



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
TPR-Houston Port
Machine Id
110119 VOLVO EC330CL 110119
Component
Swing Drive
Fluid
CHEVRON DELO GEAR ESI OIL 80W90 (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0018931	DJJ0001452	DJJ020299
Sample Date		Client Info		11 Feb 2024	20 Sep 2020	26 Oct 2018
Machine Age	hrs	Client Info		12279	10154	8656
Oil Age	hrs	Client Info		0	1000	2000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>1200	466	188	49
Chromium	ppm	ASTM D5185m	>10	4	3	2
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	1	<1
Lead	ppm	ASTM D5185m	>50	0	2	<1
Copper	ppm	ASTM D5185m	>50	8	44	7
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

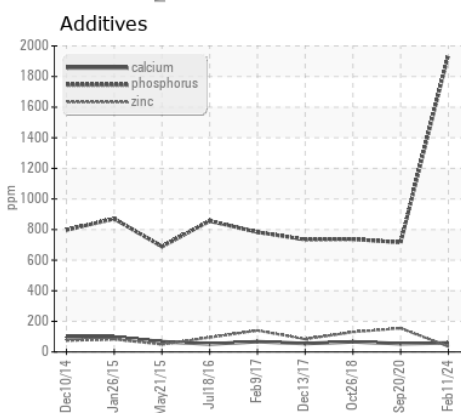
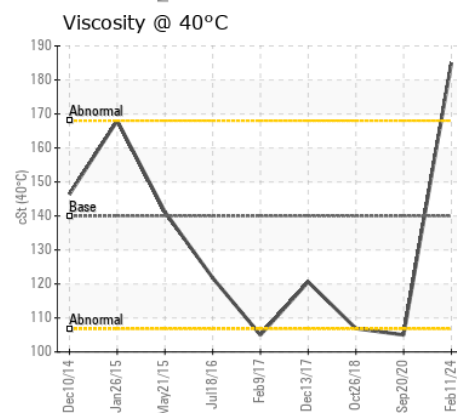
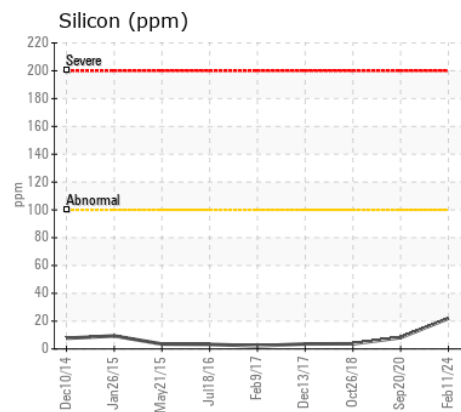
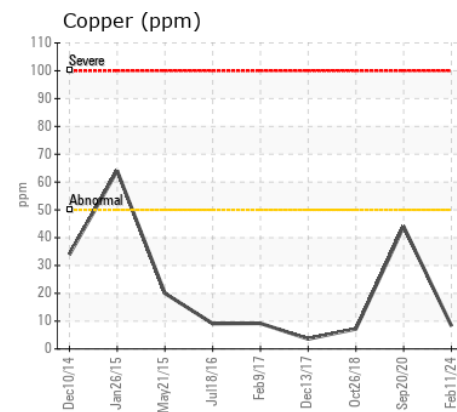
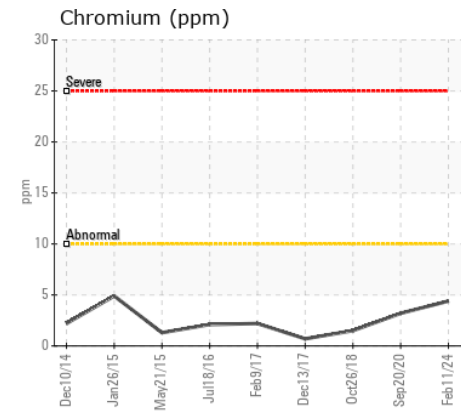
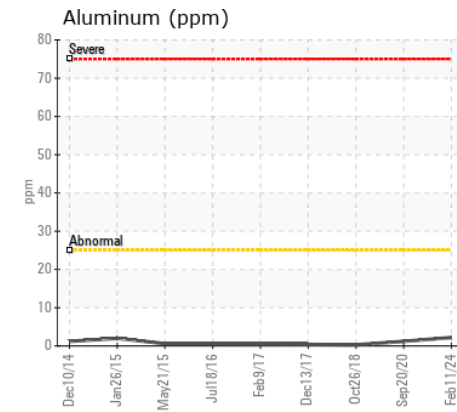
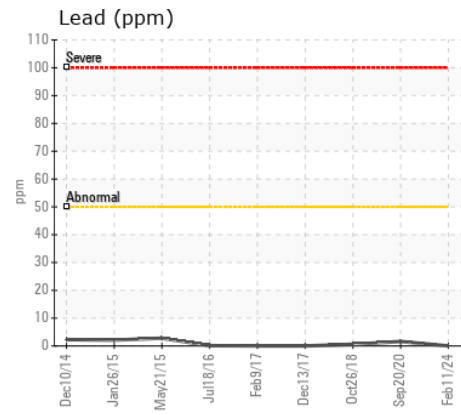
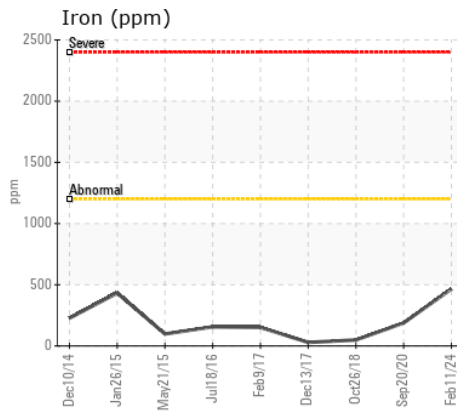
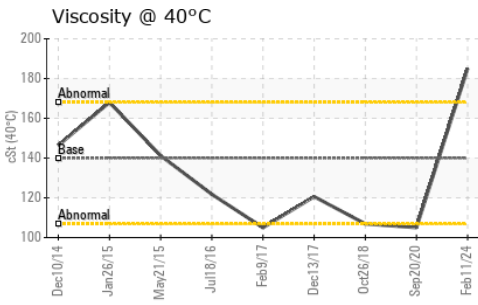
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	22	8	4
Potassium	ppm	ASTM D5185m	>20	0	0	3
Water		WC Method	>0.25	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ MILKY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.25	NEG	0.2%	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	1	2
Boron	ppm	ASTM D5185m	15	60	77	101
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	1
Manganese	ppm	ASTM D5185m		5	2	1
Magnesium	ppm	ASTM D5185m	0	7	7	4
Calcium	ppm	ASTM D5185m	5	59	54	66
Phosphorus	ppm	ASTM D5185m	600	1944	716	737
Zinc	ppm	ASTM D5185m	0	36	155	130
Sulfur	ppm	ASTM D5185m	22000	20698	11183	12462
Visc @ 40°C	cSt	ASTM D445	140	185	105	106.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018931 **Received** : 12 Feb 2024
Lab Number : 06086338 **Tested** : 13 Feb 2024
Unique Number : 10873783 **Diagnosed** : 13 Feb 2024 - Wes Davis
Test Package : MOBCE

TEXAS PORT RECYCLING - HOUSTON PORT
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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)