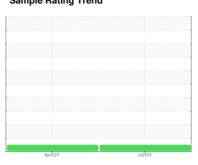


# **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id **L62** 

Front Differential

PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

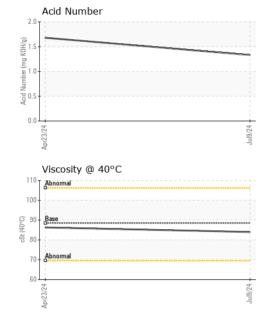
### **Fluid Condition**

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

( GAL)			Apr2024	Jul2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128751	PCA0118471	
Sample Date		Client Info		09 Jul 2024	23 Apr 2024	
Machine Age	hrs	Client Info		8704	8233	
Oil Age	hrs	Client Info		8469	500	
Oil Changed		Client Info		Not Changd	Not Changd	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	94	57	
Chromium	ppm	ASTM D5185m	>10	2	1	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	2	1	
Lead	ppm	ASTM D5185m	>25	0	0	
Copper	ppm	ASTM D5185m	>100	6	4	
Tin	ppm	ASTM D5185m	>10	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	3	1	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	<1	0	
Manganese	ppm	ASTM D5185m	9	<1	1	
Magnesium	ppm	ASTM D5185m	1	14	17	
Calcium	ppm	ASTM D5185m	3131	3128	3029	
Phosphorus	ppm	ASTM D5185m	1194	1053	977	
Zinc	ppm	ASTM D5185m	1281	1249	1185	
Sulfur	ppm	ASTM D5185m	3811	4970	4515	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	9	5	
Sodium	ppm	ASTM D5185m		<1	<1	
Potassium	ppm	ASTM D5185m	>20	<1	<1	
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		1.33	1.68	



# **OIL ANALYSIS REPORT**



Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water	cSt	*Visual  *Visual  *Visual  *Visual  *Visual  *Visual  *Visual  *Visual  *Visual  *ASTM D445	NONE NONE NONE NONE NONE NONE NORML NORML >.2	NONE NONE NONE NONE NONE NONE NORML NORML NEG	NONE NONE NONE NONE NONE NONE NORML NORML NEG		
Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPEF Visc @ 40°C	scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual method	NONE NONE NONE NONE NORML NORML >.2	NONE NONE NONE NONE NORML NORML NEG	NONE NONE NONE NONE NORML NORML NEG		
Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water  FLUID PROPER Visc @ 40°C	scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual *method	NONE NONE NORML NORML >.2	NONE NONE NONE NORML NORML	NONE NONE NONE NORML NORML NEG		
Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPER Visc @ 40°C	scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual method	NONE NONE NORML NORML >.2	NONE NONE NORML NORML NEG	NONE NONE NORML NORML NEG		
Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPER Visc @ 40°C	scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual method	NONE NORML NORML >.2	NONE NORML NORML NEG	NONE NORML NORML NEG		
Appearance Odor Emulsified Water Free Water FLUID PROPEF Visc @ 40°C	scalar scalar scalar scalar STIES	*Visual *Visual *Visual *Visual method	NORML NORML >.2	NORML NORML NEG	NORML NORML NEG		
Odor Emulsified Water Free Water  FLUID PROPEF Visc @ 40°C	scalar scalar scalar STIES	*Visual *Visual *Visual method	NORML >.2	NORML NEG	NORML NEG		
Emulsified Water Free Water FLUID PROPER Visc @ 40°C	scalar scalar RTIES cSt	*Visual *Visual method	>.2	NEG	NEG		
Free Water  FLUID PROPER Visc @ 40°C	scalar RTIES cSt	*Visual method		-			
FLUID PROPER	RTIES cSt	method	limit/base	NEG	NEG		
Visc @ 40°C	cSt		limit/base		INLU		
		ASTM DAAF		current	history1	history	
SAMPLE IMAGE		A31W1D443	88.5	84.0	86.3		
	ES	method	limit/base	current	history1	history?	
Color				no image	no image	no image	
Bottom				no image	no image	no image	
GRAPHS				Load (nnm)			
Iron (ppm)			15				
Severe			E 10	0 Severe			
Abnormal				Abnormal			
3/24			Jul9/24	3/24			
Apr23/24			Jul.	Арг23/24			
Aluminum (ppm)				Chromium (ppm)			
Severe				0			
Abnormal			퉅 <sup>2</sup>	Abnormal			
) [				0			
Apr23/24			Jul9/24	Apr23/24			
			-				
Copper (ppm)			30	Silicon (ppm)			
Severe				Severe			
Abnormal			E 20	0 - Abnormal			
24			24	0 1 2 2			
Apr23/24			Jul9/24	Apr23/24			
√ Viscosity @ 40°C							
Abnormal			(mg KOH//g)	OT ACIO MONIDEL			





Certificate 12367

Sample No. : PCA0128751 Lab Number : 06235100

Unique Number : 11123934

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 12 Jul 2024 **Tested** 

: 15 Jul 2024 Diagnosed : 15 Jul 2024 - Wes Davis

SCRAP METAL SERVICES (SMS Mill Services LLC) 1500 COMMERCIAL AVE MINGO JUNCTION, OH US 43938

Contact: TIM RANDOLPH trandolph@scrapmetalservices.com

Test Package : MOB 2 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)

Report Id: SCRMIN [WUSCAR] 06235100 (Generated: 07/15/2024 09:09:21) Rev: 1

Submitted By: TIM RANDOLPH

T:

F: