





"#\$%&!%'()*!+, ' -), !. /O!12*)O34!56*2!7-893)8: 6' 1!;!<; * -8! =>>?!(')*@A81!; B!

9*: 31*235C!3!D*D!; B!7-3O23!: *!E6/!)' 2, : ' 56CF!

GHI HJ KL&M!; !E6' 6!1' 18: 6!NB2!-/D' ;')368281!*)13: 356-*O33!7-893)8: 6*P!M!

E6/!)' 2, : ' 56C!9*: 31*2!?!>!7' 528): 3Q!185<O8; !7-893)8: 656; *!. ' -35*!

L3D' 2*8; 3A*!\$2C03: *!3!7' 6' 1!7' A63!A86B-8!78-; BQ!(')!G2*)313-*!

G2*)313-' ; 3A*!R/63: *!S6' !NB2*!1' <!-*N' 6*!)' !E6' (' !T !<!NB2!

9*1856368281!-/D' ;')3682<!*)13: 356-*O33!7-893)8: 6*P!+' !E6' (' !<!8U8!

: 8D' 6' -' 8!D' -' 6D' 8@7-*;)*@; -81<!NB2!7' 1' U: 3D' 1!-/D' ;')3682<!

*)13: 356-*O33!7-893)8: 6*P!+' !E6' (' !<!9*: 31*25<!N39: 85' 1P!!

"#\$%&!GB!7' 1: 368@d*D38!/!; *5!NB23!' , 3)*: 3<! 6!; : 8O: 84!7' 2363D3!R/63: *@

D' ()*!56*2' !<5: ' @A6' !' : !56*: 86!7-893)8: 6' 1F!%*D!; B!5-*; : 3; *23!7')Q')B!

D!' 6: ' O8: 3<1!VJ W!7' 9): 8(' !\$2C03: *!3!: *A3: *XU8(' !R/63: *F!

GHI HJ KL&GB!9: *868@d/!18: <!; *!E63!; ' 7-' 5B!856C!')3: @: *; 8-: ' 8@6*D' 4!5!

'): ' 4!56' -' : B!)' ;' 2C: ' !' NU34@;!) -/(' 4!56' -' : B@1: 8!D*, 865<@' : !

7-8)82C: ' !5' ' 6; 8656; /XU34!)8456; 3682C: ' 563!' 6; 86P!%,)B4!-' 55345D34!

7-893)8: 6@d*,)B4Y!: /!/: *5!: 8!6*D!1: ' (' !NB2' !3Q@356' -3<!



' 6: ' O8: 34!T !7-3Q') 36!- *9' A*-' ; * : 38P!K! ; ' 9: 3D*86!D*D* <[6' @\>> &>=&>>]!D!
5' , *28: 3X@/ ; 8-8: : ' 56C! ; !6' 1@A6' !E63! ' 6: ' O8: 3<!/2/AO36C! : 8 ; ' 91' , : ' @
7' 6' 1/!A6' ! : *5!) -/9C<13! : 8!5A36*X6P!L *5! : 8!5A36*X6! : 3!) -/9C<13@ : 3!
-* ; : B13!7*-6: 8-



;*, : B@: ' !; ' ' NU8@<! : 3D' ()*!: 8!5A36*X@A6' !; ' 6!6*1!; 56-863235C!); *!
A82' ;8D*@7' , *23!) -/(!) -/(/!-/D3!3!13-!56*2!) -/(31P!S6' !6*D*<!
/7-' U8: : *<!; /-: *23565D*<@D*D!7-*; 32' @3: 68-7-86*03<!6' (' @A6' !
7-' 35Q')36P!S6' @D*D!7-*; 32' @; 58[6*D3!(' 5/)*-56; 8: : *<!7' 2363D*!;!
N' 2CO3Q!56-*: *Q!; 8UC!) ' ; ' 2C: ' !3: 8-03' : : *<@3!856C!8U8!6*D*<!; 8UC@D*D!
: *03' : *2C: B8!3: 68-85B!56-*: @D' 6' -B8!6' , 8;! ') : ' A*5C8!; 8!18: <X65<P!
I 3)8-B!56-*: !7B6*X65<! ' 656*3; *6C!E63! : *03' : *2C: B8!3: 68-85B!R' E6' 1/!
7-3!; 584!\>>f!>>]!5/)CN' : ' 5: ' 563!E63Q!; 56-8A!<@A856: ' !(' ; ' -<@: 3D' ()*!
' 6!: 3Q!; 8!;)*2!A6' [6' !6*D' (' !^; */_!D' 513A85D' (' !K!E6' !; !7' 2: ' 4!18-8!
7-318: 31' !D!E6' 4!; 56-8A8!; !V2' ; 8: 33P!

"#\$%&!R' 5B2*2!23!. 82B4!) ' 1!D*D38[23N' !53(: *2B!78-8)!E6' 4!; 56-8A84@
/D*9B; *XU34!6' @A6' !*18-3D*: 0B!Q' 6<6!Q' -' O3Q! ' 6: ' O8: 34@A6' [: 3N/)C@
A6' NB!/D*9B; *2' !: *!6' @A6' !. /O!9*(2<: 86!; !)/O!/R/63: /F!

GHI HJ KL&. /O!: 3D' 1/! : 8!) *; *2!9: *6C@A6' !' : !5' N3-*865<!9*(2<: /6C!; !)/O/!
R/63: /P!L86!6*D3Q!53(: *2' ; P!R' !D-*4: 84!18-8@7' !1' 84!23: 33!<!3Q! : 8!
' U/U*2P!g8, (' 5/)*-56; 8: : B8! ' 6: ' O8: 3<@' : 3!, 8!6*D38!1: ' (' (-*: : B8@
1: ' (' !D*: *2' ; ! NU8: 3<P!V84A*5@D!5' , *28: 3X@56*2' !18: CO8h!; !A8!@
: *; 8-: ' 8@: 3A8(' !Q' -' O8(' !: 86P!L' @; ' ' NU8@3Q!) ' ; ' 2C: ' !1: ' (' P!R' !1' 84!
23: 33!6*D3Q!53(: *2' ; !: 8!NB2' P!. B2' !7' : <6: ' @A6' !: ' ; B4!7-893)8: 6P!e!
: 8(' !856C!D*-6[N2*: O! : *!D*D38[6' !: ' ; B8!7')Q')B!H: !: 8!9*2' , : 3D!-*: 88!
5' ; 8-O8: : BQ! ' O3N' DP!L!/E6' !D*D38[6' !5*1B8! NU38!6*D38!-*55/,)8: 3<P!W!
; ' 6!D*D3Q[6' !53(: *2' ; !D' : D-86: BQ!<@7' !D-*4: 84!18-8@: 8! U/632P!



"#\$%&!H): 31!39!-89/2C6*6' ; !E6' 4!; 56-8A3!56*2' !6' @A6' !. /O!5' ' NU32!R/63: /! !
 : *18-8: 3<Q!VJ W!; B463!39!)' (' ; ' -*!7' !7-' 63; ' -*D86: ' 4! N' -' : 8!c6' !; !
 %-8128!)/1*23! N!E6' 1F!L8D' 6' -B8!D' --857' :)8: 6B!/6; 8-,) *X6@A6' !
 318: : ' !; BQ')!VJ W!39!)' (' ; ' -*!56*2!1' 63; *O384!)2<!- *9-*N' 6D3!
 5; 8-09; /D' ; ' (' !' -/, 3<!; !# 5533P!V' (2*53685C!23!; B!5!E631!/6; 8-,)8: 381F!
 L *5D' 2CD' !; * , : B1!NB2!; ' 7-' 5!7-' 63; ' -*D86: ' 4! N' -' : B!)2<!
 7' 2363A85D' 4!A*563!*18-3D*: ' [-' 55345D3Q! 6: ' O8: 34F!

GHI HJ KL&!GB!9: *868@; ' ' NU8@N89/52' ; : ' @)' (' ; ' -: B8! 6: ' O8: 3<!T !E6' !: 8D* <!
 6*D* <!58-C89: * <!X-3)3A85D* <! 5: ' ; *!1: ' (' !A8(' !S6' !3!: 8D* <!535681 *!
 (*-*: 634@3!535681 *@D' 6' -* <!7' 9; ' 2<86!\>>&b&>>]!7' : 31*6C!: *18-8: 3<!
 56' -' : @7' 9; ' 2<86!7' : 31*6C@; !D*D3Q!' (-*: 3A8: 3<Q!D*,) B4!39!: *5!
 : *Q')365<@A6' !' : !31886!7-*; ' !)82*6C!7' !E6' 1/!)' (' ; ' -/@A6' !: 8!31886!
 7-*; *P!%*D!2XN' 4!)' (' ; ' -@' : !7')735B; *865<!; !D' : D-86: BQ!/52' ; 3<Q@: ' !
 7' 6' 1!/52' ; 3<!; ' D-/(! : *5!18: <X65<P!K!/52' ; 3<!)' (' ; ' -*!1' (/6!
 56*: ' ; 36C5<!N' 288!; B('): B13@18: 88!; B('): B13@; !A81[6' !' : 3!56*: ' ; <65<!
 N' 288!; B('): B13!)2<!') : ' 4!56' -' : B@; !A81[6' !)2<!)-/(' 4!56' -' : B!!

L' !; !7-*D63D8!18, (' 5/)*-56; 8: : BQ! 6: ' O8: 34!)*!3@; ' ' NU8@; !
 7-*D63D8!: *O84!, 39: 3!: 8!7-3: <6' !; BQ')36C!39!E63Q!)' (' ; ' -' ; !6*D!28(D' P!
 \$523!E6' !5-*; : 36C!5!A81[6' @1' , 86!NB6C@6*D31!N' 288!7-398128: : B1@; ' 6!
 1B!58('): <!9*D2XA323!)' (' ; ' -!D/723[7-')*, 3!T !D6' [6' !D/732@D6' [6' !
 7-')*2@*!9*; 6-*!O8: *!7' 18: <2*5C!L' !)' (' ; ' -[6' !/, 8!9*D2XA8: P!i (' !: *)' !
 357' 2: <6C!K!; !E6' 1!51B528P!\$(' !9*D2XA323!58('): <!7' !58('): <O: 31!
 O8: *1!5!6' 4!3: ` ' -1*O384@D' 6' -*<!NB2*!; !(' 2' ; 8!/!56' -' : !7-3!8(' !



9*D2XA8: 33P!+*@' : !1' , 86!68N8!9*; 6-*!NB6C!: 8; B('): B1@: ' !5A36*865<!
 : 87' -<)' A: B1!; B0')36C!39!E6' ('!)' (' ;' -*@8523!/!68N<!: 86!D*D3Q[6' !' -5[
 1* , ' -: BQ!' N56' <682C56; @D*D3Q[6' !) -/(3Q!' N56' <682C56; P!!
 R' E6' 1/@D' : 8A: ' @: *1!: 3D' ()*!: 8!: -*; 32' 5C@d' ()*!1B!; 3)823!D*D!
 18-3D: 0B!28(D' 1B528: : ' !' 6: ' 5<65<!D!5; ' 31!18,)/: *-') : B1!
 ' N<9*682C56; *1@7' !D-*4: 84!18-8@; !E6' 4!A*563@; !A*563!; B0') *!39!
)' (' ;' -' ; !g B!; 58() *!35Q') 323!39!6' (' @A6' !)' (' ;' -!E6' !; 58[6*D3!; * , : *<!
 ; 8UCP!H: !)8456; 3682C: ' !: ' 536!56-*68(3A85D34!Q*- *D68-@' : !58('): <!1' , 86!
 : *1!: -*; 36C5<@9*; 6-*!: 8!: -*; 36C5<@536/*03<!8U8!>!7' 18: <865<@: ' !8(' !
 5' Q-*: 8: 38!E6' !6*D* <! A8: C!; * , : *<N*9' ; *<!; 8UCP!K!D' ()*!') : *!39!56' -' : !
 ; 8)86!58N<!6*D!28(D' 1B528: : ' !T!*18-3D*: 5D38!: *O3!D' 228(3@d!
 5' , *28: 3X@1: ' (' !39!D*D3Q!)' (' ;' -' ; !7' 528!E6' (' !8U8!6' , 8!; B0') 323!T !
 : 3A8(' !Q' -' O8(' !; !E6' 1!: 86!S6' !-*9-/O*86@; ' ' NU8@) ' ; 8-38!; !13-8!K!
 D*D* <!O8: *!/!E6' ('!)' (' ;' -*F!j *A81!7') 735B; *6C!E6' 6!)' (' ;' -@8523!9*; 6-*!
 39!: 8(' !6*D!28(D' !; B5D' A36CF!R' E6' 1/@D' : 8A: ' @E6' !NB2!: 8D34!6*D' 4!
 \>>?&>>!]^klmnooplqrs tqr_!58-C89: B4!: *!: *O84!56' -' : 8@: ' !39!D' 6' -' (' !
 1B!)82*23!D*D38[6' !; B; ')B! : *!N/)/U88!; !6' 1!A3528P!L3A8(' !Q' -' O8(' !; !
 E6' 1!: 8!NB2' P!VD*9*6C@A6' !E6' !D*D' 4[6' !NB2!D' O1*- [D' O1*-!&!: 86@: 8!
 D' O1*-P!!

. 89/52' ; : ' @; 6' -*<!A*56C!; *O8(' !; ' 7-' 5*@) *2' !23!E6' !D*D' 4[6' !
 317/2C5!-*91BO28: 3<1!: *!681!/!; ' ; BQ!; 3)' ; !; ' ' -/, 8: 3<@!<!5A36*X!; !
 D-/7: ' 4!56-*: 8@d' 6' -*<!9*N' 6365<! ' !5; ' 84!N89' 7*5: ' 563@
 5' ' 6; 8656; /XU38!2X) 3!; 58() *!)' 2, : B! N!E6' 1!)/1*6CP!%!5' , *28: 3X@13-!



6*D!/56-' 8: !7' D*43!7-*; 32C: ' @A6' !E631!9*: 31 *X65<P!. B2!23!6*D' 4!

58-C89: B4!. /O!; ' 6!318: : ' !; !=>>?!(')/F!M@8523!A856: ' @: 8!7' 1: X@/!18: <!

D*D[6' !E6' !: 8! 62' , 32' 5CP!L8!1' (/!: *!E6' 6!; ' 7-' 5!D*D[6' !; : <6: ' !' 6; 8636CP!

"#\$%&!W!/!; *5!NB2' !7' : 31*: 38@7' A81/!' : 3!-8O323!; B463F!Z' !856C!NB2' !D*D' 8[

6' !' Nu<5: 8: 38!: *!6' 6!1' 18: 6F!

GHI HJ KL&!L86P!L/!' : 3!, 8!: *1!' Nu<5: <23!3!; 581!' Nu<5: <23@A6' !31!E6' !

: 8; B('): ' P!L/!6*D' 8!' Nu<5: 8: 38!(-/N' @8523!/463!' 6!)86*284!6*1!T !





7' ; 3: : BQPI\>>&?d&>>]!c6' !E6' !1' , 86!; B9B; *6CID-' 18!5' A/; 56; 3<d
5' N' 289: ' ; *; 3<d: 8!9: *X@d*D3Q[6' !: ' -1*2C: BQ!A82' ; 8A85D3Q!6*D3Q!
-8*D034FIG!J 6*6*Q!7' A81/[6' !1: ' (' !-*9!A36*2dA6' !6*1!NB23!532C: ' !
/)3; 28: B@dA6' !R/63: !78-; B1!7' 9; ' : 32!. /O/!3!; B-*932!5' , *28: 3<P!L/!6/6!
-*9: 30*!; ' !; -818: 3@d5B(-*2' !5; ' X!-' 2C@d: ' !)2<!; *5!NB2!: 3D*D' 4!: 8!
7' 2363A85D34!O*(!) * , 8P!S6' !NB2!*N5' 2X6: ' !A82' ; 8A85D34!O*(!; !56-*: 8@d5!
D' 6' -' 4!/: *5!7/5D*4!52' , : B8@d: ' !D*D38[6' @; !082' 1@d: ' -1*2C: B8!
' 6: ' O8: 3<d7-' 39' O2*!6-* (8) 3<d3!; *)' !2X)<1!; B-*936C!5; ' 8!5' A/; 56; 38@d
5' N' 289: ' ; *; 38!3!5D*9*6CID*D38[6' !: ' -1*2C: B8!A82' ; 8A85D38!52' ; *d
7' E6' 1/!; !E6' 1!) * , 8!: 8!NB2' !: 3D*D' 4!7' 2363D3P!S6' !NB2!6*D' 4!3: 563: D6!
:' -1*2C: ' 4@dE6' !NB2*!: ' -1*2C: *<!A82' ; 8A85D*-<!-8*D03<!; *!N8)/@D' 6' -*<!
52/A32*5C!/!D' (' [6' !)-/(' (' P!!
VI6' AD3!9-8: 3<!7' 2363A85D' 4!1B@dD' : 8A: ' @D' () *!E6' !; 58!
7-' 39' O2' Y!: *1!D*9*2' 5C@d3!1B!E6' @N89/52' ; : ' @; : /6-3!6' , 8!D*D[6' !
' N5/,) *23@dA6' @: /!: *; 8-: ' 8@d*18-3D*: OB!584A*5!N/)/6!2/AO8!: *5!
7' : 31*6CP!G' 6! : 3!5*13!5!E6' 4!9*-*9' 4!56' 2D: /235C@d' : 3!)' 2(' !: 8!1' (23!
7' : <6@dA6' !, 8!/: *5!6*D' 8!7-' 350') 36@d3!6*1!356' D3!E6' 4!; ' 4: B!; !c8A: 8@d
3!6*1!/A*5638!; !18,)/: *-') : ' 1!68--' -3918!; !E6' 4!; ' 4: 8P!K!; 58(' !E6' (' !
' : 3!)8456; 3682C: ' PPP!: ' !6878-C[6' !: 3!5!E631!56' 2D: /235CP!K!: *1!
7' D*9*2' 5C!; !D*D' 4[6' !1' 18: 6@dA6' !/-' ; 8: C!; 9*31' 7' : 31* : 3<!1' , 86!
7' ; B536C5<dA6' !: 3@d56' 2D: /; O35C!5!6' 4!, 8!N8)' 4@dA6' !3!1B@d56*: /6!
2/AO8!: *5!7' : 31*6CP!Z*D38!1B523!/: *5!6' A: ' !NB23P!H: 3!7' A63!: 8!
' 7-*;) *235CP!



"#\$%&!g 30*32!j B(*-C!73O86@A6' !; !=>>?!(')/@: 851' 6-<! : *!' N8U*: 3<!VJ W@A6' !30!

N*9*!;!%B-(B956*: 8!N/)86!; -818: : ' 4@6' ()*O: 34!5' ;86: 3D!7' !

: *03' : *2C: ' 4!N89' 7*5: ' 563!%' :)' 239*!#*45!5D*9*2*!; *1@A6' !\>>?f&>>]!

18-3D: 0*1!: /, : ' !N/)86!5' Q-*: 36C!E6!/N*9/!: *; 58()*!P!G8-: *!23!E6*!

3: 68-7-86*03<!3!D*D!; B!; ' 57-3: <23!E6' !9*;<; 28: 38F!

GHI HJ KL!\$523!A856: ' @; !082' 1@536/*03<! ' 735*: *!N239D' !D!3563: 8P!M!: 8!

7' 1: X!7-' !D' : D-86: ' 8!5' ' NU8: 38!%' :)' 239B!#*45!1: 8@: ' !

)8456; 3682C: ' @D' ()*!NB2*!D63; : *<!` *9*!' 78-*033!; !W` (*: 356*: 8@

18-3D: 0B!' N-*63235C!D!%3-(3933!5!7-' 5CN' 4!-*9185636C!6*1!

;57' 1' (*682C: /X!N*9/!7')5D' D*!)2<!N' 288!E` ` 8D63; : ' (' !' 5/U856; 28: 3<!

' 78-*033P!%' : 8A: ' @7-893)8: 6!%3-(3933!9; ' : 32!7-893)8: 6/!#' 5533@

7' 5D' 2CD/!1B!N239D38!7*-6: 8-B@3!Q' 682!' N5/)36C@d*D!-8*(3-' ; *6C!: *!E6' !

' N-*U8: 38P!K!7' 2/A32!-8*D03X!N89/52' ;: ' !' 6!R/63: *@A6' !E6' !N89/52' ;: ' !

1B!: 8!7-' 63; @7' 6' 1/!A6' !E6' !: *O*!' NU*<!N' -CN*!5!18,)/: *-') : B1!

68--' -391' 1@3!: *1!*18-3D*: 5D38!D' 228(3@)8456; 3682C: ' @(' ;' -323@A6' !

E6' !: /, : ' !6' 2CD' !: *!; -81<!D63; : ' 4!` *9B! 78-*034!; !W` (*: 356*: 8@: 8!

N' 288!A81P!K!6*D31! N-*9' 1!1B!)8[` *D6' !*18-3D*: 08; !7'))8-, *23!; !E6' 1!

51B528@7' 6' 1



5; ' - *A3; *6C!E6!/IN*9!/6*1!: 86@*!: *O3!- *9: B8!; ' 7- ' 5B!: *1! ' 6; 8A*23!^L/!
78-8)/1*23P!gB!A6' [6' !7')/1*23!D*D!\>>?b&>>]!528)/86!3!: *1!E6' !: /, : ' !
6878-C!: *; 58() * _@: /!6*D!(-/N' P!+86*284!/ , 8!: 8!7' 1: X!L' !' NU34!51B52@
N89/52' ; : ' @6*D' 4P!L!/NB2' !: 87-3<6: ' 8!' U/U8: 38!' N1*: *@D' : 8A: ' !, 8@
A6' !6' N' 4!; ' 57' 2C9' ; *235CP!V: *A*2*!5D*9*23!') : ' @7' 6' 1!5D*9*23!) -/(' 8P!
WD63; : *<!` *9*!' 78- *O34!; !W` (*: 356*: 8!9*; 8-O32*5C@*!, 82*: 38!6*1!
' 56*6C5<! ' 56*2' 5CP!e!18: <!E6' !: 8!



5/U856;/86!18,)/!N239D313!7*-6: 8-*13!3!5' X9: 3D*13@: '!: *!D*D' 4[6' !

E2818: 6!)' ;8-3<!NB2P!!

K!NB2' !, 82*: 38!8(' !)*, 8!D*D[6' !6*1!)-/(!)-/(/!)81' : 56-3-' ; *6CP!

\>&=>&>>]!+' 7/5631@' !: *A*28!;' 8: : ' 4!' 78-*033!; !



R/63: *!;!36' (8!5' A2*!3Q!*- (/18: 6B!: 8/N8)3682C: B13F!K!9*!E631!56' 36!

; *O*!23A: *<!N' 2CO* <!356' -3<!!; B!23A: ' !89)323!; !G*O3: (6' : @A6' NB!

7' 7B6*6C5<! ' 6(' ;' -36C!*18-3D*: 08; !' 6!; 6' -, 8: 3<@; 56-8A*235C!5' !; 5813!

' 6!%' 223: *!R*/E22*!)' !#*45@c84: 3!)' !%3553:), 8- *@\>>!&=&=>>]!3!6*D, 8!

5' ' NU*2' 5C@A6' !. /O!7-35/656; ' ; *2!: *!; *O3Q!; 56-8A*Q!5!#*45!; !. 82' 1!

)' 18!%*D!NB!; B! ' Q* - *D68-39' ; *23!E63!; 56-8A3@; 85C!7- ' 0855!: *A*2*!

3- *D5D' 4!D*17*: 33@; ' ; 28A8: : ' 56C!# ' 5533F!K!7-*;) *!23@A' 813: 35. 4(-)O. 1(!)T J ET



K!*18-3D*: 0B@d' : 8A: '!, 8@5' ;8-O323!D*6*56-' ` 3A85D/X!' O3ND/P!
H: 3!-8*2C: ' !; B3(-*: : B4!W` (*: 356*: @; !D' 6' -' 1!/, 8!5*13!6*23NB!: 8!
;8-323@A6' !' : 3!1' (/6!D' ()*[6' !; 8-: /6C5<!>>=&d&>>]!D!; 2*563@3!2X)3!: 8!
;8-323@3!6*1!56*2*!: *A3: *6C5<!/, 8!: ' -1*2C: *<!, 39: C@d' : 3!` ' D/5!
78-8: 8523!: *!K-*D@: ' !;!36' (8!7' 68-<23!W` (*: 356*: !!g BI584A*5!; 3)31!
7-')' 2, 8: 38!5' NB634@d' 6' -B8!-*9; 3; *X65<!; !2' (3D8!9*7/U8: : ' 4!6' ()*!;!
0')8!E6' 4!' O3ND3@d' ()*!' : 3!/7/56323!W` (*: 356*: !!K-*D@; !' NU81@
: 3D*D' (' !' 6: ' O8: 3<!; !' 623A38!' 6!W` (*: 356*: *!D!68--' -391/!' 5' N' (' !: 8!
3182!R' : <6: ' @6*1!NB2!)3D6*6' -!V*)*1!~/584: !!H: !D*D!1: ' (38!
)3D6*6' -B!NB2!)*28D! 6!5' ;8-O8: 56; *!; !1: ' (3Q!7*- *186-*Q! . 89/52' ;: ' @
: *- /O*2!7-*; *!A82' ; 8D*!3!NB2!63-*: ' 1@: ' !7-*;)*!; !6' 1@A6' !: 3D*D' (' !
' -/, 3<!1*55' ;' (' !/: 3A6' , 8: 3<!6*1!; 8!NB2' !K!E6' !7' 6' 1!; 5D-B2' 5C@3!
E6' !)' ;' 2C: ' !7' 56B): *<!356' -3<!; !*18-3D*: 5D' 4!; : 8O: 84!7' 2363D8@
D' ()*!(' 558D-86*-C!V' 8)3: 8: : BQ!J 6*6' ;!5!6-3N/: B!1*Q*2!E6' 4!
7-' N3-D' 4P!%*D!; B<5: 32' 5C@7' 6' 1!E63!)*: : B8!NB23!5` *2C53` 303-' ;*: B!
K!;!-89/2C6*68!; 6' -, 8: 3<!7' 528)/XU8(' !NB2' !)' D*9*: ' @A6' !: 3D*D' (' !
' -/, 3<!1*55' ;' (' !/: 3A6' , 8: 3<!; !K-*D8!: 8!NB2' !' N: *- /, 8: ' !L' !; 18568!5!
681!' N85D/-' A323!E6/!56-*: /!L *!88! 56*: D*Q!; ' 9: 3D2' !K52*15D' 8!
"" 5/) *-56; ' @D' 6' -' 8!7' 6' 1!7/5632' !5; ' 3!186*56*9B!; !)-/(38!5' 58): 38!
56-*: B!G! NU81@/!E6' 4!' O3ND3!)' ;' 2C: ' !D*6*56-' ` 3A85D38!13-' ;' (' !
/-' ;: <!7' 528)56; 3<!K!E6' @D' : 8A: ' @58-C89: ' !!

K!6' ()*!/!: *5!NB2*!: *)8,) *!7' 7B6*6C5<!; 58[6*D3!; !7' 528): 34!-*9!
' N18: <6C5<!*- (/18: 6*13@3!1' , 86!NB6C@*18-3D*: O8; !/N8)36C!; !6' 1@A6' !



E6' !' O3ND*!3!; !E6' 1!: 86!: 3D*D' (' !51B52*!Z81!N' 288@; 58[6*D3!; 5<!E6*!9' : *!
 \>>f&>>]!D!: *1!)' ; ' 2C: ' !N239D*!T !' 6!*18-3D*: 08; !E6' !)*28D' @E6' !: *!
)-/' 1!D' : 08!5; 86*!*)2<! : *5!E6' !7-<1' !; !9' : 8!; 3)31' 563!T !; !78-8: ' 5: ' 1!
 51B528!E6' (' !52' ; *!) *!R' !D- *4: 84!18-8@6*1!3!N8, 8: 0B@3!; 58!6*1!S6' !
 ; 58!5' ; 581!-<)' 1!D!: *1!!

%*D!*18-3D*: 0B!7B6*235C! : *5!/N8)36CF!L/!E6' !NB2' !: 81: ' , D' !
 : *3; : ' !L/! : 3!7B6*235C!!!5D' -88@2' (3D*!NB2*!/!: *O3Q!*18-3D*: 5D3Q!
 D' 228(!7' D*9*6C@A6' !/!: *5!6*1!') : 3!3!68!, 8!; -* (3P!M!7' 1: X@/6-' 1!<!
 7-328682!; !G*O3: (6' : @NB2@7' [1' 81/@; 8A8-!; ' 5D-858: C<@3!1B!5! : *O31!
 7' 52' 1!6' () *!T !• -34!eO*D' ; @D' 6' -B4!584A*5!7' 1' U: 3D!7-893)8: 6*!7' !
 ; : 8O: 84!7' 2363D8!T !7' O23!6*1!78-8D/536C!3!; B736C!73; *!()8[6' !; !D*D' 4[
 6' !9*N8(*2' ; D8! : 8)*28D' !' 6!7' 5' 2C56; *!3! : !(' ; ' -36!^c6' [6' !; B!9: *868@
 18-3D: 0B!7B6*X65<!; !7' 528): 34!1' 18: 6!(-*` 3D!7' 18: <6C@7-8)2*(*X6!
 5!/6-*!; 56-8636C5<!5!€#e_!Z*1!NB2!Z8: 86!6' () *!-/D' ; ')3682C!€#e@6*1!
 : 85D' 2CD' !8(' !9*1856368284!3!6*D!) *288P!G56-8A*6C5<!; !9)*: 33!



. 82B4!)' 1_P!R' 6' 1!6*1!D*D!-*9!; 56-8A*!NB2*!6*1!5!%' :)' 239' 4!3!



532C: ' !6*D!; ' 6!7-' 63; @6' !/!: *5!, 8!6*1!N' 2CO' 4!7' 68: 03*2!6' -(' ; ' [ED' : ' 13A85D3Q!' 6: ' O8: 34P!j *A81!, 8!: *1!; 581!E631!-35D' ; *6CF_P!L*18D3! 6*D38!NB23P!L/!1B!E6' 6!-*9(' ; ' -!: 8!56*23!7'))8-, 3; *6C@' : !3!35A89P!S6' ! : 8!NB2' !D*D' 4[6' !9: *A31' 4!\>>&v>&v>>]!A*56CX!78-8(' ; ' -' ; @: 86@E6' !6*D@ 7/: D63-' 1!7-' O2' P!

"#\$%&!G528)!9*!E6' 4!356' -384!D' 13553<!G' 2D8-*!HHL!' N; 3: 32*!; *5!; !7' 2/A8: 33! ;9<6' D!' 6!V*)*)*1*!~/584: *!; !` ' -18!: 8` 63P!R' 9, 8!; B<5: 32' 5C@A6' !; *O*! 7')735C!NB2*!7'))82*2*P!%*D!; B!)/1*868@d6' !7B6*25<!; *5!7')56*; 36CF! j *A81F!K!7-3O2' 5C!23!; *1!D*D[6' !)' 7' 2: 3682C: ' !)' D*9B; *6C!5; ' X! : 8; 3: ' ; : ' 56CF!K182' !23!E6' !7' 528)56; 3<!; !' 6: ' O8: 3<0F!

GHI HJ KL&!S6' !NB2' !)' ; ' 2C: ' !: 87-3<6: ' P!M!)8456; 3682C: ' !;)-/(! 6D/)*[6' ! 6*1!;/ 3)82P!S6' !NB2!7-8); *-3682C: B4!6' !23! 7/N23D' ; * : B4@6' !23!A6' @ E6' !NB2*!7-8); *-3682C: *<!; 8-53<!--*5528)' ; * : 3<!G' 2D8-*!6' ()*@D' ()*! G' 2D8-!8U8!E631!9*: 31*25<!; !HHL!K!6*1!<!56-* : B1!' N-*9' 1PPP!1: 8!D6' [6' !6*1!6' !23!7' 9; ' : 32@6' !23!7-352*2@: 8!7' 1: X!/, 8PPP!<!;)-/(!52BO/!T ! 1' <!` *1323<!5; <9*: *!5!D*D' 4[6' !6' -(' ; 284!: 8` 6CX@K-*D' 1!3!6*D!) *288P!!

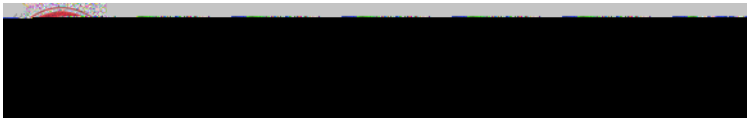
c6' !3: 68-85: ' @A6' !<!; !5; ' 84!, 39: 3!: 8!; 56-8A*25<!; 3!5!) : 31!

3-*D081@; ' ' NU8P!%*D[6' !1' <!; 39: C!52' , 32*5C!6*D@A6' !<!7-' 56' !: 8!NB2! : 3D' ()*!9: *D' 1!: 3!5!) : 31!3-*D081P!K!E6313!; 9*31' ' 6: ' O8: 3<!5!K-*D' 1! : *O313@7' : <6: ' @A6' !7' !23: 33!)372' 1*63A85D3Q!; 8)' 156; @D*D3Q[6' !)-/(3Q!23: 34@7' : <6: ' @D*D' 8[6' !; 9*31')8456; 38@: *; 8-: ' 8@NB2' !5! -*9: B13!-8, 31*13!5' 6-/): 3A856; *P!M!23A: ' !: 3D' ()*!; 8!NB2!; !E6' ! ; ' ; 28A8: P!S6' !NB2' !)2<!18: <@D' : 8A: ' @D*D' 4[6' !6*D' 4!5' ; 581!



7' 268-(8456@; ' ' NU8&! : 87' : <6: ' !A6' !!+ *!3!6' -(' ; 284! : 8` 6CX!<! : 3D*D' 4! : 8!

9* : 31 *25<!M@; ' ' NU8@; !6' !; -81<!- *N' 6*2!-/D' ; ') 368281!*) 13: 356-*03



)' 56*6' A: ' !: ' -1*2C: ' @NB56-' !' 6; 86323@5D*9*23&!^+*@' D84@: ' !: *1!: *)' !
 6*4: ' @()8[6' !: *!: 846-*2C: ' 4!68--36' -33_P!M!(' ;' -X&!^G' ' NU8@: 3A8(' !
 6*4: ' (' @; ' ' NU8@; 58!*N5' 2X6: ' !' 6D-B6' @(' 6' ;!; 56-8A*865<_P!H: 3!
 (' ;' -<6&!^L/!1B!6' ()*!1' , 81!;!g' 5D; /!7-328686C_P!T !^HD84_P!K!' : 3!
 7-3286823!;!g' 5D; /P!!

M!6' ()*!/, 8!: 8!-*N' 6*2!;!*) 13: 356-*033!D!E6' 1/!1' 18: 6/@D' ()*!E6' !
 ; 58!6*1!-*5D-/A3; *2' 5CP!K!<!6' ()*!NB2!7-8)58)*68281!5' ; 86*!)3-8D6' -' ;!
 #We!^\$SV!# 5533_P!S6' !: *O*N' 2CO*<!E: 8-(863A85D*!D' 17*: 3<!6*D*!<@
 D' 6' -*!<!6' ()*!NB2*!(' 5/)*-56; 8: : *!<@7' 6' 1!NB2*!-8` ' -13-' ; *: *@
 -*9)828: *!: *!A*563!;!-*1D*Q!6*D' 4!\>>&vd&>>]!N' 2CO' 4!7-' (-*11B!7' !
)81' : ' 7' 239*033!E: 8-(863D3P!K!/!18: <!NB2!' ` 35!6*1!6*D' 4!5D-' 1: B4!;!
 E: 8-(863A85D' 4!D' 17*: 33@; ' 6!6*1!;!E6' 1!' ` 358!1B!; 56-8A*235C!5!E6313!
 -8N<6*13!39!D' 135533!HHL@D' 6' -*!<9*: 31*2*5C!E631!-*5528)' ; *: 381P!!

G' 6!6*1!<!31!-*55D*9*2@A6' !<!)/1*2P!+/1*6C!1: 8!: *!E6/!681/!NB2' !
 6<, 82' P!#8*2C: ' !D!6' 1/!; -818: 3!/!18: <!8U8!: 8!NB2' !-89/2C6*6' ;!
 -*5528)' ; *: 3<@D' 6' -B1!9*: 31*25<!SD3: !!"*17!3!%- ' 22P!L' !57/56<!
 : 85D' 2CD' !185<08;!T !<!584A*5!: 8!7' 1: X@7' [1' 81/@E6' !NB2' !=!323!v!
 185<0*!T !7-3O23!-89/2C6*6B@)8456; 3682C: ' P!S63!-8N<6*PPP!*!6*1!8U8!O2*!
 ; ' 4: *!;!K-*D8@' : 3!6/) *!5286*23!3!;!D*D3Q[6' !7' 2/-*9-/O8: : BQ!3-*D5D3Q!
 *-Q3; *Q!: *O23!7*-/!N-8)' ; BQ!*N5' 2X6: ' !N/1*(P!S6' !735C1*!<D' NB!<!D*D!
 -/D' ; ')3682C!*) 13: 356-*033!: *!D*D3Q[6' !D-3; BQ!N*: D*Q!*) 13: 356-*033!





5' N-*: : BQ!; 5<D3Q!E63Q!' 678A*6D' ;!7*2C08;@



"#\$%&!GB!/, 8!5D*9*23@D!E6' 1/!1' 18: 6/!; B!7D23!39!*)13: 356-*033@3!5!E631!

5; <9*: !; ' 7-' 5!7' !*-856/! =>>v!(')!T



7-3)86!D6' [6' !)-/(' 4P!R' : <6: ' 8!)82' @A6' !)2<!: *5!eD-*3: *!' A8: C!N239D* <!
56-*: *@5!D' 6' -' 4!: *5!5; <9B; *86!: 8!6' 2CD' !7' 2363D*!323!ED' : ' 13D*@323!
A6' [6' !8U8@*!8U8!)85<6' D!13223' : ' ;!: 36' A8D!A82' ; 8A85D3Q!' 6: ' O8: 34P!e!
D*,)' (' !; 6' -' (' !-'): B8@)-/9C<!: *!eD-*3: 8@)*P!+2<!: *5!E6' !7-' 56' !: 8!
A/, * <!56-*: *P!g' 8!)8656; ' !6' , 8!A*563A: ' !5; <9*: ' !5!eD-*3: ' 4P!K!
-')56; 8: : 3D3!/!18: <!6*1!NB23!39!%38; *@39!V/1B@39!K; *:' [f-*: D' ; 5D*@
39!H)855B@: /!' 6D/) *!6' 2CD' !: 8!NB2' P!%38; !<!D*D!(' -')!9: *X! : 8!Q/, 8@A81!
g' 5D; /@; !082' 1P!K!)2<!18: <!E6' !6' , 8!')3: !39!1' 3Q!2XN3184O3Q!(' -')' ; P!
R' E6' 1/!)2<!: *5!E6' !; 58!6*D* <!356' -3<!7' : <6: ' !)82' !: 87-' 56* <P!+2<!: *5@
D' : 8A: ' @' A8: C!; * , : ' @A6' !6*1!7-' 35Q')36!: *!eD-*3: 8P!L' !1B! : 8!)/1*23!;!
68-13: *Q!7-88156; 8: : ' 563P!M!5D*9*2!NB@/, !D' 2C!1B!(' ; ' -31!7-' !
eD-*3: /@A6' !eD-*3: *!' A8: C!52' , ; * <!56-*: *P!H: *!52' , ; * <P!# 553<!6' , 8!
N' 288!A81!: 87-' 56* <P!!
K!eD-*3: *@D*D!3!# 553<@D56*63@' 6: ' 5365<@<!NB!E6' !: *9; *2!D' 17' 936: * <!56-*: *@
56-*: *@; !D' 6' -' 4!856C!D/5D3@d' 6' -B8!' 6: ' 5<65<!D!-*9: B1!03; 3239*03<1@
D!-*9: B1!-823(3<1@d!-*9: B1!D/2C6/- *1@<9BD*1!3!6*D!) *288P!\>>&dd&>>]!K!
: *!eD-*3: 8!<!7-<1!A/; 56; ' ; *2!) * , 8!; !)8656; 8@d' () *!6/) *!89)32!D!-'): 8@<!
A/; 56; ' ; *2!(-* : 30/!03; 3239*033P!G' 6!6/6!8U8!D*D* <[6' !6*D* <!03; 3239*03<!
: *O*@D*D[6' !7' Q' , * <!: *! : *O/@*!; ' 6!6/6!7-<1' !D*D* <[6' !)-/(* <P!%' () *!6*1!
()8[: 3N/)C!; !)8-8; : 8!7')!K; *:' [f-*: D' ; 5D' 1!1B!7-389, *23!3!6*1!; !
; ' 5D-858: C8!: *!2*; ' AD8!53)82!)8)/OD*@)' 7/5631@; !O2<78!3!732!D' ` 8P!G!
: *O84!)8-8; : 8!D' ` 8!/6-' 1!)*!8U8!; !O2<78!; !)8-8; : 8!: 3D6' !: 8!732P!L/!E6' !
7' ; 8-Q: ' 56: ' 8!-*923A38@: ' !9*!E631!856C!3!1: ' (' !; 5<D3Q!(2/N3: : BQ!





*N5' 2X6: ' !-8(3' : B!K!<[6' !5A36*2@A6' !; ' 6!5!5*1' (' !: *A*2*!: 89*; 3531' 4!

eD- *3: B!: *)' !NB2' !NB!31!: /!D*D[6' !' Nu<; 36C!E6' !; 58!5; ' 31!

: *03' : *2C: B1!N' (*656; ' 1!G' 6!E6' !518O8: 38!D/2C6/-!856C!-/55D*<!



/D-*3: 5D' 1!<9BD8P!L/!' D84@<!5!E631!' D84P!g' (/!: *735*6C!3!: *!

/D-*3: 5D' 1P!c/6D*!9: *XP!%' (/!)*, 8!57-' 536C!/!6' ; *-3U*!A6' NB!' : !6*1!

' O3ND3!; BA36*2!7' 6' 1P!M@; ' ' NU8@/D-*3: 5D34!<9BD!2XN2X!: *!52/QP!%o: 8@

; ' ' NU8@)' 56*; 2<86!' (-' 1: ' 8!



L' !D56*63@j *7*)!3!W18-3D*!;58() *!; !-8, 318!^mp•r!op±tt_!

7'))8-, 3; *2!; ' 6!E6!/D-*3: 39*03X!eD-*3: B!3!;58() *!: *!E6' 1!: *Q')32!

D*D38[6' !7' 236D' --8D6: B8!6*D38!

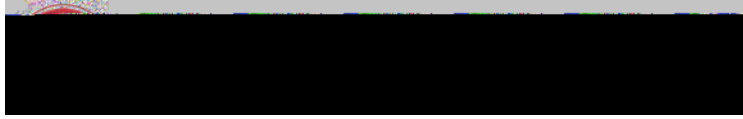


+ ' 7/5631@??!58: 6<N-<!G!- *9(*-!; ' 4: B!; !c8A: 8!1B!: 85D' 2CD' !-*9!T !
E6' !NB2' !/, 8!7-3!. /O8!T !1B!7B6*235C!/2/AO*6C!: *O3!' 6: ' O8: 3<!3!
; -')8!; 58!D*D[6' !G' 6!/, 8@. /O!9*(2<: /2!;! (2*9*!R/63: /@A6' [6' !6*1!;/ 3)82@
/, 8!; -')8!D*D[6' @NB23!D*D38[6' !O*: 5B!; *!/2/AO8: 3<P!W!; /!: *5!6*1!
9*(*5*XU* <!8U8!; ' 4: *!NB2*!; !c8A: 8!6*1!D*D38[6' !-803)3; B!K!1B!
; B<5: <23@: *O3!578052/, NB@A6' !*18-3D*: 5D38!7' 5' 2C56; *!; !j *D*; D*9C8@
6*1!; !ZN32353@; !. *D/!: *Q')<65<!; !D' : 6*D68!5!E6313!A8A8: 5D313]!
N' 8; 3D*13!T !A6' !' : 3! 66/) *!; B: B-3; *X6!39!; ' 4: B@)' N8(*X6!)' !
18-3D: 5D3Q!7' 5' 2C56; !3!7' 6' 1!6*1!7-3' N')-8: : B8!; ' 9; -*U*X65<P!)"8[
6' !31!6*1!7'))82C: B8!7*57' -6*!7' 1' (*X6!5)82*6CP!)"8[6' !)8: C(*13!3Q!
5: *N, *X6P!S6' !: 8D* <!6*D* <!356' -3<@D' 6' -*<!NB2*!D-*4: 8!: 87-3<6: *P!!
R' 5D' 2CD/!1B!: *Q')3235C!; !56*)33!7' 7B6D3!/2/AO36C!- ' 55345D' [
18-3D: 5D38!' 6: ' O8: 3<@1B!) * , 8!39!E6' (' !: 3D*D38!7/N23A: B8!5D*:) *2B!
: 8!)82*23P!g B!7' !23: 33!5' ' 6; 8656; /XU3Q!; 8)' 156; !; B<5: <23!

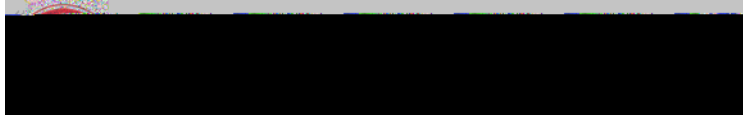


;8)' 156; *!23N' !D*D38[6' !57803*2C: B8!52/, NB!; 8)/6!; 5X!E6/!)8<682C: ' 56CP!
W!/: *5!6*1!-8*2C: *<!; ' 4: *d/!: *5!6*1!2X) 3!(3N: /6!D*,)B4!)8: Cd/!: *5!
;9-B; B!;! : *O3Q!(' - ') *QP!%*D!E6' F!c6' NB!E6' !NB2' !7' : <6: ' !*18-3D*: 0*1P!
R' A81/!<!; 57' 1: 32d)' 7/5631d7- ' !?!58: 6<N-<P!Z*1!NB23!E63!/- ')B!
732' 6B@d' 6' -B8!: *7-*; 323!5*1' 286B!;!)' 1*!; !-*9: B8P!S63!732' 6B!NB23!
68--' -356*13P!g' , 868!58N8!7-8)56*; 36C@8523!NB!;)-/(!; B<5: 32' 5C@A6' !
E63!732' 6B!7-8,)8!A81!5' ;8-O36C!E6/!; 8UC!: *D*: /: 8!NB23!NB!;!
-' 55345D' 1!7' 5' 2C56; 8!; !H66*; 8!323!()8[6' !; !g8D53D8!323!()8[6' !8U8!3!
7' 2/A*23!NB!6*1!7'))82C: B8!7*57' -6*P!g' , : ' !58N8!6*D' 8!7-8)56*; 36CF!
W18-3D*!5!: *13!E6' !)82*2*P!%*D!1B!)' 2, : B!D!E6' 1/!' 6: ' 536C5<F!+-/9C<d
6' ; *-3U3F!!

K23!)-/(' 4!7-318-!6' , 8!; !D' : 68D568!?!58: 6<N-<P!G!W18-3D8!NB2' !
: 85D' 2CD' !352*15D3Q!` ' :)' ; !D-/7: BQP!K52*15D38!` ' :)B!NB; *X6!-*9: B8P!
. B; *X6!*N5' 2X6: ' !7' 9363; : B8P!G!) * : ' 1!52/A*8!NB2' !: 85D' 2CD' !` ' :)' ; @
D' 6' -B8!-8*2C: ' !` 3: * : 53-' ; *23!; ' 4: /!; !c8A: 8!3!78-3')3A85D3!1B!6*1!
; B<; 2<23!D*D38[6' !)8: 8, : B8!7' 6' D3@d' 6' -B8!57' 5' N56; ' ; *23!E6' 4!; ' 4: 8P!
gB!; B<5: <23! 6: ' O8: 3<!5! *18-3D*: 5D313!D' 228(*13! : *!-*9: BQ!/- ' ; : <Q!
3!(' ; ' -323!31&!



7' 528!?!58: 6<N-<!; !68A8: 38!=[v!185<08; !; 58!E63!` ' :)B!35A8923@' : 3!; 58!



/N340*@/!: 88!-/D3!; !D-' ; 3@23N' !' : *!; B)*XU345<!)8<682CP!K23!E6' !

: ' -1*2C: ' !; 58!D*D!; !^...pxmt!p•!Žntkm_!G58[6*D3! Nu<5: 3!1: 8F!S6' !; 58[6*D3!





\$56C!\>?&d&>>]!); *!O*(*!: *9*)P!G' 9C181!; !A81!W18-3D*!; 823D* <!

56-*: *@) *P!#8*2C: ' !88!5' 9)*23!6*2*: 623; B8!2X) 3@5u80*; O385<!5' !; 58(' !

13-*!: *!E6!/9812X!T !: *3N' 288!7-8)7-331A3; B8@A/6C[A/6C!*; *: 6X-: B8@

6*2*: 623; B8@6-/) ' 2XN3; B8@



(' 5/)*-56; 8: : B1!78-8; ' -' 6' 1@' : !-8O*86P!%' () *@)' 7/5631@; !%38; 8!
; 2*56C!7' 18: <2*5C!: 8D' : 5636/03' : : B1!7/681@' A8; 3): ' @)*P!M: /D' ; 3A!
' 65/656; ' ; *2!; !%38; 8!7' 26' -*!): <P!R' 528!6' (' @D*D!7')735*2!5' (2*O8: 38!5!
' 77' 930384!3!5!(*-*: 63<13!: *O3Q!\>?&b&>>]!8; -' 7845D3Q!D' 228(@' : !NB2!
6*1!518U8: P!S6' !7-' 39' O2' !6' A: ' !; !: *- /O8: 38!D' : 5636/033P!I XN' 1/!
: ' -1*2C: ' 1/!X-356/! A8; 3): ' @A6' !E6' !(' 5/)*-56; 8: : B8!78-8; ' -' 6P!Z*D!



W18-3D8!7-' 35Q')36@6*1!6' , 8!D-3935B!D*D38[6' !NB; *X6@: ' !; 58[6*D3!
D' ()*!6*1!6' 27*!; -B; *865<!; !%*736' 234@E6' !D*D[6' !' NU856; ' !5A36*86@A6' !
A6' [6' !: 8!6*D@A6' !: 8!6*D31!' N-*9' 1P!~' 6C!3!2X)3!; 8D' 6' -B8!/6; 8-,)*X6@
A6' !7-3O23!6/) *!; *!ED5D/-53X@: ' !31!; 3D6' !: 8!; 8-36!L' !; !)-/(3Q!
56-*: *Q@8523!2X)3!7-3O23!; *!ED5D/-53X!; !1856: B4!7*-2*18: 6@6*1!D/) * [
6' @6' !' : 3!-8; ' 2XO3' : 8-B@8523!D!; 2*563!; !-89/2C6*68!E6' 4!-8; ' 2XO33!
7-3Q')36!6' 6@\>?&?>&>>]!D6' !: -*; 365<!V' 8)3: 8: : B1!J 6*6*1!G' 6

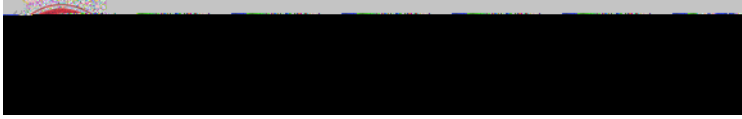


' 6)82C: *<!356' -3<d<! : 8!/; 8-8: @A6' !: *O31!*18-3D*: 5D31!D' 228(*1!E6' !
532C: ' !3: 68-85: ' P!H: *!' A8: C!: 87-' 56*<!E6*!356' -3<P!G!52/A*8!5!H586384@
6*1!' 7<6C!, 8!N' 2CO8; 3D3!-8O323!-*9)8236C!' 5863: 5D34!: *-')@6*1!: *!
V8; 8-: /X!H5863X!3!• , : /X!Z*1@V8; 8-: *<!H5863<!7' 7*2*!; !5' 56*;!
#' 5533@• , : *<!7' 7*2*!; !5' 56*;! "-/933@Q' 6<!E6' !*N5' 2X6: ' !T !6*1!581C3!
-*9)828: : B8!T !E6' !')3: !3!6' 6!, 8!: *-')P!%*D38[6' !D' 1 1/: 356B!7-' ;')323!
6*1!D' ()*[6' !7' !Q-8N6/!23: 84D' 4!E6/!\>?&=?&>>]!



A6' !; ' 6!D*D[6' !D*-6B!52' , 3235C!;!)*: : B4!D' : D-86: B4!1' 18: 6P!%' : 8A: ' @

NB2*!` *: 6*563A85D' 4! O3ND' 4!7-856/728: 38@: ' !j *7*)!NB2!: *56' 2CD' !



GHI HJ KL



€8: 6-*2C: B4!N*: D!323!6*1!^' tk_!; !J 6*6*0@f8)8-*2C: *<!--898-; : *<!
535681*@*!856C!N*: D3!; 6' -' (' !7' -<)D*P!Z' , 8!5*1' 8!; !08: : B0!N/1*(*QP!\$56C!
08: 6-*2C: B4!)87' 936*-34@()8!D' : 8A: B8!7-*; *!: *!08: : B8!N/1*(3!
/A36B; *X65<P!e!; *5!: 8!NB2' !D' ()*[6' !08: 6-*2C: ' (' !)87' 936*-3<@A6' !: 8!
: -*; 32' 5C!1: ' (31!3: ' 56-*: : B1!3: ; 856' -*1!3!: *O31!6' , 8P!K!1B!; !5; ' 8!
; -81<!T !E6' !NB2' !)' ; ' 2C: ' !)*; : ' !/, 8@5D' 2CD' [6' !286!6' 1/!: *9*)!T !1B!
5' 9)*23!E6' 6!08: 6-*2C: B4!)87' 936*-34P!!

g' 4!7-3<682C!T !)-/(@1' , : ' !5D*9*6C!T !g3O*!j /-*N' ;@D' 6' -B4!

D' ()*[



E` ` 8D63;: B13@7' 1' (*86!39N8, *6C! O3N' D@: ' !1' : ' 7' 2356' 1!NB6C!; 58() *!

7-3<6: ' P!!

c8(' !W18-3D*!)' N32*5C!;!K-*D8F!G!K-*D8!7' (3N2' !7' A63!56' 2CD' !, 8!

18-3D: 08; @D*D!?!58: 6<N-<P!g' 2')B8!-8N<6*@D' 6' -B8!: 3!9*!A6' @; ' ' NU8P!

#*9-/O323!E6!/56-*: /!)' 62*P!Z*1!; ' 9: 3D2' !352*15D' 8!(' 5/) *-56; ' P!



6; ' 3!3: 68-85B!K!; 58@d6' !68N8!7') 78; *86!T !E6' !6; ' 3!5' X9: 3D3@*!; 58@d6' !
7-' 63; @E6' !6; ' 3!; -*(3!S6' !)' ; ' 2C: ' !/N' (34!3!' A8: C!: 8/56' 4A3; B4!13-P!!
M!1: ' (' !; -818: 3!7-' ; 82!;!7' 2363D8!g' <!56-*: *Y!1B!6' , 8!D*D38[6' !
' O3ND3!5' ; 8-O*81!g B!52' , : *<!56-*: *@D' 6' -*<!)' !53Q!7' -! : *Q') 365<!;!
5' 56' <: 33!6-*: 936*!39!6' (' @A6' NB!NB6C!V' ; 865D' 4!3!56*6C!D*D' 4[6' !
-*9; 36' 4!;!- *9: BQ!51B52*Q!56-*: ' 4P!%' : A8: ' @E6' !6<, 82B4!7/6C@
1/A3682C: B4!g B!5' ; 8-O*81!' O3ND3@1B!6' , 8!) *28D3!' 6!5' ; 8-O8: 56; *P!K!
D' : 8A: ' @: *1!D*D! : 3D' 1/! : /, : B!)' N-B8!' 6: ' O8: 3<!; ' D-/(!: *5!T !1B!
N' 2CO8@A81!) -/(38!9*3: 68-85' ; * : B!G!W18-3D8!3!6*D!; 58!N' 288!3!18: 88!; !
7' -<) D8!N2* (' 7' 2/A: *<!56-*: *!5!; B5' D31!/-' ; : 81!N89' 7*5: ' 563@d5!
; B5' D31!/-' ; : 81!- *9; 363<!ED' : ' 13D3!R' : <6: ' @D*D!; !2XN' 4!N' 2CO' 4!
56-*: 8!856C!) ' ` 3(*!7-' N281!W18-3D*: 0B!3Q!2/AO8!; 58Q!9: *X6@: ' !; !
O82' 1@8523!5-*; : 3; *6C!5!7-' A31!13-' 1@; 58!; 8!6*D!72' Q' !e! : *5!7-' N281!
(' -*9)' !N' 2CO8P!K! : *1!(' -*9)' !N' 2CO8! : /, : B!)' N-B8!' 6: ' O8: 3<!5!6813!
, 8!V' 8) 3: 8: : B13!J 6*6*13@d5!6813!, 8!8; -' 7840*13P!L*1!E6' !N/) 86!
532C: ' !; !7' 1' UC@E6' !N/) 86!7' 1' (*6C! : *O81!/!- *9; 363X!; !56' -' : /!
5; ' N') : ' 4@) 81' D-*63A85D' 4@5*1' 56' <682C: ' 4@7-8/578; *XU84!# ' 5533!5!
; B5' D31!/-' ; : 81!, 39: 3!2X) 84P!G' 6!A8(' !1B!Q' 631P!HA8: C!6-/) : ' !56-' 36C!
6*D38!' 6: ' O8: 3<!; !5' ; -818: : ' 1!13-8@d' () *!856C!) 3: !1' : ' 7' 2356@
D' 6' -B4!; 58Q!; ' D-/(!9*7/(3; *86!3!/, 8!5! : 31!7-' U8!5' (2*536C5<@A81!
57' -36C!S6' !D*D!A8-: *<!) B-*@D' 6' -*<!; !58N<!; 58!9*6<(3; *86P!

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