



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
310571 VOLVO EC480E 310571
 Component
Right 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		DJJ0018900	DJJ0010477	DJJ0001599
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	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	70	497	▲ 1861
Chromium	ppm	ASTM D5185m	>10	0	4	▲ 12
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	7
Lead	ppm	ASTM D5185m	>50	0	0	<1
Copper	ppm	ASTM D5185m	>50	3	11	12
Tin	ppm	ASTM D5185m	>10	0	0	<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

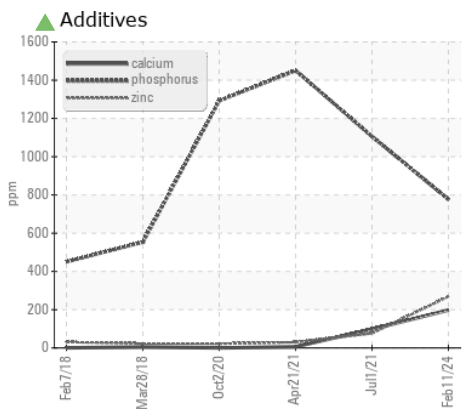
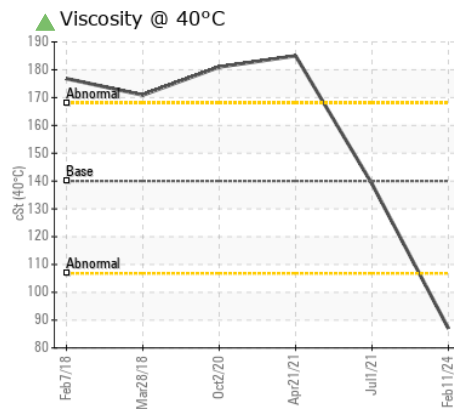
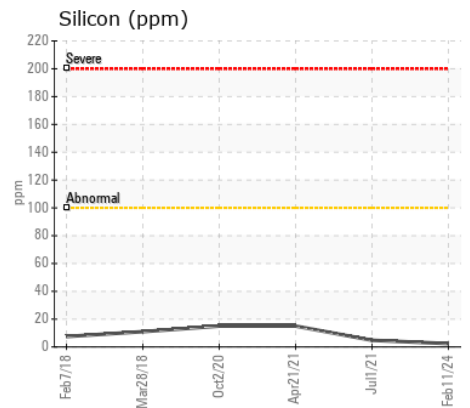
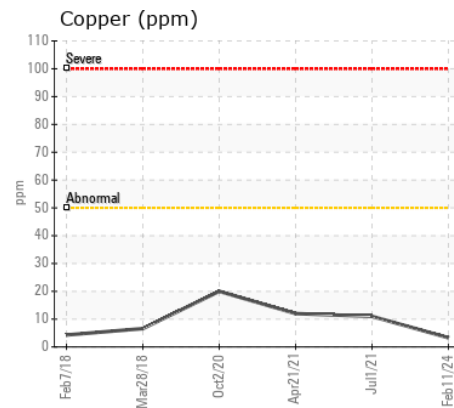
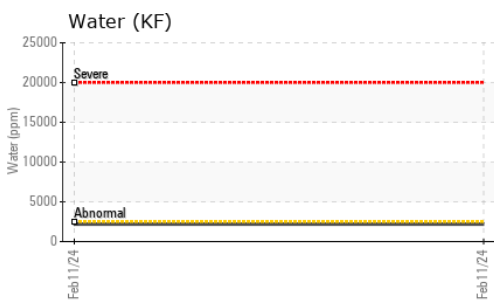
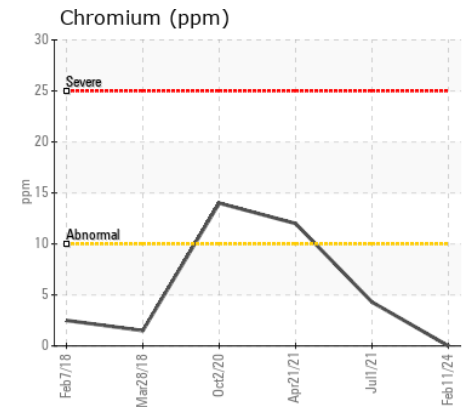
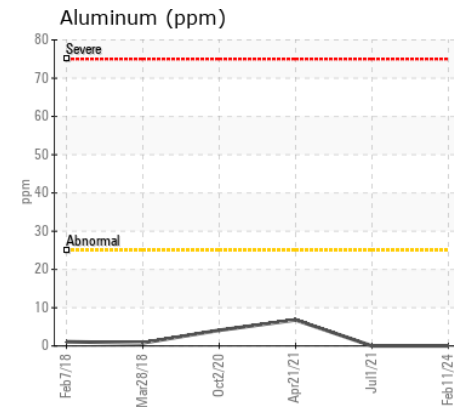
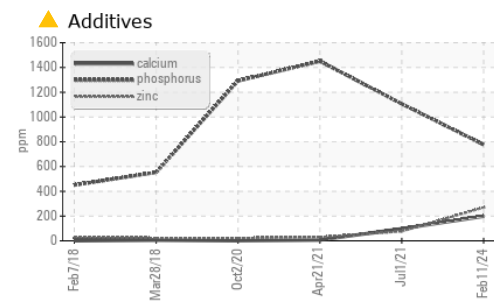
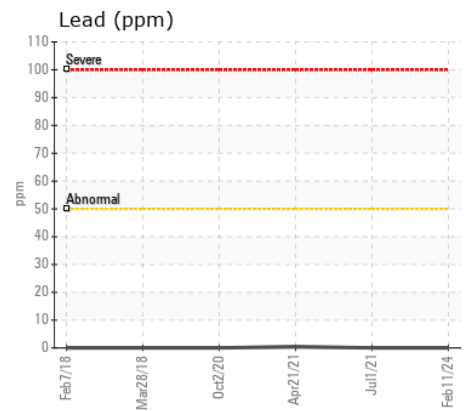
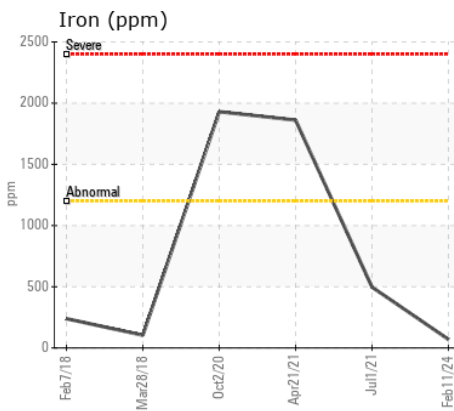
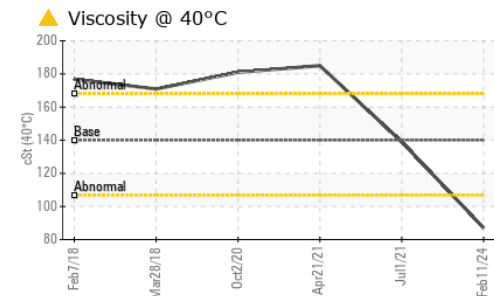
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	2	5	15
Potassium	ppm	ASTM D5185m	>20	<1	<1	<1
Water	%	ASTM D6304	>0.25	0.219	---	---
ppm Water	ppm	ASTM D6304	>2500	2190	---	---
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	2
Boron	ppm	ASTM D5185m	15	61	110	18
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	16	5	2
Manganese	ppm	ASTM D5185m		<1	4	13
Magnesium	ppm	ASTM D5185m	0	▲ 94	22	<1
Calcium	ppm	ASTM D5185m	5	198	98	6
Phosphorus	ppm	ASTM D5185m	600	▲ 777	1106	1451
Zinc	ppm	ASTM D5185m	0	▲ 269	76	30
Sulfur	ppm	ASTM D5185m	22000	▲ 13922	15462	15020
Visc @ 40°C	cSt	ASTM D445	140	▲ 87.0	139	185



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018900 **Received** : 12 Feb 2024
Lab Number : 06086334 **Tested** : 13 Feb 2024
Unique Number : 10873779 **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

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)

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