

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



KEMP QUARRIES / BCS - GRAVETTE [69060]

Front Differential

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

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: $\mathsf{Pm1}$)

WEAR

All component wear rates are normal.

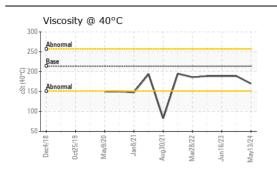
CONTAMINATION

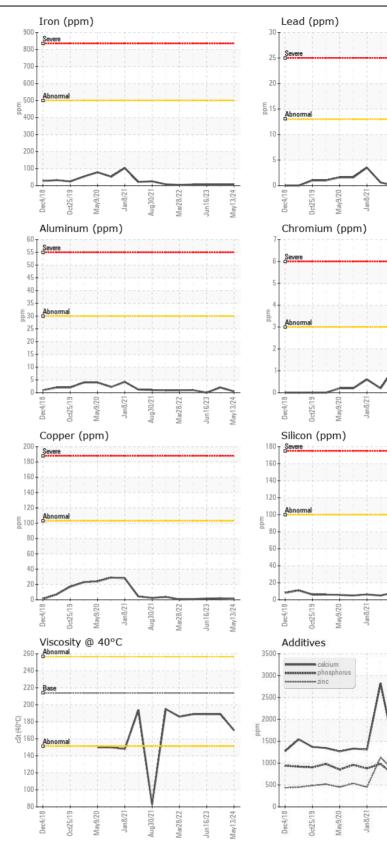
There is no indication of any contamination in the oil.

FLUID CONDITION

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

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0108489	PCA0069836	PCA0086351
Sample Date		Client Info		13 May 2024	21 Dec 2023	16 Jun 2023
Machine Age	hrs	Client Info		399020	399020	39423
Oil Age	hrs	Client Info		399020	299020	39423
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	nom	ASTM D5185m	>500	5	5	6
Chromium	ppm	ASTM D5185m	>3	۔ <1	0	0
Nickel	ppm	ASTM D5105m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>2	۰ <1	0	0
Silver	ppm	ASTM D5185m	>2		0	0
Aluminum	ppm	ASTM D5185m	>2	<1 <1	2	0
Lead	ppm		>13			<1
	ppm	ASTM D5185m		0	0	
Copper	ppm	ASTM D5185m	>103	1 0		2
Tin	ppm	ASTM D5185m	>5	-	0	0
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>100	10	4	4
Silicon Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>100 >20	10 2	4	4
				-		
Potassium		ASTM D5185m	>20	2	2	1
Potassium Water	ppm	ASTM D5185m WC Method	>20 >.2	2 NEG	2 NEG	1 NEG
Potassium Water Silt	ppm scalar	ASTM D5185m WC Method *Visual	>20 >.2 NONE	2 NEG NONE	2 NEG NONE	1 NEG NONE
Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185m WC Method *Visual *Visual	>20 >.2 NONE NONE	2 NEG NONE NONE	2 NEG NONE NONE	1 NEG NONE NONE
Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual	>20 >.2 NONE NONE NONE	2 NEG NONE NONE NONE	2 NEG NONE NONE	1 NEG NONE NONE
Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>20 >.2 NONE NONE NONE NORML	2 NEG NONE NONE NORE	2 NEG NONE NONE NONE NORML	1 NEG NONE NONE NONE NORML
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>20 >.2 NONE NONE NORML NORML	2 NEG NONE NONE NORML NORML NEG	2 NEG NONE NONE NORML NORML NEG	1 NEG NONE NONE NORML NORML NEG
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >.2 NONE NONE NORML NORML >.2	2 NEG NONE NONE NORML NORML NEG 0	2 NEG NONE NONE NORML NORML NEG	1 NEG NONE NONE NORML NORML NEG 0
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	 >20 >.2 NONE NORML >.2 2 	2 NEG NONE NONE NORML NORML NEG 0 9	2 NEG NONE NONE NORML NORML NEG 0 5	1 NEG NONE NONE NORML NORML NEG 0 4
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	 >20 >.2 NONE NORM NORML >.2 2 0 	2 NEG NONE NONE NORML NORML NEG 0 9	2 NEG NONE NONE NORML NORML NEG 0 5 0	1 NEG NONE NONE NORML NORML NEG 0 4
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >.2 NONE NORML NORML >.2 2 0 0 	2 NEG NONE NONE NORML NORML NEG 0 9 0 3	2 NEG NONE NONE NORML NEG 0 5 0 2	1 NEG NONE NONE NORML NORML NEG 0 4 0 2
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese	ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >.2 NONE NORML NORML >.2 2 0 0 0 	2 NEG NONE NONE NORML NORML NEG 0 9 0 3 0 3 0	2 NEG NONE NONE NORML NORML NEG 0 5 0 5 0 2 0	1 NEG NONE NONE NORML NORML NEG 0 4 0 2 0
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >.2 NONE NORML NORML >.2 2 0 0 0 9 	2 NEG NONE NONE NORML NORML NEG 0 9 0 3 0 3 0 22	2 NEG NONE NONE NORML NORML NEG 0 5 0 2 0 2 0 2 0 31	1 NEG NONE NONE NORML NORML NEG 0 4 0 2 0 2 0 2 9
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >.2 NONE NONE NORML NORML >.2 2 0 0 0 9 3114 	2 NEG NONE NONE NORML NORML NEG 0 9 0 3 0 3 0 22 3330	2 NEG NONE NONE NORML NORML NEG 0 5 0 2 0 2 0 31 3127	1 NEG NONE NONE NORML NORML NEG 0 4 0 2 0 2 2 0 2 9 3093
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >2 NONE NORME NORML >2 2 0 0 0 9 3114 1099 	2 NEG NONE NONE NORML NORML NEG 0 9 0 3 0 22 3330 904	2 NEG NONE NONE NORML NORML NEG 0 5 0 5 0 2 0 2 0 31 3127 1035	1 NEG NONE NONE NORML NORML NEG 0 4 0 2 0 2 0 2 9 3093 1045
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >.2 NONE NORML NORML >.2 2 0 0 9 3114 1099 1245 	2 NEG NONE NONE NORML NORML NEG 0 9 0 3 0 22 3330 904 1116	2 NEG NONE NONE NORML NORML NEG 0 5 0 2 0 2 0 31 3127 1035 1257	1 NEG NONE NONE NORML NORML NEG 0 4 0 2 2 0 2 2 0 2 9 3093 1045 1280
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >2 NONE NORME NORML >2 2 0 0 0 9 3114 1099 	2 NEG NONE NONE NORML NORML NEG 0 9 0 3 0 22 3330 904	2 NEG NONE NONE NORML NORML NEG 0 5 0 5 0 2 0 2 0 31 3127 1035	1 NEG NONE NONE NORML NORML NEG 0 4 0 2 0 2 2 0 2 9 3093 1045







Lab Number : 06189821 Tested Sulphur Springs, AR : 30 May 2024 Unique Number : 11046573 : 30 May 2024 - Angela Borella Diagnosed Test Package : MOB 1 Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. gravette@bentoncountystone.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Received

: 23 May 2024

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

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

: PCA0108489

Laboratory

Sample No.

Aug30/21

Kemp Quarries - Benton County Stone - Gravette

Mar28/22

Jun 16/23

15100 N Hwy 59

US 72768

Contact:

Т:

F:

Aav13/24

Aar28/77

ua30/5

in16/23

n16/23

/av13/24