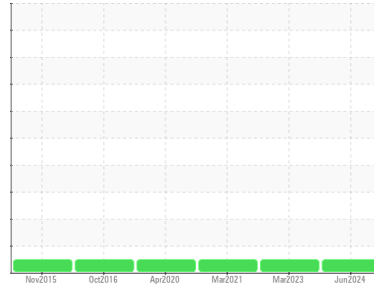




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area

**[001355-1]**

Machine Id

**COSTCO 535 RACK A (S/N 12227500)**

Component

**Reciprocating Compressor**

Fluid

**EMKARATE RL 32H (12 GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The water content is negligible. There is no indication of any contamination 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>WC0912808</b>	WC0794382	WC0556275
Sample Date	Client Info		<b>11 Jun 2024</b>	01 Mar 2023	05 Mar 2021
Machine Age	yrs	Client Info	<b>0</b>	0	0
Oil Age	yrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >50	<b>21</b>	23	8
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m) >25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m) >50	<b>9</b>	7	4
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>1</b>	2	<1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185(m) 5	<b>0</b>	0	<1
Zinc	ppm	ASTM D5185(m) 10	<b>16</b>	13	1
Sulfur	ppm	ASTM D5185(m) 50	<b>194</b>	186	8
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

### CONTAMINANTS

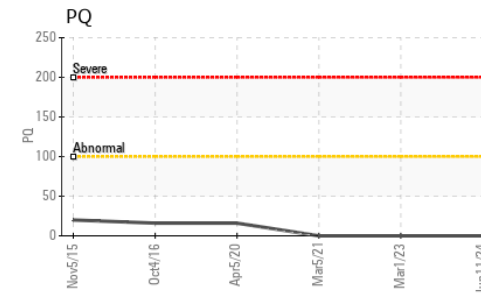
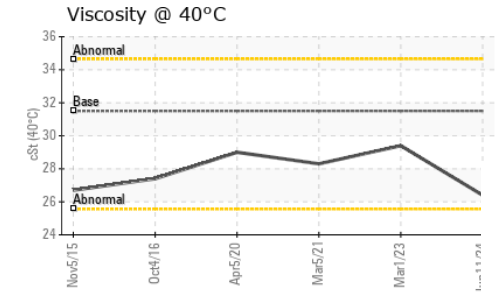
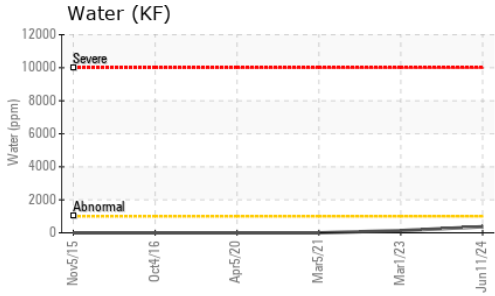
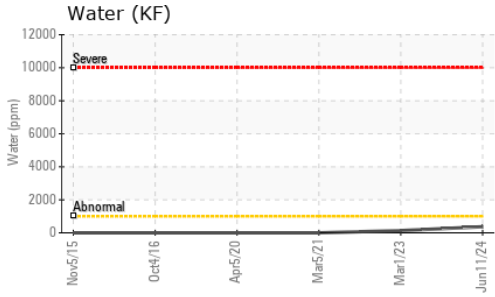
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	2	2
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	<1
Water	%	ASTM D6304* >0.1	<b>0.036</b>	0.013	---
ppm Water	ppm	ASTM D6304* >1000	<b>369</b>	134.1	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* .05	<b>0.04</b>	0.09	0.03



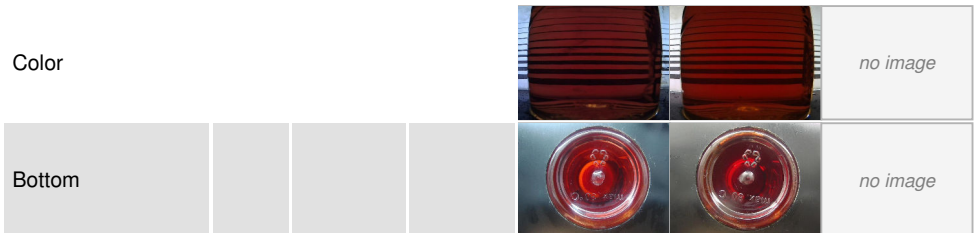
# OIL ANALYSIS REPORT



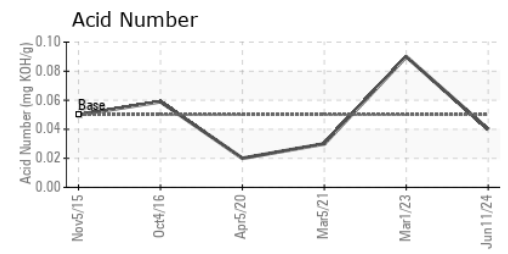
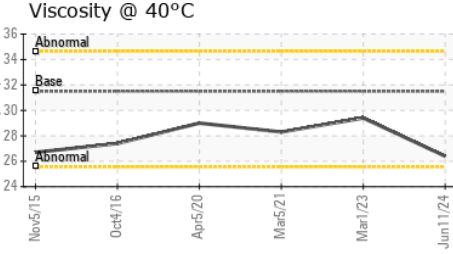
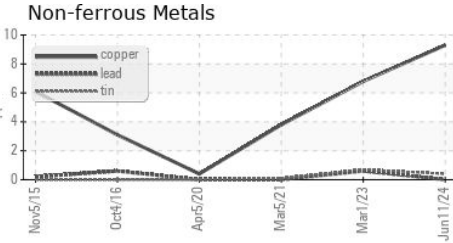
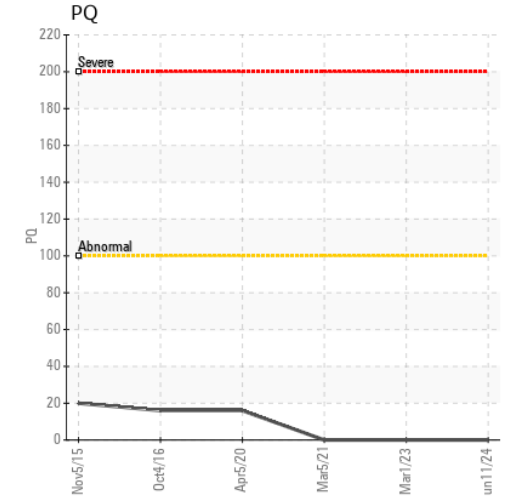
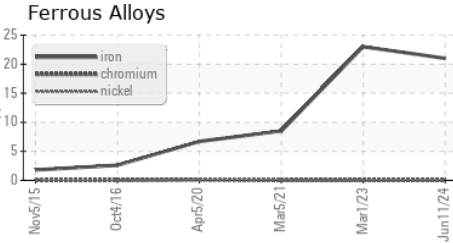
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	26.4	29.4	28.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0912808 **Received** : 12 Jun 2024  
**Lab Number** : 02641426 **Tested** : 13 Jun 2024  
**Unique Number** : 5798965 **Diagnosed** : 13 Jun 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: KF, TAN Man )

**Neelands Group Limited**  
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 Burlington, ON  
 CA L7M 0V9  
 Contact: Mike Squires  
 mike.squires@neelands.com  
 T: (905)975-0794  
 F: (905)334-7090

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.