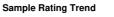


# **OIL ANALYSIS REPORT**



FUEL

# Machine Id FLORY SWP-6634 SW-33 (S/N 3045937)

Component Diesel Engine

PETRO CANADA 15W40 (--- GAL)

## 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.

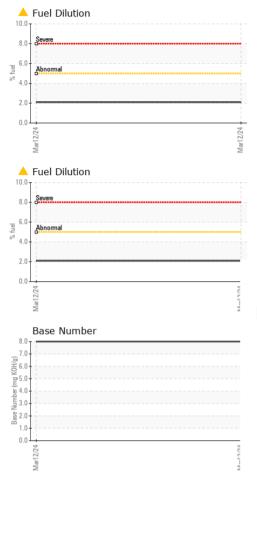
### Fluid Condition

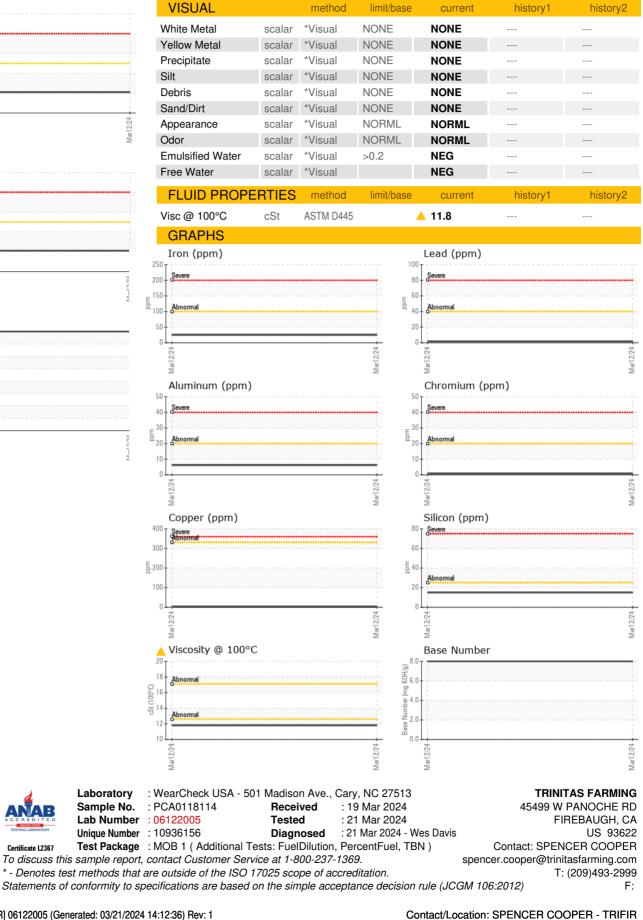
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

		<u>.</u>		Mar2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0118114		
Sample Date		Client Info		12 Mar 2024		
Machine Age	hrs	Client Info		6016		
Oil Age	hrs	Client Info		250		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	25		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	6		
Lead	ppm	ASTM D5185m	>40	2		
Copper	ppm	ASTM D5185m	>330	2		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		12		
Barium	ppm	ASTM D5185m		0		
		ASTM D5185m ASTM D5185m		0 50		
Molybdenum	ppm			-		
Molybdenum Manganese	ppm ppm	ASTM D5185m		50		
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m		50 <1		
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		50 <1 771		
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		50 <1 771 1224		
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		50 <1 771 1224 977	  	  
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	50 <1 771 1224 977 1194	  	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25	50 <1 771 1224 977 1194 3106	   	
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		50 <1 771 1224 977 1194 3106 current	     history1	     history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		50 <1 771 1224 977 1194 3106 current 15	    history1 	    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b>	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25	50 <1 771 1224 977 1194 3106 current 15 2	    history1	    history2 
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	50 <1 771 1224 977 1194 3106 current 15 2 2	    history1  	    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	>25 >20 >5	50 <1 771 1224 977 1194 3106 current 15 2 2 2 2 2 2 2 2.1	    history1  	    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm ppm	ASTM D5185m ASTM D5185m	>25 >20 >5 limit/base	50 <1 771 1224 977 1194 3106 current 15 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	    history1    history1	    history2    history2
Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm ppm %	ASTM D5185m ASTM D3524	>25 >20 >5 limit/base >3	50 <1 771 1224 977 1194 3106 <u>current</u> 15 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	    history1    history1  	    history2    history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm ppm %	ASTM D5185m ASTM D51854 *ASTM D7824 *ASTM D7824	>25 >20 >5 limit/base >3 >20	50 <1 771 1224 977 1194 3106 current 15 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	     history1    history1	     history2   history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm ppm %	ASTM D5185m ASTM D51854 *ASTM D7824 *ASTM D7824	>25 >20 >5 limit/base >3 >20 >30	50 <1 771 1224 977 1194 3106 <u>current</u> 15 2 2 2 2 ▲ 2.1 <u>current</u> 0.3 5.9 18.2	    history1    history1  history1	     history2   



# **OIL ANALYSIS REPORT**





Certificate L2367