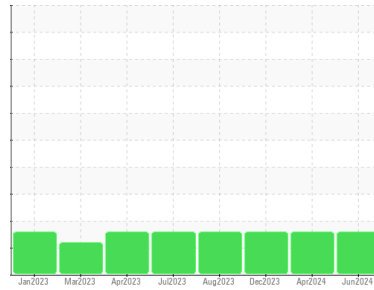




OIL ANALYSIS REPORT

Sample Rating Trend



Area

DS-102

Machine Id

B73068 - PUMP VACUUM PUMP BUSCH RA 0100 ZIPPER MULTIVAC

Component

Vacuum Pump

Fluid

PETRO CANADA PURITY FG SYNTHETIC 100 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. The amount and size of particulates present in the system are acceptable.

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		WC0930456	WC0907981	WC0872426
Sample Date	Client Info		09 Jun 2024	08 Apr 2024	15 Dec 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

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<1	1	0
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	<1	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>20	0	0	0
Tin	ppm	ASTM D5185m	>20	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		5	2	0
Calcium	ppm	ASTM D5185m		12	8	3
Phosphorus	ppm	ASTM D5185m		471	430	408
Zinc	ppm	ASTM D5185m		17	0	3
Sulfur	ppm	ASTM D5185m		1482	1480	1091

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	▲ 24	▲ 23	▲ 21
Sodium	ppm	ASTM D5185m		6	5	6
Potassium	ppm	ASTM D5185m	>20	3	0	0

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	5024	9500	1671
Particles >6µm	ASTM D7647	>2500	1195	1249	329
Particles >14µm	ASTM D7647	>320	56	39	27
Particles >21µm	ASTM D7647	>80	13	8	10
Particles >38µm	ASTM D7647	>20	2	0	2
Particles >71µm	ASTM D7647	>4	1	0	1
Oil Cleanliness	ISO 4406 (c)	>20/18/15	20/17/13	20/17/12	18/16/12

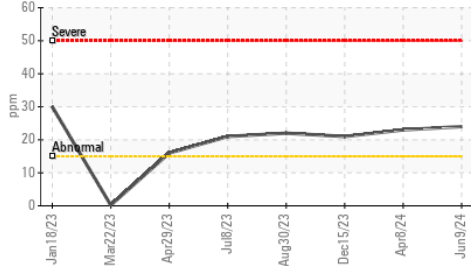
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.5	0.062	0.066	0.09

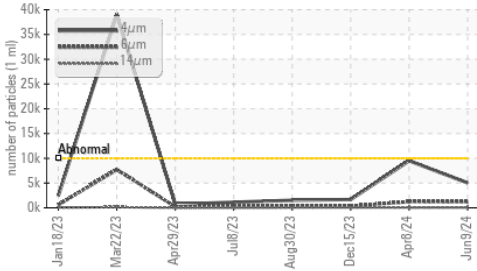


OIL ANALYSIS REPORT

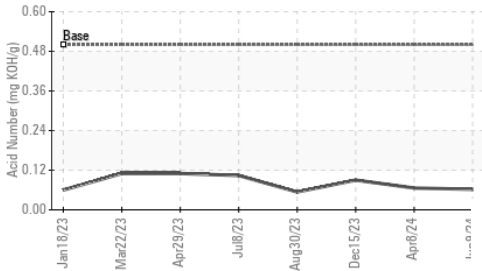
▲ Silicon (ppm)



