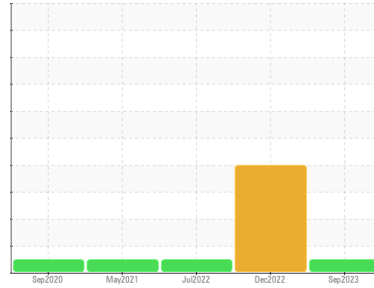




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FRICK ER3-C2**  
 Component  
**Reciprocating Compressor**  
 Fluid  
**FRICK COMPRESSOR OIL #3 (120 GAL)**

## 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>WC0592158</b>	WC0592164	WC0525888
Sample Date	Client Info		<b>26 Sep 2023</b>	08 Dec 2022	15 Jul 2022
Machine Age	hrs	Client Info	<b>38190</b>	31439	28169
Oil Age	hrs	Client Info	<b>0</b>	20000	13162
Oil Changed	Client Info		<b>N/A</b>	Changed	Not Chngd
Sample Status			<b>NORMAL</b>	SEVERE	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	1	1
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)		<b>0</b>	0	0
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	0
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m)	>50	<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	<1
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>&lt;1</b>	<1	0
Barium	ppm	ASTM D5185(m)		<b>5</b>	5	4
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>	0	<1
Zinc	ppm	ASTM D5185(m)		<b>2</b>	5	5
Sulfur	ppm	ASTM D5185(m)		<b>19</b>	28	38
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

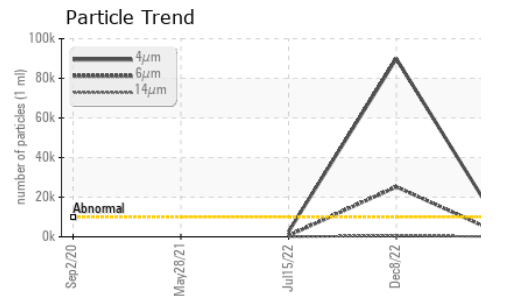
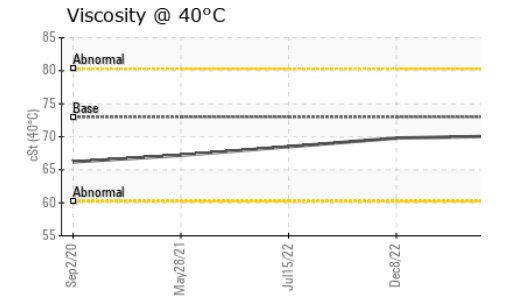
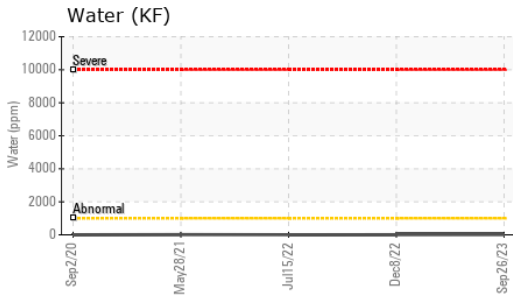
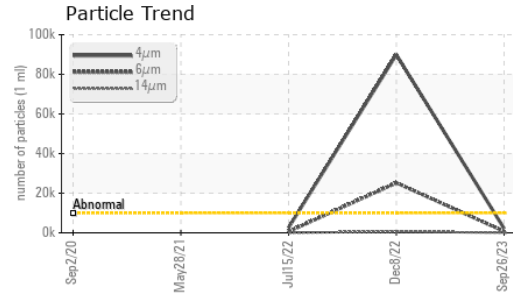
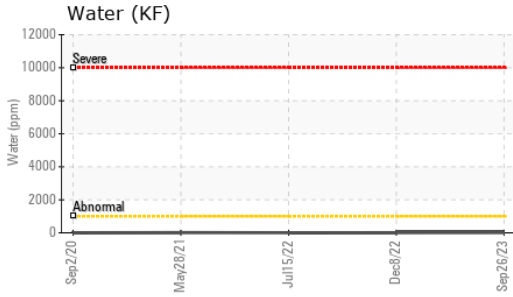
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Water	%	ASTM D6304*	>0.1	<b>0.001</b>	0.001	0.00
ppm Water	ppm	ASTM D6304*	>1000	<b>9.4</b>	3.1	0.00

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>2165</b>	89886	2612
Particles >6µm	ASTM D7647	>2500	<b>743</b>	25236	673
Particles >14µm	ASTM D7647	>320	<b>75</b>	565	68
Particles >21µm	ASTM D7647	>80	<b>23</b>	97	18
Particles >38µm	ASTM D7647	>20	<b>1</b>	1	2
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>18/17/13</b>	24/22/16	19/17/13



# OIL ANALYSIS REPORT

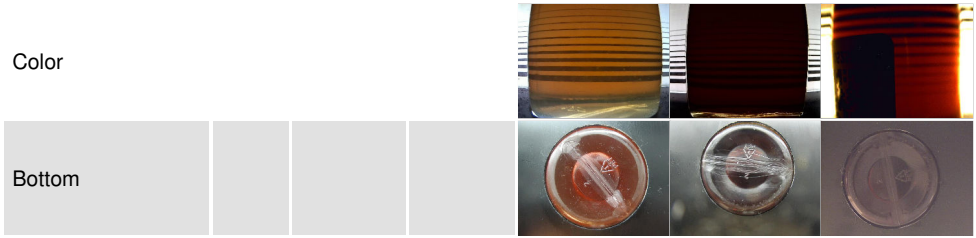


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		<b>0.01</b>	0.05	0.02

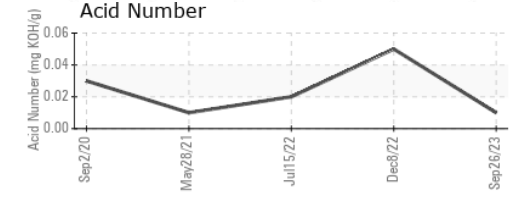
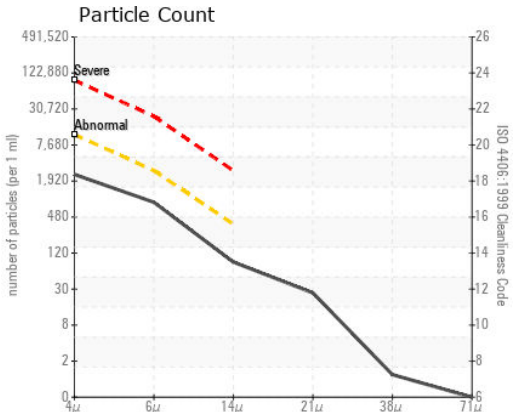
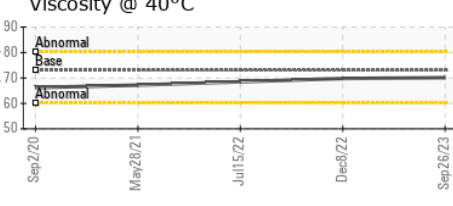
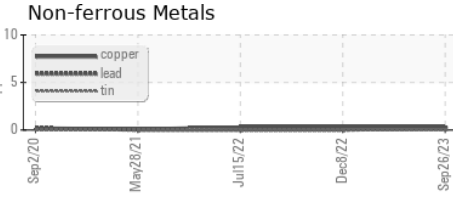
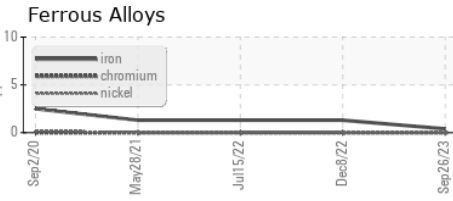
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	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>70.1</b>	69.8	68.5

## SAMPLE IMAGES



## GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : WC0592158  
 Lab Number : 02585904  
 Unique Number : 5654970  
 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.