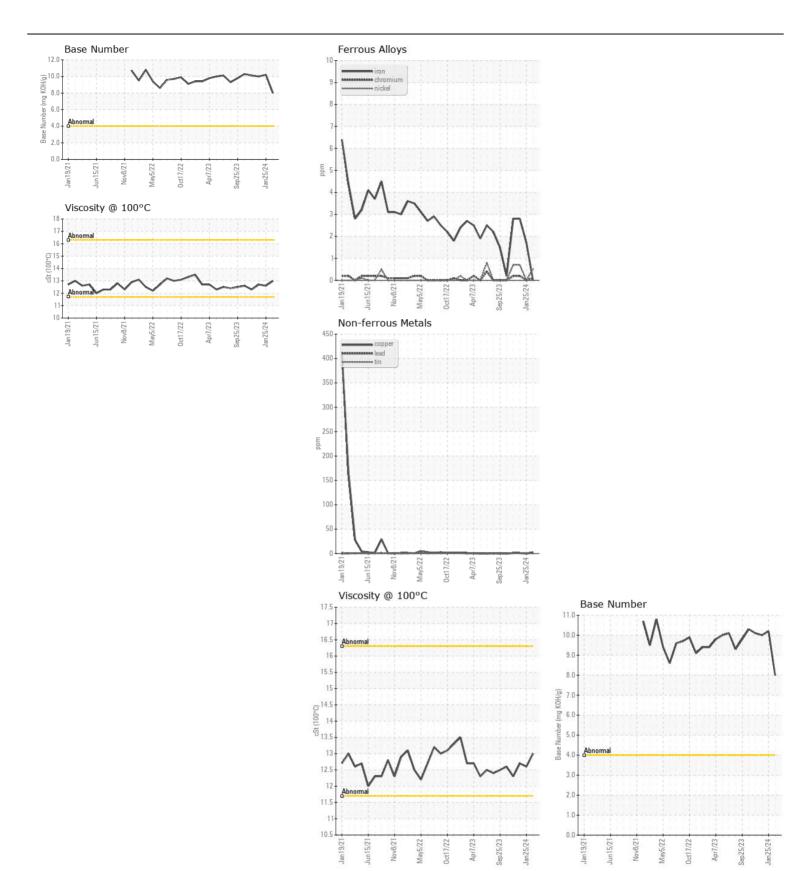
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Ascendum Machinery VOLVO L180H 14 (S/N 5269)

Component Diesel Engine

VOLVO VDS-4.5 Premium Motor Oil 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		ASC0007606	ASC0007966	ASC0000512
Resample at the next service interval to monitor.	Sample Date		Client Info		27 Feb 2024	25 Jan 2024	29 Dec 2023
	Machine Age	hrs	Client Info		15558	15040	14523
	Oil Age	hrs	Client Info		518	517	1006
	Filter Age	hrs	Client Info		0	0	554
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	0	2	3
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	<1	0	<1
	Nickel	ppm	ASTM D5185m	>10	<1	0	<1
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>10	2	1	2
	Lead	ppm	ASTM D5185m	>20	<1	<1	<1
	Copper	ppm	ASTM D5185m	>15	2	0	<1
	Tin	ppm	ASTM D5185m	>10	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	3	3	4
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2	2	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	0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	7.9	6.6	6.5
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	21.7	22.5
	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	Sodium	ppm	ASTM D5185m		1	2	0
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		48	56	47
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		46	40	38
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		303	524	494
	Calcium	ppm	ASTM D5185m		1817	1681	1649
	Phosphorus	ppm	ASTM D5185m		984	977	838
	Zinc	ppm	ASTM D5185m		1206	1145	1094
	Sulfur	ppm	ASTM D5185m	05	2233	2973	3217
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	20.5	21.5
	Base Number (BN)				8.0	10.2	10.0
	Visc @ 100°C	cSt	ASTM D445		13.0	12.6	12.7







Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No.

Lab Number : 06104961 Unique Number : 10903191

: ASC0007606

Received **Tested**

: 29 Feb 2024 : 01 Mar 2024 Diagnosed

: 04 Mar 2024 - Sean Felton

Test Package : CONST (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. **EGGER WOOD PRODUCTS**

300 EGGER PARKWAY LINWOOD, NC US 27299

Contact: HELMUT THOMAY helmut.thomay@egger.com

T: F:

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