



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

Blythe & Zachary JV CSA - I85 SC

Machine Id

VOLVO ECR88D 3005197 (S/N ECR88D214489)

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		ASC0003262	VCP308031	VCP264059
Sample Date		Client Info		15 Jul 2024	03 May 2021	24 Jun 2020
Machine Age	hrs	Client Info		2477	1493	1000
Oil Age	hrs	Client Info		984	0	0
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	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	12	9	23
Chromium	ppm	ASTM D5185m	>10	<1	<1	2
Nickel	ppm	ASTM D5185m	>10	0	1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	3	3	7
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>15	1	19	2
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

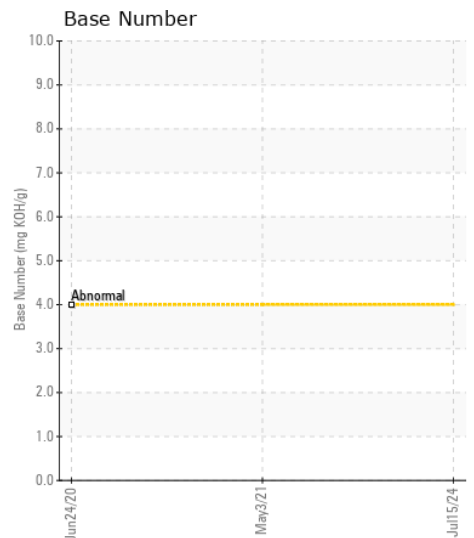
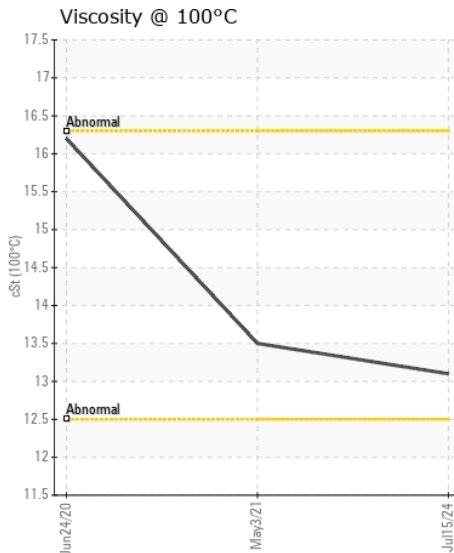
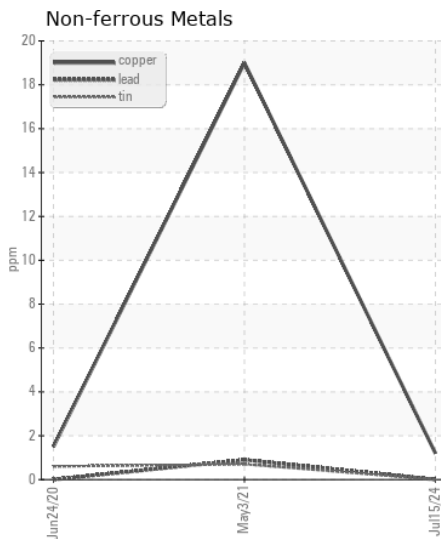
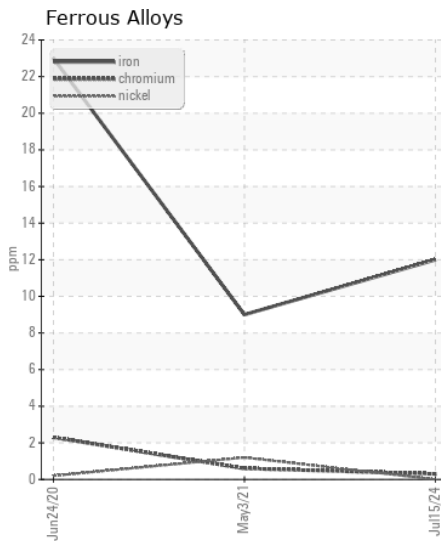
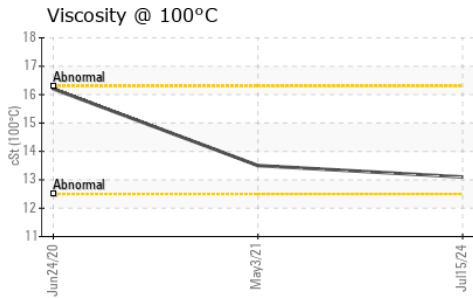
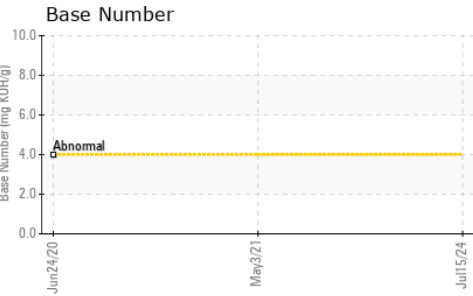
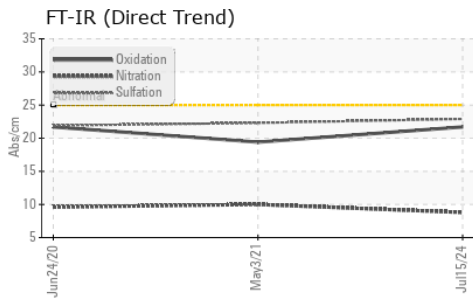
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	6	<1	11
Potassium	ppm	ASTM D5185m	>20	0	4	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	0.2	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.8	10	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.3	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

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		4	4	3
Boron	ppm	ASTM D5185m		45	68	42
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		45	15	37
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		525	634	437
Calcium	ppm	ASTM D5185m		1799	1592	1740
Phosphorus	ppm	ASTM D5185m		980	801	800
Zinc	ppm	ASTM D5185m		1124	902	881
Sulfur	ppm	ASTM D5185m		3258	2536	1830
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.7	19.4	21.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.4	---	---
Visc @ 100°C	cSt	ASTM D445		13.1	13.5	16.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0003262 **Received** : 16 Jul 2024
Lab Number : 06237559 **Tested** : 17 Jul 2024
Unique Number : 11126393 **Diagnosed** : 17 Jul 2024 - Wes Davis
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)

T:
 F: (704)373-2960