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.#7!/0%'!%364\$(!\$0-.-%!.329\$%/29-25%'!+,30.3(\$8!/(.8!*'\$.(7!/29!'!*\$(-*#\$(-,!%*/,\$%/29!%368\$,,%!
/%!#\$0*0\$%%!4-,.-<%!/29D'(!9/25\$('3%!'+\$29\$(!32&'(.#7!'!/\$2.-'2:!!V2!'!.\$(!&'(9%8!.\$7!
6\$, '<\$!/5\$2.%!'!+6'!.#!e(\$%-%/2,\$f!@.'!%0\$2,\$8!'60-.\$(/.-'28!/298!-<*'('./2.078!4-,.-<-L/.-'2A!/29!
e\$E-%.\$2,\$f!@/%!*'0-.-,/0!%368\$,,%!&#'%\$!&'(9%!/29!/...39\$!/-<!.!'/&/)2-25!.\$!/39-\$2,\$!..!
(\$+0\$,-'28!/&/(2\$%%!/29!.\$!2\$9!+'(!%' ,-/0! ,#/25\$A!

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m!T/<% '2!M)' .#!M* '29'8!O/%%(! ; '00\$5\$! I! ! ` -, #/\$0!Q:IT#/\*-('8!^2-4\$(-.7!'!+!U/&/-n-!/./! ` o2' /!

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45#56''&\$*78##9!/29!+0<!a0/9\$*: (22#''-2!&#-,#!.##!/29('9D(\$*0-,/2.1*('93,-25!''7(\$00!; '(* ' (/.-'2!
' *\$(./-25!329\$(!.##!6/22\$(!e`'(\$!U3</2!"#/2!U3</2f!3%%\$!\$<*/.#7!/%!/!</())\$(!'+!.\$#!
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%*/2%:! I -.#!.##!4/5/(-\$%!'+!\$<*/.#7!/%!(\$+\$(2.8!&\$!.3(2!2\$E.!. ' !R\$2!K-3>%!%# ' (.!%.' (7!; 8#*<%''#6%=#''!
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(-99\$2!*(' ./5'2-%.!=<*0'7%>!!/[bD_!('6'!.!/(\$./) \$!+(' <!T32%#-2\$!U' <\$,/(\$!T'03.-'2%!!1!&# ' !e-%!
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%. (3550-25!&-.#!/!*(\$, /(-'3%!0-+\$! I \$!, '2,039\$! '3(!/2/07%-%! '+!# ' &!\$<*/.#7!&'())%!. ' !4/03\$!/29!
' (9\$(! #3</2!#3</2! /29! #3</2!2'21#3</2! (\$0/.- '2%! &-.#! /! (\$/9-25! '+! G29(\$7! Q32) '4%)7>%!
N3%%-/2!%, -\$2,\$!+-,.-'2!%\$(-\$%!>#66#''*68%2*?)@*

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U-%.'(-,/0!VN!#/!/!/*(' /,#\$9!#-%.'(7!-2!/!*(\$9'<-2/2.07!32,(-.-,/0!</22\$(!/!/!(\$*'%-.'(7!'+'!(3.#!
/29!-.!#/!%!6\$\$\$2!*(%\$2.\$9!/!/2!/99-.4\$!<'9\$0!&#\$(67!.'''#*#-%.'(78!.'''#*+/,,%!/29!.'''#*
\$(%\$,-.4\$%!2,039\$9!&-.#-2!.\$!%.'(7!'+'!.\$!-2.\$(2/.-'2/0!&-00!(\$<\$97!.\$!%##'(.,'<-25%!9\$2.-+\$9:!
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C8%6%)*8&)6'''D*63.!(/.#\$(!

(\$,/(-.7!-2!2'4\$0%/29!'\$<%!&(-..\$2!6\$.&\$2!XhXY!/29!.\$#!*(\$%\$2.:!T'<\$!/\$!&(-..\$2!/!.!9-+\$((\$2.!<-\$%!./2!.\$#!\$4\$2.%,/3%-25!.\$#!*(\$,/(-.7!63!9\$*-,.!.\$#!4302\$/(6-0-.7!/29!(\$%-0-\$2,\$!'!.\$#-(!,#!/(/,.\$(%!-2!&7%!./!.!32-4\$(%/0-L\$!.\$#-(!%.(3550\$!M.\$#(%!'++\$(!#('35#!.\$#-(!,\$/-.4-.7!+-(%./29!/,, '32.%!67!.\$'%%!&#'#/4\$!/29!, '2.-23\$!.!\$E*\$(-\$2,\$!*(\$,/(-.7!T36B\$,.%!/99(\$%%\$9!-2,039\$!.\$#!XhXY!-2+03\$2L/!*/29\$<-,8!.\$#!6'<6-25!'!`/0./!93(-25! I '(09! I /(! W8! (\$*\$(-,3%%-'2%! '+!50'6/0-L/.-'28!23,0\$/(!.\$%.-250!/29!,0-</.\$!,#/25\$!-2!M,\$/2-/8!/29!;MOVH1Xh!&'(09&-9\$!d3\$%.-'2%!\$E/<-2\$9!#('35#!.\$#-(!(\$*(\$%\$2./-4\$!%/<*\$0\$!/\$!# '&!9'!-</5\$%!'+!*\$(\$,/(-.7!9\$*-,\$9!-2!0-./3(\$!67!.\$'%%!&#'\$E*\$(-\$2,\$!/29!&(-.\$!/6'3.-!93(-25!-%!',,3((\$2,\$!9-+\$(!+(<!#'%!&(-..\$2!67!/3.#'(%!-2!\$2.-(\$07!9-+\$((\$2.-<\$!*\$(-'9%/6'3.-!/\$!*(\$,/(-.7!.\$7!#4\$!2'!.\$E*\$(-\$2,\$9x!G290!&#/.!/\$!.\$#!./9\$'++6\$.&\$2!.\$#!5\$(\$/.\$(4%-6-0-.7!'!&'(%!67!/3.#'(%!&#'\$!&(-.\$!/6'3.-!/\$!*(\$,/(-.7!.\$7!9'!2'!.\$E*\$(-\$2,\$8!/29!.\$'%%!&#'\$!,/2!%*\$!/\$)'!'+!*\$(\$,/(-.7!+(<!\$E*\$(-\$2,\$!63!0/,,)!.#.\$!4%-6-0-.7!+'(!.\$#-(!%.'(-\$%!.'!6\$!#\$/9x!

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b!F4!/!U-06\$(58*^2-4\$(%-7!'!+!T#\$++\$09!

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U'&!,/2!&\$!</)\$!%\$2\$%!'+!\$E*\$(\$%- '2%!'+!*\$(\$,/(-.7!?!-2!*'\$.(78!.\$\$/.\$8!+-,-'2!?!-2!/!&/7!./!./!/,,'32.%!+'(!.\$#!*/(-.,30/(!C3/0-.\$%!'+!,#/00\$25\$!(\$%.-25!-2!.\$#\$%!+'(<%!'!+/(.x!"#-%!*/*\$(!%\$%)%!. '9(/&'3.-!.\$#!*'0-.,/0!9-<\$2%- '2!'!+'\$.-,\$E*\$(\$%- '2!'2!.\$#!6/%-%!'!+!W\$'(5!at,#2\$(>%!/'DF#=\$8!/!+53(\$!./!.-2!</27!&7%!*\$(\$%'2+-\$%!*\$(\$,/(-.7!T./(-25!+(<!.\$#!2'-'2!'!'+!%\$%\$2.-/0!,#/00\$25\$!, '2./-2\$9!-2!/!<-2'(!0-./3(\$!@+'00'&-25!H\$0\$3L\$!/29!W3/../(-!XhYmA8!.\$#!*/*\$(!5'\$%! '2!'!.\$E*0'(\$!.\$#!, '29.-'2%!'+!*\$%-6-0-.7!'!+!/*'0-.,/0!/\$%.\$#.-,%!'!+'\$.(7!/29!*'\$.-,/0!\$E*\$(\$%- '2!6/%\$9!'2!.\$#!, '2,\$*.\$%!'+!-2.\$2%-7!/29!9\$.\$((-.'(-/0-L/.-'2!'!#-%!(\$/9-25!'!+!/\$%.\$#.-,%!(\$4\$/0%!.\$#-(!*'\$.2.-/0!+'(!,#/00\$25\$8!+'(\$24-%/5-25!0-+\$!.!6\$!'!.\$#(&-%\$!?!63!&#/.!</)\$%! '2\$!4\$(\$%- '2!'!+!#-%!<'(\$!, '<*\$00-25!.\$/2!'!.\$#(%x!a7!\$E*0'(-25!-2.\$2%-7!/%!/*!/(.-,30/(!C3/0-.7!'!+!/\$%.\$#.-,\$E*\$(\$%- '28!.\$#-%!*/*\$(!.\$2!<'4\$%!6\$7'29!H\$0\$3L\$!/29!W3/../(>%!*(-</7!+',3%! '2!</B'(!/29!<-2'(!0/253/5\$!/29!9\$4\$0'*\$!.\$#!2'-'2!'!+!-2.\$2%-7!-2.'!/<'(\$!*\$4/%-4\$!*('*(.7!-2#\$((\$2.-2!0-<-2/0!.\$E.%!:'!#-%8!.\$28!/00'&%!+'(!+329/<\$2./0!(\$+0\$,.-'2!'2!.\$#!4\$(7!, '2,\$*.'!'+!*\$.(78!/29!320',)%!/2!329\$(\$./29-25!'!+'\$.-,\$E*\$(\$%- '2!/!/2!\$%%\$2.-/007!0-<-2/0!*(/,.-,\$!./!.!0&7%!,'2.-2%!/2!32\$..0-25!<'<\$2.!'+!,#/00\$25\$!*

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\!K/(/!`/(-.<!N'9(-53\$%T\$0-%8!^2-4\$(%-9/9\$!]\$9\$(/0!H\$!^6\$(0z29-/!

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.#(\$/. \$2-25!6\$, /3%\$!2 ' .!(30\$!+(' <!&-.#-2!67!< '9\$(2!(/.- '2/0-.7>:!V.!-%!.#3%!.#/.! '3(!@* '0-.-, /0A!%*\$\$,#!
2\$, \$%%% /(-07!(3*.3(\$%!/29! '4\$(+0' &%!.#\$!< '9\$(2D, '0'2-/0!0'5-, %!'!+!@32A(\$/%'2!/29!< '4\$%!.' &/ (9%!
<30.-*0\$!.'253\$%! ' +!.#\$!* '\$.-, 1* '0-.-, /0!-2!&#-, #!\$2+0\$%#<\$2.! ' +!(\$/%'2!/29!#\$/0-25!\$<6(/, \$!' +!
.\$\$. \$((-.' (-\$%! '+D/%!0/29!/29!6'97! /(\$! , \$2.(\$9: !V! &-00! \$E*0' (\$! .#-%! \$2+0\$%#<\$2.! ' +!(\$/%'2!/29!

X!Q-<<7! ; /%/%!R0/3%\$28! i ' 2.-+j,-/!^2-4\$(%-9/9\$! ; /.k0-, /!9 '!N- '!9\$!Q/2\$-('

V2!.\$!XhYZ%/29!XhhZ%8!4/(-\$.-%!' +!*(\$, /(-.7!6\$, /<\$!/.!' 2,\$!, ' 2%3</60\$/29!%36B\$, .1*(' 93,-25!
9-%, ' <+.-25!/29!6\$/3.-+30!-2!/!%\$(-\$%' +!4-%3/0!, 30.3(/0!*(' 93,.-' 2%!.#/.!9\$4\$0 ' *\$9!' 2!.\$!6/%-%!' +!
2\$' 1 ` /0.#3%-/2!/\$%.#\$.-, %:!"#\$!(-0' 5-\$%!N'D%%2&)0%6)&!@N\$55-'!XhY[8!XhYY8![ZZ[A!/29!>%''%=%*Q](-,) \$!
Xhh[8!XhY\8! [ZXXA!/29!.\$!/94\$(-%-25!, /<*/-52%' +!a\$2\$.. ' 2!/29!.\$!a' 97!T# ' *!-24-.\$9!.\$\$-(!
/39-\$2,\$%!2' .!' 207!. ' !4-%3/0-L\$!e.#\$!&' (09f!/%!32-.7!63.!/0% ' !. ' !\$E*\$(-\$2,\$!./.!&' (09!-2!/!&/7!./.!
*' %-.-' 2\$9!.\$\$<!/%! <\$<6\$(%!' +!.\$\$!]-(%.! I ' (098! "#-(9! I ' (09! ' (!] ' 3(.#! I ' (09!@' +!-29-5\$2' 3%!

"#\$!/(.-,0\$!/-<%!. ' !9-%,3%%!.\$\$!* '\$2.-/0!' +!/\$%.#\$.-,* (/ ,.-,\$%8!/%!*\$\$(+' (<\$9!67!7' 325!*\$' *0\$!+(' <!
.\$\$!+/4\$0/%!/29!*\$(-*#\$(-\$%! ' +!N-' !9\$!Q/2\$-(' !. ' !9-%.3(6!/29!\$E,\$\$9!.\$\$!.\$(<%8!5/L\$%/29! *0/,\$%!
/..(-63.\$9!. ' !.\$\$<:!] (' <!/!9\$, ' 0' 2-/0!*\$(%*\$,\$.-4\$8!.\$\$!/(.-,0\$!*(' * '\$%\$!.. ' !9-%,3%%!## ' &!e*(\$,/(-.7f!

, ' < < 32-.\$%! -2! .#\$! +/, \$! ' +! 32, \$(./-2.7! .#/2! C3\$%- ' 2%! ' +! -9\$2.-.7: !V2! /! * / (/ 9-%- / 0! . ' 3(-% .! . ' & 2! -2!
2' (.\$\$/% .! a(/ L-08! 50' 6/0! \$, ' 2' < -, ! + ' (.32\$%! / 29! .(\$29%! < -5# .! (\$29\$(! * ' * 30/ .- ' 2%! & # ' ! (\$07! ' 2!
. ' 3(-% < ! 9-% * ' % / 60\$! N\$% 30.-25! / 2E\$-.\$%! ' 4\$(! .#\$! +3.3(\$! < \$/2! (\$%-9\$2.%! .3(2! . ' ! 32\$E*\$, . \$9!% ' 3(, \$%!
' +!, \$(./-2.7! & # \$2! .#-2)-25! ' +! & # / .! -% ! 2\$, \$% % / (7! . ' ! \$2% 3(\$! .#\$! . ' 3(-% .! -293% . (7! % 3(4-4\$% ! / 29! .#\$-(!
' & 2! 0-4\$% ! 5 ' ! ' 2! & -.#! .: ! ^%-25! \$.#2 ' 5(/ * #-, ! 9/ . / 8! V! # ' & ! .#\$7! 9(/ & ! ' 2! < 30.- * 0\$! \$2 < \$% # \$9! #-%. ' (-\$% 8!
9-++\$(\$2.07! -2+0\$, . \$9! 67! .#\$-(! (\$0/ .- ' 2% #- * ! . ' ! , ' 0' 2-/0! - < / 5-2/(-\$% ! / 29! , / * -./0! \$E, # / 25\$! . ' ! < /) \$!
% \$2% \$! ' +! .#\$! 32+ ' 09-25! * (\$% \$2. ! / < -9! .#\$% \$! +\$ / (% ! N\$%-9\$2.%! ' (-\$2./.\$! .#\$ < % \$04\$% ! . ' & / (9% ! 4/(- ' 3%!
.\$ < * ' (/ 0-.\$% ! & # \$2! + / 2. / %-\$% ! ' +! * / (/ 9-%\$! < /) \$! % \$2% \$! / % ! / ! < \$/2% ! ' +! / 2, # ' (-25! .#\$-(! ' & 2! 0-4\$% ! / < -9!
.#\$! 9\$.\$(-. ' (- / 0-% / .- ' 2% ! ' +! .#\$! . ' 3(-% .! \$, ' 2' < 7! / 29! -2! .#\$! * '\$. (7! ' +! 9' -25! % ' 8! \$2/ , .! / 29! 5\$2\$ (/ . \$!
.#\$-(! ' & 2! + (/ 5-0\$! & ' (09% ! ! # / .! \$ < \$ (5\$% ! -% ! .#\$! & / 7! .#\$! 9-%% ' 2/2.8! / ((7.# < -, ! * (\$% \$2, \$! ' +!, \$(./-2!
*\$ ' * 0\$! / 29! ' 68\$, .% ! , ' < \$! . ' ! (\$* (\$% \$2. ! / 2! / \$% .#\$- , ! % \$2% \$! ' +! .#\$! * ' . \$2.- / 0! + ' (! .#\$! , ' 2.-23/ .- ' 2! ' +!
, / * -./0! \$E, # / 25\$! .#(' 35# ! % ' , - / 0! , 0 / % % 68! (/ .#\$! (! .# / 2! % ' 0\$07! / 2! \$2, ' 32.\$ (! & -.#! .#\$! ' .#\$ (: ! " (/ , -25! & -.#!
/ \$% .#\$- , % ! .#\$! & / 7! + / 2. / %-\$% ! 0\$ / 9! . ' ! < ' 9\$% ! ' +! * ' & \$ (! & #-, #! / % 3 / 5\$! / 2! \$ < 6 ' 9-\$9! % \$2% \$! ' +! * (\$, / (-.7!
5-4\$% ! 3% ! / ! < ' (\$! 23/2, \$9! 329\$ (% . / 29-25! ' +! .#\$! & / 7% ! * \$ ' * 0\$! 2/4-5/ . \$! , / * -./0! / 29! , ' 0' 27: !
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