"#$%!&' '(!(')$' *!+,$-'!$%!(. ./' -!$0!1. 2&('#'0%$)'!('%'3(1#!. 0!'44'1/$)'!#$+#'(!' -,13/$. 0!
/'31#$0+!30-!5'3(0$0+!&(31/$1'%6!&3(/$1,53(57!*$/#$0!/#'!. 05$0'!' -,13/$. 0!%&#'('8!9/:%!-'%$+0'-!
3(. ,0-!4$)'!&$) ./35!13/'+. ($'%!/#3/!0./!. 057!%/('32 5$0'!/#'!&' '(!(')$' *!&(. 1'%%!4. (!. 05$0'!
/'31#$0+!3/!; ./#!,0-'(+(3-,3/'!30-!+(3-,3/'!5')'5%!; ,/!35%. !35$+0!*$/#!<'7!&(01&5'%!. 4!. 05$0'!
'-,13/$. 0!$015,-$0+!='+,53(!30-!>,;%/30/$35!90/'(31/$. 0!?=>9@6!AO$)'(%35!B'%$+0!4. (!C'3(0$0+!
?ABC@6!30-!#,2 30D0+!. 05$0'!5'3(0$0+8!
!
E7!4. 1,%$0+!. 0!/#'%'!3('3%6!/#'!+,$-'!'0%,('%!/#3/!. 05$0'!1. ,(%'%!3('!-')'5. &'-!30-!-'5$)'('-!
$0!*37%!/#3/!3('!'0+3+$0+6!311'%%$;5'6!30-!%,&&. (/$)'!. 4!355!%/,-'0/%6!/#'(';7!4. %/'($0+!3!2. ('!
$015,%$)'!30-!&'(%. 035$D'-!5'3(0$0+!'0)$(. 02'0/8!"#'!'F32&5'%!. 4!')$-'01'!30-!('1. 2 2'0-'-!
('%. ,(1'%!&(.)$-'-!,0-'(!'31#!13/'+. (7!%'()'!/. !+,$-'!&' '(!(')$' *'(%!$0!$-'0/$47$0+!/'31#$0+!

" . !#'5&!4315$$/3/''!/#'!&''(!('')$'*!.4!.05$0'!/'31#$0+6!/#'!4.55.*$0+!&''(!('')$'*!&(.1'%%!$%!
%,++'%/'-K!
!
L8 "#'!1.,(%'!$0%/(,1/.(!1.2&5'/'%!/#'!M90%/(,1/.(!90&,/!N.(20!/.!
&(.)$-'!/#'!&''(!('')$'*'(!*$/#!1.0/'F/,35!$04.(23/$.0!3;.,/!/#'!1.,(%'8!
P8 !"#'!&''(!('')$'*'(!3%%'%%'%!#.*!/#'!$0%/(,1/.(!3--('%%'%!'31#!
.4!/#'!4$)'!13/'+.($'%!,%$0+!/#'!MQ''(!=')$'*!R,$-'!4.(!S05$0'!T.,(%'%60!0./$0+!
%/('0+/#%!30-!3('3%!4.(!$2&(.)'2'0/8!
U8 !"#'!('')$'*'(!30-!$0%/(,1/.(!-';($'4!/#'!'F&'($'01'!/.!-$%1,%%!
.;%'()3/$.0%!30-!#.*!/#'7!130!$04.(2!/'31#$0+!'0#301'2'0/%8!
!
!

!

!

"#$%!13/'+.(7!,0-'(%1.('%!/#'!$2&.(/301'!.4!4.%/'($0+!2'30$0+4,5!1.00'1/$.0%!
;'/*''0!%/,-'0/%!30-!431,5/76!*#$1#!$%!'%&'1$3557!)$/35!$0!/#'!.05$0'!5'3(0$0+!

!

X2&#3%$D'%!/#'!1('3/$.0!.4!3!1.553;.(3/$)'!5'3(0$0+!'0)$(.02'0/!*#'('!
%/,-'0/%!130!5'3(0!4(.2!.0'!30./#'(6!%#3('!-$)'(%'!&'(%&'1/$)'%6!30-!;,$5-!3!
%'0%'!.4!1.22,0$/78!
!

!B'%$+0$0+!1.553;.(3/$)'!3%%$+02'0/%!/#3/!
('G,$('!$0/'(-'&'0-'01'6!$0-$)$-,35!311.,0/3;$5$/76!30-!+(.,&!
&(.1'%%$0+8!
!N31$5$/3/$0+!4.(,2%!.(!%&31'%!*#'('!%/,-'0/%!
130!-$%1,%%!1.,(%'!23/'($35%!$04.(235576!%#3('!('%.,(1'%6!30-!%,&&.(/!
'31#!./#'(8!
!X01.,(3+$0+!&''(!(')$'*!30-!4''-;31<!/.!-''&'0!
,0-'(%/30-$0+!30-!;(.3-'0!&'(%&'1/$)'%8!
!

