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983k9:k:;=3k4"SB;<k;8\$%;%"%;98\$&9k63<9#8;_3Chk, &M5\$&63<9#8;_3Ck&S>k%&3k
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15\$&RH&) @56B3\$%98D&?) &Q%&69"#@&/ 3C5&) 964965%;98RH&! <%;98&63\$356<@&
469#65 7 &5\$;\$,%;8#&M;,%&,\$\$"3\$&9:&96#58;_5%;985B&658\$:96 7 5%;98&58C&
;C38%;,%;3\$H&

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JKK]PKF&) 9 7 7 "8;<5%;98&5C=;\$96&M;,%&W ! 0V&Q%&69"#@&- 9#;<98RH&W96:9BXD&/ ! H&
! <%;98&63\$356<@&469#65 7 &M96X;8#&M;,%&C3\$;#8&58C&<9 7 7 "8;<5%;98&
;\$"3\$&8=9B=3C&;8&\$3%;,8#&" 4&5&Z69"4&2 3<;\$;98&?"4496&&?>\$%3 7 \$&
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I@;B5C3B4@;5k) @;BCkZ ";C58<3k) B;8;<Dk%9k;8=3\$%;#5%3k%@3k63B5%;98\$@;4k
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\$<@;_94@638;<\$DkC"6;8#k:5 7 ;B>k%658\$5<%;98\$Hk

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JKLJPL J& +3\$356<@k) 98\$"B%58%k%9k ! \$4;65Dk,8<Hk9: kI388\$>B=58;5k98k%@3;6k\$ "C>k9: k
[) @9;<3k9: kIW98P23B;8d"38%k58Ck23B;8d"38%k) 56336\$&5 7 98#kI "36%9k
+;<58k o 9"%"@ [k:96k%@3kW5%;985Bk,8\$%;%"%3k9: kb"=38;B3kb"\$%;<3k58Ck%@3k -5Mk
18:96<3 7 38%k ! \$\$;\$%58<3k ! C 7 ;8;\$%65%;98Hk

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JKLJPLEk Z658\$&58Ck) 98%65<%\$k I69#65 7 k +3=;3M36DkW5%;985Bk,8\$%;%"%3k98k 2 6" #k
! S"\$3DkV::;<3k9: k?<;38<3Dk ! B<9@9BDk 2 6" #k ! S"\$3k58Ck . 38%5Bk f 35B%k@
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JKL (PLN& +3\$356<@k) 98\$"B%58%k%9k ! B:63Ck,Hk 2 " I98%k,8\$%;%"%3Dk +3\$356<@k 2 ;=;\$;98Dk
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JKNKPLY& +3\$356<@k) 98\$"B%58%k%9kA5 7 ;B;3\$&9: k 2 ;=96<3k I69#65 7 Dk I @;B5C3B4@;5k
) @;BCkZ ";C58<3k) B;8;<Dk I @;B5C3B4@;5Dk I ! Hk

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JKNKPL ' & +3\$356<@k58Ck . 3%@9C9B9#;<5Bk ! C=;\$96k%9k ?;8#B3kI5638%kA5 7 ;B>k ?% "C>k
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Z ";C58<3k) B;8;<Dk I @;B5C3B4@;5Dk I ! Hk

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436\$98&<963&%35 7 &%9&3=5B"5%3&5ʒ%&%9&&@3&) ;%>&9: & I @;B5C3B4@;5&:69 7 &
%@3&-5M&18:96<3 7 38&&! \$\$;%58<3&! C 7 ;8;\$%65%;98&Q - 1 ! ! R&9: &%@3&
* 8;%3C&?%5%3\$&2 3456 7 38&9: &) 6; 7 ;85B&b"\$%<3H&

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V4365%;98\$&+3\$356<@D&* 8;=36\$;%>&9: & I 388\$>B=58;5D&I @;B5C3B4@;5D&I ! H&P&
%35<@;8#&<9"6\$3\$&8&d"58%;%5%;=3& 7 3@9C\$D&94365%;98\$&63\$356<@D&\$%5%;\$%;<\$&
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JKFLPN(& 035<@;8#&58C&+3\$356<@&! \$\$;%58%D& 2 3456 7 38&9: & ?%5%;\$%;<\$&58C&
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%35<@;8#&<9"6\$3\$&8&) 9 7 4"%36&I 69#65 7 7 ;8#&QAV+0+ ! WR&58C&
. 9C3B;8#&58C&V4365%;98\$&+3\$356<@D&58C&C9;8#&63\$356<@&8&=56;9"\$&
5635\$&9: &94365%;985B&63\$356<@H&

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JKFN&& ! <"56;5B&065;8;8#&I 69#65 7 D& . 3%6949B;%58&- ;:3&8\$"658<3&) 9HD&&
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^@5>5 7 3H&Z9=368;8#&8&%@3&%; 7 3&9: &) 9=;C&58C&) B; 7 5%3&1 7 36#38<&Q5\$3C&
98&0@3&f ;;C38&I 9M36&9: & ?>\$3 7 \$&0@;8X;8#&c&Z9=368;8#&8&5&) B; 7 5%3&
1 7 36#38<&RH&A35%"63C&\$3\$%;98&5%&
D&! ?) &' (' (&ZB9S5B&) 98=36\$5%;98H&?3\$%;98&M5\$&@3BC&=;6%"5BB>D&
98&g99 7 H&

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!46&' (' (&8=;%3C&4583B;\$%T63\$498C38&5&5&<9 7 7 "8;<5%;98T\$>\$%3 7 \$&<;38%;\$%D&%9&
\$3\$%;98\$D&) 9 7 45\$%;98c&! &C334B>&@ " 7 58&3\$38%;5B&5S;B;%>&9&<9883<&
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\ ;%83\$%;8#&5&=9;<3&%@69"##@& 7 9=3 7 38&\$&Q,8#6;C&I;<X3BRH&) 98:3638<3&98&
ZB9S5B&?9<;5B& \ ;%83\$%;8#&D& \ ;%38P f 36C3<X3&* 8;=36\$;%>D& \ ;%38D&Z36 7 58>H&
2 "3&9&) 9=;CPJKD&<98:3638<3&M5\$&@3BC&98B;83H&

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V<%&' (JK&&I 5436&463\$38%5%;98D&M;%@&- 5"638<3&f 5S;SD&AB5=;9& . 3\$d";%5&C5&?;B=5&58C&
?36#3' &=58& . ;CC38C964D&Z38365%;8#&W3M&A""63\$&%@69"##@&) 9BB5S965%;=3&
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D&V\$B9D&W96M5>H&O@;\$&\$3\$\$;98&M5\$&5&456%;<;45%96>&\$3\$\$;98&@5%&
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b"8&' (JK& ,8=;%3C&5BXD& - ;=;8#&5&)>S3683%;<& - ;:3H&Z;=38&5\$&63<;4;38%&9:&W96S36%&
\ ;3836&5M56C&:96&b;:3%; 7 3&5<@;3=3 7 38%D&

?34' (J) s ?>\$%3 7 ;<58C&63:B3U;=3&436\$43<%;=3\$&98&<9\$ 7 949B;%58&) 9 7 7 "8;<5%;98Ht&
^ 3>89%3&5CC63\$\$&5%<98:3638<3&98& 2 ;,\$<9=36;8#&) 9\$ 7 949B;%58&
) 9 7 7 "8;<5%;98c& ! &<69\$&9=36&C;5B9#" 3&S3%M338&45\$%&58C&:"% "63T%&396>&
58C&465<%;<3T15\$%&58C& \ 3\$%H&?498\$963C&S>&@3&,8\$%;%"3&:96&ZB9S5B&,8%3#65B&
) 9 7 43%38<3H& f 3BC&5%&@3&* 8;=36\$;%>&9:&A3C365B&! 6 7 3C&A96<3SD& . "8;<@D&
Z36 7 58>H&

?34' (J) s 2 3\$;#8&9:&5&) 9 7 7 "8;<5%;98&I 69<3\$&:96&2 3\$;#8&Q9:&58&,C35&g 983Rt&Q<9P
5"%@963CD&M;%@&065=;\$&0@9 7 4\$98&I 5436&463\$38%3C&5&) 98:3638<3&98&
?>\$%3 7 ;<2 3\$;#8&8&O58:-D& ! BS36%5&H& ! %&@3&A698%;36\$&9:&?>\$%3 7 ;<2 3\$;#8&H&
+ ? 2&i&+3B5%;8#&?>\$%3 7 \$&0@;8X;8#&58C&2 3\$;#8&YH&I 5436&M5\$&463\$38%3C&S>&
065=;\$&0@9 7 4\$98D&5\$&,M5\$&" 85SB3&9&5%38CH&

b"B&' (J) && 1 ZV?&Q1 "694358&Z69"4&98&V6#58;_5%;98&?%"C;3\$R&<98:3638<3&98&
V6#58;_5%;98&\$&58C&%@3&1 U5 7 ;83C& - ;:3c&+35\$98D&+3:B3U;=;%>&58C&
+3\$498\$;S;B;%>H&,M5\$&5&456%;<;458&%;8&@3&\$%635 7 &98&s ?45<3&58C&
. 5%36;5B;%>&8&V6#58;_5%;98&Ht& ! %@38\$D&Z633<3H&&

V<%&' (JY& 1<9B9#;<5B&,C38%;%3\$&58C&2;B3 7 7 5\$&9:& ! <<3B365%3C&) @58#3H&I 63\$38%3C&5&
<98:3638<3D&,C38%;%>&58C& ! <<3B365%3C&) @58#3D&) 98:3638<3&\$498\$963C&S>&
V=36<35%;8#&I 69'3<%&58C&2 34%H&9:&?9<;5B& ! 8%&6949B9#>D&* 8;=36\$;%>&9:&
V\$B9D&->\$3S" &) 38%36D&V\$B9D&W96M5>D&

!"#&' (JY&QM;%@&b583&b96#38\$98RH&2 58<;8#&M;%@&)>S3683%;<\$H&,8=;%3C&%5BX&:96&I5\$P
I 63\$;C38%\$&2 5>&) 3B3S65%;98&5%&] (" ! 88;=36\$56>& . 33%;8#&9:& ! 7 36;<58&
?9<;3%>&:96&)>S3683%;<\$H&Z396#3& \ 5\$@;8#%98&* 8;=36\$;%>D& \ 5\$@;8#%98D&2) H&

. 5>&' (JY& 8=;%3C&I 583B;\$%&58C&I 56%;<;458&D&8&^ 3%36;8#&A9" 8C5%;98&7 33%;8#&98&) ;=<&
?<;38<3D&@3BC&5%&@3&^ 3%36;8#&A9" 8C5%;98&<5 7 4"\$D&2 5>%98D&V f H&

! 46&' (JY& ,8=;%3C&456%;<;458%D&,8%3685%;985B&?>7 49\$;" 7 &98& . 3C;5&,889=5%;98\$D&
+3\$356<@&I 56XD&* 8;=36\$;%>&9:&V\$B9D&W96M5>H&

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* 8;=36\$;%>&9:&V\$B9D&W96M5>H&&&

W9=&' (JE&QM;%@&2 969%&>& ! ##36PZ" 4%5&58C&W;3B\$& ! ##36PZ" 4%5RH&O@3&"\$3&9:&@&3&
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* 8;%3C&?%5%3\$H& \ 96X\$@94&9::363C&5%&) ! +W&Q) 9BB5S965%;=3& ! <%;98&
+3\$356<@&W3%M96XR&<98:3638<3D&s ?%5>;8#&<6%;<5B&c&W" 6% "6;8#(C3 7 9<65%;<&
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?3<98Ck,8%3685%;985BkO5%3\$98k?>749\$;"7 DkV\$B9DkW96M5>Hk

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?34% (JE -35C36k9:k\$>749\$;"7 k<98=36\$5%;98\$&kQM;%@kW965kO5%3\$98k58Ck0@975\$&
f >BB58Ck16;X\$38RHk0@3k\$3<98Ck;8%3685%;985BkO5%3\$98k?>749\$;"7 ck
ZB9S5B;_5%;98k58Ck%@3k699%\$k9:k%@3k3<9B9#;<5Bk<6;\$;ShkV\$B9DkW96M5>Hk

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?34% (JE I583Bk456%;<;458%Hk ! 8%@6949\$&58Ck%@3k . 5%36;5BHk) 98:3638<3k\$498\$963Ck
S>k ! 8%@6949B9#>:kC3456%738%Dk * 8;=36\$;%>k9:kV\$B9Hk?96;5k . 96;5k
) 98:3638<3k) 38%36DkV\$B9DkW96M5>H((

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W9=k (J' +3\$498C38%k9k4583BDk) 977 * W,0 o;k;8k%@3k) B5\$\$6997 ck1%@89#654@>Dk
?36=;<3k - 3568;8#k58Ck?9<;5B&b"\$%;<3HkW5%;985Bk) 977 "8;<5%;98k
! \$9<;5%;98k(QW) ! Rk ! 88"5Bk) 98:3638<3Dk) 3B3S65%3k) V . . * 8;%>Dk
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b"Bk (J' +3:B3U;=;%>Dk?3B:PQ - 3\$SRP+3:B3U;=;%>Dk58Ck?9<;5Bk+3\$356<@Hk05BXk#;=38k
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Q1) ? , 01Rk<98:3638<3Dk . ;58Dk, %5B>HkQ463\$38%5%;98k#;=38kS>k \ ;%k
V\$%638X9RHk

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b"83k' ((Lk / 5B";8#k?<;38<3k) 38%36\$5\$A"%"63k - 35C36\$;8kZ38365%;8#k ^ 89MB3C#3k
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?%3;36Dk I36P1C=;8k I36\$98Dk . 5%@3M\$ f 5 7 5S5%5Dk ?5 7 58%5k058k58Ck
b58k05" #HkA;:%@k ?<;38<3k) 38%36k \ 96BCk) 98#63\$SDk09698%9Hk

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b"83k' ((Lk k035<@;8#k%@3k1 %@;<\$k9:kVS\$36=5%;98ck ! k) 5\$3k?"C>k;8k%@3k * \$3k9:k
I36:96 7 58<3k%9k, 8=;%3k ! <;=3k I56%;<;45%;98k5k%5k?<;38<3k . "\$3" 7 Hk
258;3BkOB53"36DkA63C36;<Xk?%3;36Dk \ ;%k V\$%638X9Dk, 8%3685%;985Bk
)98:3638<3k98k%@3k, 8<B"\$;=3k . "\$3" 7 Dk - 3;C38Dk0@3kW3%@36B58C\$Dkb"83k
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23<k' ((Nk A35%"63Ck\$435X36Dks ! 8k3<9B9#>k9:kA65 7 3 7 5X;8#k58CkA65 7 3C9;8#Ht k
A65 7 3 7 5X36\$ckZ65=;%>k58CkZ65<3Hk0@;\$k 7 33%;8#kM5\$5k<9 7 S;85%;98k
469:3\$;\$985Bk<98:3638<3k98k<@9639#654@>k58Ck\$>\$%3 7 \$Dk%9#3%@36kM;%@k
4"SB;<k436:96 7 58<3\$58Ck%5BX\$Hk 25#@C@5k 258<3k) 9 7 458>Dk - ; 7 36;<XDk
,63B58CHk

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. 5>k' ((Nk A35%"63Ck463\$38%5%;98ck ?>\$%3 7 \$58Ck) >S3683%;<k ! 44695<@3\$%9k%@3k
+3B5%;98\$@;4kS3%M338k \ 96X4B5<3k 23\$;#8k58CkV6#58;_5%;985Bk) "B%"63Hk
\ 96Xk1 8=;698 7 38%W3%M96Xk\$43<;5Bk\$3\$;\$98k98k \ 96X4B5<3k 23\$;#8k58Ck
) "B%"63Hk ! 88"5Bk<98:3638<3k9:k1 8=;698 7 38%5Bk 23\$;#8k+3\$356<k
! \$9<;5%;98Hk?5<65 7 38%9Dk) 5B;:968;5Hk

&

A3S' ((Nk - 3568;8#k5S9" %B3568;8#kM;%@k3B3<%698;<k 7 3C;5kQM;%@k 25=;Ck - 33Dk
#65C"5%3k\$%"C38%k;8k) 9 7 7 "8;<5%;98RHk I5436k463\$38%3Ck5k?> 7 49\$;" 7 k
98k' J#!k) 38%"6>k035<@;8#k03<@89B9#;3\$Dk * 8;=36\$;%>k9:k?9" %@kAB96;C5Dk
05 7 45Hk

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58Ck / ;<%96k I;83C9Dks) 9 7 7 "8;<5%;98k58Ck49=36%>k5\$5k<98C;%;98k;8k%@3k
%658\$:96 7 5%;98k9:k\$<@99B;8#kM96BCPM;C3Ht k

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W9=k' ((Fk QM;%@k 25=;Ck, \$55<\$k58Ck \ ;%k V\$%638X9Rk \ 96BCk) 5:eR(?>\$%3 7 \$k;C35\$;8k
<635%;8#k83%M96Xk\$9:k<98=36\$5%;98Hk0@;\$kM5\$;9BB9M3CkS>k9"6k
:5<;B;%5%;8#k5k \ 96BCk) 5:eR98k%@3k%@3 7 3ck f 9Mk) 58k \ 3k I634563k?" "C38k
5\$ZB9S5Bk) ;%_38\$C"6;8#k%@3;6k\$<@99B;8#k>356\$Hk, 8%3685%;985Bk ?<@99Bk
) 9883<%;98kZB9S5Bk?" 7 7 ;%ck - 35C;8#k ?<@99Bk I56%836\$@;4\$5<69\$
O96C36\$Hk05 7 45DkA - Hk

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. 5> ((F I5436463\$38%5;98QM;%@b9@8 \ ;BB>O5XX3RH2 3\$;#8;8#45<3\$:96
X89MB3C#3<635;98H ! %588"5B<98:3638<39:1 8=;698 7 38%5B2 3\$;#8
+3\$356<@ ! \$\$9<;5%;9843<;5B\$3\$;98A9\$%36;8#5 \ 96X4B5<3
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V< ((J A5 7 ;B>B3568;8#58C&\$>\$%3 7 ;<"8C36\$%58C;8#9:.\$<;38<3H ! 7 36;<58
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C3"%369B3568;8#tH I 5436463\$38%3C98:35%"63C4583BDV8<358CA"%"63
0@396>cW3U%\$34\$%9M56C\$Z63#96>O5%398u\$1<9B9#>9: . ;8CH ! %
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A658<;\$<9H 2 "3%9@9%3B%M96X36\$u\$%6;X3D@3 7 5'96; %>9: @3<98:3638<3
M5\$49\$%4983C9 ! %B58%5;8 2 3<3 7 S36v@9M3=36@3\$43<;5B\$3\$;98\$
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?34 ((Y QM;%@b"58;%5O69M8D 2 5=;C, \$55<\$58C \ ;%V\$638X9RH I63\$38%3C
4583BTM96X\$@94Ds 2 3\$;#858C465<;<39:0@3 \ 96BC) 5:ect ! & 7 3@9C
:96@56=3\$%;8#<9BB5S965%;=3&;889=5%;98tH ! % ! \$\$9<;5%;989:.<;38<3
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,8%3685%;985BB>PB;8X3CkI56%;<;45%96>k ! <%;98k+3\$356<@k I69#65 7 k:96k%@3k
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! %k * 8;=36\$;%>k5\$) ;% ;_38ck 18#5#;8#k * 8;=36\$;% ;3\$58Ck) 9 7 7 "8%;3\$[k
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Q 2 58;\$@k, 8\$%;% "3k:96k? " 436=;\$;98Dk I 36\$9883Bk 2 3=3B94 7 38%k, 8\$%6" <%;98k
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I65<;<3k58Ck0@;8X;8#Dk63B5%3Ck%9k0@3654>Dk? " 436=;\$;98DkV6#58;_5%;985Bk
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588" 5Bk<98:3638<3Dk ! <54" B<9Dk . 3U;<9Hk

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1%@89#654@>:96&t%@3&tOM38%>PA;6\$%&) 38%"6>c& !B%3685%;=3\$&t58C&

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. 56&JKKN&)9 7 7 "8;<5%;98&58C&\$>\$%3 7 \$&465<%;<3c& ! 8&3>3&Q96&58&356wR&%9M56C&%@3&
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+3:B3U;=;%>&5\$&?9<;5B&I69<3\$H&I5436&463\$38%3C&98&<98:3638<3&@3 7 3&
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;8&* \$3&9: &

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k

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. 5>&' (JJ& -3<% "63T \ 96X\$@94c&?>\$%3 7 \$&I65<%;<3D&1<9B9#;<5B&0@;8X;8#&58C&! <%;98&
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&
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& & &
. 56<@&' (J& QM;%@&258;3B&OB53"36R&23=3B94;8#&- 3568;8#&) 977 "8%;3\$&;8&V8B;83&
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' (J&R&
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7 33%;8#&98&?>\$%3 7 \$&465<%;<3D&5%&0@3& . 9"8%5;8&k "3\$%&,8\$%;%"3D&A69\$%D&
 \ 3\$%&/ ;6#;8;5H&
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?34%&' ((K& QM;%@&2 58;3B&OB53" 36RD&2 3=3B94;8#&- 3568;8#&) 9 7 7 "8;%;3&8&V8B;83& Q58C&065C;%;985BR&) B5\$\$699 7 \$H& \ 96X\$@94&463\$38%3C&5%* ?A&) 38%36&:96& ' J#&) 38%"6>&035<@;8#&1 U<3BB38<3H&05 7 45D&A - H&

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A3SD&' ((NH& ?>\$%3 7 \$&@;&8X;8#D&M;%@&<9 7 7 "8;%>&58C&:5 7 ;B>&\$>\$%3 7 \$H& \ 96X\$@94& 9::363C&5%&^ "6%&- 3M;8&) 38%36D&O3%@3BD& . 5;83H&

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A3SD&' ((FH& ?>\$%3 7 \$&@;&8X;8#D&\$>\$%3 7 \$&465<;<3&58C&<9 7 7 "8;%>H& \ 96X\$@94&9::363C& 5%&\$%;3&9: &W5%;985B&065;8;8#&- 5S965%96;3SD&O3%@3BD& . 5;83H&

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! 46&' ((J& s)>S3683%;<&436\$43<%;=3\$&9: &7; 7 5#3\$&9: &3<@89B9#>&8&;B 7 Ht&I63\$38%36&& 98&4583BD&s; 7 5#3\$&9: &3<@89B9#>&8&;B; 7 Ht&05 7 45&,8%3685%;985B&A;B 7 & A96" 7 &:35%"63C&4583BD&@3BC&5%& . "\$3" 7 &9: &?<;38<3&58C&,8C" "\$%6>D& 05 7 45D&A - H&

&

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. 56k ' ((Yk \ 96X\$@94D&sW3M96X;8#&A96" 7 t&QM;%@&b5>& - 544;8RHk \ 96X\$@94&569"8C&
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588"5B& 7 33%;8#&D&@3&I \$><@9%&3654>&W3%M96X36& ?> 7 49\$;" 7 ctO@3&
! C=38%"63&9:&) @58#3Hk \ 5\$@;8#%98D&2) Hk

&
A3S&' ((Yk \ 96X\$@94D&?>\$%3 7 \$&@;8X;8#&58C&\$>\$%3 7 \$&465<%;<3H&V::363C&5%&\$%;3&9:&
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&
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?<;38<3&58C&,8C"\$%6>D&05 7 45D&A - Hk, 8=9B=;8#&45638%\$&9:& >9"8#&<@;BC638&
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V\$%638X9RH&2 3456% 7 38%&9:&) 9 7 7 "8;<5%;98&) 9BB9d";" 7 &\$36;3\$D&
* 8;=36\$;%>&9:&?9"%@&AB96;C5D&05 7 45D&A - &

&
V<%&' ((' & ,8:9675%;98&58C&) 9 7 7 "8;<5%;98&03<@89B9#>&Q,) OR&58C&
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&
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05 7 45D&A - Hk

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. 56kJKKLk) 9BB5S965%; = 3k; 8d"; 6 > k; 8k5 < %; 98k63\$356 < @Hk \ 96X\$@94k#; = 38k5%k? > 8 < 6" C3Tk ^ 5 > 589k) 9BB3#3Hk A96%k . 5 < . " 665 > Dk ! BS36%5Dk) 585C5k

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&

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