



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**VOLVO EC250EL 310605 - EC250EL**  
 Component  
**Diesel Engine**  
 Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0010820</b>	VCP315615	VCP261728
Sample Date		Client Info		<b>20 Jun 2024</b>	22 Jun 2021	18 Nov 2019
Machine Age	hrs	Client Info		<b>3509</b>	1669	672
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	21	30
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	4
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	7
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	1
Aluminum	ppm	ASTM D5185m	>10	<b>9</b>	26	▲ 85
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>15	<b>2</b>	8	13
Tin	ppm	ASTM D5185m	>10	<b>1</b>	2	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

There is no indication of any contamination in the oil.

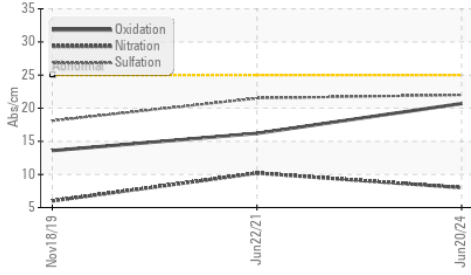
Silicon	ppm	ASTM D5185m	>20	<b>9</b>	13	25
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	43	35
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.0</b>	10.2	6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	21.5	18.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

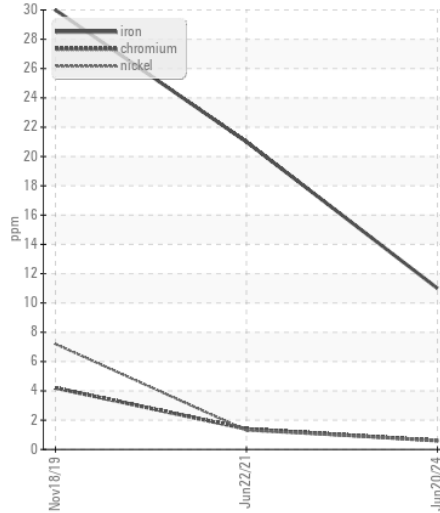
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	4	4
Boron	ppm	ASTM D5185m	2.5	<b>41</b>	42	8
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	0.7	<b>43</b>	19	12
Manganese	ppm	ASTM D5185m	0.0	<b>1</b>	<1	3
Magnesium	ppm	ASTM D5185m	256	<b>569</b>	525	248
Calcium	ppm	ASTM D5185m	2057	<b>1992</b>	1638	2041
Phosphorus	ppm	ASTM D5185m	935	<b>1065</b>	807	986
Zinc	ppm	ASTM D5185m	1223	<b>1331</b>	929	1143
Sulfur	ppm	ASTM D5185m	4079	<b>3928</b>	2669	3866
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.7</b>	16.2	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.9</b>	---	---
Visc @ 100°C	cSt	ASTM D445	15.0	<b>13.3</b>	13.7	13.0

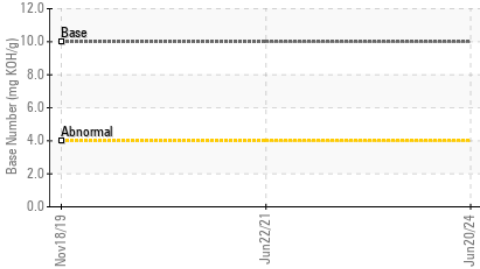
FT-IR (Direct Trend)



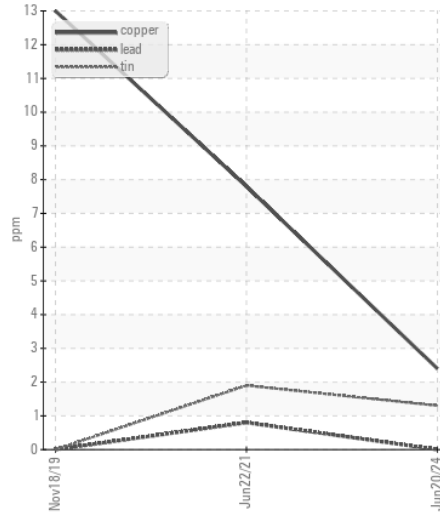
Ferrous Alloys



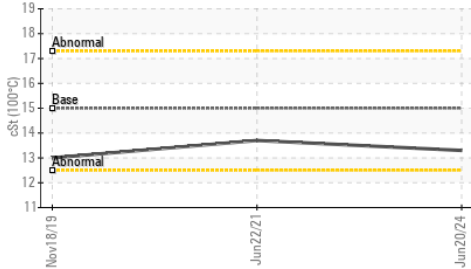
Base Number



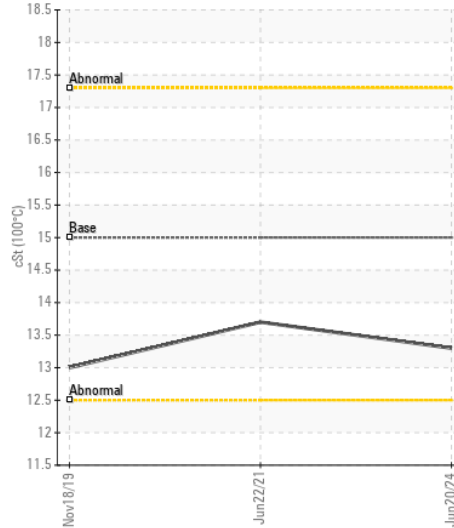
Non-ferrous Metals



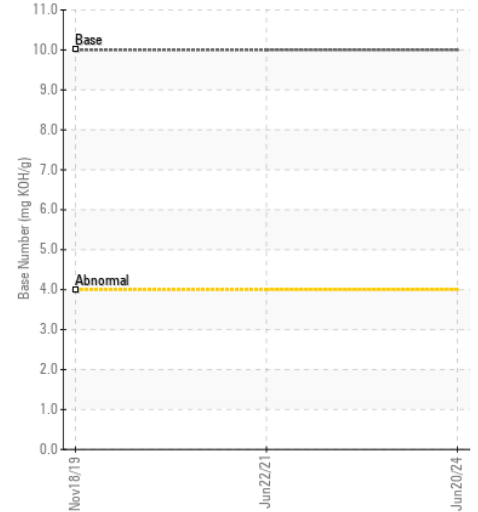
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : ASC0010820  
 Lab Number : 06222962  
 Unique Number : 11101159  
 Test Package : CONST ( Additional Tests: TBN )

365 - ASCENDUM MACHINERY INC - SAVANNAH  
 54 MEDLINE DR  
 RICHMOND HILL, GA  
 US 31324  
 Contact: JESSE WILSON  
 jesse.wilson@ascendummachinery.com

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.

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

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