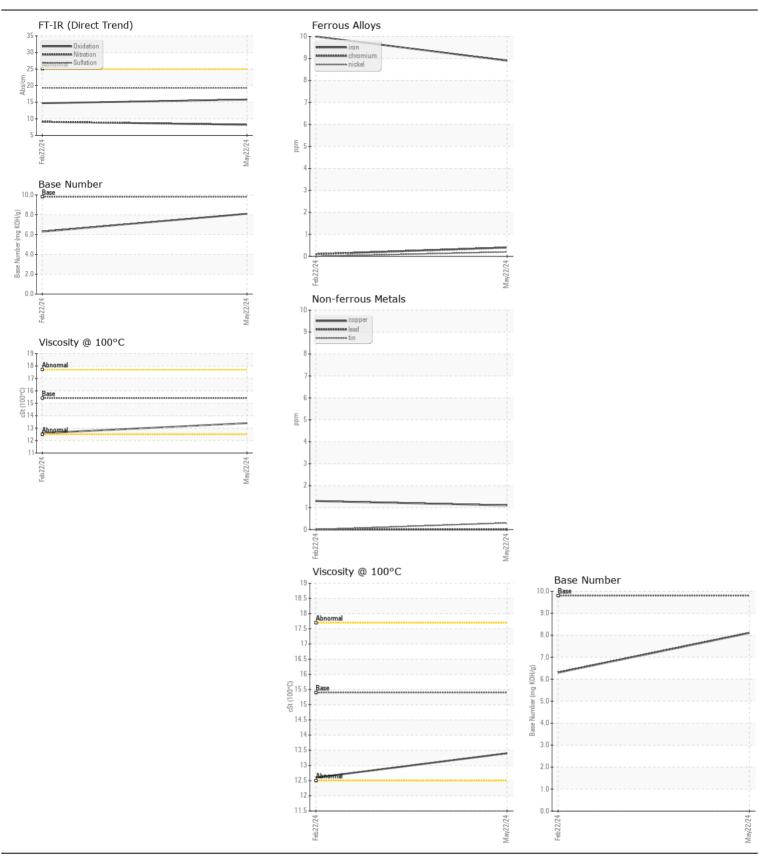
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id

CRANE CARRIER 8098037

Diesel Engine

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Resample at the next service interval to monitor.	Sample Number		Client Info		PE0003927	PE0003937	
	Sample Date		Client Info		22 May 2024	22 Feb 2024	
	Machine Age	hrs	Client Info		2499	1840	
	Oil Age	hrs	Client Info		659	362	
	Filter Age	hrs	Client Info		659	362	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
/EAR	Iron	ppm	ASTM D5185m	>100	9	10	
	Chromium	ppm	ASTM D5185m	>20	<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		4	2	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		1	1	
	Tin	ppm	ASTM D5185m		- <1	0	
	Vanadium	ppm	ASTM D5185m	710	<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
ONTAMINATION	0:::		AOTA DEADE	05	• • • • • • • • • • • • • • • • • • • •	4	
ONTAMINATION	Silicon	ppm	ASTM D5185m		3	4	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2	<1	
	Fuel		WC Method		<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	0	NEG	NEG	
	Soot %	% Ala a /ave	*ASTM D7844		0.2	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	8.2	9.1	
	Sulfation	Abs/.1mm	*ASTM D7415		19.3	19.3	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m		4	2	
	Boron	ppm	ASTM D5185m	0	5	55	
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	0	0	
	Molybdenum	ppm	ASTM D5185m	60	52	6	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	1010	964	713	
	Calcium	ppm	ASTM D5185m		1123	1349	
	Phosphorus	ppm	ASTM D5185m		1054	650	
	Zinc	ppm	ASTM D5185m		1278	789	
	Sulfur	ppm	ASTM D5185m		3366	2810	
	Oxidation	Abs/.1mm	*ASTM D7414		15.8	14.7	
	Base Number (BN)		ASTM D2896		8.1	6.3	
	(211)			15.4	13.4	12.6	







Certificate L2367

Laboratory Sample No.

Lab Number : 06222205 Unique Number : 11100402

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PE0003927 Received **Tested**

Diagnosed

: 28 Jun 2024 : 28 Jun 2024 - Don Baldridge Test Package: FLEET (Additional Tests: FT-IR, ICP, KV100, SCREEN, TBN)

: 27 Jun 2024

To discuss this sample report, contact Customer Service at 1-800-237-1369.

7343 E MARINGAL WAY S SEATTLE, WA US 98108 Contact: KAITLIN KROBATH

kaitlink@cgcompost.com T: (206)832-3067

CEDAR GROVE

* - 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)