



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[810987]

Machine Id

SPARTAN P101

Component

Front Diesel Engine

Fluid

PETRO CANADA SUPREME SYNTHETIC 10W30 (24 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0812458	WC	WC0495040
Sample Date		Client Info		17 Apr 2024	18 Apr 2023	19 Mar 2021
Machine Age	kms	Client Info		0	0	17165
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Silver ppm levels are abnormal.

Iron	ppm	ASTM D5185(m)	>75	13	34	37
Chromium	ppm	ASTM D5185(m)	>5	<1	1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	1	2
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	▲ 2	0	1
Aluminum	ppm	ASTM D5185(m)	>15	5	8	8
Lead	ppm	ASTM D5185(m)	>25	<1	3	17
Copper	ppm	ASTM D5185(m)	>100	46	▲ 117	▲ 658
Tin	ppm	ASTM D5185(m)	>4	3	▲ 6	▲ 9
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	VLITE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

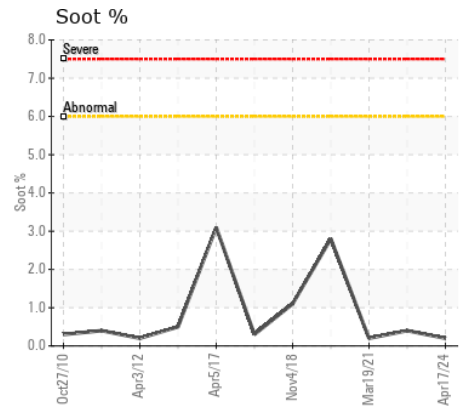
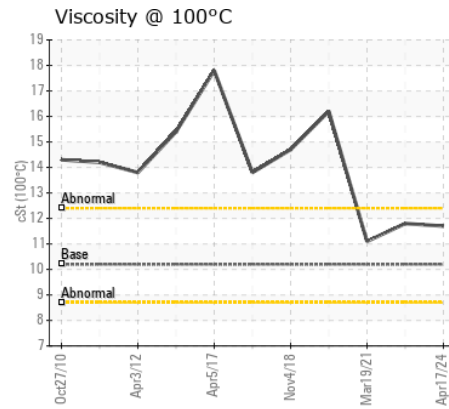
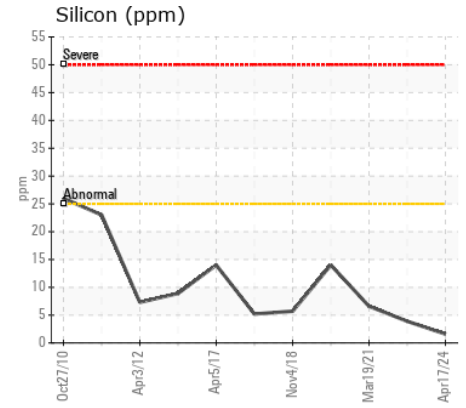
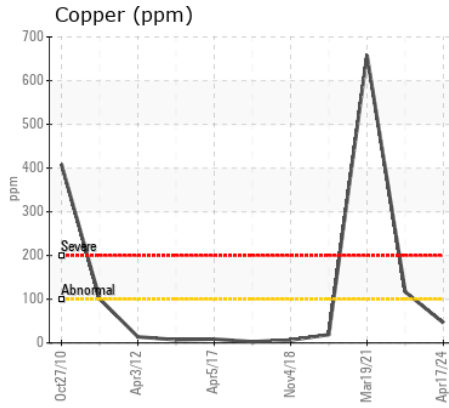
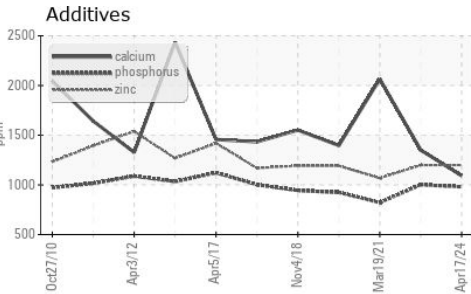
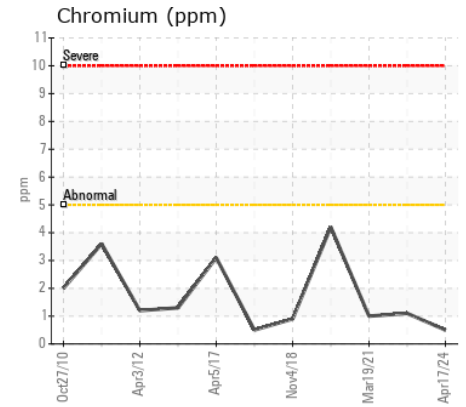
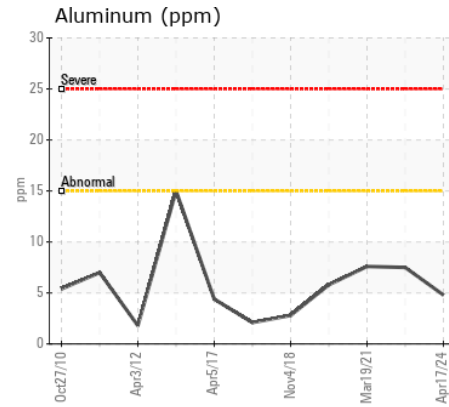
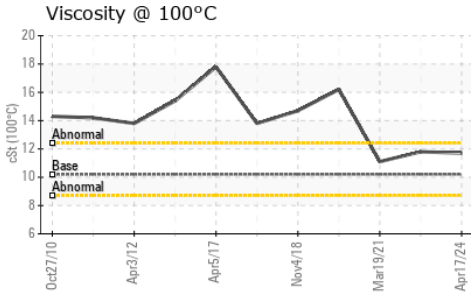
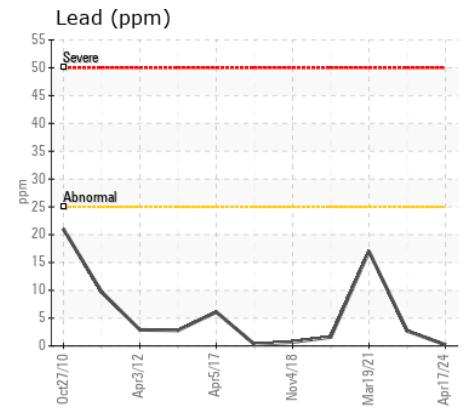
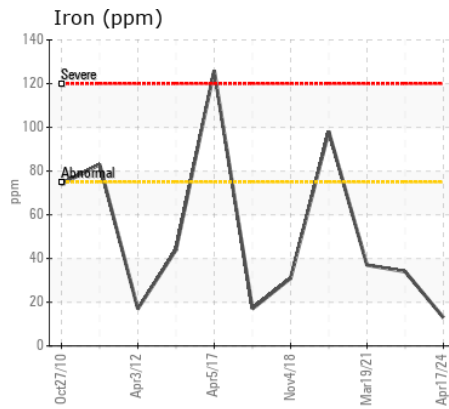
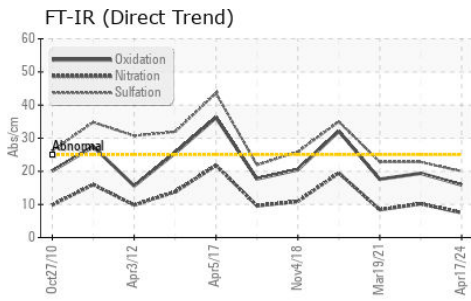
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	4	7
Potassium	ppm	ASTM D5185(m)	>20	2	8	8
Fuel		WC Method	>3.0	<1.0	<1.0	0.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>6	0.2	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.5	10.2	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.0	22.8	22.8
Silt	scalar	Visual*	NONE	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		1	4	5
Boron	ppm	ASTM D5185(m)	220	1	2	8
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	75	61	53	16
Manganese	ppm	ASTM D5185(m)		<1	2	5
Magnesium	ppm	ASTM D5185(m)	550	973	827	237
Calcium	ppm	ASTM D5185(m)	1301	1093	1351	2064
Phosphorus	ppm	ASTM D5185(m)	804	980	1001	822
Zinc	ppm	ASTM D5185(m)	794	1199	1198	1068
Sulfur	ppm	ASTM D5185(m)	2728	2299	2022	2442
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.9	19.4	17.6
Visc @ 100°C	cSt	ASTM D7279(m)	10.2	11.7	11.8	11.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0812458
Lab Number : 02640628
Unique Number : 5789790
Test Package : MOB 1 (Additional Tests: Visual)

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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.