



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
SPARTAN/ROSENBAUER 4027
 Component
Front Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (22 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. 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		WC0895856	WC0623544	PC0041380
Sample Date		Client Info		02 Apr 2024	01 Jan 2022	23 Aug 2021
Machine Age	hrs	Client Info		7930	0	6267
Oil Age	hrs	Client Info		830	623	380
Filter Age	hrs	Client Info		830	623	380
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	32	9	17
Chromium	ppm	ASTM D5185(m)	>5	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	2
Aluminum	ppm	ASTM D5185(m)	>15	6	2	3
Lead	ppm	ASTM D5185(m)	>25	6	<1	2
Copper	ppm	ASTM D5185(m)	>100	4	2	5
Tin	ppm	ASTM D5185(m)	>4	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

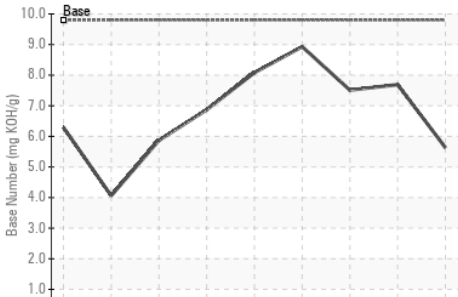
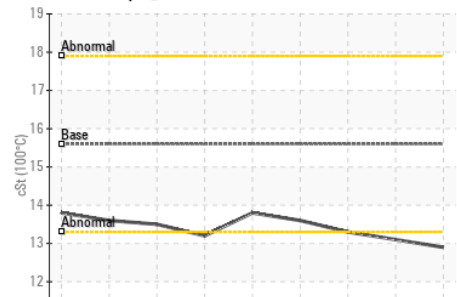
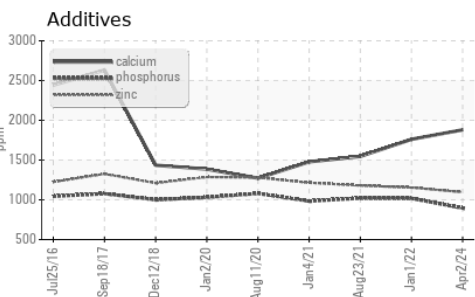
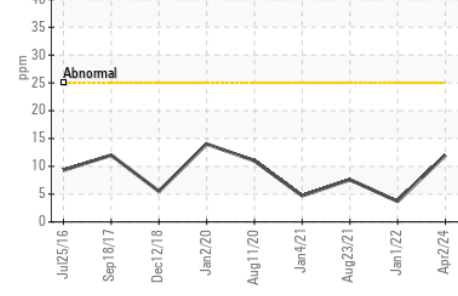
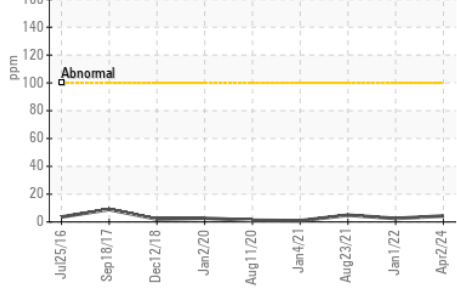
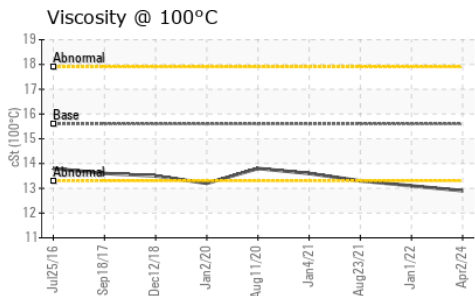
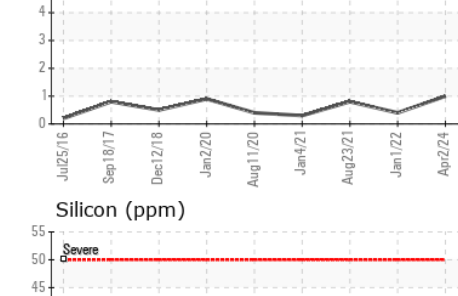
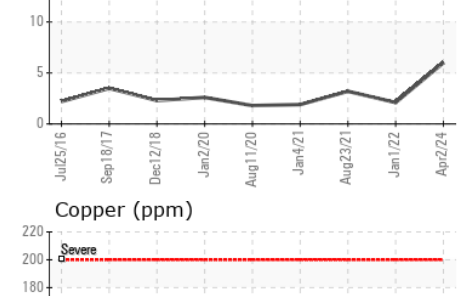
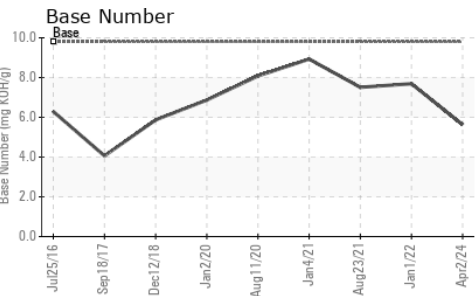
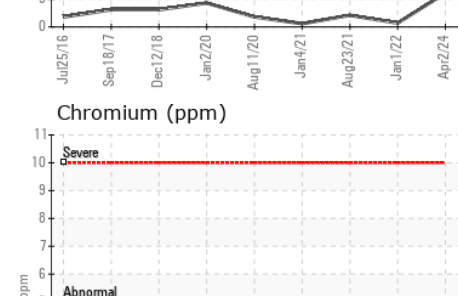
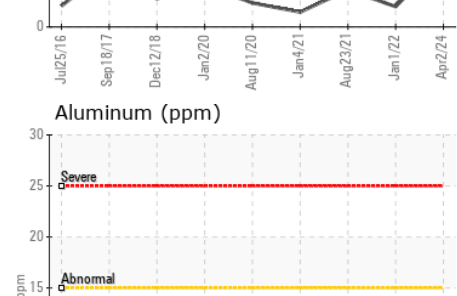
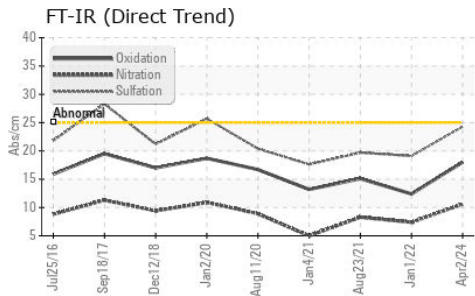
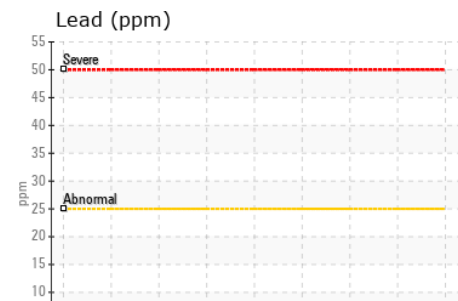
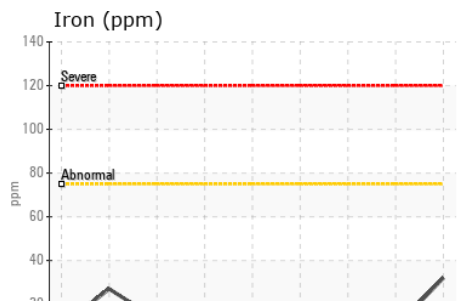
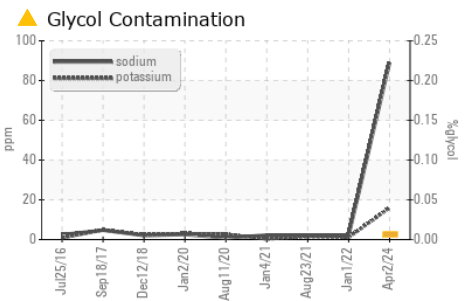
