

OIL ANALYSIS REPORT

KEMP QUARRIES / PRYOR STONE Machine Id CRSH086

Component Diesel Engine Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: New purchase oil sampled only)

Wear

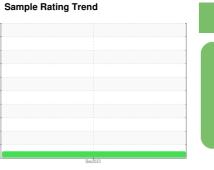
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



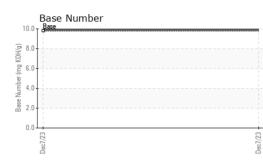


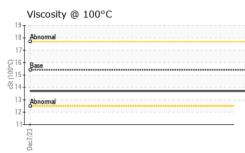
NORMAL

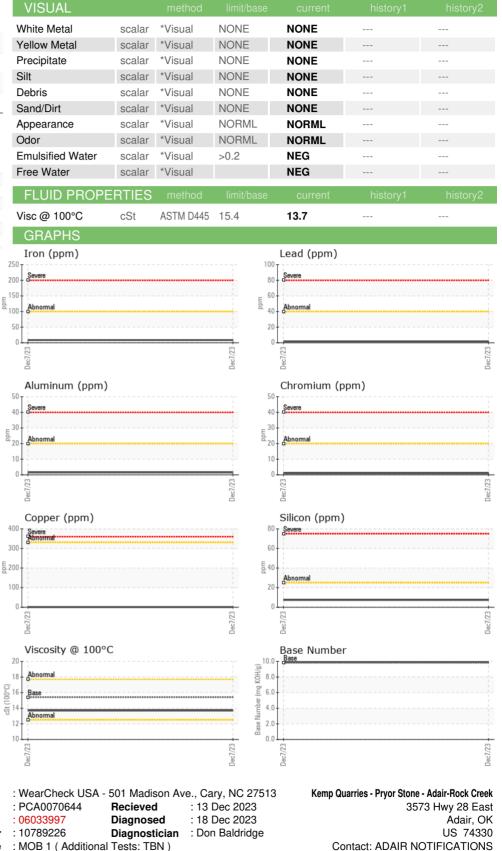
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0070644		
Sample Date		Client Info		07 Dec 2023		
Machine Age	hrs	Client Info		265		
Oil Age	hrs	Client Info		265		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	8		
Chromium		ASTM D5185m	>20	1		
Nickel	ppm ppm	ASTM D5185m	>20	، <1		
Titanium		ASTM D5185m	~	<1		
Silver	ppm ppm	ASTM D5185m	>3	0		
Aluminum		ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>20	2		
	ppm					
Copper Tin	ppm	ASTM D5185m	>330 >15	<1		
Vanadium	ppm	ASTM D5185m	>10	<1 0		
	ppm	ASTM D5185m		ں <1		
Cadmium	ppm	ASTM D5185m		< 1		
	lele					
ADDITIVES	le le tra	method	limit/base	current	history1	history2
	ppm		limit/base 0		history1	history2
ADDITIVES		method		current		
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 48		
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0	current 48 0		
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	current 48 0 37		
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	current 48 0 37 <1		
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	current 48 0 37 <1 762		
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	current 48 0 37 <1 762 1540	 	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	current 48 0 37 <1 762 1540 1022	 	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270	current 48 0 37 <1 762 1540 1022 1238		
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	Current 48 0 37 <1 762 1540 1022 1238 3757		
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060	current 48 0 37 <1 762 1540 1022 1238 3757 current	 history1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 imit/base >25	current 48 0 37 <1 762 1540 1022 1238 3757 current 7	 history1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 imit/base >25	current 48 0 37 <1 762 1540 1022 1238 3757 current 7 4	 history1	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >25	current 48 0 37 <1 762 1540 1022 1238 3757 current 7 4 1	 history1 	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 225 >25	current 48 0 37 <1 762 1540 1022 1238 3757 current 7 4 1 current	 history1 history1	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 225 >25 >20 Limit/base >20	current 48 0 37 <1 762 1540 1022 1238 3757 current 7 4 1 current 0.1	 history1 history1	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 225 220 220 220 20 20 20 20 20 20 20 20 20	current 48 0 37 <1 762 1540 1022 1238 3757 current 7 4 1 current 0.1 6.7	 history1 history1 	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 225 20 225 20 20 320 33 20 20 20	current 48 0 37 <1 762 1540 1022 1238 3757 current 7 4 1 current 0.1 6.7 16.5	 history1 history1 history1	 history2 history2 history2

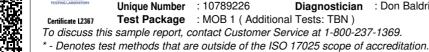


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Laboratory

Sample No.

Lab Number

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



T:

F:

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