

OIL ANALYSIS REPORT

EQ361 QUENCH HYD UNIT - OMAV Component

Hydraulic System AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

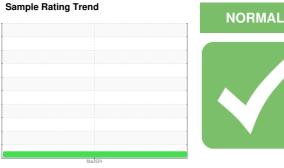
All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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





	Mar2024											
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2						
Sample Number		Client Info		WC0908465								
Sample Date		Client Info		10 Mar 2024								
Machine Age	hrs	Client Info		0								
Oil Age	hrs	Client Info		0								
Oil Changed		Client Info		N/A								
Sample Status				NORMAL								
CONTAMINATIO	N	method	limit/base	current	history1	history2						
Water		WC Method	>0.05	NEG								
WEAR METALS		method	limit/base	current	history1	history2						
Iron	ppm	ASTM D5185(m)	>20	<1								
Chromium	ppm	ASTM D5185(m)	>20	0								
Nickel	ppm	ASTM D5185(m)	>20	<1								
Titanium	ppm	ASTM D5185(m)		0								
Silver	ppm	ASTM D5185(m)		0								
Aluminum	ppm	ASTM D5185(m)	>20	<1								
Lead	ppm	ASTM D5185(m)	>20	0								
Copper	ppm	ASTM D5185(m)	>20	<1								
Tin	ppm	ASTM D5185(m)	>20	0								
Antimony	ppm	ASTM D5185(m)		0								
Vanadium	ppm	ASTM D5185(m)		0								
Beryllium	ppm	ASTM D5185(m)		0								
Cadmium	ppm	ASTM D5185(m)		0								
ADDITIVES		method	limit/base	current	history1	history2						
Boron	ppm	ASTM D5185(m)	5	0								
Barium	ppm	ASTM D5185(m)	5	0								
Molybdenum	ppm	ASTM D5185(m)	5	0								
Manganese	ppm	ASTM D5185(m)		0								
Magnesium	ppm	ASTM D5185(m)	25	<1								
Calcium	ppm	ASTM D5185(m)	200	37								
Phosphorus	ppm	ASTM D5185(m)	300	324								
Zinc	ppm	ASTM D5185(m)	370	387								
Sulfur												
Sului	ppm	ASTM D5185(m)	2500	736								
Lithium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	2500	736 <1								
	ppm		2500 limit/base									
Lithium	ppm	ASTM D5185(m)		<1								
Lithium	ppm	ASTM D5185(m) method	limit/base	<1 current	 history1	 history2						
Lithium CONTAMINANTS Silicon	ppm ppm	ASTM D5185(m) method ASTM D5185(m)	limit/base	<1 current <1	 history1 	 history2 						
Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	limit/base	<1 current <1 <1	 history1 	 history2 						
Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base >15 >20	<1 current <1 <1 <1 <1	 history1 	 history2 						
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	limit/base >15 >20 limit/base	<1 current <1 <1 <1 <1 current	history1 history1	history2 history2						
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D7647	limit/base >15 >20 limit/base >5000	<1 current <1 <1 <1 <1 <1 current 170	history1 history1 	history2 history2 						
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	<1 current <1 <1 <1 <1 <1 current 170 54	 history1 history1 	 history2 history2 						
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	<1 current <1 <1 <1 <1 current 170 54 6	 history1 history1 	 history2 history2 						
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	<1 current <1 <1 <1 <1 current 170 54 6 3	 history1 history1 	 history2 history2 						

Contact/Location: Guilherme Medeiros - ASTWIN



OIL ANALYSIS REPORT

Particle Trend		FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Honomai 4μm		Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.41		
		VISUAL		method	limit/base	current	history1	history2
		White Metal	scalar	Visual*	NONE	NONE		
		Yellow Metal	scalar	Visual*	NONE	NONE		
		Precipitate	scalar	Visual*	NONE	NONE		
- 7 //-	Mar10/24 -	Silt	scalar	Visual*	NONE	NONE		
	Mar	Debris	scalar	Visual*	NONE	NONE		
Acid Number		Sand/Dirt	scalar	Visual*	NONE	NONE NORML		
Abnormal		Appearance Odor	scalar scalar	Visual* Visual*	NORML NORML	NORML		
		Emulsified Water	scalar	Visual*	>0.05	NEG		
ase		Free Water	scalar	Visual*		NEG		
		FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
ormal	-	Visc @ 40°C	cSt	ASTM D7279(m)	46	45.3		
	Marl 0/24 -	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
cosity @ 40°C omal	Ma	Color					no image	no image
se		Bottom					no image	no image
bnormal		GRAPHS						
	ţ	Ferrous Alloys				Particle Count		
	h di	10 iron			491,520			T ²⁶
Particle Trend		톱 5- nickel			122,880	Severe		-24
Aononna 4µm					30,720			-22
ματοποιομού στο ματο ματο ματο ματο ματο ματο ματο μα		0,24			7,680 ع	Abnormal		-20 Z
		Mar10			Mar10/24 s (per 1 ml		S	-18 8
		Non-ferrous Meta	s		apite 480			-16 g
		10 copper			Mar10/2001 4800 1001 1001 1001 1001 1001 1001 1			-20 20 40 -18 0 23 40 -16 0 23 10 -16 0 23 10 -17 0 20
	ž	E 5-			and 30			-12 6
	CU I-F				8		~	-10
	4				24		1	
		Mar10/			Mar10/24			
		 Viscosity @ 40°C			- 0	م Acid Number	14μ 21μ	38µ 71µ
		55 50 Abnormal			(^B H1.00	Abnormal		
		50 50 45 45 50 50 50 50 50 50 50 50 50 5			0.00 Acid Number (mg KOH/g)	Base		
		40 Abnormal			a 0.50	Abnormal		
		35			0.00 gr			
		Mar10/24			Mar10/24	Mar10/24		Mar10/24
		Mai			Mar	Mai		Mai
ISO 17025:2017 Accredited Laboratory	Sample No. Lab Number Unique Number Test Package	: 5746205	Recei Teste Diagr	ived :11 id :12 nosed :12	Mar 2024 2 Mar 2024 2 Mar 2024 - W	es Davis	,	ASTREX 3 PATILLO RD WINDSOR, ON CA N8N 2L9 erme Medeiros iros@astrex.ca