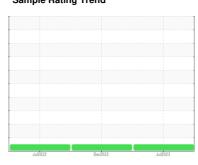


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



# DT787 Component

**Front Differential** 

GEAR OIL SAE 75W90 (--- QTS)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil

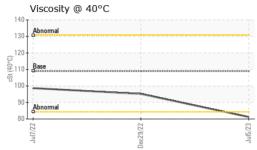
## **Fluid Condition**

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

Sample Number         Client Info         PCA0096945         PCA0080896         PCA00           Sample Date         Client Info         05 Jul 2023         29 Dec 2022         07 Jul 2           Machine Age         mls         Client Info         102990         77690         52614           Oil Age         mls         Client Info         25300         77690         0           Oil Changed         Client Info         Not Changd         Changed         Not Changed           Sample Status         NORMAL         NORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         his           Iron         ppm         ASTM D5185m         >500         78         124         123           Chromium         ppm         ASTM D5185m         >10         <1         1         1           Nickel         ppm         ASTM D5185m         >10         <1         0         0           Silver         ppm         ASTM D5185m         >25         <1         0         2           Lead         ppm         ASTM D5185m         >25         <1         0         2           Copper         ppm	2022 angd
Sample Number         Client Info         PCA0096945         PCA0080896         PCA00           Sample Date         Client Info         05 Jul 2023         29 Dec 2022         07 Jul 2           Machine Age         mls         Client Info         102990         77690         52614           Oil Age         mls         Client Info         25300         77690         0           Oil Changed         Client Info         Not Changd         Changed         Not Changed           Sample Status         Normal         NORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         his           Iron         ppm         ASTM D5185m         >500         78         124         123           Chromium         ppm         ASTM D5185m         >10         <1         1         1           Nickel         ppm         ASTM D5185m         >10         <1         0         0           Silver         ppm         ASTM D5185m         >25         <1         0         2           Lead         ppm         ASTM D5185m         >25         <1         0         2           Copper         ppm	7477 2022 angd AL
Sample Date	2022 angd AL
Machine Age         mls         Client Info         102990         77690         52614           Oil Age         mls         Client Info         25300         77690         0           Oil Changed         Client Info         Not Changed         Not Changed         Not Changed         Not Changed           Sample Status         NORMAL         NORMAL         NORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         his           WEAR METALS         meth	angd AL
Oil Age         mls         Client Info         25300         77690         0           Oil Changed         Client Info         Not Changd         Changed         Not Changed           Sample Status         NORMAL         NORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         his           Iron         ppm         ASTM D5185m         >500         78         124         123           Chromium         ppm         ASTM D5185m         >10         <1         1         1           Nickel         ppm         ASTM D5185m         >10         <1         0         0           Silver         ppm         ASTM D5185m         0         0         0         <1           Silver         ppm         ASTM D5185m         0         0         0         2           Lead         ppm         ASTM D5185m         >25         <1         0         2           Lead         ppm         ASTM D5185m         >10         26         35         1           Tin         ppm         ASTM D5185m         >10         21         <1         <1         <1	AL
Oil Changed Sample Status         Client Info         Not Changed NORMAL         Nor Changed NORMAL         Not Changed NORMAL         Nor Changed Normal	AL
NORMAL   N	AL
WEAR METALS         method         limit/base         current         history1         his           Iron         ppm         ASTM D5185m         >500         78         124         123           Chromium         ppm         ASTM D5185m         >10         <1	
Iron	story2
Chromium         ppm         ASTM D5185m         >10         <1         1         1           Nickel         ppm         ASTM D5185m         >10         <1         0         0           Titanium         ppm         ASTM D5185m         0         0         <1         0           Silver         ppm         ASTM D5185m         0         0         2           Aluminum         ppm         ASTM D5185m         >25         <1         0         2           Aluminum         ppm         ASTM D5185m         >25         0         0         <1         2           Lead         ppm         ASTM D5185m         >100         26         35         1         1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1	
Nickel	
Titanium         ppm         ASTM D5185m         0         0         <1           Silver         ppm         ASTM D5185m         0         0         2           Aluminum         ppm         ASTM D5185m         >25         <1	
Silver         ppm         ASTM D5185m         0         0         2           Aluminum         ppm         ASTM D5185m         >25         <1         0         2           Lead         ppm         ASTM D5185m         >25         0         0         <1           Copper         ppm         ASTM D5185m         >100         26         35         1           Tin         ppm         ASTM D5185m         >10         <1         <1         <1         <1           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         1           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1	
Silver         ppm         ASTM D5185m         0         0         2           Aluminum         ppm         ASTM D5185m         >25         <1         0         2           Lead         ppm         ASTM D5185m         >25         0         0         <1           Copper         ppm         ASTM D5185m         >100         26         35         1           Tin         ppm         ASTM D5185m         >10         <1         <1         <1         <1           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         1           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         193         0         <1	
Aluminum         ppm         ASTM D5185m         >25         <1         0         2           Lead         ppm         ASTM D5185m         >25         0         0         <1	
Lead         ppm         ASTM D5185m         >25         0         0         <1           Copper         ppm         ASTM D5185m         >100         26         35         1           Tin         ppm         ASTM D5185m         >10         <1         <1         <1         <1           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         1           ADDITIVES           method         limit/base         current         history1         his           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         4         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1           Magnesium         ppm         ASTM D5185m         12         193         0         2           Calcium         ppm         ASTM D5185m         150	
Copper         ppm         ASTM D5185m         >100         26         35         1           Tin         ppm         ASTM D5185m         >10         <1	
Tin         ppm         ASTM D5185m         >10         <1         <1         <1           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         1           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1	
Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         1           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1	
Cadmium         ppm         ASTM D5185m         0         0         1           ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1	
ADDITIVES         method         limit/base         current         history1         his           Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1	
Boron         ppm         ASTM D5185m         400         261         239         297           Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1           Manganese         ppm         ASTM D5185m         12         193         0         2           Magnesium         ppm         ASTM D5185m         12         193         0         2           Calcium         ppm         ASTM D5185m         150         344         6         7           Phosphorus         ppm         ASTM D5185m         1650         1509         1381         1428           Zinc         ppm         ASTM D5185m         125         302         15         20           Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963	tory2
Barium         ppm         ASTM D5185m         200         0         0         4           Molybdenum         ppm         ASTM D5185m         12         23         0         <1	
Molybdenum         ppm         ASTM D5185m         12         23         0         <1           Manganese         ppm         ASTM D5185m         7         21         7           Magnesium         ppm         ASTM D5185m         12         193         0         2           Calcium         ppm         ASTM D5185m         150         344         6         7           Phosphorus         ppm         ASTM D5185m         1650         1509         1381         1428           Zinc         ppm         ASTM D5185m         125         302         15         20           Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963           CONTAMINANTS         method         limit/base         current         history1         his	
Manganese         ppm         ASTM D5185m         7         21         7           Magnesium         ppm         ASTM D5185m         12         193         0         2           Calcium         ppm         ASTM D5185m         150         344         6         7           Phosphorus         ppm         ASTM D5185m         1650         1509         1381         1428           Zinc         ppm         ASTM D5185m         125         302         15         20           Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963           CONTAMINANTS         method         limit/base         current         history1         history1	
Magnesium         ppm         ASTM D5185m         12         193         0         2           Calcium         ppm         ASTM D5185m         150         344         6         7           Phosphorus         ppm         ASTM D5185m         1650         1509         1381         1428           Zinc         ppm         ASTM D5185m         125         302         15         20           Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963           CONTAMINANTS         method         limit/base         current         history1         his	
Calcium         ppm         ASTM D5185m         150         344         6         7           Phosphorus         ppm         ASTM D5185m         1650         1509         1381         1428           Zinc         ppm         ASTM D5185m         125         302         15         20           Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963           CONTAMINANTS         method         limit/base         current         history1         his	
Phosphorus         ppm         ASTM D5185m         1650         1509         1381         1428           Zinc         ppm         ASTM D5185m         125         302         15         20           Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963           CONTAMINANTS         method         limit/base         current         history1         his	
Zinc         ppm         ASTM D5185m         125         302         15         20           Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963           CONTAMINANTS         method         limit/base         current         history1         his	2
Sulfur         ppm         ASTM D5185m         22500         23002         22477         2963           CONTAMINANTS         method         limit/base         current         history1         his	)
CONTAMINANTS method limit/base current history1 his	20
	tory2
Silicon         ppm         ASTM D5185m         >75         19         40         25	
Sodium         ppm         ASTM D5185m         <1         6         5	
Potassium         ppm         ASTM D5185m         >20         2         3         1	
VISUAL method limit/base current history1 his	tory2
White Metal scalar *Visual NONE NONE NONE NONE	
Yellow Metal scalar *Visual NONE NONE NONE NONE	1E
Precipitate scalar *Visual NONE NONE NONE NONE	
Silt scalar *Visual NONE NONE NONE NONE	VE.
Debris scalar *Visual NONE <b>NONE</b> NONE NONE	
Sand/Dirt scalar *Visual NONE NONE NONE NONE	ΙE
Appearance scalar *Visual NORML NORML NORML NOF	NE NE
Odor scalar *Visual NORML NORML NORML NOF	NE NE
Emulsified Water scalar *Visual >.2 NEG NEG NEG	NE NE NE RML
Free Water scalar *Visual NEG NEG NEG	NE NE NE RML
FLUID PROPERTIES method limit/base current history1 his	NE NE NE RML RML

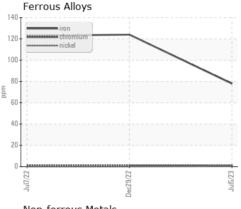


# **OIL ANALYSIS REPORT**

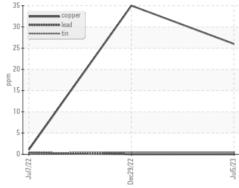


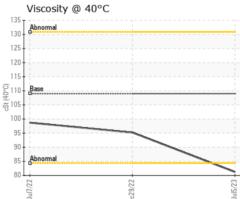


### **GRAPHS**



#### Non-ferrous Metals









Laboratory Sample No. Lab Number

Unique Number : 10561673 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0096945 : 05900317

Received Diagnosed

: 17 Jul 2023 : 19 Jul 2023 Diagnostician : Sean Felton NW WHITE & CO - ANDERSON DIVISION 2605 RIVER RD PIEDMONT, SC

US 29673 Contact: James Threatt

jthreatt@nwwhite.com T: (864)918-4646

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)