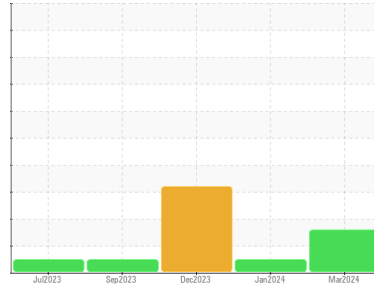




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
EPIROC ST7 SCP209
 Component
Diesel Engine
 Fluid
PETRO CANADA 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0920151	WC0886065	WC0886140
Sample Date	Client Info		16 Mar 2024	08 Jan 2024	24 Dec 2023
Machine Age	hrs	Client Info	6063	5910	5831
Oil Age	hrs	Client Info	250	100	0
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	60	37	▲ 133
Chromium	ppm	ASTM D5185(m)	>20	4	3	11
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	10	8	● 29
Lead	ppm	ASTM D5185(m)	>40	0	<1	1
Copper	ppm	ASTM D5185(m)	>330	7	5	17
Tin	ppm	ASTM D5185(m)	>15	0	<1	1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		37	46	33
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		41	39	43
Manganese	ppm	ASTM D5185(m)		0	<1	1
Magnesium	ppm	ASTM D5185(m)		522	506	579
Calcium	ppm	ASTM D5185(m)		1693	1659	1675
Phosphorus	ppm	ASTM D5185(m)		721	745	786
Zinc	ppm	ASTM D5185(m)		869	843	914
Sulfur	ppm	ASTM D5185(m)		2009	2158	2229
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

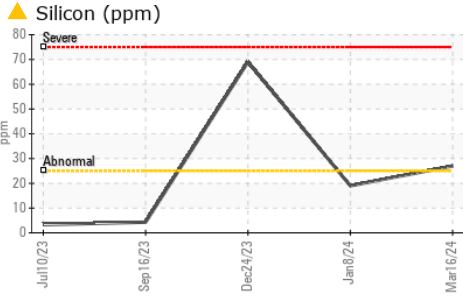
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	▲ 27	19	▲ 69
Sodium	ppm	ASTM D5185(m)		4	4	8
Potassium	ppm	ASTM D5185(m)	>20	2	2	0

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	1.2	0.5	1.2
Nitration	Abs/cm	ASTM D7624*	>20	8.4	6.3	8.3
Sulfation	Abs./1mm	ASTM D7415*	>30	24.7	23.0	23.9



OIL ANALYSIS REPORT

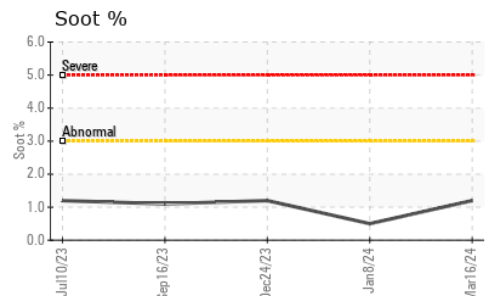
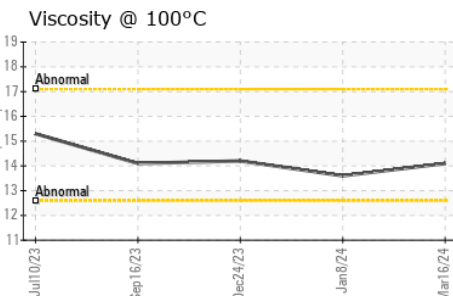
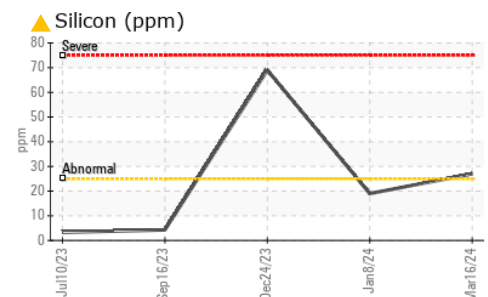
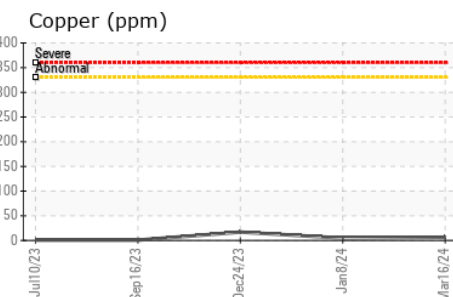
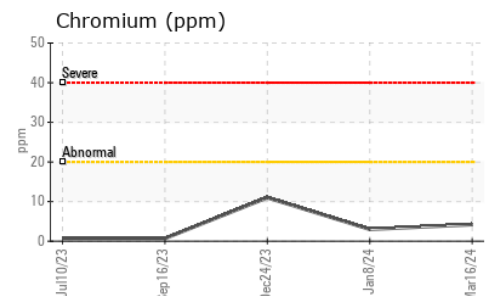
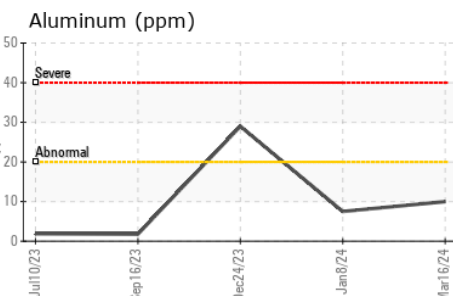
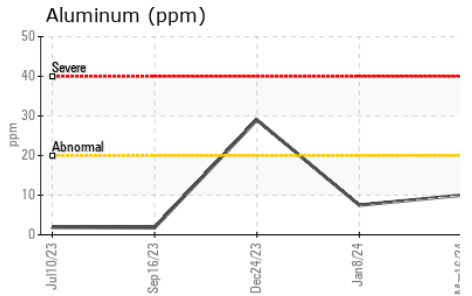
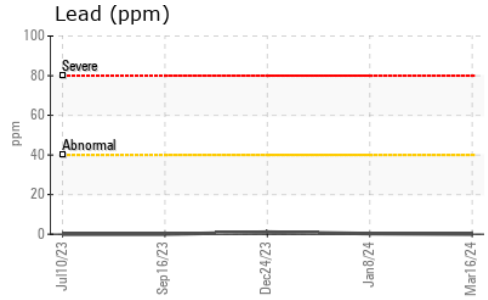
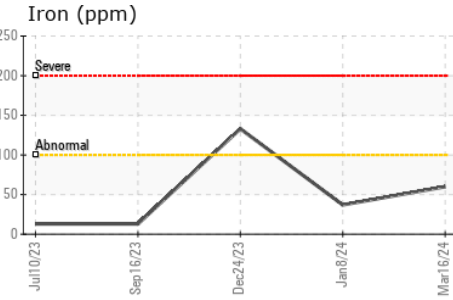
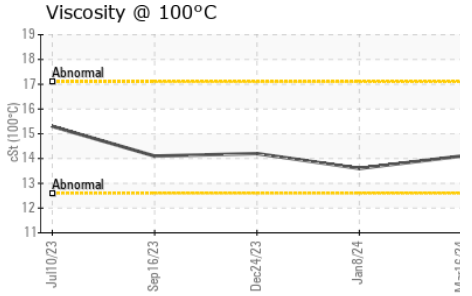


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	20.8	19.6	19.2

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		14.1	13.6	14.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0920151
Lab Number : **02623899**
Unique Number : 5749018
Test Package : MOB 1
Received : 22 Mar 2024
Tested : 22 Mar 2024
Diagnosed : 22 Mar 2024 - Kevin Marson

Agnico Eagle Canada
 1350 Government Rd. W, MACASSA COMPLEX
 Kirkland Lake, ON
 CA P2N 3J1
 Contact: Mike Campbell
 mike.campbell@agnicoeagle.com
 T: (705)567-5208
 F: (705)567-5221

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.