



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO 002374 (S/N 314224)
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0800514	WC0724616	WC0724681
Sample Date		Client Info		05 Dec 2023	08 Aug 2023	03 May 2023
Machine Age	hrs	Client Info		4262	3820	3299
Oil Age	hrs	Client Info		1500	521	533
Filter Age	hrs	Client Info		442	521	533
Oil Changed		Client Info		Changed	Not Changd	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	11	11	8
Chromium	ppm	ASTM D5185m	>10	2	1	1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	2
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>75	44	39	34
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

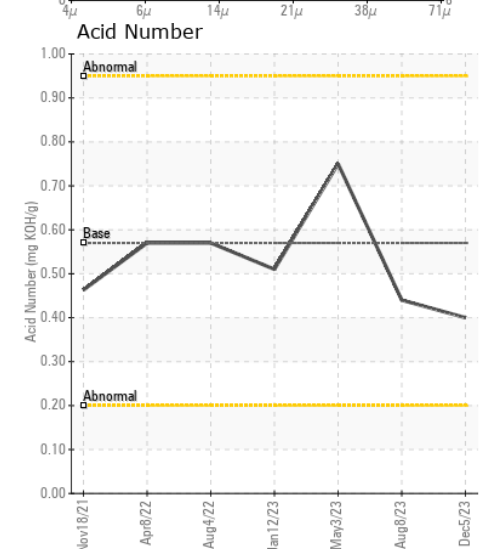
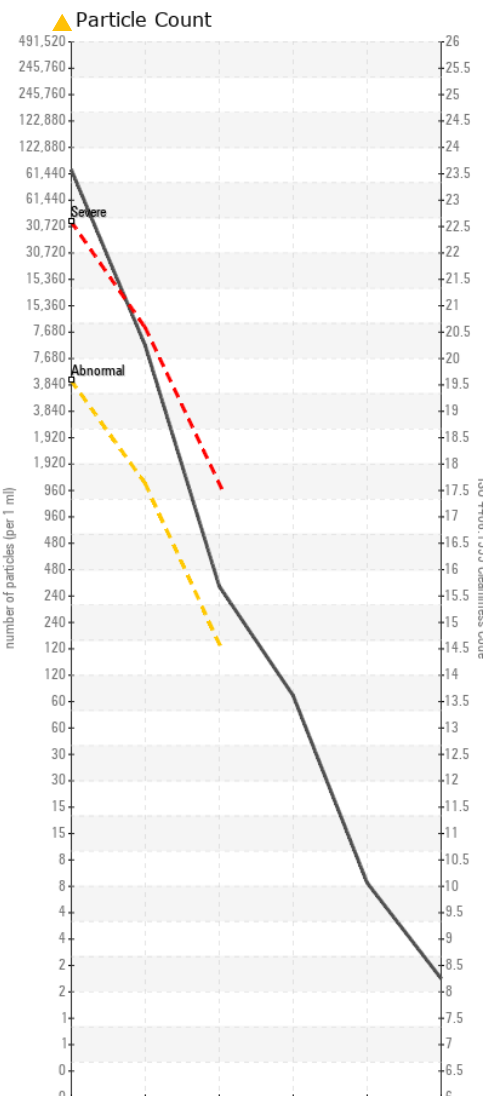
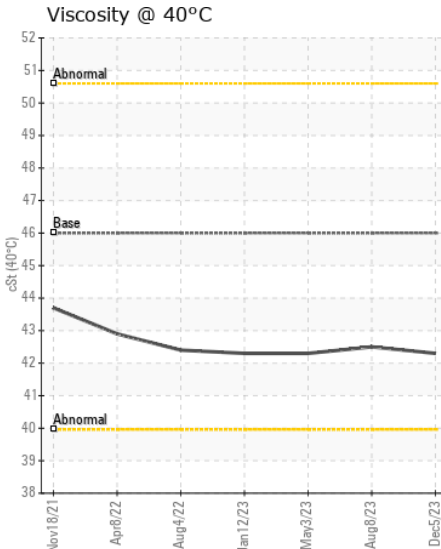
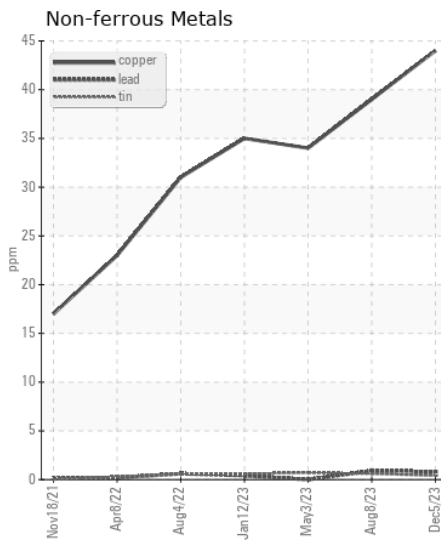
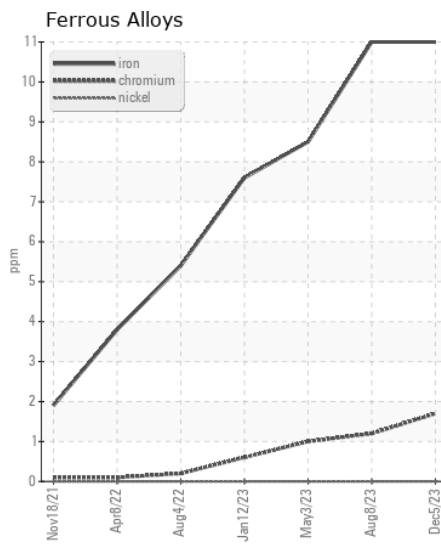
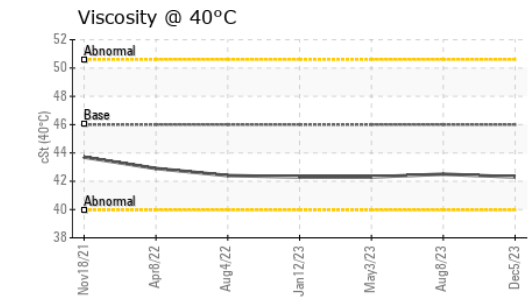
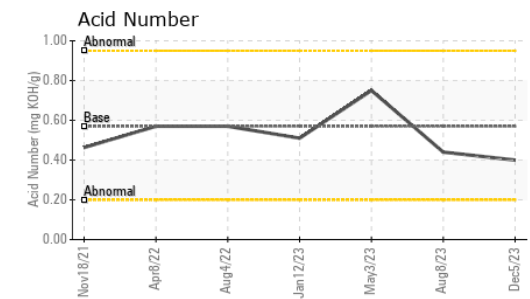
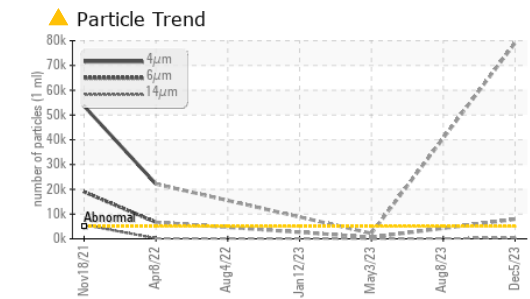
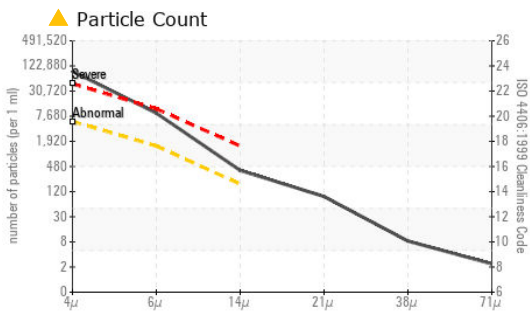
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	7	7	4
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 79093	---	2173
Particles >6µm		ASTM D7647	>1300	▲ 7914	---	628
Particles >14µm		ASTM D7647	>160	▲ 340	---	36
Particles >21µm		ASTM D7647	>40	▲ 81	---	6
Particles >38µm		ASTM D7647	>10	7	---	0
Particles >71µm		ASTM D7647	>3	2	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/20/16	---	18/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	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

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	1
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	2	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	25	8	8	4
Calcium	ppm	ASTM D5185m	200	87	88	74
Phosphorus	ppm	ASTM D5185m	300	452	393	399
Zinc	ppm	ASTM D5185m	370	465	453	470
Sulfur	ppm	ASTM D5185m	2500	1156	1080	1192
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.40	0.44	0.75
Visc @ 40°C	cSt	ASTM D445	46	42.3	42.5	42.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0800514 Recieved : 12 Jan 2024
 Lab Number : 06060169 Diagnosed : 16 Jan 2024
 Unique Number : 10831551 Diagnostician : Jonathan Hester
 Test Package : CONST

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)

CJ MILLER LLC
 2903 DEDE RD
 FINKSBURG, MD
 US 21048
 Contact: JOE ROSS
 jross@cjmillerllc.com
 T: (410)239-8006
 F: (410)239-1051