

## WEAR ABNORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id 51 Component

## 

## PETRO CANADA DURON HP 15W40 (--- GAL)

VIECOMINIENDATION         Test         UPM         Membra         Initiality         History         History           Oil and filer change at the line of sampling has been noted. Resempted at the next service interval to monitor.         Sample Date Sample Date at the next service interval to monitor.         Sample Date Sample Date (1) Age         Client Info         4189 202         23.14.023         69 5ep 2022           Oil Age         Ins         Client Info         433         0         0         0           Oil Age         Ins         Client Info         433         0         0         0           Oil Age         Ins         Client Info         433         0         0         0         0           Oil Age         Ins         Client Info         433         0 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>													
Oil and filter change at the time of sampling has been noted. Resample       Sample Date       Citent Into       4 May 220       83.809 2022         at the next service interval to monitor.       Sample Date       Citent Into       403       0       0         Biller Age       hrs       Citent Into       403       0       0       0         Filter Changed       Citent Into       403       0       0       0       0         Filter Changed       Citent Into       Changed       Changed <t< th=""><th>RECOMMENDATION</th><th>Test</th><th>UOM</th><th>Method</th><th>Limit/Abn</th><th>Current</th><th>History1</th><th>History2</th></t<>	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2					
at the next service interval to monitor.         Sample Date         Client Info         44 Mar 240         0 3 0         0           Machine Age         hrs         Client Info         433         0         0           OII Age         hrs         Client Info         433         0         0           OII Changed         Filter Anged         Filter Anged         Changed													
Oil Age         hrs         Client Info         403         0         0           Filter Age         Krs         Client Info         603         Changed			1					· ·					
Filte: Age Oil Changed Cilcent Info         400 Changed Change		•											
Oil Changed Filter Changed Filter Changed Status         Client Info         Changed		-											
Filter Changed Sample Status         Clean Info         Changed NoRMAL         Changed NoRMAL         Changed NoRMAL           WEAR         Iron         ppm         ASTMD518m         >20         43         44           Moderate concentration of visible metal present. All component wear rates are normal.         Iron         ppm         ASTMD518m         >20         0         0         <1           Nickel         ppm         ASTMD518m         >20         0         0         <1         1           Nickel         ppm         ASTMD518m         >25         0         0         <1         1           Lead         ppm         ASTMD518m         >25         1         <1         1         2         3           Vanadium         ppm         ASTMD518m         >25         <1         <1         1         2         3           Vanadium         ppm         ASTMD518m         >15         <1         2         3         4         3           Vanadium         ppm         ASTMD518m         >15         <1         2         3         4         3           Vanadium         ppm         ASTMD518m         >25         <1         <1         0         0         0 </th <th></th> <th>0</th> <th>nrs</th> <th></th> <th></th> <th></th> <th>-</th> <th></th>		0	nrs				-						
Sample Status         APROPIMA         NORMA         NORMA           WEAR         Iron         pp         ASM D518m         >100         24         33         44           Moderate concentration of visible metal present. All component wear rates are normal.         Nickel         ppm         ASM D518m         >20         0         0         0         0           Nickel         ppm         ASM D518m         >22         0		-				-							
WEAR         Iron         ppm         ASTMD5HSm         >100         24         38         44           Moderate concentration of visible metal present. All component wear rates are normal.         Iron         ppm         ASTMD5HSm         >20         <1         <1         <1           Nickel         ppm         ASTMD5HSm         >20         0         0         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1         <1 <th></th> <th></th> <th></th> <th>Client Inio</th> <th></th> <th>U U</th> <th>0</th> <th>-</th>				Client Inio		U U	0	-					
Moderate concentration of visible metal present. All component wear rates are normal.         Chromium Nickel         ppm         ASTM 05185n         >20         <1							NORIVIAL	NORIVIAL					
Moderate concentration of visible metal present. All component wear rates are normal.         Chromium Nickel         ppm         ASTM 05185n         >20         <1	WEAR	Iron	ppm	ASTM D5185m	>100	24	38	44					
Number         ppm         Astro biols         ppm         Astro bisis         pp         0         0         0         0           Silver         ppm         ASTM 05185m         >20         0         0         <1           Aluminum         ppm         ASTM 05185m         >20         0         0         <1           Aluminum         ppm         ASTM 05185m         >20         0         0         <1           Lead         ppm         ASTM 05185m         >20         3         3         4           Copper         ppm         ASTM 05185m         >20         1         21         2           Vanadium         ppm         ASTM 05185m         >5         1         2         3         3         4         3           The ppm         ASTM 05185m         >5         1         2         3         4         3         3         4         3         3         4         3         3         4         3         3         4         3         3         4         3         3         4         3         3         4         3         3         4         3         3         4         3         3	Moderate concentration of visible metal present. All component wear	Chromium		ASTM D5185m	>20	<1	<1	<1					
Intanum         ppm         ASIM D585m         >2         0         0         0           Silver         ppm         ASIM D585m         >25         <1         <1         1           Auminum         ppm         ASIM D585m         >25         <1         <1         1           Lead         ppm         ASIM D585m         >26         <1         <1         1           Copper         ppm         ASIM D585m         >30         6         11         22           Tin         ppm         ASIM D585m         >15         <1         2         3           White Metal         scalar         "Visual         NONE         MODER         NONE         NORE         NORE         NORE         NORE         NORE         NORE         NORE		Nickel	ppm	ASTM D5185m	>2	0	0	<1					
Aluminum         ppm         ASTM D5185m         >25         <1		Titanium	ppm	ASTM D5185m	>2	0	0	0					
Lead         pm         ASTM D5185n         >40         3         3         4           Copper         pm         ASTM D5185n         >30         6         11         22         3           Vanadium         ppm         ASTM D5185n         < <td>&lt;<td>1         23         3           Vanadium         ppm         ASTM D5185n         &lt;<td>&lt;<td>&lt;<td>0         0         0           White Metal         scalar         'Visual         NONE         MODE         NONE         NO</td></td></td></td></td>		< <td>1         23         3           Vanadium         ppm         ASTM D5185n         &lt;<td>&lt;<td>&lt;<td>0         0         0           White Metal         scalar         'Visual         NONE         MODE         NONE         NO</td></td></td></td>	1         23         3           Vanadium         ppm         ASTM D5185n         < <td>&lt;<td>&lt;<td>0         0         0           White Metal         scalar         'Visual         NONE         MODE         NONE         NO</td></td></td>	< <td>&lt;<td>0         0         0           White Metal         scalar         'Visual         NONE         MODE         NONE         NO</td></td>	< <td>0         0         0           White Metal         scalar         'Visual         NONE         MODE         NONE         NO</td>	0         0         0           White Metal         scalar         'Visual         NONE         MODE         NONE         NO	Silver	ppm	ASTM D5185m	>2	0	0	<1
Copper         ppm         ASTM D5185m         >330         6         11         22           Tin         ppm         ASTM D5185m         >15         <1         2         3           Vanadum         ppm         ASTM D5185m         >15         <1         0         0           White Metal         scalar         "Visual         NONE         MODER         NONE         NONE           CONTAMINATION         Scalar         "Visual         NONE         ASTM D5185m         >25         3         4         3           There is no indication of any contamination in the oil.         Silicon         ppm         ASTM D5185m         >20         <1         <1         0         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10         <10		Aluminum	ppm	ASTM D5185m	>25	<1	<1	1					
Tin         ppm         ASTM D5185m         >15         <1		Lead	ppm	ASTM D5185m	>40	3	3	4					
Vanadium         ppm         ASTM D5185m		Copper	ppm	ASTM D5185m	>330	6	11	22					
White Metal Yellow Metal         scalar         'Visual         NONE         MODEF         NONE         NORE         NORE		Tin	ppm		>15	<1	2	3					
Yeilow Metal         scalar         *Visual         NONE         NONE         NONE         NONE           CONTAMINATION         Silicon         ppm         ASTM D5185m         >20         <1         <1         0           There is no indication of any contamination in the oil.         Potassium         ppm         ASTM D5185m         >20         <1         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         1.0         <1.0         <1.0			ppm	ASTM D5185m		<1	0	0					
Stilicon         ppm         ASTM D5185m         >25         3         4         3           Potassium         ppm         ASTM D5185m         >20         -1         -1         0           Fuel         WC Method         >5         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         <1.0         1.0         <1.0         <1.0		White Metal	scalar		NONE	A MODER	NONE	NONE					
Potassium         ppm         ASTM D5185m         >20         <1		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE					
Potassium         ppm         ASTM D5185m         >20         <1		Silicon		ACTM DE105m	. 25	2	Л	0					
Fuel       WC Method       >5       <1.0       <1.0       <1.0         Water       WC Method       >0.2       NEG       NEG       NEG         Glycol       WC Method       >0.2       NEG       NEG       NEG         Soot %       %       'ASTM D784/       >3       0.2       0.3       0.3         Nitration       Abs/m       'XSTM D784/       >0       7.1       8.2       8.5         Sulfation       Abs/m       'XSTM D784/       >0       18.7       20.4       22.2         Silt       scalar       'Visual       NONE       NONE       NONE       NONE       NONE         Debris       scalar       'Visual       NONE       NORE	CONTAMINATION												
Water         WC Method         >0.2         NEG         NEG         NEG           Glycol         WC Method         NEG         NEG         NEG         NEG           Soot %         %         *STM D7844         >3         0.2         0.3         0.3           Nitration         Abs/cm         *STM D7845         >30         18.7         20.4         22.2           Sulfation         Abs/cm         *STM D7845         >30         18.7         20.4         22.2           Silt         scalar         *Visual         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE           Sand/Dirt         scalar         *Visual         NONE         NONE         NONE         NORM           Odor         scalar         *Visual         NOR         NORM         NORML         NORM           FLUID CONDITION         Sodium         ppm         ASTM D5185m         0         0         0           Sodium         ppm         ASTM D5185m         0         0         0         0           Solitable of further service.         Sodium         ppm         ASTM D518	There is no indication of any contamination in the oil.		ppm										
Glycol         WC Method         NEG         NEG         NEG           Soot %         %         *ASTM D7844         >3         0.2         0.3         0.3           Nitration         Abs/cm         *ASTM D7824         >20         7.1         8.2         8.5           Sulfation         Abs/cm         *ASTM D7624         >20         7.1         8.2         8.5           Sulfation         Abs/cm         *ASTM D7645         >30         18.7         20.4         22.2           Silf         scalar         *Visual         NONE         NONE         NONE         NONE           Debris         scalar         *Visual         NONE         NONE         NONE         NONE         NONE           Sand/Dirt         scalar         *Visual         NORE         NORM         NORM         NORM         NORM           Odor         scalar         *Visual         NORM         NO													
Soot %         %         *ASTM D7844         >3         0.2         0.3         0.3           Nitration         Abs/cm         *ASTM D7624         >20         7.1         8.2         8.5           Sulfation         Abs/fmm         *ASTM D7624         >20         7.1         8.2         8.5           Sulfation         Abs/fmm         *ASTM D7415         >30         18.7         20.4         22.2           Sit         scalar         *Visual         NONE         NORML					20.L								
Nitration       Abs/cm       'ASTM D7624       >20       7.1       8.2       8.5         Sulfation       Abs/tm       'ASTM D7615       >30       18.7       20.4       22.2         Silt       scalar       'Visual       NONE       NONE       NONE       NONE       NONE         Debris       scalar       'Visual       NONE       NONE       NONE       NONE       NONE       NONE         Sand/Dirt       scalar       'Visual       NONE       NORE		,	%		>3								
SulfationAbs/.tmm*ASTM D7415>3018.720.422.2Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONENONEAppearancescalar*VisualNORLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORNORMLNORMLNORMLNORMLNORMLNORMLIntervisited Waterscalar*VisualNORNOR21222BoronppmASTM D5185m660626769666267MarganeseppmASTM D5185mI10451065889111771717171<													
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       NORM       NORML       NORML       NORML       NORML         Odor       scalar       *Visual       NORML       NORML       NORML       NORML       NORML         Emulsified Water       scalar       *Visual       NORML       NORML       NORML       NORML       NORML         FLUID CONDITION       Sodium       ppm       ASTM D5185m        2       2         Boron       ppm       ASTM D5185m        2       12       69         Barium       ppm       ASTM D5185m        60       62       67         Magnesium       ppm       ASTM D5185m         <1       <1       <1         Magnesium       ppm       ASTM D5185m         60       62       67         Magnesium       ppm       ASTM D5185m													
Debrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONENONEAppearancescalar*VisualNORMNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGNEGFLUID CONDITIONSodiumppmASTM D5185m21269The BN result indicates that there is suitable alkalinity remaining in the oil is suitable for further service.SodiumppmASTM D5185m000MolybdenumppmASTM D5185m60626767606267ManganeseppmASTM D5185m66062677961<1<1<1MagnesiumppmASTM D5185m96696677971<11<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1<1													
Appearance Odorscalar*VisualNORML<			scalar	*Visual	NONE	NONE	NONE	NONE					
Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFLUID CONDITIONSodiumppmASTM D5185m22BoronppmASTM D5185m21269BariumppmASTM D5185m000MolybdenumppmASTM D5185m606267ManganeseppmASTM D5185m<		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE					
Emulsified Water       scalar       *Visual       >0.2       NEG       NEG         FLUID CONDITION       Sodium       ppm       ASTM D5185m       <1       2       2         Boron       ppm       ASTM D5185m       <2       12       69         Barium       ppm       ASTM D5185m       0       0       0         Molybdenum       ppm       ASTM D5185m       60       62       67         Manganese       ppm       ASTM D5185m       <1       <1       <1       <1         Magnesium       ppm       ASTM D5185m       <60       62       67         Manganese       ppm       ASTM D5185m       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1		Appearance	scalar	*Visual	NORML	NORML	NORML	NORML					
FLUID CONDITIONSodiumppmASTM D5185m<1		Odor	scalar	*Visual	NORML	NORML	NORML	NORML					
Boron       ppm       ASTM D5185m       2       12       69         Barium       ppm       ASTM D5185m       0       0       0         Molybdenum       ppm       ASTM D5185m       0       0       0         Manganese       ppm       ASTM D5185m       60       62       67         Manganese       ppm       ASTM D5185m         <1       <1         Magnesium       ppm       ASTM D5185m        966       966       779         Calcium       ppm       ASTM D5185m       1045       1065       889         Zinc       ppm       ASTM D5185m       1316       1335       1172		Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG					
Boron       ppm       ASTM D5185m       2       12       69         Barium       ppm       ASTM D5185m       0       0       0         Molybdenum       ppm       ASTM D5185m       0       0       0         Manganese       ppm       ASTM D5185m       60       62       67         Manganese       ppm       ASTM D5185m         <1       <1         Magnesium       ppm       ASTM D5185m        966       966       779         Calcium       ppm       ASTM D5185m       1045       1065       889         Zinc       ppm       ASTM D5185m       1316       1335       1172		O e ell'errer					0						
BariumppmASTM D5185m000oil. The condition of the oil is suitable for further service.BariumppmASTM D5185m606267MolybdenumppmASTM D5185m606267ManganeseppmASTM D5185m41<1<1MagnesiumppmASTM D5185m966966779CalciumppmASTM D5185m120312791117PhosphorusppmASTM D5185m1045889ZincppmASTM D5185m131613351172	FLUID CONDITION												
Molybdenum       ppm       ASTM D5185m       60       62       67         Manganese       ppm       ASTM D5185m       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1       <1 <td< th=""><th rowspan="3"></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>													
Manganesse       ppm       ASTM D5185m       <1													
Magnesium       ppm       ASTM D5185m       966       979         Calcium       ppm       ASTM D5185m       1203       1279       1117         Phosphorus       ppm       ASTM D5185m       1045       1065       889         Zinc       ppm       ASTM D5185m       1316       1335       1172		•											
Calcium       ppm       ASTM D5185m       1203       1279       1117         Phosphorus       ppm       ASTM D5185m       1045       1065       889         Zinc       ppm       ASTM D5185m       1316       1335       1172		-											
Phosphorus         ppm         ASTM D5185m         1045         1065         889           Zinc         ppm         ASTM D5185m         1316         1335         1172		<b>U</b>											
Zinc ppm ASTM D5185m 1316 1335 1172													
Oxidation Abs/.1mm *ASTM D7414 >25 14.8 16.3 17.1					>25								

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

ASTM D445 15.6

Visc @ 100°C cSt

11.08

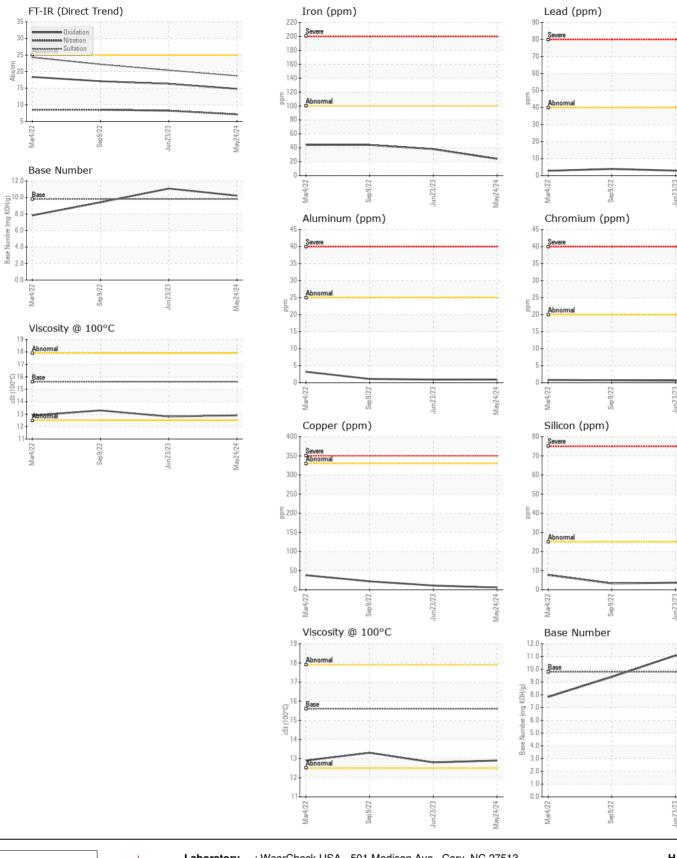
12.8

9.4

13.3

10.22

12.9



HARNESS LLC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : KFS0006083 Received 855 N JAMES CAMPBELL BLVD : 30 May 2024 Lab Number : 06196026 COLUMBIA, TN Tested : 02 Jun 2024 Unique Number : 11058149 : 02 Jun 2024 - Don Baldridge US 38401 Diagnosed Test Package : MOB 2 Contact: BEN HARNESS Certificate L2367 ben@slectharness.com 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. T: (615)733-4480 F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: BILL ENYART Page 2 of 2

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