

## **OIL ANALYSIS REPORT**

Sample Rating Trend





VOLVO A30G 740282 Component Diesel Engine

Fluid {not provided} (11 GAL)

[W2008508]

ווס	AGI	103	10	

#### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: W02008508 )

Area

### Wear

All component wear rates are normal.

## Contamination

Light fuel dilution occurring.

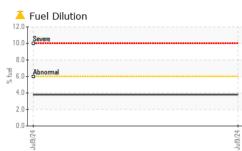
### Fluid Condition

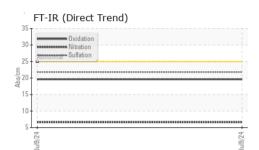
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

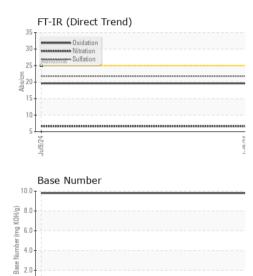
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		ML0002417		
Sample Date		Client Info		09 Jul 2024		
Machine Age	hrs	Client Info		10539		
Oil Age	hrs	Client Info		10539		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
CONTAMINATION	۷	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
	_	un o the ord	line it //s a s a		late to must	history 0
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	4		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>25	<1		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	<1		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES						history2
Abbiliveo		methou	iiiiii/base	current	history1	matoryz
Boron	ppm	ASTM D5185m	IIIII/Dase	44		
	ppm ppm		IIIIIbase			
Boron		ASTM D5185m		44		
Boron Barium	ppm	ASTM D5185m ASTM D5185m		44 <1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		44 <1 37		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		44 <1 37 <1		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		44 <1 37 <1 435		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		44 <1 37 <1 435 1818	  	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		44 <1 37 <1 435 1818 944		
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	limit/base	44 <1 37 <1 435 1818 944 1041		
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 ASTM D5185m	limit/base	44 <1 37 <1 435 1818 944 1041 3303		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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	limit/base	44 <1 37 <1 435 1818 944 1041 3303 current	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base	44 <1 37 <1 435 1818 944 1041 3303 current 4	     history1 	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base >25	44 <1 37 <1 435 1818 944 1041 3303 <u>current</u> 4 4	     history1	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	44 <1 37 <1 435 1818 944 1041 3303 <u>current</u> 4 4 0	      history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >6.0 limit/base	44 <1 37 <1 435 1818 944 1041 3303 current 4 4 0 0 ▲ 3.8	     history1   	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >6.0 limit/base >3	44 <1 37 <1 435 1818 944 1041 3303 current 4 4 0 ▲ 3.8 current 0.2	     history1    history1	    history2    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >6.0 limit/base	44 <1 37 <1 435 1818 944 1041 3303 current 4 4 0 0 ▲ 3.8	     history1    history1  	     history2    history2   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 <b>method</b> *ASTM D7844 *ASTM D7844	limit/base >25 >20 >6.0 limit/base >3 >20	44 <1 37 <1 435 1818 944 1041 3303 current 4 4 4 0 3.8 current 0.2 6.6	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >20 >6.0 limit/base >3 >20 >30 >30	44 <1 37 <1 435 1818 944 1041 3303 Current 4 4 4 0 3.8 Current 0.2 6.6 21.8 Current		      history2   history2  history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >6.0 limit/base >3 >20 >3 >20	44 <1 37 <1 435 1818 944 1041 3303 current 4 4 0 ▲ 3.8 current 0.2 6.6 21.8		      history2   history2  history2



# **OIL ANALYSIS REPORT**

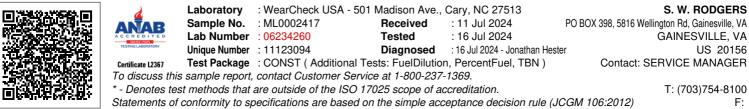






Jul9/24

White Metalscalar*VisualNONENONEYellow Metalscalar*VisualNONENONEPrecipitatescalar*VisualNONENONESiltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGFree Waterscalar*VisualNEG				limit/base	method		VISUAL
Yellow Metal scalar Visual NONE NONE Precipitate scalar Visual NONE NONE Sitt scalar Visual NONE NONE Sand/Dirt scalar Visual NONE NONE Appearance scalar Visual NORML NORML Fee Water scalar Visual NORML NORML Free Water scalar Visual NORML NORML Free Water scalar Visual NORML NEG Fee Water scalar Visual NORML NEG Fee Water scalar Visual NORML NEG Ferous Alloys GRAPHS Viscosity @ 100°C Viscosity @ 100°C See Number See Number	     						
Precipitate scalar Visual NONE NONE	    		NONE	NONE	*Visual	scalar	White Metal
Silt scalar Visual NONE NONE	    		NONE	NONE	*Visual	scalar	Yellow Metal
Debris scalar *Visual NONE NONE	   		NONE	NONE	*Visual	scalar	Precipitate
Sand/Dirit scalar *Visual NONE NORE	  		NONE	NONE	*Visual	scalar	Silt
Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Erusified Water scalar *Visual >0.2 NEG Free Water scalar *Visual NORML NORML Free Water scalar *Visual NORML NORML FLUID PROPERTIES method limit/base current history1 hist Visc @ 100°C cSt ASTM D445 • 12.2 GRAPHS Ferrous Alloys 	 					scalar	
Odor scalar *Visual NORML   Emulsified Water scalar *Visual >0.2 NEG   Free Water scalar *Visual NEG   FLUID PROPERTIES method limit/base current historyl hist   Visc @ 100°C cSt ASTM D445 12.2   GRAPHS   Ferrous Alloys							
Emulsified Water scalar 'Visual >0.2 NEG Free Water scalar 'Visual NEG FLUID PROPERTIES method Imit/base current history1 hist Visc @ 100°C cSt ASTM D445 • 12.2 GRAPHS Ferrous Alloys Mon-ferrous Metals Viscosity @ 100°C Viscosity @ 100°C Viscosity @ 100°C							••
Free Water scalar *Visual NEG   FLUID PROPERTIES method limit/base current history1 hist   Visc @ 100°C cSt ASTM D445 12.2   GRAPHS   Ferrous Alloys							
FLUID PROPERTIES       method       limit/base       current       history1       hist         Visc @ 100°C       cSt       ASTM D445       12.2           GRAPHS       Ferrous Alloys				>0.2			
Visco@ 100°C cSt ASTM D445 12.2			NEG		*Visual	scalar	Free Water
GRAPHS         Ferrous Alloys         Image: Anomal market als         Image: Alloys and	history1 history2	history1	current	limit/base	method	IES	
Ferrous Alloys         Image: Display in the second secon			12.2		ASTM D445	cSt	Visc @ 100°C
Non-ferrous Metals							GRAPHS
Viscosity @ 100°C							
Non-ferrous Metals							
Viscosity @ 100°C							sessesses chromium
Non-ferrous Metals							IIICKEI
Non-ferrous Metals							
Non-ferrous Metals							
Non-ferrous Metals				_			
Non-ferrous Metals							2
Non-ferrous Metals							
Non-ferrous Metals				9/24			1,24
Viscosity @ 100°C				Jul			Shul
Viscosity @ 100°C						c	Non-ferrous Metal
Viscosity @ 100°C Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Ab							
Viscosity @ 100°C Abnormal							head an an an and
Viscosity @ 100°C Abnormal							
Viscosity @ 100°C Base Number Monomal Abnomal Base Number							s
Viscosity @ 100°C Base Number Monomal Abnomal Base Number							
Viscosity @ 100°C Base Number Monomal Abnomal Base Number							1
Viscosity @ 100°C Base Number Monomal Abnomal Base Number							
Viscosity @ 100°C Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal Ab							
Viscosity @ 100°C							
Viscosity @ 100°C Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnormal Abnorma				Jul9/2			Jul9/2
Abnomal				~			
Abnormal         8.0           Abnormal         6.0           Abnormal         2.0	r	-		10			
Abnormal 2.0							Abnormal
			.0 +	(B) <sup>8</sup>			-
			0	KOH			
				er (mg			
			.0+	qui			
				ase N			Abnormal
1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-			.0 +	<u> </u>			T
Jul9/24 Jul9/24 Jul9/24			.0				
n n n n			19/24	19/24			
			ηr	ηr			лL



Submitted By: DARRELL ANDES Page 2 of 2