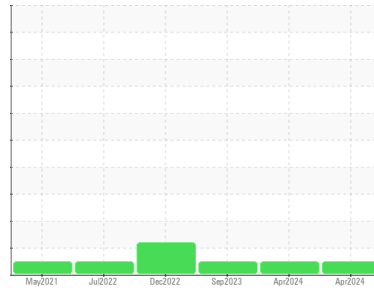




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**FRICK ER3-C3**

Component

**Screw Compressor**

Fluid

**FRICK COMPRESSOR OIL #3 (250 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is 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>WC0525886</b>	WC0525884	WC0592159
Sample Date	Client Info			<b>10 Apr 2024</b>	10 Apr 2024	26 Sep 2023
Machine Age	hrs	Client Info		<b>28998</b>	48092	24357
Oil Age	hrs	Client Info		<b>3000</b>	8596	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
Iron	ppm	ASTM D5185(m)	>60	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185(m)	>4	<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)	>5	<b>0</b>	0	0
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	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

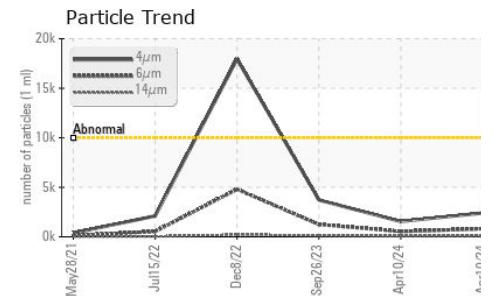
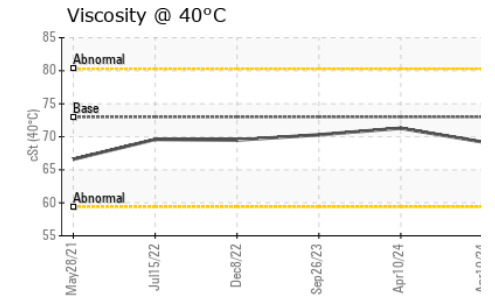
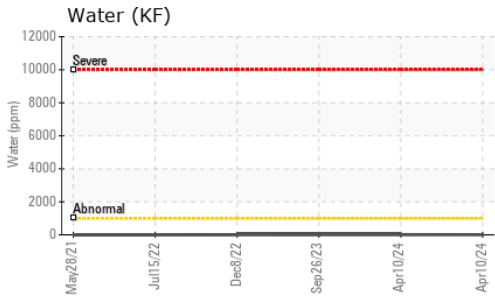
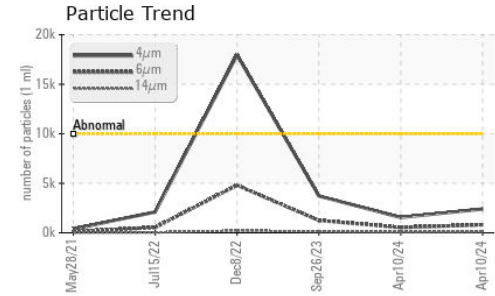
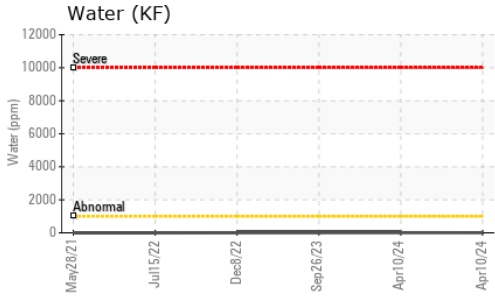
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Barium	ppm	ASTM D5185(m)		<b>5</b>	6	5
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Zinc	ppm	ASTM D5185(m)		<b>2</b>	3	2
Sulfur	ppm	ASTM D5185(m)		<b>15</b>	18	19
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	<b>0</b>	0	<1
Sodium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304*	>0.1	<b>0.00</b>	0.001	0.001
ppm Water	ppm	ASTM D6304*	>1000	<b>0</b>	4	1.4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>1549</b>	2408	3721
Particles >6µm		ASTM D7647	>2500	<b>543</b>	813	1250
Particles >14µm		ASTM D7647	>320	<b>60</b>	85	128
Particles >21µm		ASTM D7647	>80	<b>18</b>	19	35
Particles >38µm		ASTM D7647	>20	<b>1</b>	2	1
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>18/16/13</b>	18/17/14	19/17/14



# OIL ANALYSIS REPORT

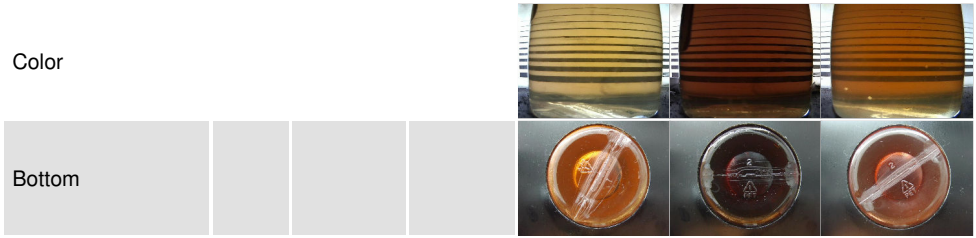


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.01</b>	0.00	0.00

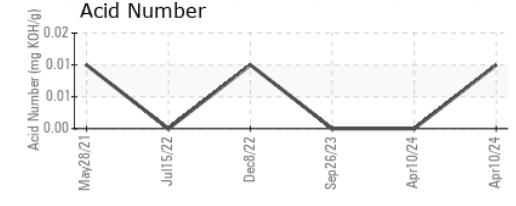
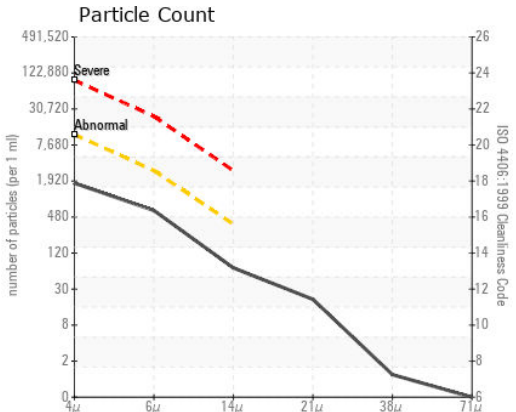
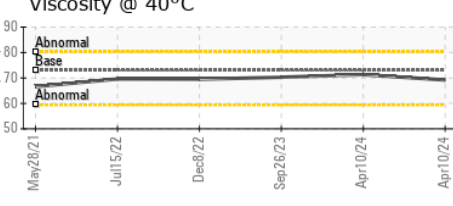
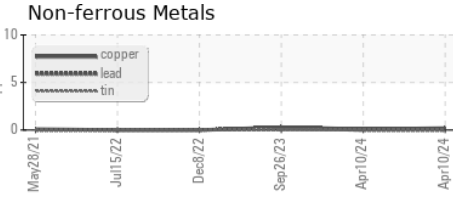
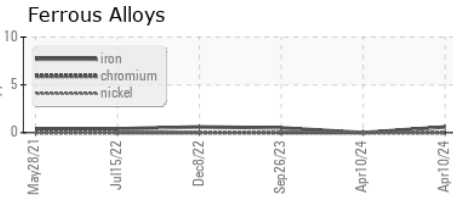
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	73	<b>69.2</b>	71.3	70.3

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0525886 **Received** : 12 Apr 2024  
**Lab Number** : **02628480** **Tested** : 15 Apr 2024  
**Unique Number** : 5761612 **Diagnosed** : 15 Apr 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KF )

**CONESTOGA COLD STORAGE**  
 299 TRILLIUM DR.  
 KITCHENER, ON  
 CA N2E 1W9  
 Contact: Geoff Ditner  
 gditner@coldstorage.com  
 T: (519)748-5892  
 F: (519)748-5208

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.