

### **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# 828060-101267

#### Component Diesel Engine

Fluid PETRO CANADA DURON SHP 15W40 (--- G

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

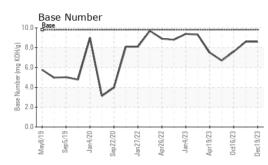
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

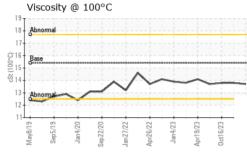
SAMPLE INFORMATION     method     limit/base     current     history1     history2       Sample Number     Client Info     9 Dec 2023     30 Nov 2023     16 Oct 2023       Machine Age     hrs     Client Info     19 Dec 2023     30 Nov 2023     16 Oct 2023       Machine Age     hrs     Client Info     222     170     443       Oil Changed     Client Info     222     170     443       Oil Changed     Client Info     Not Changd     Not Changd     Not Changd       Sample Status     method     Imit/base     current     history1     history2       Fuel     WC Method     >5     <1.0     <1.0     <1.0       Water     WC Method     >5     <1.0     <1.0     <1.0       Crommim     ppm     ASTM05165m     >100     0     <1     0     <1       Correctum     ppm     ASTM05165m     >3     0     0     0     <1     <1     1     1     1     1     1     1     1     1     1<	GAL)		lay2019 Sep201	9 Jan2020 Sep2020 Jan2	022 Apr2022 Jan2023 Apr2023 Oc	H2023 Dec202	
Sample Date     Client Info     19 Dec 2023     30 Nov 2023     16 Oct 2023       Machine Age     hrs     Client Info     13670     13618     13448       Oil Age     hrs     Client Info     222     170     443       Oil Changed     Client Info     Not Changd     Not Changd     NoRMAL     NoRMAL       CONTAMINATION     method     Imit/base     current     history1     history2       Fuel     WC Method     >5     <1.0     <1.0     <1.0       Water     WC Method     >0.2     NEG     NEG     NEG       Glycol     WC Method     >0.2     NEG     NEG     NEG       Vickel     ppm     ASTM05165m     >20     <1     0     o       Tatanium     ppm     ASTM05165m     >30     0     0     0       Copper     ppm     ASTM05165m     >40     <1     <1     2       Lead     ppm     ASTM05165m     >330     <1     <1     3       Vanduim     p	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age     hrs     Client Info     13670     13618     13448       Oil Age     hrs     Client Info     222     170     443       Oil Changed     Client Info     222     170     443       Oil Changed     Client Info     222     170     443       Oil Changed     Client Info     Not Changd     Not Changd     NoRMAL       Sample Status     method     imit/base     current     history1     history2       Fuel     WC Method     >5     <1.0     <1.0     <1.0       Water     WC Method     >0.2     NEG     NEG     NEG       Chromium     ppm     ASTM 05185m     >100     0     <1     0       Chromium     ppm     ASTM 05185m     >20     2     1     2     2       Itanium     ppm     ASTM 05185m     >20     2     1     2     2       Itanium     ppm     ASTM 05185m     >20     2     1     2     2       Notichead	Sample Number		Client Info		GFL0101961	GFL0101971	GFL0078375
Oil Age     Ins     Client Info     222     170     443       Oil Changed     Client Info     Not Changd     Not Changd     Changed       Sample Status     Imit/bass     current     Not Changd     NORMAL       CONTAMINATION     method     Imit/bass     current     Northang     Northang       Water     WC Method     >5     <1.0     <1.0     <1.0       Water     WC Method     >0     NEG     NEG     NEG       Water     WC Method     >0     0     11        Chromium     ppm     ASTM D5185m     >100     10     9     11       Chromium     ppm     ASTM D5185m     >4     0     0     0       Tatanium     ppm     ASTM D5185m     >3     0     0     0       Copper     ppm     ASTM D5185m     >3     0     0     0       Cadmium     ppm     ASTM D5185m     >15     0     0     0       Cadmium     ppm     ASTM D5185m <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>19 Dec 2023</th> <th>30 Nov 2023</th> <th>16 Oct 2023</th>	Sample Date		Client Info		19 Dec 2023	30 Nov 2023	16 Oct 2023
Oil Changed Sample Status     Client Info     Not Changd NORMAL     Not Changd NORMAL     Changed NORMAL     Changed NORMAL       CONTAMINATION     method     limit/base     current     history1     history2       Fuel     WC Method     >5.     <1.0     <1.0     <1.0       Water     WC Method     >0.2     NEG     NEG     NEG       Glycol     WC Method     >0.0     NEG     NEG     NEG       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >20     <1     0     <1       Silver     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >30     0     0     0       Copper     ppm     ASTM D5185m     >40     <1     0     0       Copper     ppm     ASTM D5185m     330     1     1	Machine Age	hrs	Client Info		13670	13618	13448
Sample Status     NORMAL     NORMAL     NORMAL     NORMAL       CONTAMINATION     method     limit/base     current     history1     history2       Fuel     WC Method     >5     <1.0     <1.0     <1.0       Water     WC Method     >0.2     NEG     NEG     NEG       Glycol     WC Method     NEG     NEG     NEG     NEG       WEAR METALS     method     imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >100     0     <1     0     <1       Chromium     ppm     ASTM D5185m     >20     <1     0     0     0       Astm D5185m     >20     2     1     <2     Lead     ppm     ASTM D5185m     >30     0     0     0     0       Copper     ppm     ASTM D5185m     >20     2     1     2     Lead     ppm     ASTM D5185m     >10     0     0     0       Chropper     ppm     ASTM D5185m<	Oil Age	hrs	Client Info		222	170	443
CONTAMINATION     method     limit/base     current     history1     history2       Fuel     WC Method     >5     <1.0     <1.0     <1.0       Water     WC Method     >0.2     NEG     NEG     NEG       Glycol     WC Method     NEG     NEG     NEG     NEG       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >100     10     9     11       Chromium     ppm     ASTM D5185m     >4     0     0     0       Titanium     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     1     2     2       Lead     ppm     ASTM D5185m     >30     <1     1     3     3       Tin     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0	•		Client Info		-	Not Changd	Changed
Fuel     WC Method     >5     <1.0	Sample Status				NORMAL	NORMAL	NORMAL
Water     WC Method     >0.2     NEG     NEG     NEG     NEG       Glycol     WC Method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >100     10     9     11       Chromium     ppm     ASTM D5185m     >20     <1     0     <1       Nickel     ppm     ASTM D5185m     >4     0     0     0       Silver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     1     2     2       Lead     ppm     ASTM D5185m     >20     2     1     0     0       Copper     ppm     ASTM D5185m     >10     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0       Magnasum     ppm     ASTM D5185m     0<	CONTAMINAT	ION	method	limit/base	current	history1	history2
Glycol     WC Method     NEG     NEG     NEG     NEG       WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >100     10     9     11       Chromium     ppm     ASTM D5185m     >20     <1     0     <1       Nickel     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >30     0     0     0       Vanadium     ppm     ASTM D5185m     0     0     0     0       Vanadium     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0       Magnesium     ppm     ASTM D5185m     0     0     1123     1094 </th <th>Fuel</th> <th></th> <th>WC Method</th> <th></th> <th>&lt;1.0</th> <th>&lt;1.0</th> <th></th>	Fuel		WC Method		<1.0	<1.0	
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >100     10     9     11       Chromium     ppm     ASTM D5185m     >20     <1     0     <1       Nickel     ppm     ASTM D5185m     >20     <1     0     0       Titanium     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >3     0     0     0       Copper     ppm     ASTM D5185m     >20     2     1     2     2       Lead     ppm     ASTM D5185m     >0     0     0     0     0       Copper     ppm     ASTM D5185m     15     0     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     2     3     2     2       Barium     ppm     ASTM D5185m     0     0     0     0     0     0       Mo	Water		WC Method	>0.2	NEG	NEG	NEG
Iron     ppm     ASTM D5185m     >100     10     9     11       Chromium     ppm     ASTM D5185m     >20     <1     0     <1       Nickel     ppm     ASTM D5185m     >4     0     0     0       Titanium     ppm     ASTM D5185m     >20     21     <1     <1       Silver     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >20     2     1     3       Tin     ppm     ASTM D5185m     >330     <1     <1     3       Tin     ppm     ASTM D5185m     >15     0     0     0       Cadmium     ppm     ASTM D5185m     0     2     3     2       Boron     ppm     ASTM D5185m     0     0     0     <1       Magnesium     ppm     ASTM D5185m     1010     908     931     97	Glycol		WC Method		NEG	NEG	NEG
Chromium     ppm     ASTM D5185m     >20     <1	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel     ppm     ASTM D5185m     >4     0     0     0       Titanium     ppm     ASTM D5185m     >3     0     0     0       Silver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >40     <1     0     0       Copper     ppm     ASTM D5185m     >40     <1     0     0       Vanadium     ppm     ASTM D5185m     >330     <1     <1     3     3       Tin     ppm     ASTM D5185m     >15     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     0     0     0     1       Magneseium     ppm     ASTM D5185m <th>Iron</th> <th>ppm</th> <th></th> <th>&gt;100</th> <th>-</th> <th></th> <th></th>	Iron	ppm		>100	-		
Titanium     ppm     ASTM D5185m     <1		ppm					
Silver     ppm     ASTM D5185m     >3     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >40     <1     0     0       Copper     ppm     ASTM D5185m     >330     <1     <1     3       Tin     ppm     ASTM D5185m     >15     0     0     0       Cadmium     ppm     ASTM D5185m     >15     0     0     0       Cadmium     ppm     ASTM D5185m     <1     0     0     0       Cadmium     ppm     ASTM D5185m     0     2     3     2       Boron     ppm     ASTM D5185m     0     0     0     0       Magaenese     ppm     ASTM D5185m     0     0     0     <11       Magnesium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1070     1032     1123		ppm		>4	-		
Aluminum     ppm     ASTM D5185m     >20     2     1     2       Lead     ppm     ASTM D5185m     >40     <1     0     0       Copper     ppm     ASTM D5185m     >330     <1     <1     3       Tin     ppm     ASTM D5185m     >15     0     0     0       Cadmium     ppm     ASTM D5185m     <1     0     0     0       Cadmium     ppm     ASTM D5185m     0     2     3     2       Boron     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0       Molybdenum     ppm     ASTM D5185m     0     0     0     <11       Magnaese     ppm     ASTM D5185m     0     0     0     <1123     1094       Phosphorus     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     2060     297							
Lead     ppm     ASTM D5185m     >40     <1		ppm			-		
Copper     ppm     ASTM D5185m     >330     <1		ppm			_		
Tin     ppm     ASTM D5185m     >15     0     0     0       Vanadium     ppm     ASTM D5185m     >15     0     0     0       Cadmium     ppm     ASTM D5185m     0     21     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0     0       Molybdenum     ppm     ASTM D5185m     0     0     0     0     0       Magnesium     ppm     ASTM D5185m     010     908     931     970       Calcium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m		ppm					
Vanadium     ppm     ASTM D5185m     -     1     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0     0       Molybdenum     ppm     ASTM D5185m     0     2     3     2       Maganese     ppm     ASTM D5185m     0     0     0     0     0     0       Calcium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfar     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method							
Cadmium     ppm     ASTM D5185m     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0     0       Molybdenum     ppm     ASTM D5185m     0     0     0     0     0     0       Magnesium     ppm     ASTM D5185m     0     0     0     0     1123     1094       Phosphorus     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1070     1032     1123     1094       Sulfur     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       <				>15	-		
ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0       Molybdenum     ppm     ASTM D5185m     60     58     63     61       Magnesium     ppm     ASTM D5185m     0     0     0     <1       Magnesium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Solium     ppm     ASTM D5185m     >20     14     22     2       Potassium     ppm     ASTM D5185m     >20<							
Boron     ppm     ASTM D5185m     0     2     3     2       Barium     ppm     ASTM D5185m     0     0     0     0       Molybdenum     ppm     ASTM D5185m     60     58     63     61       Manganese     ppm     ASTM D5185m     0     0     0     0     <1       Magnesium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1010     908     931     1094       Phosphorus     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     <1     3     2       Potassium     ppm     ASTM D		ppm	ASTM D5185m			0	-
Barium     ppm     ASTM D5185m     0     0     0     0     0       Molybdenum     ppm     ASTM D5185m     60     58     63     61       Manganese     ppm     ASTM D5185m     0     0     0     -<1       Magnesium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     <1     3     2       INFRA-RED     method	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     60     58     63     61       Manganese     ppm     ASTM D5185m     0     0     0     <1       Magnesium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1010     908     931     1094       Phosphorus     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1150     950     1053     1079       Zinc     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     <1     3     2       Potassium     ppm     ASTM D5185m     >20     <1     3     2       Soot %     %     'ASTM D7844 <th>Boron</th> <th>ppm</th> <th></th> <th></th> <th></th> <th></th> <th></th>	Boron	ppm					
Manganese     ppm     ASTM D5185m     0     0     0     <1		ppm	ASTM D5185m	0	-	0	
Magnesium     ppm     ASTM D5185m     1010     908     931     970       Calcium     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1150     950     1053     1079       Zinc     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >20     14     22     2       Potassium     ppm     ASTM D5185m     >20     <1     3     2       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/.1mm     *ASTM D7415	-	ppm					
Calcium     ppm     ASTM D5185m     1070     1032     1123     1094       Phosphorus     ppm     ASTM D5185m     1150     950     1053     1079       Zinc     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >20     14     22       Potassium     ppm     ASTM D5185m     >20     <1     3     2       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/.1mm     *ASTM D7415     >30<	-	ppm					
Phosphorus     ppm     ASTM D5185m     1150     950     1053     1079       Zinc     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >20     <11     3     2       Potassium     ppm     ASTM D5185m     >20     <1     3     2       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/1mm     *ASTM D7415     <	•						
Zinc     ppm     ASTM D5185m     1270     1167     1226     1299       Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >20     14     22       Potassium     ppm     ASTM D5185m     >20     <1     3     2       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/tmm     *ASTM D7415     >30     18.8     18.3     20.7       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.tmm     *ASTM D7414		ppm					
Sulfur     ppm     ASTM D5185m     2060     2978     3328     3165       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >20     <1     3     2       Potassium     ppm     ASTM D5185m     >20     <1	1						
CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     >20     14     22       Potassium     ppm     ASTM D5185m     >20     <1     3     2       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/.tmm     *ASTM D7415     >30     18.8     18.3     20.7       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.tmm     *ASTM D7414     >25     15.2     14.8     17.8		ppm					
Silicon     ppm     ASTM D5185m     >25     4     4     6       Sodium     ppm     ASTM D5185m     20     14     22       Potassium     ppm     ASTM D5185m     >20     <1							
Sodium     ppm     ASTM D5185m     20     14     22       Potassium     ppm     ASTM D5185m     >20     <1     3     2       INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/.1mm     *ASTM D7415     >30     18.8     18.3     20.7       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     15.2     14.8     17.8	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium     ppm     ASTM D5185m     >20     <1				>25			
INFRA-RED     method     limit/base     current     history1     history2       Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/.1mm     *ASTM D7415     >30     18.8     18.3     20.7       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     15.2     14.8     17.8	Sodium	ppm	ASTM D5185m		20		
Soot %     %     *ASTM D7844     >3     0.2     0.2     0.3       Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/.1mm     *ASTM D7415     >30     18.8     18.3     20.7       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     15.2     14.8     17.8		ppm	ASTM D5185m	>20	<1	3	2
Nitration     Abs/cm     *ASTM D7624     >20     7.1     6.7     9.1       Sulfation     Abs/.1mm     *ASTM D7415     >30     18.8     18.3     20.7       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     15.2     14.8     17.8	INFRA-RED		method	limit/base	current	history1	history2
Sulfation     Abs/.1mm     *ASTM D7415     >30     18.8     18.3     20.7       FLUID DEGRADATION     method     limit/base     current     history1     history2       Oxidation     Abs/.1mm     *ASTM D7414     >25     15.2     14.8     17.8	Soot %	%	*ASTM D7844	>3	0.2		
FLUID DEGRADATION method limit/base current history1 history2   Oxidation Abs/.1mm *ASTM D7414 >25 15.2 14.8 17.8	Nitration	Abs/cm	*ASTM D7624	>20	7.1		
Oxidation Abs/.1mm *ASTM D7414 >25 15.2 14.8 17.8	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	18.3	20.7
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN)     mg KOH/g     ASTM D2896     9.8     8.6     8.6     7.6	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	14.8	17.8
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.6	8.6	7.6



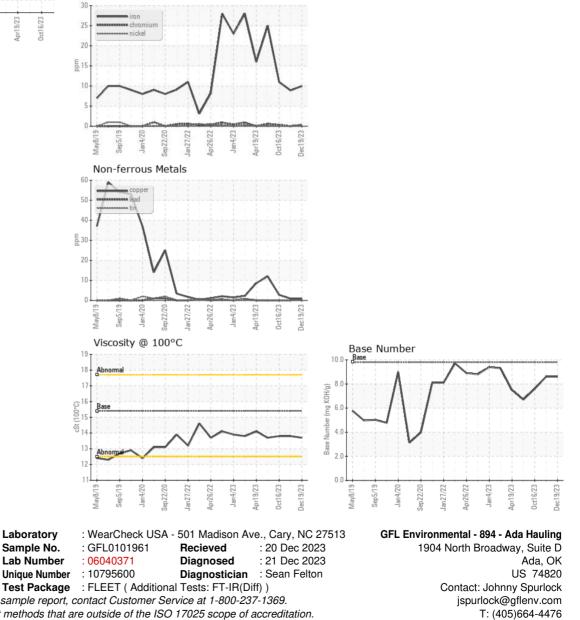
## **OIL ANALYSIS REPORT**

Ferrous Alloys





VISUAL		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
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.8	13.8
GRAPHS						





Certificate L2367 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)

Submitted By: Johnny Spurlock

Page 2 of 2

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