



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
31
 Component
Diesel Engine
 Fluid
TRC MOLY XL PROSPEC III 15W40 (--- QTS)

RECOMMENDATION

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

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

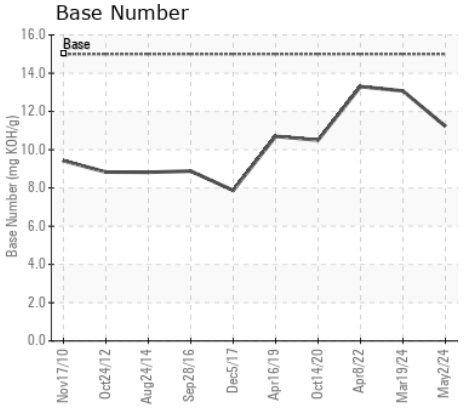
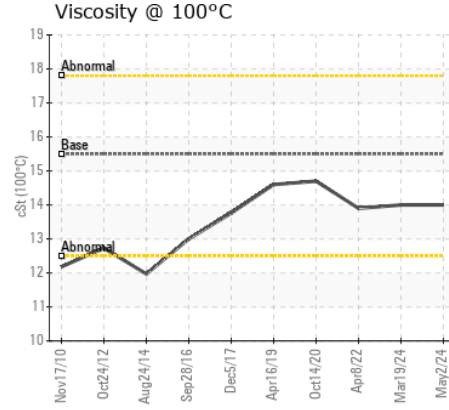
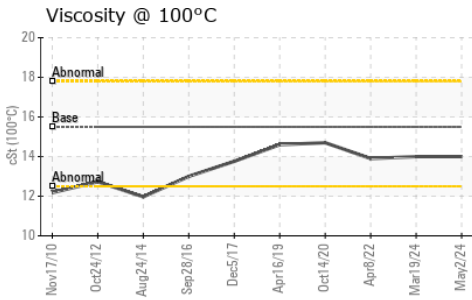
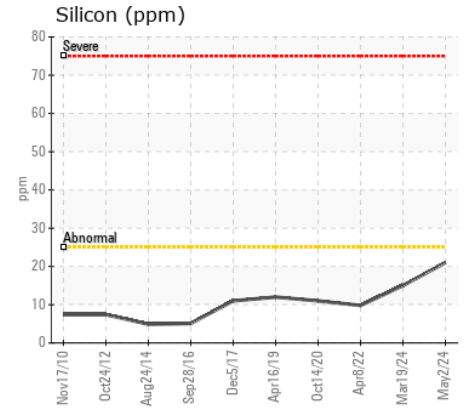
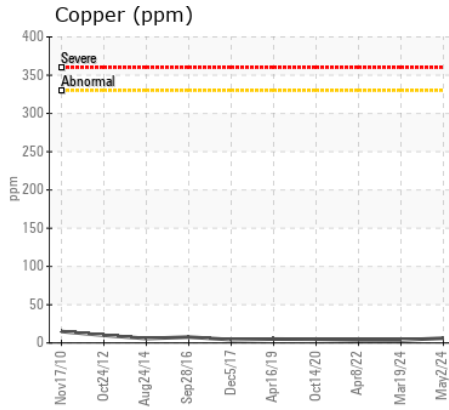
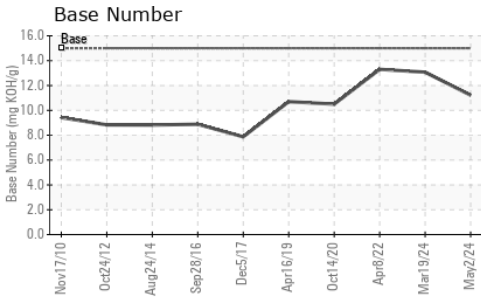
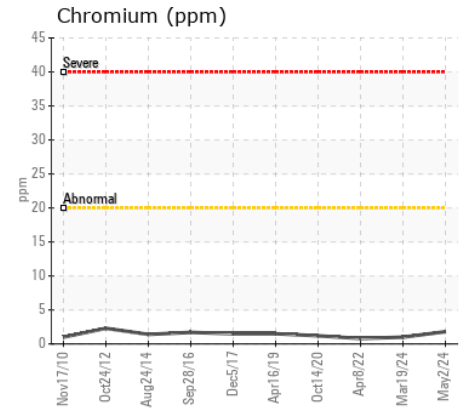
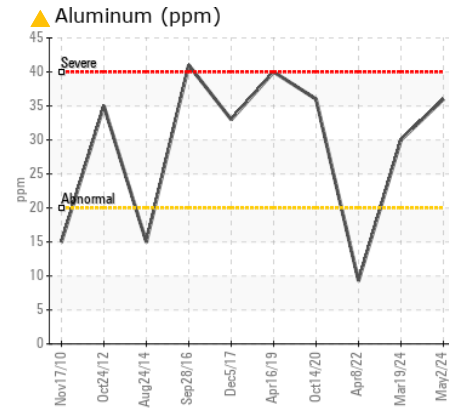
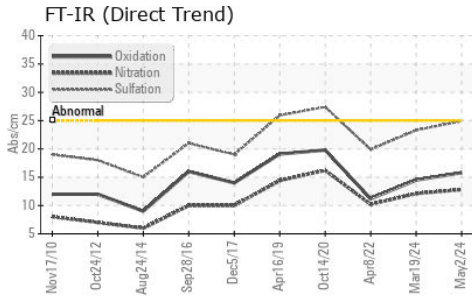
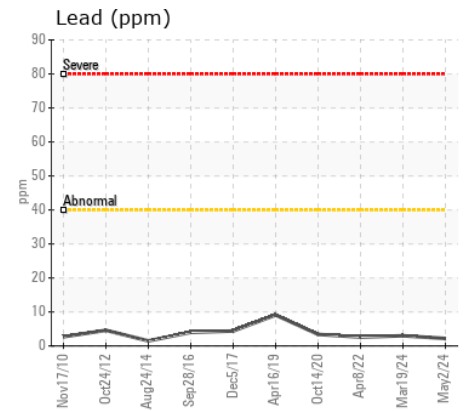
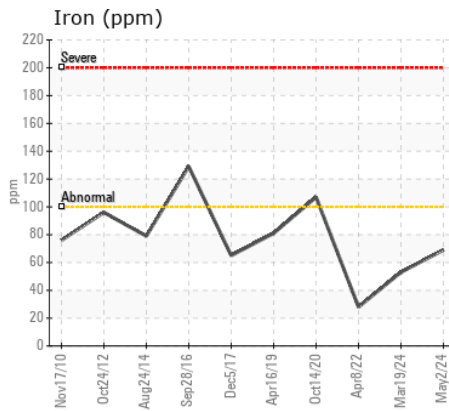
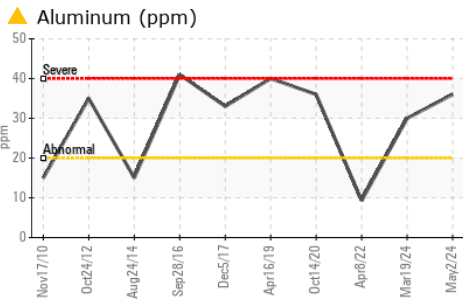
CONTAMINATION

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		TR06177400	TR06139377	TR05523651
Sample Date		Client Info		02 May 2024	19 Mar 2024	08 Apr 2022
Machine Age	mls	Client Info		169735	167671	148071
Oil Age	mls	Client Info		14205	12141	6071
Filter Age	mls	Client Info		14205	12141	6071
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	69	53	28
Chromium	ppm	ASTM D5185m	>20	2	1	<1
Nickel	ppm	ASTM D5185m	>4	2	2	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	▲ 36	▲ 30	9
Lead	ppm	ASTM D5185m	>40	2	3	3
Copper	ppm	ASTM D5185m	>330	6	4	4
Tin	ppm	ASTM D5185m	>15	3	3	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	21	15	10
Potassium	ppm	ASTM D5185m	>20	8	4	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.3	1.1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	12.8	12.1	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	23.3	19.9
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		11	12	10
Boron	ppm	ASTM D5185m		0	42	14
Barium	ppm	ASTM D5185m		9	0	0
Molybdenum	ppm	ASTM D5185m		1445	1308	595
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		19	19	16
Calcium	ppm	ASTM D5185m	4500	4531	4255	4650
Phosphorus	ppm	ASTM D5185m		1076	916	989
Zinc	ppm	ASTM D5185m	1400	1083	1042	1032
Sulfur	ppm	ASTM D5185m		5970	5927	4285
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	14.5	11.2
Base Number (BN)	mg KOH/g	ASTM D2896	15	11.22	13.07	13.3
Visc @ 100°C	cSt	ASTM D445	15.5	14.0	14.0	13.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06177400
Lab Number : 06177400
Unique Number : 11023453
Test Package : MOB 2
Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 15 May 2024 - Don Baldrige

ALEXANDER SCHOOLS
 6091 AYERS RD
 ALBANY, OH
 US 45710
 Contact: DEAN WISE

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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