



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id

**75**

Component

**Middle Differential**

Fluid

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

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR0001362	TR0001240	TR0001160
Sample Date		Client Info		08 Apr 2024	14 Nov 2023	27 Jul 2023
Machine Age	hrs	Client Info		20519	19490	18901
Oil Age	hrs	Client Info		20519	19490	18901
Filter Age	hrs	Client Info		0	0	18901
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	Not Changd
Sample Status				ABNORMAL	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	431	397	238
Chromium	ppm	ASTM D5185m	>10	2	2	<1
Nickel	ppm	ASTM D5185m	>10	2	2	<1
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	4	2
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>100	9	8	7
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

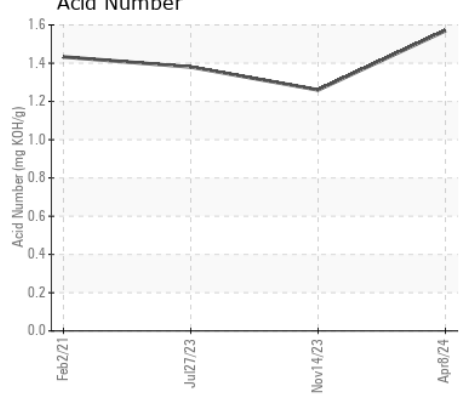
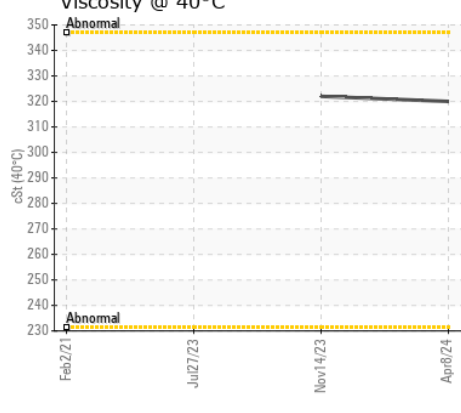
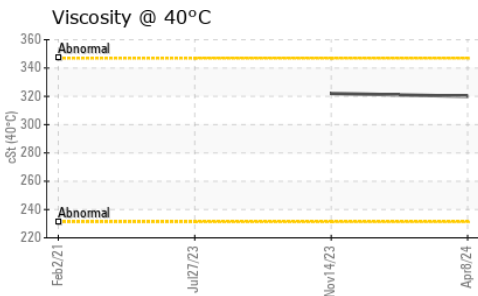
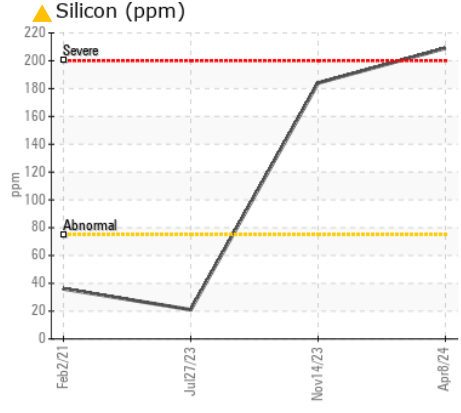
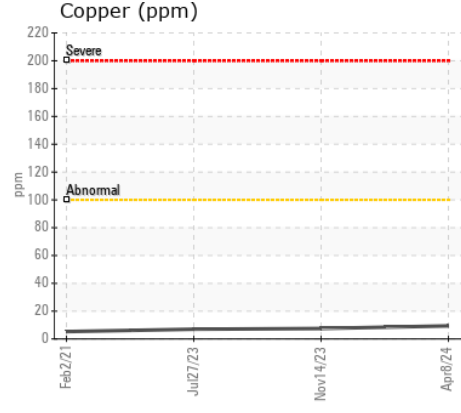
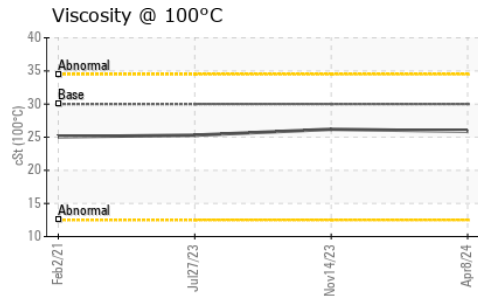
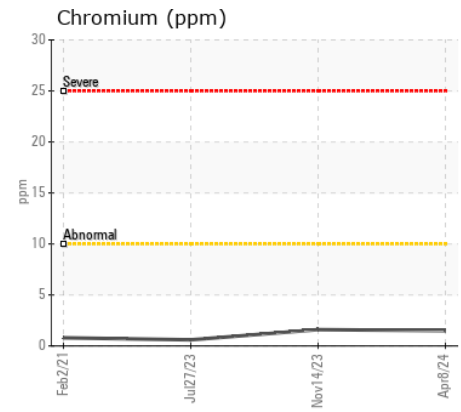
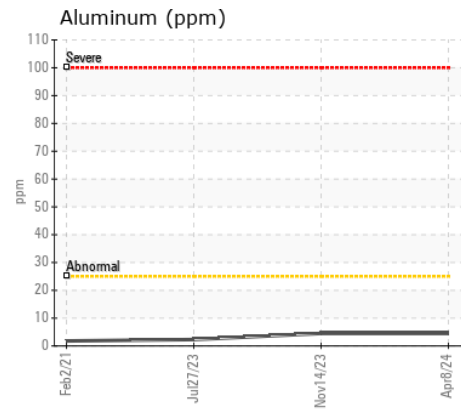
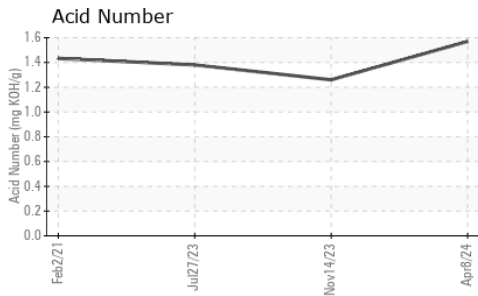
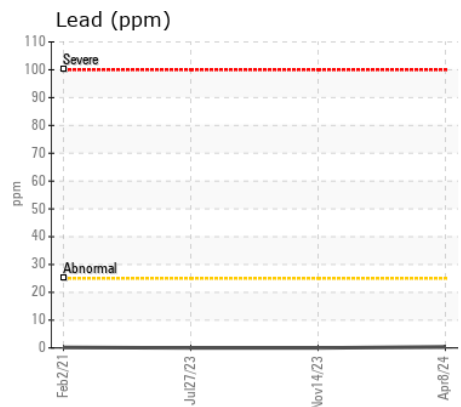
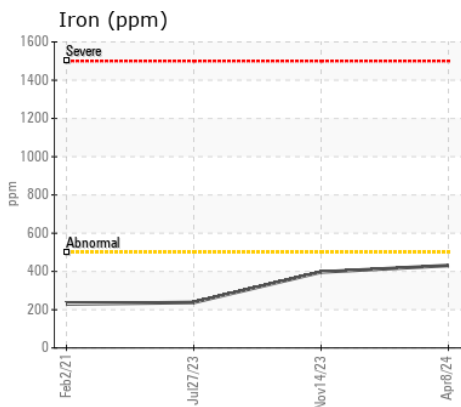
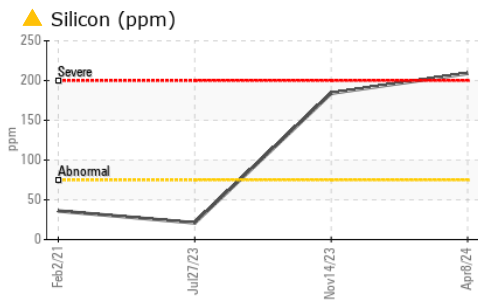
Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

