



WEAR

**NORMAL**

CONTAMINATION

**ABNORMAL**

FLUID CONDITION

**ABNORMAL**



Area  
**KEMP QUARRIES / PRYOR STONE [70706]**

Machine Id  
**OHT110**

Component  
**Diesel Engine**

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

**RECOMMENDATION**

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: Pm1 performed. All oil samples taken. Engine oil, engine oil filters, fuel filters, and air filters replaced. )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0108868</b>	PCA0086621	PCA0086249
Sample Date		Client Info		<b>19 Jun 2024</b>	29 Mar 2024	26 Oct 2023
Machine Age	hrs	Client Info		<b>29710</b>	29240	28435
Oil Age	hrs	Client Info		<b>470</b>	805	352
Filter Age	hrs	Client Info		<b>470</b>	805	352
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	SEVERE	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>14</b>	32	20
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>1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	3	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;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**

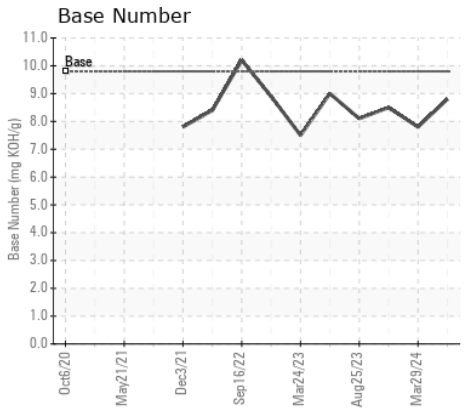
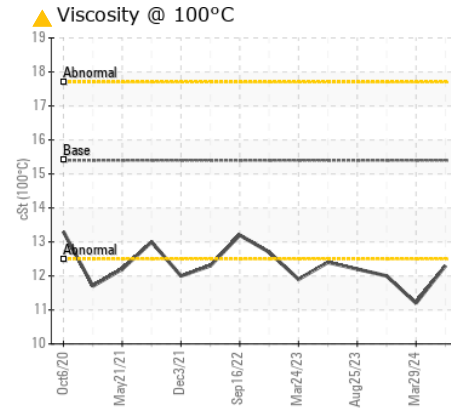
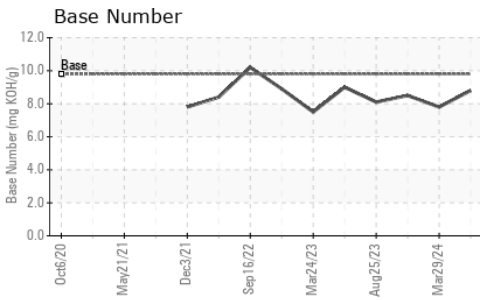
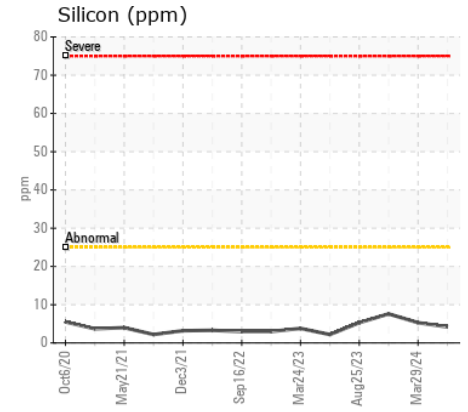
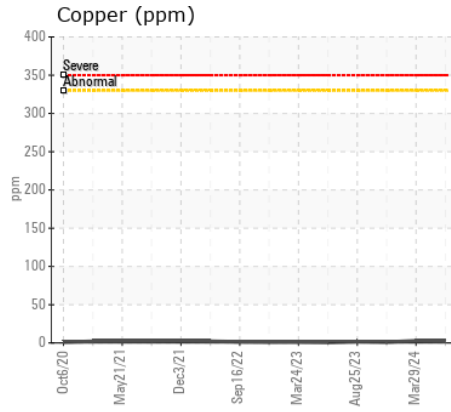
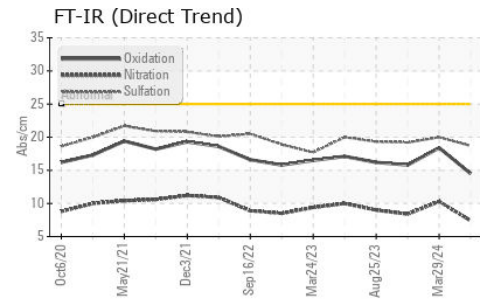
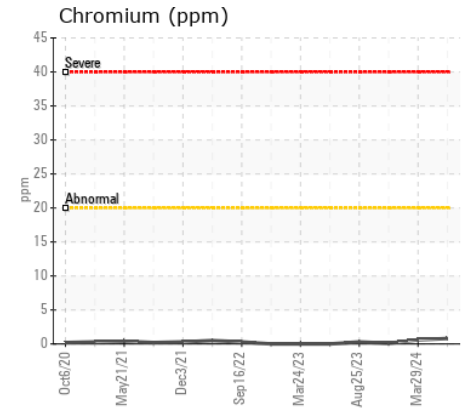
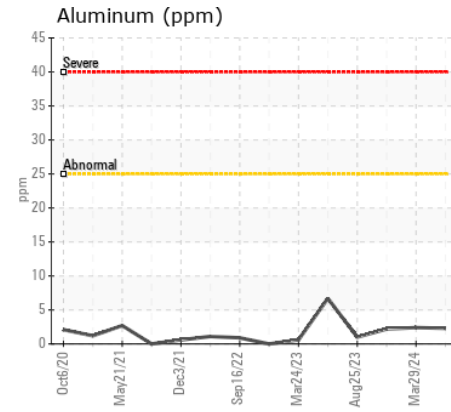
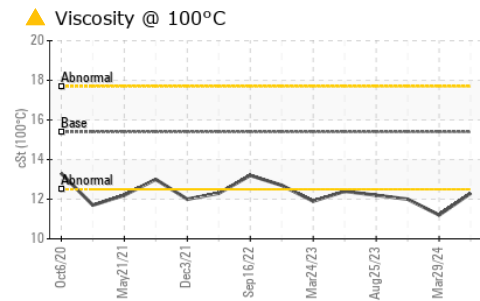
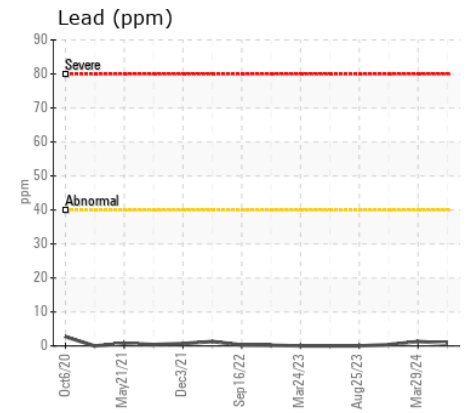
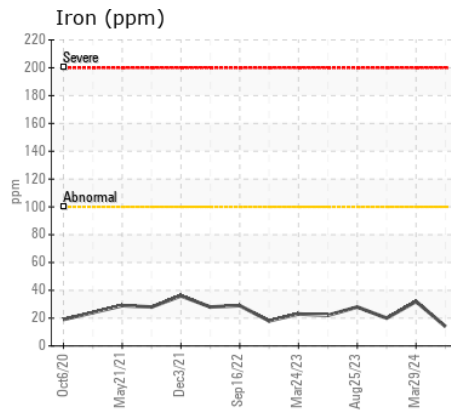
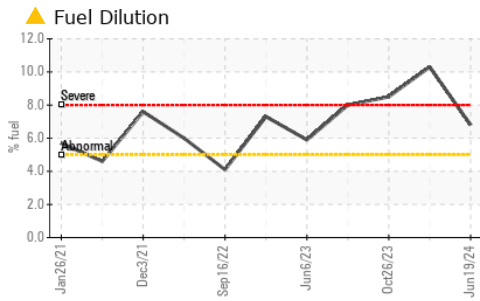
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	8
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Fuel	%	ASTM D3524	>5	<b>▲ 6.8</b>	▲ 10.3	▲ 8.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.9	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.4</b>	10.3	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	20.0	19.2
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**

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	1
Boron	ppm	ASTM D5185m	0	<b>3</b>	<1	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>58</b>	60	55
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>971</b>	902	871
Calcium	ppm	ASTM D5185m	1070	<b>1087</b>	1064	966
Phosphorus	ppm	ASTM D5185m	1150	<b>1037</b>	1024	974
Zinc	ppm	ASTM D5185m	1270	<b>1278</b>	1156	1195
Sulfur	ppm	ASTM D5185m	2060	<b>3104</b>	3010	2884
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.5</b>	18.4	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.8</b>	7.8	8.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>▲ 12.3</b>	▲ 11.2	▲ 12.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : PCA0108868  
 Lab Number : 06229708  
 Unique Number : 11113201  
 Test Package : MOB 1 ( Additional Tests: PercentFuel, 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)