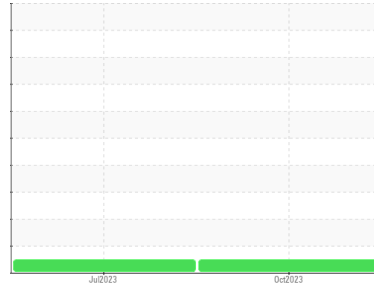




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
AF12-360-1150-1210 SOUTH LUKKI EAST LIFTING BAR HYDRAULIC UNIT
 Component
Hydraulic System
 Fluid
MOBIL DTE 10 EXCEL 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0824132	WC0818962	---
Sample Date	Client Info		25 Oct 2023	13 Jul 2023	---
Machine Age	mths	Client Info	60	60	---
Oil Age	mths	Client Info	60	6	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			NORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		12	14	---
Iron	ppm	ASTM D5185m >20	0	0	---
Chromium	ppm	ASTM D5185m >20	<1	0	---
Nickel	ppm	ASTM D5185m >20	0	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >20	<1	0	---
Lead	ppm	ASTM D5185m >20	<1	0	---
Copper	ppm	ASTM D5185m >20	2	1	---
Tin	ppm	ASTM D5185m >20	0	0	---
Vanadium	ppm	ASTM D5185m	0	<1	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m	<1	1	---
Calcium	ppm	ASTM D5185m	110	105	---
Phosphorus	ppm	ASTM D5185m	411	453	---
Zinc	ppm	ASTM D5185m	33	29	---
Sulfur	ppm	ASTM D5185m	1527	1581	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	0	<1	---
Sodium	ppm	ASTM D5185m	0	<1	---
Potassium	ppm	ASTM D5185m >20	<1	1	---
Water	%	ASTM D6304 >0.05	0.004	0.003	---
ppm Water	ppm	ASTM D6304 >500	44.5	38.9	---

FLUID CLEANLINESS

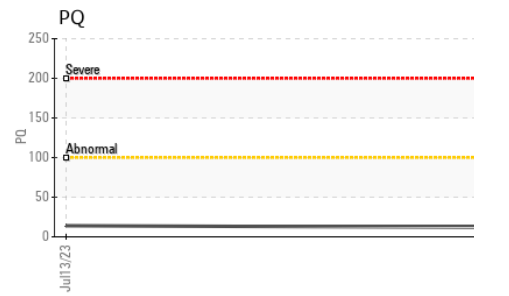
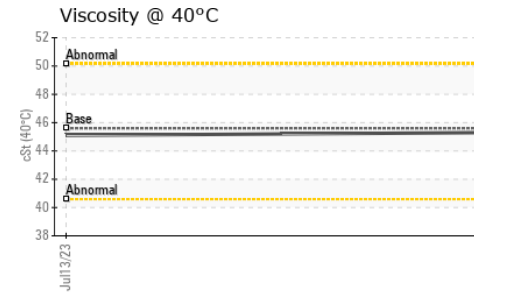
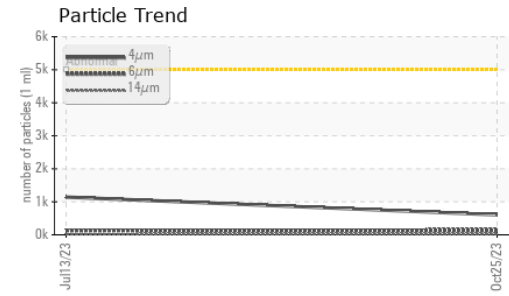
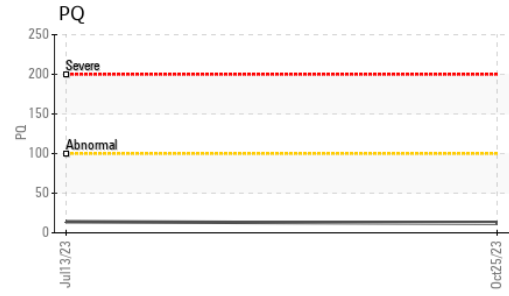
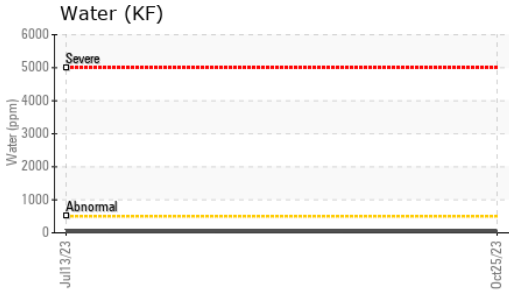
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	604	1144	---
Particles >6µm	ASTM D7647	>1300	144	127	---
Particles >14µm	ASTM D7647	>160	26	16	---
Particles >21µm	ASTM D7647	>40	13	7	---
Particles >38µm	ASTM D7647	>10	0	1	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	16/14/12	17/14/11	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.154	0.182	---



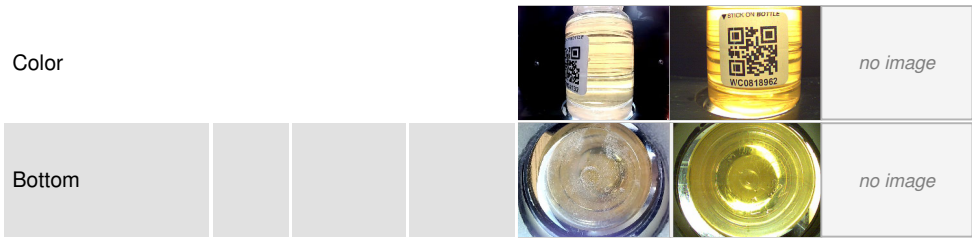
OIL ANALYSIS REPORT



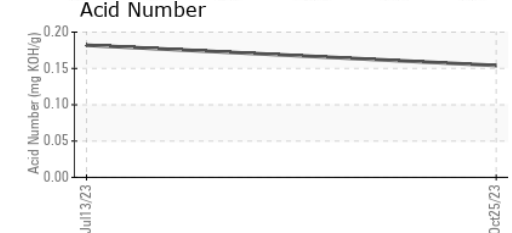
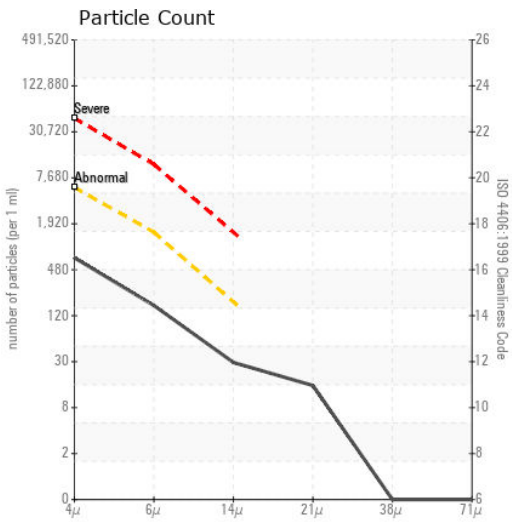
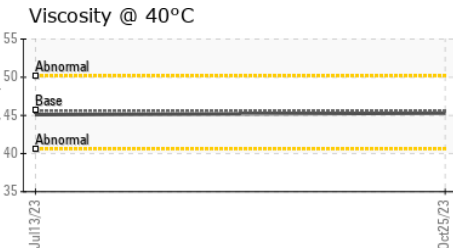
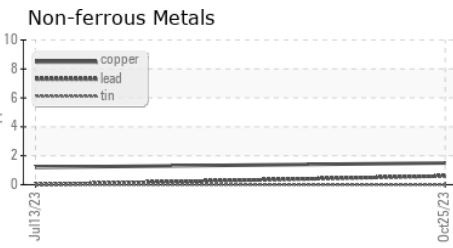
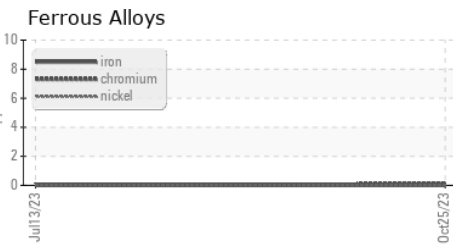
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45.6	45.3	45.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0824132 **Received** : 02 Nov 2023
Lab Number : **05996700** **Diagnosed** : 04 Nov 2023
Unique Number : 10725060 **Diagnostician** : Don Baldrige
Test Package : PLANT

ARAUCO - GRAYLING
 5851 ARAUCO ROAD
 GRAYLING, MI
 US 49738
 Contact: JOSEPH GREEN
 joseph.green@arauco.com
 T:
 F:

Certificate L2367
 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)