MOB

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Area
[FLE.22.03134]
Machine Id
FORD 285
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (24 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

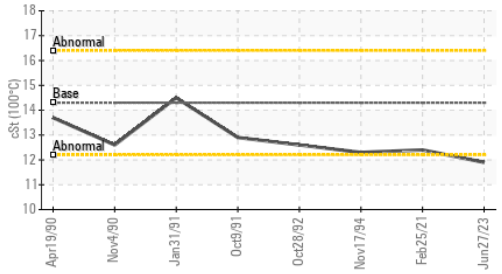
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring.

FLUID CONDITION

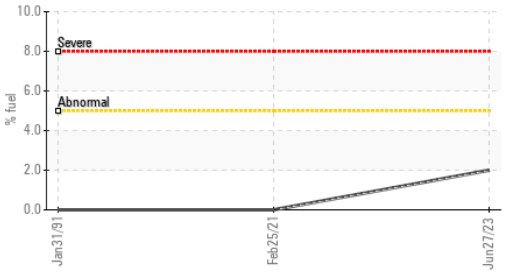
Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0804343**	WC0450335	WC00281480
Sample Date		Client Info		**27 Jun 2023**	25 Feb 2021	17 Nov 1994
Machine Age	kms	Client Info		**0**	1016	9341
Oil Age	kms	Client Info		**0**	0	0
Filter Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	Changed	---
Filter Changed		Client Info		**N/A**	Changed	---
Sample Status				**ABNORMAL**	NORMAL	---
Iron	ppm	ASTM D5185(m)	>100	**37**	32	8
Chromium	ppm	ASTM D5185(m)	>20	**1**	1	<1
Nickel	ppm	ASTM D5185(m)	>4	**<1**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)	>3	**<1**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	**3**	3	3
Lead	ppm	ASTM D5185(m)	>40	**<1**	<1	4
Copper	ppm	ASTM D5185(m)	>330	**2**	5	1
Tin	ppm	ASTM D5185(m)	>15	**<1**	1	2
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Silicon	ppm	ASTM D5185(m)	>25	**6**	9	5
Potassium	ppm	ASTM D5185(m)	>20	**12**	4	6
Fuel	%	ASTM D7593*	>5	▲ **2**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	ASTM D7844*	>3	**0.5**	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	**13.2**	11.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	**24.6**	23.1	---
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	---
Sodium	ppm	ASTM D5185(m)		**9**	5	3
Boron	ppm	ASTM D5185(m)	65	**19**	25	2
Barium	ppm	ASTM D5185(m)	0	**<1**	<1	---
Molybdenum	ppm	ASTM D5185(m)	65	**61**	53	2
Manganese	ppm	ASTM D5185(m)	0	**<1**	2	---
Magnesium	ppm	ASTM D5185(m)	1160	**1004**	1048	459
Calcium	ppm	ASTM D5185(m)	820	**903**	921	1306
Phosphorus	ppm	ASTM D5185(m)	1160	**907**	940	1083
Zinc	ppm	ASTM D5185(m)	1260	**1106**	1214	1132
Sulfur	ppm	ASTM D5185(m)	3000	**2711**	2825	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	**23.3**	21.0	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	▲ **11.9**	12.4	12.3

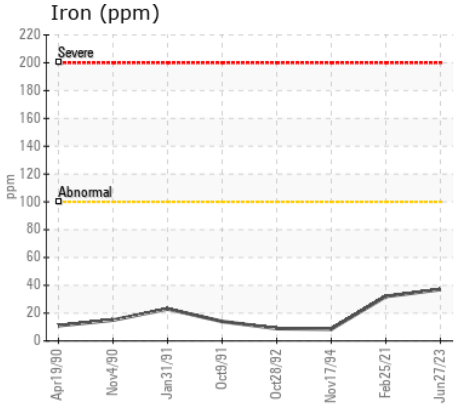
Viscosity @ 100°C



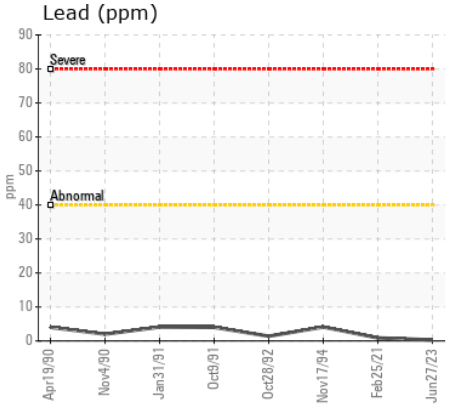
Fuel Dilution



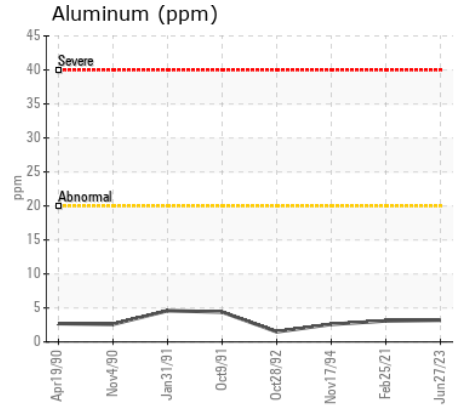
Iron (ppm)



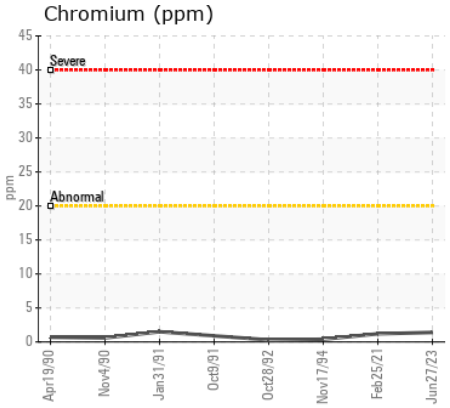
Lead (ppm)



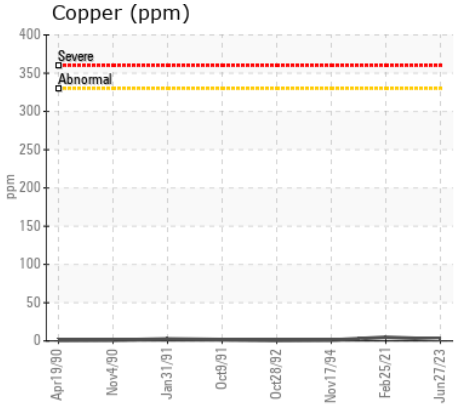
Aluminum (ppm)



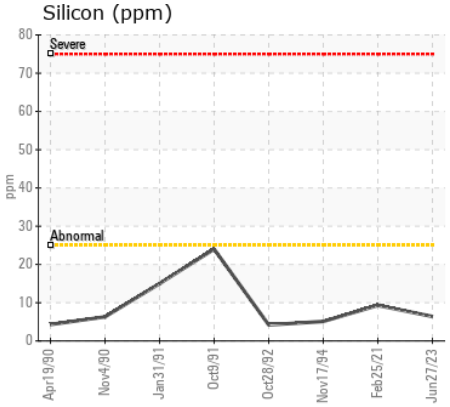
Chromium (ppm)



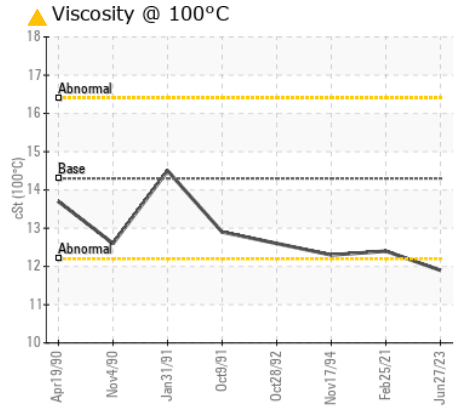
Copper (ppm)



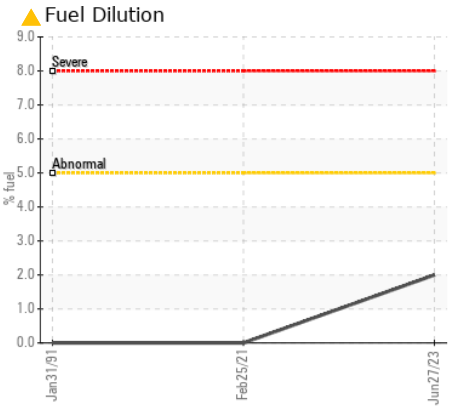
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **THE CORP/CITY OF SAULT STE MARIE**
Sample No. : WC0804343 **Recieved** : 12 Jan 2024 PUBLIC WORKS - STORES, 128 SACKVILLE ROAD
Lab Number : 02608434 **Diagnosed** : 15 Jan 2024 SAULT STE. MARIE, ON
Unique Number : 5709520 **Diagnostician** : Wes Davis CA P6B 4T6
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) Contact: Jeff Morden

To discuss this sample report, contact Customer Service at 1-800-268-2131. j.morden@cityssm.on.ca
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (705)541-7000e x:236
Validity of results and interpretation are based on the sample and information as supplied. F: (705)541-7014