

WEAR NORMAL CONTAMINATION **ABNORMAL** FLUID CONDITION **ATTENTION**

Area [SUPERIOR] VOLVO A30G 753239 Component Hydraulic System

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

Sample Number Client Info VCP44160	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2		
the next service interval to monitor. Sample Date Client Info Table Date The Date </th <th></th> <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>VCP441660</th> <th></th> <th></th>		Sample Number		Client Info		VCP441660				
Matchine Age Matchine Age<	, , , , ,	Sample Date		Client Info		12 Feb 2024				
Filter Age Oil Changed Inside Client Info 0	the next service interval to monitor.	Machine Age	hrs	Client Info		1261				
Oil Changed Filter Changed Client Info NA image Ima		Oil Age	hrs	Client Info		0				
Filter Changed Sample Status Client Info NA #		Filter Age	hrs	Client Info		0				
Sample Status ABNORMA initial initial WEAR ppm ASIM 05186 >50 3 initial initial All component wear rates are normal. Nickel ppm ASIM 05186 >10 0 initial initial All component wear rates are normal. Titanium ppm ASIM 05186 20 0 initial initial Alluminum ppm ASIM 05186 20 0 initial initial Aluminum ppm ASIM 05186 20 1 initial initial Aluminum ppm ASIM 05186 20 1 initial initial Copper ppm ASIM 05186 20 1 initial initial Value scalar Visual NOR 1 initial initial Value scalar Visual NOR 1 initial initial Value scalar Visual NOR 1 initial initial <		Oil Changed		Client Info		N/A				
WEAR Iron ppm ASTM 0518m >50 3 All component wear rates are normal. Nickel ppm ASTM 0518m >20 0 Nickel ppm ASTM 0518m >10 0 Silver ppm ASTM 0518m >20 0 Auminum ppm ASTM 0518m >20 0 Lead ppm ASTM 0518m >20 0 Vanadium ppm ASTM 0518m >20 1 Vanadium ppm ASTM 0518m >20 3 Valoa sca		Filter Changed		Client Info		N/A				
All component wear rates are normal. Chromium ppm ATM D515m >20 0 Nickel ppm ASTM D515m 10 0 All component wear rates are normal. ppm ASTM D515m 0 0 All minium ppm ASTM D515m 0 0 All minium ppm ASTM D515m 20 0 All minium ppm ASTM D515m 20 1 Lead ppm ASTM D515m >150 22 Vanadium ppm ASTM D515m >10		Sample Status				ABNORMAL				
All component wear rates are normal. Chromium Nickel ppm ASTM 0518m >20 0 Nickel ppm ASTM 0518m 10 0 All component wear rates are normal. File 0 0 Nickel ppm ASTM 0518m 20 0	WFAR	Iron	ppm	ASTM D5185m	>50	3				
All component wear rates are normal. Nickel pp ASTM 05165 >10 0 Titanium pp ASTM 05165 P 0 Silve pp ASTM 05165 P 0 Aluminum pp ASTM 05165 >20 0 Lead pp ASTM 05165 >20 1 Copper pm ASTM 05165 >20 1 Vanadium pp ASTM 05165 >20 3 Vanadium pp ASTM 05165 >20 3 Vanadium pp ASTM 0516 >20 3 There is a high amount of particulates present		Chromium		ASTM D5185m	>20					
Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Alumin ppm ASTM D5185m 20 0 Alumin ppm ASTM D5185m 20 1 Lead ppm ASTM D5185m 20 1 Copper ppm ASTM D5185m 20 1 Vanadium ppm ASTM D5185m 20 1 Vanadium ppm ASTM D5185m 20 1 Visual NONE NONE NONE NONE Visual ppm ASTM D5185m 20 0 Particles s4µm potassium ppm ASTM D7647 0 1573 Particles s4µm ASTM D7647 STM 1	All component wear rates are normal.									
Silver ppm ASTM D5185 0 0 Aluminum ppm ASTM D5185 >20 0 Lead ppm ASTM D5185 >20 0 Copper ppm ASTM D5185 >500 2 Tin ppm ASTM D5185 >20 White Metal scalar 'Visual NONE NONE Velow Metal scalar 'Visual NONE NONE CONTAMINATION Silicon ppm ASTM D5185 >20 0 Pataides >4µm ASTM D5185 >20 0 Mater ppm ASTM D5185 >20 0 Pataides >4µm ASTM D5185 >20 0 Patricles >4µm ASTM D7647		Titanium		ASTM D5185m		0				
Aluminum ppm ASTM D5185m >20 0 Lead ppm ASTM D5185m >20 1 Copper ppm ASTM D5185m >20 2 Tin ppm ASTM D5185m >20 2 Vanadium ppm ASTM D5185m V < <td> Vanadium ppm ASTM D5185m V <<td> Vanadium ppm ASTM D5185m V V V Vanadium ppm ASTM D5185m V 3 Visual NONE NONE NONE NONE Particles >6µm ASTM D5185m >20 0 Particles >6µm ASTM D7647 >500 A 5713 Particles >6µm <</td></td>	Vanadium ppm ASTM D5185m V < <td> Vanadium ppm ASTM D5185m V V V Vanadium ppm ASTM D5185m V 3 Visual NONE NONE NONE NONE Particles >6µm ASTM D5185m >20 0 Particles >6µm ASTM D7647 >500 A 5713 Particles >6µm <</td>	Vanadium ppm ASTM D5185m V V V Vanadium ppm ASTM D5185m V 3 Visual NONE NONE NONE NONE Particles >6µm ASTM D5185m >20 0 Particles >6µm ASTM D7647 >500 A 5713 Particles >6µm <		Silver		ASTM D5185m		0		
Copper ppm ASTM D5185m >150 2 Tin ppm ASTM D5185m >20 <1 Vanadium ppm ASTM D5185m >20 <1 Vanadium ppm ASTM D5185m <21 Vanadium ppm ASTM D5185m >20 NONE NONE CONTAMINATION Silicon ppm ASTM D5185m >20 0 There is a high amount of particulates present in the oil. Silicon ppm ASTM D547 >00 Particles >6um ASTM D7647 >1 RCG Particles >6um ASTM D7647 >10 A 112 Particles >71µm ASTM D7647 >10 A 12 Particles >71µm ASTM D7647 >10 A 12		Aluminum		ASTM D5185m	>20	0				
Tin ppm ASTM D5185m >20 <1		Lead	ppm	ASTM D5185m	>20	1				
Vanadium ppm ASTM D5185		Copper	ppm	ASTM D5185m	>150	2				
White Metal Yellow Metalscalar*Visual visualNONENONENONENONENONENONECONTAMINATIONPotassium PotassiumppmASTM D5185m>203NONEVisualNONENONEPotassium Particles >4µmASTM D5185m>200Particles >6µmASTM D7647A17538Particles >6µmASTM D7647>100A575Particles >1µmASTM D7647>100A122Particles >21µmASTM D7647>31Particles >1µmASTM D7647>31Particles >1µmScalar*VisualNONENONEPa		Tin	ppm	ASTM D5185m	>20	<1				
Yellow Metal scalar *Visual NONE CONTAMINATION Silicon pp ASTM D5185m >20 3 There is a high amount of particulates present in the oil. Potassium pp ASTM D5185m >20 0 Particles >4µm MSTM D5185m >20 0 Particles >4µm MSTM D7647 MSTM D7647 MSTM 2567 Particles >4µm MSTM D7647 >100 ASTM 2567 Particles >4µm MSTM D7647 >40 ASTM 2567 Particles >4µm MSTM D7647 >40 ASTM 2567 Particles >1µm ASTM D7647 >40 A 182 Particles >21µm ASTM D7647 >10 A 12 Particles >31µm ASTM D7647 >10 A 12 Particles >1µm ASTM D7647 >10 A 12 Particles >1µm ASTM D7647 >10 A 12 Particles >1µm ASTM D7647 >10 A 12 Dib		Vanadium	ppm	ASTM D5185m		<1				
CONTAMINATION Silicon ppm ASTM D5185m >20 3 Potassium ppm ASTM D5185m >20 0 Water WC Wc Hordo >0.1 NEG Particles >4µm ASTM D7647 >5000 5713 Particles >6µm ASTM D7647 >500 575 Particles >14µm ASTM D7647 >4 182 Particles >14µm ASTM D7647 >10 12 Particles >71µm ASTM D7647 >10 12 Particles >71µm ASTM D7647 >10 12 Particles >71µm ASTM D7647 >10 12 Oil Cleanliness ISO 4406 (c) >-/1914 21/2016 Silt scalar *Visual NORE NONE Debris scalar *Visual NORML NORE <th></th> <th>White Metal</th> <th>scalar</th> <th>*Visual</th> <th>NONE</th> <th>NONE</th> <th></th> <th></th>		White Metal	scalar	*Visual	NONE	NONE				
Potassium ppm ASTM D5185m >20 0 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 M 17538 Particles >6µm ASTM D7647 >5000 5713 Particles >6µm ASTM D7647 >5000 5713 Particles >4µm ASTM D7647 >60 5735 Particles >21µm ASTM D7647 >10 182 Particles >21µm ASTM D7647 >10 12 Particles >71µm ASTM D7647 >3 1 Particles >71µm ASTM D7647 >3 1 OII Cleanliness ISO 4406 (o) >-1914 2120/16 Silt scalar Visual NONE NONE Sand/Dirt scalar Visual NORM NORM		Yellow Metal	scalar	*Visual	NONE	NONE				
Potassium ppm ASTM D5185m >20 0 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 M 17538 Particles >6µm ASTM D7647 >5000 5713 Particles >6µm ASTM D7647 >5000 5713 Particles >4µm ASTM D7647 >60 5735 Particles >21µm ASTM D7647 >10 182 Particles >21µm ASTM D7647 >10 12 Particles >71µm ASTM D7647 >3 1 Particles >71µm ASTM D7647 >3 1 OII Cleanliness ISO 4406 (o) >-1914 2120/16 Silt scalar Visual NONE NONE Sand/Dirt scalar Visual NORM NORM	CONTAMINATION	Silicon	nom	ASTM D5185m	>20	3				
There is a high amount of particulates present in the oil. Water WC Method >0.1 NEG Particles >4µm ASTM D7647 A 17538 Particles >6µm ASTM D7647 >5000 5713 Particles >6µm ASTM D7647 >10 575 Particles >21µm ASTM D7647 >4 12 Particles >21µm ASTM D7647 >3 1 Particles >14µm scalar *Visual NONE NONE Oli Cleanliness scalar *Visual NOR NORM <th rowspan="2"></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>										
Particles >4µm ASTM D7647 ▲ 17538 Particles >6µm ASTM D7647 >5000 ▲ 5713 Particles >6µm ASTM D7647 >160 ▲ 575 Particles >14µm ASTM D7647 >40 ▲ 182 Particles >21µm ASTM D7647 >10 ▲ 12 Particles >38µm ASTM D7647 >10 ▲ 12 Particles >31µm ASTM D7647 >10 ▲ 12 Particles >71µm ASTM D7647 >3 1 Particles >71µm ASTM D7647 >3 1 Oil Cleanliness ISO 4406 (c) >-1914 ▲ 120/16 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML <td< th=""><th></th><th>PP</th><th></th><th></th><th>-</th><th></th><th></th></td<>			PP			-				
Particles >6µm ASTM D7647 >5000 ▲ 5713 Particles >14µm ASTM D7647 >160 ▲ 575 Particles >21µm ASTM D7647 >40 ▲ 182 Particles >38µm ASTM D7647 >10 ▲ 12 Particles >31µm ASTM D7647 >3 1 Particles >71µm ASTM D7647 >3 1 Oil Cleanliness ISO 4406 (c) >-/19/14 ▲ 21/20/16 Silt scalar *Visual NONE Inco Debris scalar *Visual NONE Inco Appearance scalar *Visual NORE Inco Odor scalar *Visual NORE NORML Inco Emulsified Wate scalar *Visual NORML NORML Inco FLUID CONDITION Sodium ppm ASTM D5185m 158 <1										
Particles >14µm ASTM D7647 >160 A 575 Particles >21µm ASTM D7647 >40 A 182 Particles >38µm ASTM D7647 >10 A 12 Particles >38µm ASTM D7647 >3 1 Particles >38µm ASTM D7647 >3 1 Particles >71µm ASTM D7647 >3 1 Oil Cleanliness ISO 4406 (c) >-/19/14 A 21/20/16 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Emulsified Water scalar *Visual NORM NORM Boron ppm					>5000					
Particles >38µm ASTM D7647 >10 ▲ 12 Particles >71µm ASTM D7647 >3 1 Oil Cleanliness ISO 4406 (c) >-/19/14 ▲ 21/20/16 Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NOR NORME Odor scalar *Visual NOR NORML Odor scalar *Visual NOR NORML Mappearance scalar *Visual NOR NORML Odor scalar *Visual NOR NORML FLUID CONDITION NOR Sodium ppm ASTM D5185m >158 <1 Boron ppm ASTM D5185m 10 0 Barium ppm ASTM D5185m 10 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>										
Particles >71µm ASTM D7647 >3 1 Oil Cleanliness ISO 4406 (c) >-/19/14 21/20/16 I I Silt scalar *Visual NONE NONE I I I Debris scalar *Visual NONE NONE I		Particles >21µm		ASTM D7647	>40	182				
Oil Cleanliness ISO 4406 (c) >-/19/14 ▲ 21/20/16 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORML NORML Codor scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML NORML FLUID CONDITION Sodium ppm ASTM D5185m<>158 <1 Boron ppm ASTM D5185m 250 <1 Barium ppm ASTM D5185m 10 0		Particles >38µm		ASTM D7647	>10	1 2				
Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML FLUID CONDITION Sodium ppm ASTM D5185m >158 <1 Boron ppm ASTM D5185m 250 <1 Barium ppm ASTM D5185m 10 0		Particles >71µm		ASTM D7647	>3	1				
Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML FLUID CONDITION Sodium ppm ASTM D5185m >158 <1 Boron ppm ASTM D5185m 250 <1 Barium ppm ASTM D5185m 10 0		Oil Cleanliness		ISO 4406 (c)	>/19/14	1/20/16				
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML NORML FLUID CONDITION Sodium ppm ASTM D5185m >158 <1		Silt	scalar			NONE				
Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG FLUID CONDITION Sodium ppm ASTM D5185m >158 <1		Debris	scalar	*Visual	NONE	NONE				
Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.1 NEG FLUID CONDITION Sodium ppm ASTM D5185m >158 <1 Boron ppm ASTM D5185m 250 <1 Barium ppm ASTM D5185m 10 0		Sand/Dirt	scalar	*Visual	NONE	NONE				
Emulsified Water scalar *Visual >0.1 NEG FLUID CONDITION Sodium ppm ASTM D5185m >158 <1 The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand or type of oil. Confirm oil Sodium ppm ASTM D5185m 250 <1 Barium ppm ASTM D5185m 10 0		Appearance	scalar	*Visual	NORML	NORML				
FLUID CONDITION Sodium ppm ASTM D5185m >158 <1		Odor	scalar	*Visual	NORML	NORML				
Boron ppm ASTM D5185m 250 <1		Emulsified Water	scalar	*Visual	>0.1	NEG				
Boron ppm ASTM D5185m 250 <1	FI UID CONDITION	Sodium	maa	ASTM D5185m	>158	<1				
The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil										
indicates the addition of a different brand, or type of oil. Confirm oil										
Molybdenum ppm ASTM D5185m 100 0	indicates the addition of a different brand, or type of oil. Confirm oil	Molybdenum	ppm			0				

