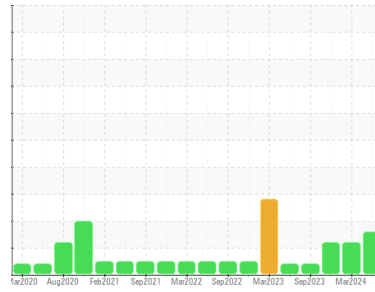


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

GRIND ROOM [98967362]

Machine Id

KR-GR-002489 - INCLINE AUGER 4A (S/N GRIND A - 11513016)

Component

Gearbox

Fluid

PETRO CANADA 220 (17 QTS)

DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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	PCA0122299	PCA0116075	PCA0110818
Sample Date	Client Info	24 May 2024	14 Mar 2024	12 Nov 2023
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

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >200	47	9	24
Chromium	ppm ASTM D5185m >15	<1	<1	0
Nickel	ppm ASTM D5185m >15	0	0	0
Titanium	ppm ASTM D5185m	<1	<1	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >25	2	3	<1
Lead	ppm ASTM D5185m >100	<1	<1	0
Copper	ppm ASTM D5185m >200	<1	<1	<1
Tin	ppm ASTM D5185m >25	<1	<1	0
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<1	2	2
Barium	ppm ASTM D5185m	<1	<1	7
Molybdenum	ppm ASTM D5185m	<1	<1	0
Manganese	ppm ASTM D5185m	<1	<1	0
Magnesium	ppm ASTM D5185m	<1	<1	<1
Calcium	ppm ASTM D5185m	112	71	55
Phosphorus	ppm ASTM D5185m	450	408	377
Zinc	ppm ASTM D5185m	5	1	0
Sulfur	ppm ASTM D5185m	3431	2980	3227

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	5	4	3
Sodium	ppm ASTM D5185m	1	0	0
Potassium	ppm ASTM D5185m >20	2	2	1

FLUID CLEANLINESS

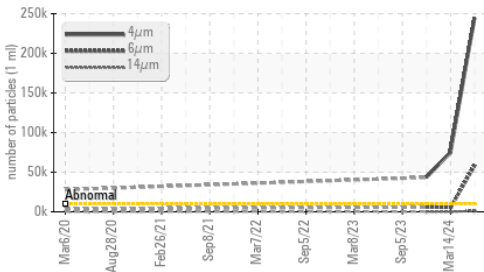
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 244586	▲ 74875	▲ 43445
Particles >6µm	ASTM D7647 >2500	▲ 58363	▲ 5700	▲ 6023
Particles >14µm	ASTM D7647 >640	● 1118	83	234
Particles >21µm	ASTM D7647 >160	131	15	52
Particles >38µm	ASTM D7647 >40	1	0	1
Particles >71µm	ASTM D7647 >10	0	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/16	▲ 25/23/17	▲ 23/20/14	▲ 23/20/15

FLUID DEGRADATION

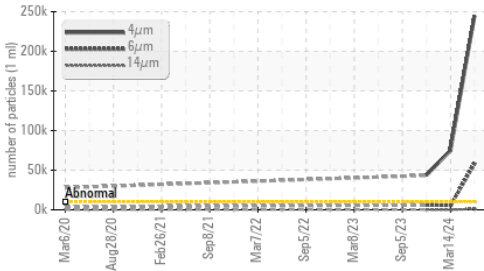
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.29	0.37	0.33

