



# VOLVO

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**[2825-1]**  
Machine Id  
**VOLVO L90G 3199**  
Component  
**Hydraulic System**  
Fluid  
**CHEVRON HYDRAULIC OIL AW ISO 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP445924	VCP429482	VCP408336
Sample Date		Client Info		20 Feb 2024	06 Dec 2023	26 Sep 2023
Machine Age	hrs	Client Info		18494	13995	17537
Oil Age	hrs	Client Info		0	2000	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	0	<1	1
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
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	0	0	<1
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>150	<1	<1	<1
Tin	ppm	ASTM D5185m	>20	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

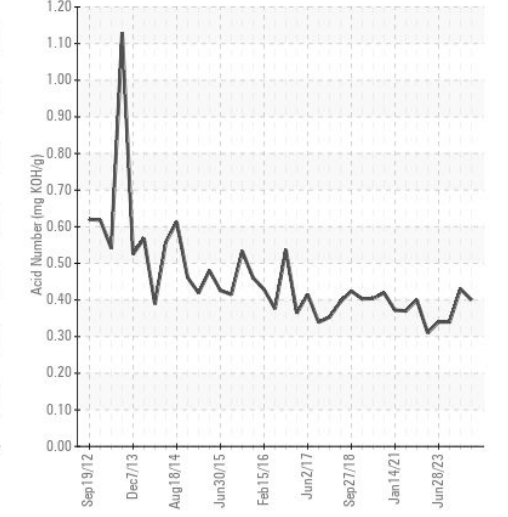
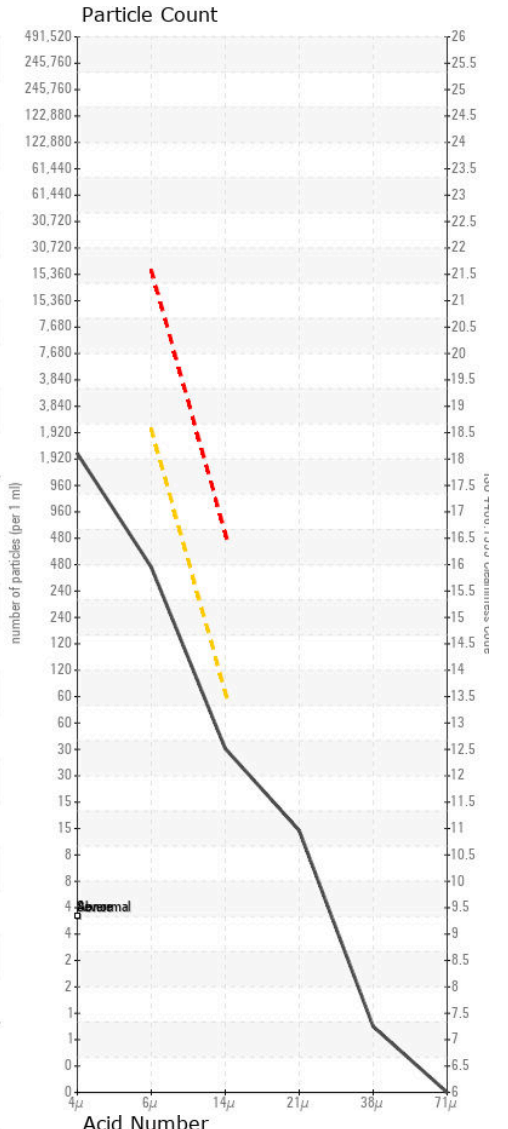
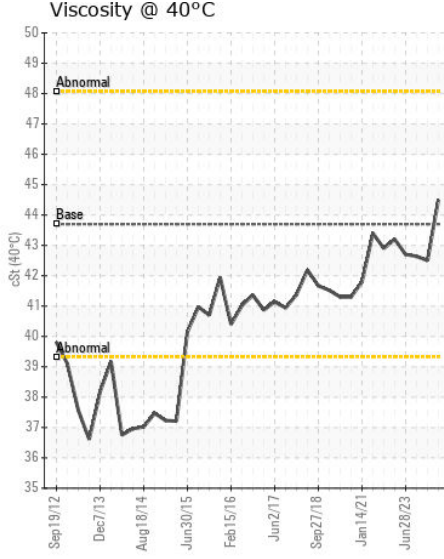
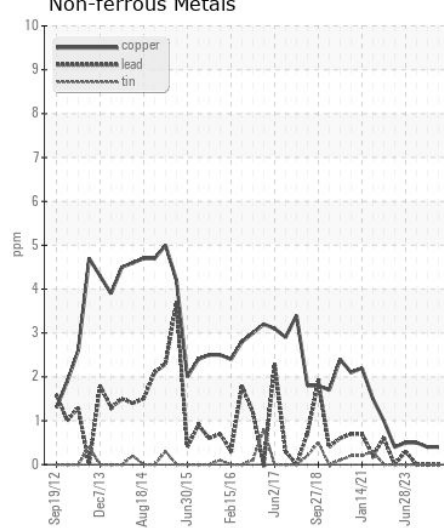
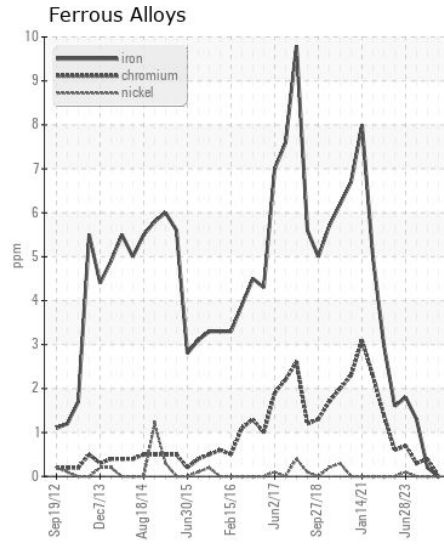
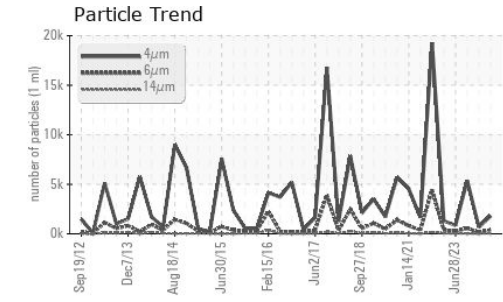
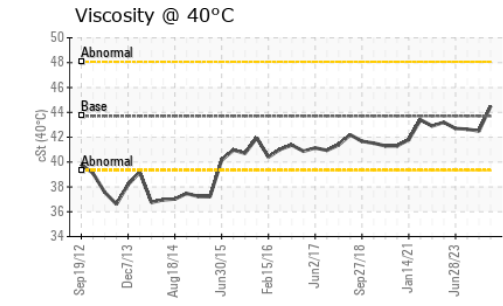
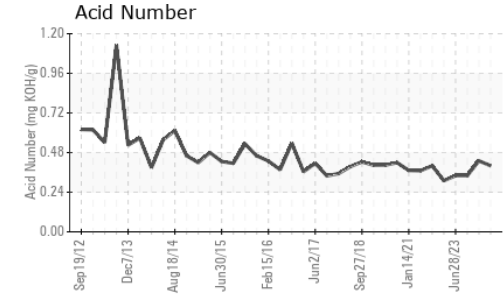
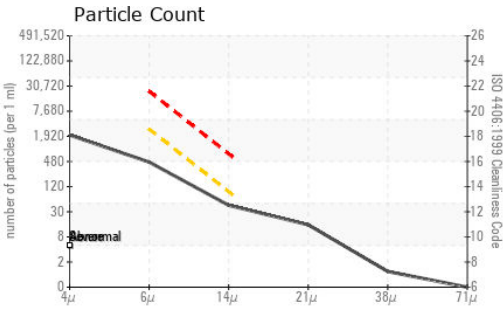
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<1	2	2
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		1806	678	5374
Particles >6µm		ASTM D7647	>2500	408	161	568
Particles >14µm		ASTM D7647	>80	38	13	29
Particles >21µm		ASTM D7647	>20	13	4	12
Particles >38µm		ASTM D7647	>4	1	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	18/16/12	17/15/11	20/16/12
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		3	3	3
Boron	ppm	ASTM D5185m		4	<1	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	<1	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		2	0	6
Calcium	ppm	ASTM D5185m		153	96	119
Phosphorus	ppm	ASTM D5185m		356	348	345
Zinc	ppm	ASTM D5185m		457	428	416
Sulfur	ppm	ASTM D5185m		977	1134	1205
Acid Number (AN)	mg KOH/g	ASTM D8045		0.40	0.43	0.34
Visc @ 40°C	cSt	ASTM D445	43.7	44.5	42.5	42.64



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP445924 **Received** : 29 Feb 2024  
**Lab Number** : 06105131 **Tested** : 01 Mar 2024  
**Unique Number** : 10903361 **Diagnosed** : 01 Mar 2024 - Wes Davis  
**Test Package** : MOB 2

**MCCLUNG-LOGAN EQUIPMENT CO - BRIDGEVILLE**  
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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)