

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



(AS402G) Supermarket **MACK 107A1881** Component

Diesel Engine Fluid

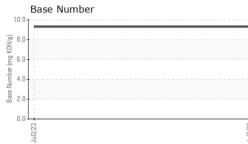
PETRO CANADA DURON SHP 10W30 (11 GAL)

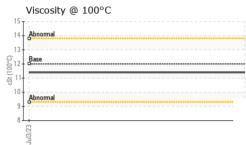
DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Recommendation	Sample Number		Client Info		PCA0099868		
Resample at the next service interval to monitor.	Sample Date		Client Info		03 Jul 2023		
Wear	Machine Age	mls	Client Info		382734		
All component wear rates are normal.	Oil Age	mls	Client Info		62		
Contamination	Oil Changed		Client Info		Not Changd		
There is no indication of any contamination in the	Sample Status				NORMAL		
oil.	CONTAMINAT	ION	method	limit/base		history1	history2
Fluid Condition The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Fuel		WC Method		<1.0		
	Glycol		WC Method	20.0	NEG		
	WEAR METAL	S	method	limit/base		history1	history2
	Iron	ppm	ASTM D5185m		12		
	Chromium		ASTM D5185m		<1		
	Nickel	ppm ppm	ASTM D5185m		4		
					4		
	Titanium Silver	ppm	ASTM D5185m ASTM D5185m		0		
		ppm	ASTM D5185m				
	Aluminum Lead	ppm	ASTM D5185m		2 0		
		ppm					
	Copper	ppm	ASTM D5185m		1		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	Cadmium	ppm	ASTM D5185m		0		
	ADDITIVES		method			history1	history2
	ABBIIIVE0		method	mmubase	ounon	Thistory I	Thistoryz
	Boron	ppm	ASTM D5185m	2	0		
		ppm ppm		2			· · · · · ·
	Boron		ASTM D5185m	2 0	0		
	Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0 50	0 0		
	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	0 0 65		
	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	0 0 65 <1		
	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	0 0 65 <1 934		
	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	0 0 65 <1 934 1105	 	
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	0 0 65 <1 934 1105 1047	 	
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	0 0 65 <1 934 1105 1047 1278 3864	 	
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	0 0 65 <1 934 1105 1047 1278 3864		
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	0 0 65 <1 934 1105 1047 1278 3864 current		
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	0 0 65 <1 934 1105 1047 1278 3864 <u>current</u> 4	 history1	 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	0 0 65 <1 934 1105 1047 1278 3864 <i>current</i> 4 0 <1	 history1 	 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	0 0 65 <1 934 1105 1047 1278 3864 <i>current</i> 4 0 <1	 history1 	 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 >20 limit/base	0 0 65 <1 934 1105 1047 1278 3864 <i>current</i> 4 0 <1 <i>current</i>	 history1 history1	 history2 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 >20 limit/base >20	0 0 65 <1 934 1105 1047 1278 3864 <u>current</u> 4 0 <1 <u>current</u>	 history1 history1 history1	history2 history2 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	<pre>ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm</pre>	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25 >20 limit/base >20	0 0 65 <1 934 1105 1047 1278 3864 <u>current</u> 4 0 <1 <u>current</u> 0.1 4.6 16.8	 history1 history1 	history2 history2 history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ITS ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 20 limit/base >20 >30	0 0 65 <1 934 1105 1047 1278 3864 <i>current</i> 4 0 <1 <i>current</i> 0.1 4.6 16.8	 history1 history1 history1	
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TTS ppm ppm ppm ppm ppm ppm DATION Abs/1mm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7415	2 0 50 0 950 1050 995 1180 2600 limit/base >25 20 limit/base >20 >30	0 0 65 <1 934 1105 1047 1278 3864 <u>current</u> 4 0 <1 <u>current</u> 0.1 4.6 16.8	 history1 history1 history1 history1	

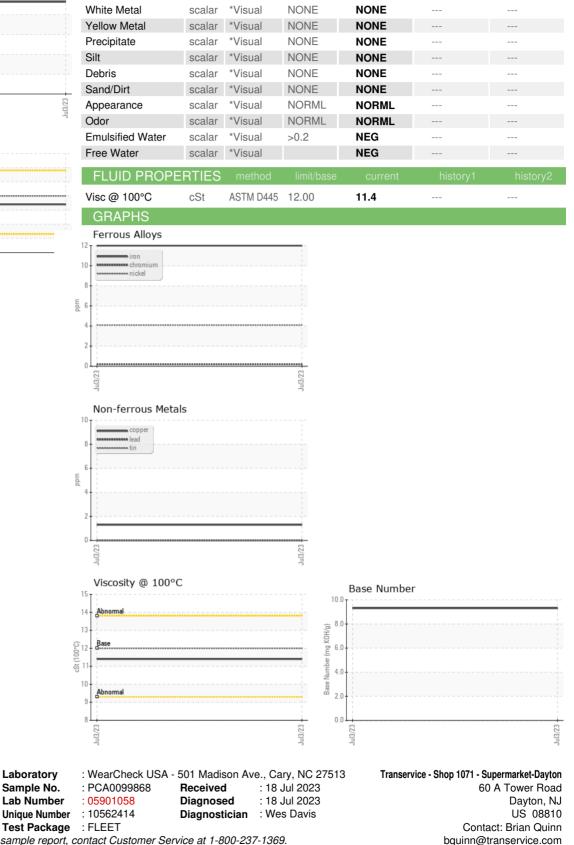


OIL ANALYSIS REPORT

VISUAL







To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

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