

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

!





K><!S433'A>

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

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

!  
QMPRNJJFPLEG% , NZNGPWUNLK%\*NES= !@A7;>6'4(!08%>&6C8(6= !J 8H! i 4&W!P f7>&'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!! !  
!            !            P f7>&'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! - \$!1YM= !XD' ( )64( ! \$ ; .443= !R&44W3<(!J i /!

!  
\*++ , V\*++h!!            N (%0")H-P" &3-<B\$2" '0-Q\$S+ #-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 /!

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\*++ , !!            !            4 '%'")\$-J), %&&\$C%'&\$#S-6'#3-')+-<3 '%0#S- N3 '0\$#

!

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

203%&0''\*+ (,-\*!. /0,'0)\$01\*

!

\*++h! ! +LJKM0KPM=R&44W3<(!"4338)8=R&44W3<(!J i /%  
\$838;68A!8(D'&4(C8(6>3!;4(;8%65!'(!6.8!O'434)';>3!5;'8(;85!94&1838C  
C'AA38!5;.443!(V58&D';8!68>;.8&5/!

!

\*++\*V\*++h% +LJKM0KPM=P C8&';>(!L7587C!49!J>67&>3!S'564&<=!J 8  
! ! d85%4(5'O'3'6'85!'(;37A8A!%&4A7;'(!>(A!;4(A7;6'(!  
! ! %&4)&>C5!>6!6.8!C7587C!94&!;.'3A&8(!>(A!%>&8(65/

!

1QQ\*V\*+++! -STOEKFLP%5PLJTCKELK%RPM%KXN% / NPLEKEG%+LKN  
! ! ! a 4C8(!>(A!2(9>(65F!S45%'6>38%-&4D'A8(;8=d  
! ! ! d85%4(5'O'3'6'85!'(;37A8!&7(('')!6.8!G'A5b!C  
! ! ! H88W3<!)&47%!94&15'O3'()5=>85!;!V!1\*-=!49!  
! ! ! %3>((')!>(A!;4(A7;6'(!>%&4%&'>68!H88  
! ! ! 7(A8&56>(A'!)!49!6.8!O'0'85!>(A!6.8!.45%  
! ! ! H'6.!.45%'6>3!54;'>3!H4&W8&5=!%5<;.434)>(A!D437(688&5/!

!

1QQ\*V1QQ,! 5PTLJNGPM="4CC7('6'85!94&!-84%38=!  
! ! ! d85%4(5'O'3'6'85!'(;37A8A!57%8&D'5'()  
! ! ! 04<5!'(!>!)&47%!4C8!5866'()/!!

!

1QQ1V1QQ\*! 5PTLJNGFLV%+LKNML=R<<!4D8!L8(6  
! ! S45%'6>3!I>C>';>!-3>'(!L P=%!  
! ! ! d85%4(5'O'3'6'85!'(;37A8A!&7(('')!  
! ! ! 947&H>&A5!Z>!A><!6&8>6C8(6!;8(68&=  
! ! ! >15.4&6V68&C!H>&A[!H'6.!.>A4385;8(65  
<;.'>6&';!5866'()/!!

!

!1QQ+V1QQ1! 5PTLJNGFLV%+LKNML="466'())\$;.44  
! d85%4(5'O'3'6'85!'(;37A8A!&7(('')!  
! GV1\*!5;.443!5866'()!94&!567A8(65!H'  
A'5>0'3'6'85/!!

4()1#3

!

\*+1Q! 5TMMFOTGTU%ELS%'JJNJJUNLK%,NZN  
2(A756&'85=!i>(07=!\$>7A!P&>O'>/

!







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

( PGGESEY8% ! ' & '= ! ? 8A8&C>

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

\*L%"2')- \*##(2" '&"( )-L(%-I\$#\$ '%23-" )-4 ' &3\$A ' &"2#s-<2"\$)2\$-' )+ -G\$23 ) (0(H=-V+/2 ' &"( )-Z%%%/!  
 \ , V\ Q[!/J 8354(!L >(A83>! L 86&4%43'6>(!N('D8&5'6<B! - 4&6!@3' j>086./!!

!

( PGGFSEY8% ! '&'=! ?8A8&C>(=!I/\$/=!^! ?8A8&C>(=!J/K/%Z\*+1h[!/PAA&855' ( )! '(f7'&<!A7&' ( )!  
 %&49855'4 (>3!A8D834% C8(6!>6!>(!' (94&C>3!5; '8( ; 8!' (56'676'4(I-R%(2\$\$+" )H#-(L-&3\$-V/%(B\$ ' )-  
 <2"\$)2\$-V+/2 ' &"( )-I\$#\$ '%23- \*##(2" '&"( )U- \ \$0#" )O"S-6" )0 ' )+I-

-

( PGGFSEY8% ! '&'=! ^! d4W868( 86j=! ?/!Z\*+\*\*[!/N( ; 4D8&' ( )! >!( >67&>3! . '564&<C<568&<!>6!6 . 8!  
 N( 'D8&5'6<49!PW&4 (/R%(2\$\$+" )H#-L%(A-&3\$- ! (2/A\$ )&- \*2 '\$ + \$A = \$-9!Z\* [ = !P&6'; 38! , /!!  
 OX2B! . 66%5B] [A4'/4&)] 1+/, h \ Q\*]A4 ; >C]Q]\* , !-

%

**! MELKJ!**

!

-&' ( ; '%>3!2(D856' )>64&!ZH'6 . ! ? < ( ( 8! -> ; . (4H5W' !>(A!G>&8 (!-3>568&[!

!

K>&<!S433'A><=- ./0/!!11!

! \$ : @ P L 8 A ! N % ! P O 4 7 6 ! P & 6 ! P - - ! Z H ' 6 . ! @ 3 3 8 ( ! - 8 & A 7 < ( = ! a ' 3 3 ' > C ! " 4 3 8 = ! > ( A ! - . ' 3 ! S 4 9 9 C > ( [ / !  
- & 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 ` ! /

! - & ' ( ; '% > 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 ` /

! " 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 !  
\$ ; ' 8 ( ; 8 ! U 4 7 ( A > 6 ' 4 ( ! Z 1 h

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

(PGGESEY% ! '&'=?8A8&C>(=!I/\$=!^!?8

!

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/!

!

?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/!

%

( PGGFSEY8% ! '&'! ?8A8&C>(=!J/K/=!^! ?8A8&C>(=!I/\$/!Z\*++g=!L>&; .[/!\*##\$##")H-0\$ '%)"H-#3 'k- (22/%#-'k-")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/!

!

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

!















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-")20/#"()-L-+/'0-0"2\$)#/%\$-2' )+""+'&\$#-")-\$'%0=-23"0+3( (+-" )20/#", \$-&\$'23\$%-B%\$B'%'&"()-B%(H%'AI!ZP7)756!\*+\*[!]

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













K>&<!S 433'A><=- ./0/!!\*Y!

\*+\*1!# '&67>3!2(68&<>'4(>3! " 4(98&8(;8!94&!6.8!G4&8>(!P554;'>'4(!94&!\$;'8(;8!@A7;>'4(!

!