

Machine Id **3400 (75) (S/N S0305)** Component Hydraulic System Fluid QUAKER CHEMICAL QUINTOLUBRIC 888-46 (--- GAL)

RECOMMENDATION	Test	UOM	Method
	Sample Number		Client Info
No corrective action is recommended at this time. Resample at the	Sample Date		Client Info
next service interval to monitor.	Machine Age	hrs	Client Info
	Oil Age	hrs	Client Info
	Filter Age	hrs	Client Info
	Oil Changed		Client Info
	Filter Changed		Client Info
	Sample Status		
NEAR	Iron	ppm	ASTM D5185r
	Chromium	ppm	ASTM D5185r
All component wear rates are normal.	Nickel	ppm	ASTM D5185r
	Titanium	ppm	ASTM D5185r
	Silver	ppm	ASTM D5185r
	Aluminum	ppm	ASTM D5185r
	Lead	ppm	ASTM D5185r

CONTAMINATION

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

FLUID CONDITION

Viscosity of sample indicates oil is within ISO 68 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		Y2K0001710		
Sample Date		Client Info		02 Jan 2024		
Machine Age	hrs	Client Info		2400		
Oil Age	hrs	Client Info		2400		
Filter Age	hrs	Client Info		2400		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		Changed		
Sample Status				ATTENTION		
Iron	ppm	ASTM D5185m	>20	0		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	0		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	0		
Tin	ppm	ASTM D5185m	>20	70		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	nom	ASTM D5185m	>15	<1		
Potassium	ppm ppm	ASTM D5185m	>20	<1		
Water	%	ASTM D518511	>20	0.011		
ppm Water	ppm	ASTM D0304 ASTM D6304	>500	119		
Particles >4µm	ρριι	ASTM D0304 ASTM D7647	>5000	3071		
Particles >6µm		ASTM D7647 ASTM D7647	>1300	839		
Particles >14µm		ASTM D7647	>160	72		
Particles >21µm		ASTM D7647	>40	21		
Particles >38µm		ASTM D7647	>10	3		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.05	NEG		
Sodium	ppm	ASTM D5185m		<1		
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		0		
Calcium	ppm	ASTM D5185m		38		
Phosphorus	ppm	ASTM D5185m		284		
Zinc	ppm	ASTM D5185m		322		
Sulfur	ppm	ASTM D5185m		811		
Acid Number (AN)	mg KOH/g	ASTM D8045		0.54		
Visc @ 40°C	cSt	ASTM D445		59.1		



