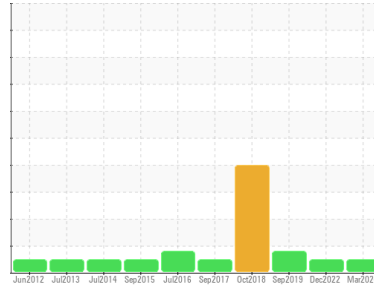


Machine Id
2010 SPARTAN 25038 (P141)

Component
Rear Diesel Engine

Fluid
CASTROL HYPURON 15W40 (20 LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0085016	PC0067228	AP109934
Sample Date	Client Info			25 Mar 2024	16 Dec 2022	12 Sep 2019
Machine Age	mths	Client Info		0	0	122090
Oil Age	mths	Client Info		0	0	0
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	MARGINAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	<1.0	▲ 2
Water	WC Method	>0.2		NEG	NEG	NEG

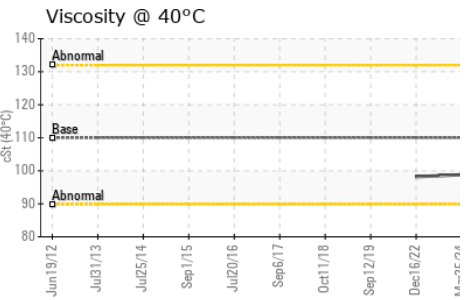
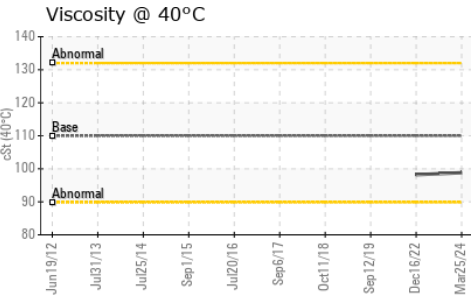
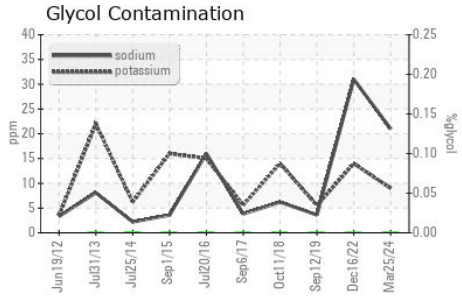
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	51	38	36
Chromium	ppm	ASTM D5185(m)	>5	2	1	2
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	4	5	4
Lead	ppm	ASTM D5185(m)	>25	0	<1	2
Copper	ppm	ASTM D5185(m)	>100	2	2	2
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	<1	<1
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)		4	11	25
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		57	51	59
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		872	801	1002
Calcium	ppm	ASTM D5185(m)		977	1257	997
Phosphorus	ppm	ASTM D5185(m)		883	972	967
Zinc	ppm	ASTM D5185(m)		1074	1102	1184
Sulfur	ppm	ASTM D5185(m)		2268	2602	2651
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	7	8	5
Sodium	ppm	ASTM D5185(m)		21	31	4
Potassium	ppm	ASTM D5185(m)	>20	9	14	6
Glycol	%	ASTM D7922*		0.0	0.0	0.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	2.6	1	1.2
Nitration	Abs/cm	ASTM D7624*	>20	17.8	13.6	14.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	35.8	31.0	31.6

OIL ANALYSIS REPORT

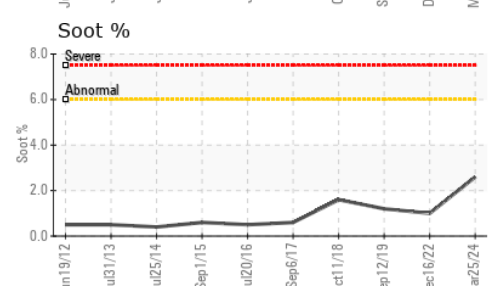
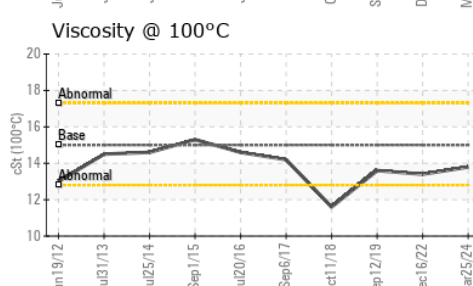
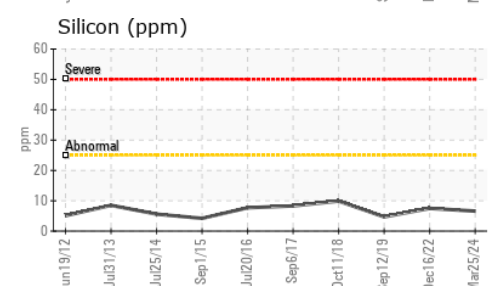
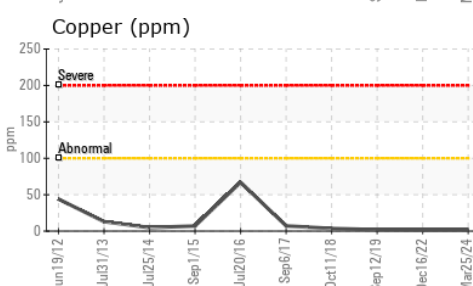
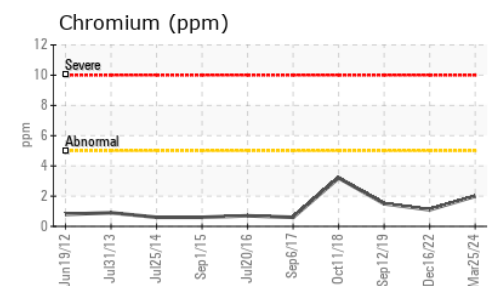
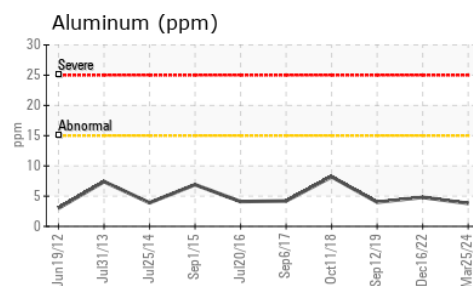
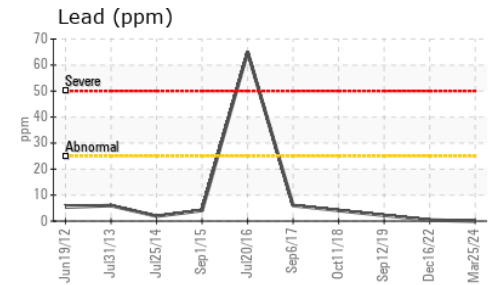
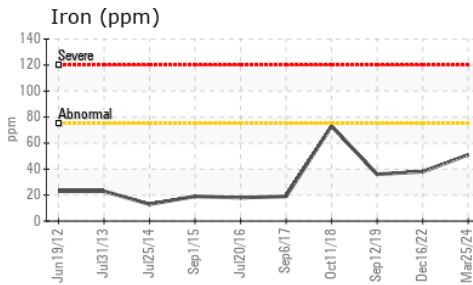


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	40.4	31.7	28.8

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 @ 40°C	cSt	ASTM D7279(m)	110	98.8	98.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	13.8	13.4	13.6
Viscosity Index (VI)	Scale	ASTM D2270*	140	141	135	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0085016 **Received** : 26 Mar 2024
Lab Number : **02624581** **Tested** : 26 Mar 2024
Unique Number : 5749700 **Diagnosed** : 26 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, KV40, VI)

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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.