

Machine Id **P210-10-1029 (S/N V605)**

Component Hydraulic System

EMPE

TULCO LUBSOIL SUPER HYDRAULIC AW 68 (200 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Number		Client Info		TO5002460		
	Sample Date		Client Info		10 Nov 2023		
	Machine Age	hrs	Client Info		5487		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
					0		
	Iron	ppm	ASTM D5185m		0		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m	>20	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	00	0		
	Aluminum	ppm	ASTM D5185m		0		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		16		
	Tin	ppm	ASTM D5185m	>20	0		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	<15 <	7		
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.	Potassium	ppm	ASTM D5185m		2		
	Water	%	ASTM D6304		0.009		
	ppm Water	ppm	ASTM D6304		93		
	Particles >4µm	ррш	ASTM D0504 ASTM D7647		▲ 27659		
	Particles >6µm		ASTM D7647		▲ 3722		
	Particles >14µm		ASTM D7647		67		
	Particles >21µm		ASTM D7647		12		
	Particles >38µm		ASTM D7647		12		
	Particles >71µm		ASTM D7647 ASTM D7647		0		
	Oil Cleanliness		ISO 4406 (c)	>3 >19/17/14	A 22/19/13		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	LIGHT		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.05	NEG		
			visuai	>0.05	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1		
	Boron		ASTM D5185m		0		
The AN level is acceptable for this fluid. The oil is still serviceable	Barium	ppm	ASTM D5185m		0		
provided that the contaminant(s) can be reduced to acceptable levels.	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		ہ <1		
	Magnesium	ppm	ASTM D5185m		83		
	Calcium	ppm	ASTM D5185m		70		
	Phosphorus	ppm	ASTM D5185m	425	302		
	Zinc		ASTM D5185m		302		
	Sulfur	ppm ppm	ASTM D5185m		1693		
	Guildi	ppill		1000	1093		

Acid Number (AN) mg KOH/g ASTM D8045 0.7

Viscosity Index (VI) Scale ASTM D2270 102

Visc @ 100°C cSt

Visc @ 40°C cSt ASTM D445 67.4

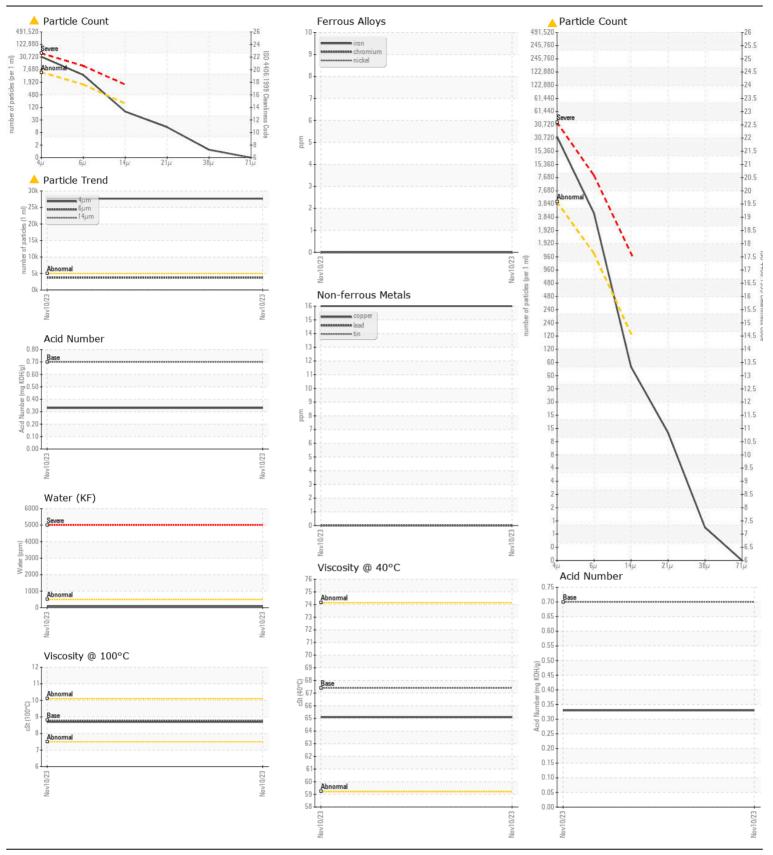
ASTM D445 8.8

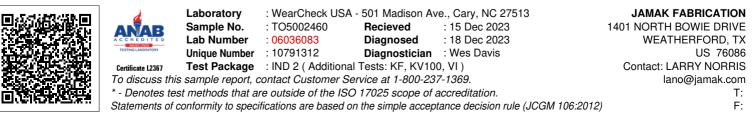
0.33

65.1

8.7

105





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