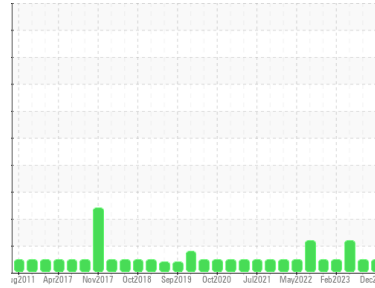




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
[360512]
 Machine Id
ALFA LAVAL CENTRIFUGE #1
 Component
Circulating Hydraulic System
 Fluid
PETRO CANADA TURBOFLO R&O 46 (60 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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		WC0706552	WC0860986	WC0706564
Sample Date	Client Info		27 Dec 2023	25 Sep 2023	23 May 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	<1	<1	1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	0	<1
Lead	ppm	ASTM D5185(m)	>20	<1	<1	0
Copper	ppm	ASTM D5185(m)	>20	<1	2	2
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
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)		0	<1	0
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		<1	0	<1
Calcium	ppm	ASTM D5185(m)	0	2	2	0
Phosphorus	ppm	ASTM D5185(m)	3	8	9	8
Zinc	ppm	ASTM D5185(m)	0	10	11	10
Sulfur	ppm	ASTM D5185(m)		98	93	84
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	10	12	14
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	2	0	<1

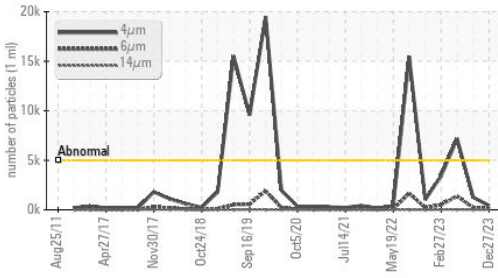
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	420	1276	▲ 7169
Particles >6µm	ASTM D7647	>1300	115	224	▲ 1374
Particles >14µm	ASTM D7647	>160	5	10	23
Particles >21µm	ASTM D7647	>40	1	3	4
Particles >38µm	ASTM D7647	>10	0	0	1
Particles >71µm	ASTM D7647	>3	0	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	16/14/10	17/15/10	▲ 20/18/12

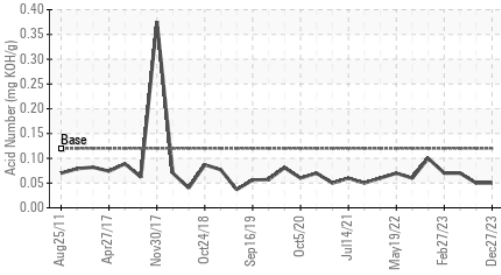


OIL ANALYSIS REPORT

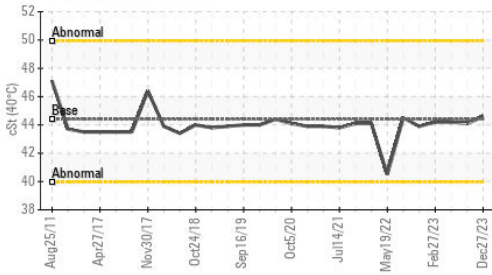
Particle Trend



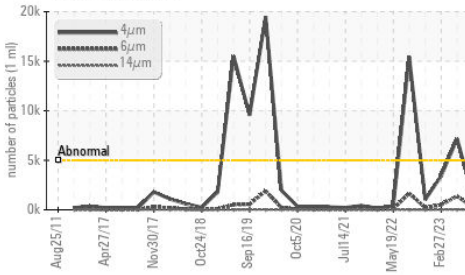
Acid Number



Viscosity @ 40°C



Particle Trend



FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g ASTM D974*	0.12	0.05	0.05	0.07

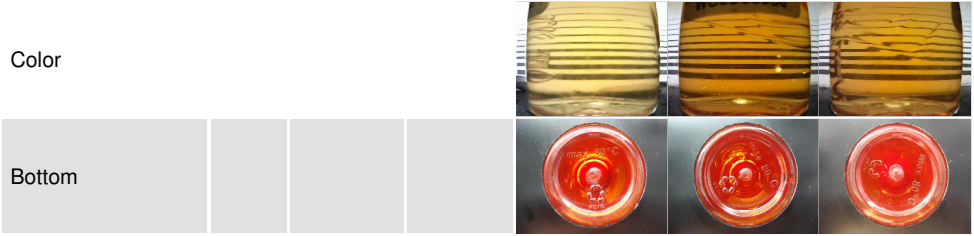
VISUAL

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*	>0.05	NEG	NEG	NEG
Free Water	scalar Visual*		NEG	NEG	NEG

FLUID PROPERTIES

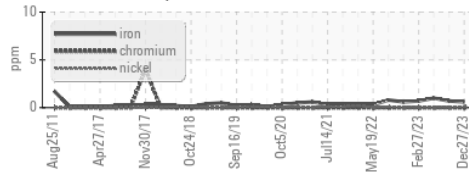
method	limit/base	current	history1	history2	
Visc @ 40°C	cSt ASTM D7279(m)	44.4	44.6	44.1	44.2

SAMPLE IMAGES

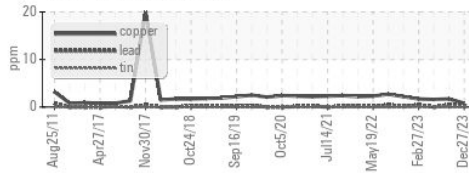


GRAPHS

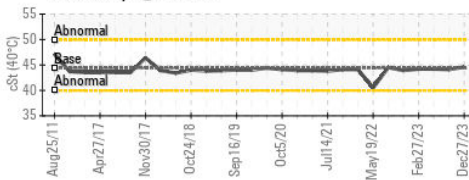
Ferrous Alloys



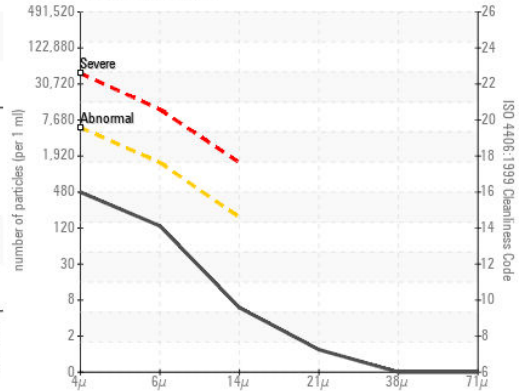
Non-ferrous Metals



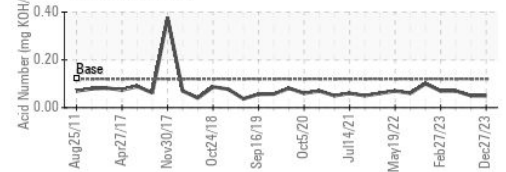
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **ONTARIO CLEAN WATER AGENCY**
Sample No. : WC0706552 **Received** : 02 Jan 2024 **2307 LAKESHORE RD. WEST**
Lab Number : 02605911 **Diagnosed** : 03 Jan 2024 **MISSISSAUGA, ON**
Unique Number : 5706997 **Diagnostician** : Kevin Marson **CA L5J 1J9**
Test Package : IND 2 (Additional Tests: TAN Man) **Contact: Hisham Alkurdi**

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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