



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

Blythe & Zachary JV CSA - I85 SC

Machine Id

VOLVO EC220E 3004954 (S/N 220E310634)

Component

Diesel Engine

Fluid

VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0003267	ASC0003356	ASC0003187
Sample Date		Client Info		15 Jul 2024	05 Apr 2024	09 Nov 2023
Machine Age	hrs	Client Info		7496	7017	6478
Oil Age	hrs	Client Info		479	7017	503
Filter Age	hrs	Client Info		0	0	503
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	29	42	26
Chromium	ppm	ASTM D5185m	>10	1	1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	4	7	6
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>15	<1	1	1
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

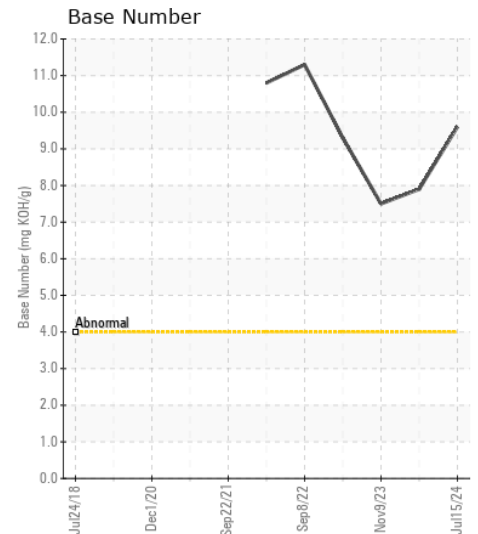
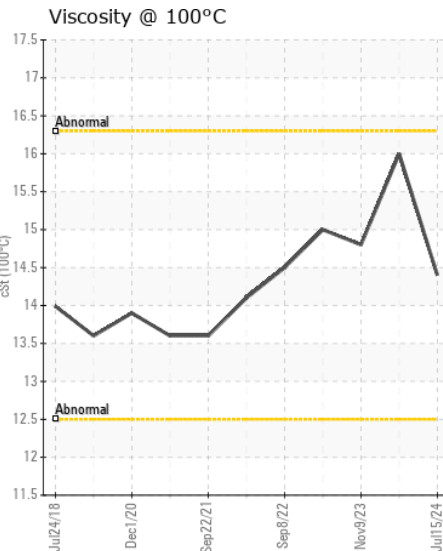
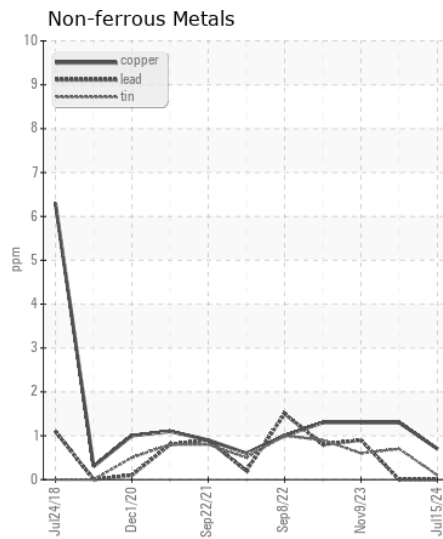
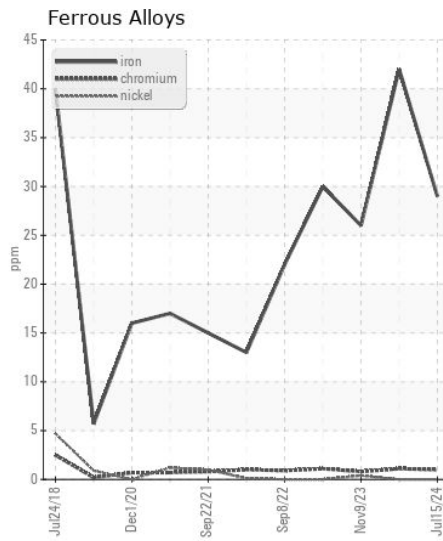
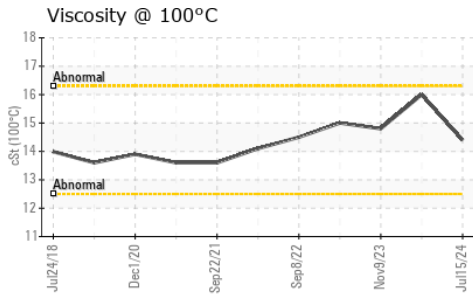
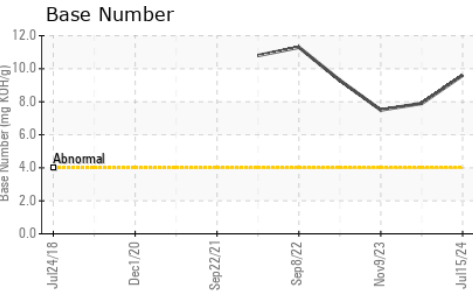
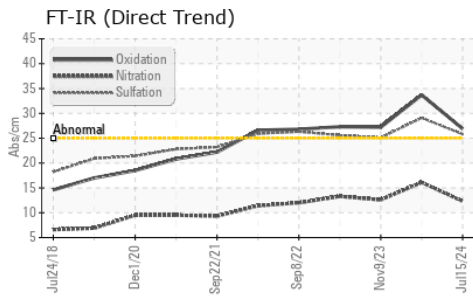
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	10	13	9
Potassium	ppm	ASTM D5185m	>20	1	0	2
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	0.3	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	12.3	16.1	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.8	29.1	25.1
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

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		2	4	5
Boron	ppm	ASTM D5185m		31	28	22
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		48	54	47
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		615	683	629
Calcium	ppm	ASTM D5185m		2013	2270	1989
Phosphorus	ppm	ASTM D5185m		997	1215	1112
Zinc	ppm	ASTM D5185m		1363	1473	1414
Sulfur	ppm	ASTM D5185m		2890	3526	3112
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.9	33.7	27.2
Base Number (BN)	mg KOH/g	ASTM D2896		9.6	7.9	7.5
Visc @ 100°C	cSt	ASTM D445		14.4	16.0	14.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0003267 **Received** : 16 Jul 2024
Lab Number : 06237576 **Tested** : 17 Jul 2024
Unique Number : 11126410 **Diagnosed** : 18 Jul 2024 - Sean Felton
Test Package : CONST (Additional Tests: TBN)

BLYTHE CONSTRUCTION INC
 2911 N GRAHAM STREET
 CHARLOTTE, NC
 US 28231
 Contact: Service Manager

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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