

OIL ANALYSIS REPORT

Sample Rating Trend







POC N6043

Component Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

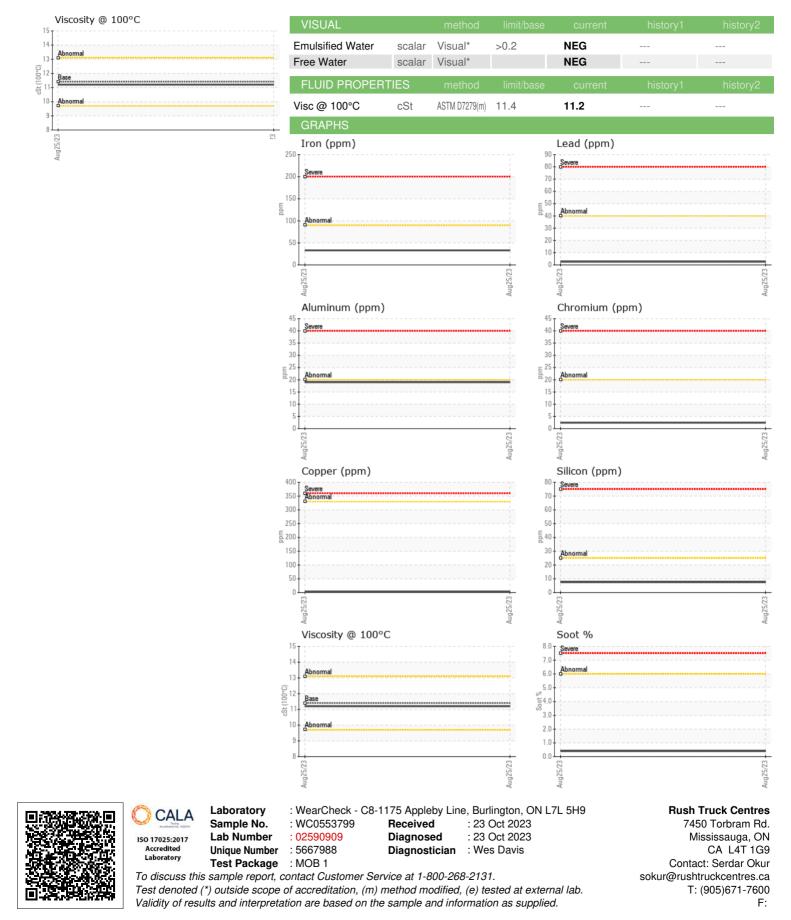
Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0553799		
Sample Date		Client Info		25 Aug 2023		
Machine Age	kms	Client Info		166869		
Oil Age	kms	Client Info		57234		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	33		
Chromium	ppm	ASTM D5185(m)	>20	2		
Nickel	ppm	ASTM D5185(m)	>2	<1		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm	ASTM D5185(m)	>20	19		
Lead	ppm	ASTM D5185(m)	>40	3		
Copper	ppm	ASTM D5185(m)	>330	2		
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		
O a aluadi una	nnm	ASTM D5185(m)		0		
Cadmium	ppm	ASTIVI D5165(III)		U		
ADDITIVES	ppm	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES		method		current		
ADDITIVES Boron	ppm	method ASTM D5185(m)	1	current 32	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm	method ASTM D5185(m) ASTM D5185(m)	1	current 32 <1	history1 	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1	current 32 <1 65	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1 1	current 32 <1 65 <1	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1 10 2942 1102	current 32 <1 65 <1 864 1207 1013	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1 10 2942 1102 1351	current 32 <1 65 <1 864 1207 1013 1201	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1 10 2942 1102	current 32 <1 65 <1 864 1207 1013 1201 2386	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	1 1 1 10 2942 1102 1351	current 32 <1 65 <1 864 1207 1013 1201	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1 10 2942 1102 1351	current 32 <1 65 <1 864 1207 1013 1201 2386	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	1 1 1 10 2942 1102 1351 3903	32 <1 65 <1 864 1207 1013 1201 2386 <1	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	1 1 1 10 2942 1102 1351 3903	32 <1 65 <1 864 1207 1013 1201 2386 <1 current	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	1 1 1 10 2942 1102 1351 3903	current 32 <1 65 <1 864 1207 1013 1201 2386 <1 current	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	1 1 1 1 1 2942 1102 1351 3903 Imit/base >25	32 <1 65 <1 864 1207 1013 1201 2386 <1 current 8 2	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	1 1 1 1 1 1 1 2942 1102 1351 3903 Imit/base >25 >20	32 <1 65 <1 864 1207 1013 1201 2386 <1 current 8 2 32	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m)	1 1 1 1 1 2942 1102 1351 3903 Imit/base >25 Imit/base	32 <1 65 <1 864 1207 1013 1201 2386 <1 current 8 2 32 current 8 2 32 current	history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m)	1 1 1 1 1 1 1 2942 1102 1351 3903 Imit/base >25 >20 Imit/base >6	32 <1 65 <1 864 1207 1013 1201 2386 <1 current 8 2 32 current 0.4	history1 history1 history1 history1	history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D5185(m)	1 1 1 1 1 1 1 1 2942 1102 1351 3903 Imit/base >25 20 Imit/base >6 >20	current 32 <1 65 <1 864 1207 1013 1201 2386 <1 current 8 2 32 current 0.4 10.6	history1 history1 history1 <	history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185(m) ASTM D7844* ASTM D7624* ASTM D7415*	1 1 1 1 1 1 2942 1102 1351 3903 Imit/base >25 Imit/base >6 >20 >30	32 <1 65 <1 864 1207 1013 1201 2386 <1 current 8 2 32 current 0.4 10.6 23.1	history1	history2 history2



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Contact/Location: Serdar Okur - RUSMIS