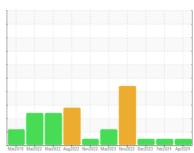


# **OIL ANALYSIS REPORT**

## Sample Rating Trend









Machine Id **425069-402432** Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

## 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.

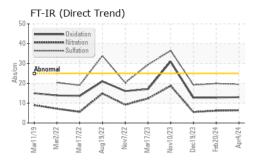
## **Fluid Condition**

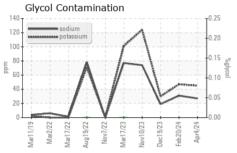
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

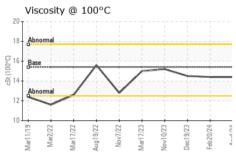
Sample Number	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Date		VIATION		III III Dasc		•	
Machine Age         hrs         Client Info         36361         36361         36319           Oil Age         hrs         Client Info         65         69         24           Oil Changed         Client Info         Not Changd         10 </th <th>'</th> <th></th> <th></th> <th></th> <th></th> <th> = 0 . 0 0 0 0 0</th> <th></th>	'					= 0 . 0 0 0 0 0	
Oil Age         hrs         Client Info         65         609         24           Oil Changed         Client Info         Not Changd	•	hre			•		
Oil Changed Sample Status							
NORMAL   NORMAL   NORMAL	-	1113					
CONTAMINATION         method         limit/base         current         history1         history2           Fuel         WC Method         >3.0         <1.0         <1.0         <1.0         <1.0           Water         WC Method         >0.2         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >20         0         <1         <1           Nickel         ppm         ASTM D5185m         >20         0         <1         <1           Silver         ppm         ASTM D5185m         >2         0         <1         <1           Silver         ppm         ASTM D5185m         >2         0         <1         <1           Silver         ppm         ASTM D5185m         >20         <1         <1         <1           Silver         ppm         ASTM D5185m         >20         <1         <1         <1           Copper         ppm         ASTM D5185m         >40         <1         0         <2           Copper         ppm         ASTM D5185m         >10         0         <1			Olioni iino			Ŭ	ŭ
Fuel   WC Method   S3.0   S1.0   S1	•	ION	method	limit/base			
Water         WC Method         >0.2         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >120         10         8         15           Chromium         ppm         ASTM D5185m         >20         0         <1         <1           Nickel         ppm         ASTM D5185m         >20         0         <1         <1           Silver         ppm         ASTM D5185m         >22         0         <1         <1           Aluminum         ppm         ASTM D5185m         >20         <1         <1         <1           Lead         ppm         ASTM D5185m         >20         <1         <1         <1           Lead         ppm         ASTM D5185m         >330         2         2         3           Tin         ppm         ASTM D5185m         0         <1         0         <2           Copper         ppm         ASTM D5185m         0         0         <1         0           Vanadium         ppm         ASTM D5185m         0         0         <1         0							•
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >120         10         8         15           Chromium         ppm         ASTM D5185m         >20         0         <1         <1           Nickel         ppm         ASTM D5185m         >20         0         0         0           Titanium         ppm         ASTM D5185m         >2         0         <1         <1           Silver         ppm         ASTM D5185m         >2         0         0         0           Aluminum         ppm         ASTM D5185m         >2         0         <1         <1         <1           Lead         ppm         ASTM D5185m         >40         <1         0         2            Copper         ppm         ASTM D5185m         >15         0         <1         0         <1         0           Vanadium         ppm         ASTM D5185m         0         0         0         0         <1         0           Cadmium         ppm         ASTM D5185m         0         4         2         <1         8         8					1		
Iron		C					
Chromium         ppm         ASTM D5185n         ≥20         0         <1         <1           Nickel         ppm         ASTM D5185m         >5         0         0         0           Tittanium         ppm         ASTM D5185m         >2         0         <1						•	
Nickel	-						
Titanium					-		
Stilver							
Aluminum         ppm         ASTM D5185m         >20         <1         <1         <1           Lead         ppm         ASTM D5185m         >40         <1					-		
Lead		• • • • • • • • • • • • • • • • • • • •			-		
Copper         ppm         ASTM D5185m         >330         2         2         3           Tin         ppm         ASTM D5185m         >15         0         <1							
Tin         ppm         ASTM D5185m         >15         0         <1         0           Vanadium         ppm         ASTM D5185m         0         0         <1         0           Cadmium         ppm         ASTM D5185m         0         0         0         <1           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         4         2         <1           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         <1         0           Magnesium         ppm         ASTM D5185m         1010         1078         872         877           Calcium         ppm         ASTM D5185m         1070         1175         988         958           Phosphorus         ppm         ASTM D5185m         1270         1396         1003         1123           Sulfur         ppm         ASTM D5185m         2060         4231 <td></td> <td></td> <td></td> <td></td> <th></th> <td></td> <td></td>							
Vanadium         ppm         ASTM D5185m         0         0         <1           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         4         2         <1           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         <1         0           Magnesium         ppm         ASTM D5185m         1010         1078         872         877           Calcium         ppm         ASTM D5185m         1070         1175         988         958           Phosphorus         ppm         ASTM D5185m         1270         1396         1003         1123           Sulfur         ppm         ASTM D5185m         2060         4231         2838         2896           CONTAMINANTS         method         limit/base         current         history1 <th< td=""><td>• •</td><td>ppm</td><td></td><td></td><th>_</th><td>_</td><td></td></th<>	• •	ppm			_	_	
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         4         2         <1           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         <1         0           Manganese         ppm         ASTM D5185m         1010         1078         872         877           Calcium         ppm         ASTM D5185m         1070         1175         988         958           Phosphorus         ppm         ASTM D5185m         1150         1141         933         921           Zinc         ppm         ASTM D5185m         1270         1396         1003         1123           Sulfur         ppm         ASTM D5185m         2060         4231         2838         2896           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >225         4 <td></td> <td>• • • • • • • • • • • • • • • • • • • •</td> <td></td> <td>&gt;15</td> <th>-</th> <td></td> <td>_</td>		• • • • • • • • • • • • • • • • • • • •		>15	-		_
ADDITIVES		ppm			-		
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         60         67         62         60           Manganese         ppm         ASTM D5185m         0         0         <1	ADDITIVES			11 1. //			h: -4
Molybdenum         ppm         ASTM D5185m         60         67         62         60           Manganese         ppm         ASTM D5185m         0         0         <1	ADDITIVES		method	limit/base	current	history1	nistory2
Manganese         ppm         ASTM D5185m         0         0         <1		ppm					
Magnesium         ppm         ASTM D5185m         1010         1078         872         877           Calcium         ppm         ASTM D5185m         1070         1175         988         958           Phosphorus         ppm         ASTM D5185m         1150         1141         933         921           Zinc         ppm         ASTM D5185m         1270         1396         1003         1123           Sulfur         ppm         ASTM D5185m         2060         4231         2838         2896           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D584b         >4         1.6         1.6         1.2           Soot %         %         *ASTM D7624	Boron		ASTM D5185m	0	4	2	<1
Calcium         ppm         ASTM D5185m         1070         1175         988         958           Phosphorus         ppm         ASTM D5185m         1150         1141         933         921           Zinc         ppm         ASTM D5185m         1270         1396         1003         1123           Sulfur         ppm         ASTM D5185m         2060         4231         2838         2896           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         >20         45         47         30           Potassium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D582m         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/.1mm         *ASTM D7415         >3	Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	4 0	2	<1
Phosphorus         ppm         ASTM D5185m         1150         1141         933         921           Zinc         ppm         ASTM D5185m         1270         1396         1003         1123           Sulfur         ppm         ASTM D5185m         2060         4231         2838         2896           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         >20         45         47         30           Bycol         %         *ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30<	Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	4 0 67	2 0 62	<1 0 60
Zinc         ppm         ASTM D5185m         1270         1396         1003         1123           Sulfur         ppm         ASTM D5185m         2060         4231         2838         2896           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         >20         45         47         30           Potassium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION         method         limit	Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	4 0 67 0	2 0 62 <1	<1 0 60
Sulfur         ppm         ASTM D5185m         2060         4231         2838         2896           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         27         31         19           Potassium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0 <td>Boron Barium Molybdenum Manganese Magnesium</td> <td>ppm ppm ppm</td> <td>ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m</td> <td>0 0 60 0 1010</td> <th>4 0 67 0 1078</th> <td>2 0 62 &lt;1 872</td> <td>&lt;1 0 60 0 877</td>	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	4 0 67 0 1078	2 0 62 <1 872	<1 0 60 0 877
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         27         31         19           Potassium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION method limit/base current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	4 0 67 0 1078 1175	2 0 62 <1 872 988	<1 0 60 0 877 958
Silicon         ppm         ASTM D5185m         >25         4         2         4           Sodium         ppm         ASTM D5185m         27         31         19           Potassium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION method limit/base current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	4 0 67 0 1078 1175 1141	2 0 62 <1 872 988 933	<1 0 60 0 877 958 921
Sodium         ppm         ASTM D5185m         27         31         19           Potassium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270	4 0 67 0 1078 1175 1141 1396	2 0 62 <1 872 988 933 1003	<1 0 60 0 877 958 921 1123
Potassium         ppm         ASTM D5185m         >20         45         47         30           Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	4 0 67 0 1078 1175 1141 1396 4231	2 0 62 <1 872 988 933 1003 2838	<1 0 60 0 877 958 921 1123 2896
Glycol         %         *ASTM D2982         NEG         NEG         NEG           INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	4 0 67 0 1078 1175 1141 1396 4231	2 0 62 <1 872 988 933 1003 2838 history1	<1 0 60 0 877 958 921 1123 2896 history2
INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION method limit/base current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	4 0 67 0 1078 1175 1141 1396 4231 current	2 0 62 <1 872 988 933 1003 2838 history1 2	<1 0 60 0 877 958 921 1123 2896 history2
Soot %         %         *ASTM D7844         >4         1.6         1.6         1.2           Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION method limit/base current history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	4 0 67 0 1078 1175 1141 1396 4231 current 4 27	2 0 62 <1 872 988 933 1003 2838 history1 2	<1 0 60 0 877 958 921 1123 2896 history2 4 19
Nitration         Abs/cm         *ASTM D7624         >20         6.4         6.2         5.5           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION method limit/base current history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	4 0 67 0 1078 1175 1141 1396 4231 current 4 27	2 0 62 <1 872 988 933 1003 2838 history1 2 31	<1 0 60 0 877 958 921 1123 2896 history2 4 19 30
Sulfation         Abs/.1mm         *ASTM D7415         >30         19.5         19.9         19.2           FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol	ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	4 0 67 0 1078 1175 1141 1396 4231 current 4 27 45 NEG	2 0 62 <1 872 988 933 1003 2838 history1 2 31 47 NEG	<1 0 60 0 877 958 921 1123 2896 history2 4 19 30 NEG
FLUID DEGRADATION method limit/base current history1 history2  Oxidation Abs/.1mm *ASTM D7414 >25 13.0 12.8 12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED	ppm	ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D2982	0 0 60 0 1010 1150 1270 2060 limit/base >25	4 0 67 0 1078 1175 1141 1396 4231 current 4 27 45 NEG	2 0 62 <1 872 988 933 1003 2838 history1 2 31 47 NEG	<1 0 60 0 877 958 921 1123 2896 history2 4 19 30 NEG
Oxidation         Abs/.1mm         *ASTM D7414         >25         13.0         12.8         12.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot %	ppm	ASTM D5185m *ASTM D5185m	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20	4 0 67 0 1078 1175 1141 1396 4231 current 4 27 45 NEG current	2 0 62 <1 872 988 933 1003 2838 history1 2 31 47 NEG history1	<1 0 60 0 877 958 921 1123 2896 history2 4 19 30 NEG history2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration	ppm	ASTM D5185m *ASTM D7844 *ASTM D7844	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20	4 0 67 0 1078 1175 1141 1396 4231 current 4 27 45 NEG current	2 0 62 <1 872 988 933 1003 2838 history1 2 31 47 NEG history1 1.6 6.2	<1 0 60 0 877 958 921 1123 2896 history2 4 19 30 NEG history2 1.2 5.5
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	4 0 67 0 1078 1175 1141 1396 4231 current 4 27 45 NEG current 1.6 6.4 19.5	2 0 62 <1 872 988 933 1003 2838 history1 2 31 47 NEG history1 1.6 6.2 19.9	<1 0 60 0 877 958 921 1123 2896 history2 4 19 30 NEG history2 1.2 5.5 19.2
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Glycol INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm	ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D5185m *ASTM D2982 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7415 *Method	0 0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20	4 0 67 0 1078 1175 1141 1396 4231 current 4 27 45 NEG current 1.6 6.4 19.5	2 0 62 <1 872 988 933 1003 2838 history1 2 31 47 NEG history1 1.6 6.2 19.9	<1 0 60 0 877 958 921 1123 2896 history2 4 19 30 NEG history2 1.2 5.5 19.2 history2

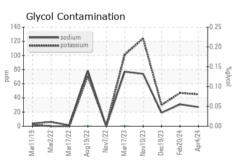


# **OIL ANALYSIS REPORT**





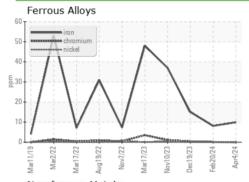


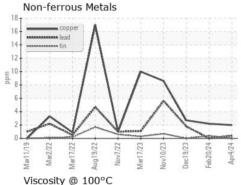


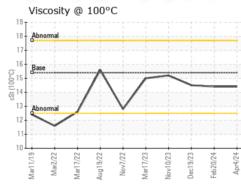
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

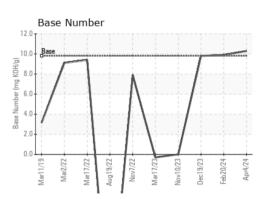
FLUID PROPI	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.4	14.4	14.5

### **GRAPHS**













Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0109341 Lab Number : 06139712 Unique Number : 10964520

Received **Tested** Diagnosed Test Package : FLEET ( Additional Tests: Glycol )

: 05 Apr 2024 : 09 Apr 2024

: 09 Apr 2024 - Jonathan Hester

GFL Environmental - 891 - Oklahoma City Hauling 1001 South Rockwell Oklahoma City, OK US 73128

Contact: Andy Smith andrew.smith@gflenv.com T: (405)306-1651

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)