



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
WESTERN STAR 76
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (36 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083431	PC0071051	PC0064649
Sample Date		Client Info		19 Apr 2024	28 Feb 2023	25 Jul 2022
Machine Age	kms	Client Info		823230	795527	783089
Oil Age	kms	Client Info		27703	12438	312996
Filter Age	kms	Client Info		27703	12438	312996
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>200	87	29	49
Chromium	ppm	ASTM D5185(m)	>10	2	2	2
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	2	2	3
Lead	ppm	ASTM D5185(m)	>30	6	2	11
Copper	ppm	ASTM D5185(m)	>30	5	6	2
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

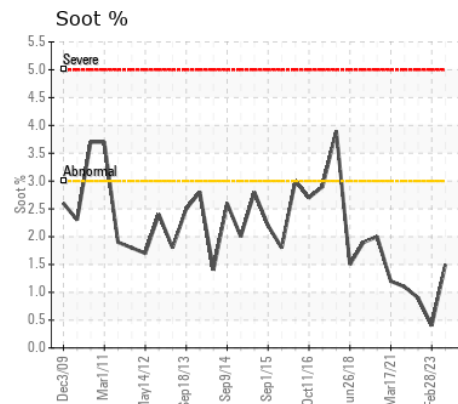
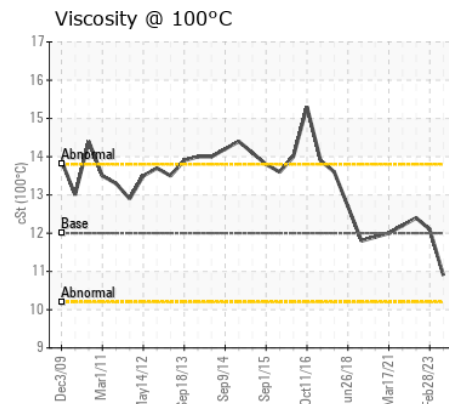
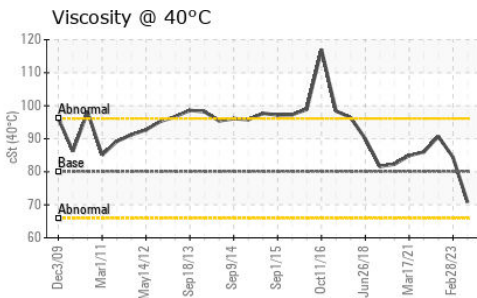
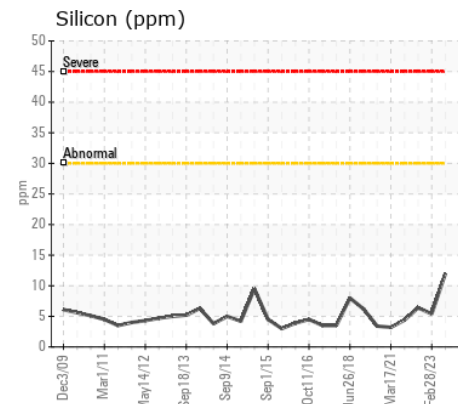
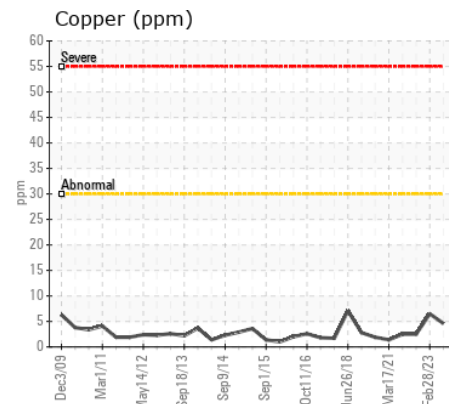
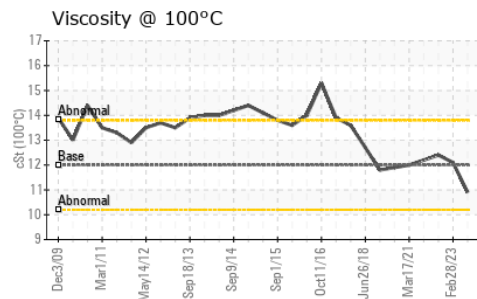
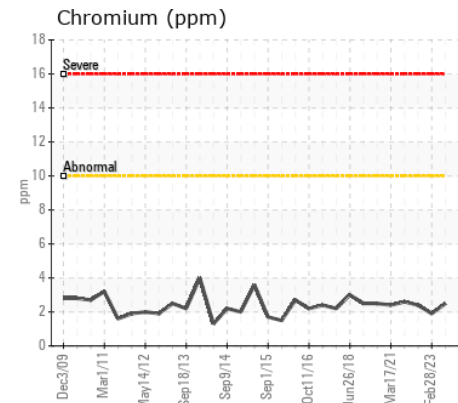
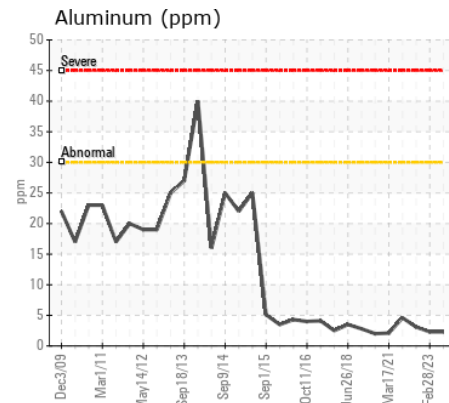
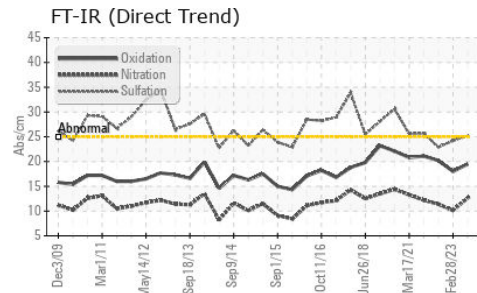
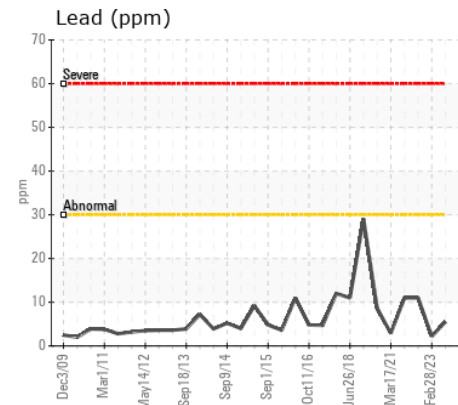
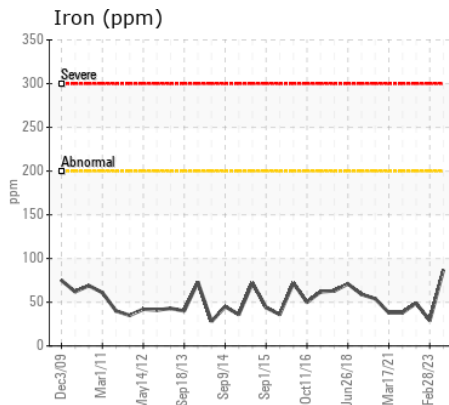
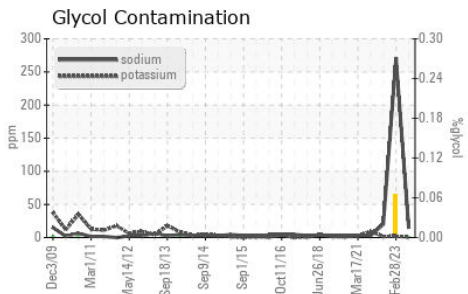
Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	12	5	6
Potassium	ppm	ASTM D5185(m)	>20	<1	2	2
Fuel		WC Method	>3.0	<1.0	▲ 3.6	▲ 4.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	▲ 0.064	NEG
Soot %	%	ASTM D7844*	>3	1.5	0.4	0.9
Nitration	Abs/cm	ASTM D7624*	>20	12.6	10.1	11.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.2	24.2	22.9
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		14	● 271	20
Boron	ppm	ASTM D5185(m)	2	2	5	3
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	61	99	59
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	941	933	918
Calcium	ppm	ASTM D5185(m)	1050	1032	1108	1055
Phosphorus	ppm	ASTM D5185(m)	995	962	1088	964
Zinc	ppm	ASTM D5185(m)	1180	1149	1195	1149
Sulfur	ppm	ASTM D5185(m)	2600	2434	2650	2445
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.5	18.0	20.2
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	70.7	84.4	90.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	10.9	12.1	▲ 12.4
Viscosity Index (VI)	Scale	ASTM D2270*	144	144	137	131



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083431
Lab Number : 02635466
Unique Number : 5776619
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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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.