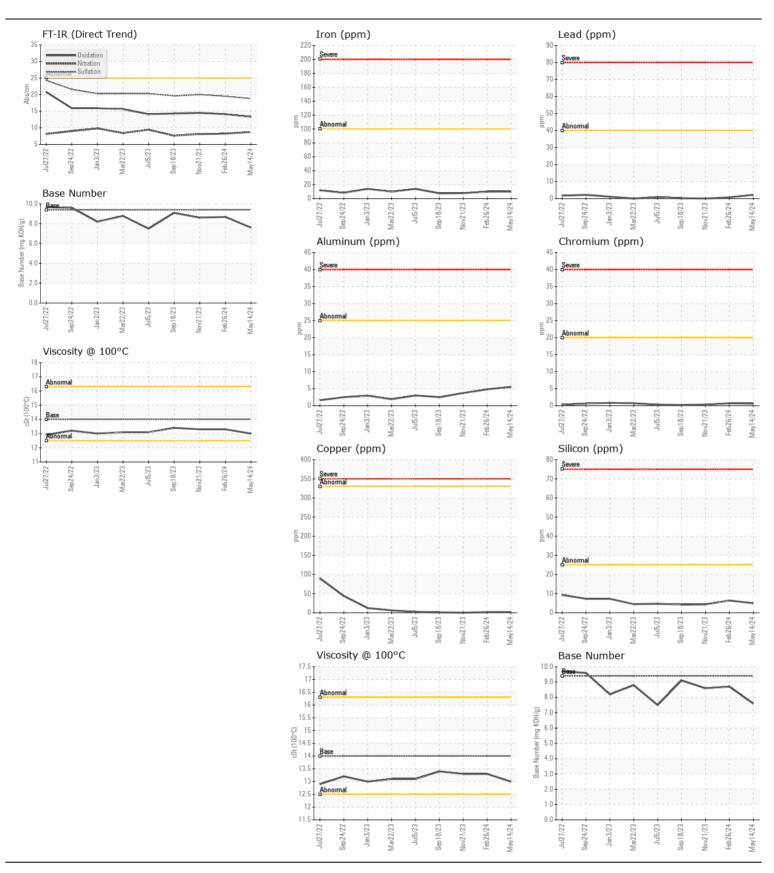


Machine Id **VOLVO A45GFS 352524**

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP400536	VCP409141	VCP382749
	Sample Date		Client Info		14 May 2024	26 Feb 2024	21 Nov 2023
	Machine Age	hrs	Client Info		4634	4351	3910
	Oil Age	hrs	Client Info		300	0	300
	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	NORMAL
/EAR	Iron	ppm	ASTM D5185m	>100	10	10	8
	Chromium	ppm	ASTM D5185m		<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		4	4	3
	Titanium	ppm	ASTM D5185m	_	<1	<1	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m		6	5	4
	Lead	ppm	ASTM D5185m		2	<1	0
	Copper	ppm	ASTM D5185m		2	2	<1
	Tin	ppm	ASTM D5185m		<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	> 25	5	6	4
	Potassium	ppm	ASTM D5185m		5	3	2
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	70.L	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	\3	0.7	0.6	0.7
	Nitration	Abs/cm	*ASTM D7624	>20	8.7	8.2	8.1
	Sulfation	Abs/.1mm	*ASTM D7415		18.8	19.5	20.0
	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		*Visual	>0.2	NEG	NEG	NEG
LUID CONDITION	Sodium	nnm	ASTM D5185m		າ	2	2
LOID CONDITION	Boron	ppm	ASTM D5185m	0	2 90	2 78	2 53
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		0	<1	0
	Molybdenum	ppm	ASTM D5185m		72	12	16
	Manganese		ASTM D5185m	U	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	0	709	642	645
	Calcium	ppm ppm	ASTM D5185m	U	1529	1421	1369
	Phosphorus	ppm	ASTM D5185m		809	753	772
	Zinc	ppm	ASTM D5185m		958	860	880
	Sulfur	ppm	ASTM D5185m		3959	2991	2852
	Oxidation	Abs/.1mm	*ASTM D3163111	-25	13.3	14.1	14.5
	Base Number (BN)		ASTM D7414 ASTM D2896		7.6	8.7	8.6







Certificate L2367

Laboratory Sample No. **Lab Number**

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP400536 : 06219043 Unique Number : 11097240

Received **Tested**

: 24 Jun 2024 Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

: 25 Jun 2024 : 26 Jun 2024 - Don Baldridge **DUNN CONSTRUCTION INC** 318 N 14TH ST BELLEVUE, IA

> US 52031 Contact: STEVE DUNN

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. DUNNCONSTRUCTINC@GMAIL.COM T:

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

F: