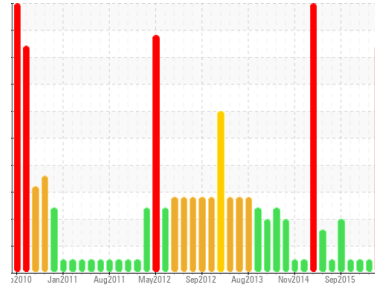


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / PRYOR STONE [18155383035]
 Machine Id
WLO49
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you check for faulty combustion, plugged air filters, or aftercoolers. We advise that you monitor for an abnormal oil pressure drop and noise. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Copper ppm levels are severe. Bearing wear is indicated.

Contamination

There is a light concentration of water present in the oil. There is an abnormal amount of solids and carbon present in the oil. Test for glycol is negative.

Fluid Condition

Viscosity of sample indicates oil is within SAE 50 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA55383035	PCA82166051	PCA32386003
Sample Date	Client Info		15 May 2018	17 Mar 2016	21 Jan 2016
Machine Age	hrs	Client Info	35693	34098	33645
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			SEVERE	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method		<1.0	<1.0	<1.0

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	54	18	19
Chromium	ppm	ASTM D5185(m)	1	0	0
Nickel	ppm	ASTM D5185(m)	0	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	0	0	0
Aluminum	ppm	ASTM D5185(m)	1	1	1
Lead	ppm	ASTM D5185(m)	3	0	0
Copper	ppm	ASTM D5185(m)	67	3	3
Tin	ppm	ASTM D5185(m)	2	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	14	37	40
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	47	51	49
Magnesium	ppm	ASTM D5185(m)	645	944	805
Calcium	ppm	ASTM D5185(m)	1205	1367	1317
Phosphorus	ppm	ASTM D5185(m)	733	1077	905
Zinc	ppm	ASTM D5185(m)	924	1191	1146

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	6	2	7
Sodium	ppm	ASTM D5185(m)	47	2	7
Potassium	ppm	ASTM D5185(m)	10	1	1
Water	%	ASTM D6304*	0.33	0	0
Glycol	%	ASTM D7922*	0.0	0.0	0.0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	5.61	1.85	1.41

FLUID DEGRADATION

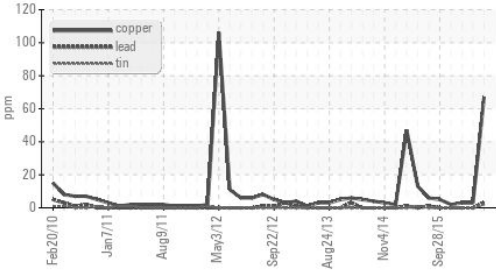
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	0	4	8

FLUID PROPERTIES

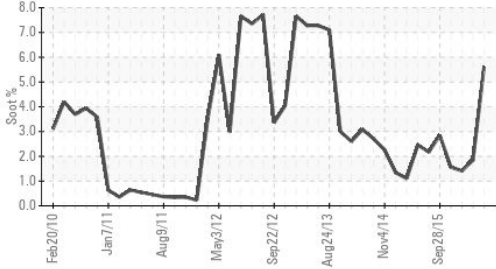
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	17.7	14.1	14.4

OIL ANALYSIS REPORT

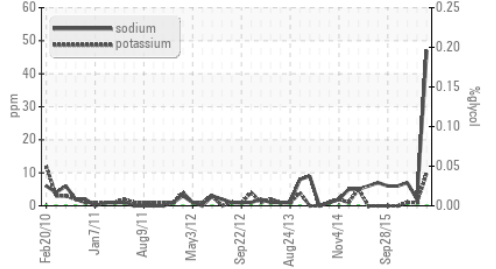
Non-ferrous Metals



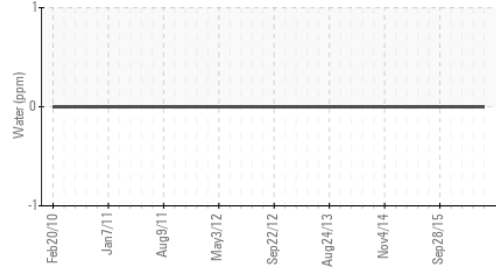
Soot %



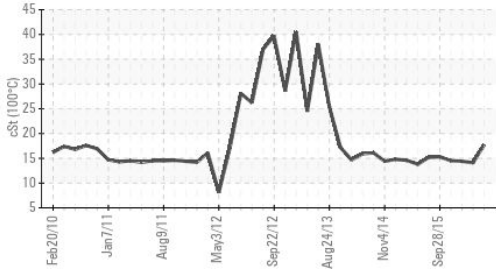
Glycol Contamination



Water (KF)

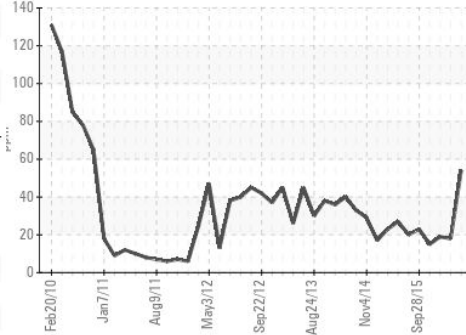


Viscosity @ 100°C

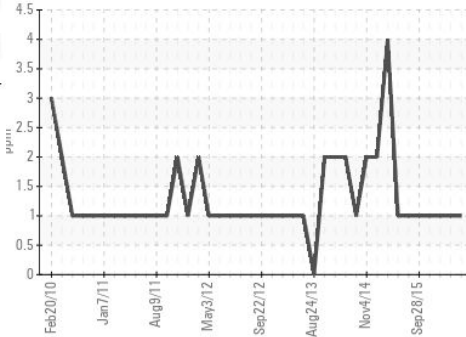


GRAPHS

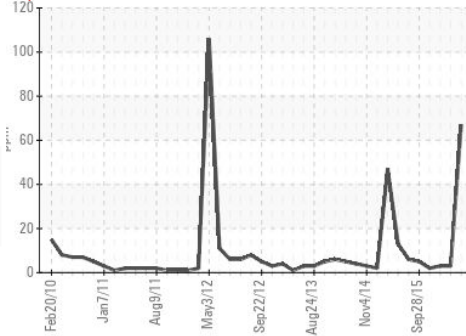
Iron (ppm)



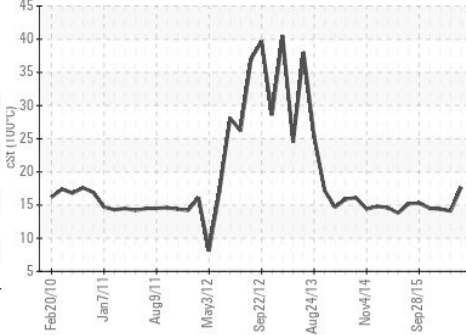
Aluminum (ppm)



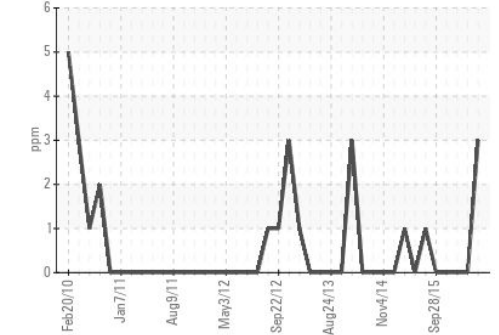
Copper (ppm)



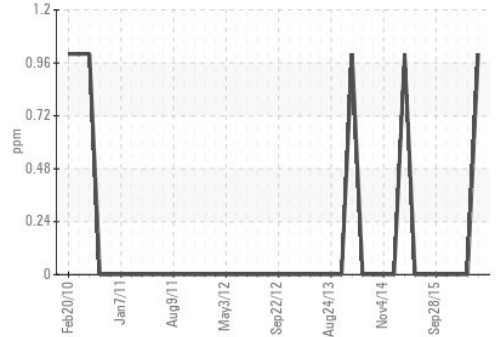
Viscosity @ 100°C



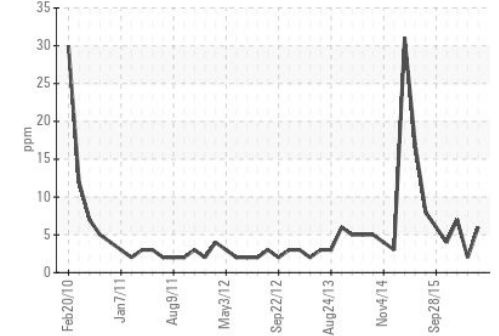
Lead (ppm)



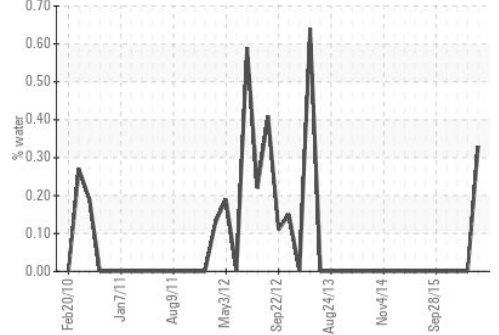
Chromium (ppm)



Silicon (ppm)



Water



Laboratory : WearCheck -
Sample No. : PCA55383035
Lab Number : 55383035
Unique Number : 12894714
Test Package : MOB1+ (Additional Tests: FT-IR, Glycol, ICP, KF, KV100)
To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received : 04 Jun 2018
Diagnosed : 05 Jun 2019
Diagnostician : Wes Davis

Test denoted () outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.*

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