

Area  
**KEMP QUARRIES / KEMP STONE - FAIRLAND [69383]**

Machine Id  
**OHT123**  
Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample  
Comment: PM-2 changed fluid and filters )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0109096</b>	PCA0070631	PCA0084732
Sample Date		Client Info		<b>22 May 2024</b>	02 Jan 2024	02 Oct 2023
Machine Age	hrs	Client Info		<b>38485</b>	37987	37517
Oil Age	hrs	Client Info		<b>38485</b>	37987	37517
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>53</b>	41	28
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>4</b>	2	3
Copper	ppm	ASTM D5185m	>330	<b>6</b>	5	5
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

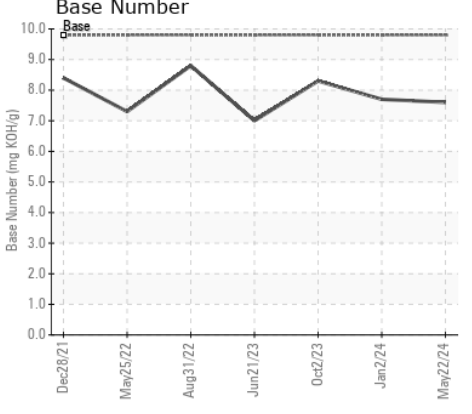
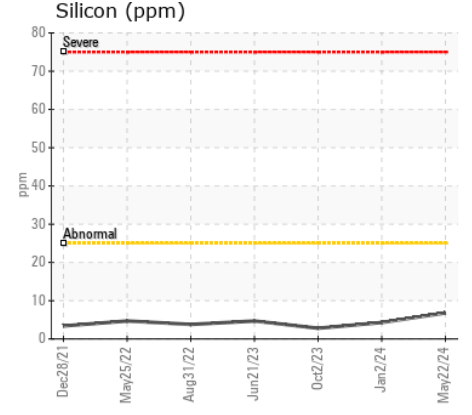
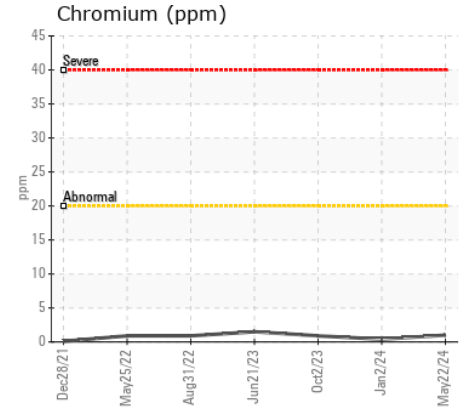
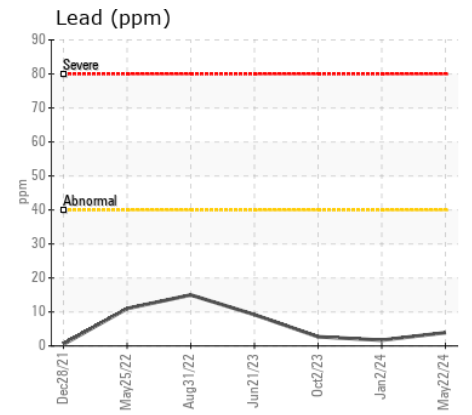
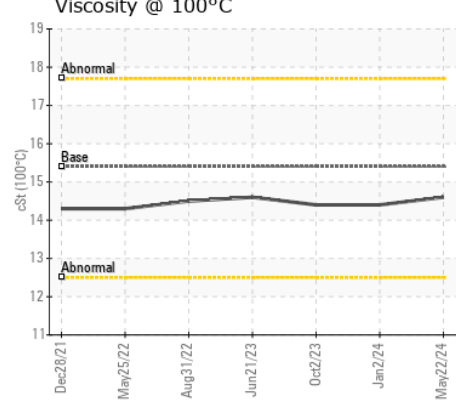
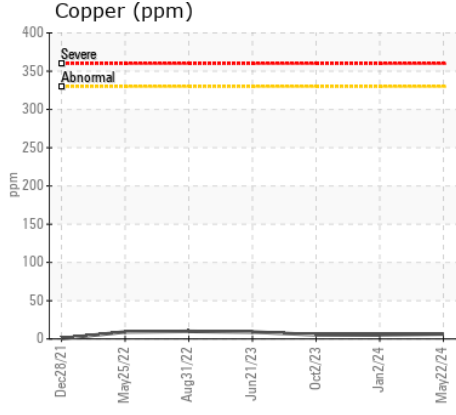
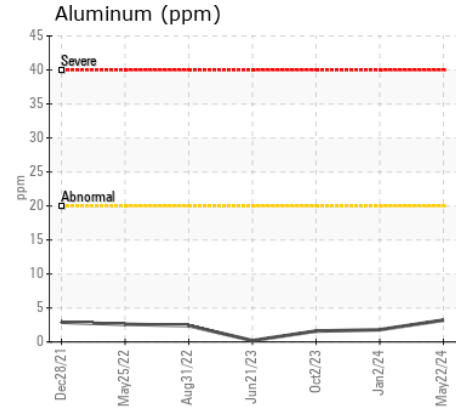
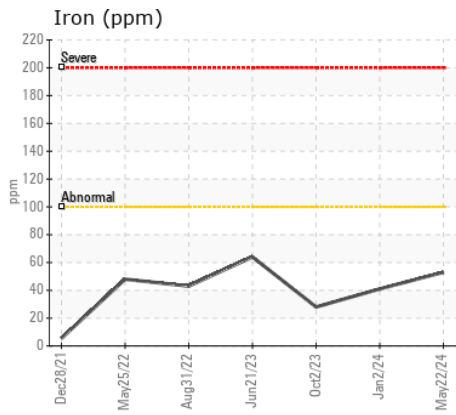
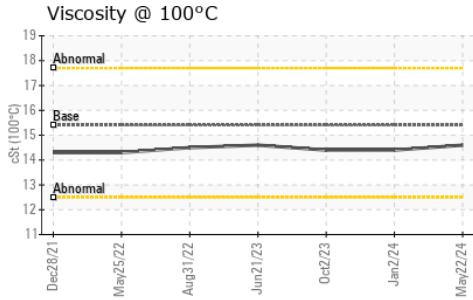
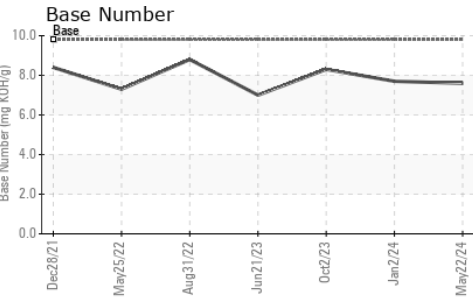
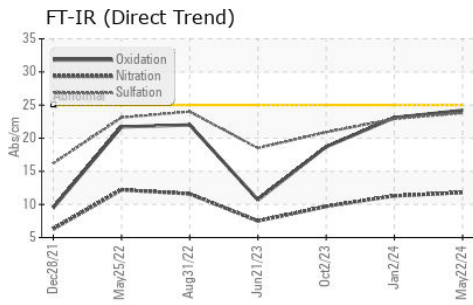
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.8</b>	11.3	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.8</b>	22.9	20.9
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**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.

Sodium	ppm	ASTM D5185m		<b>5</b>	2	4
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	4
Molybdenum	ppm	ASTM D5185m	60	<b>72</b>	67	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1194</b>	1052	882
Calcium	ppm	ASTM D5185m	1070	<b>1343</b>	1138	1031
Phosphorus	ppm	ASTM D5185m	1150	<b>1233</b>	1097	971
Zinc	ppm	ASTM D5185m	1270	<b>1594</b>	1341	1153
Sulfur	ppm	ASTM D5185m	2060	<b>4048</b>	3431	2722
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>24.2</b>	23.1	18.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.6</b>	7.7	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.6</b>	14.4	14.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0109096 **Received** : 28 May 2024  
**Lab Number** : 06193219 **Tested** : 30 May 2024  
**Unique Number** : 11049971 **Diagnosed** : 30 May 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Kemp Quarries - Kemp Stone - Fairland**  
 18350 S 590 Rd  
 Fairland, OK  
 US 74343  
 Contact:  
 fairland@kempstone.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)

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F: