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" ##\$%&!6()!. , 3, 6), 5)5!\*+, %) - . ), \*)%!/ +0!1)20, 3, 4!2, 5!6)2\*(3, 4!

-. (/0' 123!4' .506' 1' 7238!' 19!: /' 1!; ' 0.88!

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#!

'L%233!0.3!QGGB!62%.>2/020!; F03!01L/&9#3!#1%2/H#1.3!' L%233!' //!3#330213!6%02%!.2!.F#!H2=#!.2!  
.F#!L&%%#1.!RG1!C#H' 19S!>2%H' .0!

. / / ! &'0#\*', )-\$, 07' \*%80\$%&'

!

G1!' !7/2\$' !/\$' 303!\$(!.F#!#19!2>!) \*+KA!QGGB3!F' 9!%#703.##9!32H#!+\*+!H0/021!/#! %1#%3!21!

++X\*\*!L2&%3#3A! 6%29&L#9! \$(! H2%#! .F' 1! , \*\*! &10=#%30.0#3! M-F' FA0.4 (%)0.4 (3/(( )0.2(\*)0.2(+ )0.2(K)0.2N(')

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] & # 3 . 0 2 1 ' \$ / # ! L 2 & % 3 # ! ] & ' / 0 . ( ^ ! F 0 7 F ! 9 % 2 6 2 & . ! % ' . # 3 ^ ! & 1 ' = ' 0 ' \$ / # ! L 2 & % 3 # ! L % # 9 0 . 3 ! ' 1 9 ! ' L L % # 9 0 . ' . 0 2 1 ! 2 > ! 6 % 0 2 % ! # P 6 # % 0 # 1 . 0 ' / ! / # ' % 1 0 1 7 ^ ! 0 1 # >> # L . 0 = # ! ' 3 3 # 3 3 H # 1 . 3 ^ ! L 2 H 6 / # P ! L 2 6 ( % 0 7 F . ! 0 3 3 & # 3 ^ ! 9 0 >> 0 L & / . ( ! 0 1 ! # = ' / & ' . 0 1 7 ! 3 . & 9 # 1 . 3 S ! E 2 % ! ^ ! ' ! 3 # 1 3 # ! 2 > ! 3 6 # ' I 0 1 7 ! 0 1 . 2 ! ' ! = ' L & & H ! 9 & # ! . 2 ! ' \$ 3 # 1 L # ! 2 > ! 0 H H # 9 0 ' . # ! > # # 9 \$ ' L I ! > % 2 H ! 3 . & 9 # 1 . 3 ^ ! F # ' = ( ! 9 # H ' 1 9 3 ! 2 > ! . 0 H # ! ' 1 9 ! H 2 1 # ( ! ' 1 9 ! ' ! / ' L I ! 2 > ! 3 . & 9 # 1 . ! 6 ' % . 0 L 0 6 ' . 0 2 1 ! 0 1 ! 0 1 . # % ' L . 0 = # ! > & 1 L . 0 2 1 3 0 ! !

? F' . !

42E#=#%A!.F03!.0H#A!01!2&%!%#3#%'%LF!E#!6%2623#9!.2!#P6/2%#!'!.F#H#!EF0LF!03!'3!(#.A!'3!>'%!  
'3!E#!I12EA!&1#P' H01#9A!1' H#/(!.F#!&101.#19#9!0H6' L.!21!L' H6&3!\$'3#9!.#' LF017!>2%!  
.F23#!EF2!F'9!\$##1!01=2/=#9!01!QGGB!6%29&L.021!'19!6%#3#1.' .0210!G&%!F(62.F#303!E'3!  
.F' .!01=2/=#H#1.!01!21/01#!.#' LF017!.F%2&7F!QGGB3!E2&/9A!>2%!H'1(!'L'9#H0L3A!6%2=09#!  
.F#!>0%3!.!2662%.&10.(!>2%!21/01#!.#' LF017A!'19!.F' .!.F#!H29' /0.0#3!2>!H&/.0H#90!'!19!2.F#%!  
QGGB! /#'%1017!9#3071!>#'.&%#3!H07F.!%#3&/.!01!LF'17#3!01!'..0.&9#!.2E'%93!21/01#!  
6#9'7270#3!'19!/#'%1#%!3&662%.0!

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.\$1''\*''7':4'

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;2!.F03!#19!E0.F!.F#!3&662%.!2>!.F#!B#1.%#!>2%!C03.'1L#!D9&L'.021!E#!01.#%=0#E#9!101#!  
'L'9#H0L3!>%2H!30P!&10=#%30.0#3!'19!2%7'103'.0213!EF2!E###!01=2/=#9!#0.F##!01!.F#!  
6%29&L.021!2%!9#/0=#%(!2>!QGGB3!M'3!QGGB!90%#L.2%3

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(#&\$-\$+\$-'#07'0\$\$-\$+\*%&'\$''' . / / ! <'

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;F#!6'%.0L06'1.3!2>!.F03!3.&9(!%#>#%#%9!.2!.F#!01.#//#L.&'!LF'//#17#12>I>019017!32/&.0213!EF#1!  
#1F'1L017!/#'%1017!'19!.#'LF017!01!26#1!'19!903.'1L#!/#'%1017!#1=0%21H#1.30!;F#%#!'E'3!'1!  
2=#%#'/!>#%/017!.F'.!9#360.#!.F#!>'L!.!F'.!013.0.&.0213!E#%#!E0/017!.2!#17'7#!E0.F!0112='.021!  
01!26#1!/#'%1017A!.F#(!E#%#!&16%#6'%#9!'\$2&!.!F#!903%&6.021!.F'.!QGGB3!E#%#!0H6230170!  
c'%.0L06'1.3!.F2&7F!.!F#%#!'E'3!'!7#27%'6F0L'!LF'//#17#\!L2//#'7&#3!R2=#%&F#%#S!E#%#!/#33!  
I##1A!EF#%#3!.'%7#.'!&90#1L#3!2=#%3#3!'66%#L0'.#9!EF'.!QGGB3!F'9!.2!2>>#%0![1!'990.021A!  
&10=#%30.(!3.'>!.F'.!F'9!90%#L.!01=2/=#H#1.!E0.F!QGGB3!E#%#!=#%(!6230.0=#A!EF#%#3!.F#!  
\$%2'9#%&10=#%30.(!'66#'%#9!.2!\$#!H2%#13L#6.0L'/'!.F2&7F!0.!E'3!>#/'!.F'.!R'..0.&9#3!E2&/9!  
LF'17#!7%'9&'//(\$0!

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[1!L#%.'01!903L06/01#3A!.F#!1##9!>2%#17'7017!/#'%1#%3!E'3!'!#(!9%0=#%>2%&.F#0%#9#=#/26H#1.A!  
#070!.E2!6'%.0L06'1.3!.F2&7F!.!F'.!QGGB3!L2&/9'%#9%#33!.F#!0H\$'/1L#!01!H#90L'!  
#9&L'.0210!Q#90L'!/#9&L'.021!01#]&0.(!H#1!.!F'.!H#90L'!/#9&L'.021!E'3!R2&.!2>!%#LFS!>2%  
H'1(!2>!.F#!/#'%1#%3!01!.F#!.'%7#.'!&90#1L#0!

(=>0,\$''#='0-#&\$)%0='\$0,1-#:'

;F#!0H6'L.!2>!QGGB3!L'1!\$#!90%#L.!EF#1!QGGB3!'%#!#H\$#99#9!01!.F#!L&%0L&/&HA!#0.F#%#3!  
>2&19'.021!L2&%3#3!2%#3!/#'%1017!H'.#%0'/3!.F'.!#17'7#!/#'%1#%3!01!>2%H'!/#3.&9(0!42E#=#%A!  
.F03!0H6'L!L'1!\$#!0190%#L.!19!&101.#19#9A!#070!EF#1!/#'%1017!9#3071!>#'.&#%#3!2>!QGGB3!  
LF'//#17#!'19!#1%0LF!R.%'90.021'!S!'19!H2%#1#3.'\$03F#9!.#'LF017!6%L.0L#30![1!\$/#19#9!  
/#'%1017A!.F#!01>/&#1L#!03!21!L'H6&3!6%L.0L#3A!#070!01.%29&L017!QGGB!'..%0\$&.#3!01.2!  
L'H6&3!L'33#3!'19!'332L0'.#9!21/01#!'L.0=0.0#30!

QGGB3!3##H#9!.2!01>/&#1L#!'..0.&9#3!2>!.F#!6'%.0L06'1.3!2>!.F03!3.&9(!.2E'%93!R21!L'H6&3S!  
.#'LF017!'19!.F#0%#66%2'LF#3!.2!\$/#19#9!'19!21/01#!.#'LF017A!#0.F#%#01!623.7%'9&'.#!2%  
&19#%7%'9&'.#'.#LF017A!.F2&7F!QGGB3!3##H#9!.2!\$#!H23.!01>/&#1.0'!01!623.7%'9&'.#!  
#9&L'.0210!://!.F#!6'%.0L06'1.3!2>!.F03!3.&9(!\$#/0#=#9!.F'.!F#0%#17'7#H#1.!E0.F!QGGB3!

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F' 9!' 1!0H6' L.!21!.F#0%6' L.0L#0!: !92H01' 1.! ' ..0.&9#!E' 3!.F' .!01=2/=#H#1.!01!6' %!.LF' 17#9!  
L!' 33%22H!.# ' LF017M!' 19!F#/6#9!.F#H!.2!#H\$%' L#!1#E!9#=#/26H#1.3!01!>' L&/. (0!d#36213#3!  
%#>#%#9! .2! ' L]&030.021!2>! 9070.' /! 3!0/3^! #H\$%' L017!0112=' .0213^!%#=#E017! |#(!6#9' 7270L' /!  
6%' L.0L#3! 01! /# ' %1017! 9#3071! 21! L' H6&3! M01L/&9017! .F#! &3#! 2>! H&/.0H#90' N!' ' 926.017!  
' &.2H' .#9! ' 33#33H#1.! ' 19! ' 33#33H#1.! \$(!6##%30! "0=#! 6' %.0L06' 1.3! %#>#%#9! 90%#L./(!.2!  
#H\$#99017! QGGB3! 01.2! H2%#! R.%' 90.021' /S! 21/01#! /# ' %1017! ' 66%2' LF#3^! /# ' 9017! .2! ' !  
.%' 13>2%H' .021!2>!.F#!L&%0L&/&H!#070!#1L2&% 7017!/# ' %1#%3!.2!#17' 7#!E0.F!>/066#9!L/' 33%22H!  
' L.0=0.0#30!; F#!>2//2E017!3.' .#H#1.3!>2H!6' %.0L06' 1.3!0/!&3.' .#!.F#3#!' ..0.&9#3!

ROGGB3!H' 9#!H#!%#>/#L.!21!%2/#!2>!.# ' LF##e!H' 9#!H#!.F011!' \$2&.!\$#017!6##%321' //(!.F#!  
L219&0.!2>!01>2%H' .021S!

!ROGGB!E2%! !%#01>2%L#9!01.#%#3.3!01!/# ' %1017!' 19!.# ' LF017S0!

SMQGB3N!F' =#!01L%# 3#9!MH(N!L2HH0.H#1.!2!6#9' 727(!' 19!M.F#(!' %N!2>!= ' /&#!.2!; # ' LF017!





RM[N! #P6#%0H#1.#9! E0.F! 6##%&! >##9\$' LI! 21! L' H6&3e12.! ' ! =#%(! \$07! 3&LL#330! G1! L' H6&3!  
 3.&9#1.3!' %#! ' ! \$0.!RT&H6(\$!F' =017!6##%3! 70=017!7%' 9#e7229!>2%! E2%! !01!6%27%#33!>##9\$' LI!  
 ' 19!>2%H' .0=#! 33#33H#1.e\$&.!>01' /!H' %! !03!70=#1!\$(!H#112.! ' !6##%0S!

(=>0,\$''#>)'5%&&-'#07!>-'')-\$-%&'-\$%0,1-#: '0#\*')%&%0),1'

[! .F03! 6' %! !2>! 2&%! %3#%' %LF! E#! /22! #9!>2%! #=09#1L#! .F' .! QGGB3! 2=#% /! 6/ ( #9! ' ! %2/#! 01!  
 01>/&#1L017!6%2>#33021' /!6%02%0.0#3!>2%! .F#!6' % .0L06' 1.3!2>!.F03!3.&9(0! [! .F03!%#36#L.!0.!3##H3!  
 .F' .! !30710>0L' 1.!%#/' .#9!>' L.2% E' 3!#H\$%' L017!LF' 17#!' 3!L' %##%6%27%#33021A! ' 19!F2E! .F03!  
 L2&/9! 0H6' L.! 21! 903.' 1L#! /# ' %1017! 6%2>#33021' /3S! L' %##% ' 9=' 1L#H#1.0! "2&% 6' % .0L06' 1.3!  
 %>#%#9! .2!90%#L.!6%2>#33021' /!7' 01!>%2H!.F#0%01=2/=#H#1.!E0.F!QGGB30!!

G.F#%L2HH#1.3!21!6%2>#33021' /!6%02%0.0#3!%#>#%#9! .2! .F#! ' 926.021!2>.' #' LF017!%#32&%L#3!  
 ' 19!#17' 7017!E0.F! ! \$%2' 9#%.' %7#.!626&/'.021!2>/# ' %1#%3\!

!RQ' 9#!H#!' E' %#!2>! !E09#%! 17#!2>!%#32&%L#3!>2%3.&9#1.3S!

R!F' =#!9#=#/26#9!L' 6' L0. (!.2!#17' 7#!E0.F!E09#%!' 17#!2>!3.&9#1.3A!#070!%#>&7##3S!

[! .E2!L' 3#3!0.!E' 3! =2/&1.##%#9!.F' .! .F#!>2L&3!21!6#9' 727(!01!QGGB!9#=#/26H#1.!F' 9!/9!  
 .2!6&\$0L' .0213A! ' 19!.2!#P6/2%017!' !1#E!%#3#%' %LF! ' %#! !01!' 990.021! .2! .F#!L2%#!3&\$T#L.!\$' 3#9!  
 >2L&3!

R4' =#16&\$/03F#9!>2%>0%3.!0H#!21!/#' %1017!' 19!.#' LF017S0!

c' % .0L06' 1.3! ' /32!%#>#%#9! .2! .F#! 0H6' L.! .F' .! .F#0% 01=2/=#H#1.!F' 9! 21! .F#0% L2!/#' 7&#3S!  
 ' .0.&9#3!.2E' %93!QGGB3!' 19!.F#0% .0.&9#3!.2!#=' /&' .021A!01L/&9017!.F#!#=' /&' .021!2>!.F#0%  
 2E1!6%' L.0L#0! [.!3##H3!.F' .!01=2/=#H#1.!E0.F!QGGB3!E' 3!' !L' . / (.0L!>' L.2% .F#%#0! ; F#!21#3!  
 EF2!E#%#01=2/=#9!E#%#F' 66(!.2!.' % 13>#%32H#!2>!.F#!3&LL#33>&/!#17' 7#H#1.!E0.F!QGGB3!  
 .2!H' 013.%# H!L' H6&3U\$' 3#9!' 19!\$/#19#9!/#' %1017!6%' L.0L#30! [.!H&3.!\$#13' 09!.F' .! LL2%9017!  
 .2!2&%9' . A! .F03!E' 3!12.! /E' (3!921#!3&LL#33>&/(! ' 19!.F#%#!E#%#L' 3#3!EF#%#!.F#(1909!12.!  
 ' LF0#=#!EF' .! .F#(#!P6#L.#90! : 1!#P' H6!#!2>! /!0H0.017!>' L.2% E' 3!70=#1!' 3!.F#!' LI!2>!9070.' /!  
 3!0/3!' 19!01.#7%' .017!QGGB!L21.#1.!E0.F2&.!3&>>0L0#1.!112E/#97#!2>!F2E!7229!6%' L.0L#01!





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!
9%5%)%#,%&'

!
DP.#13021D1701#!M1090N!PQGGB!=3!LQGGB`!C#>01017!L2HH21!QGGB!.#%H30!G1/01#\!
F..6\ff\$/270#P.#13021#1701#0L2HfPH22LU=3ULH22L!g' LL#33#9!'#\$%&'%(!) \*+, h!

4' .506' 1' 723A!-0!M) \*+WN! ? F' .!92!QGGB3!L21.%0\$&.#!.2!.F#!9#\$' .#!21!/#' %1017!9#3071!2>
21/01#!L2&%3#3`!! "!"#\$%&'()#\*!\$+A!120!X)A!Z&1#!) \*+WA![- -i \!+KKJU+WX)0!G1/01#\!
EEE026#1#9&L' .021#&%26' 0#&f#1f#/#' %1017j 6' 6#%3!g' LL#33#9!'#\$%&'%(!) \*+, h!

4' .506' 1' 723A!-0!a!; ' 0.A!; 0!M) \*+XN!C#3071017!>2%!QGGB3\!@# ' %1017!9#3071! 19!.F#!3#!>J
%#7&/' .#9!/#' %1#%0!c' 6#%6%#3#1.#9!' .!G1/01#!D9&L' A!V%9!U!W.F!C#L#H\$#%#) \*+XA!k#%/01A!
I #%#H' 1(!

mF#A!''040A!BF#1A!n0A!b&H#17A!-0A!a!b017A!; 0!M) \*+KN!-#1.0H#1.! ' 1' / (303!2>!3.&9#1.!26010213!01!
/' %7#!3L' /#!26#1!21/01#!L2&%3#3!&3071!' &.2H' .0L!H' LF01#!/#' %1017!.#LF10]&#3\! ? F' .!92#3!0.!
.#!/&3`!c' 6#%6%#3#1.#9!' .!F#![1.#%1' .021' /!B21>#%#1L#!21!G6#1![112=' .0=#!D9&L' .021A!
4217!m2170!G1/01#\!F..6\ff0L20#) \*+K02&F10#9&0F1f!g' LL#33#9!'#\$%&'%(!) \*+, h!

-F' FA!C0!M) \*+KN!k(!.F#!1&H\$#%3\!QGGB3!01!) \*+KA!B/' 33!B#1.% /0!G1/01#\!F..63\ffEE0L/' 33U
L#1.% /0L2HF#%62%.fH22LU3.' .3U) \*+Kf!g' LL#33#9!'#\$%&'%(!) \*+, h!

\_ ' E' LI0Ud0LF.#%A!G0A!k25I&%A!; 0A!; /.&%I 0A!<0!a!; /9%' 0E##3FA!; 0!M) \*+KN! ? F' .!#3#' %LF!3' (3!
'\$2&.!QGGB3\!; 1!#P6/2%' .0=#!L21.#1.! ' 1' / (3030! [1.#%1' .021' /!d#=0#E!2>!d#3#' %LF!01!G6#1!
' 19!C03.%0\$&.#9!@# ' %1017A!+, !M+N!)X)U)W, !

! !

?>>%#\*-@'AB'C+%&\$-'##0-)%'

!

+0 ? F' .!F' 3!\$##1!(2&%01=2/=#H#1.!E0.F!QGGB3`!D070!

'0 QGGB!90%#L.2%2>16%29&L.021!!

\$0 @#' %1#%3&662%.!!

L0 : 12.F#%2/#!

!

)0 42E!H' 1(!QGGB3!F' =#!(2&\$##1!01=2/=#9!E0.F`!

!

V0 ? F' .!E###!(2&%! 0H3!01!7#..017!01=2/=#9!E0.F!QGGB3`!

!

X0 4' =#!(2&!>2//2E#9! 1(!QGGB3! 3! !/#' %1##`!!42E!H' 1(`!42E!H' 1(!909!(2&!

L2H6/#.#`!

!

W0 4' 3!(2&%01=2/=#H#1.!E0.F!QGGB3!F' 9! 1(!0H6' L.!21!(2&%H' 013.%# ' H!.#' LF017`![>!

32A!0>!EF' .!E' (3`!

<3#!2>!H&/.0!H#90'!

"/066#9!L/' 33%22H!

QGGB!01!L' H6&3!\$' 3#9!2%#@#' %1017!L2&%3#!!

@#' %1#%3&662%.!!

: 33#33H#1.!!

!

Y0 4' 3!(2&%01=2/=#H#1.!E0.F!QGGB3!F' 9! 1(!2.F#%0H6' L.!21!(2&%6%2>#33021' /!

6%02%0.0#3!01!.#' LF017!2%#%3#' %LF`!

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\*"!



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J0 4' 3!(2&%013.0.&.021!2%!(2&%L2//#' 7&#3!\$##1!' E' %#!2>!' 1(!0H6' L.!2>!01=2/=#H#1.!!  
E0.F!QGGB3!21!(2&%!.#' LF017`

!

\*#!

?>>%#\*-@'DB'(#\$%)3-%E%%&'

!

?, 6)0A3)B))! C. 97)0!	D+1)!	>//313263+, !
+! !	-#102%#@#L.&%#%! !	2/93H0.F3!
)! !	@#L.&%#%!	2/93H0.F3!
V! !	-#102%#@#L.&%#%! !	-G: -!
X! !	@#L.&%#%!	mB@!
W! !	4#' 9!2>C#6' %.H#1.!	<B@!
Y! !	-#102%#d#3#' %LF!: 332L0' .#!! !	<B@!
J! !	: 332L0' .#C# 1! !	@21921!k&301#33!-LF22/!
K! !	@#L.&%#%! !	-G: -!
,! !	DU/#' %1017!C0%#L.2%! !	@-4; Q!

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\*\$!