

!

!

"!

A\$*2!%?'7!%?'!\$A/0'>)9)'7%!M)CC!/'!0'NA)0'*!%-!'7\$A0!>-.9C)#7>'!M)%?%!%?)\$!:-C)>F!/F!)%\$!.9C-F"\$!#7*!
#;'7%\$
!

E! %?%! 67)('0\$)%F!)\$! #! \$A/0'>)9)'7%! A7*!0! #7-%?'0!)7\$%)%A%)-7U\$! ;0#7%X#M#0*2! %?'7! %?%! <8.
%'0.)7!)=! %?)\$! :-C)>F2! -0! %?%! -%?'0!)7\$%)%A%)-7U\$! BD<E! 9-C)>F2! M)E%!)\$!:-C)#7!CF!
'T9'>%!'!%?#%!'%?)\$!:-C)>F!M)CC!/'!=-CC-M*!)7!\$A?!)7\$%#7>'J
!

/#0*\$*-*1\$2

! YNA)%E7%'0'\$%\$->V\$%->V9%)-7\$#7*!-%?'0T)\$%)7;M7'0\$?)9)7%'0'\$%\$#>-.!0>)#C! '7%)%FJ
!

B)7#7>)#C! D-7=C)>%! -=! E7%'0'\$%! HBD<EI

#;'7>F2!#7!)7\$%)%A%)-7!-=!?) ;?'0!'A>#%)-7!#\$!*'=)7*!#%!34!6J8JERY24#7#>#'.)>!%#>?)7;!?-9)%#C2!#!.*)>#C!>'7%'02!-0!#!0'\$'#0>?97\$%\$%\$%#=#)C)#%'!M)%d?!#7!ERYJ

!
!

8);7)=>#7B)7#7>)#E7%'0'16BE1-\$!7-%)7>CA!%?!=-CC-M)7%F9\$=!)7#7>)#C%'0'\$%\$+HZI\$#C#0F2!0-F#C0)\$2'0&'.A7'0#%)-7!9#)*/F!%?!67)(0\$)%P!%?!D-('0!*!E7*)(*A#C)=!%?!

!

\$

YNA)%F!E7%'0'\$%IJ

!

[?#%!8BE^)\$>C-\$A0!\$0'!&'NA)0'!

!

D-('0'* !E7*)()*A#C\$A\$%*)\$>C-\$!+

!

&@?!9'0\$-7H\$P#()7;!%?)7%'0'\$%]

!

&@?!D-('0'* !E7*)()*A#C!C#%-7\$P%\$A>B'0\$-7H\$!]

!

&@?!7#.' !-=%?'7%)%M)%M?>P%?D-('0'* !E7*)()*A#C#%?8BE#7'!

!

&@?!7#%A#7'!#990-T).#%'-7'%#0F!(#CA!-=%?8BEJ

!

B-089-7\$-0'* !@0#('02-('0'* !E7*)()*A#C!C\$\$?-AC\$%#%?9A09-\$!-=%?'%0)92?)*'7%)%F!-=%?!

\$9-7\$-0X-0;#7)L'02!%?'!*\$%)7#%-72!#7'!%?'!A0#%-7J

!

Z**)%-7#A7=-0.#%-7#C\$-#F !/ !0'NA'\$%?F!%?D?#)0X^0'>%0&D<ED-..)%%" !H#\$!?'0'#=%'0!

!

%

:R8!E7('\$%);#%-0\$]
!" [?'7 !%?!R8 !E7('\$%);#%0\$7'M!%-%?!

90'()-A\$CF!0'()'M'*2!#99'#0!%-!/'!0'C#%*'!%-!8BE\$!>-(0'*!A7*0!#7!#>%)('!.#7#;'!.7%!9C#72!-0!>#7!/'!
'#\$)CF!#**0'\$*\$!/'F!\$%#7*#0*!.#7#;'!.7%!9C#7!.'#\$A0'\$J!@?'\$!#>%)>-7\$!#7*!#CC!8BE\$!M)CC!/'!0'9-0%*'!
%-!%?'!&D<E!D-..)%%!'!#\$!\$--7!#\$!90#>%)>#/'C'J

!
@'!D?#)0X^0'>%MOC9D-('*!>-9)\$!-!%?!*%'0.)7#%)>-7=C)>%D-'(0*'!E7*')*A#C!H#7*!
:E2!)=!*')=='0'7%I2!%?'!^#7!-!%?'!D-(0'*!E7*')*A#CU\$!^9#0%.7%2!#7*!%?'!<8:2!#\$!#99C)>#/'C'J!@?'
D-(0'*!E7*')*A#C!.#F!#99#C!%?'!*'%'0.)7#%)>-7!#\$!*\$>0)/*!'/'C!MJ

!
@?ID-(0'*!E7*')*A#C.A\$%>-.9CFM)%#7F.#7#;'!.7%!9C#7A7*7!M)CC!*C#F*!A7%)C!?'X\$?!'!
#;0'\$!%-!>-.9CFJ
!

E%!)\$!T9>%*'!%?#%!%?'!*'%'0.)7#%)>-7!-!M?'%?'0!#!BD<E!T)\$%\$!#7*!).9C'.7%#%)>-7!-!#!.#7#;'!.7%
9C#7%!.#7#;'!%?!BD<EM)CC!>-.9C%'*!M)%?)7

#7*)=!)%!*-\$2!).9C'.7%!#.#7#;'.7%!9C#7!)7!#>>-0*#7>'!M)%?!%?)\$!:-C)>F!%?#%\$9>=)'\$!%?!#>)-7\$!
%?#%?!?#('!'/'2!#7*!M)CC!/'2!%#V'7!%-!.#7#;!'!%?'!BD<EJ

!

[?#%IR#99'7\$][?7 !%?BD<EE\$-%!E*7%)=)!#7*!b#7#;* !

!

E7!%?!('7%!%?#%#7!BD<E!)\$!7-%!)7%)=)*!-0!.#7#;!*!7!#!%)'.CF!.#77'0!H)7>CA*)7;!#8!#0\$AC%!=
D-('0!*E7*)()*A#CU\$#)CA0%!).'CF)\$>C-\$#78B#?#9\$A/\$NA'7%CF'0.)7* !/F!%?!
67)('0\$)%F!%-!>-7\$%)%A%#!#7!BD<EJ!#%#!0\$AC%!=!#D-('0!*E7*)()*A#CU\$=#)CA0!%-!>-.9CF!M)%?!#!
.#7#;'.7%!9C#7!-0!\$!#0\$AC%!=!%?'!67)('0\$)%FU\$=#)CA0!%-!0'!)M!-0!.#7#;!'#7!BD<E!2!%?!
67)('0\$)%F!M)CC2!M)%?)7!-7!?'A7*0*!%M'7%F!H134!#*F\$!-=!%?'!*'%'0.)8#9C#7#727

>-.9C%!#0%0-\$9>%)('0'!)M!-=!%?'!D-('0!*E7*)()*A#CU\$#>%)()%)\$!-7!%?'!90-G'>%H\$!%-!*%'0.)7!
M?'%?'0!%?'0!M#\$!#7F!/#\$!)7!%?'!*\$);72!>-7*A>%2!-0!0'9-0%)7;!=!%?'!90-G'>%!A0)7;!'%?'!9'0)-*!-=!
7-7>-.9C)#7>'J

!

^>A.7%#%)7!-=!\$A>?!0'!)M!M)CC!)7>CA*!%?!=-CC-M)7;V'F!C'.7%\$+H)!!:0-G'>!7A./0!#7*!%)%C]!H
:E\$!-0!90-G'>%!*'0'>%-0\$]!H))!D-('0!*E7*)()*A#C!#7*!7%)%F!0\$AC%)7;!7!%?'!BD<E!H)!!-
0%0-\$9>%)('0'!)M!M#\$>-.9C%'*]!H(!^%#)C!*\$>0)9%)!7!.'%?-*C-;F!A\$*!%-!>-7*A>%!%?!
0%0-\$9>%)('0'!)M!H'J;J2!.'%?-*C-;F!-=!%?'!0'!)M!90->\$\$2!>-.9-\$%)7!-=!%?'!0'!)M!9#7'2!
*->A.7%\$!0'!)M*2!%>J]!#7*!H)!!B)7*)7;\$!#7*!>-7>CA\$)-7\$!-=!%?'!0'!)M!J

!

Z**)%)-7#&'NA)0'.7%\$=-0:R8 \$A99-0%!*0!8B \$A99-0%!*0-G'>%\$

!

B-0!:R8 \$A99-0%!*90-G'>%\$!<8!M)CC!>--0*)7#%!'%?'!67)('0\$)%FU\$!)=C)7;!=!\$A>?!BD<E!#7*!-%?'0!
0'9-0%\$!#0'NA)0*!A7*0!:R8!0';AC#%)7\$2!7>CA*)7;!/-=0!'T9'7*)7;!#7F!#A7*\$!A7*0!#!:R8
\$A99-0%!*90-G'>%2!#7*!M?'7!#7!BD<E!)\$!7-%!)7%)=)*!#7*!.#7#;!*J!E7!#0!A721#8#7!
#77A#0\$)%\$?67)('0\$)%F!M)CC!A.)%BD<E0'9-0%\$!%?!:R8#M#0*)7#;'7>F!\$9>)=F)7;!%?!
#>)-7\$!%?#%#M)CC!/'!%#V'7!%-!.#7#;!'!%?'!BD<E!;-7;!=-0M#0*J!E!%?'!0'%)0-\$9>%)('0'!)M!)=7*\$!/#\$!)
%?'!*\$);72!>-7*A>%2!-0!0'9-0%)7;!=!\$A99-0%!*#>%)()%)F2!%?'!67)('0\$)%FU\$!)=C)7;!=!\$A99-0%!*#>%)
#M#0*)7#;'7>F!90-.9%Q#7*\$A/.)%#!.)%#%)-0'9-0%#0'NA)0*!M?)>?!M)CC!)7>CA*+
!

