WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL



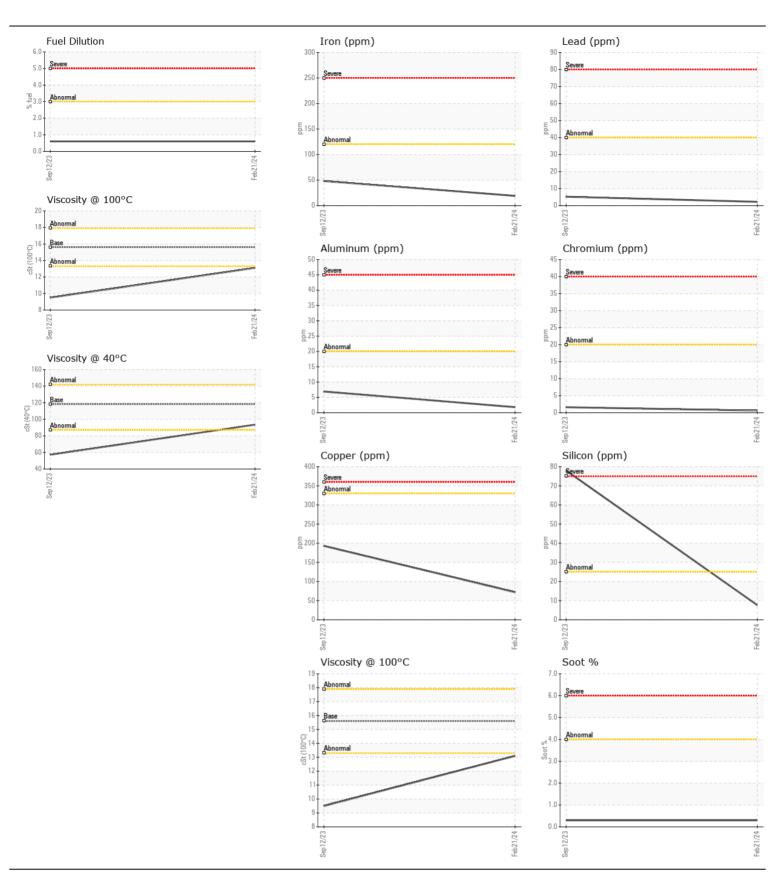
MACK 1242318

Component Diesel Engine

PETRO CANADA DURON HP 1	5W40 (G/	AL)					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		PC0073061	PC0071389	
	Sample Date		Client Info		21 Feb 2024	12 Sep 2023	
	Machine Age	kms	Client Info		32672	17555	
	Oil Age	kms	Client Info		1000	928	
	Filter Age	kms	Client Info		1000	928	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>120	19	48	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185(m)	>20	<1	2	
	Nickel	ppm	ASTM D5185(m)	>5	2	8	
	Titanium	ppm	ASTM D5185(m)	>2	0	<1	
	Silver	ppm	ASTM D5185(m)	>2	<1	<1	
	Aluminum	ppm	ASTM D5185(m)	>20	2	7	
	Lead	ppm	ASTM D5185(m)	>40	2	5	
	Copper	ppm	ASTM D5185(m)	>330	72	193	
	Tin	ppm	ASTM D5185(m)	>15	1	5	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	8	▲ 78	
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1	8	
	Fuel	%	ASTM D7593*	>3.0	0.6	0.6	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>4	0.3	0.3	
	Nitration	Abs/cm	ASTM D7624*	>20	9.6	11.9	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	20.9	24.8	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		3	4	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	0	4	<u> </u>	
	Barium	ppm	ASTM D5185(m)	0	0	<1	
	Molybdenum	ppm	ASTM D5185(m)	60	63	120	
	Manganese	ppm	ASTM D5185(m)	0	<1	6	
	Magnesium	ppm	ASTM D5185(m)	1010	919	702	
	Calcium	ppm	ASTM D5185(m)	1070	1088	1463	
	Phosphorus	ppm	ASTM D5185(m)	1150	859	662	
	Zinc	ppm	ASTM D5185(m)	1270	1115	7 47	
	Sulfur	ppm	ASTM D5185(m)	2060	2116	1724	
	Oxidation	Abs/.1mm	ASTM D7414*	>25	17.9	25.2	
	Visc @ 40°C	cSt	ASTM D7279(m)	118.2	93.5	▲ 57.2	
	Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.1	9 .5	
	Viscosity Index (VI)	Scale	ASTM D2270*	139	138	149	

Report Id: LAVCLI [WCAMIS] 02619513 (Generated: 03/05/2024 16:37:29) Rev: 1

Contact/Location: Doug Francis - LAVCLI





ISO 17025:2017
Accredited
Laboratory

Laboratory: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9Sample No.: PC0073061Received: 04 Mar 2024

 7025:2017
 Lab Number
 : 02619513
 Tested
 : 05 Mar 2024

 redited
 Unique Number
 : 5736623
 Diagnosed
 : 05 Mar 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.

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