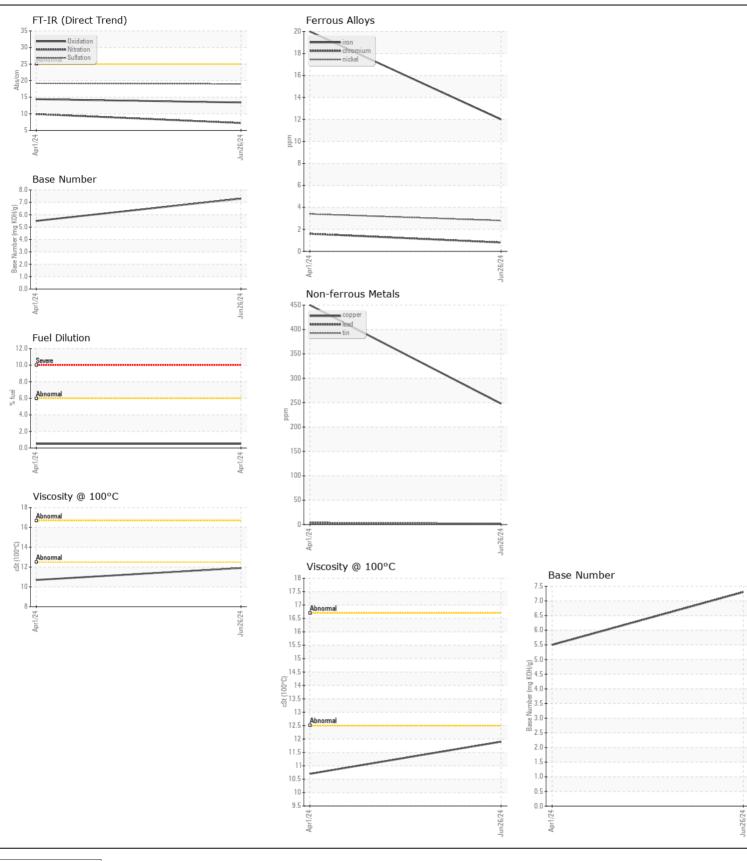
WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**



Machine Id VOLVO A45G 2361 (S/N 752166) Component Diesel Engine

Inot provided (--- GAL)

{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number	OOW	Client Info	LITTION	ASC0011184		
	Sample Date		Client Info		26 Jun 2024	01 Apr 2024	
	Machine Age	hrs	Client Info		1053	519	
	Oil Age	hrs	Client Info		500	519	
	Filter Age	hrs	Client Info		500	519	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		12	20	
	Chromium	ppm	ASTM D5185m		<1	2	
	Nickel	ppm	ASTM D5185m	>2	3	3	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		4	3	
	Lead	ppm	ASTM D5185m		<1	1	
	Copper	ppm	ASTM D5185m		248	450	
	Tin	ppm	ASTM D5185m	>15	2	4	
	Vanadium	ppm	ASTM D5185m	NONE	<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7	27	
SSITTAMINATION	Potassium	ppm	ASTM D5185m		2	3	
There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		<1.0	0.5	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.3	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	7.2	9.9	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	19.2	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
ELUID CONDITION	Sodium	nnm	ASTM D5185m		4	2	
FLUID CONDITION	Boron	ppm	ASTM D5185m		7	49	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		63	88	
	Manganese	ppm	ASTM D5185m		<1	2	
	Magnesium	ppm	ASTM D5185m		877	18	
	Calcium	ppm	ASTM D5185m		1202	2142	
	Phosphorus	ppm	ASTM D5185m		1006	932	
	Zinc	ppm	ASTM D5185m		1266	1095	
	Sulfur	ppm	ASTM D5185m		3244	3788	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	14.4	
	Base Number (BN)		ASTM D2896		7.3	5.5	
	Visc @ 100°C	cSt	ASTM D445		11.9	10.7	





Certificate L2367

Laboratory Sample No.

Lab Number : 06222019

Unique Number : 11100216

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ASC0011184 Received : 27 Jun 2024 **Tested** : 01 Jul 2024

Diagnosed

: 01 Jul 2024 - Jonathan Hester

Test Package: CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

G S MATERIALS INC PO BOX 1335 BURLINGTON, NC US 27216 Contact: KAREN NEWPORT

To discuss this sample report, contact Customer Service at 1-800-237-1369. Gsmaterials@windstream.net * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)499-9322 F: (919)499-2097 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)