

PROBLEM SUMMARY

Sample Rating Trend

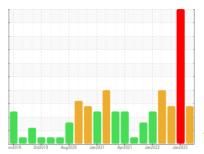
ISO

PRESS 6 HANDLING EQUIPMENT NON-FLAM

Component

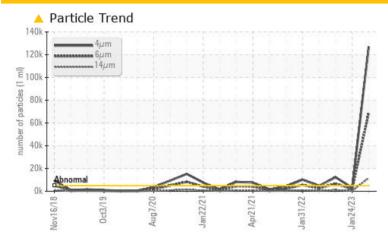
Hydraulic System

TEXACO HYDRAULIC SAFETY FLUID (--- GAL)





COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST F	RESULTS				
Sample Status			ABNORMAL	SEVERE	ABNORMAL
Particles >4μm	ASTM D7647	>5000	<u> </u>	3075	<u>▲</u> 12288
Particles >6μm	ASTM D7647	>1300	69083	<u>▲</u> 1675	<u></u> 6694
Particles >14μm	ASTM D7647	>160	<u> </u>	<u>^</u> 285	△ 1139
Particles >21μm	ASTM D7647	>40	3960	△ 96	<u></u> 384
Particles >38μm	ASTM D7647	>10	<u>▲</u> 611	△ 15	△ 59
Particles >71μm	ASTM D7647	>3	△ 62	<u>^</u> 2	<u>6</u>
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<u>4</u> 24/23/21	▲ 19/18/15	<u>\$\text{\Delta}\$ 21/20/17</u>

Customer Id: KAIRICVA Sample No.: WC0782213 Lab Number: 06001034 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 ihester@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter			?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

24 Jan 2023 Diag: Jonathan Hester

WEAR



We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The iron level is severe. The chromium level is severe. The lead level is severe. The copper level is severe. The tin level is abnormal. There is a moderate amount of particulates present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The pH level of this fluid is within the acceptable limits. The oil is no longer serviceable as a result of the abnormal and/or severe wear. pH is 10.0.



03 Jan 2023 Diag: Jonathan Hester

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The pH level of this fluid is within the acceptable limits. pH is 9.00. The condition of the oil is suitable for further service.

06 Apr 2022 Diag: Jonathan Hester

WATER



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of particulates present in the oil. The water value is lower than typical. The oil viscosity is higher than normal. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits.





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

PRESS 6 HANDLING EQUIPMENT NON-FLAM

Component

Hydraulic System

TEXACO HYDRAULIC SAFETY FLUID (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The pH level of this fluid is within the acceptable limits. pH is 10.00. The condition of the oil is suitable for further service.

iAL)		ov2018 Oc	t2019 Aug2020 Ja	in2021 Apr2021 Jan2022	Jan2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0782213	WC0690888	WC0612599
Sample Date		Client Info		03 Nov 2023	24 Jan 2023	03 Jan 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				ABNORMAL	SEVERE	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	1229	1
Chromium	ppm	ASTM D5185m	>20	0	244	0
Nickel	ppm	ASTM D5185m	>20	0	4	3
Titanium	ppm	ASTM D5185m		0	4	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	▲ 85	0
_ead	ppm	ASTM D5185m	>20	0	6 2	0
Copper	ppm	ASTM D5185m	>20	<1	88	2
Γin	ppm	ASTM D5185m	>20	0	<u> </u>	<1
/anadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		<1	<1	<1
ADDITIVEC			11 11 //			111
ADDITIVES		method	limit/base	current	history1	history2
	ppm	ASTM D5185m	limit/base	o current	history1 2	<1
Boron	ppm ppm		limit/base			
Boron Barium		ASTM D5185m	limit/base	0	2	<1
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	limit/base	0	2 15	<1 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0	2 15 <1	<1 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1	2 15 <1 20	<1 0 0 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 3	2 15 <1 20 65	<1 0 0 0 <1 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 3	2 15 <1 20 65 22	<1 0 0 0 <1 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 3 9 39	2 15 <1 20 65 22 140	<1 0 0 0 <1 2 6 18
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 3 9 39	2 15 <1 20 65 22 140 434	<1 0 0 0 <1 2 6 18
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm 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	limit/base	0 0 0 <1 3 9 39 44 24	2 15 <1 20 65 22 140 434 1046	<1 0 0 0 <1 2 6 18 11 29 history2
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	limit/base	0 0 0 <1 3 9 39 44 24	2 15 <1 20 65 22 140 434 1046 history1	<1 0 0 0 <1 2 6 18 11 29 history2 <1 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Gulfur CONTAMINANTS Silicon Bodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20	0 0 0 <1 3 9 39 44 24 current	2 15 <1 20 65 22 140 434 1046 history1	<1 0 0 0 <1 2 6 18 11 29 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20	0 0 0 <1 3 9 39 44 24 current 0 <1	2 15 <1 20 65 22 140 434 1046 history1	<1 0 0 0 <1 2 6 18 11 29 history2 <1 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20	0 0 0 <1 3 9 39 44 24 current 0 <1	2 15 <1 20 65 22 140 434 1046 history1 89 6	<1 0 0 0 <1 2 6 18 11 29 history2 <1 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20 >45	0 0 0 <1 3 9 39 44 24 current 0 <1 <1 <1	2 15 <1 20 65 22 140 434 1046 history1	<1 0 0 0 <1 2 6 18 11 29 history2 <1 2 0 41.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water opm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304	limit/base >15 >20 >45 >450000	0 0 0 <1 3 9 39 44 24 current 0 <1 <1 36.8 368000	2 15 <1 20 65 22 140 434 1046 history1 \$\infty\$ 89 6 6 38.5 385000	<1 0 0 0 <1 2 6 18 11 29 history2 <1 2 0 41.2 412000
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304	limit/base >15 >20 >45 >450000	0 0 0 -1 3 9 39 44 24 current 0 -1 -1 36.8 368000	2 15 <1 20 65 22 140 434 1046 history1	<1 0 0 0 <1 2 6 18 11 29 history2 <1 2 0 41.2 412000 history2



OIL ANALYSIS REPORT





Certificate L2367

Laboratory Sample No.

Lab Number

Unique Number

Test Package

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 07 Nov 2023 : WC0782213 : 06001034 Diagnosed : 09 Nov 2023 : 10729394 Diagnostician : Jonathan Hester

: IND 2 (Additional Tests: FT-IR, KF, pH)

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.

Contact: Yong Quan Yong.Quan@kaiseraluminum.com T: (804)743-6485

NORTH CHESTERFIELD, VA

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

KAISER ALUMINUM

1901 REYMET RD

US 23237