



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Machine Id
31117 PORT S.S. ENGINE (S/N 47B4885)
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (55 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0905534	WC0668735	WC0668725
Sample Date		Client Info		13 Mar 2024	30 Jan 2024	01 Apr 2022
Machine Age	hrs	Client Info		0	0	33012
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		0	500	500
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)	>80	6	11	4
Chromium	ppm	ASTM D5185(m)	>6	0	<1	0
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	3	<1
Lead	ppm	ASTM D5185(m)	>95	<1	6	<1
Copper	ppm	ASTM D5185(m)	>85	41	184	<1
Tin	ppm	ASTM D5185(m)	>9	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

Light fuel dilution occurring.

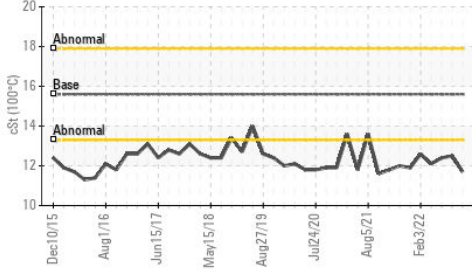
Silicon	ppm	ASTM D5185(m)	>25	2	10	2
Potassium	ppm	ASTM D5185(m)	>20	<1	1	<1
Fuel	%	ASTM D7593*	>4.0	▲ 3.8	<1.0	▲ 3.2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.9	9.1	6.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.5	19.1	19.5
Silt	scalar	Visual*	NONE	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

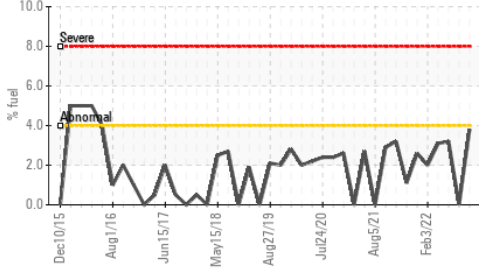
Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	1	2
Boron	ppm	ASTM D5185(m)	0	9	50	4
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	60	32	3	34
Manganese	ppm	ASTM D5185(m)	0	0	6	<1
Magnesium	ppm	ASTM D5185(m)	1010	599	55	676
Calcium	ppm	ASTM D5185(m)	1070	1439	2089	1387
Phosphorus	ppm	ASTM D5185(m)	1150	894	955	1001
Zinc	ppm	ASTM D5185(m)	1270	1107	1118	1152
Sulfur	ppm	ASTM D5185(m)	2060	2575	3118	2741
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.4	15.5	13.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 11.7	12.5	12.4

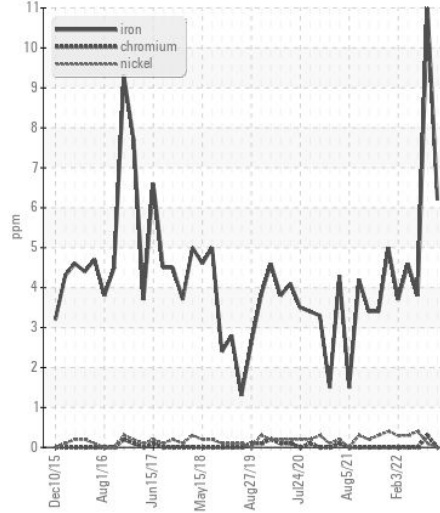
▲ Viscosity @ 100°C



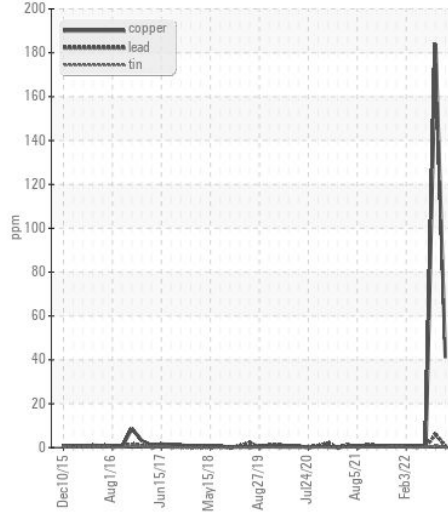
▲ Fuel Dilution



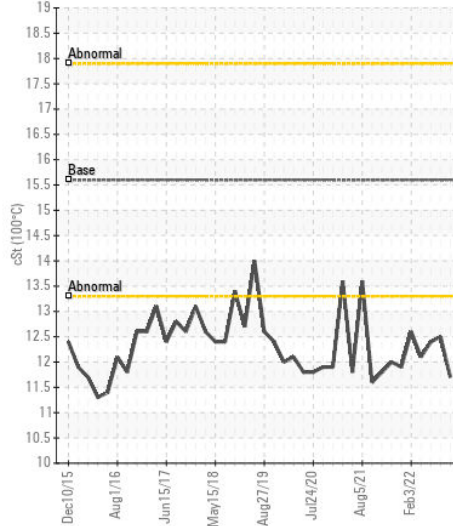
Ferrous Alloys



Non-ferrous Metals



▲ Viscosity @ 100°C



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0905534
Lab Number : 02625950
Unique Number : 5759082
Test Package : MAR 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.*