

OIL ANALYSIS REPORT

Sample Number

Sample Rating Trend

Client Info

NORMAL



PCA0084166

KEMP QUARRIES / PRYOR STONE [66577] **TTH034**

Component **Swing Drive**

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-3 sampled fluid)

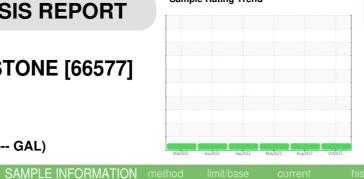
All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

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



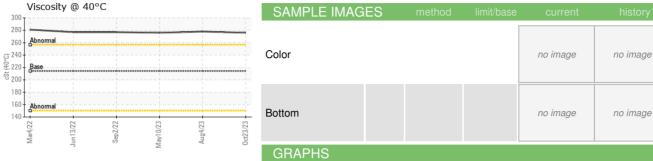
PCA0087004

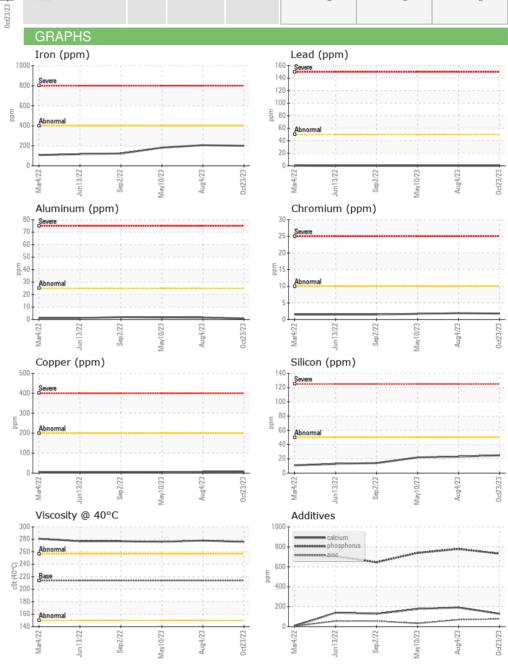
PCA0084288

Sample Date Client Info 23 Oct 2023 04 Aug 2023 10 May 2023 Machine Age hrs Client Info 6019 5598 5028 Oil Age hrs Client Info NORMAL NORMAL NORMAL WEAR METALS method Imitabase current historyt NORMAL Iron ppm ASTM 05185m -400 200 206 182 Chromium ppm ASTM 05185m -10 2 2 2 Nickel ppm ASTM 05185m -10 -1 0 0 Silver ppm ASTM 05185m -10 -1 0 0 Silver ppm ASTM 05185m -0 0 0 0 Silver ppm ASTM 05185m >50 0 0 0 Copper ppm ASTM 05185m >50 0 0 0 Copper ppm ASTM 05185m >10 1 0 0 <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>PCA0087004</th> <th>PCA0084288</th> <th>PCA0084166</th>	Sample Number		Client Info		PCA0087004	PCA0084288	PCA0084166
Oil Age hrs Client Info 6019 5028 0 Oil Changed Sample Status Client Info N/A Not Changd Not Chang	Sample Date		Client Info		23 Oct 2023	04 Aug 2023	10 May 2023
Oil Changed Sample Status Client Info NoRMAL N/A NORMAL Not Changd NORMAL NORMAL	Machine Age	hrs	Client Info		6019	5598	5028
NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2	Oil Age	hrs	Client Info		6019	5028	0
Iron	Oil Changed		Client Info		N/A	Not Changd	Not Changd
Iron	Sample Status				NORMAL	NORMAL	NORMAL
Chromium ppm ASTM D5185m >10 2 2 2 2 Nickel ppm ASTM D5185m >10 <1 0 0 Titanium ppm ASTM D5185m <1 0 0 0 Aluminum ppm ASTM D5185m >50 0 0 0 0 Aluminum ppm ASTM D5185m >50 0 0 0 0 Lead ppm ASTM D5185m >50 0 0 0 0 Tin ppm ASTM D5185m >50 0 0 0 0 Vanadium ppm ASTM D5185m 0 1 0 0 0 Cadmium ppm ASTM D5185m 0 1 0 0 0 ADDITIVES method limil/base current history1 history2 Boron ppm ASTM D5185m 0 19 0 0 0 <t< th=""><th>WEAR METAL</th><th>_S</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	WEAR METAL	_S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>400	200	206	182
Titanium	Chromium	ppm	ASTM D5185m	>10	2	2	2
Stilver	Nickel	ppm	ASTM D5185m	>10	<1	0	0
Aluminum	Titanium	ppm	ASTM D5185m		<1	0	0
Lead	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >200 6 6 5 Tin ppm ASTM D5185m >10 1 0 0 Vanadium ppm ASTM D5185m 0 <1	Aluminum	ppm	ASTM D5185m	>25	<1	2	2
Copper ppm ASTM D5185m >200 6 6 5 Tin ppm ASTM D5185m >10 1 0 0 Vanadium ppm ASTM D5185m 0 <1	Lead	ppm	ASTM D5185m	>50	0	0	0
Tin	Copper	ppm	ASTM D5185m	>200	6	6	5
Vanadium ppm ASTM D5185m 0 <1 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 66 69 56 Barium ppm ASTM D5185m 0 19 0 0 Molybdenum ppm ASTM D5185m 0 <1 0 0 Manganese ppm ASTM D5185m 0 2 2 2 Magnesium ppm ASTM D5185m 0 2 2 2 Magnesium ppm ASTM D5185m 3114 129 193 177 Phosphorus ppm ASTM D5185m 1099 731 779 739 Zinc ppm ASTM D5185m 1099 731 779 739 Sulfur ppm ASTM D5185m 7086 25268 21649 2211			ASTM D5185m	>10	1	0	0
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ADDITIVES					0		0
Barium	ADDITIVES	• •	method	limit/base	current	history1	history2
Barium	Boron	nnm	ASTM D5185m	2	66	69	
Molybdenum ppm ASTM D5185m 0 <1 0 0 Manganese ppm ASTM D5185m 0 2 2 2 Magnesium ppm ASTM D5185m 9 3 3 0 Calcium ppm ASTM D5185m 311.4 129 193 177 Phosphorus ppm ASTM D5185m 1099 731 779 739 Zinc ppm ASTM D5185m 1099 731 779 739 Zinc ppm ASTM D5185m 1245 78 70 33 Sulfur ppm ASTM D5185m 7086 25268 21649 22116 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 25 23 22 Sodium ppm ASTM D5185m >20 2 <1 1 VISUAL method							
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Sulfur ppm ASTM D5185m 7086 25268 21649 22116 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 25 23 22 Sodium ppm ASTM D5185m 2 <1 <1 Potassium ppm ASTM D5185m >20 2 <1 1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE Vellow Metal scalar *Visual NONE NONE NONE Vellow Metal scalar *Visual NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE							
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Potassium ppm ASTM D5185m >20 2 <1 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 Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2				>50			
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Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE 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 NORML NORML NORML NORML Emulsified Water scalar *Visual Scalar *Visual NORML NORM		scalar					
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 >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Yellow Metal	scalar			_	NONE	NONE
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Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG NEG Free Water scalar *Visual NEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2	Debris	scalar		NONE	NONE		NONE
Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG NEG Free Water scalar *Visual NEG	Sand/Dirt	scalar	*Visual	NONE		NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG NEG Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
FLUID PROPERTIES method limit/base current history1 history2	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
•	Free Water	scalar	*Visual		NEG	NEG	NEG
Visc @ 40°C	FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445	213.9	276	278	276



OIL ANALYSIS REPORT







Certificate L2367

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

: PCA0087004 : 05993845 : 10722205 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 30 Oct 2023

Diagnosed Diagnostician : Sean Felton

: 01 Nov 2023

Kemp Quarries - Pryor Stone - Pryor

1050 E 520 Rd Pryor, OK US 74361 Contact:

no image

no image

pryor@pryorstone.com

T: F:

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)