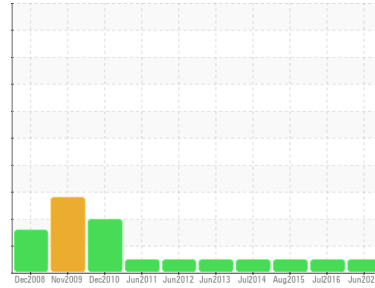


Machine Id
2007 SPARTAN 24139/P244

Component
Rear Diesel Engine

Fluid
CASTROL HYPURON 15W40 (22 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	PC0075261	AP102825	AP99275
Sample Date	Client Info	14 Jun 2023	26 Jul 2016	11 Aug 2015
Machine Age	kms	Client Info	0	117377
Oil Age	kms	Client Info	0	0
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION method limit/base current history1 history2

Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>90	31	31	32
Chromium	ppm	ASTM D5185(m)	>20	1	1	1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<1	1	<1
Aluminum	ppm	ASTM D5185(m)	>20	1	3	2
Lead	ppm	ASTM D5185(m)	>40	4	2	2
Copper	ppm	ASTM D5185(m)	>330	3	7	6
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	2	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)		6	37	32
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		60	2	<1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		962	14	11
Calcium	ppm	ASTM D5185(m)		1035	2527	2472
Phosphorus	ppm	ASTM D5185(m)		979	1040	984
Zinc	ppm	ASTM D5185(m)		1208	1269	1222
Sulfur	ppm	ASTM D5185(m)		2518	3447	3539
Lithium	ppm	ASTM D5185(m)		<1	<1	0

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>25	4	5	10
Sodium	ppm	ASTM D5185(m)		3	3	2
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1

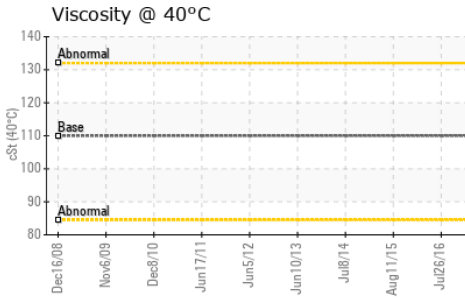
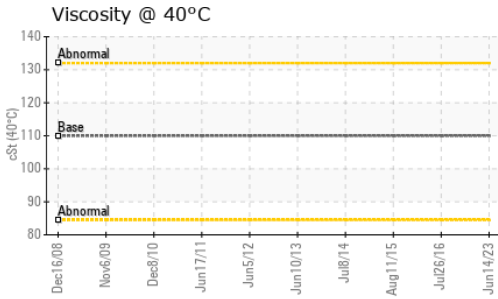
INFRA-RED method limit/base current history1 history2

Soot %	%	ASTM D7844*	>6	2.6	2.5	2.4
Nitration	Abs/cm	ASTM D7624*	>20	11.2	12.2	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.8	29.2	27.3

FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	ASTM D7414*	>25	18.3	20.6	20.7
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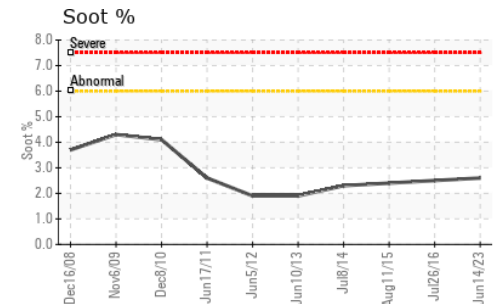
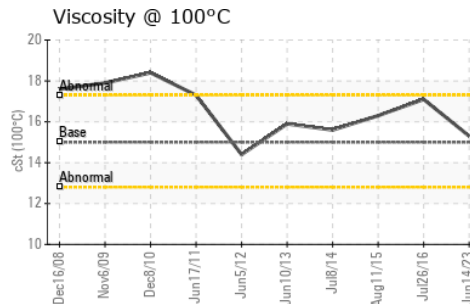
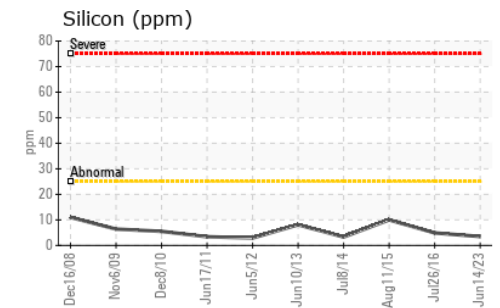
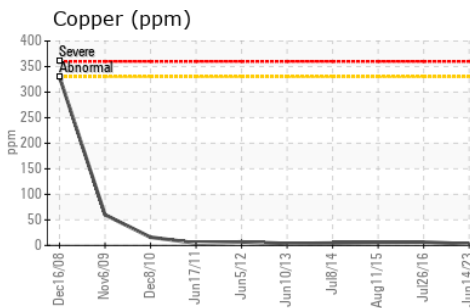
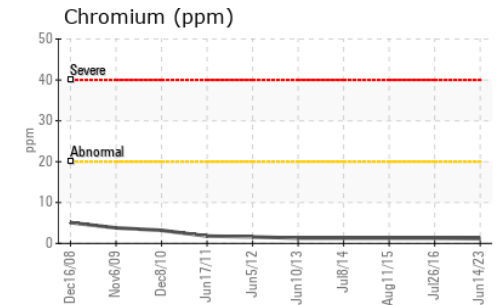
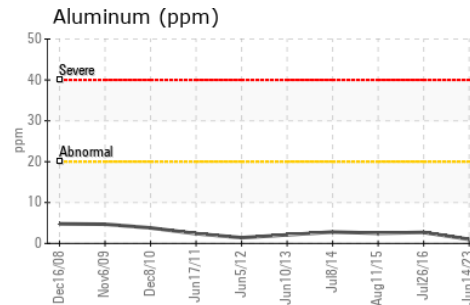
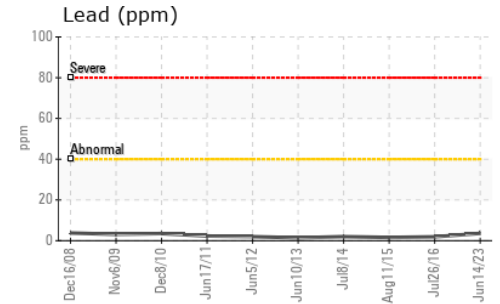
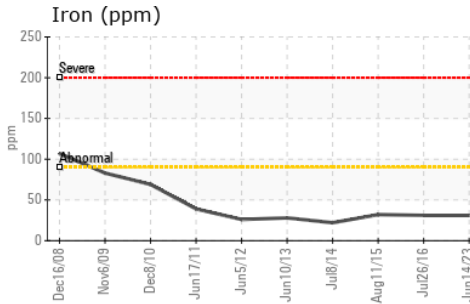
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	110	115	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	15.3	17.1
Viscosity Index (VI)	Scale	ASTM D2270*	140	139	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0075261 **Received** : 06 Nov 2023
Lab Number : 02594140 **Diagnosed** : 06 Nov 2023
Unique Number : 5671219 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: 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.