



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id

89

Component

Transfer Case

Fluid

TRC MOLY ULTRA-TEC GEAR OIL 85W140 (10 GAL)

RECOMMENDATION

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		TR0001651	TR0001193	---
Sample Date		Client Info		15 Jul 2024	21 Nov 2023	---
Machine Age	hrs	Client Info		2395	703	---
Oil Age	hrs	Client Info		2395	703	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

Gear wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	▲ 558	239	---
Chromium	ppm	ASTM D5185m	>5	6	3	---
Nickel	ppm	ASTM D5185m	>5	<1	2	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>45	13	8	---
Lead	ppm	ASTM D5185m	>150	0	1	---
Copper	ppm	ASTM D5185m	>100	3	<1	---
Tin	ppm	ASTM D5185m	>5	0	<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.

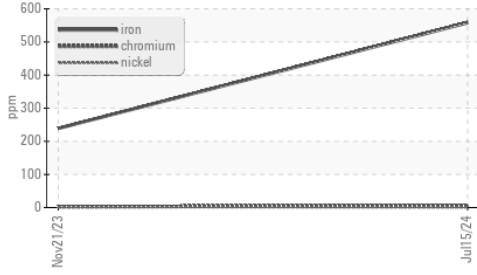
Silicon	ppm	ASTM D5185m	>85	36	26	---
Potassium	ppm	ASTM D5185m	>20	50	45	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	MODER	MODER	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

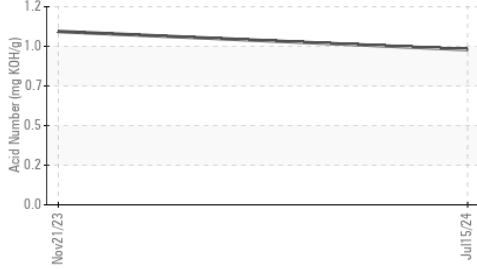
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		22	18	---
Boron	ppm	ASTM D5185m		14	8	---
Barium	ppm	ASTM D5185m		2	0	---
Molybdenum	ppm	ASTM D5185m		2	<1	---
Manganese	ppm	ASTM D5185m		8	4	---
Magnesium	ppm	ASTM D5185m		30	30	---
Calcium	ppm	ASTM D5185m		2329	2092	---
Phosphorus	ppm	ASTM D5185m		848	805	---
Zinc	ppm	ASTM D5185m		1017	971	---
Sulfur	ppm	ASTM D5185m		6393	5241	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.94	1.05	---
Visc @ 40°C	cSt	ASTM D445		171	176	---
Visc @ 100°C	cSt	ASTM D445	30	16.7	16.9	---
Viscosity Index (VI)	Scale	ASTM D2270	105	102	101	---

