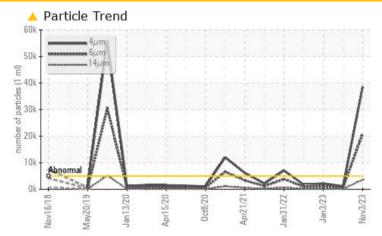


PROBLEM SUMMARY

PRESS 3 NON-FLAM

Hydraulic System Fluid 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 RESULTS								
Sample Status			ABNORMAL	NORMAL	ATTENTION			
Particles >4µm	ASTM D7647	>5000	A 38557	1133	2221			
Particles >6µm	ASTM D7647	>1300	<u> </u>	617	1210			
Particles >14µm	ASTM D7647	>160	A 3575	105	<u> </u>			
Particles >21µm	ASTM D7647	>40	<u> </u>	35	6 9			
Particles >38µm	ASTM D7647	>10	<u> </u>	5	🔺 11			
Particles >71µm	ASTM D7647	>3	<u> </u>	1	1			
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<u> </u>	17/16/14	1 8/17/15			

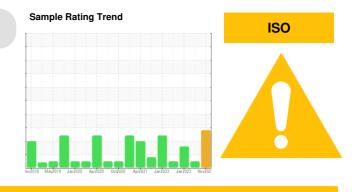
Customer Id: KAIRICVA Sample No.: WC0782217 Lab Number: 06001035 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 <u>jhester@wearcheckusa.com</u>

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



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

HISTORICAL DIAGNOSIS



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The pH level of this fluid is within the acceptable limits. The condition of the oil is acceptable for the time in service. pH is 8.00.



view report

03 Jan 2023 Diag: Jonathan Hester

24 Jan 2023 Diag: Jonathan Hester



No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate 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

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The pH level of this fluid is within the acceptable limits. The condition of the oil is acceptable for the time in service. pH is 10.00.









OIL ANALYSIS REPORT

PRESS 3 NON-FLAM

Hydraulic System

TEXACO HYDRAULIC SAFETY FLUID (--- GAL)

DIAGNOSIS

A Recommendation

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

Wear

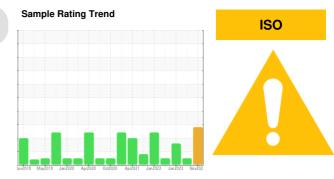
All component wear rates are normal.

Contamination

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

Fluid Condition

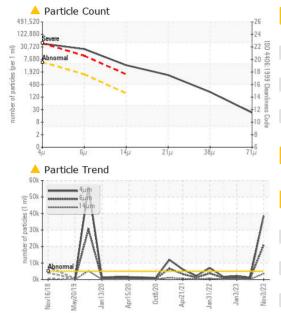
The pH level of this fluid is within the acceptable limits. pH is 10.00. The condition of the oil is suitable for further service.

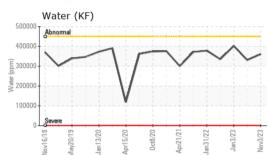


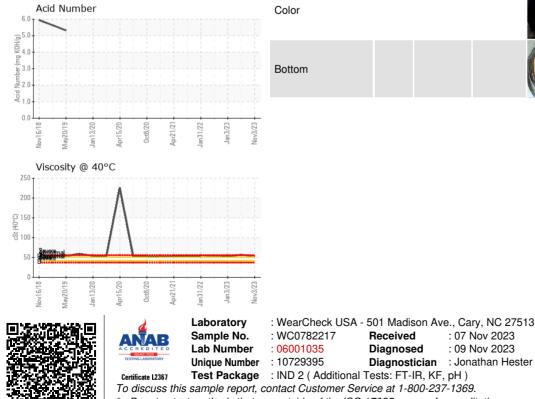
Sample Number Client Info WC0782217 WC0690885 WC0612601 Sample Date Client Info 0 0 0 0 Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info N/A N/A N/A N/A Sample Status Imit Dests current history1 history2 Iron ppm ASTM D5185m >20 0 -1 -1 Mickel ppm ASTM D5185m >20 0 0 0 0 Silver ppm ASTM D5185m >20 0 -1 0 0 -1 Cadadium ppm ASTM D5185m >20 0 -1 -1 Adminum ppm ASTM D5185m >20 0 -	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Image Client Info N/A N/A N/A WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5165m >20 0 <1 <1 Chromium ppm ASTM D5165m >20 0 0 0 Nickel ppm ASTM D5165m >20 0 0 0 Nickel ppm ASTM D5165m >20 0 0 0 Aluminum ppm ASTM D5165m >20 0 <1 0 Lead ppm ASTM D5165m >20 0 <1 0 Cadmium ppm ASTM D5165m >20 0 <1 <1 Cadmium ppm ASTM D5165m 20 0 <1 <1	Sample Number		Client Info		WC0782217	WC0690885	WC0612601
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Imathod Imit/base current history1 ATTENTION WEAR METALS method Iimit/base current history1 history2 Iron ppm ASTM D5185m >20 0 <1 <1 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m >20 0 <1 0 Lead ppm ASTM D5185m >20 0 <1 0 Cadmium ppm ASTM D5185m >20 0 <1 0 Cadmium ppm ASTM D5185m >20 0 <1 <1 Cadmium ppm ASTM D5185m 0 0 <1 <1	Sample Date		Client Info		03 Nov 2023	24 Jan 2023	03 Jan 2023
Oil Changed Sample Status Client Info N/A N/A N/A N/A Sample Status method limit/base current history1 ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 0 <1	Machine Age	hrs	Client Info		0	0	0
Sample Status method Imit/base current NORMAL ATTENTION WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 0 <1 <1 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m >20 0 0 0 Aluminum ppm ASTM D5185m >20 0 <1 0 Copper ppm ASTM D5185m >20 0 <1 0 Cadmium ppm ASTM D5185m >20 0 <1 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 <1 <1 0 Maganese ppm ASTM D5185m 0 <1 <1<	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 0 <1 <1 Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 4 Titanium ppm ASTM D5185m >20 0 0 0 Silver ppm ASTM D5185m >20 0 0 0 Lead ppm ASTM D5185m >20 0 <1 0 Copper ppm ASTM D5185m >20 0 <1 0 Cadmium ppm ASTM D5185m >20 0 <1 0 Cadmium ppm ASTM D5185m >20 0 <1 1 Addium ppm ASTM D5185m 0 0 <1 1 Cadmium ppm ASTM D5185m 0 0 1 <	Oil Changed		Client Info		N/A	N/A	N/A
Iron ppm ASTM D5185m >20 0 <1	Sample Status				ABNORMAL	NORMAL	ATTENTION
Drim ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 4 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 20 0 0 0 Aluminum ppm ASTM D5185m >20 0 <10 0 Lead ppm ASTM D5185m >20 0 <10 0 Copper ppm ASTM D5185m >20 0 <11 0 Vanadium ppm ASTM D5185m >20 0 <11 1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <11 1 Magnaese ppm ASTM D5185m 0 <11 <1 Magnesium ppm ASTM D5185m 15 21 12	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >20 0 0 4 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 20 0 0 0 Aluminum ppm ASTM D5185m >20 0 -1 0 Copper ppm ASTM D5185m >20 0 -1 0 Cadmium ppm ASTM D5185m >20 0 -1 0 Vanadium ppm ASTM D5185m 20 0 -1 -1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 -1 -1 Maganese ppm ASTM D5185m 0 -1 -1 Magnesium ppm ASTM D5185m 0 -1 1 Magnesium ppm ASTM D5185m 0 -1 1 Sulfur	Iron	ppm	ASTM D5185m	>20	0	<1	<1
Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 20 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 Lead ppm ASTM D5185m >20 0 <1	Chromium	ppm	ASTM D5185m	>20	0	0	0
Silver ppm ASTM D5185m Q Q Q Q Aluminum ppm ASTM D5185m >20 Q Q Q Q Lead ppm ASTM D5185m >20 Q <1 Q Copper ppm ASTM D5185m >20 Q <1 Q Tin ppm ASTM D5185m >20 Q 0 <1 Q Vanadium ppm ASTM D5185m >20 Q Q <1 <1 Addmium ppm ASTM D5185m Q Q <1 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m Q 0 <1 0 Magnesium ppm ASTM D5185m Q <1 <1 21 Magnesium ppm ASTM D5185m 15 21 12 12 Zinc ppm ASTM D5185m <td< th=""><th>Nickel</th><th>ppm</th><th>ASTM D5185m</th><th>>20</th><th>0</th><th>0</th><th>4</th></td<>	Nickel	ppm	ASTM D5185m	>20	0	0	4
Aluminum ppm ASTM D5185m >20 0 0 0 Lead ppm ASTM D5185m >20 0 <1	Titanium	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >20 0 <1 0 Copper ppm ASTM D5185m >20 0 <1	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >20 0 <1 0 Tin ppm ASTM D5185m >20 0 0 <1	Aluminum	ppm	ASTM D5185m	>20	0	0	0
Tin ppm ASTM D5185m >20 0 0 <1 Vanadium ppm ASTM D5185m 0 0 <1	Lead	ppm	ASTM D5185m	>20	0	<1	0
Vanadium ppm ASTM D5185m 0 <1 Cadmium ppm ASTM D5185m 0 <1 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1 0 Barium ppm ASTM D5185m 0 0 <1 0 Molybdenum ppm ASTM D5185m 0 0 <1 0 Magnesium ppm ASTM D5185m 0 0 <11 <1 Magnesium ppm ASTM D5185m 0 <11 <1 Calcium ppm ASTM D5185m 0 <11 <1 Viance ppm ASTM D5185m 15 21 12 Zinc ppm ASTM D5185m 15 0 <1 <1 Sulfur ppm ASTM D5185m 215 0 <1 <1 Sodium ppm ASTM D5185m	Copper	ppm	ASTM D5185m	>20	0	<1	0
Cadmium ppm ASTM D5185m 0 <1	Tin	ppm	ASTM D5185m	>20	0	0	<1
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 <1	Vanadium	ppm	ASTM D5185m		0	0	<1
Boron ppm ASTM D5185m 0 0 <1 Barium ppm ASTM D5185m 0 1 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 <1	Cadmium	ppm	ASTM D5185m		0	<1	<1
Barium ppm ASTM D5185m 0 1 0 Molybdenum ppm ASTM D5185m 0 0 0 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 0 <1 <1 Calcium ppm ASTM D5185m 0 5 1 Calcium ppm ASTM D5185m 2 4 4 Phosphorus ppm ASTM D5185m 15 21 12 Zinc ppm ASTM D5185m 0 9 16 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1 <1 Sodium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D5185m >20 <1 <1 0 Water ppm ASTM D6304 >45 36.1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 0 Magnese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m		0	0	<1
Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 0 5 1 Calcium ppm ASTM D5185m 0 5 1 Calcium ppm ASTM D5185m 2 4 4 Phosphorus ppm ASTM D5185m 15 21 12 Zinc ppm ASTM D5185m 21 16 15 Sulfur ppm ASTM D5185m 0 9 16 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	Barium	ppm	ASTM D5185m		0	1	0
Magnesium ppm ASTM D5185m 0 5 1 Calcium ppm ASTM D5185m 2 4 4 Phosphorus ppm ASTM D5185m 15 21 12 Zinc ppm ASTM D5185m 15 21 16 15 Sulfur ppm ASTM D5185m 0 9 16 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	Molybdenum	ppm	ASTM D5185m		0	0	0
Calcium ppm ASTM D5185m 2 4 4 Phosphorus ppm ASTM D5185m 15 21 12 Zinc ppm ASTM D5185m 21 16 15 Sulfur ppm ASTM D5185m 0 9 16 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1 <1 Sodium ppm ASTM D5185m >15 0 <1 <1 Sodium ppm ASTM D5185m >20 <1 0 3 Potassium ppm ASTM D6304 >45 36.1 33.1 40.2 ppm Water % ASTM D6304 >450000 361000 331000 402000 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 1.3 1.3 1.3 Nitration	Manganese	ppm	ASTM D5185m		0	<1	<1
Phosphorus ppm ASTM D5185m 15 21 12 Zinc ppm ASTM D5185m 21 16 15 Sulfur ppm ASTM D5185m 0 9 16 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	Magnesium	ppm	ASTM D5185m		0	5	1
Zinc ppm ASTM D5185m 21 16 15 Sulfur ppm ASTM D5185m 0 9 16 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 0 <1	Calcium	ppm	ASTM D5185m		2	4	4
Sulfur ppm ASTM D5185m 0 9 16 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m<>15 0 <1	Phosphorus	ppm	ASTM D5185m		15	21	12
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m<>15 0 <1 <1 Sodium ppm ASTM D5185m<>20 <1 0 3 Potassium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D6304 >45 36.1 33.1 40.2 ppm Water ppm ASTM D6304 >450000 361000 331000 402000 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 1.3 1.3 1.3 Nitration Abs/cm *ASTM D7624 128.9 139.4 127.4	Zinc	ppm	ASTM D5185m		21	16	15
Silicon ppm ASTM D5185m >15 0 <1	Sulfur	ppm	ASTM D5185m		0	9	16
Sodium ppm ASTM D5185m <1	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 <1 0 Water % ASTM D6304 >45 36.1 33.1 40.2 ppm Water ppm ASTM D6304 >450000 361000 331000 402000 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 1.3 1.3 1.3 Nitration Abs/cm *ASTM D7624 128.9 139.4 127.4	Silicon	ppm	ASTM D5185m	>15	0	<1	<1
Potassium ppm ASTM D5185m >20 <1	Sodium		ASTM D5185m		<1	0	3
Water % ASTM D6304 >45 36.1 33.1 40.2 ppm Water ppm ASTM D6304 >450000 361000 331000 402000 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 1.3 1.3 1.3 Nitration Abs/cm *ASTM D7624 128.9 139.4 127.4	Potassium		ASTM D5185m	>20	<1	<1	0
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 1.3 1.3 1.3 Nitration Abs/cm *ASTM D7624 128.9 139.4 127.4	Water		ASTM D6304	>45	36.1	33.1	40.2
Soot % % *ASTM D7844 1.3 1.3 1.3 Nitration Abs/cm *ASTM D7624 128.9 139.4 127.4	ppm Water	ppm	ASTM D6304	>450000	361000	331000	402000
Nitration Abs/cm *ASTM D7624 128.9 139.4 127.4	INFRA-RED		method	limit/base	current	history1	history2
Nitration Abs/cm *ASTM D7624 128.9 139.4 127.4	Soot %	%	*ASTM D7844		1.3	1.3	1.3
	Nitration	Abs/cm	*ASTM D7624		128.9		
	Sulfation	Abs/.1mm	*ASTM D7415		102.4	109.5	97.5



OIL ANALYSIS REPORT







FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	A 38557	1133	2221
Particles >6µm		ASTM D7647	>1300	<u> </u>	617	1210
Particles >14µm		ASTM D7647	>160	A 3575	105	2 06
Particles >21µm		ASTM D7647	>40	<u> </u>	35	6 9
Particles >38µm		ASTM D7647	>10	<u> </u>	5	🔺 11
Particles >71µm		ASTM D7647	>3	<u> </u>	1	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	A 22/22/19	17/16/14	▲ 18/17/15
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		117.9	128.8	112.3
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	>45	0.2%	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
рН	Scale 0-14	ASTM D1287		10.0	8.00	9.00
Visc @ 40°C	cSt	ASTM D445	41	53.0	56.9	52.6
SAMPLE IMAGES	3	method	limit/base	current	history1	history2

Bottom

KAISER ALUMINUM 1901 REYMET RD NORTH CHESTERFIELD, VA US 23237 Contact: Yong Quan

Yong.Quan@kaiseraluminum.com

Test Package : 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.

Received

Diagnosed

: 07 Nov 2023

: 09 Nov 2023

Diagnostician : Jonathan Hester

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

T: (804)743-6485

F: