

## **PROBLEM SUMMARY**

### Sample Rating Trend



PRESS 2 MAIN

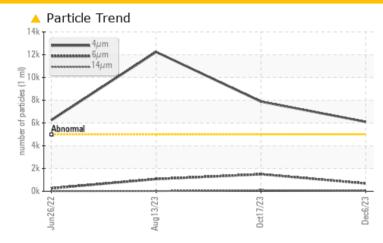
**Hydraulic System** 

**AW HYDRAULIC OIL ISO 46 (11000 LTR)** 





#### **COMPONENT CONDITION SUMMARY**



#### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.

PROBLEMATIC T	EST RESULTS				
Sample Status			ATTENTION	ATTENTION	ABNORMAL
Particles >4µm	ASTM D7647	>5000	<u> </u>	<u>▲</u> 7877	<u>▲</u> 12242
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>20/17/13</b>	<b>2</b> 0/18/14	<u>\</u> 21/17/12

Customer Id: INDMIS Sample No.: WC Lab Number: 02601591 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

#### RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.
Contact Required			?	Please contact your representative for information regarding the proper sampling kits for your service.
Alert			?	NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.
Information Required			?	Please specify the brand, type, and viscosity of the oil on your next sample.

#### HISTORICAL DIAGNOSIS

#### 17 Oct 2023 Diag: Wes Davis



We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed).



### 13 Aug 2023 Diag: Wes Davis



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed). The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



# ISO

#### 26 Jun 2022 Diag: Kevin Marson

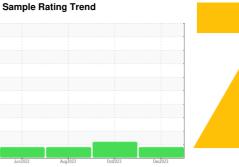


Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





## **OIL ANALYSIS REPORT**



ISO



# **PRESS 2 MAIN**

**Hydraulic System** 

**AW HYDRAULIC OIL ISO 46 (11000 LTR)** 

#### **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using Advanced Oil Monitoring (AOM) kits for this system. The AOM test package includes advanced level testing to determine the suitability of turbine and large industrial compressor oils for continued use.

#### Wear

All component wear rates are normal.

#### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

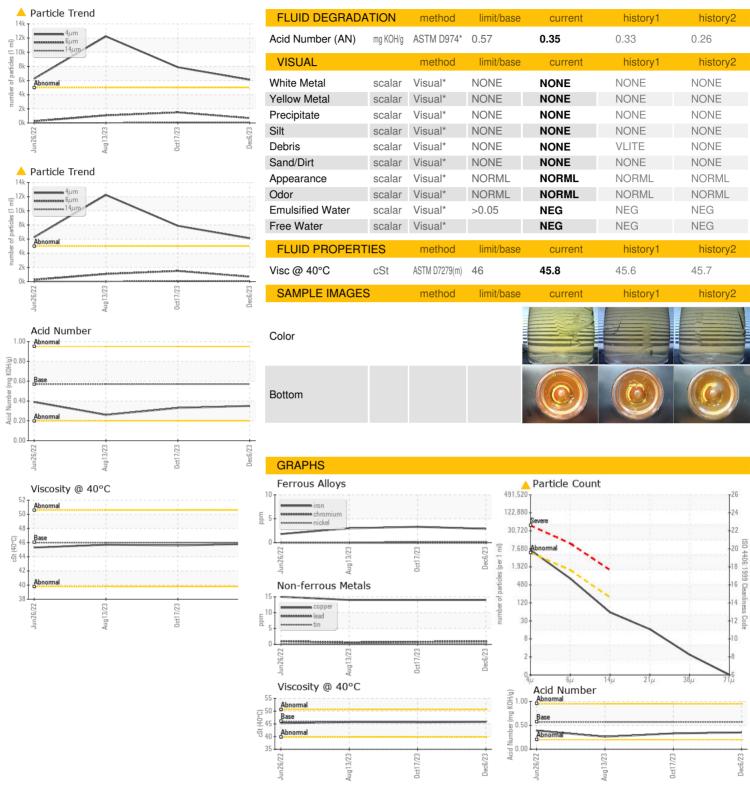
#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service (unconfirmed).

		Jun 202	2 Aug2023	Oct2023 D	ec2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		wc	WC	WC
Sample Date		Client Info		06 Dec 2023	17 Oct 2023	13 Aug 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				ATTENTION	ATTENTION	ABNORMAL
CONTAMINATIO	V	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	3	3	3
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)		<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	0	<1
Lead	ppm	ASTM D5185(m)	>20	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>20	14	14	14
Tin	ppm	ASTM D5185(m)	>20	0	0	0
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	current 1	history1 <1	history2 <1
	ppm					
Boron		ASTM D5185(m)	5	1	<1	<1
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	5 5	1 <1	<1 <1	<1
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5	1 <1 0	<1 <1 0	<1 0 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5	1 <1 0	<1 <1 0	<1 0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 25	1 <1 0 0 2	<1 <1 0 0 0 <1	<1 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200	1 <1 0 0 2 62	<1 <1 0 0 0 <1 60	<1 0 0 0 0 1 59
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300	1 <1 0 0 2 62 347	<1 <1 0 0 0 <1 60 341	<1 0 0 0 0 1 59 368
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370	1 <1 0 0 2 62 347 442	<1 <1 0 0 <1 60 341 430	<1 0 0 0 0 1 59 368 437
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370	1 <1 0 0 2 62 347 442 770	<1 <1 0 0 <1 60 341 430 753	<1 0 0 0 1 59 368 437 769
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500	1 <1 0 0 2 62 347 442 770 <1	<1 <1 0 0 0 <1 60 341 430 753 <1	<1 0 0 0 1 59 368 437 769
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500	1 <1 0 0 2 62 347 442 770 <1 current	<1 <1 0 0 0 <1 60 341 430 753 <1 history1	<1 0 0 0 0 1 59 368 437 769 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m)	5 5 5 25 200 300 370 2500	1 <1 0 0 0 2 62 347 442 770 <1 current 0	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0	<1 0 0 0 1 59 368 437 769 <1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1 0	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  METHOD  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 2500 limit/base >15 >20	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1 0 history1	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1 <1 history2
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 ppm	ASTM D5185(m)  METHOD ASTM D5185(m)	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1 0 history1  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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 ppm	ASTM D5185(m)  method ASTM D5185(m) ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1 0 history1  ↑ 7877 ↑ 1498 102	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1 <1 1 21 2242 1074 23
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 ppm	ASTM D5185(m)  METHOD  ASTM D5185(m)  ASTM D5185(m)  METHOD  ASTM D5185(m)  ASTM D7647  ASTM D7647  ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1 0 history1  ↑7877  ↑1498	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1 <1 1 1 2142 1074
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m) ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160 >40	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1 0 history1  ↑ 7877 ↑ 1498 102 26	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1 <1 21 41 23 6
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 ppm	ASTM D5185(m)  METHOD  ASTM D5185(m)  METHOD  ASTM D5185(m) ASTM D5185(m)  ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500    limit/base	1	<1 <1 0 0 0 <1 60 341 430 753 <1 history1 0 <1 0 history1  ↑ 7877 ↑ 1498 102 26 2	<1 0 0 0 1 59 368 437 769 <1 history2 <1 <1 <1 <1 21 2242 1074 23 6 0



### OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number** 

: WC 02601591 : 5694676

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received Diagnosed

: 07 Dec 2023 : 08 Dec 2023 : Wes Davis Diagnostician

Test Package : IND 2

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.

**Hydro Extrusion North** 5675 Kennedy Road

Mississauga, ON CA L4Z 2H9 Contact: Harsh Murria Harsh.murria@hydro.com T: (819)462-0479

F: (866)462-6478