**0**	3	0
Oil Changed		Client Info		**N/A**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	ATTENTION	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**7**	3	8
Chromium	ppm	ASTM D5185(m)	>10	**<1**	<1	1
Nickel	ppm	ASTM D5185(m)	>10	**<1**	0	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**<1**	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	**0**	0	<1
Lead	ppm	ASTM D5185(m)	>10	**0**	<1	0
Copper	ppm	ASTM D5185(m)	>75	**2**	4	11
Tin	ppm	ASTM D5185(m)	>10	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**<1**	<1	<1
Barium	ppm	ASTM D5185(m)		**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	<1
Magnesium	ppm	ASTM D5185(m)		**<1**	<1	2
Calcium	ppm	ASTM D5185(m)		**2**	2	<1
Phosphorus	ppm	ASTM D5185(m)		**442**	435	454
Zinc	ppm	ASTM D5185(m)		**9**	10	26
Sulfur	ppm	ASTM D5185(m)		**820**	838	1543
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	**4**	4	4
Sodium	ppm	ASTM D5185(m)		**1**	1	3
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	1
Water	%	ASTM D6304*	>0.1	▲ **0.315**	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ **3150**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **14355**	● 7797	▲ 41214
Particles >6µm		ASTM D7647	>1300	● **1498**	1246	▲ 12822
Particles >14µm		ASTM D7647	>160	**15**	96	▲ 2582
Particles >21µm		ASTM D7647	>40	**3**	35	▲ 789
Particles >38µm		ASTM D7647	>10	**0**	6	▲ 21
Particles >71µm		ASTM D7647	>3	**0**	1	2
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/18/11**	● 20/17/14	▲ 23/21/19

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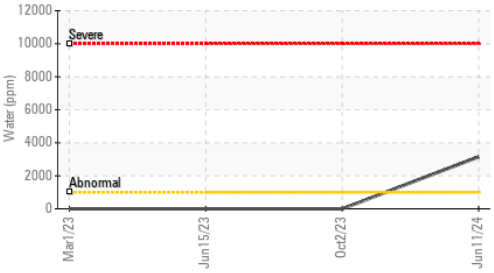
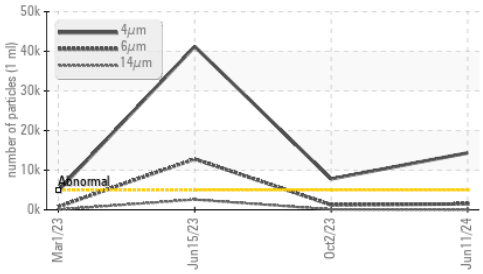
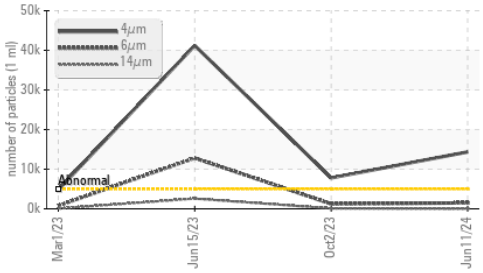
Water (KF)



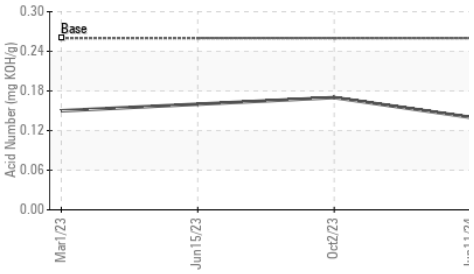
Particle Trend



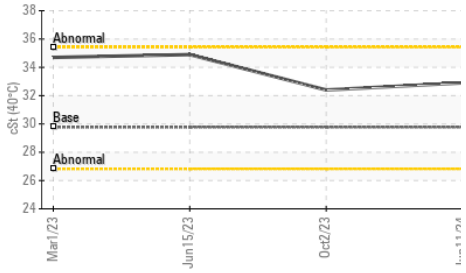
Particle Trend



Acid Number



Viscosity @ 40°C

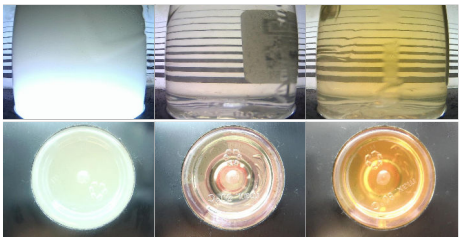


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.26	**0.14**	0.17	0.16

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ **WGOIL**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	▲ **1%**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

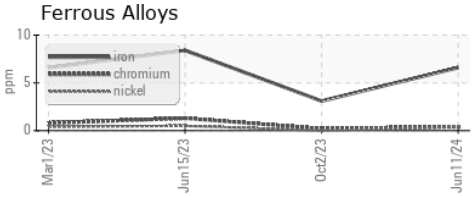
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	29.77	**32.9**	32.4	34.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

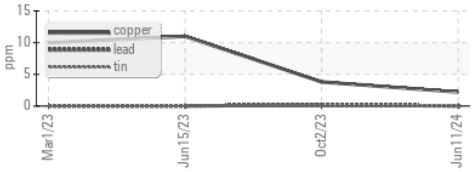


GRAPHS

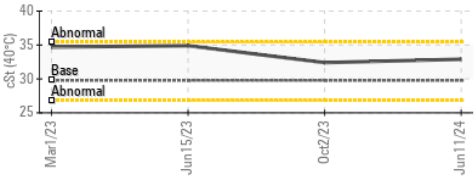
Ferrous Alloys



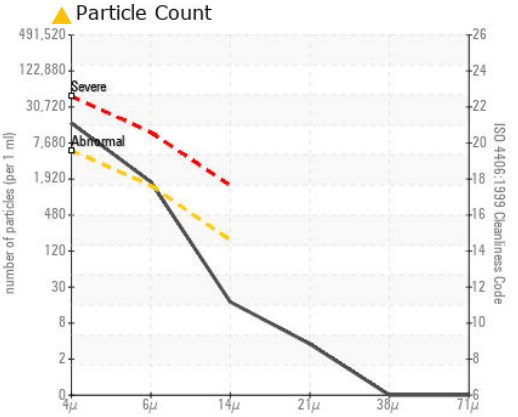
Non-ferrous Metals



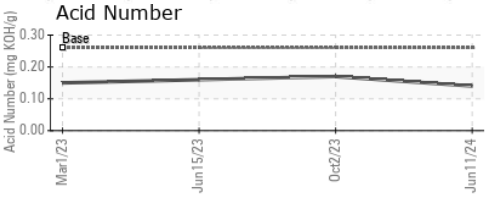
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0898873 **Received** : 18 Jun 2024
Lab Number : 02642609 **Tested** : 20 Jun 2024
Unique Number : 5800148 **Diagnosed** : 20 Jun 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: KF)

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.

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