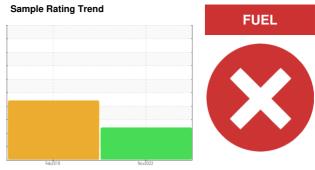


OIL ANALYSIS REPORT

KEMP QUARRIES / PRYOR STONE

LFT009
Component
Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. (Customer Sample Comment: Changed fluid and filters)

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil.

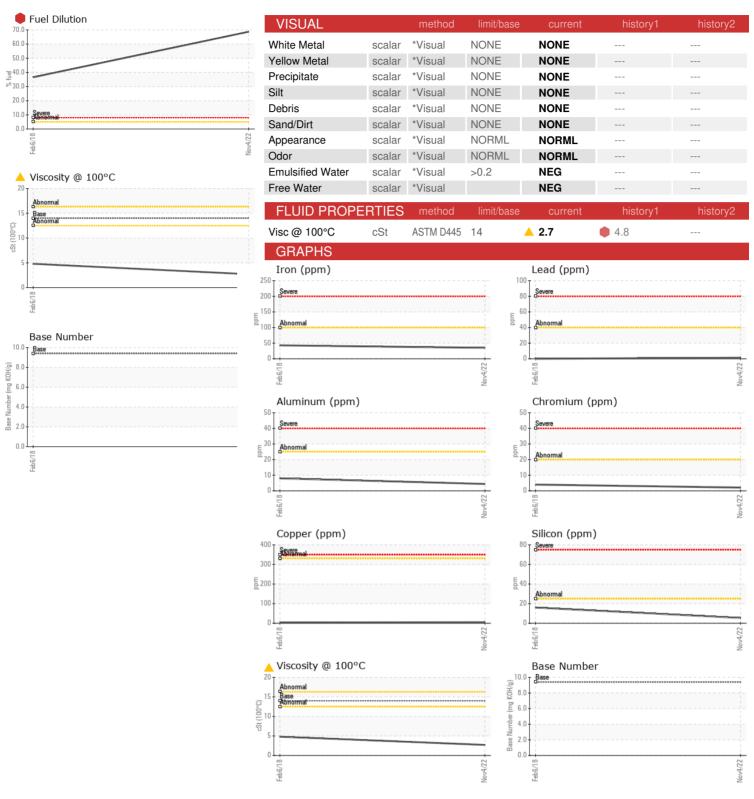
Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

AL)			Feb 2018	Nov2022		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0070248	PCA47125005	
Sample Date		Client Info		04 Nov 2022	06 Feb 2018	
Machine Age	hrs	Client Info		8365	3587	
Oil Age	hrs	Client Info		8365	214	
Oil Changed		Client Info		Changed	N/A	
Sample Status				SEVERE	SEVERE	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Glycol		WC Method		NEG	0.0	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	35	43	
Chromium	ppm	ASTM D5185m	>20	2	4	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m	>2	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>25	4	8	
Lead	ppm	ASTM D5185m	>40	1	0	
Copper	ppm	ASTM D5185m	>330	5	4	
Tin	ppm	ASTM D5185m	>15	<1	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	1	33	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	19	26	
Manganese						
···a.·ga.·ooo	ppm	ASTM D5185m		<1		
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	0	<1 272	339	
-			0			
Magnesium	ppm	ASTM D5185m	0	272	339	
Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m	0	272 327	339 1128	
Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0	272 327 307	339 1128 509	
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 limit/base	272 327 307 375	339 1128 509 592	
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		272 327 307 375 1129	339 1128 509 592	
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	272 327 307 375 1129 current	339 1128 509 592 history1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	272 327 307 375 1129 current	339 1128 509 592 history1 ▲ 16	history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	272 327 307 375 1129 current 5	339 1128 509 592 history1 ▲ 16 0	 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	272 327 307 375 1129 current 5 0 <1	339 1128 509 592 history1 ▲ 16 0 1	history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	limit/base >25 >20 >5	272 327 307 375 1129 current 5 0 <1	339 1128 509 592 history1 ▲ 16 0 1	history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >20 >5 limit/base	272 327 307 375 1129 current 5 0 <1 68.7 current	339 1128 509 592 history1 ▲ 16 0 1 ■ 36.54 history1	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D3524 method *ASTM D7844	limit/base >25 >20 >5 limit/base >3	272 327 307 375 1129 current 5 0 <1 68.7 current 0.2	339 1128 509 592 history1 ▲ 16 0 1 • 36.54 history1 0.36	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >25 >20 >5 limit/base >3 >20	272 327 307 375 1129 current 5 0 <1 68.7 current 0.2 9.1	339 1128 509 592 history1 ▲ 16 0 1 ■ 36.54 history1 0.36	history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 Method *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844 *ASTM D7844	limit/base >25	272 327 307 375 1129 current 5 0 <1 68.7 current 0.2 9.1 14.8	339 1128 509 592 history1 ▲ 16 0 1 ■ 36.54 history1 0.36	history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >25 >20 >5 limit/base >3 >20 >30 limit/base >25	272 327 307 375 1129	339 1128 509 592 history1 ▲ 16 0 1 ■ 36.54 history1 0.36 history1	history2 history2 history2



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0070248 : 05698629

: 10228203

Unique Number

Diagnosed : 23 Nov 2022 Diagnostician : Jonathan Hester **Test Package**: MOB 1 (Additional Tests: PercentFuel, TBN)

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

Received

: 21 Nov 2022

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.

Kemp Quarries - Pryor Stone - Pryor

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T:

F:

Report Id: KEMPRY [WUSCAR] 05698629 (Generated: 08/21/2023 15:19:54) Rev: 1