



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
EMB 190 1_31
 Component
Hydraulic System
 Fluid
TULCO LUBSOIL LUBVIS 746 (500 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TO50000849	TO90002013	---
Sample Date		Client Info		02 Dec 2022	31 Jan 2022	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	2	<1	---
Chromium	ppm	ASTM D5185m	>20	<1	0	---
Nickel	ppm	ASTM D5185m	>20	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		2	<1	---
Aluminum	ppm	ASTM D5185m	>20	0	0	---
Lead	ppm	ASTM D5185m	>20	2	1	---
Copper	ppm	ASTM D5185m	>20	1	5	---
Tin	ppm	ASTM D5185m	>20	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

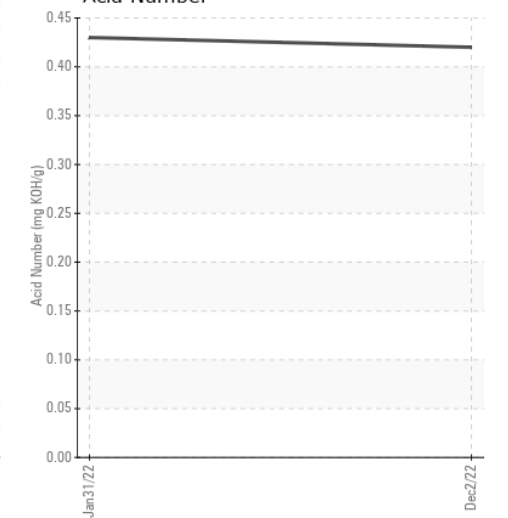
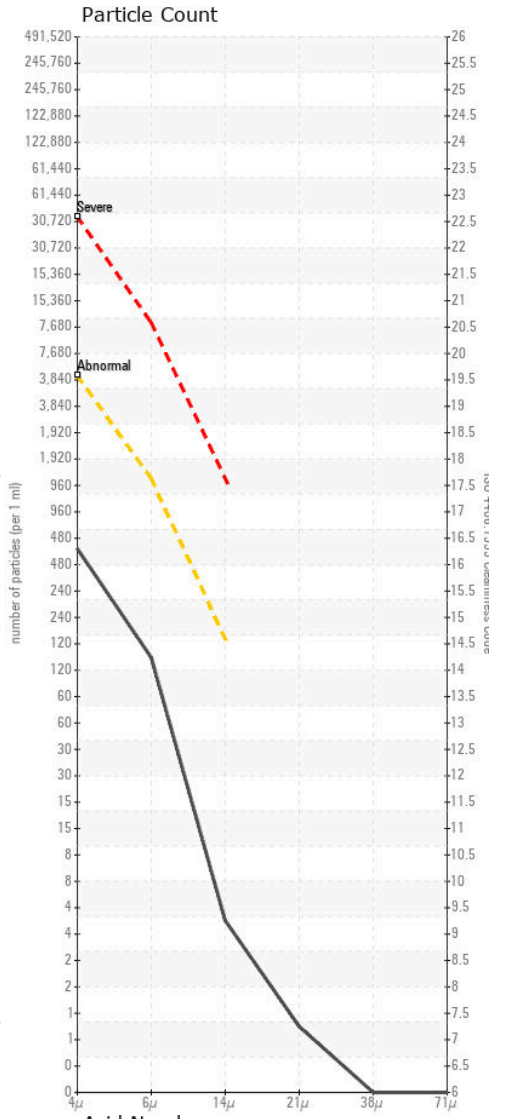
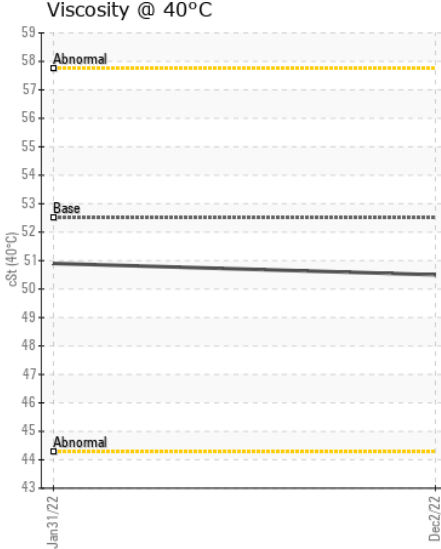
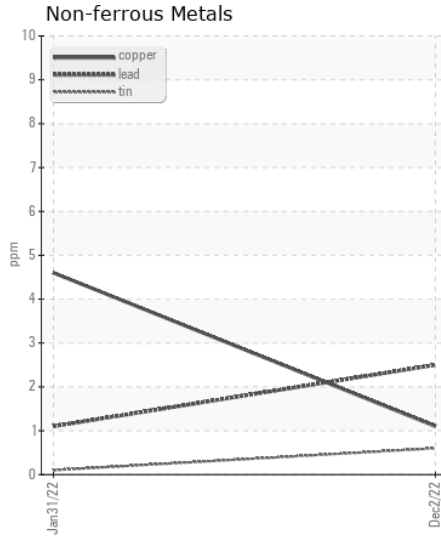
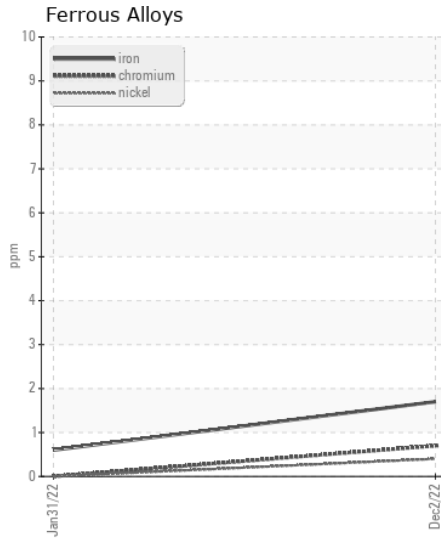
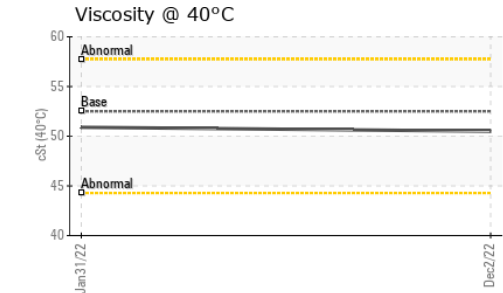
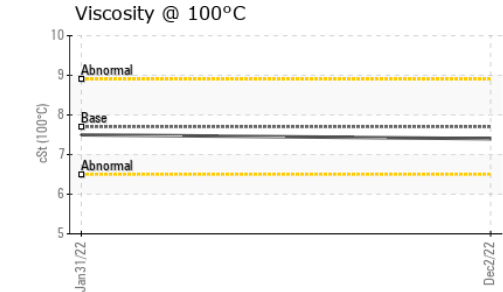
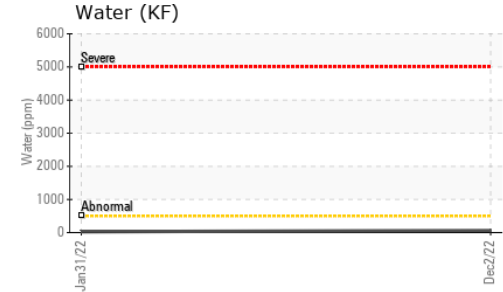
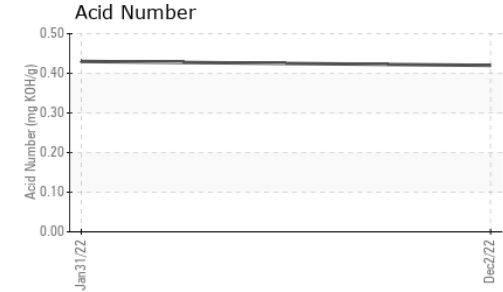
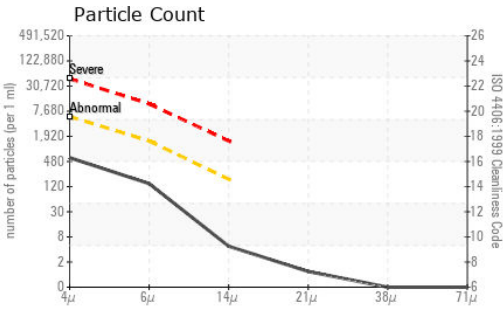
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>15	1	3	---
Potassium	ppm	ASTM D5185m	>20	30	0	---
Water	%	ASTM D6304	>0.05	0.006	0.003	---
ppm Water	ppm	ASTM D6304	>500	66.3	25.2	---
Particles >4µm		ASTM D7647	>5000	520	2703	---
Particles >6µm		ASTM D7647	>1300	125	493	---
Particles >14µm		ASTM D7647	>160	4	28	---
Particles >21µm		ASTM D7647	>40	1	9	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	16/14/9	19/16/12	---
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	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		9	1	---
Boron	ppm	ASTM D5185m		2	<1	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		12	0	---
Calcium	ppm	ASTM D5185m		0	1	---
Phosphorus	ppm	ASTM D5185m	240	44	237	---
Zinc	ppm	ASTM D5185m		7	22	---
Sulfur	ppm	ASTM D5185m	7560	514	6108	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.42	0.43	---
Visc @ 40°C	cSt	ASTM D445	52.5	50.5	50.9	---
Visc @ 100°C	cSt	ASTM D445	7.7	7.4	7.5	---
Viscosity Index (VI)	Scale	ASTM D2270	111	107	109	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO50000849 **Received** : 06 Dec 2022
Lab Number : 05710394 **Tested** : 09 Dec 2022
Unique Number : 10244969 **Diagnosed** : 11 Dec 2022 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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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)