



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**MV GEEMIA JOYE**  
Component  
**CAT C-18 - Port Generator**

Fluid  
**PETRO CANADA DURON HP 15W40 (64 Liters)**

## RECOMMENDATION

Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number				<b>WC0543069</b>	---	---
Sample Date				<b>21 Dec 2020</b>	---	---
Machine Age	hrs			<b>4086</b>	---	---
Oil Age	hrs			<b>3568</b>	---	---
Filter Age	hrs			<b>3568</b>	---	---
Oil Changed				<b>Not Changed</b>	---	---
Filter Changed				<b>Not Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>36</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>1</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>6</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>113</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

## CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Fuel	%	ASTM D3524(m)	>5	<b>1.5</b>	---	---
Glycol		ASTM D2982		<b>NEG</b>	---	---
Soot %	%	ASTM D7686	>3	<b>0.3</b>	---	---
Nitration	Abs/cm	ASTM D7624	>20	<b>9.7</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415	>30	<b>23.5</b>	---	---
Emulsified Water	scalar	Visual	>0.2	<b>NEG</b>	---	---

## 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.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	---	---
Boron	ppm	ASTM D5185(m)	0	<b>1</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>967</b>	---	---
Calcium	ppm	ASTM D5185(m)	1070	<b>1025</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>976</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1250</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2351</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414	>25	<b>21.2</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.39</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>91.9</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>12.7</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270	139	<b>134</b>	---	---