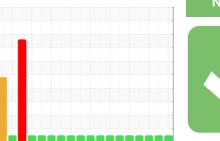


OIL ANALYSIS REPORT

Sample Rating Trend









KEMP QUARRIES / SELIGMAN [67979] Machine Id CATERPILLAR 980G CATERPILLAR WL102

Component

Rear Right Final Drive

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

DIAGNOSIS

Recommendation

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

RO TO-4 SAE 50 (GAL)	pr2016 Jul201	6 Apr2018 Oct2018 Mar20	119 Aug2019 Jan2020 May2020 Oc	12021 Nov202	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0084368	PCA0033858	PCA0025165
Sample Date		Client Info		09 Nov 2023	05 Apr 2022	25 Oct 2021
Machine Age	hrs	Client Info		39985	39907	38950
Oil Age	hrs	Client Info		39985	39907	0
Oil Changed		Client Info		Changed	Not Changd	Oil Added
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ΓΙΟΝ	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>800	40	35	23
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>15	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>75	0	<1	1
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m		0	<1	<1
Tin	ppm	ASTM D5185m	>8	0	0	<1
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m	>50	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
	ррпп		limit/bass			
ADDITIVES Boron		method ASTM D5185m	limit/base	current 0	history1 2	history2
	ppm					
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	2	2
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	9	27	27	30
Calcium	ppm	ASTM D5185m	3114	3053	3217	3284
Phosphorus	ppm	ASTM D5185m	1099	1048	1089	1099
Zinc	ppm	ASTM D5185m	1245	1273	1350	1275
Sulfur	ppm	ASTM D5185m	7086	5795	5502	5683
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>400	16	11	11
Sodium	ppm	ASTM D5185m		1	0	1
Potassium	ppm	ASTM D5185m	>20	0	2	0
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	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

NONE

NORML

NORML

>0.2

scalar

scalar

scalar

scalar *Visual

*Visual

*Visual

*Visual

NONE

NORML

NORML

NEG

NEG

NONE

NORML

NORML

NEG

NEG

Sand/Dirt

Odor

Appearance

Emulsified Water

NONE

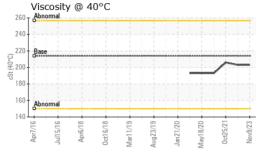
NORML

NORML

NEG



OIL ANALYSIS REPORT



FLUID PROF	PERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	203	203	206
SAMPLE IMA	AGES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS					:	

DOLLOITI								no image no image no imag	
GRAPHS									
Iron (ppm)								Lead (ppm)	
Severe								25 - Severe	
Abnormal								20 Eg. 15	
								10 - Abnormal	
	80	6	6		0.		23		-
Apr7/16 - Jul15/16 - Apr6/18 -	Oct16/18	Mar11/19	Aug23/19	Jan21/20	May18/20	Oct25/21	Nov9/23	Apri/18 - Apri6/18 - Oct16/18 - Apri6/18 - Oct16/18 - Apri6/18 - Apri6/18 - Apri6/19 - Apri6/19 - Apri6/19 - Apri6/19 - Oct25/21 - Oct25/21 - Apri6/20 - Oct25/21 - Oct25/21 - Apri6/20 - Oct25/21 - Oct25/21 - Apri6/20 - Oct25/21 - Oct25/21 - Oct25/21 - Apri6/20 - Oct25/21 - O	Nov9/23
Aluminum (p	pm)							Chromium (ppm)	
Severe				-				25 - Severe	
								20 Eg. 15	
Abnormal								10 Abnormal	
9 9 8	80	6	6	-0:	0.		- 23		- 2
Apr7/16 - Jul15/16 - Apr6/18 -	Oct16/18	Mar11/19	Aug23/19	Jan21/20	May18/20	0ct25/21	Nov9/23	Apr7/16 Jul15/16 Apr6/18 Oct16/18 Mar11/19 Jan21/20 Oct25/21	Nov9/23
Copper (ppm)							Silicon (ppm)	
Severe								800 Severe	
Ab								600 Abnormal	
Abnormal								400 Annomal	
		6	6		0.		22		57
Apr7/16	Oct16/18	Mar11/19	Aug23/19	Jan21/20	May18/20	0ct25/21	Nov9/23	Apr7/16 Jul15/16 Apr6/18 Oct16/18 Mar11/19 Jan21/20 Oct25/21	Nov9/23
Viscosity @ 4	0°C							Additives	
								4000 - calcium	
- Base						_		3000 - zinc	_
111111								2000	-
A DITOTION	80	6	6	+0		+	3		
Apr7/16 - Jul15/16 - Apr6/18 -	Oct16/18	Mar11/19	Aug23/19	Jan21/20	May18/20	Oct25/21	Nov9/23	Apri/16 Jull5/16 Apri6/18 Oct16/18 Aug23/19 Jan21/20 Oct25/21	Nov9/23





Certificate L2367

Laboratory Sample No. Lab Number

Unique Number : 10752703

: PCA0084368 : 06013559 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 20 Nov 2023 Diagnosed : 22 Nov 2023

Diagnostician : Sean Felton

Kemp Quarries - BCS - Seligman 8261 Farm rd 2295

Seligman, MO US 65745

Contact: TECHNICIAN ACCOUNT catherine.anastasio@wearcheck.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)

F: