

WEAR ABNORMAL CONTAMINATION SEVERE FLUID CONDITION ATTENTION



[729857 RENTALS] Machine Id VOLVO A25G 752682

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

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Valve wear is indicated.

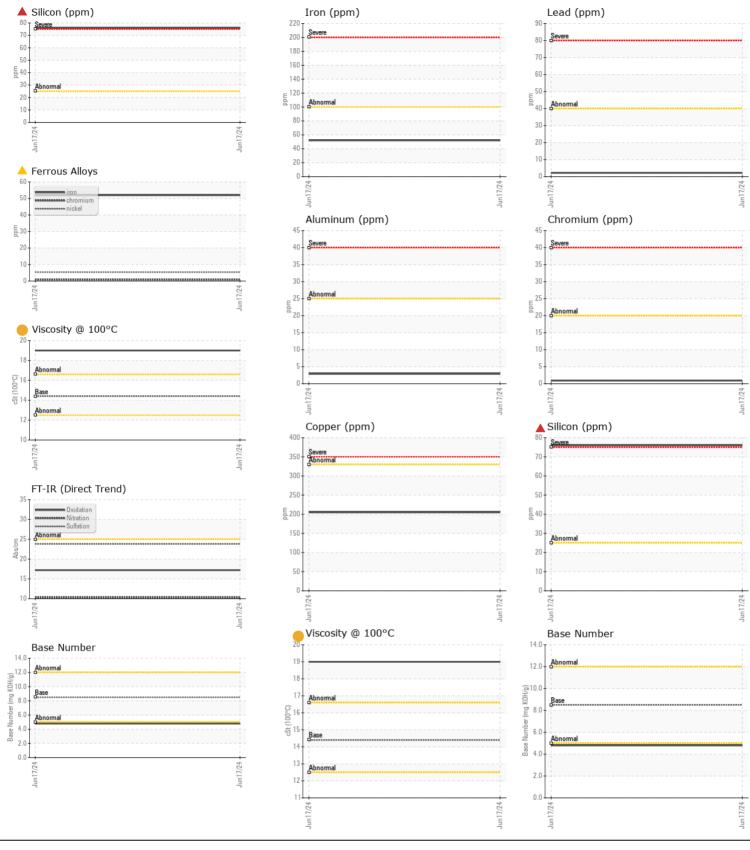
CONTAMINATION

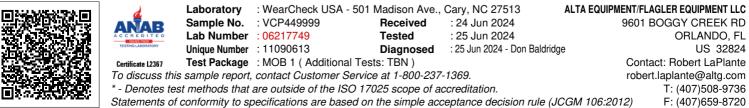
Elemental level of silicon (Si) above normal .

FLUID CONDITION

The oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Numbe	r	Client Info		VCP449999		
Sample Date		Client Info		17 Jun 2024		
Machine Age	hrs	Client Info		1340		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changeo		Client Info		Changed		
Sample Status	;			SEVERE		
Iron	nom	ASTM D5185m	>100	52		
Chromium	ppm	ASTM D5185m	>20	52 <1		
Nickel	ppm	ASTM D5185m	>20	< 1 <u> </u> 5		
Titanium	ppm	ASTM D5185m	>2	0		
	ppm		. 0	-		
Silver	ppm	ASTM D5185m ASTM D5185m	>2 >25	<1 3		
Aluminum	ppm			3		
Lead	ppm	ASTM D5185m	>40	2 205		
Copper	ppm	ASTM D5185m	>330			
Tin	ppm	ASTM D5185m	>15	2		
Vanadium	ppm	ASTM D5185m	NONE	<1 NONE		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	7 6		
Potassium	ppm	ASTM D5185m	>20	3		
Fuel	PP	WC Method	>6.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method	20.2	NEG		
Soot %	%	*ASTM D7844	>3	0.6		
Nitration	Abs/cm	*ASTM D7624	>20	10.3		
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML			
Emulsified Wate				NORMI		
	r scalar			NORML		
Sodium	r scalar	*Visual	>0.2	NORML NEG		
Boron	r scalar ppm			-		
20.0		*Visual	>0.2 >158	NEG		
Barium	ppm	*Visual ASTM D5185m	>0.2 >158	NEG 4		
	ppm ppm	*Visual ASTM D5185m ASTM D5185m	>0.2 >158 250	NEG 4 8		
Barium	ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10	NEG 4 8 <1		
Barium Molybdenum	ppm ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10	NEG 4 8 <1 78	 	
Barium Molybdenum Manganese	ppm ppm ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10 100	NEG 4 8 <1 78 5	 	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10 100 450	NEG 4 8 <1 78 5 65	 	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10 100 450 3000	NEG 4 8 <1 78 5 65 2321		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10 100 450 3000 1150	NEG 4 8 <1 78 5 65 2321 1003		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10 100 450 3000 1150 1350	NEG 4 8 <1 78 5 65 2321 1003 1189		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	*Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 >158 250 10 100 450 3000 1150 1350 4250	NEG 4 8 <1 78 5 65 2321 1003 1189 3801		





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