



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
TERRAGATOR TG8400B 477

Component
Diesel Engine

Fluid
TRC MOLY XL PRO-SPEC IV XP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06077836	TR05879063	---
Sample Date		Client Info		24 Jan 2024	15 Jun 2023	---
Machine Age	hrs	Client Info		3200	0	---
Oil Age	hrs	Client Info		400	400	---
Filter Age	hrs	Client Info		400	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	7	6	---
Chromium	ppm	ASTM D5185m	>20	<1	0	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	3	1	---
Lead	ppm	ASTM D5185m	>40	1	<1	---
Copper	ppm	ASTM D5185m	>330	43	19	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

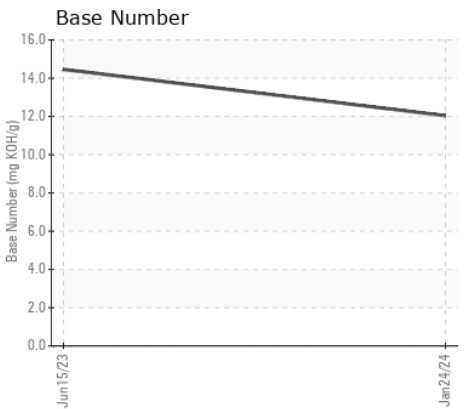
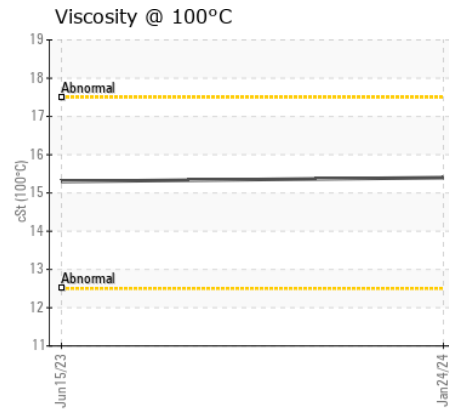
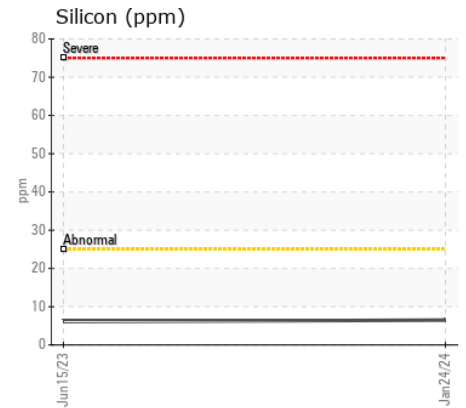
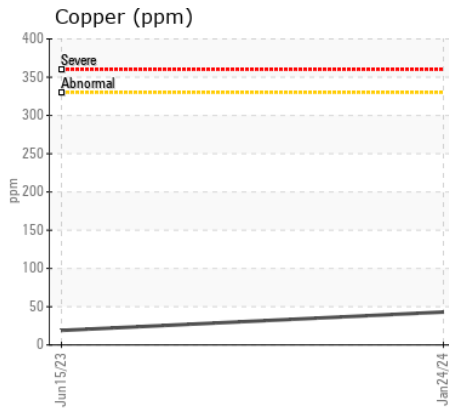
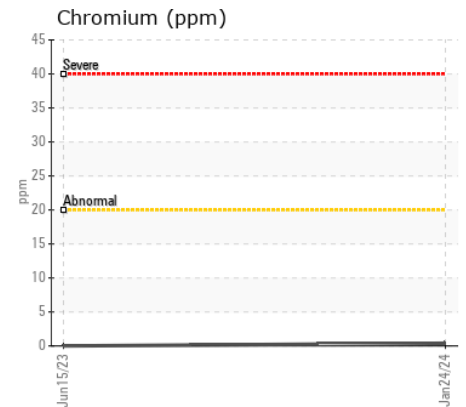
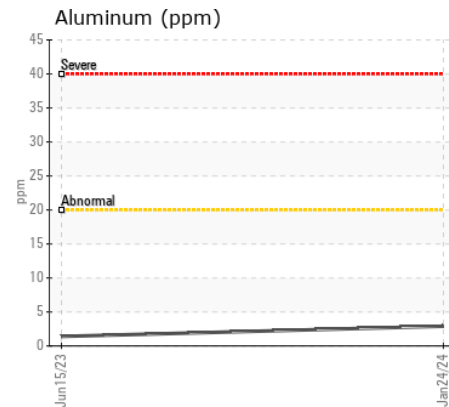
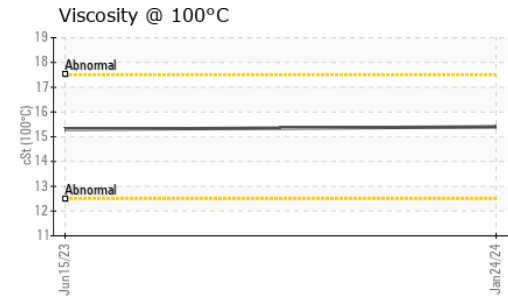
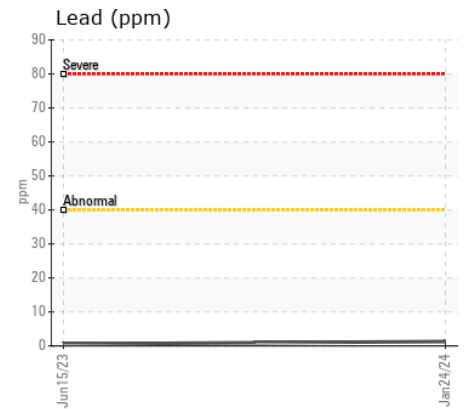
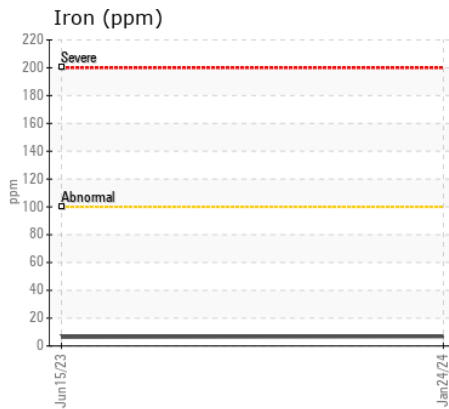
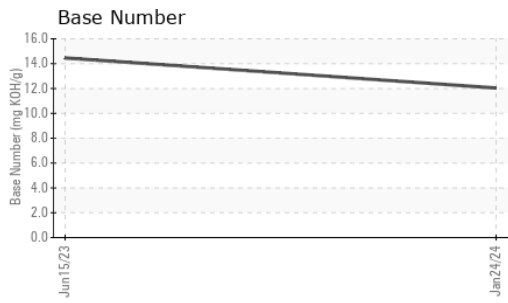
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	6	---
Potassium	ppm	ASTM D5185m	>20	7	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	21.3	---
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	>0.2	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		0	0	---
Boron	ppm	ASTM D5185m		17	10	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		122	120	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		53	52	---
Calcium	ppm	ASTM D5185m		4634	4809	---
Phosphorus	ppm	ASTM D5185m		929	943	---
Zinc	ppm	ASTM D5185m		1115	1103	---
Sulfur	ppm	ASTM D5185m		4434	4421	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.1	12.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		12.04	14.46	---
Visc @ 100°C	cSt	ASTM D445		15.4	15.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06077836 **Received** : 01 Feb 2024
Lab Number : 06077836 **Diagnosed** : 02 Feb 2024
Unique Number : 10859927 **Diagnostician** : Wes Davis
Test Package : MOB 2

WALLOWA COUNTY GRAIN GROWERS
 911 S RIVER ST
 ENTERPRISE, OR
 US 97828
 Contact: RON GROGAN

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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F: