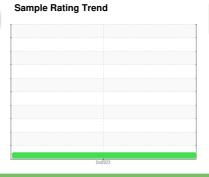


OIL ANALYSIS REPORT

Area [62846] **VOLVO VNR 4628**

Component
Diesel Engine





Fluid DETRO CANADA DURON SAE 10W20 (CAL						
PETRO CANADA DURON SAE 10W30 (GAL)				Oct2023		
DIAGNOSIS	SAMPLE INFORM	MATION	method	limit/base	current	history1	ŀ
Recommendation	Sample Number		Client Info		WC0869678		
Resample at the next service interval to monitor.	Sample Date		Client Info		21 Oct 2023		
Wear	Machine Age	mths	Client Info		175		
All component wear rates are normal.	Oil Age	mths	Client Info		3		
Contamination	Oil Changed		Client Info		Changed		
Elevated aluminum (Al) and/or lead (Pb) and	Sample Status				NORMAL		
potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant	CONTAMINATION	١	method	limit/base	current	history1	ŀ
and is common on new equipment/components.	Fuel		WC Method	>6.0	<1.0		
There is no indication of any contamination in the oil.	Glycol		WC Method		NEG		
Fluid Condition	WEAR METALS		method	limit/base	current	history1	ŀ
The condition of the oil is acceptable for the time in	Iron	ppm	ASTM D5185(m)	>100	25		
service.	Chromium	ppm	ASTM D5185(m)	>20	<1		
	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	10		
	Lead	ppm	ASTM D5185(m)	>40	2		
	Copper	ppm	ASTM D5185(m)	>330	10		

Machine Age	mths	Client Info		175		
Oil Age	mths	Client Info		3		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	25		
Chromium	ppm	ASTM D5185(m)	>20	<1		
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	10		
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		
						11.
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185(m)	limit/base	current 1	history1 	history2
Boron	ppm				•	
Boron Barium		ASTM D5185(m)	1	1		
Boron Barium Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m)	1	1 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1	1 0 63		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1	1 0 63 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1 1 10	1 0 63 <1 1006		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942	1 0 63 <1 1006 1117		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102	1 0 63 <1 1006 1117 941		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351	1 0 63 <1 1006 1117 941 1243		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351	1 0 63 <1 1006 1117 941 1243 2359		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351 3903	1 0 63 <1 1006 1117 941 1243 2359		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351 3903	1 0 63 <1 1006 1117 941 1243 2359 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351 3903	1 0 63 <1 1006 1117 941 1243 2359 <1 current	 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351 3903	1 0 63 <1 1006 1117 941 1243 2359 <1 current 8	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351 3903	1 0 63 <1 1006 1117 941 1243 2359 <1 current 8 2	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	1 1 1 1 10 2942 1102 1351 3903 limit/base >25 >20	1 0 63 <1 1006 1117 941 1243 2359 <1 current 8 2 19	history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	1 1 1 1 10 2942 1102 1351 3903 limit/base >25 >20 limit/base >3	1 0 63 <1 1006 1117 941 1243 2359 <1 current 8 2 19	history1 history1	history2 history2

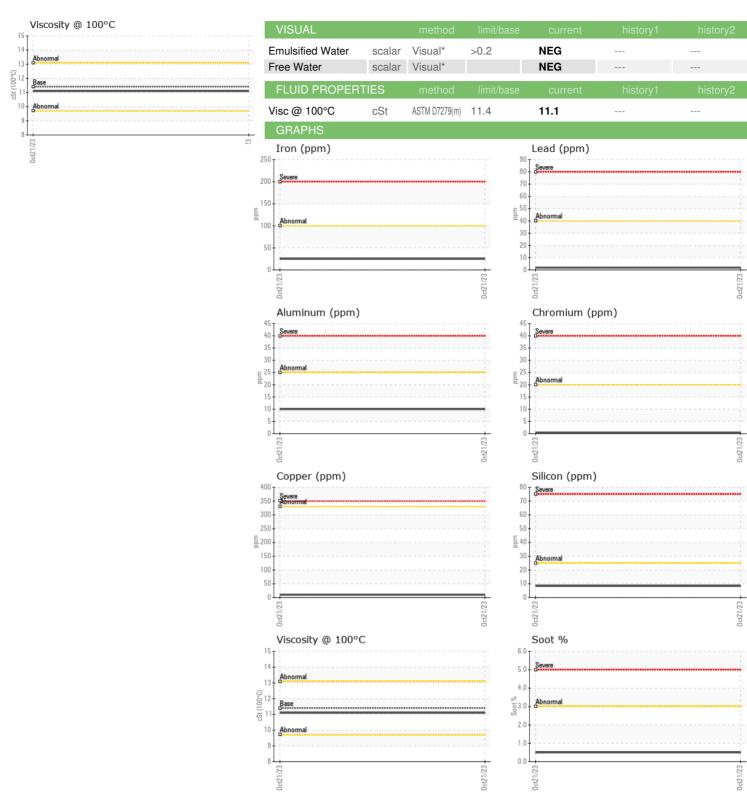
Sulfur	ppm	ASTM D5185(m)	3903	2359		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	8		
Sodium	ppm	ASTM D5185(m)		2		
Potassium	ppm	ASTM D5185(m)	>20	19		
INFRA-RED		method	limit/base	current	history1	history2
INFRA-RED Soot %	%	method ASTM D7844*	limit/base >3	current 0.5	history1	history2
	% Abs/cm				,	
Soot %		ASTM D7844*	>3	0.5		
Soot % Nitration	Abs/cm Abs/.1mm	ASTM D7844* ASTM D7624*	>3 >20	0.5 9.8		

Report Id: PER415ETO [WCAMIS] 02591312 (Generated: 10/24/2023 14:34:37) Rev: 1

Contact/Location: Service ? - PER415ETO



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

: WC0869678

: 02591312 : 5668391 Test Package : MOB 1

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received Diagnosed

: 24 Oct 2023 : 24 Oct 2023 Diagnostician : Wes Davis

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 PERFORMANCE EQUIPMENT - VISION TRUCK 415 EVANS AVENUE ETOBICOKE, ON

> CA M8W 0B3 Contact: Service

etobservice@visiontruckgroup.com T:

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

F: