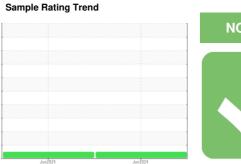


# **OIL ANALYSIS REPORT**



**NORMAL** 



# [AFTER FILTRATION] 402205.02

Hydraulic System

**AW HYDRAULIC OIL ISO 46 (--- GAL)** 

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

### **Fluid Condition**

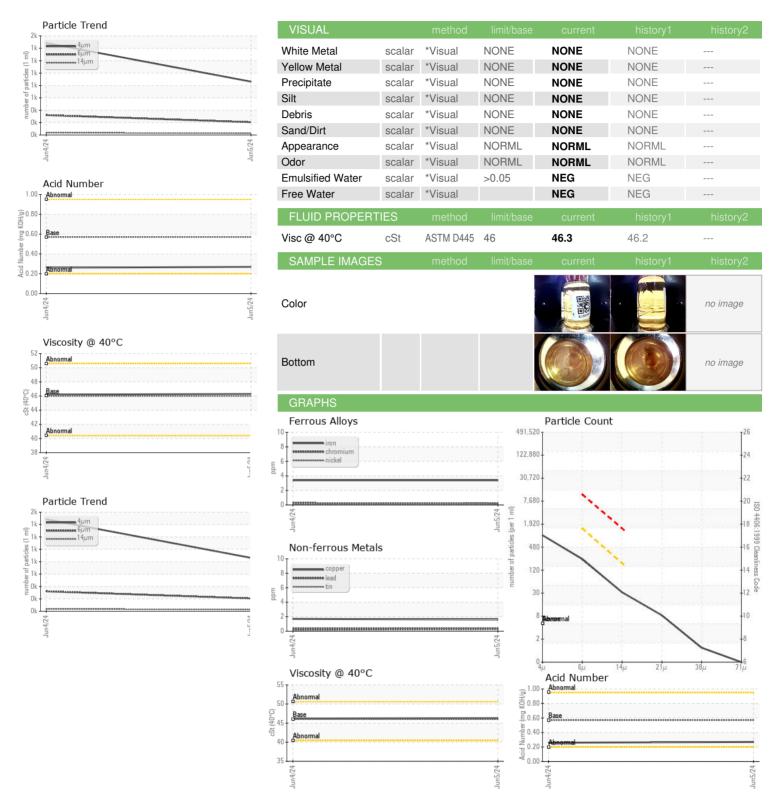
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

			Jun2024	Jun2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0014367	KL0014366	
Sample Date		Client Info		05 Jun 2024	04 Jun 2024	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	3	3	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>20	<1	<1	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m		<1	<1	
Aluminum	ppm	ASTM D5185m	>20	2	2	
Lead	ppm	ASTM D5185m	>20	- <1	<1	
Copper	ppm	ASTM D5185m	>20	2	2	
Tin	ppm	ASTM D5185m	>20	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		<1	<1	
ADDITIVES		method				history2
ADDITIVES  Boron	maa	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm				•	
Boron	ppm ppm	ASTM D5185m	5	0	0	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5	0 0	0 <1	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 0 <1	0 <1 <1	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5	0 0 <1 <1	0 <1 <1 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25	0 0 <1 <1 57	0 <1 <1 <1 <1 55	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200	0 0 <1 <1 57	0 <1 <1 <1 <1 55 4	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300	0 0 <1 <1 57 5 253	0 <1 <1 <1 <5 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4 <4	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370	0 0 <1 <1 57 5 253 339	0 <1 <1 <1 <55 4 260 334	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500	0 0 <1 <1 57 5 253 339 840	0 <1 <1 <1 <55 4 260 334 925	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500	0 0 <1 <1 57 5 253 339 840 current	0 <1 <1 <1 <55 4 260 334 925 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15	0 0 <1 <1 57 5 253 339 840 current	0 <1 <1 <1 <55 4 260 334 925 history1 3	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15	0 0 <1 <1 57 5 253 339 840 current 2	0 <1 <1 <1 <55 4 260 334 925 history1 3 0	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20	0 0 <1 <1 57 5 253 339 840 current 2 0	0 <1 <1 <1 <55 4 260 334 925 history1 3 0 1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20	0 0 -1 -1 57 5 253 339 840 	0 <1 <1 <1 <1 55 4 260 334 925 history1 3 0 1 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20	0 0	0 <1 <1 <1 <1 55 4 260 334 925 history1 3 0 1 history1 1485	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base	0 0 <1 <1 <1 57 5 253 339 840  current 2 0 1 current 861 206	0 <1 <1 <1 <55 4 260 334 925 history1 3 0 1 history1 1485 321	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base	0 0 <1 <1 <1 57 5 253 339 840  current 2 0 1 current 861 206 28	0 <1 <1 <1 <1 <55 4 260 334 925 history1 3 0 1 history1 1485 321 36	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >160 >40 >10	0 0 <1 <1 <1 57 5 253 339 840  current 2 0 1  current 861 206 28 7	0 <1 <1 <1 <1 <55 4 260 334 925 history1 3 0 1 history1 1485 321 36 10	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINANTS Silicon Sodium Potassium  FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 limit/base >15 >20 limit/base >160 >40 >10	0 0	0 <1 <1 <1 <1 <55 4 260 334 925 history1 3 0 1 history1 1485 321 36 10 1	

Contact/Location: PAT HARRAH - PVFHOUTX



## **OIL ANALYSIS REPORT**







Certificate 12367

Laboratory Sample No.

: KL0014367 Lab Number : 06213422 Unique Number : 11086286

Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 18 Jun 2024 **Tested** : 19 Jun 2024

Diagnosed : 20 Jun 2024 - Don Baldridge

Contact: PAT HARRAH PAT.HARRAH@PVFLUID.COM T: (281)620-2085

**PV FLUID PRODUCTS** 

11901 CUTTEN RD

HOUSTON, TX

US 77066

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)

Report Id: PVFHOUTX [WUSCAR] 06213422 (Generated: 06/23/2024 01:30:13) Rev: 1