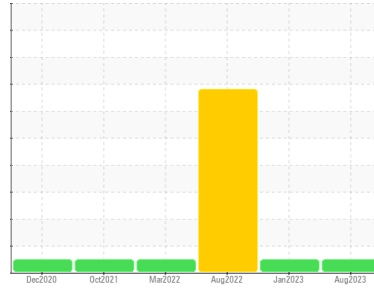




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

MASS 46

Machine Id

QUINCY UTY301292 - MIDDLEVILLE TOOL & DIE (S/N UTY301242)

Component

Compressor

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. 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.

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		UCH05938350	UCH05739760	UCH05634441
Sample Date	Client Info		18 Aug 2023	12 Jan 2023	30 Aug 2022
Machine Age	hrs	Client Info	41303	39568	38348
Oil Age	hrs	Client Info	3000	1169	8948
Oil Changed	Client Info		N/A	Not Changd	Changed
Sample Status			NORMAL	NORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	8	3	10
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	1	6
Lead	ppm	ASTM D5185m >25	0	<1	<1
Copper	ppm	ASTM D5185m >50	<1	1	11
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m	0	0	<1
Calcium	ppm	ASTM D5185m	<1	0	4
Phosphorus	ppm	ASTM D5185m	446	594	390
Zinc	ppm	ASTM D5185m	1	0	10
Sulfur	ppm	ASTM D5185m	506	758	181

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	2	2	5
Sodium	ppm	ASTM D5185m	<1	<1	1
Potassium	ppm	ASTM D5185m >20	<1	<1	<1

FLUID DEGRADATION

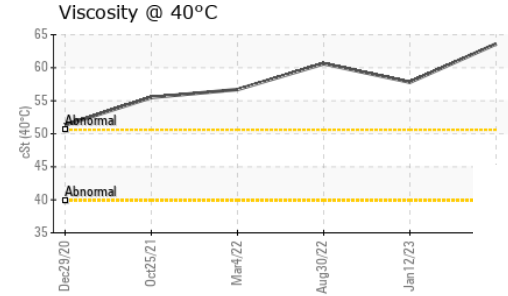
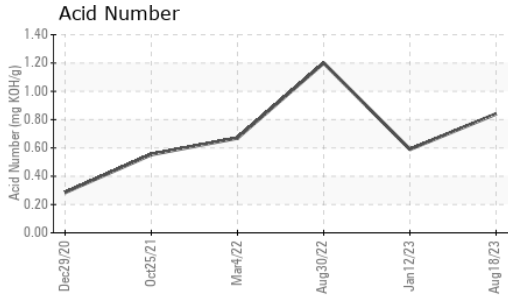
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.84	0.59	1.20

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	MODER
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.1	NEG	NEG	▲ 0.2%
Free Water	scalar	*Visual	NEG	NEG	● 10.0

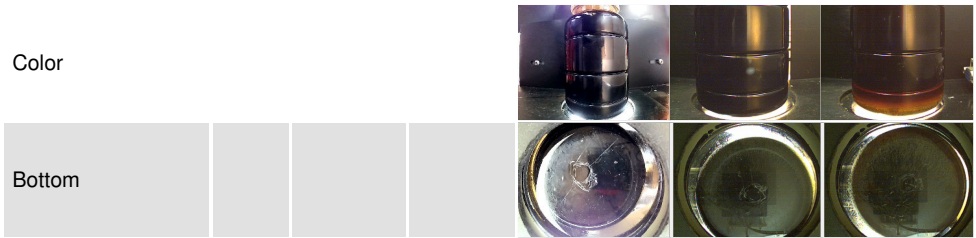


OIL ANALYSIS REPORT

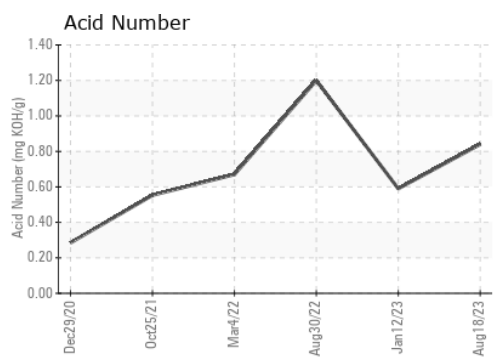
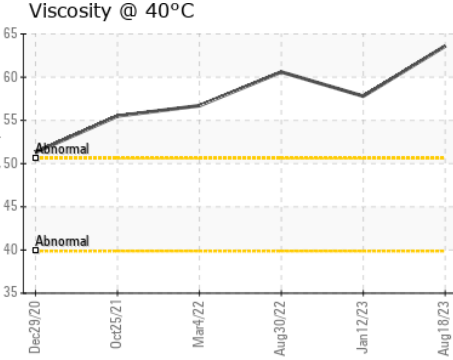
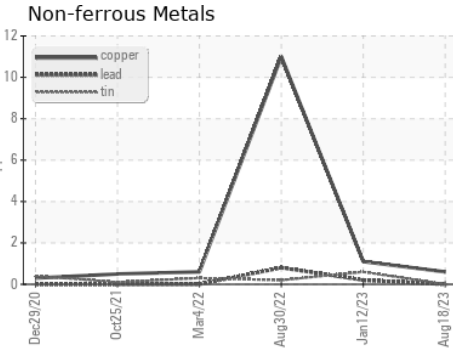
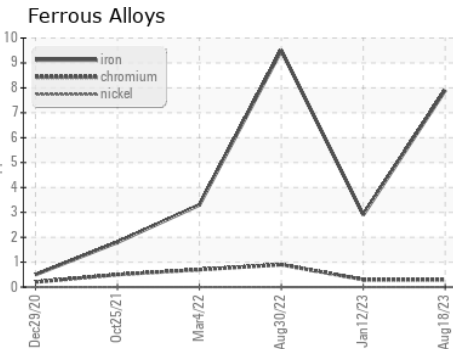


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	63.6	57.8	▲ 60.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCH05938350 **Received** : 30 Aug 2023
Lab Number : 05938350 **Diagnosed** : 31 Aug 2023
Unique Number : 10628962 **Diagnostician** : Doug Bogart
Test Package : IND 2

MICHIGAN AIR SOLUTIONS
 4511 CLAY AVE SW
 GRAND RAPIDS, MI
 US 49548
 Contact: KEVIN GEERTMAN
 kevin@mi-air.com
 T:
 F: (616)531-0084

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)