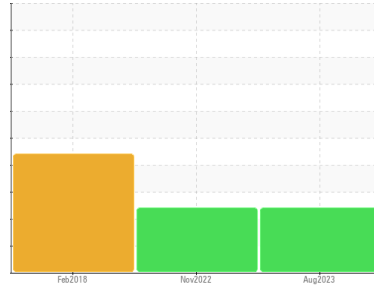


OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
KEMP QUARRIES / PRYOR STONE
Machine Id
LFT009
Component
Diesel Engine
Fluid
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. Believe key was left on, unknown hour run time. Oil very thin, possible fuel, coolant. Has soot odor. Oil in radiator.)

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 oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0086455	PCA0070248	PCA47125005
Sample Date	Client Info	21 Aug 2023	04 Nov 2022	06 Feb 2018
Machine Age	hrs	9887	8365	3587
Oil Age	hrs	9887	8365	214
Oil Changed	Client Info	Changed	Changed	N/A
Sample Status		SEVERE	SEVERE	SEVERE

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	0.0

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >100	20	35	43
Chromium	ppm	ASTM D5185m >20	<1	2	4
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m >2	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	4	8
Lead	ppm	ASTM D5185m >40	0	1	0
Copper	ppm	ASTM D5185m >330	2	5	4
Tin	ppm	ASTM D5185m >15	0	<1	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	1	33
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	24	19	26
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m 0	344	272	339
Calcium	ppm	ASTM D5185m	401	327	1128
Phosphorus	ppm	ASTM D5185m	414	307	509
Zinc	ppm	ASTM D5185m	447	375	592
Sulfur	ppm	ASTM D5185m	1316	1129	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	5	5	▲ 16
Sodium	ppm	ASTM D5185m	1	0	0
Potassium	ppm	ASTM D5185m >20	0	<1	1
Fuel	%	ASTM D3524 >5	● 68.0	● 68.7	● 36.54

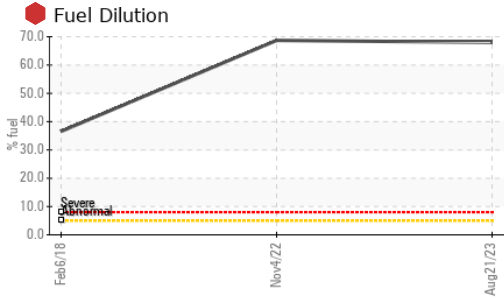
INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	0.1	0.2	0.36
Nitration	Abs/cm	*ASTM D7624 >20	7.8	9.1	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	13.7	14.8	---

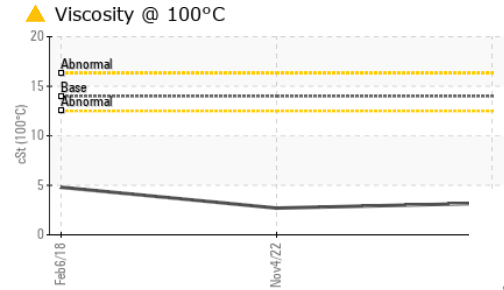
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	9.5	10.3	0
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	5.4	7.4	---

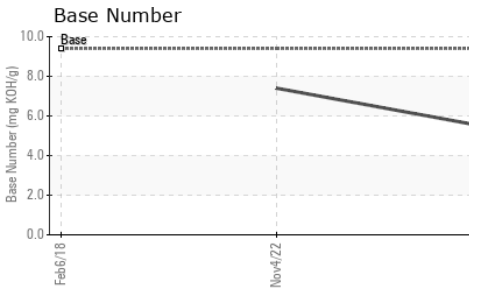
OIL ANALYSIS REPORT



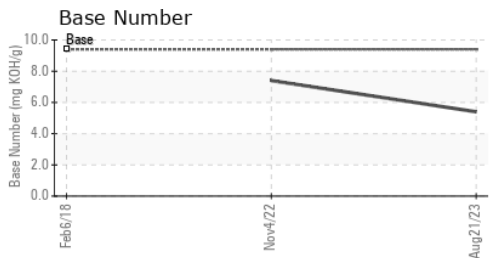
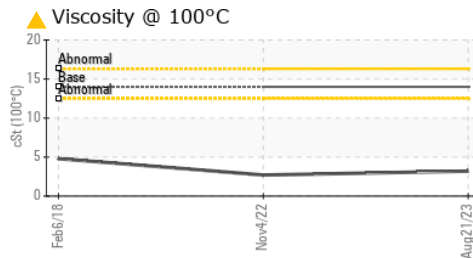
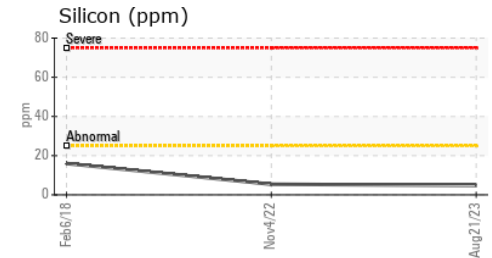
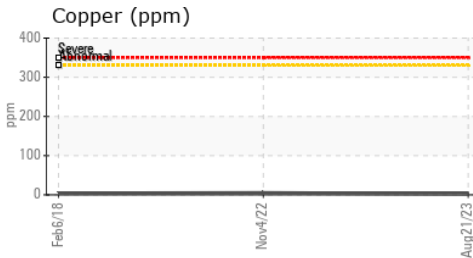
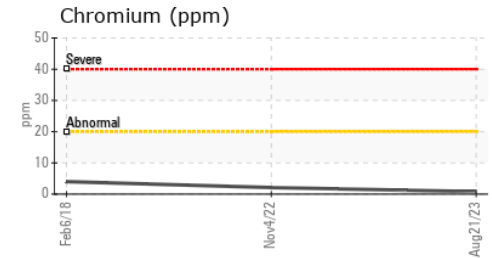
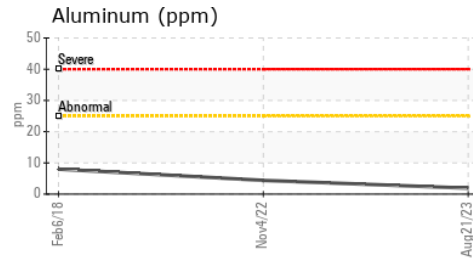
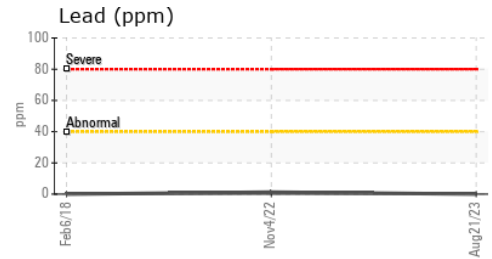
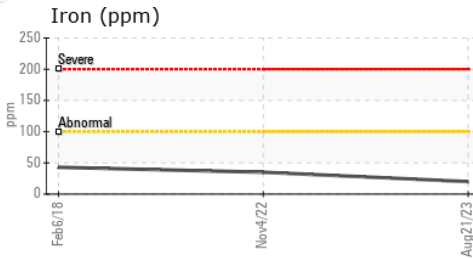
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 14	▲ 3.2	▲ 2.7	● 4.8



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086455 **Received** : 05 Sep 2023
Lab Number : 05941989 **Diagnosed** : 07 Sep 2023
Unique Number : 10632601 **Diagnostician** : Don Baldrige
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

Kemp Quarries - Pryor Stone - Pryor
 1050 E 520 Rd
 Pryor, OK
 US 74361
 Contact:
 pryor@pryorstone.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)