

# **PROBLEM SUMMARY**

Sample Rating Trend

VIS DEBRIS

LADDER 2
Component

Hydraulic System
Fluid
NOT GIVEN (--- GAL)

### **COMPONENT CONDITION SUMMARY**

No relevant graphs to display

#### RECOMMENDATION

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

PROBLEMATIC T	EST RE	SULTS				
Sample Status				ABNORMAL	ABNORMAL	NORMAL
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER	VLITE

Customer Id: SALSALOK Sample No.: WC0835827 Lab Number: 05933948 Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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

09 Sep 2022 Diag: Don Baldridge

VIS DEBRIS



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The condition of the oil is acceptable for the time in service.



#### 10 Sep 2021 Diag: Jonathan Hester

NORMAL

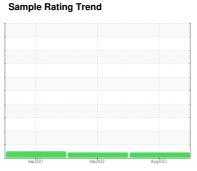


Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





# **OIL ANALYSIS REPORT**



**VIS DEBRIS** 



### Machine Id **LADDER 2**

Component

**Hydraulic System** 

**NOT GIVEN (--- GAL)** 

#### DIAGNOSIS

#### Recommendation

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

All component wear rates are normal.

#### Contamination

Moderate concentration of visible dirt/debris present in the oil.

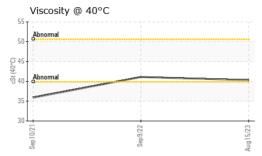
#### **Fluid Condition**

The condition of the oil is acceptable for the time in service.

Sample Number   Client Info   WC0835827   WC0724253   WC0609607   Sample Date   Client Info   15 Aug 2023   09 Sep 2022   10 Sep 2021   Machine Age   mls   Client Info   92878   0   0   0   O   O   O   O   O   O   O			Seg	2021	Sep2022 Aug20	23	
Client Info	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         mls         Client Info         92878         0         0           Oil Age         mls         Client Info         92878         0         0           Oil Changed         Client Info         N/A         N/A         N/A         Not Changd           Sample Status         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         20         1         2         8           Chromium         ppm         ASTM D5185m         >10         0         0         <1           Nickel         ppm         ASTM D5185m         >10         0         0         <1           Titanium         ppm         ASTM D5185m         >10         0         0         <1           Gopper         ppm         ASTM D5185m         >10         0         0         <1           Capper         ppm         ASTM D5185m         >10         0         <1         <1           Copper         ppm         ASTM D5185m         >10         0         <1         0           Tin         ppm         ASTM D5185m         >10         0         <1         0	Sample Number		Client Info		WC0835827	WC0724253	WC0609607
Oil Age         mls         Client Info         92878         0         0           Oil Changed         Client Info         N/A         N/A         N/A         Not Changed           Sample Status         Client Info         N/A         N/A         NA         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >20         1         2         8           Chromium         ppm         ASTM D5185m         >10         0         0         <1           Nickel         ppm         ASTM D5185m         >10         0         0         <1           Nickel         ppm         ASTM D5185m         0         0         0         0           Siliver         ppm         ASTM D5185m         >10         0         0         0           Aluminum         ppm         ASTM D5185m         >10         0         0         <1           Lead         ppm         ASTM D5185m         >10         0         <1         0           Copper         ppm         ASTM D5185m         >10         0         <1 <t< td=""><td>Sample Date</td><td></td><td>Client Info</td><td></td><th>15 Aug 2023</th><td>09 Sep 2022</td><td>10 Sep 2021</td></t<>	Sample Date		Client Info		15 Aug 2023	09 Sep 2022	10 Sep 2021
Client Info	Machine Age	mls	Client Info		92878	0	0
Sample Status         Method         limit/base         current         history1         NORMAL           Iron         ppm         ASTM D5185m         >20         1         2         8           Chromium         ppm         ASTM D5185m         >10         0         0         <1	Oil Age	mls	Client Info		92878	0	0
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >20         1         2         8           Chromium         ppm         ASTM D5185m         >10         0         0         <1	Oil Changed		Client Info		N/A	N/A	Not Changd
Irron	Sample Status				ABNORMAL	ABNORMAL	NORMAL
Chromium         ppm         ASTM D5185m         >10         0         0         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>20	1	2	8
Description   Description	Chromium	ppm	ASTM D5185m	>10	0	0	<1
Silver	Nickel	ppm	ASTM D5185m	>10	0	0	<1
ASTM D5185m   >10	Titanium	ppm	ASTM D5185m		0	0	0
Lead         ppm         ASTM D5185m         >10         0         0         <1           Copper         ppm         ASTM D5185m         >75         5         4         12           Fin         ppm         ASTM D5185m         >10         0         <1	Silver	ppm	ASTM D5185m		0	0	0
Copper	Aluminum	ppm	ASTM D5185m	>10	<1	<1	<1
Antimony	_ead	ppm	ASTM D5185m	>10	0	0	<1
Antimony ppm ASTM D5185m	Copper	ppm	ASTM D5185m	>75	5	4	12
Vanadium         ppm         ASTM D5185m         <1         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         <1         5           Barium         ppm         ASTM D5185m         0         0         <1         2           Molybdenum         ppm         ASTM D5185m         <1         <1         2         2           Magnesium         ppm         ASTM D5185m         <1         <1         2         2           Magnesium         ppm         ASTM D5185m         3         0         1         1         2         1         2         2         4         2         4         2         4         3         0         1         1         1         1         1         1         2         2         1         2         4         2         4         3         0         1         2         3         0         1         2         3         3         0         1         2         5 <th< td=""><td>Tin</td><td>ppm</td><td>ASTM D5185m</td><td>&gt;10</td><th>0</th><td>&lt;1</td><td>0</td></th<>	Tin	ppm	ASTM D5185m	>10	0	<1	0
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         <1	Antimony	ppm	ASTM D5185m				5
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         <1	Vanadium	ppm	ASTM D5185m		<1	0	0
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium         ppm         ASTM D5185m         0         0         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         <1         <1         2           Manganese         ppm         ASTM D5185m         <1	Boron	ppm	ASTM D5185m		0	<1	5
Manganese         ppm         ASTM D5185m         <1         0         <1           Magnesium         ppm         ASTM D5185m         3         0         1           Calcium         ppm         ASTM D5185m         121         116         231           Phosphorus         ppm         ASTM D5185m         472         455         439           Zinc         ppm         ASTM D5185m         585         576         556           Sulfur         ppm         ASTM D5185m         1846         1921         3836           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         1         2         5           Sodium         ppm         ASTM D5185m         >20         0         0         <1	Barium	ppm	ASTM D5185m		0	0	<1
Magnesium         ppm         ASTM D5185m         3         0         1           Calcium         ppm         ASTM D5185m         121         116         231           Phosphorus         ppm         ASTM D5185m         472         455         439           Zinc         ppm         ASTM D5185m         585         576         556           Sulfur         ppm         ASTM D5185m         1846         1921         3836           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         1         2         5           Sodium         ppm         ASTM D5185m         >20         0         0         <1	Molybdenum	ppm	ASTM D5185m		<1	<1	2
Calcium         ppm         ASTM D5185m         121         116         231           Phosphorus         ppm         ASTM D5185m         472         455         439           Zinc         ppm         ASTM D5185m         585         576         556           Sulfur         ppm         ASTM D5185m         1846         1921         3836           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         1         2         5           Sodium         ppm         ASTM D5185m         >20         0         0         <1	Manganese	ppm	ASTM D5185m		<1	0	<1
Phosphorus         ppm         ASTM D5185m         472         455         439           Zinc         ppm         ASTM D5185m         585         576         556           Sulfur         ppm         ASTM D5185m         1846         1921         3836           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         1         2         5           Sodium         ppm         ASTM D5185m         >20         0         0         <1	Magnesium	ppm	ASTM D5185m		3	0	1
Zinc         ppm         ASTM D5185m         585         576         556           Sulfur         ppm         ASTM D5185m         1846         1921         3836           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         1         2         5           Sodium         ppm         ASTM D5185m         >20         0         0         <1	Calcium	ppm	ASTM D5185m		121	116	231
Sulfur         ppm         ASTM D5185m         1846         1921         3836           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         1         2         5           Sodium         ppm         ASTM D5185m         >20         0         0         <1	Phosphorus	ppm	ASTM D5185m		472	455	439
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >20         1         2         5           Sodium         ppm         ASTM D5185m         0         0         <1	Zinc	ppm	ASTM D5185m		585	576	556
Silicon	Sulfur	ppm	ASTM D5185m		1846	1921	3836
Sodium         ppm         ASTM D5185m         0         0         <1	CONTAMINANTS	1	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <b>0</b> 0 4  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 NONE NONE NONE NONE  Appearance scalar *Visual NORML NORML NORML NORML  Odor scalar *Visual NORML NORML NORML NORML  Emulsified Water scalar *Visual >0.1 NEG NEG	Silicon	ppm	ASTM D5185m	>20	1	2	5
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       MODER       MODER       VLITE         Sand/Dirt       scalar       *Visual       NONE       NONE       NONE       NONE         Appearance       scalar       *Visual       NORML       NORML       NORML       NORML         Odor       scalar       *Visual       >0.1       NEG       NEG       NEG	Sodium	ppm	ASTM D5185m		0	0	<1
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 >0.1 NEG NEG	Potassium	ppm	ASTM D5185m	>20	0	0	4
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     MODER     MODER     VLITE       Sand/Dirt     scalar     *Visual     NONE     NONE     NONE     NONE       Appearance     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Odor     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Emulsified Water     scalar     *Visual     >0.1     NEG     NEG     NEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE MODER MODER VLITE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG	White Metal	scalar		NONE	NONE	NONE	NONE
Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE MODER MODER VLITE 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 >0.1 NEG NEG NEG		scalar	*Visual	NONE	NONE	NONE	NONE
Debris     scalar     *Visual     NONE     ▲ MODER     ▲ MODER     VLITE       Sand/Dirt     scalar     *Visual     NONE     NONE     NONE     NONE       Appearance     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Odor     scalar     *Visual     NORML     NORML     NORML     NORML     NORML       Emulsified Water     scalar     *Visual     >0.1     NEG     NEG     NEG	Precipitate	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 >0.1 NEG NEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER	VLITE
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG

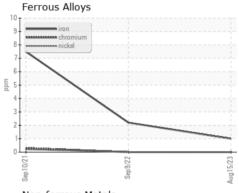


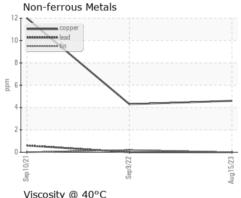
## **OIL ANALYSIS REPORT**

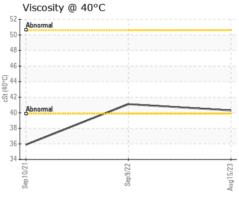


FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		40.3	41.1	35.9
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image

#### **GRAPHS**









Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10619219

: WC0835827 : 05933948

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Aug 2023 Diagnosed : 26 Aug 2023 Diagnostician : Don Baldridge

**SALLISAW FIRE DEPT.** 110 N. WALNUT ST. SALLISAW, OK

US 74955

Contact: ANTHONY ARMSTRONG

firechief@sallisawok.org T:

\* - 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)

F: (918)775-0962 Submitted By: RANDY PRICE