

OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
KEMP QUARRIES / BCS - GRAVETTE
 Machine Id
3144
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Changed fluid and filters)

Wear

All component wear rates are normal.

Contamination

There is a moderate 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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0062423	---	---
Sample Date	Client Info	01 Aug 2022	---	---
Machine Age	mls Client Info	554304	---	---
Oil Age	mls Client Info	554304	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	56	---	---
Chromium	ppm ASTM D5185m >20	1	---	---
Nickel	ppm ASTM D5185m >4	0	---	---
Titanium	ppm ASTM D5185m	<1	---	---
Silver	ppm ASTM D5185m >3	<1	---	---
Aluminum	ppm ASTM D5185m >20	3	---	---
Lead	ppm ASTM D5185m >40	7	---	---
Copper	ppm ASTM D5185m >330	80	---	---
Tin	ppm ASTM D5185m >15	<1	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	25	---	---
Barium	ppm ASTM D5185m 0	0	---	---
Molybdenum	ppm ASTM D5185m 60	61	---	---
Manganese	ppm ASTM D5185m 0	<1	---	---
Magnesium	ppm ASTM D5185m 1010	190	---	---
Calcium	ppm ASTM D5185m 1070	1840	---	---
Phosphorus	ppm ASTM D5185m 1150	945	---	---
Zinc	ppm ASTM D5185m 1270	1140	---	---
Sulfur	ppm ASTM D5185m 2060	3061	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	5	---	---
Sodium	ppm ASTM D5185m	8	---	---
Potassium	ppm ASTM D5185m >20	37	---	---
Fuel	% ASTM D3524 >5	▲ 6.0	---	---

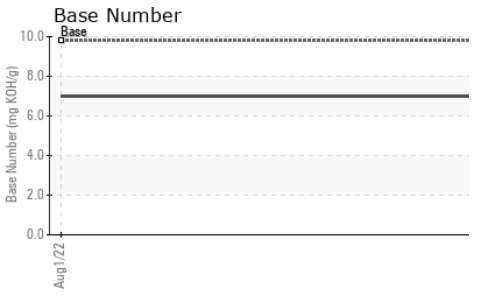
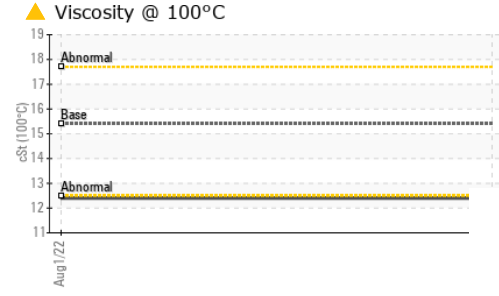
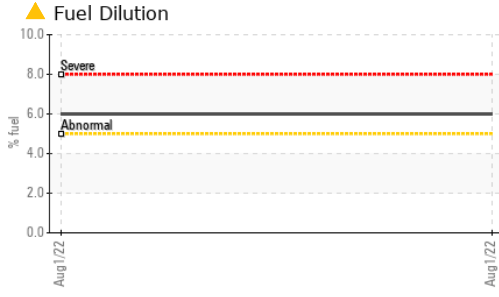
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.3	---	---
Nitration	Abs/cm *ASTM D7624 >20	12.6	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	25.1	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	19.2	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	7.0	---	---

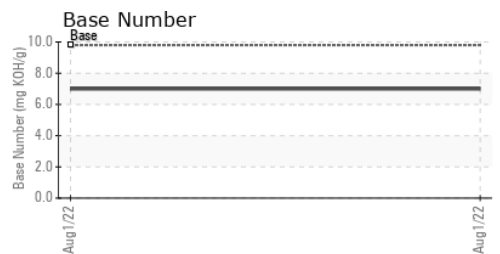
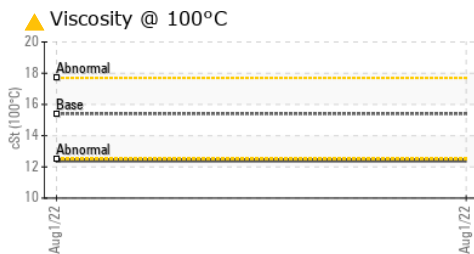
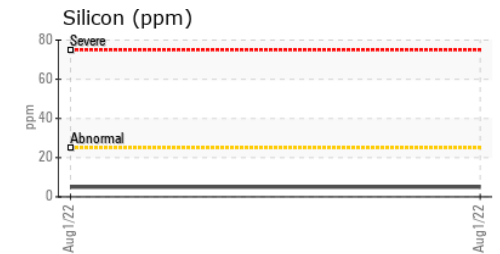
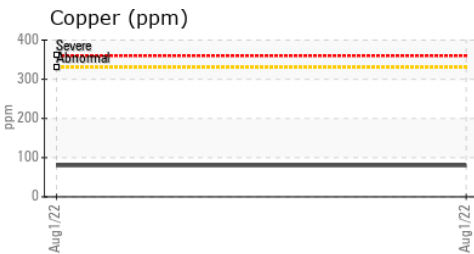
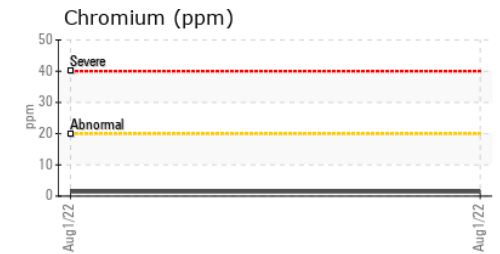
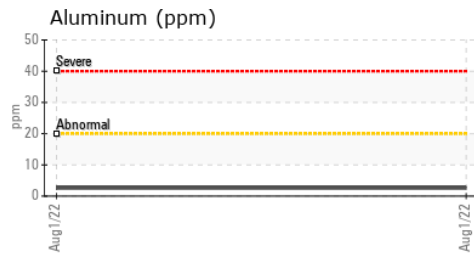
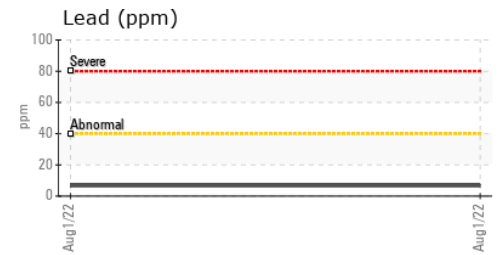
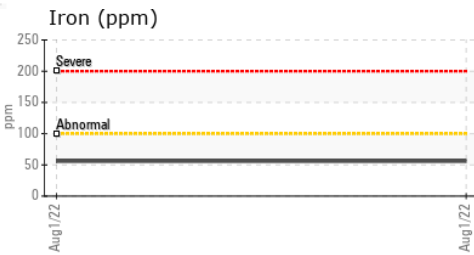
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4 ▲ 12.4	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0062423 **Received** : 05 Aug 2022
Lab Number : 05610390 **Diagnosed** : 09 Aug 2022
Unique Number : 10084884 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Kemp Quarries - Benton County Stone - Gravette
 15100 N Hwy 59
 Sulphur Springs, AR
 US 72768
 Contact:
 gravette@bentoncountystone.com

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)