

NORMAL WEAR NORMAL CONTAMINATION FLUID CONDITION NORMAL

BARTO 7063 [BARTO] **Diesel Engine**

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

Sample Number Client Info SBP007689 SBP Resample at the next service interval to monitor. Sample Date Client Info 26 Jun 2024 05 J Machine Age mls Client Info 349125 278 Oil Age mls Client Info 39432 398 Filter Age mls Client Info 39432 398 Oil Changed Client Info Changed Changed Changed Client Info Changed Changed	P0004406 Jun 2023 8798 829	History2 SBP0002456
Resample at the next service interval to monitor. Sample Date Client Info 26 Jun 2024 05 J Machine Age mls Client Info 349125 278 Oil Age mls Client Info 39432 398 Filter Age mls Client Info 39432 398 Oil Changed Client Info Changed Chan	Jun 2023 8798 829	
Machine AgemlsClient Info349125278Oil AgemlsClient Info39432398Filter AgemlsClient Info39432398Oil ChangedClient InfoChangedChangedChangedFilter ChangedClient InfoChangedChangedChanged	8798 829	
Oil AgemlsClient Info39432398Filter AgemlsClient Info39432398Oil ChangedClient InfoChangedChangedChangedFilter ChangedClient InfoChangedChangedChanged	829	16 Jan 2023
Filter AgemlsClient Info39432398Oil ChangedClient InfoChangedChangedChangedFilter ChangedClient InfoChangedChanged		238969
Oil ChangedClient InfoChangedChangedFilter ChangedClient InfoChangedChanged	329	31386
Filter ChangedClient InfoChangedChanged	520	31386
	anged	Changed
Sample Status NORMAL NO		Changed
· · · · · · · · · · · · · · · · ·	DRMAL	NORMAL
WEAR Iron ppm ASTM D5185m >100 29 2	27	22
Chromium ppm ASTM D5185m >20 <1 <	<1	1
All component wear rates are normal. Nickel ppm ASTM D5185m >2 5 2	2	1
Titanium ppm ASTM D5185m 0 C	0	0
Silver ppm ASTM D5185m >2 0 C	0	0
Aluminum ppm ASTM D5185m >25 8 9	9	7
Lead ppm ASTM D5185m >40 0 1	1	2
Copper ppm ASTM D5185m >330 6 330	3	3
	<1	<1
Vanadium ppm ASTM D5185m 0 C	0	0
	NONE	NONE
Yellow Metal scalar *Visual NONE NONE NONE	NONE	NONE
CONTAMINATION Silicon ppm ASTM D5185m >25 10 6	6	7
	6	4
There is no indication of any contamination in the oil		
	<1.0	<1.0
Water WC Method >0.2 NEG	NEG	NEG
Glycol WC Method NEG	NEG	NEG
Soot % % *ASTM D7844 >3 0.6 0	0.6	0.5
Nitration Abs/cm *ASTM D7624 >20 10.7 1	11.4	11.2
Sulfation Abs/.1mm *ASTM D7415 >30 23.6 2	25.7	23.4
	NONE	NONE
	NONE	NONE
	NONE	NONE
Appearance scalar *Visual NORML NORML N	NORML	NORML
	NORML	NORML
Odor scalar *Visual NORML NORML NORML		NEG
Odor scalar *Visual NORML NORML	NEG	
Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG N	NEG 5	6
Odor scalar *Visual NORML <		6 16
Odor scalar *Visual NORML NOR	5	
Odor scalar *Visual NORML NOR NOR <th>5 <1</th> <th>16</th>	5 <1	16
Odor scalar *Visual NORML NEG NEG </th <th>5 <1 0 61 <1</th> <th>16 0 47 <1</th>	5 <1 0 61 <1	16 0 47 <1
Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG FLUID CONDITION Sodium ppm ASTM D5185m 0 4 < The BN result indicates that there is suitable alkalinity remaining in the oil is suitable for further service. Sodium ppm ASTM D5185m 0 4 < Malganese ppm ASTM D5185m 0 58 6 6 6 Magnesium ppm ASTM D5185m 0 <1 <4	5 <1 0 61	16 0 47
Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFLUID CONDITIONThe BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.SodiumppmASTM D5185m04<BariumppmASTM D5185m004<<MolybdenumppmASTM D5185m0586666ManganeseppmASTM D5185m0<1<MagnesiumppmASTM D5185m101094268CalciumppmASTM D5185m107011051	5 <1 0 61 <1 884 1097	16 0 47 <1 596 1554
Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFLUID CONDITIONThe BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.SodiumppmASTM D5185m044BariumppmASTM D5185m0044MolybdenumppmASTM D5185m006666ManganeseppmASTM D5185m0<14CalciumppmASTM D5185m101094268PhosphorusppmASTM D5185m1150979979	5 <1 0 61 <1 884 1097 965	16 0 47 <1 596 1554 753
Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFLUID CONDITIONThe BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.SodiumppmASTM D5185m044BariumppmASTM D5185m00466MolybdenumppmASTM D5185m05866ManganeseppmASTM D5185m0<144CalciumppmASTM D5185m1010942266MagnesiumppmASTM D5185m1070110511PhosphorusppmASTM D5185m127012431	5 <1 0 61 <1 884 1097 965 1212	16 0 47 <1 596 1554 753 952
Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFLUID CONDITIONThe BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.SodiumppmASTM D5185m044BariumppmASTM D5185m0000000MolybdenumppmASTM D5185m0<586658666666ManganeseppmASTM D5185m0<11<444444CalciumppmASTM D5185m10109422<666	5 <1 0 61 <1 884 1097 965	16 0 47 <1 596 1554 753

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

ASTM D445 15.4

Visc @ 100°C cSt

4.6

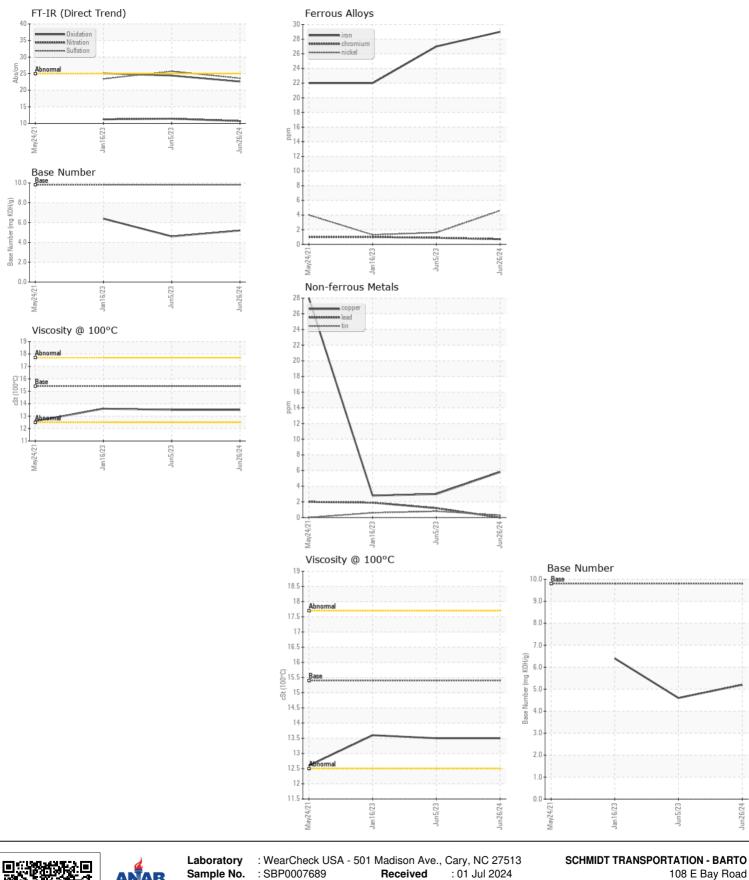
13.5

5.2

13.5

6.4

13.6



Sample No. : SBP0007689 Received : 01 Jul 2024 Lab Number : 06225599 Tested Plattsmouth, NE : 03 Jul 2024 Unique Number : 11103796 Diagnosed : 03 Jul 2024 - Jonathan Hester US 68048 Test Package : FLEET Contact: Service Manager 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)

Submitted By: CASEY WILKIE Page 2 of 2