



ASCENDUM

OIL ANALYSIS REPORT



Area
Ascendum Machinery/250 Hour CSA
 Machine Id
CATERPILLAR 953C 1500 (S/N BBX00532)
 Component
Diesel Engine
 Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0002637	VCP0006066	---
Sample Date		Client Info		20 Dec 2023	22 Feb 2023	---
Machine Age	hrs	Client Info		8432	7955	---
Oil Age	hrs	Client Info		477	7955	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	19	28	---
Chromium	ppm	ASTM D5185m	>20	0	1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>25	5	4	---
Lead	ppm	ASTM D5185m	>40	<1	3	---
Copper	ppm	ASTM D5185m	>330	1	3	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

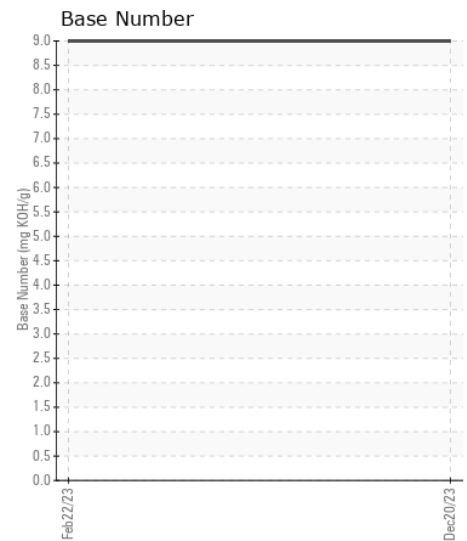
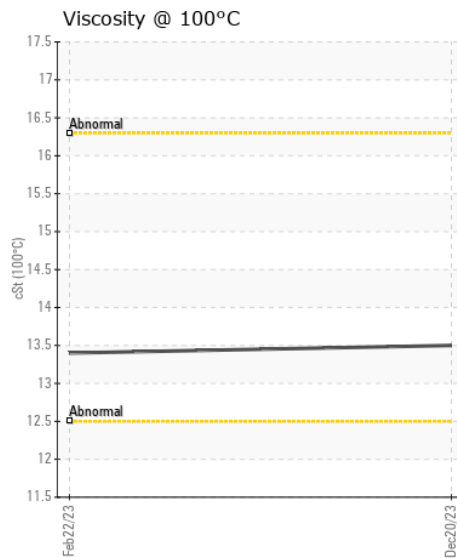
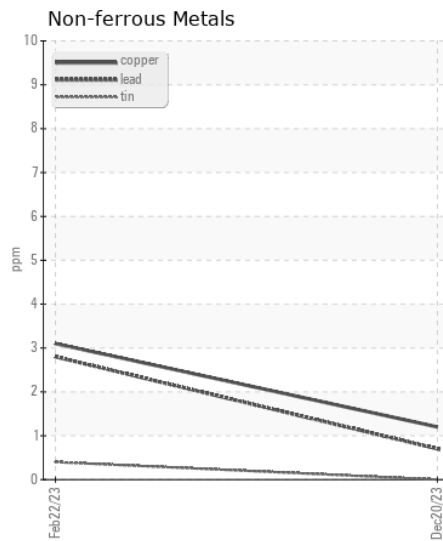
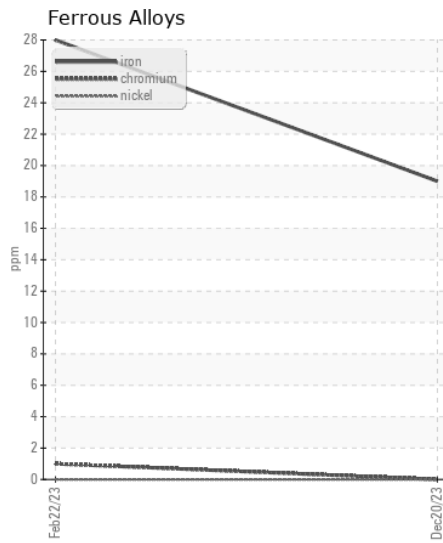
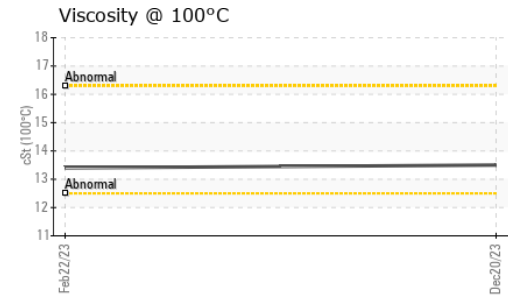
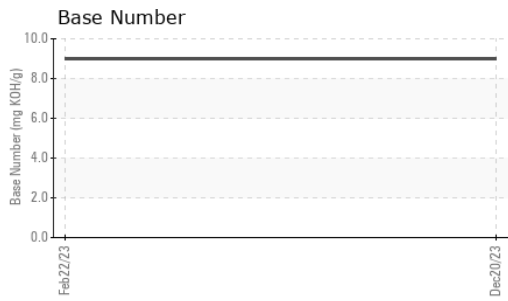
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>25	10	8	---
Potassium	ppm	ASTM D5185m	>20	2	1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	8.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	20.7	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	MODER	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	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		5	1	---
Boron	ppm	ASTM D5185m		18	15	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		63	63	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		973	939	---
Calcium	ppm	ASTM D5185m		1235	1264	---
Phosphorus	ppm	ASTM D5185m		1068	1082	---
Zinc	ppm	ASTM D5185m		1392	1329	---
Sulfur	ppm	ASTM D5185m		3127	3396	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	17.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.0	9.0	---
Visc @ 100°C	cSt	ASTM D445		13.5	13.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0002637 **Received** : 11 Jan 2024
Lab Number : 06057654 **Diagnosed** : 12 Jan 2024
Unique Number : 10823603 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: TBN)

TRIANGLE GRADING AND PAVING INC
 1521 Huffman Mill Rd
 BURLINGTON, NC
 US 27216
 Contact: ADAM CORBETT
 wacorbett@trianglegradingpaving.com

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)

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