



9 - -2/ :& ; 9 < = 4 , , .5 ( ) \$ > ! / > \$ 5 , .0 & \$ / \$ / ) 12 - \$ 50 & / ? = 2 ; 4 . % ) @ & 3 ' \$ / : 4 ' 0 . / : ) 12 ' 2 & A & / ? = 4 - - \$ 50  
B & / ' % 4 : & / ? ' \$ / > & : 2 / 0 & . % ) 34 - - \$ 50 C . / : ) 123 \$ 45 ' 23 ) . 0 0 D 2 E F G H ) + . , - 43 )

! " # \$ % & ' ( )

9 " # \$ % & ' ( ) = 0.02 , 2 / 0

V & 5 . A P . 6 . . 50 " 95 & A ( < , 6 " 7 ( 6 ) 5 ( / ( 0 - , ( & 0 " - 07 " A - 5 - 66 / . 0 , " & 0 " , A . " < - 6 ( 6 " & ? " 5 - ) . R " ) & ' & 5 R " 5 . ' ( H ( & O R " ) 5 . . 7 R " 0 - , ( & 0 - " " & 5 ( H ( O R " . , A O ( ) ( , \* R " ) - 6 , . R " 6 . W R " 95 . H O - 0 ) \* R " 6 . W 4 - " " & 5 ( . 0 , - , ( & O R " H . 07 . 5 " ( 7 . 0 , ( , \* R " H . 07 . 5 " . W 95 . 66 ( & O R " 9 - 5 . 0 , - " 6 , - , 46 R " / - 5 ( , - " 6 , - , 46 R " - H . R " 7 ( 6 - < ( ' , \* R " ) ( , X . 06 A ( 9 " 6 , - , 46 R " O . , . 5 - 0 " 6 , - , 46 R " H . 0 . , ( ) " ( O ? & 5 / - , ( & O R " 5 . 95 & 74 ) , ( O . " A . - ' , A " 7 . ) ( 6 ( & 0 " / - K ( O H R " A . ( H A , R " P . ( H A , R " & 5 " - 0 \* " & , A . 5 " ) ' - 66 ( ? ) - , ( & 0 " 95 & , . ) , . 7 " < \* " " - P " Y 5 . ? . 55 . 7 " , & " - 6 " Z 95 & , . ) , . 7 " 6 , - , 46 . 6 " & 5 " 95 & , . ) , . 7 " ) A - 5 - ) , . 5 ( 6 , ( ) 6 [ \ " ( O " , A . " . 74 ) - , ( & 0 - " 95 & H 5 - / 6 " & 5 " - ) , ( O ( , 6 " V & 5 , A P . 6 . . 50 " & 9 . 5 - , . 6 R " ( O ) ' 47 ( O H " < 4 , " 0 & , " ( / ( , . 7 " , & " / - , . . 56 " & ?

@&5".0.5\*5.9&5,R"VTc` 8 J"P(''5.0(.P",A.")5)4 / 6,-0).6"&?",A."5.9&5,.7")&074),",&"7.,.5 / (0."  
,A."?&'&P(OHd"

e A.,A.5",A."T0(0.56(\*A-6\_45(67()),(&0"&0.5",A."9-5,(.6"(00&'0.7b"  
e A()A"T0(0.56(\*9&'()\*(6"-99')-<'."&,"A."9-5,(.6"-07",A.")&074),"<.(OH"5.9&5,.7b"-07"  
UA."-),(&06"P(,A(O",A."T0(0.56(\*J6")&0,5&'0.) .66-5\*",&." / (0-.,.R"95.0.0,R"-07"-775.66"  
,A."5.9&5,.7")&074),\$"YV&,.d"DO")(5)4 / 6,-0).6"PA.5."VTc` 8 J"? (076"-0(&'-,(&0"&'9&'()\*R"  
,A."VTc` 8 J"5.?.56",A." / -,.,.5",&,"A."-995&95(-,."<&7\*f&?()?)."?"&5"6-0),(&0(OH"-6"7.6)5(<.7"  
(O"+.),(&0"DDY@\\

+9.)(?())&074),")&0.5.7"<\*",A."U(,'.D^"J.H4'-,(&06"&0"+.W4-"E-5-66 / .0,"(6"H&0.50.7"<\*",A."  
T0(0.56(\*J6"DO,.5( / "%&'()\*"&0"U(,'.D^"+.W4-"E-5-66 / .0,"-07"P(''<."-775.66.7"-))&57(OH",&,"A."  
95&).66.6"6,-.7",A.5.(O\$"#'"&,"A.5"?&5 / 6"&?"6.Wc<-6.7"7(6)5( / (0-,(&0"-5."H&0.50.7"<\*",A(6"%&'()\*R"  
(O)'47(OH"6.W4-"A-5-66 / .0,R"-6"7.?(O.7"(O",A(6"%&'()\*",A-, "7&.6"0&,"5(6.",&,"A."."O."&?"U(,'.D^"  
+.W4-"E-5-66 / .0,"-6"7.?(O.7"(O",A."DO,.5( / "%&'()\*"&0"U(,'.D^"+.W4-"E-5-66 / .0,\$"

8&074),",A-, "(6"(O(-'"\*5-(6.7",A5&4HA-"?&5 / -'"& / 9'-(O,"407.5",A."DO,.5( / "%&'()\*"&0"U(,'.D^"  
+.W4-"E-5-66 / .0," / -\*"- '6&<."-775.66.7"407.5",A(6"%&'()\*R"(O",A."T0(0.56(\*J6"7(6)5.,(&0R"PA.0d"  
Y(\",A.")&074),"-,(664.R"&5"6& / .9-5,"&?"(R" / -\*")&06,(,4,. "-O(&'-,(&0"&'",A(6"%&'()\*"(55.69.), (O."&?"  
PA.,A.5"(,")&06,(,4,.6"U(,'.D^"+.W4-"E-5-66 / .0,"407.5",A."DO,.5( / "%&'()\*"&0"U(,'.D^"+.W4-"

M" 9''233&N&#0()

VTc` 8J"(6")& / / (, .7", & / -K(OH"&45"6.50() .6"-) .66(<' . ,&"-' / . / <.56"&?", A."V&5,AP .6, .50"  
)& / / 40(,\*\$UA."`??() .(6")&HO(X-0,"&?", A."9A\*6()-"-) .66(<'(\*&?"&45"69-).R", A.")4',45-"  
)& / 9., .0)\*"&?"&45"6, -??R"-07", A." / ., A&7"-07", &0."&?", A."6.50() .6"P."95&0(7.\$"#) .66(<'(\*"  
(0)'47.6"<4,"(6"0&,"( / (.7"



<.A-O(&5"(6(O,( / (7-, (OHR"A&6, ('.R"&5"&?? .06(O."7&.6"0&, " / -K.",A-, "<.A-O(&5"  
95&A(<(.7"A-5-66 / .0,"407.5",A(6"%&'()\*"\$UA."<.A-O(&5" / 46,")5.-,."-"  
A&6,('."00(5&0 / .0,"-07f&5"64<6,-0,(-'"\*(O,.5?.5."P(A"-)).66",&"-"  
T0(O.56(\*"95&H5- / "&5"-), (O, \*"25& / "-0"&<.), (O."9.569.), (O.\$"

>W- / 9Tm / TT200. / \$

H(O.)&06.0,"74.",&"- "9A\*6(- " )&07(,(&0"(0)'47.R"<4,"-5."0&,"'(/ (.7",&R"  
)&064 / 9,(&0"&?"754H6"&5"- ' )&A&""YO&'40,-5('\*&5"(00&'40,-5('\*\ "&5"<.(OH"(O"- "  
6,-,."&?"40)&06)(&460.66R"6' . 9R"&5"&,A.5"6,-,.(O"PA()A",A. "9.56&0"(6"40-P-5."  
,A-,"6.W4- "-), (O,\*(6"&))455(OH

-,(&06["A-, "5.0. - "&0.]6".W9.),-,(&06"-07"-H5.. / .0,"&".OH-H."(O"  
69.)(?)"6.W4-"-), (O, \*\$UA(6" / .-06",A-, "6(' .0).R"9-66(O, \*R"64< / (66(&OR"&5"  
,A. "-)K"&?"O.5<-"&5"9A\*6(- "'5.6(6,-0). "Y(O)'47(OH",A. "-)K"&?"-"ZO&["\  
6A&4'7"0&,"a"(O"-07"&?",A. / 6. 'O.6"a"<."407.56,&&7"-6")&06.0,\$"8&06.0,"  
)-00&,"<."(O?.55.7"<\*" -O"(O7(O(74-' ]6" / -00.5"&?"75.66R",A. "H(O(OH"&5"  
-)) .9,-0). "&?"H(? ,6R",A. .W,.06(&O"&5"-)) .9,-0). "&?"-O"(OO(-, (&O,"&"H&,"&" -"  
95(O-, . "5&& / "&5"&)-, (&OR"&5"H&(OH"&O"-7-, . "\$

. #/0"+123d" 8&06.0, / 46,"<."?5.. '\*H(O.0"-07")-00&,"<."A. "5.64', "&?"  
(O, ( / (7-, (&O"Y. W,&5, (&OR" / .0-)(OH"<. A-O(&5R"<4''\*(OH\R")&.5)(&O"Y6.0.5. "&5"  
9.56(6, .0, "95.6645.)-46(OH"? .-5"&?"6(HO(?) -0,")&06.F4.0).6"?5& / ",A. "  
&,A.5"9-5,\*"(?"&O. "7&.6"O&,".OH-H."(O"6.W4-"-), (O, \*\$R"?&5). "YO(&' .0).R"  
9A\*6(- "'5.6,5-(O,R"&5",A. "95.6.0). "&?"-"P. -9&O\R",A5. -,6"Y(O7()-, (&O6"&?"  
(O, .0, "&"A-5 / R" PA. ,A.5"7(5.), "&5"(O7(5.), \R"&5"?5-47"Y / (65.95.6.0,-, (&O"&5"



(O\$ D/(+%\*C+.W4-''(O,.5)&456.<.,P..0"9.56&06"PA&"-5."5.'-.7",&".-)A"&,A.5"  
P,(A(O",A."7.H5..6"PA.5.(O / -55(-H."(6"95&A(<(.7"<\*"-P\$"

"" =2;4.%)O; -!\$!0.0!\$ /<)U-K(OH"6.W4-''-70-O,-H."&?"-O&,A.5"9.56&0"&5"O(&'-(OH"  
,A."6.W4-''95(O-) \*"&?"-O&,A.5"PA.O")&06.O,"(6"O&,"95.6.O,\$"

UA(6"(O)'47.6R<4,"(6"O&,"' / (.7",&R",A."?&'&'P(OH"-),(&06"Y(O)'47(OH"PA.O"  
,A.\*"-5."7&0."O(-.'.),5&0(O) / .-06R" / .,A&76"&5"7.O().6\d"

+ .W4-''O&\* .45(6 / "&5"9.5 / (, (OH"&,A.56",&"P(O.66R"'(6..0",&R"&5"  
&<6.50." ,A."6.W4-''&5"(O,( / -.,"-), (O, \*"&?"-O&,A.5"9.56&0" P,(A&4,"A-,"  
9.56&0]6")&06.O,b  
D07.).O,"&5"' .P7".W9&645."&5"(074)(OH"&,A.56",&" .W9&6." ,A. / 6.'O.6"  
PA.O")&06.O,"(6"O&,"95.6.O,\$<sup>b</sup>  
J.)&57(OH"Y,A5&4HA"O(7.&"&5"-47(&\ "-O\*"9.56&0".OH-H.7"(O"6.W4-''&5"  
(O,( / -.,"-), (O, \*(O"-95(O-,. "69-)." P,(A&4,"A-,"9.56&0]6")&06.O,b  
; (6,5(<4,(OH"6.W4-''(O?&5 / -,(&OR"( / -H.6R"&5"5.).&57(OH6"-<&4,"-O&,A.5"  
9.56&0" P,(A&4,"A-,"9.56&0]6")&06.O,b  
J.)54(,(OHR"A-5<&5(OHR",5-069&5,(OHR"95&O(7(OHR"&5"&<,-(O(OH"-O&,A.5"  
9.56&0"?&5",A."9459&6."&?"6.W4-'' .W9'&(-,(&Ob  
D074)(OH"(O)-9-)(,-(&O"(O"-O&,A.5"9.56&0"?&5",A."9459&6."&?"  
.OH-H(OH"(O"6.W4-''&074),"P,(A"6& / .&O."PA&"'-)K6")-9-)(,\*,&  
)&06.O,R"5.H-57'.66"&?"PA.,A.5"95&A(<(.7"6.W4-''&074),"-),4-' '\*"  
&))456\$

:" M.0& / ?VM\$ , 230k')W!\$!2 / '2<); -, (OH"O(&' .O)."(6"-O\*"O(&' .O)."Y(O)'47(OH"<4,"  
O&,"' / (.7",&". / &,(&O-'R"9A\*6(-'R"6.W4-'R"-07"? (O-O)(-''-<46."&5",A5.-,"&?"  
-<46.\ "<.,P..0",P&"9.&9"."PA&"-5."&5"A-O."<..0"(O"-6&)(-'"5.'-,(&06A(9"&?"-"  
5& / -O,)"&5"(O,( / -.,"O-,45.\$"UA." W(6,.O)."&?"64)A"-5.'-,(&06A(9" P("7.9.07"  
&O",A."".OH,A"-07",\*9."&?" ,A."5.'-,(&06A(9"-07",A."?5.F4.O)\*"&?"(O,.5-),(&06"  
<.,P..0",A."9.56&06"(OO&'O.7\$"

7(5.), .7"-, "-0&, A.5"9.56&0<sup>6</sup>R" PA., A.5"7&0. "7(5.), '\*R"(07(5.), '\*R", A5&4HA"  
&, A.56R"O(-"7.0(). 6R"&5"O(-"-0\*"&, A.5" / ., A&76"&5" / . -06"Y69.) (?) - '\*"  
(O)'47(OH". ' .), 5&0() / . -06". \$H\$R") \* < .56, - 'K(OH\R"(O)'47(OH"<4,"O&, "( / (. 7", &d"

@&'&P(OH"- "9.56&0b"

2.(OH"&5"5. / -(O(OH"(O)"&6."95&W(/ (\*, &" -"9.56&0b"

>0, .5(OH"&5"5. / -(O(OH"&O"&5"0. -5"- "9.56&0]6"95&9.5, \*R"5.6(7.0). R"&5"  
9'-). "&?" . / 9'&\* / .0,b"

S &O(, &5(OHR"&<6.50(OHR"&5")&074), (OH"6450. (''-0). "&?" -"9.56&0b"

UA5. -, .0(OH"Y7(5.), '\*"&5"(07(5.), '\*\ "- "9.56&0b"

T00. ) .66-5\*5.?.5.0) .6",&"9-5,6" &?" ,A. "<&7\*b"  
+. W4- "(004.07&.6R"H.6,45.6R"&5"A4 / &5b"&5"  
+. W4- "H5-??,(R"9( ),45.6R"&5"9&6, .56\$"

7" 120. %&. 0&\$ / )

V&5,AP .6, .50"6,5( ), '\*95&A(<,6"5. , -'(-, (&0"-H-(06,"-0\*" / . / <.5"&?"(,6")& / / 40(,\*"?&5"  
5.9&5,(OH"-0"(O)(7.0,"&?"7(6)5( / (O-, (&0"&5"A-5-66 / .0,"&5"?&5"9-5, ( )9-, (OHR"(O"-0\*" / -00.5R"  
(O"-O"(00.6,(H-, (&0"&5"A. -5(OH"5. '-, .7", &"-5.9&5, "&?"7(6)5( / (O-, (&0R"A-5-66 / .0,"&5"6.W4- "  
/ (6)&074), \$UA. "T0(O.56(,\*")&06(7.56"64)A"-), (&06", &"<."95&, .), .7"-), (O, (.6"(O"PA(A)"- "'  
/ . / <.56"&?" ,A. "V&5,AP .6, .50")& / / 40(,\*" / -\*"95. . '\*". OH-H.\$"

S . / <.56"&?" ,A. ")& / / 40(,\*"-5."95&A(<(.7"?5& / ".OH-H(OH"(O"-), (&06R"7(5. ), '\*"&5", A5&4HA"  
&, A.56R"PA(A)"-5. "-( / .7", &"7. ., .5"-5. -6&0-<'."9-5, \*"&5"-P(O.66"?5& / "5.9&5,(OH"  
7(6)5( / (O-, (&0R"A-5-66 / .0,"&5"6.W4- "' / (6)&074), "&5"9-5, ( )9-, (OH"(O"-O"(00.6,(H-, (&0"&5"  
A. -5(OH"&5"7&0. "(O"5. ,5(<4, (&0"?&5"64)A"-), (O, (.6R"#7. , -'(.7"7.?(O, (&0"&?"5. , -'(-, (&0"-07"  
.W- / 9'.6"&?"5. , -'(-, &5"\*)&074), "-5."95&0(7.7"(O", A. "T0(O.56(,\*16%&' ) \*"&0"V&0c  
J. , -'(-, (&0" J.9&5,6"&?"5. , -'(-, (&0"5. '-, .7", &"A(6"9&' ) \*"&P(''<."(00.6,(H-, .7"-07"5.6&'0.7"  
94564-0, ", &" ,A. "95& ) .66.6"., "?&5,A"(O", A(6"9&' ) \*"\$"

UA. "V&5,AP .6, .50")& / / 40(,\*"(6"6,5&OH"\*".0)&45-H.7", &"5.9&5, "-0\*"9&, .0, (-"(O)(7.0,"&?"  
5. , -'(-, (&0"407.5, A(6"9&' ) \*", &"VTc` 8 J R"PA&"6A-'"'-66.66", A. / -., .5"-07", -K. "-995&95(-, ."  
-), (&06", &"-775.66"64)A")&074), \$"

X" !, -%2, 2/0.0&\$ / )

6" 12-\$50&/?)

." 12-\$50&/?)Y-0&\$ / 3)

UA. "T0(O.56(,\*".0)&45-H.6"5.9&5,(OH"&?"7(6)5( / (O-, (&0R"A-5-66 / .0,"-07"  
6.W4- "' / (6)&074), \$" S . / <.56"&?" ,A. "T0(O.56(,\*")& / / 40(,\*"PA&"<.'(O. ", A. \*"  
A-O. ".W9.5(0).7R"P(O.66.7"&5"&, A.5P(6.<.)& / ."-P-5."&?"7(6)5( / (O-, (&0R"  
A-5-66 / .0,"-07"6.W4- "' / (6)&074), "A-O. ", A."5(HA, ", &")A&&6."PA., A.5"&5"0&,"&  
5.9&5,"A.(O)(7.0,"&,"A."T0(O.56(,\*"&5"-P".0?&5) . / .0,R"-07"A-O. ", A."5(HA, ", &  
)A&&6."PA., A.5", &".OH-H."P(A", A."T0(O.56(,\*"&0). "A."T0(O.56(,\*"5. ).(O.6"-  
5.9&5,\$"

( \$ J.9&5,(OH"DO)(7.0,6", &" ,A. "T0(O.56(,\*"

#0\*" (07(O(74- "' / -\*"5.9&5, "-' .H.7"&5"6469. ), .7"7(6)5( / (O-, (&0R"A-5-66 / .0,"  
&5"6.W4- "' / (6)&074), "&"VTc` 8 J \$" J.9&5,6", &"VTc` 8 J" / -\*"<." / -7. "(O"  
9.56&OR"<\*" . / -("R"<\*"5.H4'-5" / -("R"<\*"9A&0.R"&5". '. ),5&0( ) -'"\*"-6".W9'-(O.7"  
<.'&P\$"

! / : &A& : 4. %3& , - . '02: N( ) : &3' 5& , & / .0&\$ / \$) D.5.33 , 2/0)\$5)32; 4. h)  
, &3' \$ / : 4'0) , . ( ) '\$ / 0. '0) EFGY + 1)0\$)52' 2&A2)34 - - \$50\$)523\$45' 23\$) . / : )  
& / >\$5 , .0&\$ / )2A2 / )& >0D2 ( : \$) / \$0)U&3D)0\$) , \$A2) >\$5U.5 : )U&0D)0D2)

+\$ , -%.&/0)123\$%40&\$/)#5\$'233):23'5&N2:)&/)=2'0&\$/)!!!)N2%\$U"%'.-6."6.."  
6.),(&O"DDY#\YZ%-5,()9-,(&O"(O"%5&).66["?&5" / &5."(O?&5 / -,(&O\$"U&"69.-K",&  
6& / .&0.)&O?(7.0,(-'"\*P(A&4," / -K(OH"-5.9&5,"&,"A."T0(O.56(\*R"9' .-6."6.."

&9,(&06"P('"<."6.0,"(0"5.69&06.",&"5.9&5,6"?('.7".'.),5&0()-''\*\$"

**Y0D25)F / &A253&0() 12-\$50&/?)Y - 0&\$ / 3)**

**O0D&'3#&\$ / 0)**

> / 9'&\* . . 6&?" ,A. "T0(O.56(,\*%&'() ."-5. "T0(O.56(\*. / 9'&\* . . 6"-07",A.5. ?&5. "  
-5. "&<'(H-, . 7",&"95& / 9, '\*5. 9&5, "(O)(7.0,6"&'6. W4-'" / (6)&074), "&?" PA(A"  
,A. \*"<.) & / ."- P-5. "745(OH",A. "6)&9. " &?" ,A. (5"P&5K"-6". W9'-(O.7"<. ' &P\$"  
> / 9'&\* . . 6&?" ,A. "T0(O.56(,\*%&'() . "P('' / -K. "5. 9&5,6",&"VTc ` 8 J"5.H-57' .66"  
&?" PA. ,A.5",A. "(O7(O(74-' PA&" . W9.5(.O) .7",A. "6. W4-'" / (6)&074),")A&&6.6",&"  
94564. ")5( / (O-'")A-5H.6\$"

**E\$50DU23025 /)F /&A253&0()#\$%&'2)M2- .50 , 2/0))**

>0-06,&0"8 - / 946d"  
!1L!" ; -0(6"+,5. . ,R">0-06,&0"  
"%A&O.d" YI=Q\`=g!c:=BN"Y1="A&456\"

8A()-H&"8 - / 946d"  
1!!">-6, "+49.5(&5"+,5. . ,R" 8A()-H&"  
"%A&O.d" Y: !1\`BL:c:=BN"Y1="A&456\"  
e .<6(, .d"[A.,96dffPPP\\$0&5,AP .6, .50\\$.74f49f"](#)

**OA. /30\$ /)#\$%&'2)M2- .50 , 2/0)**

>0-06,&0"8 - / 946d" !=B=">' / P&&7"#0.04. R">0-06,&0"  
"%A&O.d" g! !"&5"YI=Q\`INNcBLLL"Y1="A&456\"  
e .<6(, .d"A.,96dffPPP\$)(, \*&?. O-06,&0\$&5Hf9&'() ."

)

**+D&' .? \$)#\$%&'2)M2- .50 , 2/0)J)6^0D)M&305&'0)B' \$A253)+D&' .? \$)' . , -43C)**

8A()-H&"8 - / 946d" !NL"V&5,A" j -55-<. . "#O. \$R" 8A()-H&"  
"%A&O.d" g! !"&5"Y: !1\`Q==c=LLL"Y1="A&456\"  
e .<6(, .d"[A.,96dffPPP\\$\)A\(\)-H&9&'\(\) . \\$&5Hf-<&4.f9&'\(\) .c7\(6,5\(\),6f! I.Ac7\(6,5\(\),c  
0. -5c0&5,Af"](#)

**N" 12-\$50&/?)YN%&'2)M2- .50 , 2/0)J)6^0D)M&305&'0)B' \$A253)+D&' .? \$)' . , -43C)**

)//(8"" , -25%+3(- 9 :/#3--5(;%''\*/06%''&(5+06- ''+(- 9 :/#3--5<(1''6(&21601+(-  
5+06- ''+5(\$%+(-I\*=%''&(#2(50: -2, %5#23(10+=#2%+3>(12-(2-?0%2-6(+#:2#9 :+3(  
2- :#2+(6%5\*2%9 %''I+##''>(<=121559 - ''>(#2(5-@01/(9%5\*#''60\*+(#A(\$=%\*=(+(-3(  
B- \*#9 -(I\$12-(%''(+(-5\*#:- (#A(+=-%2(\$#2C(A#2(+(- (8"" , -25%+3(+(D8E7FG(  
0''/-55(+(-3(12-(1(F#''A%6- ''+%I/(H9 :/#3--I(D#+- '(J=%5(6#-5('#+(2-?0%2-(I  
:-25#''(-@:-2%-'\*%''&(=129 (+#(2- :#2(+(-(%''\*%6- ''+I(@-('45. ,&"?4'?(('' ,A(6"  
5.9&5,(OH"&<'(H-, (&O"P(''<. "5. ? . 55. 7",& ,A. " -995&95(-. " &??() . "?&5")&55. ),(O. "  
) ,(&O\$UA. "T0(O.56(\*. .O)&45-H.6"- ""(O7(O(74-'6"a(O)'47(OH"6,47.0,6"O&,"  
5.?.5.O).7"-<&O. "a,&"5.9&5,"7(6)5( / (O-, (&OR"A-5-66 / .0,R"-07"6. W4-'"  
/ (6)&074), \$"

UA. "5. 9&5,(OH"5.F4(5. / .0,6"&5". / 9'&\* . . 6"-5. . W9'-(O.7"(O)7. ,-(("O",A. "  
[%&'\(\) \\*"&O" J .9&5,\(OH"<"T0\(O.56\(,\\*"> / 9'&\\* . . 6"&?" ; \(6\)'&645.6" J .'-, .7",&"  
; \(6\)5\( / \(O-, \(&O"-07"E-5-66 / .O,\\$"](#)

(((\$ DO)(7.0,6"(OO&'O(OH" / (O&56"



"

"

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!N"



5.69&06(<(',\*\$" e A.,A.5"-0"(0,.5(/"5. / &0-""(6"?(,.7R"- / .07.7R"&5"6,-\*.7"P('"A-0." 0&".??.),"&0"?(07(OH6"-6"7.,.5 / (0.7"<\*" -0"(00.6,(H-,(&0\$""

I" 9 , /230(>\$5)#.50&23). / :)R&0/23323)

V&5,AP .6,.50".0)&45-H.6"5.9&5,(OH"&?"7(6)5(/ (0-,(&OR"A-5-66 / .0,R"-07"6.W4- "" / (6)&074),"-07"9-5,( )9-, (OH"(0"5.6&'4,(&0"95&).66.6"-07"6. .K6,&"5. / &0."-0\*" <-55(.56",&" / -K(OH"-5.9&5,"&5"9-5,( )9-, (OH"(0"-95&).66\$UA. "TO(0.56(\*" 5.)&HO(X.6",A-,"-0"(07(O(74-"PA&"A-6"<. .0")&064 / (OH"-')&A&"Y(O)'47(OH" 407.5-H.")&064 / 9,(&0"&5"46(OH"754H6"-,"A. ,( / ."&?"A."(O)(7.0," / -\*"<." A.6(-0,"&" / -K."-5.9&5,"<.)-46."&?"9&,.0,(-'\*)&06.F4.0).6"?"&5",A-,")&074),\$U&" .0)&45-H."5.9&5,(OHR"-0"(07(O(74-"PA&" / -K.6"-H&&7"?-(,A"5.9&5,"&?" 7(6)5(/ (0-,(&OR"A-5-66 / .0,R"&5"6.W4-"" / (6)&074),",A-,"P-6"7(5.),.7"-,"A. / "&5" -0&,A.5"9.56&0"&5"9-5,( )9-, .6"(0"-0"(00.6,(H-,(&0"-6"-P(,0.66"&5"9-5,\*P('"0&," <."64<.),,"&"7(6)(9'(0-5\*" -),(&0"<\*" ,A. "TO(0.56(\*?"&5"-")&074), "&5"9&'()\*"





G(&'-,(&06"&?"7(5.), (O.6"5.'-.7",&"6499&5,(O." / .-645.6"&5"(O,.5( / "5.6,5),(&06" / -\*"'.-7",&"-0"(00.6,(H-,(&0"-07"7(6)(9'(O-5\*" -),(&0R"PA)A) / -\*(O)'47.R"<4,"(6" 0&,"( / (.7",&R"-0\*"&?"A."6-0),(&06"-07")&55.), (O."-),(&06"'(6,.7"(O",A."95.O(&46" 6.),(&0R"(O)'47(OH".W94'6(&0"&5"7(6 / (66-"?5& / ",A."TO(O.56(\*b"&5",.5 / (O-,(&0"&?" . / 9'&\* / .O,R"(O)'47(OH"5.O&)-,(&0"&?",.045.\$"

\*" **W&\$%.0&\$ / 3)\$>0D2)#\$%&' ( )\$ / )E\$ / G 120. %&.0&\$ / )**

D07(O(74-'6"PA&"-5."?&407",&"A-O.".OH-H.7"(O"5.,- '(-,(&0"-5."64<\_.), "&" 7(6)(9'(O-5\*" -),(&0",A-, " / -\*(O)'47.R"<4,"(6"0&,"( / (.7",&R"-0\*"&?"A."6-0),(&06" -07")&55.), (O."-),(&06"'(6,.7"-<&O.R"49",&"-07"(O)'47(OH".W94'6(&0"&5"7(6 / (66-" ?5& / ",A."TO(O.56(\*b"&5",.5 / (O-,(&0"&?" . / 9'&\* / .O,R"(O)'47(OH"5.O&)-,(&0"&?" ,.045.\$"+-0),(&06"?&5"5.,- '(-,(&0" / -\*"<."-99'( .7"5.H-57'.66"&?"PA.,A.5",A.5."(6"- ?(O7(OH"&O",A."407.5'\*(OH"7(6)5( / (O-,(&0R"A-5-66 / .O,R"&5"6.W4-' / (6)&074)," )& / 9'-(O,\$"

!" **12'\$5:T22-& / ?)**

+ .W4- " S(6)&074), "J .69&06. " 1 "%5.0.0.(&0"5.6&45). "9-H. ""  
T0(0.56(\*%&'(). "#004-" +.)45(\*" 1 "@(5." +-.?.,\*" J .9&5."  
T0(0.56(\*%&'(). "C4-5-0,.. "?&5"+.W4- "#66-4', "G(), (/ 6"

a" Q&30\$5()

UA(6"9&'()\*P-6".0-),.7"&0"#4H46," !=R"1L1L"-07"497-, .7"&0"+.9,. / <.5"!R"1L1!"-07"  
+.9,. / <.5"!R"1L1R"-07"+.9,. / <.5"!R"1L1:\$" S(7\*.-5"497-, .6"-775.66(OH")A-OH.6",&,"A."  
8(\*"&?"8A()-H&]6".W4-"A-5-66 / .0,"-P6"P.5." / -7."(0"34"\*R"1L11\$" S(7\*.-5"497-, .6"  
-77(OH",A5.. "95&.,),.7")A-5-),.5(6,)6"P.5." / -7."(0"#95("1L1="

%&'()\*"T J j d"A.,96dffP P P\$0&5,AP .6.,50\$.74f.F4(\*f7&)4 / .0,6f9&'()\*c&0c(06,(,4,&0-'c.F4(\*\$97?)"

!!" +\$, -.&/0)123\$%40&\$/)#5\$'233)

9" !/05\$:4'0&\$/) / :)X2/25.)#5\$'2:4523)

K'+2#60\*+/#'()

UA."95&).745.6"<.'&P"&4,'(0.",A."95&).66",A."T0(0.56(\*"&'&'&P6"PA.0'(",5.).(0.6"-5.9&5,"  
-''.H(OH"-O(&'-(,&0"&?"A." .&3\$(5,&/,4\$%('\$I\$/)\*\$&/?,E')%%I+/\*,) / ",B+@7)3,F\$%(&/ "7(\*  
<\*" - / . / <.5"&?"A."V&5,AP .6.,50")& / / 40(\*"\$@&5",A."9459&6.6"&?"A.(6"%&'()\*R"Z<\*" -"  
/ . / <.5"&?"A."V&5,AP .6.,50")& / / 40(\*"[ / .-06")455.0,"6,47.0,6R")455.0,"?-)4',\*"Y-6"  
7.?(0.7"<\*"A."@-)4',\*"E-07<&&K\R")455.0,"6,-?" / . / <.56R"-07")455.0,"6,47.0,"&5"  
. / 9'&\*.. "H5&496\$"

VTc ` 8 J"5.,-(06"7(6)5.,(&0"&0"PA.,A.5",&" .W.,.07",A(6"95&).66",&")455.0,"A(57c9-5,\*"  
-??'(-,.6"PA&"A-0."-?"&5 / -"Y(0)'47(OH")&0,5-),4-\5.'-,(&06A(9"P",A",A."T0(0.56(\*A,  
G(6(&56",&)- / 946"PA&"-5."-)46.7"&?"7(6)5( / (0-,(&OR"A-5-66 / .0,"&5"6.W4-"" / (6)&074),"  
-5."0&,".0,(.'7",&,"A."95&).66"6.,?"&5,A"(O",A(6"9&'()\*\$"



&,A.5P(6.-).9,.7"5.69&06(<(',\*"?&5",A."-' .H.7")&074),R"YB\",A." .W(6,.0). "&?"-0\*" (07.9.07.0,"(0?&5 / -,&0"&5".0(7.0)."5.H-57(OH",A."-' .H.7")&074),R"-07"YN\ "-0\*"&,A.5" -0-('-<' ." -07"5. ' .0-0,"(0?&5 / -,&0\$ J(6K"?-),&56"(O)'47.d"

UA."0-,45."-07"6)&9."&?",A."-' .H.7")&074),R'(O)'47(OH"PA.,A.5",A."5.9&5,.7" <.A-0(&5"(00&'O.6",A."46."&?"-P.-9&0R"9A\*6()-"O(&' .O).R")

@-)4', \*E-07<&&KR&5'+, -??E-07<&&K\$UA(6"95&0(6(&0"7&.6"0&, "-99"\*&, &-"H&&7"?-(, A  
5.9&5', A-, "(6"0&, "64<6, -0, (-, .7"&5"95&0.0"<\*"-95.9&07.5-0). "&?"A. ".0(7.0). \$"

**42%, I\*3(I'6(L=12%'&(#A(K'A#29I+#'')**

UA. "T0(O.56(\*))&06(7.56"5.9&5,6"-07"(00.6,(H-,(&06",&"<. "95(0-, . / -, .56"?&5", A. "9-5,(.6"  
(00&'0.7\$"@&5", A-, "5. -6&0R", A. "T0(O.56(\*P('"'95&, .), "A. "(7.0,(,\*&?"9.56&06"(00&'0.7"(O"  
5.9&5,6"&?"-''.H.7"0(&'-,(&06"&?"A(6"%&'(\*)",&"A. "<.6,"&?"(,6"-<('(\*\$UA. "T0(O.56(\*P('"  
&0"\*6A-5. "9.56&0-'\*(7.0,(?<'-. "0?&5 / -, (&0"P(A"9.56&06"P(A"-0.7",&"K0&P"64)A"  
(0?&5 / -, (&0"(0"&57.5"?&5", A. "T0(O.56(\*, &)"(00.6,(H-, . "-07"5.69&07", &"A. "5.9&5, "&5", &"  
95&0(7.5.6&45).6"&5"6499&5, "6.50().6\$UA. "(7.0,(.6"&?"P(,0.66.6"-5. ", \*9(-)'\*"6A-5.7"  
P(A, A. "9-5,(.6R"A&P.0.5R"<-6.7"&0", A. "69. )(?)"?-, 6R"5.F4.6,6R"-07")(5)4 / 6, -0).6"&?"-"  
9-5,( )4'-5)-6.R"VTc` 8 J"A-6"7(6)5. ,(&0", &"-0&0\* / (X. "P(,0.66.6"PA.0"-995&95(-, . \$UA. "  
T0(O.56(\*7&.6"0&, "94<'(6A", A. "0- / .6"0&5"9&6, "(7.0,(?<'-. "0?&5 / -, (&0"-<&4, "9.56&06"  
(00&'0.7"(O"-5.9&5, "&?"7(6)5( / (0-, (&0R"A-5-66 / .0,R"&5"6.W4-' / (6)&074), "(0", A. "T0(O.56(\*  
&%'( ). "; -(\*"85( / . j &H"Y2'&, .5"&5". '6. PA.5. "&0'(0.\$"

#""9-5,( )9-0,6"(0"-0"(00.6,(H-, (&0"P('"'<. "0?&5 / .7", A-, "95(0-) \*".0A-0).6", A. "(O. H5(\*&?"  
, A. "(00.6,(H-, (&0R"95&, .), 6", A. "95(0-) \*(O. ,5.6,6"&?"A. "9-5,(.6R"-07"95&, .), 6", A. "9-5,( )9-0,6"  
?5& / 6-, . / .0,6", A-, " / (HA, "<. "0, .595. , .7", &"<. "5. , -'(-, &5\*\$UA. "8& / 9'-(0-0, "-07"  
J.69&07.0, "P('"'<. "-6K.7"-, "A. "<.H(00(OH"&?"A. "(00.6,(H-, (&0", &"K. .9", A. "(0?&5 / -, (&0"  
5. '-, .7", &"A. "(00.6,(H-, (&0"-07"5.6&'4, (&0"95(0-, .R", &"A. ".W, .0, ")&06(6.0, "P(A"-99' )-<' . "  
'-P\$ e (,0.66.6"-07"-70(6&56"P('"'<. "-6K.7", &"K. .9"-0\*(0?&5 / -, (&0"' . -50.7"(0"-0"  
(00.6,(H-, (&0" / . ., (OH"95(0-, .R", &"A. ".W, .0, ")&06(6.0, "P(A"-99' )-<' . "'-P\$ e A( ".A. "  
T0(O.56(\*P('"' / -(0, -(0)"&0?(7.0, -(, \*69. )?(.7"(O", A(6+. ), (&0R", A. "T0(O.56(\*P('"'0&,"  
'( / (, "A. "-<('(\*&?"A. "9-5,(.6", &"7(6)466", A. "-'.H-, (&06"-, "(664. "(0"-9-5,( )4'-5)-6. \$"  
%-5,(.6"-5. "-70(6.7R"A&P.0.5R", A-, "A. " / -00.5"(0"PA(A)", A. \*)& / / 40(-), . -<&4,R"&5"  
7(6)466"-9-5,( )4'-5)-6.R" / -\*)"&06,(4, . "%5&A(<(.7"8&074), "&5"J . , -'(-, (&0"(O) .5, -(O"  
)5)4 / 6, -0).6"-07"<. "64<\_ .), "&"7(6)(9'(O. "94564-0, "&"A. "95&).66.6"69. )?(.7"(O", A(6"  
9&' )\*\$"

8.5, -(0)\*9.6"&?"9&' )\*(O(&'-, (&06"-5. )&06(7.5.7")5( / .6"?&5"PA(A)", A. "T0(O.56(\*, / 46, "  
7(6)'&6. ")5( / .6, -, (6, )6"(O(,6"#004-'"+. )45(\*J.9&5, "A-, "(6"95&0(7.7", &"A. ") - / 946"  
)& / / 40(\*"-07"-0-( '-<' . "&"A. "94<' )\$UA.6. "7(6)'&645.6"P('"'<. " / -7. "P(A&4, "(O)'47(OH"  
9.56&0-'\*(7.0,(?\* (OH"(0?&5 / -, (&0\$"

**F#9 :/I%"+(G-5#/0+#'(J%9-/)-(-**

UA. "T0(O.56(\*6,5(O.6", &"5.6&'0. "-'")& / 9'-(0,6"(0"-95& / 9, "-07", ( / . '\* / -00.5\$ "#', A&4HA"  
, A. ". OH,A"&?" . -)A"(00.6,(H-, (&0"P('"'0-5\*"<-6.7"&0", A. ")5)4 / 6, -0).6"&?"A. ") -6.R", A. "  
T0(O.56(\*6,5(O.6", &"&)"& / 9' . . . -)A"(00.6,(H-, (&0"P(A(0"0(O. , \*YgL\)-'.07-5"7-6"&?"  
6.07(OH", A. "P5(, .0"0&, ) . "&?"(00.6,(H-, (&0\$"

#77(, (&0-'\*R", A. ", ( / . '(O. "?&5"-) -6. " / -\*"<. "-??) ., .7"<\*"<5. -K6"(O", A. "-) -7. / ( )"-'.07-5R"  
-0-( '-<('(\*&?"A. "9-5,(.6"-07"P(,0.66.6"Y(O)'47(OH"74. ", &"-''. -0. "&?"<-6.0).R"6)&9. "&?"  
, A. "(00.6,(H-, (&0R"0. .7"?&5"(O. ,5( / -), (&06R"-07"&, A.5"40?&5.6. .0"&5".W(H.0, ")5)4 / 6, -0).6\$"  
UA. "9-5,(.6"P('"'<. "9.5(&7( )-'\*"497-. .7"&0", A. "6, -, 46"&?"A. (5")-6.\$"DO")-6.6"PA.5. ", A.5. "(6"  
-6( / 4', -0.&46"-P.0?&5). / .0, "(00.6,(H-, (&0R", A. "T0(O.56(\*, / -\*"0. .7", &" . / 9&5-5('\*"  
7. '-\*(,6"(00.6,(H-, (&0"PA('"'-P".0?&5). / .0, "H-, A.56".0(7.0). \$"



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U5-(O(OH"?&5"- "H5&49"&5"40(,"  
#0"-70(6&5\*" . . . 5"

D?"VTc` 8 J"5.?.56"-0".74)-,(&0-""5.69&06.",&"-0&,A.5"TO(O.56(\*"&??( ).R",A."5.69&06(O." TO(O.56(\*"&??( ). "P('"'95&0(7."-<5(.?"64 / / -5\*"&?",A."-),(&06",-K.O\$"

**M" 9 : , &/ &305.0&A2)12A&2U)**

VTc` 8 J"A-6",A."7(6)5.,(&0"-07"-4,A&5(\*",&")&074),"-0"-7 / (O(6,5-, (O."5.O(. P"PA.O" ?&5 / -""5.6&'4,(&0"(6'O&,"7.6(5.7"<\*",A."9.56&0"PA&" / -\*"A-O.".W9.5(.O).7",A." / (6)&074),R" PA.O",A.5."(6'O&,".0&4HA"(O?&5 / -,(&0",&"95&). .7"P(A"-?"&5 / -""5.6&'4,(&0"95&).66"-H-(O6," -"KO&P"O"J.69&07.O,R"-07f&5"PA.5."VTc` 8 J"7.. / 6(",-0"-995&95(-,."5.69&06.\$"

DO"7.,.5 / (O(OH"PA.,A.5",&")&074),"-0"-7 / (O(6,5-, (O."5.O(. P"&?"-''.H-,(&06R",A."` ??( ). "P('"' )&06(7.5"- ""KO&P"O"(O?&5 / -,(&0R"(O)'47(OH"Y!\",A."O-,45."-07",A."6.O.5(\*"&?",A." -'' .H-,(&06R"Y1\ "PA.,A.5",A."-''.H-,(&06"-5."- / .O-<'." ,&"5.6&'4,(&0",A5&4HA"&,A.5" )A-00.'6R"64)A"-6"A4 / -0"5.6&45).6"(O,.5O.O,(&0b"Y:\",A."A(6,&5\*"&?"95(&5)"& / 9'-(O,6" 5.H-57(OH",A."6- / ."(O7(O(74-'6R"7.9-5, / .O,R"-07f&5"-5.-b"Y=\",A." .W95.66.7"P(6A.6R"?) KO&P"O"R"&?",A."-??.),.7"(O7(O(74-'b"-07"YB\ "-0\*"&,A.5"9.5,(O.O,"(O?&5 / -,(&0\$"" T9&0"(O(-,(&0"&?"-0"-7 / (O(6,5-, (O."5.O(. PR"VTc` 8 J"P('"'O&,(?"\*,A."A.-7"&?",A." 7.9-5, / .O,f40(f-5.-"-07"&,A.5"5.'.O-0,"TO(O.56(\*"9.56&00." "Y.\$HSR"A4 / -0"5.6&45).6" 95&?.66(&0-'6\ "&?",A.")& / / .O). / .O,"-07"6)&9."&?",A."5.O(. P\$"#7 / (O(6,5-, (O."5.O(. P6" P('"'(O)'47."(O,.5O(. P(OH"P(,O.66.6"-07"5.O(. P(OH"9.5,(O.O,"7&)4 / .O,6"-07"P('"'O&5 / -'"\* <." )&0)'47.7"P(A(O"O(O.,\*"YgL\ )-'.07-5"7-\*6\$UA.",( / .?5- / . / -\*<.".W,.07.7"?&5"H&&7" )-46.\$"VTc` 8 J"P('"'A.O"95&74)."-P5(.,.0"5.9&5,"&4,'(O(OH",A."?(O7(OH6"&?",A." #7 / (O(6,5-, (O."J.O(. P"-07"-0\*"5.)& / / .07.7-),(&0"(., / 6",&,A." .W.)4,(O."5.69&06(<'." ?&5",A."7.9-5, / .O,f40(f-5.-\$UA."6- / .""O."?"&?)&0?(7.O,(-'(\*"-99')-<'."(O"?&5 / -"" 5.6&'4,(&0"95&).66.6"P('"'-99'\*,&"-7 / (OA-O."."O,(&0"9,(&0"90D?1(" / )2(-)1(1-1.)16-17240601."

"!  
D0",A.".0.0,"-9-5,\*"P(A75-P6"?5& / ",A."-',.50-, (O."5.6&'4,(&0"95&).66R"&5",A."95&).66"(6"  
,.5 / (0-,.7"<\*"A."?-)'(-,&5R"5.)&576"?5& / ",A."-',.50-, (O."5.6&'4,(&0"95&).66"P("0&,"<."  
6A-5.7"P(A",A&6."(00.6,(H-, (OH",A." / -,,.5"<4,"P(""<." / -(0,-(0.7"<\*"VTc` 8 J\$""!"  
""!  
#"9-5,(.6"P(""<."-6K.7",&"95&0(7."0&'40,-5\*"P5(,.0)&06.0,"&,"A."-',.50-, (O."5.6&'4,(&0"

8 & / 9'(-0). "P('"'95&0(7."P5(,,.0"0&,().",&,"A."9-5,(.6"PA&6."(7.0,(.6"-5."K0&P0",A-,"(O)'47.6d"

- V&,(). "&?"V&5,AP.6,.50]6")& / 9'-(0,5.6&'4,(&0"95&).66\$"
- +4??)(.0,"7.,-('6"&?"A."-''.H-,(&06"K0&P0"-,"A.",( / ".6&"A-,,"A."9-5,(.6" / -\*"95.9-5."-5.69&06."<.&5."-0"(0,(-""(0,.50(. P"P(A,"A."(00.6,(H-,&5Y6\R"(O)'47(OHd"
- o ,A."(7.0,(?('.6"&?"A."9-5,(.6"(00&'0.7"(O",A."(O)(7.0,R"(?"K0&P0b"
- o ,A.".)&074),"-'''.H.7",&")&06,(,4,. "-0(&'-,(&0"&?"9&'(\*)\*b"-07"
- o ,A."7-.,"-07""&)-,(&0"&?"A."(O)(7.0,Y6\R"(?"K0&P0\$"

UA."P5(,,.0"0&,(). "P('"'(O?&5 / ,A."9-5,(.6"&?"A."T0(O.56(\*]6"95&A(<,(;&06"&0"5.-'(-,(&0"-07"K0&P(OH"\*" / -K(OH"?-'6."6,-, / .0,6"&5"K0&P(OH"\*"64< / (,(OH"?-'6."(O?&5 / -,(&0"745(OH",A.")& / 9'-(0,5.6&'4,(&0"95&).66\$"

D?R"(O",A.")&456."&?"-0"(00.6,(H-,(&0R",A."T0(O.56(\*]7.))(7.6",&(00.6,(H-,.-77,(;&0-""-''.H-,(&06"-<&4",A."8 & / 9'-(0-0,"&5"J.69&07.0",A-,-5(6.",A-,P.5."0&,(O)'47.7"(O",A."(O,(-'"0&,().R",A."`??(). "&?"8(O("J(HA,6"-07"U(,".D^"8 & / 9'(-0). "P('"'95&0(7."0&,(). "&?"A."-77,(;&0-""-''.H-,(&06",&,"A."9-5,(.6"PA&6."(7.0,(.6"-5."K0&P0"94564-0",&,"A."5.F4(5. / .0,6"-<&0.\$"

)\*\*-. :I''\*-(#A(G-5:#''5%B%)+3(

%5(&5",&,"A.")&O)'46(&0"&?"-0"(00.6,(H-,(&0R",A."J.69&07.0," / -\*".'.),"&,"-K."5.69&06(<('(\*"?&5",A."95&A(<(.7")&074),"<\*"&0,-),(OH"VTc` 8 J"(O" P5(,(OH\$"@&'&P(OH"-O-)) .9,-0). "&?"5.69&06(<('(\*R"VTc` 8 J" / -\*"6&'(,)("-77,(;&0-""(O?&5 / -,(&0"5.'-, (OH",&,"A." / -,.,.5"VTc` 8 J"P('"'(664."- "<5(.?"&4,) & / .7.,.5 / (0-,(&0",&,"A."9-5,(.6"64 / / -5(X(OH",A."-''.H-,(&06"-07"6,-,(OH",A."J.69&07.0,"A-6-)) .9.,.7"5.69&06(<('(\*R"-07"P('"'5.?."5,A."

UA."T0(O.56(\*"(6"40-<'."&"(7.O,(?\*"A."J.69&07.O,"-?,.5",-K(OH"5.-6&0-<'."6,.96"  
,&"7&"6&b"

UA."J.69&07.O,"(6"0&""&OH.5".05&''.7"-,R"-??('(-,.7"P(,AR"&5". / 9'&\* .7"<\*"A."  
T0(O.56(\*b"

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)& / 9'-(0,"-07"VTc` 8 J"7.,.5 / (O.6",A-,R"P(A&4,"A.")& / 9'-(0-0,)6"P(A75-P0"  
-''.H-,(&06R",A.")&074),"A-,5. / -(06"(O",A.")& / 9'-(0,R"(?"-0\*"R"P&4'7"0&,"  
)&06,(4,. "7(6)5( / (O-,(&0"407.5"A-5-66 / .0,".O.O"(?"95&0.O",54.b"&5"

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7(6)5( / (O-,(&0R"A-5-66 / .0,R"&5"6.W4-' / (6)&074),"407.5",A(6"9&'())\*" -07"VTc` 8 J"  
A-6"407.5,-K.O"5.-6&0-<'."??&5,6",&)"'-5(?\*"A."-''.H-,(&06"P(A",A.")& / 9'-(0-0,\$"

D0",A.".O.O,"VTc` 8 J"7.,.5 / (O.6",A-,,"A.")& / 9'-(0,"6A&4'7"<."7(6 / (66.7R"VTc` 8 J"P('"  
95& / 9,'\*(O?&5 / ",A."8& / 9'-(0-0,"&?"7(6 / (66-'"-07",A."<-6(6"?&5",A."7(6 / (66-'"-07R"(?"A."  
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,A."(0,.50(.P"6,-, / .0,"&?",A.(5"&P0"(0,.50(.P"-07")&55.),"69.'"(OHfH5- / / -5"-07"?-),4-'"  
.55&56"-07"95&0(7.")'-5(?)-,(&0'(?'0..7.7"<\*",A."7.-7'(0."6.,"<\*",A."D00.6,(H-,&5\$D?",A."  
%-5,\*"&5" e (,0.66"7&.6"0&,"95&0(7."-0\*"5.69&06.",&"A."(0,.50(.P"64 / / -5\*"P,(A(0",A."  
-'"&,,.7",(/ .?5- / .R",A."D00.6,(H-,&5"P('"'&06(7.5",A."(0,.50(.P"64 / / -5\*"")45-,.\$"UA."  
D00.6,(H-,&5" / -\*" -775.66"-0\*"64<6,-0,(0.)& / / .0,6"&5")&55.),(&06"64< / (, .7"(0",A."  
(00.6,(H-, (0."5.9&5,\$"

S . .,(OH6",A-,"7&"0&,")&06,(,4,. "-0"(0,.50(.P"-5."0&,"-47(&"&5"0(7.&"5.)&57.7"<\*",A."  
T0(0.56(\*r"-07" / -\*"0&,"<."5.)&57.7"<\*" -0\*"9-5,( ) (9-0,\$"%-5,(.6"-07"P(,0.66.6" / -\*", -K."  
0&,.6"745(OH"(00.6,(H-,(&0" / . .,(OH6\$UA."8& / 9'-(0-0,"-07"J .69&07.0,"P('"'A-0."-0".F4-'"  
&99&5,40(\*,"&"95.6.0,"0- / .6"&?"9&,.0,(-'"P(,0.66.6"-07",&"95&9&6."F4.6,(&06",A."  
(00.6,(H-,&5Y6" / (HA,"-6K",A."&,A.5"9-5,\*"&5"P(,0.66.6\$8& / 9'-(0-0,6"-07"J .69&07.0,6"  
/ -\*" (7.0,(?"9&,.0,(-'"?-) ,4-'"P(,0.66.6"<4," / -\*"0&,"95.6.0,")A-5-),.5"P(,0.66.6\$UA."  
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-'"-,,-)A.7" / -, .5(-'6R"PA)A"-5."0&,"&A.5P(6."95(O(' .H.7\$UA."0&,(?)-,(&06" P('"(O)'47."  
?(07(OH6"5.'-, .7",&"-' .H.7"O(&'-,(&06"&?"9&'(\*)"-07",A."5-,(&0-'."?&5"-'"?(07(OH6\$D?",A."  
)& / 9'-(O,"95.6.0,6" / &5.",A-O"-6(OH'."-' .H-,(&0"&?" / (6)&074),R"-?(07(OH" P('"<." / -7."  
6.9-5-,.'\*" -6",&".-)A"-'.H-,(&0\$""

**6" 123\$|40(\$/)\$>' .323)UD252)/(\$A&\$%.0(\$/ )D.3)N22/)>\$4 / :)**

8& / 9'-(0-0,6"-07" J .69&07.0,6" P('"<."0&,(? (.7"&?",A.(5"-99. -'"5(HA,6"-07"-99. -'"  
95&).745.6\$"#6"0&,.7"-<&O.R",A."T0(O.56(\*.0)&45-H.6",A."9-5,(.6",&" / -(0,-(O"  
95(O)-\*"&?"-'")& / / 40()-,(&06"5.'-, .7",&"?(07(OH6\$"

**\*" 123\$|40(\$/)\$>' .323)UD252.)A&\$%.0(\$/ )D.3)N22/)>\$4 / :)**

D?" J .69&07.0,"(6"&407",&"<."5.69&06(<'."?&5"&O."&5" / &5."9&'(\*)"O(&'-,(&06R",A."  
0&,(?)-,(&0"&?"?(07(OH6" P('"(O)'47."(O?&5 / -,(&0"5.H-57(OH",A."6-O),(&0(OH"  
95&).66\$D"7., .5 / (O(OH"6-O),(&06R",A."7.) (6&0" / -K.5"?&5"6-O),(&06"A-6",A."  
?&'&P(OH"&<\_.), (O.6d"

%5& / &,(OH"6-?. ,\*" -07"95&,.), (OH",A."T0(O.56(\*,\*)& / / 40(\*,b""

+ -0),(&0(OH"(07(O(74-'6"&5"O(&'-, (OH",A(6"%&'(\*)"-07"7.,.55(OH",A. / "  
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>07(OH")&074),b""

U-K(OH"6,.96"5.-6&0-<'\*)-')4'-,.7",&"95.0.0,"A."?4,45."5.&))455.0)."&?"  
A.")&074),b""

J .6,&5(OH",A."8& / 9'-(0-0,"&,"A.(5"95.c7.95(O-,(&0"6,-,46R",&,"A.".W,.0,"  
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e ,(A(O"? (O."YB"<46(O.66"7-\*6"&?"5-06 / (66(&0"&?",A."@ (O-""D00.6,(H-,(&0" J .9&5,"  
PA.5.",A.5."A-6"<..0"-7.,.5 / (O-,(&0"&?"-9&'(\*)"O(&'-,(&0R"<&A"9-5,(.6" / -\*"  
64< / (" -6,-, / .0,"Y0&,"&".W)..7"B"9-H.6\,&,"A."#66&)(-,.G()).%5.6(7.0,"?&5"  
)&06(7.5-,(&0"<\*",A."(07(O(74-'Y6"5.69&06(<'."?&5"7.,.5 / (O(OH"-0"-995&95(-,."

-))&57-0). "P(A,A. "95&). 745.6"6., "?&5,A"(O",A. "+,47.0,"E-07<&&K\$UA."`??(). "&?"8& / / 40(\*"+,-07-576"P('"95&0(7."P5(,.,0"0&(), "&?"-0\*"6-0),(&0Y6\("/ 9&6.7",&,A. "9-5,(.6"?&5"O(&'-,(&06"&?",A(6"9&'()\*"6( / 4',-0.&46'\*"P(A(O"6.0.0"YQ\))-'.07-5"7-\*6"&?",A. "6-0),(&0(OH"7.)(6(&0\$UA."0&(), "P('"5.? .5.0). "? (07(OH6" / -7. "<\*"VTc` 8 J"-07"P('"(O)'47.",A."6-0),(&0Y6\R"-64 / / -5\*"&?",A. "5-,(&0-' .R"-07"(O?&5 / -,(&0"-<&4,"A. "-99. -"95&). 66\$"

**P\$5)30.>>123-\$ / :2/03R"(O",A. ".0.0,"-9&'()\*"O(&'-,(&0"(6"?&407R"VTc` 8 J"**  
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-5.( / 9&6.7R",A."7.,.5 / (0-,(&0"&?"6-0),(&06\$"#0"-99. -'"P('"'<."A-07'.7"(0"- / -00.5"  
)&06(6,.0,"P(,A"-0\*"-99'()-<'." ,.5 / 6"&5"95&).745.6"(0",A."@-)4',\*"E-07<&&KR"+,-?"  
E-07<&&KR"+,47.0,"E-07<&&KR"&5"-99'()-<'." )&0,5-),,\$" ` ,A.5P(6.R",A.",.5 / 6"-07"  
95&).745.6"&4,'(0.7"(0",A.6."H4(7.'(0.6"P('"' )&0,5&'\$"

#0"-99. -'" / 46,"<." / -7."P(A(0",.0"Y!L\)-'.07-5"7-\*6"&?",A."7-.,."&?",A."P5(,,.0"  
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6-0),(&0(OH"7.,.5 / (0-,(&0\$"#0"-99. -'" / 46,"<."(0"P5(,(OH"-07"69.)(?"\*,A."<-6(6"?&5",A."  
-99. -'"\$UA."P5(,,.0"-99. -'" / 46,"6,-.,."P(,A"69.)(?)(,\*d"Y!\",A."(664.6"<.(OH"-99.-'.7b"Y1\\$\$  
,A."<-6.6"?&5",A."-99.-'b"-07"Y:\("?"0.P".0(7.0)."(6"&?? .5.7R",A."-99.-'" / 46,"7.6)5(<."



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9" +\$/>:k:2/0k.%)=4- -\$50\$9 :A\$' .' (\$). / :)+\$4/32%k / (?)123\$45'23 )

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8&0?(7.0,(-'"J .6&45) .6"-0"95&0(7."(O?&5 / -,(&0"-<&4,"T0(O.56(,\*"-07"&??c)- / 946" 5.6&45) .6R"6499&5,"6.50() .6"-07"&A.5"&9,(&06\$"#6"0&, .7"-<&0.R"<.)-46."&?" ,A.")&0?(7.0,(-'" 0-,45."&?" ,A.6."5.6&45) .6R"7(6)'&6(OH"(O?&5 / -,(&0",&"&5"6. .K(OH"-70() ."?"&5 / "-"8&0?(7.0,(-'" J .6&45) ."7&.6"0&,")&06,(4,.-"5.9&5,"&5")& / 9'-(O,"& ,A."T0(O.56(,\*"-07"P('"'0&,"5.64',"(O" -"5.69&06."&5"(O,.50.0,(&0"<\*" ,A."T0(O.56(,\*\$"#9.56&0")&064',(OH"P(A"-8&0?(7.0,(-'" J .6&45) ." / -\*" "-, .5"7.)7.",&" / -K. "-5.9&5,"& ,A."T0(O.56(,\*"-07f&5"-P".0?&5) . / .0,\$"

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9 - /.)XD.5)	=:BL"V&5,A"25&-7P-*R"1*+"@'&&5" 8A()-H&R"Dj "NLN! :" YQQ:\": :=c=NN :" <a href="#">PPPS-90-HA-5&amp;5H"</a>	



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)&06(7.5"0&,"-'.5(OHR"7(69&6(OH"&?R"&5"7.6,5&\*(OH"-0\*"9A\*6(-'"0(7.0)."&?"  
6.W4-" / (6)&074),\$"   
D?" ,A.5."(6"6469()(&0",A-,"-75(OK" / -\*"A-0."< .0"754HH.7R"-0"(07(O(74-"   
6A&4'7(O?&5 / "- / .7()-"-66(6,-0)."95&0(7.5"-07f&5"-P".0?&5) . / .0,"-6"6&&0"   
-6"9&66(<."6&,"A.\*")-0"-.,. / 9,"&)"&'.'),"9&66(<."0(7.0)."Y.\$H\$R"?5& / ",A."  
75(OKR",A5&4HA"45(O."&5"<'&&7"6- / 9'.\)\$"   
D07(O(74-'6")-0"95.6.50."0(7.0)."&?".'.),5&0(")& / / 40(-,(&06"<\*"6-0(OH"   
,A. / "-07f&5"<\*" , -K(OH"6)5..0"6A&,6"&?" ,.W, / .66-H.6R"(06,-0, / .66-H.6R"6&)(-"  
0.,P&5K(OH"9-H.6R"&5"&,A.5".'.),5&0(")& / / 40(-,(&06R"-07"<\*"K..9(OH"   
9(),45.6R"&H6R"&5")&9(.6"&?"7&)4 / .0,6",A-,"5.'-.,,"&,A."(O)(7.0,"-07f&5"   
9.59.,5-,&5\$"   
>0.O"(?"6450(O&56")A&&6."0&,"& / -K."-")& / 9'-(O,"P(A,A."T0(O.56(\*"   
5.H-57(OH"6.W4-" / (6)&074),R",A.\*" / -\*")&06(7.5"69.-K(OH"P(A,T0(O.56(\*"   
%&'("."&5"&,A.5"-P".0?&5) . / .0,"&95.6.50."0(7.0).\$"%'-.6."0&," ,A-,R"-6"   
T0(O.56(\*" / 9'&\*..6R"TO(O.56(\*"%&'(")."P&4'7"A-0."&5.9&5,"A.)&0).50",&   
,A."`??("."&?"8(O("J(HA,6"-07"U('."D^"8& / 9'(-0).\$"

\* #D(3&' .%)2A&: 2 / '2)-52325A.0&\$ / 34??230&\$ / 3)3-2'&>&'0\$)32; 4.%) .33.4%0<

2.)-46."6& / ".0(7.0).R"9-5,()4'-5\*"0(7.0)."A-, / -\*"<."&)-.7"&0",A."  
<&7\*R"7(66(9-, .6"F4)K'\*"YP,(A(O=IcgNA&456\R"(07(O(74-'6"PA&"A-0."< .0"   
6.W4-"\*" -66-4',.7"-07"P(6A",&95.6.50."0(7.0)."6A&4'7"H&,"&-"A&69(-'"&5"   
 / .7()-""?-)(',\*"( / / .7(-,.'\*",&6..K"- / .7()-".W- / (0-,(&0"-07f&5".0(7.0)."   
)&''),(&0\$T07.5"D'(O(6"-P"R"-0\*)&6,"?&5"-0" / .5H.0)\*" / .7()-""&5"?&5.06("   
.W- / (0-,(&0"?&5"-O()),( / "&?"6.W4-"O(&'0)."A-,("6'0&,")&0.5.7"<\*"95(O-, "   
(0645-0)."&5"D'(O(6"%4<'(")#(7"P('"<." )&0.5.7"<\*"A."D'(O(6";.9-5, / .0,"&?"   
E.-',A)-5."-07"@- / ('\*"+.50()).6R"-07"6A&4'7"O&,"<.<(''.7",&,A."9-,(.0,\$"   
#0"(07(O(74-"PA&"A-6"<.0"6.W4-"\*" -66-4',.7"-07"P(6A.6",&95.6.50."   
.0(7.0)."6A&4'7R"(?"9&66(<."R"O&,"6A&P.5R"<-,A.R"7&4)A.R"6 / &K.R"<546A",. .AR"   
. -,R"75(OKR"46."A."<-,A5&& / R"&5")A-OH.")'&,A.6"&5"<.77(OH"<. ?&5."H&(OH",&,A."   
A&69(-'"&5"6..K(OH" / .7()-"-.,.0,(&0\$"  
D?" ,A."(07(O(74-"PA&"A-6"<.0"6.W4-"\*" -66-4',.7"7.) (7.6",&)"A-OH.")'&,A.6"   
&5"<.77(OH"-07"P(6A.6",&95.6.50."0(7.0).R",A.\*"6A&4'7"O&,"P-6A,"A.")'&,A.6"   
P&50"&5"<.77(OH"46.7"745(OH",A."-66-4',R"-07"6A&4'7"<5(OH",A. / ",&-"A&69(-"R"   
 / .7()-""?-)(',\*R"&5",A."9&'("."(O-"O&0c"9'-6,())Y.\$H\$R"9-9.5\<-H\$"

%&'()\*R")& / / 40(\*" / . / <.56"-07",A."T0(O.56(\*"-5."W9.),.7",&,-K."-0"-), (O."5&'."(O"  
49A&'7(OH",A(6"9&'()\*"-07"95& / &,(OH",A."7(HO(\*"&?"-'"(07(O(74-'6\$UA."T0(O.56(\*"&??.56"-  
O-5(.,\*"&?"5-(O(OHR"-P-5.O.66R"-07"95.O.O,(&O"95&H5- / 6",&"A.'9"95.O.O,"7(6)5( / (O-,(&OR"  
A-5-66 / .O,R"-07"6.W4-" / (6)&074),"P(A(O",A."V&5,AP.6,.50")& / / 40(\*\$UA."T0(O.56(\*"  
6,5(O.6",&".0645.",A-,"64)A"95&H5- / / (OH"(6"7.O.'&9.7",&"<.")4',45-'\*5.'O-0,b",5-4 / -"  
(O?&5 / .7b"(O)'46(O."&?"7(O.56.")& / / 40,(.6"-07"(7.O,(.6b"646,-(O-<'b"5.69&06(O.",&"

9 - -2 / : & ; 9 < ) = 4 , , . 5 ( ) \$ > ! / > \$ 5 , . 0 & \$ / ) \$ / ) 1 2 - \$ 5 0 & / ? ) = 2 ; 4 . % ) @ & 3 ' \$ / : 4 ' 0 ) . / : ) 1 2 ' 2 & & / ? ) = 4 - - \$ 5 0  
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- ! \$ + . . K " S . 7 ( ) - " # , . . 0 , ( & 0 "
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D ? , A . " 6 4 5 0 ( O & 5 " ) A & & 6 . 6 " O & , " , & " H & " , & " , A . " . / . 5 H . 0 ) \* 5 & & / R " 6 f A . " 6 A & 4 ' 7 " 6 , ( ' ' ' ) & 0 6 ( 7 . 5 " 6 . . ( O H " - " 9 5 ( 0 - , . " 7 & ) , & 5 " & 5 " - ) ' ( O ( ) ( - O \$ " + 4 5 0 ( O & 5 6 " - 5 . " . 0 ) & 4 5 - H . 7 " , & " ( O F 4 ( 5 . " - < & 4 , " - 0 7 " 4 0 7 . 5 6 , - 0 7 " , A . " . W , . 0 , " & ? " ) & 0 ? ( 7 . 0 , ( - ' ( , \* " A . - , A ) - 5 . " 9 5 & 0 ( 7 . 5 6 " ) - 0 " 9 5 & 0 ( 7 . " , & " , A . " 6 4 5 0 (

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" # / .5()-0"E&69(-" " " qgQ="===1"!ggg"  
" # "> / -7("E&69(-" " " qgQ="==NN"NLLg"  
" +&)(-"%5&(.),( &0"-07" J .A-<('(-,( &0" gQ="==Lg"Lggg"E&,(0.d!LI!

IO&7/%+3\$/6?,2%5(8&3&6\$( )3, ) / ",%8+3\*+ ',%+ '#\$(+%=&' ; & I +/, ) / ", (8\$3'''+/J,

**X\$A25/ , 2/0)Q\$3- &0.%3) . / :) +2/0253)U&0D)-D(3&' . %) . / :) , 2/0.%D2.%0D)523\$45' 23) . A.%N%2)**

E- / -7"C.0.5-"E&69(-" " qgQ="=:g"===="  
#"MA&5"E&69(-" " qgQ="=Q="BBBB"  
E S 8"846,& / .5+.50() . "8.0, .5" !NLNL"Y+40cUA456"Q- / c!L9 / b"@5("19 / c!L9 / b"+-,"!L- / cN9 / \\  
V.6 / -]-K"  
e (?-Ff@- / ('\*8&064',(OH"8.0, .5"qgQ="=LN"ggL1"Y / .0, -"A. - ,A"5.6&45) . 6&0'\*"

+47.0,6" / -\*- '6&"P(6A,&"(00.6,(H-, . "95(0-, . "6.50() . "95&0(7.56"&?" ,A.(5")A&() .R"<4, "-5. "  
.0)&45-H.7",&"(0F4(5. "-<&4, "-07"407.56, -07",A. " .W., .0,"&?" )&0?(7.0, (-', \* ,A. \*) -0"95&0(7. ", & ,A. "  
6450(O&5"&?"6.W4-"O(&' .0) . \$"UA. ")&0?(7.0, (-', \* ,A. \*) -P6"-07"5.H4'-, (&06" / -\*7(?.5"64<6, -0, (-' \*"  
?5& / ,A. "95&, . ), (&0"- P6"(O",A. (5"A& / . )&40,5\*\$"

**I" +\$/0. '0)0D2)#\$&' 2)**

+450(O&56"-5. ".0)&45-H.7",&,"-K",& ,A. "8A(.?" ` 9.5-, (&06" ` ??() .5"?&5" / &5. "(O?&5 / -, (&0"&0"PA-, "  
/ -\*"A-99.0"(?" ,A. \*?"( " .-"9&'() .5.9&5,\$"C.0.5-"\*R"&0) . "-6.W4-"-66-4', "(6"5.9&5, .7", & ,A. "9&'() .R"  
9A\*6() -" .0(7.0) . "&?"-6,54HH' . "(6)"&' . ), .7"-07",A.0",A. ") -6. "(6"5.?.55.7", & ,A. "95&6. )4, &5R"PA&"  
,A.0"7. , .5 / (0.6"(?"-")5( / . , &&K"9'-) . \$"UA. "- / &40, "&?"9A\*6() -" .0(7.0) . "PA(A)6A&P6"-6,54HH' . "  
P('"464-'\*7. )(7. ",A. ") -6.\$"!>)-D(3&' . %)2A&:2 / '2)k3& / '\$ / '43&A2\$0D2)' .32)U\$4% : )N2) : k3 , k332 : \$)  
. / :)0D2)345A&A\$5) , k?D0)2&0D25)N2) .3T2 :)0\$3&? / . )30.02 , 2/0)\$5)N2)b. k%2 : \$"

!/) . / )2 , 25?2 / ' ( ) : k.% ) i g8I)II\_I)jggg)B\$/)' . , -43C)\$5)ggg)B\$>>)' . , -43C)#\$&' 2) 12-\$503) . / :)  
**123-2'0&/?0D2)=45A&A\$5f3)M2' k&\$/3)**

UA.5. "(6"O&5(HA, "&5" P5&OH" P -\*" ?&5"-6450(O&5", &"95&) . .7\$"UA. "7. ) (6(&0", &"5.9&5, "-0"-66-4', ", & ,A. "  
9&'() . "(6"-9.56&0-"&0.\$"

m&4"6A&4'7"A. '9"-6,47.0, "&5")&' . -H4. " / -K. "-9&'() .5.9&5, "(?" ,A. \* "P-0, \*"&45"A. '9R"<4, "(?" ,A. \* "7&"  
O&, "P-0, "&R"\*&4"6A&4'7"-6&5.69. ), ,A. -, 7. ) (6(&0\$%4<() (, \*R")&0) .506"&0.5"5.0(, ( / (X-, (&OR"  
A(6,&5(-"9&&5", 5. -, / .0, -, ,A. "A-076"&?" ,A. "9&'() .R"&5"? . -5"&?"< . (OH\_ -(' .7"-5. ".W- / 9' .6"&?"5. -6&06"  
-"6450(O&5" / (HA, O&, "P-0, "&(OO&'O. ",A. "9&'() . "\$"

**\_ " +\$/0. '0)0D2)Y>>k' 2)\$>)+&A&%) 1&?D03) . / :)Z&0%2)! [ ] +\$, -%k. / '2)**

e A. ,A.5"&5"O&, ,A. "(07(O(74-" / -K.6"-9&'() .5.9&5,R",A. \*) -0)"&0, -), "-07" / -K. "-5.9&5, "& ,A. "  
T0(O.56(,\*\$)#0"(07(O(74-"A-6",A. "5(HA, "&,)A&&6. "PA. ,A.5", &"5.9&5, ,A. "(O)(7.0, "& ,A. " ` ??() . "&?"  
8(O(" J (HA,6"-07"U(, ' .D^"8& / 9'(-0) . "?&5"-77(,( &0- "'&9, (&06"-07"6499&5, "-07f&5", &"5.F4.6, "-0"  
(OO.6,(H-, (&0\$"UA. "T0(O.56(,\*\$)P('"95&, . ), ,A. "(7.0, (, \*"&?"9.56&06"(OO&'O.7"(O"5.9&5,6"&?"6.W4-"  
/ (6)&074), "&,0)"&76, "&?(,6"-& / (',\*\$70)"&0(\*756(,\*\$('5&0"\*60-57"9756&0-' .





523&30. / '2\$)&"2")3T&/)\$>0D2)-25-205.0\$5)4 / :25)0D2)>&/ ?25 / .&%3\$)N54&323"!>)0D252)&3) / (\$)2A&:2 / '2)  
\$>.)3054??%2\$)0D2/). /)&/ '&:2 / 0) , . (/ \$0)N2)'%.33&>&2:).3)5. -2)4 / :25)H.0.5)% .U). / : )0D2)  
345A&A\$5) , . (N2). ' '432:)\$>32;)\$403&:2)\$> , .55&. ?2\$)UD&'D)&3)&W2?.'%&/)0D2)=0.02)\$>)H.0.5")

D,"(6"/ 9&5,-0,"&"K. .9"(0" / (07",A-,".-)A"64HH.6,(&0" / -\*"0&,"-99'\*(0".0.5\*(0)(7.0,d"

%5.6.50."0(7.0). "&?".'.),5&0(")& / / 40()-,(&06"'(K.",.W," / .66-H.6R"9(),45.6R"-07f&5"6&)(-"  
O.,P&5K(OH"9-H.6"<\*"6-0(OH",A. / "-07f&5",-K(OH"6)5..0"6A&,6\$