

OIL ANALYSIS REPORT

T

Area **KEMP** QUARRIES / BCS - GRAVETTE [70111] Machine Id WL153 Component

Rear Differential

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: 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.



SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108499	PCA0085743	
Sample Date		Client Info		13 Jun 2024	07 Jun 2023	
Machine Age	hrs	Client Info		42991	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	10	38	
Chromium	ppm	ASTM D5185m	>10	0	<1	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	2	2	
Lead	ppm	ASTM D5185m	>25	2	<1	
Copper	ppm	ASTM D5185m	>100	3	5	
Tin	ppm	ASTM D5185m	>10	<1	<1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	3	2	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	1	2	
Manganese	ppm	ASTM D5185m	0	<1	<1	
Magnesium	ppm	ASTM D5185m	9	15	20	
Calcium	ppm	ASTM D5185m	3114	3428	3612	
Phosphorus	ppm	ASTM D5185m	1099	909	000	
Zinc				303	933	
	ppm	ASTM D5185m	1245	1145	933 1172	
Sulfur	ppm ppm	ASTM D5185m ASTM D5185m	1245 7086			
	ppm			1145 5827	1172	
Sulfur	ppm	ASTM D5185m	7086	1145 5827	1172 9761	
Sulfur CONTAMINAN	ppm TS	ASTM D5185m method	7086 limit/base	1145 5827 current	1172 9761 history1	
Sulfur CONTAMINAN Silicon	ppm TS ppm	ASTM D5185m method ASTM D5185m	7086 limit/base	1145 5827 current 12	1172 9761 history1 16	 history2
Sulfur CONTAMINAN Silicon Sodium	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	7086 limit/base >75	1145 5827 current 12 2 3	1172 9761 history1 16 <1	 history2
Sulfur CONTAMINAN Silicon Sodium Potassium	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	7086 limit/base >75 >20	1145 5827 current 12 2 3	1172 9761 history1 16 <1 0	 history2
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm TS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	7086 limit/base >75 >20 limit/base	1145 5827 current 12 2 3 current	1172 9761 history1 16 <1 0 history1	history2
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm TS ppm ppm ppm scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	7086 limit/base >75 >20 limit/base NONE	1145 5827 current 12 2 3 current NONE	1172 9761 history1 16 <1 0 history1 NONE	 history2 history2
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm TS ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	7086 limit/base >75 >20 limit/base NONE NONE	1145 5827 current 12 2 3 current NONE NONE	1172 9761 history1 16 <1 0 history1 NONE NONE	 history2 history2
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm TS ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	7086 limit/base >75 >20 limit/base NONE NONE NONE	1145 5827 current 12 2 3 current NONE NONE NONE	1172 9761 <u>history1</u> 16 <1 0 <u>history1</u> NONE NONE NONE	 history2 history2
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm TS ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	7086 limit/base >75 >20 limit/base NONE NONE NONE NONE	1145 5827 current 12 2 3 current NONE NONE NONE NONE	1172 9761 history1 16 <1 0 history1 NONE NONE NONE NONE NONE	 history2 history2
Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	7086 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE	1145 5827 current 12 2 3 current NONE NONE NONE NONE NONE NONE	1172 9761 history1 16 <1 0 history1 NONE NONE NONE NONE NONE NONE	 history2 history2

Odor

Emulsified Water

Free Water

scalar *Visual

scalar *Visual

*Visual

scalar

NORML

>.2

NORML

NEG

NEG

NORML

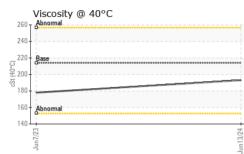
NEG

NEG

Sample Rating Trend



OIL ANALYSIS REPORT





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)

Certificate 12367

T:

F:

gravette@bentoncountystone.com