



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**KEMP QUARRIES / PRYOR STONE [69729]**

Machine Id  
**WP047**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: PM performed. Engine oil sample taken. Engine oil, and all filters changed. )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0086287</b>	PCA0086270	PCA0084397
Sample Date		Client Info		<b>01 Mar 2024</b>	29 Jan 2024	08 Dec 2023
Machine Age	hrs	Client Info		<b>1338</b>	970	626
Oil Age	hrs	Client Info		<b>368</b>	344	303
Filter Age	hrs	Client Info		<b>368</b>	344	303
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>19</b>	11	8
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Lead	ppm	ASTM D5185m	>40	<b>5</b>	2	3
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

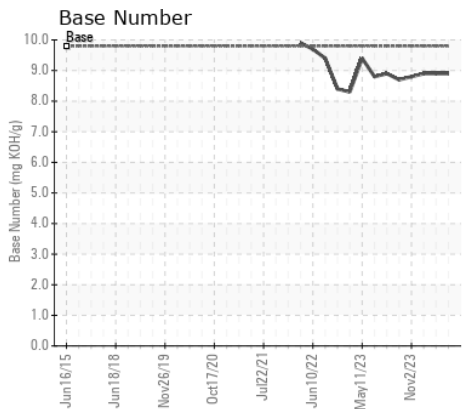
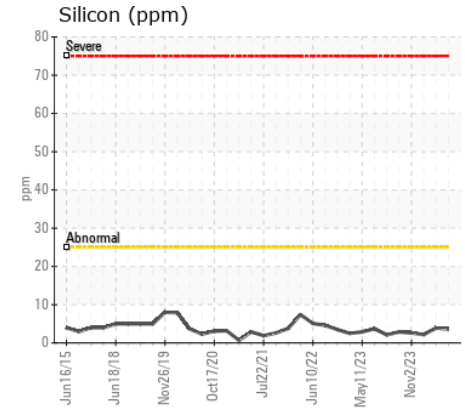
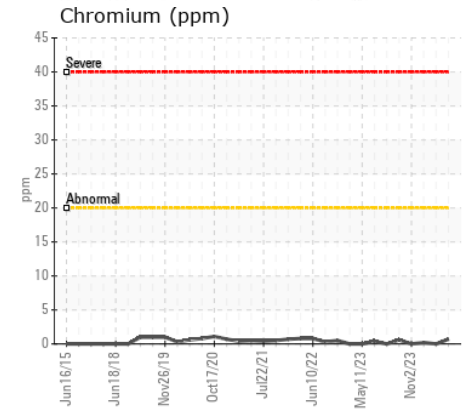
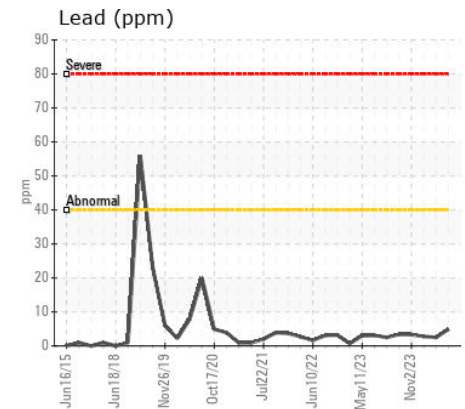
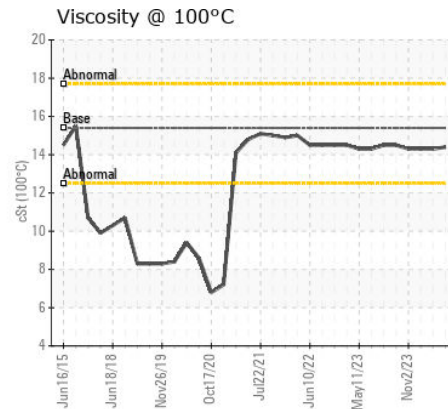
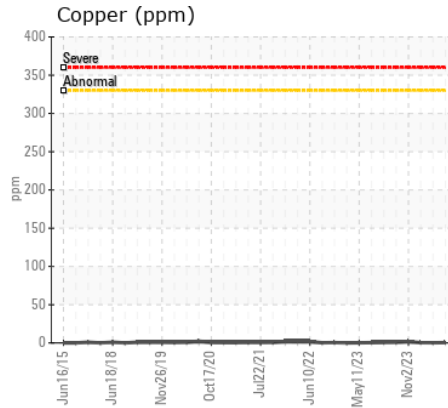
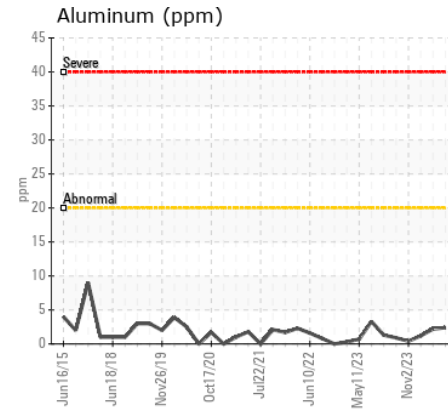
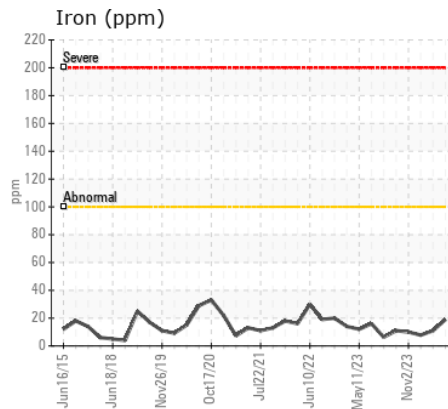
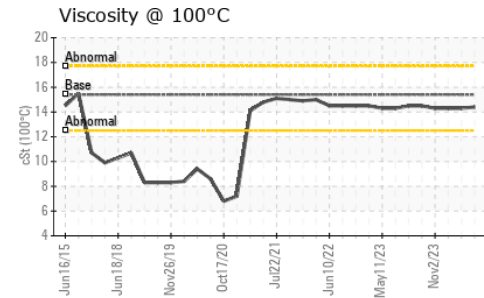
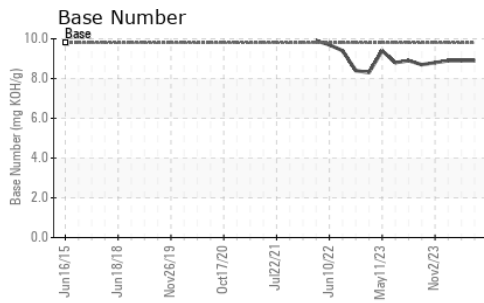
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	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>0.3</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	6.0	5.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.5</b>	18.0	18.0
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>3</b>	1	1
Boron	ppm	ASTM D5185m	0	<b>&lt;1</b>	3	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>66</b>	61	60
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>1088</b>	983	958
Calcium	ppm	ASTM D5185m	1070	<b>1192</b>	1051	1026
Phosphorus	ppm	ASTM D5185m	1150	<b>1148</b>	1082	1050
Zinc	ppm	ASTM D5185m	1270	<b>1362</b>	1313	1222
Sulfur	ppm	ASTM D5185m	2060	<b>3516</b>	3211	3259
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.6</b>	14.1	14.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.9</b>	8.9	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.4</b>	14.3	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0086287 **Received** : 18 Mar 2024  
**Lab Number** : 06121437 **Tested** : 19 Mar 2024  
**Unique Number** : 10930270 **Diagnosed** : 20 Mar 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: 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)

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F: