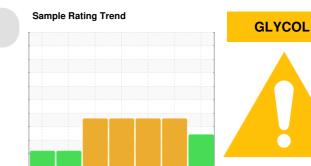


### **OIL ANALYSIS REPORT**



# 722026-261545

Component Diesel Engine Fluid PETRO CANADA DURON SHP 15W40 (--- GAL)

#### DIAGNOSIS

#### Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

Sodium and/or potassium levels remain high. There is a moderate amount of fuel present in the oil.

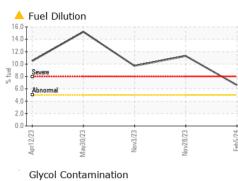
#### Fluid Condition

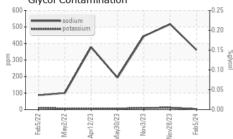
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

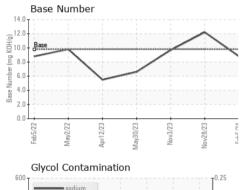
Sample Number   Client Info   GFL0109855   GFL0102547   GFL0009858     Sample Date   Client Info   19997   19820   19806     Machine Age   hrs   Client Info   19997   19820   19806     Oil Age   hrs   Client Info   0   0   0   0     Oil Changed   Client Info   Not Changed   Changed   N/A     Sample Number   Client Info   Not Changed   Changed   N/A     Sample Number   Client Info   Not Changed   N/A     CONTAMINATION   method   Imit/base   current   history1   history2     Iron   ppm   ASTM 05185m   >2   0   0								
Sample Date   Client Info   05 Feb 2024   28 Nov 2023   03 Nov 2023     Machine Age   hrs   Client Info   19997   19820   19806     Oil Age   hrs   Client Info   0   0   0     Oil Changed   Client Info   Not Changed   NA   SevERE   SEVERE     CONTAMINATION   method   Imit/base   current   history1   history1     Water   WC Method   >0.2   NEG   NEG   NEG     WEAR METALS   method   Imit/base   current   history1   history2     Iron   ppm   ASTM 05185n   >4   <1   1   1     Nickel   ppm   ASTM 05185n   >2   1   2   1     Silver   ppm   ASTM 05185n   >2   0   0   0     Alge   ppm   ASTM 05185n   >4   <1   1   1     Silver   ppm   ASTM 05185n   >45   0   2   1     Copper	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2	
Machine Age   hrs   Client Info   19997   19820   19806     Oil Age   hrs   Client Info   0   0   0     Sample Status   Client Info   Not Changed   N/A     Sample Status   Imbibose   Current   history1   history2     Water   WC Method   >0.2   NEG   NEG   NEG     WEAR METALS   method   limi/base   current   history1   history2     Water   WC Method   >0.2   NEG   NEG   NEG     Titanium   ppm   ASTM 05185m   >110   17   30   26     Chromium   ppm   ASTM 05185m   >2   <1	Sample Number		Client Info		GFL0109855	GFL0102547	GFL0098598	
Oil Age   Inrs   Client Info   0   0   0     Oil Changed   Client Info   Not Changd   Changed   N/A     Sample Status   Imitibase   Current   history1   history2     Water   WC Method   >0.2   NEG   NEG   NEG     Water   WC Method   >0.2   NEG   NEG   NEG     Water   WC Method   >0.2   NEG   NEG   NEG     Uron   ppm   ASTM D5185m   >4   <1	Sample Date		Client Info		05 Feb 2024	28 Nov 2023	03 Nov 2023	
Oil ChangedClient InfoNot Changd ABNORMALChanged SEVEREN/ASample StatusImageImageCurrentNistory1Nistory2WaterWC Method>0.2NEGNEGNEGWEAR METALSmethodImil/basecurrentNistory1Nistory2IronppmASTM D5185m>110173026ChromiumppmASTM D5185m>2121NickelppmASTM D5185m>2101SilverppmASTM D5185m>200000AluminumppmASTM D5185m>2000000AdaminumppmASTM D5185m>411111CopperppmASTM D5185m>4111 </td <td>Machine Age</td> <td>hrs</td> <td>Client Info</td> <td></td> <th>19997</th> <td>19820</td> <td>19806</td>	Machine Age	hrs	Client Info		19997	19820	19806	
Sample Status   ABNORMAL   SEVERE   SEVERE     CONTAMINATION   method   limit/base   current   history1   history2     Water   WC Method   >0.2   NEG   NEG   NEG     Wear METALS   method   limit/base   current   history1   history2     Iron   ppm   ASTM D5185m   >110   17   30   26     Chromium   ppm   ASTM D5185m   >2   <1	Oil Age	hrs	Client Info		0	0	0	
CONTAMINATION   method   limit/base   current   history1   history2     Water   WC Method   >0.2   NEG   NEG   NEG     WEAR METALS   method   limit/base   current   history1   history2     Iron   ppm   ASTM D5165m   >4   <1	Oil Changed		Client Info		Not Changd	Changed	N/A	
Water   WC Method   >0.2   NEG   NEG   NEG     WEAR METALS   method   limit/base   current   history1   history2     Iron   ppm   ASTM D5185m   >44   <1	<1	Sample Status				ABNORMAL	SEVERE	SEVERE
Water   WC Method   >0.2   NEG   NEG   NEG   NEG     WEAR METALS   method   limil/base   current   history1   history2     Iron   ppm   ASTM D5185m   >44   <1	<1	CONTAMINATIO	<b>N</b>	method	limit/base	current	historv1	history2
Iron   ppm   ASTM D5185m   >110   17   30   26     Chromium   ppm   ASTM D5185m   >4   <1								
Chromium   ppm   ASTM D5185m   >4   <1   1     Nickel   ppm   ASTM D5185m   >2   <1	WEAR METALS	;	method	limit/base	current	history1	history2	
Chromium   ppm   ASTM D5185m   >4   <1   1     Nickel   ppm   ASTM D5185m   >2   <1	Iron	ppm	ASTM D5185m	>110	17	30	26	
Nickel   ppm   ASTM D5185m   >2   <1   2   <1     Titanium   ppm   ASTM D5185m   >2   0   0   0     Sliver   ppm   ASTM D5185m   >2   0   0   0     Aluminum   ppm   ASTM D5185m   >25   1   3   3     Lead   ppm   ASTM D5185m   >25   60   46   45     Copper   ppm   ASTM D5185m   >4   <1	Chromium		ASTM D5185m	>4	<1	1	1	
Titanium   ppm   ASTM D5185m   <1   0   <1     Silver   ppm   ASTM D5185m   >2   0   0   0     Aluminum   ppm   ASTM D5185m   >25   1   3   3     Lead   ppm   ASTM D5185m   >45   0   2   1     Copper   ppm   ASTM D5185m   >45   60   46   45     Tin   ppm   ASTM D5185m   >4   <1							<1	
Silver   ppm   ASTM D5185m   >2   0   0   0     Aluminum   ppm   ASTM D5185m   >25   1   3   3     Lead   ppm   ASTM D5185m   >45   0   2   1     Copper   ppm   ASTM D5185m   >45   60   46   45     Tin   ppm   ASTM D5185m   >4   <1   1   <1     Vanadium   ppm   ASTM D5185m   >4   <1   1   <1   <1     Cadmium   ppm   ASTM D5185m   0   15   30   11   Barium     Barium   ppm   ASTM D5185m   0   15   30   11     Barium   ppm   ASTM D5185m   0   2   0   <1     Magnesium   ppm   ASTM D5185m   0   2   0   <1     Magnesium   ppm   ASTM D5185m   1010   810   793   829     Calcium   ppm   ASTM D5185m   1270 </td <td></td> <td></td> <td></td> <td></td> <th></th> <td></td> <td></td>								
Aluminum   ppm   ASTM D5185m   >25   1   3   3     Lead   ppm   ASTM D5185m   >45   0   2   1     Copper   ppm   ASTM D5185m   >85   60   46   45     Tin   ppm   ASTM D5185m   >4   <1				>2				
Lead   ppm   ASTM D5185m   >45   0   2   1     Copper   ppm   ASTM D5185m   >85   60   46   45     Tin   ppm   ASTM D5185m   >4   <1								
Copper   ppm   ASTM D5185m   >85   60   46   45     Tin   ppm   ASTM D5185m   >4   <1								
Tin   ppm   ASTM D5185m   >4   <1   1   <1     Vanadium   ppm   ASTM D5185m   0   0   0     Cadmium   ppm   ASTM D5185m   0   15   30   11     Boron   ppm   ASTM D5185m   0   15   30   11     Barium   ppm   ASTM D5185m   0   60   61   60   69     Manganese   ppm   ASTM D5185m   0   <1								
Vanadium   ppm   ASTM D5185m   <1   <1   <1   0     Cadmium   ppm   ASTM D5185m   0   0   0   0     ADDITIVES   method   limit/base   current   history1   history2     Boron   ppm   ASTM D5185m   0   15   30   11     Barium   ppm   ASTM D5185m   0   0   2   0     Molybdenum   ppm   ASTM D5185m   0   61   60   69     Manganese   ppm   ASTM D5185m   0   <1   0   <1     Qalcium   ppm   ASTM D5185m   1010   810   793   829     Calcium   ppm   ASTM D5185m   1010   840   925   925     Phosphorus   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m   2060   2621   2313   2774     CONTAMINANTS   method   limit/base   current<								
Cadmium   ppm   ASTM D5185m   0   0   0     ADDITIVES   method   limit/base   current   history1   history2     Boron   ppm   ASTM D5185m   0   15   30   11     Barium   ppm   ASTM D5185m   0   0   2   0     Molybdenum   ppm   ASTM D5185m   0   0   2   0     Marganese   ppm   ASTM D5185m   0   <1   0   <1   0   <1     Magnesium   ppm   ASTM D5185m   1010   810   793   829     Calcium   ppm   ASTM D5185m   1010   810   793   829     Calcium   ppm   ASTM D5185m   1070   889   894   925     Sulfur   ppm   ASTM D5185m   1070   889   894   925     Sulfur   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m <th< td=""><td></td><td></td><td></td><td>&gt;4</td><th></th><td></td><td></td></th<>				>4				
ADDITIVES   method   limit/base   current   history1   history2     Boron   ppm   ASTM D5185m   0   15   30   11     Barium   ppm   ASTM D5185m   0   0   2   0     Molybdenum   ppm   ASTM D5185m   60   61   60   69     Marganese   ppm   ASTM D5185m   0   <1								
Boron   ppm   ASTM D5185m   0   15   30   11     Barium   ppm   ASTM D5185m   0   0   2   0     Molybdenum   ppm   ASTM D5185m   60   61   60   69     Manganese   ppm   ASTM D5185m   0   <1		ppm			U	U	-	
Barium   ppm   ASTM D5185m   0   0   2   0     Molybdenum   ppm   ASTM D5185m   60   61   60   69     Manganese   ppm   ASTM D5185m   0   <1	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum   ppm   ASTM D5185m   60   61   60   69     Manganese   ppm   ASTM D5185m   0   <1	Boron	ppm	ASTM D5185m	0	15	30	11	
Maganese   ppm   ASTM D5185m   0   <1   0   <1     Magnesium   ppm   ASTM D5185m   1010   810   793   829     Calcium   ppm   ASTM D5185m   1070   889   894   925     Phosphorus   ppm   ASTM D5185m   1150   911   878   947     Zinc   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m   2060   2621   2313   2774     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D5185m   >20   3   11.3   9.7     Glycol   %   *ASTM D524   >5   A 6.6   11.3   9.7     Glycol   %   *ASTM D7844   >3	Barium	ppm	ASTM D5185m	0	0	2	0	
Magnesium   ppm   ASTM D5185m   1010   810   793   829     Calcium   ppm   ASTM D5185m   1070   889   894   925     Phosphorus   ppm   ASTM D5185m   1150   911   878   947     Zinc   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m   2060   2621   2313   2774     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D5185m   >20   3   11.3   9.7     Glycol   %   *ASTM D5185m   >20   3   11.3   9.7     Glycol   %   *ASTM D524   >5   KeG   NEG   NEG   NEG     NFRA-RED   method   limi	Molybdenum	ppm	ASTM D5185m	60	61	60	69	
Calcium   ppm   ASTM D5185m   1070   889   894   925     Phosphorus   ppm   ASTM D5185m   1150   911   878   947     Zinc   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m   2060   2621   2313   2774     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D5185m   >20   3   11.3   9.7     Glycol   %   *ASTM D2982   NEG   NEG   NEG   NEG     Nitration   Abs/cm< *ASTM D7844	Manganese	ppm	ASTM D5185m	0	<1	0	<1	
Phosphorus   ppm   ASTM D5185m   1150   911   878   947     Zinc   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m   2060   2621   2313   2774     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >20   3   11   0     Fuel   %   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D5185m   >20   3   11.3   9.7     Glycol   %   *ASTM D5185m   >20   3   11.3   9.7     Glycol   %   *ASTM D5185m   >20   3   0.6   0.6   0.6     INFRA-RED   method   limit/base	Magnesium	ppm	ASTM D5185m	1010	810	793	829	
Zinc   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m   2060   2621   2313   2774     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D524   >5   6.6   11.3   9.7     Glycol   %   *ASTM D2982   NEG   NEG   NEG   NEG     INFRA-RED   method   limit/base   current   history1   history2     Soot %   %   *ASTM D7624   >0   8.7	Calcium	ppm	ASTM D5185m	1070	889	894	925	
Zinc   ppm   ASTM D5185m   1270   1063   1087   1158     Sulfur   ppm   ASTM D5185m   2060   2621   2313   2774     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >30   7   15   15     Sodium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D524   >5   ▲ 6.6   11.3   ● 9.7     Glycol   %   *ASTM D2982   NEG   NEG   NEG     INFRA-RED   method   limit/base   current   history1   history2     Soot %   %   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.tmm   *ASTM D7415   >30   19.6 <td>Phosphorus</td> <td>ppm</td> <td>ASTM D5185m</td> <td>1150</td> <th>911</th> <td>878</td> <td>947</td>	Phosphorus	ppm	ASTM D5185m	1150	911	878	947	
SulfurppmASTM D5185m2060262123132774CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>3071515SodiumppmASTM D5185m>3071515SodiumppmASTM D5185m>2031110Fuel%ASTM D5185m>2031110Fuel%ASTM D5185m>20311.39.7Glycol%*ASTM D2982NEGNEGNEGINFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D7844>30.50.60.6NitrationAbs/cm*ASTM D7624>208.711.27.7SulfationAbs/.1mm*ASTM D7415>3019.619.720.4FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2515.818.815.4			ASTM D5185m	1270	1063	1087	1158	
Silicon ppm ASTM D5185m >30 7 15 15   Sodium ppm ASTM D5185m >30 7 15 15   Sodium ppm ASTM D5185m >20 3 11 10   Potassium ppm ASTM D5185m >20 3 11 10   Fuel % ASTM D524 >5 ▲ 6.6 11.3 ● 9.7   Glycol % *ASTM D2982 NEG NEG NEG   INFRA-RED method limit/base current history1 history2   Soot % % *ASTM D7844 >3 0.5 0.6 0.6   Nitration Abs/cm *ASTM D7624 >20 8.7 11.2 7.7   Sulfation Abs/.tmm *ASTM D7415 >30 19.6 19.7 20.4   FLUID DEGRADATION method limit/base current history1 history2   Oxidation Abs/.tmm *ASTM D7414 >25 15.8 18.8 15.4	Sulfur	• •				2313	2774	
Sodium   ppm   ASTM D5185m   A 361   517   444     Potassium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D3524   >5   A 6.6   11.3   9.7     Glycol   %   *ASTM D2982   NEG   NEG   NEG     INFRA-RED   method   limit/base   current   history1   history2     Soot %   %   *ASTM D7844   >3   0.5   0.6   0.6     Nitration   Abs/cm   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.1mm   *ASTM D7415   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4	CONTAMINANT	S	method	limit/base	current	history1	history2	
Potassium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D3524   >5   6.6   11.3   9.7     Glycol   %   *ASTM D3524   >5   6.6   11.3   9.7     Glycol   %   *ASTM D2982   NEG   NEG   NEG     INFRA-RED   method   limit/base   current   history1   history2     Soot %   %   *ASTM D7844   >3   0.5   0.6   0.6     Nitration   Abs/cm   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.1mm   *ASTM D7415   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4	Silicon	ppm	ASTM D5185m	>30	7	15	15	
Potassium   ppm   ASTM D5185m   >20   3   11   10     Fuel   %   ASTM D3524   >5   6.6   11.3   9.7     Glycol   %   *ASTM D2982   NEG   NEG   NEG     INFRA-RED   method   limit/base   current   history1   history2     Soot %   %   *ASTM D7844   >3   0.5   0.6   0.6     Nitration   Abs/cm   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.1mm   *ASTM D7615   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4	Sodium	ppm	ASTM D5185m		<u> </u>	<b>5</b> 17	<b>4</b> 44	
Fuel   %   ASTM D3524   >5   ▲ 6.6   11.3   9.7     Glycol   %   *ASTM D2982   NEG   NEG   NEG     INFRA-RED   method   limit/base   current   history1   history2     Soot %   %   *ASTM D7844   >3   0.5   0.6   0.6     Nitration   Abs/cm   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.1mm   *ASTM D7415   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4							10	
Glycol%*ASTM D2982NEGNEGNEGINFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D7844>30.50.60.6NitrationAbs/cm*ASTM D7624>208.711.27.7SulfationAbs/.tmm*ASTM D7415>3019.619.720.4FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.tmm*ASTM D7414>2515.818.815.4	Fuel	%	ASTM D3524	>5	<b>6</b> .6	• 11.3	9.7	
Soot %   %   *ASTM D7844   >3   0.5   0.6   0.6     Nitration   Abs/cm   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.1mm   *ASTM D7415   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4	Glycol	%					NEG	
Nitration   Abs/cm   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.1mm   *ASTM D7615   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4	INFRA-RED		method	limit/base	current	history1	history2	
Nitration   Abs/cm   *ASTM D7624   >20   8.7   11.2   7.7     Sulfation   Abs/.1mm   *ASTM D7615   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4	Soot %	%	*ASTM D7844	>3	0.5	0.6	0.6	
Sulfation   Abs/.1mm   *ASTM D7415   >30   19.6   19.7   20.4     FLUID DEGRADATION   method   limit/base   current   history1   history2     Oxidation   Abs/.1mm   *ASTM D7414   >25   15.8   18.8   15.4								
Oxidation Abs/.1mm *ASTM D7414 >25 15.8 18.8 15.4								
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	18.8	15.4	
		mg KOH/g			8.8	12.2	9.7	

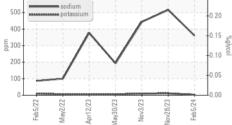


## **OIL ANALYSIS REPORT**









			method	limit/base	current	history1	history2
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Nav28/23 Feb5/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Nov	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
T <sup>0.25</sup>	Free Water	scalar	*Visual		NEG	NEG	NEG
0.20	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
0.15 e	Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.1</b>	12.0	11.8
-0.10 <sup>8</sup>	GRAPHS						
-0.05	Ferrous Alloys						
	70 T						
Nov28/23 -	60 - chromium						
Fel	50 nickel						
	= 40						
	E 30						
$\wedge$	20	<u> </u>					
	10-						
	0 - 1 1 1	/23-	123	/24			
	Feb5/22 May2/22 Apr12/23	May30/23	Nov3/23 Nov28/23	Feb5/24			
	Non-ferrous Meta		2				
Nov3/23 - Jov28/23 -	<sup>60</sup> T	15					
Nov3/23 Nov28/23 E-4 E 12 A	50- copper						
	essesses tin						
<del>т</del> 0.25	40		$\square$				
0.25			$\square$				
0.20	40	/	$\square$				
0.20	40 - 톨 30 - 20 -	/	$\square$				
	40 <u>E</u> 30 20 10	/	F				
0.20 0.15 are 0.10 g	40 E 30 20 10 0	23	23	24			
-0.20 -0.15 ge -0.10 -0.05	40 E 30 20 10 0	a/30/22		Feb5/24			
0.20 0.15 gr	40 May2/22 Apri12/23 Apri12/23	EZ/05/keW	Nov2R23	Feb5/24			
-0.20 -0.15 ge -0.10 -0.05	40 40 20 20 20 20 20 20 20 20 20 2			trigger	Base Numbe	2r	
0.20 0.15 gr	40 40 20 20 20 20 20 20 20 20 20 2			14	.0	er	
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40			14	.0 .0	er	
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40			14	.0 .0 .0 Base	er	
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40			14	0 0 0 <b>Base</b>	er	
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40			14	.0 .0 .0 Base	er	
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40			14 12 ( <sup>0</sup> )HO3 <sup>10</sup> Bu <sup>10</sup> Jaquing 6	0 0 0 <b>Base</b>	er	
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40			14 12 (B) HOY BUI Jagen 3 agen 4	.0 0 Вазе .0 0	2r	
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40		Nov28/23	14 12 (0)HOJ Bul) Jaquing 4 2 0	Base 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40		Nov28/23	14 12 (0)HOJ Bul) Jaquing 4 2 0	Base 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		63623
0.20 0.15 gr	40 40 40 40 40 40 40 40 40 40			14 12 ( <sup>(b)</sup> H0) <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(b)</sup> <sup>(</sup>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Apr12/23	Nov26723
0.20 0.15 0.00 0.00 0.00 0.00 0.00	40 40 40 40 40 40 40 40 40 40	May30/23	Nov28/23	14 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10	Hab5/222	Apr12/23 May30/23	2
C 20 0.15 0.00 0.00 0.00 0.00 0.00 0.00 0.0	40 40 40 40 40 40 40 40 40 40	May30/23	EZ/82/00N EZ/82/00N n Ave., Cary	14 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10	Hab5/222	Environmental - 8	2
0.20 0.15 0.00 0.00 0.00 0.00 0.00	40 40 40 40 40 40 40 40 40 40	EZUDE/ew 11 Madiso	EZI82volv EZI82volv m Ave., Cary ived : 08	14 12 (0)(10) 10) 10) 10) 10) 10) 10) 10) 10) 10)	Hab5/222	EIVIFONMENTAL - 8 22820 S	<b>837 - Harrison</b> State Route 2
Laboratory Sample No. Lab Number Unique Number	40 40 40 40 40 40 40 40 40 40	1 Madiso Recei Teste Diagr	EZIEVON EZIEVON IN Ave., Cary ived : 08 d : 12 nosed : 12	, NC 27513 Feb 2024 Feb 2024 - Jona	GFL E	EINVIRONMENTAL - 4 22820 S	≊ 837 - Harrison

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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