

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 632651

Component Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

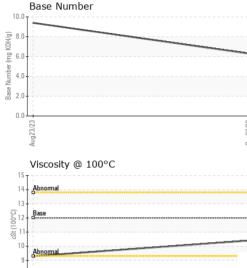
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

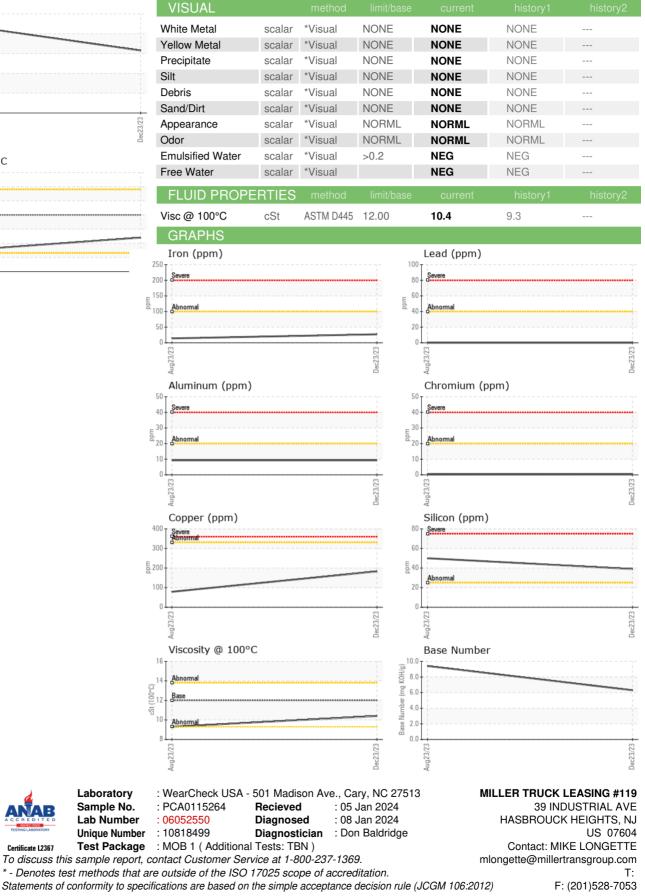
				Dec2023		
SAMPLE INFORI	MATION	method				history2
Sample Number		Client Info		PCA0115264	PCA0104238	
Sample Date		Client Info		23 Dec 2023	23 Aug 2023	
Machine Age	mls	Client Info		8518	627	
Oil Age	mls	Client Info		0	0	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	27	14	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>4	<1	<1	
Titanium	ppm	ASTM D5185m	~7	2	0	
Silver	ppm	ASTM D5185m	>3	2 <1	<1	
Aluminum	ppm	ASTM D5185m	>20	9	9	
Lead		ASTM D5185m	>20	0	0	
	ppm	ASTM D5185m	>330	183	79	
Copper Tin	ppm				2	
Vanadium	ppm	ASTM D5185m ASTM D5185m	>15	3 0	0	
Cadmium	ppm	ASTM D5185m		0	0	
	ppm	ASTIVI DJ TOJIII		U	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	159	480	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	50	109	118	
Manganaga						
Manganese	ppm	ASTM D5185m	0	3	2	
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	0 950	3 677	2 701	
•						
Magnesium	ppm	ASTM D5185m	950	677	701	
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m	950 1050	677 1451	701 1489	
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995	677 1451 755	701 1489 727	
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180	677 1451 755 867	701 1489 727 872	
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180 2600	677 1451 755 867 2272	701 1489 727 872 3118	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	950 1050 995 1180 2600 limit/base	677 1451 755 867 2272 current	701 1489 727 872 3118 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180 2600 limit/base	677 1451 755 867 2272 current 39	701 1489 727 872 3118 history1 50	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180 2600 limit/base >25	677 1451 755 867 2272 current 39 2	701 1489 727 872 3118 history1 50 2	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180 2600 limit/base >25 >20	677 1451 755 867 2272 current 39 2 23	701 1489 727 872 3118 history1 50 2 10	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	950 1050 995 1180 2600 limit/base >25 >20	677 1451 755 867 2272 current 39 2 23 23 current 0.2	701 1489 727 872 3118 history1 50 2 10 history1	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	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	950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	677 1451 755 867 2272 current 39 2 2 23 current	701 1489 727 872 3118 history1 50 2 10 history1 0.1	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	950 1050 995 1180 2600 Iimit/base >25 >20 Iimit/base >3 >20	677 1451 755 867 2272 current 39 2 23 current 0.2 11.6	701 1489 727 872 3118 history1 50 2 10 2 10 history1 0.1 6.4	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 tASTM D7415	950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20 >30 imit/base	677 1451 755 867 2272 current 39 2 23 current 0.2 11.6 24.3 current	701 1489 727 872 3118 history1 50 2 10 history1 0.1 6.4 24.5 history1	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624	950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20 >3	677 1451 755 867 2272 current 39 2 23 current 0.2 11.6 24.3	701 1489 727 872 3118 history1 50 2 10 2 10 history1 0.1 6.4 24.5	 history2 history2 history2



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Certificate L2367

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