

### **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

# Machine Id

Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- LTR)

#### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is a moderate 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 suitable for further service.

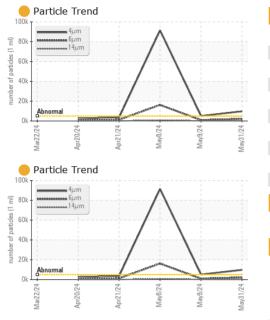
	Mar2024 Apr2024 Apr2024 Mar2024 Mar2024 Mar2024								
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2			
Sample Number		Client Info		WC0937019	WC0937027	WC0937023			
Sample Date		Client Info		31 May 2024	09 May 2024	08 May 2024			
Machine Age	hrs	Client Info		0	0	0			
Oil Age	hrs	Client Info		0	0	0			
Oil Changed		Client Info		N/A	N/A	N/A			
Sample Status				ATTENTION	ATTENTION	ABNORMAL			
CONTAMINATION	١	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 D5185m	>20	4	4	5			
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1			
Nickel	ppm	ASTM D5185m	>20	0	0	<1			
Titanium	ppm	ASTM D5185m		0	<1	<1			
Silver	ppm	ASTM D5185m		0	0	0			
Aluminum	ppm	ASTM D5185m	>20	1	2	2			
Lead	ppm	ASTM D5185m	>20	0	<1	<1			
Copper	ppm	ASTM D5185m	>20	2	2	2			
Tin	ppm	ASTM D5185m	>20	<1	<1	<1			
Vanadium	ppm	ASTM D5185m		0	<1	<1			
Cadmium	ppm	ASTM D5185m		0	0	0			
ADDITIVES		method	limit/base	current	history1	history2			
Boron	ppm	ASTM D5185m	5	0	0	0			
Barium	ppm	ASTM D5185m	5	0	0	0			
Molybdenum	ppm	ASTM D5185m	5	0	<1	<1			
Manganese	ppm	ASTM D5185m		0	0	0			
Magnesium	ppm	ASTM D5185m	25	<1	1	1			
Calcium	ppm	ASTM D5185m	200	30	36	40			
Phosphorus	ppm	ASTM D5185m	300	318	357	340			
Zinc	ppm	ASTM D5185m							
		ASTIVI DJIOJII	370	373	384	359			
Sulfur	ppm	ASTM D5185m	370 2500	373 786	384 826	359 809			
	ppm			786					
Sulfur	ppm	ASTM D5185m	2500 limit/base	786	826	809			
Sulfur CONTAMINANTS	ppm	ASTM D5185m method	2500 limit/base	786 current	826 history1	809 history2			
Sulfur CONTAMINANTS Silicon	ppm ppm	ASTM D5185m method ASTM D5185m	2500 limit/base >15	786 current <1	826 history1 <1	809 history2 <1			
Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	2500 limit/base >15	786 current <1 <1 <1 <1	826 history1 <1 0	809 history2 <1 0			
Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	2500 limit/base >15 >20	786 current <1 <1 <1 <1	826 history1 <1 0 1	809 history2 <1 0 1			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	2500 limit/base >15 >20 limit/base	786 current <1 <1 <1 <1 current	826 history1 <1 0 1 history1	809 history2 <1 0 1 history2			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647	2500 limit/base >15 >20 limit/base >5000	786 current <1 <1 <1 <1 current 9765	826 history1 <1 0 1 history1 5078	809 history2 <1 0 1 history2 ▲ 91454			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647	2500 limit/base >15 >20 limit/base >5000 >1300	786 current <1 <1 <1 <1 current 9765 2136	826 history1 <1 0 1 history1 5078 922	809 history2 <1 0 1 1 history2 ▲ 91454 ▲ 16195			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	2500 imit/base >15 >20 imit/base >5000 >1300 >160	786 current <1 <1 <1 <1 current 9765 2136 114	826 history1 <1 0 1 1 history1 5078 922 178	809 history2 <1 0 1 1 history2 ▲ 91454 ▲ 16195 ▲ 669			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2500 limit/base >15 >20 limit/base >5000 >1300 >160 >40	786 current <1 <1 <1 current 9765 9765 2136 114 21	826 history1 <1 0 1 1 <u>history1</u> 5078 922 178 41	809 history2 <1 0 1 history2 \$ 91454 \$ 16195 \$ 669 \$ 123			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2500 imit/base >15 >20 imit/base >5000 >1300 >160 >40 >10	786 current <1 <1 <1 current 9765 2136 114 21 1	826 history1 <1 0 1 history1 • 5078 922 • 178 41 2	809 history2 <1 0 1 history2 ▲ 91454 ▲ 16195 ▲ 669 ▲ 123 2			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ESS	ASTM D5185m Method ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2500 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >3	786 current <1 <1 <1 current 9765 2136 114 21 1 0 20/18/14	826 history1 <1 0 1 history1 5078 922 178 41 2 1	809 history2 <1 0 1 history2 4 91454 4 16195 4 669 4 123 2 0			
Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ESS	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c)	2500 imit/base >15 >20 imit/base >5000 >1300 >160 >40 >10 >10 >3 >19/17/14	786 current <1 <1 <1 current 9765 2136 114 21 1 0 20/18/14	826 history1 <1 0 1 1 5078 922 178 41 2 1 1 2 1 20/17/15	809 history2 <1 0 1 history2 ▲ 91454 ▲ 16195 ▲ 669 ▲ 123 2 0 0 ▲ 24/21/17			

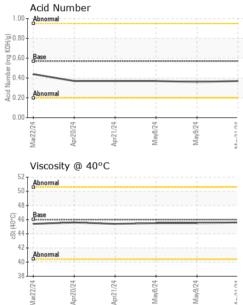
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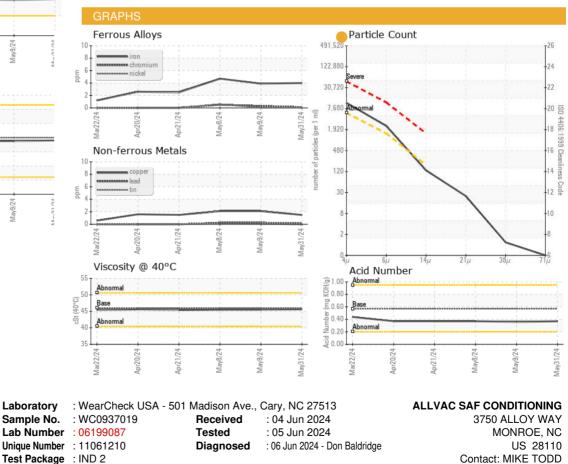


## **OIL ANALYSIS REPORT**





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	LIGHT
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 D445	46	45.6	45.5	45.5
SAMPLE IMAGES	3	method	limit/base	current	history1	history2
SAMPLE IMAGES	3	method	limit/base	current	history1	history2



To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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