



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

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

Component
Transmission

Fluid
SAE 50W (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The fluid change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06218405	---	---
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				SEVERE	---	---

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>350	▲ 563	---	---
Chromium	ppm	ASTM D5185m	>4	4	---	---
Nickel	ppm	ASTM D5185m	>2	<1	---	---
Titanium	ppm	ASTM D5185m	>2	2	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>25	● 22	---	---
Lead	ppm	ASTM D5185m	>25	3	---	---
Copper	ppm	ASTM D5185m	>600	60	---	---
Tin	ppm	ASTM D5185m	>4	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

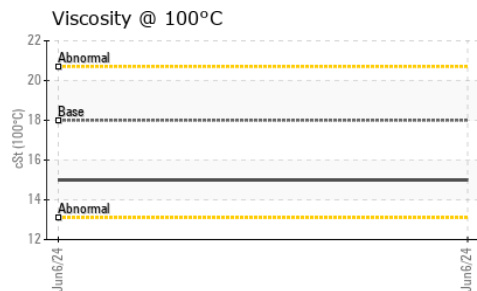
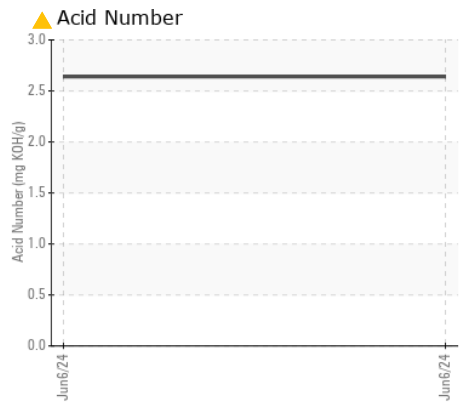
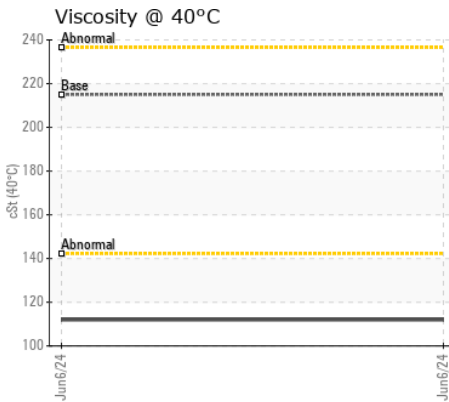
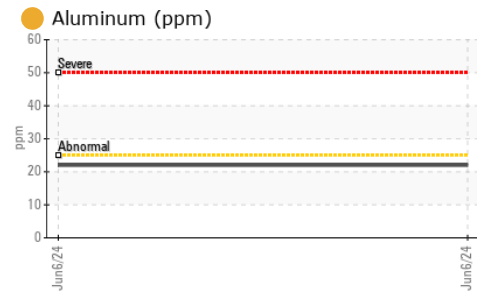
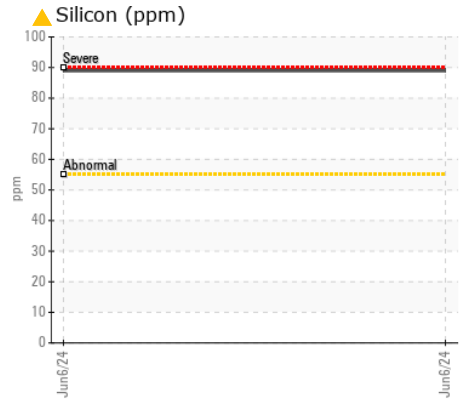
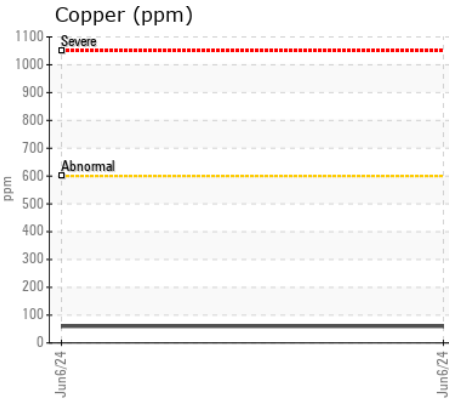
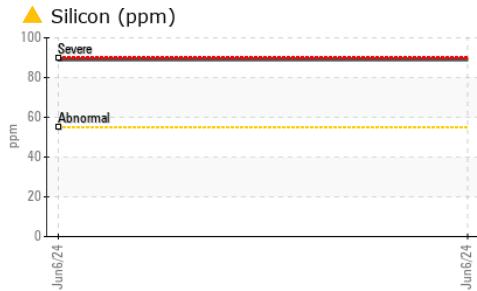
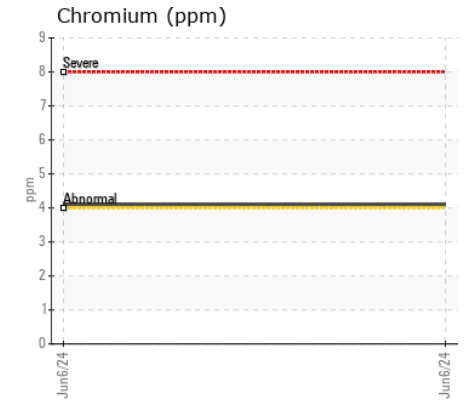
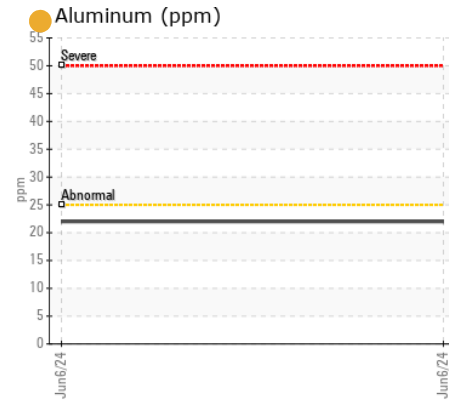
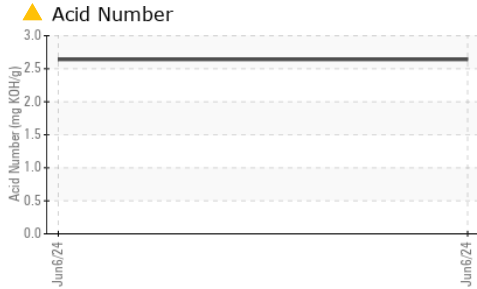
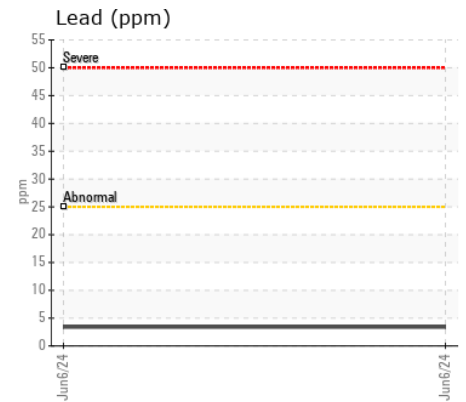
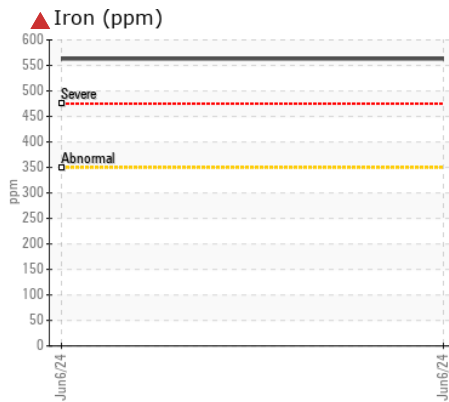
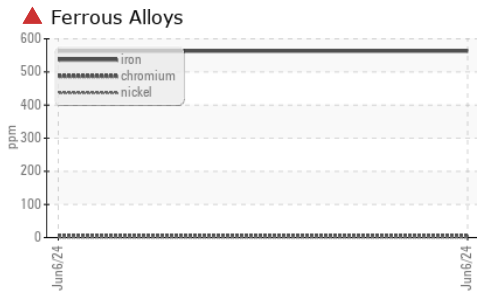
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>55	▲ 89	---	---
Potassium	ppm	ASTM D5185m	>20	16	---	---
Water		WC Method	>0.1	NEG	---	---
Silt	scalar	*Visual	NONE	LIGHT	---	---
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	>0.1	NEG	---	---

FLUID CONDITION

The AN level is above the recommended limit.

Sodium	ppm	ASTM D5185m		34	---	---
Boron	ppm	ASTM D5185m		189	---	---
Barium	ppm	ASTM D5185m		20	---	---
Molybdenum	ppm	ASTM D5185m		7	---	---
Manganese	ppm	ASTM D5185m		14	---	---
Magnesium	ppm	ASTM D5185m		29	---	---
Calcium	ppm	ASTM D5185m		222	---	---
Phosphorus	ppm	ASTM D5185m		1151	---	---
Zinc	ppm	ASTM D5185m		141	---	---
Sulfur	ppm	ASTM D5185m		880	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ 2.64	---	---
Visc @ 40°C	cSt	ASTM D445	215	112	---	---
Visc @ 100°C	cSt	ASTM D445	18.0	15.0	---	---
Viscosity Index (VI)	Scale	ASTM D2270	91	139	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06218405 **Received** : 24 Jun 2024
Lab Number : 06218405 **Tested** : 26 Jun 2024
Unique Number : 11096602 **Diagnosed** : 26 Jun 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: Glycol, 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)

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F: