



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
STERLING 171-0600
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0088728	PC0043201	PC0042916
Sample Date		Client Info		24 Apr 2024	24 Nov 2021	05 Apr 2021
Machine Age	kms	Client Info		418053	387011	376500
Oil Age	kms	Client Info		0	15000	15000
Filter Age	kms	Client Info		0	15000	15000
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	16	8	13
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	4	3	4
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	1	2
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

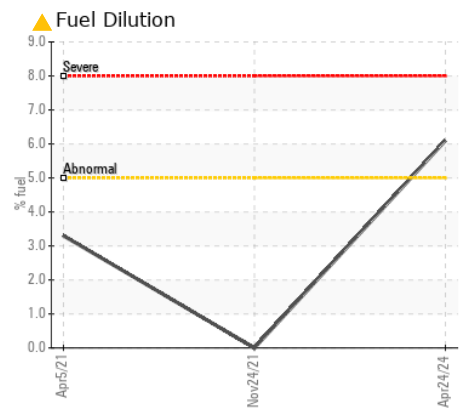
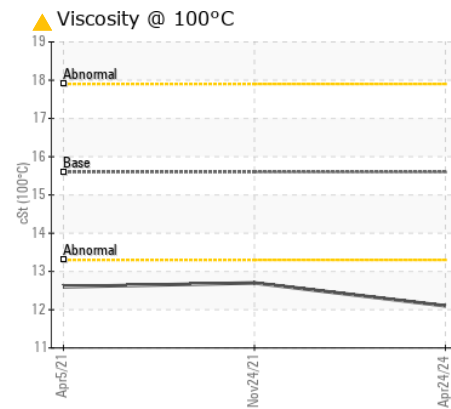
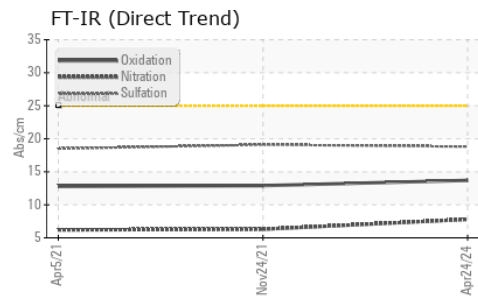
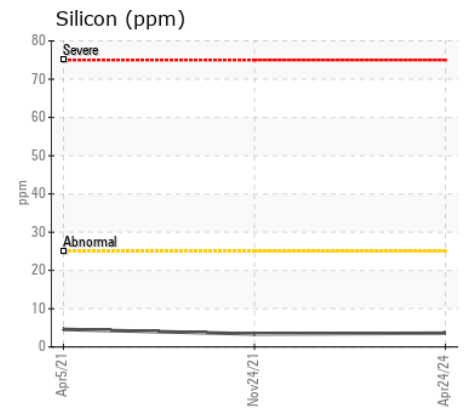
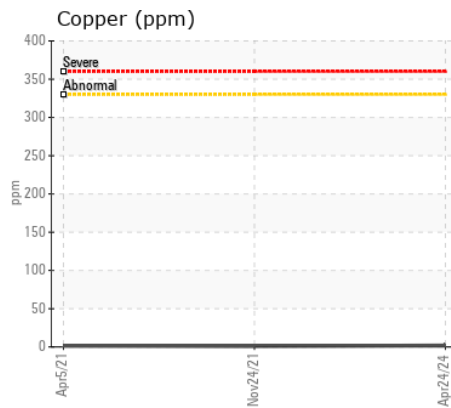
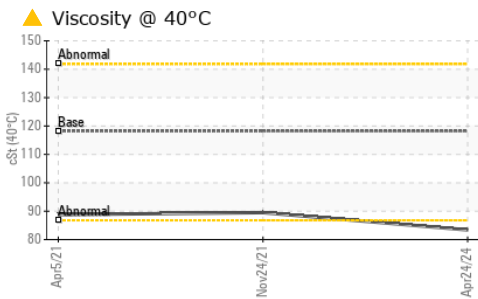
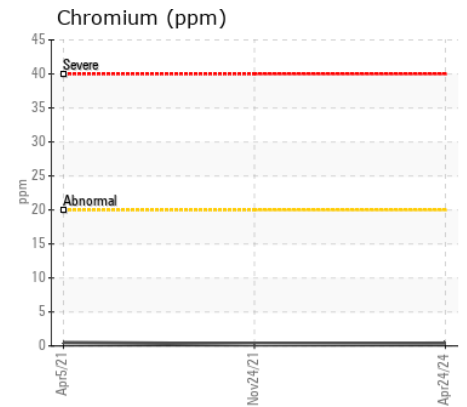
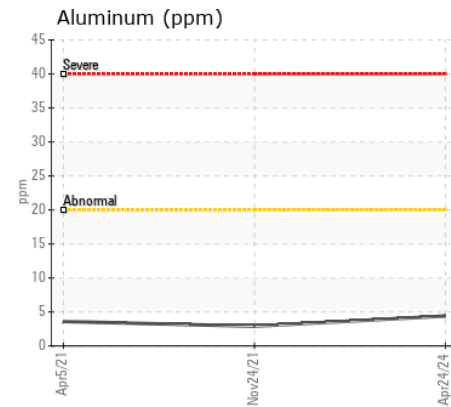
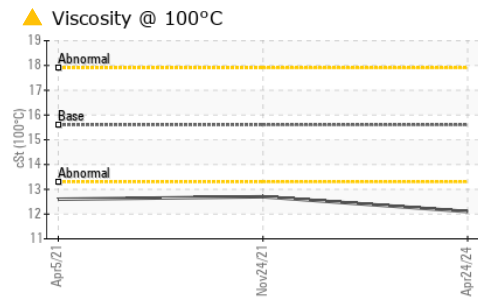
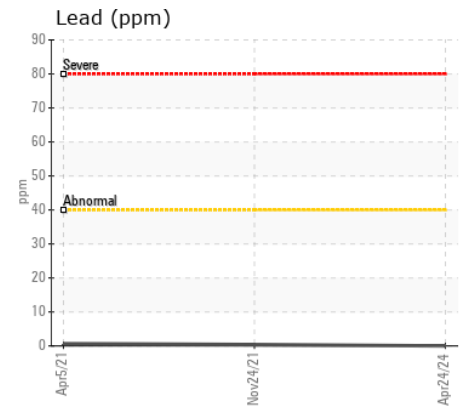
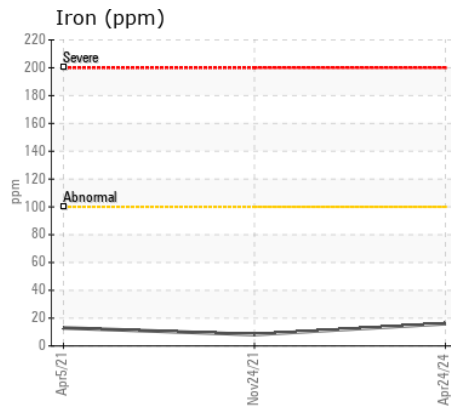
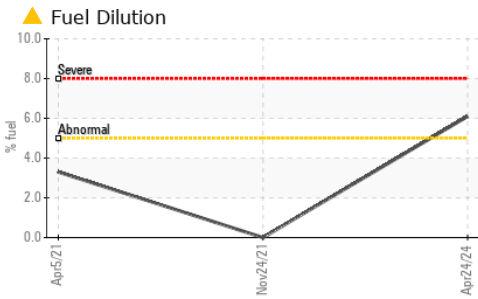
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	3	5
Potassium	ppm	ASTM D5185(m)	>20	2	1	1
Fuel	%	ASTM D7593*	>5	▲ 6.1	<1.0	▲ 3.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.4	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.8	6.3	6.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	19.1	18.5
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		9	6	9
Boron	ppm	ASTM D5185(m)	0	2	3	4
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	58	56	54
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	929	955	917
Calcium	ppm	ASTM D5185(m)	1070	1006	981	1006
Phosphorus	ppm	ASTM D5185(m)	1150	935	1024	953
Zinc	ppm	ASTM D5185(m)	1270	1129	1163	1186
Sulfur	ppm	ASTM D5185(m)	2060	2304	2511	2571
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.7	12.9	12.8
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	▲ 83.4	89.5	88.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 12.1	12.7	12.6
Viscosity Index (VI)	Scale	ASTM D2270*	139	139	138	138



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0088728 **Received** : 03 May 2024
Lab Number : 02633069 **Tested** : 06 May 2024
Unique Number : 5774222 **Diagnosed** : 06 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

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.

LAVIS CONTRACTING
 37462A HURON ROAD
 CLINTON, ON
 CA N0M 1L0
 Contact: Doug Francis
 dfrancis@lavis.ca
 T: (519)482-3694
 F: (519)482-7886