



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DODGE 2C4RDGEG4ER146344
 Component
Gasoline Engine
 Fluid
TRC PRO-SPEC SYNTHETIC 5W30 (5 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06055059	TR05902920	---
Sample Date		Client Info		24 Oct 2023	13 Jul 2023	---
Machine Age	mls	Client Info		228974	223476	---
Oil Age	mls	Client Info		5000	4000	---
Filter Age	mls	Client Info		5000	4000	---
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	>150	10	17	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>40	3	3	---
Lead	ppm	ASTM D5185m	>50	<1	<1	---
Copper	ppm	ASTM D5185m	>155	3	4	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

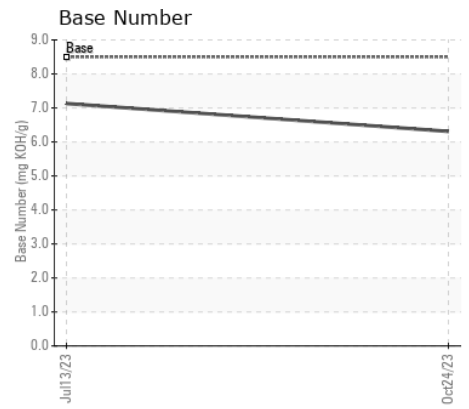
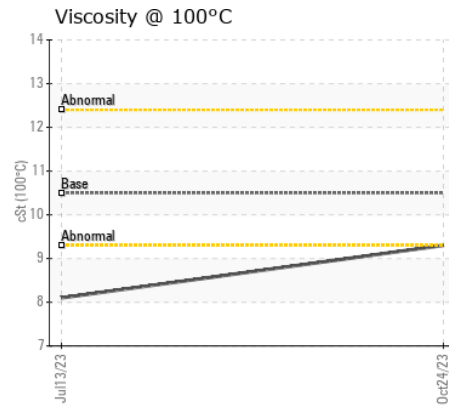
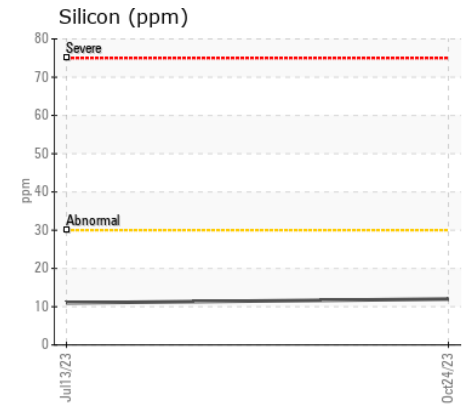
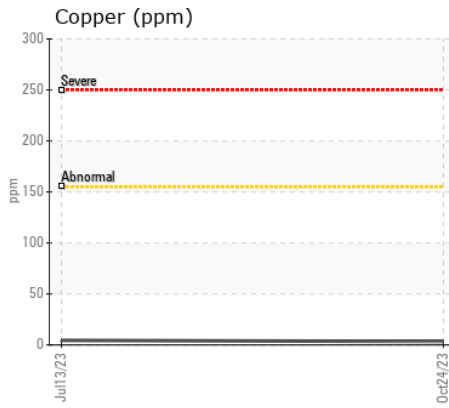
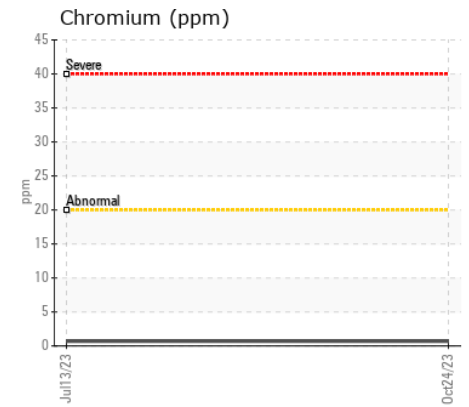
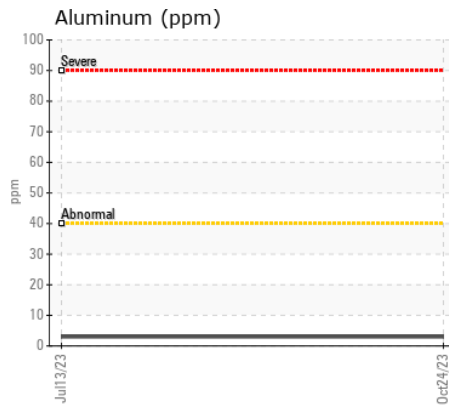
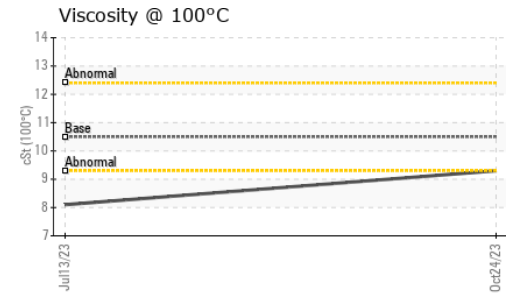
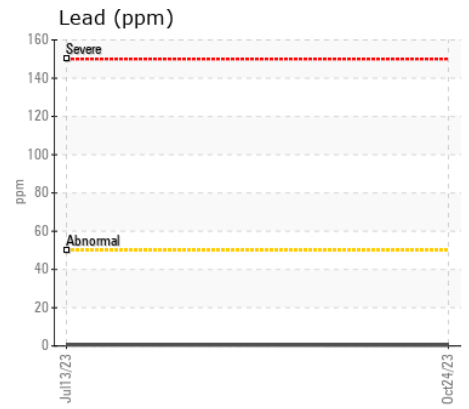
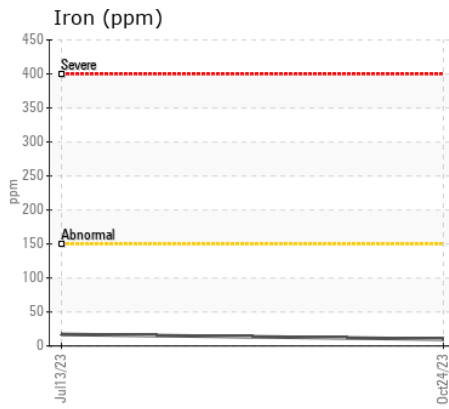
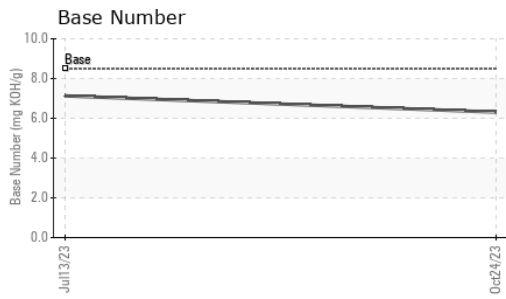
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	12	11	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0	0	---
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	17.1	---
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	>400	2	2	---
Boron	ppm	ASTM D5185m		55	43	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m	400	168	92	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	600	567	462	---
Calcium	ppm	ASTM D5185m	1500	1515	1238	---
Phosphorus	ppm	ASTM D5185m	800	746	719	---
Zinc	ppm	ASTM D5185m	900	992	847	---
Sulfur	ppm	ASTM D5185m		2840	2634	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.7	10.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.31	7.13	---
Visc @ 100°C	cSt	ASTM D445	10.5	9.3	8.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06055059 **Received** : 08 Jan 2024
Lab Number : 06055059 **Diagnosed** : 10 Jan 2024
Unique Number : 10821008 **Diagnostician** : Wes Davis
Test Package : MOB 2

HARLAN MUNNING
 212 COUNTY RD 1
 MT LAKE, MN
 US 56159
 Contact: HARLAN MUNNING

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: