

!

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

!

" # \$ % & ' (!) ' & * ' + !

, - ! , ! " # \$ % & ' " (\$! !

, . & * # / ' ! 0 % & 0 ! 1 2 (# \$ ' ! & + + # 3 ' ! & 0 ! 4 2 5 + ! 6 2 2 + ! & / 6 ! % & / 6 ! 4 2 5 ! & ! 3 & (# 6 ! 7 ' & + \$ % !
8 & + + & / 0 - ! 9 : : # \$ ' + 7 ! ' / 0 ' + ! 4 2 5 + ! % 2 . ' ! & / 6 ! 7 0 & + 0 ! * + & ; ; # / * ! 6 2 \$ 5 . ' / 0 7 < ! % & + 6 ! 6 + # 3 ' 7 < !
\$ 2 . 1 5 0 ' + 7 < ! & / 6 ! 4 2 5 + ! ; ' (2 3 ' 6 ! 7 . & + 0 ! 1 % 2 / ' - ! ! 9 : : # \$ ' + 7 ! + ' = 5 ' 7 0 ! 4 2 5 + ! \$ ' ((! 1 % 2 / ' !
1 & 7 7 \$ 2 6 ' < ! & / 6 ! 4 2 5 + ! ; 5 7 ' ! 0 2 ! * # 3 ' ! # 0 - ! ! > ' 1 ' / 6 # / * ! 2 / ! 0 % ' ! 7 0 & 0 ' ! 2 + ! ? 5 + # 7 6 # \$ 0 # 2 / !
4 2 5 ! (# 3 ' ! # / < ! / 2 0 ! 2 / (4 ! 8 2 5 (6 ! 4 2 5 ! % & 3 ' ! 0 2 ! % & / 6 ! 2 3 ' + ! 4 2 5 + ! 1 % 2 / ' < ! ; 5 0 ! 4 2 5 ! \$ 2 5 (6 !
& (7 2 ! ; ' ! 2 + 6 ' + ' 6 ! ; 4 ! & ! ? 5 6 * ' ! 0 2 ! 1 + 2 3 # 6 ' ! 4 2 5 + ! 1 % 2 / ' ! 1 & 7 7 \$ 2 6 ' < ! ' 7 7 ' / 0 # & ((4 !
& 7 7 # 7 0 # / * ! 0 % ' ! * 2 3 ' + / . ' / 0 ! # / ! 4 2 5 + ! 2 8 / ! 1 + 2 7 ' \$ 5 0 # 2 / - !

@ % ' ! \$ 2 . 1 ' ((' 6 ! 6 # 7 \$ (2 7 5 + ' ! 2 : ! & ! \$ ' ((! 1 % 2 / ' ! 1 & 7 7 \$ 2 6 ' ! 3 # 2 (& 0 ' 7 ! & / !
/ 6 # 3 # 6 5 & (A 7 ! B # : 0 % ! C . ' / 6 0 1 4 6 1 1 7 # * 2 & 0 1 4 6 1 1 (# 6) 1 0 % # 6 0 1 4 6 1 1 ! 1 (1 ([(# /) 1 (*)] T J E T Q q . 2 4 0 0 . 2 4 1 1 . 9 9 0 6 5

! " ! #

!"\$#

#

%&'()*#\$%

,/!"#\$%&'()*+,\$-!0%'!J'8!K'+7'4!)51+'.'!H25+0!%(6!0%&0!L/'#0%'!+

\$+\$,-#

#

!",#

:2+!(& 8! ' /:2+\$' . ' /0!&/6! 1+27' \$502+7!02! 2;0&# /!0% ' !#/\$+# . #/&0#/*! ' 3#6' /\$'!

!" .# # %&'()*#*\$

1&77\$26'-! ! @%#7! +'7! \$+#0\$&(! #775'7! 5/6'+! 0% '! B#:0%! C . '/6 . '/0A7!
\$2/70#050#2/&(1+20' \$0#2/!2: !&/!# /6#3#65&(A7!+#*%0!&*#&/70!7'(:D#/\$+# . #/&0#2/-!

8% 9/\$% :6;"/% (<\$) *<\$) "%! \$2;=>)7+6<6)#"64)%12#?-\$%%

,/! &\$2+6&/ \$'! 8#0%! 0% '! B#:0%! C . '/6 . '/0! 7'(:D#/\$+# . #/&0#2/! \$(&57'<!
LV/W2! 1'+72/!-!-!7%&(! ; '\$2 . 1'(('6!# /!&/4! \$+# . #/&(! \$&7'!02! ; '!'&! 8#0/ '77!
&*#&/70!%# . 7'(-:M'-!!@% ' !1+#3#(' * '\$&/! ; '!'&77'+0'6!# /!&/4! \$#3#(!2+! \$+# . #/&(!
1+2\$ ' '6# / *!2+!# /3'70#*#&0#2/!02!1+20' \$0!# / :2+ . &0#2/!0%&0!&!1'+72/!L+ ' &72/ & ; (4!
; '(# '3'7! \$25(6! ; '!'57'6!# /!&! \$+# . #/&(! 1+27' \$50#2/! 2+! \$25(6! ('&6!02! 20% '+!
'3#6' / \$' !0%&0! . #*%0! ; '!'72!57'6-M' ! ! , . 12+0&/0(4<10% '!G-) -!)51+' . '!'H25+0!%&7!
% '(6!0%&0!0% '!B#:0%!C . '/6 . '/0!1+#3#(' * 'L1+20' \$07!0% ' !# /2\$' /0!&7!8' ((!&7!0% '!
*5#(04-M' / ! ! , /!20% '+! 82+67<10% '+ '#7! /2!+ '=5#+ . ' /0!0%&0!0% '!'6' : ' /6&/0! . 570! ; '!
*5#(04!2+!%&3' !72 . '0%# / *!02!%6' <102!&77' +0!0% '#+!B#:0%!C . '/6 . '/0!1+#3#(' * -! !
, /70' &6<10% '!'&\$57'6! . &4!&77'+0!0% '!'1+#3#(' * '! :2+!&/4!# / :2+ . &0#2/!% '!' ; '(# '3'7!
\$25(6! ; '!'57'6!&*#&/70!%# . !2+!(' &6!02! '3#6' / \$' !0%&0! . #*%0! ; '!'57'6!&*#&/70!%# . !
/!&! \$+# . #/&(!1+2\$ ' '6# / * -!0!

@% ' ! *23' + / . ' /0! ; '&+7! 0% ' ! ; 5+6' /! 02! 1+265\$ ' ! '3#6' / \$' ! &*#&/70! & /!
&\$57'6! +&0% '+! 0%&/! \$2 . 1'((# / *! 0% ' ! #/6#3#65&(! 02! 1+23#6' ! #0-!4! ! @% ' !
\$2/7' =5' / \$' !2: !0% ' !B#:0%!C . '/6 . ' /0!&\$2+6# / *!02!0% ' !)51+' . '!'H25+0!#7!
0%&0! # :! 0% ' ! 70&0' ! L1+2127'7! 02! \$2/3# \$0! &/6! 15/7% ! &/! #/6#3#65&(! V#0! . 570W!
1+265\$ ' !0% ' ! '3#6' / \$' !&*#&/70!%# . ! ; 4!0% ' !# /6' 1' /6' /0!(& ; 2+!2: !#07!2: :# \$' +7< /20!
; 4!0% ' !7# . 1(' < \$+5' ('!E1'6# /0!2: :!2+ \$# / *!#0! : +2 . !%#7!28 / (#17-M'!5!

@% ' !7571' \$0A7!& ; #(#04!02!# /32I' !0% ' !1+#3#(' * ' !6' 1' /67!2/!0% ' ! /&05+' !2: !0% ' !
70&0' . ' /0!&/6!0% ' ! (#I' (##226!2: !0% ' !70&0' . ' /0!02! 'E127' !0% ' !7571' \$0-!6! ! , /!
!7/ < \$+@ \$+%& % I #26; 4+)6#<10% ' !)51+' . '!'H25+0!% '(6!0%&0!0% ' !B#:0%!C . '/6 . ' /0!
2/ (4!1+20' \$07!&/!&\$57'6!&*#&/70!0'70# . 2/#&(12+!\$2 . . 5/#\$&0#3' !\$2 . 15(7#2/-!7!!
@2! &77'+0! B#:0%! C . '/6 . ' /0! 1+#3#(' * <! 0% ' ! \$2 . . 5/#\$&0#2/! . 570! ; '!
0'70# . 2/#&(< !# / \$+# . # / &0# / * < !&/6!\$2 . 1'(('6-8!

F% ' /!&!7571' \$0!#7!75 ; 12' / &'6<12+!0% ' ! \$25+0! *+&/07!&! . 20#2/!02!\$2 . 1'(<!
0% ' ! 7571' \$0A7! 75 ; 7' =5' /0! 0'70# . 2/4! #7! \$(' &+(4! \$2 . 1'(('6-! ! @% ' + ' :2+ <!
L\$2 . 1'(('6M!0'70# . 2/4!#7! * ' / '+&((4! /20!&/!#775' !# /!B#:0%!C . '/6 . ' /0!\$&7'7-!
X' * &+6# / *! 0% ' ! L# / \$+# . # / &0# / *M! 1+2/ * < ! 0% ' ! H25+0! %&7! 70&0'6! 0%&0! 0% ' ! B#:0%!

#

! 0, #! \#9#% ' , 23#!&D+ ' (#! 1#!
! 0. #! d &<*)F&2!>#! \ ')*(!19%&*+<?!X-T! \ #9#!XXO?!XXX@XY!ROSZ, U#!
! OX#! G8)6!>#!+=) ' +2?!Y . , ! \#9#!OZ?!OW!R, --OU#!
! OY#! 6 (70.% (?!X-T! \#9#!&!XXX#!
! OT#! V)2&' (&!>#! 12)m6' &?! . WX! \#9#!X. T?!XT-!ROSTTU#!
! OZ#! 5<+44+!>#9D)*8?!XYO! \#9#!XYX?!XT, !ROSOU#!
! OW?! ,2"!
! OS#! .WX! \#9#!ZYZ?!ZTO!ROSTTU#!
! , -#! n))I+4!>#9)M*8!" : (#! \$) < *!% *!67!E+>#?! n : DI64(*!% ' *C?!YX, ! \#9#!OZZ?!OWS!R, --XU#!

\$+\$,-#

#

!"*#

C . '/6 . '/0!1+20'\$07!0'70# . 2/4!0%&0!L825(6!:5+/#7%!(#/#I!#/'!0%!'!\$%&#/'!2:!
 '3#6'/'\$!'/'!6'6!02!1+27'\$50'-M⁻¹!@%'+'':2+'<!0%!'1+#3#('*'!1+20'\$07!&/'4!
 \$2 . 1'((!6!0'70# . 2/4<'3'/'!#:/20!#/%'+'/0(4!#/'\$+# . #/&0#/'*!#07'(<:;!;50!\$25(6!
 ('&6!02!#/'\$+# . #/&0#/'*!3#6'/'\$!'&*&#/'70!&/'!#/'6#3#65&(-⁻¹!
 ,/!' . &/'4!B#:0%!C . '/6 . '/0!&\$7'7<!0%!'!#775'!#7!8%'0%'!+!0%'!6':/'6&/0A7!
 \$2 . . 5/#\$&0#2/'!2+!&\$0!#7!&!L0'70# . 2/#&(!\$2 . . 5/#\$&0#2/'<M!&/'6!0%57!=5&(#:#'7!
 :2+!1+20'\$0#2/-!!H&7'7!#/'32(3#/'*!0%'!7511(4#/'*!2:!!&!'\$'((!1%2/'!1&77\$26'!&+!'!
 /20!&/'!E\$'10#2/'!&/'6!\$&/'!%#/'*!'12/'!8%'0%'!+!0%'!6#7\$(275+'!2:!⁰%'!1&77\$26'
 =5&(#:#'7!&7!&!L0'70# . 2/#&(!\$2 . . 5/#\$&0#2/-M!

Y-!@'70# . 2/#&(!H2 . . 5/#\$&0#2/7!

@%'!)51+' . '!H25+0!%&7!70+5**('6!02!\$('&+(4!6':#/'!8%&0!=5&(#:#'7!&7!
 0'70# . 2/#&(!\$2 . . 5/#\$&0#2/'< ;50!#0!%&7!2::'+!6!72 . '!*5#6&/'\$'Z!L#/'!2+6'+!02!;'!
 0'70# . 2/#&(<!&/'!&\$57'6A7!\$2 . . 5/#\$&0#2/'! . 570!#07'(<:!'E1(#\$#0(4!2+!# . 1(#\$#0(4<!
 +'(&0'!&! :&\$05&(!&77'+0#2/'!2+!6#7\$(27'!#/'2+ . &0#2/-!'9/(4!0%/'!#7!&!1'+72/'!
 \$2 . 1'((!6!02!;'!&![8#0/'77A!&*&#/'70!%# . 7'(-M⁻¹!

@2!=5&(#:4!&7!0'70# . 2/#&(!\$2 . . 5/#\$&0#2/'<!&/'!#/'6#3#65&(! . 570!6#7\$(27'
 0%!'!\$2/0'/07!2:!'%#7!28/! . #/'6⁻¹!B5+0%'<!L[VOW%'!3&70! . &?2+#04!2:!'3'+; &(!
 70&0' . '/07!0%57!8#((!;'!0'70# . 2/#&(AM!;'\$&57'!&!3'+; &(!70&0' . '/0!8#((!575&((4!
 \$2/3'4!#/'2+ . &0#2/'!2+!&77'+0!:&\$07⁻⁰!@%'!70&0' . '/0!#7!0'70# . 2/#&(!8%'!/'!&!

!"'#

#

%&'()*\$#

#/!'712/7'!02!&!*23'+/ . '/0!75;12'/&! ; '\$&57'!0%'!&\$0!2:!1+265\$#/*!0%'!
+'\$2+67!#07'(:!\$25(6!; '!#/\$+# . #/&0#/*-·8!!)2 . '!\$25+07!%&3'!&11(#'6!0%'!&\$0!2:
1+265\$0#2/!&/6!L:2+'*2/'!\$2/\$ (57#2/!62\$0+#/ 'M!#/'\$&7'7!#/32(3#/*!\$2 . 1'('6!
1&77\$26'!6#7\$(275+'<!8%#('!20%' +7!%&3'!/20-·'!!@%'! :2+'*2/'!\$2/\$ (57#2/!
62\$0+#/ '!#7!&! (# . #0'6!'E\$'10#2/!02!0%'!B#:0%!C . '/6 . '/0!1+#3#('*'!&*&

\$+\$,-#

#

!"/#

8 &7! 0%&0! 0% '! &\$0! 2:;! 62\$5 . '/0! 1+265\$0#2/] 8%#('!\$('&+(4! /20! 15+'! 3'+; &(!
0'70# . 2/4] =5&(#:#'6!&7!0'70# . 2/#&(!7#/'\$!#0! 8&7!:2+!62\$5 . '/07!5/I/28 /!02!
0% '!*23'+/ . '/0-!!@%'! :2+'*2/ '\$2/\$57#2/!'ES'10#2/!62'7!/20!&11(4!#;!0% '!

!"0#

#

%&'()*\$#

; '#/*!\$2 . 1'((('6!02!05+!/!23'+!0% '!1%2/ '!1&77\$26'!8&7!/20!0'70# . 2/#&(-⁷!!@% '!
&11'((&0'!6#3#7#2/!&::#+ . '6<+'&72/#/*!0%&0!&(0%25*%!0% '!&\$0!2:!1+265\$#/*!
#/:2+ . &0#2/! . &4!;'!0'70# . 2/#&<!0% '!B#:0%!C . '/6 . '/0!&::2+67!/2!1+20'\$0#2/!
02! &! 6': '/6&/0! 8% '/! 0% '! &\$0! 2:! 1+265\$#/*! 0%&0! '3#6'/'\$! #7! &! :2+'*2/ '!
\$2/\$(57#2/-⁰⁸!!@% '\$25+0!%'(6!0%&0!0% '!70&0!'%&6!1+23' /!0%&0!0% '!6': '/6&/0!
28/'6<! 1277'77'6< &/6! \$2/0+2(('6! 0% '! '3#6'/'\$<!7&0#7:4#/*! 0% '! :2+'*2/ '!
\$2/\$(57#2/!'E\$'10#2/-⁰!!@% '!J'8!K'+7'4!)51+ . '!H25+0!&::#+ . '6!&/6!%'(6!
0%&0!0% '!&\$0!2:!1+265\$#/*!0% '!#0%2/ '!1&77\$26'7! 8&7!0'70# . 2/#&(! ; '\$&57'
\$2 . 1'((#/*!#07! 6#7\$(275+'!# . 1(#'6! &/! &77'+0#2/!2:!:&\$0<! ;50!0% '! :2+'*2/ '!
\$2/\$(57#2/!'E\$'10#2/!&11(#'6-⁰!!@% '+':2+'<!0% '!6': '/6&/0!8&7!/200+'6!:14(/)] 8700 . 24,!6-1(:)105c4600461

\$+\$,-#

#

!"1#

N28 '3' +<120% '+!\$25+07!%&3'!'&\$%'6!6#::'+'/0!\$2/\$57#2/7-!!,/!F'('GH%
&%"!#"#\$<16'\$#6'6!082!4'&+7!&:0'+!'"/2!#/'&!6#::'+'/0!B(2+#6&!&11'((&0'!6#70+#\$0<
0%!'\$25+0!%'(6!0%&0!0%!'\$2.1'(('6!6#7\$(275+'!2:!'&!\$'((1%2/'!1&77\$26'!#7!&
0'70# .2/#&(! \$2. .5/#\$&0#2/-⁴⁸! ! @%'! \$25+0! +'&72/'6! 0%&0! 0%!' :2+'*2/'!
\$2/\$57#2/!62\$0+#/'!8&7!/20!7&0#7:#'6!; '\$&57'!0%!'!70&0'!\$25(6!/20!7%28!8#0%!
L+'&72/&;('!1&+0#\$5(&+#04M! &/40%#/*! ;'42/6!0%!' :&\$0!0%&0!0%!'1&77\$26'
'E#70'6⁻⁴!!@%'!\$25+0!:25/6!0%&0!0%!'!70&0'!L#/\$2++'\$0(4!:2\$57'6!2/!0%!'!1&77\$26'
&7!0%!'!0&+* '0!2:!'0%!' :2+'*2/'! \$2/\$57#2/'! 'E\$'10#2/'! +&0%'!+!0%&/'!0%!'!6&0&
7%#'(6'6';4!0%!'1&77\$26'-M! ! @%'! B25+0%! >#70+#\$0!70&0'6!0%&0!0%!'!) '\$2/6!
>#70+#\$0A7!&/&(47#7!#/'!"/2<!8%#%!:2\$57'6!2/!0%!'!1&77\$26'<!8&7!:(&8'6⁻⁴!
,/!3\$4D2\$%&'!D67\$+<10%!'!12(#\$':25/6!\$2\$&#/'!#/'!0%!'!6':/6&/0A7!3'%#\$('
&:0'+10%'4!15(('6!23'+10%!'!3'%#\$('!%!'!8&7!0+&3'(#/*!#/-⁴!!@%'!12(#\$!'7'#S'6!0%!'!
6':/6&/0A7!1%2/'<!&/6!0%!'!\$25+0!#775'6!&!7'&+\$\$!8&+&&/0-⁴!!@%'!\$'((!1%2/'!

\$+,\$,-#

#

!/!#

:&\$05&(!&77'+0#2/!&/6!6#7\$(27'7!#/:2+ . &0#2/<!75\$%!&7!0%'!:&\$0!0%&0!0%'!\$26'!#7!
YD\D^De-!

>#7\$(27#/*!&!'\$((!1%2/'!1&77\$26'!#7!(#I'!+'3'&(#/*!L0%'!\$2 . ;#/&0#2/!02!
V&W!8&((!7&:'M⁵] /20!(#I'!; '#/*!L:2+\$'6!02!75++ /6'+!&I'4!02!&!70+2/*; 2E-M⁵-!!
N&/6#/*!23'+!&I'4!%&7!\$('&+!1%47#\$&(!\$%&+&\$0'+#70#\$7<!&/6!&7!75\$%!%&7!; ' /!
:25/6!; 4!0%'!H25+0!02!; '!&::2+6'6!('77!1+20'\$0#2/-!0%47#\$&((4!%&/6#/*!23'+!&!
I'4! 62'7! /20! \$2 . 1'(! &'6': /6&/0! 02! 6#7\$(27'!0%'! \$2/0' /07! 2:!'%'+! . #/6-!
N28'3'+!3'+;&(!6#7\$(275+'!2:!'&!'\$((!1%2/'!1&77\$26'!#7!0%'!15+'70!2:+'!2:!
0'70# . 2/4!&/6!#7!&I# /!02!1+23#6#/*!0%'!\$2 . ;#/&0#2/!02!&8&((!7&:'-!@%'+' :2+'<!
; '\$&57'!0%'!6#7\$(275+'!2:!'&!'\$((!1%2/'!1&77\$26'!#7!0%'70# . 2/#&(<#/#+ . #/&0#/*<!
&/6!\$2 . 1'(('6<!#0!#7!' /0#0('6!02!5:(!1+20'\$0#2/!5/6'+!0%'!B#:0%'C . '/6 . '/0-!

\! @%'!B2+'*2/'!H2/\$(<57#2/!dE\$' 10#2/!>2'7!J20!C11(4!02!0&77\$26'!
O+265\$0#2/!H&7'7!

@%'!\$2 . 1'(('6!6#7\$(275+'!2:!'&!'\$((!1%2/'!1&77\$26'!7# . 1(4! 62'7! /20!
0+##**'+!0%'!2506&0'6! :6-/\$+!2+'*2/'!\$2/\$(<57#2/!'ES' 10#2/-! , /! :6-/\$+!0%'!
*23'+/ . '/0! \$2 . 1'(('6!0%'!6': /6&/0! 02! 1+265\$'!1%47#\$&(!62\$5 . '/0&0#2/<!
8%#%\$!0+##**'+ '6!0%'!L&\$0!2:!'1+265\$0#2/M!&/&(47#7<!8%'+'!B#:0%'C . '/6 . '/0!
1+20'\$0#2/!#7!&::2+6'6!02!0%'!&\$0!2:!'62\$5 . '/0! 1+265\$0#2/!%&7!0'70# . 2/#&(!
&71'\$07-! !@%'! :2+'*2/'! \$2/\$(<57#2/! 62\$0+##/'!#7! &/! 'ES' 10#2/!02!0%'!&\$0!2:!
1+265\$0#2/!#:#!#0!#7!&!L:2+'*2/'!\$2/\$(<57#2/M!&7!02!0%'!'E#70' /\$'<1277'772/<!
&/6!&50%' /0#04!2:!'0%'!62\$5 . '/07!# /! =5'70#2/-!@%#7!'ES' 10#2/!62'7! /20!&11(4!
/!&1&7782+6!6#7\$(275+'!\$&7'!8%' /!0%'!*23'+/ . '/0!\$2 . 1'(7!15+'!0'70# . 2/4!
T&!1&77\$26'U! \$2 . #/*!6#+'\$0(4!;2 . !0%'!6': /6&/0-! F%' /!0%'!*23'+/ . '/0!
7' 'I7!' /8!# /:2+ . &0#2/! :2 . !0%'!6': /6&/0!02!*'0!&\$77!02!0%'!\$(!1%2/'A7!
\$2/0' /07<!#0! 62'7!72!02! ;5#(6!&! \$+# . #/&(! \$&7'!&*#&/70!0%&0'6': /6&/0-! !@%'!
23'+/ . '/0! #7! /20! 7# . 1(4! &7I#/!0%'!6': /6&/0! 02! 1+265\$'! I/28' /! 1+'D
'E#70#/*!62\$5 . '/07<!8%#%\$!8&7!&! \$+5\$#&(!:&\$02+!# /! :6-/\$+⁻⁵! !@%'+' :2+'<!0%'!
&\$0!2:!'1+265\$0#2/!&/6!0%'! :2+'*2/'!\$2/\$(<57#2/!'ES' 10#2/!&+'!# /&11(#& ;('!# /!
1&77\$26'!6#7\$(275+'!\$&7'7-!

, /!1&77\$26'!1+265\$0#2/!\$&7'7<!0%'!&11(#& ;('!&8!1'+0#&/7!02!1%47#\$&(!
62\$5 . '/07! T#-'<!0%'!0&E! 62\$5 . '/07! # /! :6-/\$+U-! !B2+\$#/*! &!6': /6&/0! 02!
1+265\$'!1%47#\$&(!62\$5 . '/07!#7!2/!'!0%#/*-!

!/\$

\$+\$,-#

#

!/,#

&!1&77\$26'!2+!/20-!@2!'/75+'!5/#:2+.#04!\$25+07!.570!/20!23'+\$2.1(#\$&0'!0%'!
#775'-!)#/\$'!1+27'\$502+7!&/6!(&8!'/:2+\$'. '/0!&+'!7' 'I#/*!'3#6'/\$'!0%&0!#7!
\$2.1'('('6< #/\$+#.#/&0#/*<!&/6!0'70#.2/#&<!0%'!B#:0%!C.'. /6.'. /0!\$('+&(4!
&::2+67!&/!#/6#3#65&(!1+20'\$0#2/!:+2. !0%#7!041'!2:!*23'+/.'. /0!23'++'&\$%!&/6!
&!7571'\$0!\$&/20!;'!\$2.1'('('6!02!:5+/#7%! '3#6'/\$'!0%&0!\$&/!;'!57'6!&*&#/70!
%#.#!#/'!&!\$+#.#/&(!1+27'\$50#2/-!

@%'! ;5+6'/'!.570!+'.&#/'!8#0%!0%'!*23'+/.'. /0!02!I''!1!51!8#0%!
0'\$%/2(2*#\$&(!&63&/ '\$7!8%'/'!E'\$50#/*!'7'&+\$%!8&+&/07-!@%'!*23'+/.'. /0A7!
#/&;#(04!02!*&0%'+'#/6'1'/'6'/'0!'3#6'/\$'!#7!#/75::#\$#/'0!02!?570#:4!0%'!
0+&.1(#/*!2:!!\$2/70#050#2/&(!+*%07-!!F%'0%'!+2+!/20!0%'!*23'+/.'. /0!%&7!0%'!
120' /0#&(102!;+'&I!#/02!&!(2\$I'6!1%2/'!#7!5/I/28 /!&/6!+'.&#/#7!#/'!:(5E-!!@%'!
\$%&((/'* '%'+ '#7!0%'!&00'.10#/*!02!6':#/'!\$2/70#050#2/&(!1+20'\$0#2/7#/'!026&4A7!
0'\$%/2(2*#\$&((4!&63&/ '\$6!72\$#04-!!@%'!*23'+/.'. /0A7!2;?'\$0#3'7!.570!;'!
;&(&/\$'6!8#0%!#/6#3#65&(!1+3&\$4!&/6! (#;'+04-!!@%#7!#7! /20!&!7# .1('!0&7I<
'71'\$#&((4!8#0%250!\$('+!*5#6&/ '\$!:+2. !0%'!)51+'.'!H25+0-!!N28'3'+<!8%'!/
#/'!625;0! ?56#\$#&(!#/0'+1+'0&0#2/! .570!'++!2/!0%'!7#6'!2:!!1+20'\$0#/*!'&/!
#/6#3#65&(A7!\$2/70#050#2/&(!+*%07-!

,P-! H\$! ' 1&/(\$!