



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH W900 TRK 8 (S/N 683765)

Component
Rear Differential

Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06218409	---	---
Sample Date		Client Info		06 Jun 2024	---	---
Machine Age	mls	Client Info		612900	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Aluminum ppm levels are noted. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	416	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		4	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	39	---	---
Lead	ppm	ASTM D5185m	>25	1	---	---
Copper	ppm	ASTM D5185m	>100	2	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

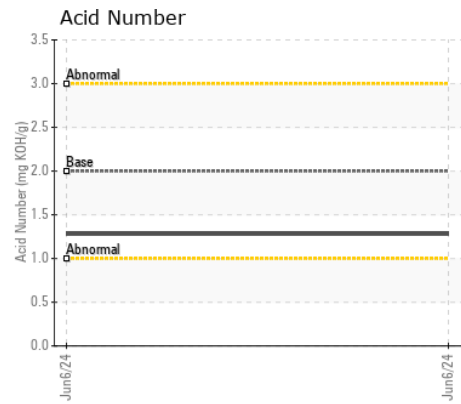
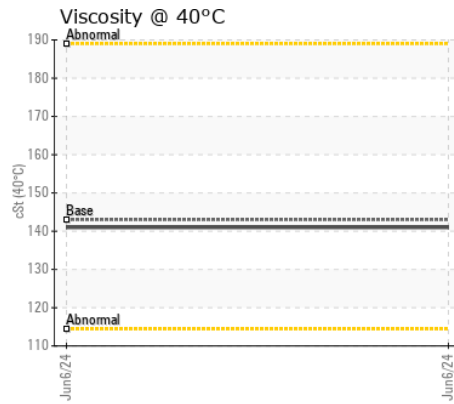
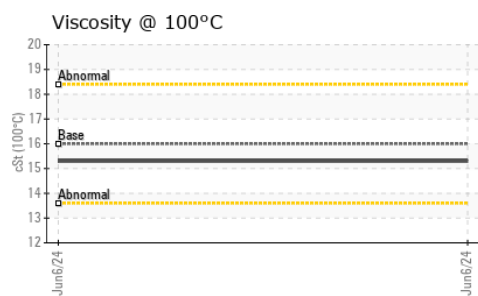
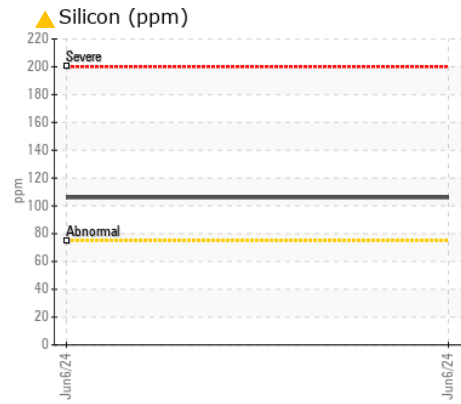
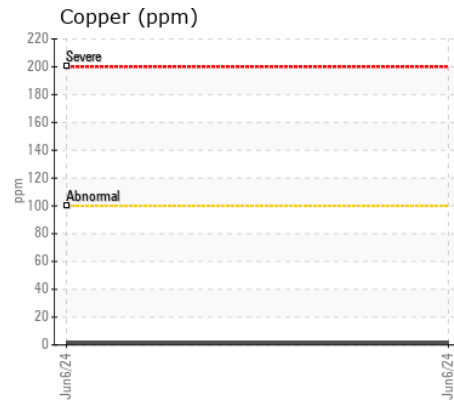
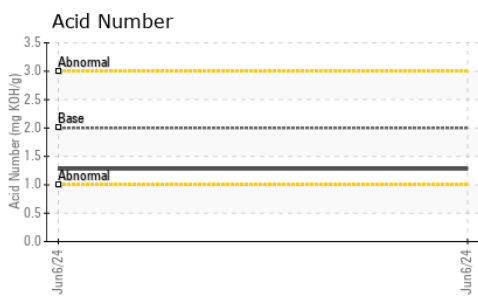
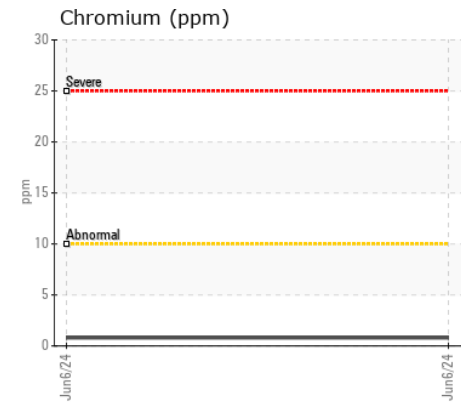
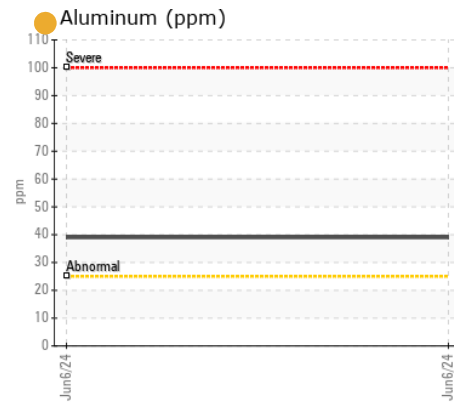
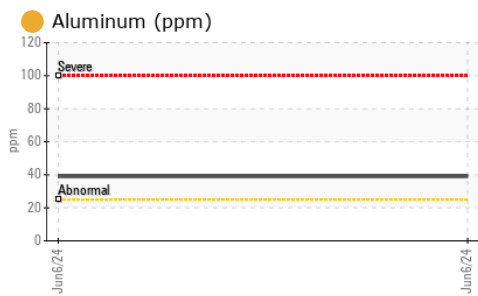
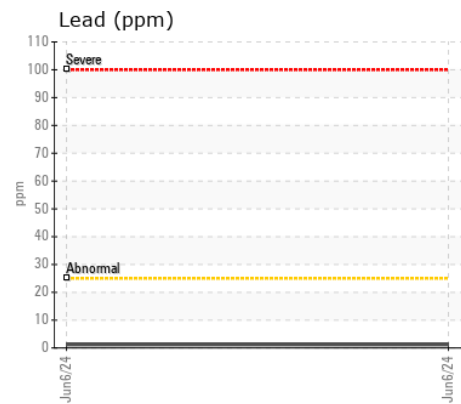
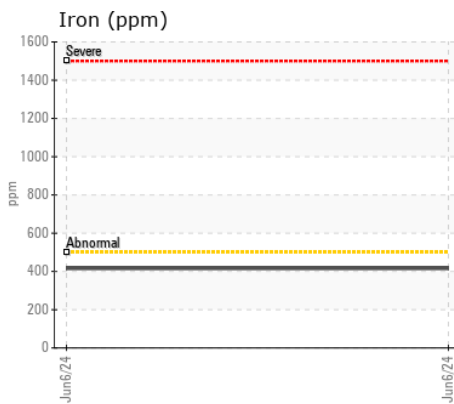
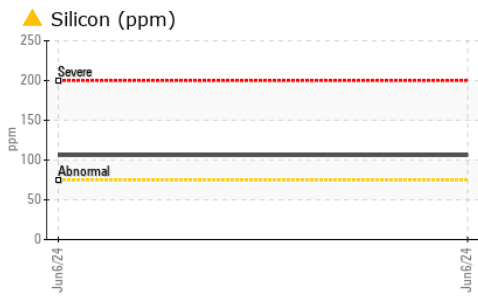
