

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

338698

Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

A Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

🔺 Wear

Cylinder, crank, or cam shaft wear is indicated.

Contamination

There is no indication of any contamination in the oil.

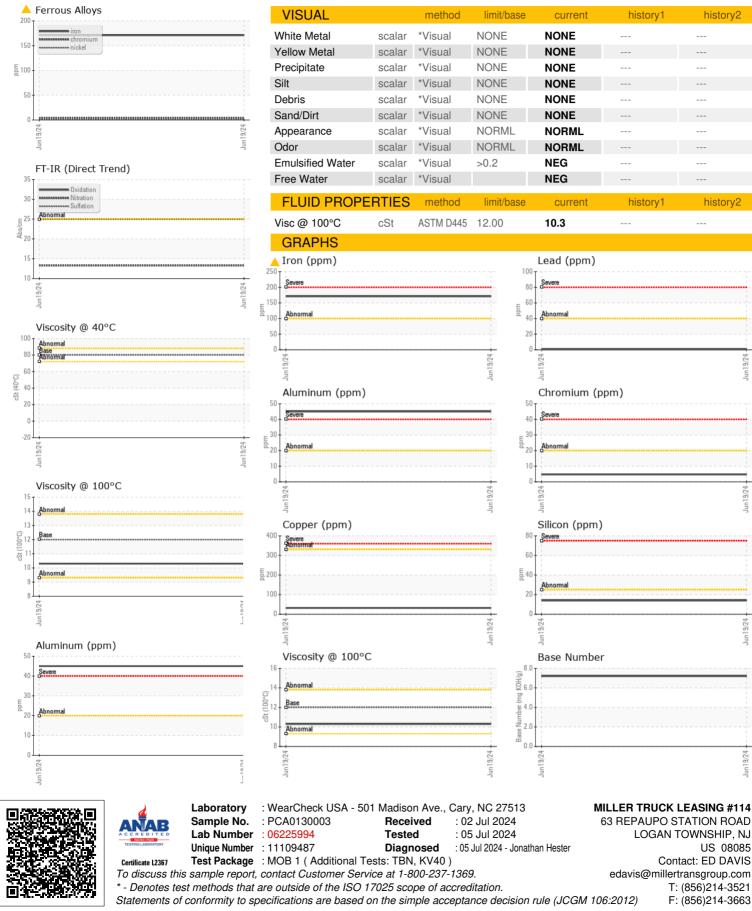
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0130003		
Sample Date		Client Info		19 Jun 2024		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	1 71		
Chromium	ppm	ASTM D5185m	>20	5		
Nickel	ppm	ASTM D5185m	>4	2		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	45		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	32		
Tin	ppm	ASTM D5185m	>15	5		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base		history1	history2
ADDITIVES Boron	ppm		limit/base		history1	
		method		current		
Boron	ppm	method ASTM D5185m	2	current 21		history2
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 21 1		history2
Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 21 1 51		history2
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	21 21 1 51 11		history2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	21 21 1 51 11 548		history2
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 21 1 51 11 548 1642	 	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current 21 1 51 11 548 1642 701	 	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	Current 21 1 51 11 548 1642 701 941	 	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method 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	Current 21 1 51 11 548 1642 701 941 1952		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method 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	Current 21 1 51 11 548 1642 701 941 1952 Current	 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m 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	current 21 1 51 11 548 1642 701 941 1952 current 14	 history1 	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base	current 21 1 51 11 548 1642 701 941 1952 current 14 4	 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	current 21 1 51 11 548 1642 701 941 1952 current 14 4 63	 history1 	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	Current 21 1 51 11 548 1642 701 941 1952 current 14 63 current	 history1 history1	history2 history2 history2 history2 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 TS	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 21 1 51 11 548 1642 701 941 1952 current 14 63 current 0.9	 history1 history1	history2 history2 history2 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	current 21 1 51 11 548 1642 701 941 1952 current 14 63 current 0.9 13.3	 history1 history1 history1	history2 history2 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 ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	2 0 50 0 950 1050 995 1180 2600 limit/base >25 limit/base >3 >20	current 21 1 51 11 548 1642 701 941 1952 current 14 63 current 0.9 13.3 25.0	 history1 history1	history2 history2 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 ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 imit/base >3 >20 >30	Current 21 1 51 11 548 1642 701 941 1952 current 14 63 current 0.9 13.3 25.0 current	 history1 history1 history1	history2 history2 history2 history2 history2 history2 history2 history2 history2



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