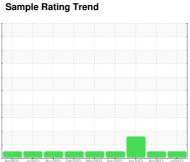


OIL ANALYSIS REPORT



NORMAL



KEMP QUARRIES / PRYOR STONE [64442] WL139

Component Rear Right Final Drive

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: Pm4 performed. All oil samples taken. All oils, and all filters changed. All breathers cleaned/ changed)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

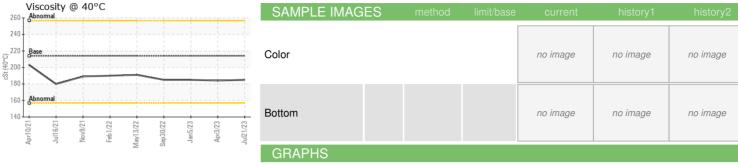
Fluid Condition

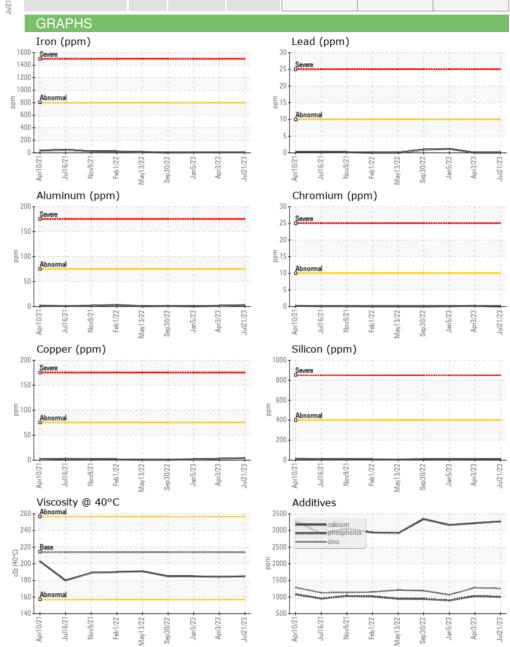
The condition of the oil is acceptable for the time in service.

