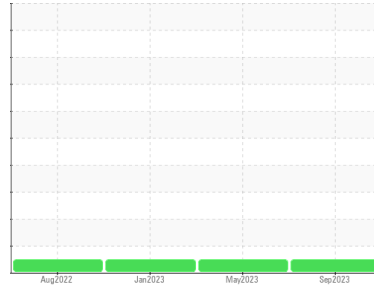


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / BCS - GRAVETTE [66575]**  
 Machine Id  
**GEN026**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

Sample Rating Trend



**NORMAL**



## 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			<b>PCA0037710</b>	PCA0085738	PCA0086706
Sample Date	Client Info			<b>05 Sep 2023</b>	16 May 2023	03 Jan 2023
Machine Age	hrs	Client Info		<b>6014</b>	5492	4847
Oil Age	hrs	Client Info		<b>5369</b>	5492	4847
Oil Changed	Client Info			<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>15</b>	11	11
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	0	0
Lead	ppm	ASTM D5185m	>40	<b>2</b>	2	2
Copper	ppm	ASTM D5185m	>330	<b>4</b>	4	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

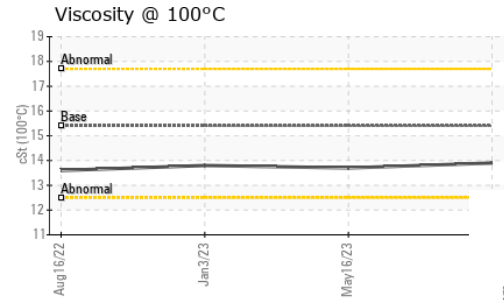
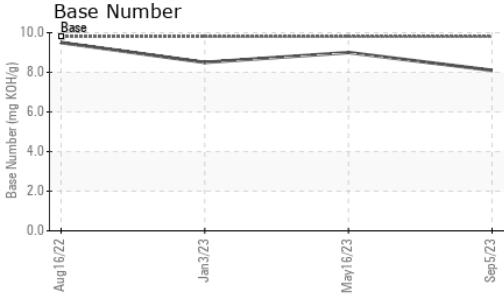
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	2	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>62</b>	65	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>1039</b>	960	925
Calcium	ppm	ASTM D5185m	1070	<b>1155</b>	1123	1076
Phosphorus	ppm	ASTM D5185m	1150	<b>1056</b>	1074	1016
Zinc	ppm	ASTM D5185m	1270	<b>1294</b>	1313	1240
Sulfur	ppm	ASTM D5185m	2060	<b>3559</b>	3474	2896

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	2	3
Sodium	ppm	ASTM D5185m		<b>3</b>	<1	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.4</b>	9.5	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.8</b>	20.4	20.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.0</b>	18.0	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.1</b>	9.0	8.5

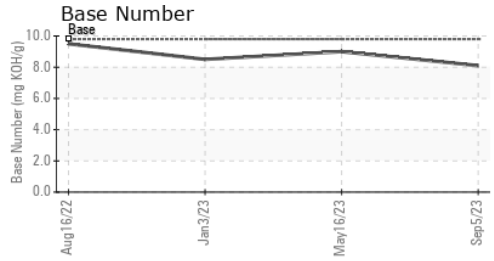
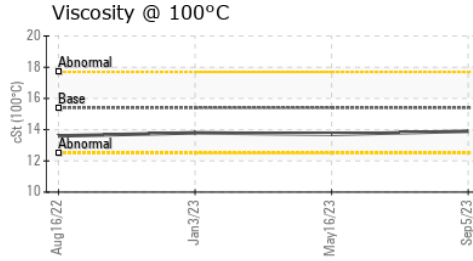
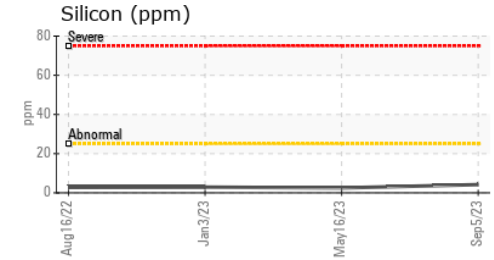
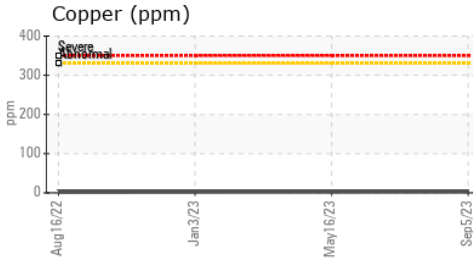
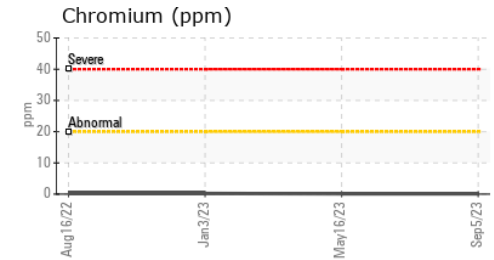
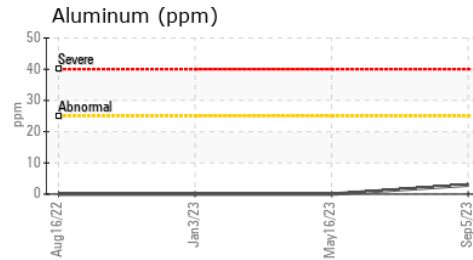
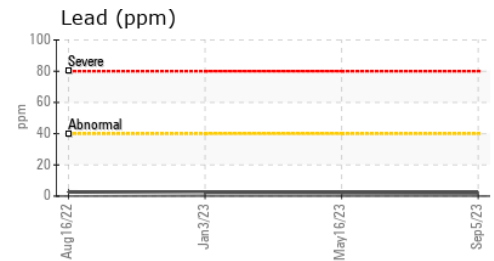
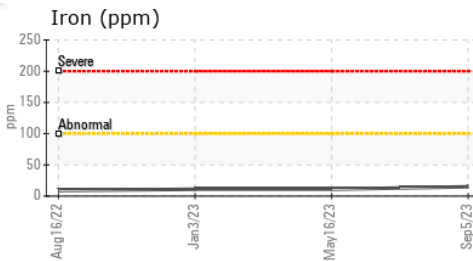
# OIL ANALYSIS REPORT



VISUAL	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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.9</b>	13.7	13.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0037710 **Received** : 14 Sep 2023  
**Lab Number** : **05952075** **Diagnosed** : 19 Sep 2023  
**Unique Number** : 10648034 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Kemp Quarries - Kemp Stone - Fairland**  
 18350 S 590 Rd  
 Fairland, OK  
 US 74343  
 Contact: FAIRLAND NOTIFICATIONS  
 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: