

## **OIL ANALYSIS REPORT**

Sample Rating Trend





## Machine Id OR872 Component

Rear Differential

PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)

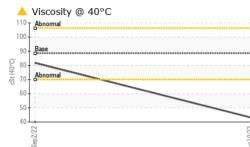
▲ Recommendation   Sample Number   Client Info   GFL0077028   GFL0054     Resample at the next service interval to monitor.   Sample Date   Client Info   10 Aug 2023   02 Sep 20     Wear   Machine Age   hrs   Client Info   20882   19622     All component wear rates are normal.   Oil Age   hrs   Client Info   1260   1500     Contamination   Oil Changed   Client Info   Not Changd   Not Changd   Not Changd     There is no indication of any contamination in the oil.   Fluid Condition   WEAR METALS   method   Imit/base   current   histor     Iron   ppm   ASTM D5185(m)   >500   13   27	)22 
Wear   Machine Age   hrs   Client Info   20882   19622     All component wear rates are normal.   Oil Age   hrs   Client Info   1260   1500     Contamination   Oil Changed   Client Info   Not Changd   Not Changd   Not Changd     There is no indication of any contamination in the oil.   Oil Changed   Image: Client Info   Not Changd   NORMAL     VEAR METALS   method   Imit/base   current   histor     Vean   page   ASTM DE198(m)   500   12   27	
Wear   Machine Age   hrs   Client Info   20882   19622     All component wear rates are normal.   Oil Age   hrs   Client Info   1260   1500     Contamination   Oil Changed   Client Info   Not Changd   Not Changd   Not Changd     There is no indication of any contamination in the oil.   Oil Changed   Image: Client Info   Not Changd   NORMAL     VEAR METALS   method   Imit/base   current   histor     Vean   page   ASTM DE198(m)   500   12   27	
All component wear rates are normal.   Oil Age   hrs   Client Info   1260   1500     Contamination   Oil Changed   Client Info   Not Changd   Not Changd   Not Changd     There is no indication of any contamination in the oil.   Sample Status   Image: Client Info   ABNORMAL   NORMAL     VEAR METALS   method   limit/base   current   history	
Contamination   Oil Changed   Client Info   Not Changd   Not Changd     There is no indication of any contamination in the oil.   Sample Status   ABNORMAL   NORMAL     VEAR METALS   method   limit/base   current   history     Fluid Condition   Iron   Normal   ASTMUSTION   27	gd
Sample Status   ABNORMAL   NORMAL     oil.   VEAR METALS   method   limit/base   current   histor     Fluid Condition   Iron   NORMAL   NORMAL   NORMAL   NORMAL	
oil. WEAR METALS method limit/base current histor   ▲ Fluid Condition Iron ppp 4STM 05195(m) > 500 12 27	
	y1 history2
Viscosity of sample indicates oil is within SAE TOW	
range, advise investigate. The condition of the onits	
Titanium     ppm     ASTM D5185(m)     >2     <1     <1       Silver     ASTM D5185(m)     >2     <1	
Silver     ppm     ASTM D5185(m)     >2     0     0	
Aluminum     ppm     ASTM D5185(m)     >30     3     2	
Lead ppm ASTM D5185(m) >13 2 <1	
Copper     ppm     ASTM D5185(m)     >103     5     9	
Tin     ppm     ASTM D5185(m)     >5     0     0	
Antimony     ppm     ASTM D5185(m)     >5     0     <1	
<b>Vanadium</b> ppm ASTM D5185(m) <b>0</b> 0	
Beryllium     ppm     ASTM D5185(m)     0     0	
Cadmium     ppm     ASTM D5185(m)     0     0	
ADDITIVES method limit/base current histor	y1 history2
Boron ppm ASTM D5185(m) 2 3 2	
Barium     ppm     ASTM D5185(m)     0	
Molybdenum     ppm     ASTM D5185(m)     0     1     <1	
Manganese     ppm     ASTM D5185(m)     9     <1     <1	
Magnesium     ppm     ASTM D5185(m)     1     18     9	
Calcium ppm ASTM D5185(m) 3131 3297 3036	
Phosphorus ppm ASTM D5185(m) 1194 1000 1028	
Zinc ppm ASTM D5185(m) 1281 1137 1156	
Sulfur ppm ASTM D5185(m) 3811 3802 3656	
Lithium     ppm     ASTM D5185(m)     <1	
CONTAMINANTS method limit/base current histor	y1 history2
Silicon ppm ASTM D5185(m) >100 16 5	
<b>Sodium</b> ppm ASTM D5185(m) <b>3</b> 2	
Sodium     ppm     ASTM D5185(m)     3     2       Potassium     ppm     ASTM D5185(m)     >20     2     2	
	y1 history2
Potassium     ppm     ASTM D5185(m)     >20     2     2	y1 history2
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistory	
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistorWhite MetalscalarVisual*NONENONENONE	
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistorWhite MetalscalarVisual*NONENONENONEYellow MetalscalarVisual*NONENONENONE	
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistorWhite MetalscalarVisual*NONENONENONEYellow MetalscalarVisual*NONENONENONEPrecipitatescalarVisual*NONENONENONE	
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistorWhite MetalscalarVisual*NONENONENONEYellow MetalscalarVisual*NONENONENONEPrecipitatescalarVisual*NONENONENONESiltscalarVisual*NONENONENONEDebrisscalarVisual*NONENONENONE	
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistorWhite MetalscalarVisual*NONENONENONEYellow MetalscalarVisual*NONENONENONEPrecipitatescalarVisual*NONENONENONESiltscalarVisual*NONENONENONEDebrisscalarVisual*NONENONENONESand/DirtscalarVisual*NONENONENONE	
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistorWhite MetalscalarVisual*NONENONENONEYellow MetalscalarVisual*NONENONENONEPrecipitatescalarVisual*NONENONENONESiltscalarVisual*NONENONENONEDebrisscalarVisual*NONENONENONESand/DirtscalarVisual*NONENONENONEAppearancescalarVisual*NORMLNORMLNORM	    L
PotassiumppmASTM D5185(m)>2022VISUALmethodlimit/basecurrenthistorWhite MetalscalarVisual*NONENONENONEYellow MetalscalarVisual*NONENONENONEPrecipitatescalarVisual*NONENONENONESiltscalarVisual*NONENONENONEDebrisscalarVisual*NONENONENONESand/DirtscalarVisual*NONENONENONEAppearancescalarVisual*NORMLNORMLNORM	    L

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Contact/Location: Dean Imbeau - GFL575



## **OIL ANALYSIS REPORT**





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.

CALA

ISO 17025:2017 Accredited Laboratory

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