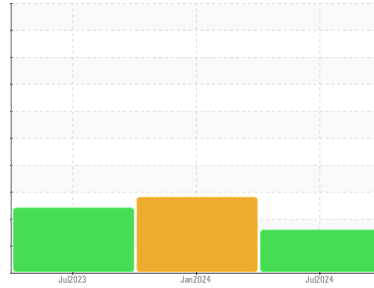


OIL ANALYSIS REPORT

Area
PHASE 1 HTS
 Machine Id
HT 01
 Component
Agitator Gearbox
 Fluid
PETRO CANADA PURITY FG SYN GEAR ISO 220 (--- LTR)

Sample Rating Trend



DIAGNOSIS

- Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
The copper level is abnormal. All other 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 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	PCA0124933	PCA0111044	USP244666
Sample Date	Client Info	08 Jul 2024	08 Jan 2024	17 Jul 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Chngd	Not Chngd	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>150	2	4	3
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	2	0
Lead	ppm	ASTM D5185m	>100	0	0	<1
Copper	ppm	ASTM D5185m	>50	78	75	38
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		12	14	8
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		0	<1	1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		2	<1	<1
Calcium	ppm	ASTM D5185m		1	19	2
Phosphorus	ppm	ASTM D5185m		690	675	623
Zinc	ppm	ASTM D5185m		22	9	12
Sulfur	ppm	ASTM D5185m		9839	9756	9997

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>50	8	6	19
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	0	1	1

FLUID CLEANLINESS

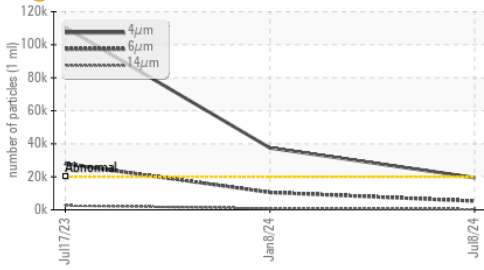
method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>20000	19456	37498	110457
Particles >6µm	ASTM D7647	>5000	5289	10514	27829
Particles >14µm	ASTM D7647	>640	322	777	2550
Particles >21µm	ASTM D7647	>160	69	203	835
Particles >38µm	ASTM D7647	>40	11	4	62
Particles >71µm	ASTM D7647	>10	2	0	6
Oil Cleanliness	ISO 4406 (c)	>21/19/16	21/20/16	22/21/17	24/22/19

FLUID DEGRADATION

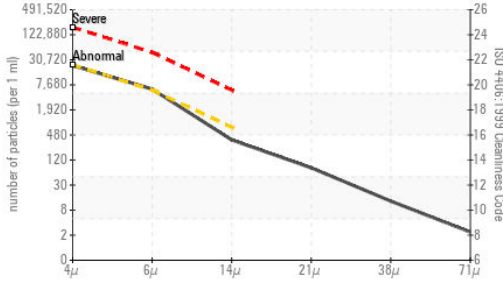
method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.42	1.49	1.30	0.93

