

#### **PROBLEM SUMMARY**

#### Sample Rating Trend

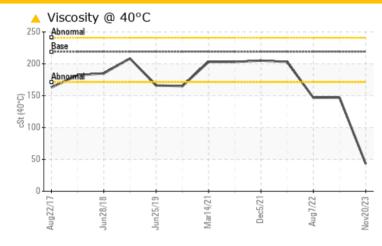
#### VISCOSITY

## BARRIER DEPARTMENT SAMPLES Machine Id DAVIS STAND WEB 12 G

Component **Gearbox** 

**TEXACO MEROPA 220 (25 GAL)** 

#### **COMPONENT CONDITION SUMMARY**



#### RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS								
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL		
Debris	scalar	*Visual	NONE	MODER	VLITE	VLITE		
Visc @ 40°C	cSt	ASTM D445	219	<b>43.12</b>	<b>1</b> 47	A 146.8		

Customer Id: CRYIOW Sample No.: WC0869570 Lab Number: 06013999 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 jhester@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 if applicable.
Alert			?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

#### HISTORICAL DIAGNOSIS

#### 30 Oct 2022 Diag: Angela Borella

#### VISCOSITY



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Viscosity of sample indicates oil is within ISO 150 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.



#### 07 Aug 2022 Diag: Jonathan Hester

#### VISCOSITY



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Viscosity of sample indicates oil is within ISO 150 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

# view report

#### 15 Feb 2022 Diag: Doug Bogart

#### ISO



We recommend you service the filters on this component if applicable. 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





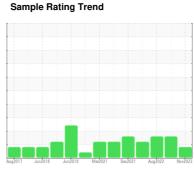
#### **OIL ANALYSIS REPORT**

### BARRIER DEPARTMENT SAMPLES **DAVIS STAND WEB 12 G**

Component

Gearbox

**TEXACO MEROPA 220 (25 GAL)** 





#### **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

All component wear rates are normal.

#### Contamination

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

#### ▲ Fluid Condition

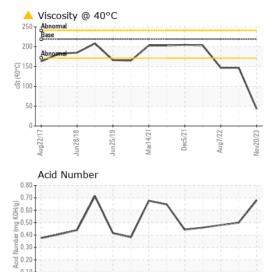
Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION         method         limit/base         current         history1         history2           Sample Date         Client Info         WC0669570         WC0692842         WC0608687           Sample Date         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         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL           CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG         NEG           Iron         ppm         ASTM D5185m         >200         37         61         53           Chromium         ppm         ASTM D5185m         >15         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1	CAMPLE INCORN	ATION	una nella nell			la la tamud	la la ta mu O
Sample Date   Client Info   0	SAIVIPLE INFORIV	IATION	method	limit/base	current	history1	history2
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           Asmple Status         Babonemal         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL           CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         37         61         53           Chromium         ppm         ASTM D5185m         >15         <1	·						
Oil Age         hrs         Client Info         N/A           Water         Water         WC         Method         50.2         NEG         NEG         NEG         NEG         NEG         NEG           Water         Water         ASTM D5						30 Oct 2022	07 Aug 2022
Oil Changed Sample Status         Client Info         N/A         N/A         N/A         ABNORMAL         ABNORMAL		hrs					
Sample Status         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         37         61         53           Chromium         ppm         ASTM D5185m         >15         <1         <1         <1           Nickel         ppm         ASTM D5185m         >15         <1         0         0           Silver         ppm         ASTM D5185m         >15         <1         0         0           Aluminum         ppm         ASTM D5185m         >25         2         2         2           Lead         ppm         ASTM D5185m         >20         2         11         1           Copper         ppm         ASTM D5185m         >20         2         11         1           Vanadium         ppm         ASTM D5185m         >5              Vanadium         ppm         ASTM D5185m         >5		hrs					
CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         >0.2         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         37         61         53           Chromium         ppm         ASTM D5185m         >15         <1         <1         <1           Nickel         ppm         ASTM D5185m         >15         <1         0         0           Silver         ppm         ASTM D5185m         >10         0         0           Aluminum         ppm         ASTM D5185m         >25         2         2         2           Lead         ppm         ASTM D5185m         >200         2         11         10           Copper         ppm         ASTM D5185m         >200         2         11         10           Tin         ppm         ASTM D5185m         >5              Antimony         ppm         ASTM D5185m         >0         0         0         0     <	-		Client Info				
Water         WC Method         >0.2         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >2000         37         61         53           Chromium         ppm         ASTM D5185m         >15         <1	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >200         37         61         53           Chromium         ppm         ASTM D5185m         >15         <1         <1         <1           Nickel         ppm         ASTM D5185m         >15         <1         0         0           Titanium         ppm         ASTM D5185m         >15         <1         0         0           Aluminum         ppm         ASTM D5185m         >25         2         2         2         2           Lead         ppm         ASTM D5185m         >200         2         11         1         1           Copper         ppm         ASTM D5185m         >200         2         11         1         1           Tin         ppm         ASTM D5185m         >20         2         11         0         0           Antimony         ppm         ASTM D5185m         >5                       <	CONTAMINATION	١	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.2	NEG	NEG	NEG
Chromium         ppm         ASTM D5185m         >15         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel         ppm         ASTM D5185m         >15         <1	Iron	ppm	ASTM D5185m	>200	37	61	53
Titanium	Chromium	ppm	ASTM D5185m	>15	<1	<1	<1
Silver         ppm         ASTM D5185m         0         0         0           Aluminum         ppm         ASTM D5185m         >2.25         2         2         2           Lead         ppm         ASTM D5185m         >10.0         <1         1         1           Copper         ppm         ASTM D5185m         >20.0         2         11         10           Tin         ppm         ASTM D5185m         >5              Antimony         ppm         ASTM D5185m         >5              Vanadium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Born         ppm         ASTM D5185m         0.5         4         0	Nickel	ppm	ASTM D5185m	>15	<1	0	0
Aluminum         ppm         ASTM D5185m         >25         2         2         2           Lead         ppm         ASTM D5185m         >100         <1         1         1           Copper         ppm         ASTM D5185m         >200         2         11         10           Tin         ppm         ASTM D5185m         >5              Antimony         ppm         ASTM D5185m         >5              Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         -              Boron         ppm         ASTM D5185m         3.2         0         2         4           Barium         ppm         ASTM D5185m         0.5         4         0         0           Molybdenum         ppm         ASTM D5185m         0.5         4         0         0           Molybdenum         ppm         ASTM D5185m         0.1         <1         4         4           Magnesium         ppm         ASTM D5185m         0.1         <1         <	Titanium	ppm	ASTM D5185m		<1	0	0
Lead         ppm         ASTM D5185m         >100         <1	Silver	ppm	ASTM D5185m		0	0	0
