

Machine Id VOLVO L220H 3064 Component Diesel Engine Fluid CHEVRON 15W40 (15 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		ML0001203	VCP409445	VCP422878
	Sample Date		Client Info		19 Apr 2024	15 Dec 2023	03 Nov 2023
	Machine Age	hrs	Client Info		17902	16951	16503
	Oil Age	hrs	Client Info		17902	0	0
	Filter Age	hrs	Client Info		17902	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	7	2	1
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	<1	0	0
	Nickel	ppm	ASTM D5185m	>10	1	0	0
	Titanium	ppm	ASTM D5185m		1	2	2
	Silver	ppm	ASTM D5185m	>2	0	0	1
	Aluminum	ppm	ASTM D5185m	>10	4	1	2
	Lead	ppm	ASTM D5185m	>20	3	0	0
	Copper	ppm	ASTM D5185m	>15	3	0	0
	Tin	ppm	ASTM D5185m	>10	<1	0	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	19	14	20
	Potassium	ppm	ASTM D5185m	>20	3	0	<1
There is no indication of any contamination in the oil.	Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.1	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	8.3	6.4	6.8
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	20.6	21.9
	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	scalar	*Visual	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	1	<1
	Boron	ppm	ASTM D5185m		224	285	364
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		2	0	<1
	Molybdenum	ppm	ASTM D5185m		113	64	86
	Manganese	ppm	ASTM D5185m		<1	0	0
	Magnesium	ppm	ASTM D5185m		554	341	407
	Calcium	ppm	ASTM D5185m		1435	1428	1358
	Phosphorus	ppm	ASTM D5185m		813	870	1075
	Zinc	ppm	ASTM D5185m		985	1142	1294
	Sulfur	ppm	ASTM D5185m		2913	3079	3352
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	15.0	15.7
	Base Number (BN)	mg KOH/g	ASTM D2896		6.0	7.1	6.7
	Vies @ 10000	- 0+	ACTN D445	- 4 4	10.0	10.0	10.0

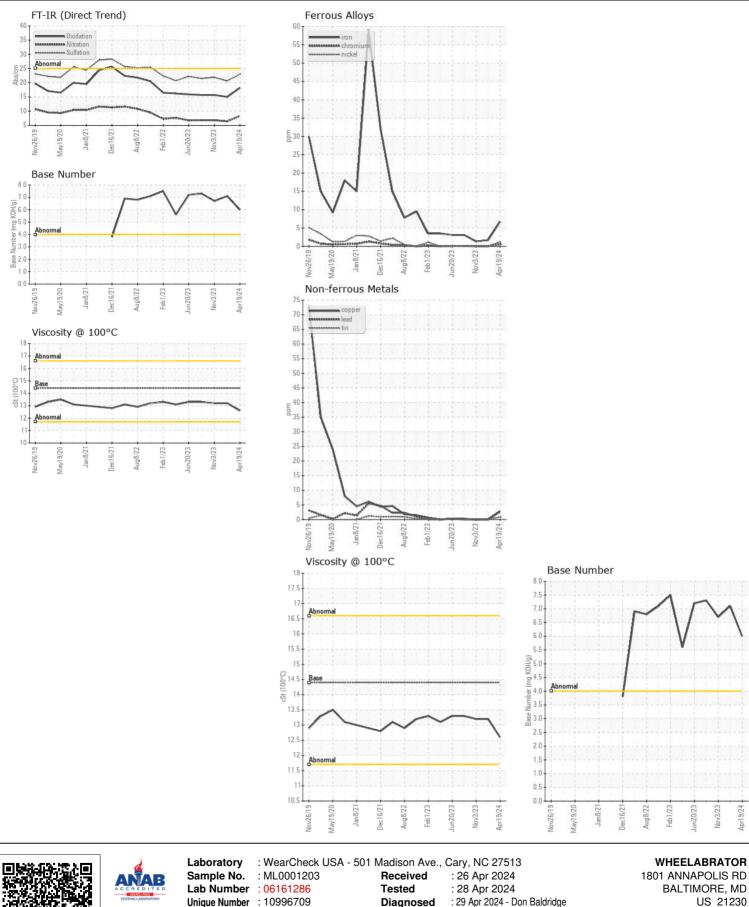
Visc @ 100°C cSt

ASTM D445 14.4

13.2

13.2

12.6



US 21230 Contact: SERVICE MANAGER

> T: (215)428-7902 F:

Certificate L2367

Test Package : CONST (Additional Tests: TBN)

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

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.