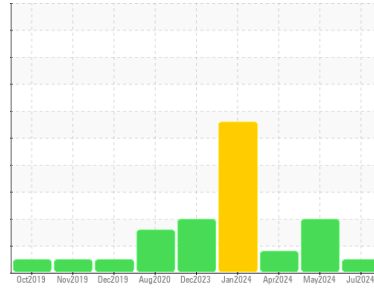




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**DS-102**

Machine Id

**B64981 - PUMP VACUUM BUSCH RA 630 HIGH SPEED (S/N U192100028)**

Component

**Vacuum Pump**

Fluid

**PETRO CANADA PURITY FG SYNTHETIC 100 (4 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination 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. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0953219</b>	WC0930383	WC0907994
Sample Date	Client Info	<b>17 Jul 2024</b>	26 May 2024	04 Apr 2024
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ABNORMAL	ATTENTION

## 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>&lt;1</b>	11	4
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>4</b>	<1	0
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	0
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185m	<b>0</b>	<1	1
Phosphorus	ppm	ASTM D5185m	<b>553</b>	316	329
Zinc	ppm	ASTM D5185m	<b>3</b>	16	<1
Sulfur	ppm	ASTM D5185m	<b>1152</b>	578	622

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	7	6
Sodium	ppm	ASTM D5185m	<b>0</b>	108	72
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	0

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>870</b>	▲ 17550	9992
Particles >6µm	ASTM D7647 >2500	<b>344</b>	▲ 6990	● 2688
Particles >14µm	ASTM D7647 >320	<b>36</b>	▲ 599	141
Particles >21µm	ASTM D7647 >80	<b>10</b>	▲ 97	34
Particles >38µm	ASTM D7647 >20	<b>1</b>	7	2
Particles >71µm	ASTM D7647 >4	<b>0</b>	2	0
Oil Cleanliness	ISO 4406 (c) >20/18/15	<b>17/16/12</b>	▲ 21/20/16	● 20/19/14

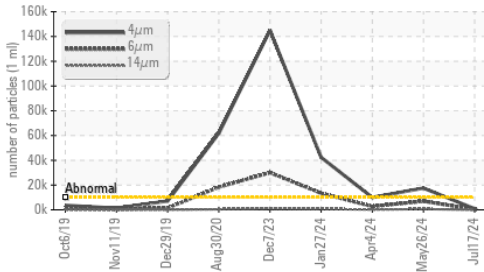
## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.5	<b>1.22</b>	0.98	0.82

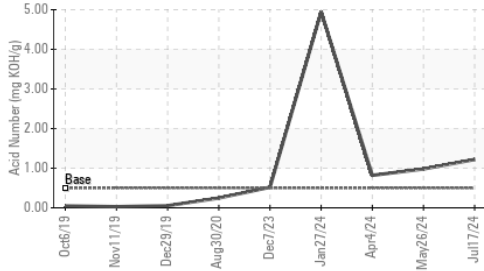


# OIL ANALYSIS REPORT

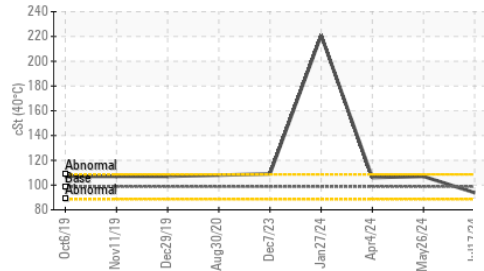
Particle Trend



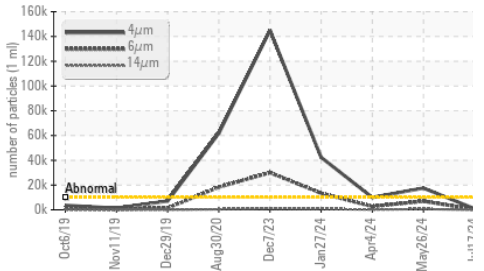
Acid Number



Viscosity @ 40°C



Particle Trend



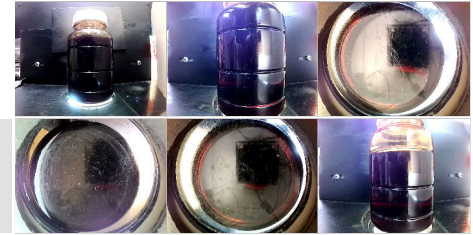
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	107	106

SAMPLE IMAGES	method	limit/base	current	history1	history2
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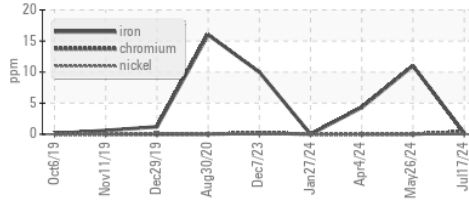
Color

Bottom

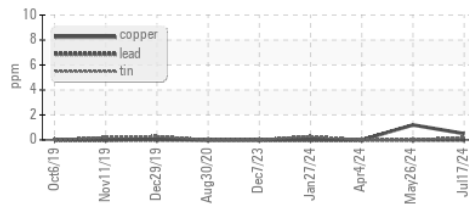


## GRAPHS

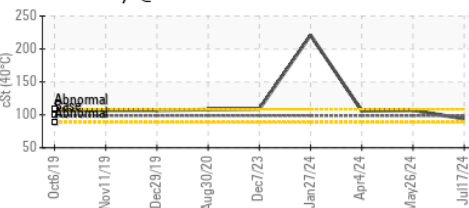
Ferrous Alloys



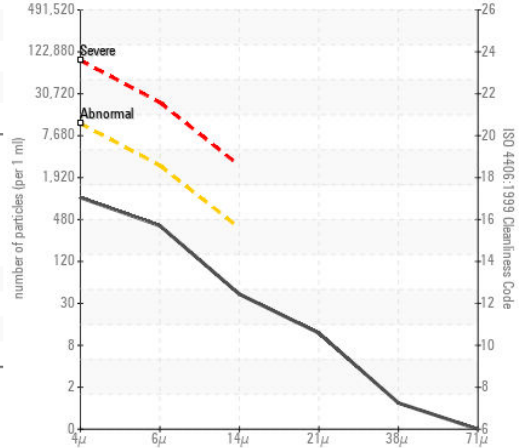
Non-ferrous Metals



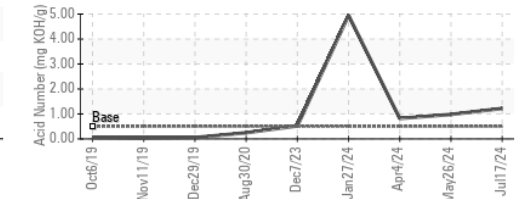
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

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

Sample No. : WC0953219

Lab Number : 06240294

Unique Number : 11129128

Test Package : IND 2 ( Additional Tests: PrtCount )

Received : 18 Jul 2024

Tested : 19 Jul 2024

Diagnosed : 20 Jul 2024 - Don Baldrige

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)