!" @?!V'F!C'.7%\$!*->A.7%* !7!%?0%0-\$9>%)('0'!)M\$>0)!* !#-(! !
!" Z!*\$>0)9%)!7!%?!9#>%!-#?!)#7!-7!%?0'\$#0>?90-G'>%7!
!" @?!67)('0\$)%FU\$#7=#>%)!70!#>)-7%#V!7!C).7#%&-0!.)%#%?!'==>%=!%?!
/)#\$!H)J'J2!).9#>%!-7!%?'!0'\$#0>?90-G'>%2!'T%'7%!=!#0!.*-7'2!)7>CA*)7;!#7F!NA#C)%#%)(!#7
NA#7%)%#%)(!*#%#!%-!\$A99-0%!*#7F!#>%A#C!-0!A#A0!?'#0.]!#7#CF\$)!-=!M?'%?'0!%?'!0'\$#0
90-G'>%!)\$!\$#C#;#C!J

!

B-0!:R8 \$A99-0%!*>C)7>#C!0'\$2#>?!'6J8J!^'9#0%.7%!=!R'#C%?!#7*!RA.#7!8'0(>)'\$!
%'0.)7'\$!%?#%#!#!: \$A99-0%!>C)7>#C!0'\$#0>?90-G'>%!H)J'J2!#90-G'>%!M?-\$!9A09-\$!)\$!%-!(#CA.9

!

!" @?!V'F!C'.7%\$!*->A.7%* !7!%?0%0-\$9>%)('0'!)M\$>0)!* !#-(! !
!" Z!*\$>0)9%)!7!%?!9#>%!-#?!)#7!-7!%?0'\$#0>?90-G'>%7!
!" @?!67)('0\$)%FU\$#7=#>%)!70!#>)-7%#V!7!C).7#%&-0!.)%#%?!'==>%=!%?!
/)#\$!H)J'J2!).9#>%!-7!%?'!0'\$#0>?90-G'>%2!'T%'7%!=!#0!.*-7'2!)7>CA*)7;!#7F!NA#C)%#%)(!#7
NA#7%)%#%)(!*#%#!%-!\$A99-0%!*#7F!#>%A#C!-0!A#A0!?'#0.]!#7#CF\$)!-=!M?'%?'0!%?'!0'\$#0
90-G'>%!)\$!\$#C#;#C!J

!

B-0!:R8 \$A99-0%!*>C)7>#C!0'\$2#>?!'6J8J!^'9#0%.7%!=!R'#C%?!#7*!RA.#7!8'0(>)'\$!
%'0.)7'\$!%?#%#!#!: \$A99-0%!>C)7>#C!0'\$#0>?90-G'>%!H)J'J2!#90-G'>%!M?-\$!9A09-\$!)\$!%-!(#CA.9

!

!" @?!V'F!C'.7%\$!*->A.7%* !7!%?0%0-\$9>%)('0'!)M\$>0)!* !#-(! !
!" Z!*\$>0)9%)!7!%?!9#>%!-#?!)#7!-7!%?0'\$#0>?90-G'>%7!
!" @?!67)('0\$)%FU\$#7=#>%)!70!#>)-7%#V!7!C).7#%&-0!.)%#%?!'==>%=!%?!
/)#\$!H)J'J2!).9#>%!-7!%?'!0'\$#0>?90-G'>%2!'T%'7%!=!#0!.*-7'2!)7>CA*)7;!#7F!NA#C)%#%)(!#7
NA#7%)%#%)(!*#%#!%-!\$A99-0%!*#7F!#>%A#C!-0!A#A0!?'#0.]!#7#CF\$)!-=!M?'%?'0!%?'!0'\$#0
90-G'>%!)\$!\$#C#;#C!J

!

B-0!:R8 \$A99-0%!*>C)7>#C!0'\$2#>?!'6J8J!^'9#0%.7%!=!R'#C%?!#7*!RA.#7!8'0(>)'\$!
%'0.)7'\$!%?#%#!#!: \$A99-0%!>C)7>#C!0'\$#0>?90-G'>%!H)J'J2!#90-G'>%!M?-\$!9A09-\$!)\$!%-!(#CA.9

!

!" @?!V'F!C'.7%\$!*->A.7%* !7!%?0%0-\$9>%)('0'!)M\$>0)!* !#-(! !
!" Z!*\$>0)9%)!7!%?!9#>%!-#?!)#7!-7!%?0'\$#0>?90-G'>%7!
!" @?!67)('0\$)%FU\$#7=#>%)!70!#>)-7%#V!7!C).7#%&-0!.)%#%?!'==>%=!%?!
/)#\$!H)J'J2!).9#>%!-7!%?'!0'\$#0>?90-G'>%2!'T%'7%!=!#0!.*-7'2!)7>CA*)7;!#7F!NA#C)%#%)(!#7
NA#7%)%#%)(!*#%#!%-!\$A99-0%!*#7F!#>%A#C!-0!A#A0!?'#0.]!#7#CF\$)!-=!M?'%?'0!%?'!0'\$#0
90-G'>%!)\$!\$#C#;#C!J

!

B-0!:R8 \$A99-0%!*>C)7>#C!0'\$2#>?!'6J8J!^'9#0%.7%!=!R'#C%?!#7*!RA.#7!8'0(>)'\$!
%'0.)7'\$!%?#%#!#!: \$A99-0%!>C)7>#C!0'\$#0>?90-G'>%!H)J'J2!#90-G'>%!M?-\$!9A09-\$!)\$!%-!(#CA.9

!

!" @?!V'F!C'.7%\$!*->A.7%* !7!%?0%0-\$9>%)('0'!)M\$>0)!* !#-(! !
!" Z!*\$>0)9%)!7!%?!9#>%!-#?!)#7!-7!%?0'\$#0>?90-G'>%7!
!" @?!67)('0\$)%FU\$#7=#>%)!70!#>)-7%#V!7!C).7#%&-0!.)%#%?!'==>%=!%?!
/)#\$!H)J'J2!).9#>%!-7!%?'!0'\$#0>?90-G'>%2!'T%'7%!=!#0!.*-7'2!)7>CA*)7;!#7F!NA#C)%#%)(!#7
NA#7%)%#%)(!*#%#!%-!\$A99-0%!*#7F!#>%A#C!-0!A#A0!?'#0.]!#7#CF\$)!-=!M?'%?'0!%?'!0'\$#0
90-G'>%!)\$!\$#C#;#C!J

!

B-0!:R8 \$A99-0%!*>C)7>#C!0'\$2#>?!'6J8J!^'9#0%.7%!=!R'#C%?!#7*!RA.#7!8'0(>)'\$!
%'0.)7'\$!%?#%#!#!: \$A99-0%!>C)7>#C!0'\$#0>?90-G'>%!H)J'J2!#90-G'>%!M?-\$!9A09-\$!)\$!%-!(#CA.9

!

!" @?!V'F!C'.7%\$!*->A.7%* !7!%?0%0-\$9>%)('0'!)M\$>0)!* !#-(! !
!" Z!*\$>0)9%)!7!%?!9#>%!-#?!)#7!-7!%?0'\$#0>?90-G'>%7!
!" @?!67)('0\$)%FU\$#7=#>%)!70!#>)-7%#V!7!C).7#%&-0!.)%#%?!'==>%=!%?!
/)#\$!H)J'J2!).9#>%!-7!%?'!0'\$#0>?90-G'>%2!'T%'7%!=!#0!.*-7'2!)7>CA*)7;!#7F!NA#C)%#%)(!#7
NA#7%)%#%)(!*#%#!%-!\$A99-0%!*#7F!#>%A#C!-0!A#A0!?'#0.]!#7#CF\$)!-=!M?'%?'0!%?'!0'\$#0
90-G'>%!)\$!\$#C#;#C!J

!

!" @?!V'F!C'.7%\$!*->A.7%* !7!%?0%0-\$9>%)('0'!)M\$>0)!* !#-(! !
!" Z!*\$>0)9%)!7!%?!9#>%!-#?!)#7!-7!%?0'\$#0>?90-G'>%7!
!" @?!67)('0\$)%FU\$#7=#>%)!70!#>)-7%#V!7!C).7#%&-0!.)%#%?!'==>%=!%?!
/)#\$!H)J'J2!).9#>%!-7!%?'!0'\$#0>?90-G'>%2!'T%'7%!=!#0!.*-7'2!)7>CA*)7;!#7F!NA#C)%#%)(!#7
NA#7%)%#%)(!*#%#!%-!\$A99-0%!*#7F!#>%A#C!-0!A#A0!?'#0.]!#7#CF\$)!-=!M?'%?'0!%?'!0'\$#0
90-G'>%!)\$!\$#C#;#C!J

