



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**KEMP QUARRIES / BCS - GRAVETTE [69691]**  
Machine Id  
**WL127**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: Pm2 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0108517</b>	PCA0069872	PCA0086391
Sample Date		Client Info		<b>01 May 2024</b>	08 Dec 2023	30 Aug 2023
Machine Age	hrs	Client Info		<b>33781</b>	33270	32702
Oil Age	hrs	Client Info		<b>511</b>	568	32702
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>63</b>	87	88
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	<1
Lead	ppm	ASTM D5185m	>40	<b>3</b>	4	3
Copper	ppm	ASTM D5185m	>330	<b>9</b>	10	6
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
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**

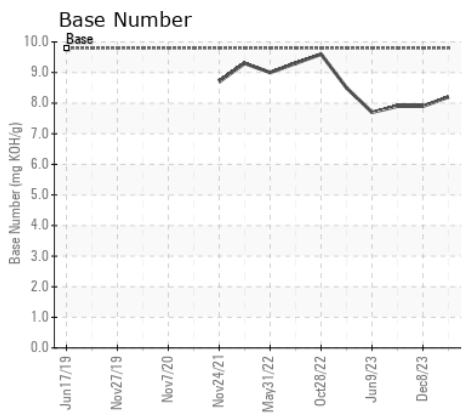
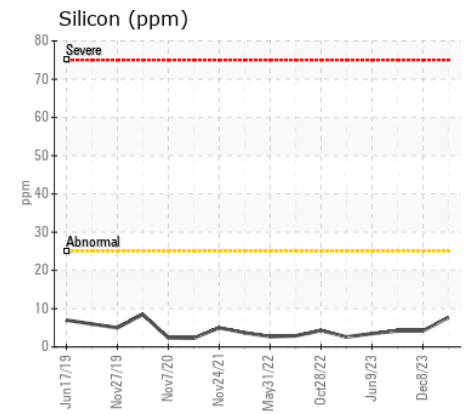
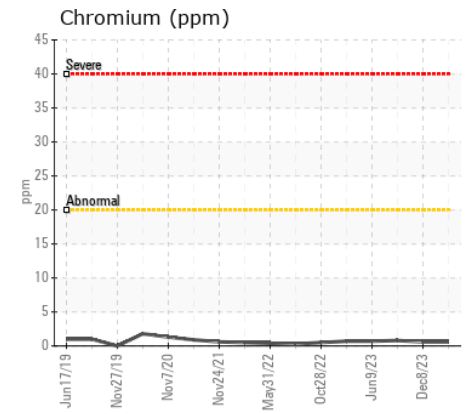
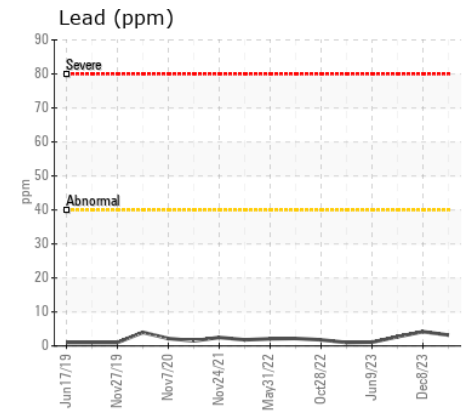
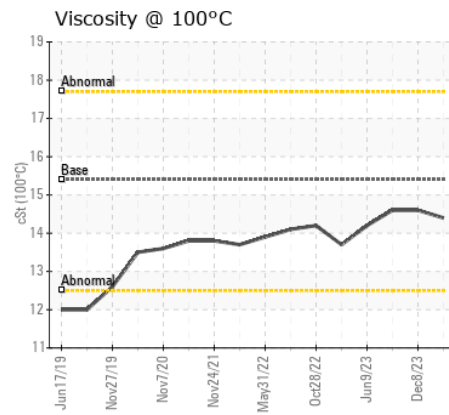
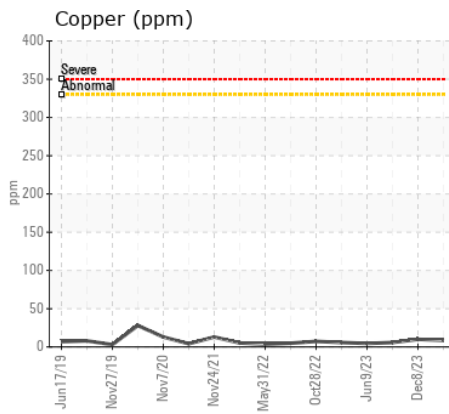
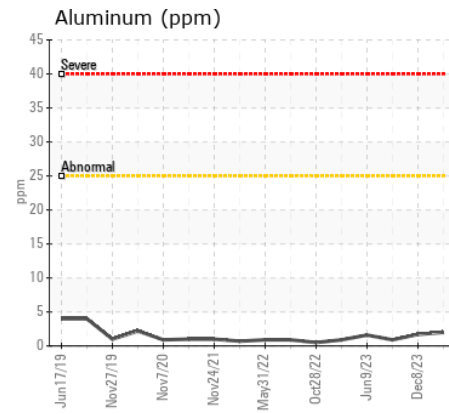
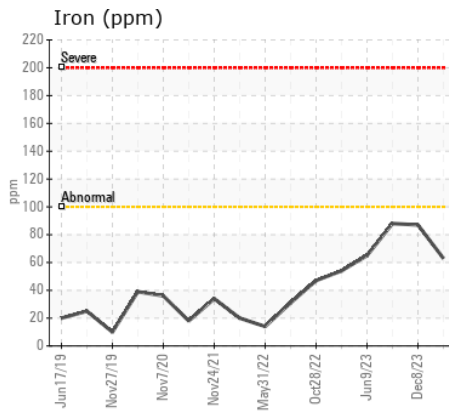
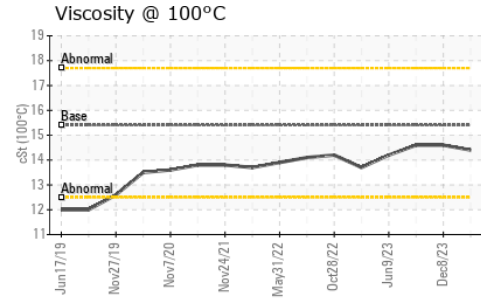
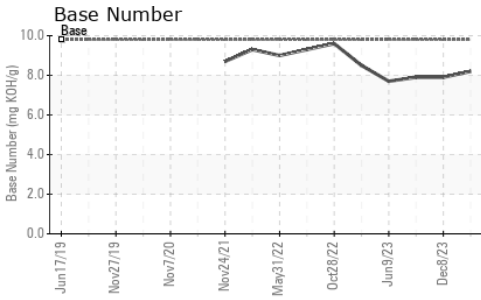
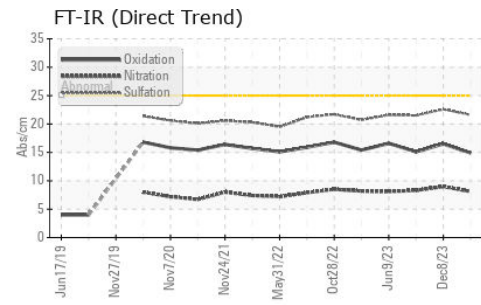
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>3</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>1.7</b>	1.9	1.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	9.0	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	22.6	21.5
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>&lt;1</b>	1	2
Boron	ppm	ASTM D5185m	0	<b>0</b>	<1	1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	63	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>917</b>	964	966
Calcium	ppm	ASTM D5185m	1070	<b>1076</b>	1075	1109
Phosphorus	ppm	ASTM D5185m	1150	<b>983</b>	1048	990
Zinc	ppm	ASTM D5185m	1270	<b>1205</b>	1248	1232
Sulfur	ppm	ASTM D5185m	2060	<b>3234</b>	3070	3324
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.9</b>	16.5	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.2</b>	7.9	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.4</b>	14.6	14.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0108517  
**Lab Number** : 06178052  
**Unique Number** : 11029378  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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

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)

gravette@bentoncountystone.com

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