



RECOMMENDATION

VOLVO A45G 342398 omponent

Drop Box

VOLVO SUPER GEAR OIL 75W-80-GO102 (--- GAL)

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

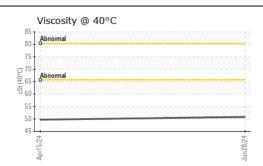
There is no indication of any contamination in the oil.

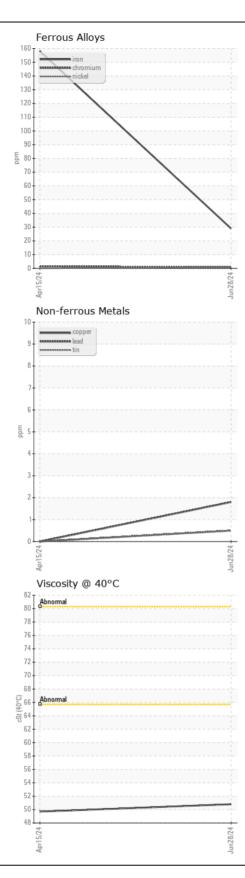
FLUID CONDITION

The condition of the oil is acceptable for the time in service.

TestUOMMethodLimit/AbCurrentHistory1History2Sample NumberClient Info28 Jun 202415 Apr 2024Machine AgehrsClient Info28 Jun 202415 Apr 2024Machine AgehrsClient Info5203400Filter AgehrsClient Info5203400Oil ChangedClient InfoNANAANAFilter ChangedClient InfoNANAASample StatusClient InfoNANAAIronppmASTM D5185n>50029158IronppmASTM D5185n>10<10NickelppmASTM D5185n>10<10SilverppmASTM D5185n>302<1AluminumppmASTM D5185n>302<1AgandumppmASTM D5185n>302VanadiumppmASTM D5185n>20<10Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185n>2020Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185n>2020Yellow Metalscalar*VisualNONENONENONEA							
Sample DateClient Info28 Jun 202415 Apr 2024Machine AgehrsClient Info79617441Oil AgehrsClient Info5203400Filter AgehrsClient Info00Oil ChangedClient InfoNAN/AN/AFilter ChangedClient InfoNAN/AN/ASample StatusClient InfoNAN/AN/AIronppmASTM D5185m>50029158IronppmASTM D5185m>10<10NickelppmASTM D5185m>10<10SilverppmASTM D5185m>302<1AluminumppmASTM D5185m>302<1VanadiumppmASTM D5185m>20<10VanadiumppmASTM D5185m>20<10VanadiumppmASTM D5185m>20<10VanadiumppmASTM D5185m>20<10ValadiumppmASTM D5185m>20<10ValadiumppmASTM D5185m>20<10ValadiumppmASTM D5185m>20<10ValadiumppmASTM D5185m>20<10Valadiumppm<	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine AgehrsClient Info79617441Oil AgehrsClient Info5203400Filter AgehrsClient InfoChangedChangedOil ChangedClient InfoNAN/AN/ASample StatusClient InfoNAN/AIronppmASTM D5185n>50029158IronppmASTM D5185n>10<10NickelppmASTM D5185n>10<10NickelppmASTM D5185n>10<10AluminumppmASTM D5185n>3021<1AluminumppmASTM D5185n>30210LeadppmASTM D5185n>30210VanadiumppmASTM D5185n>20<10VanadiumppmASTM D5185n>20<10SiliconppmASTM D5185n>20<10SiliconppmASTM D5185n>20220SiliconppmASTM D5185n>20220SiliconppmASTM D5185n>20220SiliconppmASTM D5185n>20220SiliconppmASTM D5185n>20220 <trr>SiliconppmASTM D5</trr>	Sample Number		Client Info		ML0002622	ML0001508	
Oil Age Filter AgehrsClient Info5203400Filter AgehrsClient Info00Oil ChangedClient InfoN/AN/AN/ASample StatusClient InfoN/AN/ANORMALIronppmASTM D5185>50029158IronppmASTM D5185>20<11NickelppmASTM D5185>10<10SilverppmASTM D5185>10<10AluminumppmASTM D5185>302<1LeadppmASTM D5185>302<1CopperppmASTM D5185>3020VanduinuppmASTM D5185>20<10VanduinuppmASTM D5185>20<10ValduinuppmASTM D5185>20<10ValduinuppmASTM D5185>20<10SiliconppmASTM D5185>2034ValduinuppmASTM D5185>2034SiliconppmASTM D5185>2034SiliconppmASTM D5185>2034SiliconppmASTM D5185>2020Siliconppm <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>28 Jun 2024</th> <th>15 Apr 2024</th> <th></th>	Sample Date		Client Info		28 Jun 2024	15 Apr 2024	
Filter AgehrsClient Info00Oil ChangedClient InfoChangedChangedFilter ChangedClient InfoN/AN/AN/ASample StatusNORMALNORMALIronppmASTM D5185m>50029158ChromiumppmASTM D5185m>20<11NickelppmASTM D5185m>10<10ASTM D5185m>10<10AItaminumppmASTM D5185m<10AluminumppmASTM D5185m>302<11LeadppmASTM D5185m>3020VanadiumppmASTM D5185m>20<10VanadiumppmASTM D5185m>20<10Yellow Metalscalar"VisualNONENONENONESiliconppmASTM D5185m>2020Yellow Metalscalar"VisualNONENONENONESiliconppmASTM D5185m>2020Yellow Metalscalar"VisualNONENONENONESoliconppmASTM D5185m>2020SiliconppmASTM D5185m>2020SoliconppmASTM	Machine Age	hrs	Client Info		7961	7441	
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Filter Changed Sample StatusClient InfoN/AN/AN/AIronppmASTM D5185n>5002915.8IronppmASTM D5185n>2011NickelppmASTM D5185n>1010NickelppmASTM D5185n>100SilverppmASTM D5185n0AluminumppmASTM D5185n>302LeadppmASTM D5185n>3020VanadiumppmASTM D5185n>200VanadiumppmASTM D5185n>200Vellow Metalscalar'VisualNONENONENONESiliconppmASTM D5185n>2034Yellow Metalscalar'VisualNONENONENONESiliconppmASTM D5185n>2034SiliconppmASTM D5185n>2034SiliconppmASTM D5185n>2034SiliconppmASTM D5185n>2034SoliconppmASTM D5185n>2034SoliconppmASTM D5185n>202NCRESolicon	Filter Age	hrs	Client Info		0	0	
Sample StatusNORMALNORMALNORMALIronppmASTM D5185m>50029158ChromiumppmASTM D5185m>10<10NickelppmASTM D5185m>10<10TitaniumppmASTM D5185m>10<10SilverppmASTM D5185m>302<10AluminumppmASTM D5185m>302<10LeadppmASTM D5185m>30210CopperppmASTM D5185m>20<10VanadiumppmASTM D5185m>20<10White Metalscalar'VisualNONENONENONESiliconppmASTM D5185m>2020Yellow Metalscalar'VisualNONENONENONESiliconppmASTM D5185m>2020SiliconppmASTM D5185m>2020Siliconscalar'VisualNONENONENONESiliconppmASTM D5185m>2020SiliconppmASTM D5185m>2020Solitscalar'VisualNORENORENORESolitscalar'VisualNOR	Oil Changed		Client Info		Changed	Changed	
Iron ppm ASTM D5185m >500 29 158 Chromium ppm ASTM D5185m >20 <1 1 Nickel ppm ASTM D5185m >10 <1 0 Titanium ppm ASTM D5185m >10 <1 0 Silver ppm ASTM D5185m >30 <1 0 Aluminum ppm ASTM D5185m >30 <1 0 Lead ppm ASTM D5185m >30 <1 0 Vanadium ppm ASTM D5185m >30 <1 0 Vanadium ppm ASTM D5185m >20 <1 0 Vanadium ppm ASTM D5185m >20 <1 0 Vanadium ppm ASTM D5185m >20 2 0 Vanadium ppm ASTM D5185m >20	Filter Changed		Client Info		N/A	N/A	
Chromium ppm ASTM D5185m >20 <1	Sample Status				NORMAL	NORMAL	
Chromium ppm ASTM D5185m >20 <1	Iron		ASTM D5185m	× 500	20	150	
NickelppmASTM D5185m>10<1							
Titanium ppm ASTM D5185m <1							
Silver ppm ASTM D5185m <1				>10		-	
Aluminum ppm ASTM D5185m >30 2 <1							
Lead ppm ASTM D5185m >30 <1				00		-	
Copper ppm ASTM D5185m >30 2 0 Tin ppm ASTM D5185m >20 <1 0 Vanadium ppm ASTM D5185m >20 <1 0 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >50 3 4 Potassium ppm ASTM D5185m >20 2 0 Water WC Method >0.2 NEG NEG Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NORM NORML Appearance scalar *Visual NOR NORML NORML Godor scalar *Visual NOR <th></th> <th></th> <th></th> <th></th> <th>_</th> <th></th> <th></th>					_		
TinppmASTM D5185m>20<1		ppm					
VanadiumppmASTM D5185m<	Copper	ppm	ASTM D5185m	>30	2	0	
White Metalscalar*VisualNONENONENONE	Tin	ppm	ASTM D5185m	>20	<1	0	
Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>5034PotassiumppmASTM D5185m>2020WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONEMODERDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMNONENONEAppearancescalar*VisualNORMLNORMLNORMLCodorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m222BariumppmASTM D5185m00ManganeseppmASTM D5185m<124MagnesiumppmASTM D5185m30PhosphorusppmASTM D5185m<30SulfurppmASTM D5185m<24552239MagnesiumppmASTM D5185m<5583MagnesiumppmASTM D5185m<2819728983PhosphorusppmASTM D5185m<5583Magnesium <td< th=""><th>Vanadium</th><th>ppm</th><th>ASTM D5185m</th><th></th><th><1</th><th>0</th><th></th></td<>	Vanadium	ppm	ASTM D5185m		<1	0	
SiliconppmASTM D5185m>5034PotassiumppmASTM D5185m>2020WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONEMODERDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m222BoronppmASTM D5185m000MalganeseppmASTM D5185m224ManganeseppmASTM D5185m330PhosphorusppmASTM D5185m5583SulfurppmASTM D5185m224552239MagnesiumppmASTM D5185m5583PhosphorusppmASTM D5185m5583SulfurppmASTM D5185m5583MagnesiumppmASTM D5185m5583MagnesiumppmASTM D5185m5583MagnesiumppmASTM D5185m22819728983	White Metal	scalar	*Visual	NONE	NONE	NONE	
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PotassiumppmASTM D5185m>2020WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONEMODERDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m22BoronppmASTM D5185m00MolybdenumppmASTM D5185m24MagnesiumppmASTM D5185m30PhosphorusppmASTM D5185m93354PhosphorusppmASTM D5185m2239ZincppmASTM D5185m55833SulfurppmASTM D5185m2819728983	Silicon	ppm	ASTM D5185m	>50	3	4	
WaterWC Method>0.2NEGNEGSiltscalar*VisualNONENONEMODERDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m22BoronppmASTM D5185m1224MolybdenumppmASTM D5185m00MagnesiumppmASTM D5185m130PhosphorusppmASTM D5185m9354ZincppmASTM D5185m55833SulfurppmASTM D5185m55833	Potassium		ASTM D5185m	>20	2	0	
Siltscalar*VisualNONENONEMODERDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m222BoronppmASTM D5185m00MolybdenumppmASTM D5185m00ManganeseppmASTM D5185m30MagnesiumppmASTM D5185m93544PhosphorusppmASTM D5185m55833SulfurppmASTM D5185m55833	Water		WC Method	>0.2	NEG	NEG	
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Appearancescalar*VisualNORML<	Debris	scalar	*Visual	NONE		NONE	
Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m22BoronppmASTM D5185m284206BariumppmASTM D5185m00MolybdenumppmASTM D5185m1244ManganeseppmASTM D5185m<112MagnesiumppmASTM D5185m130CalciumppmASTM D5185m93544PhosphorusppmASTM D5185m24552239ZincppmASTM D5185m5583SulfurppmASTM D5185m55833	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLIEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m22BoronppmASTM D5185m28442060BariumppmASTM D5185m00MolybdenumppmASTM D5185m244ManganeseppmASTM D5185m<112MagnesiumppmASTM D5185m30CalciumppmASTM D5185m93544PhosphorusppmASTM D5185m2239ZincppmASTM D5185m55833SulfurppmASTM D5185m2819728983	Appearance	scalar	*Visual	NORML	NORML	NORML	
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Boron ppm ASTM D5185m 284 206 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 2 4 Manganese ppm ASTM D5185m 2 4 Magnesium ppm ASTM D5185m 3 0 Calcium ppm ASTM D5185m 93 54 Phosphorus ppm ASTM D5185m 2455 2239 Zinc ppm ASTM D5185m 55 83 Sulfur ppm ASTM D5185m 28197 28983	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Boron ppm ASTM D5185m 284 206 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 2 4 Manganese ppm ASTM D5185m 2 4 Magnesium ppm ASTM D5185m 3 0 Calcium ppm ASTM D5185m 93 54 Phosphorus ppm ASTM D5185m 2455 2239 Zinc ppm ASTM D5185m 55 83 Sulfur ppm ASTM D5185m 28197 28983							
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Molybdenum ppm ASTM D5185m 2 4 Manganese ppm ASTM D5185m <1 2 Magnesium ppm ASTM D5185m 3 0 Magnesium ppm ASTM D5185m 3 0 Calcium ppm ASTM D5185m 93 54 Phosphorus ppm ASTM D5185m 2455 2239 Zinc ppm ASTM D5185m 55 83 Sulfur ppm ASTM D5185m 28197 28983	-						
Manganese ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		284	206	
Magnesium ppm ASTM D5185m 3 0 Calcium ppm ASTM D5185m 93 54 Phosphorus ppm ASTM D5185m 2455 2239 Zinc ppm ASTM D5185m 55 83 Sulfur ppm ASTM D5185m 28197 28983	Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m		284 0	206 0	
Calcium ppm ASTM D5185m 93 54 Phosphorus ppm ASTM D5185m 2455 2239 Zinc ppm ASTM D5185m 55 83 Sulfur ppm ASTM D5185m 28197 28983	Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		284 0 2	206 0 4	
Phosphorus ppm ASTM D5185m 2455 2239 Zinc ppm ASTM D5185m 55 83 Sulfur ppm ASTM D5185m 28197 28983	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		284 0 2 <1	206 0 4 2	
Zinc ppm ASTM D5185m 55 83 Sulfur ppm ASTM D5185m 28197 28983	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		284 0 2 <1 3	206 0 4 2 0	
Sulfur ppm ASTM D5185m 28197 28983	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		284 0 2 <1 3 93	206 0 4 2 0 54	
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		284 0 2 <1 3 93	206 0 4 2 0 54 2239	
Visc @ 40°C cSt ASTM D445 50.8 49.7	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		284 0 2 <1 3 93 2455 55	206 0 4 2 0 54 2239	
	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		284 0 2 <1 3 93 2455 55	206 0 4 2 0 54 2239 83	

Submitted By: Service - Alex Anderson





MCCLUNG-LOGAN EQUIPMENT CO - BALTIMORE 4601 WASHINGTON BOULEVARD BALTIMORE, MD dge US 21227 Contact: MARK CIULLA mciulla@mcclung-logan.com T: (410)242-6500 CJCGM 106:2012) F: (410)242-7835



 Unique Number
 : 11112847
 Diagnosed
 : 09 Jul 2024 - Don Baldridge

 Certificate 12367
 Test Package
 : CONST
 Contact: MAI

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 mciulla@mcclung

 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 T: (410)

 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)
 F: (410)

Received

Tested

: 05 Jul 2024

: 09 Jul 2024

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Laboratory

Sample No.

Lab Number : 06229354

: ML0002622

Submitted By: Service - Alex Anderson Page 2 of 2