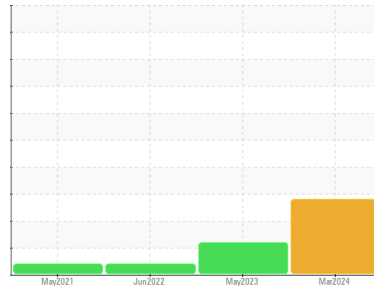




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
VIAM/Main Floor
Machine Id
[VIAM^Main Floor] COMP 1 MOLD PRESS
Component
Hydraulic System
Fluid
PETRO CANADA TURBOFLO R&O 150 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

High concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample. There is a light concentration of water 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	KFS0005137	KFS0002487	KFS0001650
Sample Date	Client Info	18 Mar 2024	16 May 2023	28 Jun 2022
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	2	<1	<1
Chromium	ppm	ASTM D5185m >20	<1	<1	0
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >20	0	<1	0
Lead	ppm	ASTM D5185m >20	0	<1	<1
Copper	ppm	ASTM D5185m >20	11	13	12
Tin	ppm	ASTM D5185m >20	<1	0	0
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	3
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	<1	<1	0
Manganese	ppm	ASTM D5185m	<1	<1	0
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m 0	9	15	14
Phosphorus	ppm	ASTM D5185m 4	108	130	140
Zinc	ppm	ASTM D5185m 0	125	134	139
Sulfur	ppm	ASTM D5185m	1961	1952	2315

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	1	1	2
Sodium	ppm	ASTM D5185m	1	1	<1
Potassium	ppm	ASTM D5185m >20	0	0	0
Water	%	ASTM D6304 >0.05	▲ 0.182	---	---
ppm Water	ppm	ASTM D6304 >500	▲ 1820	---	---

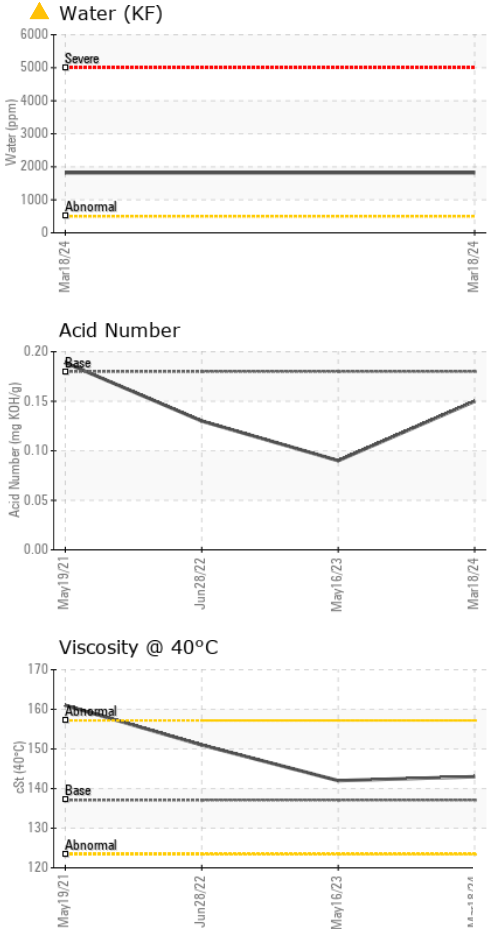
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >1300	---	▲ 17537	---
Particles >6µm	ASTM D7647 >320	---	▲ 2620	---
Particles >14µm	ASTM D7647 >80	---	61	---
Particles >21µm	ASTM D7647 >20	---	9	---
Particles >38µm	ASTM D7647 >4	---	0	---
Particles >71µm	ASTM D7647 >3	---	0	---
Oil Cleanliness	ISO 4406 (c) >17/15/13	---	▲ 21/19/13	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.18	0.15	0.09	0.13

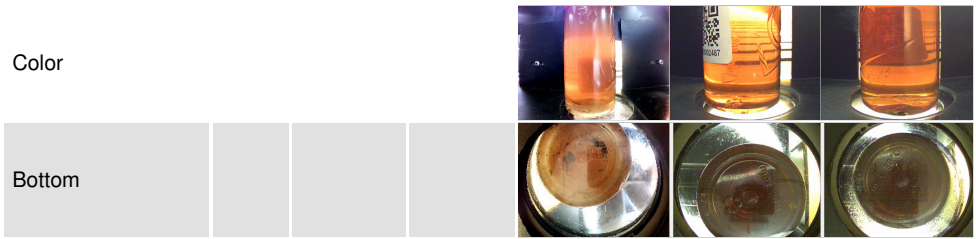
OIL ANALYSIS REPORT



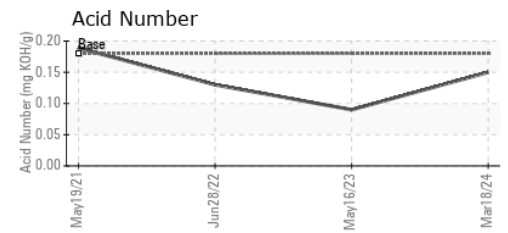
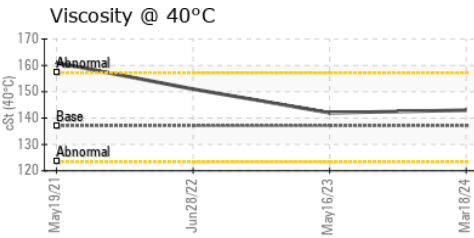
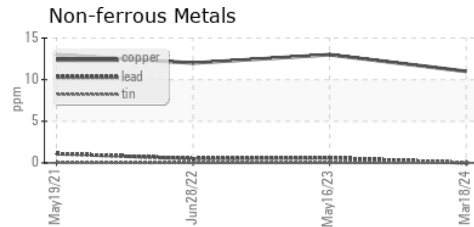
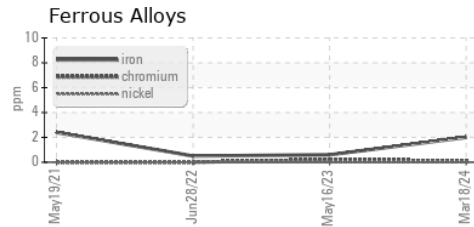
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	▲ HEAVY	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	137.1	143	142

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0005137 **Received** : 21 Mar 2024
Lab Number : **06124836** **Tested** : 26 Mar 2024
Unique Number : 10938987 **Diagnosed** : 26 Mar 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF)

VIAM/VICAM Manufacturing - Tennessee
 87 Parktower Road
 Manchester, TN
 US 37355
 Contact: Eric Thompson
 ethompson@viammfg.com
 T: (931)461-2300
 F:

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)