–·	! "#$%&'()*+,#(- ".(/001(
23"&" 4%35(*&6(7%&*&3,(! "#$%&'()*+,#(8,#%,5(	! A A !! A A ! "#!$%&'()!*+,-%.,+,!/%!/0+!12345678!$9.:+;'(! 9.:!#+(/%<9&!#/%(=!4.:'(+,>!?!@<9(/'%.9&!4./+A<9/'%.! ?--<%9(0!
!	"##$%&& ' ' '()*+,-.(/0(+1&-02,2340 5!

(

! !

!

!

!

GH) I04, (7"D4%(0))

=.00.O$/1! '/!$/$-$'0! .*-9)('G!$/! _*#'/8! @#$/'!$/!D(,(29()! LMEF! -#(!@.<$3:EF! &'/3(2$,!7,0'%%$+$(3! '%!%*,#!96!-#(! _.)03! H('0-#!A)1'/$%'-$./!7_HA?!./! J '),#!EE8! LMLM?! #'%! #'3!*/&)(,(3(/-(3!(++(,-%!./!-#(!#('0-#!'/3!(,./.2$,!%$-*'-$./!.+!2.%-!,.*/-)$(%!$/!-#(!O.)03!7I*%G.!'/3!I(`$/.<$,8!LMLE?S!%&(,$+$,'0068!$-!#'%!,'*%(3!#*1(!3('-#!0.%%(%!75#'#`'3!(-!'0N8!LMLE? !'%!O(00!'%!'!%#')&!3(,0$/(!$/!O.)03!.*-&*-N!=.)!$/%-'/,(8!3*)$/1!-#(!&()$.3!+).2!LMEF! a^!-.!LMLM! a^8!45!UDW!+(00!96!V b 8!'/3!-#(!45!*/(2&0.62(/-!)'-(!#'3!)$%(/!+).2!^N^ b!-.!ETNT b!96! J '),#!LMLMN !C/,)('%(3!*/,()-'$/-6!'/3!-#(!%*9%(c*(/-!&'/$,!%(00$/1!'0%.!'++(,-(3!%-.,G!2')G(-%N!=.)!(R'2&0(8!-#(!D.O!K./(%!C/3(R!7DKC?!3(,0$/(3!96!dNdF b!./!F! J '),#!LMLM!'/3!96!'!+*)-#()!FNF b!./!EL! J '),#!LMLM8!-#(!0'--()!9($/1!./(!.+!-#(!%#')&(%-!+'00%!(<()!3.,*2(/-(3!$/!45!#$%-.)6N!Q33$-$./'0068!

!

!

@./0./!''/3! J ,U((8!LMLMS!X(!(-!'0N8!LMLES!h')(29'!!(-!'0N8!LMLES!C/%'$3..!(-!'0N8!LMLES!"$O')$!(-!'0N8!LMLE'89S!(-,?N!H.O(<()8!$-!$%!'0%.!$2&.)-''/-!-.!'%%(%%!&.%%$90(!(++(,-%!./!%(,-.)'0!%-.,G!$/3$,(%N!=.)!$/%-''/,(8!%-.,G!&)$,(%!$/!-#(!(/()1608!$/3*%-)$'0%!''/3!-)'<(0!%(,-.)%!(R&()$(/,(3!#('<6!0.%%(%S!%$2$0')068!+$/''/,$'0!$/%-$-*-$./%!''/3!9''/G%!%'O!-#($)!(')/$/1%!''/3!%-.,G!&)$,(%!&0*22(-!'%!'!)(%*0-!.+!'!%#')&!$/,)('%(!$/!-#(!%#')(!.+!/./:&()+.)2$/1!0.''/%!,.*&0(3!O$-#!-#(!3(,)('%(!$/!$/-()(%-!)'-(!2')1$/%!)(%*0-$/1!+).2!0.O()!&.0$,6!)'-(%!7-#(!)(,.)3(3!0.%%!O'%!TFb8!2.)(!-#''/!$/!-#(!45!%-.,G!2')G(-!'%!'!O#.0(?N!)

g'-$./'0!1.<()/2(/-%!#'<(!'3.&-(3!<')$.*%!&.0$,6!2('%*)(%!$/!)(%&./%(!-.!-#(!&'/3(2$,!7@'&.)'0(!''/3!@())'-.8!LMLMS!H'0(!(-!'0N8!LMLM?N!"#(!45 8!./(!.+!-#(!#')3(%-!#$-!,.*/-)$(%8!$/-).3*,(3!''!/*29()!.+!,./-'$/2(/-!2('%*)(%!)(%-)$,-$/1!%.,$'0!$/-()',-$./!7%*,#!'%!O.)G&0',(8!%,#..0%!''/3!)(%-'*)''/-%!,0.%*)(%?8!3.2(%-$,!''/3!$/-()/''-$./'0!-)'<(0S!2./(-')6!2('%*)(%!%*,#!'%!0.O()!&.0$,6!)'-(%!'/3!2.)(!c*''/-$-'-$<(!('%$/1!7(N1N8!45?S!+$%,'0!2('%*)(%!%*,#!'%!$/,.2(!%*&&.)-!''/3!3(9-!)(0$(+!%,#(2(%N!"#(!'$2!.+!-#(!&)(%(/-!%-*36!$%!-.!(R'2$/(!-#(!(++(,-%!.+!-#.%(!2('%*)(%!''/3!.+!-#(!&'/3(2$,!$-%(0+!./!45!%(,-.)'0!%-.,G!$/3$,(%N!C-!$%!O(00!G/.O/!-#'-!-#(!$/-).3*,-$./!96!-#(!45!1.<()/2(/-!.+!)(0$(+!%,#(2(%!%*,#!'%!-#(!@.)./''<$)*%!Q$38!>(0$(+8!''/3!;,./.2$,!5(,*)$-6!7@Q>;5?!Q,-!%'O!45!''11)(1'-(!%-.,G!$/3$,(%8!/''2(06!-#(!gQ5DQa8!5 i W!VMM!''/3!DKC8!)$%(!96!dNTTb 8!dNTb !''/3!dNdTb!)(%&(,-$<(06N !Q0-#.*1#!I.*)$!(-!'0N!7LMLE?!''/3! J ``(6!''/3!>$,#')3%./!7LMLM?!&).<$3(!%.2(!(!(<$3(/,(!./!-#(!$2&',-!.+!-#(!@.<$3:EF!&''/3(2$,!./!%(,-.)'0!%-.,G!$/3$,(%!$/!-#(!,'%(!.+!g(O!h('0''/38!''/3!H*6/#!(-!'0N!7LMLE?!$/!-#(!,'%(!.+!Q*%-)'0$'8!-.!-#(!9(%-!.+!.*)!

_____!

#!

!

!

G/.O0(31(!-#(!,*))(/-!%-*36!$%!-#(!+$)%-!-.!,'))6!.*-!%(,-.)'0!''06%$%!+.)!-#(!45!'/3!-.!(R'2$/(!-#(!+',-.)%!-#'-!#'<(!3)$<(/!)(-*)/%!'/3!'++(,-(3!-#(!%-'9$0$-6!.+!3$++()(/-!%(,-.)%!$/!%-.,G!2')G(-%!7I#')1'<'!(-!'0N8!LMEL?!3*)$/1!-#(!2.%-!)(,(/-!%-)(%%!&()$.3N!J.)(.<()8!O#$0%-!&)(<$.*%!%-*3$(%!./!@.<$3:EF!'/3!%-.,G!2')G(-%!75'0$%*!'/3!B.8!LMLM8!Q%#)'+8!LMLMS!I'G()!(-!'0N8!LMLMS!@.)9(-!(-!'0N8!LMLMS!AG.)$(!'/3!X$/8!LMLES!J''`*)!(-!'0N8!LMLE!X(!(-!'0N8!LMLE?!')(!9'%(3!./!-#(!,0'%%$,'0!C7M?]C7E?!3$,#.-.26!9(-O((/!%-'-$./')6!'/3!/./:%-'-$./')6!%()$(%8!-#(!,*))(/-!./(!*%(%!'!+)',-$./'0!$/-(1)'-$./!7.)!C73??!2.3(00$/1!'&&).',#!O#$,#!'00.O%!+.)!+)',-$./'0!<'0*(%!.+!-#(!$/-(1)'-$./],.$/-(1)'-$./!&')'2(-()!3!'/3!-#()(+.)(!+.)!'!2*,#!O$3()!)'/1(!.+!&.%%$90(!%-.,#'%-$,!9(#'<$.*)%!.+!-#(!%()$(%!*/3()!(R'2$/'-$./N!

"#(!0'6.*-!.+!-#(!&'&()!$%!'%!+.00.O%[!!5418583.36(&))]TJETQq0.240 0.241858 1./N

!

!

-'G$/1!'!<'0*(!9(-O((/!M!'/3!EMMN!Q!#$1#()!%,.)(!$/3$,'-(%!'!%-)$,-()!)(%&./%(!7$N(N!EMM!j!%-)$,-(%-!)(%&./%(?N!!

"#(!+$%,'0!&.0$,6!)(%&./%(!<')$'90(%!$/,0*3([!$/,.2(!%*&&.)-8!O#$,#!&).<$3(%!$/+.)2'-$./!

;!

!

!

!

NH) AD(0(' &4,%D)L,+ ' &E(,<))

_ (!, . /%$3()!-#(!+.00.O$/1!)(1)(%%$./!2 .3(0[!

!!!!!!!!!!!! ! ! ! 7E?!

O#()(!*!"#$!$%!-#(!.9%()<(3!-$2 (!%()$(%!)(&)(%(/-$/1!(',#!.+!-#(!$/3*%-)6!%-.,G!2 ')G(-!$/3$,(%!$/!-*)/8!/'2 (06!"(,#/.0.16!7";@H?8!"(0(,.2!7";X?8!H('0-#!@')(!7H;QX"H?8!>('0!;%-'-(!7>;?8!@./%*2 ()!5-'&0(%!7@5?!@./%*2 ()!D$%,)(-$./')6!7@D?8!C/3*%-)$'0%!7CD5?8!I '%$,!J '-()$'0%!7I J ?8!;/()16!7;g;?!'/3!4-0-$(%!74 "C?[!

<!

!

!

$/!7E?!+.)!'/6!)('0!<'0*(!)"ℕ!"#*%8!*/3()!-#(!/*00!#6&.-#(%$%!H !7L?8!-#(!-O.!(c*'0$-$(%!$/!(c*'-$./!

7E?!,'/!9(!(R&)(%%(3!'%!

!!!!!!!!!!!!! ! !! !! ! ! ! 7T?!

O#()(!! ! '/3! '/3! /.-$/1!-#'-! +"#$

=!

!

!

"''90(!L!3$%&0'6%!-#(!(%-$2'-(3!,.(++$,$(/-%!*/3()!-#(!'%%*2&-$./!.+!O#$-(!/.$%(!()).)%!+.)!-#(!0.1!)(1)(%%$./!$/,0*3$/1!D>E!'%!-#(!2.)-'0$-6!)'-(N!!"#(!)(%*0-%!')(!%$2$0')!-.!-#.%(!$/!"''90(!EN!H.O(<()8!D>E7-?!$%!/.O!/(1'-$<(!'/3!%$1/$+$,'/-!+.)!+.*)!%(,-.)%8!$N(N!@./%*2()!5-'&0(%8!H('0-#8!"(,#/.0.16!'/3!"(0(,.2N!"#$%!$%!/.-!%*)&)$%$/1!$/!-#(!,'%(!.+!@./%*2()!5-'&0(%!%$/,(!2.%-!+$)2%!.&()'-$/1!$/!-#$%!%(,-.)!O(/-!$/-.!0.,G3.O/!3*)$/1!-#(!&'/3(2$,!&()$.3!O#$,#!0(3!-.!'!3).&!$/!%'0(%!'/3!)(<(/*(N!!

0I?@APM)

>!

!

!

"''90(!^!3$%&0'6%!-#(!0.1!)(1)(%%$./!)(%*0-%!O$-#!D>L!'%!-#(!2.)-'0$-6!)'-(N!C/!-#$%!,'%(!D>L!$%!+.*/3!-.!#'<(!'!%$1/$+$,'/-!'/3!/(1'-$<(!(++(,-!./!'00!%(,-.)%!(R,(&-!;/()16N!!@#'/1(%!$/!;==>7-?8!=W7-?!'/3!J J =W7-?!')(!+.*/3!-.!#'<(!'++(,-(3!%(<()'0!%(,-.)'0!%-.,G!$/3$,(%N!=.)!$/%-'/,(8!,#'/1(%!

!

!

D(9-:>(0$(+!W.0$,68!,#'/1(%!-.!-#(!;++(,-$<(!=(3()'0!=*/3%!>'-(8!'/3!-O.!3*2 2$(%!,.))(%&./3$/1!

-.!2./(-')6!'/3!+$%,'0!&.0$,6!'//.*/,(2(/-%N)

"#(!)(%*0-%!&).<$3(!(<$3(/,(!.+!2('/!)(<()%$./!+.)!%(<(/!%(,-.)'0!%-.,G!$/3$,(%!7@./%*2()!

D$%,)(-$./')68!@./%*2()!5-'&0(%8!H('0-#8!C/3*%-)$'0%8!"(,#/.0.168!"(0(,.2!'/3!4-0-$(%?8!O$-#!

00.?2(!!)3(2%!3(!$)0-(2)('-$0./2,(2%(!-2!(!-#2*(1#!$01/$)$T,J/E06!2(")0(()T-#'E0?.20.240 24.7(%)-0.2(20.2(')/)]TJE0.2(')m

!

!

P&>&,&0D&3)

!

!

X(8!"N!XN8!Q9'G'#8!;N!KN!QN8!i!"$O')$8!QN!ZN!7LMLE?N!"$2(!'/3!+)(c*(/,6!3.2'$/!,.//(,-(3/(%%!'/3!%&$00:.<()!'2./1!+$/-(,#8!1)((/!9./3%!'/3!,)6&-.,*))(/,$(%!$/!-#(!'1(!.+!-#(!+.*)-#!$/3*%-)$'0!)(<.0*-$./N!*G378:;<;0975<*>;63754#9:0*5:)*T;795<*A85:038!JXS8!ELMTYLN!

J'`(68!5N8!i!>$,#')3%./8!KN!7LMLM?N!X(%%./tD)'O$/1!+).2!g(O!h('0'/3!'/3!@.<$3tEF[!"#(!/((3!+.)!'/-$,$&'-.)6!&.0$,6!2'G$/1N!G83*H;<9#975<*[+56#36<!8!\J7T?8!VfE:VdMN!

J'`*)8!JN8!D'/18!JN8!i!B(1'8!JN!7LMLE?N!@ABCD:EF!'/3!-#(!2'),#!LMLM!%-.,G!2')G(-!,)'%#N!;<$3(/,(!+).2!5 i WEVMMN!>9:5:73*23435678*-3##3648!P]8!EMEfFMN!

g')'6'/8!WN!ZN8!W#'/8!DN!HN!IN8!i!X$*8!UN!7LMLE?N!@ABCD:EF!0.,G3.O/%8!%-$2*0*%!&',G'1(%8!-)'<(0!9'/%8!'/3!%-.,G!)(-*)/%N!>9:5:73*23435678*-3##3648!P]8!EMEdTLN!

AG.)$(8!DN!CN8!i!X$/8!IN!7LMLE?N!5-.,G!2')G(-%!'/3!-#(!@ABCD:EF!+)',-'0!,./-'1$./!

!

!

h')(29'8!Q8!Q#').//8!D8!e8!D(2$)8!;8!Z$`6%8!>8! i !h'O'3G'8!D8!7LMLE?8!@ABCD:EF8!1.<()/2(/-!

!

! "#$%& ' (&

!

! "#$%&A(&) *+, - "+%.&/0%11,/,%2+*&3,+4&34,+%&20,*%&%5505*&6 7 8 '9&	
! "#$%#&&'%!	9'$$#-!4+.+!

/ 0 12! 3 45 63"72! 36218976! 7:7";<! =7192=! 5:4>6! "762127! 273=! 2797!

!

! "#$%&<(&) *+, - "+% . &/0%11,/,%2+*&3,+4&34,+%&20,*%&%5505*&6 7 8 A9&										
! "#$%#&& '%!	(%)$)*+,!!4+.+!									
	/ 0 1 2!	3 4563 " 72!	36218976!	7 : 7 " ; <!	=7192=!	5 : 4 >6!	" 762127!	273=!	2797!	>25!
-!	?@AB! C?@DAE!F@?GH!	?@AGJ! C?@DDE!?@AAH!	?@DDJ! C?@DGE!?@ABH							

!

! "#$%&B(&) *+, - "+% . &/0%11,/,%2+*&3,+4&34,+%&20,*%&%5505*&67 8A9&										
! "#$%#&&'%!	9'$$#-!!4+.+!									
	/ 0 12!	34563"72!	36218976!	7:7";<!	=7192=!	5:4>6!	"762127!	273=!	2797!	>25!
-!	?@AB! C?@AIE!F@?FH!	?@ABJ! C?@AIE!?@ADH!	?@AMJ! C?@AFE!?@ALH!	F@??! C?@ABE!F@?LH!	?@AGJ! C?@A?E!?@ABH!	?@ABJ! C?@AIE?@AAH!	?@AB! C?@AFEF@?FH!	?@AFJ! C?@DAE?@AMH!	?@AFJ! C?@DAE?@AMH!	?@AIJ! C?@DDE?@ALH!