



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
DODGE 20 LEG M7
 Component
Gearbox
 Fluid
TRC MOLY ULTRA-TEC GEAR OIL 85W140 (4 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR05871614	TR05645595	---
Sample Date		Client Info		06 Jun 2023	12 Sep 2022	---
Machine Age	yrs	Client Info		0	0	---
Oil Age	yrs	Client Info		0	7	---
Filter Age	yrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	182	▲ 231	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		<1	<1	---
Aluminum	ppm	ASTM D5185m	>25	0	<1	---
Lead	ppm	ASTM D5185m	>50	0	0	---
Copper	ppm	ASTM D5185m	>200	<1	<1	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	MODER	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

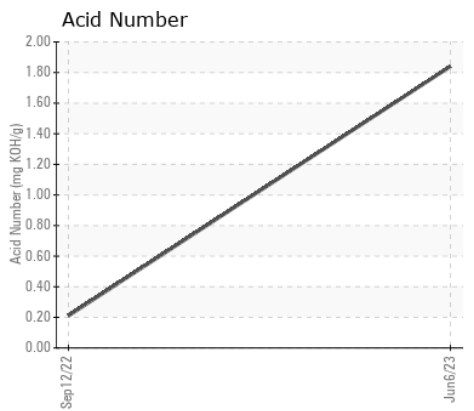
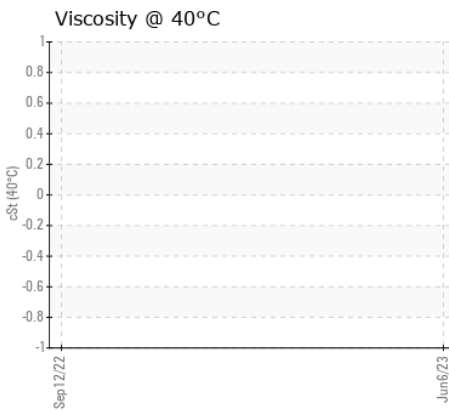
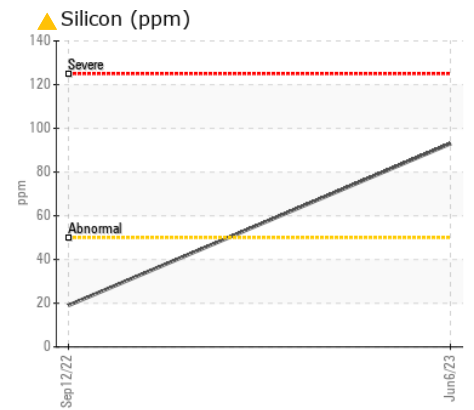
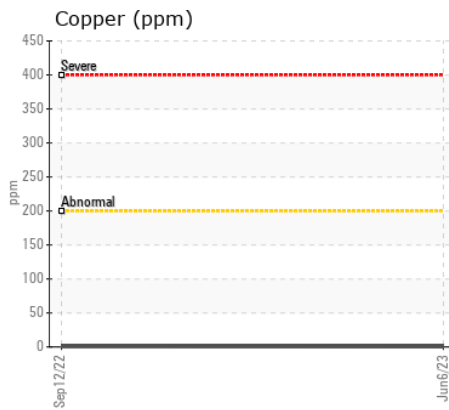
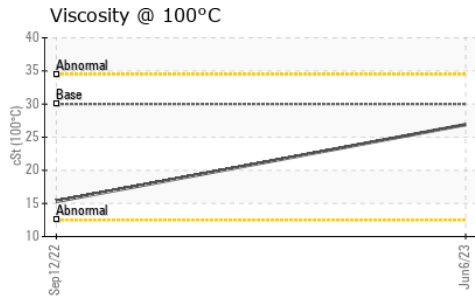
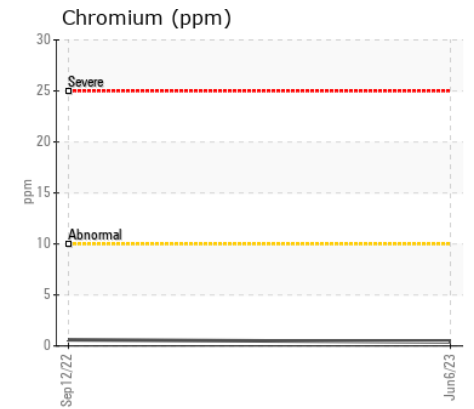
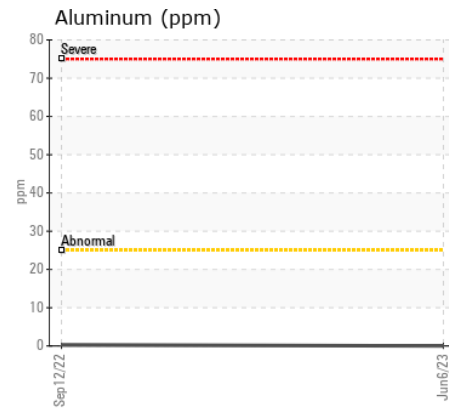
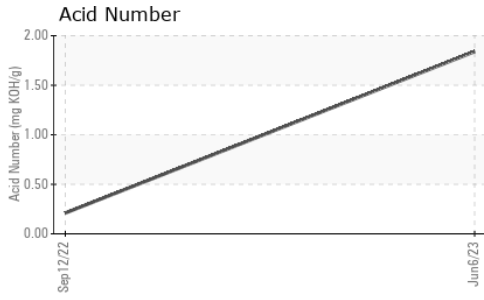
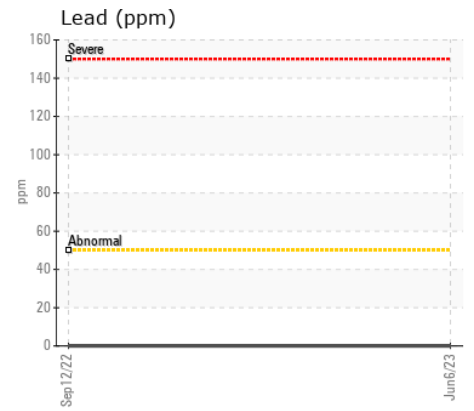
