

OIL ANALYSIS REPORT

Sample Rating Trend

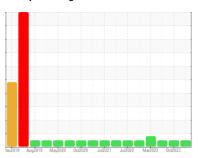
NORMAL



KEMP QUARRIES / BCS - GRAVETTE [67745] WL124

Component **Rear Differential**

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





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Pm3)

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 10-4 SAE 50 (. ,	Jec2018 Aug	2019 May2020 Oct2020	JUIZUZI JUIZUZZ IMIRZUZS		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0069791	PCA0086997	PCA0084631
Sample Date		Client Info		08 Feb 2024	12 Oct 2023	06 Jul 2023
Machine Age	hrs	Client Info		37365	37365	36752
Oil Age	hrs	Client Info		36319	37365	36752
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	TION	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG	NEG	NEG
WEAR METAL	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	51	33	46
Chromium	ppm	ASTM D5185m	>3	<1	<1	<1
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	<1	2	2
Lead	ppm	ASTM D5185m	>13	0	<1	0
Copper	ppm	ASTM D5185m	>103	2	14	2
Tin	ppm	ASTM D5185m	>5	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	0	3	2
Barium	ppm	ASTM D5185m	0	0	9	0
Molybdenum	ppm	ASTM D5185m	0	0	2	1
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium						
	ppm	ASTM D5185m	9	17	18	19
Calcium	ppm ppm	ASTM D5185m ASTM D5185m		17 2539	18 3001	19 3112
Calcium Phosphorus						
Calcium Phosphorus Zinc	ppm	ASTM D5185m	3114	2539	3001	3112
Phosphorus	ppm	ASTM D5185m ASTM D5185m	3114 1099	2539 926	3001 1028	3112 1059
Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245	2539 926 1192	3001 1028 1230	3112 1059 1308
Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245 7086	2539 926 1192 4805	3001 1028 1230 6468	3112 1059 1308 6280
Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	3114 1099 1245 7086 limit/base	2539 926 1192 4805	3001 1028 1230 6468 history1	3112 1059 1308 6280 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	3114 1099 1245 7086 limit/base	2539 926 1192 4805 current	3001 1028 1230 6468 history1	3112 1059 1308 6280 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	3114 1099 1245 7086 limit/base >100	2539 926 1192 4805 current 11	3001 1028 1230 6468 history1 12	3112 1059 1308 6280 history2 12 2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm NTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	3114 1099 1245 7086 limit/base >100 >20 limit/base	2539 926 1192 4805 current 11 0 current NONE	3001 1028 1230 6468 history1 12 0 2 history1 NONE	3112 1059 1308 6280 history2 12 2 2 history2 NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm NTS ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3114 1099 1245 7086 limit/base >100 >20	2539 926 1192 4805 current 11 0 0 current	3001 1028 1230 6468 history1 12 0 2	3112 1059 1308 6280 history2 12 2 2 history2
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm NTS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	3114 1099 1245 7086 limit/base >100 >20 limit/base	2539 926 1192 4805 current 11 0 current NONE NONE NONE	3001 1028 1230 6468 history1 12 0 2 history1 NONE	3112 1059 1308 6280 history2 12 2 2 history2 NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm NTS ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	3114 1099 1245 7086 limit/base >100 >20 limit/base NONE	2539 926 1192 4805 current 11 0 0 current NONE NONE NONE	3001 1028 1230 6468 history1 12 0 2 history1 NONE	3112 1059 1308 6280 history2 12 2 2 history2 NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	3114 1099 1245 7086 limit/base >100 >20 limit/base NONE NONE	2539 926 1192 4805 current 11 0 current NONE NONE NONE	3001 1028 1230 6468 history1 12 0 2 history1 NONE NONE	3112 1059 1308 6280 history2 12 2 2 history2 NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	3114 1099 1245 7086 limit/base >100 >20 limit/base NONE NONE NONE	2539 926 1192 4805 current 11 0 0 current NONE NONE NONE	3001 1028 1230 6468 history1 12 0 2 history1 NONE NONE NONE	3112 1059 1308 6280 history2 12 2 2 NONE NONE NONE
Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	3114 1099 1245 7086 limit/base >100 >20 limit/base NONE NONE NONE NONE	2539 926 1192 4805 current 11 0 0 current NONE NONE NONE NONE NONE NONE	3001 1028 1230 6468 history1 12 0 2 history1 NONE NONE NONE NONE	3112 1059 1308 6280 history2 12 2 2 history2 NONE NONE NONE NONE

>.2

scalar *Visual

scalar *Visual

NEG

NEG

NEG

NEG

Emulsified Water

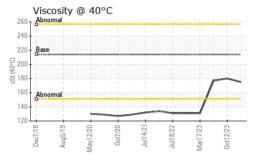
Free Water

NEG

NEG



OIL ANALYSIS REPORT





Silicon (ppm)

Additives

50

3500

3000

2500

E 2000 1500

1000

500





Certificate L2367

Laboratory Sample No.

: PCA0069791 Lab Number : 06101189 Unique Number: 10899419 Test Package : MOB 1

260

240

220

160

140 120

(200 ts) 180

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 26 Feb 2024 **Tested**

: 28 Feb 2024 : 28 Feb 2024 - Sean Felton Diagnosed

Oct12/23 -

Kemp Quarries - Benton County Stone - Gravette

15100 N Hwy 59 Sulphur Springs, AR US 72768

Contact:

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

gravette@bentoncountystone.com T:

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Copper (ppm)

Viscosity @ 40°C

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: