

# **OIL ANALYSIS REPORT**

### Sample Rating Trend

# **NORMAL**



# KEMP QUARRIES / KEMP STONE - FAIRLAND **WL128**

Component

**Front Differential** 

PETRO CANADA PRODURO TO-4 SAE 50

## DIAGNOSIS

### Recommendation

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

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

### **Fluid Condition**

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

( GAL)		Aar2019 Jan.	2020 Jul2020 Jan2021	Mar2022 Aug2022 Feb2023	Jul2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0084756	PCA0084605	PCA0085999
Sample Date		Client Info		06 Oct 2023	10 Jul 2023	20 Apr 2023
Machine Age	hrs	Client Info		80832	33887	33426
Oil Age	hrs	Client Info		32942	33887	33426
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	30	24	16
Chromium	ppm	ASTM D5185m	>10	3	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	2	1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>100	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	<1	1	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	<1
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	9	15	14	17
Calcium	ppm	ASTM D5185m	3114	3502	3406	3344
Phosphorus	ppm	ASTM D5185m	1099	939	947	917
Zinc	ppm	ASTM D5185m	1245	1244	1169	1118
Sulfur	ppm	ASTM D5185m	7086	5107	4814	5167
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	39	34	32
Sodium	ppm	ASTM D5185m		0	0	1
Potassium	ppm	ASTM D5185m	>20	2	2	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	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	history1	history2

Visc @ 40°C

cSt

ASTM D445 213.9

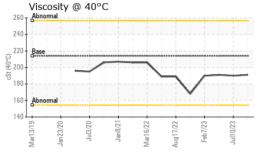
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# **GRAPHS** Iron (ppm) Lead (ppm) 1400 100 1200 80 1000 800 600 400 200 Chromium (ppm) Aluminum (ppm) 25 100 20 E 15 20 Silicon (ppm) Copper (ppm) 250 200 150 Viscosity @ 40°C Additives 3500 3000 220 \$\frac{1}{2}\$ 2500 <sup>음</sup> 2000 1500 160 1000 140 500



Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** 

: PCA0084756 : 05980739

: 10698034 Test Package : MOB 1

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 16 Oct 2023

: 18 Oct 2023 Diagnosed : Sean Felton Diagnostician

Kemp Quarries - Kemp Stone - Fairland 18350 S 590 Rd

Fairland, OK US 74343

Contact:

fairland@kempstone.com

\* - 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) T:

F: