



## [SWO071894] Wachine Id VOLVO A30G 753219

Diesel Engine

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

			· · · · · · · · · · · · · · · · · · ·	/	~~~~		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP434682	VCP410816	VCP412720
Resample at the next service interval to monitor.	Sample Date		Client Info		09 May 2024	23 Jan 2024	13 Sep 2023
	Machine Age	hrs	Client Info		2028	1500	1000
	Oil Age	hrs	Client Info		0	500	500
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	ABNORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	11	14	10
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m		4	6	1
	Titanium	ppm	ASTM D5185m		<1	<1	0
	Silver	ppm	ASTM D5185m	>2	<1	0	<1
	Aluminum	ppm	ASTM D5185m		2	1	<1
	Lead	ppm	ASTM D5185m		_ <1	0	0
	Copper	ppm	ASTM D5185m		7	▲ 25	▲ 132
	Tin	ppm	ASTM D5185m		1	1	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Silicon		ASTM D5185m		 F		
CONTAMINATION	Potassium	ppm	ASTM D5185m	-	5 2	5 0	9
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	0.3
	Water		WC Method		×1.0 NEG	NEG	NEG
	Glycol		WC Method	>0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	13	0.4	0.5	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	7.5	8.5	8.0
	Sulfation	Abs/.1mm	*ASTM D7024		22.4	23.0	22.5
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
	0				•	0	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	0.5	0	2	2
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		49	30	30
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		2	0	0
	Molybdenum	ppm	ASTM D5185m		42	39	43
	Manganese	ppm	ASTM D5185m		<1	1	1
	Magnesium	ppm	ASTM D5185m		489	460	453
	Calcium	ppm	ASTM D5185m	2057	1701	1650	1756
	Phosphorus	ppm	ASTM D5185m		832	741	818
	Zinc	ppm	ASTM D5185m	-	902	872	1000
	Sulfur	ppm	ASTM D5185m		2703	2318	2696
	Oxidation	Abs/.1mm	*ASTM D7414		20.0	20.4	20.0
	Base Number (BN)	mg KOH/g	ASTM D2896	10	9.3	8.6	8.8

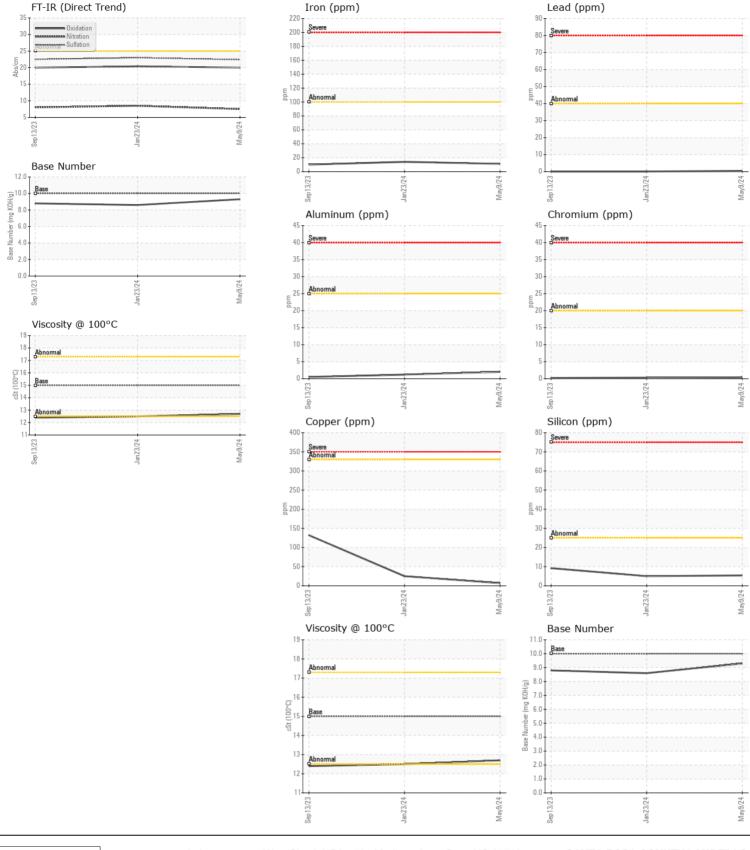
Visc @ 100°C cSt

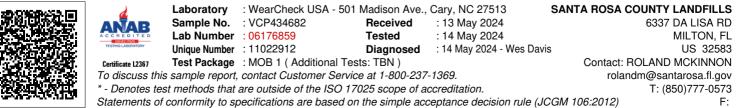
12.5

12.4

12.7

ASTM D445 15.0





ġ,

Contact/Location: ROLAND MCKINNON - SANMILFL