Copper         ppm         ASTM D5185m         >200         2         11         10           Tin         ppm         ASTM D5185m         >25         <1         <1         0           Antimony         ppm         ASTM D5185m         >5              Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         <-1         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         3.2         0         2         4           Barium         ppm         ASTM D5185m         0.5         4         0         0           Molybdenum         ppm         ASTM D5185m         1.1         1         4         4           Magnesium         ppm         ASTM D5185m         1.1         1         4         4           Calcium         ppm         ASTM D5185m         1.6         0         7         8           Phosphorus         ppm         ASTM D5185m         1.5         0         19	Aluminum	ppm	ASTM D5185m	>25	2	2	2
Tin         ppm         ASTM D5185m         >25         <1	Lead	ppm	ASTM D5185m	>100	<1	1	1
Antimony         ppm         ASTM D5185m         >5               Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         < 1	Copper	ppm	ASTM D5185m	>200	2	11	10
Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         <1	Tin	ppm	ASTM D5185m	>25	<1	<1	0
Cadmium         ppm         ASTM D5185m         <1	Antimony	ppm	ASTM D5185m	>5			
ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         3.2         0         2         4           Barium         ppm         ASTM D5185m         0.5         4         0         0           Molybdenum         ppm         ASTM D5185m         1.1         1         4         4           Manganese         ppm         ASTM D5185m         1.1         1         4         5           Calcium         ppm         ASTM D5185m         0.1         <1	Vanadium	ppm	ASTM D5185m		0	0	0
Boron         ppm         ASTM D5185m         3.2         0         2         4           Barium         ppm         ASTM D5185m         0.5         4         0         0           Molybdenum         ppm         ASTM D5185m         1.1         1         4         4           Magnesie         ppm         ASTM D5185m         1.1         1         4         4           Magnesium         ppm         ASTM D5185m         0.1         <1	Cadmium	ppm	ASTM D5185m		<1	0	0
Barium         ppm         ASTM D5185m         0.5         4         0         0           Molybdenum         ppm         ASTM D5185m         1.1         1         4         4           Manganese         ppm         ASTM D5185m         1.1         1         4         5           Magnesium         ppm         ASTM D5185m         0.1         <1         4         5           Calcium         ppm         ASTM D5185m         1.6         0         7         8           Phosphorus         ppm         ASTM D5185m         159         111         179         190           Zinc         ppm         ASTM D5185m         0.5         0         19         17           Sulfur         ppm         ASTM D5185m         10342         4257         7549         6328           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current	ADDITIVES						
Molybdenum         ppm         ASTM D5185m         1.1         1         4         4           Manganese         ppm         ASTM D5185m         -         -         1         -         1         -         1         -         1         -         -         1         -         -         -         1         -<	ADDITIVES		method	limit/base	current	history1	history2
Manganese         ppm         ASTM D5185m         <1         <1         <1           Magnesium         ppm         ASTM D5185m         0.1         <1         4         5           Calcium         ppm         ASTM D5185m         1.6         0         7         8           Phosphorus         ppm         ASTM D5185m         159         111         179         190           Zinc         ppm         ASTM D5185m         0.5         0         19         17           Sulfur         ppm         ASTM D5185m         10342         4257         7549         6328           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         >50         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000		ppm					
Magnesium         ppm         ASTM D5185m         0.1         <1         4         5           Calcium         ppm         ASTM D5185m         1.6         0         7         8           Phosphorus         ppm         ASTM D5185m         159         111         179         190           Zinc         ppm         ASTM D5185m         0.5         0         19         17           Sulfur         ppm         ASTM D5185m         10342         4257         7549         6328           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         >50         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4µm         ASTM D7647         >20000          △ 303768         △ 331053           Particles >51µm         ASTM D7647         >640	Boron		ASTM D5185m	3.2	0	2	4
Calcium         ppm         ASTM D5185m         1.6         0         7         8           Phosphorus         ppm         ASTM D5185m         159         111         179         190           Zinc         ppm         ASTM D5185m         0.5         0         19         17           Sulfur         ppm         ASTM D5185m         10342         4257         7549         6328           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >21μm         ASTM D7647         >160          48         49           Particles >38μm         ASTM D7647         >40 </td <th>Boron Barium</th> <td>ppm</td> <td>ASTM D5185m ASTM D5185m</td> <td>3.2 0.5</td> <th>0 4</th> <td>2</td> <td>4 0</td>	Boron Barium	ppm	ASTM D5185m ASTM D5185m	3.2 0.5	0 4	2	4 0
Phosphorus         ppm         ASTM D5185m         159         111         179         190           Zinc         ppm         ASTM D5185m         0.5         0         19         17           Sulfur         ppm         ASTM D5185m         10342         4257         7549         6328           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ         303768         Δ         331053           Particles >6μm         ASTM D7647         >640          Δ         44331         Δ         43737           Particles >21μm         ASTM D7647         >160          48         49           Particles >71μm	Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	3.2 0.5	0 4 1	2 0 4	4 0 4
Zinc         ppm         ASTM D5185m         0.5         0         19         17           Sulfur         ppm         ASTM D5185m         10342         4257         7549         6328           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >1μm         ASTM D7647         >640          387         262           Particles >21μm         ASTM D7647         >40          48         49           Particles >71μm         ASTM D7647         >10          0         0	Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3.2 0.5 1.1	0 4 1 <1	2 0 4 <1	4 0 4 <1
Sulfur         ppm         ASTM D5185m         10342         4257         7549         6328           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >14μm         ASTM D7647         >640          387         262           Particles >21μm         ASTM D7647         >40          48         49           Particles >71μm         ASTM D7647         >10          0         0	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3.2 0.5 1.1	0 4 1 <1 <1	2 0 4 <1 4	4 0 4 <1 5
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >14μm         ASTM D7647         >640          387         262           Particles >21μm         ASTM D7647         >160          48         49           Particles >38μm         ASTM D7647         >40          2         0           Particles >71μm         ASTM D7647         >10          0         0	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3.2 0.5 1.1 0.1 1.6	0 4 1 <1 <1 0	2 0 4 <1 4 7	4 0 4 <1 5
Silicon         ppm         ASTM D5185m         >50         3         7         8           Sodium         ppm         ASTM D5185m         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >14μm         ASTM D7647         >640          387         262           Particles >21μm         ASTM D7647         >160          48         49           Particles >38μm         ASTM D7647         >40          2         0           Particles >71μm         ASTM D7647         >10          0         0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159	0 4 1 <1 <1 0 111	2 0 4 <1 4 7 179	4 0 4 <1 5 8 190
Sodium         ppm         ASTM D5185m         3         11         8           Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >14μm         ASTM D7647         >640          387         262           Particles >21μm         ASTM D7647         >160          48         49           Particles >38μm         ASTM D7647         >40          2         0           Particles >71μm         ASTM D7647         >10          0         0	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 ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5	0 4 1 <1 <1 0 111	2 0 4 <1 4 7 179	4 0 4 <1 5 8 190
Potassium         ppm         ASTM D5185m         >20         0         0         1           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >14μm         ASTM D7647         >640          387         262           Particles >21μm         ASTM D7647         >160          48         49           Particles >38μm         ASTM D7647         >40          2         0           Particles >71μm         ASTM D7647         >10          0         0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342	0 4 1 <1 <1 0 111 0 4257	2 0 4 <1 4 7 179 19 7549	4 0 4 <1 5 8 190 17 6328
FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >20000          Δ 303768         Δ 331053           Particles >6μm         ASTM D7647         >5000          Δ 44331         Δ 43737           Particles >14μm         ASTM D7647         >640          387         262           Particles >21μm         ASTM D7647         >160          48         49           Particles >38μm         ASTM D7647         >40          2         0           Particles >71μm         ASTM D7647         >10          0         0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base	0 4 1 <1 <1 0 111 0 4257	2 0 4 <1 4 7 179 19 7549 history1	4 0 4 <1 5 8 190 17 6328 history2
Particles >4μm       ASTM D7647       >20000        Δ 303768       Δ 331053         Particles >6μm       ASTM D7647       >5000        Δ 44331       Δ 43737         Particles >14μm       ASTM D7647       >640        387       262         Particles >21μm       ASTM D7647       >160        48       49         Particles >38μm       ASTM D7647       >40        2       0         Particles >71μm       ASTM D7647       >10        0       0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base	0 4 1 <1 <1 0 1111 0 4257  current 3	2 0 4 <1 4 7 179 19 7549 history1	4 0 4 <1 5 8 190 17 6328 history2
Particles >6μm       ASTM D7647       >5000        Δ 44331       Δ 43737         Particles >14μm       ASTM D7647       >640        387       262         Particles >21μm       ASTM D7647       >160        48       49         Particles >38μm       ASTM D7647       >40        2       0         Particles >71μm       ASTM D7647       >10        0       0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50	0 4 1 <1 <1 0 1111 0 4257  current 3 3	2 0 4 <1 4 7 179 19 7549 history1 7	4 0 4 <1 5 8 190 17 6328 history2 8
Particles >14μm       ASTM D7647       >640        387       262         Particles >21μm       ASTM D7647       >160        48       49         Particles >38μm       ASTM D7647       >40        2       0         Particles >71μm       ASTM D7647       >10        0       0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50	0 4 1 <1 <1 0 1111 0 4257 current 3 3 0	2 0 4 <1 4 7 179 19 7549 history1 7	4 0 4 <1 5 8 190 17 6328 history2 8 8
Particles >21μm       ASTM D7647       >160        48       49         Particles >38μm       ASTM D7647       >40        2       0         Particles >71μm       ASTM D7647       >10        0       0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50 >20	0 4 1 <1 <1 0 111 0 4257 current 3 3 0 current	2 0 4 <1 4 7 179 19 7549 history1 7	4 0 4 <1 5 8 190 17 6328 history2 8 1
Particles >38μm       ASTM D7647       >40        2       0         Particles >71μm       ASTM D7647       >10        0       0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50 	0 4 1 <1 <1 0 1111 0 4257 current 3 3 0 current	2 0 4 <1 4 7 179 19 7549 history1 7 11 0 history1 ▲ 303768	4 0 4 <1 5 8 190 17 6328 history2 8 8 1 history2 ▲ 331053
Particles >71μm ASTM D7647 >10 0 0	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50 >20 limit/base	0 4 1 <1 <1 0 1111 0 4257 current 3 3 0 current	2 0 4 <1 4 7 179 19 7549 history1 7 11 0 history1 ▲ 303768 ▲ 44331	4 0 4 <1 5 8 190 17 6328 history2 8 8 1 history2 △ 331053 △ 43737
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50 >20 limit/base >20000 >5000 >640	0 4 1 <1 <1 0 1111 0 4257 current 3 3 0 current	2 0 4 <1 4 7 179 19 7549 history1 7 11 0 history1 △ 303768 △ 44331 387	4 0 4 <1 5 8 190 17 6328 history2 8 8 1 history2 △ 331053 △ 43737 262
Oil Cleanliness ISO 4406 (c) >21/19/16	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50 >20 limit/base >20000 >5000 >640 >160	0 4 1 <1 <1 0 1111 0 4257 current 3 3 0 current	2 0 4 <1 4 7 179 19 7549 history1 7 11 0 history1 ▲ 303768 ▲ 44331 387 48	4 0 4 <1 5 8 190 17 6328 history2 8 8 1 history2 ▲ 331053 ▲ 43737 262 49
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	3.2 0.5 1.1 0.1 1.6 159 0.5 10342 limit/base >50 >20 limit/base >20000 >5000 >640 >160 >40	0 4 1 <1 <1 0 1111 0 4257 current 3 3 0 current	2 0 4 <1 4 7 179 19 7549 history1 7 11 0 history1 ▲ 303768 ▲ 44331 387 48 2	4 0 4 0 4 <1 5 8 190 17 6328 history2 8 8 1 history2   43737 262 49 0



0.00

#### **OIL ANALYSIS REPORT**



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.68	0.50	0.48
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE	LIGHT
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	VLITE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	TIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	219	<b>43.12</b>	<u> </u>	<b>▲</b> 146.8

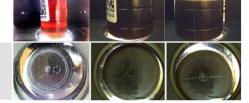
limit/base

method

Color

SAMPLE IMAGES

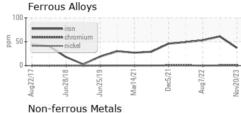


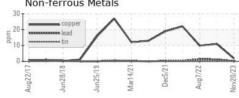


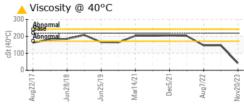
history1

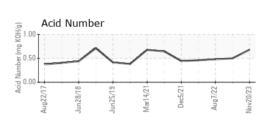
history2

#### **GRAPHS**













Laboratory Sample No. Lab Number Unique Number

: 10753143

: WC0869570 : 06013999

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

: 21 Nov 2023 : 30 Nov 2023 Diagnostician

: Jonathan Hester

IOWA PARK, TX

Contact: KEVIN KETCHERSID kevin.a.ketchersid@sealedair.com

**SEALED AIR CORP - CRYOVAC DIVISION** 

1301 WEST MAGNOLIA AVE

T: (940)592-2111 F: (940)592-2513

Test Package : IND 2 ( Additional Tests: PrtCount ) 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)

US 76367