



OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
NOT GIVEN RH0001627 - THURSTON WHEELER LOGGING

Component
Hydraulic System

Fluid
NAPA AW 46 (--- GAL)



DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RH0001627	---	---
Sample Date	Client Info		01 Jun 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		12	---	---
Iron	ppm	ASTM D5185m >20	3	---	---
Chromium	ppm	ASTM D5185m >10	0	---	---
Nickel	ppm	ASTM D5185m >10	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >10	0	---	---
Lead	ppm	ASTM D5185m >10	0	---	---
Copper	ppm	ASTM D5185m >75	1	---	---
Tin	ppm	ASTM D5185m >10	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m	5	---	---
Calcium	ppm	ASTM D5185m	24	---	---
Phosphorus	ppm	ASTM D5185m	366	---	---
Zinc	ppm	ASTM D5185m	409	---	---
Sulfur	ppm	ASTM D5185m	1963	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	---	---
Sodium	ppm	ASTM D5185m	<1	---	---
Potassium	ppm	ASTM D5185m >20	<1	---	---

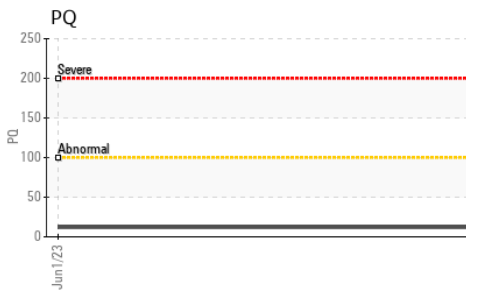
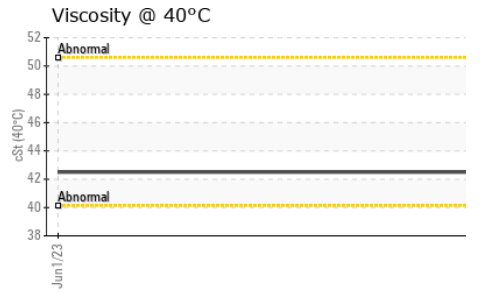
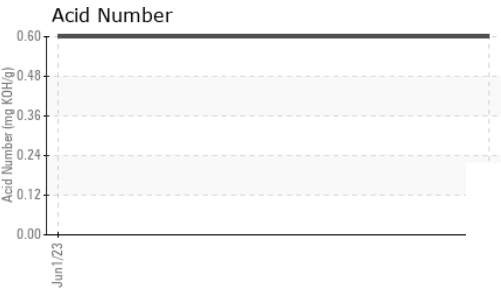
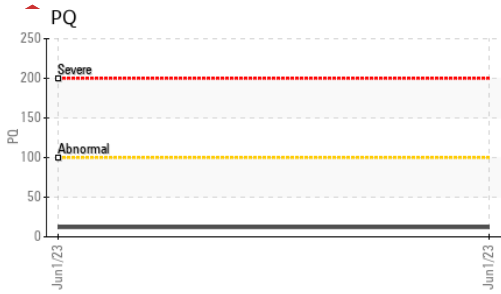
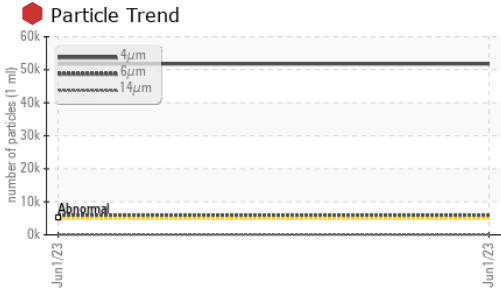
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	51793	---	---
Particles >6µm	ASTM D7647	>1300	5894	---	---
Particles >14µm	ASTM D7647	>160	94	---	---
Particles >21µm	ASTM D7647	>40	19	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	23/20/14	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.60	---	---

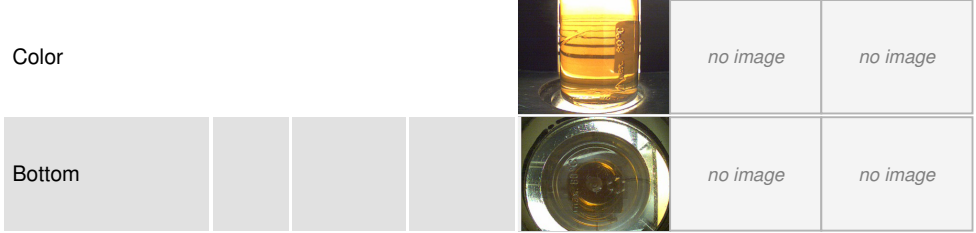
OIL ANALYSIS REPORT



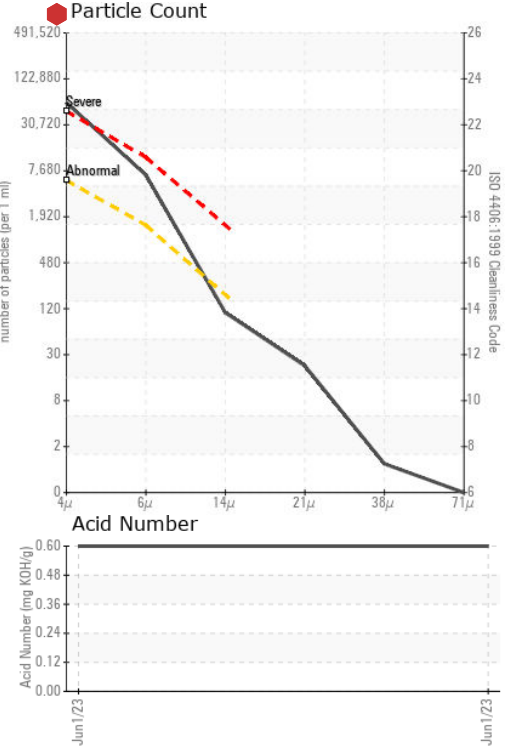
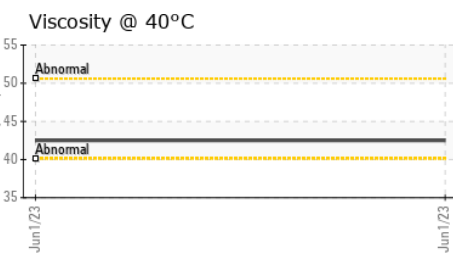
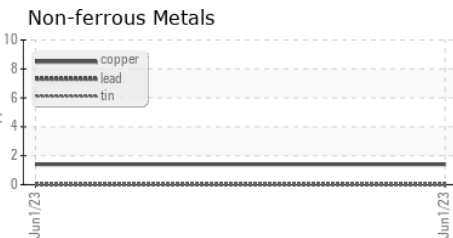
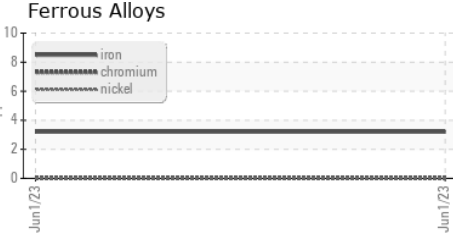
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	42.5	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RH0001627 **Received** : 13 Jun 2023
Lab Number : 05871962 **Diagnosed** : 14 Jun 2023
Unique Number : 10511746 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: PQ)

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 US 23005
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To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - 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)