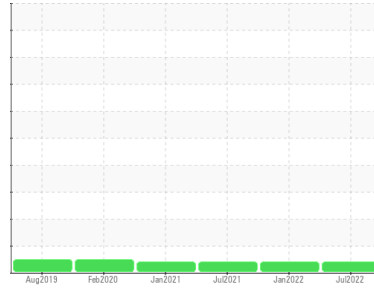


# PROBLEM SUMMARY

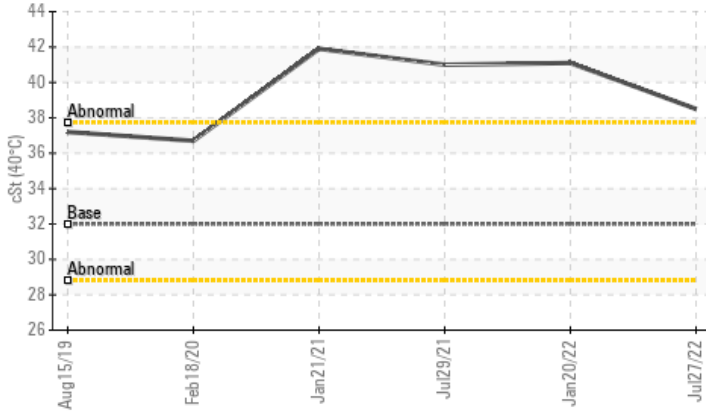
Area  
**EBAY**  
Machine Id  
**SB13MHYD**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



### RECOMMENDATION

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

### PROBLEMATIC TEST RESULTS

Sample Status				<b>ATTENTION</b>	ATTENTION	ATTENTION
Visc @ 40°C	cSt	ASTM D445	32	▲ 38.5	▲ 41.1	▲ 41.0

Customer Id: KOBPIN  
Sample No.: ST42951  
Lab Number: 05608256  
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](mailto:jhester@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 20 Jan 2022 Diag: Angela Borella

#### VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



### 29 Jul 2021 Diag: Don Baldrige

#### VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



### 21 Jan 2021 Diag: Jonathan Hester

#### VISCOSITY

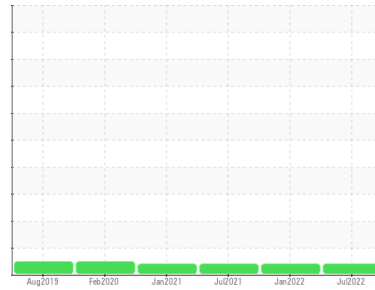


No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



Area  
**EBAY**  
 Machine Id  
**SB13MHYD**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**



**DIAGNOSIS**

- Recommendation**  
 No corrective action is recommended at this time. 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**  
 Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

**SAMPLE INFORMATION**

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>ST42951</b>	ST39257	ST42272
Sample Date	Client Info	<b>27 Jul 2022</b>	20 Jan 2022	29 Jul 2021
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ATTENTION</b>	ATTENTION	ATTENTION

**WEAR METALS**

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >20	<b>1</b>	3	2
Tin	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

**ADDITIVES**

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 5	<b>2</b>	1	3
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>2</b>	1	2
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 25	<b>6</b>	3	5
Calcium	ppm	ASTM D5185m 200	<b>65</b>	38	64
Phosphorus	ppm	ASTM D5185m 300	<b>278</b>	317	322
Zinc	ppm	ASTM D5185m 370	<b>339</b>	395	367
Sulfur	ppm	ASTM D5185m 2500	<b>2400</b>	1113	1109

**CONTAMINANTS**

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	2	<1
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	1	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Water	%	ASTM D6304 >0.05	<b>0.004</b>	0.002	0.003
ppm Water	ppm	ASTM D6304 >500	<b>44.4</b>	21.6	31.7

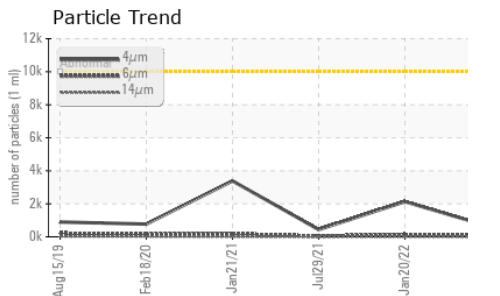
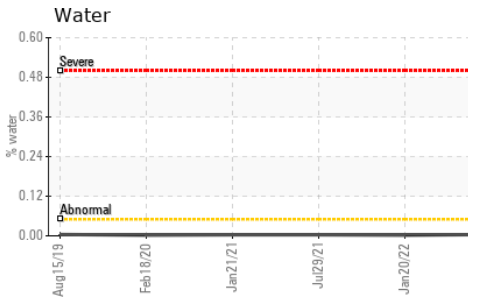
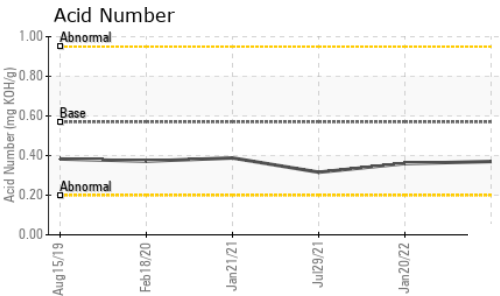
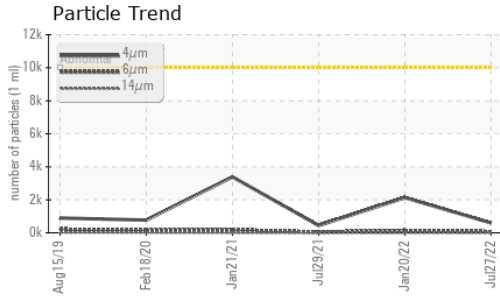
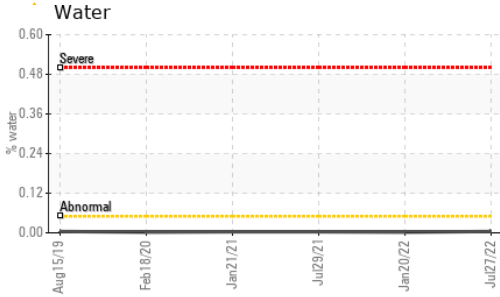
**FLUID CLEANLINESS**

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>597</b>	2129	437
Particles >6µm	ASTM D7647 >1300	<b>65</b>	143	37
Particles >14µm	ASTM D7647 >160	<b>7</b>	6	5
Particles >21µm	ASTM D7647 >40	<b>3</b>	1	1
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >20/17/14	<b>16/13/10</b>	18/14/10	16/12/10

**FLUID DEGRADATION**

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	<b>0.37</b>	0.36	0.316

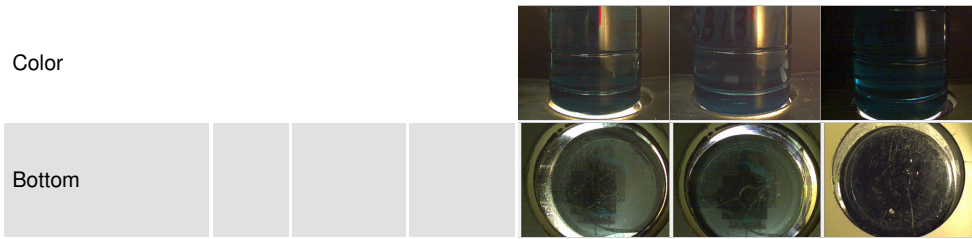
# OIL ANALYSIS REPORT



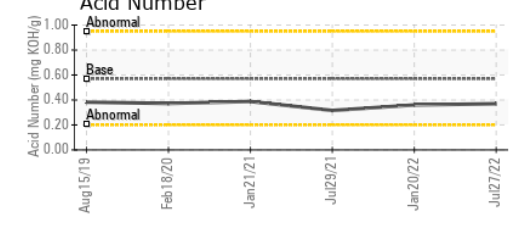
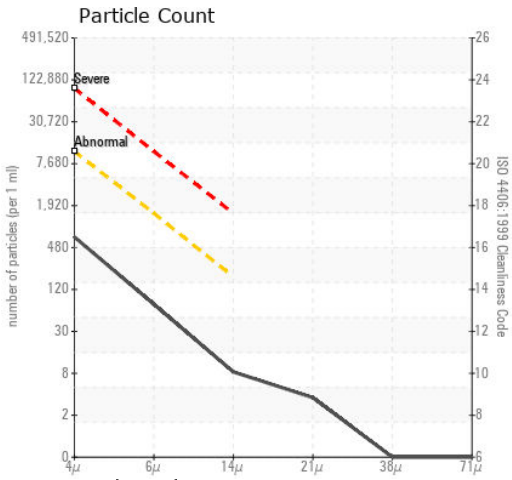
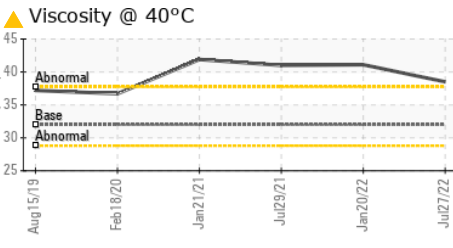
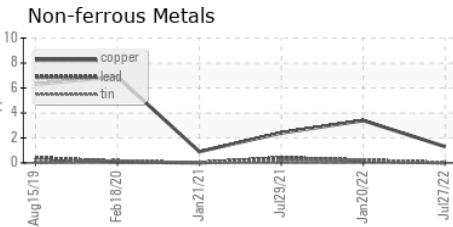
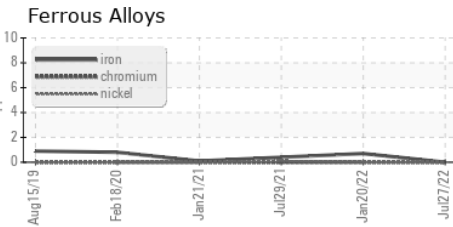
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 32	▲ 38.5	▲ 41.1	▲ 41.0

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST42951 **Received** : 03 Aug 2022  
**Lab Number** : 05608256 **Diagnosed** : 05 Aug 2022  
**Unique Number** : 10077737 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF )

**KOBE WIELAND COPPER PRODUCTS**  
 3990 HWY. 311  
 PINE HALL, NC  
 US 27042  
 Contact: NEAL SHINAULT  
 NEAL.SHINAULT@WIELAND.COM  
 T: (336)604-1498  
 F:

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)