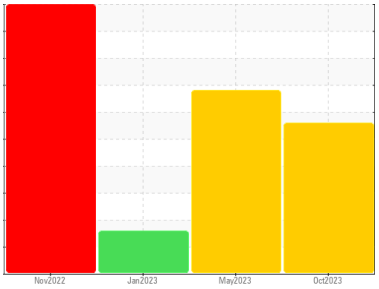
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
EPIROC ST14 SCP206
Component
Front Differential
Fluid
SAE 85W140 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Aluminum ppm levels are noted. All other component wear rates are normal.

Contamination

There is a high concentration of water present in the oil. 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		**WC0835198**	WC0788010	WC0631479
Sample Date		Client Info		**08 Oct 2023**	26 May 2023	17 Jan 2023
Machine Age	hrs	Client Info		**611**	1091	6634
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	Not Changd
Sample Status				**SEVERE**	SEVERE	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**179**	▲ 1129	183
Iron	ppm	ASTM D5185(m)	>500	**746**	▲ 1171	808
Chromium	ppm	ASTM D5185(m)	>10	**6**	6	3
Nickel	ppm	ASTM D5185(m)	>10	**2**	1	<1
Titanium	ppm	ASTM D5185(m)		**4**	2	<1
Silver	ppm	ASTM D5185(m)		**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**73**	23	13
Lead	ppm	ASTM D5185(m)	>25	**3**	3	3
Copper	ppm	ASTM D5185(m)	>100	**108**	87	93
Tin	ppm	ASTM D5185(m)	>10	**4**	2	1
Antimony	ppm	ASTM D5185(m)	>5	**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	<1	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)		**184**	15	11
Barium	ppm	ASTM D5185(m)		**3**	0	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	<1
Manganese	ppm	ASTM D5185(m)		**9**	4	4
Magnesium	ppm	ASTM D5185(m)		**45**	9	5
Calcium	ppm	ASTM D5185(m)		**115**	19	32
Phosphorus	ppm	ASTM D5185(m)		**961**	703	704
Zinc	ppm	ASTM D5185(m)		**48**	52	63
Sulfur	ppm	ASTM D5185(m)		**20051**	18053	18054
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>75	▲ **255**	75	39
Sodium	ppm	ASTM D5185(m)		**36**	7	4
Potassium	ppm	ASTM D5185(m)	>20	**36**	8	6
Water	%	ASTM D6304*	>.2	⬢ **1.782**	⬢ 9.142	▲ 0.208
ppm Water	ppm	ASTM D6304*	>2000	⬢ **17822.0**	⬢ 91421.6	▲ 2088.5

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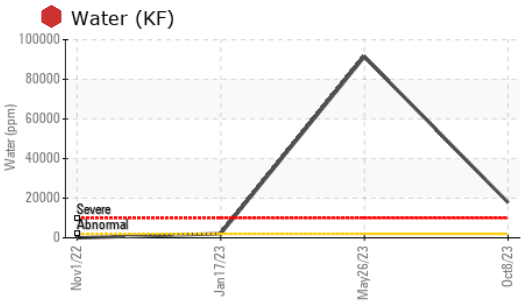
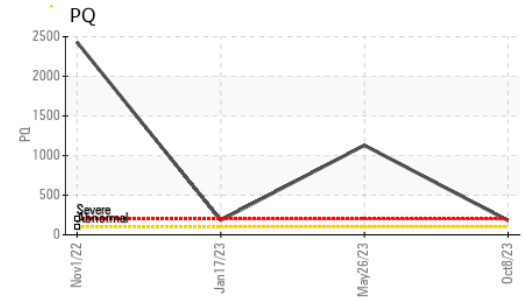
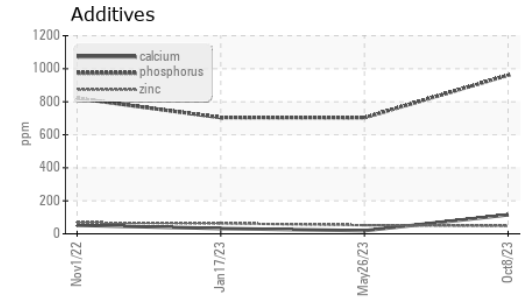
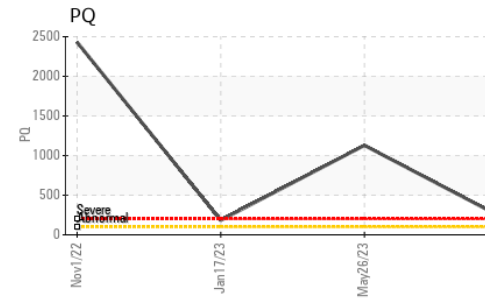
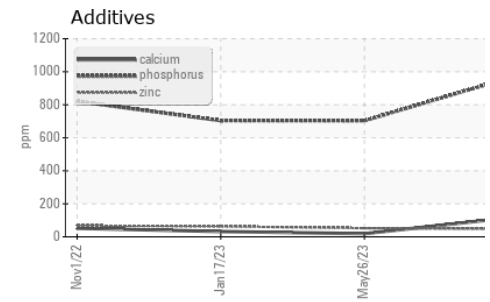




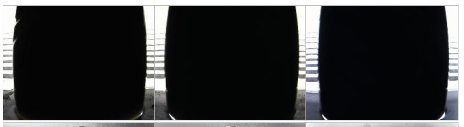




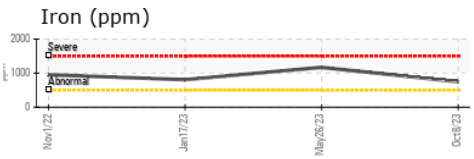


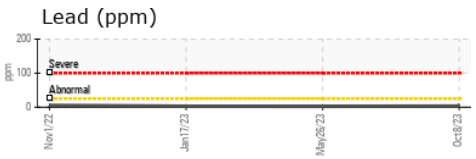
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	▲ **MILKY**	▲ WGOIL	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>.2	**NEG**	▲ 1%	▲ .5%
Free Water	scalar	Visual*		**NEG**	NEG	NEG

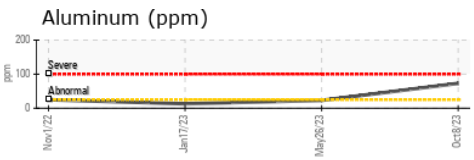
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	375	**310**	175	172

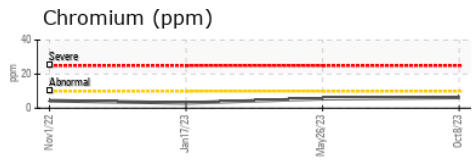
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

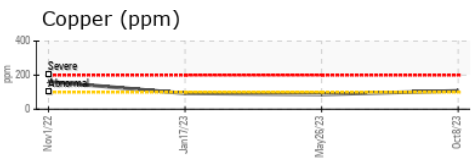
GRAPHS

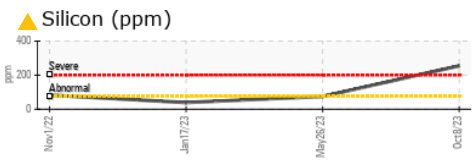


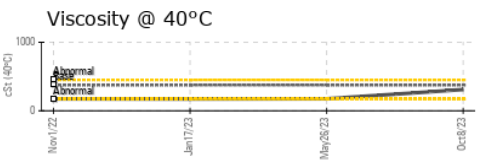


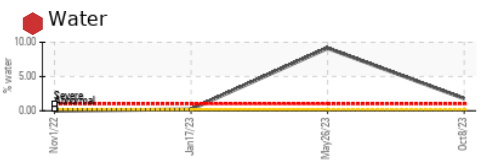












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0835198 **Received** : 12 Oct 2023
Lab Number : 02588737 **Diagnosed** : 13 Oct 2023
Unique Number : 5657803 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KF, PQ)

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.

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