Silicon	ppm	ASTM D5185m	>75	▲ 209	▲ 184	21
Potassium	ppm	ASTM D5185m	>20	4	2	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	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		4	5	3
Boron	ppm	ASTM D5185m		326	273	112
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		3	<1	<1
Manganese	ppm	ASTM D5185m		6	5	4
Magnesium	ppm	ASTM D5185m		6	0	4
Calcium	ppm	ASTM D5185m		56	0	16
Phosphorus	ppm	ASTM D5185m		1204	896	932
Zinc	ppm	ASTM D5185m		55	0	36
Sulfur	ppm	ASTM D5185m		25392	20730	22611
Acid Number (AN)	mg KOH/g	ASTM D8045		1.57	1.26	1.38
Visc @ 40°C	cSt	ASTM D445		320	322	---
Visc @ 100°C	cSt	ASTM D445	30	25.9	26.2	25.3
Viscosity Index (VI)	Scale	ASTM D2270	105	105	106	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR0001362 **Received** : 12 Apr 2024  
**Lab Number** : 06148137 **Tested** : 15 Apr 2024  
**Unique Number** : 10978215 **Diagnosed** : 17 Apr 2024 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**S S CONCRETE MATERIALS LLC**  
P.O. BOX 23283  
BULLHEAD CITY, AZ  
US 86439  
Contact: MARK OPHEIM

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: (928)754-1991  
F: (928)754-1991