OIL ANALYSIS REPORT

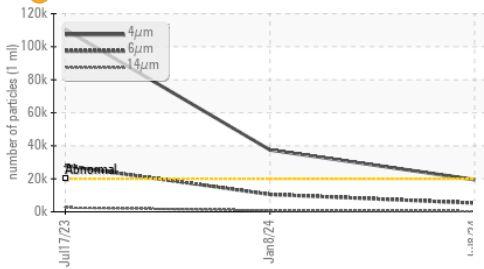
Particle Trend



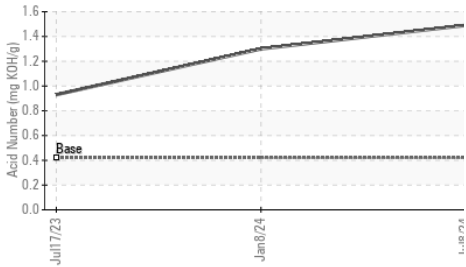
Particle Count



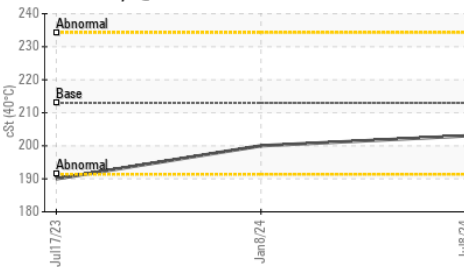
Particle Trend



Acid Number



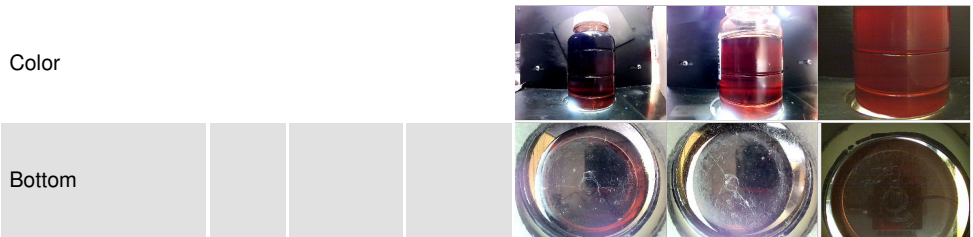
Viscosity @ 40°C



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

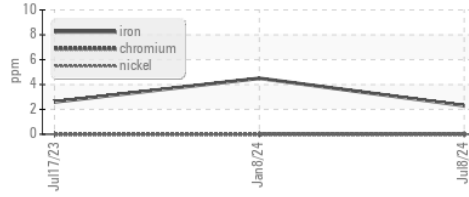
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 213	203	200	190

SAMPLE IMAGES	method	limit/base	current	history1	history2
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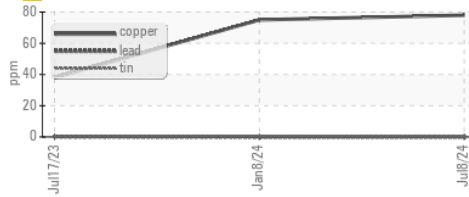


GRAPHS

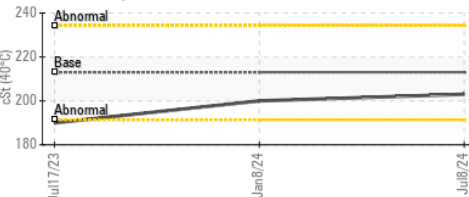
Ferrous Alloys



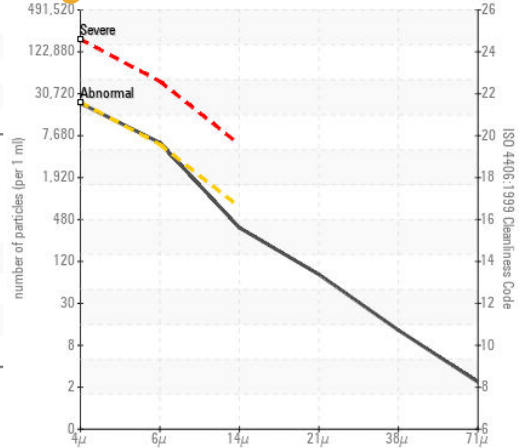
Non-ferrous Metals



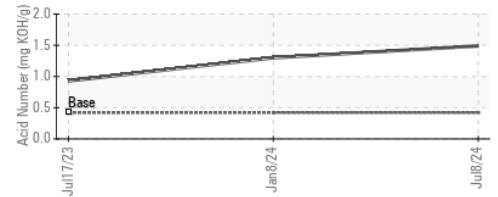
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0124933

Lab Number : 06233248

Unique Number : 11116741

Test Package : IND 2 (Additional Tests: PrtCount)

Received : 11 Jul 2024

Tested : 12 Jul 2024

Diagnosed : 12 Jul 2024 - Don Baldrige

KraftHeinz - Mason City - Plant 8360

1022 12TH ST

MASON CITY, IA

US 50401

Contact: Service Manager

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)

T: (641)421-2936