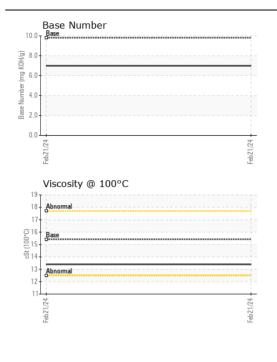
**WEAR** CONTAMINATION **FLUID CONDITION** 

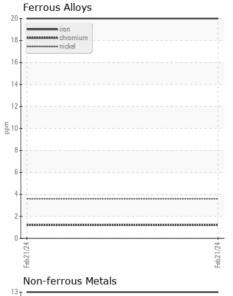
**NORMAL NORMAL NORMAL** 

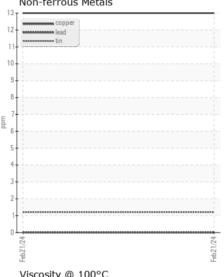
[0111048] Machine Id 914042

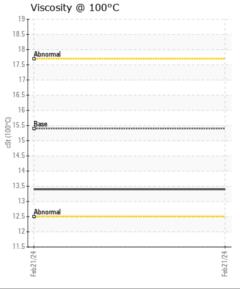
Component Center Diesel Engine

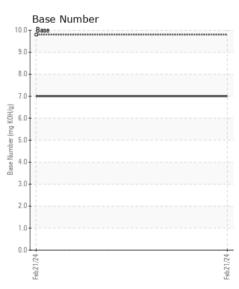
Sample Number   Cilent Info   CR111088	PETRO CANADA DURON SHP 15W40 (38 QTS	)						
Sample Date   Client Info   Client Info   Client Info   Client Info   Client Info   Client Info   Changed   Firs   Client Info   Changed   Changed   Client Info   Changed   Changed   Client Info   Changed   Changed   Client Info   Changed   Changed   Changed   Client Info   Changed   Changed   Changed   Changed   Changed   Client Info   Changed   Changed   Changed   Changed   Changed   Client Info   Changed	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age   hrs   Client Info   0   0   0   0   0   0   0   0   0	Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0111048		
Oil Age		Sample Date		Client Info		21 Feb 2024		
Filter Age   bits   client Info   Changed   Client Info   Changed   Client Info   Changed   Changed   Client Info   Changed   Changed		Machine Age	hrs	Client Info		0		
Oil Changed   Client Info   Changed   Client Info   Changed   Client Info   Client Info   Changed   Client Info   Client Info   Changed   Client Info   Client Info   Changed   Client Info   Changed   Client Info   Client Info		Oil Age	hrs	Client Info		1716		
Filter Changed   Sample Status		Filter Age	hrs	Client Info		0		
NCEAR   Iron		Oil Changed		Client Info		Changed		
Iron		Filter Changed		Client Info		Changed		
Chromium   ppm   ASTM D5185m   >5   4		Sample Status				NORMAL		
Chromium   ppm   ASTM D5185m   >5   4	WEAR	Iron	nnm	ASTM D5185m	<b>&gt;120</b>	20		
Nickel   ppm   ASTM D8185m   >5   4	WEAT							
Titanium   ppm   ASTM D6185m   >2   <1	All component wear rates are normal.							
Silver								
Aluminum   ppm   ASTM D6185m   >20   4								
Lead								
Copper								
Tin								
Vanadium   Vanadium								
White Metal   Scalar   *Visual   NONE   NO					>15			
Vellow Metal   Scalar   Visual   NONE   NONE					NONE			
Silicon   ppm   ASTM D5185m   >25   7								
Potassium   ppm   ASTM D5185m   >20   12		Yellow Metal	scalar	^Visual	NONE	NONE		
Fuel   WC Method   So.0   <1.0   Silt   WC Method   So.0   NEG   So.0   Silt   So.0   So.0	CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7		
Water	There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	12		
Glycol   WC Method   NEG         Soot % % % *ASTM D7844   >4		Fuel		WC Method	>3.0	<1.0		
Soot %		Water		WC Method	>0.2	NEG		
Nitration   Abs/cm   *ASTM D7624   >20   9.0         Sulfation   Abs/.tmm   *ASTM D7415   >30   20.1         Silt   scalar   *Visual   NONE   NONE         Debris   scalar   *Visual   NONE   NONE   NONE         Appearance   scalar   *Visual   NORML   NORML   NORML   NORML         Appearance   scalar   *Visual   NORML   NORML   NORML         Appearance   scalar   *Visual   NORML   NORML   NORML         Codor   scalar   *Visual   NORML   NORML   NORML         Emulsified Water   scalar   *Visual   NORML   NORML         Emulsified Water   scalar   *Visual   NORML   NORML         Molybdenum   ppm   ASTM D5185m   0   2         Barium   ppm   ASTM D5185m   0   2         Molybdenum   ppm   ASTM D5185m   0   41         Magnesium   ppm   ASTM D5185m   0   1         Magnesium   ppm   ASTM D5185m   0   1         Calcium   ppm   ASTM D5185m   1010   972         Calcium   ppm   ASTM D5185m   1150   1050         Sulfur   ppm   ASTM D5185m   2060   3105         Sulfur   ppm   ASTM D5185m   2060   3105         Sulfur   ppm   ASTM D5185m   22   16.3         ASSTM D5185m   1270   1263           Sulfur   ppm   ASTM D5185m   2060   3105           Oxidation   Abs/.tmm   *ASTM D7414   >25   16.3           ASTM D5185m   2060   3105           ASTM D5185m   2060   3105         ASTM D5185m   2060   3105         ASTM D5185m   2060   3105     -		Glycol		WC Method		NEG		
Sulfation   Abs./imm   "ASTM D7415   >30   20.1		Soot %	%	*ASTM D7844	>4	0.5		
Silt   Scalar   *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NORML   Scalar   *Visual   NORML   NOR		Nitration	Abs/cm	*ASTM D7624	>20	9.0		
Debris   Scalar   *Visual   NONE   NONE   NONE   Sand/Dirt   Scalar   *Visual   NONE   NONE		Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1		
Sand/Dirt   Scalar   *Visual   NONE   NONE   NORML		Silt	scalar	*Visual	NONE	NONE		
Appearance   Scalar   *Visual   NORML   NORML   NORML   Emulsified Water   Scalar   *Visual   NORML   NORML   NORML   Emulsified Water   Scalar   *Visual   NORML   NORML   NORML   NORML   Emulsified Water   Scalar   *Visual   NORML   NO		Debris	scalar	*Visual	NONE	NONE		
Codor   Scalar   *Visual   NORML   NORML   NORML   Emulsified Water   Scalar   *Visual   NORML   NOR		Sand/Dirt	scalar	*Visual	NONE	NONE		
Codor   Scalar   *Visual   NORML   NORML   NORML   Emulsified Water   Scalar   *Visual   NORML   NOR		Appearance	scalar	*Visual	NORML	NORML		
Emulsified Water   scalar   *Visual   >0.2   NEG			scalar	*Visual		NORML		
Boron   ppm   ASTM D5185m   0   2         Barium   ppm   ASTM D5185m   0   <1         Molybdenum   ppm   ASTM D5185m   0   <1         Magnesium   ppm   ASTM D5185m   0   1         Magnesium   ppm   ASTM D5185m   1010   972         Calcium   ppm   ASTM D5185m   1070   1075         Phosphorus   ppm   ASTM D5185m   1150   1050         Zinc   ppm   ASTM D5185m   1270   1263         Sulfur   ppm   ASTM D5185m   2060   3105         Oxidation   Abs/.1mm   *ASTM D7414   >25   16.3         Base Number (BN)   mg KOH/g   ASTM D2896   9.8   7.0		<b>Emulsified Water</b>	scalar	*Visual	>0.2			
Boron   ppm   ASTM D5185m   0   2         Barium   ppm   ASTM D5185m   0   <1         Molybdenum   ppm   ASTM D5185m   0   <1         Magnesium   ppm   ASTM D5185m   0   1         Magnesium   ppm   ASTM D5185m   1010   972         Calcium   ppm   ASTM D5185m   1070   1075         Phosphorus   ppm   ASTM D5185m   1150   1050         Zinc   ppm   ASTM D5185m   1270   1263         Sulfur   ppm   ASTM D5185m   2060   3105         Oxidation   Abs/.1mm   *ASTM D7414   >25   16.3         Base Number (BN)   mg KOH/g   ASTM D2896   9.8   7.0	ELLID CONDITION	0 "		AOTA DE LOS				
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.    Barium   ppm   ASTM D5185m   0   -1         Molybdenum   ppm   ASTM D5185m   0   1         Magnesium   ppm   ASTM D5185m   1010   972         Calcium   ppm   ASTM D5185m   1070   1075         Phosphorus   ppm   ASTM D5185m   1150   1050         Zinc   ppm   ASTM D5185m   1270   1263         Sulfur   ppm   ASTM D5185m   2060   3105         Oxidation   Abs/.1mm   *ASTM D7414   >25   16.3         Base Number (BN)   mg KOH/g   ASTM D2896   9.8   7.0	FLUID CONDITION				0			
Molybdenum   ppm   ASTM D5185m   60   67         Manganese   ppm   ASTM D5185m   1010   972         Magnesium   ppm   ASTM D5185m   1070   1075         Phosphorus   ppm   ASTM D5185m   1150   1050         Zinc   ppm   ASTM D5185m   1270   1263         Sulfur   ppm   ASTM D5185m   2060   3105         Oxidation   Abs/.1mm   *ASTM D7414   >25   16.3         Base Number (BN)   mg KOH/g   ASTM D2896   9.8   7.0	The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.							
Manganese         ppm         ASTM D5185m         0         1             Magnesium         ppm         ASTM D5185m         1010         972             Calcium         ppm         ASTM D5185m         1070         1075             Phosphorus         ppm         ASTM D5185m         1150         1050             Zinc         ppm         ASTM D5185m         1270         1263             Sulfur         ppm         ASTM D5185m         2060         3105             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.3             Base Number (BN)         mg KOH/g         ASTM D2896         9.8         7.0								
Magnesium         ppm         ASTM D5185m         1010         972             Calcium         ppm         ASTM D5185m         1070         1075             Phosphorus         ppm         ASTM D5185m         1150         1050             Zinc         ppm         ASTM D5185m         1270         1263             Sulfur         ppm         ASTM D5185m         2060         3105             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.3             Base Number (BN)         mg KOH/g         ASTM D2896         9.8         7.0		-						
Calcium         ppm         ASTM D5185m         1070         1075             Phosphorus         ppm         ASTM D5185m         1150         1050             Zinc         ppm         ASTM D5185m         1270         1263             Sulfur         ppm         ASTM D5185m         2060         3105             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.3             Base Number (BN)         mg KOH/g         ASTM D2896         9.8         7.0		_						
Phosphorus         ppm         ASTM D5185m         1150         1050             Zinc         ppm         ASTM D5185m         1270         1263             Sulfur         ppm         ASTM D5185m         2060         3105             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.3             Base Number (BN)         mg KOH/g         ASTM D2896         9.8         7.0		•						
Zinc         ppm         ASTM D5185m         1270         1263             Sulfur         ppm         ASTM D5185m         2060         3105             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.3             Base Number (BN)         mg KOH/g         ASTM D2896         9.8         7.0								
Sulfur         ppm         ASTM D5185m         2060         3105             Oxidation         Abs/.1mm         *ASTM D7414         >25         16.3             Base Number (BN)         mg KOH/g         ASTM D2896         9.8         7.0								
Oxidation         Abs/.1mm         *ASTM D7414         >25         16.3             Base Number (BN)         mg KOH/g         ASTM D2896         9.8         7.0								
Base Number (BN) mg KOH/g ASTM D2896 9.8 7.0								
Visc @ 100°C cSt ASTM D445 15.4 13.4								
		Visc @ 100°C	cSt	ASTM D445	15.4	13.4		













Certificate L2367

Laboratory Sample No. Lab Number : 06102301

Unique Number : 10900531

Test Package : FLEET

: GFL0111048

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 27 Feb 2024 : 28 Feb 2024 **Tested** 

: 28 Feb 2024 - Wes Davis

GFL Environmental - 006 - Wilmington 3618 US Highway 421 N Wilmington, NC

US 28401 Contact: Eric Wood eric.wood@gflenv.com

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. T: (717)723-1956 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (910)762-6880

Diagnosed