WEAR CONTAMINATION FLUID CONDITION

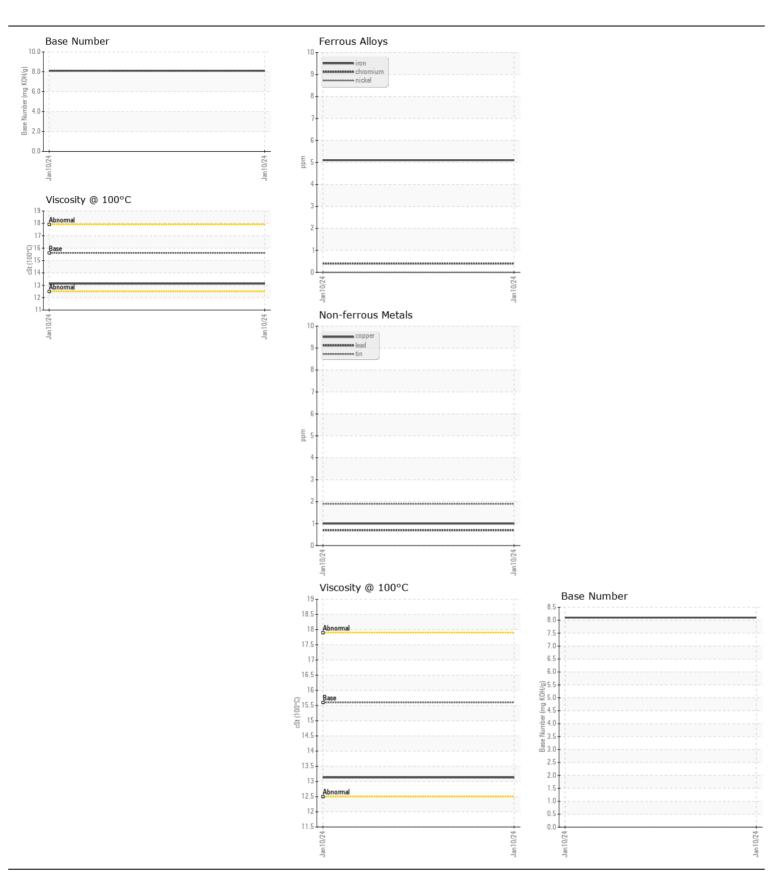
NORMAL NORMAL NORMAL

Machine Id

## **LIEBHERR ATC-1300**

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		LH0236074		
	Sample Date		Client Info		10 Jan 2024		
	Machine Age	hrs	Client Info		3736		
	Oil Age	hrs	Client Info		192		
	Filter Age	hrs	Client Info		192		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAD			AOTA DE 40E	400	_		
WEAR	Iron	ppm	ASTM D5185m		5		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>5	0		
	Titanium	ppm	ASTM D5185m	. 0	<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		1		
	Tin Vanadium	ppm	ASTM D5185m	>0	2		
	White Metal	ppm	ASTM D5185m	NONE	<1 NONE		
		scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>60	8		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2		
	Fuel	%	ASTM D3524	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.1		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	16.1		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
ELLUD CONDITION	Codium	nnm	ACTM DE10E		2		
FLUID CONDITION	Sodium Boron	ppm	ASTM D5185m ASTM D5185m		2 26		
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				
	Barium	ppm			0 62		
	Molybdenum	ppm	ASTM D5185m ASTM D5185m				
	Manganese Magnesium	ppm			<1 759		
	Calcium	ppm	ASTM D5185m ASTM D5185m		758 1208		
		ppm	ASTM D5185m		931		
	Phosphorus Zinc	ppm	ASTM D5185m		1208		
	Sulfur	ppm	ASTM D5185m		3118		
	Oxidation	Abs/.1mm	*ASTM D7414	>25			
				>20	12.5 8 1		
	Base Number (BN)	mg KOH/g	ASTM D2896	15.6	8.1		







Laboratory

Sample No. Lab Number **Unique Number** 

: LH0236074 : 06061842 : 10833224

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 16 Jan 2024 Diagnosed

: 23 Jan 2024 Diagnostician : Wes Davis

Test Package : CONST ( Additional Tests: FuelDilution, 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

**PACE FIELD SERVICES LLC** 

6040 FAUDREE RD, SUITE 104A #219 ODESSA, TX

US 79765 Contact: ACCOUNTING

accounting@pacefieldservices.net T: (432)312-7707

Contact/Location: ACCOUNTING? - PACODE