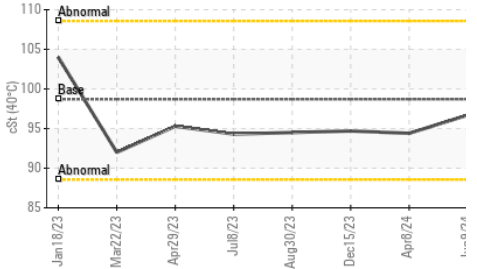
Particle Trend



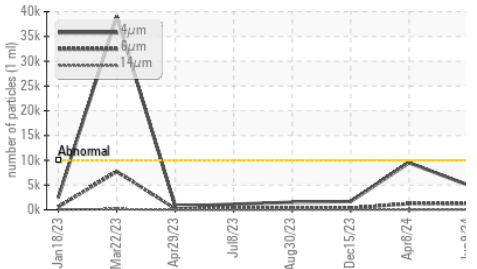
Acid Number



Viscosity @ 40°C



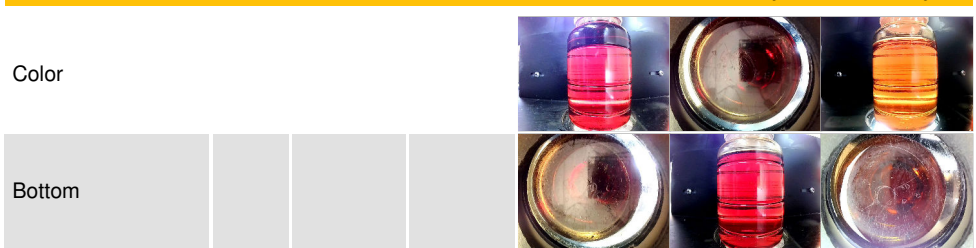
Particle Trend



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	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

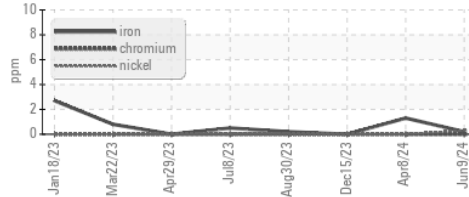
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	98.7	94.4	94.7

SAMPLE IMAGES

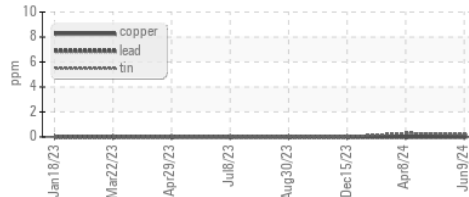


GRAPHS

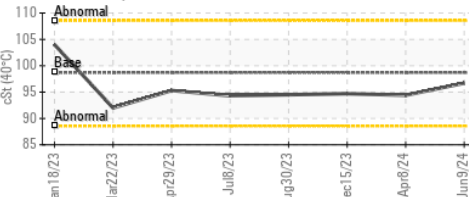
Ferrous Alloys



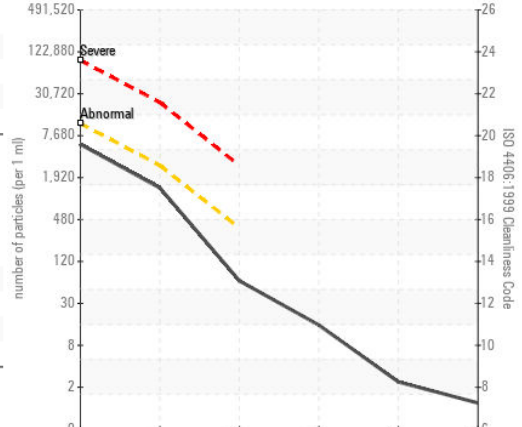
Non-ferrous Metals



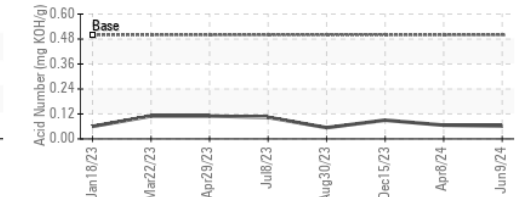
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

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

Sample No. : WC0930456

Lab Number : 06204546

Unique Number : 11072007

Test Package : IND 2 (Additional Tests: PrtCount)

Received : 10 Jun 2024

Tested : 11 Jun 2024

Diagnosed : 12 Jun 2024 - Angela Borella

HORMEL FOODS - AUSTIN

1101 NORTH MAIN ST

AUSTIN, MN

US 55912

Contact: RYAN LOWE

rslowe@hormel.com

T: (507)437-5674

F: (507)437-9805

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)