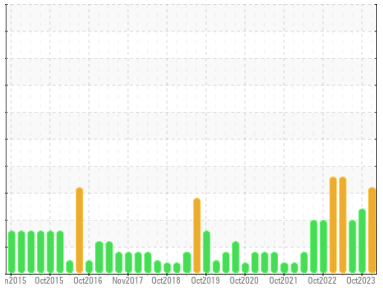
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
RP-101
Machine Id
B57035 CAKE TRANSFER SCREW
Component
Gearbox
Fluid
PETRO CANADA ENDURATEX EP 320 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. Resample at the next service interval to monitor. There is too much water present in this sample to perform a particle count.

Wear
Gear wear is indicated.

Contamination
Appearance is milky. There is a moderate concentration of water present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0880543**	WC0850217	WC0781450
Sample Date		Client Info		**05 Jan 2024**	13 Oct 2023	16 Jul 2023
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**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	>200	▲ **299**	183	167
Chromium	ppm	ASTM D5185m	>15	**1**	<1	<1
Nickel	ppm	ASTM D5185m	>15	**<1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**5**	1	<1
Lead	ppm	ASTM D5185m	>100	**<1**	0	0
Copper	ppm	ASTM D5185m	>200	**2**	<1	<1
Tin	ppm	ASTM D5185m	>25	**0**	0	0
Vanadium	ppm	ASTM D5185m		**0**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	55	**29**	31	20
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**0**	0	0
Manganese	ppm	ASTM D5185m	0	**4**	3	3
Magnesium	ppm	ASTM D5185m	0	**9**	0	2
Calcium	ppm	ASTM D5185m	0	**93**	38	35
Phosphorus	ppm	ASTM D5185m	240	**558**	423	466
Zinc	ppm	ASTM D5185m	1	**122**	81	61
Sulfur	ppm	ASTM D5185m	13700	**7266**	5511	6762

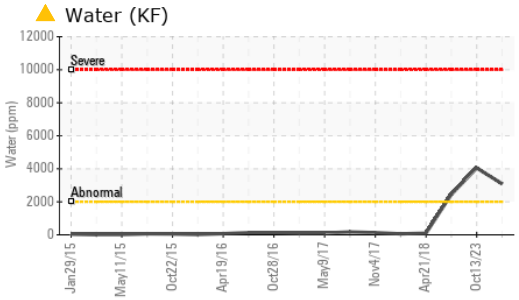
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**30**	19	14
Sodium	ppm	ASTM D5185m		**10**	3	7
Potassium	ppm	ASTM D5185m	>20	**5**	2	<1
Water	%	ASTM D6304	>0.2	▲ **0.309**	▲ 0.405	---
ppm Water	ppm	ASTM D6304	>2000	▲ **3090**	▲ 4050	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**---**	---	▲ 172605
Particles >6µm		ASTM D7647	>2500	**---**	---	▲ 16881
Particles >14µm		ASTM D7647	>320	**---**	---	▲ 567
Particles >21µm		ASTM D7647	>80	**---**	---	▲ 142
Particles >38µm		ASTM D7647	>20	**---**	---	5
Particles >71µm		ASTM D7647	>4	**---**	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**---**	---	▲ 25/21/16

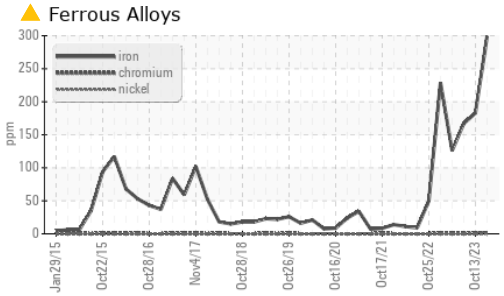
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**1.57**	1.51	1.20

OIL ANALYSIS REPORT

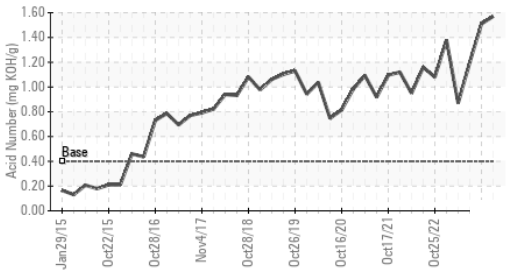
Water (KF)



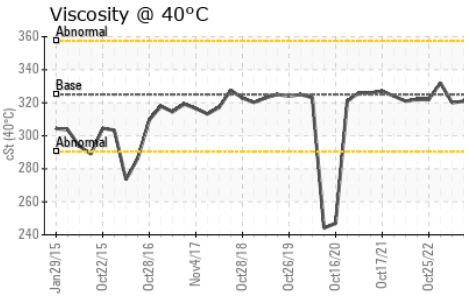
Ferrous Alloys



Acid Number

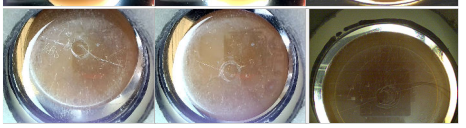


Viscosity @ 40°C



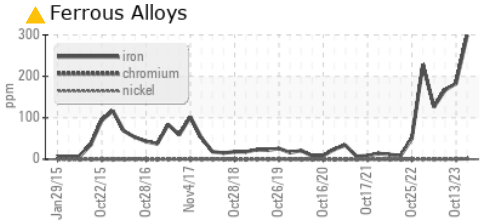
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	325	**329**	327	321

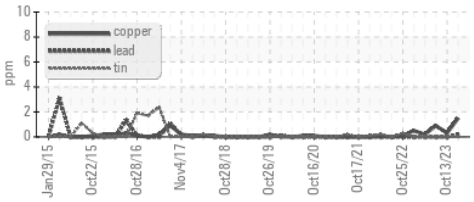
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

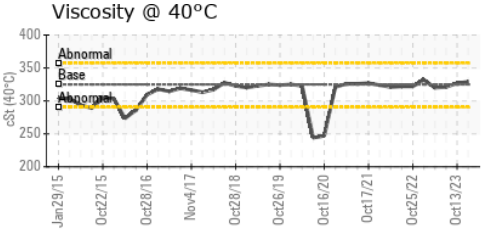
Ferrous Alloys



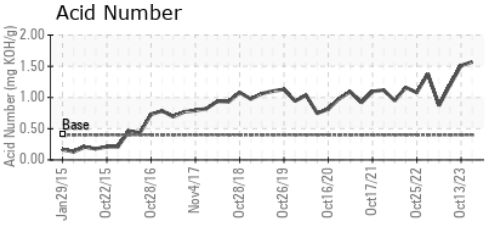
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0880543 **Recieved** : 17 Jan 2024
Lab Number : 06062624 **Diagnosed** : 24 Jan 2024
Unique Number : 10834006 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

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