

## Area [HERC] Machine Id VOLVO L110H 632557 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

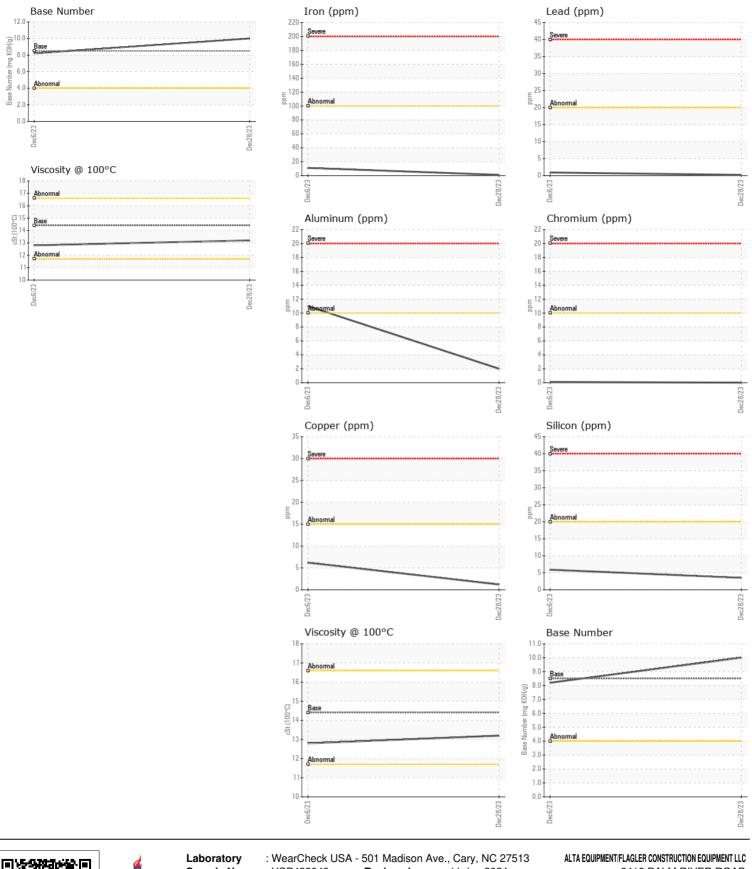
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Recommendation Resample at the next service interval to monitor.	Sample Number	UOIVI	Client Info	LIIIIUADII	VCP432040	VCP428845	
	Sample Date		Client Info		28 Dec 2023	06 Dec 2023	
	Machine Age	hrs	Client Info		1206	1101	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed	1110	Client Info		N/A	N/A	
	Filter Changed		Client Info		N/A	N/A	
	Sample Status				NORMAL	ABNORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	1	11	
	Chromium	ppm	ASTM D5185m	>10	0	<1	
	Nickel	ppm	ASTM D5185m	>10	0	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>2	0	0	
	Aluminum	ppm	ASTM D5185m	>10	2	🔺 11	
	Lead	ppm	ASTM D5185m	>20	<1	<1	
	Copper	ppm	ASTM D5185m	>15	1	6	
	Tin	ppm	ASTM D5185m	>10	0	1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon		ASTM D5185m		4	0	
	Potassium	ppm	ASTM D5185m		4 <1	6	
There is no indication of any contamination in the oil.	Fuel	ppm		>20		<1.0	
	Water		WC Method		<1.0 NEG	NEG	
	Glycol		WC Method	>0.1	NEG	NEG	
	Soot %	%	*ASTM D7844	× 2	0.1	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	5.1	6.9	
	Sulfation	Abs/.1mm	*ASTM D7024		20.5	20.6	
	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		*Visual	>0.1	NEG	NEG	
FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.							
	Sodium	ppm	ASTM D5185m	>158	1	1	
	Boron	ppm	ASTM D5185m	250	86	281	
	Barium	ppm	ASTM D5185m	10	0	<1	
	Molybdenum	ppm	ASTM D5185m	100	43	72	
	Manganese	ppm	ASTM D5185m		0	0	
	Magnesium	ppm	ASTM D5185m	450	513	448	
	Calcium	ppm	ASTM D5185m	3000	1500	1349	
	Phosphorus	ppm	ASTM D5185m	1150	879	924	
	Zinc	ppm	ASTM D5185m		1140	1222	
	Sulfur	ppm	ASTM D5185m	4250	3070	3112	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	15.4	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.0	8.2	
	Vies (2 10000	- 01	AOTA DATE			10.0	

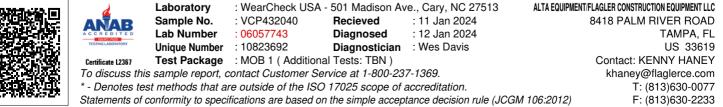
Visc @ 100°C cSt

ASTM D445 14.4

12.8

13.2





Contact/Location: KENNY HANEY - VOLVO0093