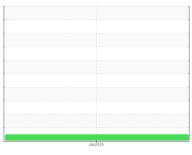


OIL ANALYSIS REPORT

Sample Rating Trend







Area [65231] Wachine Id VOLVO VNL 4493 Component

Diesel Engine

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.

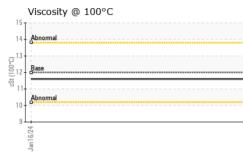
Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0895353		
Sample Date		Client Info		16 Jan 2024		
Machine Age	kms	Client Info		624050		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0		
Water			>0.2	NEG		
Glycol		WC Method	20.2	NEG		
WEAR METALS		method	limit/base	-	history1	history?
				current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	92		
Chromium	ppm	ASTM D5185(m)	>20	2		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm	ASTM D5185(m)	>25	16		
Lead	ppm	ASTM D5185(m)	>40	2		
Copper	ppm	ASTM D5185(m)	>330	10		
Tin	ppm	ASTM D5185(m)	>15	<1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	11		
Barium	ppm	ASTM D5185(m)	0	<1		
Molybdenum	ppm	ASTM D5185(m)	50	55		
Manganese	ppm	ASTM D5185(m)	0	<1		
Magnesium	ppm	ASTM D5185(m)	950	870		
Calcium	ppm	ASTM D5185(m)	1050	1155		
Phosphorus		ACTM DE10E(m)	005	922		
	ppm	ASTM D5185(m)	995	922		
Zinc	ppm	ASTM D5185(m)	1180	922 1111		
Zinc Sulfur						
	ppm	ASTM D5185(m)	1180	1111		
Sulfur	ppm ppm	ASTM D5185(m) ASTM D5185(m)	1180	1111 2118		
Sulfur Lithium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1180 2600	1111 2118 <1		
Sulfur Lithium CONTAMINANTS	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	1180 2600 limit/base	1111 2118 <1 current	 history1	 history2
Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	1180 2600 limit/base	1111 2118 <1 current 12	 history1 	 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	1180 2600 limit/base >25	1111 2118 <1 current 12 3	 history1 	 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1180 2600 limit/base >25 >20	1111 2118 <1 current 12 3 5	 history1 	 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7844*	1180 2600 limit/base >25 >20 limit/base	1111 2118 <1 current 12 3 5 5 current 1	 history1 history1	 history2 history2
Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1180 2600 limit/base >25 >20 limit/base >3	1111 2118 <1 current 12 3 5 5 current	 history1 history1	 history2 history2



OIL ANALYSIS REPORT





CALA

ISO 17025:2017 Accredited Laboratory

Contact/Location: Service ? - PER415ETO