



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery
Machine Id
VOLVO L120H RL71 (S/N L120HV632898)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (37 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011125	ASC0010253	ASC0002520
Sample Date		Client Info		16 Jun 2024	31 Mar 2024	21 Jan 2024
Machine Age	hrs	Client Info		5572	5015	4495
Oil Age	hrs	Client Info		1572	1015	495
Filter Age	hrs	Client Info		1572	1015	495
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	6	5	5
Chromium	ppm	ASTM D5185m	>20	4	4	4
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	>20	2	2	<1
Lead	ppm	ASTM D5185m	>20	1	1	1
Copper	ppm	ASTM D5185m	>150	4	3	4
Tin	ppm	ASTM D5185m	>20	0	<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

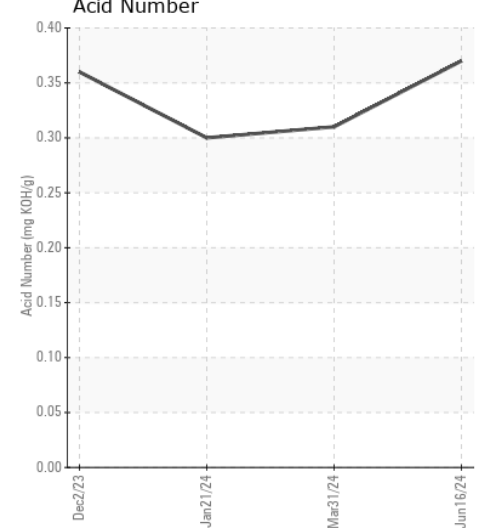
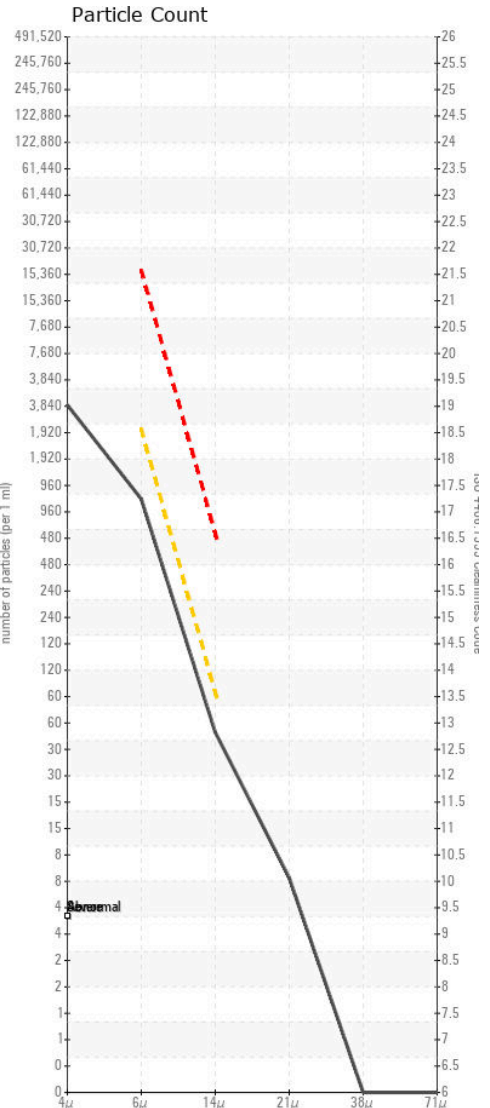
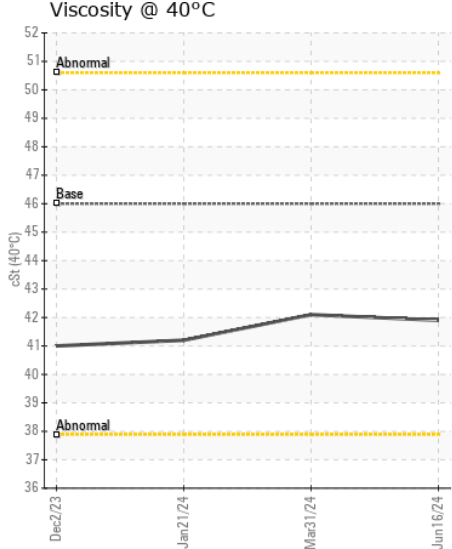
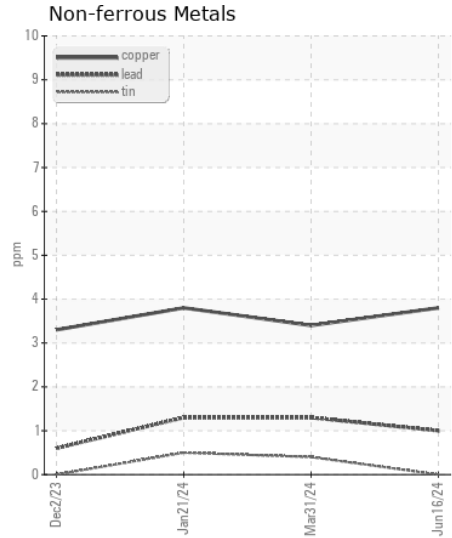
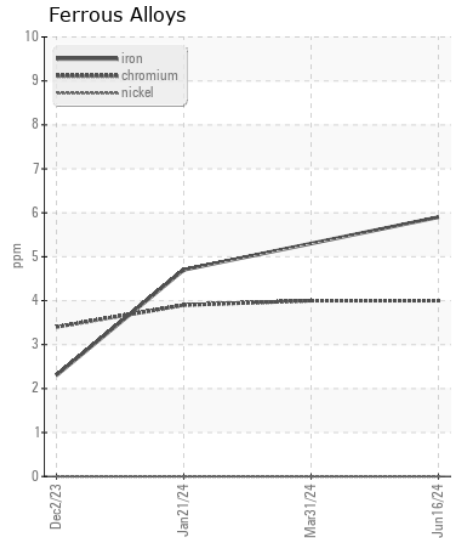
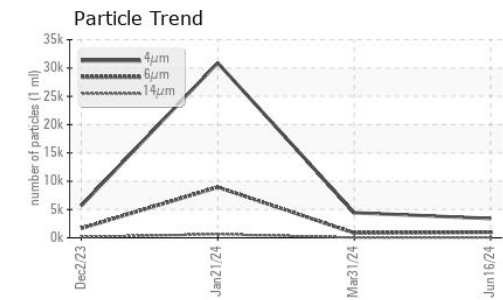
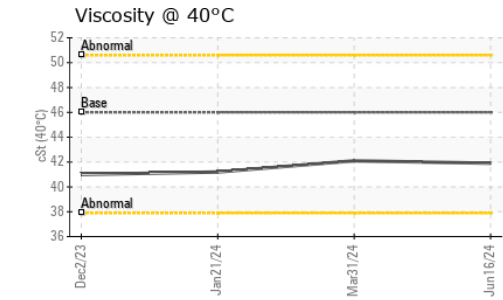
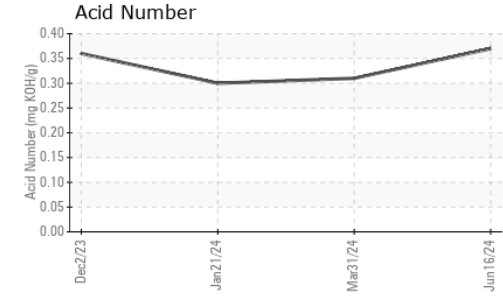
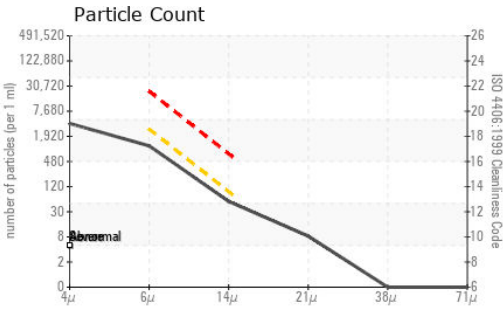
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	9	8	10
Potassium	ppm	ASTM D5185m	>20	9	9	10
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		3408	4433	30891
Particles >6µm		ASTM D7647	>2500	996	859	▲ 8947
Particles >14µm		ASTM D7647	>80	47	35	▲ 627
Particles >21µm		ASTM D7647	>20	7	8	▲ 128
Particles >38µm		ASTM D7647	>4	0	0	3
Particles >71µm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/17/13	19/17/12	▲ 22/20/16
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

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

Sodium	ppm	ASTM D5185m		2	3	6
Boron	ppm	ASTM D5185m	14	16	17	21
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	9	9	12
Manganese	ppm	ASTM D5185m	0.0	0	0	<1
Magnesium	ppm	ASTM D5185m	2.6	23	23	32
Calcium	ppm	ASTM D5185m	49	200	205	245
Phosphorus	ppm	ASTM D5185m	354	296	277	322
Zinc	ppm	ASTM D5185m	419	380	352	377
Sulfur	ppm	ASTM D5185m	3719	1482	1480	1685
Acid Number (AN)	mg KOH/g	ASTM D8045		0.37	0.31	0.30
Visc @ 40°C	cSt	ASTM D445	46	41.9	42.1	41.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011125 **Received** : 19 Jun 2024
Lab Number : 06214599 **Tested** : 20 Jun 2024
Unique Number : 11087463 **Diagnosed** : 20 Jun 2024 - Wes Davis
Test Package : CONST

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Certificate L2367
 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)