



< 20F;!W5!P5;! f 20F2;!P5! S 5;!BNS%(&#;!P5;!X!V2#(!75![9:@?\5!"#\$%&'%%)#2-!Y2.% )0\$!2#F!  
+0) . (\$(\$!&#!"##(02R(#.4!M)--2, )02%&)#D!` O(!M2\$(!)\*!YB S =!M)0N\$5!EF1)G@1%'2\*#)HII'1J)"&)  
6. =-'2)G+@ '#7(%\*('"#9): K[?;! ?J9^?T@5!O%%N\$D F)&5)0R @:5@@TT :9TJ:TK:@TTKJLJK!  
!  
< 20F;!W5!

< 20F;!W5!P5!9: @I5! f )- '#%20&\$C5!"#! / %(NO(#!V5! / .O( .O%(0![BF5\;!G@I%'2\*#)T" I1%#\*#2I5!  
S 2. C&--2#5!

!

U02\$\$(;! ] 5!X! < 20F;!W5!P5!9: @J5!=NN-4&#R!M) )N(02%&1(!7&)-)R&. 2-!` O( )04!%)! ] )#N0)\*&!  
] (%E)0G\$5!!"#! S )00&\$;!e5!X! S &--(0A/ % (1(#\$;!W5![BF5\;!G+I\*#2'##?)O"--\*="%"\*( '#' )EF1 "%/U  
> "+I-79)E/\$"- "? '179)\*#+)QI'+I#2I! ] (E! j )0G5!Z) '%-(FR(5!!!

!

+ ! "' '%\*

< 20F;!W5!P5!h"\*! < (!/21(!=C(0&M)0N\$;! "%! S 24!B#F!3N!/21&#R!3\$5i!B\$\$24;!L. &&'#?("#)6"7(P!  
=N0&-!@K;!9: @T5!

!

< 20F;!W5!P5!h/ (01&#R!M)CC '#&%4!2#F!M) '#%04!20(! < )0%O!%O(! ] 2%&)#2-!"#1(\$%C(#%5i!6NA(F5!  
0I\*(-I)E'@17P! 6 .% ) , (0!9;!9: @J5!

!

< 20F;!W5!P5!hg) E! S 4!=F1(#% ' 0(!&#! ] 2%&)#2-! / (01&. (!M2C(!% )! /O2N(!%O(!Z(\$%!) \*! S 4!V&\* (5i!  
B\$\$245!L. &&'#?("#)6"7(



V2#(;!75;! f 20F2;!P5;!BN\$%(&#;!P5;!X! < 20F;!W5!P5![ ] ) 1(C , (0!9 : @K\5!h= !M2\$(!+0(\$(#%2%&#)!) \*!  
%O(!YB S =M)0N\$! S )F(-D!=!Y(F(02-!=R(#.4!+20#(0\$O&N;!\*0)C!"#. (N%&#)!)!"CN-(C(#%2%&#)5i!  
G77"2'\*(("#)&"%)H171\*%2F)"#! "#\$%"&'()V%?\*#M\*("#7)\*#+), "-.#(%%/)G2("";!P(#1(0;!M65!  
!

f 20F2;!P5;!BN\$%(&#;!P5;! < 20F;!W5!P5;!X!V2#(;!75;![ ] ) 1(C , (0!9 : @K\5!hYB S =M)0N\$D! 6#(!  
j (20!2\*(0!"CN-(C(#%2%&#)5i!G77"2'\*(("#)&"%)H171\*%2F)"#! "#\$%"&'()V%?\*#M\*("#7)\*#+)  
, "-.#(%%/)G2("";!P(#1(0;!M65!  
!

U02\$\$(;! ] 5!X! < 20F;!W5!P5![ ] ) 1(C , (0!9 : @K\5!h`0(!"#\*- '(#.(!)!60R2#&b2%&#)2-!  
M0202.(0&\$%&\$. \$;! S 2#2R(0&2-!M2N2.&%4;!/ ' , \$(.%)0! f 20&2%&#)#!2#F!Z(R'-2%&#)#!] )#N0)\*&#!  
V) , ,4&#R! = .%&1&%45i!G77"2'\*(("#)&"%)H171\*%2F)"#! "#\$%"&'()V%?\*#M\*("#7)\*#+), "-.#(%%/)  
G2("";!P(#1(0;!M65!  
!

< 20F;!W5!P5!2#F! S &--(0A/%(1(#\$;!W5![ ] ) 1(C , (0!9 : @L\5!h=1)&F&#R!7)0(F!7)20F\$D!  
3#F(0\$%2#F&#R!%O(!S )%&1(\$!)!7)20F! S (C , (0\$5i!G77"2'\*(("#)&"%)H171\*%2F)"#! "#\$%"&'()  
V%?\*#M\*("#7)\*#+), "-.#(%%/)G2("";!g 20%\*)0F;!M`5!  
!

U02\$\$(;! ] 5!X! < 20F;!W5!P5![ ] ) 1(C , (0!9 : @L\5!h=NN-4&#R!M)N(02%&1(!7&#)-)R&.2-!`0(04!%)!  
] )#N0)\*&#! ] (%E)0G\$5i!G77"2'\*(("#)&"%)H171\*%2F)"#! "#\$%"&'()V%?\*#M\*("#7)\*#+), "-.#(%%/)  
G2("";!g 20%\*)0F;!M`5!  
!

< 20F;!W5!P5![ ] ) 1(C , (0!9 : @9\5!mM'-%&12%&#R!+' , -&.!/(01&.(!S )%&12%&#)#!%00)'RO! ] 2%&#)2-!  
/(01&.(D!=!-)#R&% 'F&#2-!\$'F45m!G77"2'\*(("#)&"%)H171\*%2F)"#! "#\$%"&'()V%?\*#M\*("#7)\*#+)  
, "-.#(%%/)G2("";!#F&2#2N)-&\$5!  
!

< 20F;!W5!P5!2#F! S &--(0A/%(1(#\$;!W5![ ] ) 1(C , (0!9 : @9\5!h S )%&12%(F!)!/(01(D!=!+' , -&.!  
/(01&.(!S )%&12%&#)#!+(0\$N(.%&1(!)#!] )#N0)\*&#!7)20F! S (C , (0\$O&N5i!G77"2'\*(("#)&"%)H171\*%2F)  
)"#! "#\$%"&'()V%?\*#M\*("#7)\*#+), "-.#(%%/)G2("";!#F&2#2N)-&\$5!  
!

< 20F;!W5!P5!![ 6 . % ) , (0!9 : @9\5!hU(%&#R!`O&#R\$!P)#(D!+0(F&.#&#R!+20%&.&N2%&#)#!&#!  
=C(0&M)0N\$5i!O".(F1\*7(I#)#O"#&I#21)&"%)6. =-2)G+@'#7(%\*("#;!M)02-!/N0&#R\$;!YV5!  
!

f 20F2;!P5!2#F! < 20F;!W5!P5![ ] ) 1(C , (0!9 : @@\5!h+(0.(N%&#)#!)\*!/(.%)0!P&\*(0(#.(\$!&#!2!  
/4\$(C!)!M20(D)!`0(!B8&\$%&#R!  
!



T1''%?'\*)0".(F1%#)X#I1%7'(/)

U02F'2%(! +7=P!T@LK!^!+' , -&. !2#F! ] )#N0)\*&&! S 2#2R(C(#%!!

+7=P!TJL@!^!+' , -&. !+0)R02C!B12-'2%&)#!!

+7=P!TJL9!^!+' , -&. !+)-&.4!!

! +7=P!T@LK!Y6V!^!





9:@LA9:@K! Y2.'-4!/(20.0!M)CC&%(;"#\$%&'(!)\*!+',-&.!/(01&.(!)/(2%%-(!  
3#&1(0\$&4;!(#'#0(!%02.G!N)\$&&#;!\$N(.&2-&b2%&)#D!N',-&.!N)-&.45!  
/'..(\$\$\*'-!O&0(5!

!  
!  
!

9:@9A9:@L! M)AM02&0;!M'00&. '- 'C!Z(1&\$&)#!2#F!=\$\$(\$C(#!M)CC&%(;  
"\$%&'(!\*)0!+',-&.!2#F! ] )#N0)\*&!/%'F&(\$;!U()0R&2!/ )'!O(0#!  
3#&1(0\$&45!

9:@9A9:@L!

9: @>! =\$\$&\$%(F!%0(!%2%(!.)CC&\$\$&)#!)#!#2%&)#2-!2#F!.)CC '#&%4!\$(01&.(!  
[/ (01(! < 2\$0&#R%)#\!)0R2#&b(!\*) . '\$!R0) 'N\$!\* )0!%O(&0!h\$%2%(!)\*!  
\$(01&.(i!0(N)0%;!EO&.O!..)C(\$!) '%!(1(04!\* (E!4(20\$!  
!  
!  
!  
9: @J! B8N(0%!B12-' 2%&)#!Z(1&(E(0;!/ ) . &2-!'##)12%&)#!Y' #F;!  
M)0N)02%&)#!\*)0! ] 2%&)#2-!2#F!M)CC '#&%4!/ (01&.(!  
9: @J! =C ,2\$\$2F)05!!Y02#G-&#!+0)c(.% ;!` O(!=\$N(#!"#\$\$&% '%(5!

\*