



T R A A P

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id

**87**

Component

**Transfer Case**

Fluid

**TRC MOLY ULTRA-TEC GEAR OIL 85W140 (1 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR0001449</b>	TR0001143	TR0000840
Sample Date		Client Info		<b>23 Feb 2024</b>	24 Oct 2023	19 Jun 2023
Machine Age	hrs	Client Info		<b>6702</b>	5899	5245
Oil Age	hrs	Client Info		<b>6702</b>	5245	5245
Filter Age	hrs	Client Info		<b>0</b>	5899	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>248</b>	268	205
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>45	<b>24</b>	29	26
Lead	ppm	ASTM D5185m	>150	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>100	<b>2</b>	3	2
Tin	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

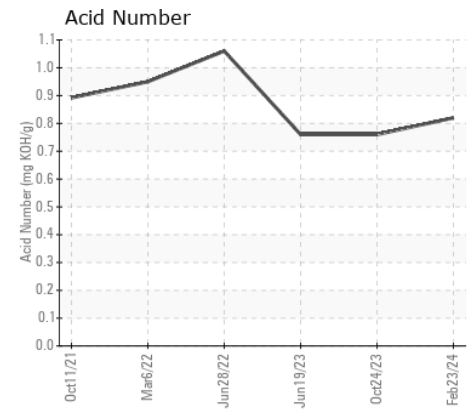
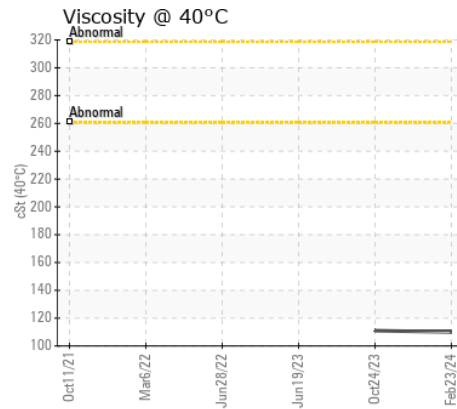
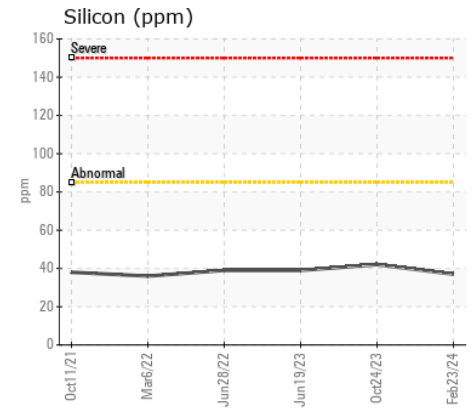
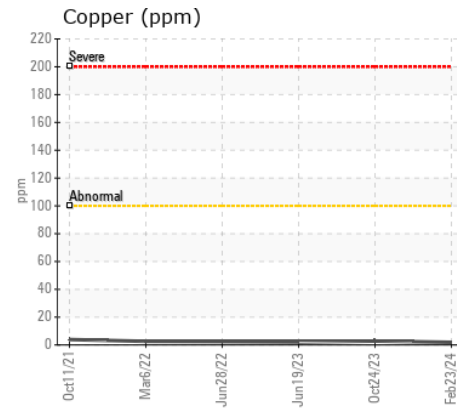
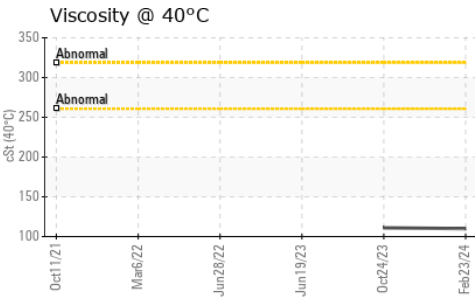
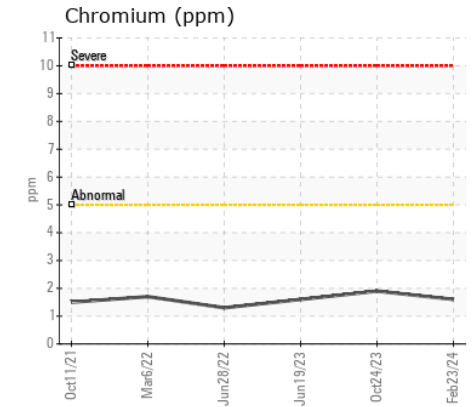
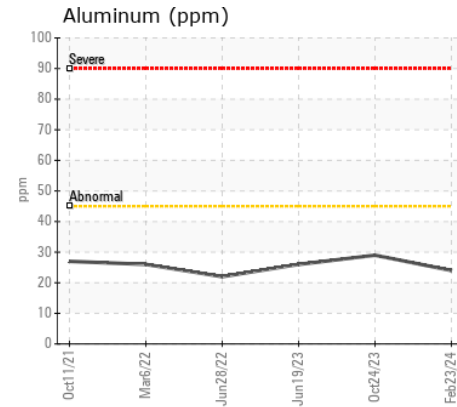
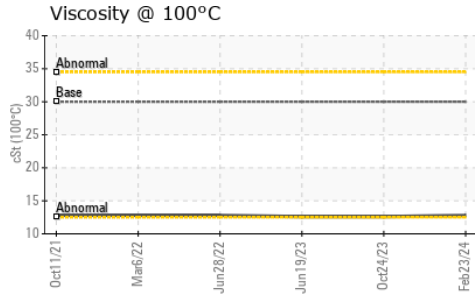
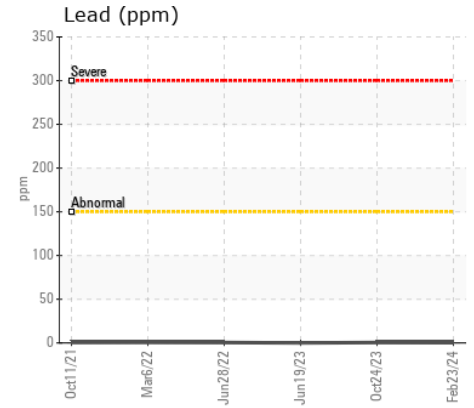
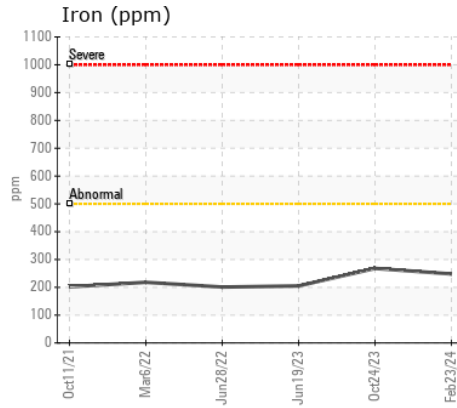
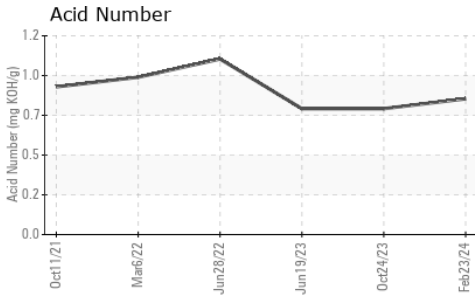
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>85	<b>37</b>	42	39
Potassium	ppm	ASTM D5185m	>20	<b>51</b>	59	59
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>18</b>	28	24
Boron	ppm	ASTM D5185m		<b>0</b>	13	6
Barium	ppm	ASTM D5185m		<b>2</b>	1	2
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>3</b>	3	3
Magnesium	ppm	ASTM D5185m		<b>18</b>	15	18
Calcium	ppm	ASTM D5185m		<b>1899</b>	1801	2117
Phosphorus	ppm	ASTM D5185m		<b>805</b>	750	863
Zinc	ppm	ASTM D5185m		<b>963</b>	862	997
Sulfur	ppm	ASTM D5185m		<b>5420</b>	5353	7503
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.82</b>	0.76	0.76
Visc @ 40°C	cSt	ASTM D445		<b>110</b>	111	---
Visc @ 100°C	cSt	ASTM D445	30	<b>12.8</b>	12.6	12.6
Viscosity Index (VI)	Scale	ASTM D2270	105	<b>110</b>	105	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR0001449  
**Lab Number** : 06101112  
**Unique Number** : 10899342  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**Received** : 26 Feb 2024  
**Tested** : 28 Feb 2024  
**Diagnosed** : 28 Feb 2024 - Doug Bogart

**S S CONCRETE MATERIALS LLC**  
 P.O. BOX 23283  
 BULLHEAD CITY, AZ  
 US 86439  
 Contact: SERVICE MANAGER  
 snsmaterials1@gmail.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)

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