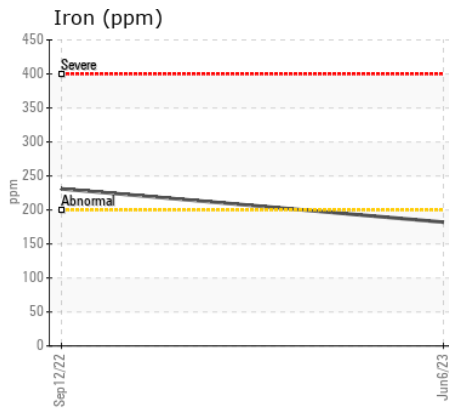
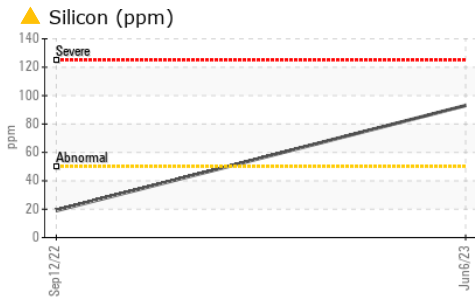
Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>50	▲ 93	19	---
Potassium	ppm	ASTM D5185m	>20	4	0	---
Water		WC Method	>0.2	NEG	NEG	---
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	0	---
Boron	ppm	ASTM D5185m		290	4	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	<1	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		<1	0	---
Calcium	ppm	ASTM D5185m		17	3	---
Phosphorus	ppm	ASTM D5185m		1232	723	---
Zinc	ppm	ASTM D5185m		4	3	---
Sulfur	ppm	ASTM D5185m		26155	255	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.84	0.21	---
Visc @ 100°C	cSt	ASTM D445	30	26.9	● 15.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR05871614 **Received** : 12 Jun 2023
Lab Number : 05871614 **Tested** : 14 Jun 2023
Unique Number : 10511398 **Diagnosed** : 14 Jun 2023 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KV100)

HIGHLINE GRAIN GROWERS
 9025 S CRAIG RD
 CHENEY, WA
 US 99004
 Contact: RONALD 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)

T:
F: