



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ATTENTION
ABNORMAL
NORMAL



Area
TPR-Pinemont
Machine Id
624944 VOLVO L90H 624944
Component
Diesel Engine
Fluid
CHEVRON 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0018896	DJJ0010235	DJJ0010332
Sample Date		Client Info		29 Jan 2024	17 Nov 2022	27 Jul 2022
Machine Age	hrs	Client Info		8964	7980	7145
Oil Age	hrs	Client Info		250	250	0
Filter Age	hrs	Client Info		250	250	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	23	5	6
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	11	6	6
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>15	3	<1	<1
Tin	ppm	ASTM D5185m	>10	1	<1	<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

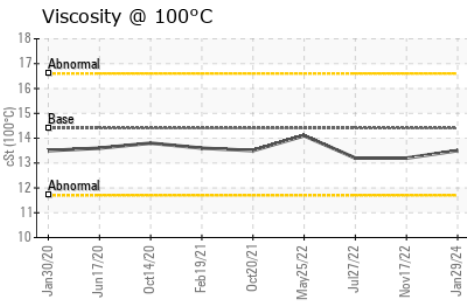
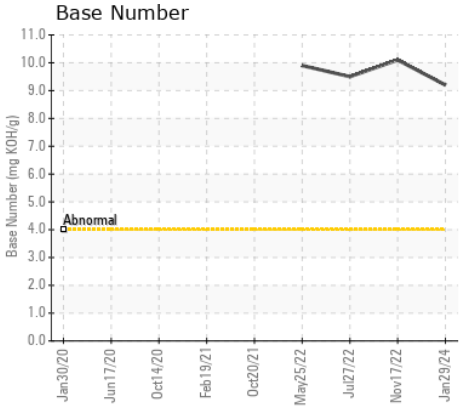
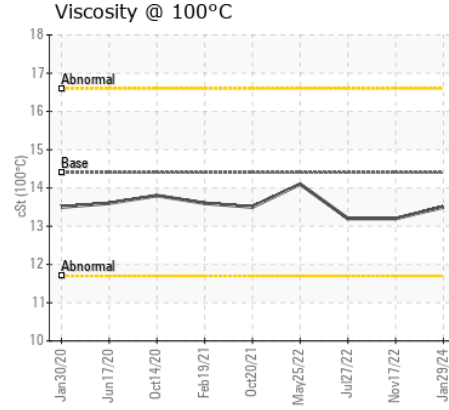
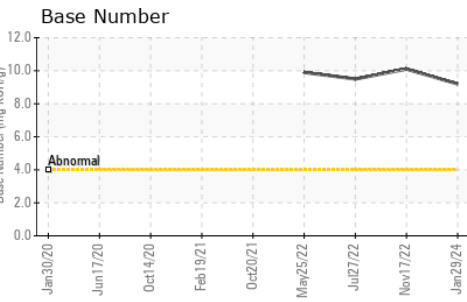
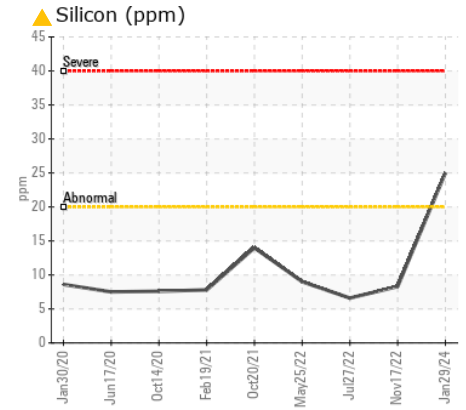
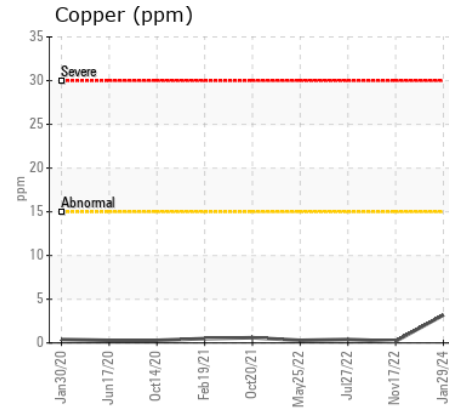
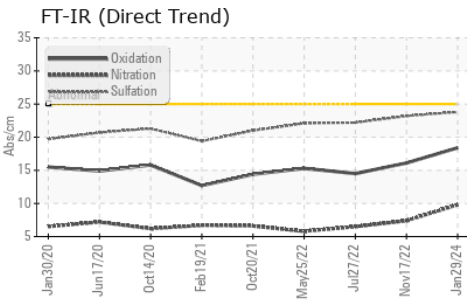
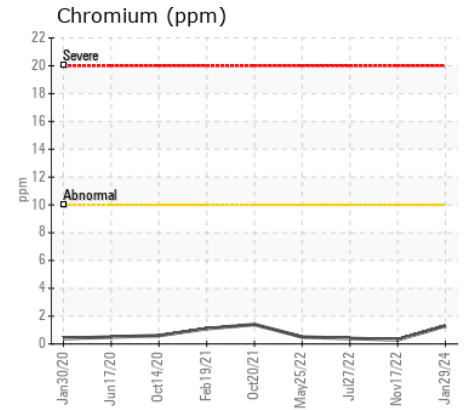
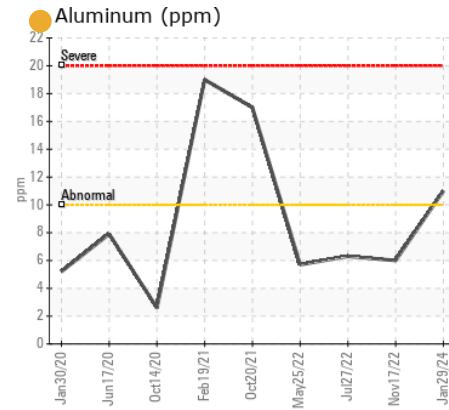
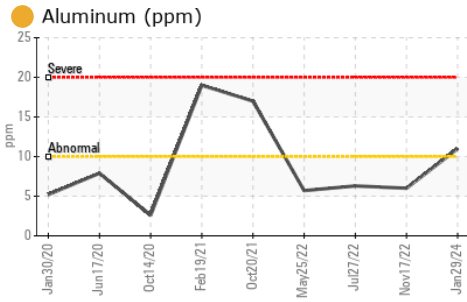
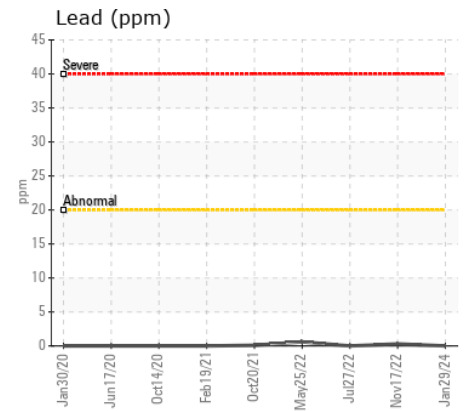
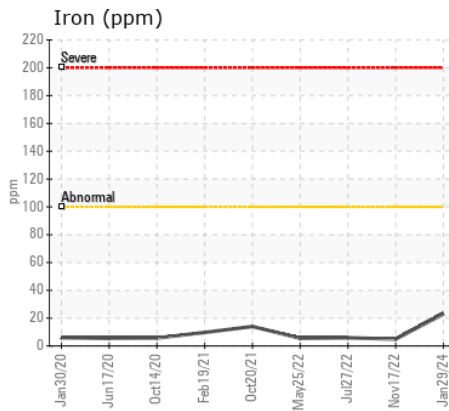
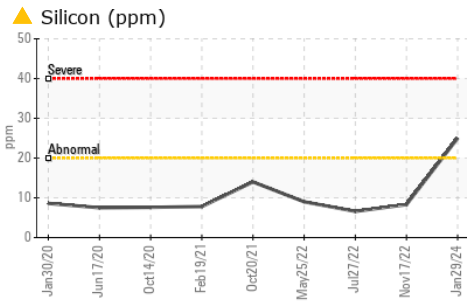
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>20	25	8	7
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.8	7.4	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	23.2	22.2
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>50	1	<1	<1
Boron	ppm	ASTM D5185m		216	268	271
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		132	103	107
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		635	658	552
Calcium	ppm	ASTM D5185m		1778	1500	1356
Phosphorus	ppm	ASTM D5185m		849	692	702
Zinc	ppm	ASTM D5185m		960	828	868
Sulfur	ppm	ASTM D5185m		2776	3017	2783
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	16.1	14.5
Base Number (BN)	mg KOH/g	ASTM D2896		9.2	10.1	9.5
Visc @ 100°C	cSt	ASTM D445	14.4	13.5	13.2	13.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0018896 **Received** : 17 Apr 2024
Lab Number : 06151779 **Tested** : 18 Apr 2024
Unique Number : 10981857 **Diagnosed** : 19 Apr 2024 - Don Baldrige
Test Package : MOBCE (Additional Tests: TBN)

TEXAS PORT RECYCLING - PINEMONT
 4400 PINEMONT DRIVE
 HOUSTON, TX
 US 77018
 Contact: Rusty Trask
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 T:
 F: (713)686-1004

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)