

# TAKEUCHI TB230R 130008591

## Hydraulic System

**AW HYDRAULIC OIL ISO 46 (--- GAL)** 

### RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

# WEAR

All component wear rates are normal.

## CONTAMINATION

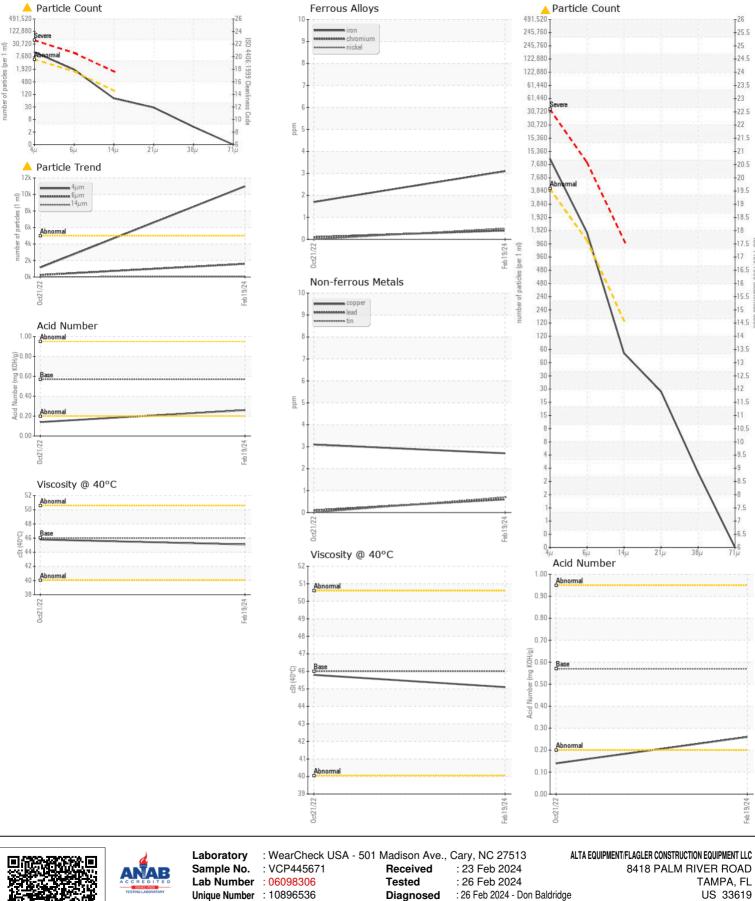
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

#### FLUID CONDITION

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

Test     UOM     Method     Limit/Ab     Current     History1     History1       Sample Dume     Client Info     19 Feb 2024     21 Cot 2022        Machine Age     hrs     Client Info     0     0        Oil Age     hrs     Client Info     0     0        Oil Age     hrs     Client Info     C     Changed     Not Changd        Filter Age     hrs     Client Info     C     Changed     Not Changd        Gample Status      ABNORMAL     NORMAL         Chromium     ppm     ASTM D5185m     >20     3     2        Nickel     ppm     ASTM D5185m     >20     3     2        Nickel     ppm     ASTM D5185m     >10     <1     0        Aluminum     ppm     ASTM D5185m<>10     <1     0        Aluminum     ppm     ASTM D5185m<>10     <1     0  <							
Sample Date     Client Info     19 Feb 2024     21 Oct 2022        Machine Age     hrss     Client Info     0     0        Oil Age     hrss     Client Info     0     0        Oil Changed     Client Info     0     0        Oil Changed     Client Info     Changed     Not Changd        Sample Status     Client Info     Changed     Not Changd        Iron     ppm     ASTM D5185m<>20     3     2        Nickel     ppm     ASTM D5185m<>10     <1     0        Nickel     ppm     ASTM D5185m<>10     <1     0        Aluminum     ppm     ASTM D5185m<>10     <1     <1        Aluminum     ppm     ASTM D5185m<>10     <1     <1        Vanadum     ppm     ASTM D5185m<>20     2     <1        Vanadum     ppm     ASTM D5185m<>20     <1     0        Van	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age     hrs     Client Info     006     349        Gil Age     hrs     Client Info     0     0        Filter Age     hrs     Client Info     Changed     Not Changd        Gil Changed     Client Info     Changed     Not Changd        Sample Status      ABNORMAL     NORMAL        Iron     ppm     ASTM D5185m<>20     3     2        Nickel     ppm     ASTM D5185m<>10     <1     0        Silver     ppm     ASTM D5185m<>10     <1     0        Cloper     ppm     ASTM D5185m<>10     <1         Vanadium     ppm     ASTM D5185m<>10     <1     0        Vanadium     ppm     ASTM D5185m<>10     <1     0        Vellow Metal     scalar     *Visual     NONE     NONE     NONE        Vellow Metal     scalar     *Visual     NONE     NONE </th <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>VCP445671</th> <th>VCP368648</th> <th></th>	Sample Number		Client Info		VCP445671	VCP368648	
Oil Age     hrs     Client Info     0     0        Filter Age     hrs     Client Info     Changed     Not Changed     <	Sample Date		Client Info		19 Feb 2024	21 Oct 2022	
Filter Age     hrs     Client Info     0     0        Oil Changed     Client Info     Changed     Not Changed        Filter Changed     Client Info     ABNORMAL     Nor Changed     Not Changed        Sample Status     Client Info     ABNORMAL     Nor Changed	Machine Age	hrs	Client Info		1006	349	
Oil Changed Filter Changed Sample Status     Client Info     Changed Changed ABNORMAL     Not Changed Not Changed Not Changed Not Changed Not Changed Not Changed ABNORMAL     ····       Iron     ppm     ASTM D5185m     >20     3     2        Iron     ppm     ASTM D5185m     >10     <1     <1        Nickel     ppm     ASTM D5185m     >10     <1     0        Silver     ppm     ASTM D5185m     >10     <1     0        Aluminum     ppm     ASTM D5185m     >10     <1     <1        Aluminum     ppm     ASTM D5185m     >10     <1     0        Vanadum     ppm     ASTM D5185m     >10     <1     0        Vanadum     ppm     ASTM D5185m     >20     2     <1        Vanadum     ppm     ASTM D5185m     >20     2     <1        Vanadum     ppm     ASTM D5185m     >20     2     <       Vanadum	Oil Age	hrs	Client Info		0	0	
Filter Changed Sample Status     Client Info     Changed ABNORMAL     Not Changed NORMAL     ····       Iron     ppm     ASTM D5185m     >20     3     2        Iron     ppm     ASTM D5185m     >10     <1     0        Nickel     ppm     ASTM D5185m     >10     <1     0        Aluminum     ppm     ASTM D5185m     >10     <1     0        Aluminum     ppm     ASTM D5185m     >10     <1     <1        Aluminum     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >20     2     <1        Vanadium     ppm     ASTM D5185m     >20     2     <1     0        Silite     scalar     'Visual </th <th>Filter Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th>0</th> <th></th>	Filter Age	hrs	Client Info		0	0	
Sample Status     ABNORMAL     NORMAL     NORMAL        Iron     ppm     ASTM D5185m     >20     3     2        Chromium     ppm     ASTM D5185m     >10     <1     <1        Nickel     ppm     ASTM D5185m     >10     <1     0        Silver     ppm     ASTM D5185m     >10     <1     0        Aluminum     ppm     ASTM D5185m     >10     <1     1        Lead     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >20     <1     0        Vanadium     ppm     ASTM D5185m     >20     <1     0        Ventle Metal     scalar     *Visual     NONE     NONE     NONE        Vatar     WC Method     >0.1     M1983     1147	Oil Changed		Client Info		Changed	Not Changd	
Iron     ppm     ASTM D5185m     >20     3     2        Chromium     ppm     ASTM D5185m     >10     <1     <1        Nickel     ppm     ASTM D5185m     >10     <1     0        Titanium     ppm     ASTM D5185m     <1     0        Silver     ppm     ASTM D5185m     <1     0        Aluminum     ppm     ASTM D5185m     >10     <1     <1        Lead     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     >20     2     <1        Vanadium     ppm     ASTM D5185m     >20     2     <1        Vanadium     ppm     ASTM D5185m     >20     <1     0        Vanadium     ppm     ASTM D5185m     >20     <1     0	Filter Changed		Client Info		Changed	Not Changd	
Chromium     pm     ASTM D5185m     >10     <1	Sample Status				ABNORMAL	NORMAL	
Chromium     pm     ASTM D5185m     >10     <1							
Nickel     ppm     ASTM D5185m     >10     <1					-		
Titanium     ppm     ASTM D5185m     <1							
Silver     ppm     ASTM D5185m     <1				>10			
Aluminum     ppm     ASTM D5185m     >10     <1							
Lead     ppm     ASTM D5185m     >10     <1				10			
Copper     ppm     ASTM D5185m     >75     3     3        Tin     ppm     ASTM D5185m     >10     <1     0        Vanadium     ppm     ASTM D5185m     0     0     0        White Metal     scalar     *Visual     NONE     NONE     NONE        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Potassium     ppm     ASTM D5185m     >20     <1     0        Potassium     ppm     ASTM D5185m     >20     <1     0        Patricles >4µm     ASTM D7647     >5000     ▲ 19983     1147        Particles >21µm     ASTM D7647     >40     25     5        Particles >21µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     21/18/13     17/15/12        Silt     scalar     *Visual     NONE     NONE </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
Tin     ppm     ASTM D5185m     >10     <1							
Vanadium     ppm     ASTM D5185m     0     0        White Metal     scalar     *Visual     NONE     NONE     NONE        Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     <1     0        Potassium     ppm     ASTM D5185m     >20     <1     0        Water     WC Method     >0.1     NEG     NEG        Particles >6µm     ASTM D7647     >100     4     1596     249        Particles >6µm     ASTM D7647     >100     3     1        Particles >6µm     ASTM D7647     >10     3     1        Particles >71µm     ASTM D7647     >3     0     0        Oll Cleanliness     ISO 4406 (c)     >191714     2118/13     1715/12        Silt     scalar     *Visual     NONE     NONE     NORE    <					-		
White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>20<10PotassiumppmASTM D5185m>20<10WaterWC Method>0.1NEGNEGParticles >4µmASTM D7647>100<109831147Particles >6µmASTM D7647>100<6822Particles >14µmASTM D7647>100<31Particles >21µmASTM D7647>300Particles >21µmASTM D7647>300Particles >21µmASTM D7647>300Oil CleanlinessISO 4406 (c)>19/17/421/18/1317/15/12Siltscalar*VisualNONENONENONESand/Dirtscalar*VisualNORENONEAppearancescalar*VisualNORLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLBoronppmASTM D5185m50Manganeseppm <td< th=""><th></th><th></th><th></th><th>&gt;10</th><th></th><th></th><th></th></td<>				>10			
