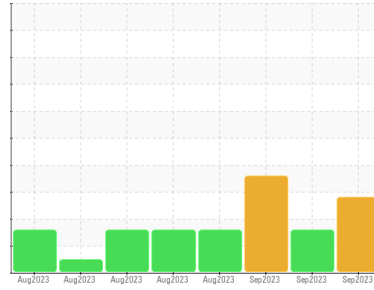




PROBLEM SUMMARY

Sample Rating Trend



WATER



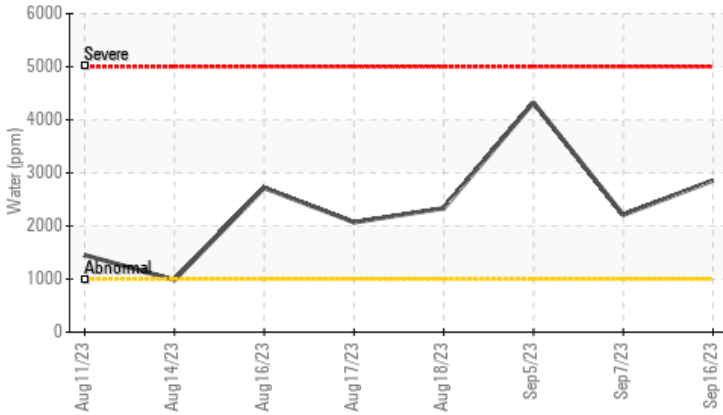
Machine Id
SL4-4 ASSET 8416 (S/N C0125000493)

Component
Vacuum Pump

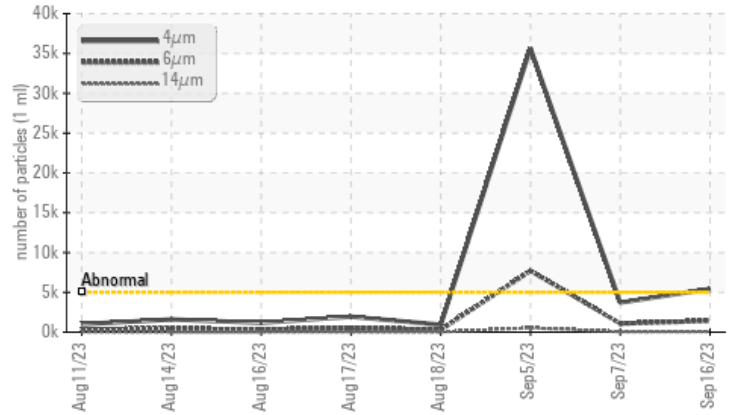
Fluid
USPI 1580-150 (11 GAL)

COMPONENT CONDITION SUMMARY

▲ Water (KF)



▲ Particle Trend



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Water	%	ASTM D6304	>.1	▲ 0.285	▲ 0.220	▲ 0.432
ppm Water	ppm	ASTM D6304	>1000	▲ 2858.3	▲ 2209.4	▲ 4323.9
Particles >4µm		ASTM D7647	>5000	▲ 5435	3712	▲ 35639
Particles >6µm		ASTM D7647	>1300	▲ 1426	1084	▲ 7710
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 20/18/13	19/17/12	▲ 22/20/16

Customer Id: CAMLES_USP
Sample No.: USPM27240
Lab Number: 05961263
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@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

07 Sep 2023 Diag: Doug Bogart

WATER



Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



05 Sep 2023 Diag: Doug Bogart

WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



18 Aug 2023 Diag: Doug Bogart

WATER



We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. pH measured at 7.0.

