

JKNYPLN& - 3<% "636D& ! 8838S36#& ?<@99B&9: &) 9 7 7 "8;<5%;98\$D& * 8;=36\$;%>&9: &
I388\$>B=58;5D& I @;B5C3B4@;5D& I ! HP&%35<@;8#& <9"6\$3\$&;8& 7 3@9C9B9#>&58C&
\$%5%;\$%;<5B&585B>\$;\$&;8&<9 7 7 "8;<5%;98&63\$356<@H&

&

JKLN& - 3<% "636D& ?9<;5B& ?>\$%3 7 \$& ?<;38<3\$&Z65C"5%3&Z69"4D& \ @56%98& ?<@99BD&
* 8;=36\$;%>&9: & I388\$>B=58;5P&%35<@;8#& <9"6\$3&;8& ! C=58<3C& ?>\$%3 7 \$&
+3\$356<@& IB588;8#& 58C& 2 3\$;#8H&

&

JKLJPLF& ^;8#& VB5=& / & A3BB9M&Q\$498\$963C&S>&5ʒ%&:69 7 &&@3& ! 7 36;<58&

&
?%3;36D&AH&Q' ((JRH& 1 U36<;\$,8#&:65 7 3&:B3U;S;B;%>H& D&
J' QJP' RDEFPYKH&Q5B\$9&;8&AH& ?%3;36D&Q 1 CHRc&
H&, 7 46;8%&! <5C3 7 ;<D&' ((J& i &&\$33&S99X\$D&5S9=3RH&&

&
?%3;36D&AH&58C&b96#38\$98D&bH&Q' ((JRH& I5%%368\$&&@5%&<9883<%&&45%%368\$&&@5%&<9883<%H&
D&J' D&QJP' D& JPJ (RH&Q5B\$9&;8&AH& ?%3;36D&Q 1 CHRc&
H&, 7 46;8%&! <5C3 7 ;<D&' ((J& i &&\$33&
S99X\$D&5S9=3RH&&

&
V\$%638X9D& \ H& a & ?%3;36D&AH&Q' ((JRH&) 98=36\$5%;98&5\$&5&<963&469<3\$\$c&) 635%;8#&5&<"B%" 63&
9:&C;5B9#" 3H&, 8&bH&O69M8D& 2 H&,\$55<\$&58C&&@3& \ 96BC&) 5:e&) 9 7 7 "8;%>D&
H&O3663%%P ^ 93@B36H&

&
?%3;36D&AH&58C&b96#38\$98D&bH&Q' ((ERH& 1 %@;<\$&58C&53\$%@3%;<\$&9:~9S\$36=;8#&:65 7 3\$H&
D& J' YPJEFH&&

&
?%3;36D&AH&Q' (('RH& - ;=;8#&5&\$3<98C&96C36&B;:3H& D&
KQJRD&LEPLNH&

&
?%3;36H&AH&58C&V\$%638X9D& \ H&Q' (((RH&

?%3;36D&A&QJKLJ&R&O9M56C&5&S3683%;<7 3%@9C9B9#>9:5 7 ;B>@3654>63\$356<@&A;%%;8#&@3654>63\$356<@&9&@3654>7 3%9C&H&,8& - H& ! 8C639__;&Q 1 CHR&H& ! \$438&?>\$%3 7 \$H&

&
?%3;36D&A&H&?%58%98D& . H 2 H&58C&09CCD&O H) H&QJKL ' R H& I 5%368\$&9:5 7 ;B>&9 7 7 "8;<5%;98c& ! &\$% "C>9:469<3\$3\$&9:&"68P%5X;8#&58C&5BB;58<3&:96 7 5%;98&;8&896 7 5B&58C& C>\$: "8<%;985B&:5 7 ;B;3\$ D&E ' D&JYLPJF (H&

&
?%58%98D& . H 2 HD&?%3;36D&A&H&58C&09CCD&O H) H&QJKL ' R&I 5>;8#&:5 7 ;B;3\$&:96&5%38C&8#& \$3\$;&98\$&c&) 9 "8%365<%;8#&@3&C6949 " %&469SB3 7 H& &LQERH&

&
. 9M5%&D& 2 HOHD& f 356CD& 2 HOHD&?%3;36D&A&H&?%58%98D& . H 2 H&58C&09CCD&O H) H&QJKL ' R H&) 6;\$;& 63\$9B " %>98&58C&@3&5CC;<%;98&<<B3H&,8& . H 2 H&?%58%98D&O H) H&O9CC&58C& ! \$\$9<;5%3\$& Q 1 C\$HR& H&Z " ;B:96C&I 63\$H&

&
?%58%98D& . H 2 HD&09CCD&O H) HD&?%3;36D&A&H&58C& / 58 2 3 " \$38D&b H . H&QJKL ' R&O @3654>9 " %<9 7 3H& ,8& . H 2 H&?%58%98D&O H) H&O9CC&58C& ! \$\$9<;5%3\$&Q 1 C\$HR& H&Z " ;B:96C&I 63\$H&

&
&
%2C0/6+(#77.D7(.2+(\lt 11A(&B.:/647(
(

?%3;36D&A&H&58C& - 544;8D&bH&Q ' (JKRH&A;6\$&V6C36&) >S3683%;<\$H&,8& - 3S9MD&bHD&) @5 7 S36%SD& ! HD&O63 " 8B;8D& 2 H&Q 1 C\$HR& H& ?46;8#36D&) @5 7 H&QJE&45#3&63:3633C&3U%38C&38<>B943C;5&38%6>R&

?%3;36D&A&H&Q ' (JNRH&A963M96C&9&?36#3`&=58& . ;CC38C964D& H&1S " 698& ! <5C3 7 ;<I " SB;\$@36\$&&

&
V\$%638X9D& \ H&58C&?%3;36D&A&H&Q ' (JYRH& - 3568;8#&) 98=36\$5%;98\$&c&,8=;%;8#&<9 7 7 "8;>& 456%836\$@;4&;8&5&\$<;38<3&<38%36H& D&?34%3 7 S36TV<%9S36& ' (JYD& ' YP ' NH&&

&
O@9 7 4\$98D& \ HOHD&?%3;36D&A&H&58C&V\$%638X9H& \ H&Q ' (JYRH& \ 96BC&) 5:e&469<3\$&& %658\$:96 7 \$&\$<;38<3&<38%36&<9 7 7 "8;%>&;8%9&<9PC3\$;#836\$H& D& ! " # " \$ % & K Q Y R H &&

&
?%3;36D&A&H&Q ' (J (RH& * 8 ; % > P , 8 P 2 ; = 36 \$; % > c & ! & \$ > \$ 3 7 ; < : 963M96CH&,8& ? % 3 = 38 & \ 5BB ; \$ & Q 1 CHR& H& , Z , & Z B 9 S 5 B H &

&
?%3;36D&A&H&58C&OB53 " 36D& 2 H&Q ' ((LRH& ! & @ 9639#654 > @ 9 : : < > S3683%;<\$&58C& 436:96 7 5%;=;>H&,8&b3::63>&Z96 7 B3>&Q 1 C;%96R&c& H& 2 5#@C@5H&Q, ?OW&cKNLP(PK]JLJLJJPJ' R&Q@;,\$&,\$&5B\$9& 5=5;B5SB3&98B;83&5& ! "#\$%&&&'(!)*+ , *-#!' . +&5\$&5&B35C&56%;<B3R&

&
?%3;36D&AH&Q'(((RH&[\ 5B%_;8#&9M56C&C;5B9#"3H[&
Q\$43<;5B&;\$\$"3&98&2;5B9#"3RH&F]D&Q'DERD& \ ;8%36P?46;8#D&']]P']KH&Q ! &63=;3M&
3\$\$5>RH&

&
- 544;8D&bH&58C&?%3;36D&AH&QJKKFPKNRH&O3;8#&@363c& - 3568;8#&@9M&9&5BX&@3&5BXH&

D&FFD&JYPJLH&

&
?%3;36D&AH&QJKLLRH&W96S36%& \ ;3836H& H&
VU:96C&*8;=36\$;%>&I63\$\$H&

&
?%3;36D&AH&QJKLLRH&V8&<>S3683%;<\$&5\$&63:B3U;=3&"8C36\$%58C;8#H&
&?46;8#D H&

&
?%3;36D&AH&QJKLNRH&+3=;3M&9:&O& \ ;89#65C&58C&AH&AB963\$D&*8C36\$%58C;8#&)974"%36\$&
58C&)9#8;%98c&!&W3M&A9"8C5%;98&:96&23\$;#8H D&END&
JE]PJY(H&&

&
?%3;36D&AH&QJKLERH&O@3&)>S3683%;<\$&9:&n@3B4;8#nc&!8&;8%363\$%E"4&9:&@3&!736;<58&
?9<;3%>&:96&)>S3683%;<\$& H& &
D&.56<@D&JQYRH&&

&
&1256462-6(341-66+02E7(

&
Z"BC38D&OH&a&?%3;36D&AH&Q'('RH&-;7%;#&3U436;38<3&58C&<9#8%;98&S>&:B3U;S;B;>D&
;8%365<%;98&C3\$;#8&58C&<>S3683%;<\$&H&,8c&!%?34@58;C;\$&)HD&!8%985&.Ha&W%95&?H&
Q3C\$R&f),&,8%3685%;985B&'('(&
D&=9B&J'KEH&?46;8#36H&

&
?%3;36D&AH&a&O@974\$98D& \ HOH&Q'(J]RH&?>\$%37;<&C3\$;#8&9:&58&;C35&_983&5%&5&\$<;38<3&
<38%36H ,8&!B3U&+>58&58C&I3%36&b983\$ Q1C\$HRD&
D&O58:;D&)585C5H&?>\$%37;<&23\$;#8&
+3\$356<@&W3%M96XH&,?OWc&KNLP(PKK]('Y]P(P'H&&

&
O@974\$98D& \ H&OH&D&a&?%3;36D&AH&Q'(JERH&. "\$3"7\$&5\$&@;6C&4B5<3\$c&23\$;#8;8#&:96&
<974B3U&M3S&9:&:8%365<%;98H&

I56;\$D&A658<3H&&

&
?%3;36D&AH&D&)9<X63BBD&)H&a&-3M;\$D&OH&QJJK]RH&+3%@;8X;8#&:6573\$&:96&[;8:9675%;98&
\$@56;8#[&;8&96#58;_5%;985B&\$3%%;8#&\$c&-3\$98\$&B35683C&5S9"%&5&[-3\$98\$&B35683C&
;8:9675%;98&\$>\$%37[&5%&W!?!H&,8&-H&2H&+;<@56C\$&Q1CHR&

[D&J'NPJE'D& \ 5\$@;8#%98D&2)H&&

- 3M;\$D&OH&58C&?%3;36D&AH&QJKKYR&O@3&69B3&9:;E"4&C3<;\$;98&\$"4496&&\$>\$%3 7 \$&;8&&@3&
B3568;8#&96#58;_5%;98H&,8& 1 H& 2 H& f 566;\$&Q 1 CHR&

H&KLPJ (J D& \ 5 \$ @ ; 8 # % 9 8 D& 2) H&&

&

?%3;36D&AH&58C&Z5BB"4D&?H&QJKKERH&,8%36=38%;98\$&58C&<@59\$c& ! &\$356<@&:96&4565C;# 7 \$H&,8&
. H& . ;<@53B\$&Q 1 CHR& CH&

H&Q44H& ' E (P ' YNR&

* 6S585D&, - H&I394B3&03<@89B9#;3\$H&&

&

?%3;36D&AH&g@59D&OD& \ 99C@57 \$D& \ H&58C&Z5BB"4D&?H&QJKKERH& . 358;8#\$&9:;&k "5B;%>c&
?3 7 58%;<P,8:96 7

D& \ 5\$@;8#%98D&2H) H&

&

?%58%98D& . H 2 HD&09CCD&0H) H&58C& ?%3;36D&AH&QJKL (RH&V""<9 7 3&:96&\$%6" <"65B&:5 7 ;B>&
%@3654>&M;%@&C6" #&5CC;<%\$H&,8& - H ? H& f 566;\$&Q 1 CHR D&

&W, 2 ! &

+3\$356<@& . 989#654@& ?36;3\$D& * H ? H& Z9=368 7 38%& I 6;8%;8#&V::;<3D& \ 5\$@;8#%98D&
2H) H&

&

^6;4438C96::D& ^ H&58C& ?%3;36D&AH&QJKNKR&) >S3683%;<&469436%;3\$&9:&@3B4;8#&ck0@3&
96#58;_5%;985B&B3=3BH&,8&+HAH& 16;<\$98&Q 1 CHR D&

& I 69<33C;8#\$&9:&%@3& ? ;B=36& ! 88;=36\$56>&

,8%3685%;985B& . 33%;8#D& ?9<;3%>&:96&Z38365B& ?>\$%3 7 \$&+3\$356<@H& ?46;8#36H&&

&

?/B64(3 , F80- . /0127(

&

?%3;36D&AH&QJKLER&

H& * 84"SB;\$@3C&C;\$36%5%;98D&

* 8;=36\$;%>&9:& I 388\$>B=58;5D& I @;B5C3B4@;5D& I ! H&

&

&

)686-/6+(*6-B20- .8('6:14/7(

&

?%3;36D&AH&D& - 3M;\$D&OH&58C&O53\$B36D& 1 HbH&QJJK]RH&

&

? "S 7 ;%3C&%9&W ! ? ! & - 58#B3>&+3\$356<@&) 38%36D& f 5 7 4%98D& / ! H&

&

?%3;36D&AH&58C&+33CD&OH&QJKKERH&

& ? "S 7 ;%3C&%9&W ! ? ! & - 58#B3>&+3\$356<@&

) 38%36D& f 5 7 4%98D& / ! & "8C36& . 5\$%36&) 98%65<%&W ! ? JPJL]LYH&

&

?%3;36D&AH&D&Z5BB"4D& ?HD& \ 99C@5 7 \$D& \ HD&g@59D&OH&D& f 36M3#D& - HD&O_363:9SD& - H& I 5\$;<9=D&
. H&58C&O58#D& o H&QJJK ' RH&

&

+3496%&K ' HJD&) 38%36&:96&) >S3683%;<& ? % "C;3\$&;8&) 9 7 4B3U& ?>\$%3 7 \$D& VBC&2 9 7 ;8;98&
* 8;=36\$;%>D&W96:9BXH&

&

?%3;36D&AH&D&Z63<9D&AH&+9S;8\$98D&OH&D& ! \$@ "6D& f HD&pU83=5CD& ^ H, H&58C& I 58D& - H - H&QJJK (RH&
&

) B5\$699 7 H&+3496%&K (HJD&) 38%36&:96&) >S3683%;<& ? % "C;3\$&;8&) 9 7 4B3U& ?>\$%3 7 \$D&
VBC&2 9 7 ;8;98& * 8;=36\$;%>D&W96:9BXH&

&

?%58%98D& . H 2 HD& ?%3;36D&AH&D&) 99XD& - H&58C&09CCD&0H) H&QJKLYRH&

,8\$%;%"3k98&26"#k ! S"\$3&QZ658%&W9Hk + (Jk2 ! k (E(KNR&S>k%&3kI@;B5C3B4@;5k) @;BCk
Z";C58<3k) B;8;<Hk

&

?%58%98Dk . H 2 HDk ?%3;36DkAHd&09CCD&OH) Hk58Ck . 56C36Dk - HkQJKLJRHk

Hk I @;B5C3B4@;5k) @;BCkZ";C58<3k) B;8;<Hk

&

25=;\$D&IHDk ?%368Dk 2 HD&b96#38\$98D&bHk58Ck ?%3;36DkAH&QJKL (RHk

kA;85Bk + 3496%k\$ "S 7 ;%%3Ck%9k%&3k

W5%;985Bk,8\$%;%"3k98k ! B<9@9Bk ! S"\$3k58Ck ! B<9@9B;\$ 7 Dk4634563Ck5%k%&3k \ @56%98k
! 44B;3Ck + 3\$356<@&k) 38%36Dk I @;B5C3B4@;5Dk I ! Hk

&

/ 5823 "\$38D&bH . HDk09CCD&OH) HDk . <2989" #&Dk ?HDk + 9CC>Dk - HDk . 56C36Dk - HDk ?%3;36DkAHk58Ck
?%58%98Dk . H 2 HkQJKNRHk Hk

I @;B5C3B4@;5k) @;BCkZ";C58<3k) B;8;<Hk

&

?%58%98Dk . H 2 HDk09CCD&OH) HDk ?%3;36DkAHd / 5823 "\$38D&bH . HDk . 56C36Dk - H + HDk + 9\$9: :Dk + HbHDk
?35758Dk ?HAHk58Ck ?X;S;8\$X;Dk 1 HkQJKNRHk

k ? "S 7 ;%%3Ck%9k%&3k W5%;985Bk

,8\$%;%"3k98&26"#k ! S"\$3&QZ658%&W9Hk + VJk 2 ! k (JJJKR&S>k%&3kI@;B5C3B4@;5k) @;BCk
Z";C58<3k) B;8;<Hk

&

&

&

> G > " \$) &

&

' (JKk @14F64/(G 06264(.H.4+I(E0C62(FD(/B6(> J 640-. 2() 1-06/D(514(
&DF6426/0-7k(*B07(07(.H.4+6+(514(8056/0 J 6(. -B06C6 J 62/(. 2+(H.7(
:46762/6+(./(/B6(LMN0(.22 , .8(-1256462-6(15(/B6(71-06/Dk(
' (JFk f "S ! M56CDk:96k\$36=;<3k%9k . H ! Hk\$% "C38%\$k;8k%&3k#65C"5%;8#k<B5\$SDk
23456 7 38%&9: k) 9 7 7 "8;<5%;98Dk * 8;=36\$;%>k9: k ?9" %&kAB96;C5k
' ((Kk 0@3k . "\$3" 7 k9:k ?<;38<3k58Ck,8C"\$%6>kQ . V ? ,RDk05 7 45DkAB96;C5Dk
63<3;=3Ck%&3k' ((Kk W5%;985Bk . 3C5Bk:96k . "\$3" 7 k58Ck - ;S656>k ?36=;<3Dk
983k9:k:;=3k4"SB;<k;8\$%;%"%;98\$&\$9k63<9#8;_3Chk, &M5\$&63<9#8;_3C&S>k%&3k
I63\$;C38%&9:k . V ? ,k:96k 7 >k63\$356<@&k<98%6;S"%;98\$&k%9k%&3;6k63<3;=;8#k%& ;\$k
5M56Chk

' ((JPk) 56Bk +;##\$k ?<;38%;\$%k;8k + 3\$;C38<3Hk . "\$3" 7 k9:k ?<;38<3k58Ck;8C"\$%6>k
Q . V ? ,RHk05 7 45D&A - HkQ58k@989656>k%;%B3Rk

' ((Ek f "S ! M56CDk:96k\$36=;<3k%9k . H ! Hk\$% "C38%\$k;8k%&3k#65C"5%;8#k<B5\$SDk
23456 7 38%&9: k) 9 7 7 "8;<5%;98Dk * 8;=36\$;%>k9: k ?9" %&kAB96;C5k
JKLKk VBCk 2 9 7 ;8;98k * 8;=36\$;%>k ? " 7 7 36kA5<"B">k + 3\$356<@&kA3BB9M\$@;4k
& QI69`3<k%&k;%B3ck ! 8k;8d";6>k;8%9k%&3k63B5%;98\$@;4kS3%M338k#69"4k
<9 7 7 "8;<5%;98k45%368\$&58CkC3\$;#8k46;8<;4B3\$;8k%&3k<98\$%6"<k%;98k9:k
9S`3<k\$;8kM96X&k%35 7 \$RHk

JKLJPLF&k ! 7 36;<58k ?<58C;85=;58kA9"8C5%;98Dk ^ ;8#kVB5=k / &kA3BB9MD&k&k

& * 8;=36\$;%>k9: k V\$B9Dk W96M5>Hk

&

JKN(PNE&& * 8;=36\$;%>#9: & I388\$>B=58;5D&035<@;8#& ! \$\$;\$%58%\$@;4H&
JKN(& * 8;=36\$;%>#9: & 2 3B5M563D& 1 U<3BB38<3&8&035<@;8#& ! M56CH&
JKFKPN(&& * 8;=36\$;%>#9: & 2 3B5M563D& + 3\$356<@&A3BB9M\$@;4H&
JKFLPFK& * 8;=36\$;%>#9: & 2 3B5M563D&035<@;8#&A3BB9M\$@;4H&
JKFYPL& * 8;=36\$;%>#9: & 2 3B5M563D& * 8;=36\$;%>#<@9B56H&
&
P ">@*)(
(
' ((K& & & Z658%&:69 7 &@3&* ? A&,889=5%:=3&035<@;8#&V4496" 8;%;3\$&Q;0V I IR&
469#65 7 H&A "8C3CD& 2 3=3B94;8#&- 3568;8#&V4496" 8;%;3\$&;8&@3&V8B;83&
) B5\$699 7 &QM;%@&; 7 4B;<5%;98\$&58C&B3\$98&&B35683C&:96&@3&65C;%;985B&
<B5\$699 7 RH&Z658%&: "8C3C&456%&;<45%;98&8&?9<;5B& . 3C;5&) 9BB5S965%96&&
?%58:96C&* 8;=36\$;%># . 3C;5&q&?" 7 7 36&,8\$;%;"%3&5%& \ 5BB38S36#& f 5BBD&
I5B9& ! B%9D&) 5B;:968;5H&
&
' ((NP(K& &Q<9PI6;8<;45B&,8=3\$%;#5%96D&M;%@&! BB;\$98&I;8%9D&AB96;C5& . 38%5B& f 35B%&
,8\$;%;"%3D&I ,RH&2 3=3B94;8#&<9 7 7 "8;%;3\$&5\$&<9 7 4B3U&5C54%:=3&\$>\$3 7 \$H&
A "8C3C&S>&@3&* 8;=36\$;%>#9: &?9" %&AB96;C5&Z65C "5%3&?<@99B&? "\$5;85SB3&
f 35B%&>&) 9 7 7 "8;%;3\$&,8;%;5%:=3I(r J ' JD(((&:96&M9&>356\$H&0 @;\$&469`3<%&
;8=9B=3\$&<9BB5S965%:=3&63\$356<@&M;%@&\$3=365B&<9 7 7 "8;%>#5#38<;3SD&5\$&
M3BB&5\$&5AC" 5%3&35<@;8#&<9 7 49838%&;8=9B=;8#&5&\$3 7 ;856&58C&
465<%;<" 7 H&
&
' ((JP(N& Q<9PI6;8<;45B&,8=3\$%;#5%96D&M;%@&+9S;8&16\$;8#D&2 34%&9: &?9<;5B& \ 96XD&I ,RH&
1U4B96;8#&@3&69B3&9: &83;#&S96@99C&5\$9<;5%;98\$&;8&@3&2 3=3B94 7 38%&9: &
?9<;5B&) 54;%5BH&A "8C3C&S>&* 8;=36\$;%>#9: &?9" %&AB96;C5&) 9BB5S965%:=3&:96&
) @;BC638D&A5 7 ;B;3\$&58C&) 9 7 7 "8;%;3\$H&&
&
JKKKP' ((J& f 35C&9: &46;8<;45B&35 7 &QM;%@&?58C>&) 99436D&2 ;63<%96&9: &V6#58;_5%;985B&
2 3=3B94 7 38%&58C&065;8;8#RH&+3P38#;8336;8#&@3&" 8;=36\$;%>#&:96&

) 38%36D&b"b>D&JKKE&P& ! 46;BD&JKKYD& . 5\$%36&) 98%65<%&W ! ?&JPJKLJLD&O5\$X&
'KH&Qr ']D(((R&

&

JKKE&

I6;8<;45B&;8=3\$%;#5%96D&[?"6=3>&9:& - 3\$\$98\$& - 35683C&I69#65 7 [H&O9&
5%%38CD&456%;<;45%3&;8D&58C&63496%&98&5& 7 33%;8#&9: &5BB&W ! ? ! &\$;%3&
<996C;85%96\$&9:& - 3\$\$98\$& - 35683C&I69#65 7 \$D&5%& ^ 3883C>&?45<3&) 38%36H&
A3S6"56>D&JKKEH&QrJ ' ((R&

&

JKK ' PKE&

[;8%365<%96\$T&3U4B5;836\$[&98&@3&:B996D&9&C3\$;#8&;\$\$"3\$D&9闝B&
96#58;_5%;985B&;\$\$"3\$&9&\$"4496&&@;,\$&83M&:65 7 3M96X&58C&4@;B9\$94@>H&
Q0@;,\$&5&=9B"8%336&49\$;,%98D&\$"4496%;8#&* 8;=36\$;,%>&9:&?9"%"@&AB96;C5u&
7;,\$;98&9:&38#5#3C&\$<@9B56\$@;4RH&

&
'(((P'((& ?>\$%3 7 \$&! C=;\$96D& 2;=;\$;98&9:&A5 7 ;B>&?36=;<3\$D&?%5%3&9:&2 3B5M563&
Q%&69"#@&- 544;8&58C&! \$9<;5%3\$RH&! <%;98&63\$356<@&469#65 7 &&9&C3=3B94&
58C&; 7 4B3 7 38& \ @9B3&?>\$%3 7 \$&065;8;8#&58C&?"436=;\$96>&) 95<@;8#D&
58C&<635%3&58&96#58;_5%;985B&:65 7 3M96X&&9&\$"4496&&@;,\$&8;,%;=3H&

&
JKKKP'(((& ?>\$%3 7 \$&! C=;\$96D& . 9%3& . 56;83&- 5S965%96>&58C&! d"56;" 7 D&?565\$9%5D&
A - H&! \$;\$,%;8#&M;,%&,\$\$"3\$&9:&96#58;_5%;985B&<@58#3D&63:B3<%;=3&465<%;<3&
58C&\$@563C&X89MB3C#3H&

&
JKKFP463\$38%I 65U;\$&1C;,%96D&)>S3683%;<\$&58C& f " 7 58& ^ 89M;8#H&

&
JKK]PKF& V6#58;_5%;985B&5C=;\$96D&W, ? 1P 15\$&QW5=5B&,8P?36=;<3&1 8#;8336;8#D&
15\$&RH&) @56B3\$%98D&?) &Q%&69"#@& / 3C5&) 964965%;98RH&! <%;98&63\$356<@&
469#65 7 &5\$;\$,%;8#&M;,%&,\$\$"3\$&9:&96#58;_5%;985B&658\$:96 7 5%;98&58C&
;C38%;,%;3\$H&

&
JKK]PKF&) 9 7 7 "8;<5%;98&5C=;\$96&M;,%&W ! 0V&Q%&69"#@&- 9#;<98RH&W96:9BXD& / ! H&
! <%;98&63\$356<@&469#65 7 &M96X;8#&M;,%&C3\$;#8&58C&<9 7 7 "8;<5%;98&
;\$"3\$&8=9B=3C&;8&\$3%;,8#&" 4&5&Z69"4&2 3<;\$;98&?"4496&&?>\$%3 7 \$&
38=;698 7 38%H

JKLNPLL&

&

JKL ' PLY&) 9P46;8<;45Bk;8=3\$%;#5%96k9: &5k4;B9%&63\$356<@&469#65 7 D&5%&&@3k
I@;B5C3B4@;5k) @;BC&Z ";C58<3k) B;8;<D&9k;8=3\$%;#5%3k%&3k63B5%;98\$@;4k
S3%M338&45%%368\$&9: &:5 7 ;B>&9 7 7 " 8;<5%;98k;8k:5 7 ;B;3\$&M%;&@&5k
\$<@;_94@638;<k<@;BCD&58C&45%%368\$&9: &S;9<@3 7 ;<5Bk<@58#3k;8k%&9\$3k
\$<@;_94@638;<\$D&C"6;8#k:5 7 ;B>k%658\$5<%;98\$Hk

&

JKLJPL J& +3\$356<@&) 98\$"B%58%&&9k ! \$4;65Dk,8<Hk9: &I388\$>B=58;5k98k%&3;6k\$ "C">9: &
[) @9;<3k9: &W98P23B;8d"38%&58C&23B;8d"38%&) 56336\$&5 7 98#&I "36%9k
+;<58k o 9"%"@ [k:96k%&3kW5%;985Bk,8\$%;%"%3k9: &b"=38;B3kb"\$%;<3k58C&%&3k -5Mk
18:96<3 7 38%& ! \$\$;\$%58<3k ! C 7 ;8;\$%65%;98Hk

&

JKLJPLE& Z658\$&58C&) 98%65<%\$&I69#65 7 k +3=;3M36D&W5%;985Bk,8\$%;%"%3k98k 2 6" #k
! S"\$3D&V::;<3k9: &?<;38<3Dk ! B<9@9BDk 2 6" #k ! S"\$3k58C& . 38%5Bk f 35B%&
! C 7 ;8;\$%65%;98kQ ! 2 ! . f ! RD&23456% 7 38%&9: &k f 35B%&58C& f " 7 58k
?36=;<3\$Dk +9<X=;BB3Dk . 56>B58CHk

&

JKL (PLN& +3\$356<@&) 98\$"B%58%&&9k ! B:63C&,Hk 2 " I98%&,8\$%;%"%3Dk +3\$356<@& 2 ;=;\$;98Dk
\ ;B 7 ;8#%98Dk 2 3B5M563Hk

&

JKNKPLY& +3\$356<@&) 98\$"B%58%&&9kA5 7 ;B;3\$&9: &2 ;=96<3k I69#65 7 D&I @;B5C3B4@;5k
) @;BC&Z ";C58<3k) B;8;<D&I @;B5C3B4@;5D&I ! Hk

&

JKNKPL ' & +3\$356<@&58C& . 3%&9C9B9#;<5Bk ! C=;\$96k%9k ?;8#B3kI5638%&A5 7 ;B>k ?% "C">k
Q:96k%&3kW5%;985Bk,8\$%;%"%3k9: &k . 38%5Bk f 35B%&RD&I @;B5C3B4@;5k) @;BC&
Z ";C58<3k) B;8;<D&I @;B5C3B4@;5D&I ! Hk

&

JKNKPL (& +3\$356<@&) 98\$"B%58%&&9kA9\$%36k I5638%&I69#65 7 D&I @;B5C3B4@;5D&) @;BC&
Z ";C58<3k) B;8;<D&I @;B5C3B4@;5D&I ! Hk

&

JKNLPL (& +3\$356<@&) 98\$"B%58%&&9kA5 7 ;B>k ?>\$%3 7 \$k58C& ! B<9@9B;\$ 7 &I69#65 7 &5%&
%&3k \ @56%98k ! 44B;3Ck +3\$356<@&) 38%36Dk * 8;=36\$%;>k9: &k I388\$>B=58;5Dk
I@;B5C3B4@;5D&I ! &PkC35B;8#kM%;&@& 7 3%&9C\$&9: &k"8C36\$%58C;8#k:5 7 ;B>k
<9 7 7 " 8;<5%;98&45%%368\$D&58C&M96X&58C&:5 7 ;B>k63B5%;98\$@;4\$Dk;8k
5B<9@9B;<k58C&898P5B<9@9B;<k:5 7 ;B;3\$Hk

&

JKNL&

&

436\$98&<963&%35 7 &%9&3=5B"5%3&5ʒ&%&9&%@3&) ;>&9: & I @;B5C3B4@;5&:69 7 &
%@3&-5M&18:96<3 7 38&& ! \$\$;%58<3& ! C 7 ;8;\$%65%;98&Q - 1 ! ! R&9: &%@3&
* 8;%3C&?%5%3\$&2 3456 7 38&9: &) 6; 7 ;85B&b"\$%<3H&

&
JKN(PNE& 035<@;8#&! \$\$;%58%D&0@3& \ @56%98&?<@99BD&2 3456 7 38&9: & ?%5%;\$;<\$&58C&
V4365%;98\$&+3\$356<@D&* 8;=36\$;%>&9: & I 388\$>B=58;5D&I @;B5C3B4@;5D&I ! H&P&
%35<@;8#&<9"6\$3\$&8&d"58%;%5%;=3& 7 3@9C\$D&94365%;98\$&63\$356<@D&\$%5%;\$;<\$&
58C& 7 3@9C9B9#>H&

&
JKFLPN(& 035<@;8#&58C&+3\$356<@& ! \$\$;%58%D& 2 3456 7 38&9: & ?%5%;\$;<\$&58C&
) 9 7 4"%36&?<;38<3D&* 8;=36\$;%>&9: & 2 3B5M563D&W3M56XD& 2 3B5M563&P&
%35<@;8#&<9"6\$3\$&8&) 9 7 4"%36&I 69#65 7 7 ;8#&QAV+0+ ! WR&58C&
. 9C3B;8#&58C&V4365%;98\$&+3\$356<@D&58C&C9;8#&63\$356<@&;8&=56;9"\$&
5635\$&9: &94365%;985B&63\$356<@H&

&
JKFN&& ! <"56;5B&065;8;8#&I 69#65 7 D& . 3%6949B;%58&- ;:3&,8\$"658<3&) 9HD&&
Q?" 7 7 36R& W3M&o 96XD&W3M&o 96XH&

&
3" #)#@* > *% ? @)

&
)686-/6+(&1256462-6(3.:647(.2+(3.2687(

&
?34&' (' (&A35%"63C&I 583B&463\$38%5%;98D&M;%@&+5>&,\$98D&1 C&?%65M&58C&f 9"C5&
^@5>5 7 3H&Z9=368;8#&;8&%@3&; 7 3&9: &) 9=;C&58C&) B; 7 5%3&1 7 36#38<&Q5\$3C&
98&0@3&f ;;C38&I 9M36&9: & ?>\$3 7 \$&0@;8X;8#&c&Z9=368;8#&;8&5&) B; 7 5%3&
1 7 36#38<&RH&A35%"63C&\$3\$;98&5&
D&! ?) &' (' (&ZB9S5B&) 98=36\$5%;98H&?3\$;98&M5\$&@3BC&=;6%"5BB>D&
98&g99 7 H&

&
!46&' (' (&,8=;%3C&4583B;\$%T63\$498C38&5\$&<9 7 7 "8;<5%;98T\$>\$%3 7 \$&<;38%;\$%D&9&
\$3\$;98\$D&) 9 7 45\$;98c&! &C334B>&@" 7 58&3\$38%;5B&5S;B;%>&9&<9883<&
Q?"\$5883&! @B38C96:RD&58C&0@3&63\$498\$;=3&S9C>c&Z;=;8#&ZB9S5B&?9<;5B&
\ ;%83\$;8#&5&=9;<3&%@69"#&@& 7 9=3 7 38&\$&Q,8#6;C&I;<X3BRH&) 98:3638<3&98&
ZB9S5B&?9<;5B& \ ;%83\$;8#&D& \ ;%38P f 36C3<X3&* 8;=36\$;%>D& \ ;%38D&Z36 7 58>H&
2 "3&9&) 9=;CPJKD&<98:3638<3&M5\$&@3BC&98B;83H&

&
V<&&' (JK&&I 5436&463\$38%5%;98D&M;%@&- 5"638<3&f 5S;SD&AB5=;9& . 3\$d";%5&C5&?;B=5&58C&
?36#3' &=58& . ;CC38C964D&Z38365%;8#&W3M&A""63\$&@69"#&@&) 9BB5S965%;=3&
?"4496&W3M96X\$H&

D&V\$B9D&W96M5>H&O@;\$&\$3\$\$;98&M5\$&5&456%;<;45%96>&\$3\$\$;98&@5%&
S";B%&98&@3&45436&\$3\$\$;98&B;\$%3C&5S9=3H&

&

b"8&' (JK& ,8=;%3C&5BXD& - ;=;8#&5&)>S3683%;<& - ;:3H&Z;=38&5\$&63<;4;38%&9:&W96S36%&
\ ;3836&5M56C&:96&b;:3%; 7 3&5<@;3=3 7 38%D&

?34' (J) s ?>\$%3 7 ;<58C&63:B3U;=3&436\$43<%;=3\$&98&<9\$ 7 949B;%58&) 9 7 7 "8;<5%;98Ht&
^ 3>89%3&5CC63\$\$&5%<98:3638<3&98& 2 ;,\$<9=36;8#&) 9\$ 7 949B;%58&
) 9 7 7 "8;<5%;98c& ! &<69\$&9=36&C;5B9#" 3&S3%M338&45\$%&58C&:"% "63T%&396>&
58C&465<%;<3T15\$%&58C& \ 3\$%H&?498\$963C&S>&@3&,8\$%;%"3&:96&ZB9S5B&,8%3#65B&
) 9 7 43%38<3H& f 3BC&5%&@3&* 8;=36\$;%>&9: &A3C365B& ! 6 7 3C&A96<3\$D& . "8;<@D&
Z36 7 58>H&

?34' (J) s 2 3\$;#8&9: &5&) 9 7 7 "8;<5%;98&I 69<3\$&:96& 2 3\$;#8&Q9: &58&,C35&g 983Rt&Q<9P
5"%@963CD&M;%@&065=;\$&0@9 7 4\$98&I 5436&463\$38%3C&5&) 98:3638<3&98&
?>\$%3 7 ;< & 2 3\$;#8&8&O58:-D& ! BS36%5&H& ! %&@3&A698%;36\$&9: & ?>\$%3 7 ;< & 2 3\$;#8&H&
+ ? 2 &i& + 3B5%;8#&?>\$%3 7 \$&0@;8X;8#&58C& 2 3\$;#8&YH& I 5436&M5\$&463\$38%3C&S>&
065=;\$&0@9 7 4\$98D&5\$&, &M5\$&" 85SB3&9&5%38CH&

b"B&' (J) && 1 ZV?&Q1 "694358&Z69"4&98&V6#58;_5%;98&?%"C;3\$R&<98:3638<3&98&
V6#58;_5%;98&\$&58C&%@3&1 U5 7 ;83C& - ;:3c& + 35\$98D& + 3: B3U;=;%>&58C&
+ 3\$498\$;S;B;%>H&, &M5\$&5&456%;<;458&%;8&@3&\$%635 7 &98&s ?45<3&58C&
. 5%36;5B;%>&8&V6#58;_5%;98&Ht& ! %@38\$D&Z633<3H&&

V<%&' (JY& 1 <9B9#;<5B&,C38%;%;3\$&58C& 2 ;B3 7 7 5\$&9: & ! <<3B365%3C&) @58#3H&I 63\$38%3C&5&
<98:3638<3D&,C38%;%>&58C& ! <<3B365%3C&) @58#3D&) 98:3638<3&\$498\$963C&S>&
V=36<35%;8#&I 69'3<%&58C& 2 34%H&9: & ?9<;5B& ! 8%&6949B9#>D& * 8;=36\$;%>&9: &
V\$B9D& - >\$3S" &) 38%36D&V\$B9D&W96M5>D&

!"#&' (JY&QM;%@&b583&b96#38\$98RH& 2 58<;8#&M;%@&) >S3683%;<\$H&,8=;%3C&%5BX&:96&I5\$P
I 63\$;C38%\$& 2 5>&) 3B3S65%;98&5%&] (" ! 88;=36\$56>& . 33%;8#&9: & ! 7 36;<58&
?9<;3%>&:96&) >S3683%;<\$H&Z396#3& \ 5\$@;8#%98& * 8;=36\$;%>D& \ 5\$@;8#%98D& 2) H&

. 5>&' (JY& 8=;%3C&I 583B;\$%&58C&I 56%;<;458&D&8& ^ 3%36;8#&A9" 8C5%;98& 7 33%;8#&98&) ;=<&
?<;38<3D&@3BC&5%&@3& ^ 3%36;8#&A9" 8C5%;98&<5 7 4"\$D& 2 5>%98D&V f H&

! 46&' (JY&,8=;%3C&456%;<;458%D&,8%3685%;985B&?> 7 49\$;" 7 &98& . 3C;5&,889=5%;98\$D&
+ 3\$356<@& I 56XD& * 8;=36\$;%>&9: &V\$B9D&W96M5>H&

! 46&' (JY&,8=;%3C&456%;<;458%D& ! 8%&6949\$&58C&%@3& . 5%36;5BD&,D&M;%@&:9<"\$&98&:;B 7 &58C&
63463\$38%5%;98H&?498\$963C&S>& 2 34%H&9: & ?9<;5B& ! 8%&6949B9#>D&OB;8C368D&
* 8;=36\$;%>&9: &V\$B9D&W96M5>H&&&

W9=&' (JE&QM;%@& 2 969%&>& ! ##36PZ" 4%5&58C&W;3B\$& ! ##36PZ" 4%5RH&O@3&"\$3&9: &%@3&
\ 96BC&) 5:ek&8& ! <%;98& + 3\$356<@& I 69#65 7 \$D&8&) 585C5D&W96M5>&58C&%@3&
* 8;%3C&?%5%3\$H& \ 96X\$@94&9: :363C&5%&) ! +W&Q) 9BB5S965%;=3& ! <%;98&
+ 3\$356<@&W3%M96XR&<98:3638<3D&s ?%5>;8#&<6%;<5Bc&W" 6% "6;8#(C3 7 9<65%;<&
456%836\$@;4&;8&5<%;98&63\$356<@Ht&069 7 \$mD&W96M5>H&

?34% (JE I583B<@5;6k58Ck63\$498C38%k9k::B7 k\$<6338;8#Dk ! k 25"#@%36u\$&I96%65;%ck ! 8k
1<9B9#>:k . ;8CkQM;%@kW965kO5%3\$98k58Ck0@975\$&f >BB58Ck16;X\$38RHk ! %k
?3<98Ck,8%3685%;985BkO5%3\$98k?>749\$;"7 DkV\$B9DkW96M5>Hk

&

?34% (JE -35C36k9:k\$>749\$;"7 k<98=36\$5%;98\$&kQM;%@kW965kO5%3\$98k58Ck0@975\$&
f >BB58Ck16;X\$38RHk0@3k\$3<98Ck;8%3685%;985BkO5%3\$98k?>749\$;"7 ck
ZB9S5B;_5%;98k58Ck%@3k699%\$k9:k%@3k3<9B9#;<5Bk<6;\$;ShkV\$B9DkW96M5>Hk

&

?34% (JE I583Bk456%;<;458%&k ! 8%@6949\$&58Ck%@3k . 5%36;5Bk) 98:3638<3k\$498\$963Ck
S>k ! 8%@6949B9#>:kC3456%738%Dk * 8;=36\$;%>k9:kV\$B9Hk?96;5k . 96;5k
) 98:3638<3k) 38%36DkV\$B9DkW96M5>H((

&

W9=k (J' +3\$498C38%k9k4583BDk) 977 * W,0 o;k;8k%@3k) B5\$\$6997 ck1%@89#654@>Dk
?36=;<3k - 3568;8#k58Ck?9<;5B&b"\$%;<3HkW5%;985Bk) 977 "8;<5%;98k
! \$9<;5%;98k(QW) ! Rk ! 88"5Bk) 98:3638<3Dk) 3B3S65%3k) V . . * 8;%>Dk
V6B58C9DkAB96;C5k

&

b"Bk (J' +3:B3U;=;%>Dk?3B:PQ - 3\$SRP+3:B3U;=;%>Dk58Ck?9<;5Bk+3\$356<@Hk05BXk#;=38k
98k:35%"63Ck4583BDk+3:B3U;=;%>Dk5%k'9;8%k733%;8#k9:k%@3kO5%3\$98k,C35k
Z69"4k58Ck%@3k ! 736;<58k?9<;3%>k:96k) >S3683%;<\$Dk ! \$;B9756k) 98:3638<3k
) 38%36Dk) 5B;:968;5Hk

&

W9=k (JJ QM;%@kb583kb96#38\$98Q(0@3k \ 96BCk) 5:ectA9\$%36;8#kA6573\$&9:k?36;9"\$k
IB5>Hk,8k4583BDk0@396;_ ;8#kA6573\$&58CkA657;8#k%@69"#@k%@3k - 38\$&9:k
V6#58;_5%;985BkI65<%;<3kQV6#58;_5%;985Bk) 977 "8;<5%;98kC;=;\$;98RHk

Q1) ? , 01Rk<98:3638<3Dk . ;B58Dk,%5B>HkQ463\$38%5%;98k#;=38kS>k \ ;%k
V\$%638X9RHk

&

b"83k' ((Lk / 5B";8#k?<;38<3k) 38%36k\$5k\$A ""63k - 35C36k\$;8kZ38365%;8#k ^ 89MB3C#3k
?9<;3%;3\$Hk I583Bk463\$38%5%;98T \ 96X\$@94DkM;%@k \ ;%k V\$%638X9DkA63C36;<Xk
?%3;36Dk I36P1C=;8k I36\$98Dk . 5%#@3M\$k f 5 7 5S5%5Dk ?5 7 58%@5k058k58Ck
b58k05" #HkA;:%@k ?<;38<3k) 38%36k \ 96BCk) 98#63\$SDk09698%9Hk

&

b"83k' ((Lk k035<@;8#k%@3k1 %@;<\$k9:kVS\$36=5%;98ck ! k) 5\$3k?"C>k;8k%@3k * \$3k9:k
I36:96 7 58<3k%9k,8=;%3k ! <%;=3k I56%;<;45%;98k5k%5k?<;38<3k . "\$3" 7 Hk
258;3BkOB53"36DkA63C36;<Xk?%3;36Dk \ ;%k V\$%638X9Dk,8%3685%;985Bk
)98:3638<3k98k%@3k,8<B"\$;=3k . "\$3" 7 Dk - 3;C38Dk0@3kW3%@36B58CSDkb"83k
' ((LHk

&

23<k' ((Nk A35%"63Ck\$435X36Dks ! 8k3<9B9#>k9:kA65 7 3 7 5X;8#k58CkA65 7 3C9;8#Ht k
A65 7 3 7 5X36k\$Z65=;%>k58CkZ65<3Hk0@;\$k 7 33%;8#kM5k\$5k<9 7 S;85%;98k
469:3\$%;985Bk<98:3638<3k98k<@9639#654@>k58Ck\$>\$%3 7 \$Dk%9#3%@36kM;%@k
4"SB;<k436:96 7 58<3k\$58Ck%5BX\$Hk 25#@C@5k 2 58<3k) 9 7 458>Dk - ; 7 36;<XDk
,63B58CHk

(

. 5>k' ((Nk A35%"63Ck463\$38%5%;98ck ?>\$%3 7 k58Ck) >S3683%;<k ! 44695<@3k\$%9k%@3k
+3B5%;98\$@;4kS3%M338k \ 96X4B5<3k 2 3\$;#8k58CkV6#58;_5%;985Bk) "B%"63Hk
\ 96Xk1 8=;698 7 38%W3%M96Xk\$43<;5Bk\$3\$%;98k98k \ 96X4B5<3k 2 3\$;#8k58Ck
) "B%"63Hk ! 88"5Bk<98:3638<3k9:k1 8=;698 7 38%5Bk 2 3\$;#8k+3\$356<k
! \$%9<;5%;98Hk ?5<65 7 38%9Dk) 5B;:968;5Hk

&

A3S' ((Nk - 3568;8#k5S9""%k%B3568;8#kM;%@k3B3<%698;<k 7 3C;5kQM;%@k 2 5=;Ck - 33Dk
#65C"5%3k\$%"C38k;8k) 9 7 7 "8;<5%;98RHk I5436k463\$38%3Ck5k?> 7 49\$;" 7 k
98k ' J#!k) 38%"6>k035<@;8#k03<@89B9#;3Dk * 8;=36\$;%>k9:k?9""%k@AB96;C5Dk
05 7 45Hk

&

W9=k' ((Fk IB3856>k%5BXc k) 9 7 7 "8;<5%;98kDC;5B9#"3k58Ck\$>\$%3 7 ;<k;C35k\$;8k#B9S5Bk
3C"<5%;98Hk,8%3685%;985Bk ?<@99Bk) 9883<%;98kZB9S5Bk? " 7 7 ;%ck - 35C;8#k
?<@99Bk I56%836\$@;4k\$5<69\$%O96C36\$Hk05 7 45DkA - Hk0@;\$k%5BXkM5k\$
:9BB9M3CkS>k5k4583Bk463\$38%5%;98k58CkC;5B9#"3DkM;%@k . ;<@3BB3k f 9<3=56k
58Ck / ;<%96k I;83C9Dks) 9 7 7 "8;<5%;98k58Ck49=36%>k5k\$5k<98C;%;98k;8k%@3k
%658\$:96 7 5%;98k9:k\$<@99B;8#kM96BCPM;C3Ht k

&

W9=k' ((Fk QM;%@k 2 5=;Ck,\$55<\$k58Ck \ ;%k V\$%638X9Rk \ 96BCk) 5:eR(?>\$%3 7 k\$;C35k\$;8k
<635%;8#k83%M96Xk\$9:k<98=36\$5%;98Hk0@;\$kM5k\$:9BB9M3CkS>k9"6k
:5<;B;%5%;8#k5k \ 96BCk) 5:eR98k%@3k%@3 7 3ck f 9Mk) 58k \ 3k I634563k?%"C38k\$
5kZB9S5Bk) ;%_38kC"6;8#k%@3;6k\$<@99B;8#k>356\$Hk,8%3685%;985Bk ?<@99Bk
) 9883<%;98kZB9S5Bk? " 7 7 ;%ck - 35C;8#k?<@99Bk I56%836\$@;4k\$5<69\$%k
O96C36\$Hk05 7 45DkA - Hk

&

&

'(

. 5> &' ((F& I5436&463\$38%5%;98&QM;%@&b9@8& \ ;BB>&O5XX3RH&2 3\$;#8;8#&\$45<3\$&:96&
X89MB3C#3&<635%;98H& ! %&588"5B&<98:3638<3&9:&1 8=;698 7 38%5B&2 3\$;#8&
+3\$356<@& ! \$\$9<;5%;98&\$43<;5B&\$3\$\$;98D&A9\$%36;8#&5& \ 96X4B5<3&
18=;698 7 38%&W3%M96XH& ! %B58%5H&

&
V<%&' ((J& A5 7 ;B>&B3568;8#&58C&\$>\$%3 7 ;<&"8C36\$%58C;8#&9:&\$<;38<3H& ! 7 36;<58&
?9<;3%>&:96&)>S3683%;<\$&588"5B&<98:3638<3D& \ 5\$@;8#%98D&2) H&
&

b"8&' ((J& ^3>89%3&463\$38%5%;98&I5%@\$&:96&) @58#3&58C&?%5S;B;%>&8&58&1 <9B9#>&9:&
,C35\$H& ! %&<98:3638<3D&&A65 7 3 7 5X36\$c&) @9639#654@>&5\$&58& ! 3\$%@3%;<&9:&
) @58#3H& - ; 7 36;<XD&,63B58CH&

&
W9=&' ((Y& s 2 3\$;#8&:96&58&3<9B9#>&9:&C35\$c&) 9 7 7 "8;%>D&\$<;38<3&58C&
C3"%369B3568;8#&tH& I 5436&463\$38%3C&98&:35%"63C&4583BD&V8<3&58C&A"% "63&
0@396>&c&W3U%&\$34\$&%9M56C&\$Z63#96>&O5%3\$98u\$&1 <9B9#>&9:& . ;8CH& ! %&
588"5B&<98:3638<3&9:& ! 7 36;<58& ! 8%@6949B9#>& ! \$\$9<;5%;98D&?58&
A658<;\$<9H&2 "3&%9&@9%3B&M96X36\$u&\$%6;X3D&%@3&7 5'96;%>&9:&@3&<98:3638<3&
M5\$&49\$%4983C&&9& ! %B58%5&8&2 3<3 7 S36v&@9M3=36&%@3&\$43<;5B&\$3\$\$;98\$&
96#58;_3C&569"8C&%@3&B3#5<>&9:&Z63#96>&O5%3\$98D&%@5%M363&9&S3&456&
9:&@3&<98:3638<3D&M363&@3BC&5\$&%@3&sZ63#96>&O5%3\$98&) 38%388;5B&
?3\$\$98\$t&5%&%@3& * 8;=36\$;%>&9:&) 5B;:968;5P&&O36X3B3>RH&

&
?34%&' ((Y& QM;%@&b"58;%5&O69M8D&2 5=;C&,\$55<\$&58C& \ ;%&V\$%638X9RH&I63\$38%3C&
4583BTM96X\$@94D&s 2 3\$;#8&58C&465<%;<3&9:&@3& \ 96BC&) 5:ec& ! &7 3%@9C&
:96&@56=3\$%;8#&<9BB5S965%;=3&;889=5%;98tH& ! %& ! \$\$9<;5%;98&9:&?<;38<3&
58C&O3<@89B9#>&) 38%36\$&Q ! ?0) R&588"5B&<98:3638<3D&?"\$%5;8;8#&
;889=5%;98&8&365&9:&654;C&<@58#3H&?58&b9\$3D&) ! H&

&
?34%&' ((Y& QM;%@& \ ;%&V\$%638X9RH&I63\$38%3C&M96X\$@94D&s . 9C3B;8#&5& . V?,&
sQ . "\$3" 7 &9:&?<;38<3&58C&,8C"\$%6>RH& ! %& ! \$\$9<;5%;98&9:&?<;38<3&58C&

. 56<@k' ((Jk ,8=;%3CkI63\$38%5%;98k[?>\$%3 7 ;<k ! 44695<@3\$%9kZ65C" 5%3k2 ;\$%58<3k
- 3568;8#[k5%k0@3kkO56.;3BkC?<@99Bk?> 7 49\$;" 7 k98k0@3k) @5BB38#3k9:k
2 ;\$%58<3k - 3568;8#k%9k?4;6;% "5BB>kO5\$3Ck f ;#@36k 1 C" <5%;98Dk@3Bk&5%k
035<@36\$%k) 9BB3#3Dk) 9B" 7S;5k * 8;=36\$;%>DkW3Mk o96Xhk

A3S' ((Jk) @5;63Ck58Ck463\$38%3Ck98k4583Bk[23=3B94;8#k5k) 9 7 7 "8;%>PS5\$3Ck
,8%3685%;985BB>PB;8X3CkI56%;<;45%96>k ! <%;98k+3\$356<@k I69#65 7 k:96k%@3k
1 8#5#3Ck * 8;=36\$;%>ck ! kM96X\$@94kS\$53Ck98k8B3\$98\$&B35683Ck:69 7 k5k
C3 7 98\$%65%;98k469#65 7 [k \ ;%@kb98kA69C3kOB;<@:3BkCkQ * Hk9:k V\$B9RDk I 36k
f 3B 7 36\$38kQ03B3896RDk 16;<k 1 ;\$3S36#kQ * Hk9:k ?9" %@kAB96;C5RDk \ ;%k
V\$%638X9k58Ckb58k - "%@kQ . "3" 7 k9:k?<;38<3k58Ck,8C" \$%>RDk58CkO>B36k
O5#M3BBDkb366>k) 9BB;8Dk ! 8#;3k 2 5>Dk ?@3;B5kZ9S3\$P+>5SDkW58<>k ^ ; 7 Dk
?B5=;<5k ^ 9C;\$@Dk ?@583k . 963 7 58k58Ck 2 3S \ 5BX36Dk * Hk9:k ?9" %@kAB96;C5Hk
! %k * 8;=36\$;%>k5\$) ;% ;_38ck 18#5#;8#k * 8;=36\$;%;3\$58Ck) 9 7 7 "8%;3\$[k
) 98:3638<3k@9\$%3CkS>k * 8;=36\$;%>k9:k ?9" %@kAB96;C5DkO5 7 45DkA - Hk

V<%k' (((k ^ 3>89%3k ! CC63\$Sc[k +3:B3U;=;%>k58Ck?>\$%3 7 ;<k ^ 89M;8#H[k 2 , ? I * ^ k
Q 2 58;\$@k, 8\$%;% "3k:96k? " 436=;\$;98Dk I 36\$9883Bk 2 3=3B94 7 38%k, 8\$%6" <%;98k
58Ck) 98\$ "B%5%;98Rk038%@k ! 88;=36\$56>k) 98:3638<3ck) @58#3k58Ck
2 3=3B94 7 38%k5k%@3k0 "68k9:k%@3k . ;BB38;" 7 ck?%5%3k9:k%@3k ! 6k9:k?>\$%3 7 ;<k
I65<%;<3k58Ck0@;8X;8#Dk63B5%3Ck%9k0@3654>Dk? " 436=;\$;98DkV6#58;_5%;985Bk
2 3=3B94 7 38%k58Ck 1 4;\$%3 7 9B9#>Hk + @9C3\$DkZ633<3Hk

V<%k' (((k \ 96X\$@94Tk I 63\$38%5%;98Dk[A5 7 ;B>k - 3568;8#k;8k . "3" 7 \$ck1U4B96;8#k
;8d";6>H[k \ ;%@k 2 96;\$k ! \$@Dk . 56#563%kV\$%638X9Hk ! \$\$9<;5%;98k9:k?<;38<3k
58Ck03<@89B9#>k) 38%36\$588" 5Bk<98:3638<3Dk) B3=3B58CkV f Hk

! "#k' (((k \ 96X\$@94k I 583Bk . 3 7 S36Dk[A5 7 ;B>k - 3568;8#k;8k . "3" 7 \$ck099B\$;96k
! 85B>\$;H[k \ ;%@k 2 96;\$k ! \$@kQ 1U4B965%96;" 7 Dk?58kA658<;\$<9RDk . 56#563%k
V\$%638X9kQ * 8;=36\$;%>k9:k ?9" %@kAB96;C5RDk . ;8C5kO96" 8kQA658XB;8k
,8\$%;% "3Dk I @;B5C3B4@;5Rk58Ck - 3\$B3>k ^ 3883C>kQO9\$%98k . "3" 7 k9:k
?<;38<3RHk / ;%;96\$%?" C;3\$! \$\$9<;5%;98k588" 5Bk<98:3638<3DkO9\$%98Dk . ! Hk

kb"8k' (((k I 56%;<;458%k;8k I 583Bk ?3\$%;98ck[05X;8#k?%9<Xk9:k 2 ;5B9#" 3ck, %k\$45\$%Dk
463\$38%k58Ck: "% "63k5\$5k . 3%@9CDk I 65<%;<3k58Ck0@396>Hk [k, k83CkC;\$<" \$\$;98k
;8k5635k9:k[C;5B9#;<ck3\$;#8H[k, 8%3685%;985Bk) 9 7 7 "8;<5%;98k ! \$\$9<;5%;98k
588" 5Bk<98:3638<3Dk ! <54" B<9Dk . 3U;<9Hk

b"8k' (((k k[05BX;8#k\$<;38<3ckA5 7 ;B>k;8%365<%;98k5%k5k\$<;38<3k<38%36kM;%@k
; 7 4B;<5%;98\$;96k3U@;S;%kC3\$;#8k5\$5k&B3568;8#k<98=36\$5%;98Hk \ ;%@k
 . 56#563%kV\$%638X9k58Ck \ ;%kV\$%638X9Hk I 63\$38%5%;98k98k4583Bk I "SB;<k
* 8C36\$58C;8#k9:k?<;38<3k58Ck03<@89B9#>ck0@3k69B3k9:k:5 7 ;B>k
<9 7 7 "8;<5%;98k58Ck\$3<98Ck96C36&B3568;8#Hk, 8%3685%;985Bk
) 9 7 7 "8;<5%;98k ! \$\$9<;5%;98k588" 5Bk<98:3638<3Dk ! <54" B<9Dk . 3U;<9Hk

b58&'(((& [W3<3\$\$;%>l58C&038\$;98\$t;8&+3:B3U;=3&+3\$356<@H[&I63\$38%5%;98&98&4583BD&
+3:B3U;=;%>D&W5665%;=3&t58C&A;3BCM96X&t5%&) 9"<@P?%983&t?>749\$;" 7 c&
1%@89#654@>:96&t%@3&tOM38%>PA;6\$%&) 38%"6>c& !B%3685%;=3\$&t58C&

&

. 56&JKKN&)977"8;<5%;98&58C&\$>\$%37\$&465<%;<3c& ! 8&3>3&Q96&58&356wR&%9M56C&%@3&
<9883<%;98H& I5436&463\$38%3C&5%&588"5B&<98:3638<3&9:& ! 736;<58&?9<;3%>&
:96&)>S3683%;<\$D&)@5745;#8D&,BB;89;\$H&

&

W9=&JKKF& 2379<65%;<&C;5B9#"3&58C&B3568;8#&5%M96Xc& 1736#38%&;\$\$"3&8&%@3&
C3\$;#8&9:&5&<974"%36P73C;5%3C&n - 3\$\$98\$& - 35683C&W3%M96X&8&5&
"8;=36\$;%>&\$3%%;8#H& I5436&463\$38%3C&5%&?433<@&)977"8;<5%;98&
! \$\$9<;5%;98&588"5B&<98:3638<3&\$43<;5B&463P<98:3638<3D&[O@3&A""63&9:&

&

']!

W9=JKKE ,,\$"3\$;8@3C3=3B94738%9:-3\$98\$-35683C,8:9675%;98?>\$37\$5%
W!?!-58#B3>+3\$356<@)38%36H I63\$38%5%;98#;=385\$456%9:W5%;985B
/;C3903B3<98:3638<39:W!?!-3\$98\$-35683C?%336;8#
)9777;%33H

&
?34%JKKE QM;%@?@3BB3>Z5BB"4R[)>S3683%;<\$58C)@59\$

. 56&JKKJ& ,8=;%3C&45436D&[O3>98C&+;#96&58C&+3B3=58<3c&09M56C&+3:B3U;=3&
,75#;85%;98&8&!44B;3C&)977"8;<5%;98&+3\$356<@[&5%&&3&<98:3638<3D&
[!44B;3C&)977"8;<5%;98&8&@3&'J\$%&)38%"6>c&0@3&05745&)98:3638<3&
98&!44B;3C&)977"8;<5%;98[D&\$498\$963C&S>&@3&?433<@&)977"8;<5%;98&
!\$\$9<5%;98&58C&@3&234%&9: &)977"8;<5%;98&9: &@3&* &9: &?9%"&AB96;C5&
P&8%38C3C&9&756X&,\$\$"3\$&58C&63\$498\$;S;B;%;3\$&9: &@3&.;3B&9: &544B;3C&
<977"8;<5%;98&63\$356<@D&S9%&M;,%&@&63#56C&9&63\$356<@&46;96;%;3\$&58C&
#65C"5%3&3C"<5%;98D&:96&@3&%M38%>.;6\$&<38%"6>H&

&

23<&JKK(&& &[!&\$9<;9P%3<@8;<5B&544695<@&9&<977"8;<5%;98&58C&7"B%;4B3&
C3\$<6;4%;98&8&@3&<98\$%6"<%;98&9: &9S`3<%\$D&M;,%&@&456%;<"B5&63:3638<3&9&
)!2&\$>\$%37\$[H&I5436&463\$38%3C&5%&]@&,8%3685%;985B&)98:3638<3&9&
)!2T)! . D&+9S9%;<\$&58C&A5<%96;3\$&9: &@3&A%"%"63H&W96:9BXH&

&

!"#&JKK(& I63\$;C38%;5B&!CC63\$D&[O9M56C&1<9B9#;<5B&*8C36\$%58C;8#H[!736;<58&
?9<;3%>:96&)>S3683%;<\$&588"5B&<98:3638<3D&[1<9B9#;<5B&
*8C36\$%58C;8#[H&V\$B9D&W96M5>H&

&

!"#&JKK(& I583B&<@5;6&58C&C;\$<"\$%58%D&[+3\$356<@D&5<%;98&63\$356<@&58C&63:B3U;=;%>H[&
!736;<58&?9<;3%>:96&)>S3683%;<\$&588"5B&<98:3638<3D&[1<9B9#;<5B&
*8C36\$%58C;8#[H&V\$B9D&W96M5>H&

&

!"#&JKK(& ,8=;%3C&C;\$<"\$%58%D&58C&4583B;\$%D&?%H&Z5BB38&+3\$356<@&)98:3638<3D&
[?9<5BP96#58;_5%;985B&@396>c&A697&.3%&9C9B9#;<5B&8C;=;C"5B;\$7&9&
+3B5%;985B&A967"B5%;98\$H[&f9<@&@&"B3&?%H&Z5BB38D&?%H&
Z5BB38D?M;%_36B58CH&

&

b"8&JKK(& [V6#58;_5%;985B&;C38%;%;3\$&58C&C379<65<>&8&@3&M96X4B5<3H[&I5436&
463\$38%3C&98&4583BD&?3<98C&96C36&<>S3683%;<\$D&<977"8;<5%;98&58C&
3d"5B;%>:9: &@3&\$"S"3<%H&,8%3685%;985B&)977"8;<5%;98&!\$9<5%;98&
588"5B&<98:3638<3H&2"SB;8D&,63B58CH&

&

b"8&JKK(& ,8=;%3C&<@5;6436\$98&58C&C;\$<"\$%58%D&[O@3&<>S3683%;<\$&9: &34;\$%379B9#>&
58C&@3&34;\$%379B9#>&9: &<&>S3683%;<\$H[&L%&@&,8%3685%;985B&)98#63\$&9: &
)>S3683%;<\$&58C&?>\$%37\$D&W3M&o96XH&

&

b"8&JKK(& [?3B:P63#"B5%;98&8&<98\$%6"<%;8#&:57;B;3\$&58C&:57;B>&@3654>H[&05BX&
#;=38&98&\$>749\$;"7D&?3B:P96#58;_5%;98&58C&@3&5<d";\$%;98&9: &
X89MB3C#3H&L%&@&,8%3685%;985B&)98#63\$&98&)>S3683%;<\$&58C&?>\$%37\$D&
W3M&o96XH&

&

W9=&JKLK& IB3856>&?3\$&98&<@5;6D&[-3568;8#&58C&f3B4;8#H[&!88"5B&<98:3638<3&9: &
%&3&!736;<58&?9<;3%>:96&)>S3683%;<\$D&[&]9883<%;98\$[H&/;6#;8;5&O35<@H&

&

W9=JLKL

. 5>&JKLN& [) 9 7 7 "8;<5%;98&+3\$356<@&9:&) 9 7 7 "8;<5%;98&+3\$356<@&c&?3B:P
+3:B3U;=;%>&5\$&?9<;5B&I69<3\$H&I5436&463\$38%3C&98&<98:3638<3&@3 7 3&
\$3\$;98D&[0@3&1<9B9#>&9:&V\$36=;8#&?>\$%3 7 \$[H&! 88" 5B&7 33%;8#&9:&@3&
,8%3685%;985B&) 9 7 7 "8;<5%;98&! \$9<;5%;98D& . 98%635BD&) 585C5H&

&

. 5>&JKLN& ,8=;%3C&4583B&<@5;6436\$98&58C&C;\$<"\$58%D&[W3M&2;63<%;98\$&;8&?>\$%3 7 \$&
0@396>c&! "%949;3\$;\$&;8&V6#58;_5%;98\$&58C&1<9B9#>[H&! 88" 5B&7 33%;8#&9:&
%&3&,8%3685%;985B&) 9 7 7 "8;<5%;98&! \$9<;5%;98D& . 98%635BD&) 585C5H&

&

. 56&JKLN& ,8=;%3C&4583B&7 3 7 S36&9:&4B3856>&\$>7 49\$;" 7 D&[- 58#" 5#3&58C&
V6#58;_5%;985B&2 3\$;#8[H&! 88" 5B&7 33%;8#&9:&@3&! 7 36;<58&?9<;3%>&:96&
)>S3683%;<\$&Q?43<;5B&1 "694358&) 98:3638<3RD&?%H&Z5BB38D&?M;%_36B58CH&

&

. 56&JKLN& [) 9P<98\$%6"<%;98&9:&V6#58;_5%;985B&,C38%;%;3\$[H&I5436&463\$38%3C&98&
4583BD&[23=3B94;8#&?3B:P&V6#58;_5%;985B&,C38%;%;3\$[H&I5436&463\$38%3C&98&
) 98:3638<3&9:&@3&! 7 36;<58&?9<;3%>&:96&)>S3683%;<\$D&?%H&Z5BB38D&
?M;%_36B58CH&

&

. 56&JKLN& \ 96X\$@94&<@5;6436\$98D&[! 44695<@3\$&9&?9<;5B&?>\$%3 7 \$[H&! 88" 5B&
7 33%;8#&9:&@3&! 7 36;<58&?9<;3%>&:96&)>S3683%;<\$&Q?43<;5B&1 "694358&
) 98:3638<3RD&?%H&Z5BB38D&?M;%_36B58CH&

&

V<%&JKLF&) @5;63C&\$3\$;98&[. 5<69&58C& . ;<69&/ ;3M\$&98&V6#58;_5%;98&58C&
,8\$%;%"%;98D&[&5%&@3&?;U%&@,8%3685%;985B&) 98:3638<3&98&) "B" 63&58C&
) 9 7 7 "8;<5%;98D&I@;B5C3B4@;5D&I ! H&

&

?34%&JKLF& [!&)>S3683%;<& . 3%&9C9B9#>&8&Q?3B:RPV6#58;_5%;98&58C&
\ 3\$%368&+3#;985B&7 33%;8#&9:&@3&! 7 36;<58&?9<;3%>&:96&)>S3683%;<\$D&
?58%5&) 6" _D&) 5B;:968;5H&

&

b"83&JKLF& ,8=;%3C&C;\$<"\$58%D&Z96C98&+3\$356<@&) 98:3638<3&98&[)>S3683%;<\$&9:&
) 9#8%;98H&[\ 9B:3S969D&W3M& f 5 7 4\$@;63H&

&

A3S&JKLF& [V8&05X;8#&V" 6\$3b=3\$&?36;9" \$B>&5\$&)>S3683%;<&+3\$356<@36\$H&[&I B3856>&
! CC63\$D&! 7 36;<58&?9<;3%>&:96&)>S3683%;<\$&588" 5B&7 33%;8#&D&
[) 98=36\$5%;98\$&;8&)>S3683%;<\$[D&/ ;6#;8;5&O35<@D&/ ! H&

&

A3S&JKLF&

63<97 738C5%;98\$%9%@3\$498\$96\$58C3\$5SB;\$@#";C3B;83\$:96:""63

W9=J&K&L&J [! C54%5%;98D&) 9"8%36P ! C54%5%;98D&58C& ! CC;<%;98H [& I5436&463\$38%3C&5%&
588"5B& 7 33%;8#&9: &%@3& ! 7 36;<58&?9<;3%>&:96&) >S3683%;<\$D& \ 5\$@;8#%98D&
2 H) H&

&

! "#&J&K&N&K QM;%@& ^ B5" \$& ^ 6;4438C96: : RD& [&) >S3683%;<& I69436%;3\$&9: & f 3B4;8#c&0@3&
V6#58;_5%;985B& - 3=3BH [& ,8%3685%;985B& . 33%;8#&9: &%@3& ?9<;3%>&:96&Z38365B&
?>\$%3 7 \$&+3\$356<@D& - 98C98D& 1 8#B58CH&&

&

V<%&J&K&N&L QM;%@& . H& 2 "8<58&?%58%98&58C&0@9 7 5\$&) H&09CCRD& [+3C" <%;98&9: &A5 7 ;B>&
0@3654>& 2 6949" %&+5%3\$&0@69" #&@&+3; 7 S"6\$3 7 38%& ! &?"C">&M;%@& ! CC;<%&
A5 7 ;B;3\$H [& I5436&463\$38%3C&5%&W5%;985B&) 9"8<;B&98&A5 7 ;B>&+3B5%;98\$&
588"5B& 7 33%;8#&I @;B5C3B4@;5D& I ! H&

&

%2C0/6+(3 , F80-(. 2+(; 20C6470/D(* .8A7(. 2+(G 14A7B1: 7(

&

W9=J&' (JK& ,8=;%3C&%5BX&c&065C;%;98&58C&) @58#3&;8&W96M5>H& I63\$38%3C&%9&?98\$&9: &
W96M5>D&05 7 45D&A - H&

&

. 5>&' (JK& A5<"B%>&B35C36&Z5S6;9B5&,\$B58C&?>\$%3 7 \$&+3\$;C38%;5B& \ 96X\$@94D&
H&Z5S6;9B5&,\$B58C&O6;%;\$@&) 9B" 7 S;5D&) 585C5&

&

. 56<@&' (JK& ?%"C;9&M96X\$@94&QM;%@&b358PI;3663&,\$S9" %RH&03<@8;d"3\$&58C& ! 3\$%@3%;<\$&
;8&* \$3&9: &

&

EYI

b"Bk' (JFc&& !<%;98&+3\$356<@&c&185SB;8#&)97 7 "8;%;3\$&%@69"#@&185<%;8#&)@58#3D&
,8%3685%;985Bk?" 7 7 36k?<@99Bk5%& * 8;=36\$;%>&)9BB3#3&9: &V\$B9&58C&
! X36\$@" \$D&V\$B9D&W96M5>H&

&

! 46;Bk' (JF&& \ 96X\$@94&Q98&?X>43R&M;%@&;8%3685%;985Bk\$"C38%\$&;8&4634565%;98&:96&
!<%;98&+3\$356<@&3 7 ;856&;8&V\$B9&W96M5>D&5\$&456%&9: & f ;V ! &Q* 8;=36\$;%>&
)9BB3#3R&,8%3685%;985Bk?" 7 7 36k?<@99BH&&

&

V<%&' (J] && f 9M&C9&?>\$%3 7 \$& - 3568&Q<98=36\$5%;98\$&M;%@&%@3&,8%3685%;985BkO5%3\$98&
,8\$%;%" %3RD&@3BC&5%&%@3&V<%9S36&Z5B\$B9&58C&

! "#\$% ' (JJ& +3\$498C38%QM;%@&W965&O5%3\$98&58C&0@9775\$& f >BB58C&16;X\$38R&9&
4"SB;<k\$<6338;8#&9:;&:;B 7D&! 8&1<9B9#>&9: . ;8CRH&- ;%365%"63&f 9"\$3D&
V\$B9D&W96M5>H&

&

. 5>&' (JJ& -3<% "63T \ 96X\$@94c&?>\$%3 7 \$&I65<%;<3D&1<9B9#;<5B&0@;8X;8#&58C&! <%;98&
+3\$356<@c&O6;8#;8#&9#3%&36?<@9B56\$@;4&58C&I65<%;<3H&* 8;=36\$;%>&
) 9BB3#3D&?<@99B&9: &1C" <5%;98D&V\$B9D&W96M5>&&

&

. 56&' (JJ& W3M& \ 5>\$&9: & \ 96X;8#&H& f 9M&83M&7 3C;5&\$@543&<9BB5S965%;=3&M96X&
5<69\$&\$&S9" 8C56;3\$H&O5BXTM96X\$@94&463\$38%3C&5%&03B3896&Q+3\$356<@&58C&
23=3B94 7 38%&2 ;=;\$;98RD&V\$B9D&W96M5>&

&

A3S&' (JJ& QM;%@&1C;3&?35\$@963D&) @56B;3&?35\$@963&58C&b583&b96#38\$98RH&O@3&
63B5%;985B&\$3B: &5&\$&58&5#38&9: &<@58#3c&?97 3&; 7 4B;<5%;98\$&:96&\$>\$%3 7 \$&
465<%;<3H& \ 96X\$@94T463\$38%5%;98&5%&0@3&- 3M;8&) 38%36&588"5B&7 33%;8#&
98&?>\$%3 7 \$&I65<%;<3D&5%&0@3& . 9"8%5;8&k "3\$%&,8\$%;%"3D&A69\$%D& \ 3\$%&
/ ;6#;8;5H(&

&

W9=&' (J(& !<%;98&+3\$356<@&58C&, 7 4B3 7 38%5%;98&?<;38<3H&I63\$38%5%;98&9: :363C&&9&
, 7 4B3 7 38%5%;98&?<;38<3&Z69"4&5%&* 8;=36\$;%>&9: &?9"%"&AB96;C5H&

&

V<%&' (J(& ?>\$%3 7 \$&! 44695<@3\$&&9&! <%;98&+3\$356<@D&58C&O6;8#;8#&09#3%&36&
?<@9B56\$@;4&58C&I65<%;<3H&O5BX\$&58C& \ 96X\$@94&463\$38%3C&5%&
* 8;=36\$;%>&) 9BB3#3D&V\$B9D&W96M5>H&&

&

?34%&' (J(& s \ @5%&;&5&"8;=36\$;%>&M363&96#58;_3C&5\$&58&1 <9 / ;BB5#3w&?97 3&
<98%;C365%;98\$&5S9" %&3<9B9#;<5B&C3\$;#8&58C&B3568;8#&45<3\$H&t&O5BX&58C&
 \ 96X\$@94&9: :363C&5%&1 <9 / ;BB5#3&? "5%5;85S;B;%>& . 33%;8#&D&?@5M85#58&
- 5X3D&O6;%;&\$@&) 9B" 7 S;5D&) 585C5H&

&

! "#\$% ' (J(& -3<% "63&463\$38%3C&Q=;5&?X>43R&&9&2 ;63&2 5M5&* 8;=36\$;%>&D&2 ;63D&2 5M5D&
1%&;94;5c&?>\$%3 7 \$&544695<@3\$&&9&) 97 7 "8;<5%;98D&V6#58;_5%;985B&
) "B" 63&58C&) @58#3c&- 3\$&98\$&- 35683C&5S9" %&^ 89MB3C#3&?@56;8#&H&&

&

. 56<@&' (J(&& QM;%@&2 58;3B&OB53"36R&2 3=3B94;8#&- 3568;8#&) 97 7 "8%;3\$&;8&V8B;83&
Q58C&O65C;%;985BR&) B5\$&699 7 \$H& \ 96X\$@94&463\$38%3C&5%&* ?A&) 38%36&:96&
' J#&) 38% "6>&O35<@;8#&1 U<3BB38<3H&O5 7 45D&A - H&Q463\$38%3C&5#5;8&?34&D&
' (J(R&

&

A3SD&' (J(& QM;%@&b583&b96#38\$98R&O@3&69B3&9: &:65 7 ;8#&58C&%@3&:65 7 ;8#&9: &69B3\$&;8&
?>\$%3 7 \$&I65<%;<3H&I63\$38%5%;98T \ 96X\$@94&5%&0@3&- 3M;8&) 38%36&
7 33%;8#&98&?>\$%3 7 \$&465<%;<3D&5%&0@3& . 9"8%5;8&k "3\$%&,8\$%;%"3D&A69\$%D&
 \ 3\$%&/ ;6#;8;5H&

&

?34%&' ((K& QM;%@&2 58;3B&OB53" 36RD&2 3=3B94;8#&- 3568;8#&) 9 7 7 "8;%;3&8&V8B;83& Q58C&065C;%;985BR&) B5\$\$699 7 \$H& \ 96X\$@94&463\$38%3C&5%* ?A&) 38%36&:96& ' J#&) 38%"6>&035<@;8#&1 U<3BB38<3H&05 7 45D&A - H&

A3SD&' ((K& QM;%@&b583&b96#38\$98R&0@3&+9B3&9: &sO9"8C56>t& . 3%54@96\$&8&) 98<34%"5B;_;&8#&A5 7 ;B>&58C&) 9 7 7 "8;%>&?>\$%3 7 \$H& I63\$38%5%;98T \ 96X\$@94&5%&0@3&- 3M;8&) 38%36D&O3%@3BD& . 1H&A3S6"56>D& ' ((KH&) @56B;3&?35\$@963&58C&1C;3&?35\$@963&63\$498C38%\$H&

?34%&' ((L& A35%"63C&463\$38%36TM96X\$@94&b35C36H&?9<;5B&3<9B9#>&58C&C3\$;#8&:96& \$"\$%5;85S;B;%>H&,\$B58CM99C& 7 33%;8#&98&?"\$%5;85SB3&) 9 7 7 "8;%;3\$H& O5;8S6;C#3&,\$B58CD \ 5\$@;8#%98H&

A3SD&' ((LH& QM;%@&b583&b96#38\$98R&O5B58<;8#&,C38%;&58C&) @58#3&8&A5 7 ;B>&58C&) 9 7 7 "8;%>&?>\$%3 7 \$H& I63\$38%5%;98T \ 96X\$@94&9::363C&5%&^ "6%&- 3M;8&) 38%36D&O3%@3BD& . 5;83H&) @56B;3&?35\$@963&58C&1C;3&?35\$@963& 63\$498C38%\$H&

?34%&' ((N& A35%"63C&463\$38%3CTM96X\$@94&b35C36H&0@3&\$>\$%3 7 ;<&699%\$&9: &\$9<;5B& 3<9B9#>H&1) VP / ;BB5#3& 7 33%;8#&98&\$>\$%3 7 \$&58C&<9 7 7 "8;%;3\$H& / ;<%96;5D& O6%;\$@&) 9B" 7 S;5H&

A3SD&' ((NH& ?>\$%3 7 \$&@;&8X;8#D&M;%@&<9 7 7 "8;%>&58C&:5 7 ;B>&\$>\$%3 7 \$H& \ 96X\$@94& 9::363C&5%&^ "6%&- 3M;8&) 38%36D&O3%@3BD& . 5;83H&

. 5>&' ((F& \ 96BC&A99C&I69#65 7 7 3D&+9 7 3H&0@3& \ 96BC&) 5:e&5\$&5& 7 3%@9C&:96& <635%;8#&C;5B9#;<&63B5%;98\$@;4&\$&58C闝%;8#&83M&X89MB3C#3& Q:9BB9M3C&S>&:5<;B;%5%;98&9: &5& \ 96BC&) 5:eRH& ! B\$9=3&5&M9PC5>& M96X\$@94&98&\$>\$%3 7 \$&544695<@3\$&9&63P%@;8X;8#& f " 7 58&+3\$9"6<3\$H&

A3SD&' ((FH& ?>\$%3 7 \$&@;&8X;8#D&\$>\$%3 7 \$&465<;<3&58C&<9 7 7 "8;%>H& \ 96X\$@94&9::363C& 5%&\$%;3&9: &W5%;985B&065;8;8#&- 5S965%96;3SD&O3%@3BD& . 5;83H&

! 46&' ((J& s)>S3683%;<&436\$43<%;=3\$&9: &.; 7 5#3\$&9: &3<@89B9#>&8&;B 7 Ht&I63\$38%36&& 98&4583BD&s; 7 5#3\$&9: &3<@89B9#>&8&;B; 7 Ht&05 7 45&,8%3685%;985B&A;B 7 & A96" 7 &:35%"63C&4583BD&@3BC&5%& . "\$3" 7 &9: &?<;38<3&58C&,8C"\$%6>D& 05 7 45D&A - H&

?34%&' ((Y& ,,\$\$3\$&9: &\$<;38<3&58C&<9 7 7 "8;%>ct&,8%36#38365%;985B&b3568;8#D& ;8C;#389"\$&X89MB3C#3&58C&C;5B9#" 3H& \ 96X\$@94T%5BX&463\$38%3C&5%& ^9@5B5&) 38%36D&^ 5;B"5& f 5M5;;H&

! "#&' ((Y& 2 3\$;#8&:96&) 98=36\$5%;98H& - 3<% "63&463\$38%3C&5%&03B3896&+3\$356<@&58C& 2 3=3B94 7 38%&V<<5\$;985B&- 3<% "63&?36;3SD&V\$B9D&W96M5>&

. 56k' ((Yk \ 96X\$@94D&sW3M96X;8#&A96" 7 t&QM;%@&b5>& - 544;8RHk \ 96X\$@94&569"8C&
;\$"3\$&9:&<635%;8#&<98%3U%\$&:96&5& \ 96BC&) 5:e&:8&@%36543"%;<&\$3%%;8#&\$Hk ! %&
588"5B& 7 33%;8#&D&@3&I\$><@9%&3654>&W3%M96X36&?> 7 49\$;" 7 ctO@3&
! C=38%"63&9:&) @58#3Hk \ 5\$@;8#%98D&2) Hk

&
A3S&' ((Yk \ 96X\$@94D&?>\$%3 7 \$&@;8X;8#&58C&\$>\$%3 7 \$&465<%;<3H&V::363C&5%&\$%;3&9:&
W5%;985B&O65;8;8#&- 5S965%96;3\$D&O3%&3BD& . 5;83Hk

&
! 46;B&' ((Ek \ 96BC&) 5:e&98&C3\$;#8&9:&5&) @;BC638u\$&?<;38<3&) 38%36D& . "\$3" 7 &9:&
?<;38<3&58C&,8C"\$%6>D&O5 7 45D&A - Hk, 8=9B=;8#&45638%\$&9:& >9" 8#&<@;BC638&
58C&3U@;S;%&C3\$;#836\$Hk

&&
b58&' ((Ek &s I56%;<;45%96>&5<%;98&63\$356<@&;8&5&\$<;38<3&<38%36t&QM;%@& \ ;%&
V\$%638X9RH&2 3456% 7 38%&9:&) 9 7 7 "8;<5%;98&) 9BB9d";" 7 &\$36;3\$D&
* 8;=36\$;%>&9:&?9"%@&AB96;C5D&O5 7 45D&A - &

&
V<%&' ((' & ,8:9675%;98&58C&) 9 7 7 "8;<5%;98&O3<@89B9#>&Q,) OR&58C&
V#58;_5%;985B& 2 3=3B94 7 38%ctO@3&C"5B&:5<3&9:&&b58"\$H&Z"\$3%&B3<% "63&
#;=38&9&,8\$%;%"3&:96&,8C"\$%6;5B&1<989 7 ;<\$&58C&O3<@89B9#>&
. 585#3 7 38%D&O@3&W96M3#;58&* 8;=36\$;%>&9:&?<;38<3&58C&O3<@89B9#>&
QWOW *RD&O698C@3; 7 D&W96M5>Hk

&
?34%&' ((' &) 996C;85%3C&58C&B3C&s \ 96BC&) 5:et&@3BC&5%& . "\$3" 7 &9:&?<;38<3&58C&
,8C"\$%6>&Q . V? ,RD&O5 7 45D&A - &98&C3\$;#8&S" ;BC;8#&" 498&@3&3U436;38<3&
9:&B;=;8#&8&@3&O5 7 45&O5>&63#;98Hk, 8=9B=;8#&5&M;C3&<69\$&\$3<%;98&9:&
;8@5S;%58%\$&9:&@3&O5 7 45&O5>&63#;98Hk

&
b58&' ((' &) 996C;85%3C&58C&B3C&s \ 96BC&) 5:et& 7 33%;8#&;8&O5 7 45D&A - &5\$&456%&9:&
M96BCPM;C3&;8%36<9883<%3C&\$36;3\$&9:& 7 33%;8#&\$&3U4B96;8#&<9 7 7 "8;%>&
58C&;8\$%;%"%;985B&63\$498\$3\$&9&3=38%\$&9:&K&T&J&H&QM;%@& 2 5=;C&, \$55<\$RHk

&
?34%&' ((J& +3B5%;985B&X89M;8#&;8&<9 7 7 "8;%>&S5\$3C&5<%;98&63\$356<@Hk?3 7 ;856&
9::363C&5%& \ 96X&+3\$356<@&,8\$%;%"3\$D&V\$B9D&W96M5>Hk

&
! 46k' ((J& \ 96X\$@94&QM;%@& ! 8#3B5&Z;96C589Rct& \ @5%&45638%\$&58C&<95<@3\$&\$5>D&
58C&M@5%&X;C\$&@356Ht&&A96&* ?A& \ 9 7 38&\$&?9<<36&) B;8;<\$&Q - 9#58&AB3<XD&
96#58;_36RHk) B;8;<&:96&) 95<@3\$&58C&I5638%\$&9:&Z;6B\$&?9<<36&35 7 \$D&
O5 7 45D&A - Hk

&
A3S&' ((J& \ 96X\$@94&QM;%@& I3#&V\$%638X9R&s * 8C36\$%58C;8#E"4&;8%365<%;98&;8&
;8:96 7 5B&B3568;8#&\$3%%;8#&\$Ht&&A96&;8%365<%96&B3568;8#&469#65 7 D& . "\$3" 7 &
9:&?<;38<3&58C&,8C"\$%6>D&O5 7 45D&A - Hk

&
W9=&' (((& ,8;=3C&4583B;\$%D&& . "\$3" 7 \$&58C&) 9 7 7 "8;%>ct) 9 7 7 "8;%>&2;5B9#"3Hk
?498\$963C&S>& ! 7 36;<58& ! \$\$9<;5%;98&9:& . "\$3" 7 \$D&O5 7 45D&AB96;C5D&

W9=3 7 S36D ' ((H I 583Bk3U4B963Ck% @3k69B3k9: k 7 " \$3" 7 \$k; 8kS"; BC; 8#k58Ck \$" \$%5; 8; 8#k < 9 7 7 " 8; %> Hk

&

W9=kJKKKk) 9P463\$38%36k9: kM96X\$@94kQb"58; %5kO69M8Dk96#58; _36k58Ck 7 5; 8k 463\$38%36RDk) 98=36\$5%; 98k5\$5k5k < 963kS" \$; 83\$5k465< %; < 3Hk ! 88" 5Bk? > \$3 7 \$k 0@; 8X; 8#k < 98: 3638 < 3Dk ! %B58%5Hk

&

b" BkJKKKk 2; B3 7 7 5\$M; % @k96#58; _5%; 985BkC; 5B9#" 3Hk \ 96X\$@94T&463\$38%5%; 98k 9:: 363Ck5%k \ 96Xk + 3\$356< @k, 8\$%; % " %3\$ k? 3 7 ; 856k? 36; 3\$Dk V\$B9Dk W96M5> Hk

&

?34%kJKKLk [+3: 65 7 ; 8#k% @69" #k? > \$3 7 ; < k I 65< %; < 3c k 2 3\$; #8Dk 1 :: 3< %; = 383\$SDk58Ck 2; :: 3638 < 3Hk [k I 63\$38%5%; 98T k \ 96X\$@94k5%k ! 88" 5Bk V6#58; _5%; 985Bk 2 3\$; #8k 58Ck 1 :: 3< %; = 383\$ \$k < 98: 3638 < 3Dk ? 58k A658< ; \$ < 9Dk) ! Hk

&

. 56kJKKLk 2 3 7 9 < 65%; < kC; 5B9#" 3k58Ck < 9BB5S965%; = 3kM96XHk ! 8k9 < < 5\$; 985Bk \$3 7 ; 856Dk #; = 38k% 9k? > 8 < 6" C3Tk ^ 5 > 589k) 9BB3#3Tk ! % @5S5\$ < 5k * 8; = 36\$; % > Dk A96%k . 5 < . " 665 > Dk ! BS36%5Dk) 585C5k

&

. 56kJKKLk) 9BB5S965%; = 3k; 8d"; 6 > k; 8k5 < %; 98k63\$356< @Hk \ 96X\$@94k#; = 38k5%k? > 8 < 6" C3Tk ^ 5 > 589k) 9BB3#3Hk A96%k . 5 < . " 665 > Dk ! BS36%5Dk) 585C5k

&

?34%kJKKFk V6#58; _5%; 985Bk; C38%; %; 3\$58Ck%658\$: 96 7 5%; 98\$Hk \ 96X\$@94kC983k5%k W, ? 1 15\$%kQW5=5Bk, 8P?36=; < 3k 18#; 8336; 8#Dk 15\$%RDk) @56B3\$%98Dk?) Hk

&

! "#kJKK]k \ 96X\$@94k98k; 8%36P96#58; _5%; 985Bk < 9 7 7 " 8; < 5%; 98k58CkS9" 8C56 > k < 69\$ \$; 8#k63B5%; 98\$ @; 4\$Hk Z; = 38k% 9k% @3k 2 ; =; \$; 98k9: k, 8\$%; % " %; 985Bk ! C=58 < 3 7 38%k5%k VBCk 2 9 7 ; 8; 98k * 8; = 36\$; % > Dk W96: 9BXDk / 5Hk

&

. 5 > kJKK]k

&

EKl

b" B>JJKKY& - 3<" 63TM96X\$@94&98&) "B" 63&58C&<9 7 7 "8;<5%;98&8& ! 7 36;<58&
96#58;_5%;98\$H&I63\$38%3C&9&=;\$%;8#E"4&9:.&+ "\$\$;58&35<@36\$&@69"##&
&@3&18#B;\$@& - 58#"5#3&) 38%36D&VBC&2 9 7 ;8;98& * 8;=36\$;%>D&W96:9BXD& / ! &

b" 83&JJKKY& ,8=;%3C&4583B;\$%T&63\$9"6<3&436\$98H&? " 7 7 36&A5<"B%>& \ 96X\$@94D&
[035<@;8#&98&03B3=;\$;98H[& ! <5C3 7 ;<&03B3=;\$;98&?36=;<3\$D&VBC&
2 9 7 ;8;98& * 8;=36\$;%>D&W96:9BXD& / ! H&&

. 5>JJKKY&& - 3<" 63T&M96X\$@94c&) "B" 63&58C&) 9 7 7 "8;<5%;98H&I63\$38%3C&5\$&456&9:.&
\$@96&<9"6\$3D&[) 9 7 7 "8;<5%;8#&58C&W3#9%;5%;8#&M;,%& ! 7 36;<58&
O"\$;83\$4394B3D[&9&O"8C349\$%&03B3X9 7 D&@69"##&@3&18#B;\$@& - 58#"5#3&
) 38%36&9:.&VBC&2 9 7 ;8;98& * 8;=36\$;%>D& / ;6#;8;5&O35<@H&

. 5>JJKKY&& +338#;8336;8#D&6396#58;_ ;8#D&C9M8\$;_ ;8#D&7 36#;8#D&<98\$9B;C5%;8#H& ! 63&
>9"C9;8#& ;%&#&@%w& ^ 3>89%3& - 3<%" 63&#;=38&9&?38%565& ! B%3685%;=3&
2 3B;=36>& ?>\$3 7 \$& - "8<@398H&) @3\$5435X3D& / ! H&

! 46&JJKKYH&& [\ @5%563&@3&<@565<%36;\$%;<\$9:.&5cC&63B5%;98\$@;4w[&05BXT&M96X\$@94&
#;=38&9&A658<@;,\$;8#&' (((&05\$X&A96<3H& . 5<2985BCn\$&) 964965%;98D&V5X&
O699XD&, - H&

. 56&JJKKY& [)>S3683%;<\$H[& - 3<" 63&#;=38&9&,8C" \$%6;5BTV6#58;_5%;985B&I \$><@9B9#>&
\$3 7 ;856&\$36;3\$H&2 3456% 7 38&9:.&I \$><@9B9#>D&VBC&2 9 7 ;8;98& * 8;=36\$;%>D&
W96:9BXD& / ! H&

. 56&JJKKY& [) 98C"< ;8#&5<5C3 7 ;<&63\$356<@& ;8&>9"6&9M8&96#58;_5%;98[H& - 3<" 63&
#;=38&9&18#;8336;8#& . 585#3 7 38&\$3 7 ;856&\$36;3\$D&2 3456% 7 38&9:.&
18#;8336;8#& . 585#3 7 38%D&VBC&2 9 7 ;8;98& * 8;=36\$;%>D&W96:9BXD& / ! H&

V<%&JKKE&& - 3<" 63D&[?>\$3 7 \$&436\$43< ;=3\$H[& I63\$38%3C&9&,8%36C;\$<;4B;856>&?"C;3\$&
<9"6\$3D&[,8%36C;\$<;4B;856>&0@396>&58C&) 98<34\$[H&,8%36C;\$<;4B;856>&
\$"C;3\$&C3456% 7 38%D&VBC&2 9 7 ;8;98& * 8;=36\$;%>D&W96:9BXD& / ! H&

V<%&JKKE& - 3<" 63T&M96X\$@94c&) "B" 63&58C&) 9 7 7 "8;<5%;98H&I63\$38%3C&5\$&456&9:.&
\$@96&<9"6\$3D&[) 9 7 7 "8;<5%;8#&58C&W3#9%;5%;8#&M;,%& ! 7 36;<58&
O"\$;83\$4394B3D[&9&O"8C349\$%&03B3X9 7 &QZ36 7 58&W5%;985B&03B34@983&
) 9 7 458>RD&@69"##&@3&18#B;\$@& - 58#"5#3&) 38%36&9:.&VBC&2 9 7 ;8;98&
* 8;=36\$;%>D& / ;6#;8;5&O35<@H&

b" 8&JKKE&& &QM;,%&tb583&tb96#38\$98R&03B3=;\$3C&\$@96&<9"6\$3D&[,8%36<"B" 65B&0@;8X;8#&
;8&@3&ZB9S5B&03<@;<5B&V6#58;_5%;98[H&0@69"##&W5%;985B&03<@89B9#;<5B&
* 8;=36\$;%>H&

&
23<&JKKJ& ?9<;5B&<98\$%6"<%<;98;\$ 7 &58C&63:B3U;=3&465<%<;<3H& \ 96X\$@94&#;=38&%9&
Z65C"5%3&I69:3\$\$;985B&I\$><@9B9#>&I69#65 7 D& ! 8%;9<@&W3M&18#B58CD&
^3383D&W f H&

&
23<&JKKJ& QM;%&@&b583&b96#38\$98R&[) 9 7 7 "8;<5%;98&;8&M96X&58C&:5 7 ;B>D&;8&W96M5>&
58C&* ? ! H&O5BX&#;=38&%9&W96\$3 7 38&\$&A3C365%;98D&W96#3D& / ! H&

&
. 56&JKKJ& ?9<;9%3<@8;<5B&\$>\$%3 7 \$&58C&96#58;_5%;985B&<9 7 7 "8;<5%;98H&O5BX&#;=38&
;8&,O . & - 3<% "63&?36;3\$D&O9%5B&d"5B;%>&96#58;_5%;98&\$&58C&%3<@89B9#;<5B&
<@58#3D&W96:9BXD& / 5H& &

&
W9=&JKK (& QM;%&@&b583&b96#38\$98R&[) 69\$\$P<"B%"65B&;\$\$"3\$&;8&63B5%;8#&M96X&58C&
:5 7 ;B>c&) 9 7 456;8#&W96M5>&58C&* ? ! H[&,8=;%3C&%5BX&#;=38&%9&?98\$&9:&
W96M5>D&W96:9BXD& / ;6#;8;5&

&
?34&JKK (&) 9 7 7 "8;<5%;98&58C&) "B%"63&;8&%@3& \ 96X4B5<3H&,8=;%3C&%5BX&#;=38&%9&
)9\$7949B;%58&) B" S&9:&W96:9BXD&W96:9BXD& / ;6#;8;5H&

&
b"8&JKK (&) 9 7 7 "8;<5%;98&58C&<996C;85%;98&;8&<;%>	=368 7 38%H&,8=;%3C&M96X\$@94&
#;=38&:96&) ;%>&* 8;=36\$;%>&9:&W96:9BX&Q96#58;_5%;98&9:&<;%>& 7 585#36\$&58C&
C3456% 7 38%&@35C\$RH&Q \ ;%&@&O566>&) B3 7 \$98RH&

&
! 46&JKK (&) 69\$\$P<"B%"65B&;\$\$"3\$&;8&;8C"\$%6;5B&C3 7 9<65<>c&W96M5>&58C&%@3&* 8;%3C&

V6#58;_5%;98\$H[&-5"C36&,8\$%;%"%3&9:& . 585#3 7 38&58C&,8%3685%;985B&
?"%C;3D&* 8;=36\$%;>&9:&I388\$>B=58;5D&I@;B5C3B4@;5H&

&
W9=&JKLF& QM;%&f " 7 S36%9& . 5%"6585R&[V8&) 98\$%6" <%;8#&+35B%;3\$[&,8=;%3C&M9&C5>&
4"SB;<&\$3 7 ;856D&\$498\$963C&S>&@3&W96M3#;58&A5 7 ;B>&0@3654>&
! \$\$9<;5%;98D&58C&%@3&* 8;=36\$%;>&9:&V\$B9D&V\$B9D&W96M5>H&

&
V<%&JKLF& [) 98%3U%&58C&1<9B9#>&;8&A5 7 ;B>&0@3654>&,8\$%;%"%98\$&c&! 44B>;8#&
?>\$%3 7 ;<&0@;8X;8#&9&V"6&VM8&V6#58;_5%;98\$H[& ^ 3>89%3&5CC63\$&\$&58C&
M96X\$@94D&%M38%>&::;%@&588;=36\$56>&b"S;B3" 7 &9:&3& ^ 6;\$\$;58\$58C&
A5 7 ;B>&0@3654>&V6#58;_5%;98D& ^ 6;\$\$;58\$58C&W96M5>H&

&
. 5>&JKLF& [?38\$3P . 5X;8#&58C&n f 3B4;8#&+3B5%;98\$@;4\$&;8&V6#58;_5%;98\$&58C&
A5 7 ;B;3\$[H&,8=;%3C&M96X\$@94&#;=38&9&W96M3#;58&V6#58;_5%;98&9:&
A5 7 ;B>&0@3654>&V6#58;_5%;98\$D&V\$B9D&W96M5>H&

&
. 5>&JKLF&) 69\$&\$&) "B%"65B&I36\$43<%;=3\$&98&) 9 7 7 "8;<5%;98&0@396>&58C&
) 9 7 7 "8;<5%;98&+3\$356<@H[&,8=;%3C&463\$38%5%;98&QM;%"&b583&b96#38\$98RD&
,8\$%;%"%3&9:&I63\$&\$&+3\$356<@D&* 8;=36\$%;>&9:&V\$B9D&V\$B9D&W96M5>H&

&
! 46&JKLF& [) 635%;8#&5&?>\$%3 7 ;<&V6#58;_5%;98HHHQ09& . 5X3&?>\$%3 7 ;<&
,8%36=38%;98\$RH[&,8=;%3C&9438;8#&5CC63\$&\$D&V6#58;_5%;98&9:&I"SB;<&A5 7 ;B>&
) 9"8\$3B;8#&V::;<3\$&588"5B&7 33%;8#&D&0698C@3; 7 D&W96M5>H&

&
! 46&JKLF& [09M56C&5&)>S3683%;<& . 3%@9C9B9#>&9:&V\$36=;8#&?>\$%3 7 \$&;8&
+3\$356<@H[&,8=;%3C&Z"3\$%&- 3<%&"63D&A5<"B%>&9:&I\$><@9B9#>&D&* 8;=36\$%;>&9:&
O36#38D&O36#38D&W96M5>H&

&
! 46&JKLF&& [) 9 7 7 "8;<5%;98&58C&) 98%3U%&;8&) 69\$&\$&) "B%"65B&A5 7 ;B>&+3\$356<@H[&
,8=;%3C&B3<%&"63D&A5 7 ;B>&+3\$356<@&Z69"4&9:&3&! C9B3\$<38&I\$><@;5%6>&
! \$\$9<;5%;98&9:&V\$B9D&V\$B9D&W96M5>H&

&
. 56&JKLF& [) "6638&)&98%69=36\$;5B&,\$\$%3\$&;8&A5 7 ;B>&+3\$356<@H[&,8=;%3C&Z"3\$%&
- 3<%&"63D&,8\$%;%"%3&9:&I\$><@9B9#>&D&* 8;=36\$%;>&9:&V\$B9D&V\$B9D&W96M5>H&

&
b58&JKLF& [! &?>\$%3 7 \$&&0@3963%;<9>&I\$><@9B9#>&D&* 8;=36\$%;>&9:&V\$B9D&V\$B9D&W96M5>H&

\$37;856SDt,8\$%;%"3t:96t?9<;5Bt?<;38<3SDt * 8;=36\$;%>t9:t0697 \$mD&0697 \$mD&
W96M5>Ht

&

V<%&JKL]& [)>S3683%;<SDt ?>\$%37 \$t0@396>D&58C&A57 ;B>t0@3654>H[t,8=;%3C&37 ;856D&
V\$B9&A57 ;B>t0@3654>t ! \$9<;5%;98D&V\$B9D&W96M5>Ht

&

. 56&JKL]& [?33;8#&V6#58;_5%;98\$t58C&V%@36&A57 ;B;3\$c&I5%%368\$t:697 &O5%3\$98H[t
I6;8<;45Bt ! CC63\$t\$&#;=38&5%%@3&I63\$;C38%t&A96" 7 &t5%%@3t) 9BB3#3&9:t ?5;8&
O383C;<%D&?%H&b9\$34@D& . ;883\$9%5Ht

&

A3S&JKL]& [O5%3\$98D&)>S3683%;<\$t58C&I\$><@9%@3654>ct?973&) 9883<%;98\$H[t - 3<% "63&
463\$38%3C&t%9&I\$><@;5%6;<t+3\$;C38%SD&O@3&,8\$%;%"3t9:tI388\$>B=58;5&
f9\$4;%5B&I@;B5C3B4@;5D&I ! Ht

