

**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 



## **CATERPILLAR LOADER 80**

Component Diesel Engine

Test	PETRO CANADA 15W40 ( GA	<b>AL</b> )						
Resample at the next service interval to monitor.	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample at the next service interval to monitor.	TESSIMIENS/CHOIC						-	
Machine Age	Resample at the next service interval to monitor.							
Oil Age			hrs					
Filter Age		•	hrs					
Cilchanged   Cilent Info   Changed   Cilent Info   Changed   Cha				Client Info				
Filter Changed   Sample Status		•						
Nome				Client Info				
Iron		_				_		
Chromium   Oph   ASTM Disting   20   2								
All component wear rates are normal.    Nicke	WEAR	Iron	ppm	ASTM D5185m	>100	26		
Titanium   ppm   ASTMOSISES   22   0		Chromium	ppm	ASTM D5185m	>20	2		
Silver   ppm   ASTM D5186m   >25   2   0         Aluminum   ppm   ASTM D5186m   >25   2         Lead   ppm   ASTM D5186m   >25   2         Lead   ppm   ASTM D5186m   >25   2         Copper   ppm   ASTM D5186m   >30   6         Tin   ppm   ASTM D5186m   >30   6         Vanadium   ppm   ASTM D5186m   >15   <1         Vanadium   ppm   ASTM D5186m   >25   7         Vanadium   ppm   ASTM D5186m   >20   2         Vanadium   ppm   ASTM D5186m   >20   2         Vanadium   ppm   ASTM D5186m   >20   2         Vanadium   ppm   ASTM D5186m   ASTM D7415   >30   19.3       Vanadium   ppm   ASTM D5186m   NONE   NONE         Vanadium   ppm   ASTM D5186m   ASTM D5186		Nickel	ppm	ASTM D5185m	>2	0		
Aluminum   ppm   ASTM D5185m   >25   2		Titanium	ppm	ASTM D5185m	>2	0		
Lead		Silver	ppm	ASTM D5185m	>2	0		
Copper		Aluminum	ppm	ASTM D5185m	>25	2		
Tin		Lead	ppm			<1		
Vanadium   ppm   ASTM 05185m   NONE   NONE   White Metal   scalar   Visual   NONE   NONE   NONE   Water   Stalar   Visual   NONE   NO		Copper	ppm	ASTM D5185m	>330	6		
White Metal Yellow Metal   Scalar *Visual NONE NONE   NO		Tin	ppm	ASTM D5185m	>15	<1		
Silicon		Vanadium	ppm	ASTM D5185m		0		
Silicon   ppm   ASTM D5185m   >25   7		White Metal	scalar	*Visual	NONE	NONE		
Potassium   ppm   ASTM D5185m   2-0   2		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium   ppm   ASTM D5185m   2-0   2		0:1:		AOTA DEADE	05	_		
Fuel   WC Method   >5   <1.0			• •					
Valer			ppm					
Glycol   Scot % %								
Soot %					>0.2			
Nitration   Abs/cm   *ASTM D7624   >20   6.5			0/		0			
Sulfation   Abs/.tmm   *ASTM D7415   >30   19.3								
Silt   Scalar   *Visual   NONE   NONE   Debris   Scalar   *Visual   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NORML   NORML   NORML   Scalar   *Visual   NORML   Scalar   *Scalar   *Visual   NORML   Scalar   *Visual   NORML   Scalar   *Scalar   *Visual   NORML   Scalar   *Scalar   *Visual   NORML   Scalar   *Scalar   *Scalar   *Scalar   *Scalar   *Visual   NORML   *Scalar   *Sca								
Debris   Scalar   *Visual   NONE								
Sand/Dirt   Scalar   *Visual   NONE   NONE   Appearance   Scalar   *Visual   NORML								
Appearance								
Calcium   Calc								
Emulsified Water   scalar *Visual   >0.2   NEG								
Sodium   ppm   ASTM D5185m   3								
Boron   ppm   ASTM D5185m   0	<u></u>	Liliuisilleu vvalei	Scalai	Visuai	>0.2			
Boron   ppm   ASTM D5185m   0	FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
Barium   ppm   ASTM D5185m   D0       Molybdenum   ppm   ASTM D5185m   D59       Magnesium   ppm   ASTM D5185m   D63       Magnesium   ppm   ASTM D5185m   D585m   D59       Magnesium   ppm   ASTM D5185m   D63       Magnesium   ppm   ASTM D5185m   D585m   D59         Magnesium   ppm   ASTM D5185m   D59   D59           Magnesium   ppm   ASTM D5185m   D59           Magnesium   ppm   ASTM D5185m   D59   D59           Magnesium   ppm   ASTM D5185m   D59             Magnesium   ppm   ASTM D5185m   D59             Magnesium   ppm   ASTM D5185m   D59               Magnesium   ppm   ASTM D5185m   D59             Magnesium   ppm   ASTM D5185m   D59                   Magnesium   ppm   ASTM D5185m   D59	The BN result indicates that there is suitable alkalinity remaining in the							
Molybdenum ppm ASTM D5185m		Barium		ASTM D5185m		0		
Manganese         ppm         ASTM D5185m         <1			• •					
Magnesium         ppm         ASTM D5185m         963             Calcium         ppm         ASTM D5185m         1033             Phosphorus         ppm         ASTM D5185m         1117             Zinc         ppm         ASTM D5185m         1311             Sulfur         ppm         ASTM D5185m         3112             Oxidation         Abs/.1mm         *ASTM D7414         >25         14.0             Base Number (BN)         mg KOH/g         ASTM D2896         9.1		-		ASTM D5185m				
Calcium         ppm         ASTM D5185m         1033             Phosphorus         ppm         ASTM D5185m         1117             Zinc         ppm         ASTM D5185m         1311             Sulfur         ppm         ASTM D5185m         3112             Oxidation         Abs/.1mm         *ASTM D7414         >25         14.0             Base Number (BN)         mg KOH/g         ASTM D2896         9.1		-		ASTM D5185m				
Phosphorus         ppm         ASTM D5185m         1117             Zinc         ppm         ASTM D5185m         1311             Sulfur         ppm         ASTM D5185m         3112             Oxidation         Abs/.1mm         *ASTM D7414         >25         14.0             Base Number (BN)         mg KOH/g         ASTM D2896         9.1		_						
Zinc         ppm         ASTM D5185m         1311             Sulfur         ppm         ASTM D5185m         3112             Oxidation         Abs/.1mm         *ASTM D7414         >25         14.0             Base Number (BN)         mg KOH/g         ASTM D2896         9.1		Phosphorus		ASTM D5185m		1117		
Sulfur         ppm         ASTM D5185m         3112             Oxidation         Abs/.1mm         *ASTM D7414         >25         14.0             Base Number (BN)         mg KOH/g         ASTM D2896         9.1			ppm			1311		
Oxidation         Abs/.1mm         *ASTM D7414         >25         14.0             Base Number (BN)         mg KOH/g         ASTM D2896         9.1		Sulfur		ASTM D5185m		3112		
		Oxidation	Abs/.1mm		>25			
Visc @ 100°C cSt ASTM D445		Base Number (BN)	mg KOH/g	ASTM D2896		9.1		
						14.6		





Laboratory Sample No.

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

: WC0906054 Lab Number : 06104992

Unique Number : 10903222

Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

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. **C.L. BENTON & SONS INC** 

706 38TH AVE N MYRTLE BEACH, SC US 29577

Contact: NEIL neil@clbenton.com

T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Received

**Tested** 

: 29 Feb 2024

: 01 Mar 2024

: 01 Mar 2024 - Wes Davis