



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/250 Hour CSA
Machine Id
CATERPILLAR 326F 1740 (S/N WGL00946)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (46 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0005175	ASC0000296	VCP0007196
Sample Date		Client Info		29 Nov 2023	05 Jun 2023	26 Jan 2023
Machine Age	hrs	Client Info		8105	7542	7254
Oil Age	hrs	Client Info		8105	7542	7254
Filter Age	hrs	Client Info		0	7542	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	16	16	18
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	0	0
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	19	20	21
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

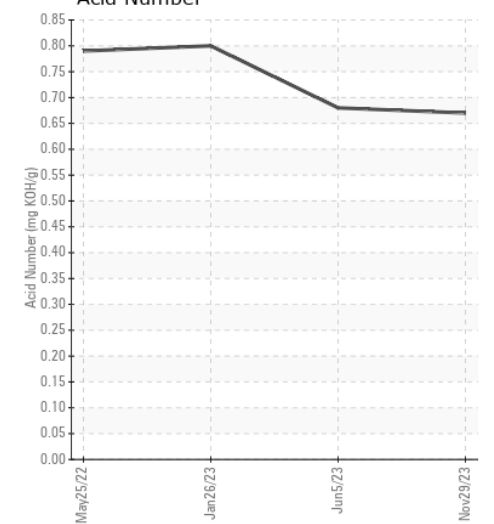
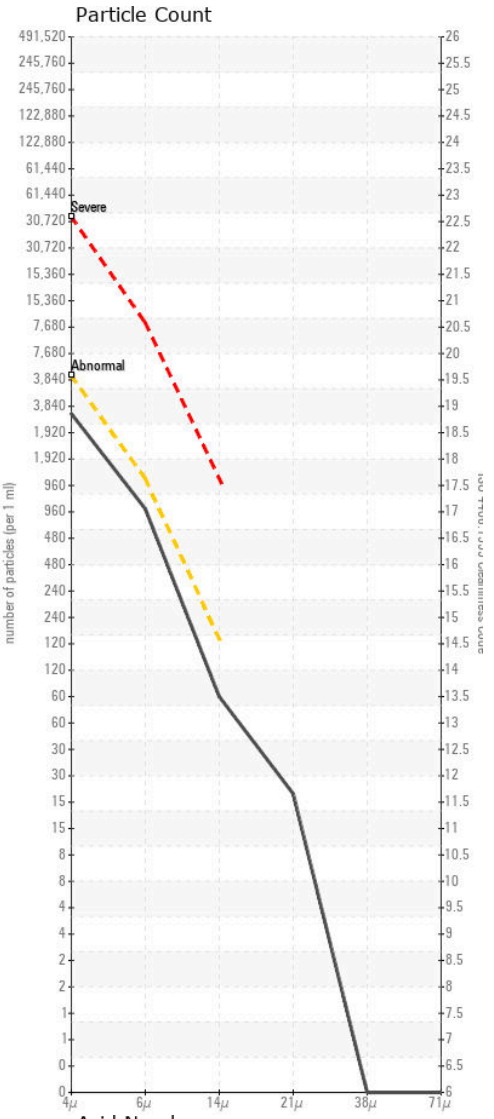
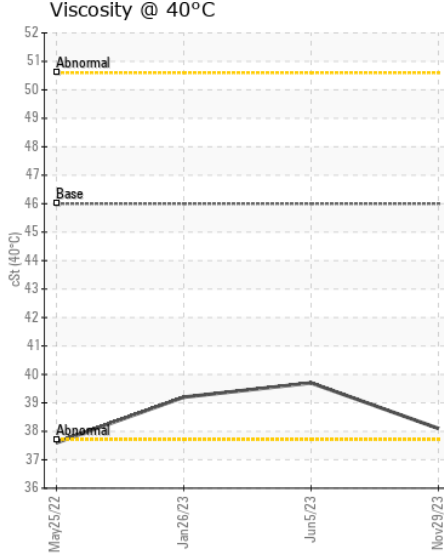
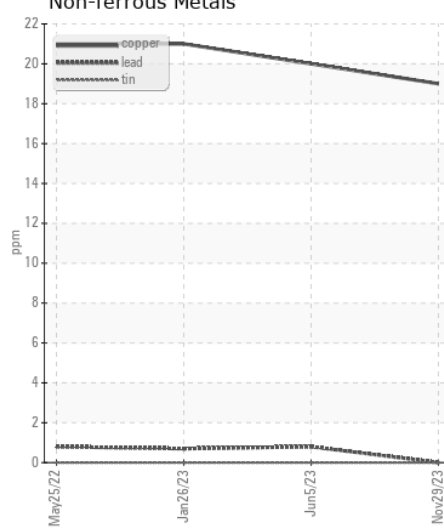
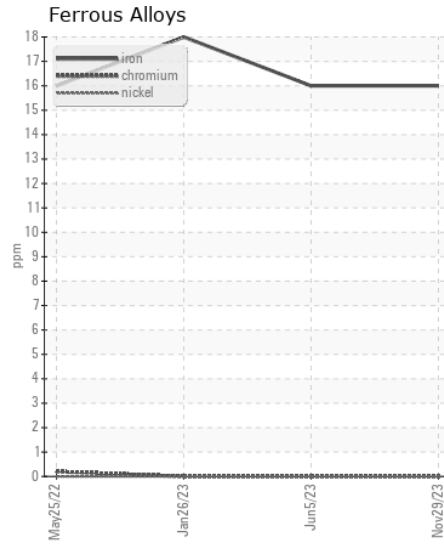
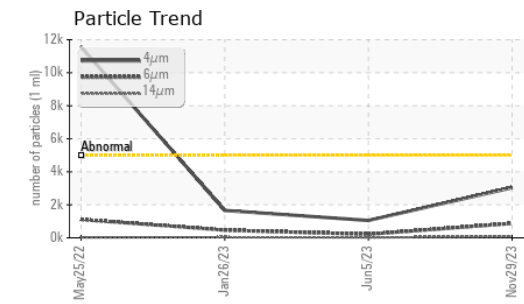
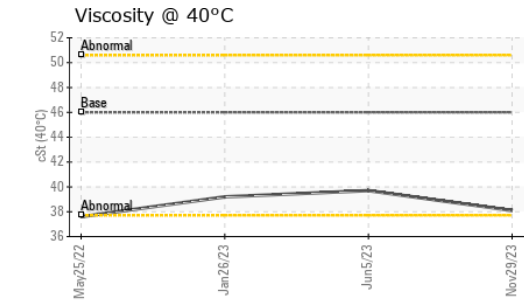
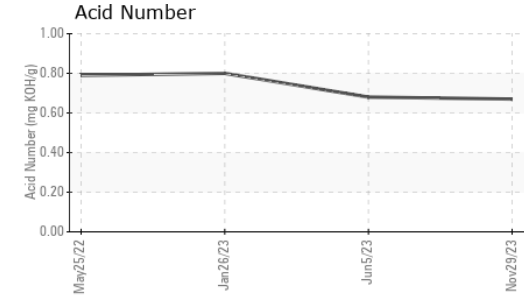
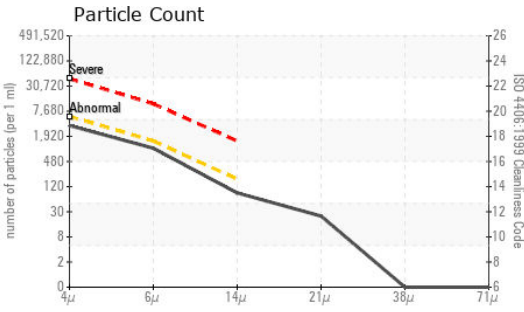
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	2	3	3
Potassium	ppm	ASTM D5185m	>20	<1	3	3
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	3039	1053	1658
Particles >6µm		ASTM D7647	>1300	876	217	463
Particles >14µm		ASTM D7647	>160	75	17	36
Particles >21µm		ASTM D7647	>40	21	3	6
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13	17/15/11	18/16/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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	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	0	<1
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	2	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	1	1
Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	30	32	35
Calcium	ppm	ASTM D5185m	49	264	292	307
Phosphorus	ppm	ASTM D5185m	354	597	647	684
Zinc	ppm	ASTM D5185m	419	790	831	883
Sulfur	ppm	ASTM D5185m	3719	1588	1911	1790
Acid Number (AN)	mg KOH/g	ASTM D8045		0.67	0.68	0.80
Visc @ 40°C	cSt	ASTM D445	46	38.1	39.7	39.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0005175 **Received** : 09 Jan 2024
Lab Number : 06055349 **Diagnosed** : 10 Jan 2024
Unique Number : 10821298 **Diagnostician** : Wes Davis
Test Package : CONST

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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)