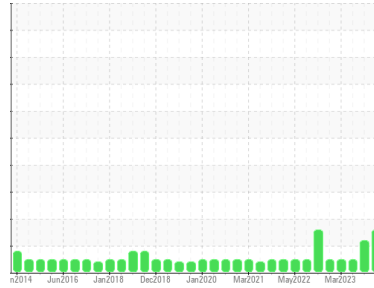




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**VILTER B31987 - HC3**

Component  
**Compressor**

Fluid  
**PETRO CANADA REFLO XL SYNTHETIC BLEND (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. 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		<b>WC0850272</b>	WC0842500	WC0814151
Sample Date	Client Info		<b>22 Dec 2023</b>	19 Sep 2023	22 Jun 2023
Machine Age	hrs	Client Info	<b>17606</b>	17386	17156
Oil Age	hrs	Client Info	<b>0</b>	812	582
Oil Changed	Client Info		<b>Not Changed</b>	N/A	Not Changed
Sample Status			<b>ABNORMAL</b>	ATTENTION	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	6	0
Chromium	ppm	ASTM D5185m >5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<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 >15	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >65	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >65	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
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	<1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	2
Calcium	ppm	ASTM D5185m	<b>0</b>	2	0
Phosphorus	ppm	ASTM D5185m	<b>4</b>	0	4
Zinc	ppm	ASTM D5185m	<b>0</b>	<1	0
Sulfur	ppm	ASTM D5185m	<b>1234</b>	1235	1487

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >35	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185m	<b>0</b>	2	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Water	%	ASTM D6304 >0.1	<b>0.003</b>	0.00	0.002
ppm Water	ppm	ASTM D6304 >1000	<b>28</b>	0.00	24.2

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 27802</b>	▲ 13165	7582
Particles >6µm	ASTM D7647	>2500	<b>▲ 9703</b>	▲ 2937	2296
Particles >14µm	ASTM D7647	>320	<b>▲ 388</b>	84	83
Particles >21µm	ASTM D7647	>80	<b>65</b>	11	14
Particles >38µm	ASTM D7647	>20	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>▲ 22/20/16</b>	▲ 21/19/14	20/18/14

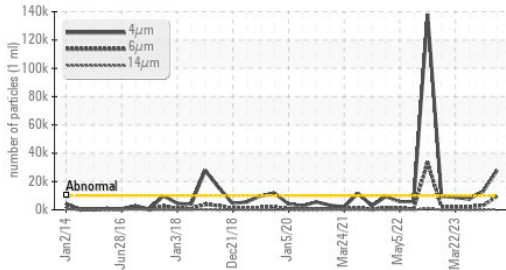
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.1	<b>0.013</b>	0.015	0.013

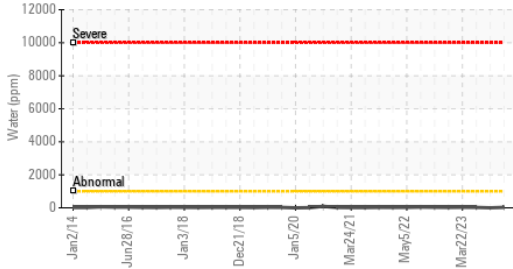


# OIL ANALYSIS REPORT

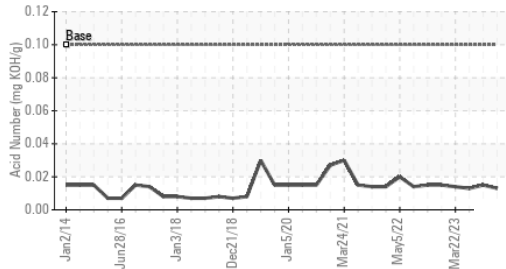
## ▲ Particle Trend



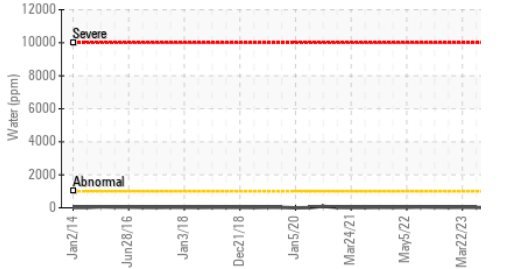
## Water (KF)



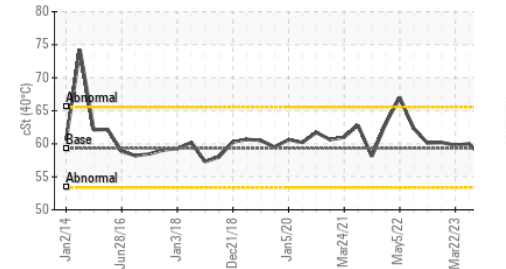
## Acid Number



## 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	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	59.3	60.1	57.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

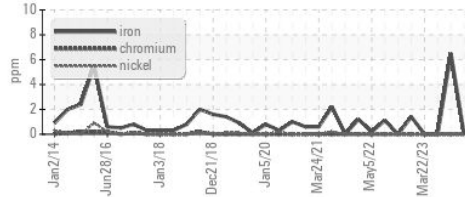


Bottom

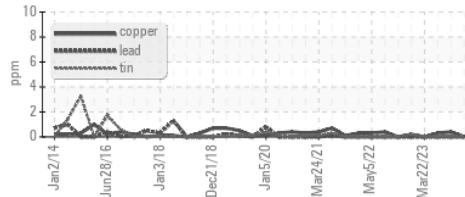


## GRAPHS

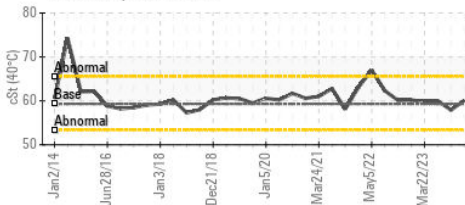
### Ferrous Alloys



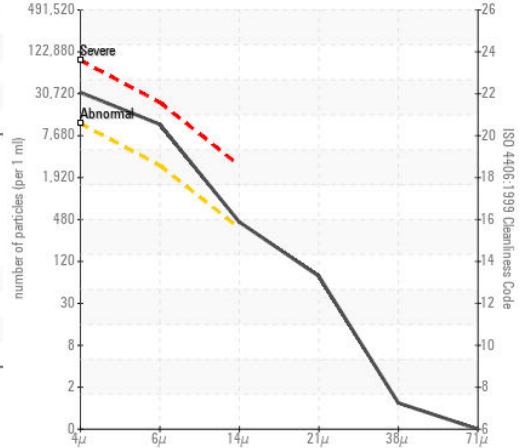
### Non-ferrous Metals



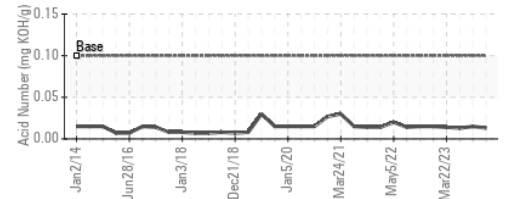
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0850272 **Received** : 09 Jan 2024  
**Lab Number** : 06055927 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821876 **Diagnostician** : Don Baldrige

**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

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)

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