



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
51000 series
 Machine Id
INTERNATIONAL 51909
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0892034	WC0854786	WC0828261
Sample Date		Client Info		04 Jan 2024	30 Oct 2023	06 Sep 2023
Machine Age	kms	Client Info		28837	30021	714628
Oil Age	kms	Client Info		28837	30021	30000
Filter Age	kms	Client Info		28837	30021	30000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	16	13	13
Chromium	ppm	ASTM D5185(m)	>20	2	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	6	4	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	1	1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

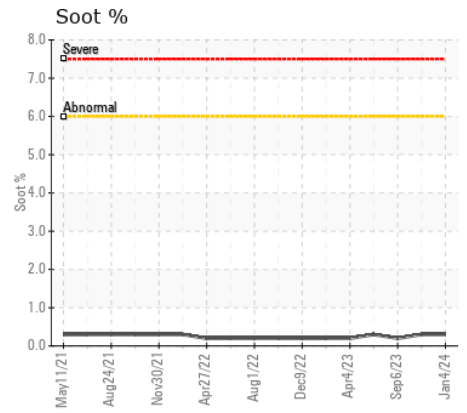
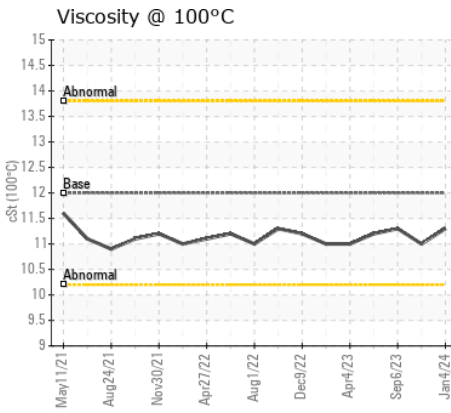
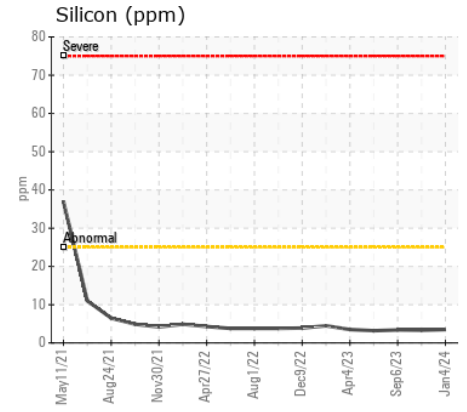
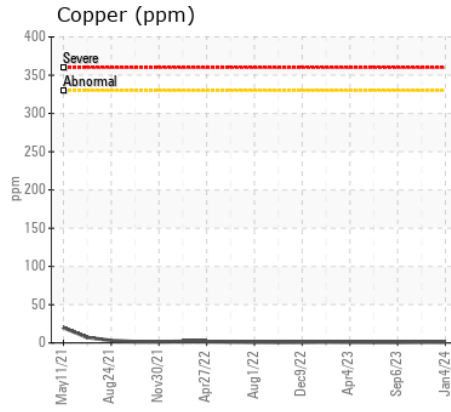
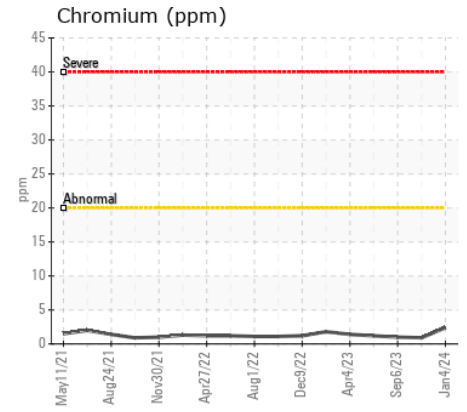
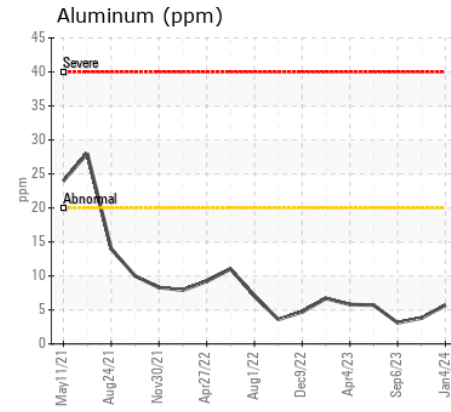
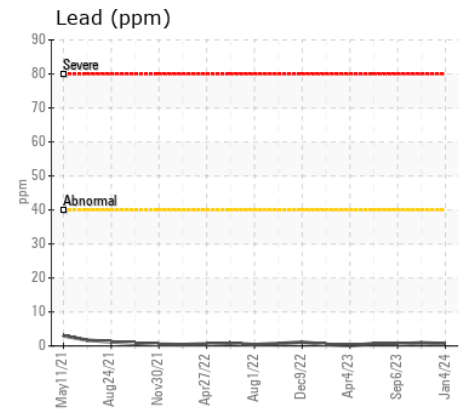
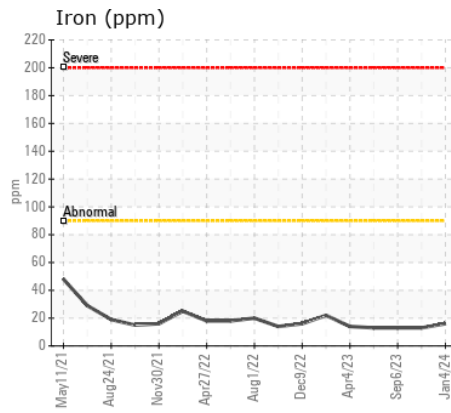
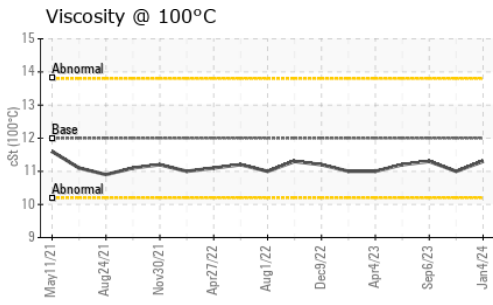
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	3	3
Potassium	ppm	ASTM D5185(m)	>20	2	0	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	0.3	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.7	8.9	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	20.6	20.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		1	2	2
Boron	ppm	ASTM D5185(m)	2	3	5	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	59	65	58
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	962	1034	954
Calcium	ppm	ASTM D5185(m)	1050	1079	1163	1028
Phosphorus	ppm	ASTM D5185(m)	995	985	1037	976
Zinc	ppm	ASTM D5185(m)	1180	1181	1298	1156
Sulfur	ppm	ASTM D5185(m)	2600	2499	2512	2252
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	17.3	15.1
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	11.0	11.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0892034 **Received** : 18 Jan 2024
Lab Number : 02609678 **Diagnosed** : 18 Jan 2024
Unique Number : 5710764 **Diagnostician** : Wes Davis
Test Package : MOB 1

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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.