



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SPARTAN/ROSENBAUER 4027
Component
Front Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (22 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0623544	PC0041380	PC0033463
Sample Date		Client Info		01 Jan 2022	23 Aug 2021	04 Jan 2021
Machine Age	hrs	Client Info		0	6267	5887
Oil Age	hrs	Client Info		623	380	75
Filter Age	hrs	Client Info		623	380	75
Oil Changed		Client Info		Changed	Changed	Not Chngd
Filter Changed		Client Info		Changed	Changed	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	9	17	7
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)		<1	2	<1
Aluminum	ppm	ASTM D5185(m)	>15	2	3	2
Lead	ppm	ASTM D5185(m)	>25	<1	2	<1
Copper	ppm	ASTM D5185(m)	>100	2	5	<1
Tin	ppm	ASTM D5185(m)	>4	<1	1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

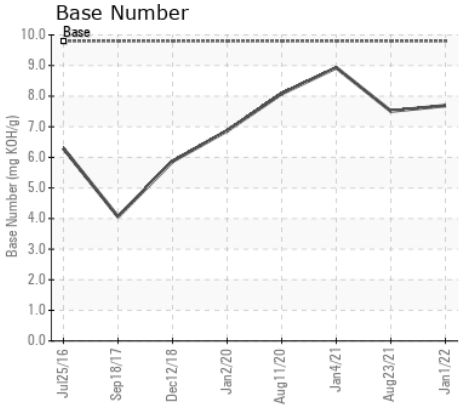
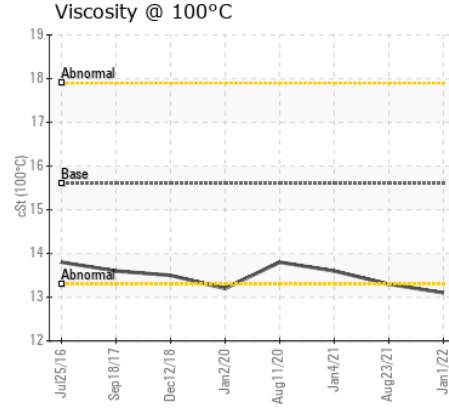
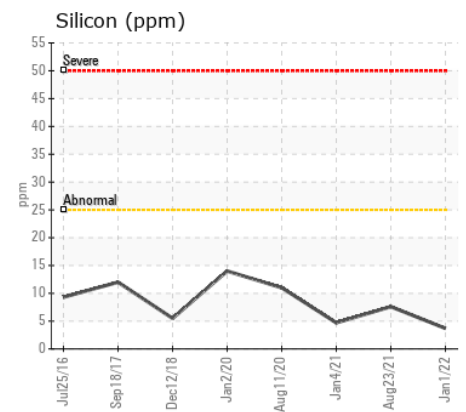
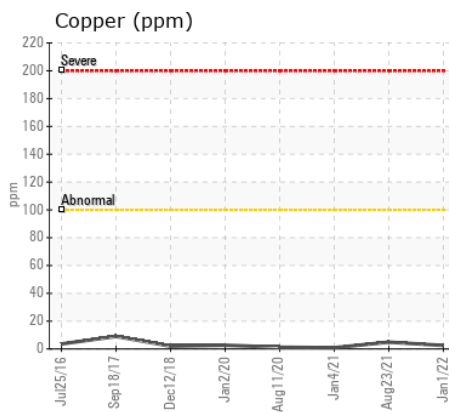
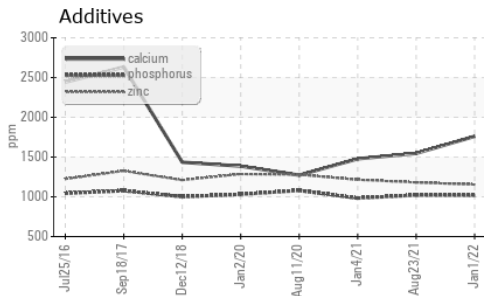
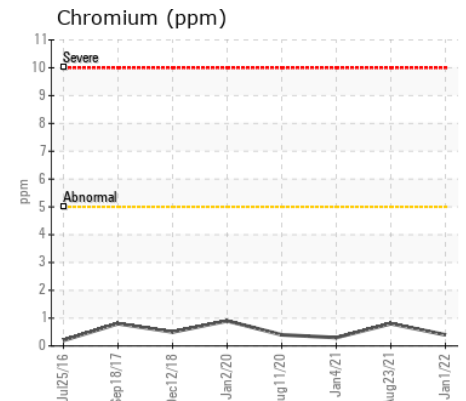
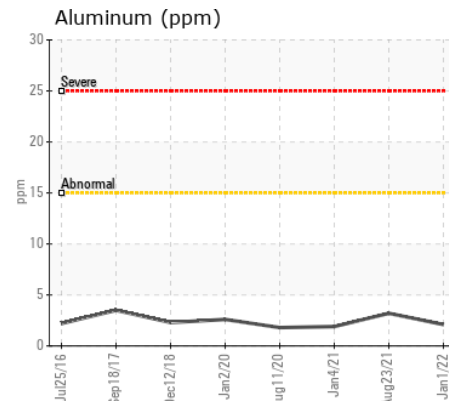
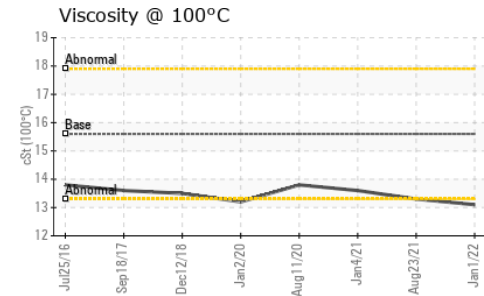
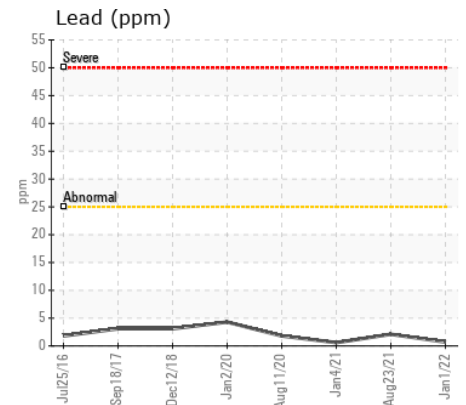
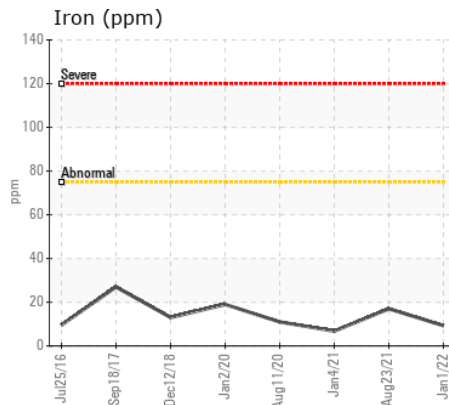
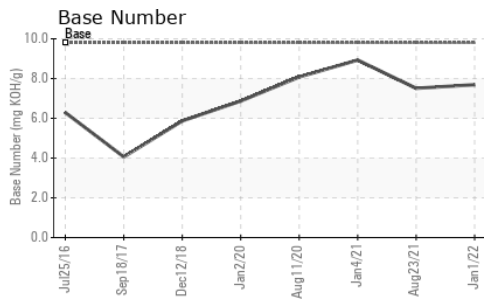
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	8	5
Potassium	ppm	ASTM D5185(m)	>20	1	2	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.4	8.3	5.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.1	19.7	17.6
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		2	2	2
Boron	ppm	ASTM D5185(m)	0	13	7	13
Barium	ppm	ASTM D5185(m)	0	<1	3	3
Molybdenum	ppm	ASTM D5185(m)	60	32	37	39
Manganese	ppm	ASTM D5185(m)	0	<1	4	3
Magnesium	ppm	ASTM D5185(m)	1010	420	572	594
Calcium	ppm	ASTM D5185(m)	1070	1761	1546	1478
Phosphorus	ppm	ASTM D5185(m)	1150	1019	1021	983
Zinc	ppm	ASTM D5185(m)	1270	1154	1180	1215
Sulfur	ppm	ASTM D5185(m)	2060	2972	2852	3068
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.4	15.1	13.2
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	7.69	7.51	8.93
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.1	13.3	13.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0623544 **Received** : 20 May 2022
Lab Number : 02489941 **Tested** : 25 May 2022
Unique Number : 5398879 **Diagnosed** : 25 May 2022 - Kevin Marson
Test Package : MOB 2

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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.