&

. 56&JKLY& [! C54%5%;98&58C& / ;5S;B;%>t9:tA57 ;B>t,8%365<%;98&I5%%368\$c&t?973&
,74B;<5%;98\$t:96&O@3654>[Ht,8=;%3C&B3<% "63&463\$38%3C&t%9&O" %B36&) B;8;<D&
I69=;C38<3D&+H,Ht

&

! "#&JKL ' & [. 3%@9C9B9#;<5B&) 98\$;C365%;98\$t:96&+3\$356<@&98&A57 ;B>t0@3654>tM;%@&
A57 ;B;3\$t@5=;8#&t5& f369;8P ! CC;<%3C& . 37S36H[t,8=;%3C&463\$38%5%;98&
#;=38&9&5E" 4&9:t63\$356<@36&58C&<B;8;<;58\$t:697 &%@3&W3%@36B58C&\$t5%&
b3BB;83X&) 38%6" 7 &t;8& ! 7 \$%36C57 D&O@3&W3%@36B58C&\$Ht

&

. 5>&JKL ' & [+3\$356<@&98&A57 ;B>t) 977 "8;<5%;98&I5%%368\$t;8& ! CC;<%&58C&tW9675B&t
A57 ;B;3\$H[t - 3<% "63&#;=38&t%9& ! <@;3=3738%%&@69" #&t) 9"8\$3B;8#&58C&
O635%738%D&,8P?36=;<3&O65;8;8#&t?36;3SD&I@;B5C3B4@;5Ht

&

. 56&JKL ' &

&

?@3;B5&Z9S3\$P+>58c&A"BB&0;73&03B3M96X36\$&?38\$3P . 5X;8#&I69<3\$\$&:96&,8:9675B&
)977"8;<5%;98H&Q*8;=36\$;%>&9:&?9"%@&AB96;C5D&23<37S36D&'(JNR&

&

\ H&065=;\$&0@974\$98c&23\$;#8;8#&09#3%&36&M;%@&@3& \ 96B&C&)5:ect,8=;%8#&
)977"8;%>&,C35\$&:96&58&,C35&g983&;8&5&?<;38<3&)38%36H&Q*8;=36\$;%>&9:&
?9"%@&AB96;C5DD . 5>D&'(JJRH&

&

f 35%&36&+H&)"66>c&!&?37;9%;<&I@3897389B9#>&9:&f973B3\$\$83\$\$&58C&%@3&I63<56;9"\$&
)977"8;%>c&!&.5%&36&9:&O9"8C56>&Q<9P<@5;6&M;%@&. ;<@53B&-3=58RH&
Q*8;=36\$;%>&9:&?9"%@&AB96;C5D&! "#"\$%D&'(JJRH&&

&

25=;C&-33c&s,8:967;8#D&18%36%5;8;8#&58C&I36\$"5C;8#c&f35B%&)&977"8;<5%;98&5%&
Ht&*8;=36\$;%>&9:&?9"%@&AB96;C5&Q! "#"\$%D&'(JYRH&

&

?565@& . <Z@33&Q' (J ' R&
b5<9S&b38X;8&\$&Q' (J ' R&
O6;58&b9@8&\$%98&Q' (J J R&
b" B;5&kO568@;BB&Q' (J J R&
O3%&k1\$<@38:3BC36&Q' ((NR&
?58C>&k) 99436&Q' ((NR&
?B5=;<5& ^ 9C;\$@&Q' ((YR&
+9S36%& ^ 63;\$@36&Q' ((ER&
)>8%&;5&kO358&Q' ((ER&
O3%&58>&kZ99C;36&Q' ((' R&
. 56#563%&V\$%638X9&Q' ((' R&

&
Vk>k(*B6767(&B.046+I(\$6:/k(15(&1 J J , 20- ./012I(;)) ! (
b5; 7 3&+9SS&Q' (JFR&k,8&?356<@&9:&k?9B;C56;%>c&,C38%;;;<5%&98&I56%;<;45%&98&8&/ ;6% "5B&
A58&) 9 7 7 " 8 ; % ; 3 \$ &
! 8%&98>& / 5B38%&83&Q' ((J R&O658\$:96 7 ; 8 # & I " S B ; < & ? 4 5 < 3 \$ & O @ 6 9 " # & I 3 6 : 9 6 7 5 8 < 3 &

&
; 2+64E4.+, ./6(U12147(&1886E6(*B6767(&B.046+I(;)) ! (
?"<<3&\$&1X438>98#&Q' (' (R&
! 7 S36&1BB36;8&Q' (JNR&
2@33`5&Z9433&I5BB5=;&Q' (JFR&
b3&\$;3&I938&Q' (JFR&

&
& ,4462/(\$1-/14.8()/ , +62/7S&B.04(15(&1 J J 0//66>+C0714(
29"#B5&\$&b96C58&
?" ; % &) @ 3 7 S " 6 X 5 6 & Q 9 8 & B 3 5 = 3 R &

&
& ,4462/(\$1-/14.8()/ , +62/7S V 6 J F 6 4 (1 5 (& 1 J J 0 // 6 6 (
?98;5&2 ; 7 ; %69=5&
16;8&Z9"#&

&
V 6 J F 6 4 (\$ 0 7 7 6 4 / . / 0 1 2 (& 1 J J 0 // 6 6 I (? / B 6 4 (\$ 6 : . 4 / J 6 2 / 7 I (;)) ! ((

(
. ; < @ 5 3 B & O " < X B 3 > & Q) 9 B B 3 # 3 & 9 : & 1 C " < 5 % ; 9 8 D & * ? A D & ' (J K R &
?565@&?3798&Q)9BB3#3&9:&1C"<5%;98D&'((KR&
W58<>&. ;BB&\$&Q)9BB3#3&9:&1C"<5%;98D&'((KR&
1HbH&A96C&Q!8%&6949B9#>D&'((LR&

&
3Bk\$(\$07764/ . /0127(&B.046+(34014/(1(;)) ! (> : : 102/ J 6 2 / ((

&
. 5;`5P- ; ; \$ 5 & f 3 6 M 3 # c & [] 6 9 \$ \$ P < " B " 6 5 B & C ; : : 3 6 3 8 < 3 \$ & 5 8 C & ; 8 % 3 6 < " B " 6 5 B & < 9 9 4 3 6 5 % ; 9 8 & ; 8 & % @ 3 &
<98%3U%&9:&k<@58#3&58C&"8<36%5;8%>c&! 7 3 6 ; < 5 8 \$ & 5 8 C & A ; 8 8 \$ & ; 8 & % @ 3 &
\ 9 6 X 4 B 5 < 3 H [& V B C & 2 9 7 ; 8 ; 9 8 & * 8 ; = 3 6 \$; % > & Q . 5 > D & J K K N R H &

&

O36856Ck - 3M;\$c[^ 89MB3C#3k5<d";\$%;98k58Ck\$%6" <% "6;8#kS>k 7 "B%;4B3k3U436%\$k;8k5k
Z69"4k ? "4496%k ?>\$%3 7 \$k38=;698 7 38%H[k VBCk 2 9 7 ;8;98k * 8;=36\$;%>kQ . 5>Dk
Jkk]RHk

&

A658XkZ63<9c[k * 8C36\$%58C;8#k<9BB5S965%;=3kM6%;8#k9: k%3<@8;<5Bk46949\$5B\$M; %k5k
469<3\$T&469C" <%k 7 9C3BH[k VBCk 2 9 7 ;8;98k * 8;=36\$;%>kQ . 5>DkJkk]RHk

&

)@6;\$%94@36k 1 Hk \ 33X\$c[k [! k\$% "C>k9: k\$; 7 ;B56;%>k58Ck585B9#;<5BkC3<;\$;98k 7 5X;8#k;8k
<9BB5S965%;=3kC3\$;#8H[k VBCk 2 9 7 ;8;98k * 8;=36\$;%>kQ 2 3<3 7 S36DkJKKYRHk

&

0@9 7 5\$! 8C63Mk f 5\$B36c[k [035 7 M96Xk;8k@3kM96X4B5<3c ! kC;\$<9=36>k9: k@3kM96Xk
469<3\$3\$%98k&%35 7 k "\$3Ck%9k 7 33%k; %\$k#95B\$H[k VBCk 2 9 7 ;8;98k * 8;=36\$;%>k
Q 2 3<3 7 S36DkJKKYRHk

&

O5;_@98#k g@59c[k [2 ;: : "\$;98k9: k09%5Bk k "5B;%>k . 585#3 7 38%k ! 8k96#58;_5%;985Bk\$3B: P
469C" <%;98k436\$43<;=3H[k VBCk 2 9 7 ;8;98k * 8;=36\$;%>kQ 2 3<3 7 S36DkJKKERHk

&

&

1686-16+(#9/642.8(3Bk\$K(\$07764/. /012(&1 J J 0//667((

&

b58k05" #kQA;3BC;8#kZ65C" 5%3k, 8\$%;% "3Rc%k, 8%58#;SB3\$%58Ck) 54;%5Bk) 98=36\$;98k;8k
) 9 7 4B3UkV6#58;_5%;98\$RHk&b58"56>Dk ' ((YHk

&

- "C=#k ?%38C5BkQW96M3#;58k * 8;=36\$;%>k9: k ?<;38<3k58Ck03<@89B9#>Dk0698C@3; 7 Dk
W96M5>Rck

&

&

s - 3568;8#k5S9" %k469<3\$%<98%69BHt k ?34%3 7 S36Dk ' ((EHk
096S`968k ^ 96\$=9BkQW96M3#;58k * 8;=36\$;%>k9: k ?<;38<3k58Ck03<@89B9#>Dk0698C@3; 7 Dk
W96M5>Rcks) 635%;8#k96#58;_5%;985Bk<@58#3k58Ck;889=5%;98c ! 8k5<;98k
63\$356<@k96;38%3Ck\$ "C>k9: k456%;<;45%;=3k96#58;_5%;985Bk<@58#3k58Ck
;889=5%;98k;8k@3kW96M3#;58k ! 1) k;8C" %6>HtQV<%9S36Dk ' ((' RHk

&

b"58;%5kO69M8kQA;3BC;8#kZ65C" 5%3k, 8\$%;% "3Rc%k s 0@3k \ 96Bk) 5: eck - ;=;8#k ^ 89MB3C#3k
%k69" #k) 98=36\$5%;98\$%k@5%k . 5%36t&Qb58"56>Dk ' ((JRHk

&

b583k&A;369kQA;3BC;8#kZ65C" 5%3k, 8\$%;% "3Rc%k s ? "6=;=;8#k58CkO@6;=;8#k 1<9B9#;<5BB>ckO@3k
?%96>k9: ksOM9k+3#;985Bk 1 8=;698 7 38%5BkV6#58;_5%;98\$;8%3#65%;8#k
?%6" <% "65%;98Dk ! "%949;3%;<k58Ck?9<;5Bk) 98\$%6" <%;98kO@396;3\$Ht&Qb58"56>Dk
' ((RHk

&

p>\$%3;8kA9\$38kQW96M3#;58k, 8\$%;% "3k9: k03<@89B9#>Dk0698C@3; 7 DkW96M5>Rck [! <%;98k
63\$356<@k5\$%63: B3<;=3k465<;<3H[k Qb58"56>DkJKK]RHk

&

,Sk+5=8kQ * 8;=36\$;%>k9: k I 388\$>B=58;5Rck [, 7 4B;<5%3k96C36[k 58Ck@3k#99Ck;:3ck ! 44B>;8#k
2 5=;CkO9@ 7 n\$&98%9B9#;<5Bk<98<34%k;8k@3k@ " 7 58kM96BCH[k Q . 5>DkJKLKRHk

&

&

&1,4767(*.,EB/(

&

Z65C"5%3<B5\$\$3\$C&&&&&

&

)977"8;<5%;98&58C&23\$;#8&0@;8X;8#&QC9<%965B&\$37;856R&

&

)977"8;<5%;98&58C&)977"8;%>&QC9<%965B&\$37;856R&

&

+3:B3U;=;%>&QC9<%965B&\$37;856R&

&

!<%;98&+3\$356<@&Q5B\$9&5"#@%&5\$&!<%;98&+3\$356<@c&,8%36<"B%"65B&

I65<%;<"7R&

&

V6#58;_5%;985B&)977"8;<5%;98&

&

)977"8;<5%;98&58C&)635%;=;%>&

&

)977"8;<5%;98D&)>S3683%;<\$D&58C&?>\$%37\$&I65<%;<3&&

&

)977"8;<5%;98&58C&23\$;#8&Q<9P%5"#@%R&

&

&)977"8;<5%;98&0@396;3\$&58C&f;\$%96;3\$&Q<9P%5"#@%R&

&

)977"8;<5%;98&0@396>&&

&

?9<;5B&1<9B9#>&

&

k "58%;%5%;=3&+3\$356<@& . 3%@9C\$

XXXXXXXXXXXXXXXX

* ?A&, 2 1 ! &Q, 889=5%;98D& 2 3\$;#8D& 18%6346383"6\$@;4&58C& ! 44B;<5%;98RE"4D& ' ((LP
' (JJ&
!"#\$%&'()*+,-./0 1 \$,-&'2(3*"#4-,.(,5(3*#4,0%0.' 1(6788(
* ?A&I69=9\$%u\$&O5\$X:96<3&98&,8%3#65%3C&,8%36C;\$<;4B;856>&,8d";6>&Q,,RD&' ((LP' ((K&
1U%38C3C&A5<"B">D&& 18=;698 7 38%5B&?<;38<3&58C&I9B;<>&Q1 ? IR&469#65 7 D&' ((YP' (JJ&
) ! ?&?"\$%5;85SB3&) 9 7 7 "8;%;3\$&,8;%;5%;=3&A5<"B">&?356<&) 9 7 7 ;%%33D&' ((N&
2;5B9#"3&Z69"4&Q@69"#& * ?A&) 38%36&:96& - 35C36\$@;4&58C&);=<& 18#5#3 7 38%RD&' ((K&
, 74B3 7 38%5%;98&?<;38<3&Z69"4D&' ((KP' (J (&
* 8;=36\$;%>&? !) ?&<9 7 7 ;%%33D&A;858<;5B&58C&I@>\$;<5B&I B588;8#D&' ((EP' ((Y&
- ;S656>&+3C3\$;#8&) 9 7 7 ;%%33D&' (('P' ((Y&
0;%B3& / ,&I69#65 7 D&,8%36<"B" 65B&<9 7 7 "8;<5%;98&:96&ZB9S5B&\$<@9B56\$D&' ((Y&
&
&
)686-/6+(&1 J J , 20/D()64C0-6(
&
&&& ! C=;\$96&%9&I63\$;C38%D& . "\$3" 7 &9:&?<;38<3&58C&,8C"\$%6>&Q . V?,RD&O5 7 45D&A - H&
&&& 1 %@;<\$&O956CD& . "\$3" 7 &9:&?<;38<3&58C&,8C"\$%6>&Q . V?,RD&O5 7 45D&A - H&
 . "\$3" 7 \$&58C&) 9 7 7 "8;%>&) 9BB5S965%;=3&&
W5%;985B&?<@9B5\$%;<& ! %@B3%;<\$&