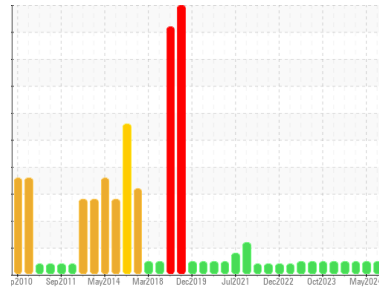


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
KEMP QUARRIES / KEMP STONE - FAIRLAND [71522]
 Machine Id
WP023
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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 no indication of any contamination 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			PCA0126292	PCA0108703	PCA0109315
Sample Date	Client Info			07 Jun 2024	09 May 2024	20 Mar 2024
Machine Age	hrs	Client Info		2757	2361	2029
Oil Age	hrs	Client Info		2757	2361	6384
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.21		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>51	19	24	24
Chromium	ppm	ASTM D5185m	>11	<1	1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>31	2	3	3
Lead	ppm	ASTM D5185m	>26	3	2	3
Copper	ppm	ASTM D5185m	>26	<1	2	2
Tin	ppm	ASTM D5185m	>4	0	1	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	<1

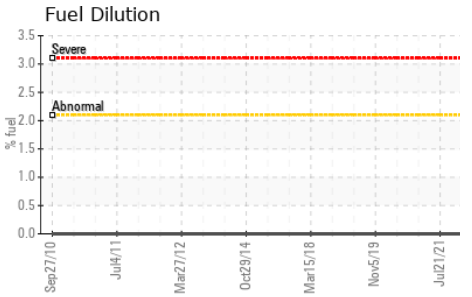
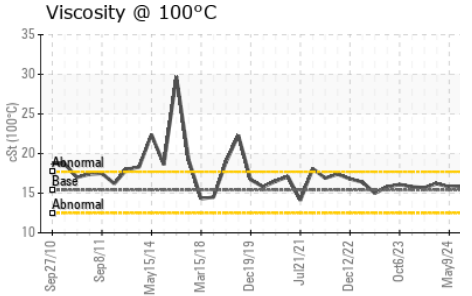
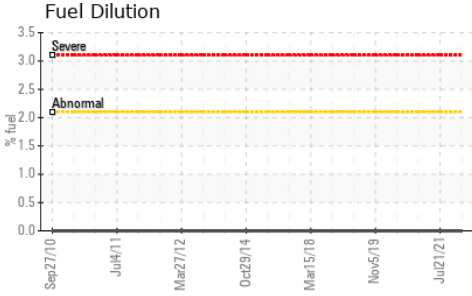
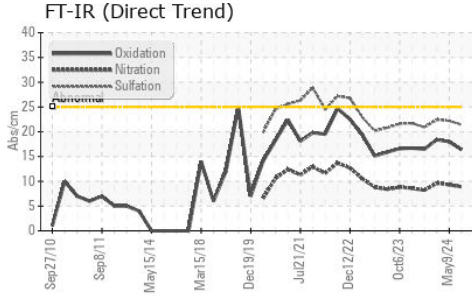
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	1	0
Barium	ppm	ASTM D5185m	0	0	0	1
Molybdenum	ppm	ASTM D5185m	60	70	75	73
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1136	1150	1089
Calcium	ppm	ASTM D5185m	1070	1241	1273	1298
Phosphorus	ppm	ASTM D5185m	1150	1166	1160	1147
Zinc	ppm	ASTM D5185m	1270	1475	1442	1422
Sulfur	ppm	ASTM D5185m	2060	3311	3415	3468

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>22	4	5	4
Sodium	ppm	ASTM D5185m	>31	<1	2	0
Potassium	ppm	ASTM D5185m	>20	2	2	2
Fuel	%	ASTM D3524	>2.1	<1.0	<1.0	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1	1.1	1.4
Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.3	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	22.2	22.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	18.0	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.5	8.6	9.0

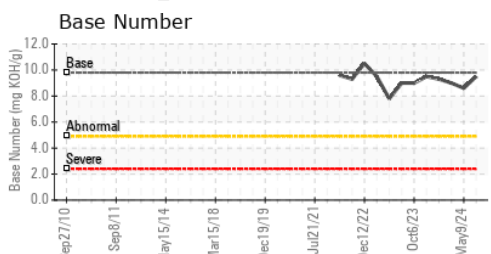
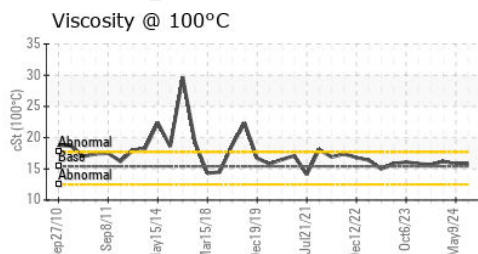
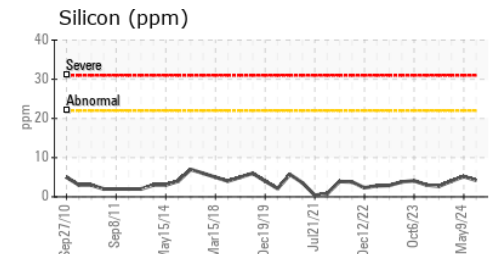
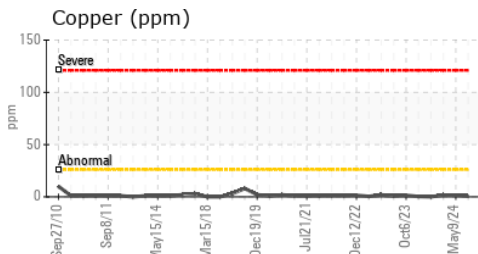
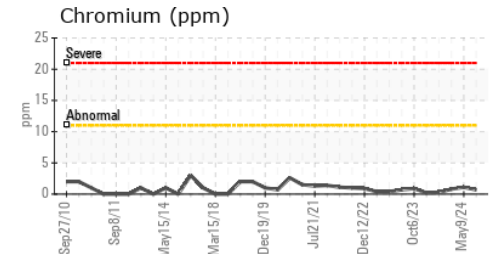
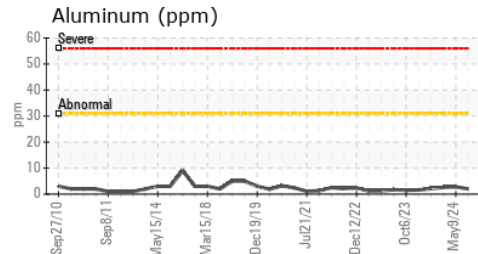
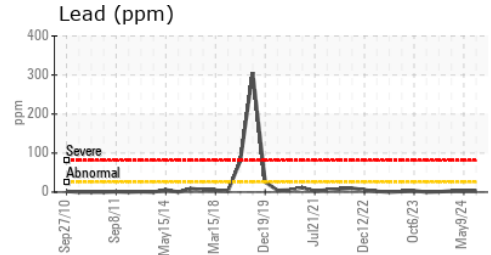
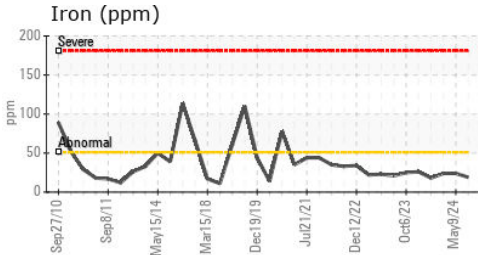
OIL ANALYSIS REPORT



PARAMETER	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	>0.21	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	15.9	15.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0126292
Lab Number : 06216438
Unique Number : 11089302
Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

Kemp Quarries - Kemp Stone - Fairland
 18350 S 590 Rd
 Fairland, OK
 US 74343

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: FAIRLAND NOTIFICATIONS
 fairland@kempstone.com

* - 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)

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F: