WEAR CONTAMINATION FLUID CONDITION

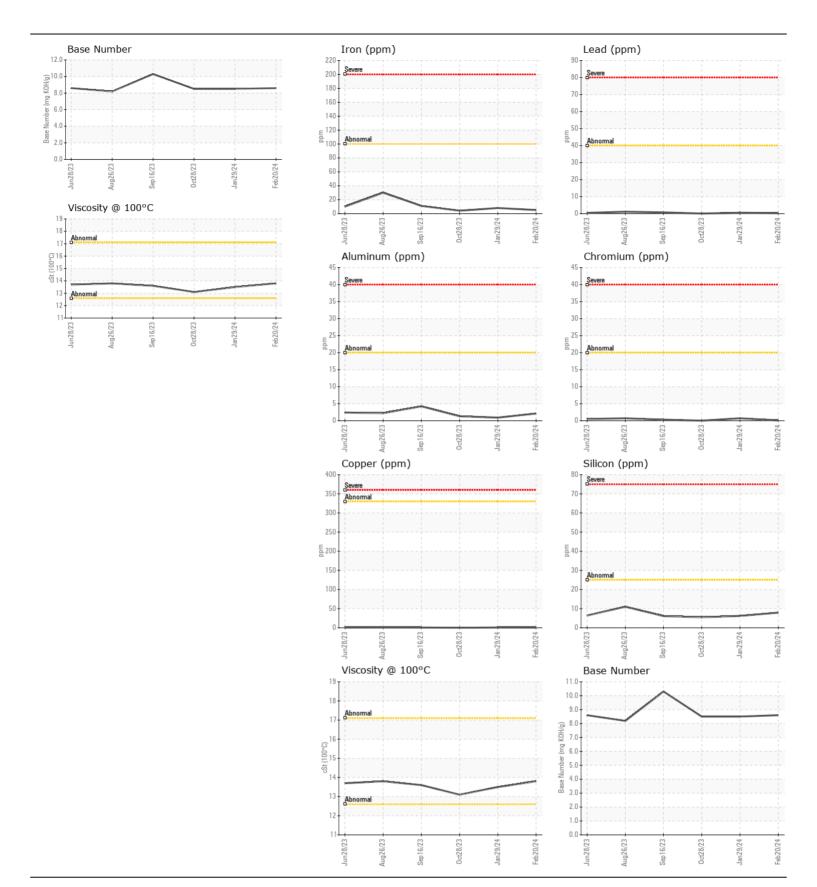
NORMAL NORMAL

Machine Id

## 4 IN VAC PUMP 335

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0906055	WC0878757	WC086815
	Sample Date		Client Info		20 Feb 2024	29 Jan 2024	28 Oct 202
	Machine Age	hrs	Client Info		17701	17309	16933
	Oil Age	hrs	Client Info		392	376	248
	Filter Age	hrs	Client Info		392	376	248
	Oil Changed		Client Info		N/A	Changed	Changed
	Filter Changed		Client Info		N/A	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAD	Iron	nnm	ASTM D5185m	> 100	5	8	1
WEAR		ppm					4
All component wear rates are normal.	Chromium Nickel	ppm	ASTM D5185m		<1 0	<1	0
		ppm	ASTM D5185m	>4		<1	0
	Titanium	ppm	ASTM D5185m	. 0	0	<1	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		2	<1	1
	Lead	ppm	ASTM D5185m		<1	<1	0
	Copper Tin	ppm	ASTM D5185m		<1	<1	
		ppm	ASTM D5185m	>15	<1	<1	0
	Vanadium White Metal	ppm	ASTM D5185m	NONE	0 NONE	0	0 NONE
	Yellow Metal	scalar	*Visual *Visual	NONE	NONE NONE	NONE NONE	NONE
<u></u>		scalar	Visuai		NONE	INOINL	INOINL
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8	6	6
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1	1	0
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.4	7.8
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	18.1	18.6
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium		ASTM D5185m		<1	0	0
-LOID CONDITION	Boron	ppm	ASTM D5185m		3	4	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.		ppm	ASTM D5185m		0		8
	Barium	ppm			57	0 62	0 56
	Monganona	ppm	ASTM D5185m ASTM D5185m			<1	0
	Manganese	ppm			<1		
	Magnesium Calcium	ppm	ASTM D5185m		944	975	871
		ppm	ASTM D5185m ASTM D5185m		986 1023	952 872	971 951
	Phosphorus	ppm					
	Zinc	ppm	ASTM D5185m		1262	1244	1169
	Sulfur	ppm Abo/1mm	ASTM D5185m	- OF	2865	2582	2769
	Oxidation	Abs/.1mm	*ASTM D7414	><0	17.0	15.3	16.0
	Base Number (BN)	mg KOH/g	ASTM D2896		8.6	8.5	8.5







Certificate L2367

Laboratory Sample No. Unique Number : 10903223

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06104993

: WC0906055

Received **Tested** 

: 01 Mar 2024 : 01 Mar 2024 - Wes Davis Diagnosed

: 29 Feb 2024

Test Package : MOB 1 ( Additional Tests: TBN ) 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.

**C.L. BENTON & SONS INC** 

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Contact: NEIL neil@clbenton.com

T: F:

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