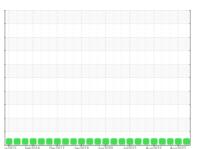


OIL ANALYSIS REPORT

Sample Rating Trend







KEMP QUARRIES / KEMP STONE - FAIRLAND [66903] WLO94

Component
Front Left Final Drive

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

Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2	RO 10-4 SAE 50 (-	GAL)	ın2015 Feb2	016 Dec2017 Jan2019	Jun2020 Jul2021 Aug2022	Aug2023	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 32210 31910 31363 Oil Age hrs Client Info 32210 31910 31363 Oil Changed Client Info N/A N/A N/A N/A Sample Status	Sample Number		Client Info		PCA0087077	PCA0086469	PCA0062036
Oil Age hrs Client Info 32210 31910 31363 Oil Changed Client Info N/A N/A N/A N/A N/A Sample Status method limit/base current history1 history2 Iron ppm ASTM D5185m >800 31 32 17 Chromium ppm ASTM D5185m >5 0 0 <1 Nickel ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Aluminum ppm ASTM D5185m >75 <1 <1 1 Lead ppm ASTM D5185m >75 <15 9 3 Tin ppm ASTM D5185m >75 15 9 3 Vanadium ppm ASTM D5185m 0 0 0	Sample Date		Client Info		02 Nov 2023	08 Aug 2023	11 Jan 2023
Oil Changed Status Client Info N/A N/A N/A N/A WEAR METALS method limit base current history1 history2 Iron ppm ASTM D5185m >8000 31 32 17 Chromium ppm ASTM D5185m >50 0 0 -1 Nickel ppm ASTM D5185m >55 0 0 0 Silver ppm ASTM D5185m >15 0 0 0 Aluminum ppm ASTM D5185m >22 0 0 0 Aluminum ppm ASTM D5185m >10 0 0 -1 Lead ppm ASTM D5185m >10 0 0 -1 Copper ppm ASTM D5185m >8 0 0 -1 Vanadium ppm ASTM D5185m 8 0 0 -1 Vanadium ppm ASTM D5185m 2 3 <1	Machine Age	hrs	Client Info		32210	31910	31363
NORMAL NORMAL NORMAL NORMAL	Oil Age	hrs	Client Info		32210	31910	31363
VEAR METALS	Oil Changed		Client Info		N/A	N/A	N/A
Iron	Sample Status				NORMAL	NORMAL	NORMAL
Chromium ppm ASTM D5185m >10 0 0 <1	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >5 0 0 0 Titanium ppm ASTM D5185m >15 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >75 <1	Iron	ppm	ASTM D5185m	>800	31	32	17
Titanium ppm ASTM D5185m >15 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >75 <1	Chromium	ppm	ASTM D5185m	>10	0	0	<1
Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >75 <1 <1 1 Lead ppm ASTM D5185m >10 0 0 <1 Copper ppm ASTM D5185m >10 0 0 <1 Tin ppm ASTM D5185m >8 0 0 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limil/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 ADDITIVES method limil/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 ADDITIVES method limil/base current history1 history2 </td <td>Nickel</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>5</td> <th>0</th> <td>0</td> <td>0</td>	Nickel	ppm	ASTM D5185m	>5	0	0	0
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Copper ppm ASTM D5185m >75 15 9 3 Tin ppm ASTM D5185m >8 0 0 <1	Lead		ASTM D5185m	>10	0	0	<1
Tin	Copper		ASTM D5185m	>75	15	9	3
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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 >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID PROPERTIES method limit/base current history1 history2	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2

Visc @ 40°C

cSt

ASTM D445 213.9

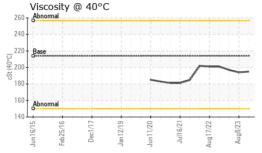
195

194

197



OIL ANALYSIS REPORT





GRAPHS Iron (ppm) Lead (ppm) 1400 25 1200 20 1000 800 600 400 200 Aluminum (ppm) Chromium (ppm) 25 20 Silicon (ppm) Copper (ppm) 100 150 틆 100 50 200 Viscosity @ 40°C Additives 240 3000 220 220 200 200 2500 E 2000 160 1000 140 500





Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: PCA0087077 : 06006603 : 10740365

Received : 13 Nov 2023 Diagnosed : 15 Nov 2023 Diagnostician : Don Baldridge

Kemp Quarries - Kemp Stone - Fairland

18350 S 590 Rd Fairland, OK US 74343

Contact:

fairland@kempstone.com

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: KEMFAI [WUSCAR] 06006603 (Generated: 11/15/2023 20:16:57) Rev: 1

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