



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
DODGE 2015-03
 Component
Gasoline Engine
 Fluid
TRC PRO-SPEC MULTI-VIS SB 5W20 (6 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06044151	TR05960789	---
Sample Date		Client Info		16 Dec 2023	07 Sep 2023	---
Machine Age	mls	Client Info		149030	143085	---
Oil Age	mls	Client Info		5945	5814	---
Filter Age	mls	Client Info		5945	5814	---
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	8	8	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	0	1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>40	4	4	---
Lead	ppm	ASTM D5185m	>50	0	0	---
Copper	ppm	ASTM D5185m	>155	6	8	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

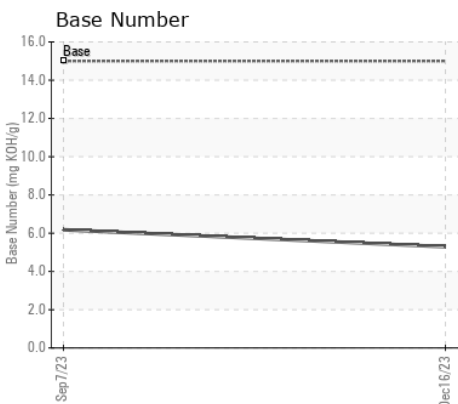
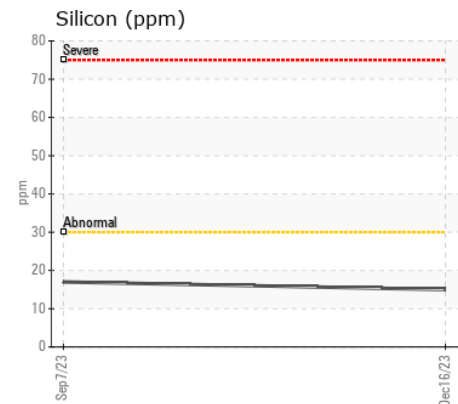
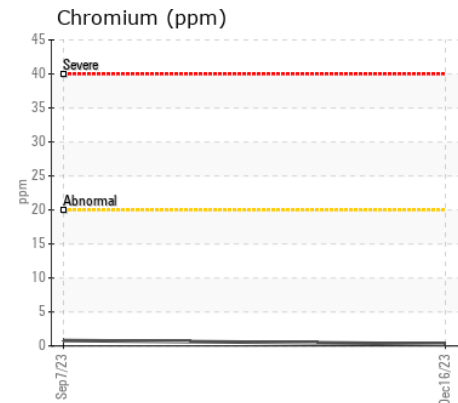
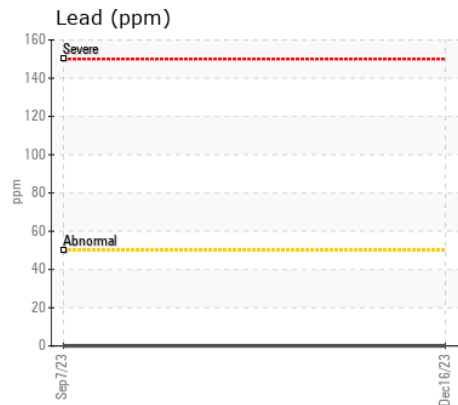
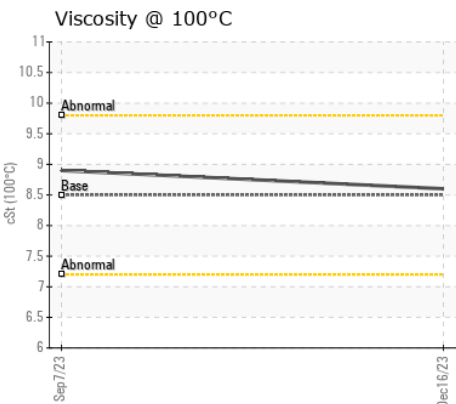
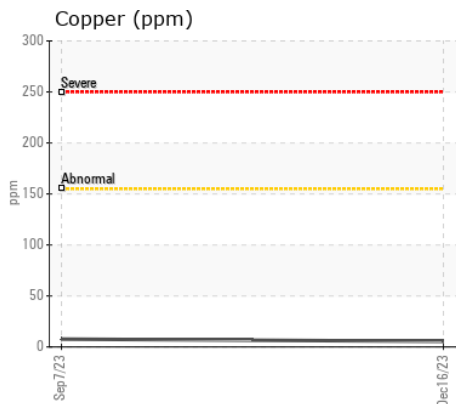
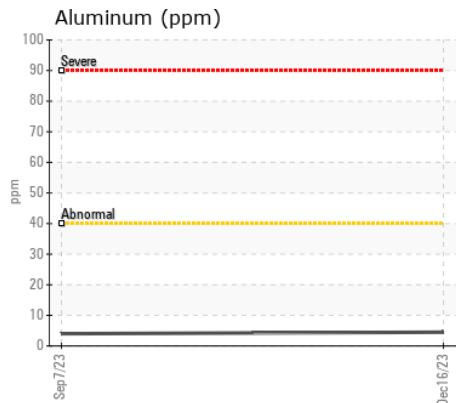
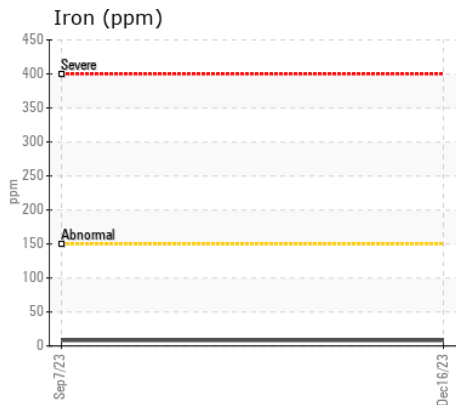
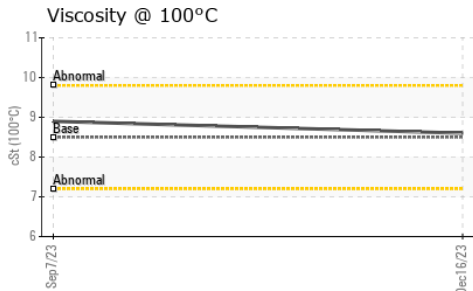
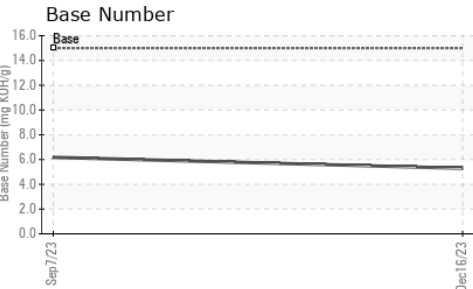
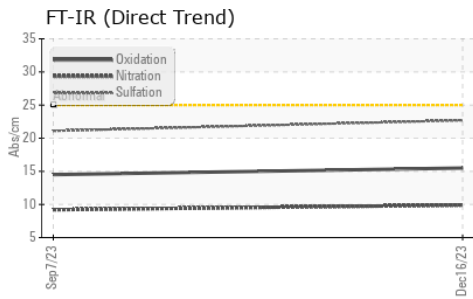
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	15	17	---
Potassium	ppm	ASTM D5185m	>20	3	4	---
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	9.9	9.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	21.1	---
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		20	26	---
Barium	ppm	ASTM D5185m		0	2	---
Molybdenum	ppm	ASTM D5185m		268	231	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		457	457	---
Calcium	ppm	ASTM D5185m	4200	1309	1710	---
Phosphorus	ppm	ASTM D5185m	800	647	791	---
Zinc	ppm	ASTM D5185m	800	814	979	---
Sulfur	ppm	ASTM D5185m		2057	2528	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	14.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	15	5.29	6.18	---
Visc @ 100°C	cSt	ASTM D445	8.5	8.6	8.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06044151
Lab Number : 06044151
Unique Number : 10804759
Test Package : MOB 2

Received : 22 Dec 2023
Tested : 27 Dec 2023
Diagnosed : 27 Dec 2023 - Wes Davis

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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)