



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO EC350E E15 (S/N 0050)
 Component
Diesel Engine
 Fluid
TRC MOLY XL PROSPEC III 15W40 (13 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06212587	TR05967191	TR05871128
Sample Date		Client Info		10 Jun 2024	25 Sep 2023	06 Jun 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		415	875	297
Filter Age	hrs	Client Info		415	875	297
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	3	8	5
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	4	0	<1
Lead	ppm	ASTM D5185m	>20	<1	1	0
Copper	ppm	ASTM D5185m	>15	1	1	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

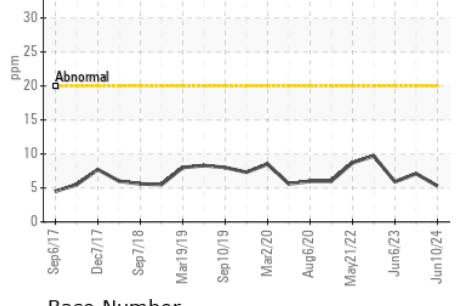
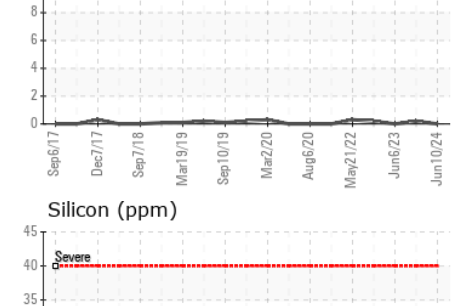
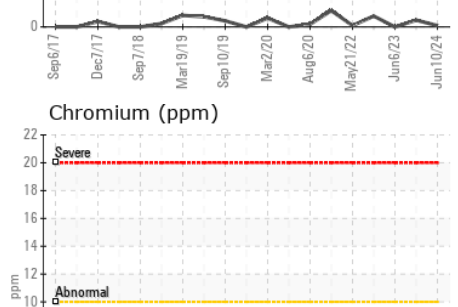
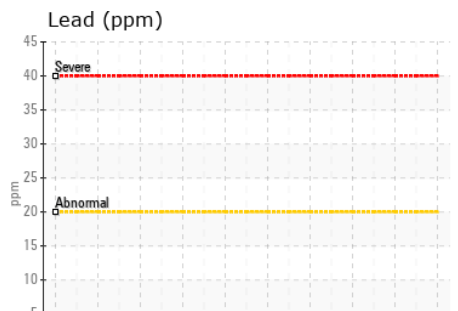
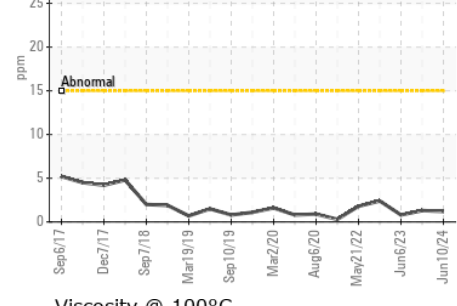
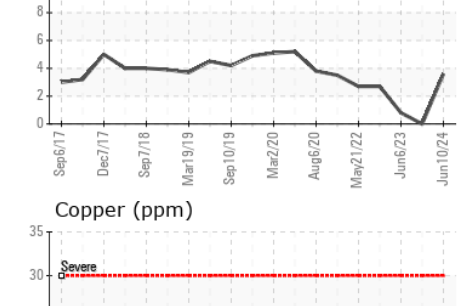
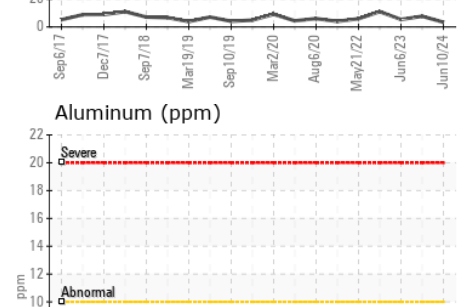
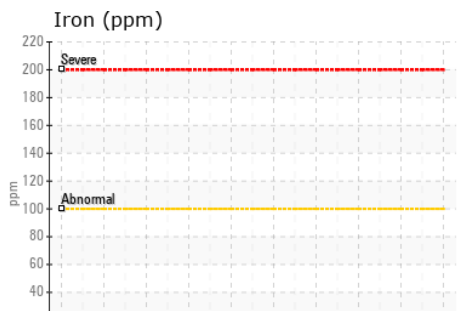
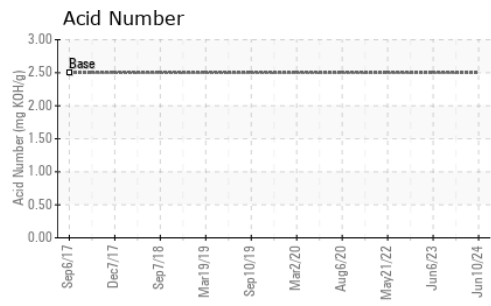
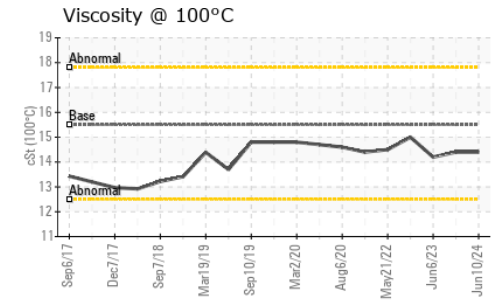
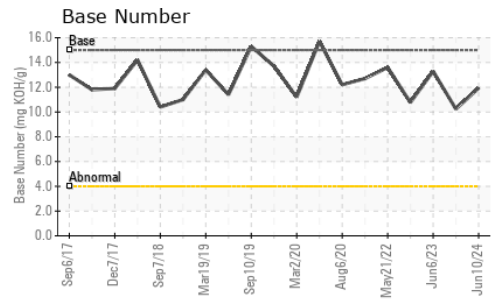
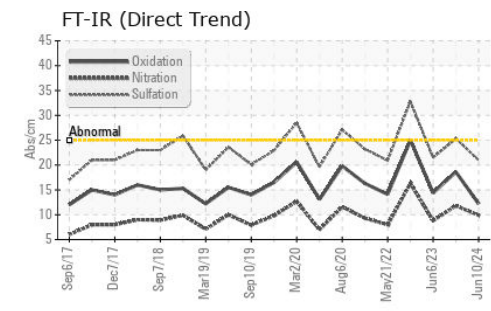
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	7	6
Potassium	ppm	ASTM D5185m	>20	4	2	0
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	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.9	11.8	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	25.3	21.5
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 suitable for further service.

Sodium	ppm	ASTM D5185m		4	6	4
Boron	ppm	ASTM D5185m		10	112	195
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		135	154	153
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		51	417	440
Calcium	ppm	ASTM D5185m	4500	4419	3655	3716
Phosphorus	ppm	ASTM D5185m		945	910	915
Zinc	ppm	ASTM D5185m	1400	1065	1111	1061
Sulfur	ppm	ASTM D5185m		5027	3836	4446
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.2	18.6	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	15	11.93	10.24	13.29
Visc @ 100°C	cSt	ASTM D445	15.5	14.4	14.4	14.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06212587
Lab Number : 06212587
Unique Number : 11085451
Test Package : MOB 2 (Additional Tests: TAN Man)

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

NUTTER ENTERPRISES INC
 28 STONE RD
 BELMONT, NH
 US 03220
 Contact: DON PERCY

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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