

!!!!!!!!!!"#!

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K><!S433'A>

- \$! , g! L!  
 - \$! , Y+! G! I' C! : . 4&%8! \$ ; . 443!  
 - \$! Y\* 1! G! R&44W3<( ! X ; ; 7% > 6'4 (> 3! : &>' (' )! " 8(68&!!

! QMPRNJJPLEG% , NZNGPWUNLK% \*NES=!@A7;>6'4(!08%>&6C8(6=!J8H! i 4&W! Pf7>&'7C=! a '3A3'98!" 4(58&D>6'4(! \$4; ; 86<=!R&44W3<(=!J i /%

#! \*+++V\*++M!! ! ( 2\$)&-G% " " ) HI- a 4&W5 . 4%5!%&858(68A!94&!6 . 8! J 8H! i 4&W!! !  
 ! ! Pf7>&'7C!@A7;>6'4(!08%>&6C8(6=!R&44W3<(=!J i /!

! \*++\V\*++M!! 4 ' % " ) \$ - J , \$ % & \$ C % ' & \$ # - ' ) + - K \$ % & \$ C % ' & \$ # ! a 4&W5 . 4%5!%&858(68A!94&!!  
 ! ! 6 . 8! 5%8 ; ; ' > 3! 8A7 ; > 6'4 (!9> ; 736<!>6! - \$! Y\* 1! G! R&44W3<( ! X ; ; 7% > 6'4 (> 3!!  
 ! ! : &>' (' )! " 8(68&=!R&44W3<(=!J i /!

! \*+++h! ! <2"\$)&"L"2- 4 \$&3( + # ? - J ) M / " % = ? - I \$ # \$ ' % 23 ! / P ! 6H4VA ><! H4&W5 . 4%!  
 ! ! % & 858(68A!94&!9> ; 736<!>6! - \$! 1Y M = ! X D ' ( ) 64 ( ! \$ ; . 443 = ! R & 44W3 < ( = ! J i /!

! \*++ , V\*++h!! N ( % 0 " ) H - P " & 3 - < B \$ 2 " ' 0 - Q \$ \$ + # - R ( B / 0 ' & " ( ) # I - P ! 58 & ' 85 ! 49 ! H4 & W5 . 4%!  
 ! ! % & 858(68A!94&!! ( 56&7 ; 64&5! ' ( ! 6 . 8! a ' 3A3'98!" 4(58&D>6'4(! \$4; ; 86<!  
 ! ! @A7;>6'4(!08%>&6C8(6=!R&4(E=!J i /!

! \*++\!! ! 4 ' % " ) \$ - J , \$ % & \$ C % ' & \$ # - ' ) + - K \$ % & \$ C % ' & \$ # ! P ! H4 & W5 . 4% ! 94 & ! 5 % 8 ; ; ' > 3!  
 ! ! 8A7 ; > 6'4 (!9> ; 736<!>6! - \$! \* , k = ! k 788 ( 5! " . ' 3A & 8 ( ! " 8 ( 68 & = ! k 788 ( 5 = !  
 ! ! J i /!

! \*++ , !! ! 4 ' % " ) \$ - J , \$ % & \$ C % ' & \$ # - ' ) + - K \$ % & \$ C % ' & \$ # ! P ! H4 & W5 . 4% ! % & 858(68A!64!!  
 ! ! 9> ; 736<!>6! 6 . 8! d ' W8 & 5 ! 253 > ( A! " 4 & 8 ; 6'4 (> 3! U > ; ' 3' 6 < ! S ' ) . ! \$ ; . 443 = !  
 ! ! k 788 ( 5 = ! J i /!

! \*++ , !! ! 4 ' % " ) \$ - J , \$ % & \$ C % ' & \$ # - 6 ' # 3 - ' ) + - < 3 ' % 0 # S - N 3 ' 0 \$ #













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- & 4 ) & 8 5 5 ' D 8 ! 2 ( 5 7 & > ( ; 8 ! > ( A ! 6 . 8 ! G ( ' ) . 6 ! U 4 7 ( A > 6 ' 4 ( ! 9 4 & ! z 1 \* + = + + + ! \_ ( 4 6 ! 9 7 ( A 8 A ` / !

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- & ' ( ; ' % > 3 ! 2 ( D 8 5 6 ' ) > 6 4 & ! Z H ' 6 . ! ? < ( ( 8 ! - > ; . ( 4 H 5 W ' = ! U 4 & & 8 5 6 ! \$ . 8 ( ) ! R > 4 = ! \$ 8 7 ( ) A 8 4 ) ! " . 4 ' ! > ( A ! G > & 8 ( !  
- 3 > 5 6 8 & [ / \* + , ' ) 2 " ) H - W ( = # - ; - T " % 0 # - @ 0 / C # - " ) - < G V 4 - 5 W T @ a < G V 4 : - & 3 % ( / H 3 - \* L & \$ % # 2 3 ( ( 0 -  
I ( C ( & " 2 # I - J > 6 ' 4 ( > 3 ! \$ ; ' 8 ( ; 8 ! U 4 7 ( A > 6 ' 4 ( ! Z 1 h V h Q , [ = ! z ! \* = + M \ = g \ g ! \_ ( 4 6 ! 9 7 ( A 8 A ` /

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" 4 V - & ' ( ; ' % > 3 ! 2 ( D 8 5 6 ' ) > 6 4 & ! Z H ' 6 . ! - > 7 3 > ! a > 6 6 [ / ! R ( 0 = A \$ % - 6 % ( ) & " \$ % # U - 4 ' 0 " ) H - & 3 \$ - @ ( ) \$ 2 & " ( ) - L % ( A -  
I \$ # \$ ' % 2 3 - & ( - @ ' % \$ \$ % # - L ( % - < G V 4 - J ) L ( % A ' 0 - V + / 2 ' & ( % # - ' ) + - > \$ ' % ) \$ % # - 5 R 6 Y I ` @ : ! J > 6 ' 4 ( > 3 !  
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K>&<!S433'A><=- ./0/!!1\!

?8A8&C>(=!I/\$/=!^! ( PGGFSEY8% ! '&'!Z\*++g=!L>&; .[/!Q '&/%\$(L-#2"\$)2\$-' )+ -#2"\$)&"L"2-"M/'%=-"- )L(%A '0-#2"\$)2\$-#\$&&" )H#/\$855'4(!%&858(68A!>6!6.8!>( (7>3!C886' ( )!49!6.8!J>6'4(>3!\$; '8(;8! :8>; .8&5!P554; '>6'4(B!R4564(=!L P/!

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?8A8&C>(=!I/\$/=?8A8&C>(=!J/K/=!^! ( PGGFSEY8% ! '&'!Z\*++g=!L>&; .[/!G\$ '23")H-#3\$-) '&/%\$(L- #2"\$)2\$-#( -(/)H-23"0+%\$)-5@V<J:/\$855'4(!%&858(68A!>6!6.8!>( (7>3!C886' ( )!49!6.8!J>6'4(>3! \$;'8(;8! :8>; .8&5!P554; '>6'4(B!R4564(=!L P/!

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( PGGFSEY8% ! '&'! ?8A8&C>(=!J/K/=!^! ?8A8&C>(=!I/\$/!Z\*++g=!L>&; .[/!\*##\$##")H-0\$ '%)"H-#3 ' - (22/%#-' -)L(%A '0-#2"\$)2\$-#\$&&" )H#I! ->%8&!%&858(68A!>6!6.8!>( (7>3!C886' ( )!49!6.8!J>6'4(>3! \$;'8(;8! :8>; .8&5!P554; '>6'4(B!R4564(=!L P/!

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:4C%W'(5=!P/!( PGGFSEY8% ! '&'! ^! ?8A8&C>(=!I/\$/!Z\*++g=!L>&; .[/!

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K>&<!S433'A><=- ./0/!!1Y!

%&858(68A!>6!6.8!(68&( >6'4(>3!;4(98&8( ;8!49!6.8!J>6'4(>3!P554;'>6'4(!94&!d858>&;.!'(!\$;'8(;8!  
:8>;. ' (!)B! - '66507&) .!=! - P!

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( PGGFSEY8% ! '&'=! ^!L>WW'!=! J!/Z\*1+\=!I73<[!/ \ (P-k(-")2(%B(%' &\$-) ' &/%\$-(L-#2"\$)2\$-" )&(-d3\$-A"++0\$-  
' )+#\$2( )+ '%=-@0'##%( (A!/! a 4&W5.4%!%&858(68A!>6!6.8!( >6'4(>3!;4(D8(' (!)49!6.8! a 44A&4H!  
a '354(! :8>;. ' (!)U8334H5B!" .';>)4=!2?!

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( PGGFSEY8% ! '&'=?8A8&C>(=!J/K/=! ^!?8A8&C>(=!I/\$!/Z\*+1h=!I>(7>&<[!

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K>&<!S 433'A><=- ./0/!!1Q!

( PGGFSEY8% ! ' & '!^!L>)76. !R!/Z\*+1Q!X;6408&[!G\$ '23")H-3\$- \ (0(2' /#&U-G3\$-\$2( ) (A "2#-' )+ #2"\$)2\$-(L-3 '\$I- ->%8&!%&858(68A!>6!6. 8!>( (7>3! ;4(98&8( ;8!49!6. 8!X. '4!" 47( ; '3!94&16. 8! \$4; '>3!\$67A'85B!0703' (=!XS/!

d4W868(86j=!?!/! ( PGGFSEY8% ! ' & '!^!G434Aj '8e=! L!/Z\*+\*!=\$8%68C08&[! ! "#2( , \$%)H-3\$- ^ \* - 4 /#\$ /A-(L-1 ( (0(H=!/ -&858(6>6'4( !>6!6. 8!>( (7>3! ;4(98&8( ;8!49!6. 8! J 8H!@E%34&>6'4(5! '( : 8>; . '( )B!PW&4(=!XS/!

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+LZFKNS%OMNJNLKEKPLJ%  
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( PGGFSEY8% ! ' & '!Z\*++g[!/\*##\$##)H-0\$ '\$)H-3 '\$-(22/%#- ' &-")L(%A '0-#2"\$)2\$-#&&"H#! ->%8&! %&858(68A!>6!6. 8!233'(4'5!2(56'6768!49! : 8; . (434)<=! " . ' ;>)4=12?/!

( PGGFSEY8% ! ' & '!Z\*++Q[ / J)L(%A '0-<2"\$)2\$-J)#&&/&&()#-5J<J#:-3' , \$-C\$\$)-%\$2(H)"g\$+-L(%-B%( , "+)H- M/ '0" &=-B%(L\$##') '0-+ \$, \$0(BA\$)&-L(%-eYF ` -20' ##%( ( A- &\$ '23\$%#-5Q<G\* \$-F99m:l- \ ( P\$ , \$%\$-P3 ' &-"#-3\$-2 /%%\$)&-J<J-B%(L\$##') '0-+ \$, \$0(BA\$)&-A (+ \$0- ' )+-"#-3"#-A (+ \$0- ' + \$M/ ' &\$-L(%-3\$- )\$ \$+ #- (L- eYF ` -20' ##%( ( A- &\$ '23\$%#c!! ->%8&!%&858(68A!>6!6. 8!233'(4'5!2(56'6768!49! : 8; . (434)<=! " . ' ;>)4=12?/!

( PGGFSEY8% ! ' & '!Z\*++Q[! 4 /#\$ /A-\$+/2' &( %#7-, "\$P#-'C( /&-) ' &/%\$(L-#2"\$)2\$! ->%8&!%&858(68A!>6!6. 8!233'(4'5!2(56'6768!49! : 8; . (434)<=! " . ' ;>)4=12?/!

( PGGFSEY8% ! ' & '%Z\*+1+[!R%(L\$##') '0-+ \$, \$0(BA\$)

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K>&<!S433'A><=- ./0/!!\*1!

L8C08&=!: .4C>5!R8>6C>(=!0'558&6>6'4(!:'638B!J)&\$H%'&")H-H'A\$Y+\$#H)-0)(P0\$+H\$-')+-\$+/2'd"()-&3\$(%=&-(-2(AA/)2'd&\$-C"(0(H=-2( )&\$)&!ZP7)756!\*+1Q[/--

L8C08&=!\$ .>!?'!\$H')8&=!0'558&6>6'4(!:'638B!G\$23)(0(H=-^#\$\$-')+J)&\$H%'&")(-C=-<"b-<3\$0&\$\$+\$YJ)#&%/2&"()-G%'")\$+-G\$'23\$%#/!ZL><!\*+\*+[!

L8C08&=!P()83>!L!PAW'(5=!0'558&6>6'4(!:'638B!N3'd&3\$=-&'0\$-(/&-(L&3\$-20'##%((AU-K'0/\$#S-2(AB'##"())S-')+0\$##( )#-&3'd-0'#/!ZP7)756!\*+\*+[!

