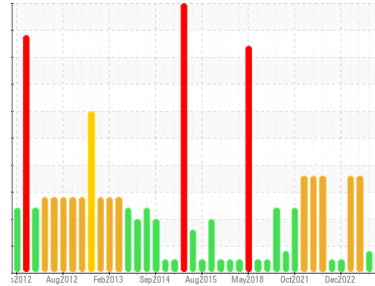


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / PRYOR STONE
 Machine Id
WL049
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

Sample Rating Trend



SOOT



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. (Customer Sample Comment: Oil sampled due to seized, pulling engine)

Wear

All component wear rates are normal.

Contamination

There is an abnormal amount of solids and carbon present 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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0084745	PCA0085830	PCA0034671
Sample Date	Client Info	04 Oct 2023	18 Aug 2023	04 Aug 2023
Machine Age	hrs	4793	4583	4581
Oil Age	hrs	4793	212	500
Oil Changed	Client Info	N/A	Not Changd	Changed
Sample Status		ABNORMAL	ABNORMAL	SEVERE

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >85	27	31	52
Chromium	ppm	ASTM D5185m >4	<1	<1	2
Nickel	ppm	ASTM D5185m >4	<1	0	1
Titanium	ppm	ASTM D5185m >2	<1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >11	1	1	3
Lead	ppm	ASTM D5185m >30	5	5	11
Copper	ppm	ASTM D5185m >135	8	8	17
Tin	ppm	ASTM D5185m >4	1	<1	<1
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	1	<1	<1
Barium	ppm	ASTM D5185m 0	3	0	1
Molybdenum	ppm	ASTM D5185m 0	58	64	67
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	858	1014	981
Calcium	ppm	ASTM D5185m	986	1106	1098
Phosphorus	ppm	ASTM D5185m	916	1048	990
Zinc	ppm	ASTM D5185m	1079	1261	1228
Sulfur	ppm	ASTM D5185m	2577	3504	2939

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >20	4	4	5
Sodium	ppm	ASTM D5185m	6	4	12
Potassium	ppm	ASTM D5185m >20	<1	0	2
Fuel	%	ASTM D3524 >5	<1.0	<1.0	<1.0

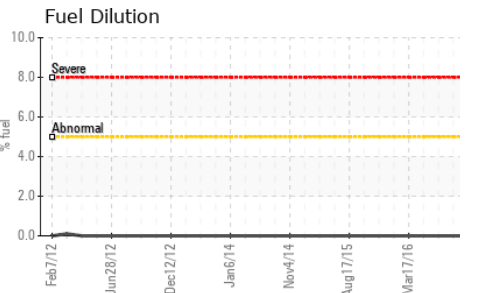
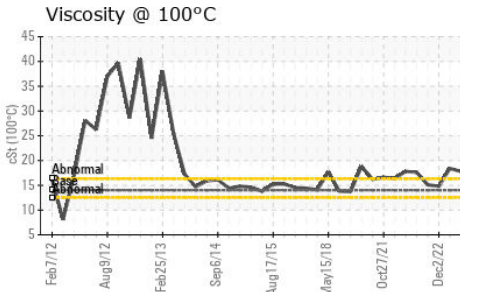
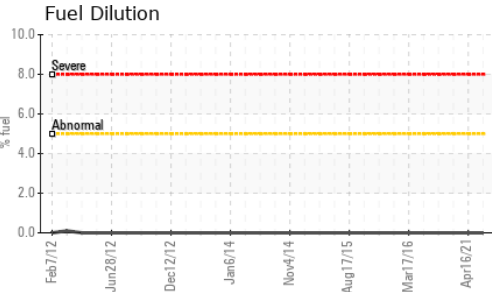
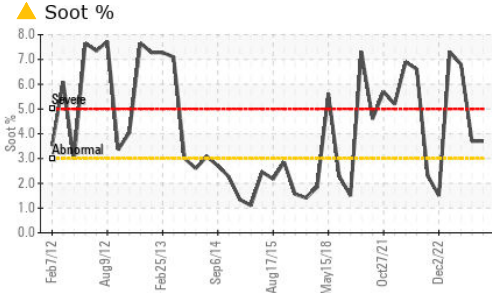
INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	▲ 3.7	▲ 3.7	● 6.8
Nitration	Abs/cm	*ASTM D7624 >20	9.3	8.9	16.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.7	25.3	35.6

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.8	13.9	25.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	7.5	4.8	▲ 0.0

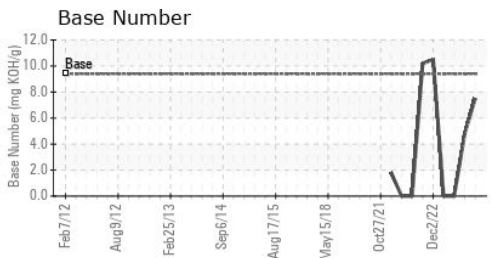
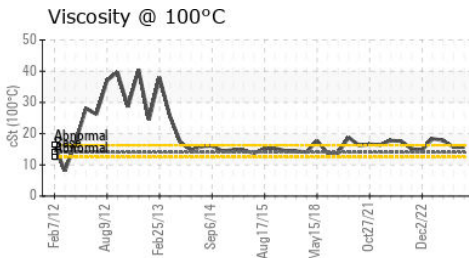
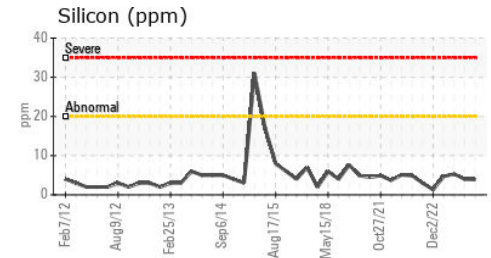
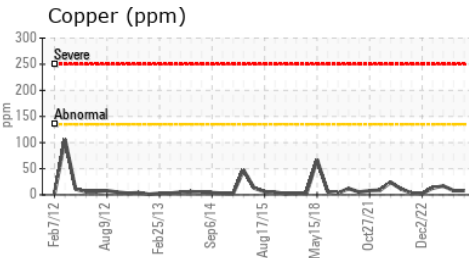
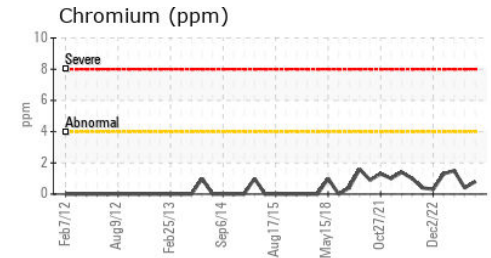
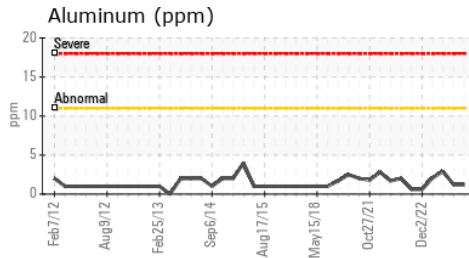
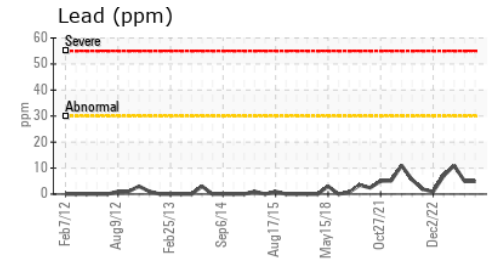
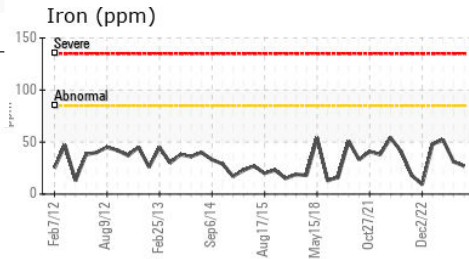
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 14	15.7	15.7	▲ 17.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084745 **Received** : 16 Oct 2023
Lab Number : 05980161 **Diagnosed** : 17 Oct 2023
Unique Number : 10697456 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, 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)