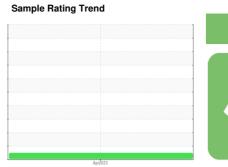


OIL ANALYSIS REPORT

Area **04-022-CD** [4022] 04022CD

New (Unused) Oil

PETRO CANADA LUMINOL LS B-4 (--- GAL)





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Recommendation

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

Fluid Condition

Pour Point: -60°C.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PP0000622		
Sample Date		Client Info		27 Apr 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	٧	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)		<1		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	OLLKKO IST	hiotom/1	history2
		memou	IIIIII/Dase	current	history1	1113tOl yZ
Boron	ppm	ASTM D5185(m)	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	2		
	ppm		IIIIIV Dase		•	
Boron		ASTM D5185(m)	IIIII/Jase	2		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	IIIIIVDASE	2 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	IIIIIVUUSSE	2 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	iiiiii/Jd3e	2 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	2 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)	iiiiiii base	2 0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	iiiiiii base	2 0 0 0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	iiiiiiv base	2 0 0 0 0 0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	2 0 0 0 0 0 0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		2 0 0 0 0 0 0 0 <1 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	2 0 0 0 0 0 0 0 0 <1 0 <1 0 current		 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m)	limit/base >15	2 0 0 0 0 0 0 0 0 <1 0 <1 0 current		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)	limit/base >15 >5	2 0 0 0 0 0 0 0 <1 0 <1 current	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)	limit/base >15 >5 >20	2 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 0	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base >15 >5 >20 limit/base	2 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 current	history1	history2 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) METHOD ASTM D5185(m)	limit/base >15 >5 >20 limit/base NONE	2 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 current	history1 history1	history2 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 ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Wethod Visual*	limit/base >15 >5 >20 limit/base NONE NONE	2 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 current 0 0 0 vicurent NON 0	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Wisual* Visual*	limit/base >15 >5 >20 limit/base NONE NONE NONE	2 0 0 0 0 0 0 0 <1 0 <1 0 <1 0 current 0 0 0 vinition of the current NONE NONE	history1 history1	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) MASTM D5185(m) MASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) Wethod Visual* Visual* Visual*	limit/base >15 >5 >20 limit/base NONE NONE NONE NONE	2 0 0 0 0 0 0 0 <1 0 <1 current 0 0 current NONE NONE	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) METHOD ASTM D5185(m) Wethod Visual* Visual* Visual* Visual*	limit/base >15 >5 >20 limit/base NONE NONE NONE NONE NONE NONE NONE	2 0 0 0 0 0 0 0 <1 0 <1 current 0 0 current NONE NONE NONE	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) MASTM D5185(m) MASTM D5185(m) MASTM D5185(m) MASTM D5185(m) ASTM D5185(m) Visual* Visual* Visual* Visual* Visual*	limit/base >15 >5 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	2 0 0 0 0 0 0 0 <1 0 <1 current 0 0 0 current NONE NONE NONE NONE	history1 history1	history2 history2



OIL ANALYSIS REPORT

FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Pour Point	°C	ASTM D97*		-60		
SAMPLE IMAG	GES	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						



CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Sample No.** : PP0000622 **Lab Number** : 02554310

Received Tested Unique Number : 5567325 Diagnosed

Test Package : TEST (Additional Tests: ICP, PourPt, Visual) To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

: 28 Apr 2023

: 28 Apr 2023

: 01 May 2023 - Bill Quesnel

Oleo Energies 5800 Thorold Stone Road

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Contact/Location: Rahzia Neufeld - OLENIA