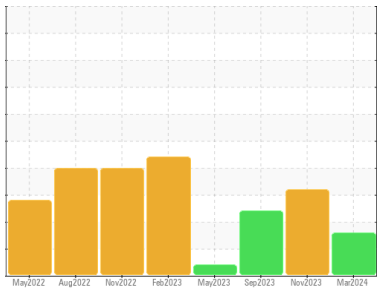
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
INJECT B ROOM [98750087]
Machine Id
KR-GR-003250 - 11 FT GRINDER (S/N INJECT B - 11513044)
Component
Gearbox
Fluid
PETRO CANADA PURITY FG SYN GEAR ISO 220 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. Resample at the next service interval to monitor. (Customer Sample Comment: 98750087)

Wear
All component wear rates are normal.

Contamination
There is a moderate concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0116074**	PCA0108456	PCA0102525
Sample Date		Client Info		**14 Mar 2024**	15 Nov 2023	05 Sep 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				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**65**	60	56
Chromium	ppm	ASTM D5185m	>15	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>15	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**3**	<1	2
Lead	ppm	ASTM D5185m	>100	**<1**	0	0
Copper	ppm	ASTM D5185m	>200	**<1**	0	1
Tin	ppm	ASTM D5185m	>25	**<1**	<1	0
Vanadium	ppm	ASTM D5185m		**<1**	0	<1
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**11**	10	10
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**41**	37	40
Manganese	ppm	ASTM D5185m		**2**	1	1
Magnesium	ppm	ASTM D5185m		**2**	<1	0
Calcium	ppm	ASTM D5185m		**20**	17	6
Phosphorus	ppm	ASTM D5185m		**508**	479	507
Zinc	ppm	ASTM D5185m		**45**	20	11
Sulfur	ppm	ASTM D5185m		**4278**	4082	4929

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**5**	4	4
Sodium	ppm	ASTM D5185m		**10**	6	9
Potassium	ppm	ASTM D5185m	>20	**3**	2	3
Water	%	ASTM D6304	>0.2	▲ **0.523**	▲ 0.853	▲ 0.855
ppm Water	ppm	ASTM D6304	>2000	▲ **5230**	▲ 8530	▲ 8550

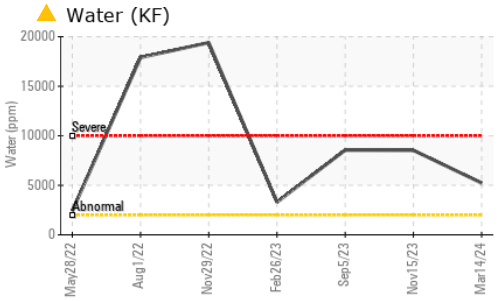
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**1749**	---	1262
Particles >6µm		ASTM D7647	>2500	**953**	---	687
Particles >14µm		ASTM D7647	>640	**162**	---	117
Particles >21µm		ASTM D7647	>160	**55**	---	39
Particles >38µm		ASTM D7647	>40	**8**	---	6
Particles >71µm		ASTM D7647	>10	**1**	---	1
Oil Cleanliness		ISO 4406 (c)	>20/18/16	**18/17/15**	---	17/17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.42	**0.74**	0.58	0.64

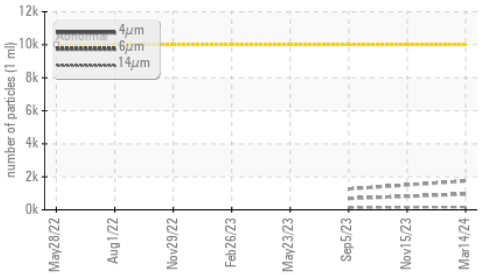
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

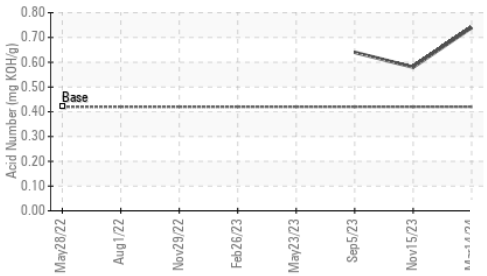
Water (KF)



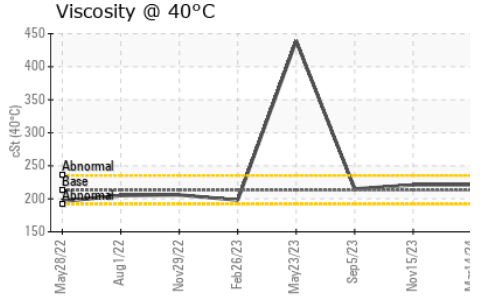
Particle Trend



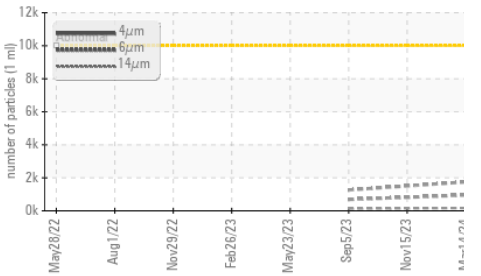
Acid Number



Viscosity @ 40°C



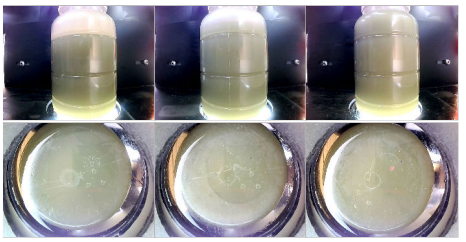
Particle Trend



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**	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	● MILKY	● MILKY
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	0.2%	0.2%
Free Water	scalar	*Visual		**NEG**	NEG	NEG

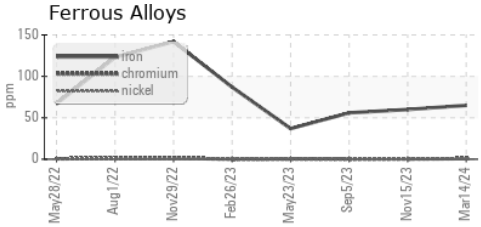
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213	**221**	221	215

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

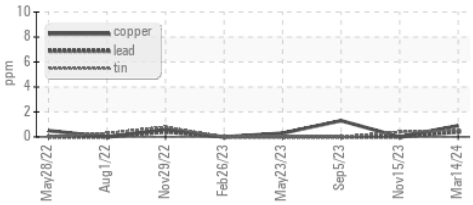


GRAPHS

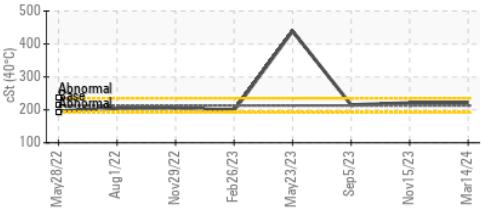
Ferrous Alloys



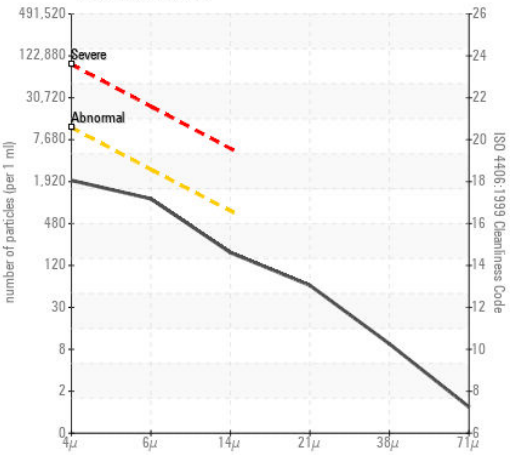
Non-ferrous Metals



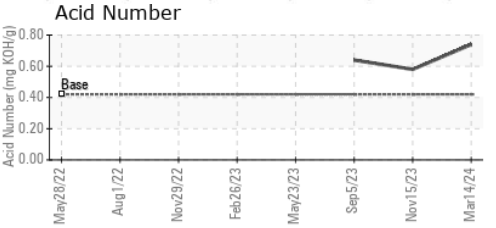
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0116074
Lab Number : 06133214
Unique Number : 10952679
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 29 Mar 2024
Tested : 05 Apr 2024
Diagnosed : 05 Apr 2024 - Jonathan Hester

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)

KraftHeinz - Kirksville - Plant 8333 PCA
2504 INDUSTRIAL DR
KIRKSVILLE, MO
US 63501
Contact: WALLACE WARD
wallace.ward@kraftheinzcompany.com
T: (660)627-1031
F: (660)627-5887

Report Id: KRAKIR [WUSCAR] 06133214 (Generated: 04/05/2024 12:13:25) Rev: 1

Submitted By: Wilberto Pacheco Garcia