

### **OIL ANALYSIS REPORT**

Sample Rating Trend



# EQ100 FILL DMS

#### Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (250 LTR)

#### 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**

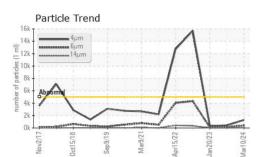
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

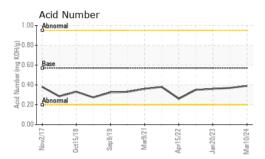

SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0908461	WC0857813	WC0780951
Sample Date		Client Info		10 Mar 2024	25 Sep 2023	20 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	0	0	0
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	0	0
Lead	ppm	ASTM D5185(m)	>20	<1	<1	0
Copper	ppm	ASTM D5185(m)	>20	2	2	2
Tin	ppm	ASTM D5185(m)	>20	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base 5	current 0	history1 <1	history2 <1
	ppm ppm		5		· · · · · ·	
Boron		ASTM D5185(m)	5	0	<1	<1
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	5 5	0 0	<1 <1	<1 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5	0 0 0	<1 <1 0	<1 0 0
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25	0 0 0 0	<1 <1 0 0	<1 0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25	0 0 0 <1	<1 <1 0 0 0	<1 0 0 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200	0 0 0 <1 39	<1 <1 0 0 0 42	<1 0 0 0 <1 41
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300	0 0 0 <1 39 328	<1 <1 0 0 0 42 332	<1 0 0 0 <1 41 355
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300 370	0 0 0 <1 39 328 398	<1 <1 0 0 0 42 332 417	<1 0 0 0 <1 41 355 413
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300 370	0 0 0 <1 39 328 398 822	<1 <1 0 0 0 42 332 417 1022	<1 0 0 <1 41 355 413 807
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 25 200 300 370 2500	0 0 0 <1 39 328 398 822 <1	<1 <1 0 0 42 332 417 1022 <1	<1 0 0 <1 41 355 413 807 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 25 200 300 370 2500	0 0 0 <1 39 328 398 822 <1 current	<1 <1 0 0 42 332 417 1022 <1 history1	<1 0 0 <1 41 355 413 807 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 25 200 300 370 2500	0 0 0 <1 39 328 398 822 <1 current 0	<1 <1 0 0 42 332 417 1022 <1 history1 0	<1 0 0 <1 41 355 413 807 <1 history2 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300 370 2500 2500 <b>limit/base</b> >15	0 0 0 <1 39 328 398 822 <1 current 0 <1	<1 <1 0 0 0 42 332 417 1022 <1 history1 0 <1	<1 0 0 <1 41 355 413 807 <1 <b>history2</b> 5 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 200 300 370 2500 2500 <b>limit/base</b> >15	0 0 0 <1 39 328 398 822 <1 <i>current</i> 0 <1 <1	<1 <1 0 0 0 42 332 417 1022 <1 <b>history1</b> 0 <1 0	<1 0 0 (0 <1 41 355 413 807 <1 <b>history2</b> 5 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 25 200 300 370 2500 2500 <b>Imit/base</b> >20 <b>Imit/base</b> >20	0 0 0 <1 39 328 398 822 <1 <i>current</i> 0 <1 <1 <1 <1 297	<1 <1 0 0 42 332 417 1022 <1 <b>history1</b> 0 <1 0 <b>history1</b> 434	<1 0 0 (0 <1 41 355 413 807 <1 <b>history2</b> 5 <1 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 200 300 370 2500 2500 1 1 1 1 1 5 20 1 1 1 1 1 2 2 0 1 1 1 1 1 2 2 0 1 1 1 1	0 0 0 <1 39 328 398 822 <1 current 0 <1 <1 <1 <1	<1 <1 0 0 42 332 417 1022 <1 <u>history1</u> 0 <1 0 0 +istory1 434 150	<1 0 0 (0 <1 41 355 413 807 <1 <b>history2</b> 5 <1 0 <b>history2</b> 309
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647	5 5 5 200 300 370 2500 2500 bimit/base >15 >20 bimit/base >5000 >1300 >160	0 0 0 (0 <1 39 328 398 822 <1 <i>current</i> 0 <1 <1 <1 <1 1297 405 35	<1 <1 0 0 42 332 417 1022 <1 history1 0 <1 0 <1 0 0 434 150 18	<1 0 0 ( 1 41 355 413 807 <1 <b>history2</b> 5 <1 0 <b>history2</b> 309 102 11
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 2500 <b>imit/base</b> >15 >20 <b>imit/base</b> >5000 >1300 >160 >40	0 0 0 (0 <1 39 328 398 822 <1 <i>current</i> 0 <1 <1 <1 20 <i>current</i> 1297 405 35 10	<1 <1 0 0 42 332 417 1022 <1 <u>history1</u> 0 <1 0 0 +istory1 434 150	<1 0 0 -1 41 355 413 807 <1 history2 5 <1 0 history2 309 102 11 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Potassium Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 2500 2500 >15 >20 <b>imit/base</b> >5000 >1300 >160 >40 >40	0 0 0 (0 <1 39 328 398 822 <1 Current 0 <1 <1 <1 1297 405 35 10 1	<1 <1 0 0 0 42 332 417 1022 <1 history1 0 <10 0 434 150 18 5 1	<1 0 0 0 <1 41 355 413 807 <1 history2 5 <1 0 history2 309 102 11 2 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 2500 <b>imit/base</b> >15 >20 <b>imit/base</b> >5000 >1300 >160 >40	0 0 0 (0 <1 39 328 398 822 <1 <i>current</i> 0 <1 <1 <1 20 <i>current</i> 1297 405 35 10	<1 <1 0 0 0 42 332 417 1022 <1 history1 0 <10 0 434 150 18 5	<1 0 0 -1 41 355 413 807 <1 history2 5 <1 0 history2 309 102 11 2

