

## ASCENDUM MACHINERY

## VOLVO EC220E 315539

Component Diesel Engine

## {not provided} (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		ASC0009741		
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		19 Jun 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		32		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>10	6		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		8		
	Tin	ppm	ASTM D5185m	>10	4		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	17		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	3		
	Fuel		WC Method	>6.0	<1.0		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	8.6		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		9		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		6		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m		135		
	Calcium	ppm	ASTM D5185m		2348		
	Phosphorus	ppm	ASTM D5185m		964		
	Zinc	ppm	ASTM D5185m		1181		
	Sulfur	ppm	ASTM D5185m		3554		
	Ovidation	Abc/1mm	*ACTM D7/1/	< 25	1/17		

Oxidation

Visc @ 100°C cSt

14.7

5.9

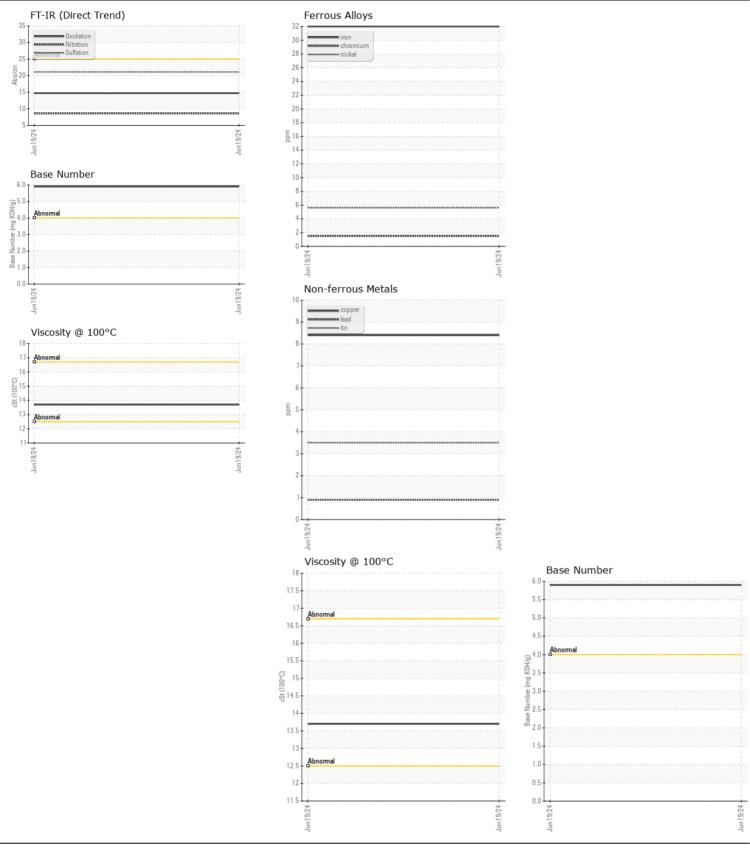
13.7

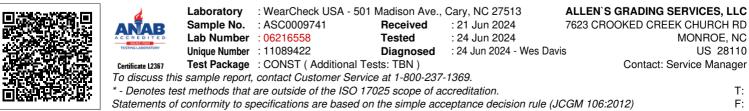
Abs/.1mm \*ASTM D7414 >25

ASTM D445

Base Number (BN) mg KOH/g ASTM D2896

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL





Submitted By: KARRINGTON RENDLEMAN Page 2 of 2