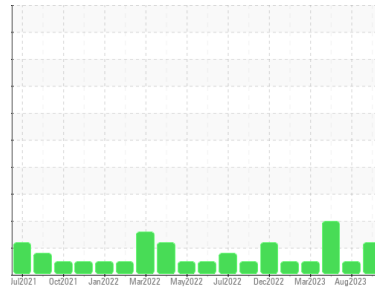




# PROBLEM SUMMARY

Sample Rating Trend



## VISUAL METAL



Area  
**Extrusion**  
 Machine Id  
**Press 4 Press Hydraulic Unit (S/N 27954)**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (2500 GAL)**

### COMPONENT CONDITION SUMMARY

No relevant graphs to display


### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

### PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	ABNORMAL
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE

**Customer Id:** WESCARTEX  
**Sample No.:** RP0038259  
**Lab Number:** 05982369  
**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

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to metal particles present in this sample.

## HISTORICAL DIAGNOSIS

### 25 Aug 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination 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



### 30 Jun 2023 Diag: Wes Davis

ISO



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

view report



### 23 Mar 2023 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination 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

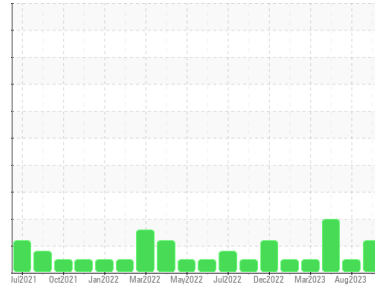


# OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL

Area  
**Extrusion**  
 Machine Id  
**Press 4 Press Hydraulic Unit (S/N 27954)**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (2500 GAL)**



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

### Wear

Moderate concentration of visible metal present. 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	<b>RP0038259</b>	RP0024727	RP0024732
Sample Date	Client Info	<b>13 Oct 2023</b>	25 Aug 2023	30 Jun 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>6</b>	2	1
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m >20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >20	<b>7</b>	8	8
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 5	<b>11</b>	14	0
Barium	ppm	ASTM D5185m 5	<b>0</b>	2	<1
Molybdenum	ppm	ASTM D5185m 5	<b>14</b>	18	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 25	<b>25</b>	29	2
Calcium	ppm	ASTM D5185m 200	<b>115</b>	134	27
Phosphorus	ppm	ASTM D5185m 300	<b>340</b>	335	335
Zinc	ppm	ASTM D5185m 370	<b>393</b>	421	382

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	<1	5
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	<1
Water	%	ASTM D6304 >0.05	<b>0.002</b>	0.005	0.002
ppm Water	ppm	ASTM D6304 >500	<b>22.6</b>	51.7	18.8

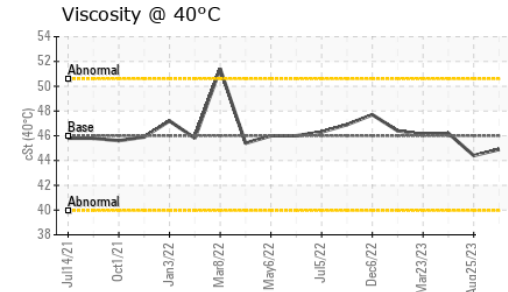
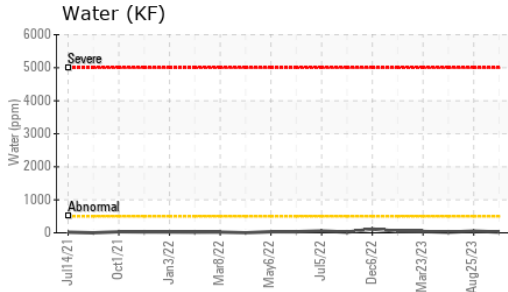
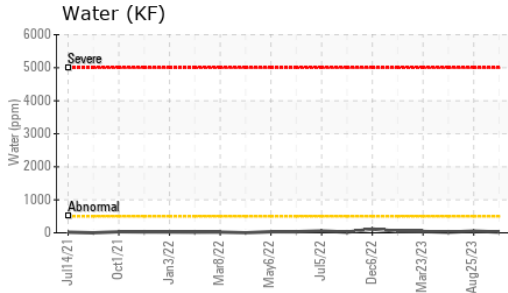
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	---	2185	▲ 21534
Particles >6µm	ASTM D7647 >1300	---	267	▲ 6522
Particles >14µm	ASTM D7647 >160	---	29	▲ 452
Particles >21µm	ASTM D7647 >40	---	11	▲ 102
Particles >38µm	ASTM D7647 >10	---	0	2
Particles >71µm	ASTM D7647 >3	---	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	---	18/15/12	▲ 22/20/16

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	<b>0.41</b>	0.42	0.38

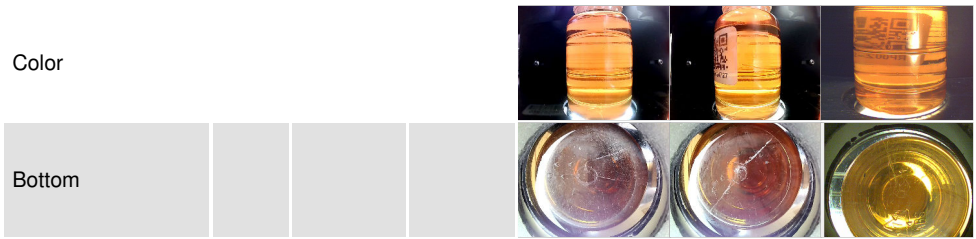
# OIL ANALYSIS REPORT



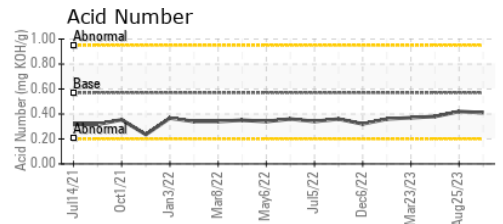
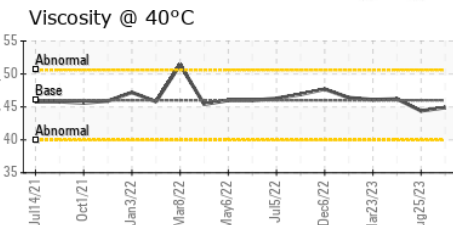
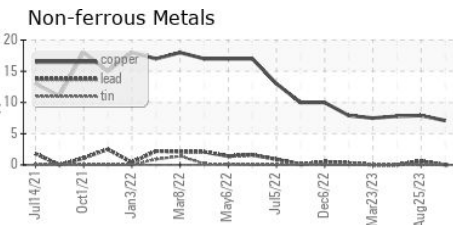
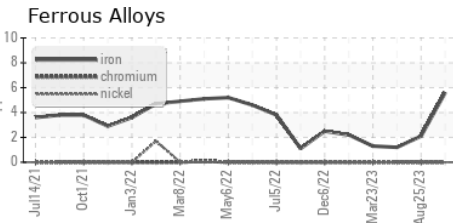
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	44.9	44.4

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038259 **Received** : 18 Oct 2023  
**Lab Number** : 05982369 **Diagnosed** : 20 Oct 2023  
**Unique Number** : 10699664 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2

**WESTERN EXTRUSIONS CORPORATION**  
 1735 SANDY LAKE RD  
 CARROLLTON, TX  
 US 75006  
 Contact: WESTERN EXTRUSIONS  
 SHAYLEY@WESTERNEXTRUSIONS.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)

T:  
F: