



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		KL0014746	KL0013797	KL0014092
Sample Date		Client Info		09 Jul 2024	10 Apr 2024	10 Jan 2024
Machine Age	hrs	Client Info		9632	9163	8669
Oil Age	hrs	Client Info		1013	544	50
Filter Age	hrs	Client Info		1013	544	50
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	13	8	1
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	3	2
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>20	2	4	3
Tin	ppm	ASTM D5185m	>20	0	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

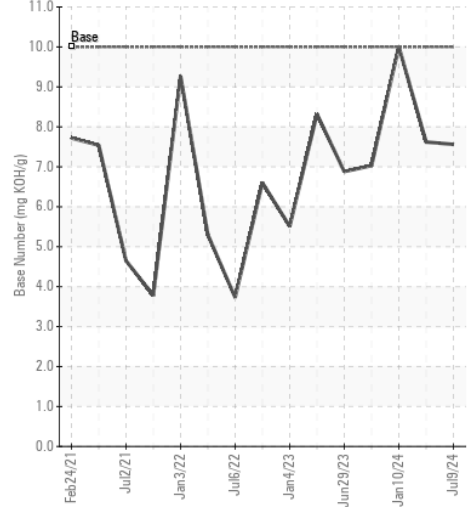
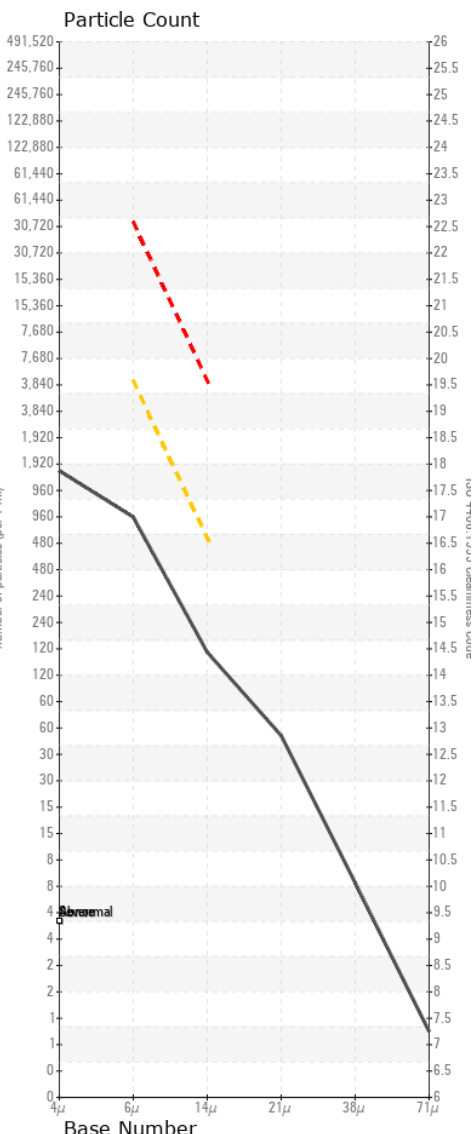
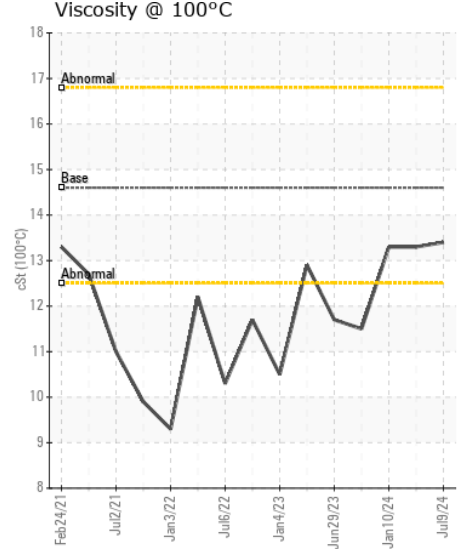
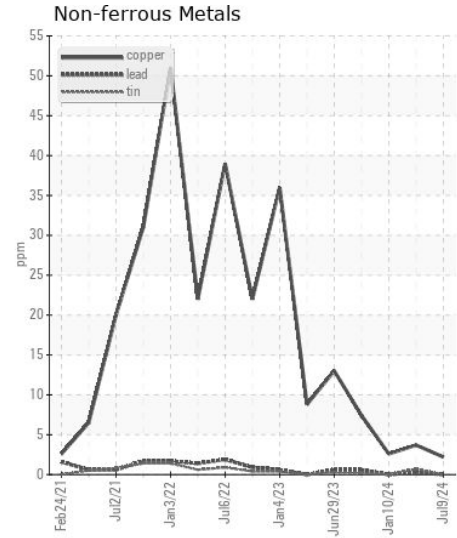
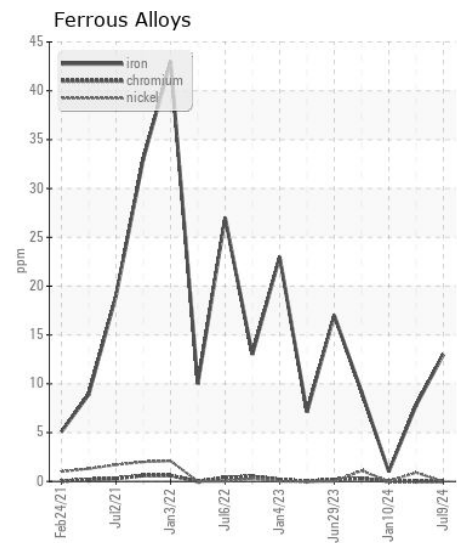
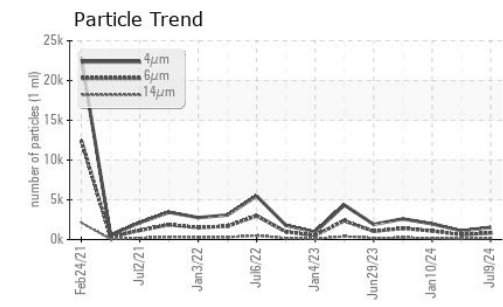
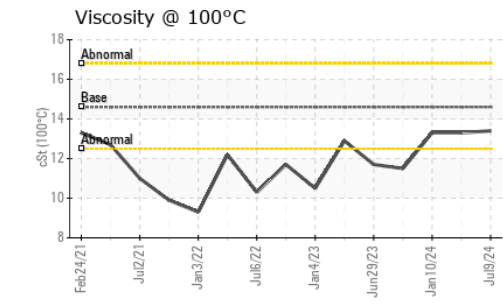
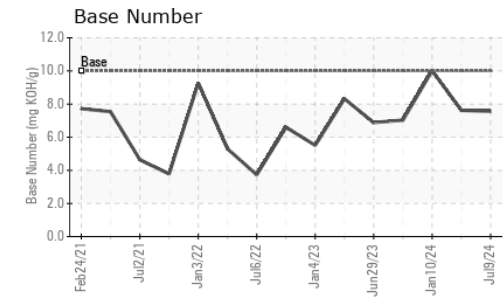
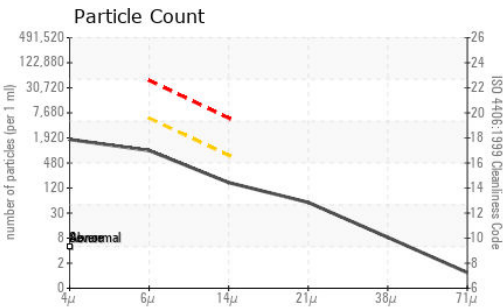
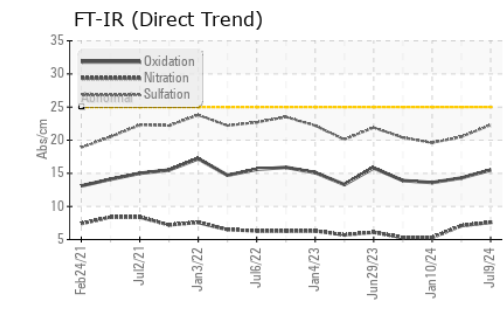
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	5	6	3
Potassium	ppm	ASTM D5185m	>20	1	4	0
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.6	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.1	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	20.5	19.6
Particles >4µm		ASTM D7647		1540	1096	1983
Particles >6µm		ASTM D7647	>5000	839	597	1080
Particles >14µm		ASTM D7647	>640	143	102	184
Particles >21µm		ASTM D7647	>160	48	34	62
Particles >38µm		ASTM D7647	>40	7	5	10
Particles >71µm		ASTM D7647	>10	1	1	1
Oil Cleanliness		ISO 4406 (c)	>19/16	17/14	16/14	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		6	4	0
Boron	ppm	ASTM D5185m		179	278	203
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		63	58	41
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		477	542	537
Calcium	ppm	ASTM D5185m		1527	1470	1256
Phosphorus	ppm	ASTM D5185m	760	937	934	768
Zinc	ppm	ASTM D5185m	800	1074	1113	904
Sulfur	ppm	ASTM D5185m	3000	4642	4205	3161
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	14.3	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	7.56	7.62	10.01
Visc @ 100°C	cSt	ASTM D445	14.6	13.4	13.3	13.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014746
Lab Number : 06237997
Unique Number : 11126831
Test Package : MOB 2 (Additional Tests: PrtCount)
Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Wes Davis

*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)*

PIKES PEAK PERFORMANCE PRODUCTS
 7888 BULLET RD
 PEYTON, CO
 US 80831
 Contact: SCOTT RIGGS
 rriggs.pikespeakperformance@gmail.com
 T: (303)434-0126
 F: x: