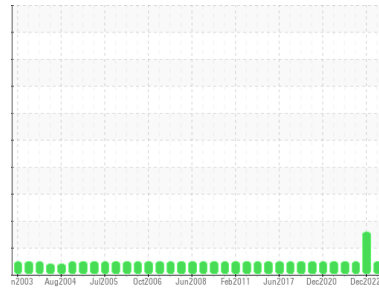




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
VOLVO A25C 609 (S/N V61529)
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (8 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RW0005011	RW0004083	RW0003698
Sample Date	Client Info		16 Feb 2024	07 Dec 2022	03 Sep 2022
Machine Age	hrs	Client Info	12684	12580	12298
Oil Age	hrs	Client Info	104	282	310
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	35	29	18
Chromium	ppm	ASTM D5185m >10	2	2	2
Nickel	ppm	ASTM D5185m >5	0	<1	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >5	0	0	<1
Aluminum	ppm	ASTM D5185m >20	5	2	2
Lead	ppm	ASTM D5185m >40	6	7	6
Copper	ppm	ASTM D5185m >300	14	3	2
Tin	ppm	ASTM D5185m >10	1	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	9	6	7
Barium	ppm	ASTM D5185m 10	<1	0	0
Molybdenum	ppm	ASTM D5185m 100	74	72	63
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 450	1079	1009	903
Calcium	ppm	ASTM D5185m 3000	1440	1275	1226
Phosphorus	ppm	ASTM D5185m 1150	1241	1106	1051
Zinc	ppm	ASTM D5185m 1350	1568	1394	1305
Sulfur	ppm	ASTM D5185m 4250	4589	3862	3292

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	16	6	3
Sodium	ppm	ASTM D5185m >158	4	51	0
Potassium	ppm	ASTM D5185m >20	0	6	0
Fuel	%	ASTM D3524 >4.0	0.9	<1.0	<1.0

INFRA-RED

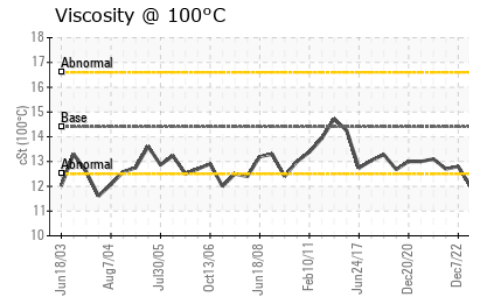
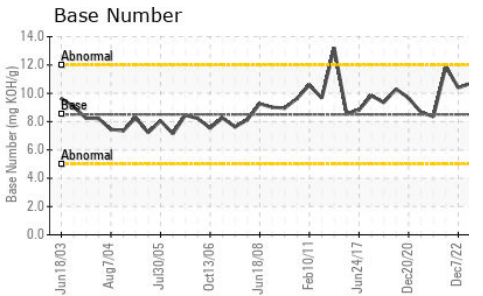
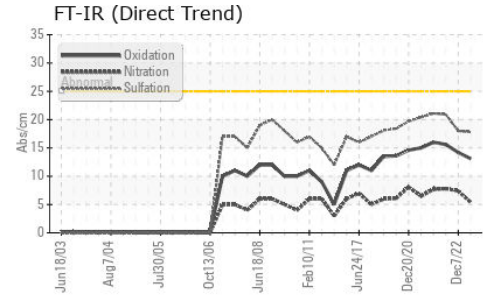
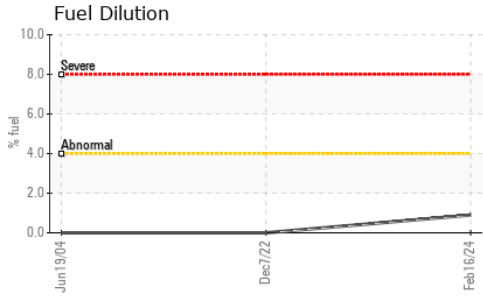
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.2	0.4	0.5
Nitration	Abs/cm	*ASTM D7624 >20	5.4	7.4	7.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.8	18	20.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.1	14.2	15.6
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	10.70	10.39	11.9



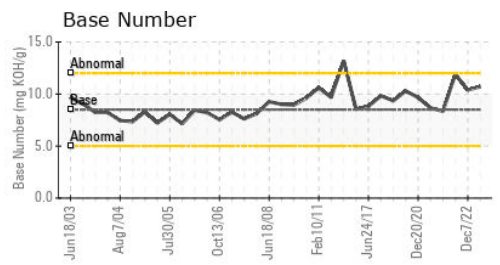
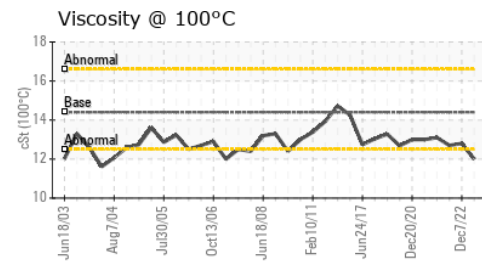
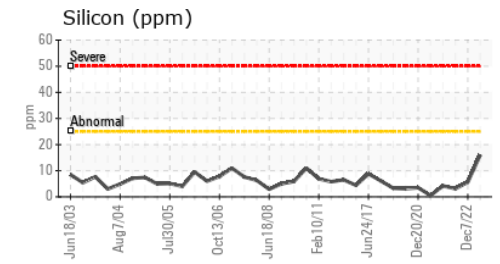
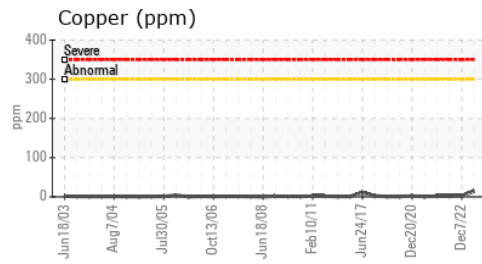
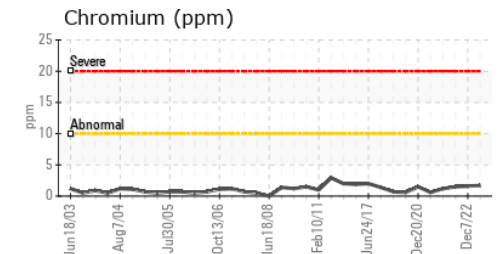
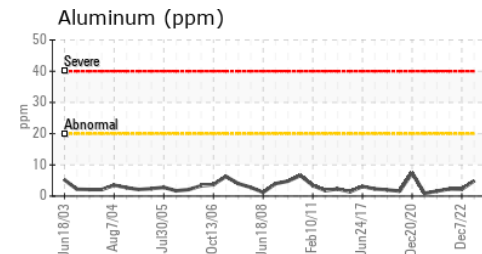
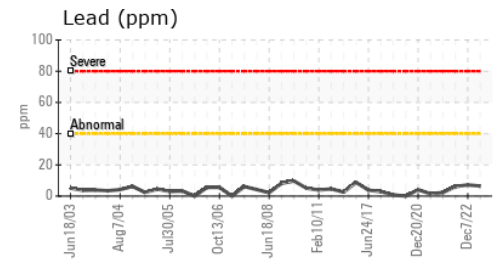
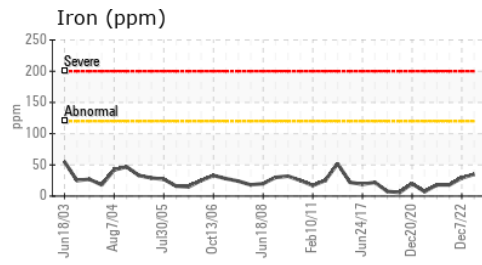
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	12.0	12.8	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005011 **Received** : 11 Apr 2024
Lab Number : **06146736** **Tested** : 17 Apr 2024
Unique Number : 10976814 **Diagnosed** : 17 Apr 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

HALLACK CONTRACTING, INC.
 4223 W POLK
 HART, MI
 US 49420

To discuss this sample report, contact Customer Service at 1-800-237-1369. Contact: DAN HALLACK KARL BUTCHER shop@hallackcontracting.com
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (231)873-5081
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (231)873-2889