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	106	---	---
Potassium	ppm	ASTM D5185m	>20	8	---	---
Water		WC Method	>.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>.2	NEG	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	9	---	---
Boron	ppm	ASTM D5185m	400	123	---	---
Barium	ppm	ASTM D5185m	200	4	---	---
Molybdenum	ppm	ASTM D5185m	12	2	---	---
Manganese	ppm	ASTM D5185m		5	---	---
Magnesium	ppm	ASTM D5185m	12	10	---	---
Calcium	ppm	ASTM D5185m	150	107	---	---
Phosphorus	ppm	ASTM D5185m	1650	970	---	---
Zinc	ppm	ASTM D5185m	125	76	---	---
Sulfur	ppm	ASTM D5185m	22500	19282	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	1.28	---	---
Visc @ 40°C	cSt	ASTM D445	143	141	---	---
Visc @ 100°C	cSt	ASTM D445	16.0	15.3	---	---
Viscosity Index (VI)	Scale	ASTM D2270	117	110	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06218409 **Received** : 24 Jun 2024
Lab Number : 06218409 **Tested** : 25 Jun 2024
Unique Number : 11096606 **Diagnosed** : 25 Jun 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: KV100, VI)

KASKI LOGGING
 22411 HE CEDAR CREEK RD
 AMBOY, WA
 US 98601
 Contact: NATHAN BYRD

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: