

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

VOLVO VNL 760 242

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.

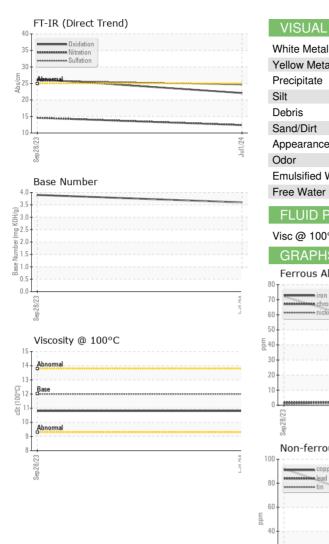
Fluid Condition

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

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0117376	PCA0104961	
Sample Date		Client Info		01 Jul 2024	28 Sep 2023	
Machine Age	mls	Client Info		159825	84722	
Oil Age	mls	Client Info		40000	41334	
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	32	72	
Chromium	ppm	ASTM D5185m	>20	<1	2	
Nickel	ppm	ASTM D5185m	>2	3	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>2	2	1	
Aluminum	ppm	ASTM D5185m	>25	4	20	
Lead	ppm	ASTM D5185m	>40	<1	<1	
Copper	ppm	ASTM D5185m	>330	33	92	
Tin	ppm	ASTM D5185m	>15	<1	2	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	0	
	ppin	AOTIN DOTOSIII		<1	0	
ADDITIVES	ppin	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES Boron Barium		method		current	history1	history2
ADDITIVES Boron Barium Molybdenum	ppm	method ASTM D5185m	2 0 50	current 0	history1 4 0 73	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 0 <1 57 1	history1 4 0 73 2	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 0 <1 57 1 760	history1 4 0 73 2 923	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 0 <1 57 1 760 1142	history1 4 0 73 2 923 1167	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current 0 <1 57 1 760 1142 877	history1 4 0 73 2 923 1167 939	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	current 0 <1 57 1 760 1142 877 992	history1 4 0 73 2 923 1167 939 1216	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 0 <1 57 1 760 1142 877	history1 4 0 73 2 923 1167 939	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	method 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	Current 0 <1 57 1 760 1142 877 992 2364 Current	history1 4 0 73 2 923 1167 939 1216 2548 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current 0 <1 57 1 760 1142 877 992 2364 current 7	history1 4 0 73 2 923 1167 939 1216 2548 history1 17	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	o o <1 57 1 760 1142 877 992 2364 current 7 4	history1 4 0 73 2 923 1167 939 1216 2548 history1 17 2	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	current 0 <1 57 1 760 1142 877 992 2364 current 7	history1 4 0 73 2 923 1167 939 1216 2548 history1 17	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	o o <1 57 1 760 1142 877 992 2364 current 7 4	history1 4 0 73 2 923 1167 939 1216 2548 history1 17 2	history2
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 0 <1 57 1 760 1142 877 992 2364 7 4 8 current 0.6	history1 4 0 73 2 923 1167 939 1216 2548 history1 17 2 53 history1 0.9	history2 history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 0 <1 57 1 760 1142 877 992 2364 current 7 4 8 current 0.6 12.4	history1 4 0 73 2 923 1167 939 1216 2548 history1 17 2 53 history1 0.9 14.6	history2 history2 history2 history2
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 0 <1 57 1 760 1142 877 992 2364 7 4 8 current 0.6	history1 4 0 73 2 923 1167 939 1216 2548 history1 17 2 53 history1 0.9	history2 history2 history2 history2 history2
ADDITIVES 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 TS ppm ppm ppm	method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 0 <1 57 1 760 1142 877 992 2364 current 7 4 8 current 0.6 12.4	history1 4 0 73 2 923 1167 939 1216 2548 history1 17 2 53 history1 0.9 14.6	history2 history2 -
ADDITIVES 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 TS ppm ppm ppm	method ASTM D5185m ASTM D5185m	2 0 0 50 0 950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20 >30	0 <1 57 1 760 1142 877 992 2364 current 7 4 8 current 0.6 12.4 24.6	history1 4 0 73 2 923 1167 939 1216 2548 history1 17 2 53 history1 0.9 14.6 25.9	history2 history2 history2



OIL ANALYSIS REPORT



	VISUAL						
	VISUAL		method	limit/base	current	history1	history
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Precipitate	scalar	*Visual	NONE	NONE	NONE	
-	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
August 1	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Jul1/24	Appearance	scalar	*Visual	NORML	NORML	NORML	
Jul	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	
	FLUID PROF	PERTIES	method	limit/base	current	history1	history
	Visc @ 100°C	cSt	ASTM D445		10.8	10.8	
	GRAPHS						
Ċ.	Ferrous Alloys						
¥	80						
1.11.5	70 60						
	50						
	틆 40 -						
	30 -						
	20						
	10+						
	0						
				Jul1/24 .			
	Sep28/23			Jul			
_	Non-ferrous Me	tals					
VG/ 11-1							
-	100 conner_1						
1	so copper						
11	copper						
11	80 - copper lead						
11	80 - tin						
L.1	80 - copper lead	<u> </u>		/			
Luft	80 - tin	<u> </u>		/			
1P	80 - Lead 60 - 40 - 20 -	<u> </u>		/			
11	80 - copper 60 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -			/ ·			
Luft	80 - copper 60 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -			Juli 24			
Luit I	80 60 40 20 0 EC202 EC20	0°C		Juli24			
Luit	80 - copper 60 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -	P°C			Base Numb	er	
Luit	80 60 40 20 0 EV EV EV EV EV EV EV EV EV EV)°C		4.0 3.5		er	
Luft (Luft)	80 60 40 20 0 EX EX EX EX EX EX EX EX EX EX	0°C		4.0	[er	
Luft (Luft)	80 60 40 20 0 Viscosity @ 100 15 14 Abnormal 13	0°C		4.0	[er	
Luft (Luft)	80 60 40 20 0 Viscosity @ 100 15 14 Abnormal 13	p°C		4.0	[er	
Luft (Luft)	80 60 40 20 Viscosity @ 100 15 14 Abnormal 13 Base	p°C		4.0 3.5 (¹)HO3 2.0 PBO3 PBO3 PBO3 PBO3 PBO3 PBO3 PBO3 PBO3	[er	
Luft - Lu	80 60 40 20 0 EXECUTE EXEC	р _о С		4.0 3.5 (¹)HO3 2.0 PBO3 PBO3 PBO3 PBO3 PBO3 PBO3 PBO3 PBO3		er	
I. I	80 60 40 20 0 52 52 52 52 52 52 52 52 52 52	b ₀ C		4.0 3.5 (b)HOX 20 3.0 HOX 20 3.0 HOX 20 3.0 HOX 20 3.0 HOX 20 3.0 HOX 20 3.5 HOX 20 1.5 HOX 20 HOX 20 H		er	
Turk to the second s	80 60 40 20 Viscosity @ 100 15 14 Abnormal 10 Abnormal	b ₀ C		4.0 3.5 (b)HOX 2.5 but 3.0 but		er	
Tube Control of the C	80 40 20 Viscosity @ 100 15 14 Abnormal 9 8	b ₀ C		4.0 3.5 (b)HOX 2.5 but 3.0 but		er	
Tube Control of the C	80 60 40 20 Viscosity @ 100 15 14 Abnomal 13 10 Abnomal 9)°C		4.0 3.5 (0)(0) 3.0 2.5 00 2.5 00 2.0 1.5 1.5 88 1.0 0.5		er	
	80 60 40 20 0 EXERCISE (INCOMPARENT OF INCOMPARENT OF INCOMPAR			4.0 3.5 (9)HOX DWJ 32.0 40WJ 32.0 40			
ory	Viscosity @ 100	501 Madisc		4.0 3.5 (9)HOX DBU 32.0 9400 HOX DBU 32.0 9400 H			A Truck Reg
ory No.	Viscosity @ 100	501 Madisc Rece	ived : 18	4.0 3.5 (PHOY Due J2.0 J2.0 J2.0 J2.0 J2.0 J2.0 J2.0 J2.0			e Church R
ory No.	E WearCheck USA - E PCA0117376 : 06239977	501 Madiso Rece Testa	ived : 18 ed : 18	4.0 3.5 (PHOY Due J2.0 J2.5 J2.0 WW 32.0 J2.0 WW 32.0 J2.0 WW 32.0 J2.0 VIII VIII VIII VIII VIII VIII VIII VI	Sep28/23		e Church R Pineville,
ory No. iber	Viscosity @ 100	501 Madiso Rece Testa	ived : 18 ed : 18	4.0 3.5 (PHOY Due J2.0 J2.0 J2.0 J2.0 J2.0 J2.0 J2.0 J2.0	Sep28/23	9349 China Grov	

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)

Certificate L2367

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