Test for glycol is positive. There is a light concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185(m)	>25	12	4	8
Potassium	ppm	ASTM D5185(m)	>20	▲ 16	1	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		▲ 0.01	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.5	0	0
Nitration	Abs/cm	ASTM D7624*	>20	10.6	7.4	8.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.3	19.1	19.7
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 BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		● 89	2	2
Boron	ppm	ASTM D5185(m)	0	7	13	7
Barium	ppm	ASTM D5185(m)	0	0	<1	3
Molybdenum	ppm	ASTM D5185(m)	60	35	32	37
Manganese	ppm	ASTM D5185(m)	0	<1	<1	4
Magnesium	ppm	ASTM D5185(m)	1010	381	420	572
Calcium	ppm	ASTM D5185(m)	1070	1880	1761	1546
Phosphorus	ppm	ASTM D5185(m)	1150	896	1019	1021
Zinc	ppm	ASTM D5185(m)	1270	1096	1154	1180
Sulfur	ppm	ASTM D5185(m)	2060	2784	2972	2852
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.0	12.4	15.1
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	5.63	7.69	7.51
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	12.9	13.1	13.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0895856 **Received** : 12 Apr 2024
Lab Number : 02628349 **Tested** : 12 Apr 2024
Unique Number : 5761481 **Diagnosed** : 12 Apr 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: Glycol)

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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.