OIL ANALYSIS REPORT

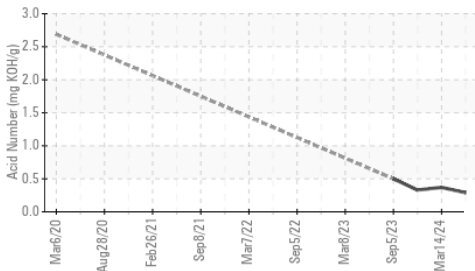
▲ Particle Trend



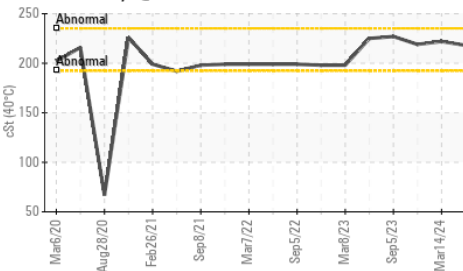
▲ Particle Trend



Acid Number



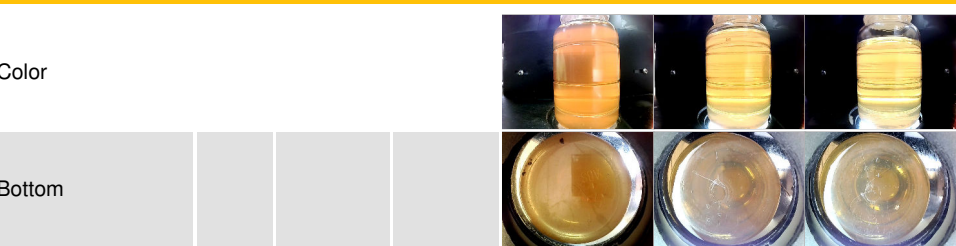
Viscosity @ 40°C



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

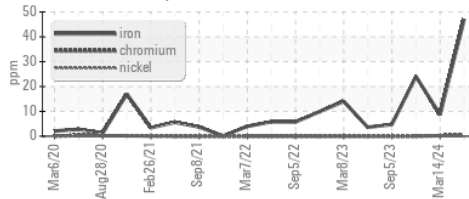
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	218	222	219

SAMPLE IMAGES

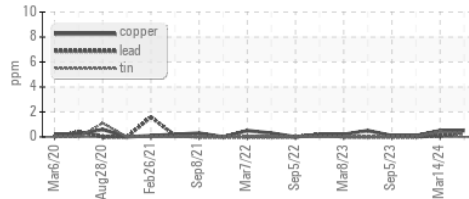


GRAPHS

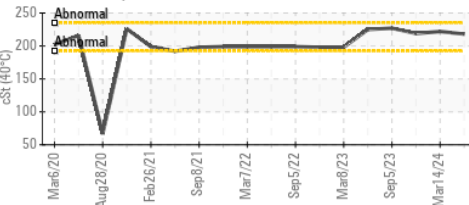
Ferrous Alloys



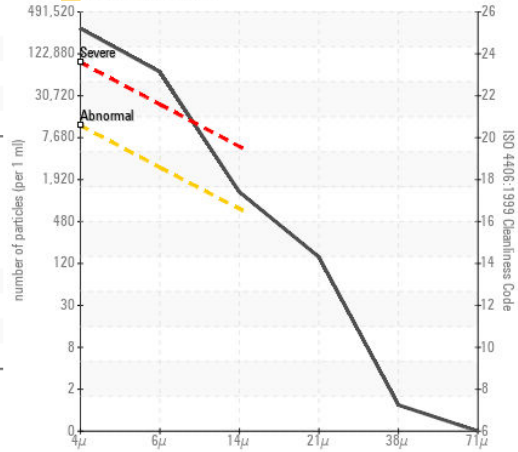
Non-ferrous Metals



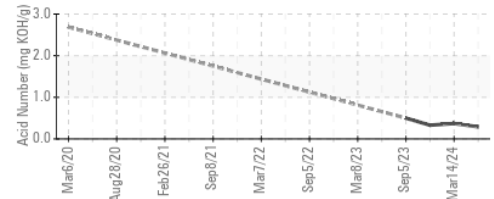
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

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

Sample No. : PCA0122299

Lab Number : 06195364

Unique Number : 11057487

Test Package : IND 2 (Additional Tests: PrtCount)

Received : 30 May 2024

Tested : 31 May 2024

Diagnosed : 31 May 2024 - Angela Borella

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

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)