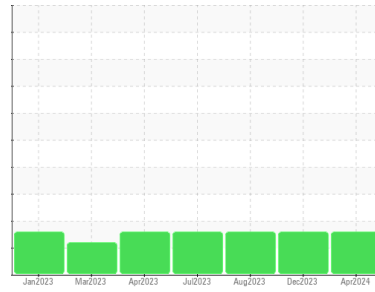




# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



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		<b>WC0907981</b>	WC0872426	WC0826125
Sample Date	Client Info		<b>08 Apr 2024</b>	15 Dec 2023	30 Aug 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>1</b>	0	<1
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>0</b>	0	0
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>2</b>	0	3
Calcium	ppm	ASTM D5185m	<b>8</b>	3	0
Phosphorus	ppm	ASTM D5185m	<b>430</b>	408	443
Zinc	ppm	ASTM D5185m	<b>0</b>	3	0
Sulfur	ppm	ASTM D5185m	<b>1480</b>	1091	1401

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>▲ 23</b>	▲ 21	▲ 22
Sodium	ppm	ASTM D5185m	<b>5</b>	6	4
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>9500</b>	1671	1530
Particles >6µm	ASTM D7647	>2500	<b>1249</b>	329	438
Particles >14µm	ASTM D7647	>320	<b>39</b>	27	37
Particles >21µm	ASTM D7647	>80	<b>8</b>	10	12
Particles >38µm	ASTM D7647	>20	<b>0</b>	2	3
Particles >71µm	ASTM D7647	>4	<b>0</b>	1	2
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>20/17/12</b>	18/16/12	18/16/12

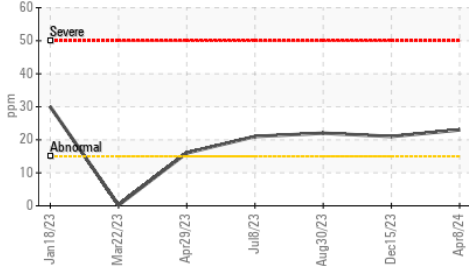
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.5	<b>0.066</b>	0.09	0.054

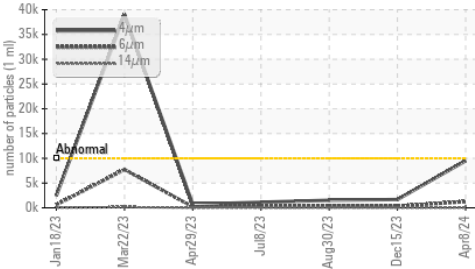


# OIL ANALYSIS REPORT

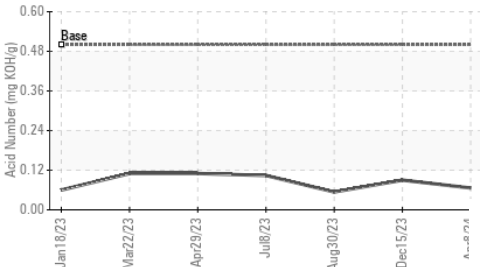
▲ Silicon (ppm)



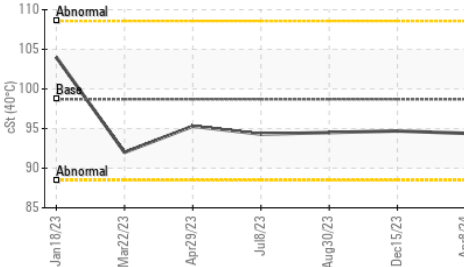
Particle Trend



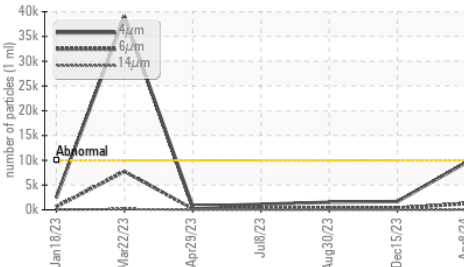
Acid Number



Viscosity @ 40°C



Particle Trend

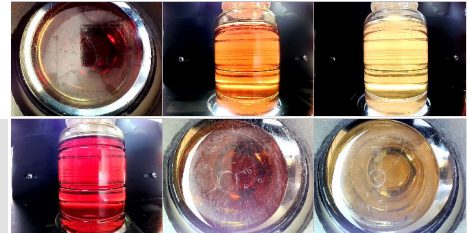


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	94.7	94.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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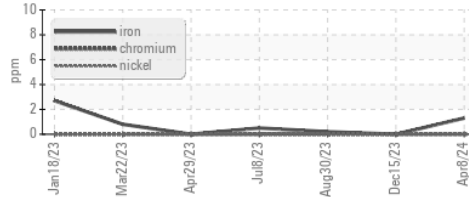
Color



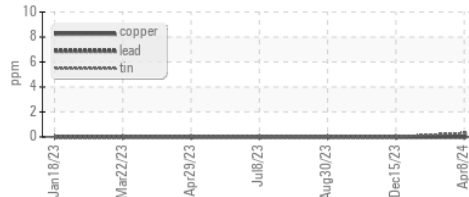
Bottom

## GRAPHS

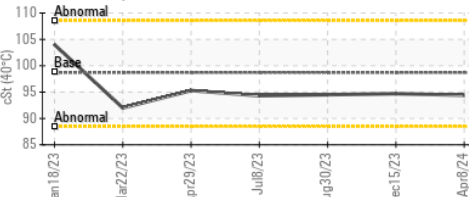
Ferrous Alloys



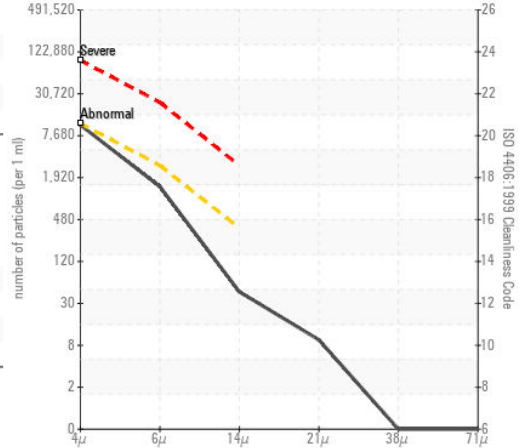
Non-ferrous Metals



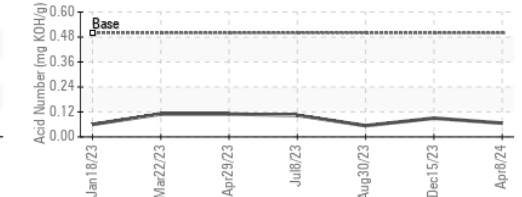
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

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

Sample No. : WC0907981

Lab Number : 06143024

Unique Number : 10967832

Test Package : IND 2 ( Additional Tests: PrtCount )

Received : 09 Apr 2024

Tested : 10 Apr 2024

Diagnosed : 11 Apr 2024 - Jonathan Hester

HORMEL FOODS - AUSTIN

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AUSTIN, MN

US 55912

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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)