

OIL ANALYSIS REPORT

Sample Rating Trend



PRESS 3 MAIN

Component **Hydraulic System** AW HYDRAULIC OIL ISO 46 (9000 LTR)

DIAGNOSIS

Recommendation

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

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 acceptable for the time in service (unconfirmed).

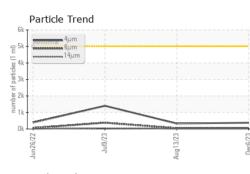
		Jun202	2 Jul2023	Aug2023 D	ec2023	
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		wc	WC	WC
Sample Date		Client Info		06 Dec 2023	13 Aug 2023	09 Jul 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	J	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	2	2
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>20	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		- <1	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	<1
Lead	ppm	ASTM D5185(m)	>20	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>20	15	14	13
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)	>20	0	0	0
Vanadium				0	0	0
	ppm	ASTM D5185(m)				
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<1	<1	<1
Barium	ppm	ASTM D5185(m)	5	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	5	0	<1	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	25	2	1	2
Calcium	ppm					
		ASTM D5185(m)	200	59	56	55
Phosphorus	ppm	ASTM D5185(m) ASTM D5185(m)	200 300	59 348	56 374	55 385
Zinc	ppm ppm	ASTM D5185(m)				
	ppm		300	348	374	385
Zinc		ASTM D5185(m) ASTM D5185(m)	300 370	348 446	374 440	385 438
Zinc Sulfur	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	300 370	348 446 783	374 440 798	385 438 783
Zinc Sulfur Lithium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	300 370 2500	348 446 783 <1 current	374 440 798 <1	385 438 783 <1 history2
Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	300 370 2500 limit/base	348 446 783 <1 current 0	374 440 798 <1 history1 <1	385 438 783 <1 history2 0
Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	300 370 2500 limit/base	348 446 783 <1 current	374 440 798 <1 history1	385 438 783 <1 history2
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	300 370 2500 limit/base >15	348 446 783 <1 <u>current</u> 0 <1	374 440 798 <1 <u>history1</u> <1 <1	385 438 783 <1 history2 0 <1
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	300 370 2500 limit/base >15 >20	348 446 783 <1 <u>current</u> 0 <1 0	374 440 798 <1 history1 <1 <1 <1 <1	385 438 783 <1 history2 0 <1 0
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	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)	300 370 2500 limit/base >15 >20 limit/base	348 446 783 <1 current 0 <1 0 current 377	374 440 798 <1 history1 <1 <1 <1 <1 history1 328	385 438 783 <1 history2 0 <1 0 <1 0 history2 1405
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	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 D7647 ASTM D7647	300 370 2500 limit/base >15 >20 limit/base >5000	348 446 783 <1 current 0 <1 0 current 377 64	374 440 798 <1 history1 <1 <1 <1 <1 <1 <1 1 328 50	385 438 783 <1 history2 0 <1 0 <1 0 history2 1405 379
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	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 D7647 ASTM D7647 ASTM D7647	300 370 2500 limit/base >15 >20 limit/base >5000 >1300 >160	348 446 783 <1 0 (1 0 (1 0 0 (1 0 0 (1 0 0 (1 0 0 (1 0 0 (1 0 0 (1 1 0 (1 1 0 (1 1 (1 1) (1 1 (1) (1)	374 440 798 <1 history1 <1 <1 <1 <1 <1 <1 <1 328 50 8	385 438 783 <1 history2 0 <1 0 <1 0 history2 1405 379 46
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	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 D7647 ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 Iimit/base >15 >20 Iimit/base >5000 >1300 >160 >40	348 446 783 <1 0 <1 0 <1 0 current 377 64 10 3	374 440 798 <1 history1 <1 <1 <1 <1 <1 <1 328 50 8 3	385 438 783 <1 history2 0 <1 0 kistory2 1405 379 46 14
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	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 D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 Imit/base >15 >20 Imit/base >5000 >1300 >160 >40 >10	348 446 783 <1 0 <1 0 <1 0 <1 0 0 <i>current</i> 377 64 10 3 1	374 440 798 <1 history1 <1 <1 <1 <1 <1 <1 328 50 8 3 3 1	385 438 783 <1 history2 0 <1 0 <1 0 history2 1405 379 46 14 14 0
Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	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 D7647 ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 Imit/base >15 >20 Imit/base >5000 >1300 >160 >40 >10	348 446 783 <1 0 <1 0 <1 0 current 377 64 10 3	374 440 798 <1 history1 <1 <1 <1 <1 <1 <1 328 50 8 3	385 438 783 <1 history2 0 <1 0 <1 0 history2 1405 379 46 14

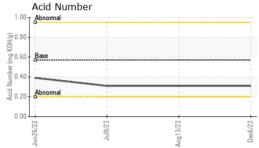


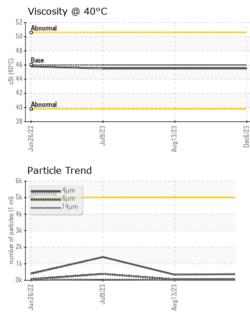
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Color

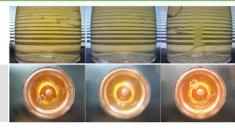
Bottom

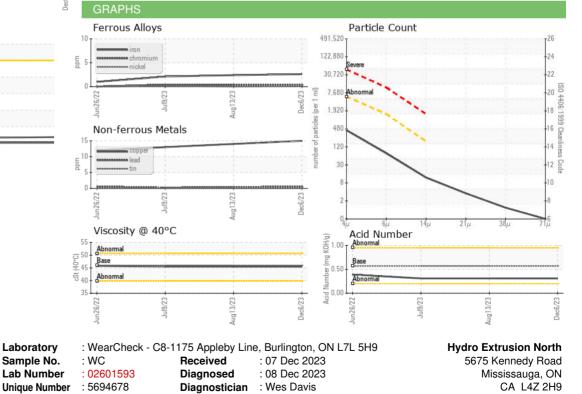






FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	0.31	0.31	0.31
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	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	45.5	45.5	45.5
SAMPLE IMAGES	\$	method	limit/base	current	history1	history2





 Accredited Laboratory
 Unique Number
 : 5694678
 Diagnostician
 : Wes Davis

 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.

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CALA

ISO 17025:2017

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