

Area  
**KEMP QUARRIES / BCS - GRAVETTE [68949]**

Machine Id  
**TTH020**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample  
Comment: 50 hr service )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0069865</b>	PCA0037727	PCA0038306
Sample Date		Client Info		<b>25 Jan 2024</b>	20 Jun 2022	09 Mar 2021
Machine Age	hrs	Client Info		<b>19640</b>	19640	19269
Oil Age	hrs	Client Info		<b>19640</b>	19269	0
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>27</b>	55	32
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>4</b>	13	26
Copper	ppm	ASTM D5185m	>330	<b>7</b>	2	3
Tin	ppm	ASTM D5185m	>15	<b>3</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

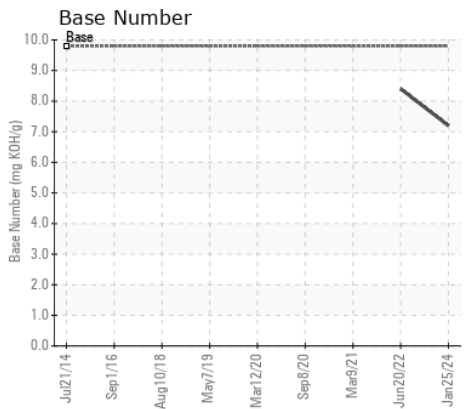
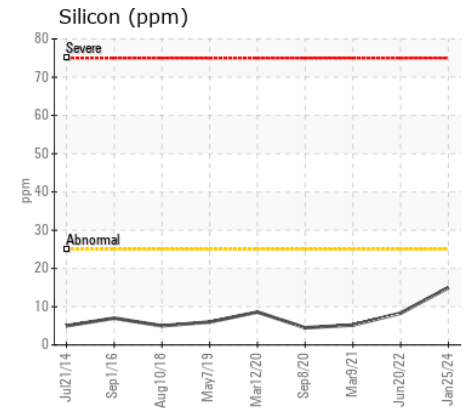
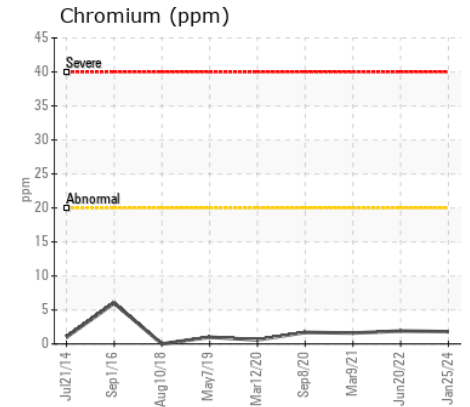
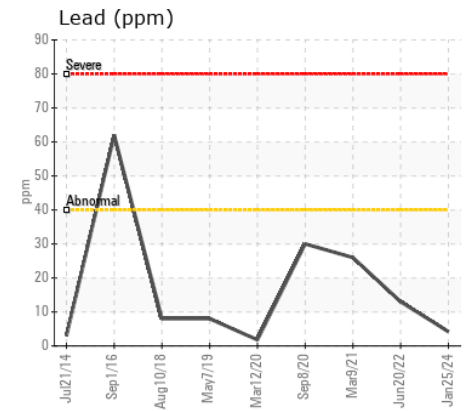
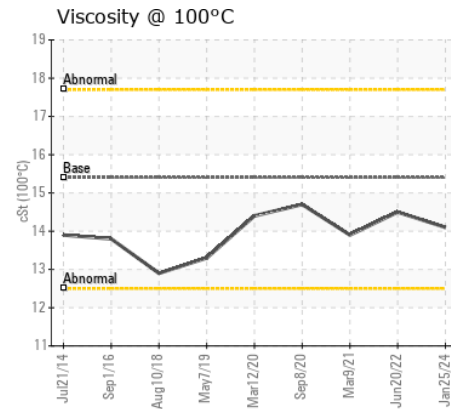
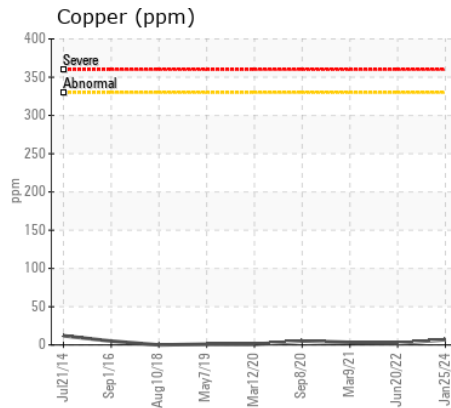
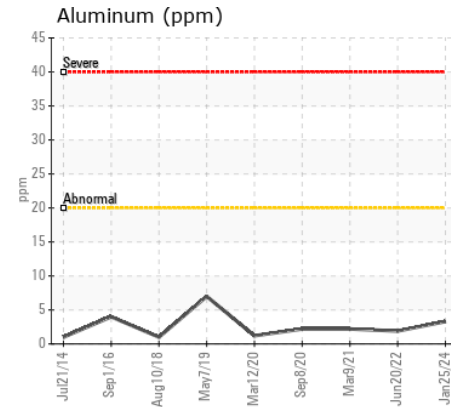
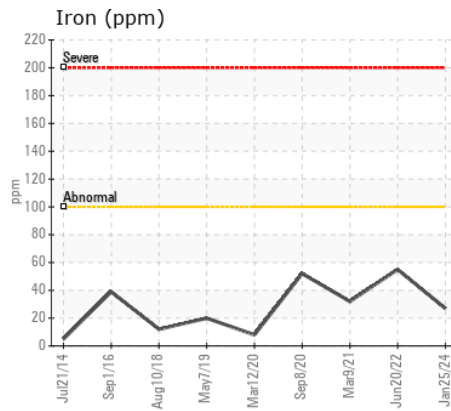
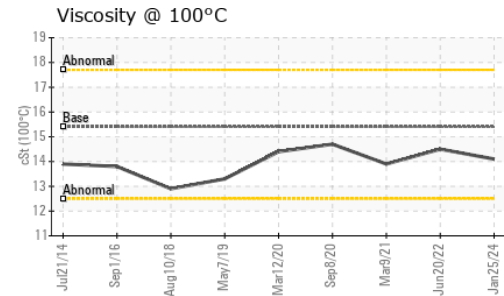
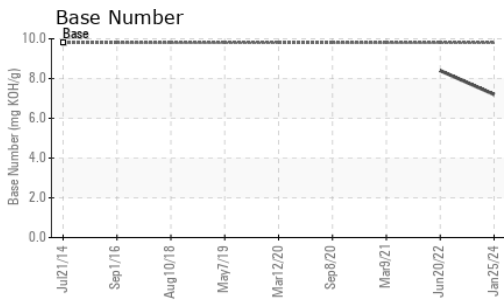
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>15</b>	8	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	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>0.7</b>	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.6</b>	8.6	9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.8</b>	20.7	23.3
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>6</b>	4	7
Boron	ppm	ASTM D5185m	0	<b>1</b>	4	6
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>49</b>	62	59
Manganese	ppm	ASTM D5185m	0	<b>12</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>971</b>	1025	916
Calcium	ppm	ASTM D5185m	1070	<b>982</b>	1165	1056
Phosphorus	ppm	ASTM D5185m	1150	<b>957</b>	1041	988
Zinc	ppm	ASTM D5185m	1270	<b>1116</b>	1316	1229
Sulfur	ppm	ASTM D5185m	2060	<b>2787</b>	3392	2395
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.3</b>	16.7	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.2</b>	8.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	14.5	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0069865 **Received** : 31 Jan 2024  
**Lab Number** : 06076348 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10858439 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Kemp Quarries - Benton County Stone - Gravette**  
 15100 N Hwy 59  
 Sulphur Springs, AR  
 US 72768  
 Contact:  
 gravette@bentoncountystone.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: