

# **OIL ANALYSIS REPORT**

Sample Rating Trend

# DIRT

Area [BEFORE FILTRATION] 402205.01 Component Hydraulic System

AW HYDRAULIC OIL ISO 46 (--- GAL)

# DIAGNOSIS

### A 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

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

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

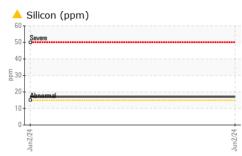
	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0014364		
Sample Date		Client Info		02 Jun 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	4		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>20	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m		<1		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>20	- <1		
Copper	ppm	ASTM D5185m		2		
Tin	ppm	ASTM D5185m	>20	- <1		
Vanadium		ASTM D5185m	>20	0		
Cadmium	ppm ppm	ASTM D5185m		۰ <1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0		
Barium	ppm	ASTM D5185m	5	<1		
Molybdenum	ppm	ASTM D5185m	5	<1		
-		ASTM D5185m	5	<1		
Manganese	ppm		25	<1 48		
Magnesium	ppm	ASTM D5185m		40 10		
Calaium						
	ppm	ASTM D5185m	200	-		
Phosphorus	ppm	ASTM D5185m	300	251		
Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m	300 370	251 319		
Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	300 370 2500	251		
Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m	300 370	251 319		
Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	300 370 2500	251 319 1709		
Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	300 370 2500 limit/base	251 319 1709 current		
Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	300 370 2500 limit/base >15	251 319 1709 current ▲ 17	  history1	  history2
Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	300 370 2500 limit/base >15	251 319 1709 current ▲ 17 0	  history1	  history2 
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m ASTM D5185m	300 370 2500 limit/base >15 >20	251 319 1709	  history1  	  history2  
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	300 370 2500 limit/base >15 >20 limit/base	251 319 1709 current ▲ 17 0 1 current	  history1   history1	  history2   history2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	300 370 2500 limit/base >15 >20 limit/base	251 319 1709	  history1   history1 	  history2   history2 
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 >15 >20 limit/base >1300 >160	251 319 1709 ▲ 17 0 1 1 <u>current</u> 4710 1131 130	  history1   history1  history1	  history2   history2  history2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647	300 370 2500 >15 >20 limit/base >1300 >160	251 319 1709 ▲ 17 0 1 1 <u>current</u> 4710 1131	 history1   history1  history1 	  history2   history2  
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 limit/base >15 >20 limit/base >1300 >160 >40 >10	251 319 1709 current ▲ 17 0 1 1 current 4710 1131 130 41 2	  history1   history1   history1 	  history2   history2       
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 limit/base >15 >20 limit/base >1300 >160 >40 >10	251 319 1709	 history1   history1  history1  	 history2   history2  history2
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 limit/base >15 >20 limit/base >1300 >160 >40 >10 >3	251 319 1709 current ▲ 17 0 1 1 current 4710 1131 130 41 2 2 1	 history1    history1     	  history2   history2   
Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	300 370 2500 limit/base >15 >20 limit/base >1300 >160 >40 >10 >3 >17/14	251 319 1709 current ▲ 17 0 1 1 current 4710 1131 130 41 2 1 1 17/14	  history1   history1        	  history2   history2         

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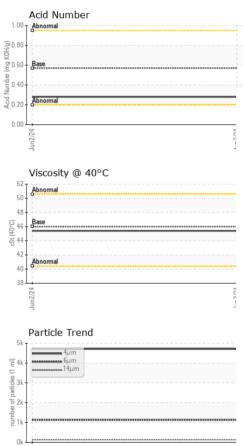
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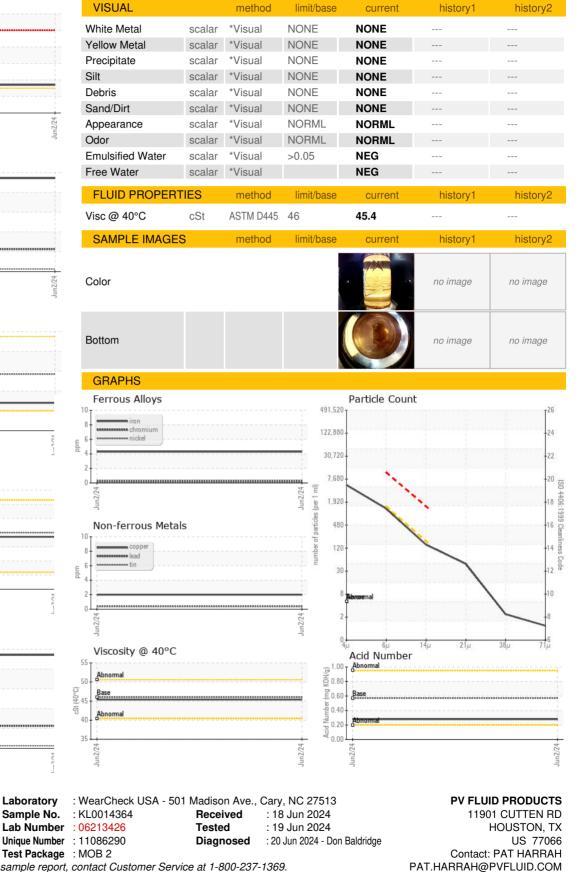


# **OIL ANALYSIS REPORT**









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)

Certificate 12367

Laboratory

Sample No.

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