

Machine Id

VOLVO A40G 352355

Diesel Engine

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

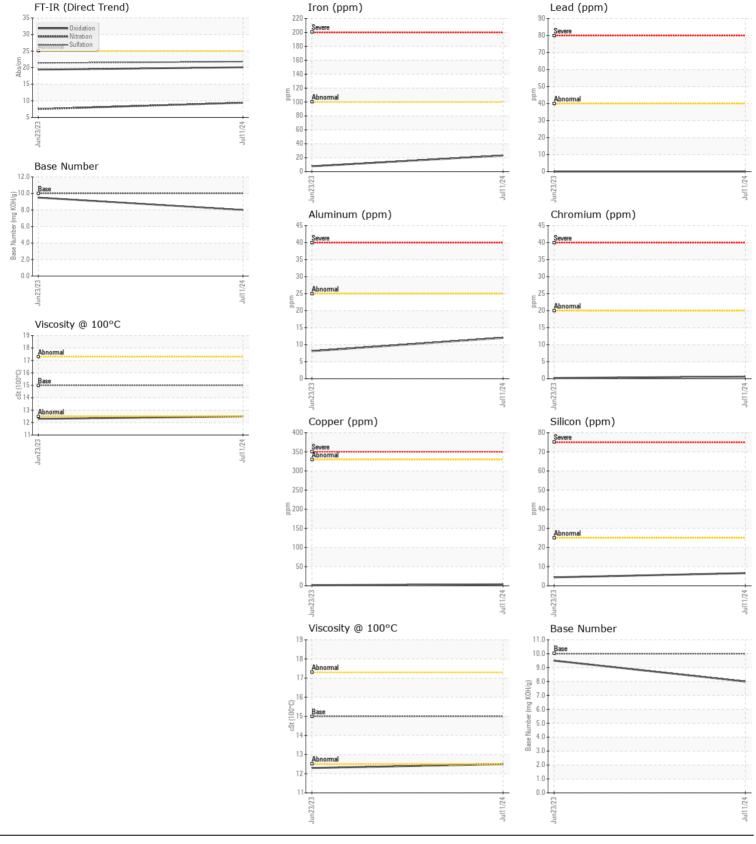
VOLVO DETRA DIESEL ENGINE DIE 15W40 VDS-5 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP442809	VCP417341	
Resample at the next service interval to monitor.	Sample Date		Client Info		11 Jul 2024	23 Jun 2023	
	Machine Age	hrs	Client Info		4971	7528	
	Oil Age	hrs	Client Info		0	500	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
	lron		ASTM D5185m	. 100	00	0	
WEAR All component wear rates are normal.	Iron Chromium	ppm	ASTM D5185m		23 <1	8 <1	
	Nickel	ppm ppm	ASTM D5185m		<1	5	
	Titanium	ppm	ASTM D5185m	>2	0	<1	
	Silver	ppm	ASTM D5185m	>2	0	0	
	Aluminum	ppm	ASTM D5185m		12	8	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		4	2	
	Tin	ppm	ASTM D5185m		0	0	
	Vanadium	ppm	ASTM D5185m	210	0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7	4	
There is no indication of any contamination in the oil	Potassium	ppm	ASTM D5185m	>20	0	0	
There is no indication of any contamination in the oil.	Fuel		WC Method	>6.0	<1.0	0.6	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0.3	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	9.4	7.5	
	Sulfation	Abs/.1mm	*ASTM D7415		21.8	21.4	
	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	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		14	4	
	Boron	ppm	ASTM D5185m	2.5	29	41	
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	0	0	
	Molybdenum	ppm	ASTM D5185m	0.7	44	48	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	256	495	529	
	Calcium	ppm	ASTM D5185m	2057	1709	1723	
	Phosphorus	ppm	ASTM D5185m	935	914	937	
	Zinc	ppm	ASTM D5185m	1223	1049	1105	
	Sulfur	ppm	ASTM D5185m	4079	3304	3412	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	19.4	
	Base Number (BN)	mg KOH/g	ASTM D2896	10	8.0	9.5	
	1/1	~	AOTH DAAF	15.0	10 5	10.0	

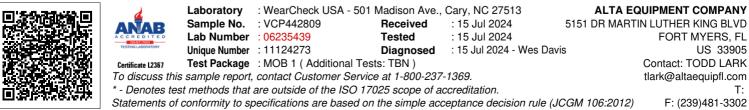
Visc @ 100°C cSt

ASTM D445 15.0

12.3

12.5





Contact/Location: TODD LARK - VOLVO0090 Page 2 of 2