



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Ascendum Machinery/250 Hour Service
 Machine Id
SANDVIK 56875
 Component
Hydraulic System
 Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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		ASC0009555	ASC0005255	ASC0000022
Sample Date		Client Info		20 May 2024	20 Oct 2023	24 Jul 2023
Machine Age	hrs	Client Info		9895	8969	8516
Oil Age	hrs	Client Info		7009	2886	2433
Filter Age	hrs	Client Info		0	0	473
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	2	<1	3
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	2	<1
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	9	10	8
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

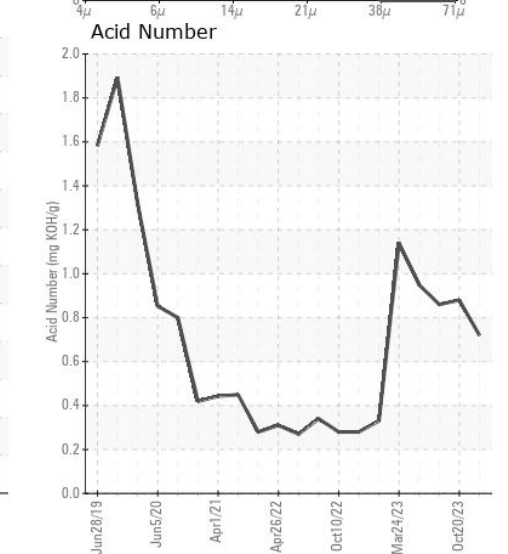
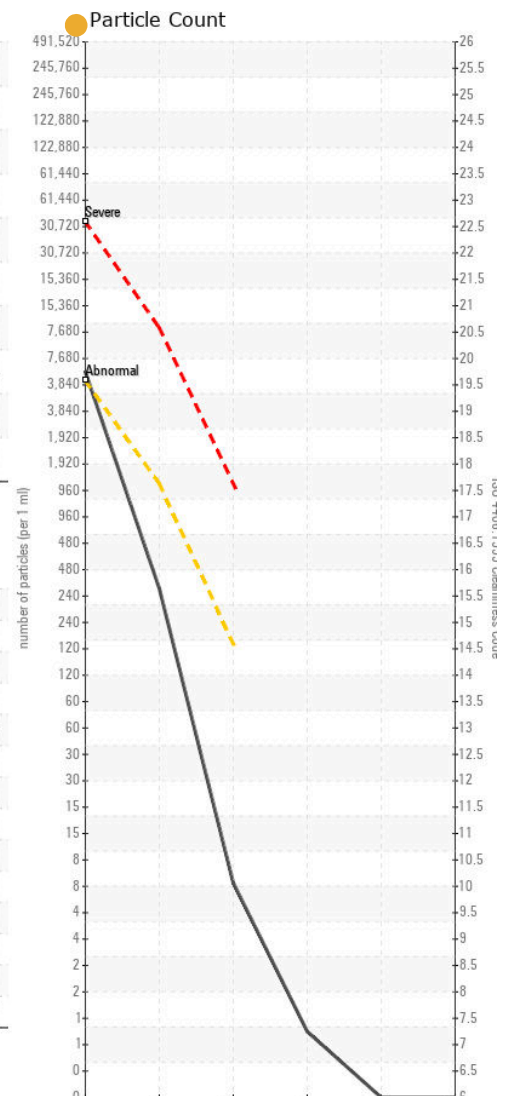
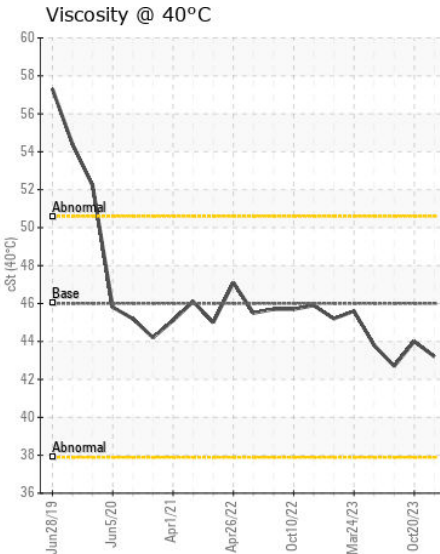
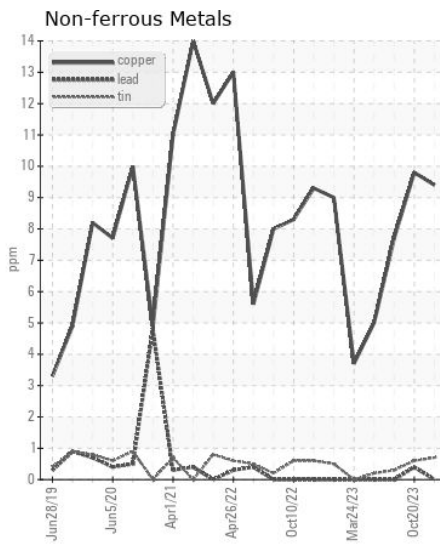
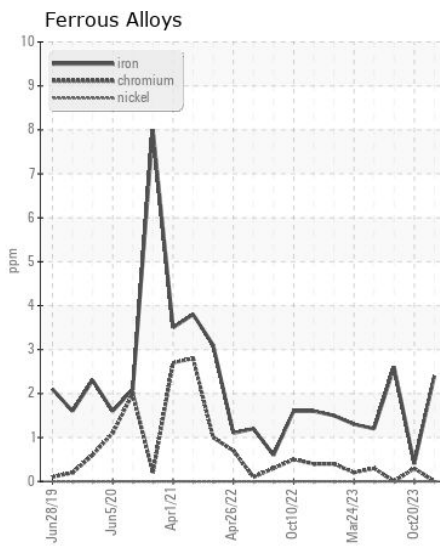
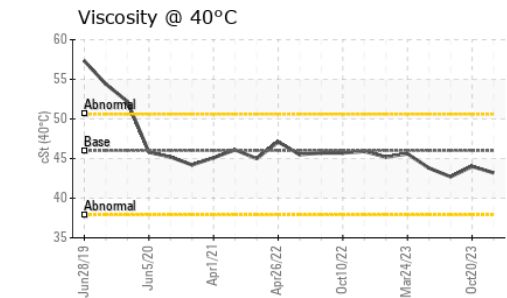
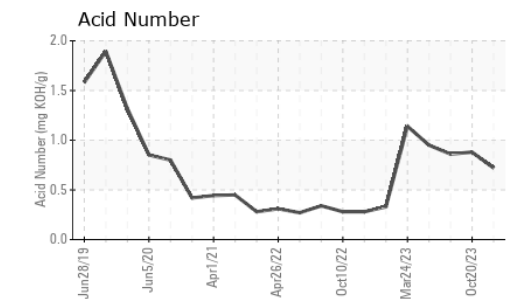
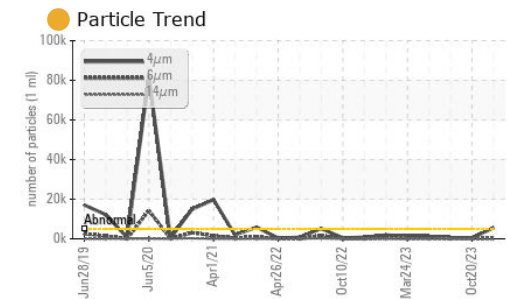
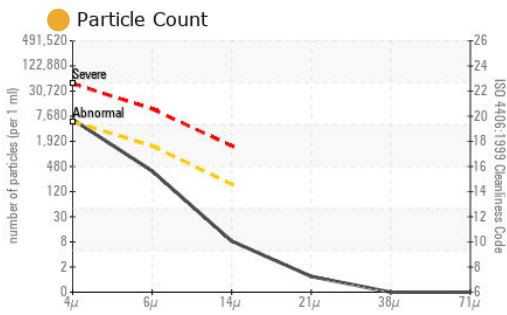
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	5	3	3
