CONST

ASCENDUM

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Ascendum Machinery 500HR CSA/Lemon Springs, NC
Machine Id
VOLVO EC350E 2128 (S/N 310689)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (60 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

The iron level is abnormal. All other component wear rates are normal.

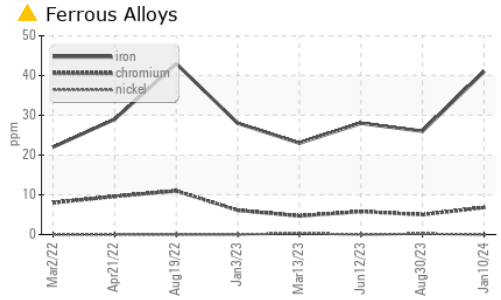
CONTAMINATION

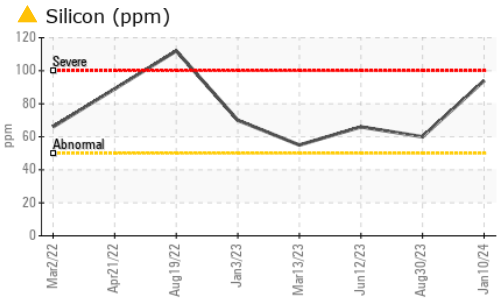
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The amount and size of particulates present in the system are acceptable.

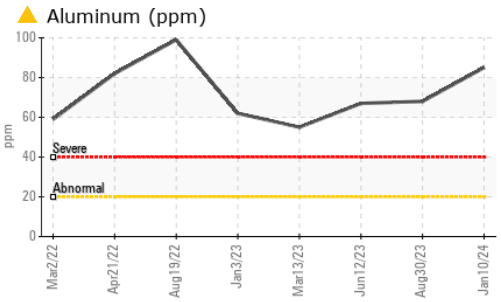
FLUID CONDITION

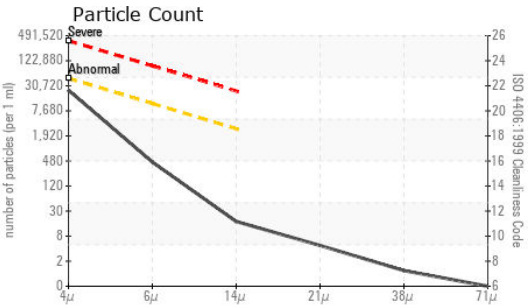
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

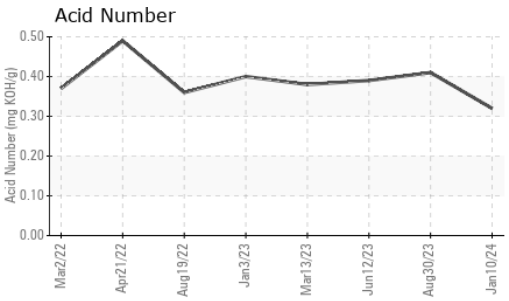
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006484	VCP423903	VCP418415
Sample Date		Client Info		10 Jan 2024	30 Aug 2023	12 Jun 2023
Machine Age	hrs	Client Info		5958	5426	5040
Oil Age	hrs	Client Info		1958	0	0
Filter Age	hrs	Client Info		1958	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>25	▲ 41	▲ 26	▲ 28
Chromium	ppm	ASTM D5185m	>10	7	5	6
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		3	2	2
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 85	▲ 68	▲ 67
Lead	ppm	ASTM D5185m	>20	<1	<1	<1
Copper	ppm	ASTM D5185m	>150	23	22	23
Tin	ppm	ASTM D5185m	>10	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
Silicon	ppm	ASTM D5185m	>50	▲ 94	▲ 60	▲ 66
Potassium	ppm	ASTM D5185m	>20	2	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>40000	20945	32094	37583
Particles >6µm		ASTM D7647	>10000	399	1650	4056
Particles >14µm		ASTM D7647	>2500	15	37	88
Particles >21µm		ASTM D7647	>640	4	14	17
Particles >38µm		ASTM D7647	>160	1	1	0
Particles >71µm		ASTM D7647	>40	0	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	22/16/11	22/18/12	22/19/14
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
Sodium	ppm	ASTM D5185m		<1	0	0
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	2	0
Molybdenum	ppm	ASTM D5185m	0.0	<1	<1	0
Manganese	ppm	ASTM D5185m	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	5	6	5
Calcium	ppm	ASTM D5185m	49	57	69	50
Phosphorus	ppm	ASTM D5185m	354	324	319	317
Zinc	ppm	ASTM D5185m	419	374	393	379
Sulfur	ppm	ASTM D5185m	3719	1153	1330	1405
Acid Number (AN)	mg KOH/g	ASTM D8045		0.32	0.41	0.39
Visc @ 40°C	cSt	ASTM D445	46	41.9	41.9	41.9

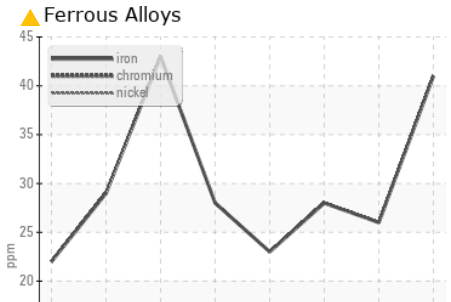


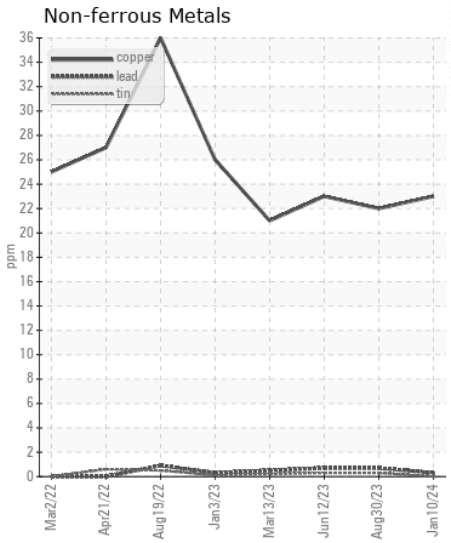


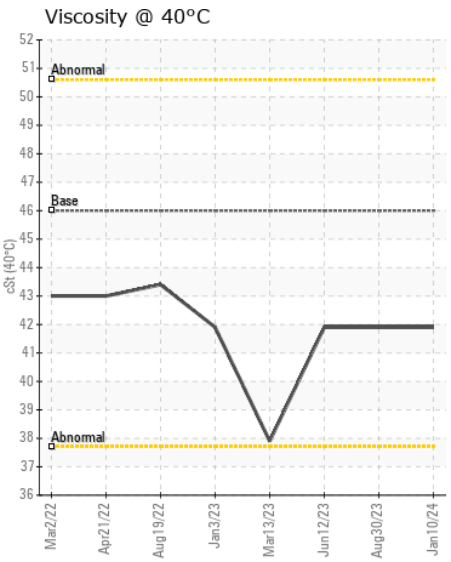


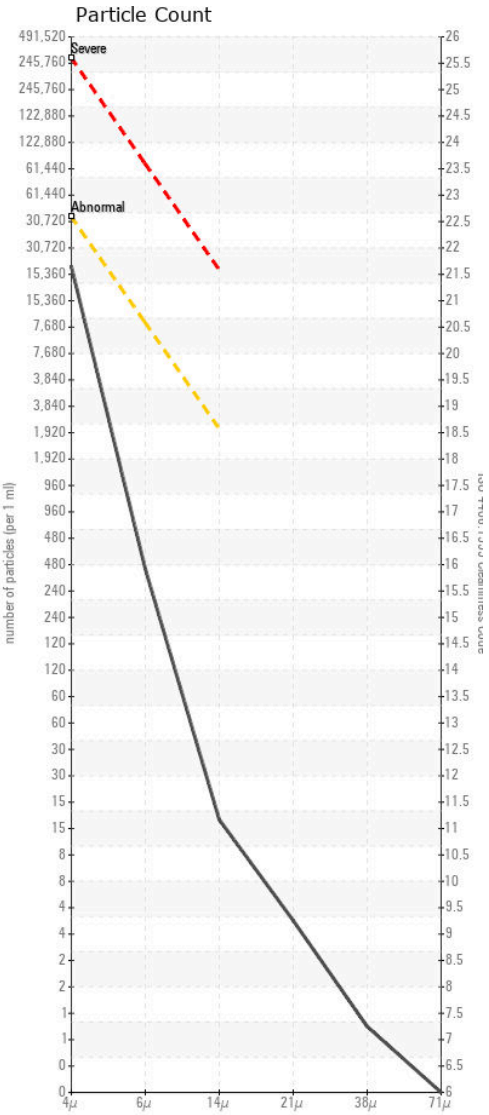


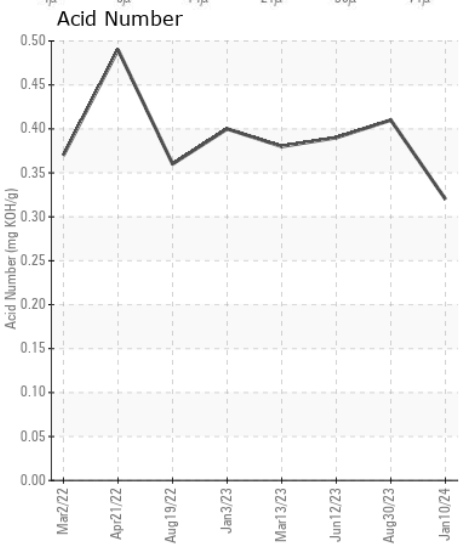












Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: ASC0006484	**Recieved**	: 17 Jan 2024
Lab Number	: 06062575	**Diagnosed**	: 19 Jan 2024
Unique Number	: 10833957	**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)

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