



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**MACK CV713 91**

Component  
**Diesel Engine**

Fluid  
**TRC PRO-SPEC III SYNTHETIC BLEND 15W40 (40 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06099322	TR05784638	---
Sample Date		Client Info		29 Jan 2024	28 Feb 2023	---
Machine Age	hrs	Client Info		28859	27378	---
Oil Age	hrs	Client Info		311	199	---
Filter Age	hrs	Client Info		311	199	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	16	11	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	<1	2	---
Lead	ppm	ASTM D5185m	>40	<1	2	---
Copper	ppm	ASTM D5185m	>330	2	2	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

**CONTAMINATION**

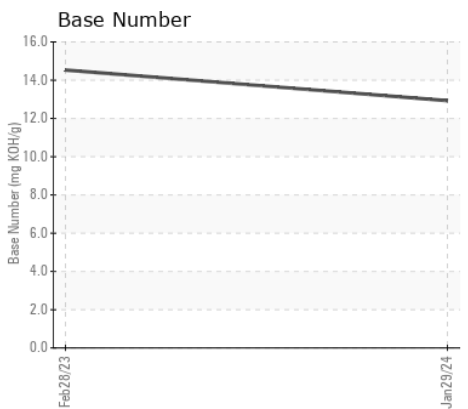
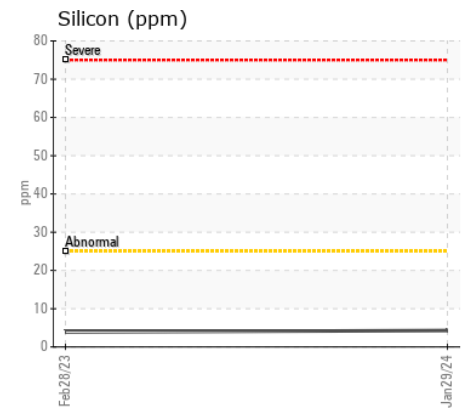
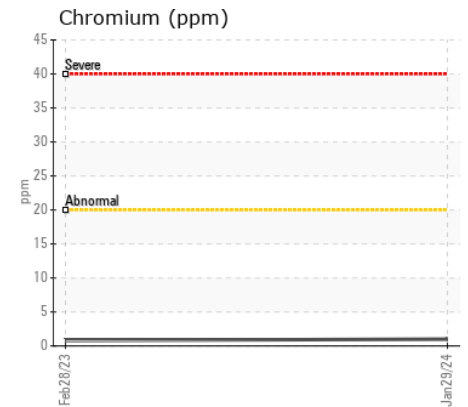
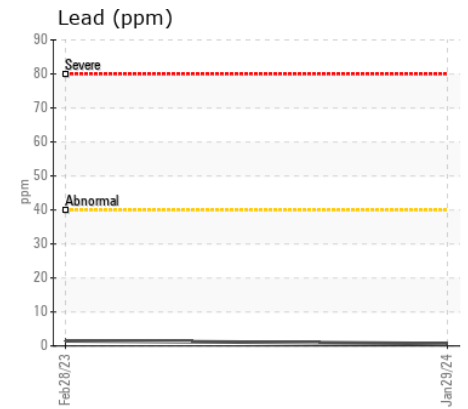
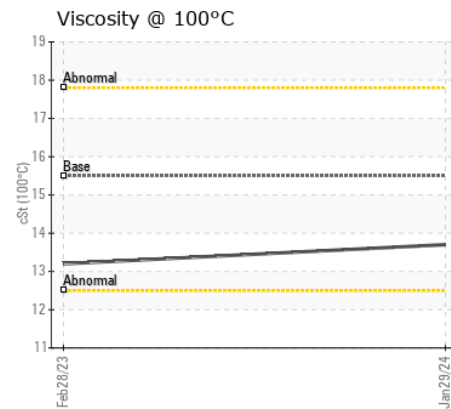
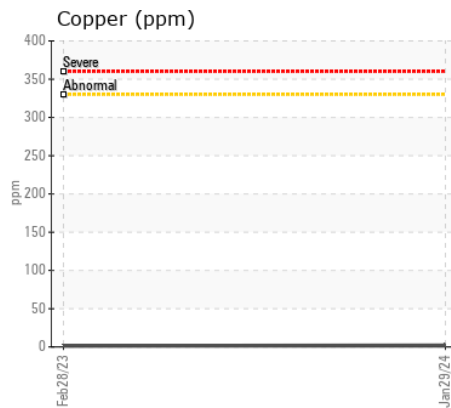
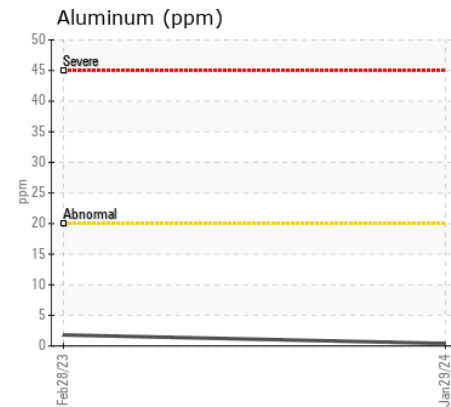
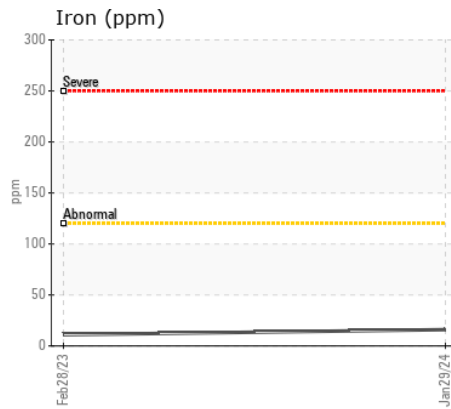
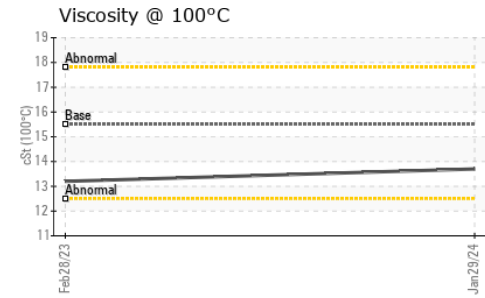
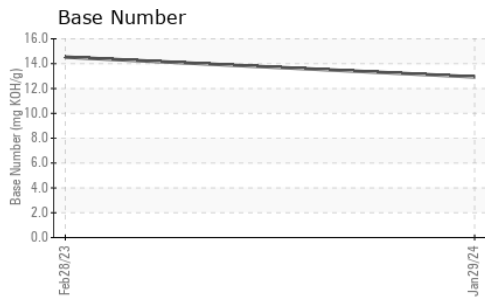
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	4	---
Potassium	ppm	ASTM D5185m	>20	2	3	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>4	1.7	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	6.2	5.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	17.8	---
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	2	---
Boron	ppm	ASTM D5185m		0	<1	---
Barium	ppm	ASTM D5185m		5	0	---
Molybdenum	ppm	ASTM D5185m		2	2	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		19	27	---
Calcium	ppm	ASTM D5185m		3970	4834	---
Phosphorus	ppm	ASTM D5185m		753	996	---
Zinc	ppm	ASTM D5185m		905	1172	---
Sulfur	ppm	ASTM D5185m		3811	5375	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.0	9.0	---
Base Number (BN)	mg KOH/g	ASTM D2896		12.93	14.53	---
Visc @ 100°C	cSt	ASTM D445	15.5	13.7	13.2	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06099322  
**Lab Number** : 06099322  
**Unique Number** : 10897552  
**Test Package** : MOB 2

**Received** : 23 Feb 2024  
**Tested** : 26 Feb 2024  
**Diagnosed** : 27 Feb 2024 - Don Baldrige

**HUTH READY MIX AND SUPPLY CO**  
 501 5TH ST NW  
 MASSILLON, OH  
 US 44647  
 Contact: JIM FITZGERALD

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)

T:  
F: