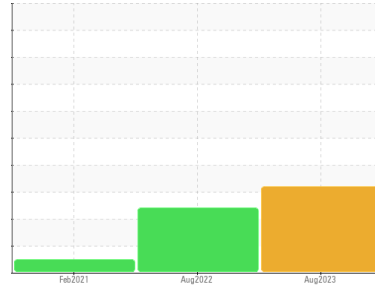




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area  
**4000 Series**  
 Machine Id  
**FORD 4285**

Component  
**Gasoline Engine**  
 Fluid

**PETRO CANADA DURON SHP 10W30 (7 LTR)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring.

### Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	<b>WC0720935</b>	WC0501604	WC0501599	
Sample Date	Client Info	<b>10 Aug 2023</b>	01 Aug 2022	17 Feb 2021	
Machine Age	kms	Client Info	<b>84994</b>	61543	32045
Oil Age	kms	Client Info	<b>0</b>	0	3566
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed	
Sample Status		<b>ABNORMAL</b>	ABNORMAL	NORMAL	

## CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>150	<b>35</b>	35	23
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>40	<b>6</b>	6	4
Lead	ppm	ASTM D5185(m)	>50	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>155	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	2	<b>▲ 40</b>	38	14
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>88</b>	125	73
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185(m)	950	<b>▲ 511</b>	445	410
Calcium	ppm	ASTM D5185(m)	1050	<b>1038</b>	1220	1089
Phosphorus	ppm	ASTM D5185(m)	995	<b>▲ 746</b>	633	630
Zinc	ppm	ASTM D5185(m)	1180	<b>▲ 795</b>	738	737
Sulfur	ppm	ASTM D5185(m)	2600	<b>▲ 1810</b>	1876	1740
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>30	<b>22</b>	▲ 43	26
Sodium	ppm	ASTM D5185(m)	>400	<b>4</b>	8	19
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	8	1
Fuel	%	ASTM D7593*	>4.0	<b>▲ 2.2</b>	▲ 6.1	<1.0

## INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.4</b>	20.6	15.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.4</b>	32.0	27.4

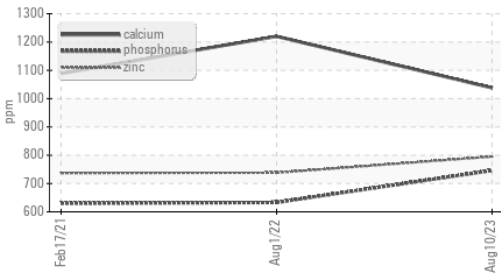
## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.7</b>	35.1	22.1

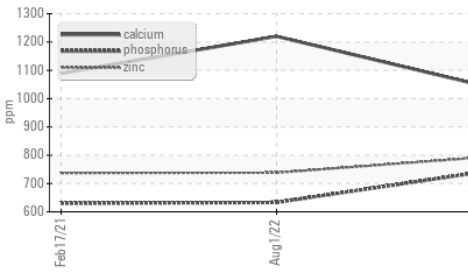


# OIL ANALYSIS REPORT

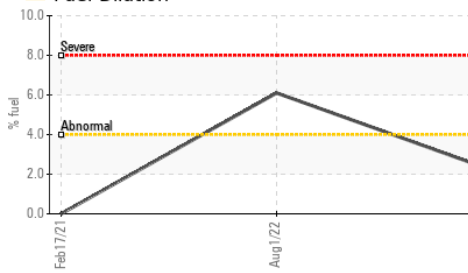
### ▲ Additives



### ▲ Additives



### ▲ Fuel Dilution

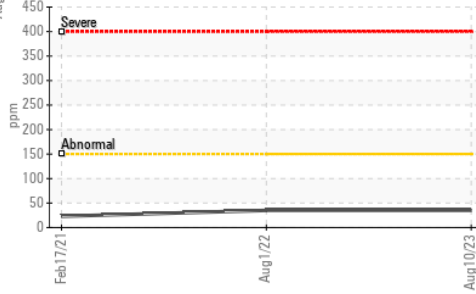


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

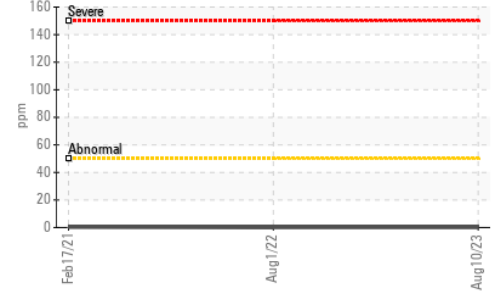
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	▲ 8.4	9.6	7.8

### GRAPHS

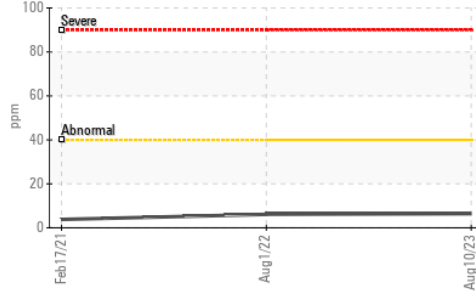
#### Iron (ppm)



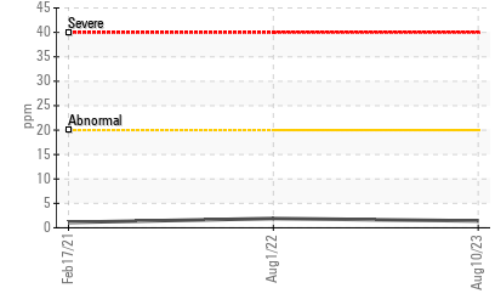
#### Lead (ppm)



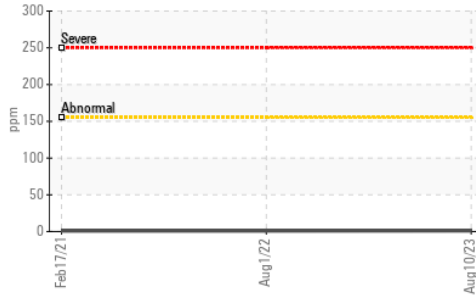
#### Aluminum (ppm)



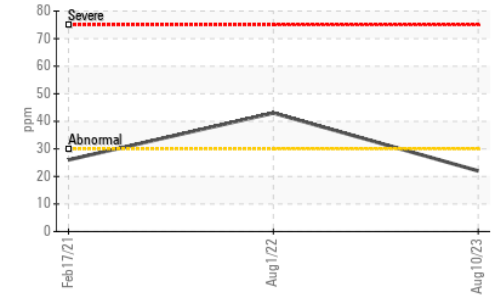
#### Chromium (ppm)



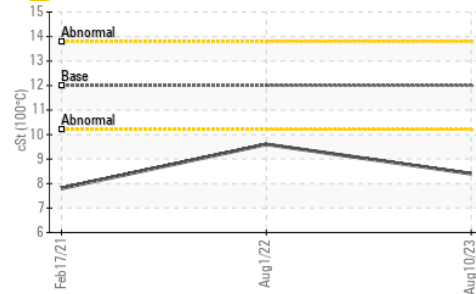
#### Copper (ppm)



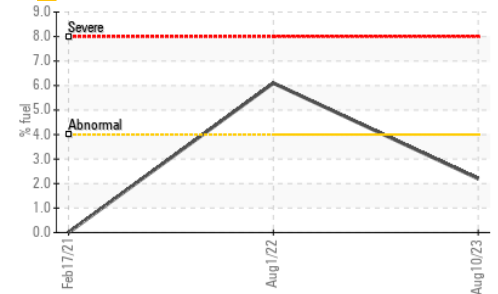
#### Silicon (ppm)



#### ▲ Viscosity @ 100°C



#### ▲ Fuel Dilution



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0720935 **Received** : 16 Aug 2023  
**Lab Number** : 02576166 **Diagnosed** : 17 Aug 2023  
**Unique Number** : 5629226 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

**MANITOU LIN TRANSPORT**  
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 F: x:

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