



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ATTENTION



Area
KEMP QUARRIES / PRYOR STONE [68156]
Machine Id
WL141
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: Pm4 performed. All oil samples taken. All oils, and all filters changed.)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0086636	PCA0084331	PCA0084558
Sample Date		Client Info		06 Apr 2024	18 Nov 2023	24 Jul 2023
Machine Age	hrs	Client Info		26330	25744	25250
Oil Age	hrs	Client Info		586	494	25250
Filter Age	hrs	Client Info		586	494	25250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	17	13
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	<1	<1
Lead	ppm	ASTM D5185m	>40	<1	2	<1
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

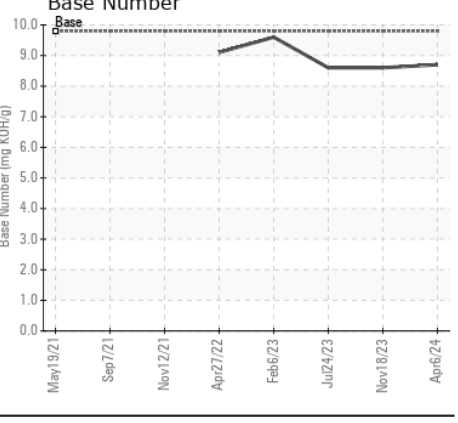
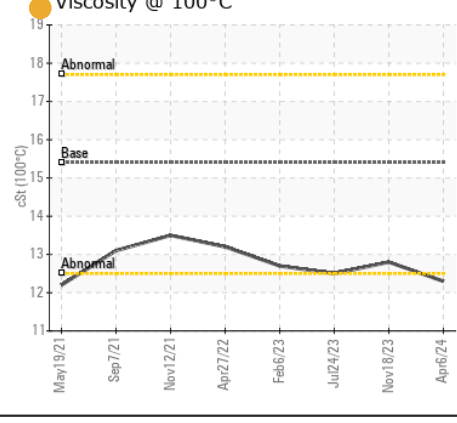
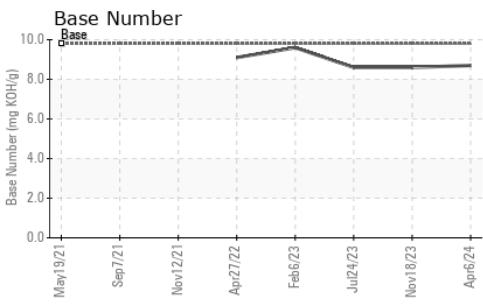
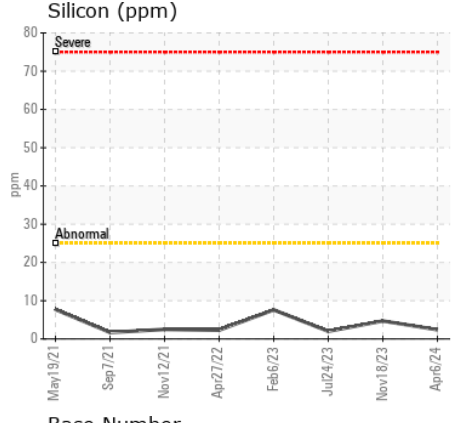
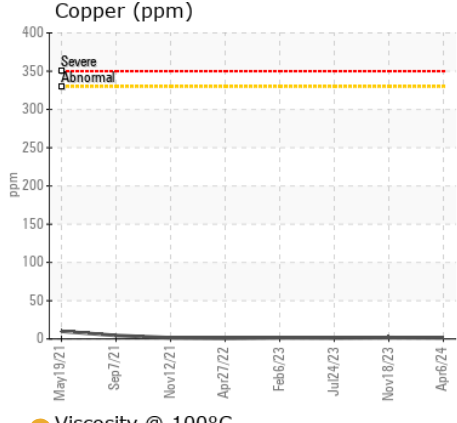
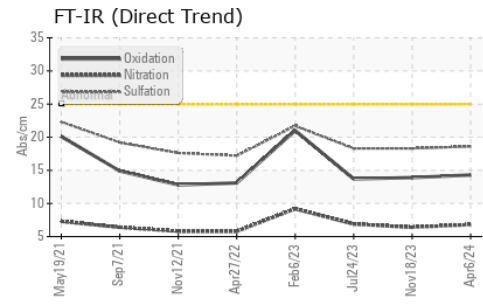
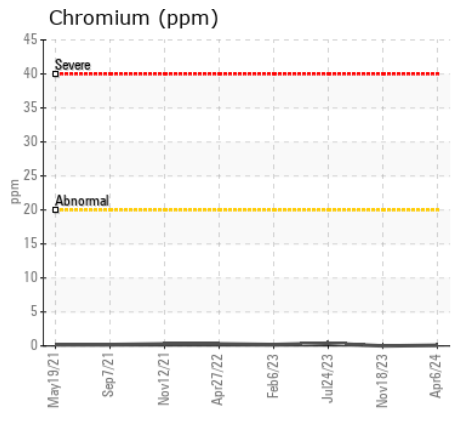
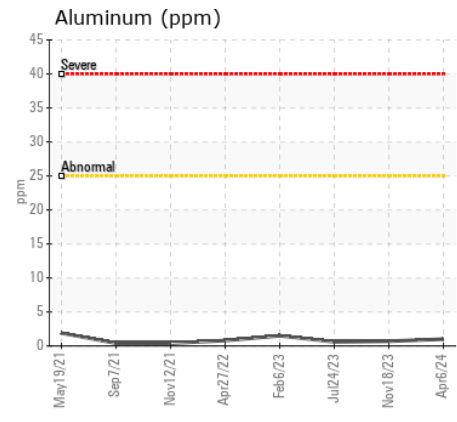
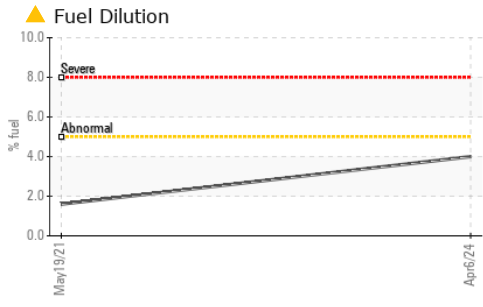
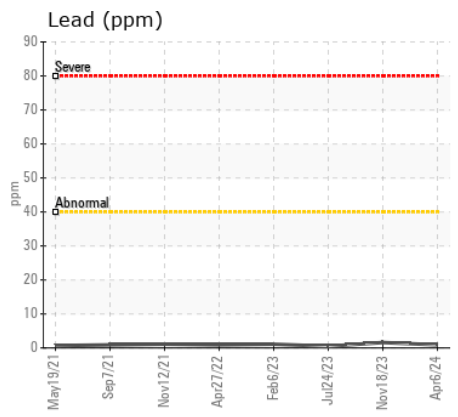
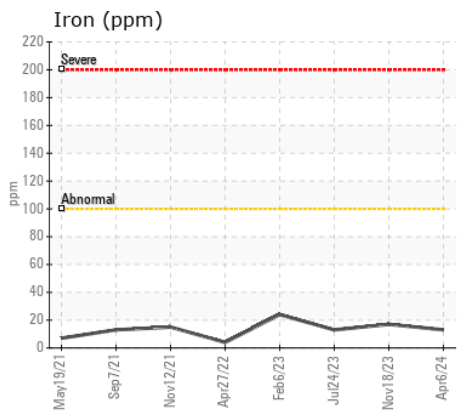
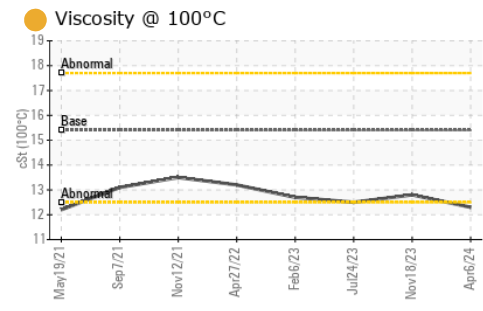
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	2	5	2
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Fuel	%	ASTM D3524	>5	▲ 4.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	6.8	6.4	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	18.3	18.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		<1	3	1
Boron	ppm	ASTM D5185m	0	2	0	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	59	57	55
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	1017	934	944
Calcium	ppm	ASTM D5185m	1070	1105	1063	1032
Phosphorus	ppm	ASTM D5185m	1150	1127	1035	1016
Zinc	ppm	ASTM D5185m	1270	1320	1248	1242
Sulfur	ppm	ASTM D5185m	2060	3741	3079	3632
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	13.9	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.7	8.6	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	● 12.3	12.8	12.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086636 **Received** : 15 Apr 2024
Lab Number : 06149297 **Tested** : 19 Apr 2024
Unique Number : 10979375 **Diagnosed** : 19 Apr 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Kemp Quarries - Pryor Stone - Pryor
 1050 E 520 Rd
 Pryor, OK
 US 74361
 Contact: PRYOR NOTIFICATIONS
 pryor@pryorstone.com

Certificate L2367
 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)