



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MACK MACK

Component
Diesel Engine

Fluid
TRC PRO-SPEC III SYNTHETIC BLEND 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02616939	TR02374155	---
Sample Date		Client Info		07 Feb 2024	26 Aug 2020	---
Machine Age	kms	Client Info		0	1657	---
Oil Age	kms	Client Info		0	526	---
Filter Age	kms	Client Info		42771	526	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	21	37	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	1	0	---
Titanium	ppm	ASTM D5185(m)	>2	0	<1	---
Silver	ppm	ASTM D5185(m)	>2	<1	0	---
Aluminum	ppm	ASTM D5185(m)	>20	6	3	---
Lead	ppm	ASTM D5185(m)	>40	1	15	---
Copper	ppm	ASTM D5185(m)	>330	8	1	---
Tin	ppm	ASTM D5185(m)	>15	1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---

CONTAMINATION

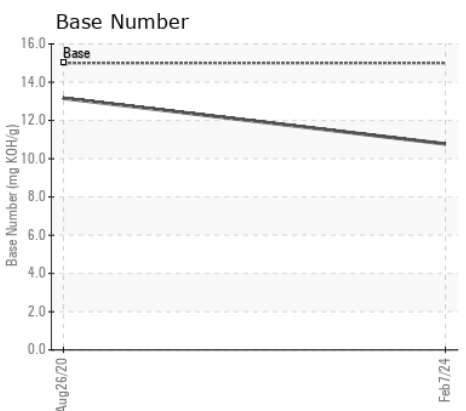
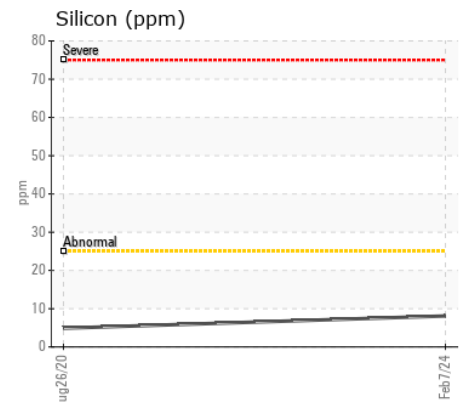
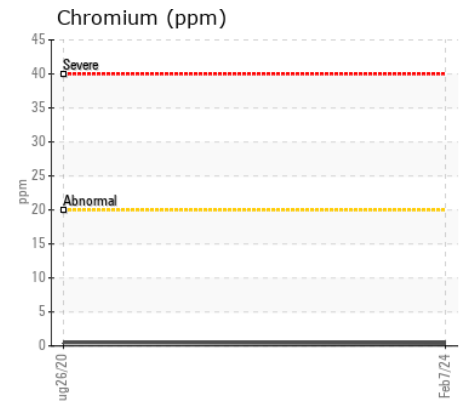
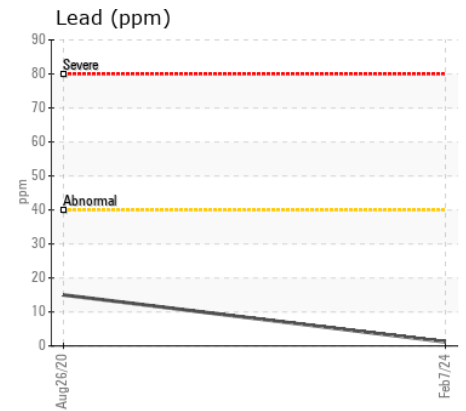
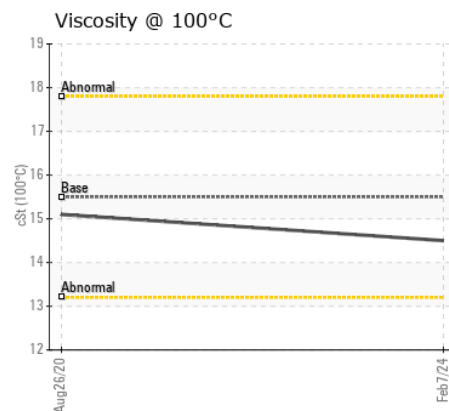
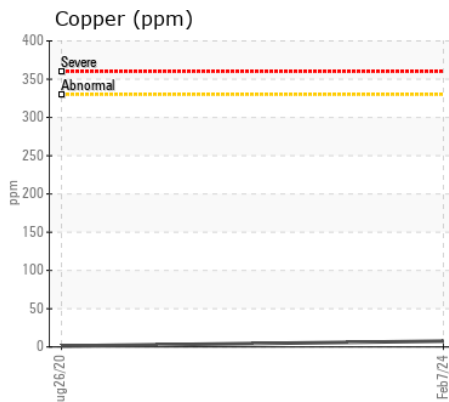
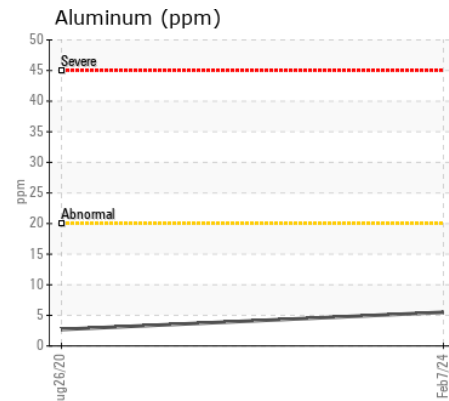
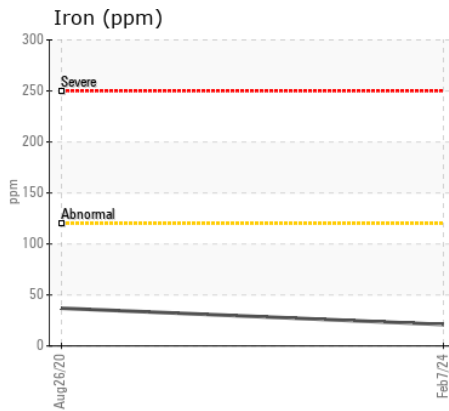
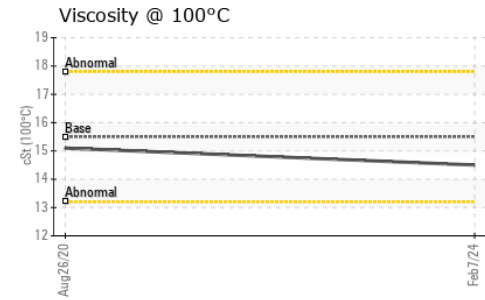
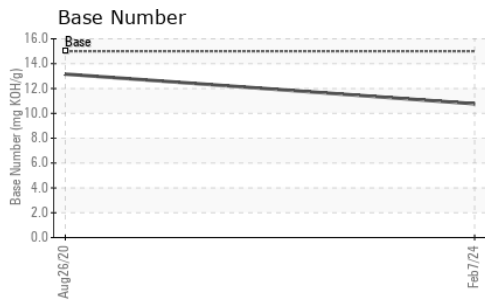
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	5	---
Potassium	ppm	ASTM D5185(m)	>20	4	1	---
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	0.4	1.6	---
Nitration	Abs/cm	ASTM D7624*	>20	14.0	14.3	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.4	27.1	---
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 D5185(m)		6	2	---
Boron	ppm	ASTM D5185(m)		16	55	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		218	93	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)		37	44	---
Calcium	ppm	ASTM D5185(m)	4500	4531	4611	---
Phosphorus	ppm	ASTM D5185(m)		1031	1142	---
Zinc	ppm	ASTM D5185(m)	1400	1173	1336	---
Sulfur	ppm	ASTM D5185(m)		3715	3658	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	21.4	---
Base Number (BN)	mg KOH/g	ASTM D2896*	15	10.77	13.16	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	14.5	15.1	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02616939 **Received** : 21 Feb 2024
Lab Number : 02616939 **Tested** : 22 Feb 2024
Unique Number : 5734049 **Diagnosed** : 22 Feb 2024 - Wes Davis
Test Package : MOB 2

POLAR ENTERPRISE
 BOX 36, GRP 8
 HADASHVILLE, MB
 CA R0E 0X0
 Contact: Trevor Panych

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: (204)326-8683

F: