

# **OIL ANALYSIS REPORT**

## Sample Rating Trend

# NORMAL



KEMP QUARRIES / BCS - GRAVETTE [65703]
WL127

Component

Transmission (Manual)

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

# DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-4 changed fluid and filters)

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the fluid.

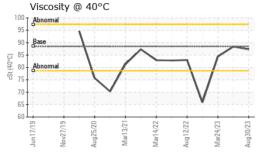
### **Fluid Condition**

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

RO TO-4 SAE 30	( GAL)	Jun2019 No	v2019 Aug2020 Mar202	1 Mar2022 Aug2022 Mar20	23 Aug202:	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0086392	PCA0086350	PCA0086087
Sample Date		Client Info		30 Aug 2023	09 Jun 2023	24 Mar 2023
Machine Age	hrs	Client Info		32702	32254	31807
Oil Age	hrs	Client Info		32702	32254	31807
Oil Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR META	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	6	4	5
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>7	0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	<1	<1
Lead	ppm	ASTM D5185m	>45	<1	<1	0
Copper	ppm	ASTM D5185m		8	6	13
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	4	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	6	6	10
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1	92	91	160
Calcium	ppm	ASTM D5185m	3131	2660	2523	2394
Phosphorus	ppm	ASTM D5185m	1194	970	929	941
Zinc	ppm	ASTM D5185m	1281	1186	1144	1128
Sulfur	ppm	ASTM D5105m	3811	4631	4383	4640
CONTAMINAL	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>125	3	3	2
Sodium	ppm	ASTM D5185m		3	2	2
Potassium	ppm	ASTM D5185m	>20	1	0	0
VISUAL		method	limit/base	current	history1	history2
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	LIGHT	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	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPI	ERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	88.5	87.3	88.4	84.4
						0 1 111 15



# **OIL ANALYSIS REPORT**



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GR/	4PH	S													
Iron	(ppn	1)						Lead	l (ppi	m)					
Severe								Severe 80							
								60							
Abnom	mal							Abnon	mal						
								20							
								0	_						
Jun17/19	Nov27/19	Aug25/20	Mar13/21	Mar14/22	Aug12/22	Mar24/23	Aug30/23	Jun17/19	Nov27/19	Aug25/20	Mar13/21	Mar14/22	Aug12/22	Mar24/23	00.00
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								10 - Severe							
Abnom	mal							E c	mal						
								Abnon							
								2							
- 61// Lunc	Nov27/19	Aug25/20	Mar13/21	Mar14/22	Aug12/22 -	Mar24/23	Aug30/23	0 101/71mp	Nov27/19 -	Aug25/20	Mar13/21-	Mar14/22	Aug12/22	Mar24/23	
			Ma	Mar	Aug	Mar	Aug				Ma	Mar	Aug	Mar	
	oer (p	opm)						300 T 3 - 2 - 3	on (p	pm)					
Severe								250 - Severe							
Abnom								200 - Abnon							
Abnom	nai							Abnon	mal						
								50							
91/21unp	+61//	9/20	3/21	1/22	2727	1/23	1/23	0	- 61//	9/20	3/21	1/22	2/22	1/23	
	Nov27/19	Aug25/20	Mar13/21	Mar14/22	Aug12/22	Mar24/23	Aug30/23	Jun17/19	Nov27/1	Aug25/20	Mar13/21	Mar14/22	Aug12/22	Mar24/23	
Visco Abnom	sity	@ 40°	C					Addi	tives						
	Treat	1						3000 -		cium esphorus		^			
Base		1		$\overline{}$		7	~~	2500	www.Zin		/	1	_/	-	
Abnom	mal	+			1	1		1500		1	/				
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								500							
Jun17/19	Nov27/19	Aug25/20	Mar13/21-	Mar14/22	Aug12/22 -	Mar24/23 -	Aug30/23 +	Jun17/19	Nov27/19 -	Aug25/20 -	Mar13/21-	Mar14/22 -	Aug12/22 -	Mar24/23 -	



Certificate L2367

Laboratory Sample No. Lab Number

: 05948370 Unique Number : 10644329 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0086392 Received : 12 Sep 2023

Diagnosed : 14 Sep 2023 Diagnostician : Don Baldridge Kemp Quarries - Benton County Stone - Gravette

15100 N Hwy 59 Sulphur Springs, AR US 72768

Contact:

F:

gravette@bentoncountystone.com

T:

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)