WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

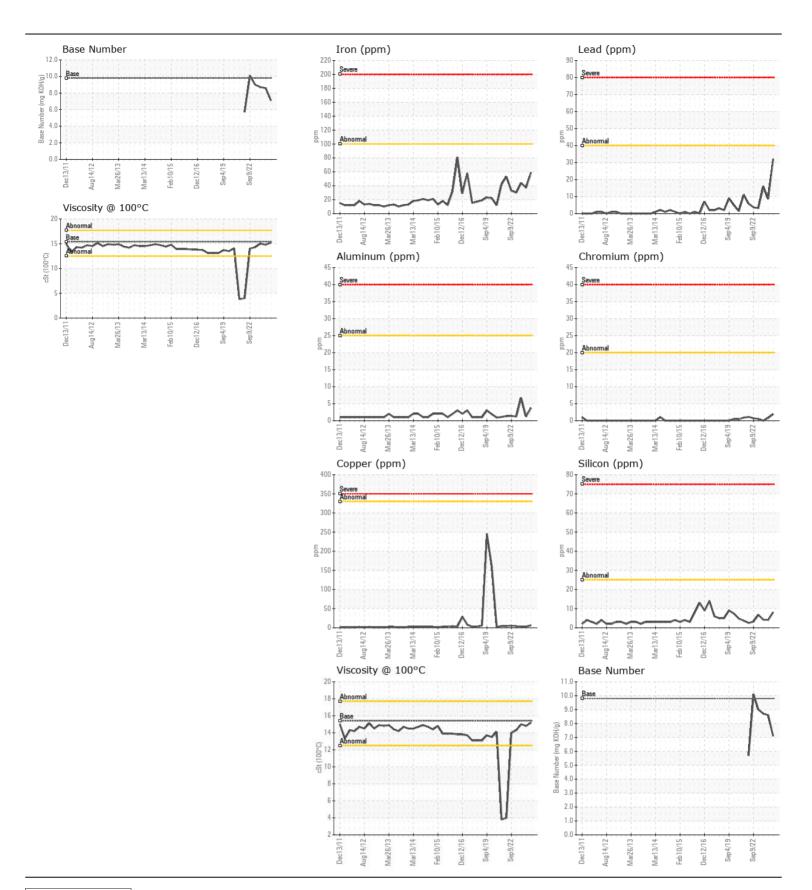


KEMP QUARRIES / PRYOR STONE [68210]

OHT066

Component Diesel Engine

Diesel Engine PETRO CANADA DURON SHP	15W40 (C	aAL)					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		PCA0086281	PCA0084302	PCA0084017
Resample at the next service interval to monitor. (Customer Sample Comment: Pm4 performed. All oil samples taken. All oils, and all filters changed.)	Sample Date		Client Info		09 Feb 2024	02 Nov 2023	22 May 2023
	Machine Age	hrs	Client Info		64419	63909	63506
	Oil Age	hrs	Client Info		510	403	533
	Filter Age	hrs	Client Info		510	403	533
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	59	37	44
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	2	<1	0
	Nickel	ppm	ASTM D5185m	>2	2	1	0
	Titanium	ppm	ASTM D5185m	>2	0	<1	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>25	4	1	7
	Lead	ppm	ASTM D5185m	>40	32	9	16
	Copper	ppm	ASTM D5185m	>330	6	3	3
	Tin	ppm	ASTM D5185m	>15	2	<1	0
	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	8	4	4
,	Potassium	ppm	ASTM D5185m	>20	2	2	<1
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.8	1.3	1.4
	Nitration	Abs/cm	*ASTM D7624	>20	13.5	11.8	13.1
	Sulfation	Abs/.1mm	*ASTM D7415	>30	27.9	24.5	25.4
	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		39	23	39
	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	<1	0	0
	Molybdenum	ppm	ASTM D5185m	60	68	66	70
	Manganese	ppm	ASTM D5185m	0	<1	<1	0
	Magnesium	ppm	ASTM D5185m	1010	1042	992	1137
	Calcium	ppm	ASTM D5185m		1190	1106	1265
	Phosphorus	ppm	ASTM D5185m		1131	1082	1158
	Zinc	ppm	ASTM D5185m		1367	1365	1487
	Sulfur	ppm	ASTM D5185m		2968	3089	3981
	Oxidation	Abs/.1mm	*ASTM D7414		26.7	22.0	24.0
	Base Number (BN)	mg KOH/g	ASTM D2896		7.1	8.6	8.7
	Visc @ 100°C	cSt	ASTM D445	15.4	15.2	14.8	15.0





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0086281 Lab Number : 06100657

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Unique Number: 10898887 Diagnosed Test Package : MOB 1 (Additional Tests: TBN)

: 26 Feb 2024 : 27 Feb 2024

: 28 Feb 2024 - Sean Felton

Kemp Quarries - Pryor Stone - Pryor 1050 E 520 Rd Pryor, OK US 74361

Contact: pryor@pryorstone.com

* - 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)

T: F: