

## 6 UmYf]gWk Yf'6Øf[ Yf'YbhXYW\_h'fUgUbhYg CV^\_h]b'XYf'A ]`Wk ghfU» Y°

K ]ggYbgWk UZhYf'YbhXYW\_Yb'Y]b'a mghYf'ØgYg'CV^\_hž'XUg'a ]h  
%ž\* 'A ]`]cbYb'\_a # 'Xi fW'X]Y'A ]`Wk ghfU» Y'fUghi bX  
a Ø[ `]Wk Yfk Y]gY'Ybh\_ca a h"

K ]ggYbgWk UZhYf'\ UVYb'Y]b'ZUgn]b]YfYbXYg'D\Àbca Yb'YbhXYW\_hž  
XUg]b'XYf'K Y]hY'i bgYfYf'A ]`Wk ghfU» Y'i a \Yf'fUgh"9]b  
[ Y\Y]a b]gj c`Yg'CV^\_hž'XUg'a ]h]i b[ `Ui V`]Wk Yb'%ž\* 'A ]`]cbYb  
?]ca YhYfb'dfc'Ghi bXY'Xi fW'XUg'5`'gWk]Y» hž\_ØbbhY'gc[ Uf'X]Y  
GWk k Yf\_fUZh'i bgYfYf'; U'Ui ]Y'ØVYfk ]bXYb"8]YgY'Ui ZfY[ YbXY  
9bhXYW\_i b[ 'ghUa a h]j cb'Y]bYa 'HYUa 'Ui g'gc[ YbUbbhYb  
6Øf[ Yfk ]ggYbgWk UZhYfb ž'X]Y]ja 'FU\ a Yb'XYg'Dfc^\_hg  
6UW\_mUfX'K cf'Xg.'D'UbYh- 'XYf'B5G5'UfVY]hYb"8]YgY  
Yb[ U[ ]YfhYb'5a UhYi fYž'XUfi bhYf'Y]b'Yb[ U[ ]YfhYf'A Ubb'Ui g  
6UmYfbž'\ UVYb'XUg'Ui » Yf[ Yk Ø\b`]Wk Y'CV^\_h'VYcVUWk hYh'i bX  
[ Ya Y'XYh"

8]Y'9bhXYW\_i b[ 'k i fXY'Xi fW'X]Y'<cWk hYWk bc`c[ ]Y'XYf'B5G5  
a Ø[ `]Wk [ Ya UWk hž]bgVYgcbXYfY'Xi fW'8UhYb'Ui g'XYf'K €G9!  
A ]gg]cb'fK ]XY!Z]Y'X'`bZfUfYX'9I d`cfYfL"8]YgY'A ]gg]cb'\Uh'XYb  
<]a a Y`nk ]gWk Yb'&\$-\$- 'i bX'&\$%%]b'`bZfUfch]Wk h'\_Ufh]Yfh"8Yf  
Ui Za Yf\_gUa Y'VUmYf]gWk Y'K ]ggYbgWk UZhYf'A Ufh]b'? UVUhb]\_i bX  
gY]bY'A ]hghfY]hYfž'H\ca Ug'D"6]W\_Y'i bX'8Ub'7UgY'XYbž'\ UVYb'XUg  
gWk k UWk Yž'UVYf'YI hfYa 'gWk bY`Y'HY]Wk Ybž'XUg'XYb'GWk'ØggY`ni f  
I bhYfgi Wk i b[ 'bYi Yf'Ughfcd\mg]\_U`]gWk Yf'D\Àbca YbY`]YZYfhž]b  
X]YgYb'5i ZbU\ a Yb']XYbh]Zn]Yfh"

