

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

VOLVO VNL 760 149

Diesel Engine

Fluid PETRO CANADA DURON SHP 10W30 (12 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.

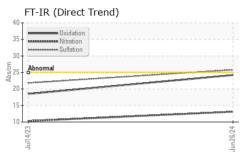
Fluid Condition

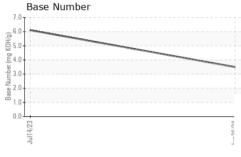
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

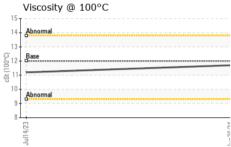
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0117382	PCA0100671	
Sample Date		Client Info		26 Jun 2024	14 Jul 2023	
Machine Age	mls	Client Info		295402	180181	
Oil Age	mls	Client Info		40000	42613	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<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	53	22	
Chromium	ppm	ASTM D5185m	>20	<1	0	
Nickel	ppm	ASTM D5185m	>2	1	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>25	3	<1	
Lead	ppm	ASTM D5185m	>40	2	0	
Copper	ppm	ASTM D5185m	>330	5	4	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2
	ppm ppm					
Boron		ASTM D5185m ASTM D5185m ASTM D5185m	2	0	0	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	0 <1	0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	0 <1 58	0 0 62	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	0 <1 58 1	0 0 62 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	0 <1 58 1 791	0 0 62 <1 953	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	0 <1 58 1 791 1065	0 0 62 <1 953 1142	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	0 <1 58 1 791 1065 933	0 0 62 <1 953 1142 1001	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180	0 <1 58 1 791 1065 933 983	0 0 62 <1 953 1142 1001 1259	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	0 <1 58 1 791 1065 933 983 2392	0 0 62 <1 953 1142 1001 1259 3484	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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 D5185m	2 0 50 950 1050 995 1180 2600	0 <1 58 1 791 1065 933 983 2392 current	0 0 62 <1 953 1142 1001 1259 3484 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 0 50 950 1050 995 1180 2600	0 <1 58 1 791 1065 933 983 2392 current 9	0 0 62 <1 953 1142 1001 1259 3484 history1 5	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	0 <1 58 1 791 1065 933 983 2392 current 9 5	0 0 62 <1 953 1142 1001 1259 3484 history1 5 3	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	0 <1 58 1 791 1065 933 983 2392 current 9 5 6	0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 -20 limit/base	0 <1 58 1 791 1065 933 983 2392 current 9 5 6 6	0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 bistory1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6	0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 history1 0.4	 history2 history2
Boron Barium Molybdenum Manganese Magnesium 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	2 0 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20	0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6 13.1	0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 3 0 history1 0.4 10.3	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	2 0 0 50 0 950 1050 995 1180 2600 imit/base >25 >20 >20 >30 >30 imit/base	0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6 13.1 25.8 current	0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 history1 0.4 10.3 21.8 history1	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium 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	2 0 50 0 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	0 <1 58 1 791 1065 933 983 2392 current 9 5 6 current 0.6 13.1 25.8	0 0 62 <1 953 1142 1001 1259 3484 history1 5 3 0 history1 0.4 10.3 21.8	 history2 history2 history2 history2



OIL ANALYSIS REPORT







VISUAL NONE White Metal *Visual NONE NONE scalar Yellow Metal *Visual NONE NONE NONE scalar NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE NONE Debris *Visual NONE scalar NONE NONE Sand/Dirt NONE NONE NONE scalar *Visual NORML NORML Appearance scalar *Visual NORML Odor *Visual NORML NORML NORML scalar **Emulsified Water** scalar *Visual >0.2 NEG NEG Free Water scalar *Visual NEG NEG **FLUID PROPERTIES** Visc @ 100°C cSt ASTM D445 12.00 11.7 11.2 GRAPHS Ferrous Alloys 60 nicke 40 E 30 20 10 Jul14/23 Non-ferrous Metals Viscosity @ 100°C Base Number 14 6. (B/HO) 5.0 13 St (100°C) E 4.0 - e 3.0 器 2.0 Abnorma 1.0 0.0 Jul14/23 Jul14/23 Jun26/24 Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 A Truck Repair Sample No. : PCA0117382 Received : 18 Jul 2024 9349 China Grove Church Road Lab Number : 06240003 Tested : 18 Jul 2024

: 18 Jul 2024 - Wes Davis



 Certificate 12367
 Test Package
 : FLEET
 (C

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - 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)

Diagnosed

Unique Number : 11128837

9349 China Grove Church Road Pineville, NC US 28134 Contact: Vlad Melnichuk shop@migway.com T: (980)255-3200 6:2012) F:

Report Id: ATRPIN [WUSCAR] 06240003 (Generated: 07/18/2024 16:36:24) Rev: 1

Submitted By: Vlad Melnichuk

Page 2 of 2