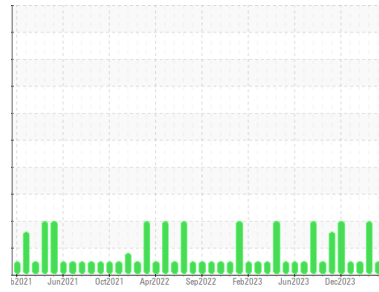




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

## MELT SHOP - HYDRAULIC

Machine Id

### MELT SHOP HYDRAULIC POWER PACK SMS (S/N 15-8000-0815-0100)

Component

#### Tank Hydraulic System

Fluid

#### FIRE-RESISTANT FLUID ISO 46 (105 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 pH level of this fluid is within the acceptable limits at 9.0. The condition of the oil is acceptable for the time in service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>RP0042717</b>	RP0042650	RP0039319
Sample Date	Client Info		<b>28 Mar 2024</b>	05 Mar 2024	31 Jan 2024
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ATTENTION	NORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>6</b>	2	0
Chromium	ppm	ASTM D5185m >20	<b>1</b>	1	0
Nickel	ppm	ASTM D5185m >20	<b>1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>12</b>	11	<1
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	2
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m >20	<b>1</b>	1	1
Vanadium	ppm	ASTM D5185m	<b>1</b>	1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>8</b>	<1	0
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	2
Magnesium	ppm	ASTM D5185m 5	<b>&lt;1</b>	<1	2
Calcium	ppm	ASTM D5185m 50	<b>6</b>	5	2
Phosphorus	ppm	ASTM D5185m 175	<b>6</b>	2	8
Zinc	ppm	ASTM D5185m 62	<b>&lt;1</b>	3	17

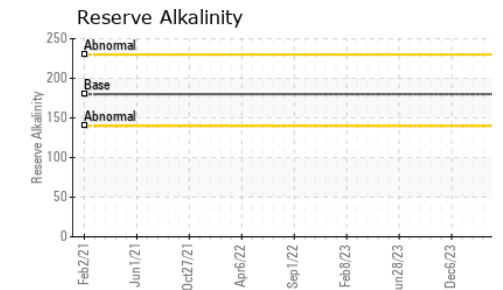
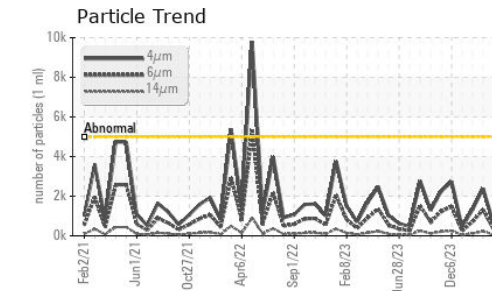
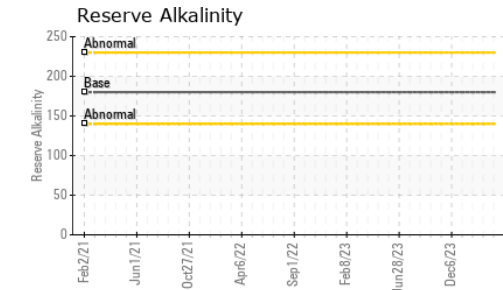
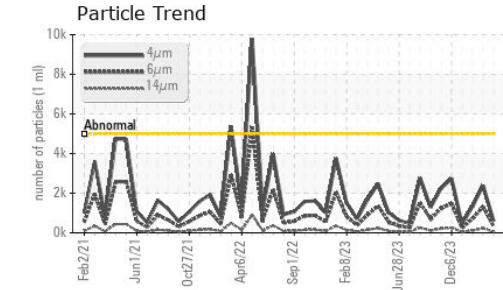
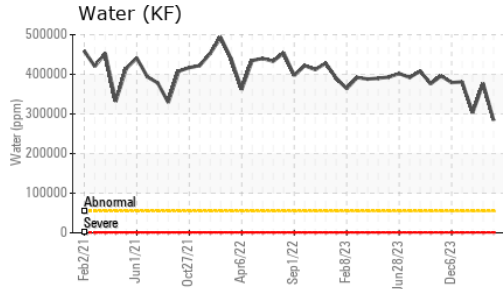
### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>3</b>	3	1
Sodium	ppm	ASTM D5185m	<b>55</b>	45	2
Potassium	ppm	ASTM D5185m >20	<b>7</b>	7	4
Water	%	ASTM D6304 >55	<b>28.4</b>	37.7	30.3
ppm Water	ppm	ASTM D6304 >55000	<b>284000</b>	377000	303000

### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>600</b>	2392	1331
Particles >6µm	ASTM D7647	>1300	<b>327</b>	1303	725
Particles >14µm	ASTM D7647	>160	<b>56</b>	222	123
Particles >21µm	ASTM D7647	>40	<b>19</b>	75	42
Particles >38µm	ASTM D7647	>10	<b>3</b>	12	6
Particles >71µm	ASTM D7647	>3	<b>0</b>	1	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/16/13</b>	18/18/15	18/17/14

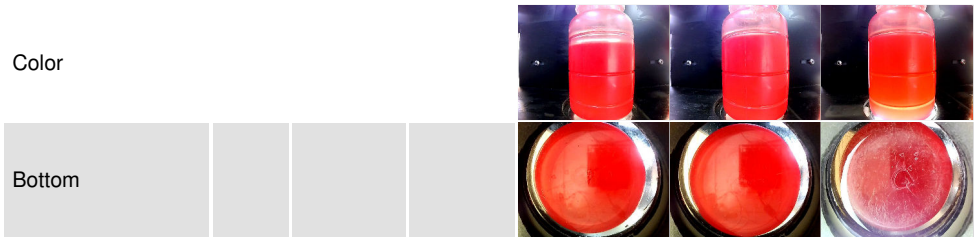
# OIL ANALYSIS REPORT



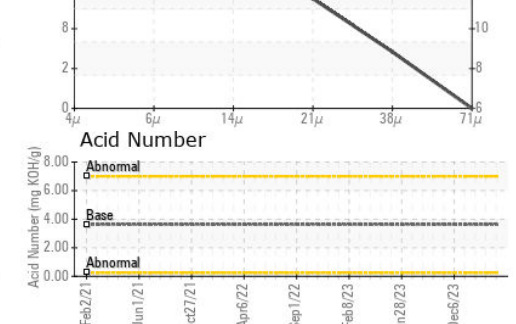
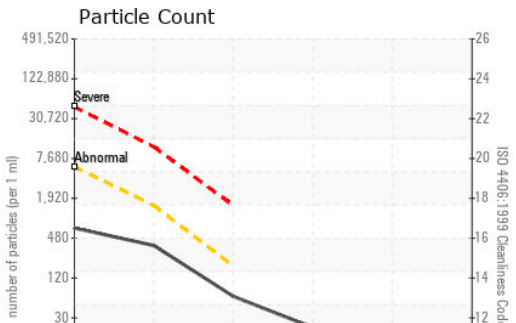
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML
Emulsified Water	scalar	*Visual	>55	<b>0.2%</b>	0.2%
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287	<b>9.00</b>	10.0	10.0
Visc @ 40°C	cSt	ASTM D445	<b>46</b>	44.2	46.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0042717 **Received** : 29 Mar 2024  
**Lab Number** : **06134118** **Tested** : 05 Apr 2024  
**Unique Number** : 10953583 **Diagnosed** : 05 Apr 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: pH, ReserveAlk )

**OUTOKUMPU STAINLESS USA**  
 HWY 43 N  
 CALVERT, AL 36513  
 Contact: MARIO JOHNSON  
 Mario.johnson@outokumpu.com  
 T: (251)321-4105  
 F: x:

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)