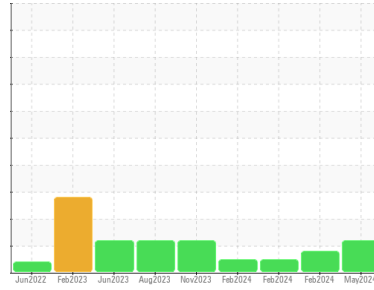




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

[10-1513027]

Machine Id

VANDEBERG EAST VANDEBERG 17B

Component

Gearbox

Fluid

PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high 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		USP0012449	USP0006272	USP0006277
Sample Date	Client Info		31 May 2024	29 Feb 2024	28 Feb 2024
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	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	8	3	2
Chromium	ppm	ASTM D5185m	>15	0	0	0
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	<1	0	0
Lead	ppm	ASTM D5185m	>100	<1	0	0
Copper	ppm	ASTM D5185m	>200	<1	0	0
Tin	ppm	ASTM D5185m	>25	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		2	1	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		0	<1	<1
Calcium	ppm	ASTM D5185m		353	170	1
Phosphorus	ppm	ASTM D5185m		491	363	542
Zinc	ppm	ASTM D5185m		0	0	0
Sulfur	ppm	ASTM D5185m		3067	2985	732

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	4	2	2
Sodium	ppm	ASTM D5185m		3	<1	0
Potassium	ppm	ASTM D5185m	>20	1	1	1
Water	%	ASTM D6304	>0.2	0.001	0.001	0.002
ppm Water	ppm	ASTM D6304	>2000	1	7	21

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ 70642	---	6122
Particles >6µm	ASTM D7647	>5000	▲ 15898	---	1095
Particles >14µm	ASTM D7647	>640	63	---	19
Particles >21µm	ASTM D7647	>160	2	---	3
Particles >38µm	ASTM D7647	>40	0	---	1
Particles >71µm	ASTM D7647	>10	0	---	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ 23/21/13	---	20/17/11

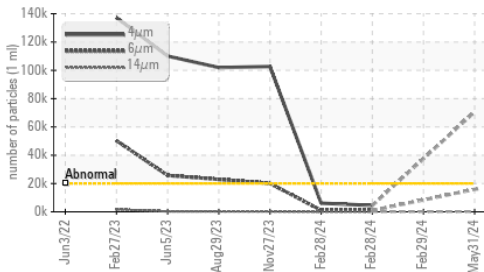
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.59	0.38	0.35	0.69

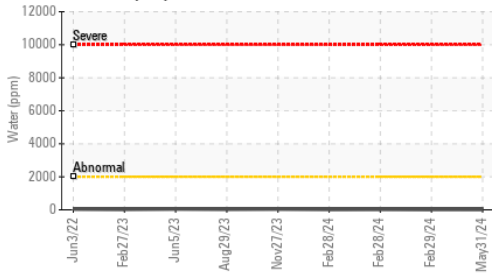


OIL ANALYSIS REPORT

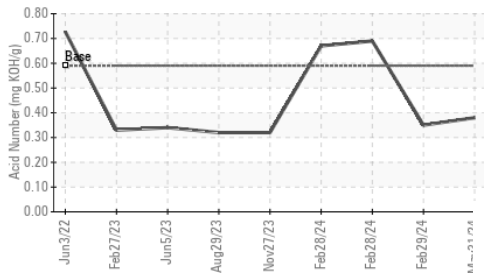
Particle Trend



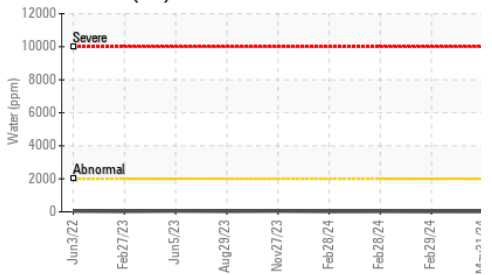
Water (KF)



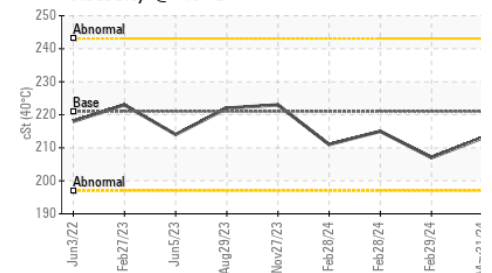
Acid Number



Water (KF)



Viscosity @ 40°C



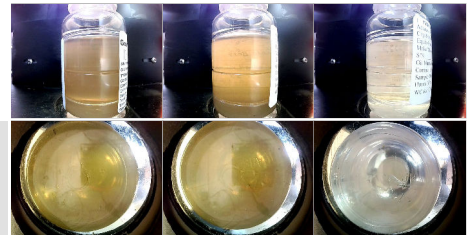
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	221	207	215

SAMPLE IMAGES	method	limit/base	current	history1	history2
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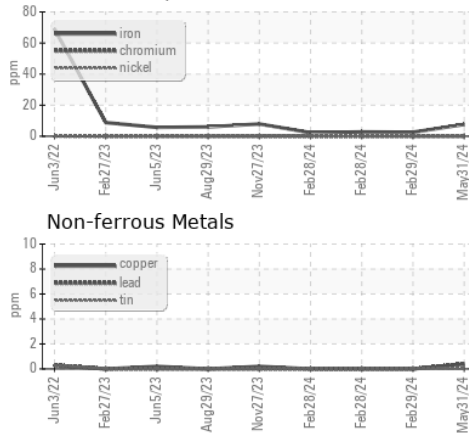
Color

Bottom

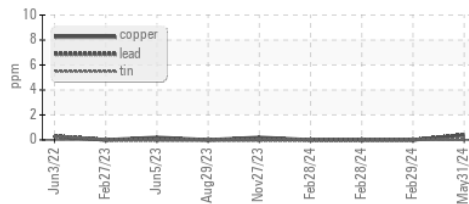


GRAPHS

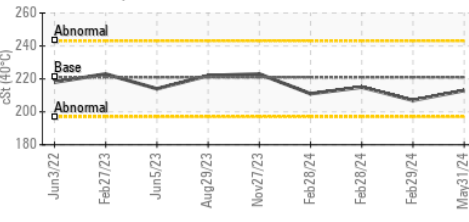
Ferrous Alloys



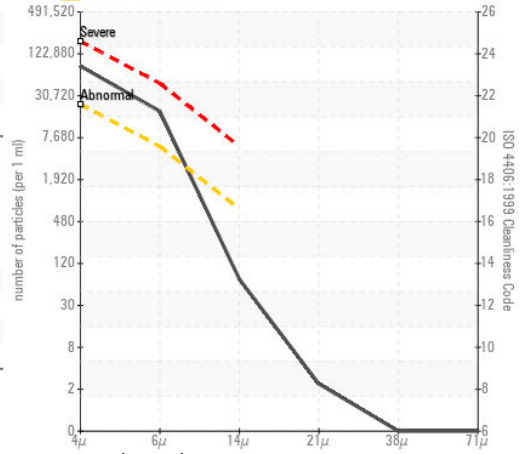
Non-ferrous Metals



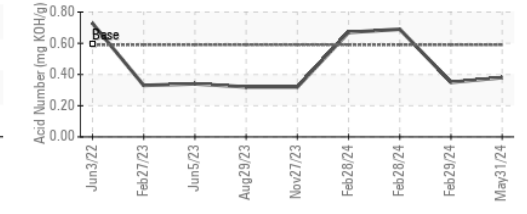
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : USP0012449
 Lab Number : 06204717
 Unique Number : 11072178
 Test Package : IND 2

Received : 10 Jun 2024
 Tested : 12 Jun 2024
 Diagnosed : 12 Jun 2024 - Doug Bogart

TYSON - SMART CHICKEN MBA
 13151 DOVER ST
 WAVERLY, NE
 US 68462
 Contact: KURT CONTRADT
 kconradt@smartchicken.com
 T: (402)786-1072
 F:

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)