

12-031-CD

## **OIL ANALYSIS REPORT**

Sample Rating Trend







Component New (Unused) Oil Fluid PETRO CANADA LUMINOL TRI (--- GAL)

## DIAGNOSIS

Area [4381] Machine Id

Recommendation

This is a baseline read-out on the submitted sample.

Wear {not applicable}

Contamination {not applicable}

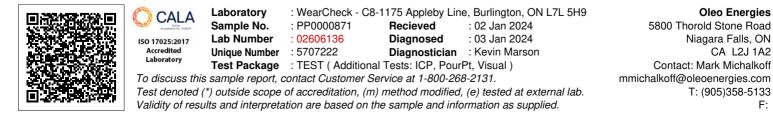
**Fluid Condition** Pour Point = -63°C.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PP0000871		
Sample Date		Client Info		28 Dec 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	٨	method	limit/base	current	history1	history2
Water		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>5	0		
Chromium	ppm	ASTM D5185(m)	>5	0		
Nickel	ppm	ASTM D5185(m)	>5	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>5	0		
Aluminum	ppm	ASTM D5185(m)	>5	<1		
Lead	ppm	ASTM D5185(m)	>5	0		
Copper	ppm	ASTM D5185(m)	>5	0		
Tin	ppm	ASTM D5185(m)	>5	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method			history1	history2
ADDITIVES		methou	IIIIII/Dase	Current	Thistory I	mstoryz
Boron	ppm	ASTM D5185(m)	0	0		
Boron Barium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	0 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	0 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0	0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0	0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0	0 0 0 0 0 0	  	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	  	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 <1 0	     	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0 0 10	0 0 0 0 0 0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0 0 10 10 <b>limit/base</b>	0 0 0 0 0 0 0 0 0 2 1 0 <1 0 1	     	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) <b>method</b> ASTM D5185(m)	0 0 0 0 0 0 0 0 0 10 10 <b>limit/base</b> >15	0 0 0 0 0 0 0 0 0 2 1 0 <1 0 <1 0 0	       history1 	       history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0 0 0 10 10 <b>limit/base</b> >15 >5	0 0 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 0 0 0		       history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) <b>method</b> ASTM D5185(m)	0 0 0 0 0 0 0 0 0 10 10 <b>limit/base</b> >15	0 0 0 0 0 0 0 0 0 2 1 0 <1 0 <1 0 0	       history1 	      history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0 0 0 0 0 10 10 10 10 10 10	0 0 0 0 0 0 0 <1 0 <1 0 <1 0 current 0 2 2 current		       history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 0 2 2 0 0 2 2 0 0 0 2		      history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) Chisual*	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 <1 0 <1 0 current 0 0 2 2 current NONE NONE		      history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL VISUAL Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) Visual*	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 10 10 10	0 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 0 2 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 0 0 2 0		      history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) Cusual* Visual* Visual*	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 0 2 2 <i>current</i> 0 0 2 2 <i>current</i> NONE NONE NONE		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL VISUAL VHIE Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) Visual* Visual* Visual*	0 0 0 0 0 0 0 0 0 0 0 0 10 0 10 10 10 10	0 0 0 0 0 0 0 2 1 0 2 1 0 0 2 2 0 0 2 0 0 2 0 0 2 0 0 0 2 0 0 0 2 0		      history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL VISUAL VISUAL VISUAL VISUAL Silt Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) Visual* Visual* Visual* Visual*	0 0 0 0 0 0 0 0 0 0 0 0 0 0 10 0 10 0	0 0 0 0 0 0 0 2 1 0 2 2 0 0 2 2 0 0 0 2 2 0 0 0 2 0 0 0 2 0 0 0 0 2 0		history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL VISUAL VHIE Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) Visual* Visual* Visual*	0 0 0 0 0 0 0 0 0 0 0 0 10 0 10 10 10 10	0 0 0 0 0 0 0 2 1 0 2 1 0 0 2 2 0 0 2 0 0 2 0 0 2 0 0 0 2 0 0 0 2 0	<ul> <li></li> <li< th=""><th>     history2  history2  history2</th></li<></ul>	     history2  history2  history2



## **OIL ANALYSIS REPORT**

FLUID PROPERTIES		method	limit/base	current	history1	history2
Pour Point	°C	ASTM D97*	-60	-63		
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						



Contact/Location: Mark Michalkoff - OLENIA

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