



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/250 Hour CSA
Machine Id
CATERPILLAR D6R 1353 (S/N 5LN03564)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (13 GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

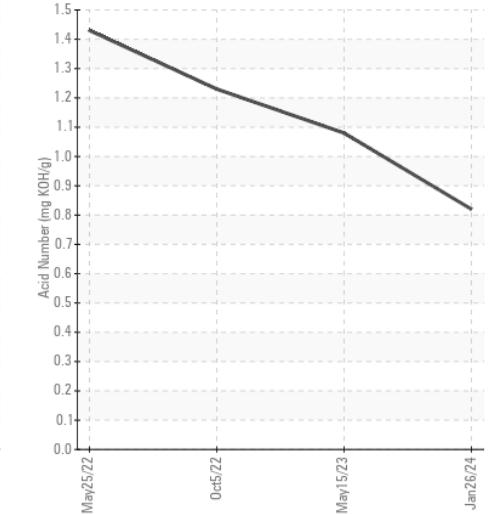
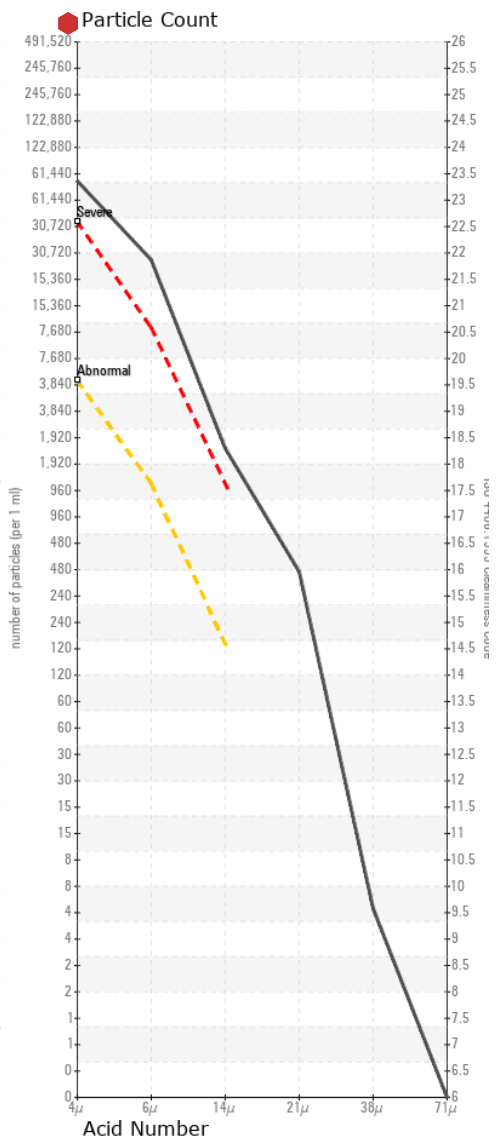
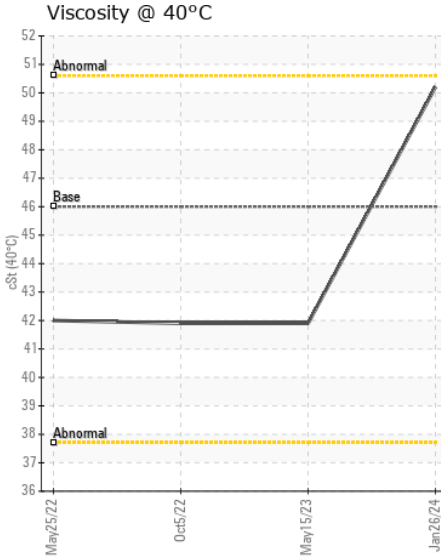
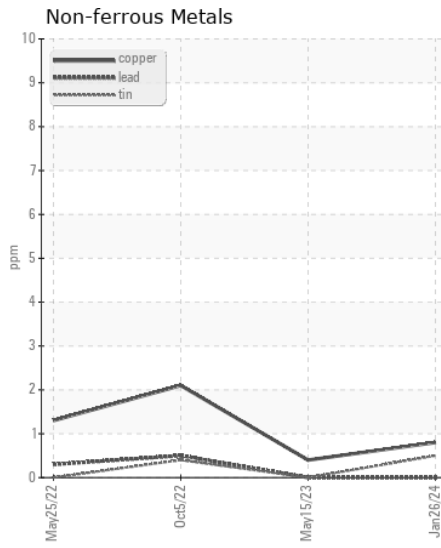
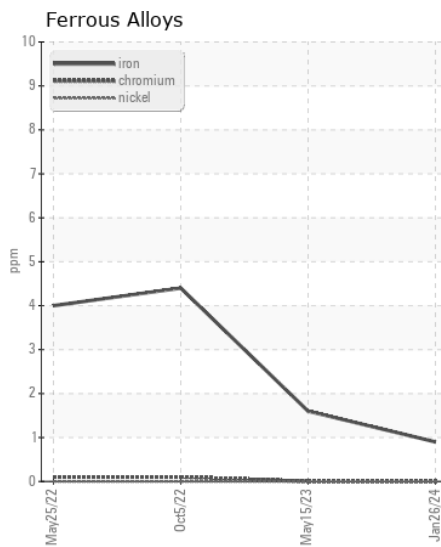
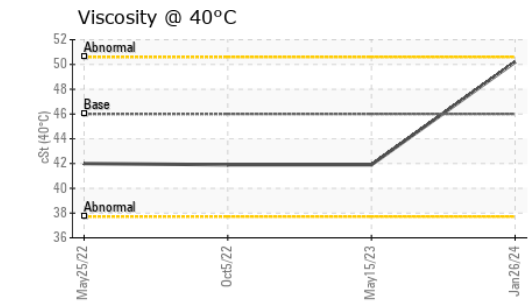
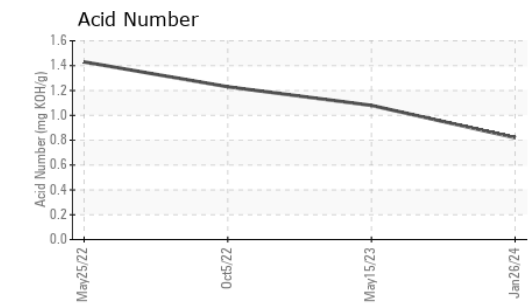
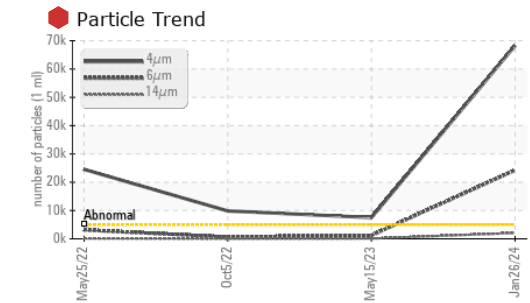
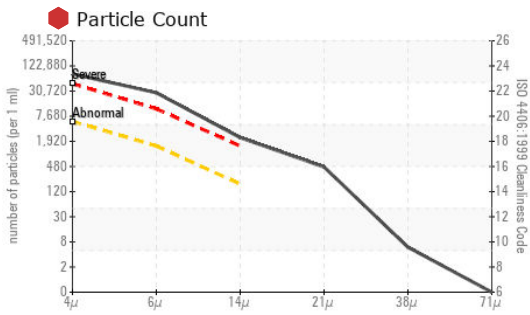
CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007853	ASC0000412	VCP0002198
Sample Date		Client Info		26 Jan 2024	15 May 2023	05 Oct 2022
Machine Age	hrs	Client Info		19677	19376	18713
Oil Age	hrs	Client Info		19677	19376	18713
Filter Age	hrs	Client Info		0	0	18713
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				SEVERE	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m	>20	<1	2	4
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	2	2
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	<1	<1	2
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	5	4	5
