



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
TPR-Houston Port
Machine Id
110119 VOLVO EC330CL 110119
Component
Left Final Drive
Fluid
{not provided} (5 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Gear wear is indicated.

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil.

FLUID CONDITION

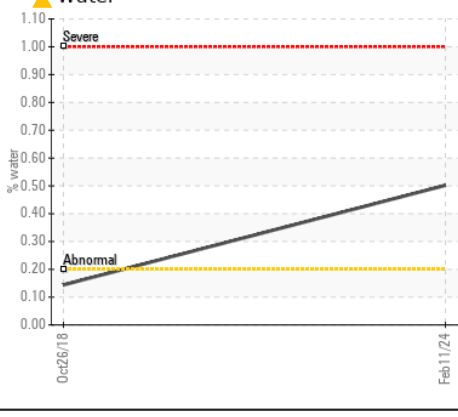
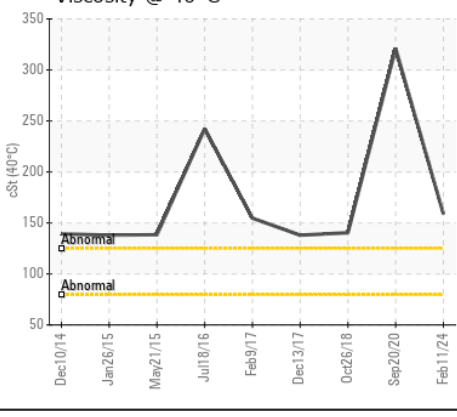
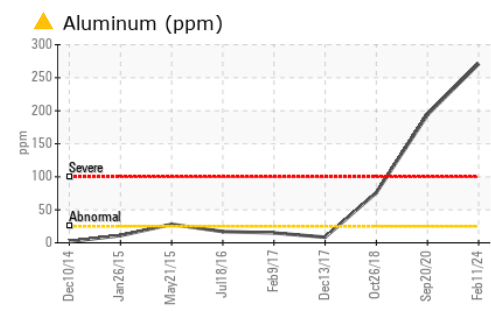
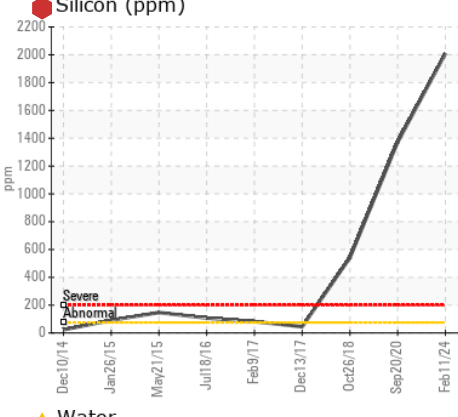
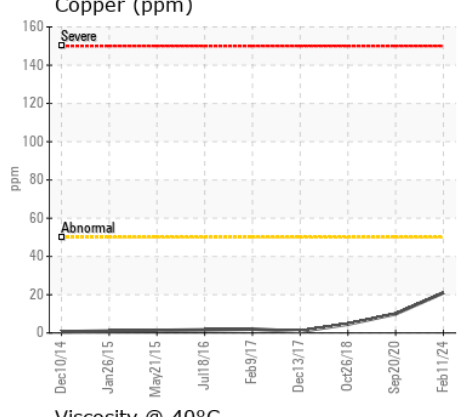
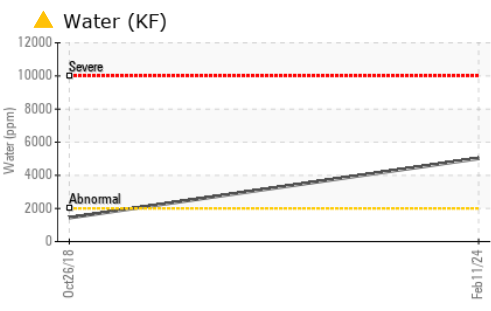
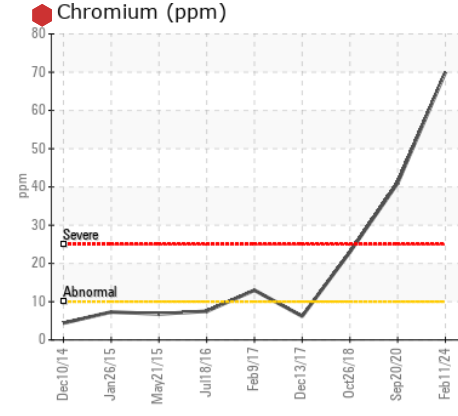
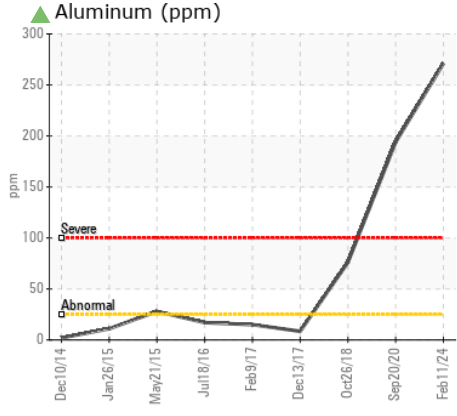
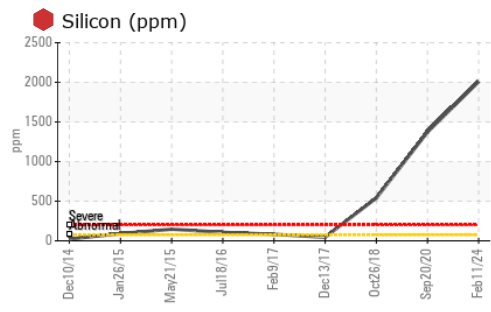
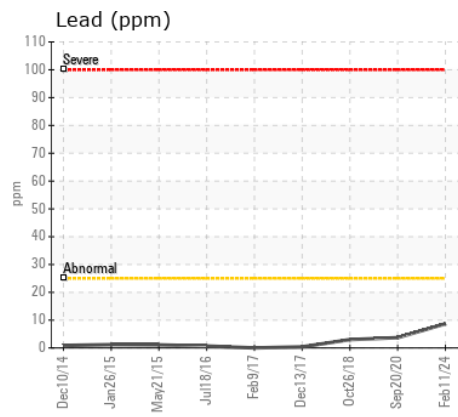
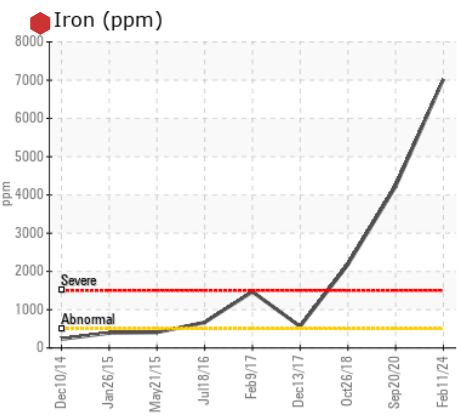
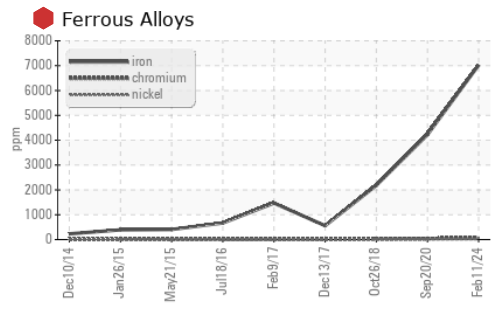
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0018928	DJJ0001455	DJJ020460
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	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				SEVERE	SEVERE	SEVERE

Iron	ppm	ASTM D5185m	>500	7021	4224	2182
Chromium	ppm	ASTM D5185m	>10	70	41	23
Nickel	ppm	ASTM D5185m	>10	12	4	2
Titanium	ppm	ASTM D5185m		38	25	9
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	271	194	76
Lead	ppm	ASTM D5185m	>25	9	4	3
Copper	ppm	ASTM D5185m	>50	21	10	5
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>75	2009	1372	541
Potassium	ppm	ASTM D5185m	>20	52	38	17
Water	%	ASTM D6304	>0.2	0.502	---	0.144
ppm Water	ppm	ASTM D6304	>2000	5020	---	1440
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	0.2%	NEG	0.2%

Sodium	ppm	ASTM D5185m		28	18	9
Boron	ppm	ASTM D5185m		219	111	137
Barium	ppm	ASTM D5185m		34	15	1
Molybdenum	ppm	ASTM D5185m		15	0	0
Manganese	ppm	ASTM D5185m		47	28	15
Magnesium	ppm	ASTM D5185m		90	48	24
Calcium	ppm	ASTM D5185m		1335	865	445
Phosphorus	ppm	ASTM D5185m		1378	725	995
Zinc	ppm	ASTM D5185m		114	80	59
Sulfur	ppm	ASTM D5185m		20494	52740	32053
Visc @ 40°C	cSt	ASTM D445		159	321	140.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018928 **Received** : 12 Feb 2024
Lab Number : 06086327 **Tested** : 13 Feb 2024
Unique Number : 10873772 **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: ROBERT BARKER
 robert.barker@texasportrecycling.com
 T:

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) F: (713)921-5545