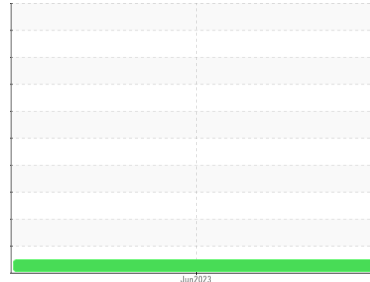




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2PM WET END
 Component
Tank Circulating System
 Fluid
MOBIL DTE PM 220 (6000 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Analytical Ferrography: Results indicate normal operation with minimal ferrous rubbing wear and external contamination.

Wear

All component wear rates are normal. The analytical ferrographic results are normal indicating no abnormal wear in the system.

Contaminants

There is no indication of any contamination in the oil.

Oil 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		WC0824311	---	---
Sample Date	Client Info		08 Jun 2023	---	---
Machine Age	yrs	Client Info	0	---	---
Oil Age	yrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		12	---	---
Iron	ppm	ASTM D5185m	6	---	---
Chromium	ppm	ASTM D5185m	0	---	---
Nickel	ppm	ASTM D5185m	0	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m	<1	---	---
Lead	ppm	ASTM D5185m	0	---	---
Copper	ppm	ASTM D5185m	<1	---	---
Tin	ppm	ASTM D5185m	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	<1	---	---
Magnesium	ppm	ASTM D5185m	0	---	---
Calcium	ppm	ASTM D5185m	15	---	---
Phosphorus	ppm	ASTM D5185m	812	---	---
Zinc	ppm	ASTM D5185m	1038	---	---
Sulfur	ppm	ASTM D5185m	6449	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	2	---	---
Sodium	ppm	ASTM D5185m	41	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

FLUID DEGRADATION

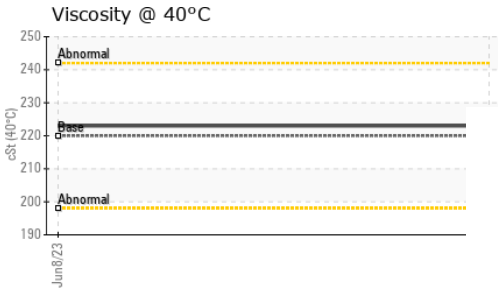
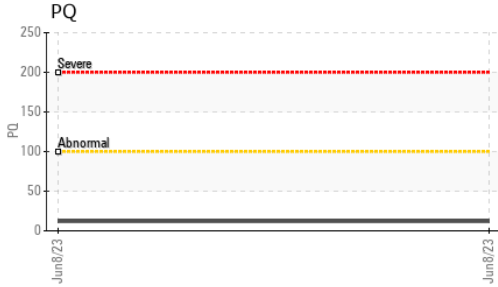
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.27	---	---

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	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---



OIL ANALYSIS REPORT

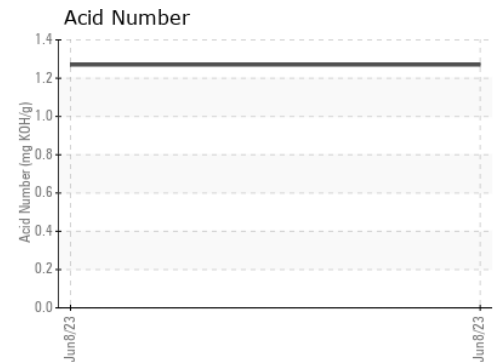
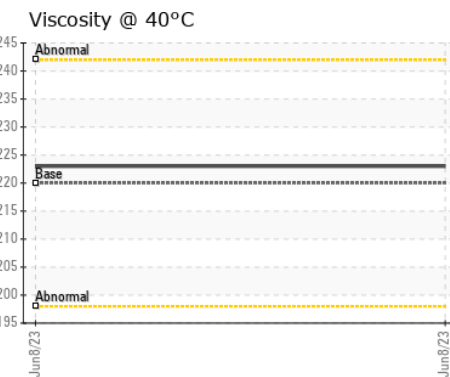
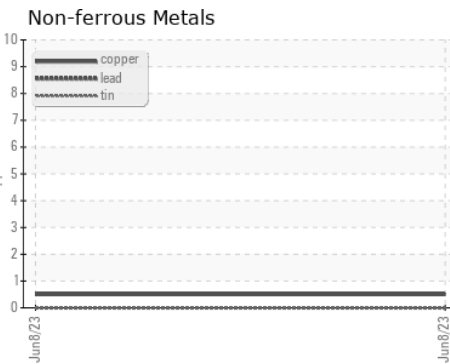
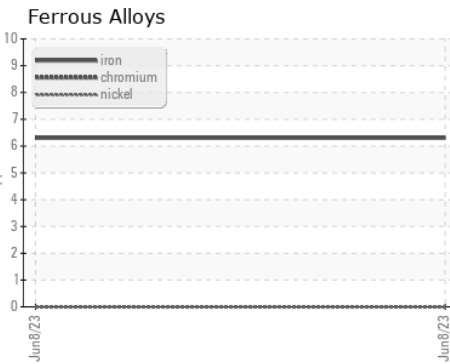


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	223	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0824311 **Received** : 09 Jun 2023
Lab Number : 05869555 **Diagnosed** : 16 Jun 2023
Unique Number : 10509339 **Diagnostician** : Aaron Black
Test Package : PLANT (Additional Tests: A-FERR)

GRAPHIC PACKAGING INTERNATIONAL
 100 GRAPHIC PACKAGING INTERNATIONAL
 MACON, GA
 US 31206
 Contact: DARYL SPRINGER
 daryl.springer@graphicpkg.com
 T: (478)784-3677
 F:

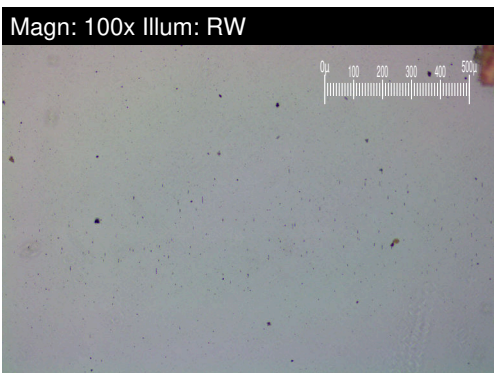
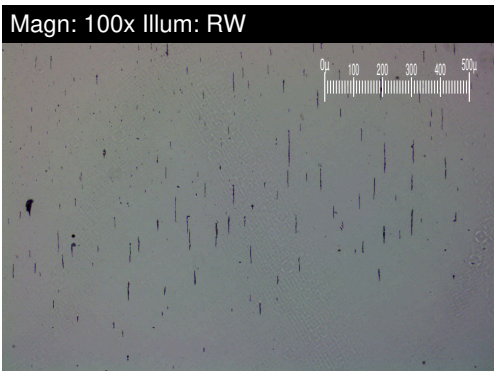
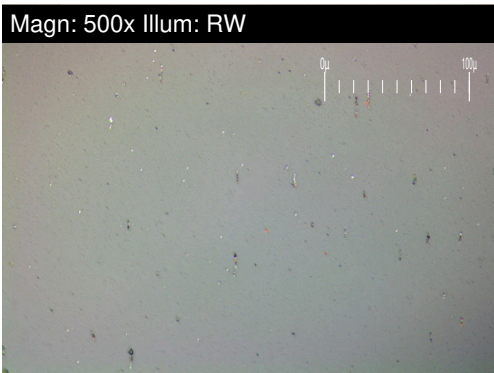
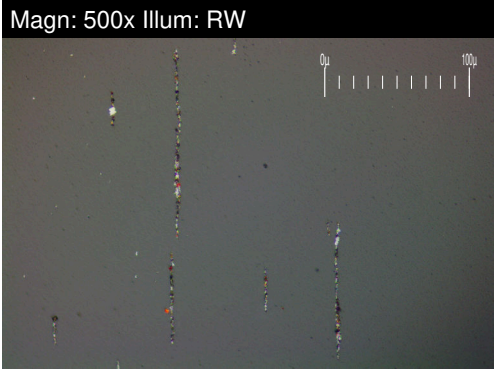
To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - 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)

FERROGRAPHY REPORT

Machine Id
2PM WET END
 Component
Tank Circulating System
 Fluid
MOBIL DTE PM 220 (6000 GAL)



FERROGRAPHY	method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	*ASTM D7684	█ 2		
Ferrous Sliding	Scale 0-10	*ASTM D7684			
Ferrous Cutting	Scale 0-10	*ASTM D7684			
Ferrous Rolling	Scale 0-10	*ASTM D7684			
Ferrous Break-in	Scale 0-10	*ASTM D7684			
Ferrous Spheres	Scale 0-10	*ASTM D7684			
Ferrous Black Oxides	Scale 0-10	*ASTM D7684	█ 1		
Ferrous Red Oxides	Scale 0-10	*ASTM D7684			
Ferrous Corrosive	Scale 0-10	*ASTM D7684			
Ferrous Other	Scale 0-10	*ASTM D7684			
Nonferrous Rubbing	Scale 0-10	*ASTM D7684			
Nonferrous Sliding	Scale 0-10	*ASTM D7684			
Nonferrous Cutting	Scale 0-10	*ASTM D7684			
Nonferrous Rolling	Scale 0-10	*ASTM D7684			
Nonferrous Other	Scale 0-10	*ASTM D7684			
Carbonaceous Material	Scale 0-10	*ASTM D7684			
Lubricant Degradation	Scale 0-10	*ASTM D7684			
Sand/Dirt	Scale 0-10	ASTM D7684			
Fibres	Scale 0-10	*ASTM D7684			
Spheres	Scale 0-10	*ASTM D7684			
Other	Scale 0-10	*ASTM D7684	█ 1		

WEAR

All component wear rates are normal.
 The analytical ferrographic results are normal indicating no abnormal wear in the system.

This page left intentionally blank