Client Info PCA0084204 PCA0083909 PCA007035 Client Info PCA00843909 PCA007035 PCA00843909 PCA007035 PCA00843909 PCA0084390	RO TO-4 SAE 50 (-	GAL)	Apr2021 Ju	2021 Nov2021 Feb2022	May2022 Sep2022 Jan2023 Apr202	3 Jul2023	
Sample Date Client Info 21 Jul 2023 03 Apr 2023 05 Jan 2023	SAMPLE INFORM	AOITAN	method	limit/base	current	history1	history2
Machine Age	Sample Number		Client Info		PCA0084204	PCA0083909	PCA007035
Dil Changed	Sample Date		Client Info		21 Jul 2023	03 Apr 2023	05 Jan 2023
Changed Client Info Changed NORMAL WEAR METALS method Imitibase current history1 history2 history2 history3 normal norm	Machine Age	hrs	Client Info		34308	33745	33273
NORMAL NORMAL MARGINAL	Oil Age	hrs	Client Info		2154	1691	1119
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >800 7 7 6 Chromium ppm ASTM D5185m >10 0 <1	Oil Changed		Client Info		Changed	Oil Added	Changed
Chromium	Sample Status				NORMAL	NORMAL	MARGINAL
Description	WEAR METALS	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>800	7	7	6
Silver	Chromium	ppm	ASTM D5185m	>10	0	<1	<1
ASTM D5185m >2	Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Aluminum	Titanium	ppm	ASTM D5185m	>15	0	0	0
December Part Par	Silver	ppm	ASTM D5185m	>2	0	0	0
December Part Par	Aluminum	ppm	ASTM D5185m	>75	3	1	<1
Description	Lead					0	1
ASTM D5185m Part		• •					
ASTM D5185m D	Tin						
ADDITIVES							
Soron ppm ASTM D5185m 2 0 0 0 0 0 0 0 0 0	Cadmium						
Sarium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 0 1 1 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	0	<1	6
Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Barium	ppm	ASTM D5185m	0	0	0	0
Manganese ppm ASTM D5185m 0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Molybdenum	ppm	ASTM D5185m	0	0	1	1
Magnesium ppm ASTM D5185m 9 14 16 18 Calcium ppm ASTM D5185m 3114 3272 3220 3167 Phosphorus ppm ASTM D5185m 1099 1002 1028 898 Zinc ppm ASTM D5185m 1245 1255 1278 1064 Gulfur ppm ASTM D5185m 7086 5164 5628 4883 CONTAMINANTS method limit/base current history1 history2 Gilicon ppm ASTM D5185m >400 11 1 1 1 Godium ppm ASTM D5185m >400 11 1 1 2 Potassium ppm ASTM D5185m >20 1 3 <1	Manganese	• •	ASTM D5185m	0	<1	<1	<1
Calcium ppm ASTM D5185m 3114 3272 3220 3167 Phosphorus ppm ASTM D5185m 1099 1002 1028 898 Zinc ppm ASTM D5185m 1245 1255 1278 1064 Sulfur ppm ASTM D5185m 7086 5164 5628 4883 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >400 11 11 10 Sodium ppm ASTM D5185m >400 1 1 1 2 Potassium ppm ASTM D5185m >20 1 3 <1	Magnesium				14	16	18
Phosphorus ppm ASTM D5185m 1099 1002 1028 898 Zinc ppm ASTM D5185m 1245 1255 1278 1064 Sulfur ppm ASTM D5185m 7086 5164 5628 4883 CONTAMINANTS method limit/base current history1 history2 Gilicon ppm ASTM D5185m >400 11 1 1 1 Sodium ppm ASTM D5185m >400 11 1 1 2 Potassium ppm ASTM D5185m >400 1 3 <1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE Wellow Metal scalar *Visual NONE NONE NONE NONE NONE Wellow Metal scalar *Visual NONE NONE NONE NONE NONE <td>Calcium</td> <td>ppm</td> <td>ASTM D5185m</td> <td>3114</td> <td>3272</td> <td>3220</td> <td>3167</td>	Calcium	ppm	ASTM D5185m	3114	3272	3220	3167
Zinc	Phosphorus			1099		1028	898
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >400 11 11 11 10 Sodium ppm ASTM D5185m >400 11 1 1 1 2 Potassium ppm ASTM D5185m >20 1 3 <1 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 NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Codor NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Zinc	• •	ASTM D5185m	1245	1255		1064
Silicon ppm ASTM D5185m >400 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sulfur						
Sodium ppm ASTM D5185m	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 1 3 <1 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 Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Ddor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG 0.2% Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Silicon	ppm	ASTM D5185m	>400	11	11	10
White Metal scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Sodium	ppm	ASTM D5185m		<1	1	2
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 NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	Potassium	ppm	ASTM D5185m	>20	1	3	<1
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLDdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE NONE NONE NON	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
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 NORML Ddor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG 0.2% Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Yellow Metal	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 NORML Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG 0.2% Free Water scalar *Visual NEG NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	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 NORML Emulsified Water scalar *Visual >0.2 NEG NEG 0.2% Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance scalar *Visual NORML NORM	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORM	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG 0.2% Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water scalar *Visual >0.2 NEG NEG 0.2% Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Emulsified Water		*Visual		NEG	NEG	0.2%
	Free Water	scalar	*Visual		NEG	NEG	NEG
/isc @ 40°C	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	213.9	185	184	185



OIL ANALYSIS REPORT









Certificate L2367

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0084204 : 05926894 : 10606841

Received Diagnosed

: 16 Aug 2023 : 18 Aug 2023 Diagnostician : Don Baldridge Kemp Quarries - Pryor Stone - Pryor 1050 E 520 Rd Pryor, OK US 74361 Contact:

pryor@pryorstone.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) T:

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