

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Area N.E.R./Off-Road L86

Component Transmission (Manual)

PETRO CANADA PRODURO TO-4 SAE 30 (--- 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 fluid.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0122476	PCA0098473	PCA0078066
Sample Date		Client Info		18 Jun 2024	07 Aug 2023	04 Oct 2022
Machine Age	hrs	Client Info		106810	106810	106810
Oil Age	hrs	Client Info		14458	14458	14458
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	13	7	4
Chromium	ppm	ASTM D5185m	>5	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>7	1	<1	1
Aluminum	ppm	ASTM D5185m	>25	1	<1	1
Lead	ppm	ASTM D5185m	>45	4	4	<1
Copper	ppm	ASTM D5185m	>225	41	19	4
Tin	ppm	ASTM D5185m	>10	2	2	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	1	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	2	1
Manganese	ppm	ASTM D5185m	9	<1	2	1
Magnesium	ppm	ASTM D5185m	1	17	13	11
Calcium	ppm	ASTM D5185m	3131	2947	2546	2960
Phosphorus	ppm	ASTM D5185m	1194	1115	897	1041
Zinc	ppm	ASTM D5185m	1281	1290	1113	1227
Sulfur	ppm	ASTM D5185m	3811	9166	8108	5744
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>125	9	9	4
Sodium	ppm	ASTM D5185m		22	22	2
Potassium	ppm	ASTM D5185m	>20	3	3	0
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		1.47	1.56	1.45



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· · · · · · · · · · · · · · · · · · ·	VISUAL		method	limit/base	current	history1	history2			
$\sim$	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE			
	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			
/20 -	Appearance	scalar	*Visual	NORMI	NORMI	NORMI	NORMI			
Vov23 Feb22 Aug7	Odor	scalar	*Visual	NORMI	NORMI	NORMI	NORMI			
	Emulsified Water	scalar	*Vieual	>0.1	NEG	NEG	NEG			
	Eree Water	scalar	*Visual	20.1	NEG	NEG	NEG			
		304141	VISUAI		NEG	NEG	NEG			
	FLUID PROP	ERTIES	method	limit/base	current	history1	history2			
$\sim$		cSt	ASTM D445	88.5	85.3	88.0	85.2			
	SAMPLE IMA	GES	method	limit/base	current	history1	history2			
Nov23/20 + Feb22/22 +	Color				no image	no image	no image			
	Bottom				no image	no image	no image			
	GRAPHS									
	400 T Severe			10	Lead (ppm)	,,				
	E and Abnormal			E	Abnormal					
	e. 200 + <b>e</b>			dd						
		2	12	21 21		6 0	3 2			
	3ep4/1031/11	0v23/2	sb 22/2	Z/LBm	31/1 031/1	13/1 023/2	b22/2			
	Au Au	, ž	Ľ	4	Au S	, Au	₽			
	Aluminum (ppm)	)		1	Chromium (p	pm)				
	= 40				0 - Severe					
	a 20			d	5 - Abnormal					
	0		5				3			
	13/11	123/20	22/22	:2//Br	p4/13	13/11	22/22			
	Aug	Nov	Feb	Ац	Se Aug	Aug	Feb			
	Copper (ppm)			20	Silicon (ppm)					
	400 Severe			20	Severe					
	abnormal			<u>ة</u> 10	Abnormal					
			~	~	0	6	5			
	13/15	/23/21	22/2	Z/LBr	ep4/1.	13/1: /23/2(	22/22			
	Aug	Nov	Feb	Au	Se Aug	Aug	Feb			
	Viscosity @ 40°C	2		(B/HC	Acid Number					
			~	y Z.U						
	¥ 80 - Abnormal		~		0					
	70		~							
	p.4/1:	/23/2(	22/2	Aci	ep4/1;	13/1: 23/20	,22/2,			
	Se Aug	Nov	Feb	Au	Se	Aug	Feb			
Laborato Sample N Lab Num Unique Num Certificate L2367	ry : WearCheck USA - 5 lo. : PCA0122476 ber : 06215884 nber : 11088748 age : MOB 2	01 Madiso Rece Teste Diagi	Madison Ave., Cary, NC 275 Received : 20 Jun 202 Tested : 21 Jun 202 Diagnosed : 21 Jun 2024		Ves Davis	G LOPES CONSTRUCTION 565 WINTHROP ST TAUNTON, MA US 02780 Contact: BUTCH MCGRATH				
o discuss this sample rep - Denotes test methods	o 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 sin	nple accepta	ance decision	rule (JCGM 10	6:2012)	F:			

Submitted By: MATT MANOLI Page 2 of 2