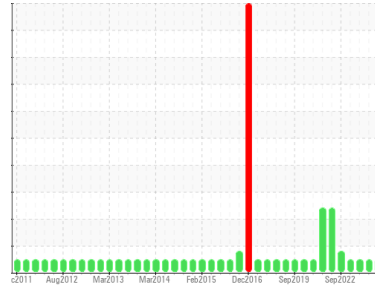


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / PRYOR STONE [68210]**  
Machine Id  
**OHT066**  
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: Pm4 performed. All oil samples taken. All oils, and all filters changed. )

### 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>PCA0086281</b>	PCA0084302	PCA0084017
Sample Date	Client Info		<b>09 Feb 2024</b>	02 Nov 2023	22 May 2023
Machine Age	hrs	Client Info	<b>64419</b>	63909	63506
Oil Age	hrs	Client Info	<b>510</b>	403	533
Oil Changed	Client Info		<b>Changed</b>	Changed	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
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>59</b>	37	44
Chromium	ppm	ASTM D5185m >20	<b>2</b>	<1	0
Nickel	ppm	ASTM D5185m >2	<b>2</b>	1	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>4</b>	1	7
Lead	ppm	ASTM D5185m >40	<b>32</b>	9	16
Copper	ppm	ASTM D5185m >330	<b>6</b>	3	3
Tin	ppm	ASTM D5185m >15	<b>2</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>2</b>	1	2
Barium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>68</b>	66	70
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>1042</b>	992	1137
Calcium	ppm	ASTM D5185m 1070	<b>1190</b>	1106	1265
Phosphorus	ppm	ASTM D5185m 1150	<b>1131</b>	1082	1158
Zinc	ppm	ASTM D5185m 1270	<b>1367</b>	1365	1487
Sulfur	ppm	ASTM D5185m 2060	<b>2968</b>	3089	3981

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>8</b>	4	4
Sodium	ppm	ASTM D5185m	<b>39</b>	23	39
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	<1

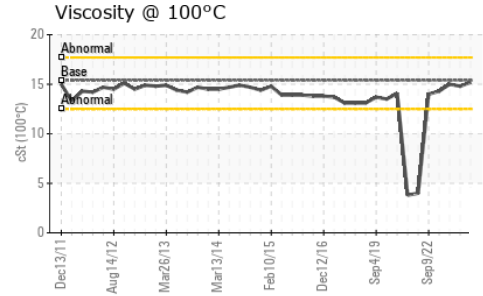
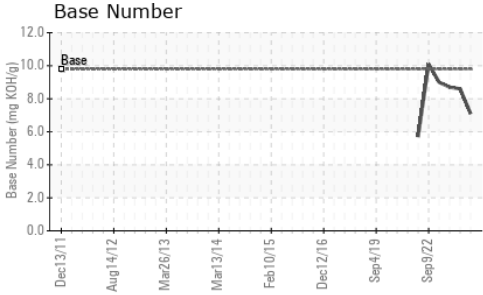
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>1.8</b>	1.3	1.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>13.5</b>	11.8	13.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>27.9</b>	24.5	25.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>26.7</b>	22.0	24.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.1</b>	8.6	8.7

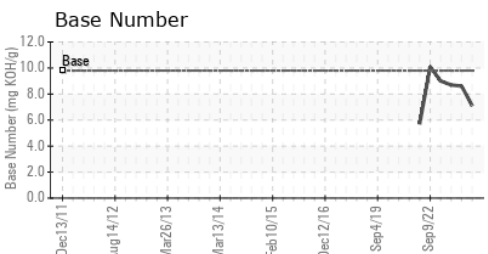
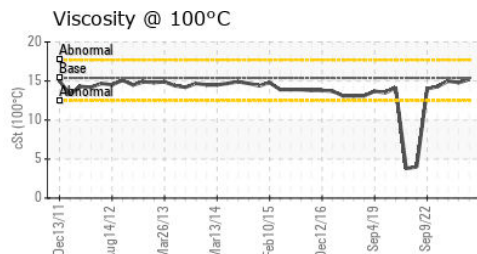
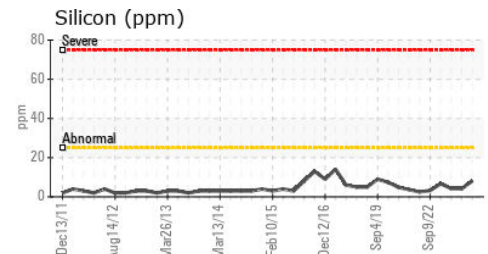
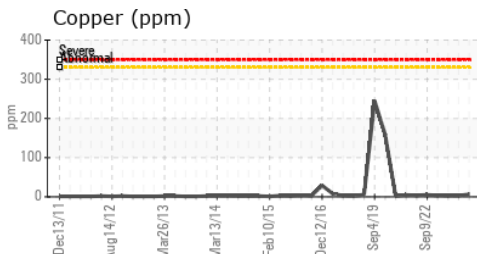
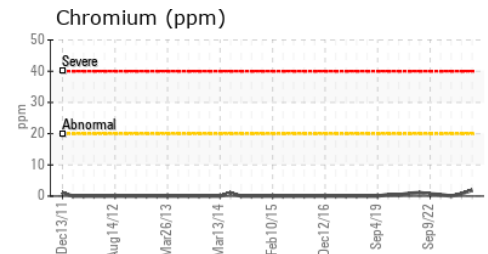
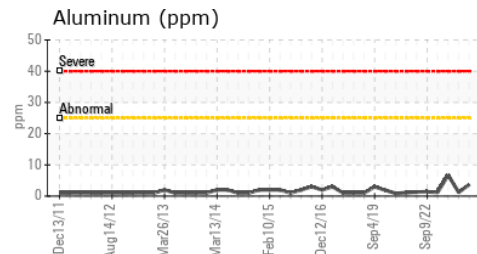
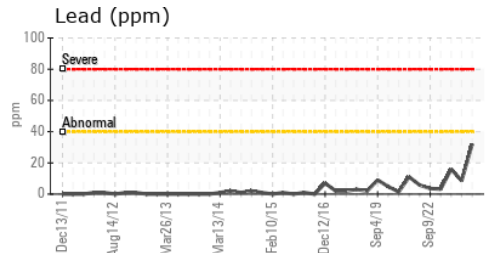
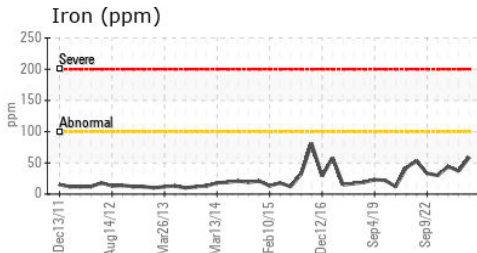
# OIL ANALYSIS REPORT



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	15.2	14.8	15.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0086281 **Received** : 26 Feb 2024  
**Lab Number** : 06100657 **Tested** : 27 Feb 2024  
**Unique Number** : 10898887 **Diagnosed** : 28 Feb 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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

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)