

# Not GIVEN JR0206667 (S/N NO INFO ON SIF/BOTTLE)

## **Front Differential**

## TDH FLUID SAE 75W80 (--- GAL)

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

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The copper level is abnormal. All other component wear rates are normal.

#### CONTAMINATION

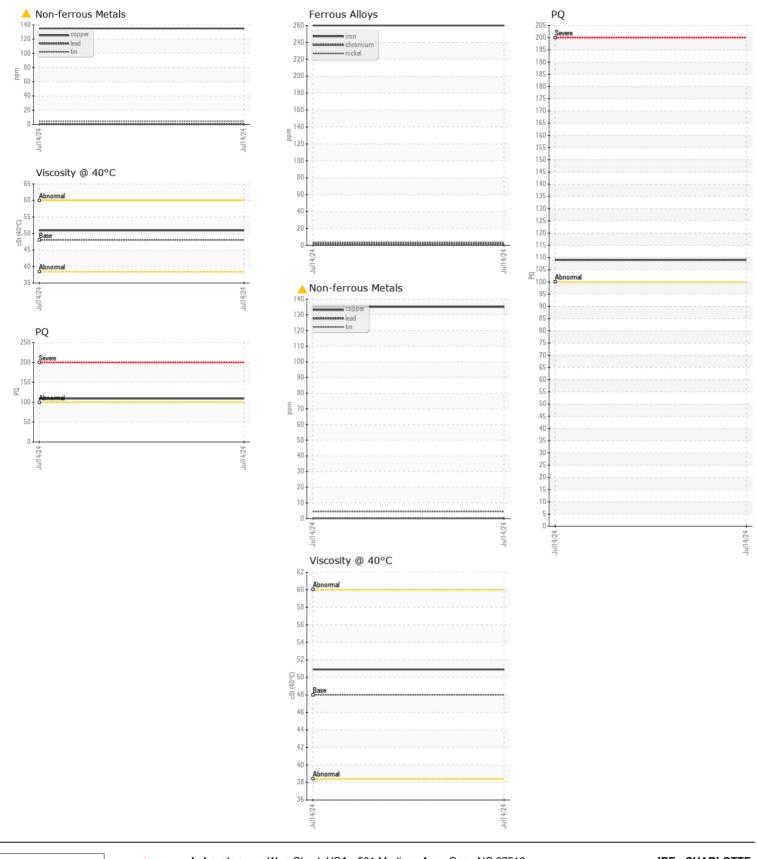
There is no indication of any contamination in the oil.

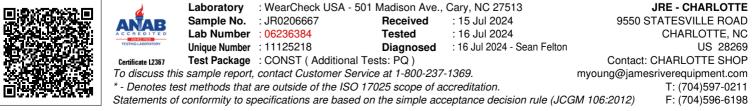
FLUID CONDITION
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The condition of the oil is acceptable for the time in service.

TestUOMMethodLimit/MCurrentHistory1History2Sample NumberClient InfoIA JU2026667Sample DatClient Info14 JU2024Machine AgehrsClient Info0Oil AgehrsClient Info0Filter AgehrsClient InfoN/AOil ChangedClient InfoN/AFilter AgeNClient InfoN/ASample StatusClient InfoN/APQASTM D5185S5002600IronppmASTM D5185>101NickelppmASTM D5185>103AluminumppmASTM D5185>25<1AluminumppmASTM D5185>25<1CopperppmASTM D5185>10ASiliconppmASTM D5185>10ASiliconppmASTM D5185>7512SiliconppmASTM D5185>7512SiliconppmASTM D5185>7512SiliconppmASTM D5185>202SiliconppmASTM D5185NONENO							
Sample DateClient Into14 Jul 2024Machine AgehrsClient Into0Oil AgehrsClient Into0Filter AgehrsClient IntoN/AOil ChangedClient IntoN/AFilter ChangedClient IntoN/ASample StatusASTM D8184109PQASTM D8184109NickelppmASTM D5185>101NickelppmASTM D5185>103SilverppmASTM D5185>103AluminumppmASTM D5185>252AluminumppmASTM D5185>10A15AluminumppmASTM D5185>10AVanadiumppmASTM D5185>10AVanadiumppmASTM D5185>10ASiliconppmASTM D5185>2512ValadiumppmASTM D5185>10ASiliconppmASTM D5185>10ASiliconppmASTM D5185>22ISiliconppmASTM D5185>22 <t< th=""><th>Test</th><th>UOM</th><th>Method</th><th>Limit/Abn</th><th>Current</th><th>History1</th><th>History2</th></t<>	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age         hrs         Client Info         0             Oil Age         hrs         Client Info         0             Filter Age         hrs         Client Info         N/A             Oil Changed         Client Info         N/A             Filter Changed         Client Info         N/A             Sample Status          ASTM D5185         S500         260            PQ         ASTM D5185         >500         260             Chromium         ppm         ASTM D5185         >10         1             Nickel         ppm         ASTM D5185         >10         3             Aluminum         ppm         ASTM D5185         >25         2             Lead         ppm         ASTM D5185         >10         4             Silicon         ppm         ASTM D5185         >20              Silicon         ppm         ASTM D5185         2	Sample Number		Client Info		JR0206667		
Oil Age Filter Age Filter Age (Lient InfoOFilter Age Oil ChangedClient InfoN/AFilter ChangedClient InfoN/AFilter ChangedClient InfoN/ASample StatusASTM D8184109PQASTM D8185>500260IronppmASTM D5185>101NickelppmASTM D5185>103SilverppmASTM D5185>22SilverppmASTM D5185>22LeadppmASTM D5185>25<1VanadiumppmASTM D5185>104VanadiumppmASTM D5185>7512SiliconppmASTM D5185>7512VaterWC Method >.2NONESiliconppmASTM D5185NONEISiliconppmASTM D5185NONEISiliconppmASTM D5185NONEISiliconppmASTM D5185NONEISiliconppmASTM D5185NONEISiliconppmASTM D5185II <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>14 Jul 2024</th> <th></th> <th></th>	Sample Date		Client Info		14 Jul 2024		
Filter Age         hrs         Client Info         0             Oil Changed         Client Info         N/A             Filter Changed         Client Info         N/A             Sample Status         ABNORMAL             PQ         ASTM D8184         109             Iron         ppm         ASTM D5185m         >10         1             Nickel         ppm         ASTM D5185m         >10         3             Silver         ppm         ASTM D5185m         >10         3             Aluminum         ppm         ASTM D5185m<>>10         4             Copper         ppm         ASTM D5185m<>>10         4             Vanadium         ppm         ASTM D5185m<>10         4             Silicon         ppm         ASTM D5185m<>75         12             Silicon         ppm         ASTM D5185m<>75         12	Machine Age	hrs	Client Info		0		
Oli Changed         Client Info         N/A            Filter Changed         Client Info         N/A          ABNORMAL            Sample Status         ASTM D8184         109             PQ         ASTM D8185         >500         260             Chromium         ppm         ASTM D5185m         >10         1             Nickel         ppm         ASTM D5185m         >10         3             Nickel         ppm         ASTM D5185m         <1              Nickel         ppm         ASTM D5185m         >25         2             Aluminum         ppm         ASTM D5185m         >25         <1             Lead         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >20         2             Vellow Metal	Oil Age	hrs	Client Info		0		
Filter ChangedClient InfoN/ASample StatusASTM D8184ABNORMALPQASTM D8185109IronppmASTM D5185>101NickelppmASTM D5185>103NickelppmASTM D5185>103SilverppmASTM D5185>103AuminumppmASTM D5185>22AuminumppmASTM D5185>22LeadppmASTM D5185>1004YanadiumppmASTM D5185>104VanadiumppmASTM D5185>104Yellow Metalscalar*VisualNONENONESiliconppmASTM D5185>202SiliconppmASTM D5185>202SiliconppmASTM D5185>202Sulfurscalar*VisualNONENONESoliconppmASTM D5185>202SoliconppmASTM D5185>202SoliconppmASTM D5185NONESoliconppmASTM D5185NONESoliconppmASTM D5185100Boronppm <th>Filter Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th></th> <th></th>	Filter Age	hrs	Client Info		0		
Sample Status     ABNORMAL        PQ     ASTM D8184     109        Iron     ppm     ASTM D5185     >500     260        Nickel     ppm     ASTM D5185     >10     1        Nickel     ppm     ASTM D5185     >10     3        Silver     ppm     ASTM D5185     >10     3        Aluminum     ppm     ASTM D5185     >20         Aluminum     ppm     ASTM D5185     >20         Aluminum     ppm     ASTM D5185     >20         Aluminum     ppm     ASTM D5185     >10     4         Aluminum     ppm     ASTM D5185     >10     4         Vanacium     ppm     ASTM D5185     >10     4         Vanacium     ppm     ASTM D5185     >10     4         Vanacium     ppm     ASTM D5185     >12         Yellow Metal     scalar     *Visual     NONE     NONE        Silicon     ppm     ASTM D5185     >20     NORE	Oil Changed		Client Info		N/A		
PQASTM D8184109IronppmASTM D5185m>500260ChromiumppmASTM D5185m>101NickelppmASTM D5185m>103SilverppmASTM D5185m>103AluminumppmASTM D5185m>252AluminumppmASTM D5185m>25<1CopperppmASTM D5185m>104135YanadiumppmASTM D5185m>104VanadiumppmASTM D5185m>10ACYellow Metalscalar*VisualNONENONESiliconppmASTM D5185m>7512Yellow Metalscalar*VisualNONENONESiliconppmASTM D5185m>202SiliconppmASTM D5185m>202Solitscalar*VisualNONEMODERSolitscalar*VisualNORHNORHSolutscalar*VisualNORHNORHGodrscalar*VisualNO	Filter Changed		Client Info		N/A		
Iron         ppm         ASTM D5185m         >500         260             Chromium         ppm         ASTM D5185m         >10         1             Nickel         ppm         ASTM D5185m         >10         3             Titanium         ppm         ASTM D5185m         <1             Aluminum         ppm         ASTM D5185m         >22             Aluminum         ppm         ASTM D5185m         >25         2             Lead         ppm         ASTM D5185m         >100         ▲ 135             Copper         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >20         2             Vanadium         ppm         ASTM D5185m         >20 <td< th=""><th>Sample Status</th><th></th><th></th><th></th><th>ABNORMAL</th><th></th><th></th></td<>	Sample Status				ABNORMAL		
Iron         ppm         ASTM D5185m         >500         260             Chromium         ppm         ASTM D5185m         >10         1             Nickel         ppm         ASTM D5185m         >10         3             Titanium         ppm         ASTM D5185m         <1             Aluminum         ppm         ASTM D5185m         >22             Aluminum         ppm         ASTM D5185m         >25         2             Lead         ppm         ASTM D5185m         >100         ▲ 135             Copper         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >20         2             Vanadium         ppm         ASTM D5185m         >20 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>							
Chromium         ppm         ASTM D5185m         >10         1             Nickel         ppm         ASTM D5185m         >10         3             Titanium         ppm         ASTM D5185m          <1				=			
Nickel         ppm         ASTM D5185m         >10         3             Titanium         ppm         ASTM D5185m         C         1             Aluminum         ppm         ASTM D5185m         22             Aluminum         ppm         ASTM D5185m         >22             Lead         ppm         ASTM D5185m         >100         ▲         135            Copper         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >20         2             Yellow Metal         scalar<*/td>         *Visual         NONE         NONE             Silicon         ppm         ASTM D5185m         >20 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>							
Titanium         ppm         ASTM D5185m         <1					-		
Silver         ppm         ASTM D5185m         0            Aluminum         ppm         ASTM D5185m<>25         2            Lead         ppm         ASTM D5185m<>25         <1            Copper         ppm         ASTM D5185m<>100         ▲ 135            Tin         ppm         ASTM D5185m<>100         ▲ 135            Vanadium         ppm         ASTM D5185m<>10         4            Vanadium         ppm         ASTM D5185m<>10         4            Vanadium         ppm         ASTM D5185m<>10         4            Vanadium         ppm         ASTM D5185m<>75         12            Yellow Metal         scalar         *Visual         NONE         NONE            Silicon         ppm         ASTM D5185m<>75         12             Silit         scalar         *Visual         NONE         MODER             Sand/Dirt         scalar         *Visual         NONE         NORE             Appearance         scalar         *Visual <t< th=""><th></th><th></th><th></th><th>&gt;10</th><th>-</th><th></th><th></th></t<>				>10	-		
Aluminum         ppm         ASTM D5185m         >25         2             Lead         ppm         ASTM D5185m         >25         <1							
Lead         ppm         ASTM D5185m         >25         <1				05			
Copper         ppm         ASTM D5185m         >100         ▲ 135             Tin         ppm         ASTM D5185m         >10         4             Vanadium         ppm         ASTM D5185m         >0             White Metal         scalar         *Visual         NONE         NONE             Yellow Metal         scalar         *Visual         NONE         NONE             Silicon         ppm         ASTM D5185m         >75         12             Potassium         ppm         ASTM D5185m         >20         2             Water         WC Method         >.2         NEG             Sand/Dirt         scalar         *Visual         NONE         NONE            Appearance         scalar         *Visual         NORM         NORML             Sodium         ppm         ASTM D5185m         10         0             Boron         ppm         ASTM D5185m         10					_		
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Silicon         ppm         ASTM D5185m         >75         12             Potassium         ppm         ASTM D5185m         >20         2             Water         WC Method         >.2         NEG             Silt         scalar         *Visual         NONE         MODER             Debris         scalar         *Visual         NONE         NONE             Sand/Dirt         scalar         *Visual         NONE         NONE             Appearance         scalar         *Visual         NORML         NORML             Odor         scalar         *Visual         NORML         NORML             Godium         ppm         ASTM D5185m         10         8             Boron         ppm         ASTM D5185m         10         3             Molybdenum         ppm         ASTM D5185m         10         3             Magnesium         ppm         ASTM D5185m		scalar	*Visual	NONE	NONE		
PotassiumppmASTM D5185m>202WaterWC Method>.2NEGSiltscalar*VisualNONEMODERDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMLNORMLDobrisscalar*VisualNORMLNORMLAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLSodiumppmASTM D5185m108BoronppmASTM D5185m103ManganeseppmASTM D5185m103MagnesiumppmASTM D5185m10093PhosphorusppmASTM D5185m35003400ZincppmASTM D5185m11501273SulfurppmASTM D5185m50003550SoulfurppmASTM D5185m50003550	Yellow Metal	scalar	*Visual	NONE	NONE		
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Boron         ppm         ASTM D5185m         10         8             Barium         ppm         ASTM D5185m         10         0             Molybdenum         ppm         ASTM D5185m         10         3             Manganese         ppm         ASTM D5185m         100         93             Magnesium         ppm         ASTM D5185m         3500         3400             Phosphorus         ppm         ASTM D5185m         1150         1075             Zinc         ppm         ASTM D5185m         1150         1273             Sulfur         ppm         ASTM D5185m         5000         3550	Emulsified Water	scalar		>.2	-		
Boron         ppm         ASTM D5185m         10         8             Barium         ppm         ASTM D5185m         10         0             Molybdenum         ppm         ASTM D5185m         10         3             Manganese         ppm         ASTM D5185m         100         93             Magnesium         ppm         ASTM D5185m         3500         3400             Phosphorus         ppm         ASTM D5185m         1150         1075             Zinc         ppm         ASTM D5185m         1150         1273             Sulfur         ppm         ASTM D5185m         5000         3550							
Barium         ppm         ASTM D5185m         10         0            Molybdenum         ppm         ASTM D5185m         10         3             Manganese         ppm         ASTM D5185m         10         3             Magnesium         ppm         ASTM D5185m         100         93             Calcium         ppm         ASTM D5185m         100         93             Phosphorus         ppm         ASTM D5185m         100         93             Zinc         ppm         ASTM D5185m         1150         1075             Sulfur         ppm         ASTM D5185m         1150         1273	Sodium	ppm	ASTM D5185m		1		
Molybdenum         ppm         ASTM D5185m         10         3            Manganese         ppm         ASTM D5185m         100         8             Magnesium         ppm         ASTM D5185m         100         93             Calcium         ppm         ASTM D5185m         3500         3400             Phosphorus         ppm         ASTM D5185m         1150         1075             Zinc         ppm         ASTM D5185m         1150         1273             Sulfur         ppm         ASTM D5185m         5000         3550	Boron	ppm	ASTM D5185m	10	8		
Manganese         ppm         ASTM D5185m         8            Magnesium         ppm         ASTM D5185m         100         93            Calcium         ppm         ASTM D5185m         3500         3400            Phosphorus         ppm         ASTM D5185m         1150         1075            Zinc         ppm         ASTM D5185m         1150         1273            Sulfur         ppm         ASTM D5185m         5000         3550	Barium	ppm	ASTM D5185m	10	0		
Magnesium         ppm         ASTM D5185m         100         93             Calcium         ppm         ASTM D5185m         3500         3400             Phosphorus         ppm         ASTM D5185m         1150         1075             Zinc         ppm         ASTM D5185m         1150         1273             Sulfur         ppm         ASTM D5185m         5000         3550	Molybdenum	ppm	ASTM D5185m	10	3		
Calcium         ppm         ASTM D5185m         3500         3400             Phosphorus         ppm         ASTM D5185m         1150         1075             Zinc         ppm         ASTM D5185m         1150         1273             Sulfur         ppm         ASTM D5185m         5000         3550	Manganese	ppm	ASTM D5185m		8		
Phosphorus         ppm         ASTM D5185m         1150         1075             Zinc         ppm         ASTM D5185m         1150         1273             Sulfur         ppm         ASTM D5185m         5000         3550	Magnesium	ppm	ASTM D5185m	100	93		
Zinc         ppm         ASTM D5185m         1150 <b>1273</b> Sulfur         ppm         ASTM D5185m         5000 <b>3550</b>	Calcium	ppm	ASTM D5185m	3500	3400		
Sulfur         ppm         ASTM D5185m         5000         3550	Phosphorus	ppm	ASTM D5185m	1150	1075		
		ppm	ASTM D5185m	1150	1273		
Visc @ 40°C cSt ASTM D445 48 50.9	Zinc						
			ASTM D5185m	5000	3550		

Contact/Location: Mike Young - CHARLOTTE SHOP - JAMCHA





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