

NORMAL WEAR CONTAMINATION NORMAL **FLUID CONDITION** NORMAL



KEMP QUARRIES / PRYOR STONE [70115]

Componen **Diesel Engine**

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. (Customer Sample Comment: Pm3 performed. All oil samples taken. Engine oil, engine oil filters, fuel filters, air filters, and cabin air filters changed.)	Sample Number		Client Info		PCA0108886	PCA0086338	PCA0084390
	Sample Date		Client Info		27 Jun 2024	23 Feb 2024	02 Dec 2023
	Machine Age	hrs	Client Info		40814	40226	39780
	Oil Age	hrs	Client Info		588	446	531
	Filter Age	hrs	Client Info		588	446	531
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
				400		4.0	~
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		23	18	9
	Chromium	ppm	ASTM D5185m		1	<1	0
	Nickel	ppm	ASTM D5185m		<1	0	<1
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m		2	2	1
	Lead	ppm	ASTM D5185m		2	<1	0
	Copper	ppm	ASTM D5185m		5	3	2
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	4	2
Source	Potassium	ppm	ASTM D5185m		2	<1	1
There is no indication of any contamination in the oil.	Fuel	lele	WC Method		_ <1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.8	0.6	0.5
	Nitration	Abs/cm	*ASTM D7624		8.8	8.1	7.1
	Sulfation	Abs/.1mm	*ASTM D7415		19.6	18.7	18.7
	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	Sodium	ppm	ASTM D5185m		3	2	<1
The DN regult indicates that there is quitable alkelinity remaining in the	Boron	ppm	ASTM D5185m	0	2	1	2
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	60	63	64	60
	Manganese	ppm	ASTM D5185m	0	<1	0	<1
	Magnesium	ppm	ASTM D5185m		1039	1013	936
	Calcium	ppm	ASTM D5185m	1070	1133	1147	1033
	Phosphorus	ppm	ASTM D5185m	1150	1085	1123	1074
	Zinc	ppm	ASTM D5185m	1270	1356	1295	1270
	Sulfur	ppm	ASTM D5185m	2060	3195	3443	3138
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	15.0	14.4
	D N I (D)	VAU	LOTH DOGG	0.0			o =

Base Number (BN) mg KOH/g ASTM D2896 9.8

ASTM D445 15.4

Visc @ 100°C cSt

8.7

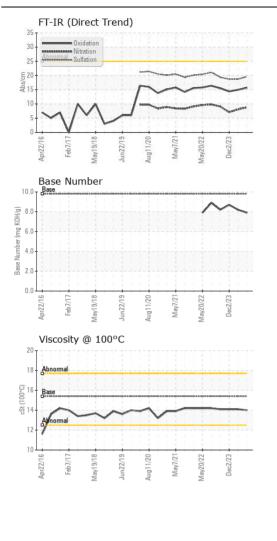
14.1

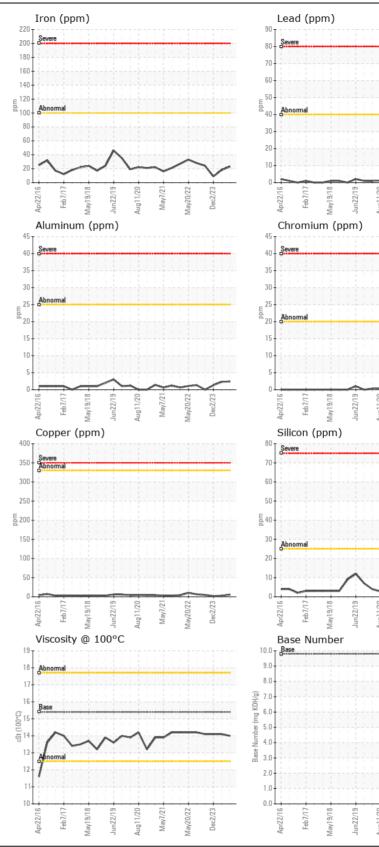
7.9

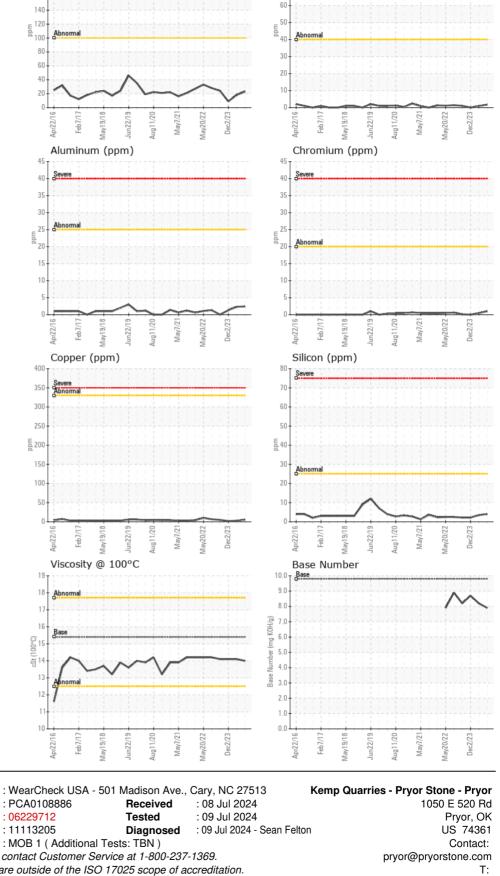
14.0

8.2

14.1









Unique Number : 11113205 Diagnosed Test Package : MOB 1 (Additional Tests: TBN) 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)

Received

Tested

: 08 Jul 2024

: 09 Jul 2024

Laboratory

Sample No.

Lab Number

: PCA0108886

: 06229712

F: