

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Rear Differential

PETRO CANADA PRODURO TO-4 SAE 50

DIAGNOSIS

Recommendation

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: Sampled only, new purchase)

A Wear

Gear wear is indicated. Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

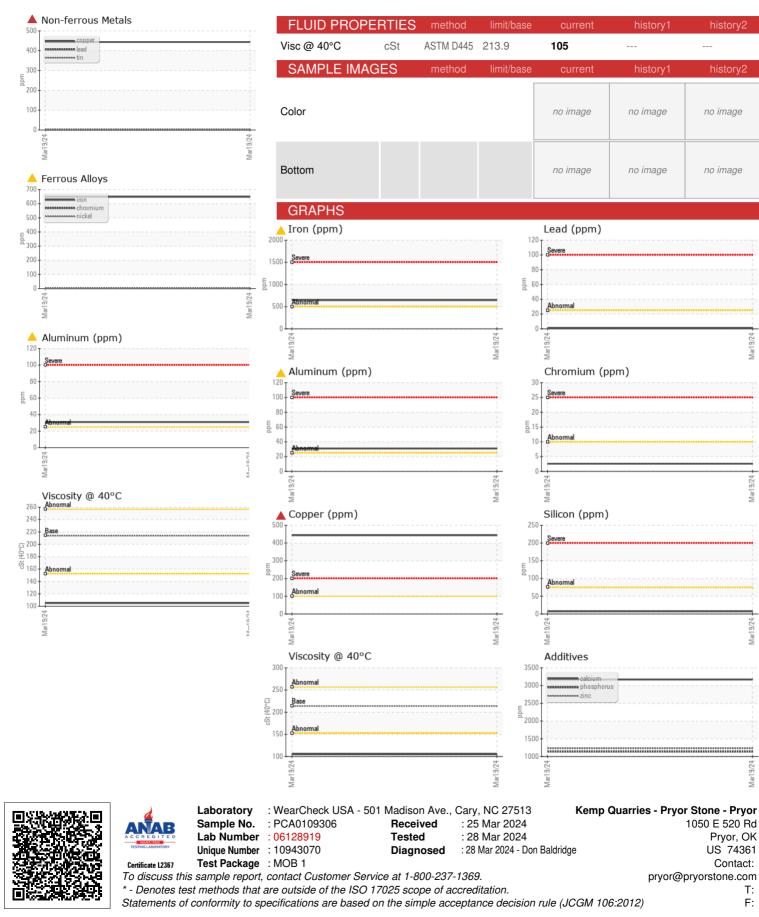
Fluid Condition

Confirm oil type. The condition of the oil is acceptable for the time in service.

				Mar2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0109306		
Sample Date		Client Info		19 Mar 2024		
Machine Age	hrs	Client Info		16803		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				SEVERE		
CONTAMINAT	TION	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	648		
Chromium	ppm	ASTM D5185m	>10	3		
Nickel	ppm	ASTM D5185m	>10	2		
Titanium	ppm	ASTM D5185m		- <1		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>25	▲ 31		
Lead	ppm	ASTM D5185m	>25	1		
Copper	ppm	ASTM D5185m		4 44		
Tin	ppm	ASTM D5185m	>100	1		
Vanadium	ppm	ASTM D5185m	- 10	، <1		
Cadmium	ppm	ASTM D5185m		<1		
	ppm					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0		
Barium	ppm	ASTM D5185m	0	2		
Volybdenum	ppm	ASTM D5185m	0	1		
Vanganese	ppm	ASTM D5185m	0	8		
Magnesium	ppm	ASTM D5185m	9	11		
Calcium	ppm	ASTM D5185m	3114	3171		
Phosphorus	ppm	ASTM D5185m	1099	1139		
Zinc	ppm	ASTM D5185m	1245	1228		
Sulfur	ppm	ASTM D5185m	7086	13705		
Sulfur CONTAMINAN		ASTM D5185m method	7086 limit/base	13705 current		 history2
CONTAMINAN			limit/base			 history2
	NTS	method	limit/base	current	 history1	
CONTAMINAN Silicon	NTS ppm	method ASTM D5185m	limit/base >75	current 7	 history1 	
CONTAMINAN Silicon Sodium	NTS ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >75	current 7 4	history1	
CONTAMINAN Silicon Sodium Potassium VISUAL	NTS ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >75 >20	current 7 4 8	 history1 	
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	NTS ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base >75 >20 limit/base	current 7 4 8 current	 history1 history1	 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	NTS ppm ppm ppm scalar	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	limit/base >75 >20 limit/base NONE	current 7 4 8 current NONE	history1 history1 	 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	NTS ppm ppm ppm scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual	limit/base >75 >20 limit/base NONE NONE	current 7 4 8 current NONE NONE	 history1 history1 	 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	NTS ppm ppm ppm scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE	current 7 4 8 current NONE NONE NONE	 history1 history1 	 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	NTS ppm ppm ppm scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE	current 7 4 8 current NONE NONE NONE NONE	 history1 history1 	 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	NTS ppm ppm ppm scalar scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE	current 7 4 8 Current NONE NONE NONE NONE NONE	 history1 history1 	 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	NTS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE	current 7 4 8 Current NONE NONE NONE NONE NONE NONE	 history1 history1 	 history2
CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yelow Metal Precipitate Silt Debris Sand/Dirt Appearance Ddor	NTS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	current 7 4 8 Current NONE NONE NONE NONE NONE NONE NONE NON	 history1 history1 	 history2
CONTAMINAN Silicon Sodium Potassium	NTS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NORML NORML	current 7 4 8 current NONE NONE NONE NONE NONE NONE NONE NON	 history1 history1 -	 history2 -



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