L8C08&!=- '<>!" .>668&e88=!0'558&6>6'4(!:'638B!V0/#", \$- ' & & & / + \$ # - ' ) + - B \$ % 2 \$ B & " ( ) # - ( L - " ) 2 0 / # " ( ) - ( L - + / ' 0 - 0 " 2 \$ ) # / % \$ - 2 ' ) + " + ' & \$ # - " ) - \$ ' % 0 = - 2 3 " 0 + 3 ( ( + - " ) 2 0 / # " , \$ - & \$ ' 2 3 \$ % - B % \$ B ' % ' & " ( ) - B % ( H % ' A ! Z P 7 ) 7 5 6 ! \* + \* + [ ! / !

L8C08&=!\$>&>.!L;2(8&(8<=!0'558&6>6'4(!:'638B!W"(A"A"2%=-)-C/#"\$##U-\*,')2")H-&3\$-) '%%'&", \$(L-2(%B(%'&\$-#/&&'"))'C"0"&=&3%( /H3-+\$#H)-')+C\$3', "(%/!Z08;8C08&!\*+\*1[!

" .>'&=!K>04&!\$C'6.=!0'558&6>6'4(!:'638B!G3\$-\$+/2'd"()-(-L&3\$-0"())U-\*M/'0"&'&",\$,-, #/'0-%\$#\$'23-\$bB0(%'&")-(L-A\$)&(#3"B-)-3"H3\$%-\$+/2'd"())I!ZI73<!\*+\*+[!

"4V".>'&=!d808;;>!@>)38VL>34(8=!0'558&6>6



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\*+\*1V%&858(6!! J)&\$%) 'd"(' '0-[(/%) '0-(L-J)L(%A '0-')+-V), ""(')A\$)&'0-V+/2'd"('

K>&<!S433'A><=- ./0/!!\* \!

-&858(68&=!K&>A7>68!\$67A8(6!U4&7C!A7&'(!6.8!\*+1Y! J P d \$ : !'(68&>6'4(>3!;4(98&8(;8!Z\$>(!  
P(64('4=: q=!P%&'3[/!

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"44&A'(>64&=!4 \$)(&%Y 4 \$)&\$\$-Q\$b/#!A7&'(!6.8!\*+1g! J P d \$ : !'(68&>6'4(>3!;4(98&8(;8!ZP63>(6>=!  
KP=!L>&;.[/!

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"44&A'(>64&=!4 \$)(&%Y 4 \$)&\$\$-Q\$b/#!A7&'(!6.8!\*+1Q! J P d \$ : !'(68&>6'4(>3!;4(98&8(;8!  
ZR>36'C4&8=!L 0=!P%&'3[/!

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U>;'3'6>64&=!K&>A7>68!\$67A8(6!U4&7C!A7&'(!6.8!\*+1Q! J P d \$ : !'(68&>6'4(>3!;4(98&8(;8!  
ZR>36'C4&8=!L 0=!P%&'3[/!

!

->(83!L 8C08&=!J>6'4(>3!\$;'8(;8!U47(A>6'4(!)&>(6!%&4%45>3!&8D'8H!94&!6.8!PAD>(';(!)2(94&C>3!  
\$: @L! ?8>&'(!)!ZP2\$? [!%&4)&>C!Z# '&67>3=!L>&;. !h! ^ !M=!\*+1Q[/!

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L 8C08&=!L 8C08&5. '%!"4CC'6688!94&!6.8!J>6'4(>3!P554;'>6'4(!94&!d858>&;. !'(!\$;'8(;8!:8>;. '(!)!  
ZJ P d \$ : [=!\*+1YV\*+\*+!/!

!

"44&A'(>64&=!4 \$)(&%Y 4 \$)&\$\$-Q\$b/#!A7&'(!6.8!\*+\*+! J P d \$ : !'(68&>6'4(>3!;4(98&8(;8!Z-4&63>(A=!  
Xd=!L>&;.[/!

!

L 8C08&=!#8&6';>3!: &>'(')!PAD'54&<!R4>&A=!J>6'4(>3!\$%838434)';>3!\$4;'86<!#8&6';>3!: &>'(')!  
"4CC'55'4(=!\*+\*+\*+!/!

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