

## **OIL ANALYSIS REPORT**

Sample Rating Trend





Machine Id OR1974 Component

**Right Final Drive** 

### PETRO CANADA PRODURO TO-4 SAE 30 (13 LTR)

DIAGNOSIS
Recommendation
necommentiation

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.

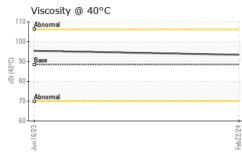
### Fluid Condition

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

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0113375	GFL0087385	
Sample Date		Client Info		22 Feb 2024	16 Jun 2023	
Machine Age	hrs	Client Info		20139	20139	
Oil Age	hrs	Client Info		20139	1000	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
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 D5185(m)	>800	9	11	
Chromium	ppm	ASTM D5185(m)	>10	0	<1	
Nickel	ppm	ASTM D5185(m)	>5	0	0	
Titanium	ppm	ASTM D5185(m)	>15	0	0	
Silver	ppm	ASTM D5185(m)	>2	0	0	
Aluminum	ppm	ASTM D5185(m)	>75	0	1	
Lead	ppm	ASTM D5185(m)	>10	0	0	
Copper	ppm	ASTM D5185(m)		<1	<1	
Tin	ppm	ASTM D5185(m)	>8	0	0	
Antimony	ppm	ASTM D5185(m)	>50	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<1	<1	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	0	0	0	
Manganese	ppm	ASTM D5185(m)	9	0	<1	
Magnesium	ppm	ASTM D5185(m)	1	13	11	
Calcium	ppm	ASTM D5185(m)		3073	3162	
Phosphorus	ppm	ASTM D5185(m)	1194	995	1099	
Zinc	ppm	ASTM D5185(m)	1281	1193	1247	
Sulfur	ppm	ASTM D5185(m)	3811	5443	5922	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>400	4	6	
Sodium	ppm	ASTM D5185(m)		2	2	
Potassium	ppm	ASTM D5185(m)	>20	0	<1	



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	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
	Precipitate	scalar	Visual*	NONE	NONE	NONE	
	Silt	scalar	Visual*	NONE	NONE	NONE	
-	Debris	scalar	Visual*	NONE	NONE	NONE	
	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Feb 22/24	Appearance	scalar	Visual*	NORML	NORML	NORML	
Fet	Odor	scalar	Visual*	NORML	NORML	NORML	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
	Free Water	scalar	Visual*		NEG	NEG	
	FLUID PROPE		method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	88.5	93.4	95.4	
	SAMPLE IMAG	ES	method	limit/base	current	history1	history2
	Color						no image
	Bottom						no image
	GRAPHS						
	Iron (ppm)			31	Lead (ppm)		
	Severe						
d.	1000 - Abnormal			<sup>20</sup>	- Abnormal		
				4	1 <u>1</u>		7
	Jun 16/23			Feb22/24	Jun16/23		E-h 22/24
	,			ű		>	ŭ
	Aluminum (ppm)			31	Chromium (p)	pm)	
	F			<sup>20</sup>			
	a 100 - Abnormal			8-10	Abnormal		
				24	53		PC
	Jun 16/23			Feb22/24	Jun 16/23		Esh22/24
				ιĒ.			ŭ
	Copper (ppm) 200 <sub>T S</sub> evere			100	Silicon (ppm)		
	E			틆 500			
	ā 100 - Abnormal			4 50			
	U			24	53		24
	Jun 16/23			Feb22/24	Jun 16/23		Eeh22/24
	⊸ Viscosity @ 40°C				Additives		
	120 T Abnormal			4000		1	
	Base			<u> </u>	calcium phosphoru	s	
đ					zinc	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	60 L +			2/24	6/23		401
	Jun 16/23			Feb22/24	Jun 16,23		Feb22/24
Sample No.	: MOB 1	Recei Teste Diagr	ived : 21 id : 21 nosed : 21 200-268-213	Mar 2024 Mar 2024 Mar 2024 - W	'es Davis	Mo Contact: Ch cbergero	Lafleche - Landfi Lafleche Road ose Creek, ON CA KOC 1W0 arles Bergerou on@gflenv.com (613)538-4853

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Submitted By: Charles Bergeron Page 2 of 2