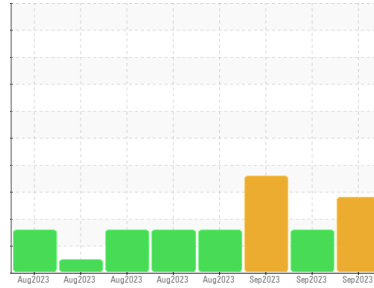
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
SL4-4 ASSET 8416 (S/N C0125000493)

Component
Vacuum Pump
Fluid
USPI 1580-150 (11 GAL)

DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present 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	USPM27240	USPM27242	USPM27243	
Sample Date	Client Info	16 Sep 2023	07 Sep 2023	05 Sep 2023	
Machine Age	hrs	Client Info	744	767	728
Oil Age	hrs	Client Info	16	39	0
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd	
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL	

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	3	4	0
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	0	0	0
Lead	ppm	ASTM D5185m >20	0	0	0
Copper	ppm	ASTM D5185m >20	<1	<1	<1
Tin	ppm	ASTM D5185m >20	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<1	0	1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1	1	5
Calcium	ppm	ASTM D5185m	<1	0	1
Phosphorus	ppm	ASTM D5185m	1593	1716	1645
Zinc	ppm	ASTM D5185m	<1	1	0
Sulfur	ppm	ASTM D5185m	1335	1352	1300

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	16	27	2
Sodium	ppm	ASTM D5185m	2	2	2
Potassium	ppm	ASTM D5185m >20	3	4	4
Water	%	ASTM D6304 >.1	▲ 0.285	▲ 0.220	▲ 0.432
ppm Water	ppm	ASTM D6304 >1000	▲ 2858.3	▲ 2209.4	▲ 4323.9

FLUID CLEANLINESS

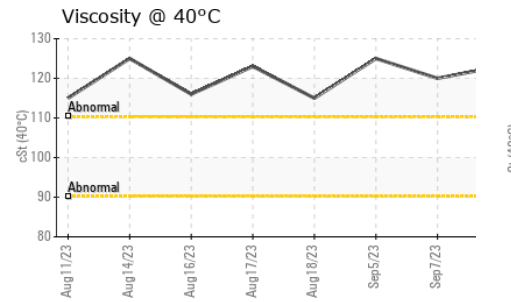
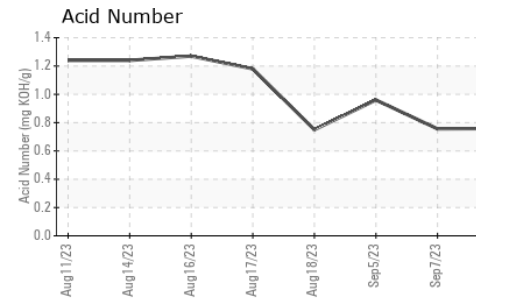
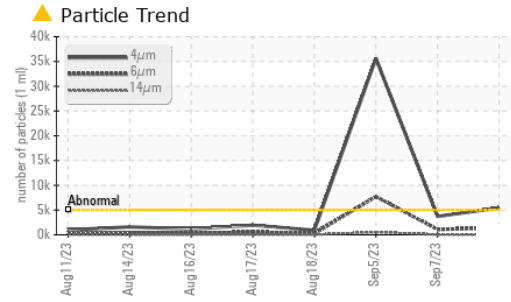
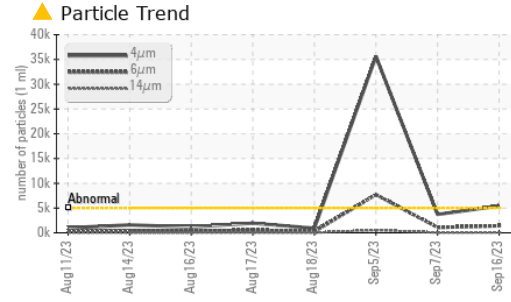
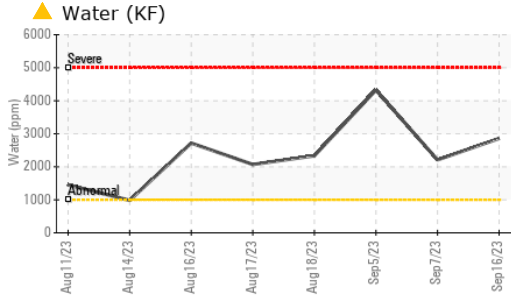
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 5435	3712	▲ 35639
Particles >6µm	ASTM D7647 >1300	▲ 1426	1084	▲ 7710
Particles >14µm	ASTM D7647 >160	62	40	▲ 538
Particles >21µm	ASTM D7647 >40	15	10	▲ 154
Particles >38µm	ASTM D7647 >10	2	1	10
Particles >71µm	ASTM D7647 >3	0	0	2
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/18/13	19/17/12	▲ 22/20/16