Potassium	ppm	ASTM D5185m	>20	0	2	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	5615	419	605
Particles >6µm		ASTM D7647	>1300	330	101	130
Particles >14µm		ASTM D7647	>160	7	10	13
Particles >21µm		ASTM D7647	>40	1	3	5
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/16/10	16/14/10	16/14/11
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	MODER	LIGHT	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		1	0	0
Boron	ppm	ASTM D5185m	14	3	4	3
Barium	ppm	ASTM D5185m	0.0	0	9	1
Molybdenum	ppm	ASTM D5185m	0.0	3	4	4
Manganese	ppm	ASTM D5185m	0.0	<1	0	0
Magnesium	ppm	ASTM D5185m	2.6	28	30	32
Calcium	ppm	ASTM D5185m	49	1760	1604	1798
Phosphorus	ppm	ASTM D5185m	354	619	563	610
Zinc	ppm	ASTM D5185m	419	713	684	738
Sulfur	ppm	ASTM D5185m	3719	2859	2619	2703
Acid Number (AN)	mg KOH/g	ASTM D8045		0.72	0.88	0.86
Visc @ 40°C	cSt	ASTM D445	46	43.2	44.0	42.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009555
Lab Number : 06190977
Unique Number : 11047729
Test Package : CONST
Received : 24 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Don Baldrige

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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