

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



KEMP QUARRIES / PRYOR STONE [65429] Machine Id OHT066

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 performed. All oil samples taken. Engine oil, and all filters changed.)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

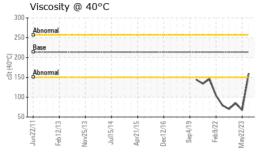
Fluid Condition

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

Sample Number Client Info PCA0084304 PCA0084016 PCA007030 Sample Date Client Info 02 Nov 2023 22 May 2023 30 Dec 202 30 Dec 20	RO TO-4 SAE 50 (n2011 Feb201	3 Nov2013 Jul2014 A	pr2015 Dec2016 Sep2019 Feb20	22 May2023	
Client Info	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age	Sample Number		Client Info		PCA0084304	PCA0084016	PCA007030
Dil Age	Sample Date		Client Info		02 Nov 2023	22 May 2023	30 Dec 2022
Client Info	Machine Age	hrs	Client Info		63909	63506	62432
NORMAL NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history1 nistory2 ron ppm ASTM D5185m >3 0 0 0 0 0 0 0 0 0	Oil Age	hrs	Client Info		1577	1074	62432
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >500 7 2 6 Chromium ppm ASTM D5185m >3 0 0 0 Nickel ppm ASTM D5185m >3 0 <1	Oil Changed		Client Info		Oil Added	Oil Added	Oil Added
Chromium	Sample Status				NORMAL	NORMAL	NORMAL
Chromium	WEAR METAL	_S	method	limit/base	current	history1	history2
Nickel	ron	ppm	ASTM D5185m	>500	7	2	6
Description	Chromium	ppm	ASTM D5185m	>3	0	0	0
Silver	Nickel	ppm	ASTM D5185m	>3	0	<1	0
Altuminum	Γitanium	ppm	ASTM D5185m	>2	0	0	0
December December	Silver	ppm	ASTM D5185m	>2	0	0	0
Description	Aluminum	ppm	ASTM D5185m	>30	<1	0	<1
Tin	Lead	ppm	ASTM D5185m	>13	0	0	0
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Borron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 2 0 Molybdenum ppm ASTM D5185m 0 0 0 0 Manganese ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 3114 2650 110 859 Phosphorus ppm ASTM D5185m 1099 793 347 531 Zinc ppm ASTM D5185m 1099 793 347 461 625 Sulfur ppm ASTM D5185m 7086 3577 1008	Copper	ppm	ASTM D5185m	>103	0	<1	<1
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 0 0 0 0 Barium ppm ASTM D5185m 0 0 2 0 0 Molybdenum ppm ASTM D5185m 0 0 0 0 -1 Manganese ppm ASTM D5185m 0 0 0 0 0 Magnesium ppm ASTM D5185m 9 9 -1 4 4 2650 110 859 9 -1 4 4 2650 110 859 9 -1 4 461 625 5 31 1099 793 347 531 531 20 20 7 100 2507 20 7 1008 2507 2507 20 20 -1 10 1 3	Tin	ppm	ASTM D5185m	>5	0	0	<1
ADDITIVES	Vanadium	ppm	ASTM D5185m		0	0	0
Boron ppm ASTM D5185m 2 0 0 0 0 0 0 0 0 0	Cadmium		ASTM D5185m		0	0	0
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 0 <1 Manganese ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 9 9 <1	Boron	ppm	ASTM D5185m	2	0	0	0
Manganese ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 9 9 <1	Barium	ppm	ASTM D5185m	0	0	2	0
Magnesium ppm ASTM D5185m 9 9 <1 4 Calcium ppm ASTM D5185m 3114 2650 110 859 Phosphorus ppm ASTM D5185m 1099 793 347 531 Zinc ppm ASTM D5185m 1245 947 461 625 Sulfur ppm ASTM D5185m 7086 3577 1008 2507 CONTAMINANTS method limit/base current history1 history3 Silicon ppm ASTM D5185m >100 18 <1	Molybdenum	ppm	ASTM D5185m	0	0	0	<1
Calcium ppm ASTM D5185m 3114 2650 110 859 Phosphorus ppm ASTM D5185m 1099 793 347 531 Zinc ppm ASTM D5185m 1245 947 461 625 Sulfur ppm ASTM D5185m 7086 3577 1008 2507 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >100 18 <1	Manganese	ppm	ASTM D5185m	0	0	0	0
Phosphorus ppm ASTM D5185m 1099 793 347 531 Zinc ppm ASTM D5185m 1245 947 461 625 Sulfur ppm ASTM D5185m 7086 3577 1008 2507 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >100 18 <1 3 Sodium ppm ASTM D5185m >100 18 <1 3 Sodium ppm ASTM D5185m >20 0 <1 0 Potassium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE MONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE NONE NONE NONE <t< td=""><td>Magnesium</td><td>ppm</td><td>ASTM D5185m</td><td>9</td><td>9</td><td><1</td><td>4</td></t<>	Magnesium	ppm	ASTM D5185m	9	9	<1	4
Zinc ppm ASTM D5185m 1245 947 461 625 Sulfur ppm ASTM D5185m 7086 3577 1008 2507 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >100 18 <1 3 Sodium ppm ASTM D5185m >100 18 <1 0 <1 Potassium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE MONE Yellow Metal scalar *Visual NONE NO	Calcium	ppm	ASTM D5185m	3114	2650	110	859
Sulfur ppm ASTM D5185m 7086 3577 1008 2507 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >100 18 <1	Phosphorus	ppm	ASTM D5185m	1099	793	347	531
CONTAMINANTS method limit/base current history1 history3 Silicon ppm ASTM D5185m >100 18 <1 0 <1 Potassium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history3 White Metal scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Zinc	ppm	ASTM D5185m	1245	947	461	625
Silicon	Sulfur	ppm	ASTM D5185m	7086	3577	1008	2507
Sodium	CONTAMINAN	NTS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 0 <1 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE 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		ppm	ASTM D5185m	>100	18		3
White Metal scalar *Visual NONE NONE NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON		ppm	ASTM D5185m			0	<1
White Metal scalar *Visual NONE NONE NONE MODER 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 Sand/Dirt scalar *Visual NONE 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	Potassium	ppm	ASTM D5185m	>20	0	<1	0
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE 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	White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Silt scalar *Visual NONE 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	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debris scalar *Visual NONE 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 NORML Emulsified Water scalar *Visual >.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt scalar *Visual NONE 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	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >.2 NEG NEG NEG Free Water scalar *Visual NEG 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	>.2	NEG	NEG	NEG
FLUID PROPERTIES method limit/base current history1 history1	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2



OIL ANALYSIS REPORT





GRAPHS Iron (ppm) Lead (ppm) 25 800 20 600 200 Chromium (ppm) Aluminum (ppm) 50 Silicon (ppm) Copper (ppm) 20 200 150 150 E 100 Viscosity @ 40°C Additives 3500 250 3000 2500 E 2000 1000 100 500



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

: 06006591

: PCA0084304 : 10740353

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 Nov 2023 Diagnosed

: 15 Nov 2023 Diagnostician : Don Baldridge

Kemp Quarries - Pryor Stone - Pryor

1050 E 520 Rd Pryor, OK US 74361 Contact:

pryor@pryorstone.com

T: F:

Test Package : MOB 1 Certificate L2367 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: KEMPRY [WUSCAR] 06006591 (Generated: 11/15/2023 20:01:10) Rev: 1