



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area  
**EMPW**  
Machine Id  
**260-12-1036 (S/N 820366)**  
Component  
**Hydraulic System**  
Fluid  
**TULCO LUBSOIL SUPER HYDRAULIC AW 68 (140 GAL)**

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO5003289</b>	---	---
Sample Date		Client Info		<b>12 Sep 2023</b>	---	---
Machine Age	hrs	Client Info		<b>4529</b>	---	---
Oil Age	hrs	Client Info		<b>4529</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Changd</b>	---	---
Filter Changed		Client Info		<b>Not Changd</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>20	<b>11</b>	---	---
Tin	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

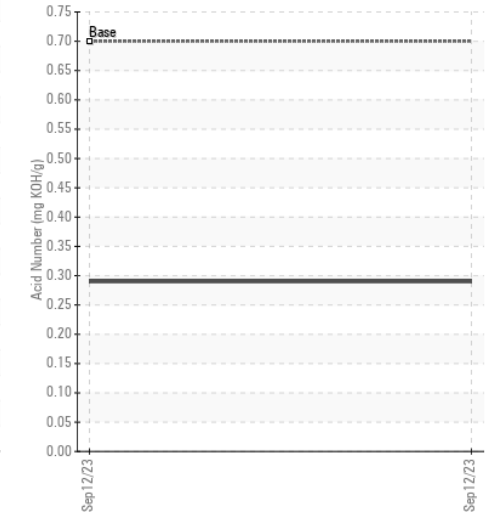
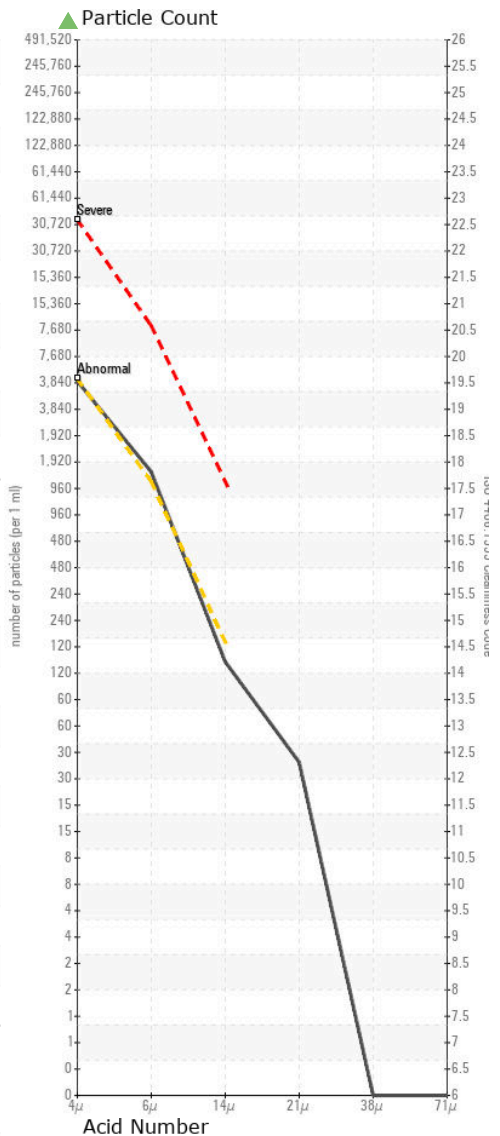
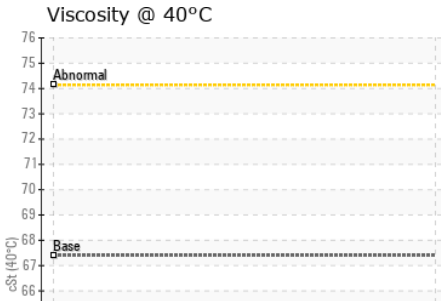
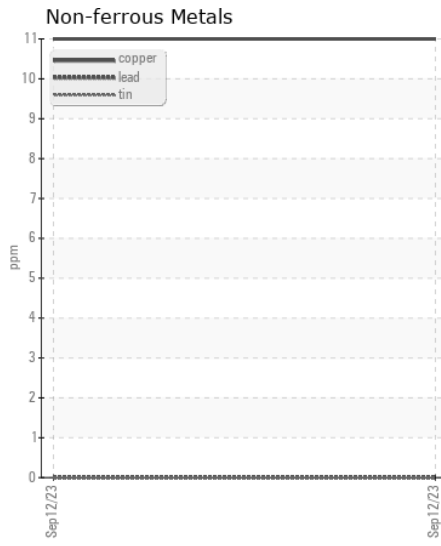
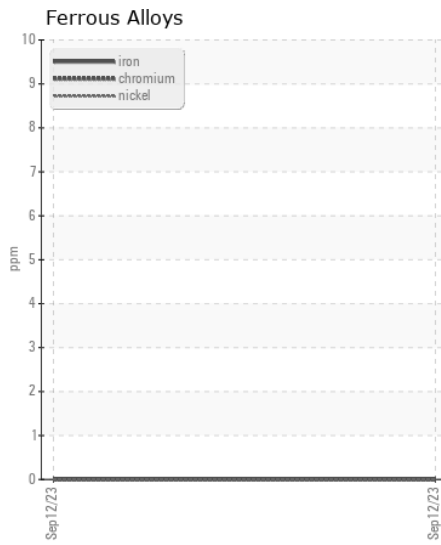
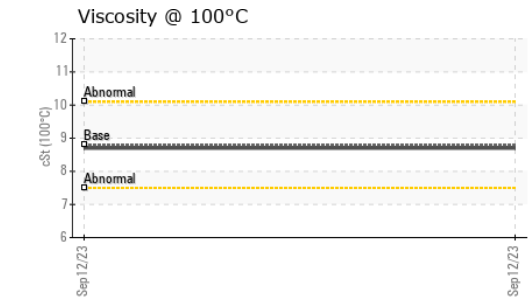
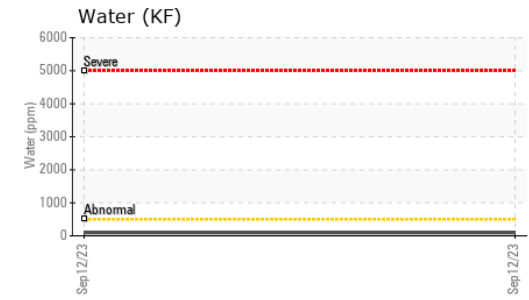
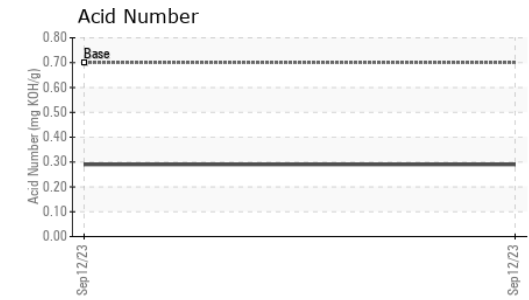
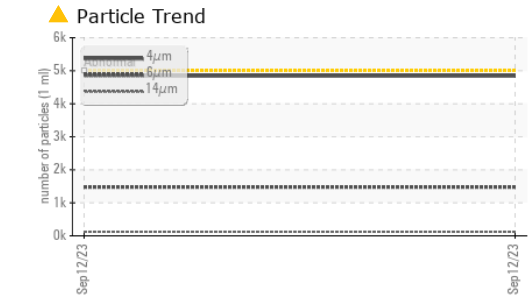
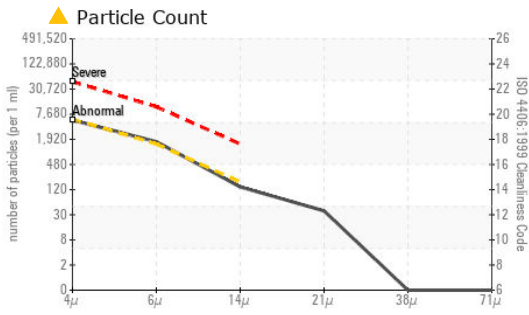
There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

Silicon	ppm	ASTM D5185m	>15	<b>1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.009</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>95</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>4843</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 1477</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>123</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>33</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 19/18/14</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	---	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>69</b>	---	---
Calcium	ppm	ASTM D5185m		<b>92</b>	---	---
Phosphorus	ppm	ASTM D5185m	425	<b>289</b>	---	---
Zinc	ppm	ASTM D5185m	500	<b>370</b>	---	---
Sulfur	ppm	ASTM D5185m	1900	<b>3352</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	<b>0.29</b>	---	---
Visc @ 40°C	cSt	ASTM D445	67.4	<b>64.4</b>	---	---
Visc @ 100°C	cSt	ASTM D445	8.8	<b>8.7</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>107</b>	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : TO5003289      Recieved : 15 Dec 2023  
 Lab Number : 06036075      Diagnosed : 18 Dec 2023  
 Unique Number : 10791304      Diagnostician : Wes Davis  
 Test Package : IND 2 ( Additional Tests: KF, KV100, VI )

**JAMAK FABRICATION**  
 1401 NORTH BOWIE DRIVE  
 WEATHERFORD, TX  
 US 76086  
 Contact: LARRY NORRIS  
 lano@jamak.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: