

!

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"#\$%&""!%(!)*+!, %- . "+

, /0""!1!, %\$)0,)! '\$ (%. 20)'%\$!

, 3455!3674896: ;" "	#\$%&' (%)"# (*"+), -.)/"0\$)1(%()2("31142("567"8. 4)"9&%((&:"; (<=&\$ \$>:"8+"?5?7@"	
, 3455!<==89: >!89<=5;"	9(A&(B=(%"@6&' "&\$"9(A&(B=(%"C?&' ""9D)/. E	! GC?. BJ"FG??AB"
, 6@A5=!B=C598=;"	-(. %)4), ' D=L.)/%(* <L(/D"	
': 58A@786A!)=3=DE6: =;"	M@?7"6! @JCC! I	
': 58A@786A!+ < 493;"	A. OD4)4P.)/%(* <L(/D"	
%FF97=!3674896: ;;"	9(B4) . %E"OD4/4), : "R4<24A-(<' 4A.)/"S41(<A.)" + /D2. &4\$)"9D4&(: "#@! 6"	
%FF97=!E6@A5;" "	QE". AA\$4)&B ()&"\$)-E"	
"		

G - //+) '\$!H+", . '&)'%\$!%(, %- . "+!!

!"

R. E"	R. & ("	K\$A42"	Y<<4,)B ()&"RD ("
		5\$""61(.)&74"89:1(-1&,1" -&");+'<"=-&-.!(>\$?5+((1&"%..+1."-&");+'< =-&-.!(>\$ 8\$@<1)4)A>")B";)+'<" =-&-.!(>\$ C\$)(4*"E-13"	
F"	./)0\$%& ()*+' ,1!	#\$""6+G4-,"57H:+." =-&-.!(>"0)&"6;J14K /\$""L1&1(7'-)&74" 5<7441&A1. 5\$""@<1)4)A-,74" 5<7441&A1.	"
M	2)\$#)0\$%& ()*+' ,3 "	#\$""5)447G)(7'1"=-&-.!(>" IN,)"D7(* K /\$""6)."67&*1H-," 5<7441&A1. 5\$""N,-)"8,)&)H-,74" 5<7441&A1.	" "
σ	.4/50\$%& ()*'67 !	Y! %&'1(A1&1(7'-)&74" 5<+(<," ! !;=4%)?!=@%55&	8/55)#+'900/)0':5)0)#+%+;"#

" <=+">)5'67

! !

5L!0SY99"XY\KVOVXYKIV3#"

0-. <<" &&()/.)2(".)/"A. %&424A. &4\$) "4-<"%(OD4%(/".)/"U4&. -"/D("&\$"&' ("4)&()<(".)/"4)&(<%. 2&4U("
). &D%("\$1"&' ("2\$D%<("M*' (&' (%1. 2(J&\$J1. 2(:"\$%"U4. "m\$BML"9&D/()&<". %("%(OD4%(/"&\$"' . U("&' (4%"
2. B(%.<"&D%)(/"\$)"1\$%"&' ("()&4%("/D%. &4\$)"\$1"&' ("<(<\$)L"V1". "<&D/()&"BD<&"B4<<"B\$%("&' .)"
&' %(" "\$D%<"\$1"2-. <<:"&' ("14). -", %./(" *4-"=("-\$ * (%(/"=E"\$) ("1D--. (&&("%L""

!

O559>: <=: 85!H=57A9D896: !1!B=9>E89: >

"##\$%&'(&)*(#+,\$-)\$.&	/(\$%0)\$&%
1!2..3!4(-.,) #	567!
89,,(&!:#9(#!;,-<,<)\$.&!;! ;,(#(&<)\$.&!	567!
8.&)(>)9<?\$@(A!B\$&\$#),C!B!A(?	D67!
E.)<?!	F667!

OG%-)!#%-.!\$").- ,)%.!

\\$, (-4\$X. 0D4)4"2\$BA-(&(/" 4<"R84)"4)"W\$D&' ".)/"W\$D), "Y/D-&"84)4<&%E"4)"
@?!`L"] (" . <"<' . %(/" 4<"A. <<4\$)"1\$%&&. 4)4), :". 114%B4), :".)/"B()&\$%4), "
E\$D), "A(\$A-("4)"B4)4<&%E". <". "A. <&\$%1\$%@"`E(. %<"4)"9\$D&' (%) "O. -41\$%)4. L"
K' ("1\$2D<"\$1" 4<"* \$%>"4<"&\$" (-A"2' D%2' (<="(2\$B("4)&(% , () (%. &4\$). -.)/"
/4U(%<("2\$), %(, . &4\$)<L"

""

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%) *+. !, %- . "+P. +/O)+H!&%/' , '+!"

|"
"

o! tD\$&. &4\$)"B. %>"A. 2(/". %\$D)/".)E"(T. 2&"A' % . <(<"\$%<()&())2(<"MC"\$%"B\$%(" * \$%/<N"&. >())
1%"\$B"&' ("&(T&"\$%"<A((2' "\$1".)\$&' (%4)/4U4/D. -l""

- ¥! X%(<()&4), ".)\$&' (%h<"*\$%>". <"\$) (h<"\$*)"M(L, L:"A. 2(B())&"(T. B<:" \$B(*\$%>". <<4,)B())&<N!"
- ¥! _<4), "B. &(%A. <"/D%A), ". "OD4Z"\$%(T. B4). &4\$)"\$&' (%&' .)&' \$<("TA-42&&-E". --\$*/="E"&' ("&(. 2' (%
\$%"A%\$, % B!"
- ¥! 9&(. -4), ". 22(A&4), ":%<&D/E4), "1%"\$B"<&\$-() "OD4ZZ(<"\$%(T. B4). &4\$)"B. &(%A. <-a"
- ¥! O\$AE4), "1%"\$B".)\$&' (%<&D/()&"/D%A), ". "%(, D-. %"\$%&. >(J' \$B("&(<&"\$%"OD4Za"
- ¥! Y<<4&&4), ".)\$&' (%4)". 2&<"\$1". 2. /(B42"/4<' \$) (<&E"
- ¥! 9D=B4&&4), "&' (<. B("*\$%>"\$%B. j\$%"A\$%&4\$)<"&' (%(\$1:"*4&' \$D&"A(%B4<<4\$)"1%"\$B"&' (4)<&%D2&\$%<:"
&\$"<. &4<1E"&' ("(OD4%(B())&<"\$1"B\$%("&' .)"\$("2\$D%<(L"

^\$%". //4&4\$). -"/(&. 4<<((G" [&&A<fcc * * *L.](#))/(*<l(/Dc. 2. /(B42<c. 2. /(B42u4)&(. %A&EL' &B-

!

O74M=<97!O776<<6M4896: 5!!

V!"E\$D"OD. -41E"1\$%. 22\$BB\$/ . &4\$)"D)/(%"&' ("YB(%42.)"R4<. =4&4(<"Y2&:"A-(("<("(\$2)&. 2&"9&D/()&
9D22(<<4)"#(&' (%E"] . --"! ??M/4<. =4&4(<P.)/(*<l(/D"\$%@"F7J56! JF?7FN". <<4\$)\$). "<A\$<<4=-("<\$"&' . &
. 22\$BB\$/ . &4\$)"<2.)"="(. %%.) , (/l"

"
"

-5=!6F!+3=78A6: 975!!

#\$%(\$2\$/4), "\$%<&%(. B4), "4<"A(%B4&&("/4)"<(B4). %E"2\$D%<(<l""

O\$D%&(<E:"<A(2&.")/"A%\$1(<<4\$). -4<B"/42&. &("&' . &". A&\$A<.")/"2(-"A' \$) (<. %("&\$"="(D<("/\$)-E"1\$%2-. <<J
%(-. &("/. 2&4U4&4(<"/D%A), "2-. <<"&4B(L""

"

,6<<@: 974896: 5!4: M!-DM48=5!!

+B. 4"4"&' ("11424. -"1%"\$B"\$1"2\$BBD)42. &4\$)". &"Y)/%(*<_)4U(%&4&EL""9&D/()&<". %("(<A\$)<4=-("1\$%
2' (2>4), "&' (4%"Y)/%(*<_)4U(%&4&E"(JB. 4:"8\$\$/-(:.)/"4qD(" . -(%&<%(, D-. %EL"

!

/=4A: 9: >*@C!O77=55!!

Y)/%(*<_)4U(%&4&E"S(. %)4), "]D=" \$<&<"&' 4<2\$D%<("\$)-4) (L"W\$D"S(. %)4), "]D="D<(%). B(.)/"
A. <<*\$%"/. %("&' (<. B(. <E\$D%"Y)/%(*<D<(%). B(.)/"A. <<*\$%"/L_<("&' ("1\$--\$*4), "2\$)&. 2&
4)1\$%B. &4\$)"41E\$D")((("/&(2')42. -. <<4<&.)2(" . &".)E"&4B("/D%A), "&' ("2\$D%<(:"\$%&\$%("A\$%&". "
A%\$=-("B"*4&' "S(. %)4),]D=L"

"

<u>_<(%). B(.)/"A. <<*\$%"/. <<4&.)2("</u>	<u>'(-A/(<>P.)/(*<l(/D"</u>	M@F7N"56!
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K(2')42.-". <<4&.)2(" * 4&' "S(. %)4) ,"] D="	/-4&P.)/%(*<L(/D"	M@F7N"56!JC7F?"
K(2')42.-". <<4&.)2(" * 4&' "E\$D%"Y)/%(*<" . 22\$D)&"	' &&A6cc.)/%(*<L(/Dc' /2' . &c2' . &LA' A""	"

!?"
"

O&&+\$H'O];!O""'I \$2+\$)! . -G. '

!!"
"

O&&+\$H'O!\;!\$)+. &. +)'\$! !/+) +. !. !. OH+"!

/=88=A!! A4M=5!4: M!&=A7=: 84>=5!

7` J! ???K"Y"	I ?J! 5K"Q"	F` JF7K"O" " "
"7?J75K"YJ"	6` J67K"QJ"	F?JF5K"OJ" " "
I` J! 7K"Qv"	6?J65K"Ov"	` ` J` 7K"R"

"

!#B#G\$%&#"#

K' ("Q", % / ("4", "<4,)" &' . &"E\$D" . U("2\$BA(&())&-E"1D-14- (/". --"\$1"&' ("%(OD4%(B()&<"&4AD-. &("/1\$%".)"
. <<(<<B()&"\$%2\$BA(&())2E"(U. -D. &4\$)l""V&"4". "U(%E", \$\$"/, % / (".) / (B\$)<&% . & (<. "' 4, ' "-(U("-\$1"&' ("
>) \$* - (/ , (: "4" <4, ' &:"2%&42. -"2\$BA(&())2(".) / "A%\$1(<<4\$). -"A%(<())&. &4\$)"<&.) / . % / < (<())&. -"1\$%".) "
4) / 4U4/D. -" * 4- 4), "&\$"AD%<D(" . "2. % ("%. <". "A%\$1(<<4\$). -" (. / (% "4)"B4)4<&%E!

!#A#G\$%&#"#

Y)"Y", % / ("4", 4U() "\$) -E" * ' ()". "<&D/()&)"\$&")-E"1D-14-<"&' ("2%&(%A. "1\$%". "Q", % / (: "=D&"4) / \$4), "<\$"
/ (B\$)<&% . & (<.)". /U.) 2 (/". 2. / (B42". A&4D / ("1\$%2\$) & () &">) \$* - (/ , (: "2%&4OD (: "<E) &' (<4-.) / "
4) / (A() / () &"4" <4, ' &:" * ' 4 (" (T' 4=4&4), "' 4, ' -E" / (U(-\$A ("2\$BBD) 42. &4\$)"<>4-<".) / "A%\$1(<<4\$). -"
AD=42. &4\$)"<&.) / . % / < "&' . &" * \$D- /". --\$ * "&' (B"&\$"AD%<D(" . "' 4, ' -E"2\$BA (&4&4U(" . 2. / (B42"2. % (&!

!#C#G\$%&#"#

K' ("O", % / ("411(%<"\$) -E"1\$B". "O", % / ("4)"&' . &"&' ("&% . 4&<"\$D&4) (/ "4)"&' ("O", % / (" = \$U(" . % (") \$&"
2\$)<4& (&) &-E". AA-4(/l""] \$* (U(%: " * 4&" / 44, () 2 (" .) / " = E". AA-E4), "1((/ = . 2>"1\$B"E\$D%"- (2&D(%: "&' ("
. 2. / (B42"A%\$2 (<<"2.) "A%\$U4 / (" \$AA\$&D) 4&E"1\$%". "&D/() & "\$4BA\$U ("&' (4%2\$) <4& () 2E: ".) / " () 2 ("&' (4%
, % / (!

!#D#G\$%&#"#

K' ("R", % / ("A\$4) &<"&\$". -4B4& (/ "-(U("-\$1">) \$* - (/ , (: "4" <4, ' &:" .) / "2%&4OD (: ". <" * (-. <"&\$4). / (OD. & ("OD. -4&E"
\$1" * %&& () " * \$%>l""K' 4" B. E" = (" = (2. D< (" \$1". - . 2>"\$1"&4B ("B.) . , (B() & "\$) "&' ("A. %&"\$1"&' ("<&D/() &:"
/41142D-&E", % . <A4), "&' ("2\$) 2(A&<=" (4), "&. D, ' &:"D< (" \$1"+), -4" " . <". "<(2\$) / "-.) , D. , (: "\$%". "A(%<\$). -"4<<D(" "
&' . &"4". 11(2&4), "\$) (h<"2\$) 2() &% . &4\$)". .) / "B\$&4U. &4\$)"- (U(-<l""Y. . 4): " * 4&" / 44, () 2 (: ". AA-E4), "1((/ = . 2>"
1\$B"E\$D%"- (2&D(%: ".) / "< (>4), "< (%U42 (<"\$11(% (/ " = E"&' ("_) 4U (%&E"-4> ("&' (" * %&4), "-. = "\$%&' ("2\$D) (<-4), "
2() & (%: "&' (". 2. / (B42"A%\$2 (<<"2.) "A%\$U4 / (" .) "\$AA\$&D) 4&E"1\$%". "&D/() & "\$&"<4,) 4142.) &-E"4BA\$U ("&' (4%
A(%!\$B.) 2(l"

!#F#G\$%&#"#

Y"1. 44), ", % / ("4", 4U() " * ' () "U(%E"-4B4& (/ "\$%) \$" / (B\$) <&% . - ("2\$BA(&())2E" . <=" () "\$ = < (%U(/l""
"

!@
"

O&&+\$H'O!Y;!&. %I . 02!/ +0. '\$\$!%-), %2+"!

!C"
"