

# **OIL ANALYSIS REPORT**

## Sample Rating Trend

# NORMAL

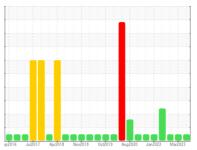


# KEMP QUARRIES / NEOSHO Machine Id WL111

Component

Rear Differential

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





## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-3 sampled fluid)

#### 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 INFORM	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		PCA0086321	PCA0086040	PCA0037718
Sample Date		Client Info		19 Jun 2023	21 Mar 2023	01 Jul 2022
Machine Age	hrs	Client Info		29243	28833	28351
Oil Age	hrs	Client Info		29243	28833	28351
Oil Changed		Client Info		N/A	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS	S	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>500	152	130	113
Chromium	ppm	ASTM D5185m	>3	<1	0	<1
Nickel	ppm	ASTM D5185m	>3	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	<1	1	2
Lead	ppm	ASTM D5185m	>13	<1	2	1
Copper	ppm	ASTM D5185m	>103	54	48	37
Tin	ppm	ASTM D5185m	>5	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	2	0	0	3
Barium	ppm	ASTM D5185m	0	14	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0	<1
Manganese	ppm	ASTM D5185m	0	1	2	1
Magnesium	ppm	ASTM D5185m	9	30	20	14
Calcium	ppm	ASTM D5185m	3114	3619	3355	3191
Phosphorus	ppm	ASTM D5185m	1099	1105	983	915
Zinc	ppm	ASTM D5185m	1245	1389	1284	1114
Sulfur	ppm	ASTM D5185m	7086	5364	4733	4555
CONTAMINAN	TS	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>100	16	13	12
Sodium	ppm	ASTM D5185m		1	<1	2
Potassium	ppm	ASTM D5185m	>20	0	0	0
VISUAL		method	limit/base	current	history 1	history 2
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
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history 1	history 2

Visc @ 40°C

cSt

ASTM D445 213.9

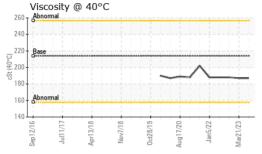
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# **GRAPHS** Iron (ppm) Lead (ppm) 25 20 600 200 Chromium (ppm) Aluminum (ppm) 50 Silicon (ppm) Copper (ppm) 150 150 E 100 Viscosity @ 40°C Additives 4000 3500 220 (220 (200 ₹5 180 3000 E 2500 2000 1500 160 1000 140 500





Certificate L2367

Laboratory

Sample No. Lab Number **Unique Number** 

: PCA0086321 : 05888547 : 10539030 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 30 Jun 2023 : 05 Jul 2023 Diagnosed

Diagnostician : Sean Felton Kemp Quarries - Kemp Stone - Neosho

19148 Ingersol Lane Neosho, MO US 64850

Contact:

F:

neosho@kempstone.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)

Report Id: KEMNEO [WUSCAR] 05888547 (Generated: 07/05/2023 18:43:51) Rev: 1