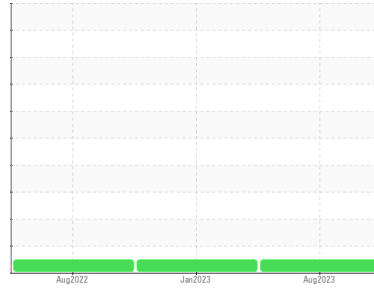




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**TK535**

Component

**Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### Fluid Condition

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

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0772528</b>	WC0708459	WC0664472
Sample Date	Client Info		<b>14 Aug 2023</b>	25 Jan 2023	14 Aug 2022
Machine Age	days	Client Info	<b>0</b>	0	0
Oil Age	days	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>13</b>	13	15
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >75	<b>1</b>	1	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>0</b>	<1	3
Barium	ppm	ASTM D5185m 5	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m 5	<b>0</b>	1	1
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 25	<b>8</b>	9	7
Calcium	ppm	ASTM D5185m 200	<b>90</b>	94	95
Phosphorus	ppm	ASTM D5185m 300	<b>325</b>	318	344
Zinc	ppm	ASTM D5185m 370	<b>353</b>	356	384
Sulfur	ppm	ASTM D5185m 2500	<b>4195</b>	3494	4007

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>2</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	0

## FLUID CLEANLINESS

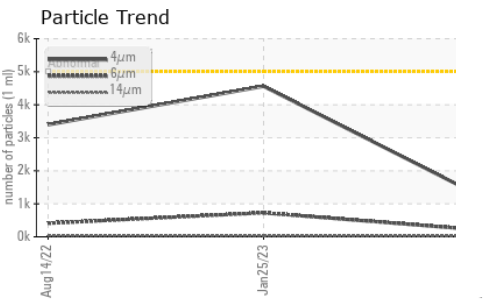
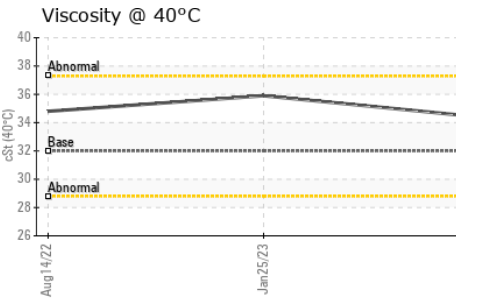
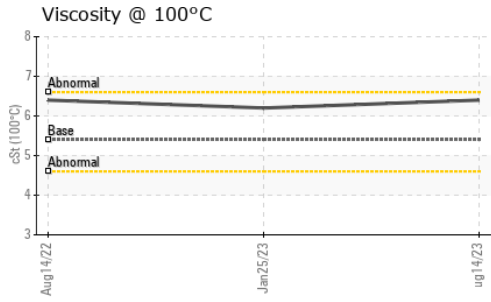
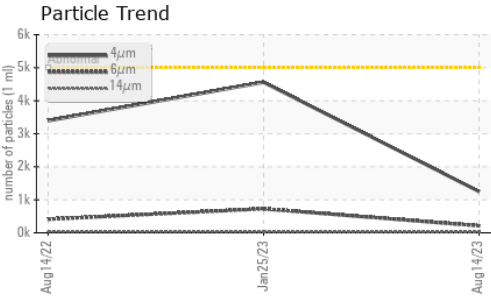
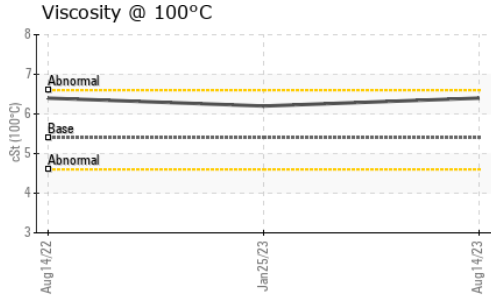
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1250</b>	4559	3394
Particles >6µm	ASTM D7647	>1300	<b>212</b>	727	410
Particles >14µm	ASTM D7647	>160	<b>20</b>	31	36
Particles >21µm	ASTM D7647	>40	<b>5</b>	10	14
Particles >38µm	ASTM D7647	>10	<b>0</b>	3	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/15/11</b>	19/17/12	19/16/12

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	<b>0.33</b>	0.47	0.30



# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	34.4	35.9
Visc @ 100°C	cSt	ASTM D445	5.4	6.4	6.4
Viscosity Index (VI)	Scale	ASTM D2270	102	139	121

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

### GRAPHS

#### Ferrous Alloys

#### Non-ferrous Metals

#### Viscosity @ 40°C

#### Particle Count

#### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0772528 **Received** : 14 Aug 2023  
**Lab Number** : 05924208 **Diagnosed** : 15 Aug 2023  
**Unique Number** : 10604155 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**HIAB USA - HAGERSTOWN**  
 148 WESTERN MARYLAND PKWY  
 HAGERSTOWN, MD  
 US 21740  
 Contact: CHUCK WISHARD  
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 T: (240)625-0045  
 F: (301)797-7284

Certificate L2367  
 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)