

## **OIL ANALYSIS REPORT**

Sample Rating Trend







## Machine Id PETERBILT V919

Component Diesel Engine

Fluid PETRO CANADA DURON HP 15W40 (--- GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

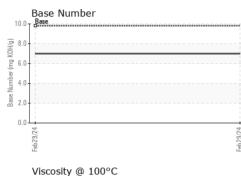
#### Fluid Condition

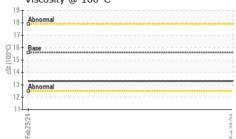
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

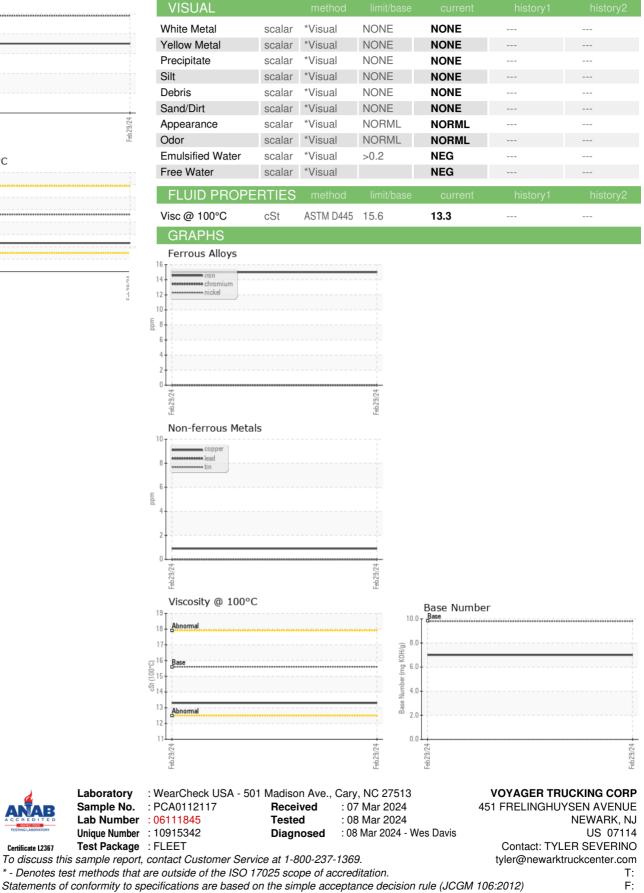
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0112117		
Sample Date		Client Info		29 Feb 2024		
Machine Age	mls	Client Info		445533		
Oil Age	mls	Client Info		23188		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	15		
Chromium	ppm	ASTM D5185m	>4	0		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>25	4		
Lead	ppm	ASTM D5185m	>45	0		
Copper	ppm	ASTM D5185m	>85	<1		
Tin	ppm	ASTM D5185m	>4	0		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 6	history1	history2
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	6		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	6 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 0 60		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 0 60 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 0 60 <1 919 1148 944		  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 0 60 <1 919 1148 944 1167	  	  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 0 60 <1 919 1148 944	  	   
Boron Barium 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 ASTM D5185m	limit/base	6 0 60 <1 919 1148 944 1167	    	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 0 60 <1 919 1148 944 1167 2836	     	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	6 0 60 <1 919 1148 944 1167 2836 current	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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 <b>method</b>	limit/base >30	6 0 60 <1 919 1148 944 1167 2836 current 7	     history1	     history2
Boron Barium 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 ASTM D5185m ASTM D5185m	limit/base >30	6 0 60 <1 919 1148 944 1167 2836 <u>current</u> 7 2	      history1	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >30 >20	6 0 60 <1 919 1148 944 1167 2836 current 7 2 2 4	     history1  	      history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >30 >20 limit/base	6 0 60 <1 919 1148 944 1167 2836 current 7 2 2 4 4 current	     history1   history1	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >30 >20 limit/base >3	6 0 60 <1 919 1148 944 1167 2836 <i>current</i> 7 2 2 4 <i>current</i> 0.5	     history1   history1  history1	     history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm t ppm ppm	ASTM D5185m ASTM D5185m	limit/base >30 >20 limit/base >3 >20	6 0 60 <1 919 1148 944 1167 2836 <i>current</i> 7 2 2 4 <i>current</i> 0.5 8.3	      history1   history1  history1	      history2   history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm t ppm ppm	ASTM D5185m ASTM D5185m	Imit/base >30 >20 Imit/base >3 >20 ≥20 ≥3 >3 >20	6 0 60 <1 919 1148 944 1167 2836 <b>current</b> 7 2 2 4 <b>current</b> 0.5 8.3 19.5	      history1  history1  history1	      history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	imit/base >30 >20 Imit/base >3 >20 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30 >30	6 0 60 <1 919 1148 944 1167 2836 current 7 2 836 current 0.5 8.3 19.5 current	     history1   history1  history1	      history2  history2  history2  history2



# **OIL ANALYSIS REPORT**







Certificate L2367

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