



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
310571 VOLVO EC480E 310571
Component
Left Swing Drive
Fluid
CHEVRON DELO GEAR ESI OIL 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0018899	DJJ0010478	DJJ0001600
Sample Date		Client Info		11 Feb 2024	01 Jul 2021	21 Apr 2021
Machine Age	hrs	Client Info		0	5153	4876
Oil Age	hrs	Client Info		0	500	1000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	69	746	10000
Chromium	ppm	ASTM D5185m	>10	0	7	164
Nickel	ppm	ASTM D5185m	>10	0	<1	13
Titanium	ppm	ASTM D5185m		0	<1	4
Silver	ppm	ASTM D5185m		0	4	<1
Aluminum	ppm	ASTM D5185m	>25	0	0	59
Lead	ppm	ASTM D5185m	>50	0	0	3
Copper	ppm	ASTM D5185m	>50	3	10	157
Tin	ppm	ASTM D5185m	>10	0	0	2
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

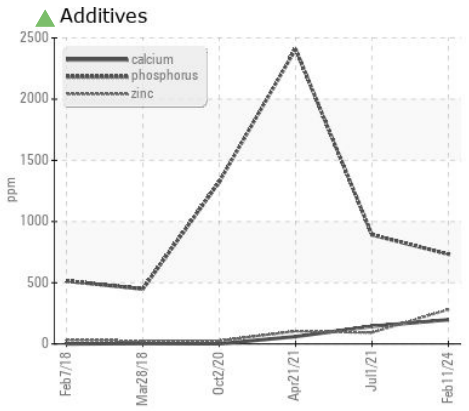
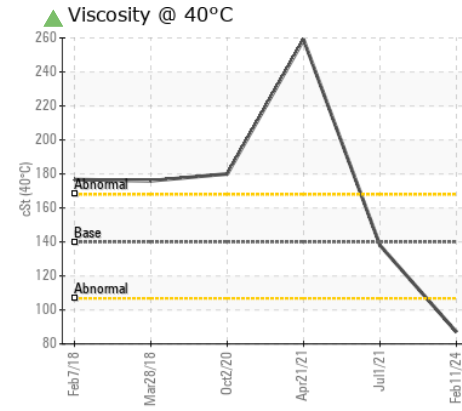
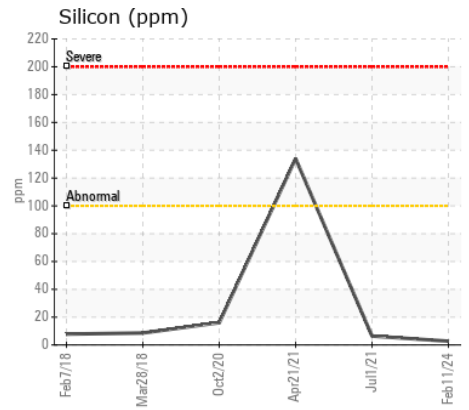
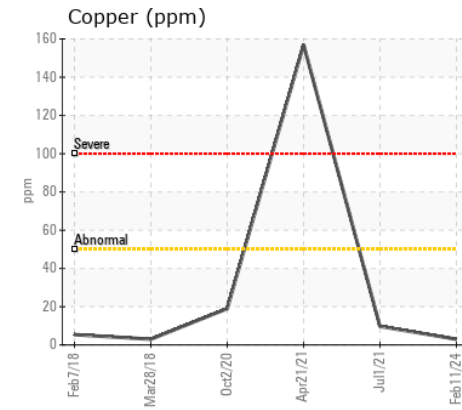
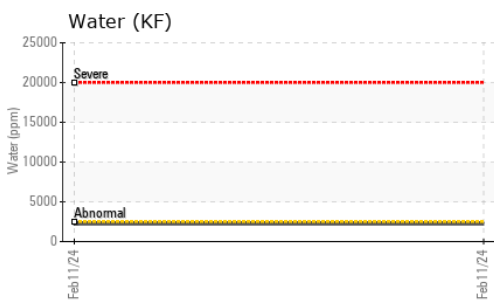
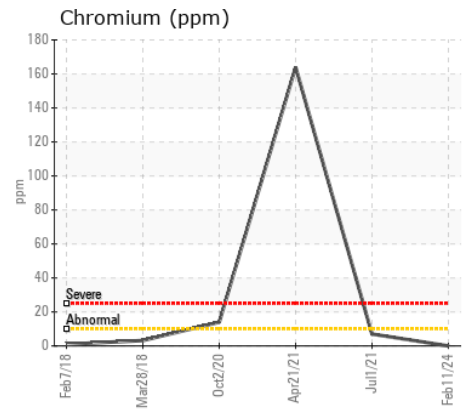
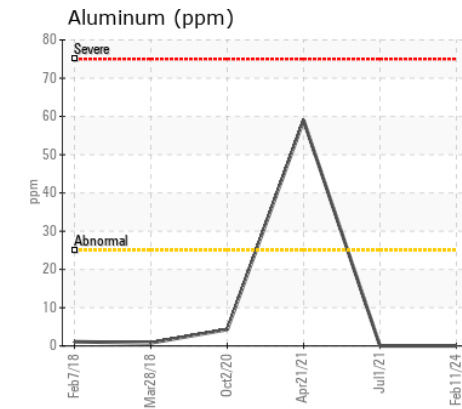
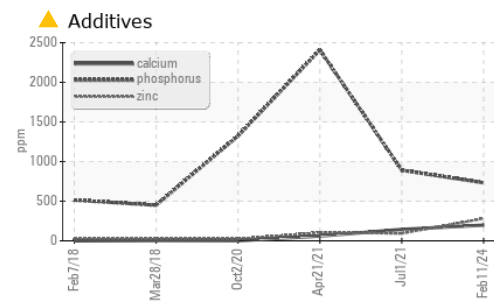
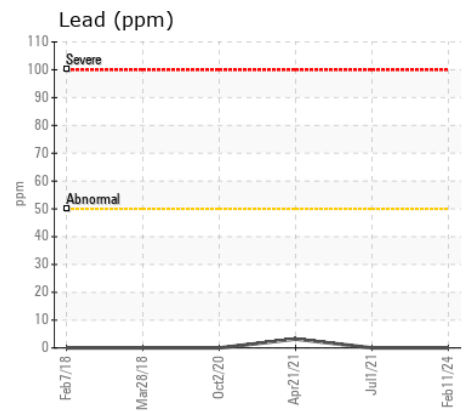
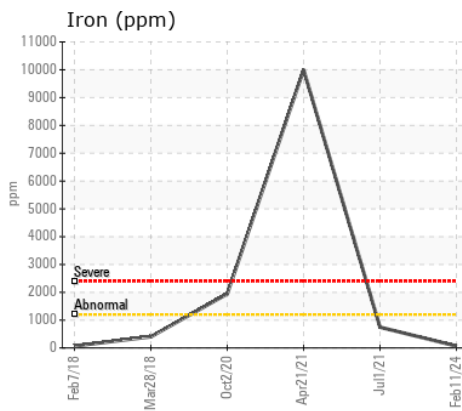
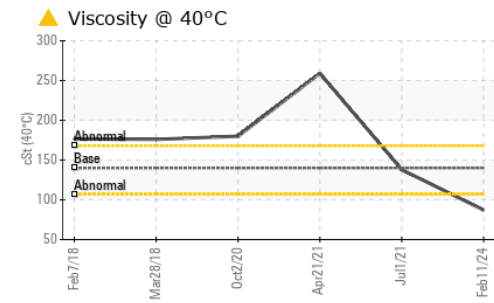
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	3	6	134
Potassium	ppm	ASTM D5185m	>20	<1	<1	3
Water	%	ASTM D6304	>0.25	0.224	---	---
ppm Water	ppm	ASTM D6304	>2500	2240	---	---
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	>0.25	0.2%	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		0	<1	8
Boron	ppm	ASTM D5185m	15	62	174	17
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	16	5	18
Manganese	ppm	ASTM D5185m		<1	6	109
Magnesium	ppm	ASTM D5185m	0	95	25	22
Calcium	ppm	ASTM D5185m	5	198	144	60
Phosphorus	ppm	ASTM D5185m	600	733	891	2409
Zinc	ppm	ASTM D5185m	0	281	92	104
Sulfur	ppm	ASTM D5185m	22000	13827	14016	12822
Visc @ 40°C	cSt	ASTM D445	140	87.0	138	259



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018899 **Received** : 12 Feb 2024
Lab Number : 06086335 **Tested** : 13 Feb 2024
Unique Number : 10873780 **Diagnosed** : 13 Feb 2024 - Sean Felton
Test Package : MOBCE (Additional Tests: KF)

TEXAS PORT RECYCLING - HOUSTON PORT
 8945 MANCHESTER ST
 HOUSTON, TX
 US 77012
 Contact: Dale Shaw
 dale.shaw@tmrecycling.com
 T:
 F: (713)921-5545

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)