



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
PCS - PORTABLE CRUSHING SERVICES

Machine Id
VOLVO L180G LD12 - PCS

Component
Diesel Engine

Fluid
CHEVRON DELO 400 SDE SAE 15W40 (--- QTS)



RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014092	KL0013060	KL0009670
Sample Date		Client Info		10 Jan 2024	03 Oct 2023	29 Jun 2023
Machine Age	hrs	Client Info		8669	8276	7819
Oil Age	hrs	Client Info		50	1433	976
Filter Age	hrs	Client Info		50	1433	976
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	1	9	17
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	0	2
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>20	3	7	13
Tin	ppm	ASTM D5185m	>20	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

CONTAMINATION

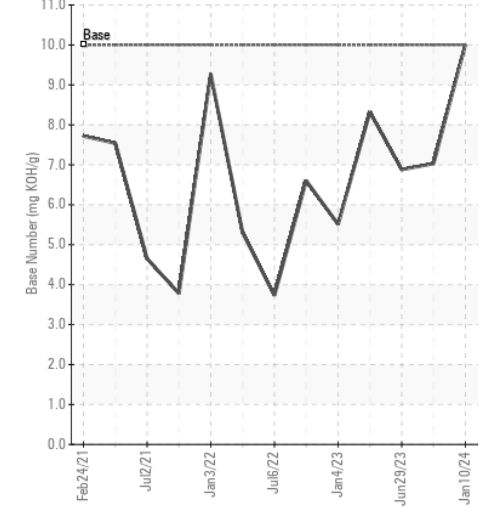
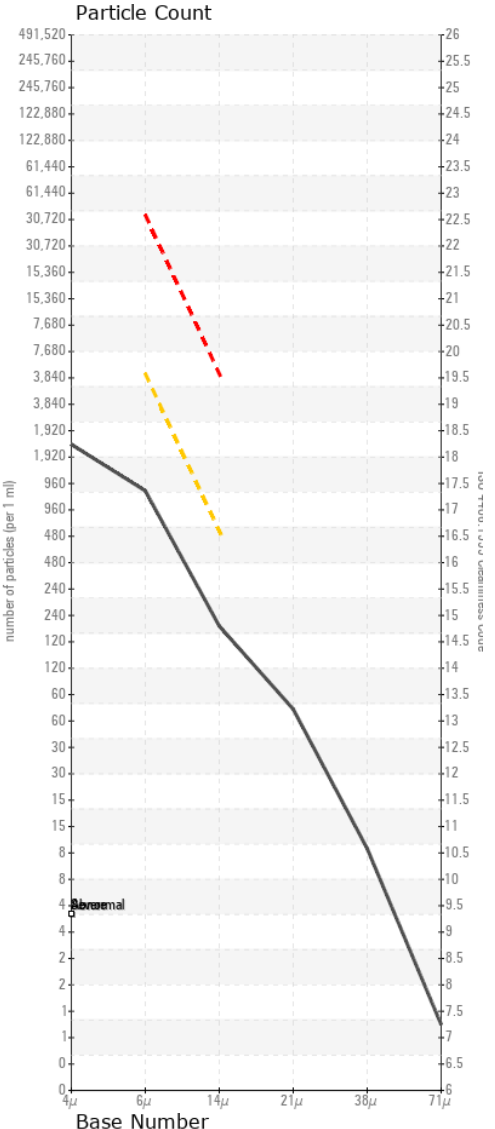
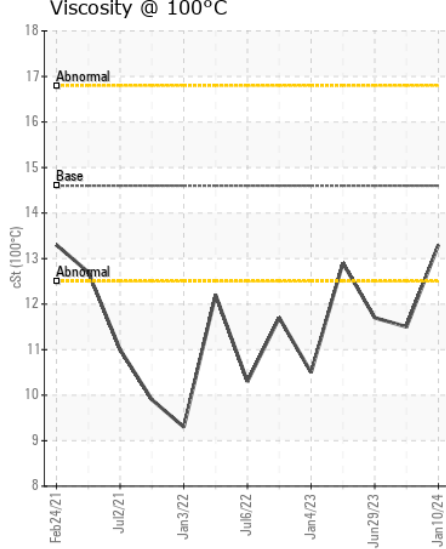
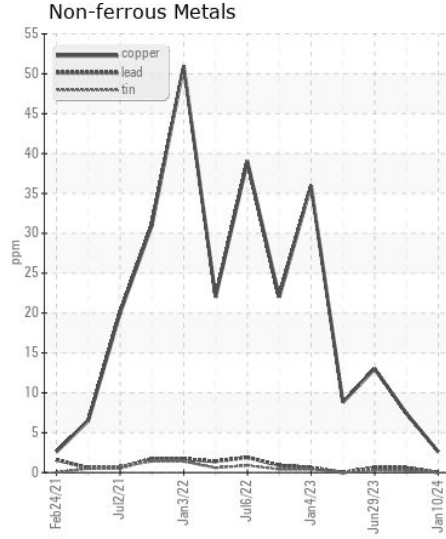
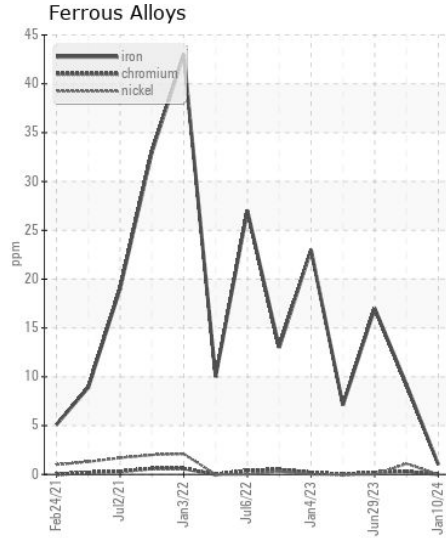
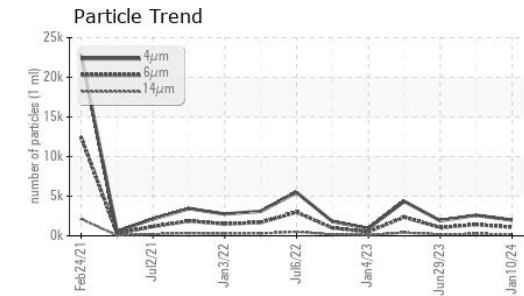
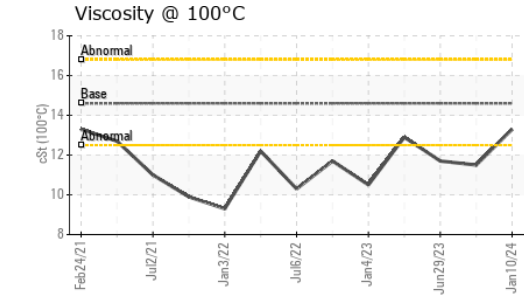
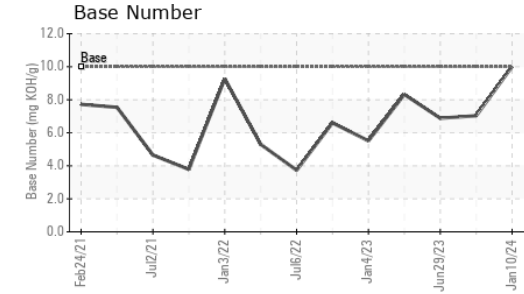
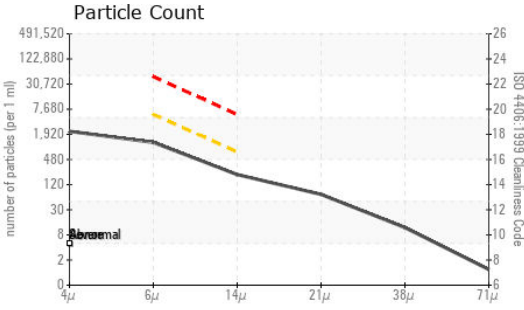
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	4	5
Potassium	ppm	ASTM D5185m	>20	0	2	2
Fuel		WC Method	>6.0	<1.0	<1.0	1.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	5.3	5.3	6.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	20.4	21.9
Particles >4µm		ASTM D7647		1983	2601	1914
Particles >6µm		ASTM D7647	>5000	1080	1417	1043
Particles >14µm		ASTM D7647	>640	184	241	177
Particles >21µm		ASTM D7647	>160	62	81	60
Particles >38µm		ASTM D7647	>40	10	13	9
Particles >71µm		ASTM D7647	>10	1	1	1
Oil Cleanliness		ISO 4406 (c)	>19/16	17/15	18/15	17/15
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	0	0
Boron	ppm	ASTM D5185m		203	290	324
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		41	75	79
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		537	290	302
Calcium	ppm	ASTM D5185m		1256	1159	1236
Phosphorus	ppm	ASTM D5185m	760	768	877	871
Zinc	ppm	ASTM D5185m	800	904	1059	1037
Sulfur	ppm	ASTM D5185m	3000	3161	3243	3440
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	13.9	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.01	7.03	6.88
Visc @ 100°C	cSt	ASTM D445	14.6	13.3	▲ 11.5	▲ 11.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014092 **Received** : 16 Jan 2024
Lab Number : 06061359 **Diagnosed** : 18 Jan 2024
Unique Number : 10832741 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: PrtCount)

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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)