Manganese

Phosphorus

Calcium

Zinc

Sulfur

ASTM D5185m

ppm ASTM D5185m 1150

ppm ASTM D5185m 4250

ASTM D5185m 3000

ASTM D5185m 1350

ppm

ppm

ppm

Visc @ 40°C cSt ASTM D445 115

Acid Number (AN) mg KOH/g ASTM D8045

Magnesium ppm ASTM D5185m 450

type. The AN level is acceptable for this fluid.

0

2

56

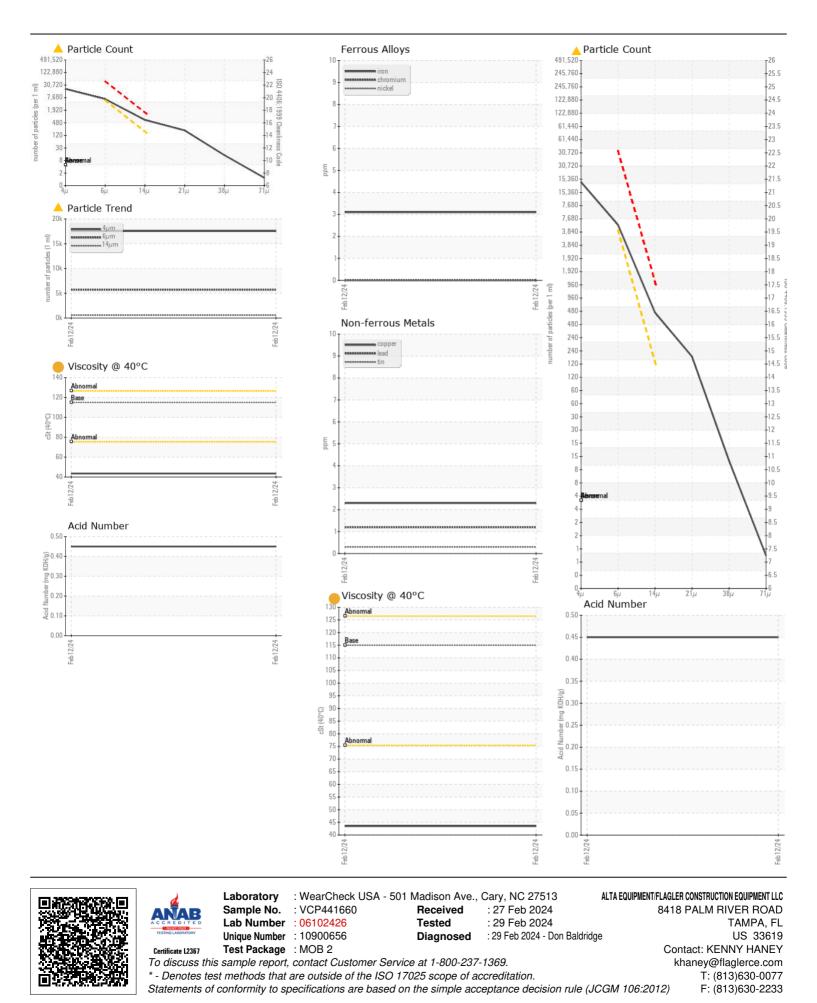
322

418

1712

0.45

43.5



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Contact/Location: KENNY HANEY - VOLVO0093