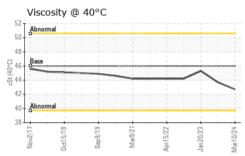
Contact/Location: Guilherme Medeiros - ASTWIN

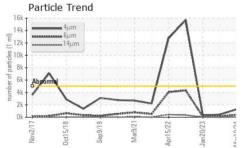


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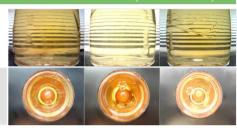




FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.39	0.37	0.36
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	46	42.7	43.7	45.3
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
			1		1-21	F

Color

Bottom



Ferrous Alloys Particle Count 491,520 122,880 bpm • chr 30,72 ISO 4406:1999 Clea -20 lan20/23 Apr15/22 /lar10/24 Mar9/21 Sep 9/1 (per 1 1,92 18 articles 16 Non-ferrous Metals 480 120 14 30 12 8 Sep 9/19 Mar9/21 Apr15/22 an 20/73 far10/74 214 28/ 14 Viscosity @ 40°C Acid Number KOH/g) 55 T 1.00 Abnor Abnorma () 50 0+ 45 ber (mg l Base Ba 0.50 충 <sub>40</sub> Abnormal Ā Acid N 35 0.00 Mar9/21. Apr15/22 -Mar10/24 -Sep9/19 Mar9/21 Mar10/24 Jan 20/23 11/2/17 Sep 9/19 Apr15/22 an20/23 71/2/vol : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 ASTREX : WC0908461 Received : 11 Mar 2024 383 PATILLO RD Lab Number : 02621081 Tested : 12 Mar 2024 WINDSOR, ON Unique Number : 5746200 Diagnosed : 12 Mar 2024 - Wes Davis CA N8N 2L9 Test Package : IND 2 Contact: Guilherme Medeiros

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Guilherme.Medeiros@astrex.ca T: (226)363-0100 F:



CALA

ISO 17025:2017

Laboratory

Sample No.