



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Ascendum Machinery/250 Hour Service
 Machine Id
SANDVIK 64500
 Component
Hydraulic System
 Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007136	ASC0001408	ASC0000311
Sample Date		Client Info		08 Apr 2024	11 Sep 2023	12 May 2023
Machine Age	hrs	Client Info		6029	5044	4617
Oil Age	hrs	Client Info		4157	1872	3433
Filter Age	hrs	Client Info		0	0	3433
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<1	3	2
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	0	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	7	12	11
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

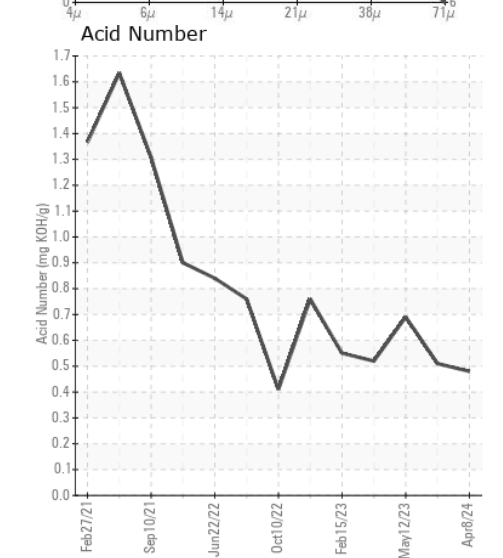
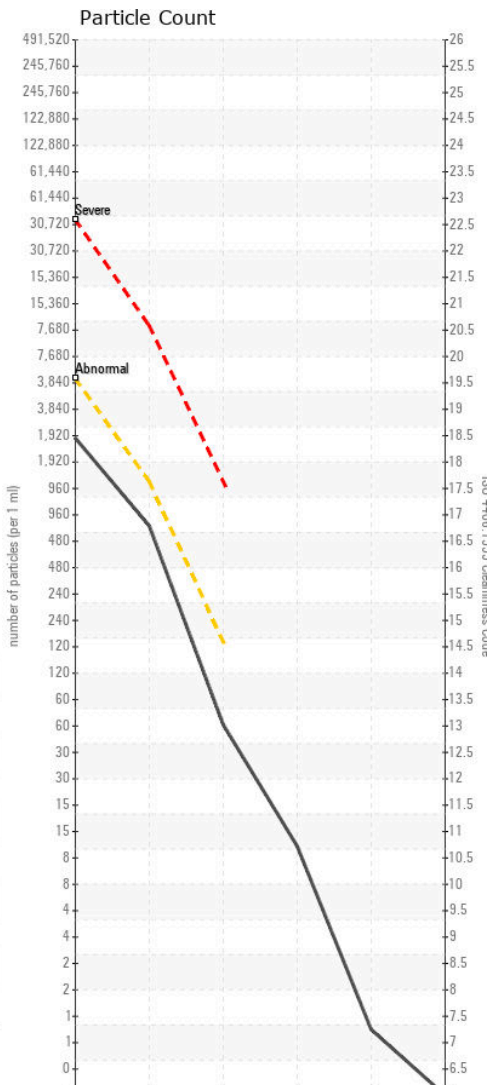
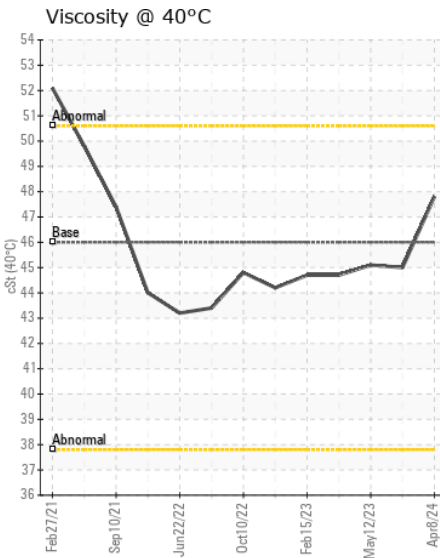
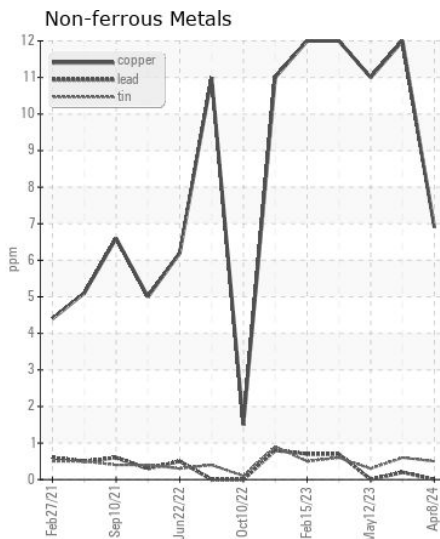
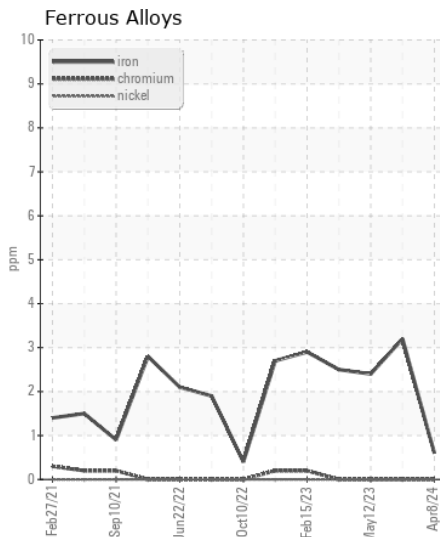
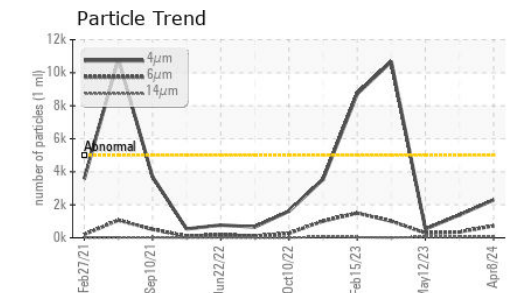
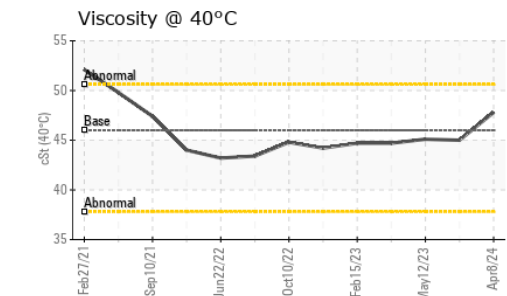
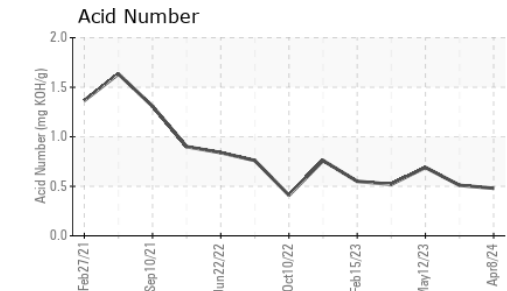
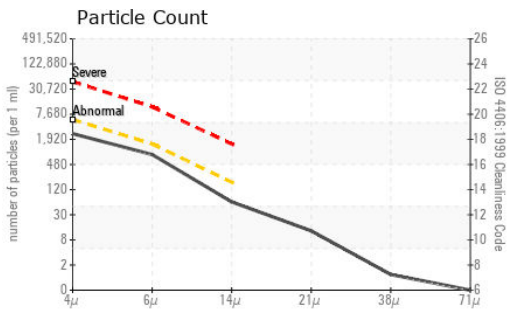
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	3	2
Potassium	ppm	ASTM D5185m	>20	0	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2297	1385	531
Particles >6µm		ASTM D7647	>1300	728	351	289
Particles >14µm		ASTM D7647	>160	54	44	49
Particles >21µm		ASTM D7647	>40	11	10	17
Particles >38µm		ASTM D7647	>10	1	1	3
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/17/13	18/16/13	16/15/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
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	0.2%

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	2	0
Boron	ppm	ASTM D5185m	14	5	10	8
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	2	2
Manganese	ppm	ASTM D5185m	0.0	0	<1	0
Magnesium	ppm	ASTM D5185m	2.6	15	16	19
Calcium	ppm	ASTM D5185m	49	1153	1259	1109
Phosphorus	ppm	ASTM D5185m	354	620	567	602
Zinc	ppm	ASTM D5185m	419	442	457	471
Sulfur	ppm	ASTM D5185m	3719	1649	1788	1794
Acid Number (AN)	mg KOH/g	ASTM D8045		0.48	0.51	0.69
Visc @ 40°C	cSt	ASTM D445	46	47.8	45.0	45.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0007136

Lab Number : 06148584

Unique Number : 10978662

Test Package : CONST

Received : 15 Apr 2024

Tested : 16 Apr 2024

Diagnosed : 16 Apr 2024 - Wes Davis

MARTIN MARIETTA

4551 BEATTIES FORD ROAD

CHARLOTTE, NC

US 28216

Contact: TIM BYLES

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T: (704)392-1333

F:

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)