▲ Ferrous Alloys



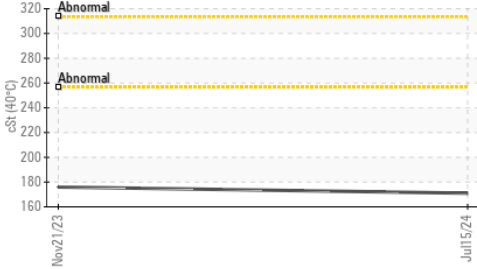
Acid Number



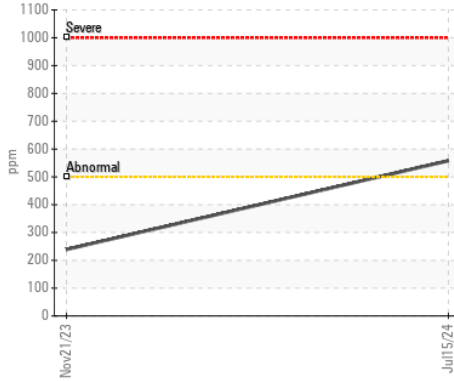
Viscosity @ 100°C



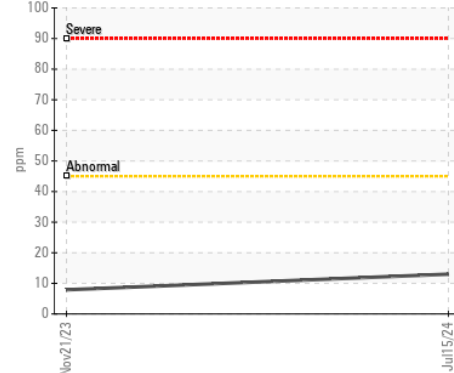
Viscosity @ 40°C



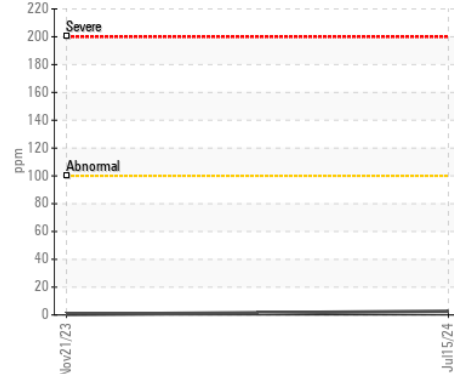
▲ Iron (ppm)



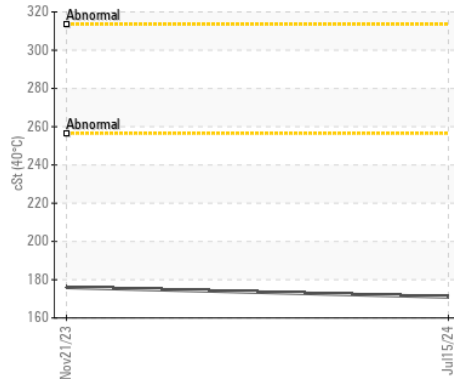
Aluminum (ppm)



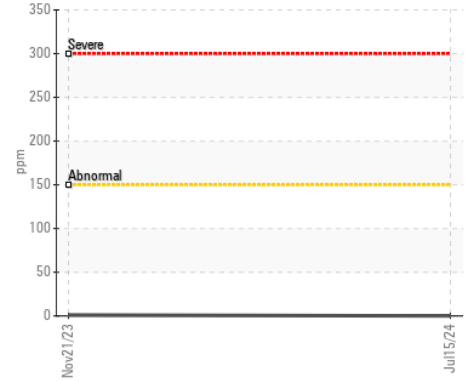
Copper (ppm)



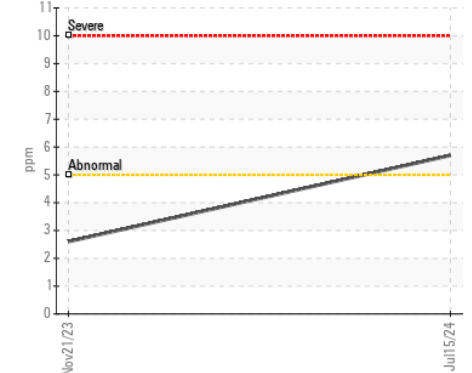
Viscosity @ 40°C



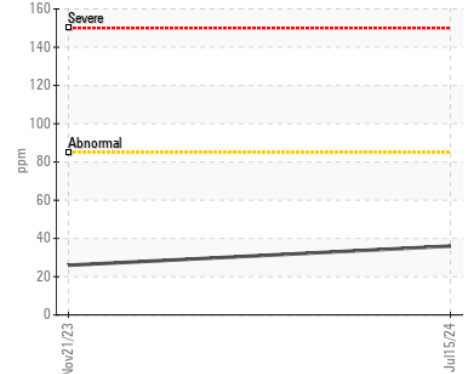
Lead (ppm)



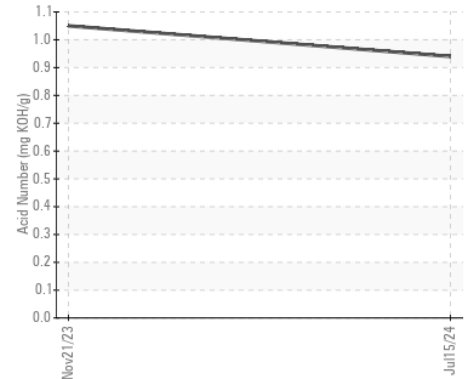
Chromium (ppm)



Silicon (ppm)



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : TR0001651
 Lab Number : 06239627
 Unique Number : 11128461
 Test Package : MOB 2 (Additional Tests: KV100, VI)

Received : 17 Jul 2024
 Tested : 18 Jul 2024
 Diagnosed : 19 Jul 2024 - Don Baldrige

S S CONCRETE MATERIALS LLC
 P.O. BOX 23283
 BULLHEAD CITY, AZ
 US 86439
 Contact: SNS INVENTORY
 snsinventory@yahoo.com

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: (928)754-1991