Yellow Metal     scalar     *Visual     NONE     NONE     NONE        Silicon     ppm     ASTM D5185m     >20     <1     0        Potassium     ppm     ASTM D5185m     >20     <1     0        Water     WC Method     >0.1     NEG     NEG        Particles >4µm     ASTM D7647     >5000     ▲ 1596     249        Particles >6µm     ASTM D7647     >160     68     22        Particles >1µm     ASTM D7647     >40     25     5        Particles >21µm     ASTM D7647     >3     0     0        Particles >38µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NOR     NORML     NORML					-		
Silicon     ppm     ASTM D5185m< >20     2     <1					-		
Potassium     ppm     ASTM D5185m     >20     <1	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium     ppm     ASTM D5185m     >20     <1	Silicon	nnm	ASTM D5185m	>20	2	~1	
Water     WC Method     >0.1     NEG     NEG       Particles >4µm     ASTM D7647     >5000     ▲ 10983     1147        Particles >6µm     ASTM D7647     >1300     ▲ 1596     249        Particles >14µm     ASTM D7647     >160     68     22        Particles >21µm     ASTM D7647     >40     25     5        Particles >38µm     ASTM D7647     >10     3     1        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     1917/14     ▲ 21/18/13     17/15/12        Silt     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NORM     NORM     NORM        Appearance     scalar     *Visual     NORM     NORM     NORM        Appearance     scalar     *Visual     NORM     NORM     NORM							
Particles >4µm     ASTM D7647     >5000     ▲ 10983     1147        Particles >6µm     ASTM D7647     >1300     ▲ 1596     249        Particles >14µm     ASTM D7647     >160     68     22        Particles >21µm     ASTM D7647     >40     25     5        Particles >38µm     ASTM D7647     >10     3     1        Particles >71µm     ASTM D7647     >3     0     0        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     1917/14     ▲ 21/18/13     171/15/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NOR     NORE     NORE        Sand/Dirt     scalar     *Visual     NOR     NORM     NORML        Boron     ppm     ASTM D5185m     5     0 <td< th=""><th></th><th>ppiii</th><th></th><th></th><th></th><th>÷</th><th></th></td<>		ppiii				÷	
Particles >6µm   ASTM D7647   >1300   ▲ 1596   249      Particles >14µm   ASTM D7647   >160   68   22      Particles >21µm   ASTM D7647   >40   25   5      Particles >38µm   ASTM D7647   >10   3   1      Particles >38µm   ASTM D7647   >3   0   0      Oil Cleanliness   ISO 4406 (c)   >19/17/14   21/18/13   17/15/12      Silt   scalar   *Visual   NONE   NONE   NONE      Debris   scalar   *Visual   NONE   NONE   NONE      Sand/Dirt   scalar   *Visual   NOR   NORML   NORML      Appearance   scalar   *Visual   NORML   NORML       Sodium   ppm   ASTM D5185m   5   0   0      Boron   ppm   ASTM D5185m   5   5   0      Manganese   ppm   ASTM D5185m   5   1							
Particles >14µm     ASTM D7647     >160     68     22        Particles >21µm     ASTM D7647     >40     25     5        Particles >38µm     ASTM D7647     >10     3     1        Particles >38µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     21/18/13     17/15/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NONE     NORE     NORE        Appearance     scalar     *Visual     NORM     NORML         Odor     scalar     *Visual     NORM     NORML         Boron     ppm     ASTM D5185m     5     0         Barium     ppm     ASTM D5185m     5     1 <td< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>							
Particles >21µm     ASTM D7647     >40     25     5        Particles >38µm     ASTM D7647     >10     3     1        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     ▲ 21/18/13     17/15/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NORK     NORML     NORML        Appearance     scalar     *Visual     NORML     NORML     NORML        Odor     scalar     *Visual     NORML     NORML     NORML        Boron     ppm     ASTM D5185m     5     0         Barium     ppm     ASTM D5185m     5     0         Magnesium     ppm     ASTM D5185m     20							
Particles >38µm     ASTM D7647     >10     3     1        Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     ▲ 21/18/13     17/15/12        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        Godor     scalar     *Visual     NORML     NORML     NORML        Odor     scalar     *Visual     >0.1     NEG         Boron     ppm     ASTM D5185m     5     0         Malganese     ppm     ASTM D5185m							
Particles >71µm     ASTM D7647     >3     0     0        Oil Cleanliness     ISO 4406 (c)     >19/17/14     21/18/13     17/15/12        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        Godor     scalar     *Visual     NORML     NORML     NORML        Odor     scalar     *Visual     NORML     NORML     NORML        Boron     ppm     ASTM D5185m     5     0         Barium     ppm     ASTM D5185m     5      0        Magnesium     ppm     ASTM D5185m <th></th> <th></th> <th></th> <th></th> <th>-</th> <th></th> <th></th>					-		
Oil Cleanliness     ISO 4406 (c)     >19/17/14     ▲ 21/18/13     17/15/12        Silt     scalar     *Visual     NONE     NONE     NONE        Debris     scalar     *Visual     NONE     NONE     NONE        Sand/Dirt     scalar     *Visual     NONE     NONE     NONE        Appearance     scalar     *Visual     NORL     NORML     NORML        Odor     scalar     *Visual     NORML     NORML     NORML        Godor     scalar     *Visual     NORML     NORML     NORML        Modor     scalar     *Visual     >0.1     NEG         Boron     ppm     ASTM D5185m     5     0         Barium     ppm     ASTM D5185m     5      0        Magnesium     ppm     ASTM D5185m     20     <1     0        Magnesium     ppm					-		
Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m500BoronppmASTM D5185m500BariumppmASTM D5185m50MolybdenumppmASTM D5185m5<10MagnesiumppmASTM D5185m200<1CalciumppmASTM D5185m20022PhosphorusppmASTM D5185m300214293ZincppmASTM D5185m3706474SulfurppmASTM D5185m2500326449Acid Number (AN)mg KOHyASTM D5185m25000.14					-	-	
Debrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m500BoronppmASTM D5185m500BariumppmASTM D5185m50MolybdenumppmASTM D5185m5<10ManganeseppmASTM D5185m20<10MagnesiumppmASTM D5185m200<22PhosphorusppmASTM D5185m300214293ZincppmASTM D5185m3706474SulfurppmASTM D5185m2500326449Acid Number (AN)mg KOH/gASTM D5185m0.570.260.14		scalar					
Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m00BoronppmASTM D5185m50BariumppmASTM D5185m50MolybdenumppmASTM D5185m5<10MagneseppmASTM D5185m250<MagnesiumppmASTM D5185m20022PhosphorusppmASTM D5185m3706474ZincppmASTM D5185m2500326449SulfurppmASTM D5185m25000.14					-		
Appearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m00BoronppmASTM D5185m50BariumppmASTM D5185m50MolybdenumppmASTM D5185m5<10MagneseppmASTM D5185m250MagnesiumppmASTM D5185m20022PhosphorusppmASTM D5185m300214293ZincppmASTM D5185m3706474SulfurppmASTM D5185m2500326449Acid Number (AN)mg KOH/gASTM D8450.570.260.14							
Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGSodiumppmASTM D5185m00BoronppmASTM D5185m500BariumppmASTM D5185m50MolybdenumppmASTM D5185m50MagneseppmASTM D5185m250MagnesiumppmASTM D5185m2022PhosphorusppmASTM D5185m300214293ZincppmASTM D5185m3706474SulfurppmASTM D5185m2500326449Acid Number (AN)mg KOH/gASTM D8450.570.260.14	Appearance			NORML	NORML		
Emulsified Water     scalar     *Visual     >0.1     NEG     NEG        Sodium     ppm     ASTM D5185m     0     0.1      0        Boron     ppm     ASTM D5185m     5     0     0.1        Barium     ppm     ASTM D5185m     5     5     0.1        Molybdenum     ppm     ASTM D5185m     5     <1     0        Magnese     ppm     ASTM D5185m     25     0     <1        Magnesium     ppm     ASTM D5185m     250     0     <1        Phosphorus     ppm     ASTM D5185m     200     2     2        Phosphorus     ppm     ASTM D5185m     300     214     293        Zinc     ppm     ASTM D5185m     370     64     74        Sulfur     ppm     ASTM D5185m     2500     326     449   Acid Number (AN)     mg KOH/g <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>							
Sodium     ppm     ASTM D5185m     0     0        Boron     ppm     ASTM D5185m     5     0     0        Barium     ppm     ASTM D5185m     5     5     0        Barium     ppm     ASTM D5185m     5     5     0        Molybdenum     ppm     ASTM D5185m     5     <1     0        Magnese     ppm     ASTM D5185m     25     0     <1        Magnesium     ppm     ASTM D5185m     250     0     <1        Calcium     ppm     ASTM D5185m     200     2     2        Phosphorus     ppm     ASTM D5185m     300     214     293        Zinc     ppm     ASTM D5185m     370     64     74        Sulfur     ppm     ASTM D5185m     2500     326     449        Acid Number (AN)     mg KOH/g     ASTM D845     0.57     0.26 </th <th></th> <th></th> <th></th> <th></th> <th>-</th> <th></th> <th></th>					-		
Boron     ppm     ASTM D5185m     5     0     0        Barium     ppm     ASTM D5185m     5     5     0        Molybdenum     ppm     ASTM D5185m     5     <1     0        Manganese     ppm     ASTM D5185m     25     <1     0        Magnesium     ppm     ASTM D5185m     25     <1     0        Calcium     ppm     ASTM D5185m     200     <2     2        Phosphorus     ppm     ASTM D5185m     300     <214     293        Zinc     ppm     ASTM D5185m     370       <       Sulfur     ppm     ASTM D5185m     370       <       Acid Number (AN)     mg KOH/g     ASTM D5185m     0.57       <							
Barium     ppm     ASTM D5185m     5     0        Molybdenum     ppm     ASTM D5185m     5     <1     0        Manganese     ppm     ASTM D5185m     <1     0        Magnesium     ppm     ASTM D5185m     25     0     <1        Calcium     ppm     ASTM D5185m     200     2     2        Phosphorus     ppm     ASTM D5185m     300     214     293        Zinc     ppm     ASTM D5185m     370     64     74        Sulfur     ppm     ASTM D5185m     2500     326     449        Acid Number (AN)     mg KOH/g     ASTM D8045     0.57     0.26     0.14	Sodium	ppm				0	
Molybdenum     ppm     ASTM D5185m     5     <1		ppm		5	0	0	
Manganese     ppm     ASTM D5185m     <1		ppm					
Magnesium     ppm     ASTM D5185m     25     0     <1		ppm		5	<1	0	
Calcium     ppm     ASTM D5185m     200     2     2        Phosphorus     ppm     ASTM D5185m     300     214     293        Zinc     ppm     ASTM D5185m     370     64     74        Sulfur     ppm     ASTM D5185m     2500     326     449        Acid Number (AN)     mg KOH/g     ASTM D8045     0.57     0.26     0.14	-	ppm				0	
Phosphorus     ppm     ASTM D5185m     300     214     293        Zinc     ppm     ASTM D5185m     370     64     74        Sulfur     ppm     ASTM D5185m     2500     326     449        Acid Number (AN)     mg KOH/g     ASTM D8045     0.57     0.26     0.14		ppm					
Zinc     ppm     ASTM D5185m     370     64     74        Sulfur     ppm     ASTM D5185m     2500     326     449        Acid Number (AN)     mg KOH/g     ASTM D8045     0.57     0.26     0.14		ppm					
Sulfur     ppm     ASTM D5185m     2500     326     449        Acid Number (AN)     mg KOH/g     ASTM D8045     0.57     0.26     0.14		ppm	ASTM D5185m				
Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.26 0.14		ppm					
		ppm	ASTM D5185m	2500		449	
Visc @ 40°C cSt ASTM D445 46 45.1 45.8	( )			0.57			
	Visc @ 40°C	cSt	ASTM D445	46	45.1	45.8	

## WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL



Certificate L2367 Test Package : MOB 2 To discuss this sample report. contact (

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)

Contact: KENNY HANEY khaney@flaglerce.com T: (813)630-0077 012) F: (813)630-2233

Contact/Location: KENNY HANEY - VOLVO0093