

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

TTH037 Component

Component Left Final Drive

Fluid PETRO CANADA PRODURO TO-4 SAE 50 (--- 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

Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The condition of the oil is acceptable for the time in service.

	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0086984	PCA0070633	
Sample Date		Client Info		03 Apr 2024	03 Jan 2024	
Machine Age	hrs	Client Info		801	502	
Oil Age	hrs	Client Info		502	502	
Oil Changed		Client Info		Not Changd	N/A	
Sample Status				ATTENTION	ATTENTION	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	59	49	
Chromium	ppm	ASTM D5185m	>10	<1	<1	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	0	2	
Lead	ppm	ASTM D5185m	>25	0	0	
Copper	ppm	ASTM D5185m	>50	2	<1	
Tin		ASTM D5185m	>10	2 <1	0	
Vanadium	ppm	ASTM D5185m	210	0	0	
Cadmium	ppm	ASTM D5185m		0	0	
	ppm			U	U	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	0	
Barium	ppm	ASTM D5185m	0	5	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
	ppm	ASTM D5185m	0	2	1	
Manganese	ppm					
	ppm	ASTM D5185m	9	0	1	
Magnesium			9 3114	0 • 33	1 7	
Magnesium Calcium	ppm	ASTM D5185m				
Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	3114	<mark> </mark> 33	7	
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099	33 110	7144	
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245	331105	71440	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245 7086 limit/base	 33 110 5 16114 	 7 144 0 14396 	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	3114 1099 1245 7086 limit/base	 33 110 5 16114 current 	 7 144 0 14396 history1 	
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	3114 1099 1245 7086 limit/base >75	 33 110 5 16114 current 7 	 7 144 0 14396 history1 8 	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245 7086 limit/base >75	 33 110 5 16114 current 7 3 0 	 7 144 0 14396 history1 8 0 	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm TS ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245 7086 limit/base >75 >20	 33 110 5 16114 current 7 3 0 	 7 144 0 14396 history1 8 0 2 	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245 7086 limit/base >75 >20 limit/base	 33 110 5 16114 current 7 3 0 current 	 7 144 0 14396 history1 8 0 2 history1 	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm TS ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m	3114 1099 1245 7086 imit/base >75 >20 imit/base NONE	 33 110 5 16114 current 7 3 0 current NONE 	 7 144 0 14396 history1 8 0 2 history1 NONE 	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm TS ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	3114 1099 1245 7086 imit/base >75 >20 imit/base NONE NONE	 33 110 5 16114 current 7 3 0 current NONE NONE NONE NONE 	 7 144 0 14396 history1 8 0 2 history1 NONE NONE NONE 	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm TS ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	3114 1099 1245 7086 imit/base >75 >20 imit/base NONE NONE NONE NONE	 33 110 5 16114 current 7 3 0 current NONE NONE NONE NONE NONE NONE NONE 	 7 144 0 14396 history1 8 0 2 history1 NONE NONE NONE NONE NONE NONE 	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XASTM D5185m *Visual *Visual *Visual *Visual	3114 1099 1245 7086 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE	 33 110 5 16114 current 7 3 0 current NONE NONE NONE NONE NONE NONE NONE NONE NONE 	 7 144 0 14396 history1 8 0 2 history1 NONE NONE NONE NONE NONE NONE NONE NONE NONE 	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m *Visual *Visual *Visual *Visual *Visual	3114 1099 1245 7086 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE	 33 110 5 16114 current 7 3 0 current NONE 	 7 144 0 14396 history1 8 0 2 history1 NONE NONE NONE NONE LIGHT 	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	3114 1099 1245 7086 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE	 33 110 5 16114 current 7 3 0 current NONE 	 7 144 0 14396 history1 8 0 2 history1 NONE NONE NONE LIGHT NONE NONE LIGHT NONE 	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	3114 1099 1245 7086 imit/base >75 >20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	 33 110 5 16114 current 7 3 0 current NONE NORML 	 7 144 0 14396 history1 8 0 2 history1 NONE NONE NONE LIGHT NONE NORML 	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	3114 1099 1245 7086 imit/base >75 20 imit/base NONE NONE NONE NONE NONE NONE NONE NON	 33 110 5 16114 current 7 3 0 current NONE NORML NORML 	 7 144 0 14396 history1 8 0 2 history1 NONE NORML NORML 	 history2 history2 history2 -

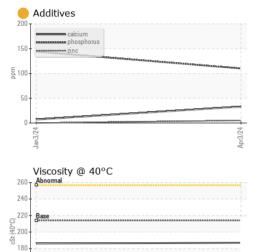


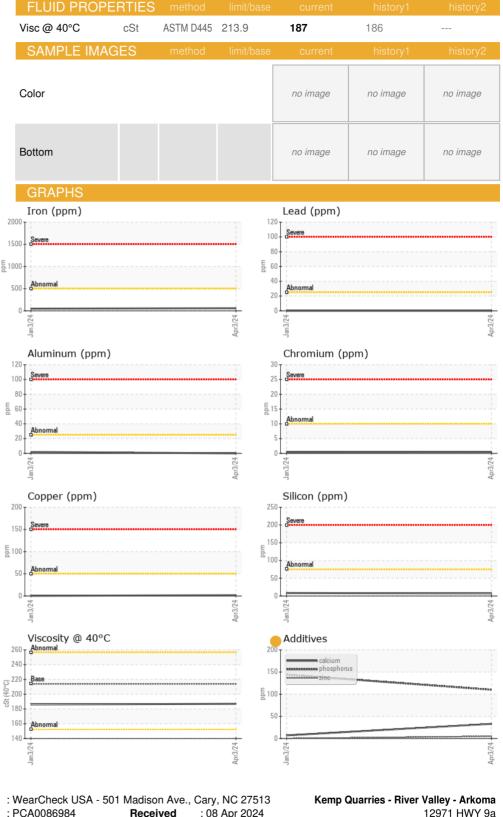
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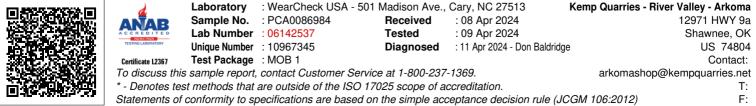
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