



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area  
**EMPE**  
Machine Id  
**P210-6-1028 (S/N V604)**  
Component  
**Hydraulic System**  
Fluid  
**TULCO LUBSOIL SUPER HYDRAULIC AW 68 (200 GAL)**

**RECOMMENDATION**

We advise that you check all areas where dirt can enter the system. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO5002459</b>	---	---
Sample Date		Client Info		<b>07 Sep 2023</b>	---	---
Machine Age	hrs	Client Info		<b>12055</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>ABNORMAL</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>&lt;1</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>1</b>	---	---
Copper	ppm	ASTM D5185m	>20	<b>15</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**

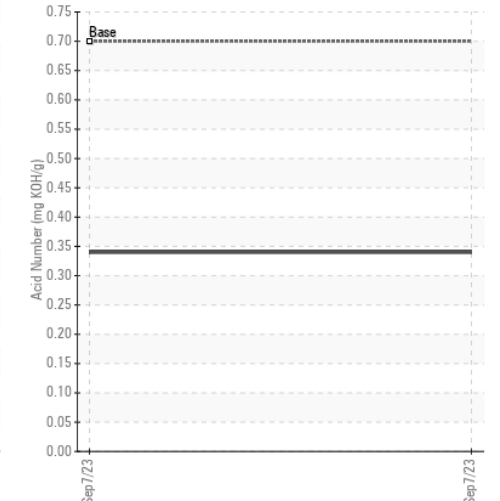
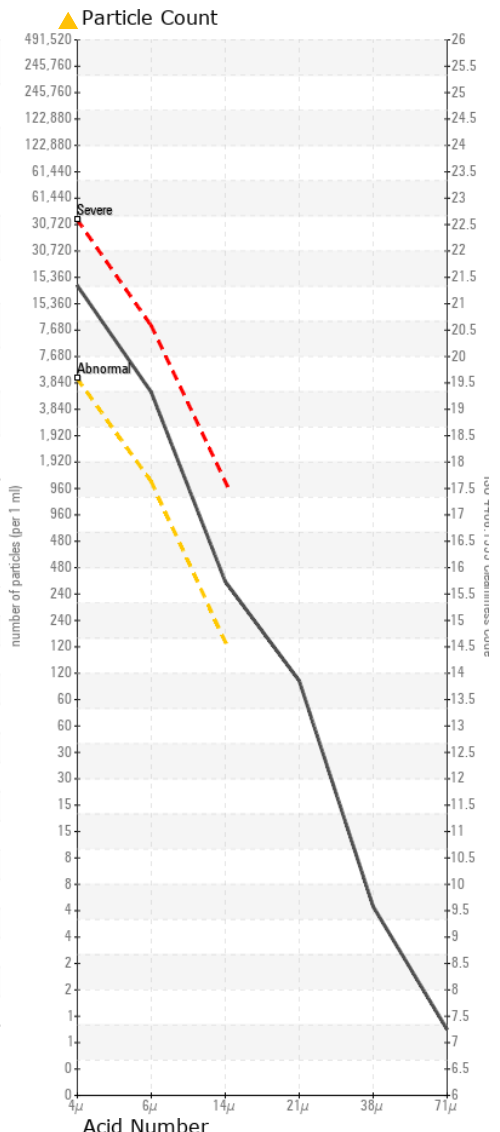
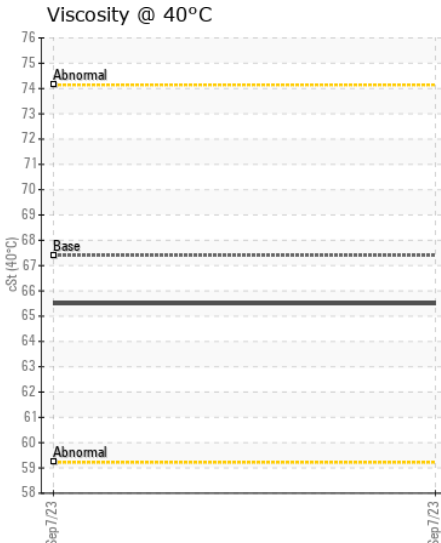
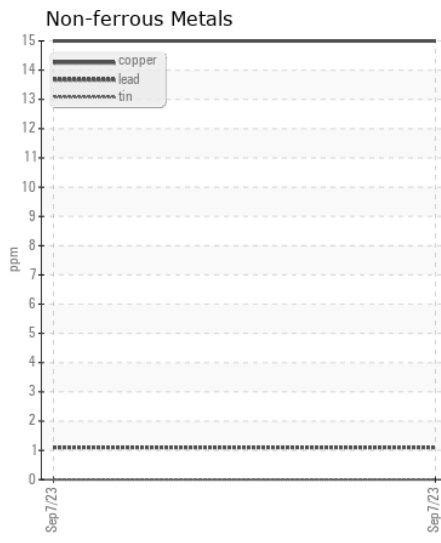
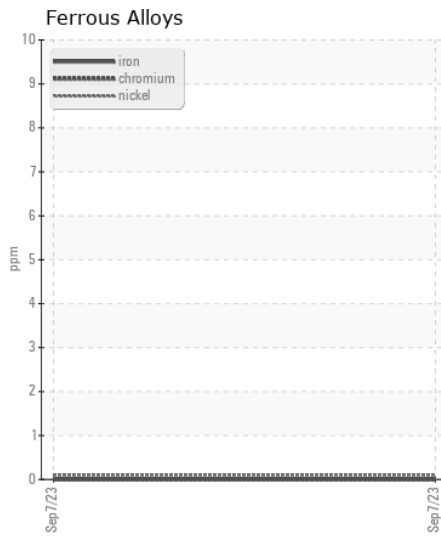
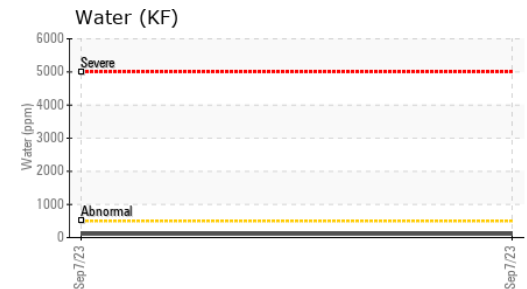
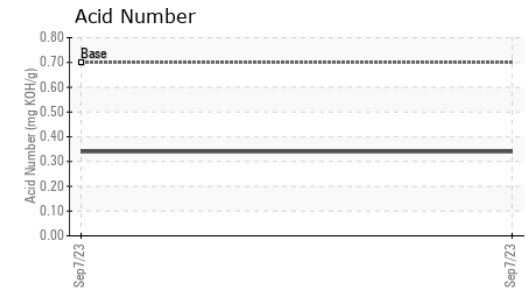
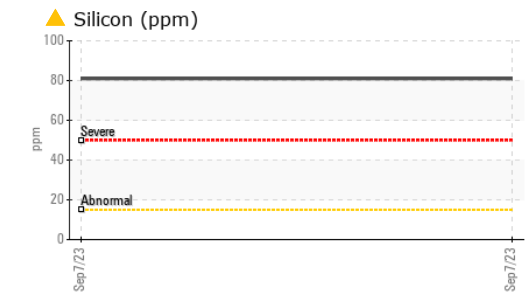
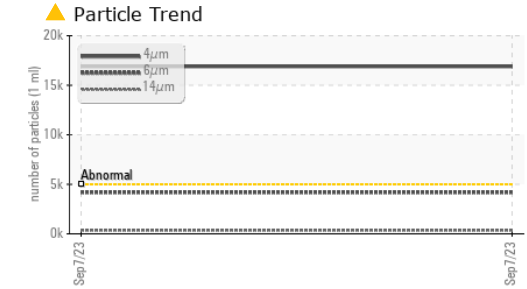
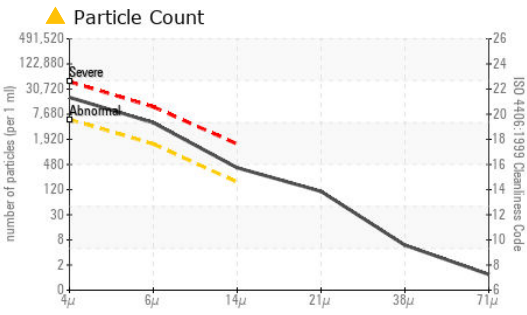
There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>15	<b>▲ 81</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.010</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>109</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 16892</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 4187</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 352</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 96</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>5</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>1</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/19/16</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>LIGHT</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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>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>71</b>	---	---
Calcium	ppm	ASTM D5185m		<b>57</b>	---	---
Phosphorus	ppm	ASTM D5185m	425	<b>305</b>	---	---
Zinc	ppm	ASTM D5185m	500	<b>388</b>	---	---
Sulfur	ppm	ASTM D5185m	1900	<b>1707</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	<b>0.34</b>	---	---
Visc @ 40°C	cSt	ASTM D445	67.4	<b>65.5</b>	---	---
Visc @ 100°C	cSt	ASTM D445	8.8	<b>8.5</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>99</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO5002459 **Received** : 15 Dec 2023  
**Lab Number** : 06036082 **Diagnosed** : 19 Dec 2023  
**Unique Number** : 10791311 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, VI )

**JAMAK FABRICATION**  
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 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: