

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 338665

Component Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

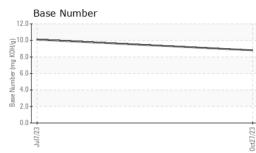
Fluid Condition

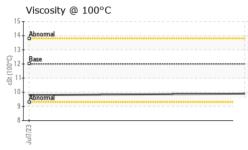
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

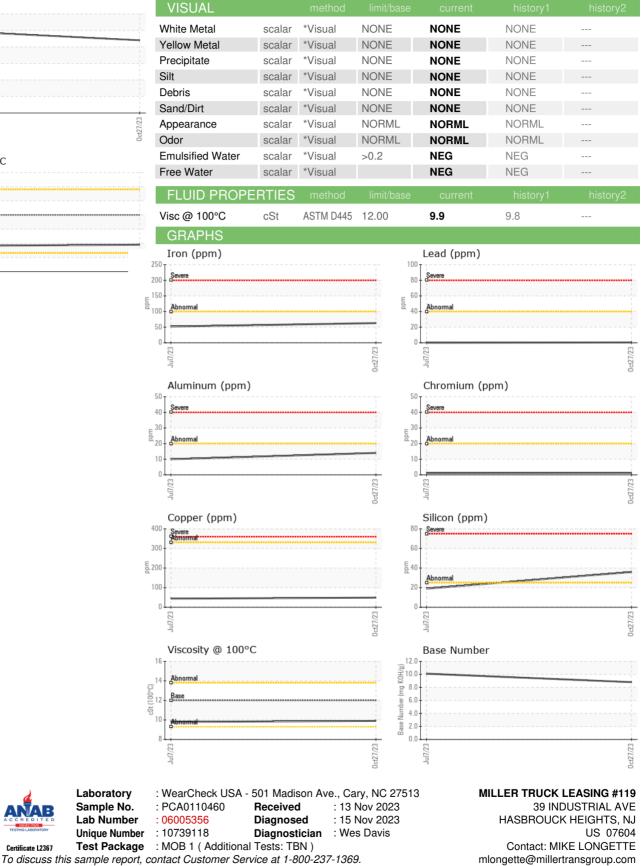
AL)			Jul2023	0ct2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0110460	PCA0101340	
Sample Date		Client Info		27 Oct 2023	07 Jul 2023	
Machine Age	mls	Client Info		15437	8539	
Oil Age	mls	Client Info		0	0	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	63	52	
Chromium	ppm	ASTM D5185m	>20	1	1	
Nickel	ppm	ASTM D5185m	>4	1	1	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m	>3	<1	0	
Aluminum	ppm	ASTM D5185m	>20	14	10	
Lead	ppm	ASTM D5185m	>40	<1	0	
Copper	ppm	ASTM D5185m	>330	49	44	
Tin	ppm	ASTM D5185m	>15	5	4	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	35	58	
Barium	ppm	ASTM D5185m	0	<1	0	
Molybdenum	ppm	ASTM D5185m	50	46	49	
Manganese	ppm	ASTM D5185m	0	12	12	
	pp					
Magnesium	ppm	ASTM D5185m	950	531	556	
•		ASTM D5185m ASTM D5185m	950 1050	531 1759	556 1883	
Calcium	ppm					
Calcium Phosphorus	ppm ppm	ASTM D5185m	1050	1759	1883	
Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m	1050 995	1759 788	1883 850	
Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180	1759 788 941	1883 850 997	
Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600	1759 788 941 2363	1883 850 997 2848	
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	1050 995 1180 2600 limit/base	1759 788 941 2363 current	1883 850 997 2848 history1	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	1050 995 1180 2600 limit/base	1759 788 941 2363 current 36	1883 850 997 2848 history1 19	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm TTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25	1759 788 941 2363 current 36 1 26	1883 850 997 2848 history1 19 5	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm TTS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20	1759 788 941 2363 current 36 1 26	1883 850 997 2848 history1 19 5 14	 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm TTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20 limit/base	1759 788 941 2363 current 36 1 26 current	1883 850 997 2848 history1 19 5 14 history1	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	1050 995 1180 2600 limit/base >25 >20 limit/base >3	1759 788 941 2363 current 36 1 26 current 0.5	1883 850 997 2848 history1 19 5 14 history1 0.3	 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D51854 *ASTM D7844 *ASTM D7624	1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	1759 788 941 2363 current 36 1 26 current 0.5 10.1 23.7	1883 850 997 2848 history1 19 5 14 history1 0.3 8.2	 history2 history2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D51854 *ASTM D7844 *ASTM D7624	1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	1759 788 941 2363 current 36 1 26 current 0.5 10.1 23.7	1883 850 997 2848 history1 19 5 14 history1 0.3 8.2 23.0	 history2 history2 history2



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Certificate L2367

Laboratory

Sample No.

* - 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)

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