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.758	0.756	0.96



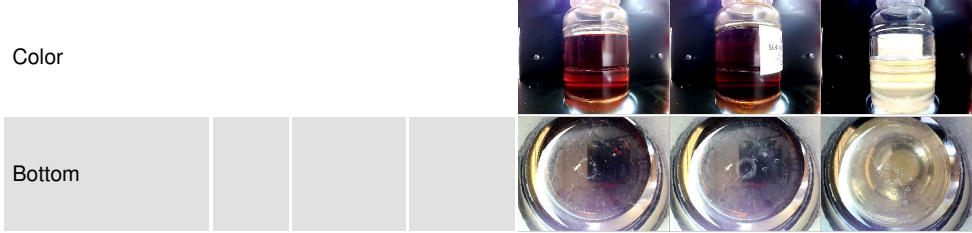
OIL ANALYSIS REPORT



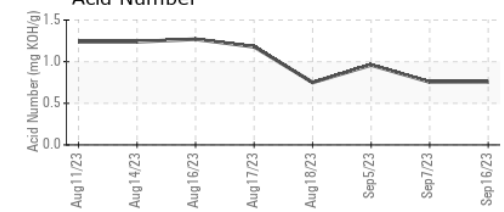
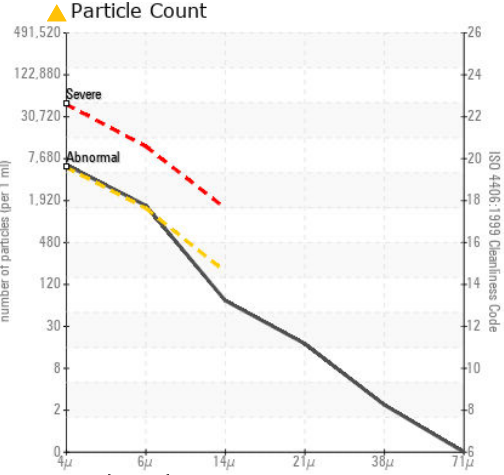
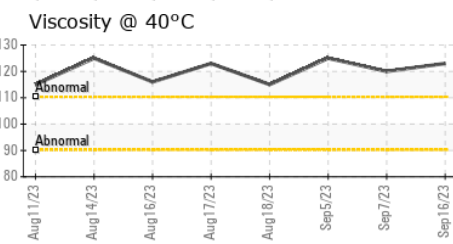
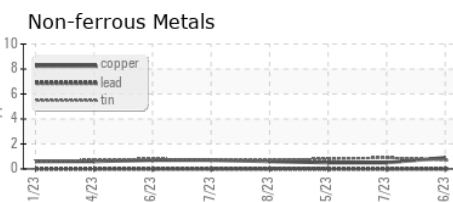
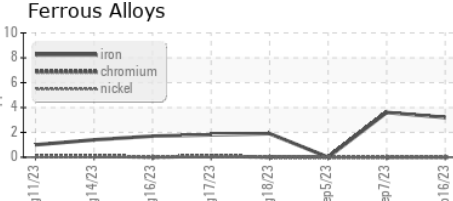
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	123	120	125

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USPM27240 **Received** : 26 Sep 2023
Lab Number : 05961263 **Diagnosed** : 27 Sep 2023
Unique Number : 10662476 **Diagnostician** : Doug Bogart
Test Package : IND 2

CAMBRIA
 31496 CAMBRIA AVE
 LE SUEUR, MN
 US 56058
 Contact: Service Manager

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)

T:
F: