

!"#\$%&'()*+,-./01&2/0-345&&

!"#\$%&'()*+,-./01&2/0-345&

67,0-489,& : -8; ,38),& ' (\$!%<8=-, ;& ""*">*#>?k.,98=, ;&#%*"**#A<k#B*"@"#<k>*"C*"#<k#&#B*" "<kC* ">*"@<kB*@D*"!<k!"**"D<k%*B*@#&k

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

E0/ ; , F80k/GG(8)4F ,)4=k/4k4H, & I)89 , . =845k (Jk K8==(-.8k0-...)435k/. , & ;898 ; , ; &8)4(k4L (& F /8) & 0/4, M(.8, =Nk. , M-3/ .& /) ; &) (* . , M-3/ .& I) ; , . &4H8=k, 7, 0-489, & M-8 ; , 38) , <k. , M-3/ .& J/0-345k=H/33k O, & . , J, . . . ; &4 (& / =kP4,) - . . ; & /) ; &4 ,) - . , &4 . /01Qk/J/0-345k</) ; &4H8=kM. (-Gk=H/33kO()48) - , &4 (& 8)O3- ; , &4H, &4 . / ; 848 () /3kJ/0-345k (Jk4H, &8) =484-48 () \$k 670, G4kL84Hk. , M/ . ; &4 (&4H, & ; , J8)848 () =k 38=4, ; &H, . , 8) <k!"#\$%&'#() * # +) % # \$ % , - - * # . , / *) % ! 0 % I ' * * 2 ! # 3) % 4 , + 5) (% + 0 + 2 4) & ' * , 4 % I , . ' * ! 6 % , + (% # \$ % + 0 !) (% \$ # & +) (% ! 0 % , ((4) \$ \$ % , . , () 3 # . % , - - 0 # + ! 3) + ! \$ % 0 ! % , + 6 % 0 ! ') 4 ! 6 -) % # + . ' * (# + & 7 % / ' ! % + 0 ! % * # 3 # !) (% ! 0 7 % I ' * * 2 ! # 3) % ' + 4 , + 5) (7 % - , 4 ! 2 ! # 3) % + 0 + 4) & ' * , 4 % I , . ' * ! 6 7 % , + (!) + ' 4) (% , + (!) + ' 4) % ! 4 , . 5 % I , . ' * ! 6 8 &&

' () * . , M-3/ .& J/0-345k=H/33kO, & ;898 ; , ; &8)4(k4H. , & M. (-G=NkR" S&J-33*48 F , <k. /) 1 , ; <k) () * . , M-3/ .& J/0-345kR () * 4 ,) - . , &4 . /01kR ' ++S&J/0-345S?kR@S&J-33*48 F , <k- . /) 1 , ; <k) () * . , M-3/ .& J/0-345?k/) ; & R ! S&G/ .4*48 F , <k) () * . , M-3/ .& J/0-345kR/ ; T-) 04kJ/0-345S&U" V\$&

+H, & . , W-8. , F ,)4=k ; 8=48)M-8=H8)MkO, 4L , ,)k/ & J-33*48 F , <k. /) 1 , ; &) () * . , M-3/ .& J/0-345k F , F O , . & /) ; & / & J-33*48 F , <k- . /) 1 , ; &) () * . , M-3/ .& J/0-345k F , F O , . & =H/33kO, & F / ; , & /4k4H, & O / F G =k 3, 9, 3&k XH83, & F /) 5k (Jk4H, & J-33*48 F , & - . /) 1 , ; &) () * . , M-3/ .& 4843, =k L833k) (4kO, & , 38 F 8) /4 , ; <k84k8=k 8 F G38084k8) &4H8=kM-8 ; , 38) , &4H/4k4H, &8) ; 898 ; - /3=k4H/4k F , , &4k4H, & W- /38J80/48 () =k J (. & ' ++k J/0-345k =H(-3 ; & . , 0, 89, & /) & /GG. (G.8/4, & ' ++k J/0-345k4843, & / =k ; , =0.80, ; &8) &4H, & J(33(L8)Mk=, 048 () \$k&Y) & F (=k08.0- F =4/) 0, =k) () * 4 ,) - . , &4 . /01kJ/0-345k F , F O , . & =k L H (& H / 9, & G.8 F / .5k / -4H (.845k8) & . , = , / .OH<k (.&4 , /OH8) M<k (.&038) 80/3ZG. (J , ==8 () /3kG. /0480, <k (. & , 74 ,) =8 () & ; -48, =k=H(-3 ; & . , 0, 89, & 4843, & OH/) M, =k /GG. (G.8/4, &4 (& . /) 1 , ; & ' ++k G (=848 () =k /4k4H, &48 F , & (Jk=-OHk. , /GG(8)4F ,)4=kU@V\$&

+H8=kM-8 ; , 38) , & /GG38, =k4 (& /33k) , L35*H8. , ; & ' ++k J/0-345k F , F O , . & /) ; &4 (&4H (=, &) () * . , M-3/ .& J/0-345kLH (& / . , & . , /GG(8)4 , ; &8)4 (& ' ++k J/0-345kG (=848 () =k /4k4H, &48 F , & (Jk=-OHk. , /GG(8)4F ,)4=k

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

+H, . , & =H/33kO, & =87k F / 8) &45G, =k (Jk J-33*48 F , <k. /) 1 , ; & ' ++k J/0-345k&k 6 /OHk=H(-3 ; & H / 9, & G.8 F / .5k . , =G () =8083845k8) & / & =8) M3, & / . , /N&4 , /OH8) M<k (. & . , = , / .OH<k (.&038) 80/3ZG. (J , ==8 () /3k G. /0480, <k (. & , 74 ,) =8 () & /0489848, =k <k (.&380. / .8, =k&k+H, &4843, =k=H(-3 ; &8 ; ,) 48J5k4H, & / . , / \$k X 84H8) & , /OHk / . , / <k4H, . , & =H/33kO, &4H. , & . /) 1 =Nk&

"\$ \ , = , / .OH&J/0-345kR \ , = , / .OH&] . (J , == (.<kE== (08/4, & \ , = , / .OH&] . (J , == (.<kE==8=4/) 4k \ , = , / .OH&] . (J , == (.S&

@ \$ + , /OH8) M&J/0-345kR + , /OH8) M&] . (J , == (.<kE== (08/4, & + , /OH8) M&] . (J , == (.<kE==8=4/) 4k + , /OH8) M&] . (J , == (.S&

! \$ ^ 3 8) 80/3Z] . (J , ==8 () /3k] . /0480, & J/0-345kR ^ 3 8) 80/3k] . (J , == (.<kE== (08/4, & ^ 3 8) 80/3k] . (J , == (.<kE==8=4/) 4k ^ 3 8) 80/3k] . (J , == (.& (.&] . (J , ==8 () /3k] . /0480, &] . (J , == (.<k

$$E = (08/4, k] \cdot (J, =8()/3k] \cdot /0480, k] \cdot (J, =(\cdot k E = 8 = 4 /) 4k] \cdot (J, =8()/3k] \cdot /0480, k$$

8)4, .98, L=L84H(-)84< ; ,G/.4F,)4</ ; Z(.&0(33,M,&J/0-345&F, FO, .=\$&+H, &=-00, ==J-3&
0/); 8;/4, =&H(-3; &; , F()=4./4, &G(4,)48/3&J(.&, 70, 33,)0, &8)&4H, &G.8F/.5&/ ., /&(J&4H, 8.&
/GG(8)4F,)4=&R, \$M\$<&4, /OH8)M<&. , =, / .OH<&038)80/3ZG. (J, ==8()/3&G./0480, <&, 74,)=8()&(.&380./ .5S&
/=&L, 33&/=&8)&4H, &=, .980, &/); &G. (J, ==8()/3&/=G, 04=&. , 3/4, ; &4(&4H, 8.& ; 8=08G38) , =&/); &4H, 8.&
G(=848()=\$&

: \$. ;%#0;<(=%1'+%\$(DE)%' ,#,'*+-(1*0(D#'?'>*-','*+&
fG, 08J80&W-/38J80/48()=&J(.&, /OH&. /) 1&=H/33&O, &; , 4, .F8) , ;&05&4H, &; , G/.4F,)4</ ; Z(.&0(33,M,&
L84H&/GG. (9/3&05&4H, &G. (9(=4\$&+H, &L(.13(/ ;&. , W-8. , F,)4=&J(.& ' ++&J/0-345&F, FO, .=&
=H(-3; &O, &=G, 33, ; &(-4&8)&; , 4/83&8)&/ ; 9/)0, \$&2(.&4, /OH8)M&/GG(8)4F,)4=&<&4H, ., &=H(-3; &O, &
03, / .35&/ .480-3/4, ; &4, /OH8)M&/=8M) F,)4=&/); &4, /OH8)M&3(/ ;=&8)03- ; 8)M&/; T-=4F,)4=&F / ; &
J(.&3/ .M, &03/==, =&(.&O(-. =, =&L84H&F - 348G3, &=, 048()=\$& \ , =, / .OH&/GG(8)4F,)4=&=H(-3; &=G, 33&
(-4&4H, &=G, 08J80&. (3, =&<& ; -48, =&<&M./)4&G. (T, 04=&/); &, 7G, 04/48()=&J(.&J-4- . , &J-) ; 8)M\$&
^38)80/3ZG. (J, ==8()/3&G./0480, &380./ .8/)<&038)80/3&; , G/.4F,)4&J/0-345&/GG(8)4F,)4=&=H(-3; &
03, / .35&/ .480-3/4, &4H, &=G, 08J80&. (3, =&<&. , =G()=8083848, =&/); &G, .J(.F /)0, &, 7G, 04/48()=&J(.&
; , 389, .8)M&038)80/3ZG. (J, ==8()/3&G./0480, &380./ .8/)&(.&038)80/3&; , G/.4F,)4&J/0-345&=&, .980, =\$&
674,)=8()&/GG(8)4F,)4=&=H(-3; &; , =0.80, &4H, &=G, 08J80&, 74,)=8()&/0489848, =&/); &(-438) , &
. , 3/48()=H8G=&L84H&4H, &; , G/.4F,)4\$&

c \$. *+,0#',(F%+/,?&

,74,) - /48)M&08.0- F=4/)0,=k,78=4\$670,G4kJ(.k^38)80/3Z].(J,==8()/3k]./0480,<k^38)80/3k
b,G/.4F,)4k2/0-345<k/);k'+++kJ/0-345kLH(,k=3/.8,=k/.,&J-);,;k8)&LH(3,k(.k8)&G/.4kO5k
M./)4*; ,G,); ,)4k=(-.0,=k(Jk.,9,)- ,<k'+++kJ/0-345kL84Hk4L(k4(Jk89,k5,/.=k(Jk0(=,0-489,k
=, .980,kL84HkG(=8489,k/))- /3k,9/3-/48(=kL833k.,0,89,k=87kF()4H=e&k)(480,k(Jk)(. ,),L/3k
-)3,==k,74,)-/48)M&08.0- F=4/)0,=k,78=4k/);k'+++kJ/0-345kL84HkF(.,k4H/)&J89,k0(=,0-489,k
5,/.=kL84HkG(=8489,k/))- /3k,9/3-/48(=kL833k.,0,89,k/kF8)8F-Fk(Jk/k(),*5,/.k)(480,k(Jk
(. ,),L/3k-)3,==k,74,)-/48)M&08.0- F=4/)0,=k,78=4k

h\$ >0*&*,'*+*(1(688(:#'9;,<k

fG,08J8,;k0.84.,8/kJ(.kG.(F(48(k)/);k; ,=0.8G48(k)(Jk4H,kG.(0,==k=-,;kJ(.kG.(F(48(k)k8)k./)1k
=H(-3;k0,k=G,33,;k(-4kO5k4H,k=OH((3<k0(33,M,k(.k/0/; ,F80k-)84k/);k/GG.(9,;kO5k4H,kG.(9(=4k
8)k/;9/0),Skk+H,k; ,9,3(GF,)4k(Jk=G,08J80k0.84.,8/k/);kM-8; ,38),=k=-,;k4(k; ,4, .F8),k
=4/);/.;=k(Jk,70,33,)0,kJ(.kG.(F(48(k)kG-.G(=,=k=H(-3;k0,k4H,k.,=G(=)8083845k(Jk4H,k
; ,G/.4F,)4Z-)84k=-OT,04k4(k/GG.(9/3kO5k/k/; ,/)k(.k;8.,04(.kU%Vk/);k4H,kG.(9(=4k
69/3-/48(k)/.,/ =k=H(-3;k0,k0(=)8=4,)4kL84Hk4H,k,=4/O38=H,;k/0/; ,F80k=4/);/.;=kJ(.k, /OHk
;8=08G38),Skk+H,k; ,08=8(k)4(k/GG35kJ(.kG.(F(48(k)kL(-3;k0,k(k),k4H,k'+++kJ/0-345kF,FO, .k
0(-3;k,3,04k(.k)(4?k/))- /3k.,98,L=k=H(-3;k0,k9/3-/O3,k8);80/4(.=k(Jk4H,k/GG380/)4e=k
.,/;8),=kJ(.kG.(F(48(k)kSkk+H,k; ,08=8(k)k(k)/kG.(F(48(k)k/GG380/48(k)k(Jk/k'+++k/0/; ,F80k
/GG(8)4F,)4k=H(-3;k)(4k0/..5k/-4(F/480k.,L/.;=kR/G/.4kJ.(F&OH/)M,k8)k4843,Sk(.kG,)/348,=k
J.(Fk4H,k0(33,M,<k=OH((3k(.k/0/; ,F80k-)84kG.(98; ,;kH(L,9, .<k4H/4k/k_80./ .8/)kYk
0(=)8; ,.; ,kJ(.kG.(F(48(k)k4(k_80./ .8/)kYYk; - .8)M&H8=k(.kH, .k=874Hk5, / .k(Jk,FG3(5F,)4k/=k/k
_80./ .8/)kYk/);kLH(k8=k)(4kG.(F(4,;k4(k_80./ .8/)kYYkF/5k0,k=-OT,04k4(k/-4(F/480k
(. ,),L/3k

69/3-/48(k)(Jk4H,k0/);8;/4,e=k/GG380/48(k)kJ(.kG.(F(48(k)k=H(-3;kJ(0=)k(k)k4H,k=G,08J80k/.,/k
(Jk/GG(8)4F,)4k i k4, /OH8)M<k.,=,/.OHk038)80/3ZG.(J,==8()/3kG./0480,<k,74,)=8(k)&(k.380./ .5k i k
/=kL,33k/=k=, .980,k/);kG.(J,==8()/3k/0489848,=k.,3/4,;k4(k4H/4kG.8F/.5k.,=G(=)8083845k
Y)kG.(F(48(k)k0(=)8; ,./48(=)k4H,k4(4/3k0()4.80-48(k)k(Jk4H,kJ/0-345kF,FO, .k4(k4H,kF8==8(k)
(Jk4H,k=OH((3<k0(33,M,k(.k/0/; ,F80k-)84k(9, .k/k=-4/8),;kG, .8(;k(Jk48F,k=H(-3;k0,k4/1,)k
8)4(k0(=)8; ,./48()Skk+H8=k8)03-; ,=k0(FG.,H,)=89,k; (0-F,)4/48(k)(Jk4H,kG(=848(k)<k
8)03-;8)M&k/3,44, .k(Jk/GG(8)4F,)4k8; ,)48J58)M&H(F,k; ,G/.4F,)4k(.k-)84k/);k4H,k8)848/3k
G(=848(k)k; ,=0.8G48(k)<k0(F F-)80/48(k)=k; ,4/838)M&OH/)M,=k8)kG(=848(k)k.,=G(=)8083848,=k(k/);k
)5k(4H, .k=4/4, F,)4=k.,M/.;8)M&k,7G,04,;kG, .J(.F/)0,Sk
6/OHk0/FG-=k=H/33k/; (G4k/kG.(F(48(k)kG.(0,==k4H/4k8)9(39,=k/4k3,/=4k(),kJ/0-345k0(F F844, ,k
0(FG(=,;k(Jk(k),k(.kF(.,k'+++kJ/0-345k/4k4H,kG.(F(4/O3,k./)1k(.k/0(9,<k/);k(),k(.kF(.,k
4,)-.,;kJ/0-345k8Jk=-OHk'+++kJ/0-345k/);k4,)-.,;kJ/0-345k,78=4\$kk+H,k0(F F844, ,k(.k

K\$ >#0,'"')#,'*+'+(:#'9;,<(G*H%0+#+'%&

' ++&J/0-345&F, FO, . =e&. (3, &8)&J/0-345&M(9, .)/0, &=H/33&O, &/ .480-3/4, ; &05&4H, &8); 898; -/3&
O/FG-=&L84H8)&4H, &38F84=&(J&4H, &I)89, . =845&(J&K8==(-.8&^(33,04, ; &\ -3, =&/); &\ , M-3/48()=\$&
+H, &M(/3&8=&4(&8; ,)48J5&L/5=&J(.&4H, &' ++&J/0-345&F, FO, . =&4(&H/9, &/&9(80, &L84H8)&4H, 8. &
O/FG-=&/); &0(33, M, <&=0H((3&(.&/0/; , F80&-)84&/); &4(&O, &8)9(39, ; &8)&J/0-345&M(9, .)/0, &
LH, . , &/GG. (G.8/4, \$&&&

&&

IJK&+H, &O/4, M(.8, =&(J&' ++<&-) . /)1, ; <&)()*. , M-3/ .&J/0-345<&/); &G/ .4*48F, <&)()*. , M-3/ .&J/0-345&
8)03- ; , &; 8JJ, . ,)4&J/0-345&4843, =&/==(08/4, ; &L84H&, /OH&0/4, M(.5&&f, 048()& [&(J&4H8=& (0- F ,)4&38=4=&4H, &
J/0-345&4843, =&/==(08/4, ; &L84H&4H, &' ++&M. (-G&&+843, =&/==(08/4, ; &L84H&4H, &-) . /)1, ; <&)()*. , M-3/ .&
J/0-345&M. (-G&8)03- ; , <&O-4&/ . , &) (4&38F84, ; &4(<&8)=4. -04(.<&3, 04- . , .<&=,)8(.&3, 04- . , .&/); &98=848)M&
G. (J, ==(. \$&+H, &4843, &(J&98=848)M&G. (J, ==(. &=H/33&()35&O, &- , ; &J(.&4H(=, &J/0-345&()&4, FG(. / .5&
/GG(8)4F,)4=\$&] / .4*48F, &(.&0(- .4, =5&/GG(8)4F,)4=&=H/33&O, &0()=8; , . , ; &/; T-)04&/GG(8)4F,)4=&/); &
8)03- ; , &=-0H&4843, =0.26.T2(G2(8)/)0.2(4)0.2(,)0.2(; &L)-0.2(8)0.2(4)0.2(H&,)0.5.225-7H&, 848- ; , H; &LH&4H, , -