## 9]b'bYi Yg'Ughfcd\mg]\_U`]gWk Yg'F ÀhgY`

8 Ug'YbhXYW\_hY'CV^\_h'hfÀ[ h'XYb'BUa Yb' 7K €G9

-%&(- \$- "\$, Ž ' \* &%%"\$ " "9g\UbXY`hg]W\i a `XUg`YfghY`gY]bYf`5fhž  
XYggYb`A UggY`À\b`]W\cXYf`[ Yf]b[ Yf`]ghU`g`X]Y`Y]bYg`\_Y]bYb  
GhYfbg""8]Y`9bhXYW\_i b[ `]gh`ni XYa `cZZ]n]Y`""b`Y]bYf`Ghi X]Yž`X]Y`]a  
ž `]`&\$&(`]a `5ghfcd\mg]WU``æi fbU``@YhhYfgj YfÖZZYbh]W\h`k i fXYž  
ZYgh[ Y\U`hYb`k cfXYb" < ]YfVY]`k UfYb`X]Y`@U]Yb!K ]ggYbgW\UZh`Yf  
U`g`7c!5i hcYb`VYhY"][ hž`k Ug`X]Y`F`Y`Yj Ubn`]\fYg`6Y]hfU[ g  
i bhYfghfY]W\h"i bhYf`XYf`@Y]hi b[ `j cb`5XUa `6i f[ UggYfž`Y]bYa  
DfcZYggcf`Ub`XYf`i b]j Yfg]hm`cZ`7U`]Zcfb]Už`GUb`8]Y[ cž`k i fXY  
X]YgYg`Dfc`Y`\_h`a Ö[ `]W\ "

⇒W\ `Ub`b`X]Y`5i ZfY[ i b[ `b]W\h`VYgW\fY]VYb ž`Ai »YfhY`XYf  
VUmYf]gW\Y`K ]ggYbgW\UZh`Yf`A Ufh]b`?UVUhb]\_""`5`g`]W\`ni a `YfghYb  
A U`g`U\ž`k ]Y`gW\`bY`""Y`g`g]W\`VYk Y[ hYž`k Uf`]W\`ØVYfnYi [ hž`XUgg`Yg  
VYfY]hg[ Ya Y`XYh`k cfXYb`gY]b`a i gghY" `GY]b`9bh`i g]Uga i g  
gd]Y[ Y`h`X]Y`6Y[ Y]ghYfi b[ `k ]XYfž`X]Y`j ]Y`Y`6Øf[ Yfk ]ggYbgW\UZh`Yf  
Ya dZ]bXYbž`k Ybb`g]Y`ni f`9bhgW\`ØggY`i b[ `j cb  
i b]j Yfgi a g[ Y\Y]a b]ggYb`VY]hfU[ Yb"

## 8 ]Y`9][ YbgW\UZhYb`i bX`X]Y`< Yf`\_i bZh`XYg C V`Y`\_hg

6Ya Yf`\_Ybgk Yfh`Ub` 7K €9`-%&(- \$- `]gh`b]W\h`bi f`gY]bY  
i b[ `Ui`V`]W\Y` ; YgW\k ]bX][ \_Y]hž`gcbXYfb`Ui W\`gY]bY`i b`\_UfY  
A UggY""8]YgY`< YfUi gZcfXYfi b[ `a UW\h`Yg`gW\k ]Yf][ ž`XUg`C V`Y`\_h  
[ YbUi `ni `\_'Ugg]Z]n]YfYb""Gc`hY`Yg`g]W\`i a `Y]bYb`GhYfb`a ]h  
[ Yf]b[ Yf`A UggY`\UbXY`bž`\_ÖbbhY`Ygž`ZU`g`]b`gY]bYa `?Yfb`\_Y]b  
K UggYfghcZZ`a Y`f`gW\`a ]`nhž`Y]b`6fUi bYf`Nk Yf[ `gY]b""6fUi bY  
Nk Yf[ Y`g]bX`Y]bY`6YgcbXYf\Y]h]a `i b]j Yfgi a ž`XU`g]Y`k YXYf  
j c`gh`AbX][ `D`UbYh`bcW\`GhYfb`g]bX`i bX`g]W\`]b`Y]bYa ` [ Ubn  
Y][ YbYb`Ni ghUbX`nk ]gW\Yb`X]YgYb`?UhY[ cf]Yb`VYZ]bXYb"

Ni g`Äh`]W\`nY][ Yb`8UhYb`j ca `K "IA`"!YW`!C VgYfj Uhc]f]i a `]b  
< Uk U][ž`XUgg`XUg`C V`Y`\_h`VYa Yf`\_Ybgk Yfh`k Yb][ `9]gYb`i bX`UbXYfY  
A YhU`Y`]a `J Yf[ `Y]W\`ni `ghUfVYb`]gh""8]YgY`9f`\_Ybb`hb]g`XYi hYh  
XUfUi Z`\]bž`XUgg`Yg`g]W\`i a `Y]bYb`gY`\f`U`hYb`6YghUbXhY]`XYf  
[ U`U`\_h]gW\Yb` ; YgW\]W\hY`\UbXY`hž`a Ö[ `]W\Yfk Y]gY`j cb`Y]bYf`XYf  
YfghYb`GhYfbYb[ YbYfUh]cbYb`XYf`A ]`W\ghfU»Y""9]b`k Y]hYfYf  
VYXYi hYbXYf`9bhXYW\_i b[ g\cf]ncb`hž`XYf`X]YgY`J YfZØ[ i b[

Yfk Y]hYfb`k ]fXž]gh`X]Y`A Ò[ `]W\_X]h`Y]bYg`k Y]hYfYb`GWk UfnYb  
@cW`Yg`]b`i bgYfYf` ; U`UI ]Yž`k Ug`XUg` ðhYfYggY`XYf  
K ]ggYbgW`UZh`Yf`k YW`h`

K ]ggYbgW`UZh`Yf`YfZc fgW`Yb`XYfnY]h`nk Y]`<Ui dh`mdch`YgYb`ni`XYf  
YI hfYa`Yb` ; YgW`k ]bX][`\_Y]h` 7K €9`%&(-`"9]bY`H`Ycf]Y`VYgU[ hž  
XUgg`XUg`CV`Y`\_h`Ui`g`Y]bYa`Yb[ Yb`GhYfb`U`i ZYb`ghUa`a`h`i`bX  
Xi`fW`Y]bY`6Y[ Y[ bi`b[ `a` ]h`Y]bYa`DUUf`GWk UfnYf`@`W`Yf`Ui`g  
X]YgYa`7`i`ghYf`[ YgW`Y`i`XYfh`k`i`fXY`"8]Y`nk`Y]hY`<mdch`YgY  
VYgU[ hžXUgg`Yg`i`fgdf0b[ `]W`HY]`Y]bYg`8`cddY`ghYfb`gmghYa`g`k`Uf  
i`bX`XUgg`a`Ugg]j`Y`A`UhYf]Y`j`cb`Y]bYa`K`Y]»Yb`Nk`Yf[ `]b`Y]bYf  
[ Yk`U`h][ Yb`Gi`dYfbcj`U!9!`d`c]cb`UV[ Ygc[ Yb`k`i`fXY`"8]Yg`k`0fXY  
X]Y` ; YgW`k ]bX][`\_Y]h`Yf`\_`ÀfYb`i`bX`\_`0bbhY`a` ]h`ni`\_`0bZh][ Yb  
6YcVUW`hi`b[ Yb`XYg`9`Ya`YbhUi`ZV`Ui`g`XYg`CV`Y`\_hg`k`Y]hYf  
Yf[ f0bXYh`k`YfXYb`"

ð`XYf`K`Y]hY`XYg`?`cga`cg`V`Y]Vh` 7K €9`%&(-`\$`-`Y]b  
VYa`Yf`\_Ybgk`YfhYg`A`mghYf]i`a`"8]Y`9bhXYW`i`b[ `X]YgYf`bYi`Yb  
?`UggY`j`cb`5ghfcbca` ]Y!CV`Y`\_hYb`\_`0bbhY`G]Y`XUni`UbfY[ Ybž`XYb  
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i`bYfZc fgW`hYb` ; Y`Y]a`b]ggY`VYk`i`ggh`ni`k`YfXYbž`X]Y`g]W`Xcfh  
]a`a`Yf`bcW`j`YfVYf[ Yb`"

## < ]ghcf]gW`Y`J`Yf[ `Y]W`Y

8]Y`9bhXYW`i`b[ `Ui`»Yf[ Yk`0`b`]W`Yf`<]a`a`Y`gcV`Y`\_hY`]gh`\_Y]b  
bYi`Yg`D`À`bca`Ybž`i`bX`Yg`[ ]Vh]j`YfgW`]YXYbY`]\]ghcf]gW`Y  
9fY][`b]ggYž`X]Y`À`b`]W`Y`GdUbbi`b[ Yb`i`bX`5i`ZfY[ i`b[ Yb`Ui`g[ Y`0gh  
\UVYb`"Ni`a`6Y]gd]Y`k`i`fXY`%-`\$`XYf`D`UbYh`D`i`hc`Yb`hXYW`hž`k`Ug  
ni`[ fc»Yb`8]g`i`gg]cbYb`0VYf`X]Y`?`Ugg]Z]\_Uh]cb`j`cb  
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i`bgYfYg`GcbbYbgmghYa`gž`VYj`cf`Yf`&\$`\$`\*`U`g`Nk`Yf[ d`UbYh  
Y]b[ Yghi`Zh`k`i`fXY`"8]YgY`8YVUhY`i`a`X]Y`8YZ]b]h]cb`j`cb`D`UbYhYb  
gd]Y[ Y`h`hY]k`Y]gY`X]Y`[ Y[ Ybk`À`fh][ Y`i`b[ Yk`]gg`Y]h`0VYf`XUg  
CV`Y`\_h`7K €9`%&(-`\$`-\$`Ž`'`\*`&`%`\*`"\$`k`]XYf`"Y`b`]W`k`]Y`XUa`U`g  
\_0bbhYb`Ui`W`Y`h`h`X]Y`K ]ggYbgW`UZh`Yf`Xi`fW`bYi`Y  
ð`Zcfa`Uh]cbYb`]\fY`G]W`hk`Y]gY`0VYf`b]Y`ni`j`cf`VYcVUW`hYhY  
<]a`a`Y`g`\_0fdYf`UbdUggYb`a`0ggYb`"ð`VY]XYb`i`À`Yb`nY][`h]g]W`ž

k ]Y`8 mbUa ]\_ ]b`XYf`5ghfcbca ]Y`ni`Y]bYa`ghÅbX][ Yb`K UbXY`XYg  
K ]ggYbg`ZØ\fhž`Ui WÅ`k Ybb`X]Y`[ YbUi Yb`6YX]b[ i b[ Yb`i bX  
HYWÅbc`c[ ]Yb`g]WÅ`i bhYfgWÅY]XYb"

9]b`k Y]hYfYg`6Y]gd]Y`]gh`X]Y`9bhXYW\_i b[ `j cb`ei UgUf`ck \Yb`]b  
XYb`%- \* \$Yf`J\ fYb``8]YgY`k i fXYb`UbZÅb[ `]WÅ`U`g`a mghYf]ÖgY  
G][ bU`Y`Ui g`XYa`K Y`hfUi a`k U\ f[ Ybca`a Ybž`X]Y`g]WÅ`U`g`k Y]h  
YbhZYfbhY` ; U`UI ]Yb`\YfUi gghY`hYb``8]Y`5i ZfY[ i b[ `h]Yfh`g]WÅ`\]Yfž  
XU`XUg`U\_hi Y``Y`CV`Y\_h`a Ö[ `]WÅYfk Y]gY`YVYbgc`Y]bYb`[ fc» Yb  
9]bZi gg`Ui Zi bgYf`J YfghÅbXb]g`j cb`XYf`9bhghY\i b[ `XYf` ; U`UI ]Y  
\UVYb`\_ÖbbhYž`k ]Y`Yg`ei UgUf`ck \Yb`hUhYb"

< ]bhYf[ fi bX]bZcfa Uh]cbYb`ni f`9bhXYW\_i b[

8 Ug`Dfc`Y\_h` 6UW\_mUfX`K cf`Xg.`D`UbYh`- `XYf`B5G5`nY][ hž`k ]Y  
ÖZYbh]WÅYg`9b[ U[ Ya Ybhi bX`X]Y`Bi hni b[ `a cXYfbYf  
HYWÅbc`c[ ]Yb`Yg`Yfa Ö[ `]WÅYbž`VYXYi hYbXY`k ]ggYbgWÅUZh]WÅY  
: cfhgWÅf]hhY`ni`Yfn]Y`Yb``8i fWÅ`X]Y`\c`Y`5bnU\`Ub`5a UhYi f!  
K ]ggYbgWÅUZhYfb`k ]fX`Y]bY`VfY]hYfY`8UhYbUi gk Yfhi b[ `a Ö[ `]WÅž  
X]Y`ni`9bhXYW\_i b[ Yb`ZØ\fhž`X]Y`XYb`< Ui dhZc fgWÅYfb  
a Ö[ `]WÅYfk Y]gY`Ybh[ Ub[ Yb`k ÅfYb``Gc`WÅY`Dfc`Y\_h`j YfXYi h]WÅYb  
X]Y`Fc`Y`XYf`6Øf[ Yfk ]ggYbgWÅUZh`i bX`XYb`9]bZi gg`XYg`b`hYfbYhg  
Ui ZX]Y`K ]ggYbgWÅUZh`8 Ug`b`hYfbYh`Yfa Ö[ `]WÅh`XYb`Ni [ Ub[ `ni  
8UhYb`i bX`6`X[ YVi b[ gj YfZU\ fYbž`X]Y`ZØf`X]Y`VfY]hY`2 ZZYbh]WÅ`\_Y]h  
gcbgh`b]WÅ`hj YfZØ[ VUf`k ÅfYb"

8]Y`9bhXYW\_i b[ `j cb`7K €G9`%&(- \$- "\$, Ž` \* &%%\*" \$`\_ÖbbhY`Ui WÅ  
5i gk ]f\_i b[ Yb`Ui ZXUg`J YfghÅbXb]g`j cb`< ]a`a`Y`gcV`Y\_h`Yb`]a  
5``[ Ya Y]bYb`\UVYb``8 Ug`CV`Y\_h`\Uhž`k ]Y`VYf]WÅ`hYhž`Y]bY`[ Yf]b[ Y  
A UggY`i bX`Yb`h`Å`h`Ub`gWÅY]bYbX`k Yb][ Yf`A`YhU`Y`U`g`UbXYfY  
< ]a`a`Y`g`\_ÖfdYf``8]YgY`9][ YbgWÅUZhYb`k YfZYb` : fU[ Yb`ØVYf`X]Y  
9bhghY\i b[ `i bX`9] c`i h]cb`gc`WÅYf`CV`Y\_h`j]b`XYf` : fØ`nY]h`XYf  
A ]WÅ`ghfU» Y`Ui Zi bX`\_ÖbbhYb`X]Y`VYghY\YbXY`H\Ycf]Y`ØVYf`X]Y  
6]Xi b[ `j cb`GhYfbYb`i bX`D`UbYhYb`\YfUi gZcfXYfb"

5\_hi Y``Y`8 UhYb`i bX`GhUh]gh]\_Yb

Ni gÅh`n]WÅ`ni f`9bhXYW\_i b[ `j cb`7K €G9`%&(- \$- "\$, Ž` \* &%%\*" \$`]gh

Yg'fY`Yj Ubhž'Ui Z'Y]b][ Y`GhUh]gh]\_Yb`ni a`H\Ya YbZY`X`YbhXYW\_hY  
<]a a Y`gcV`Y\_hY`i bX`6Øf[ Yfk ]ggYbgW\UZh`\]bni k Y]gYb``@Ui h`Y]bYf  
Ghi X]Y`XYf`B5G5ž`X]Y`&\$\$%`Xi fW\ [ YZØ\fh`k i fXYž`[ ]Vh`Yg  
a ca YbhUb`ØVYf`) \$\$`fY[ ]ghf]YfhY`6Øf[ Yfk ]ggYbgW\UZhgd`fc`Y\_hY  
]bbYf\U`V`XYf`5ghfcbca ]Y``8]YgY`Dfc`Y\_hY`\UVYb`ni f`9bhXYW\_i b[  
j cb`a Y`f`U`g`%`\$\$\$`bYi Yb`D`UbYhYb`i bX`nU`\`fY]W\Yb`UbXYfYb  
<]a a Y`gcV`Y\_hYb`VY][ YhfU[ Yb``Gc`W\Y`8UhYb`nY][ Yb`X]Y  
k UW\gYbXY`k ]W\h][ Y`F`c``Y`XYf`@]Ybk ]ggYbgW\UZh`Yf`]b`XYf  
a cXYfbYb`5ghfcbca ]Y``Ni XYa`nY][ h`Y]bY`l a ZfU[ Y`j cb`&\$\$` ž  
XUgg`Yhk U`+\$`i`XYf`HY]`bY`a Yf`Ub  
6Øf[ Yfk ]ggYbgW\UZhgd`fc`Y\_hYb`Ub[ UVYbž`XUgg`XUg`Dfc`Y\_hY]\`fY  
DYfgdY\_hj] Y`Ui Z`X]Y`K ]ggYbgW\UZh] Yf`AbXYfh`\Uhž`k cXi fW`XUg  
9b[ U[ Ya Ybh]b`XYf` : cfgW\i b[ `[ YghY][ Yfh`k ]fX"

8YhU]`g

6Ygi W\Yb`G]Y`i bg`Ui Z.`b!U[ "XY