



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area  
**EMPE**  
Machine Id  
**P210-15-1032**  
Component  
**Hydraulic System**  
Fluid  
**TULCO LUBSOIL SUPER HYDRAULIC AW 68 (200 GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO5002463</b>	---	---
Sample Date		Client Info		<b>05 Dec 2023</b>	---	---
Machine Age	hrs	Client Info		<b>5230</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>&lt;1</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>0</b>	---	---
Copper	ppm	ASTM D5185m	>20	<b>1</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**

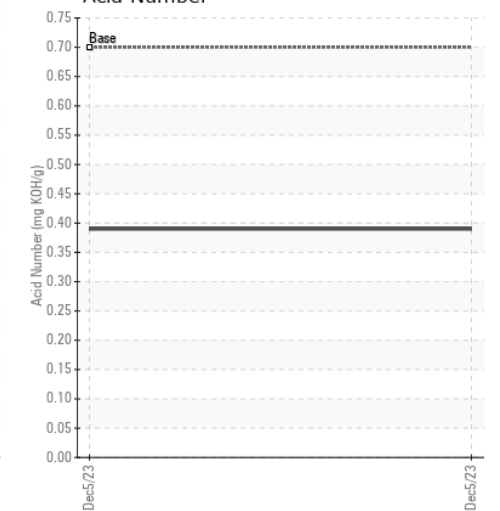
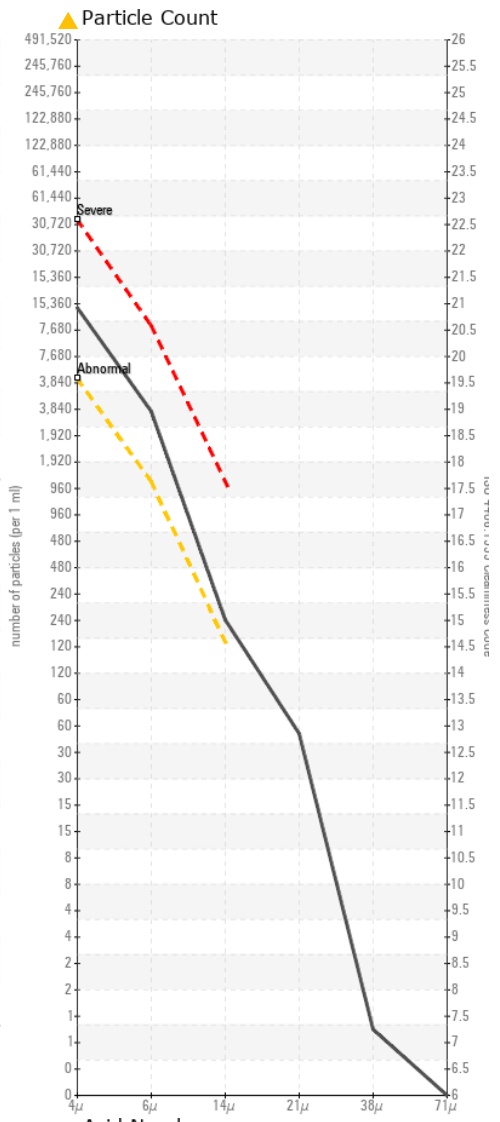
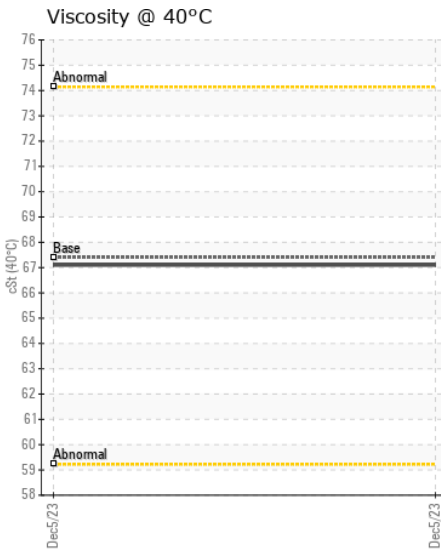
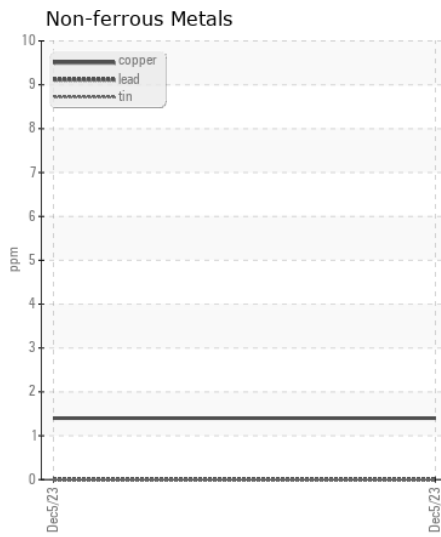
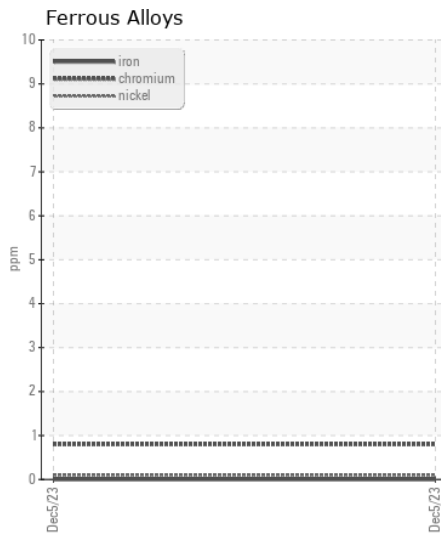
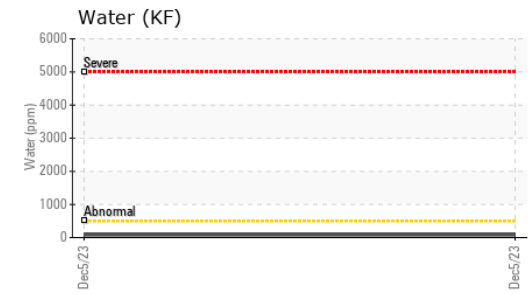
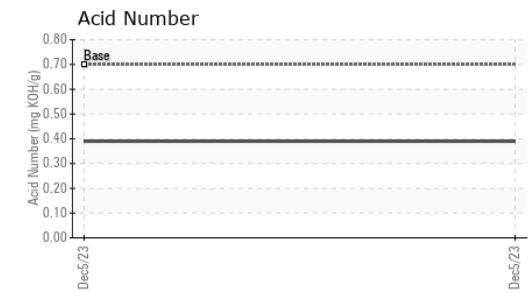
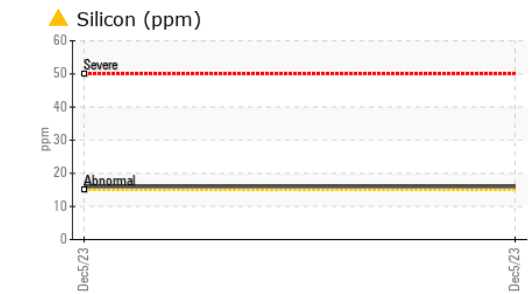
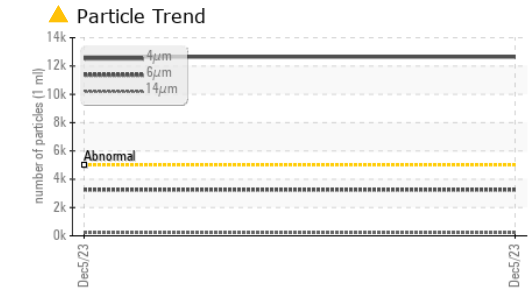
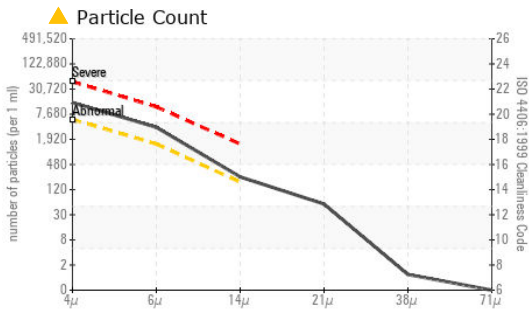
There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>15	<b>▲ 16</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.008</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>83</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 12642</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 3260</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 213</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>▲ 48</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 21/19/15</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>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>67</b>	---	---
Calcium	ppm	ASTM D5185m		<b>66</b>	---	---
Phosphorus	ppm	ASTM D5185m	425	<b>310</b>	---	---
Zinc	ppm	ASTM D5185m	500	<b>400</b>	---	---
Sulfur	ppm	ASTM D5185m	1900	<b>1557</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.7	<b>0.39</b>	---	---
Visc @ 40°C	cSt	ASTM D445	67.4	<b>67.1</b>	---	---
Visc @ 100°C	cSt	ASTM D445	8.8	<b>8.8</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>103</b>	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : TO5002463      Recieved : 15 Dec 2023  
 Lab Number : 06036073      Diagnosed : 19 Dec 2023  
 Unique Number : 10791302      Diagnostician : Don Baldrige  
 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: