

PROBLEM SUMMARY

Sample Rating Trend

WATER

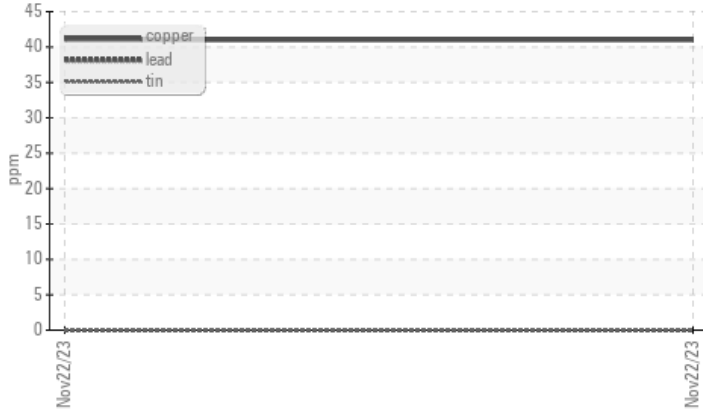


Machine Id
01 PENEX CHARGE PUMP WEST
 Component
Pump
 Fluid
ISO 32 (--- GAL)

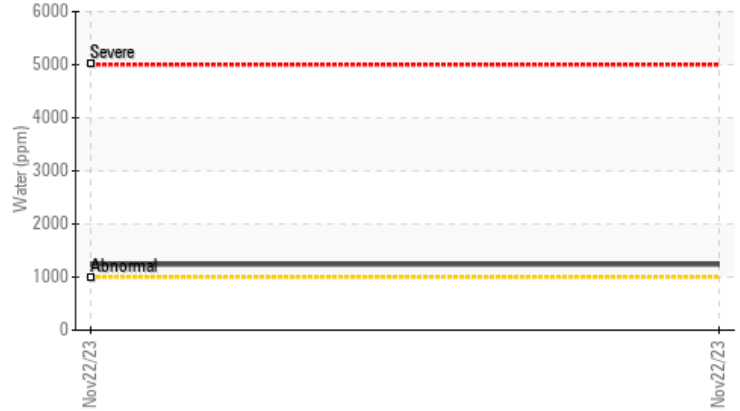


COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



▲ Water (KF)



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	Value	Limit	Result	Severe	Abnormal
Copper	ppm	ASTM D5185m >30	▲ 41	---	---
Water	%	ASTM D6304 >.1	▲ 0.124	---	---
ppm Water	ppm	ASTM D6304 >1000	▲ 1240	---	---

Customer Id: CALSHR
 Sample No.: RP0034766
 Lab Number: 06015189
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

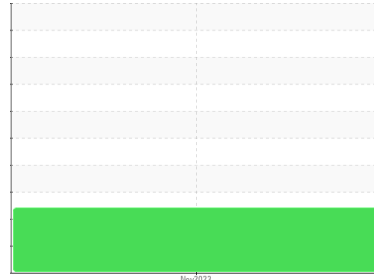
RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
01 PENEX CHARGE PUMP WEST
 Component
Pump
 Fluid
ISO 32 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

The copper level is abnormal. All other component wear rates are normal.

▲ Contamination

There is a trace of moisture present 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	RP0034766	---	---
Sample Date	Client Info	22 Nov 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >90	0	---	---
Chromium ppm	ASTM D5185m >5	0	---	---
Nickel ppm	ASTM D5185m >5	0	---	---
Titanium ppm	ASTM D5185m >3	0	---	---
Silver ppm	ASTM D5185m >3	0	---	---
Aluminum ppm	ASTM D5185m >7	0	---	---
Lead ppm	ASTM D5185m >12	0	---	---
Copper ppm	ASTM D5185m >30	▲ 41	---	---
Tin ppm	ASTM D5185m >9	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	1	---	---
Phosphorus ppm	ASTM D5185m	51	---	---
Zinc ppm	ASTM D5185m	3	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >60	21	---	---
Sodium ppm	ASTM D5185m	0	---	---
Potassium ppm	ASTM D5185m >20	0	---	---
Water %	ASTM D6304 >.1	▲ 0.124	---	---
ppm Water	ASTM D6304 >1000	▲ 1240	---	---

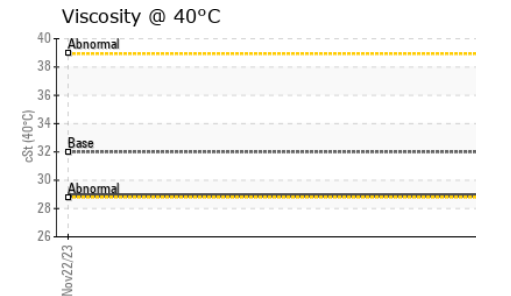
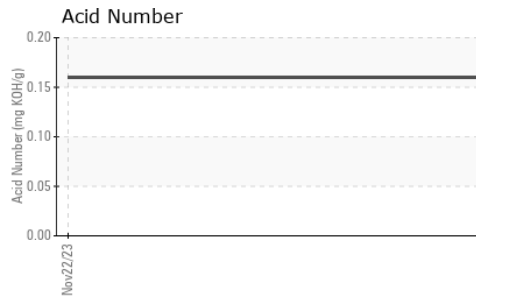
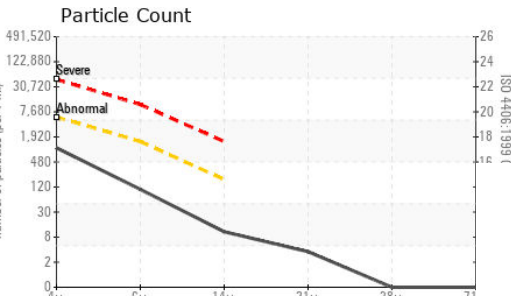
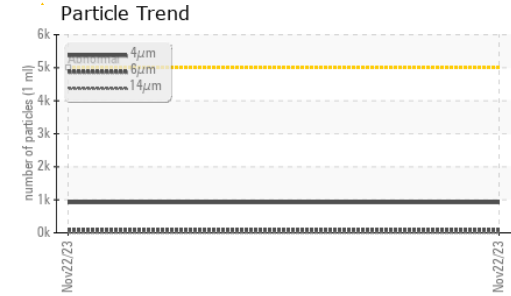
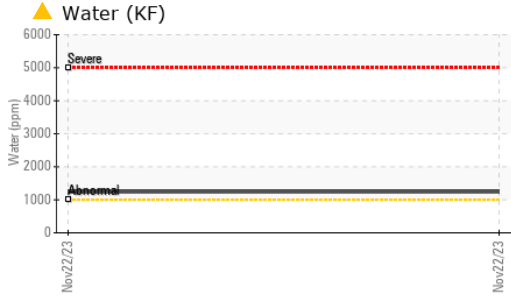
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	920	---	---
Particles >6µm	ASTM D7647 >1300	93	---	---
Particles >14µm	ASTM D7647 >160	9	---	---
Particles >21µm	ASTM D7647 >40	3	---	---
Particles >38µm	ASTM D7647 >10	0	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	17/14/10	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045	0.16	---	---

OIL ANALYSIS REPORT



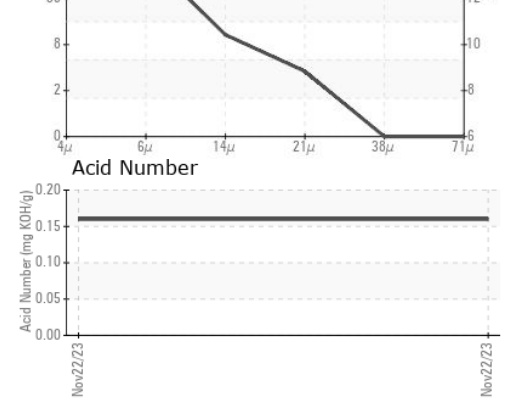
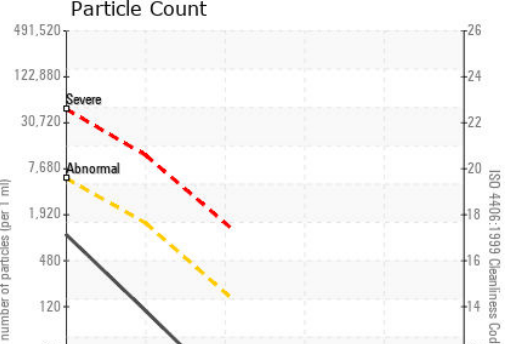
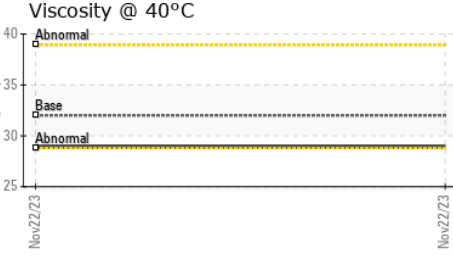
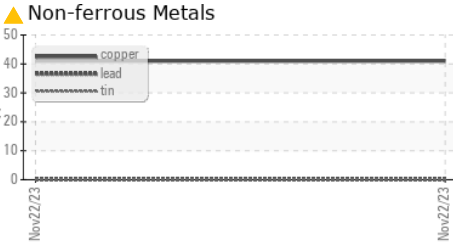
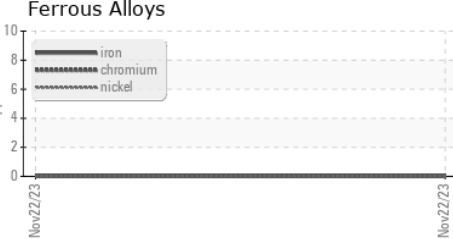
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>.1	0.2%	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.0	28.9	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034766 **Received** : 22 Nov 2023
Lab Number : 06015189 **Diagnosed** : 30 Nov 2023
Unique Number : 10754333 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: PRTCOUNT)

CALUMET
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 SHREVEPORT, LA
 US 71109
 Contact: NICHOLAS LESAGE
 nicholas.lesage@clmt.com

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)