

OIL ANALYSIS REPORT

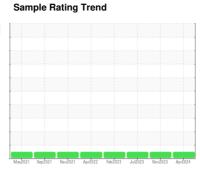


KEMP QUARRIES / PRYOR STONE [68156]

WL141

Component Front 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 component wear rates are normal.

Contamination

There is no indication of any contamination in the

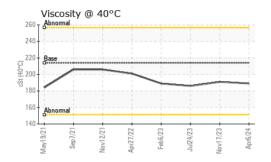
Fluid Condition

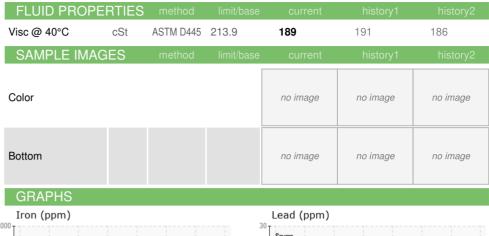
The condition of the oil is acceptable for the time in

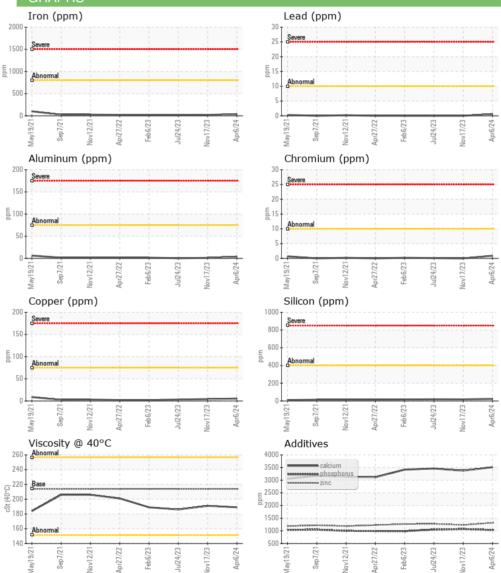
Sample Number	RO TO-4 SAE 50 (-	GAL)	May2021 \$	ep2021 Nov2021 Apr202	2 Feb2023 Jul2023 Nov2023	Apr2024	
Sample Date Client Info 06 Apr 2024 17 Nov 2023 24 Jul 202	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 26330 25744 25250 201 Age hrs Client Info 2223 1637 25250 25250 25010 Changed Client Info Client Inf	Sample Number		Client Info		PCA0086639	PCA0084334	PCA008454
Dil Age	Sample Date		Client Info		06 Apr 2024	17 Nov 2023	24 Jul 2023
Client Info	Machine Age	hrs	Client Info		26330	25744	25250
NORMAL NORMAL NORMAL NORMAL NORMAL	Oil Age	hrs	Client Info		2223	1637	25250
CONTAMINATION method limit/base current history1 history1 Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history1 Fron ppm ASTM D5185m >800 37 20 20 Chromium ppm ASTM D5185m >800 37 20 20 Chromium ppm ASTM D5185m >10 <1 0 <1 Vickel ppm ASTM D5185m >15 <1 0 <1 Alluminum ppm ASTM D5185m >2 0 0 0 Alluminum ppm ASTM D5185m >10 <1 0 0 Cead ppm ASTM D5185m >10 <1 0 0 Cappper ppm ASTM D5185m >8 <1 <1 <1 0 Cappper ppm ASTM D5185m 0 <1	Oil Changed		Client Info		Changed	Oil Added	Oil Added
Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/bass current history1 history1 Oron ppm ASTM D5185m >800 37 20 20 Chromium ppm ASTM D5185m >10 <1 0 <1 Vickel ppm ASTM D5185m >5 <1 0 <1 Silver ppm ASTM D5185m >15 <1 0 <1 Aluminum ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >75 4 1 <1 Lead ppm ASTM D5185m >10 <1 0 0 Copper ppm ASTM D5185m >10 <1 0 0 Aganadium ppm ASTM D5185m <1 <1 0 0 Adamadium ppm ASTM D5185m 2 0 0 0 </td <td>Sample Status</td> <td></td> <td></td> <td></td> <td>NORMAL</td> <td>NORMAL</td> <td>NORMAL</td>	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >800 37 20 20 Chromium ppm ASTM D5185m >10 <1	CONTAMINAT	ION	method	limit/base	current	history1	history2
Chromium	Water		WC Method	>0.2	NEG	NEG	NEG
Description	WEAR METAL	S	method	limit/base	current	history1	history2
ASTM D5185m S	ron	ppm	ASTM D5185m	>800	37	20	20
ASTM D5185m >15	Chromium	ppm	ASTM D5185m	>10	<1	0	<1
ASTM D5185m Potential Process Potentiala	Nickel	ppm	ASTM D5185m	>5	<1	0	0
ASTM D5185m >75	Titanium	ppm	ASTM D5185m	>15	<1	0	<1
December December	Silver	ppm	ASTM D5185m	>2	0	0	0
Description	Aluminum	ppm	ASTM D5185m	>75	4	1	<1
Description	ead	ppm	ASTM D5185m	>10	<1	0	0
All	Copper		ASTM D5185m	>75	5	4	3
Anadium	Γin	ppm	ASTM D5185m	>8	<1	<1	0
ADDITIVES	/anadium		ASTM D5185m		<1	<1	<1
Soron ppm ASTM D5185m 2 0 0 0 0 0 0 0 0 0	Cadmium	ppm	ASTM D5185m		<1	0	0
Sarium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 0 1 0 <1 Manganese ppm ASTM D5185m 0 <1	Boron	ppm	ASTM D5185m	2	0	0	0
Manganese ppm ASTM D5185m 0 <1 0 <1 Magnesium ppm ASTM D5185m 9 15 13 8 Calcium ppm ASTM D5185m 3114 3513 3376 3462 Phosphorus ppm ASTM D5185m 1099 1032 1072 1051 Zinc ppm ASTM D5185m 1245 1318 1232 1277 Sulfur ppm ASTM D5185m 7086 4498 4160 4792 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >400 24 18 19 Godium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history1 Mile Metal scalar *Visual NONE NONE NONE Mole Metal scalar *Visual	Barium	ppm	ASTM D5185m	0	<1	0	0
Magnesium ppm ASTM D5185m 9 15 13 8 Calcium ppm ASTM D5185m 3114 3513 3376 3462 Phosphorus ppm ASTM D5185m 1099 1032 1072 1051 Zinc ppm ASTM D5185m 1245 1318 1232 1277 Gulfur ppm ASTM D5185m 7086 4498 4160 4792 CONTAMINANTS method limit/base current history1 history1 history1 CONTAMINANTS method limit/base current history1 history1 history1 CONTAMINANTS method limit/base current history1 history1 history1 CONTAMINANTS method limit/base current history1 history1 CONTAMINANTS method limit/base current history1 history1 CONTAMINANTS method limit/base current history1 history2 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>0</td> <td>1</td> <td>0</td> <td><1</td>	Molybdenum	ppm	ASTM D5185m	0	1	0	<1
Calcium ppm ASTM D5185m 3114 3513 3376 3462 Phosphorus ppm ASTM D5185m 1099 1032 1072 1051 Zinc ppm ASTM D5185m 1245 1318 1232 1277 Sulfur ppm ASTM D5185m 7086 4498 4160 4792 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >400 24 18 19 Godium ppm ASTM D5185m >20 2 2 1 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history1 White Metal scalar *Visual NONE NONE NONE Vellow Metal scalar *Visual NONE NONE NONE Vellow Metal scalar *Visual	Manganese	ppm	ASTM D5185m	0	<1	0	<1
Phosphorus ppm ASTM D5185m 1099 1032 1072 1051 Zinc ppm ASTM D5185m 1245 1318 1232 1277 Sulfur ppm ASTM D5185m 7086 4498 4160 4792 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >400 24 18 19 Sodium ppm ASTM D5185m >20 2 2 1 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history1 White Metal scalar *Visual NONE NONE NONE White Metal scalar *Visual NONE NONE NONE Vellow Metal scalar *Visual NONE NONE NONE Vellow Metal scalar *Visual NONE NONE	Magnesium	ppm	ASTM D5185m	9	15	13	8
2016 2016	Calcium	ppm	ASTM D5185m	3114	3513	3376	3462
Sulfur ppm ASTM D5185m 7086 4498 4160 4792 CONTAMINANTS method limit/base current history1 history1 Solicon ppm ASTM D5185m >400 24 18 19 Sodium ppm ASTM D5185m 2 2 1 1 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history1 White Metal scalar *Visual NONE NONE NONE White Metal scalar *Visual NONE NONE NONE NONE Wellow Metal scalar *Visual NONE NONE NONE NONE NONE Wellow Metal scalar *Visual NONE NONE <td>Phosphorus</td> <td>ppm</td> <td>ASTM D5185m</td> <td>1099</td> <td>1032</td> <td>1072</td> <td>1051</td>	Phosphorus	ppm	ASTM D5185m	1099	1032	1072	1051
CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >400 24 18 19 Sodium ppm ASTM D5185m 2 2 2 1 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history White Metal scalar *Visual NONE NONE NONE NONE NONE Vellow 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 Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Zinc	ppm	ASTM D5185m	1245	1318	1232	1277
Solition	Sulfur	ppm	ASTM D5185m	7086	4498	4160	4792
Godium ppm ASTM D5185m 2 2 1 Potassium ppm ASTM D5185m >20 2 0 0 VISUAL method limit/base current history1 history1 history1 White Metal scalar *Visual NONE NONE NONE NONE Vellow 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 Sand/Dirt scalar *Visual NORM NORML NORML NORML Appearance scalar *Visual NORML NORML NORML NORML Codor scalar *Visual >0.2 NEG NEG	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 2 0 0 0 VISUAL method limit/base current history1 history White 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 Dodor scalar *Visual NORML NORML NORML NORML NORML Dodor scalar *Visual NORML NORML NORML NORML DOGOR Scalar *Visual NORML NORML NORML NORML DOGOR Scalar *Visual NORML NORML NORML NORML NORML DOGOR Scalar *Visual NORML NORML NORML NORML NORML DOGOR Scalar *Visual NORML NORML NORML NORML NORML DOGOR NEG NEG NEG	Silicon	ppm	ASTM D5185m	>400	24	18	19
VISUAL method limit/base current history1 history Mhite Metal scalar *Visual NONE NONE NONE NONE Mellow Metal scalar *Visual 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 Dodor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Sodium	ppm	ASTM D5185m		2	2	1
Mhite 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 Depearance scalar *Visual NONE NONE NONE NONE NONE Depearance scalar *Visual NORML NORML NORML NORML NORML Deformulsified Water scalar *Visual >0.2 NEG NEG NEG	Potassium	ppm	ASTM D5185m	>20	2	0	0
Vellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLDdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	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 Ddor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG	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 Ddor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	ellow 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 Ddor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 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 NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Silt	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 NEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NFG NFG NFG	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
TILO INCO	Free Water	scalar	*Visual		NEG	NEG	NEG



OIL ANALYSIS REPORT









Sample No. Lab Number : 06149705 Unique Number : 10979783

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0086639 Received

: 15 Apr 2024 **Tested** : 16 Apr 2024 Diagnosed

: 18 Apr 2024 - Don Baldridge

1050 E 520 Rd Pryor, OK US 74361

Test Package : MOB 1 Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: pryor@pryorstone.com T:

Kemp Quarries - Pryor Stone - Pryor

* - 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] 06149705 (Generated: 04/18/2024 11:11:21) Rev: 1

Submitted By:

F: