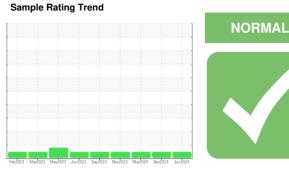


## **OIL ANALYSIS REPORT**





Machine Id

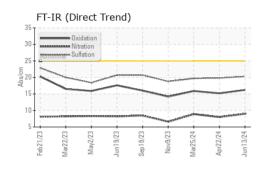
CATERPILLAR D6 10034 (S/N KEW01121) Diesel Engine

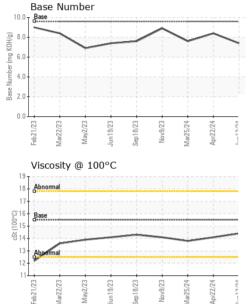
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

Resample at the next service interval to monitor.       Sample Date       Client Info       13 Jun 2024       22 Apr 2024         Machine Age       hrs       Client Info       4723       4220         All component wear rates are normal.       Contamination       There is no indication of any contamination in the oil.       Oil Ohanged       Client Info       492       0         Contamination       The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.       NORMAL       NORMAL       NORMAL       NORMAL       NORMAL         Viater       Wider       Wider       Wider       Normat       NEG       NEG         Wear       Wider       Wider       Normat       Nickel       Nickel       Nickel       Nickel       Nickel       Nickel       Nickel       Nickel       Nickel       22       0       <1         Silver       ppm       ASTM 05155m       -20       0       <1       2       2       1       2       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       2       1       1       1       2       1       1 </th <th>history2 WC0913207 25 Mar 2024 3781 582 Changed NORMAL history2 &lt;1.0 NEG NEG history2 17 0</th>	history2 WC0913207 25 Mar 2024 3781 582 Changed NORMAL history2 <1.0 NEG NEG history2 17 0
Resample at the next service interval to monitor.       Sample Date       Client Info       13 Jun 2024       22 Apr 2024         Machine Age       hrs       Client Info       4723       4220         All component wear rates are normal.       Ool Age       hrs       Client Info       4723       4220         Contamination       There is no indication of any contamination in the oil.       Oil Changed       Client Info       4723       4220         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.       NORMAL       NORMAL       NORMAL       NORMAL         Glycol       WC Method       >5       <1.0       <1.0       Water       WC Method       >0.2       NEG       NEG         VEAR METALS       method       Imit/base       current       history1         Iron       ppm       ASTM 05185m<>20       0       <1.0         Nickel       ppm       ASTM 05185m<>20       0       <1.0         Nickel       ppm       ASTM 05185m<>20       0       <1.0         Nickel       ppm       ASTM 05185m<>20       0       <1         Lead       ppm       ASTM 05185m<>25       <1       2       2	25 Mar 2024 3781 682 Changed NORMAL NEG NEG history2 17
Wear       Machine Age       hrs       Client Info       4723       4220         Nachine Age       hrs       Client Info       492       0         Contamination       here is no indication of any contamination in the it.       Sample Status       Client Info       Changed       N/A         Hid Condition       he BN result indicates that there is suitable ukalinity remaining in the oil. The condition of the it is suitable for further service.       Sample Status       Current       NoRMAL       NORMAL         Vear       WC Method       >5       <1.0       <1.0         Water       WC Method       >0.2       NEG       NEG         Glycol       WC Method       >0.2       NEG       NEG         Water       WC Method       >0.2       NEG       NEG         Glycol       WC Method       >0.2       NEG       NEG         Nickel       ppm       ASTM D5185m<>100       22       17         Chromium       ppm       ASTM D5185m<>2.0       0       <1         Nickel       ppm       ASTM D5185m<>2.0       <1       2         Lead       ppm       ASTM D5185m<>2.0       <1       2         Copper       ppm       ASTM D5185m       0       <1 <th>3781 582 Changed NORMAL history2 &lt;1.0 NEG NEG history2 17</th>	3781 582 Changed NORMAL history2 <1.0 NEG NEG history2 17
Oil Age       hrs       Client Info       492       0         component wear rates are normal.       Oil Age       hrs       Client Info       Changed       N/A         parts is no indication of any contamination in the .       Oil Age       Client Info       Changed       N/A         sample Status       Imit/base       current       history1         wid Condition       Fuel       WC Method       >5       <1.0	882 Changed NORMAL history2 <1.0 NEG NEG history2 17
Oritamination tere is no indication of any contamination in the uid Condition is eBN result indicates that there is suitable tailnity remaining in the oil. The condition of the is suitable for further service.       Oil Changed       Client Info       Changed       NA         Fuel       WC Method       >5       <1.0	Changed NORMAL history2 <1.0 NEG NEG history2 17
Sample Status       NORMAL       NORMAL         Vid Condition       e BN result indicates that there is suitable alinify remaining in the oil. The condition of the is suitable for further service.       Vid Method       >5       <1.0	NORMAL history2 <1.0 NEG NEG history2 17
Bample Status       NORMAL       NORMAL         vid Condition       EN result indicates that there is suitable alinity remaining in the oil. The condition of the is suitable for further service.       CONTAMINATION       method       limit/base       current       history1         Fuel       WC Method       >5       <1.0	history2 <1.0 NEG NEG history2 17
CONTAMINATION       method       imit/base       current       history1         e BN result indicates that there is suitable alinity remaining in the oil. The condition of the is suitable for further service.       Fuel       WC Method       >0.2       NEG       NEG         Water       WC Method       >0.2       NEG       NEG       NEG         Glycol       WC Method       >0.2       NEG       NEG         VEAR METALS       method       imit/base       current       history1         Iron       ppm       ASTM D5185m       >20       0       <1	<1.0 NEG NEG history2 17
Puel       WC Method       >5       <1.0	NEG NEG history2 17
Water         WC Method         >0.2         NEG         NEG           s suitable for further service.         Glycol         WC Method         NEG         NEG           WEAR METALS         method         limit/base         current         history1           Iron         ppm         ASTM D5185m         >100         22         17           Chromium         ppm         ASTM D5185m         >20         0         <1	NEG history2 17
S suitable for further service.         Glycol         WC Method         NEG         NEG           VUEAR METALS         nethod         limit/base         current         history1           Iron         ppm         ASTM D5185m         >100         22         17           Chromium         ppm         ASTM D5185m         >20         0         <1	history2 17
Iron         ppm         ASTM D5185m         >100         22         17           Chromium         ppm         ASTM D5185m         >20         0         <1	17
Chromium         pm         ASTM D5185m         >20         0         <1           Nickel         ppm         ASTM D5185m         >2         0         <1	
Nickel       ppm       ASTM D5185m       >2       0       <1         Titanium       ppm       ASTM D5185m       >2       0       <1	0
Titanium       ppm       ASTM D5185m       >2       0       <1         Silver       ppm       ASTM D5185m       >2       0       <1	0
Silver       ppm       ASTM D5185m       >2       0       <1         Aluminum       ppm       ASTM D5185m       >25       <1       2         Lead       ppm       ASTM D5185m       >40       <1       2         Copper       ppm       ASTM D5185m       >40       <1       2         Copper       ppm       ASTM D5185m       >330       2       4         Tin       ppm       ASTM D5185m       >15       0       1         Vanadium       ppm       ASTM D5185m       >15       0       <1         Cadmium       ppm       ASTM D5185m       0       <1       <1         Boron       ppm       ASTM D5185m       1       0       <1         Barium       ppm       ASTM D5185m       1       0       1         Molybdenum       ppm       ASTM D5185m       1       0       <1         Magnesium       ppm       ASTM D5185m       1010       1047       913         Calcium       ppm       ASTM D5185m       1070       1308       1190         Phosphorus       ppm       ASTM D5185m       1070       1308       1190         Magnesium <t< td=""><td>0</td></t<>	0
Aluminum       ppm       ASTM D5185m       >25       <1	0
LeadppmASTM D5185m>40<12CopperppmASTM D5185m>33024TinppmASTM D5185m>1501VanadiumppmASTM D5185m>150<1	0
LeadppmASTM D5185m>40<12CopperppmASTM D5185m>33024TinppmASTM D5185m>1501VanadiumppmASTM D5185m>150<1	2
Copper       ppm       ASTM D5185m       >330       2       4         Tin       ppm       ASTM D5185m       >15       0       1         Vanadium       ppm       ASTM D5185m       >15       0       <1         Cadmium       ppm       ASTM D5185m       0       <1       <1         Cadmium       ppm       ASTM D5185m       0       <1       <1         ADDITIVES       method       limit/base       current       history1         Boron       ppm       ASTM D5185m       1       0       1         Barium       ppm       ASTM D5185m       1       0       1         Molybdenum       ppm       ASTM D5185m       1       0       <1         Magnesium       ppm       ASTM D5185m       1010       1047       913         Calcium       ppm       ASTM D5185m       1070       1308       1190         Phosphorus       ppm       ASTM D5185m       1270       1371       1298	1
TinppmASTM D5185m>1501VanadiumppmASTM D5185m0<1	8
VanadiumppmASTM D5185m0<1CadmiumppmASTM D5185m0<1	<1
CadmiumppmASTM D5185m0<1ADDITIVESmethodlimit/basecurrenthistory1BoronppmASTM D5185m101BariumppmASTM D5185m100MolybdenumppmASTM D5185m606060ManganeseppmASTM D5185m10<1	0
Boron         ppm         ASTM D5185m         1         0         1           Barium         ppm         ASTM D5185m         1         0         0           Molybdenum         ppm         ASTM D5185m         60         60         60           Manganese         ppm         ASTM D5185m         1         0         <1	0
Barium         ppm         ASTM D5185m         1         0         0           Molybdenum         ppm         ASTM D5185m         60         60         60           Manganese         ppm         ASTM D5185m         1         0         <1	history2
Molybdenum         ppm         ASTM D5185m         60         60         60           Manganese         ppm         ASTM D5185m         1         0         <1	4
Manganese         ppm         ASTM D5185m         1         0         <1           Magnesium         ppm         ASTM D5185m         1010         1047         913           Calcium         ppm         ASTM D5185m         1070         1308         1190           Phosphorus         ppm         ASTM D5185m         1150         1095         1106           Zinc         ppm         ASTM D5185m         1270         1371         1298	0
Manganese         ppm         ASTM D5185m         1         0         <1           Magnesium         ppm         ASTM D5185m         1010         1047         913           Calcium         ppm         ASTM D5185m         1070         1308         1190           Phosphorus         ppm         ASTM D5185m         1150         1095         1106           Zinc         ppm         ASTM D5185m         1270         1371         1298	59
Magnesium       ppm       ASTM D5185m       1010       1047       913         Calcium       ppm       ASTM D5185m       1070       1308       1190         Phosphorus       ppm       ASTM D5185m       1150       1095       1106         Zinc       ppm       ASTM D5185m       1270       1371       1298	<1
Calcium         ppm         ASTM D5185m         1070         1308         1190           Phosphorus         ppm         ASTM D5185m         1150         1095         1106           Zinc         ppm         ASTM D5185m         1270         1371         1298	951
Phosphorus         ppm         ASTM D5185m         1150         1095         1106           Zinc         ppm         ASTM D5185m         1270         1371         1298	1201
Zinc ppm ASTM D5185m 1270 1371 1298	1076
	1309
Sulfur ppm ASTM D5185m 2060 3658 3311	3504
CONTAMINANTS method limit/base current history1	history2
Silicon ppm ASTM D5185m >25 3 3	3
Sodium         ppm         ASTM D5185m         1         0	1
Potassium         ppm         ASTM D5185m         >20         0         2	0
INFRA-RED method limit/base current history1	history2
Soot % % *ASTM D7844 >3 0.9 0.7	0.7
Nitration         Abs/cm         *ASTM D7624         >20         9.0         8.0	8.9
Sulfation         Abs/.1mm         *ASTM D7415         >30         20.3         19.8	19.7
FLUID DEGRADATION method limit/base current history1	
Oxidation Abs/.1mm *ASTM D7414 >25 16.2 15.2	history2
Base Number (BN)         mg KOH/g         ASTM D2896         9.6         7.4         8.4	history2 15.9



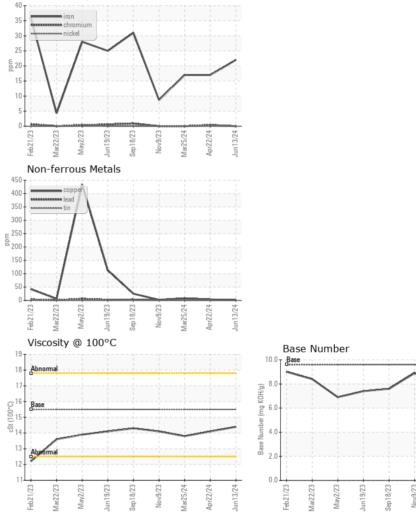
## **OIL ANALYSIS REPORT**





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	14.4	14.1	13.8
GRAPHS						

Ferrous Alloys





Sample No. : WC0888065 Received : 18 Jun 2024 PO DRAWER 1578 Lab Number : 06213193 Tested : 19 Jun 2024 NEW BERN, NC Unique Number : 11086057 Diagnosed : 19 Jun 2024 - Wes Davis US 28563 Test Package : CONST (Additional Tests: TBN) Contact: MIKE WYATT Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. mwyatt@traderconstruction.com T: (252)633-1399 \* - 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) F: (252)638-4871

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Report Id: TRANEW [WUSCAR] 06213193 (Generated: 06/22/2024 22:35:41) Rev: 1

Laboratory

Contact/Location: MIKE WYATT - TRANEW

Page 2 of 2

un13/24

pr22/24

Mar25/24

TRADER CONSTRUCTION CO.