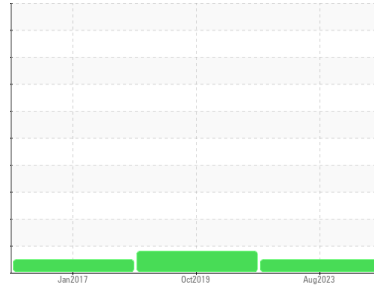


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
SPARTAN 24122

Component
Rear Diesel Engine

Fluid
PETRO CANADA DURON HP 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			PC0075286	AP109943	AP104338
Sample Date	Client Info			08 Aug 2023	23 Oct 2019	04 Jan 2017
Machine Age	hrs	Client Info		200371	11170	72857
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	MARGINAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>3.0	<1.0	<1.0	<1.0
Glycol	WC Method			NEG	0.0	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>75	32	▲ 76	16
Chromium	ppm	ASTM D5185(m)	>5	2	2	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	3	11	2
Lead	ppm	ASTM D5185(m)	>25	<1	5	1
Copper	ppm	ASTM D5185(m)	>100	5	166	2
Tin	ppm	ASTM D5185(m)	>4	<1	2	<1
Antimony	ppm	ASTM D5185(m)		0	<1	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

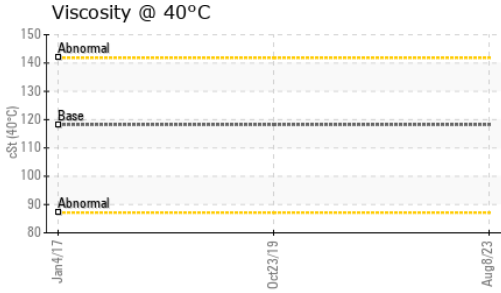
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	5	23	26
Barium	ppm	ASTM D5185(m)	0	<1	7	<1
Molybdenum	ppm	ASTM D5185(m)	60	63	83	50
Manganese	ppm	ASTM D5185(m)	0	0	5	<1
Magnesium	ppm	ASTM D5185(m)	1010	986	181	796
Calcium	ppm	ASTM D5185(m)	1070	1092	2194	1376
Phosphorus	ppm	ASTM D5185(m)	1150	1003	1030	999
Zinc	ppm	ASTM D5185(m)	1270	1247	1227	1196
Sulfur	ppm	ASTM D5185(m)	2060	2499	2696	2731
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	19	9
Sodium	ppm	ASTM D5185(m)		2	3	14
Potassium	ppm	ASTM D5185(m)	>20	0	24	<1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	2.1	1.8	0.3
Nitration	Abs/cm	ASTM D7624*	>20	11.0	12.4	8.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.8	28.2	20.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.6	19.4	13.7

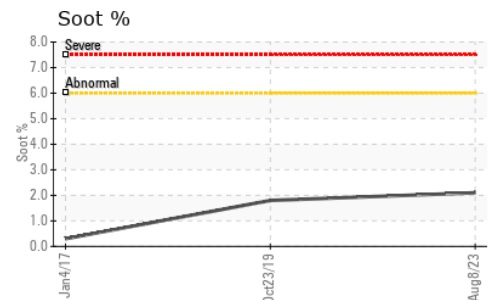
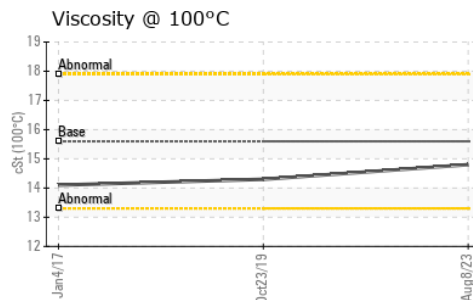
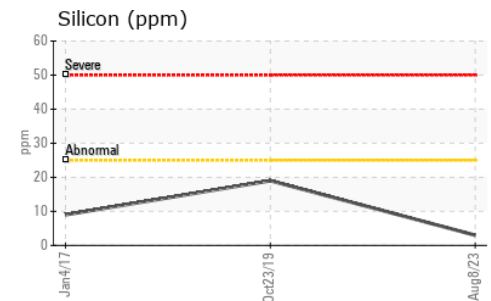
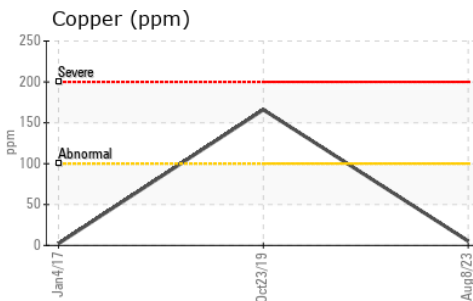
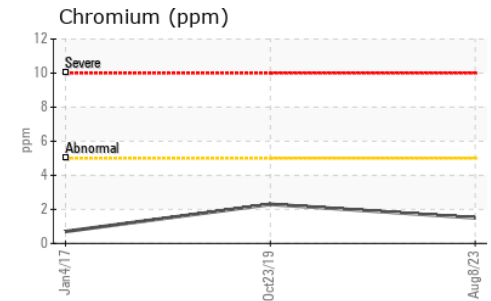
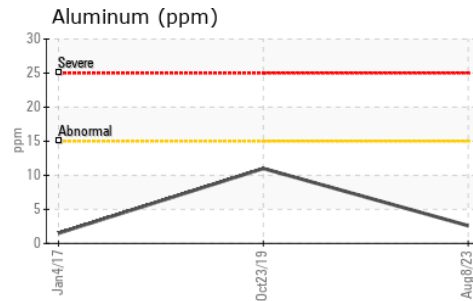
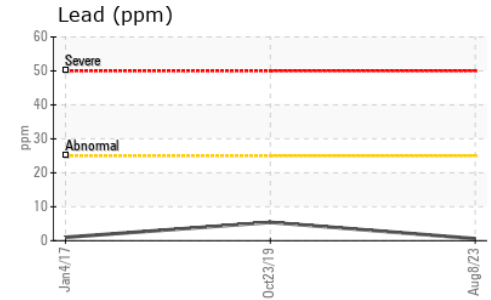
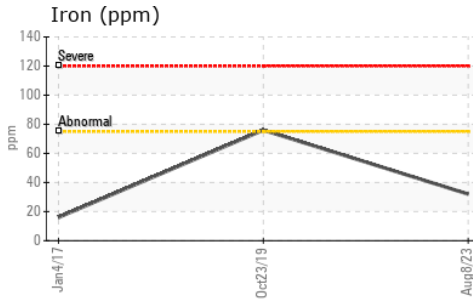
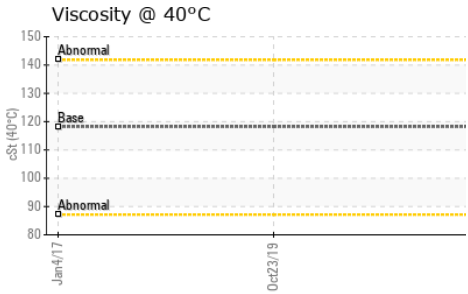
OIL ANALYSIS REPORT



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)	118.2	111	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.8	14.3	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	139	137	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0075286 **Received** : 06 Nov 2023
Lab Number : **02594130** **Diagnosed** : 07 Nov 2023
Unique Number : 5671209 **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.