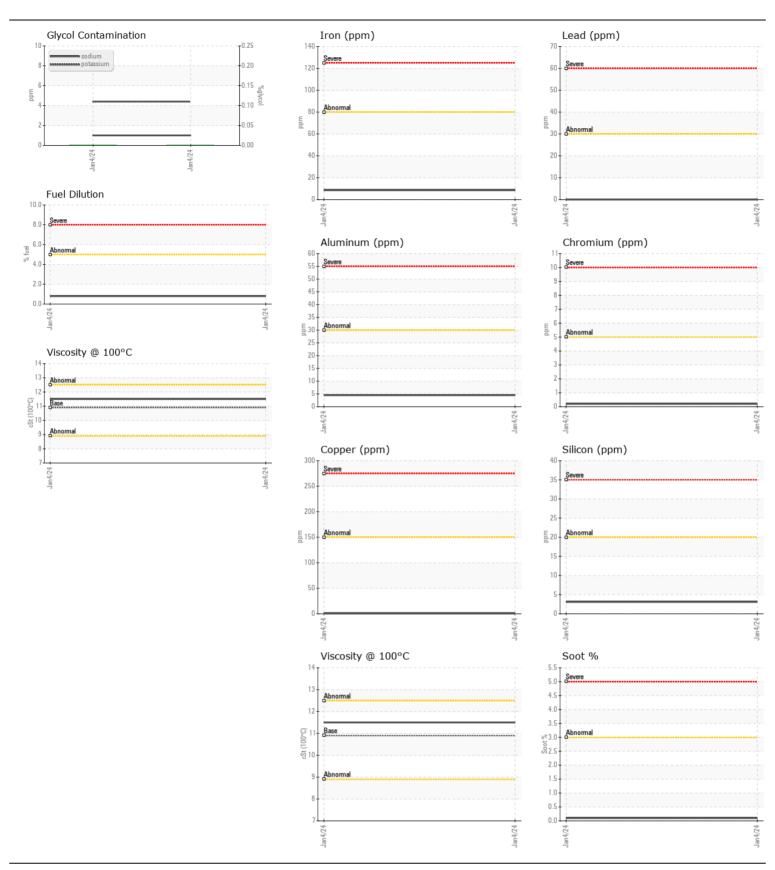
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

## **FREIGHTLINER NO UNIT WC0788979**

Diesel Engine

No corrective action is recommended at this time. Resample at the enter service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL  SAE 30. Please confirm.    Machine Age   hrs   Client Into   S412	DIESEL ENGINE OIL SAE 30 ( GAL)					.,		
Name	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Date   Client Info   Q 4 Jan 2024   Client Info   Q 6   Client Info   Q	next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL	Sample Number		Client Info		WC0788979		
SAE 30. Please confirm.		Sample Date		Client Info		04 Jan 2024		
Client Info		Machine Age	hrs	Client Info		5412		
Piler Changed   Cilent Info   Not Changed   Piler Changed   Cilent Info   Not Roth   Noth   Not Roth   Not Roth   Not Roth   Not Roth   Not Roth   Not R		Oil Age	hrs	Client Info		0		
Filter Change   Filter Chang		Filter Age	hrs	Client Info		0		
No		Oil Changed		Client Info		Not Changd		
Iron		Filter Changed		Client Info		Not Changd		
All component wear rates are normal.    Chromium   ppm   ASTN DSIGN   > 2   0         Nickel   ppm   ASTN DSIGN   > 2   0         Titanium   ppm   ASTN DSIGN   > 3   0         Silver   ppm   ASTN DSIGN   > 3   0         Aluminum   ppm   ASTN DSIGN   > 3   0         Copper   ppm   ASTN DSIGN   > 5   0         Tin   ppm   ASTN DSIGN   > 5   0         Ti		Sample Status				NORMAL		
All component wear rates are normal.    Chromium   ppm   ASTN DSIGN   > 2   0         Nickel   ppm   ASTN DSIGN   > 2   0         Titanium   ppm   ASTN DSIGN   > 3   0         Silver   ppm   ASTN DSIGN   > 3   0         Aluminum   ppm   ASTN DSIGN   > 3   0         Copper   ppm   ASTN DSIGN   > 5   0         Tin   ppm   ASTN DSIGN   > 5   0         Ti	WEAR	Iron	maa	ASTM D5185(m)	>80	9		
Nickel   ppm   ASTM DS185/m   22   0         Titanium   ppm   ASTM DS185/m   30   0         Silver   ppm   ASTM DS185/m   30   0         Aluminum   ppm   ASTM DS185/m   30   0         Lead   ppm   ASTM DS185/m   30   0         Lead   ppm   ASTM DS185/m   30   0         Copper   ppm   ASTM DS185/m   30   0         Tin   ppm   ASTM DS185/m   55   0         Tin   ppm   ASTM DS185/m   55   0         Tin   ppm   ASTM DS185/m   50   0   11         Tin   ppm   ASTM DS185/m   50   0         Tin   ppm   ASTM DS185/m   150   910				. ,				
Titanium   ppm   ASTM 05185 m   30   30   30   30   30   30   30				, ,				
Silver		Titanium		, ,				
Lead		Silver			>3	0		
Copper		Aluminum	ppm	ASTM D5185(m)	>30	4		
Tin		Lead	ppm	ASTM D5185(m)	>30	0		
Vanadium   ppm   ASTM D5185(m)   20   3		Copper	ppm	ASTM D5185(m)	>150	<1		
Silicon   ppm   ASTM D5185(m)   >20   3		Tin	ppm	ASTM D5185(m)	>5	0		
Potassium   ppm   ASTM D5185(m)   >20   4		Vanadium	ppm	ASTM D5185(m)		0		
Potassium   ppm   ASTM D5185(m)   >20   4	CONTAMINATION	Ciliana		ACTM DE10F()		•		
Fuel   %   ASTM D7593   > 5   0.8	Fuel content negligible. Test for glycol is negative. There is no			, ,				
Water   WC Method   0.0.2   NEG           Glycol   %   ASTM D7922*   0.0           Soot %   %   ASTM D7824*   >3   0.1           Nitration   Abs/cm   ASTM D7824*   >20   8.1           Sulfation   Abs/mm   ASTM D7462*   >20   8.1           Sulfation   Abs/mm   ASTM D7462*   >20   NEG           Sulfation   Abs/mm   ASTM D7465*   >30   18.8           The condition of the oil is acceptable for the time in service.      Sodium   ppm   ASTM D5185(m)   >75   1           Barium   ppm   ASTM D5185(m)   250   11           Molybdenum   ppm   ASTM D5185(m)   10   0           Manganese   ppm   ASTM D5185(m)   100   5           Manganese   ppm   ASTM D5185(m)   450   94           Calcium   ppm   ASTM D5185(m)   3000   2229           Phosphorus   ppm   ASTM D5185(m)   1150   910           Zinc   ppm   ASTM D5185(m)   1350   1014           Sulfur   ppm   ASTM D5185(m)   4250   3140           Oxidation   Abs/:mm   ASTM D7414*   >25   11.9								
Glycol   %   ASTM D7922*   0.0         Soot %   %   ASTM D7844*   >3   0.1         Nitration   Abs/cm   Abs/lmm   Abs/mm   ASTM D7624*   >20   8.1         Sulfation   Abs/lmm   Abs/mm   ASTM D7415*   >30   18.8         Emulsified Water   scalar   Visual*   >0.2   NEG         The condition of the oil is acceptable for the time in service.     Boron   ppm   ASTM D5185(m)   >75   1         Barium   ppm   ASTM D5185(m)   250   11         Molybdenum   ppm   ASTM D5185(m)   10   0         Manganese   ppm   ASTM D5185(m)   100   5         Manganese   ppm   ASTM D5185(m)   450   94         Calcium   ppm   ASTM D5185(m)   3000   2229         Phosphorus   ppm   ASTM D5185(m)   1150   910         Zinc   ppm   ASTM D5185(m)   1350   1014         Sulfur   ppm   ASTM D5185(m)   4250   3140         Oxidation   Abs/1mm   ASTM D71414*   >25   11.9			70					
Soot %			0/		>0.2			
Nitration		-			<b>\3</b>			
Sulfation   Abs/.tmm   ASTM D7415*   >30   18.8								
Emulsified Water   scalar   Visual*   >0.2   NEG								
Boron   ppm   ASTM D5185(m)   250   11           Barium   ppm   ASTM D5185(m)   10   0           Molybdenum   ppm   ASTM D5185(m)   100   5           Manganese   ppm   ASTM D5185(m)   450   94           Phosphorus   ppm   ASTM D5185(m)   3000   2229           Zinc   ppm   ASTM D5185(m)   1350   1014           Sulfur   ppm   ASTM D5185(m)   4250   3140           Oxidation   Abs/.1mm   ASTM D5185(m)   4250   3140								
Boron   ppm   ASTM D5185(m)   250   11           Barium   ppm   ASTM D5185(m)   10   0           Molybdenum   ppm   ASTM D5185(m)   100   5           Manganese   ppm   ASTM D5185(m)   450   94           Phosphorus   ppm   ASTM D5185(m)   3000   2229           Zinc   ppm   ASTM D5185(m)   1350   1014           Sulfur   ppm   ASTM D5185(m)   4250   3140           Oxidation   Abs/.1mm   ASTM D5185(m)   4250   3140	ELUID CONDITION	Cadium		ACTM DE10E(m)	. 75			
Barium   ppm   ASTM D5185(m)   10   0         Molybdenum   ppm   ASTM D5185(m)   100   5         Manganese   ppm   ASTM D5185(m)   0         Magnesium   ppm   ASTM D5185(m)   450   94         Calcium   ppm   ASTM D5185(m)   3000   2229         Phosphorus   ppm   ASTM D5185(m)   1150   910         Zinc   ppm   ASTM D5185(m)   1350   1014         Sulfur   ppm   ASTM D5185(m)   4250   3140         Oxidation   Abs/.1mm   ASTM D7414*   >25   11.9								
Molybdenum         ppm         ASTM D5185(m)         100         5             Manganese         ppm         ASTM D5185(m)         0             Magnesium         ppm         ASTM D5185(m)         450         94             Calcium         ppm         ASTM D5185(m)         3000         2229             Phosphorus         ppm         ASTM D5185(m)         1150         910             Zinc         ppm         ASTM D5185(m)         1350         1014             Sulfur         ppm         ASTM D5185(m)         4250         3140             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9								
Manganese         ppm         ASTM D5185(m)         0             Magnesium         ppm         ASTM D5185(m)         450         94             Calcium         ppm         ASTM D5185(m)         3000         2229             Phosphorus         ppm         ASTM D5185(m)         1150         910             Zinc         ppm         ASTM D5185(m)         1350         1014             Sulfur         ppm         ASTM D5185(m)         4250         3140             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9								
Magnesium         ppm         ASTM D5185(m)         450         94             Calcium         ppm         ASTM D5185(m)         3000         2229             Phosphorus         ppm         ASTM D5185(m)         1150         910             Zinc         ppm         ASTM D5185(m)         1350         1014             Sulfur         ppm         ASTM D5185(m)         4250         3140             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9				, ,	100			
Calcium         ppm         ASTM D5185(m)         3000         2229             Phosphorus         ppm         ASTM D5185(m)         1150         910             Zinc         ppm         ASTM D5185(m)         1350         1014             Sulfur         ppm         ASTM D5185(m)         4250         3140             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9					450			
Phosphorus         ppm         ASTM D5185(m)         1150         910             Zinc         ppm         ASTM D5185(m)         1350         1014             Sulfur         ppm         ASTM D5185(m)         4250         3140             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9		_						
Zinc         ppm         ASTM D5185(m)         1350         1014             Sulfur         ppm         ASTM D5185(m)         4250         3140             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9								
Sulfur         ppm         ASTM D5185(m)         4250         3140             Oxidation         Abs/.1mm         ASTM D7414*         >25         11.9								
Oxidation		Sulfur		ASTM D5185(m)	4250	3140		
Visc @ 100°C   cSt   ASTM D7279(m)   10.9   11.5		Oxidation	Abs/.1mm			11.9		
		Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.5		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number** 

: WC0788979 : 02607424

: 5708510

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Recieved : 09 Jan 2024 Diagnosed : 11 Jan 2024 Diagnostician : Kevin Marson Test Package : MOB 1 ( Additional Tests: FuelDilution, Glycol, PercentFuel )

P.O. BOX 155,, 17080 HWY #7 EAST

**CA K7H 3E3** Contact: Dave oakesparts@cogeco.net T: (613)267-2843 F: (613)267-6673

**OAKES TRUCK SALES** 

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

PERTH, ON