''#\$%!&''()!''#\$%\$ * +#!, -..-/\$0 * -%1! 23//!4544!6\$789-!:;//3<79!=>8-/+ * +%38;?!

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! >8\$@-99\$8!A3%+3!B38C3 * ! D@##-)! "#\$%\$&'#(!)) *!! " * 3+/)!+,%',-.,/0,& 1 #\$2\$/,3\$-435!! D@##-!E\$789)! 678 !9:;<=;:;<!\$/!.>!,??\$'%+&4%+! 6/399!A+ * -!3%F!/\$#31+\$%)! 678 !)):)@,&=)9:;<?&! "#\$%!@! 6/399!G -<9+1-)!AB,!

6\$789-!, -9#8+01+\$%!

A0'(!'(!,!B',35,+4!#\$5/(4!'%!34C42\$?&4%+!4#\$%\$&'#(-!!A04!?/'&,/>!B\$,2!\$D!+0'(!#\$5/(4!'(!+\$!?/4?,/4! (+534%+(!D\$/!\$/'B'%,2!/4(4,/#0!E'+0'%!+04!D'423!\$D!F4C42\$?&4%+!''#\$%\$&'#(-!!A04!#\$5/(4!/4,3'%B(!D\$#5(!\$%! 4&?'/'#,2!?,?4/(!E'+0!,%!4&?0,('(!\$%!05&,%!#,?'+,2-!!

A04!?/'&,/>!B\$,2!\$D!+0'(!#\$5/(4!'(!+\$!.5'23!(G'22(!'%!/4,3'%B!,%3!E/'+'%B!,??2'43!&'#/\$4#\$%\$&'#!?,?4/(-! H##\$/3'%B2>I!J!0,C4!?5+!24((!4&?0,('(!\$%!B'C'%B!,!+0\$/\$5B0!\$C4/C'4E!\$D!+04!2'+4/,+5/4!,%3!&\$/4!4&?0,('(! \$%!+4,#0'%B!,!D4E4/!?,?4/(!'%!34+,'2-!A04!D\$#5(!\$%!05&,%!#,?'+,2!E'22!042?!34&\$%(+/,+4!+04!E'34!,//,>!\$D! +\$?'#(!+0,+!#,%!.4!E\$/G43!\$%!'%!\$%4!,/4,-!!!

>8-8-H7+9+1-9!

KL-F-!6'#/\$4#\$%\$&'#!A04\$/>!,%3!''#\$%\$&4+/'#(-!JM&!,2(\$!,((5&'%B!>\$5!0,C4!24,/%+!&,%>!\$D!+04!,??2'43! &\$342(!+0/\$5B0!#2,((4(!(5#0!,(!H??2'43!6'#/\$4#\$%\$&'#(!\$/!N,.\$/-! !

A-I1<\$\$J!

A04/4!'(!%\$!/405'/43!+4P+.\$\$G!D\$/!+0'(!#\$5/(4-!L\$E4C4/I!J!0,C4!?5+!+\$B4+04/!,!2'(+!\$D!/4(\$5/#4(!+0,+!&,>! 0,C4!5(4D52!(5??24&4%+,/>!&,+4/',2-!

	; K-H7+8- * -%19!3%F!L83F+%M!
<u>H(('B%&4%+</u> !	<u>8 4'BO+</u> !
Q2,((!?,/+'#'?,+'\$%!,%3!(5&&,/'4(!	@ R !
)!\$4D4/44!\$4?\$/+!) <r!< td=""></r!<>

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&'((43!D'%,2!E'22!.4!B'C4%!%\$!E4'B0+!'%!+04!#,2#52,+'\$%!\$D!+04!D'%,2!B/,34!,%3!>\$5/!?/\$?\$(,2!,%3!&'3+4/&! E'22!.4!/4E4'B0+43!,##\$/3'%B2>-!

6/399!>381+#+031+\$%PK-3F+%M9)!!

• **K-3F**+%**M9**)!Q\$&4!+\$!#2,((!?/4?,/43!E'+0!+04!,(('B%43!,/+'#24U(\\!/4,3!?/'\$/!+\$!#\$&'%B!+\$!#2,((-!Y4! ?/4?,/43!+\$!,%(E4/!054(+'\$%(!,%3!?,/+'#'?,+4!'%)+04!#2,((!3'(#5(('\$%-!Y/'%B!,!#\$?>!\$D!+04!?,?4/! U0,/3!\$/!424#+/\$%'#\!E4!E'22!.4!3'(#5(('%B!+0,+!3,>-!!

G""T!D2!	QDU, OV!	G",U":,OV!
)!a!H5B!99!	J%+/\$-!7!H(('B%&4%+(!7V+,/+!A\$?'#!)!)-!J&?,#+!"C,25,+'\$%!
9!a!H5B!9b!)-!J&?,#+!"C,25,+'\$%!)-!J&?,#+!"C,25,+'\$%! S4C'4E!F,+,!H(('B%&4%+!
;!a!V4?+!@!	9,-!V\$#',2!K\$2'#>!"P?4/'&4%+:!QQA(!,%3!V0\$/+=A4/&!"DD4#+(!	
*!a!V4?+!)9!	9!V\$#',2!K\$2'#>!"P?4/'&4%+:!N\$%B!	9!V\$#',2!K\$2'#>!"P?4/'&4%+:!N\$%B!!

A-%131+.-!6/399!:#C-F7/-!

@!a!V4?+!)b!

K\$\$/!"#\$%\$&'#(I! 8 0>!\,+'\$%(!

T, '2I!A04!Y\$++\$&!Y'22'\$%I!A04!"%3!\$D!K\$C4/+>I!A04! 8 0'+4! 6 ,%M(!Y5/34%I!F4C42\$?&4%+!,(!T/443\$&I! "#\$%\$&'#! j ,%B(+4/(! k

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 $1\ 904\ 6\ 40/TT\ 6\ 1\ 04\ 6\ 24''(\ 2\ 245485!6\ 0\ .\ 9\ 1\ 43c(\ 6\)\ -\ 1\ 75\ 6\ 0\)\ -\ 1\ (<\!c4\ 6\ 0\)\ -\ 11(\ 1\ -\ 1\ 1)(\ 21)\ -\ 1)(\ 21)$

K-3F+%M!N+91!

! A\$0+#!ZR!W * 03#1!''.3/731+\$%! !

OR K3%F\$*+[-F!''I0-8+*-%19!!

!

F5D2\$I!" (+04/I!S, #042! j 24%%4/(+4/-!9<<f-!_Q0, ?+4/!c):!g('%B!S,%3\$&'],+'\$%!'%!F4C42\$?&4%+!"#\$%\$&'#(! S4(4,/#0:!H!A\$\$2G'+-`!!'%!A-!K,52!V#05+2]!,%3!h\$0%!H-!V+/,5((!U43(-WI! C\$2-!*-!H&(+4/3,&I!A04!\4+04/2,%3(:!\\$/+0!L\$22,%3-!! ۸ !

F4!h,%C4/>I!H2,'%!,%3!

A\$0+#!4R!:\$#+3/!>\$/+#;!''I0-8+*-%19)!6\$%F+1+\$%3/!639C!A83%9@-89!! !

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OR

BR!N\$%M-8\$1-8*!''@@-#19!\$@!66A9!\!N-38%+%M!3%F!N3<\$8!Q38J-1!D71#\$*-9]!

 $!Y,/0,&I!AI! [-!6,\#5/(I!h!6,25#\#'$-!9<99-!_"P?4/'&4\%+,2!"C'34\%#4!D/$&!,!Q$\%3'+'$\%,2!Q,(0!A/,\%(D4/!K/$B/,&:!V#0$$2'%BI!N4,/%'%BI!T4/+'2'+>!,%3!N,.$/!6,/G4+!d5+#$&4(!HD+4/!)<!X4,/(`!g\%?5.2'(043!USQAW!$

!K,/G4/!,%3! i \$B2-!9<9)

"@@-#1!\$@!"38/;!6C+/FC\$\$F!W%1-8.	-%1+\$%!\$%!E7 * 3%!630+13/!
0 #4! 3 μ ! A /4, + ∞ 4%+! Γ +4/%, 2 + 4(1!	I!e9U)WI!)@b=9)e-!!USQAW!
	:!N\$%B=A4/&!,%3!J%+4/B4%4/,+'\$%,2!"DD4#+(! '&4%+W!
!S\$.24(!,%3!6,P'&\$!A\$/4/\$-!9< <b-< td=""><td>!_J\$3'%4!F4D'#'4%#>!,%3!V#0\$\$2'%B!</td></b-<>	!_J\$3'%4!F4D'#'4%#>!,%3!V#0\$\$2'%B!
)U*W:!)*<=)cb-!U6,>!
)'(!.5+!E\$523!2'G4!>\$5!+\$!/4,3!'+\!	
,%#'%B!Q\$B%'+'C4!T5%#+'\$%'%B:!643	3'5&=A4/&!"DD4#+(!\$D!L4,2+0!,%3!T,&'2>!
%! 6 ,+2, .I`!	I!*U)WI!9*@=e;-!!
64! i 4224(4%!NvG4%I!,%3!Q0/'(+\$?04/	/!\4'2(\$%-!9<);-!o",/2>!N'D4!L4,2+0!
•	I!)<;U@W:!)fc9=b)-!
	#+,%#>!,%3!L5&,%!Q,?'+,2!J%C4(+&4%+(:!
4/%,2!6\$/+,2'+>!F4#2'%4(!w	!)9*!U)\:;*b=
_0,2,/`,!``/,3`#,+`\$%!,%3!``35#,+`\$%	,2!H++, '%&4%+:!"C'34%#4!U/\$&!K,/,B5,>! I!9U9W:!*c=e)-!
	<pre>!g%?5.2'(043!Uu5,('=/,%3\$&!4P?4/ '!S\$.24(!,%3!6,P'&\$!A\$/4/\$-!9<<b- ,%',`! !)'(!.5+!E\$523!2'G4!>\$5!+\$!/4,3!'+W! ,%#'%B!Q\$B%'+'C4!T5%#+'\$%'%B:!643 %!6,+2,.I`! %4! i 4224(4%!NvG4%I!,%3!Q0/'(+\$?04/ I#,34&'#!H#0'4C4&4%+-o!</b- </pre>

6,25##'\$I!h\$0%I!4+!,2-!9<<b-!_A04!J&?,#+!\$D!J&?/\$C'%B!\5+/'+'\$%!35/'%B!",/2>!Q0'230\$\$3!\$%!"35#,+'\$%! ,&\$%B!j5,+4&,2,%!H352+(`-!))bU@;eW:!e;*=ec;-!

6R ''@-#1!\$@!''38/;!6C+/FC\$\$F!W%1-8.-%1+\$%!\$%!N3<\$8!Q38J-1!D71#\$*-9!

!Y24,G24>I!L\$>+-!9<)<-!06,2,/',!"/,3'#,+'\$%!'%!+04!H&4/'#,(:!H!S4+/\$(?4#+'C4!H%,2>('(!\$D!

!

-!;e)Ubc) <w:!*))a*)c-!< th=""><th><pre>/4(I!,%3!S-!6,/+\$/422-!9<<f-!_"dd4#+!\$d!,!\5+ #\$%\$&'#!k="" \$35#+'c'+="" '+'\$%!="">!'%!j5,+4&,2,%!H352+(I`! !Q\$5/(4\M!U??-!;;e@a!;*c@\!'%!A-!K,52!V#O52+]!,%3! !U"2(4C'4/I!9<<f\"!!< pre=""></f\"!!<></f-!_"dd4#+!\$d!,!\5+></pre></th></w:!*))a*)c-!<>	<pre>/4(I!,%3!S-!6,/+\$/422-!9<<f-!_"dd4#+!\$d!,!\5+ #\$%\$&'#!k="" \$35#+'c'+="" '+'\$%!="">!'%!j5,+4&,2,%!H352+(I`! !Q\$5/(4\M!U??-!;;e@a!;*c@\!'%!A-!K,52!V#O52+]!,%3! !U"2(4C'4/I!9<<f\"!!< pre=""></f\"!!<></f-!_"dd4#+!\$d!,!\5+></pre>	
! , R , - * 3%F!@\$8!A-91+%M!		
!		
!A0\$/%+\$%I!S4.4##,-!9< <f-!_a04!f4&,%3!d\$ %'%b!lji!v+,+5(-`!<br="" i!,%3!j&?,#+!\$di!n4,="">I!bfU@W:!)f9ba)fc;-!USQAW!</f-!_a04!f4&,%3!d\$>		
!		
F5?, (I!K, (#,2'%4-!9<))-!_F\$!A44%, B4/(!S4(?\$%3!+ "P?4/'&4%+!'%! [4%>,-`! j \$%BI!"/'#-!9<)*!_LJ i !A4(+'%B!,%3!S'(G>!V4P5,2! "C,%(I!F-I!,%3!"-!6'B542-!9< <e-!d ?0,%(!,%3!v#05<br="">I!**U)W:!;@=@e-! [/4&4/I!6'#0,42-!9<<9-!_K0,/&,#45+'#,2(!,%3!+04! I!)cU*W:!ce=b<-!</e-!d>	I!;U)W:!)=;*-! Y40,C'\$/`! I!)9@U@f9W:;9=c<-! \$\$2'%B!'%!HD/'#,:!H!N\$%B'+53'%,2!H%,2>('(Io!	
A\$0+#!(R! !''F7#31+\$%!		
1		
!N5#5(I!H!,%3!J-!6.'+'-!9<)*-!_"DD4#+(! F'(#\$%+'%5'+>!"C'34%#4!D/\$&![4%>,1`! 9;*=9c;-!US4B/4(('\$%!F'(#\$%+'%5'+>W!	\$D!V#0\$\$2!u5,2'+>!\$%!V+534%+!,#0'4C4&4%+:! I!cU;W:!	

!

BR "@@-#19!\$@!Q+M831+\$%!

! **U\$.!**]!**X**, %**B**!!**F**4, %-!**9**<<**f**-!**_**J%+4/%, +'**\$**%, 2! **6** '**B**/, +'**\$**%**!**!**S**4&'++, %**#**4(**!**, %3!**L\$**5(40**\$**23!**J**%C4(+&4%+:!"C'34%#4! D/\$&!K0'2'??'%4! 6 'B/,%+(M!" P#0,%B4!S,+4!V0\$#G(I`! I!))f!U@9fW:!@b)=c;<-!UJiW!Y/>,%I!j-!Q0\$E305/>I!V-!6\$.,/,GI!H-6-!9<)*-! g%34/='%C4(+&4%+!'%!,!K/\$D'+,.24!A4#0%\$2\$B>:!A04!Q,(4! \$D!V4, (\$%, 2! 6 'B/, +'\$%!'%!Y, %B2, 34(0`I! I!f9I!)ce)a)e*f!j \$%],24]= i 42\$(,1!Q,/\$2'%,!U9<)9WI!_AO4!"DD4#+(!\$D!"&'B/,+'\$%!,%3!S4&'++,%#4(!\$%!HB/'#52+5/4:!"C'34%#4! D/\$&!+04!K0'2'??'%4(`I!5%?5.2'(043!&'&4\$-!! L,%(\$%I! j \$/3\$%!L-!U9<<eWI!_"&'B/,+'\$%I!N,.\$/!V5??2>I!,%3!",/%'%B(!'%!64P'#\$I`!'%! U9<<eWI! j 4\$/B4!h-!Y\$/Z, (I!43'+\$/I!?-!9fb!a!;9f-!! 6#[4%]'4I!F,C'3I!h-!j'.(\$%!,%3!V-!V+'22&,%!U9<))WI!_A04!J&?,#+(!\$D!J%+4/%,+'\$%,2!6'B/,+'\$%!\$%! \$4&,'%'%B!L\$5(40\$23!64&.4/(:!d&%'.5(!\$4(52+(!D/\$&!,!6'B/,+'\$%!N\$++4/>!K/\$B/,&I`! I!b; U*W!)9be=); eI!9<) -!!6 '(0/,I!K/,#0'!U9<<eWI! "&'B/,+'\$%!,%3! 8,B4(!'%!V\$5/#4!Q\$5%+/'4(:!"C'34%#4!D/\$&!64P'#\$`I! I!%\$-!f9I!??-!)f<=)bb-!! 65%(0'!,%3!S\$(4%]E4'B-!9<)@-!\4+E\$/G(!,%3!6'(,22\$#,+'\$%:!J%(5/,%#4I!6'B/,+'\$%!,%3!+04!S5/,2=g/.,%! 8,B4!j,?-! A\$0+#!')!N3<\$8!2+8 * 9! **aaa!U\$.N!Z(**:!L,/3>I!6\$/B,%!,%3!h,&'4!6#Q,(2,%3-!9<99! H/4!V&,22!T'/&(!N,.\$/!Q\$%(+/,'%431! "P?4/'&4%+,2!"C'34%#4!D/\$&! j 0,%,-!T\$/+0#\$&'%B! !! 1 Y,%4/B44I!H.0'Z'+!,%3!"(+04/!F5D25-!9<<<-!_S4?5+,+'\$%!"DD4#+(!,%3!+04!N'&'+(!\$D!Q\$%+/,#+'%B:!H!V+53>!\$D! +04!J%3',%!V\$D+E,/4!J%35(+/>I`! !))@U;W:!bfb=)<)e-! 6,##0',C422I!S\$##\$I!,%3!H&44+!6\$/Z,/',-!9<9)-!_Q\$&?4+'+'\$%!,%3!S42,+'\$%,2!Q\$%+/,#+(!'%!+04!SE,%3,! O\$DD44!O0.'%-`! I!);cU9W:)<bf=))*;-! 6 # 6 '22, %3!h\$0%!, %3!Q0/'(+?04/! 8 \$\$3/5DD-!)bbb-! J%+4/D'/&!S42,+'\$%(0'?(!,%3!J%D\$/&,2!Q/43'+!'%! i '4+%,&4I`!u5,/+4/2>!h\$5/%,2!\$D!"#\$%\$&'#(I!))*U*W:!)9f@=);9<-! A\$0+#!&R!!6C\$+#-!>30-89!! aaa!U\$.R!Zb!\!#C\$\$9-!@8\$ * !<-/\$ c !\$8!97MM-91!3!030-8! H+G'%I!F,C'3I!H],&!Q0,530/>I!V0,&>2,!Q0,53/>I!H&'+! [-! [0,%342E,2I!"/'#! i 4/0\$\$B4%-!9<)e-! _d/B,%'],+'\$%,2!Y,//'4/(!+\$!A4#0%\$2\$B>!H3\$?+'\$%:!"C'34%#4!D/\$&!V\$##4/=Y,22!K/\$35#4/(!'%! K,G'(+,%`I! I!);9U;W:)) <)=))c*!USOAW-!Y2,++&,%I!Q0/'(+\$?04/I!j5(+,C\$!F5%#,%I!Y4%Z,&'%!N4(('%BI!z!V,%+',B\$!A\$.\$%-!h5%4!9<99-!_j,%B!S524:! g%34/(+,%3'%B!,%3!Q\$5%+4/'%B!Q/'&'%,2!j\$C4/%,%#4I`!g%?5.2'(043-! Q\$2&4/1!h\$0%,+0,%-!9<9)-! A4&?4/,+5/4I!N,.\$/!S4,22\$#,+'\$%I!H%3!J%35(+/',2!K/\$35#+'\$%:!"C'34%#4!J%3',I`! I!);U*₩:)<)=9*-! j \$%],24]I!S\$.4/+-!9<9)-! Q422!K0\$%4!H##4((!,%3!"24#+'\$%!T/,53:!"C'34%#4!D/\$&!,!V?,+',2!S4B/4(('\$%! F'(#\$%+'%5'+>!F4('B%!'%!HDBO,%'(+,%I`! !);U9W:!)=@)-!USFF! 34('B%W! L,&\$/>I!h\$,%I!4+!,2-!9<9)-!o\$44C,25,+'%B!,B/'#52+5/,2!?/\$35#+'C'+>!B,?(!E'+0!2\$%B'+53'%,2! &'#/\$3,+,-0! !)bU;W:!)@99=)@@@-!

X%+.-89+1;!>\$/+#+-9!

 $Y \$+0!(+534\%+(!,\%3!D,\#52+>!,/4!/4(?\%('.24!D\%)!\&,'\%+,'\%'\%B!,\%!,??/\$?',+4!24,/\%'\%B!4\%C'/\%\&4\%+!'\%!,22! \\ '\%(+/5\#+'\%,2!(4++'\%B(I!E04+04/!'\%)!?4/($\%I!/4&\$+4!\$/!$\%2'%4-!A0$(4!E0\$!D,'2!+\$!,304/4!+\$!(5\#0!.40,C'$/,2! \\ (+,\%3,/3(!\&,>!.4!(5.74\#+!+\$!3'(\#'?2'\%4-!K/\$D4(('$\%,2!\#$5/+4(>!,\%3!(4\%('+'C'+>!,/4!4(?4\#',22>!'&?$/+,\%+!E'+0!) \\ /4(?4\#+!+\$!'\%3'C'35,2(!,\%3!+\$?'\#(!34,2'\%B!E'+0!/,#4I!#2/I!\%,+'$\%,2!$/'B'\%I!(4PI!?/4B\%,\%\#>I!,B4I!3'(,.'2'+>I!) \\ \#/443I!/42'B'$\%I!(4P5,2!$/'4\%+,+'$\%I!B4\%34/!'34\%+'+>I!B4\%34/!4P?/4(('$\%I!C4+4/,\%!(+,+5(I!?$2'+'\#,2!,DD'2',+'$\%!) \\ \$/!?$2'+'\#,2!?0'2$($?0>-!!T$/!&$/4!'\D$/&,+'$\%I!(44!+04!#2,((/$$\&!.40,C'$/!?$2'#>I!+04!V+534\%+!Q$34!$D!) \\ O $\%35\#+I!,\%3!+04!dDD'#4!$D!J\%(+'+5+'$\%,2!''05'+>$