



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Area
[W/O 10848]
Machine Id
VOLVO L90H 623915
Component
Hydraulic System
Fluid
CHEVRON HYDRAULIC OIL AW ISO 46 (25 GAL)

RECOMMENDATION

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		ML0002188	VCP390094	VCP290789
Sample Date		Client Info		28 May 2024	13 Oct 2022	14 Dec 2020
Machine Age	hrs	Client Info		11224	8591	4845
Oil Age	hrs	Client Info		5186	0	0
Filter Age	hrs	Client Info		2000	0	0
Oil Changed		Client Info		Changed	Not Chngd	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	9	7	16
Chromium	ppm	ASTM D5185m	>20	6	5	8
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	0
Lead	ppm	ASTM D5185m	>20	<1	1	4
Copper	ppm	ASTM D5185m	>150	3	2	6
Tin	ppm	ASTM D5185m	>20	0	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

CONTAMINATION

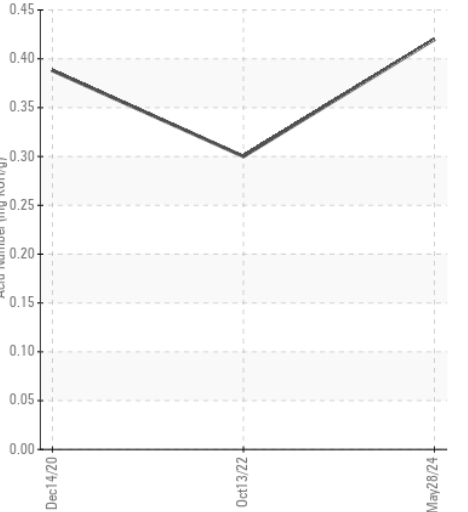
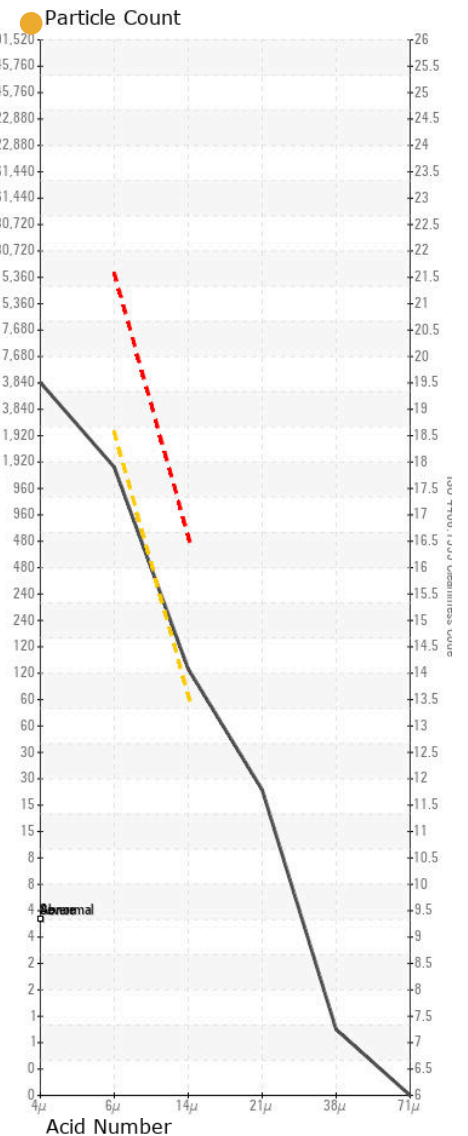
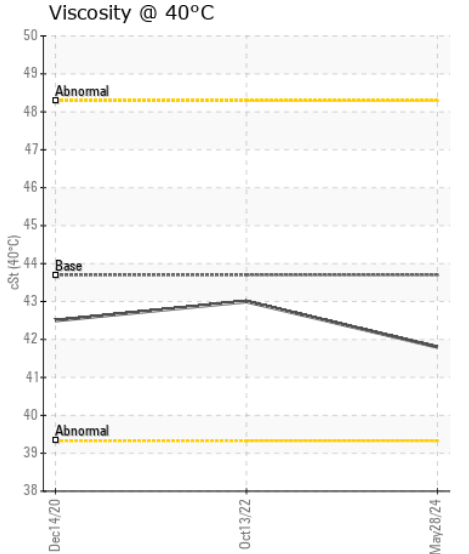
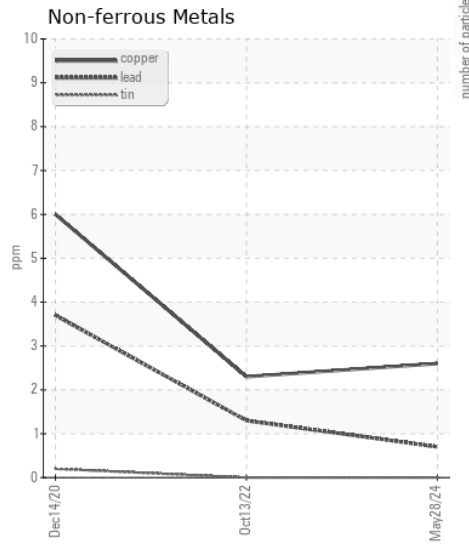
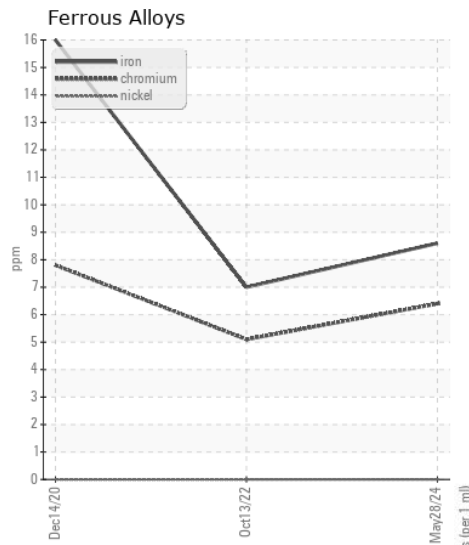
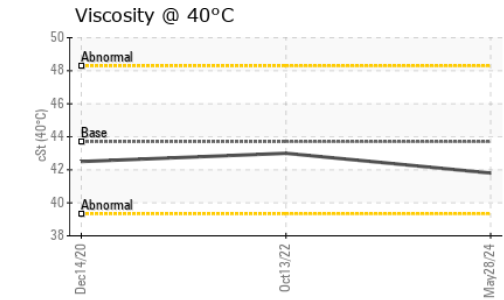
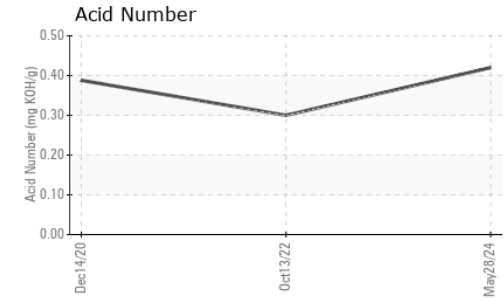
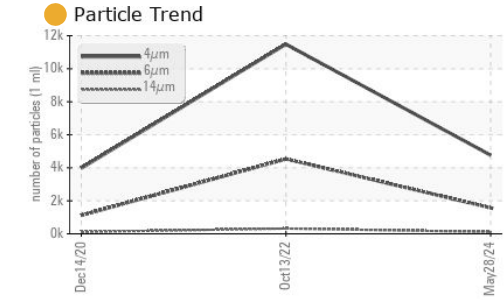
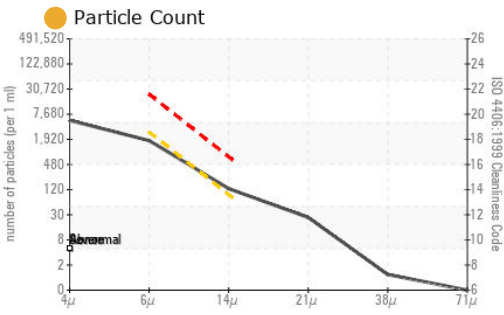
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	8	7	18
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		4763	11485	3973
Particles >6µm		ASTM D7647	>2500	1570	4536	1121
Particles >14µm		ASTM D7647	>80	112	▲ 321	● 108
Particles >21µm		ASTM D7647	>20	23	▲ 41	● 23
Particles >38µm		ASTM D7647	>4	1	3	0
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/18/14	▲ 21/19/16	● 19/17/14
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		<1	0	<1
Boron	ppm	ASTM D5185m		2	0	28
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	2	8
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		6	9	30
Calcium	ppm	ASTM D5185m		87	78	158
Phosphorus	ppm	ASTM D5185m		355	340	363
Zinc	ppm	ASTM D5185m		428	414	449
Sulfur	ppm	ASTM D5185m		1608	1681	2212
Acid Number (AN)	mg KOH/g	ASTM D8045		0.42	0.30	0.388
Visc @ 40°C	cSt	ASTM D445	43.7	41.8	43.0	42.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002188
Lab Number : 06196615
Unique Number : 11058738
Test Package : CONST

Received : 31 May 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Angela Borella

MCCLUNG-LOGAN EQUIPMENT CO - BALTIMORE
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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)