R(.,&!&(.J'1/%!/#3/!$015,-'!(.5'%!4.(!'31#!2';'(6!'0%,($0+!31/$)'!
&3(/1&3/$.0!30-!%#3('-!('%&.0%$;5/78!
T('3/$.0!.4!3!W)$(/,35!134'W!.(!%$2$53(!.05$0'!%&31'!*#'('!%/,-'0/%!130!
#3)'!$04.(235!-$%1,%%$.0%!,0('53/'-!/.!%&'1$4$1!3%%$+02'0/%8!
Q''(!3%%'%%2'0/!31/$)$/$'%!*#'('!%/,-'0/%!&(.)$-'!1.0%/(,1/$)'!
4''-;31<!.0!'31#!./#'(:%!*.(<6!+,$-'-!;7!15'3(!1($/'($38!
>/(,1/,('%!-$%1,%%$.0%!.4!23/'($35!;3%'-!.0!4''-;31<!.0!%/,-'0/%Y!
,0-'(%/30-$0+6!'01.,(3+$0+!-''&'(!'0+3+'2'0/!*$/#!/#'!1.0/'0/8!
V%<%!%/,-'0/!/'32%!/.!('3-!'31#!./#'(:%!#.2'*.(<!30-!1($/$G,'6!
4.%/'($0+!3!%'0%'!.4!1.22,0$/7!30-!1.553;.(3/$)'!5'3(0$0+8!
V!&,;5$%#'-!1.,(%'!%1#'-,5'!.,/5$0'%!/.&$1%!30-!3%%$+02'0/!-,'!-3/'%!
%.!%/,-'0/%!130!&530!/#'$(!*.(<5.3-6!'0#301$0+!/$2'!2303+'2'0/!30-!
1.553;.(3/$)'!&5300$0+8!
!

!

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!

!

N . 1 , % ' %! . 0!$0) . 5)$0+!%/ , - ' 0/%! - $(' 1/57!$0!/# ' !5 ' 3(0$0+!&(. 1 ' %%6! ' 01 . , (3+$0+!
/# ' 2 !/ . !31/$) ' 57! ' 0+3+ ' ! * $/#!/# ' ! 2 3/ ' ($356!3&&57! * #3/!/# ' 7!5 ' 3(06!30 - !(' 45 ' 1/! . 0!
/# ' $(!<0 . * 5 ' - + ' 8!
!

9O/ ' (31/$) ' !T . 0/ ' 0/K!A/$5D0+! 2 , 5/$ 2 ' - $36!%$ 2 , 53/$. 0%6!30 - !$0/ ' (31/$) ' !
31/$)$/$ ' %!/#3/!(' G , $(' !%/ , - ' 0/! ' 0+3+ ' 2 ' 0/8!
T($/$135!"#$0<$0+!30 - !Q(. ; 5 ' 2 I> . 5)$0+K!X01 . , (3+$0+!%/ , - ' 0/%!/ . !3&&57!
1 . 01 ' &/%!/ . !(' 35I * . (5 - !%1 ' 03($. %6!30357D ' !13% ' !%/ , - $ ' %6!30 - ! ' 0+3+ ' !$0!
&(. ; 5 ' 2 I% . 5)$0+! ' F ' (1$% ' %8!
= ' 45 ' 1/$. 0!30 - !> ' 54IV%% ' %% 2 ' 0/K!901 . (& . (3/$0+!(' 45 ' 1/$) ' !J . , (035%6!% ' 54I
3%% ' %% 2 ' 0/!G , $DD ' %6!30 - ! . /# ' (!31/$)$/$ ' %!/#3/!355 . * !%/ , - ' 0/%!/ . !1 . 0%$ - ' (!
/# ' $(!5 ' 3(0$0+!&(. +(' %%8!
!

A% ' ! . 4!)$(/ , 35!53 ; %! . (!%$ 2 , 53/$. 0%! * # ' (' !%/ , - ' 0/%!130! 2 30$& , 53/ ' !
)3($3 ; 5 ' %!30 - !% ' ' !/# ' ! . , /1 . 2 ' %!$0!(' 35I/$ 2 ' 8!
T3% ' I ; 3% ' - ! - $%1 , %%$. 0%!$0!4 . (, 2 %! . (! - , ($0+!5$) ' !% ' %%$. 0%! * # ' (' !%/ , - ' 0/%!
30357D ' !30 - ! - ' ; 3/ ' ! - $44 ' (' 0/!3&&(. 31# ' %!/ . !&(. ; 5 ' 2 I% . 5)$0+8!
X0 - I . 4I 2 . - , 5 ' !(' 45 ' 1/$. 0!&(. 2 &/%!/#3/! ' 01 . , (3+ ' !%/ , - ' 0/%!/ . !3(/$1 , 53/ ' !
* #3/!/# ' 7:) ' !5 ' 3(0 ' - !30 - !$ - ' 0/$47!3(' 3%!4 . (!4 , (/# ' (! ' F&5 . (3/$. 08!
Q(.)$ - ' %! 2 ' 30$0+4 , 5!4 ' ' - ; 31<! . 0!%/ , - ' 0/!3%%$+0 2 ' 0/%! * $/#$0!3!
& , ; 5$1$D ' - !30 - !(' 3% . 03 ; 5 ' !/$ 2 ' !4(3 2 ' 6! ' 01 . , (3+$0+!31/$) ' ! ' 0+3+ ' 2 ' 0/!
* $/#!/# ' !5 ' 3(0$0+! 2 3/ ' ($358!
>#3(' %! ' F3 2 &5 ' %! . 4!%/ , - ' 0/! * . (<!/#3/! - ' 2 . 0%/(3/ ' !3 -)301 ' 2 ' 0/!
/ . * 3(- !5 ' 3(0$0+!+ . 35%6!$0%&$($0+! . /# ' (%!30 - !%# . * 13%$0+! - $) ' (% ' !
3&&(. 31# ' %!/ . !&(. ; 5 ' 2 I% . 5)$0+8!
Q(.)$ - ' %! . && . (/ , 0$/$ ' %!4 . (!&(31/$1 ' ! * $/#!4 ' ' - ; 31<6!% , 1#!3%!$0/ ' (31/$) ' !
% ' 54I3%% ' %% 2 ' 0/%! . (!03((3/ ' - ! - ' 2 . 0%/(3/$. 0%! . 4!# . * !/ . !% . 5) ' !
2 3/# ' 2 3/$135!&(. ; 5 ' 2 %6!&(. 2 . /$0+!31/$) ' ! ' 0+3+ ' 2 ' 0/8!
!

XO%,('%!/#3/!1.,(%'%!3('!1#355'0+$0+!30-!$0/'55'1/,3557!%/$2,53/$0+6!%'//$0+!#$+#!
'F&'1/3/$.0%!4.(!355!%/,-'0/%!/.!31#$')'!/#'$(!;'%/8!

!V(/$1,53/$0+!*#3/!%/,-'0/%!3('!'F&'1/'-!/.!
5'3(0!30-!31#$')'!;7!/#'!'0-!.4!/#'!1.,(%'!.(!2.-,5'8!
!B'%$+0$0+!/3%<%!/#3/!&,%#!%/,-'0/%!;'7.0-!
2'('!('135!.4!$04.(23/$.0!/.!303571%$%6!%70/#'%$%6!30-!')35,3/$.08!
!X01.,(3+$0+!3!+(.*/#!2$0-%'/!*#'('!
%/,-'0/%!)$'*!1#355'0+'%!3%!.&&.(/,0$/$'%!4.(!5'3(0$0+!30-!
-')'5.&2'0/8!

B'/3$5'-!(,;($1%!/#3/!1.22,0$13/'!/#'!1($/'($3!4.(!'F1'55'01'!$0!
3%%$+02'0/%!30-!-$%1,%%$.0%8!
Q(.J'1/%!/#3/!('G,$('!%/,-'0/%!/.!1.0-,1/!$0-'&'0-'0/!('%'3(1#6!
$0/'+(3/'!)3($.,%!%.,(1'%!.4!$04.(23/$.06!30-!&('%'0/!/#'$(!4$0-$0+%8!
901.(&.(3/$.0!.4!$/'(3/$)'!3%%$+02'0/%!*#'('!%/,-'0/%!('4$0'!30-!
$2&(.)'!/#'$(!*.(<!;3%'-!.0!4''-;31<8!
XF&5$1$/!1.22,0$13/$.0!.4!/#'!%<$55%!30-!<0.*5'-+'!')'(7!%/,-'0/!0''-%!
/.!;'!%,11'%%4,5!$0!/#'!1.,(%'6!%'//$0+!15'3(!'F&'1/3/$.0%8!
N('G,'0/!4''-;31<!$%!&(.)$-''-!/.!%/,-'0/%!/#(.,+#!*($//'0!'F&5303/$.0%!
30-!-'/3$5'-!4''-;31<!.0!3%%$+02'0/%6!23$0/3$0$0+!#$+#!313-'2$1!
%/30-3(-%8!
Z./$)3/$.0!30-!'01.,(3+'2'0/!$0%&$('!%/,-'0/%!/.!2.)'!&3%/!/#'!'3%7!
30%*'(%!/.!2.('!1.2&5'F!%.5,/$.0%6!4.%/'($0+!3!1,5/,('!.4!#$+#!
'F&'1/3/$.0%!30-!313-'2$1!($+.(8!
!

!

Q($.($/$D'%!/#'!1('3/$.0!.4!30!$015,%$)'!5'3(0$0+!'0)$(.02'0/!/#3/!
311.2 2.-3/'%!%/,-'0/%:!-$)'(%'!0''-%6!;31<+(.,0-%6!30-!3;5/$'%8!

!92&5'2'0/$0+!ABC!&($01$&5'%!/.!
&(.)$-'!2,5/$&5'!2'30%!.4!'0+3+'2'0/6!('&('%'0/3/$.06!30-!'F&('%%$.08!
!XO%,($0+!1.,(%'!1.0/'0/!30-!'F32&5'%!3('!
$015,%$)'!30-!('&('%'0/3/$)'!.4!3!-$)'(%'!%/,-'0/!&.&,53/$.08!
!