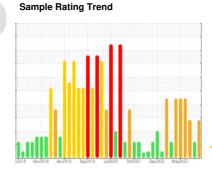


PROBLEM SUMMARY

RHOB/HYDRAULICS E - 1 Hydraulics Repair Car

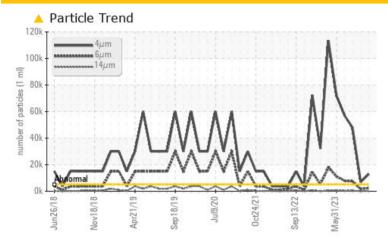
Tank Hydraulic System

AMERICAN CHEMICAL TECH. FR WG 200-D (132 GAL)





COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS										
Sample Status			ABNORMAL	ATTENTION	SEVERE					
Particles >4µm	ASTM D7647	>5000	<u> </u>	△ 6859	47775					
Particles >6µm	ASTM D7647	>1300	2389	<u></u> 1661	<u>^</u> 7468					
Particles >14μm	ASTM D7647	>160	<u> </u>	75	△ 384					
Particles >21μm	ASTM D7647	>40	<u> </u>	17	△ 97					
Particles >38μm	ASTM D7647	>10	<u> </u>	0	5					
Particles >71μm	ASTM D7647	>3	<u> </u>	0	0					
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<u>^</u> 21/18/15	<u>^</u> 20/18/13	23/20/16					

Customer Id: LEWBOSC **Sample No.:** WC0871206 Lab Number: 02589798 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample			?	We recommend an early resample to monitor this condition.
Filter Fluid			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS

16 Aug 2023 Diag: Kevin Marson

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 light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The condition of the oil is suitable for further service.



ISO



13 Jul 2023 Diag: Kevin Marson

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.All component wear rates are normal. There is a high amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



COOL CHEMICALS



20 Jun 2023 Diag: Kevin Marson

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.





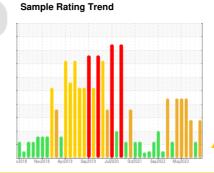
COOLANT REPORT

RHOB/HYDRAULICS Machine Id E - 1 Hydraulics Repair Car

Component

Tank Hydraulic System

AMERICAN CHEMICAL TECH. FR WG 200-D (132 GAL)





DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable. The water concentration level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0871206	WC0850108	WC0838976
Sample Date		Client Info		16 Oct 2023	16 Aug 2023	13 Jul 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	ATTENTION	SEVERE
CORROSION INH	IBITORS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)		<1	0	<1
Phosphorus	ppm	ASTM D5185(m)		<1	0	0
Boron	ppm	ASTM D5185(m)		<1	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	<1
CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>20	0	<1	1
Lead	ppm	ASTM D5185(m)	>20	0	<1	0
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Zinc	ppm	ASTM D5185(m)		0	0	0
CONTAMINANTS	3	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	12930	△ 6859	47775
Particles >6µm		ASTM D7647	>1300	<u>^</u> 2389	<u> 1661</u>	1 7468
Particles >14µm		ASTM D7647	>160	<u> </u>	75	<u></u> 384
Particles >21µm		ASTM D7647	>40	<u> 111</u>	17	△ 97
Particles >38µm		ASTM D7647	>10	<u> </u>	0	5
Particles >71µm		ASTM D7647	>3	<u> </u>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>^</u> 21/18/15	2 0/18/13	23/20/16
CARRIER SALTS	,	method	limit/base	current	history1	history2
Sodium	ppm	ASTM D5185(m)		160	172	116
Potassium	ppm	ASTM D5185(m)		14	0	0
SCALE POTENTI	AL	method	limit/base	current	history1	history2
Calcium	ppm	ASTM D5185(m)		<1	2	<1
Magnesium	ppm	ASTM D5185(m)		0	<1	2



COOLANT REPORT

