

## **OIL ANALYSIS REPORT**

## Sample Rating Trend

### NORMAL



# South Molding Press 11

Component

PETRO CANADA (--- GAL)

## 11 Gearbox

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample Number         Client Info         SBP0005195             Sample Date         Client Info         10 Nov 2023             Machine Age         yrs         Client Info         9             Oil Age         yrs         Client Info         Not Changd             Oil Changed         Client Info         Not Changd             Sample Status         NORMAL             WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184         7             Iron         ppm         ASTM D5185m         >200         0             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Silver         ppm         ASTM D5185m         >25         0             Aluminum         ppm         ASTM D5185m         >200         0	tory2
SAMPLE INFORMATION         method         limit/base         current         history1         history1           Sample Number         Client Info         SBP0005195	
Sample Number         Client Info         SBP0005195	
Sample Date         Client Info         10 Nov 2023	tory2
Machine Age         yrs         Client Info         9             Oil Age         yrs         Client Info         9             Oil Changed         Client Info         Not Changd             Sample Status         NORMAL             WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184         7             Iron         ppm         ASTM D5185m         >200         0             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Silver         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         >25         0             Lead         ppm         ASTM D5185m         >200         0             Copper         ppm         ASTM D5185m         >200	tory2
Oil Age         yrs         Client Info         9             Oil Changed         Client Info         Not Changd             Sample Status         NORMAL             WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184         7             Iron         ppm         ASTM D5185m         >200         0             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Silver         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         >25         0             Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         0             Vanadium         ppm         ASTM D5185m	tory2
Oil Changed Sample Status         Client Info         Not Changd             WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184         7             Iron         ppm         ASTM D5185m         >200         0             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >20             Lead         ppm         ASTM D5185m         >20         0             Copper         ppm         ASTM D5185m         >20         0             Vanadium         ppm         ASTM D5185m         0             Vanadium         ppm         ASTM D5185m<	tory2
Sample Status	tory2
WEAR METALS         method         limit/base         current         history1         history1           PQ         ASTM D8184         7             Iron         ppm         ASTM D5185m         >200         0             Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Titanium         ppm         ASTM D5185m         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >25         0             Lead         ppm         ASTM D5185m         >200         0             Copper         ppm         ASTM D5185m         >20         0             Vanadium         ppm         ASTM D5185m         0             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm <t< td=""><td>tory2</td></t<>	tory2
PQ	tory2
Iron	
Chromium         ppm         ASTM D5185m         >15         0             Nickel         ppm         ASTM D5185m         >15         0             Titanium         ppm         ASTM D5185m         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >25         0             Aluminum         ppm         ASTM D5185m         >200         0             Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         0             Vanadium         ppm         ASTM D5185m         >25         <1             Vanadium         ppm         ASTM D5185m         0              Cadmium         ppm         ASTM D5185m         0              Boron         ppm         ASTM D5185m         0.0         0	
Nickel         ppm         ASTM D5185m         >15         0             Titanium         ppm         ASTM D5185m         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >25         0             Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         0             Tin         ppm         ASTM D5185m         >25         <1	
Titanium         ppm         ASTM D5185m         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >25         0             Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         0             Tin         ppm         ASTM D5185m         >25         <1             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         42         84             Barium         ppm         ASTM D5185m         0.0         0             Manganese         ppm         ASTM D5185m         235         0	
Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >25         0             Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         0             Tin         ppm         ASTM D5185m         >25         <1	
Aluminum         ppm         ASTM D5185m         >25         0             Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         0             Tin         ppm         ASTM D5185m         >25         <1	
Lead         ppm         ASTM D5185m         >100         0             Copper         ppm         ASTM D5185m         >200         0             Tin         ppm         ASTM D5185m         >25         <1	
Copper         ppm         ASTM D5185m         >200         0             Tin         ppm         ASTM D5185m         >25         <1	
Tin         ppm         ASTM D5185m         >25         <1             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         42         84             Barium         ppm         ASTM D5185m         0.0         0             Molybdenum         ppm         ASTM D5185m         0.0         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         346         <1             Phosphorus         ppm         ASTM D5185m         364         0             Zinc         ppm         ASTM D5185m         364         0             Sulfur         ppm         ASTM D5185m         1370         7374	
Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         42         84             Barium         ppm         ASTM D5185m         0.0         0             Molybdenum         ppm         ASTM D5185m         0.0         0             Manganese         ppm         ASTM D5185m         235         0             Magnesium         ppm         ASTM D5185m         346         <1             Calcium         ppm         ASTM D5185m         309         313             Phosphorus         ppm         ASTM D5185m         364         0             Zinc         ppm         ASTM D5185m         1370         7374             CONTAMINANTS         method         limit/base         current         history1 <td></td>	
Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         42         84             Barium         ppm         ASTM D5185m         0.0         0             Molybdenum         ppm         ASTM D5185m         0.0         0             Manganese         ppm         ASTM D5185m         235         0             Magnesium         ppm         ASTM D5185m         346         <1	
ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         42         84             Barium         ppm         ASTM D5185m         0.0         0             Molybdenum         ppm         ASTM D5185m         0.0             Manganese         ppm         ASTM D5185m         235         0             Magnesium         ppm         ASTM D5185m         346         <1	
Boron         ppm         ASTM D5185m         42         84             Barium         ppm         ASTM D5185m         0.0         0             Molybdenum         ppm         ASTM D5185m         0.0         0             Manganese         ppm         ASTM D5185m         235         0             Magnesium         ppm         ASTM D5185m         346         <1	
Barium         ppm         ASTM D5185m         0.0         0             Molybdenum         ppm         ASTM D5185m         0.0         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         346         <1	tory2
Molybdenum         ppm         ASTM D5185m         0.0         0             Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         235         0             Calcium         ppm         ASTM D5185m         346         <1             Phosphorus         ppm         ASTM D5185m         309         313             Zinc         ppm         ASTM D5185m         364         0             Sulfur         ppm         ASTM D5185m         1370         7374             CONTAMINANTS         method         limit/base         current         history1         history1	
Manganese         ppm         ASTM D5185m         0             Magnesium         ppm         ASTM D5185m         235         0             Calcium         ppm         ASTM D5185m         346         <1	
Magnesium         ppm         ASTM D5185m         235         0             Calcium         ppm         ASTM D5185m         346         <1             Phosphorus         ppm         ASTM D5185m         309         313             Zinc         ppm         ASTM D5185m         364         0             Sulfur         ppm         ASTM D5185m         1370         7374             CONTAMINANTS         method         limit/base         current         history1         history1	
Calcium         ppm         ASTM D5185m         346         <1             Phosphorus         ppm         ASTM D5185m         309         313             Zinc         ppm         ASTM D5185m         364         0             Sulfur         ppm         ASTM D5185m         1370         7374             CONTAMINANTS         method         limit/base         current         history1         history1	
Phosphorus         ppm         ASTM D5185m         309         313             Zinc         ppm         ASTM D5185m         364         0             Sulfur         ppm         ASTM D5185m         1370         7374             CONTAMINANTS         method         limit/base         current         history1         history1         history1	
Zinc         ppm         ASTM D5185m         364         0             Sulfur         ppm         ASTM D5185m         1370         7374             CONTAMINANTS         method         limit/base         current         history1         history1	
Sulfur     ppm     ASTM D5185m     1370     7374         CONTAMINANTS     method     limit/base     current     history1     history1	
CONTAMINANTS method limit/base current history1 history	
Silicon ppm ASTM D5185m >50 <b>5</b>	tory2
Sodium         ppm         ASTM D5185m         0	
Potassium ppm ASTM D5185m >20 <b>0</b>	
Water % ASTM D6304 >0.2 <b>0.007</b>	
ppm Water ppm ASTM D6304 >2000 <b>75.0</b>	
FLUID CLEANLINESS method limit/base current history1 history	tory2
Particles >4μm ASTM D7647 >20000 <b>12550</b>	
Particles >6μm ASTM D7647 >5000 <b>1929</b>	
Particles >14μm ASTM D7647 >640 <b>55</b>	
Particles >21μm ASTM D7647 >160 <b>12</b>	
Particles >38μm ASTM D7647 >40 <b>0</b>	
Particles >71μm ASTM D7647 >10 <b>0</b>	
Oil Cleanliness ISO 4406 (c) >21/19/16 <b>21/18/13</b>	
FLUID DEGRADATION method limit/base current history1 history	

0.46



### **OIL ANALYSIS REPORT**







Certificate L2367

Sample No. Lab Number **Unique Number** Test Package : PLANT

: SBP0005195 : 06010201

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received Diagnosed : 10749345

: 16 Nov 2023 : 20 Nov 2023 : Don Baldridge Diagnostician

150 S 1ST AVE

BROKEN BOW, NE US 68822

Contact: JUSTIN HURLBURT

Justin\_W\_Hurlburt@bd.com T:

\* - 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)

F: