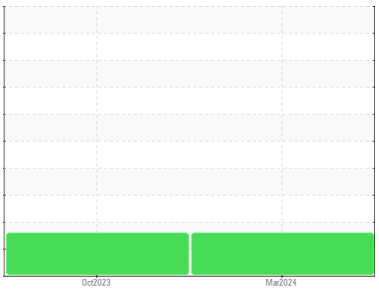
OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id
FRICK DC-3 (S/N SGC2317)
Component
Refrigeration Compressor
Fluid
PETRO CANADA REFLO 46A AMMONIA OIL (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

Fluid Condition
The oil viscosity is higher than normal. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP0008056**	USP0002797	---
Sample Date		Client Info		**31 Mar 2024**	23 Oct 2023	---
Machine Age	hrs	Client Info		**64188**	61323	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**ATTENTION**	ATTENTION	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	**<1**	<1	---
Chromium	ppm	ASTM D5185m	>2	**<1**	0	---
Nickel	ppm	ASTM D5185m		**<1**	0	---
Titanium	ppm	ASTM D5185m		**<1**	<1	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>3	**1**	0	---
Lead	ppm	ASTM D5185m	>2	**0**	0	---
Copper	ppm	ASTM D5185m	>8	**0**	0	---
Tin	ppm	ASTM D5185m	>4	**<1**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**<1**	0	---

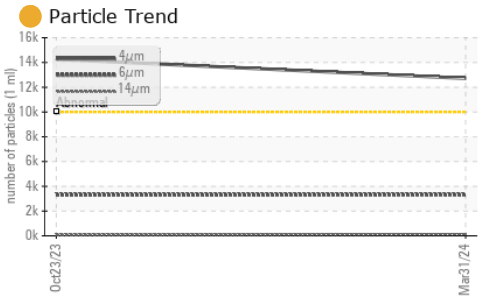
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	---
Barium	ppm	ASTM D5185m	0	**0**	0	---
Molybdenum	ppm	ASTM D5185m	0	**<1**	0	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m	0	**<1**	0	---
Calcium	ppm	ASTM D5185m	0	**0**	0	---
Phosphorus	ppm	ASTM D5185m	0	**0**	0	---
Zinc	ppm	ASTM D5185m	0	**0**	2	---
Sulfur	ppm	ASTM D5185m	0	**0**	4	---

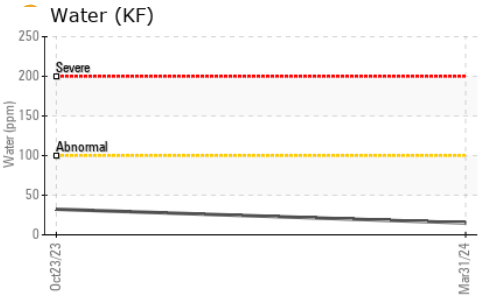
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	<1	---
Sodium	ppm	ASTM D5185m		**<1**	1	---
Potassium	ppm	ASTM D5185m	>20	**1**	<1	---
Water	%	ASTM D6304	>0.01	**0.001**	0.003	---
ppm Water	ppm	ASTM D6304	>100	**15**	32.3	---

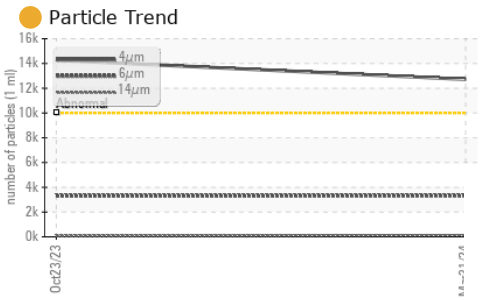
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**12717**	14267	---
Particles >6µm		ASTM D7647	>2500	**3315**	3304	---
Particles >14µm		ASTM D7647	>320	**129**	68	---
Particles >21µm		ASTM D7647	>80	**21**	9	---
Particles >38µm		ASTM D7647	>20	**0**	1	---
Particles >71µm		ASTM D7647	>4	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**21/19/14**	21/19/13	---

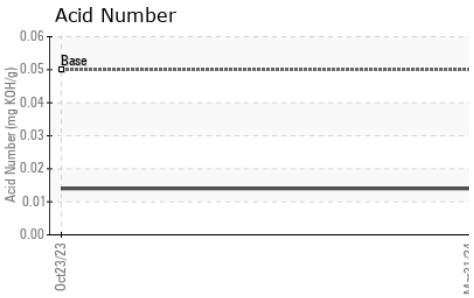
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974	0.05	**0.014**	0.014	---

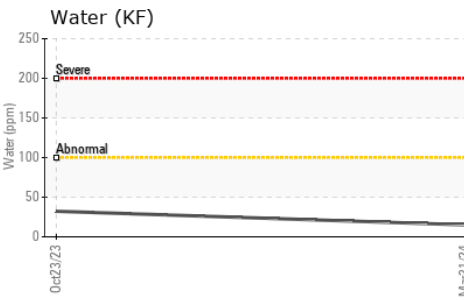
OIL ANALYSIS REPORT





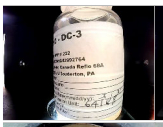
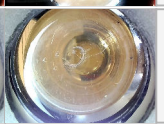




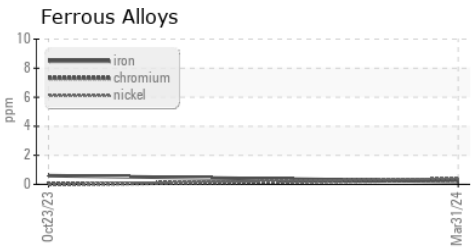


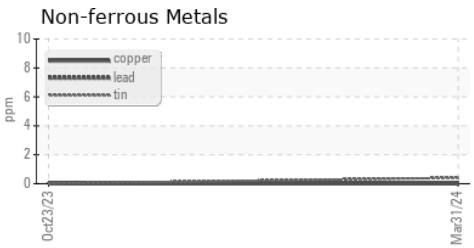
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.01	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

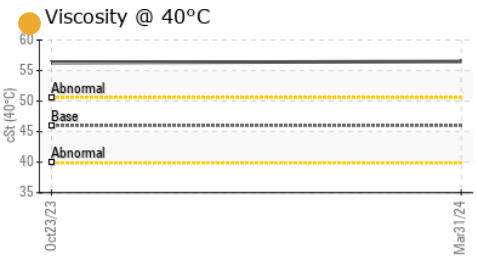
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	**56.5**	56.3	---

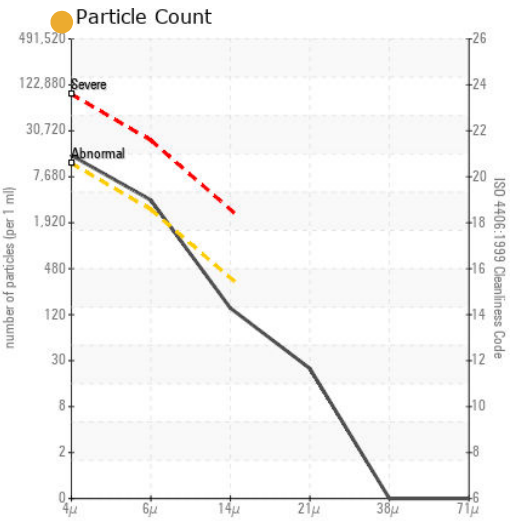
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					no image
Bottom					no image

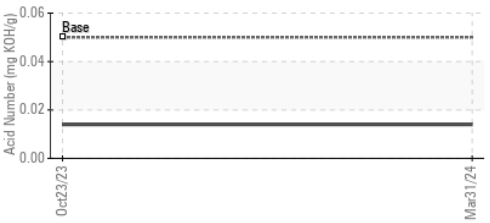
GRAPHS











Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0008056
Lab Number : 06138582
Unique Number : 10963390
Test Package : IND 2

Received : 04 Apr 2024
Tested : 05 Apr 2024
Diagnosed : 05 Apr 2024 - Doug Bogart

JBS
SOUDERTON, PA
US
Contact:
T:
F:

Certificate L2367

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)