

WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**



900187 Component Diesel Engine

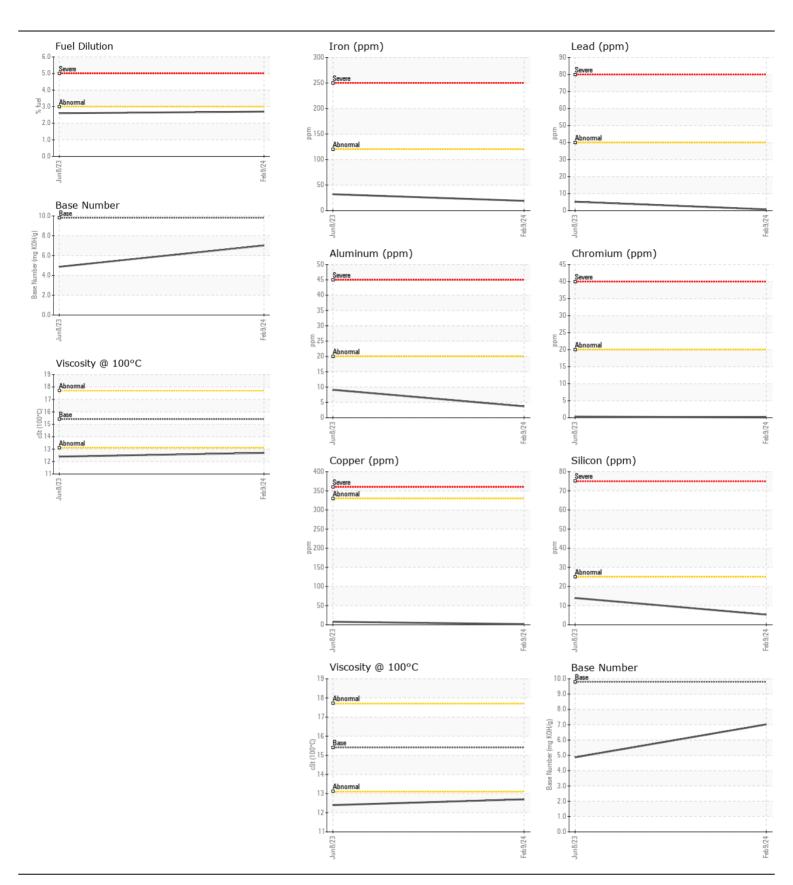
PETRO CANADA DURON SHP 15W40 (40 LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.	Sample Number		Client Info		WC956167	WC956139	
	Sample Date		Client Info		09 Feb 2024	08 Jun 2023	
	Machine Age	kms	Client Info		281557	14706	
	Oil Age	kms	Client Info		0	1200	
	Filter Age	kms	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	\120	19	32	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		<1	<1	
	Nickel	ppm	ASTM D5185(m)		<1	<1	
	Titanium	ppm	ASTM D5185(m)		0	<1	
	Silver	ppm	ASTM D5185(m)		0	0	
	Aluminum	ppm	ASTM D5185(m)		4	9	
	Lead	ppm	ASTM D5185(m)	>40	- <1	5	
	Copper	ppm	ASTM D5185(m)		2	8	
	Tin	ppm	ASTM D5185(m)		<1	1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	5	14	
Light fuel dilution occurring. No other contaminants were detected in the oil.	Potassium	ppm	ASTM D5185(m)		1	2	
	Fuel	%	ASTM D7593*	>3.0	2.7	2.6	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*		0.3	0.5	
	Nitration	Abs/cm	ASTM D7624*	>20	8.6	11.1	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	25.2	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		4	5	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185(m)	0	8	43	
	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)		57	111	
	Manganese	ppm	ASTM D5185(m)		0	<1	
	Magnesium	ppm	ASTM D5185(m)		897	696	
	Calcium	ppm	ASTM D5185(m)		1010	1555	
	Phosphorus	ppm	ASTM D5185(m)		938	784	
	Zinc	ppm	. ,	1270	1091	872	
	Sulfur	ppm	ASTM D5185(m)		2357	2032	
	Oxidation	Abs/.1mm	ASTM D7414*		16.5	22.0	
	Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	7.02	4.87	

Visc @ 100°C cSt

ASTM D7279(m) 15.4

<u>12.4</u>

12.7





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 870 - St John s : WC956167 Lab Number : 02616899

Unique Number : 5734009

Received **Tested**

Diagnosed Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

: 22 Feb 2024 : 22 Feb 2024 - Wes Davis

: 21 Feb 2024

19 Harding Road, St. John's, NL CA A1A 5T8 Contact: Angus Molloy amolloy@gflenv.com T: (709)739-9302

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.