

OIL ANALYSIS REPORT



Front Left Final Drive

PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)





DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We recommend an early resample to monitor this condition. (Customer Sample Comment: PM-2 sampled fluid)

Wear

All component wear rates are normal.

Contamination

There is a moderate concentration of water present in the oil.

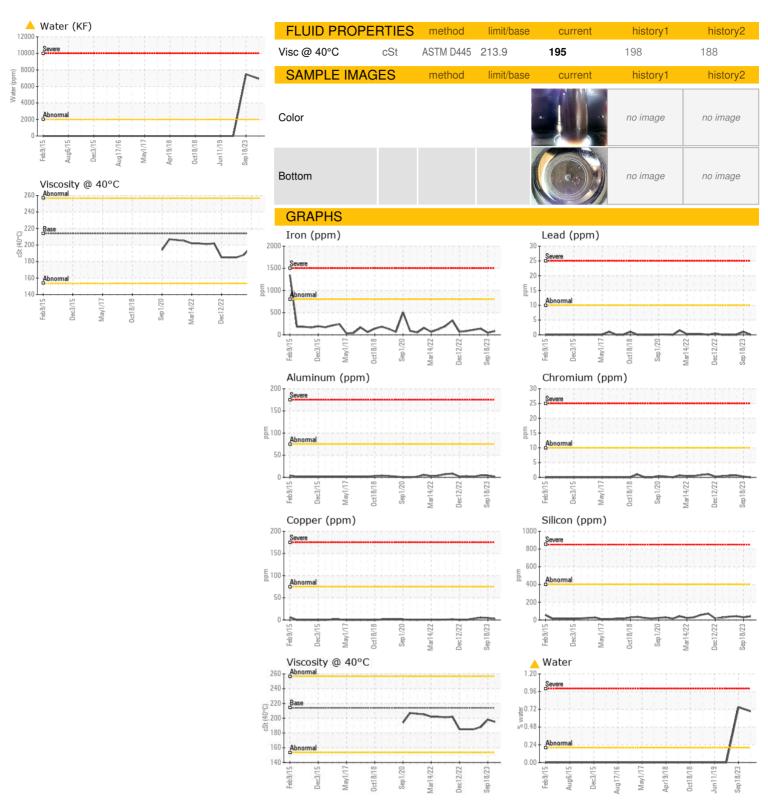
Fluid Condition

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

10 10-4 SAE 50 (GAL)	b2015 Dec2	015 May2017 Oct2018	Sep 2020 Mar 2022 Dec 2022	Sep 2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0070653	PCA0084818	PCA0084559
Sample Date		Client Info		06 Dec 2023	18 Sep 2023	18 Jul 2023
Machine Age	hrs	Client Info		55193	54650	54189
Oil Age	hrs	Client Info		67475	54650	54189
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>800	84	47	140
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m	>15	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>75	2	4	5
Lead	ppm	ASTM D5185m	>10	0	1	0
Copper	ppm	ASTM D5185m		2	5	5
Tin	ppm	ASTM D5185m		0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		4	9	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	14	6	17
Manganese	ppm	ASTM D5185m		<1	2	1
Magnesium	ppm	ASTM D5185m	9	19	17	18
Calcium	ppm	ASTM D5185m		3399	3353	3208
Phosphorus		ASTM D5185m	1099	1021	1029	979
Zinc	ppm	ASTM D5185m		1266	1186	1219
Sulfur	ppm	ASTM D5185m			5694	5103
	ppm		7086	5449		
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>400	41	30	42
Sodium	ppm	ASTM D5185m		0	3	0
Potassium	ppm	ASTM D5185m	>20	3	0	2
Water	%	ASTM D6304	>0.2	△ 0.693	△ 0.748	
opm Water	ppm	ASTM D6304	>2000	<u>▲</u> 6930	<u>^</u> 7480	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	△ 0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG



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Laboratory Sample No. Lab Number Unique Number

: PCA0070653 : 06034197 : 10789426

Recieved Diagnosed

: 18 Dec 2023 Diagnostician : Sean Felton

: 13 Dec 2023

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Test Package : MOB 1 (Additional Tests: KF)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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