



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
[811711]
 Machine Id
ALF P#117
 Component
Diesel Engine
 Fluid
PETRO CANADA 15W40 (40 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0812459	WC0618754	WC0495045
Sample Date		Client Info		29 May 2024	03 May 2022	05 May 2021
Machine Age	kms	Client Info		10000	2	12209
Oil Age	kms	Client Info		0	1	0
Filter Age	kms	Client Info		0	1	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>200	13	25	31
Chromium	ppm	ASTM D5185(m)	>10	<1	1	1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	2
Aluminum	ppm	ASTM D5185(m)	>30	5	8	7
Lead	ppm	ASTM D5185(m)	>30	<1	4	16
Copper	ppm	ASTM D5185(m)	>30	54	139	587
Tin	ppm	ASTM D5185(m)	>4	3	5	6
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

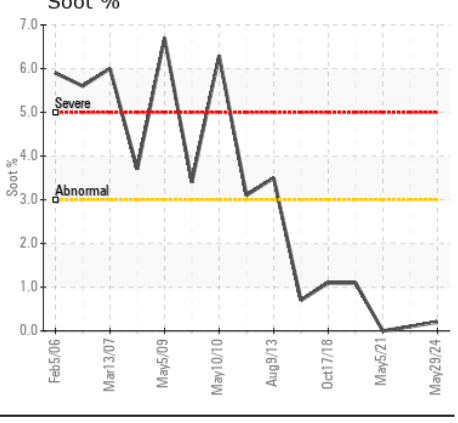
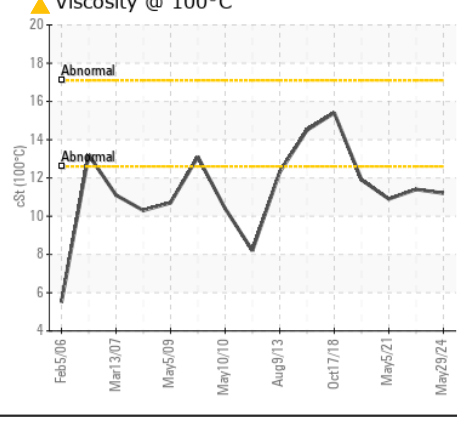
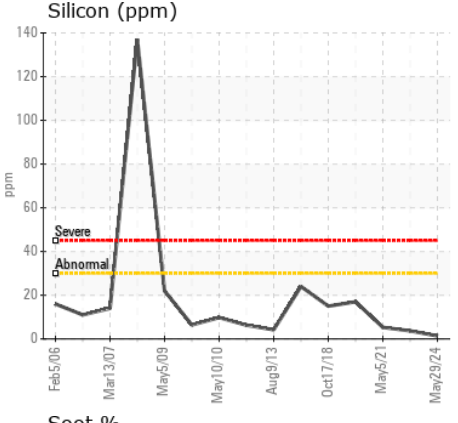
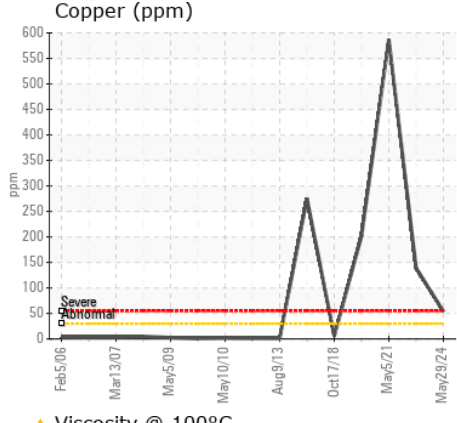
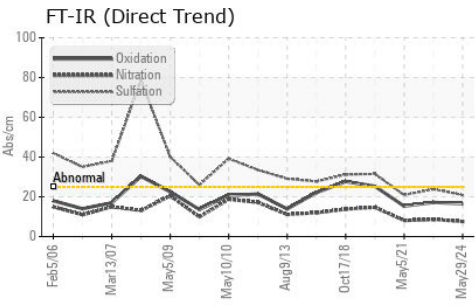
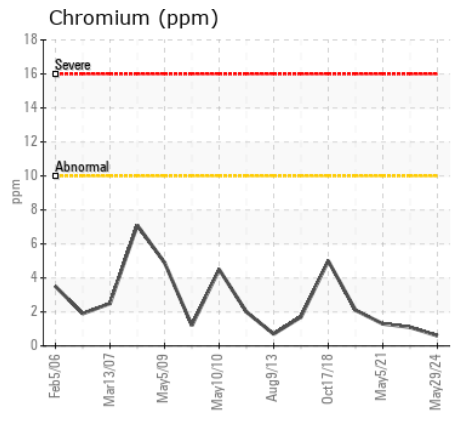
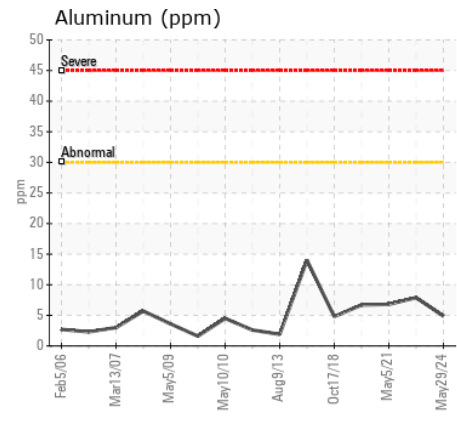
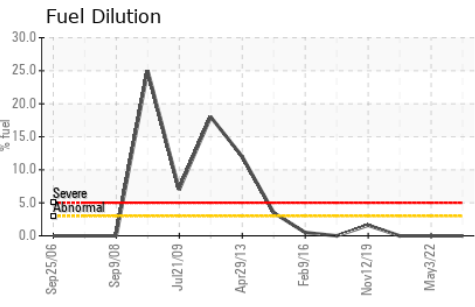
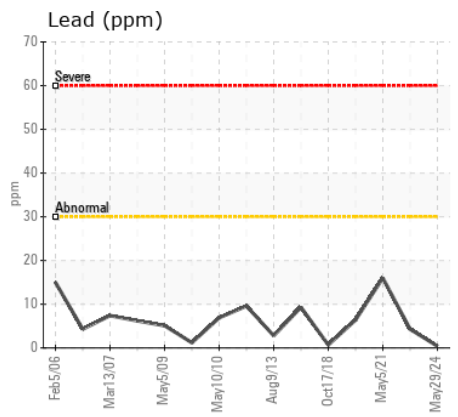
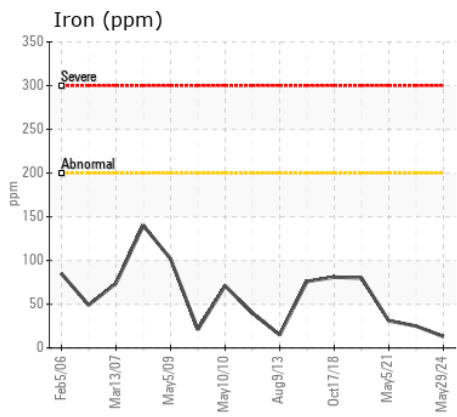
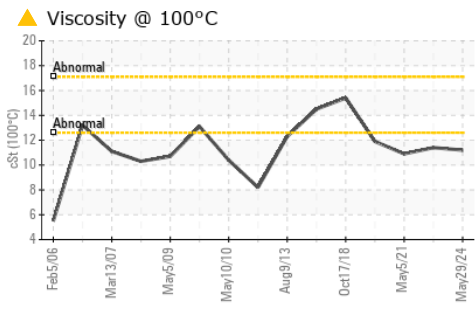
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	1	4	5
Potassium	ppm	ASTM D5185(m)	>20	4	11	11
Fuel	%	ASTM D7593*	>3.0	0.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0.2	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	7.6	8.6	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.9	23.8	20.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	3	4
Boron	ppm	ASTM D5185(m)		1	2	10
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		61	50	11
Manganese	ppm	ASTM D5185(m)		<1	2	4
Magnesium	ppm	ASTM D5185(m)		961	742	153
Calcium	ppm	ASTM D5185(m)		1109	1475	2108
Phosphorus	ppm	ASTM D5185(m)		952	958	860
Zinc	ppm	ASTM D5185(m)		1196	1217	1021
Sulfur	ppm	ASTM D5185(m)		2156	2285	2578
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.5	17.2	15.3
Visc @ 100°C	cSt	ASTM D7279(m)		▲ 11.2	11.4	10.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0812459 **Received** : 10 Jun 2024
Lab Number : 02640629 **Tested** : 11 Jun 2024
Unique Number : 5789791 **Diagnosed** : 11 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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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.