



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area
[808725]
 Machine Id
SPARTAN A152
 Component
Diesel Engine
 Fluid
PETRO CANADA 15W40 (34 LTR)

RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0812443	WC0711604	WC0495056
Sample Date		Client Info		25 Jan 2024	20 Oct 2022	06 Jul 2021
Machine Age	kms	Client Info		93272	159546	71993
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>75	67	54	95
Chromium	ppm	ASTM D5185(m)	>5	2	1	2
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	3	2	5
Lead	ppm	ASTM D5185(m)	>25	43	16	30
Copper	ppm	ASTM D5185(m)	>100	11	6	13
Tin	ppm	ASTM D5185(m)	>4	1	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

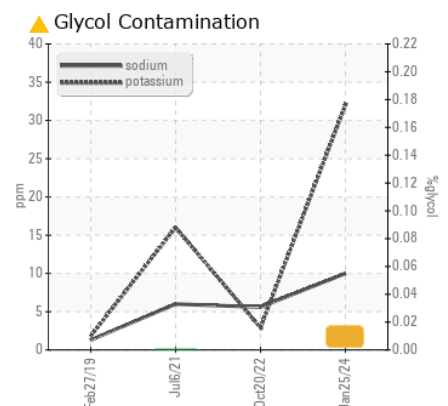
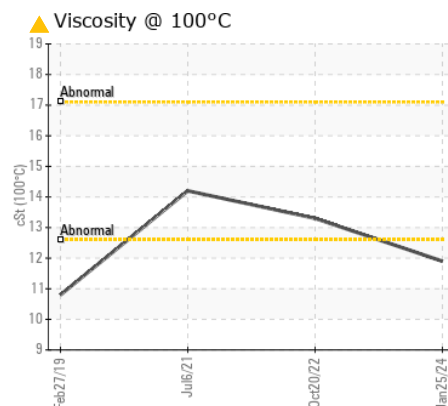
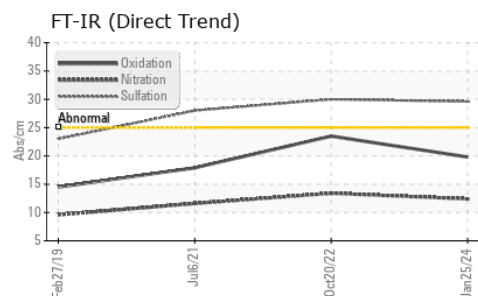
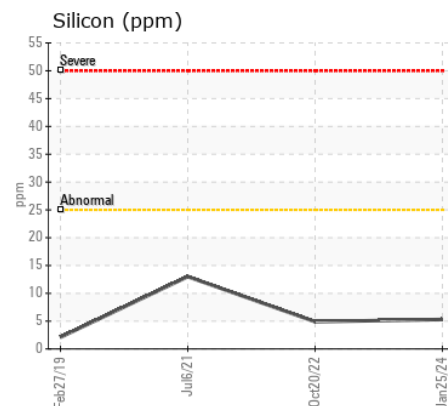
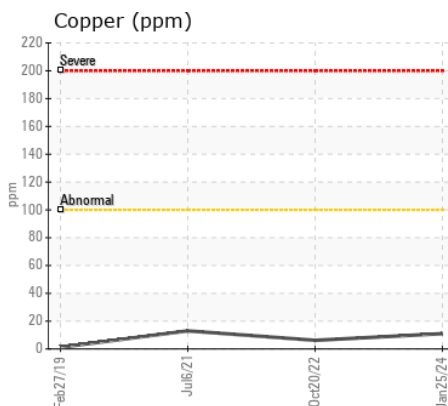
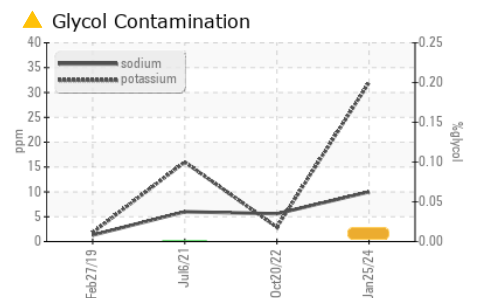
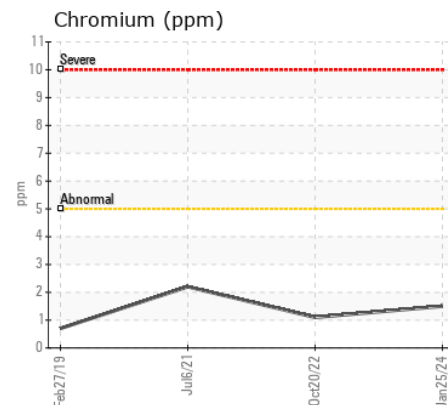
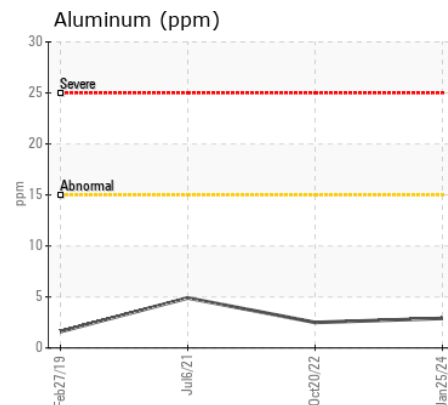
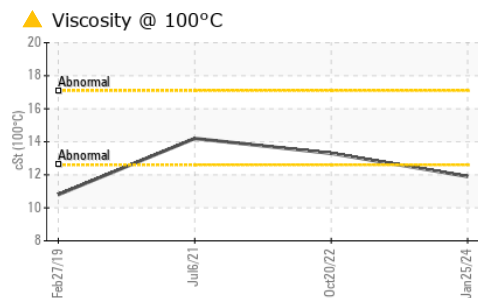
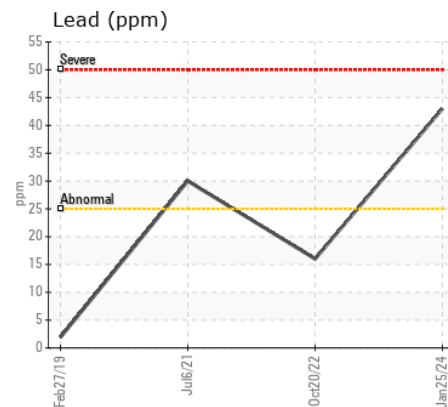
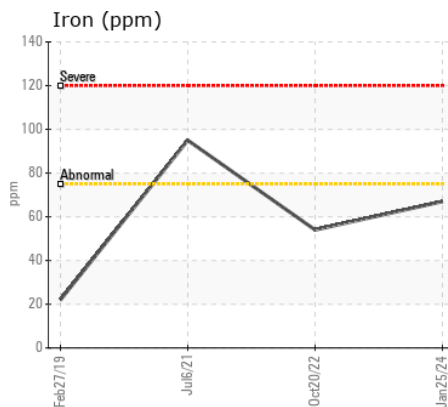
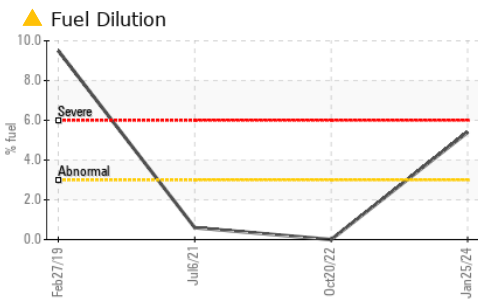
Test for glycol is positive. There is a moderate amount of fuel present in the oil. There is a light concentration of glycol present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	5	13
Potassium	ppm	ASTM D5185(m)	>20	▲ 32	3	16
Fuel	%	ASTM D7593*	>3.0	▲ 5.4	<1.0	0.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.017	NEG	0.0
Soot %	%	ASTM D7844*	>6	3.6	3.9	2.8
Nitration	Abs/cm	ASTM D7624*	>20	12.4	13.4	11.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	29.6	30.0	28.0
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		10	6	6
Boron	ppm	ASTM D5185(m)		1	2	9
Barium	ppm	ASTM D5185(m)		<1	0	<1
Molybdenum	ppm	ASTM D5185(m)		61	59	93
Manganese	ppm	ASTM D5185(m)		<1	<1	2
Magnesium	ppm	ASTM D5185(m)		879	850	729
Calcium	ppm	ASTM D5185(m)		1150	1250	2438
Phosphorus	ppm	ASTM D5185(m)		927	1084	1689
Zinc	ppm	ASTM D5185(m)		1175	1228	1810
Sulfur	ppm	ASTM D5185(m)		2291	2536	4035
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.8	23.5	17.9
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 11.9	13.3	14.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0812443
Lab Number : 02640650
Unique Number : 5789812
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel, Visual)

CITY OF MISSISSAUGA FIRE DEPT
 7535 NINTH LINE
 MISSISSAUGA, ON
 CA L5N 7C3
 Contact: Nick Specic
 nicolas.specic@mississauga.ca
 T: (905)615-3753
 F: (905)615-4523

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.