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	68256	7504	9845
Particles >6µm		ASTM D7647	>1300	24270	1231	618
Particles >14µm		ASTM D7647	>160	2064	73	22
Particles >21µm		ASTM D7647	>40	411	19	4
Particles >38µm		ASTM D7647	>10	5	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/22/18	20/17/13	20/16/12
Silt	scalar	*Visual	NONE	LIGHT	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	<1	0
Boron	ppm	ASTM D5185m	14	27	7	9
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	4	3
Manganese	ppm	ASTM D5185m	0.0	<1	0	<1
Magnesium	ppm	ASTM D5185m	2.6	18	124	399
Calcium	ppm	ASTM D5185m	49	1314	1576	1403
Phosphorus	ppm	ASTM D5185m	354	618	608	881
Zinc	ppm	ASTM D5185m	419	773	746	1087
Sulfur	ppm	ASTM D5185m	3719	2497	2514	3997
Acid Number (AN)	mg KOH/g	ASTM D8045		0.82	1.08	1.23
Visc @ 40°C	cSt	ASTM D445	46	50.2	41.9	41.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007853 **Received** : 31 Jan 2024
Lab Number : 06075652 **Diagnosed** : 01 Feb 2024
Unique Number : 10857743 **Diagnostician** : Wes Davis
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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