



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id

T14

Component

Rear Differential

Fluid

TRC MOLY ULTRA-TEC GEAR OIL 85W140 (--- 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		TR0001375	TR0000630	---
Sample Date		Client Info		09 Jan 2024	15 Jan 2023	---
Machine Age	hrs	Client Info		4203	0	---
Oil Age	hrs	Client Info		4203	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	89	173	---
Chromium	ppm	ASTM D5185m	>10	<1	1	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	2	3	---
Lead	ppm	ASTM D5185m	>25	0	<1	---
Copper	ppm	ASTM D5185m	>100	0	1	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

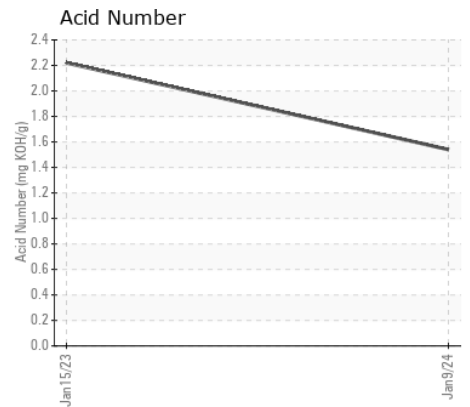
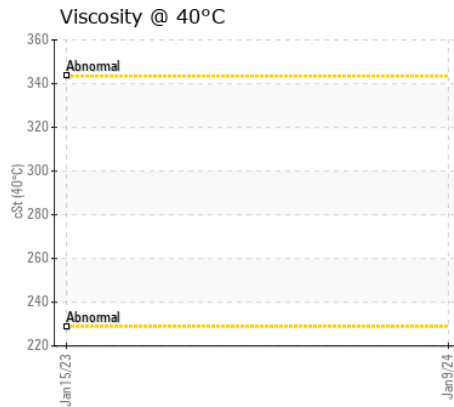
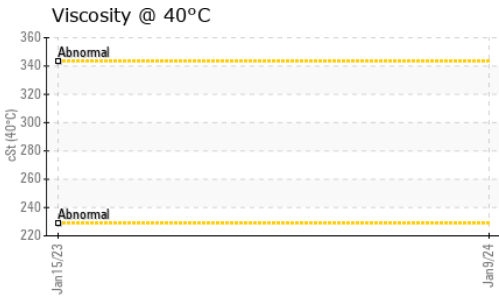
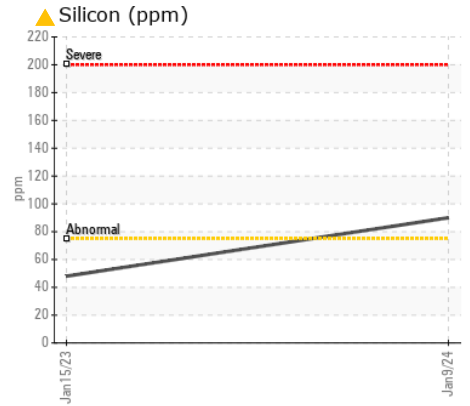
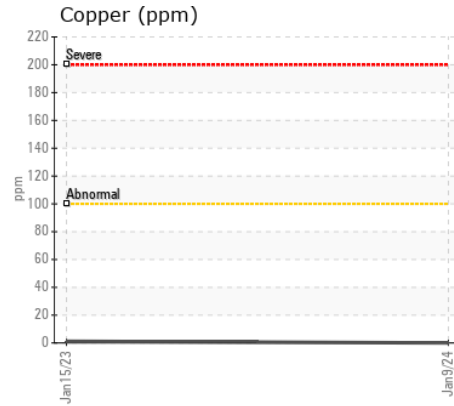
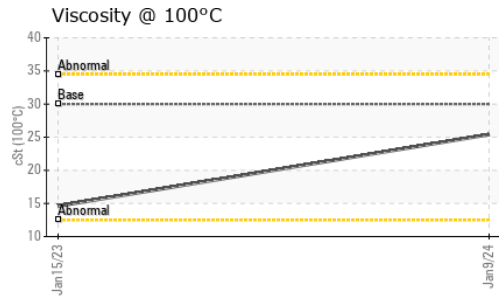
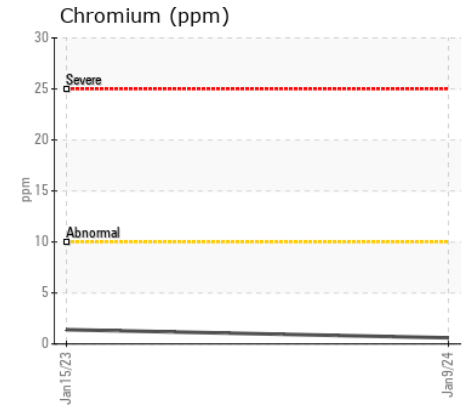
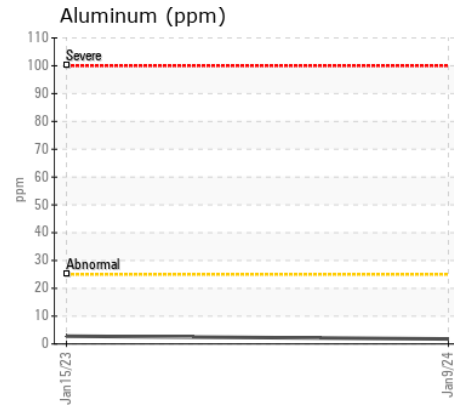
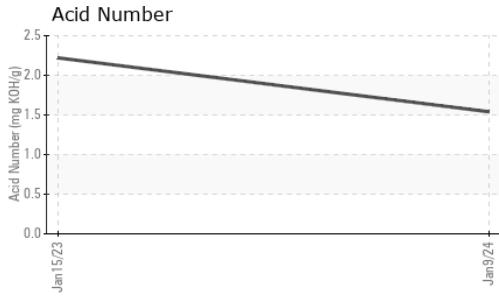
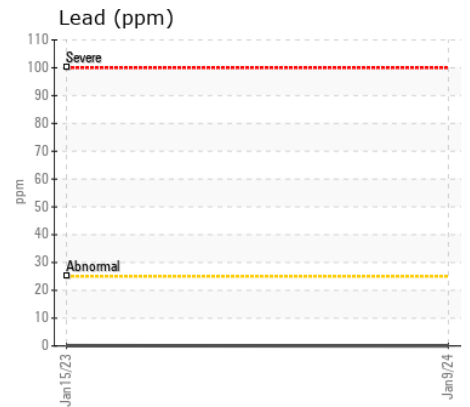
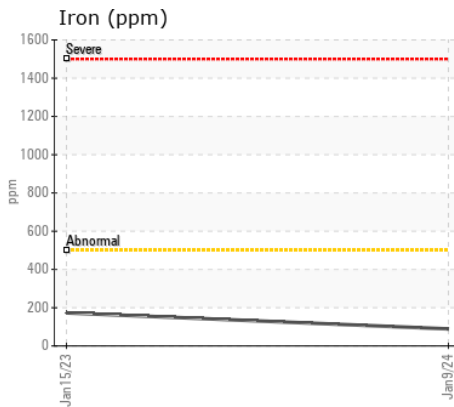
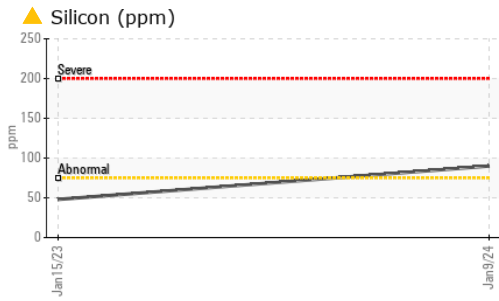
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>75	▲ 90	48	---
Potassium	ppm	ASTM D5185m	>20	1	1	---
Water		WC Method	>.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	>.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	6	---
Boron	ppm	ASTM D5185m		283	252	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	<1	---
Manganese	ppm	ASTM D5185m		3	10	---
Magnesium	ppm	ASTM D5185m		0	<1	---
Calcium	ppm	ASTM D5185m		21	10	---
Phosphorus	ppm	ASTM D5185m		1201	1340	---
Zinc	ppm	ASTM D5185m		6	16	---
Sulfur	ppm	ASTM D5185m		21931	25056	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.54	2.22	---
Visc @ 40°C	cSt	ASTM D445		290	---	---
Visc @ 100°C	cSt	ASTM D445	30	25.4	14.6	---
Viscosity Index (VI)	Scale	ASTM D2270	105	113	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR0001375 **Received** : 12 Jan 2024
Lab Number : 06060379 **Diagnosed** : 16 Jan 2024
Unique Number : 10831761 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: KV100, VI)

S S CONCRETE MATERIALS LLC
P.O. BOX 23283
BULLHEAD CITY, AZ
US 86439
Contact: SERVICE MANAGER
snsmaterials1@gmail.com
T:
F: (928)754-1991

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)