

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

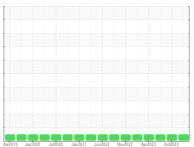


KEMP QUARRIES / KEMP STONE - FAIRLAND [67743] Machine Id WL 128

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.

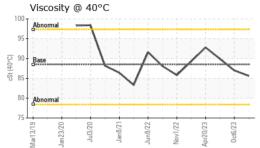
Fluid Condition

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

Sample Number Client Info PCA0086561 PCA0084754	10 10-4 SAE 30 (-	GAL)	Aar2019 Jan.	2020 Jul2020 Jan2021	Jun2022 Nov2022 Apr2023	Oct2023		
Sample Date	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2	
Machine Age	Sample Number		Client Info		PCA0086561	PCA0084754	PCA0084608	
Oil Age hrs Client Info 34924 34458 33887 Oil Changed Sample Status Client Info Changed N/A Changed N/A Changed Chan			Client Info		21 Dec 2023	06 Oct 2023	10 Jul 2023	
Client Info Changed N/A Changed NORMAL NORMAL	Machine Age	hrs	Client Info		34924	34458	33887	
NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2	Oil Age	hrs	Client Info		34924	34458	33887	
CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ASTM DS185m >200 4 3 4 Chromium ppm ASTM DS185m >200 0 0 Chromium ppm ASTM DS185m >5 0 0 0 Nickel ppm ASTM DS185m >5 0 0 0 Silver ppm ASTM DS185m >7 0 0 0 Aluminum ppm ASTM DS185m >7 0 0 0 Copper ppm ASTM DS185m >225 1 2 1 Lead ppm ASTM DS185m >225 4 6 8 Tin ppm ASTM DS185m 10 <1 0 0	Oil Changed		Client Info		Changed	N/A	Changed	
Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >200 4 3 4 Chromium ppm ASTM D5185m >5 0 3 0 Nickel ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Aluminum ppm ASTM D5185m >25 1 2 1 Lead ppm ASTM D5185m >25 1 2 1 Lead ppm ASTM D5185m >225 4 6 8 8 Tin ppm ASTM D5185m 0 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 0 Barium ppm ASTM D5185m 2 3	Sample Status				NORMAL	NORMAL	NORMAL	
Iron	CONTAMINAT	ION	method	limit/base	current	history1	history2	
Irron	Water		WC Method	>0.1	NEG	NEG	NEG	
Chromium	WEAR METAL	S	method	limit/base	current	history1	history2	
Nickel	Iron	ppm	ASTM D5185m	>200	4	3	4	
Description	Chromium	ppm	ASTM D5185m	>5	0	3	0	
Silver	Nickel	ppm	ASTM D5185m	>5	0	0	0	
Aluminum	Titanium	ppm	ASTM D5185m		0	0	0	
Aluminum	Silver		ASTM D5185m	>7		0	0	
Lead			ASTM D5185m					
Copper ppm ASTM D5185m >22.5 4 6 8 Tin ppm ASTM D5185m >10 <1	Lead				0	0	0	
Tin								
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 3 <1 <1 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 <1 2 2 Manganese ppm ASTM D5185m 0 <1 0 0 Magnesium ppm ASTM D5185m 1 39 22 18 Calcium ppm ASTM D5185m 1194 993 888 871 Zinc ppm ASTM D5185m 1281 1173 1156 1056 Sulfur ppm ASTM D5185m 1281 1173 1156 1056 Sulfur ppm ASTM D5185m >125 5 6 8	• •							
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 3 <1 <1 Barium ppm ASTM D5185m 0 0 0 0 0 Molybdenum ppm ASTM D5185m 0 <1 2 2 2 Manganese ppm ASTM D5185m 0 <1 0 0 0 Magnesium ppm ASTM D5185m 1 39 22 18 Calcium ppm ASTM D5185m 3131 2925 3220 2966 Phosphorus ppm ASTM D5185m 1194 993 888 871 Zinc ppm ASTM D5185m 1281 1173 1156 1056 Sulfur ppm ASTM D5185m 1281 1173 1156 1056 Sulfur ppm ASTM D5185				7.0				
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Magnesium ppm ASTM D5185m 1 39 22 18 Calcium ppm ASTM D5185m 3131 2925 3220 2966 Phosphorus ppm ASTM D5185m 3131 2925 3220 2966 Phosphorus ppm ASTM D5185m 1194 993 888 871 Zinc ppm ASTM D5185m 1281 1173 1156 1056 Sulfur ppm ASTM D5185m 3811 3809 4014 3522 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 5 6 8 Sodium ppm ASTM D5185m <t< td=""><td>Molybdenum</td><td>ppm</td><td>ASTM D5185m</td><td>0</td><th><1</th><td>2</td><td>2</td></t<>	Molybdenum	ppm	ASTM D5185m	0	<1	2	2	
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Phosphorus ppm ASTM D5185m 1194 993 888 871 Zinc ppm ASTM D5185m 1281 1173 1156 1056 Sulfur ppm ASTM D5185m 3811 3809 4014 3522 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 5 6 8 Sodium ppm ASTM D5185m >1 0 0 0 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE MODER NONE Vellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE	Calcium		ASTM D5185m	3131	2925	3220	2966	
Zinc ppm ASTM D5185m 1281 1173 1156 1056 Sulfur ppm ASTM D5185m 3811 3809 4014 3522 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 5 6 8 Sodium ppm ASTM D5185m 1 0 0 0 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual <td>Phosphorus</td> <td></td> <td>ASTM D5185m</td> <td>1194</td> <th>993</th> <td>888</td> <td>871</td>	Phosphorus		ASTM D5185m	1194	993	888	871	
Sulfur ppm ASTM D5185m 3811 3809 4014 3522 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >125 5 6 8 Sodium ppm ASTM D5185m 1 0 0 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Yellow 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 NO			ASTM D5185m	1281		1156	1056	
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Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG	VISUAL		method	limit/base	current	history1	history2	
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 >0.1 NEG NEG								
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Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Emulsified Water scalar *Visual >0.1 NEG NEG NEG	Appearance	scalar	*Visual	NORML		NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
Free Water scalar *Visual NEG NEG NEG	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	NEG	



OIL ANALYSIS REPORT





1500 1000 500



Certificate L2367

Laboratory Sample No.

Lab Number **Unique Number** Test Package : MOB 1

: PCA0086561 : 06049690

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved Diagnosed : 10810298 Diagnostician

: 02 Jan 2024 : 04 Jan 2024 : Sean Felton

Kemp Quarries - Kemp Stone - Fairland 18350 S 590 Rd

Fairland, OK US 74343

Contact: fairland@kempstone.com

T: F:

* - 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)