



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**EPIROC ST18 SCP202**  
Component  
**Diesel Engine**  
Fluid  
**MOBIL 15W40 (--- GAL)**

## RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

## WEAR

All component wear rates are normal.

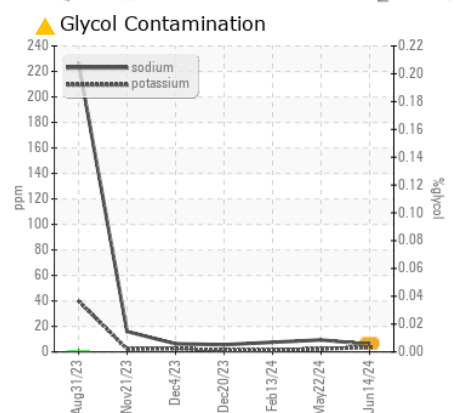
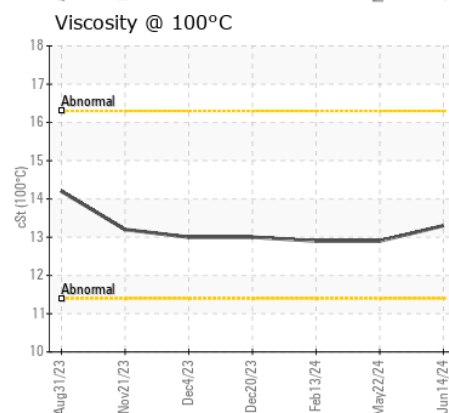
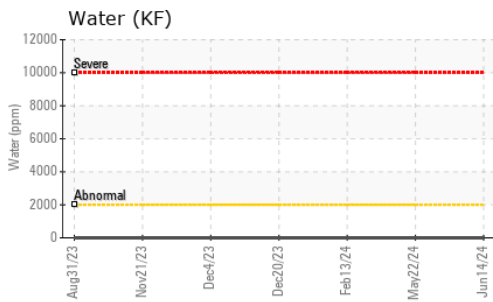
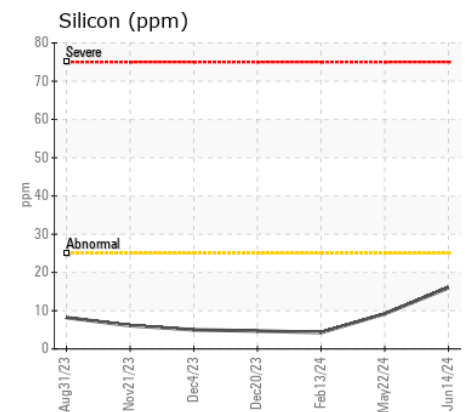
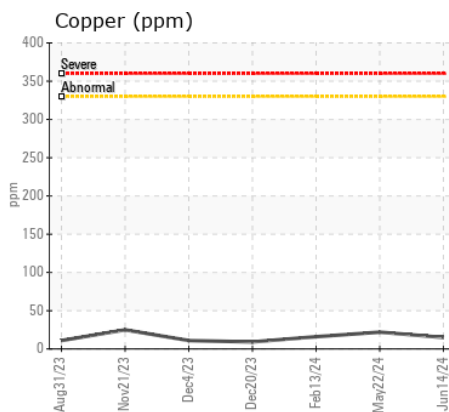
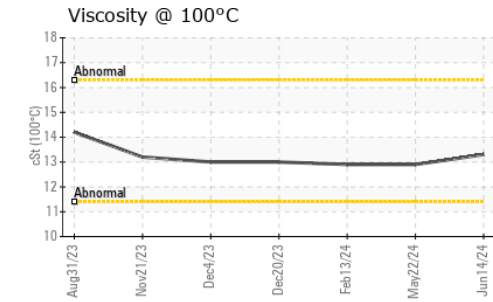
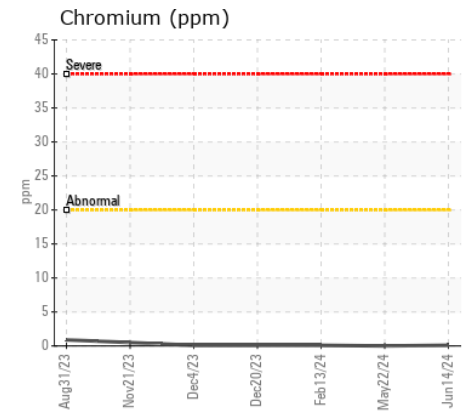
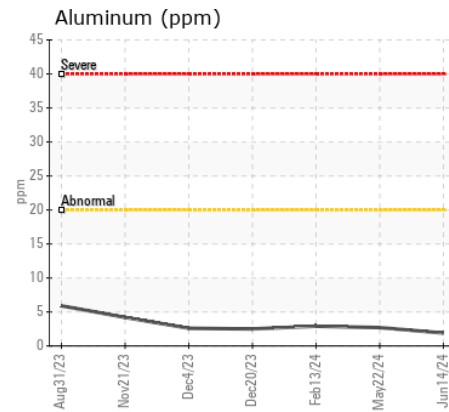
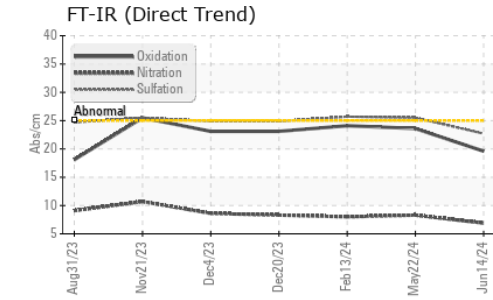
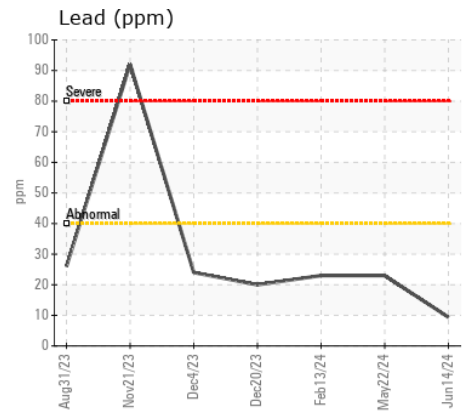
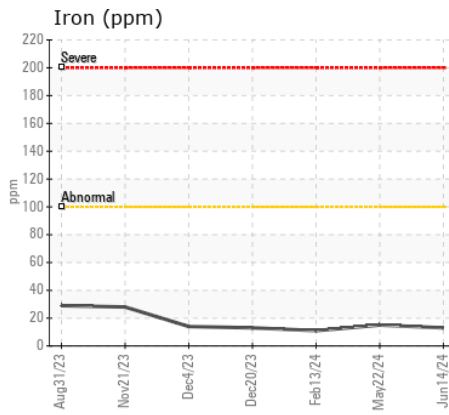
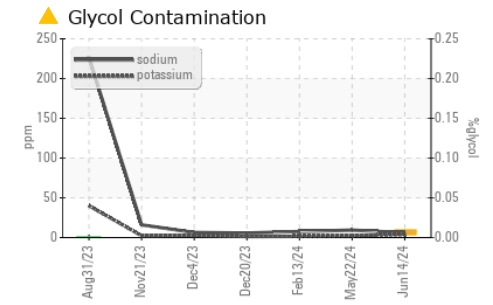
## CONTAMINATION

Test for glycol is positive. There is a light concentration of glycol present in the oil. There is a moderate concentration of water present in the oil.

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0937740</b>	WC0937724	WC0883866
Sample Date		Client Info		<b>14 Jun 2024</b>	22 May 2024	13 Feb 2024
Machine Age	hrs	Client Info		<b>3806</b>	3570	0
Oil Age	hrs	Client Info		<b>250</b>	250	0
Filter Age	hrs	Client Info		<b>0</b>	250	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	<b>13</b>	15	11
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	3	3
Lead	ppm	ASTM D5185(m)	>40	<b>9</b>	23	23
Copper	ppm	ASTM D5185(m)	>330	<b>15</b>	22	16
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>25	<b>16</b>	9	4
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	2	2
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	%	ASTM D6304*	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	ASTM D7922*		<b>▲ 0.01</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0</b>	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.9</b>	8.3	8.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.7</b>	25.5	25.7
Silt	scalar	Visual*	NONE	<b>NONE</b>	VLITE	VLITE
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*	>0.2	<b>▲ .5%</b>	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>118	<b>6</b>	9	8
Boron	ppm	ASTM D5185(m)		<b>105</b>	68	38
Barium	ppm	ASTM D5185(m)		<b>2</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>17</b>	31	41
Manganese	ppm	ASTM D5185(m)		<b>2</b>	1	0
Magnesium	ppm	ASTM D5185(m)		<b>213</b>	394	508
Calcium	ppm	ASTM D5185(m)		<b>1848</b>	1838	1686
Phosphorus	ppm	ASTM D5185(m)		<b>779</b>	800	741
Zinc	ppm	ASTM D5185(m)		<b>989</b>	968	869
Sulfur	ppm	ASTM D5185(m)		<b>2343</b>	2159	2082
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.6</b>	23.6	24.1
Visc @ 100°C	cSt	ASTM D7279(m)		<b>13.3</b>	12.9	12.9



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0937740  
**Lab Number** : 02643673  
**Unique Number** : 5801212  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KF, Visual )

**Received** : 24 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 26 Jun 2024 - Kevin Marson

**Agnico Eagle Canada**  
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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.