TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO ECR305CL E-09 (S/N 0161)
Component
Diesel Engine
Fluid
TRC MOLY XL PROSPEC III 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

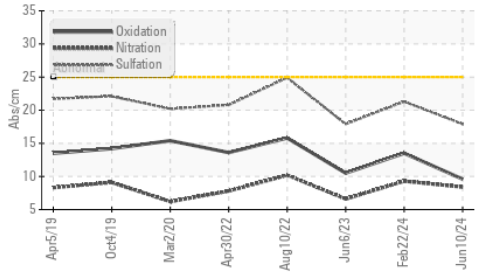
There is no indication of any contamination in the oil.

FLUID CONDITION

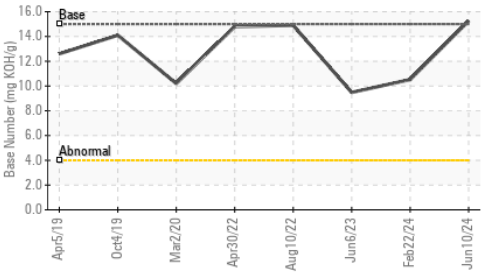
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06212586	TR06101173	TR05871126
Sample Date		Client Info		10 Jun 2024	22 Feb 2024	06 Jun 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		250	421	250
Filter Age	hrs	Client Info		250	421	250
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>100	8	21	11
Chromium	ppm	ASTM D5185m	>10	<1	1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	4	2	<1
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>15	1	1	1
Tin	ppm	ASTM D5185m	>10	<1	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
Silicon	ppm	ASTM D5185m	>20	7	8	7
Potassium	ppm	ASTM D5185m	>20	4	0	0
Fuel		WC Method	>6.0	<1.0	<1.0	0.4
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.9	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.4	9.3	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	21.3	17.9
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
Sodium	ppm	ASTM D5185m		3	0	2
Boron	ppm	ASTM D5185m		9	39	68
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		128	67	67
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		43	282	271
Calcium	ppm	ASTM D5185m	4500	4355	2966	2800
Phosphorus	ppm	ASTM D5185m		922	925	879
Zinc	ppm	ASTM D5185m	1400	1042	1205	1037
Sulfur	ppm	ASTM D5185m		4911	4059	4888
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.6	13.5	10.5
Base Number (BN)	mg KOH/g	ASTM D2896	15	15.25	10.52	9.48
Visc @ 100°C	cSt	ASTM D445	15.5	15.6	12.3	11.7

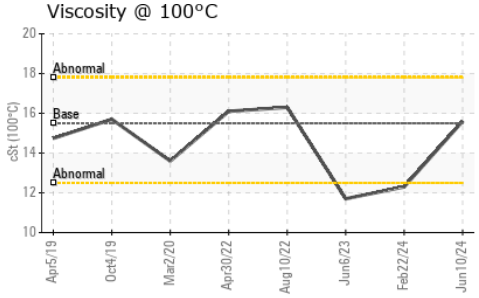
FT-IR (Direct Trend)



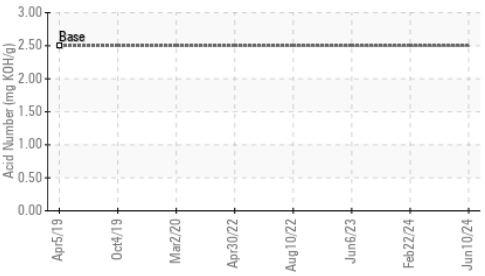
Base Number



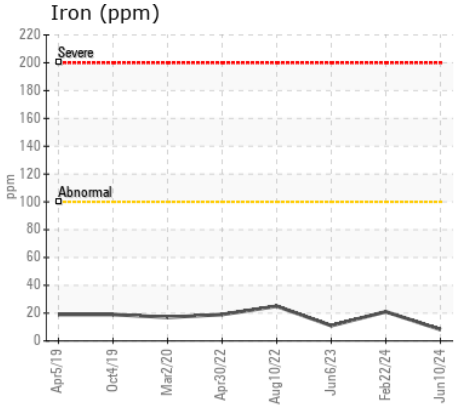
Viscosity @ 100°C



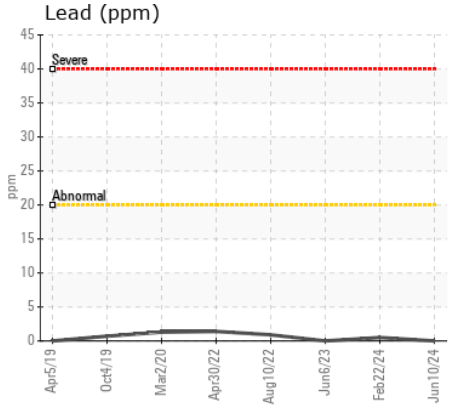
Acid Number



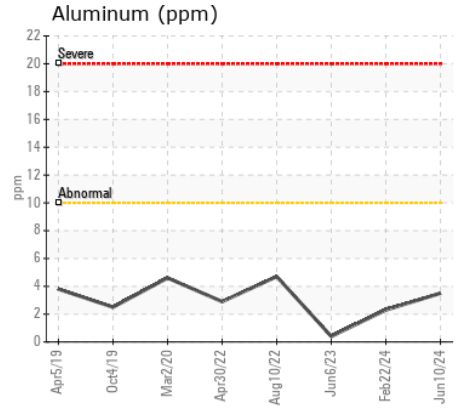
Iron (ppm)



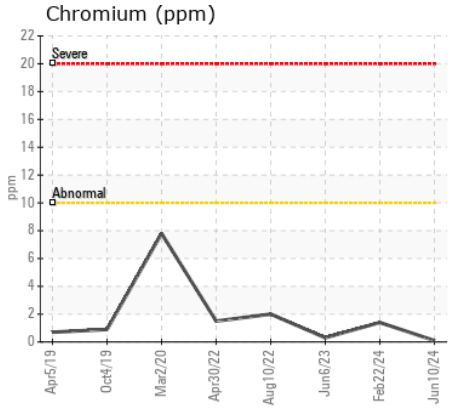
Lead (ppm)



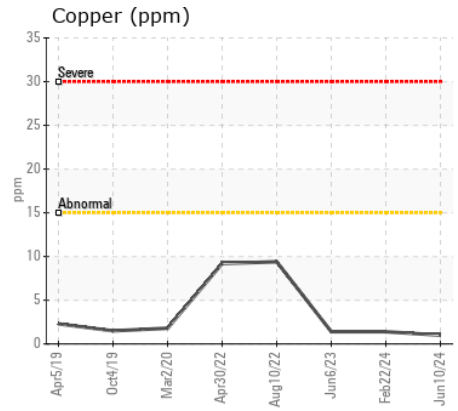
Aluminum (ppm)



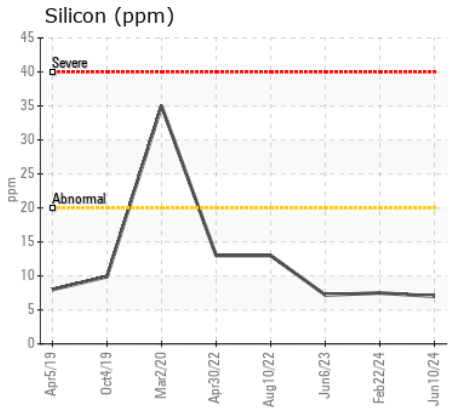
Chromium (ppm)



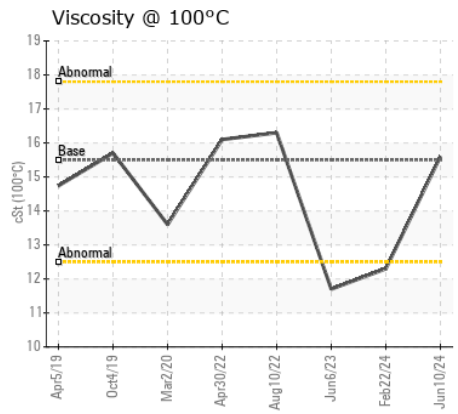
Copper (ppm)



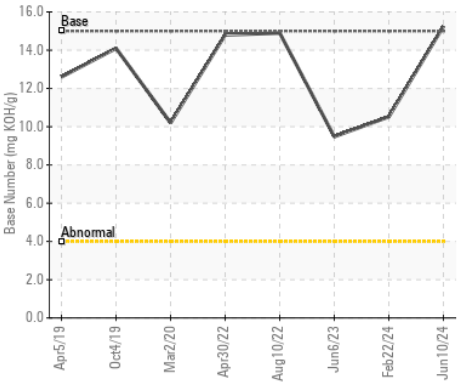
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06212586
Lab Number : 06212586
Unique Number : 11085450
Test Package : MOB 2 (Additional Tests: TAN Man)

Received : 17 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Sean Felton

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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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T:
F: