



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
3000 Series
 Machine Id
INTERNATIONAL 3276
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (26 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0930263	WC0857673	WC0788124
Sample Date		Client Info		30 May 2024	04 Dec 2023	06 Jun 2023
Machine Age	mls	Client Info		127981	118049	108542
Oil Age	mls	Client Info		19439	9507	6163
Filter Age	mls	Client Info		19439	9507	6163
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>75	68	36	46
Chromium	ppm	ASTM D5185(m)	>5	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<1	0	<1
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>15	15	5	5
Lead	ppm	ASTM D5185(m)	>25	0	<1	0
Copper	ppm	ASTM D5185(m)	>100	17	2	3
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

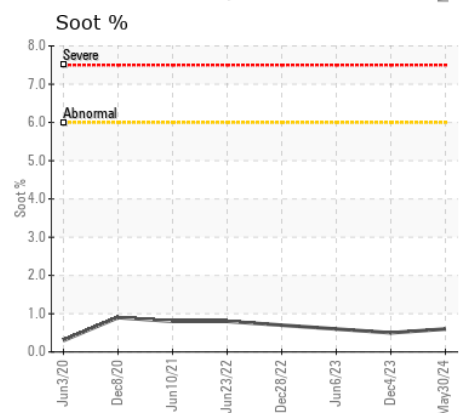
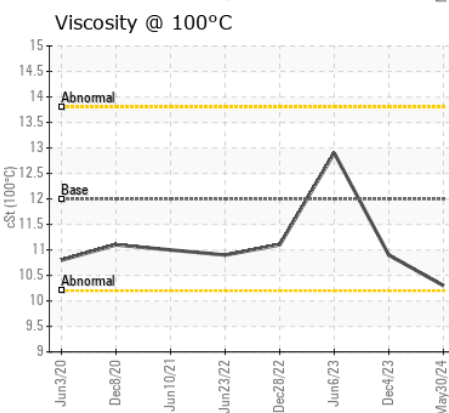
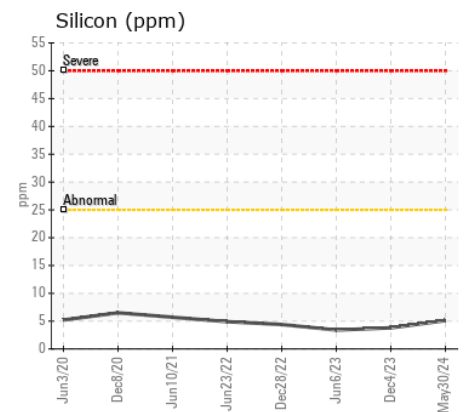
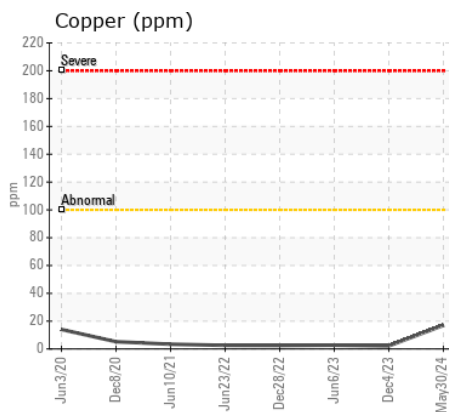
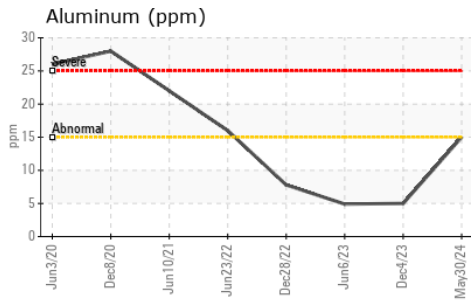
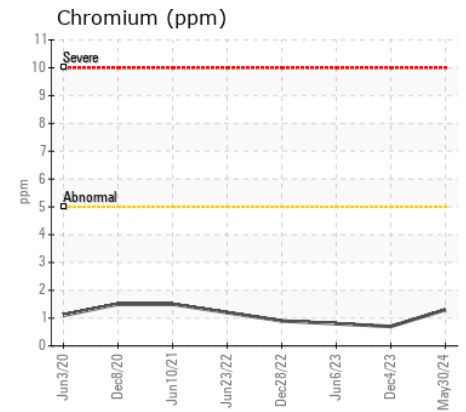
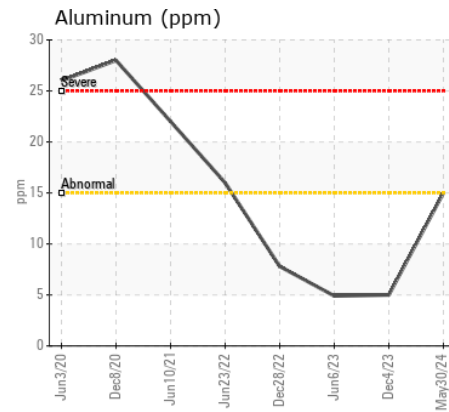
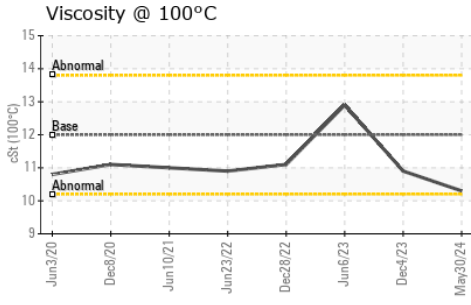
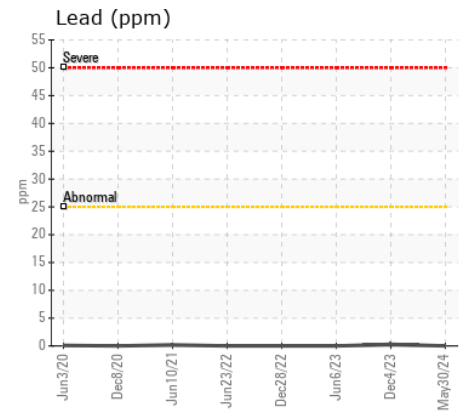
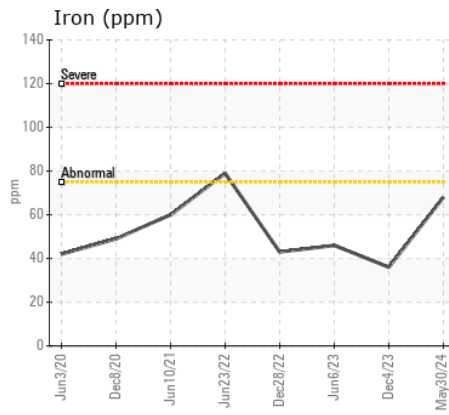
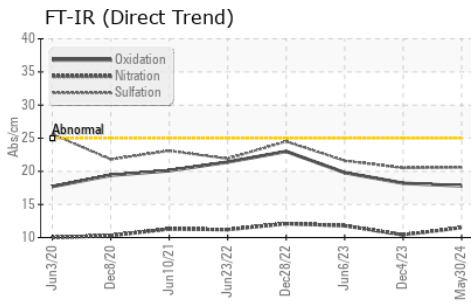
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	4	3
Potassium	ppm	ASTM D5185(m)	>20	20	2	3
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	0.6	0.5	0.6
Nitration	Abs/cm	ASTM D7624*	>20	11.5	10.4	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	20.5	21.6
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)		3	2	2
Boron	ppm	ASTM D5185(m)	2	10	6	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	59	59	57
Manganese	ppm	ASTM D5185(m)	0	1	0	<1
Magnesium	ppm	ASTM D5185(m)	950	853	926	925
Calcium	ppm	ASTM D5185(m)	1050	1004	1045	1002
Phosphorus	ppm	ASTM D5185(m)	995	897	963	995
Zinc	ppm	ASTM D5185(m)	1180	1112	1163	1137
Sulfur	ppm	ASTM D5185(m)	2600	2382	2504	2469
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.8	18.2	19.8
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	10.3	10.9	12.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0930263
Lab Number : 02645191
Unique Number : 5802730
Test Package : MOB 1
Received : 03 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Wes Davis

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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.