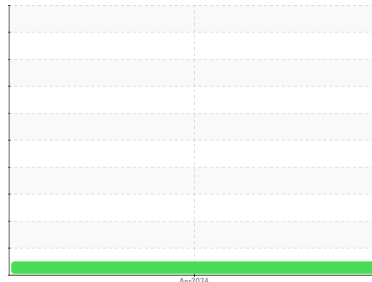




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**HED BULK - DURON 15W40 HED BULK - 15W40**  
 Component  
**Bulk Tank New (Unused) Oil**  
 Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### Recommendation

This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KFS0005267</b>	---	---
Sample Date	Client Info			<b>22 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method			<b>NEG</b>	---	---

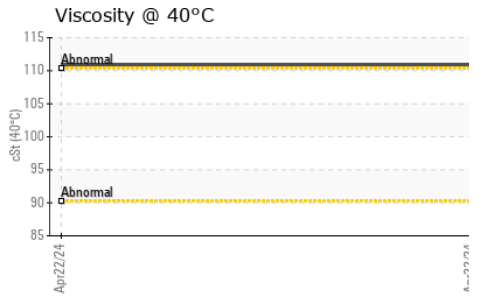
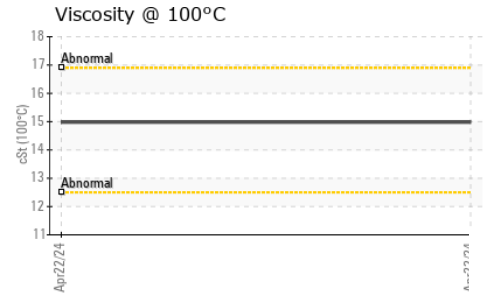
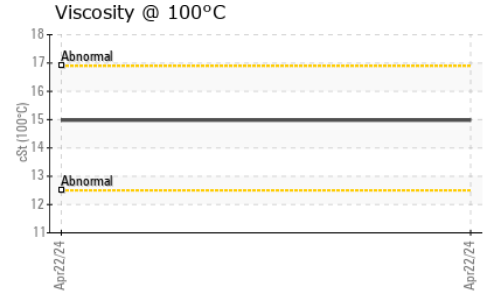
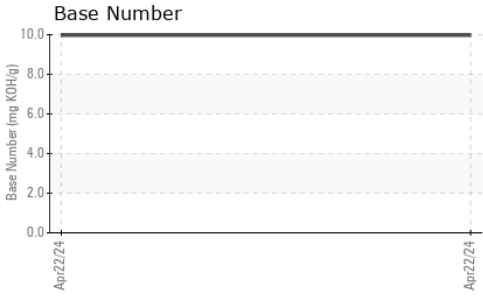
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Lead	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Tin	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>57</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>940</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1207</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>1107</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1309</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>3783</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>4</b>	---	---
Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.86</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.97</b>	---	---

# OIL ANALYSIS REPORT



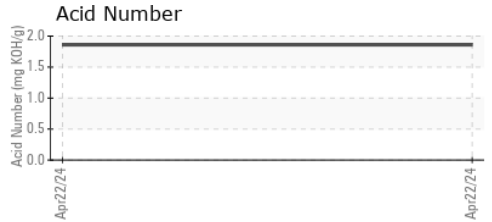
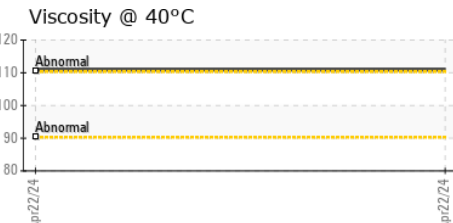
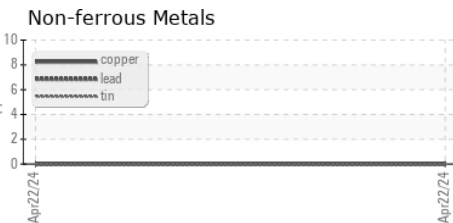
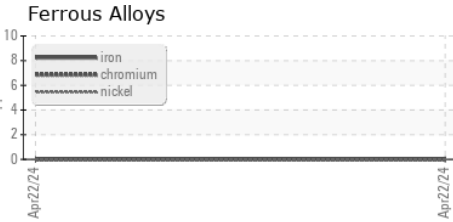
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>110.9</b>	---	---
Visc @ 100°C	cSt	ASTM D445	<b>14.98</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270	<b>140</b>	---	---

### SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0005267      **Received** : 23 Apr 2024  
**Lab Number** : **06158204**      **Tested** : 25 Apr 2024  
**Unique Number** : 10993627      **Diagnosed** : 25 Apr 2024 - Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI )

**CONSTELLIUM**  
 4805 SECOND STREET  
 MUSCLE SHOALS, AL  
 US 35661  
 Contact: Randy Nichols  
 randall.nichols@constellium.com

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)