

!" #&/  
4;O <548G=>3> 70AB>AC20==O ?@5?0@0BC

- □!  
(HIPRIL-A PLUS)

!;:04:  
4VNG0 @5G>28=0: 1 B01;5B:0 ;V78=>?@8;C 5:2V20;5=B=> 1572>4=>?@8;C 10 <3;  
4>?>28=8: <03=VN AB50@0B, ;0:B>78 <=>3V4@0B, :@>E<0;L :C:C@C47O=89, ?>2V4>=, B0;L:.

V:0@AL:0 D>@<0. "01;5B:8.

\$0@<0:>B5@0?52B8G=0 3@C?0. □><1V=>20=V ?@5?0@0B8 V=3V1VB>@V2 \$. >4 "!"C09□ □03.

;V=VG=V E0@0:B5@8AB8:8.

>:070==O.

A5=V0;L=0 0@B5@V0;L=0 3V?5@B5=7VO.

@>B8?>:070==O.

V428I5=0 GCB;82VABL 4> ;V78=>?@8;C 01> V=H8E V=3V1VB>@V2  
0=3V>B5=78=?5@5B2>@NNG>3> D5@<5=BC (\$);  
?V428I5=0 GCB;82VABL 4> 0<;>48?V=C 01> 4> V=H8E ?>EV4=8E 483V4@>?V@848=C;  
?V428I5=0 GCB;82VABL 4> 1C4L-O:8E 4>?>28= ?@5?0@0BC;  
BO6:0 0@B5@V0;L=0 3V?>B5=7VO;  
0=3V>=52@>B8G=89 =01@O:2 0=0<=57V ?VA;O ?@89>@C 0=3V>B5=78=?5@5B2>@NNG>3> D5@  
<5=BC, A?04:>289 01> V4V>?0B8G=89 0=3V>=52@>B8G=89 =01@O;;  
28@065=89 AB5=>7 0>@B8 01> 3> ;:0?0=0 01> 3V?5@B@>DVG=0 :0@4V>?0BVO;  
:0@4V>35==89 (A5@F5289) H>;  
A5@F520 =54>AB0B=VABL ?VA;O ?5@5=5A5=>3> V=D0@:BC:0@40 ( ?@>BO3>< ?5@H8E 28 4=V2);  
=5AB01V;L=0 AB5=>:0@4VO (70 28=OB:× AB5=>:0@4VW @8=F<5B0;0);  
1V;0B5@0;L=89 AB5=>7 =8@:>2>W 0@B5@VW 01> AB5=>7 0@B5@VW T48=>W =8@:8;  
>4=>G0A=5 70AB>AC20==O ?@5?0@0BC ?@8 4V0;V7V 7 28A>:>?@>?CA:=8<8 <5<1@0=0<8 7  
>?>;V0:@8;=VB@8;=0B@VN-2-<5B8;0;V;AC;LD>=0BC (=0?@8;:04 N 96);  
?0FVT=B8 7 @V2=5< :@50B8=V=C 2 A8@>20BFV :@>2V ≥ 220  
- 203VB=V 01> 6V=:8, O:V ?;0=CNBL 70203VB=VB8 (482. @>74V; «0AB>AC20==O C ?5@V>4  
203VB=>ABV B0 3>4C20==O 3@C44N»).

!?!>AV1 70AB>AC20==O B0 4>78.

@5?0@0B 70AB>A>2CNBL 4>@>A;8< ?> 1 B01;5BFV 1 @07 =0 4>1C. >1>2C 4>7C ?V418@0NBL  
V=482V4C0;L=> 70;56=> 2V4 V=482V4C0;L=>W GCB;82>ABV, C @07V =5>1EV4=>ABV 4>7C<>6=0  
?V428I8B8 4> 2 B01;5B>: =0 4>1C (10 <3 0<;>48?V=C B0 20 <3 ;V78=>?@8;C).  
A:V;L:8 W60 =5 ??;820T =0 2A<>:BC20==O ?@5?0@0BC, B01;5B:8 V?@8;-;NA <>6=0 ?@89<0B8  
=570;56=> 2V4 ?@89>1B> 4>, ?V4 G0A 01> ?VA;O W48.  
/: ?@028;>, :×<1V=>20=89 ?@5?0@0B 7 DV:A>20=>N 4>7>N =5 A;V4 70AB>A>2C20B8 4;O ?>G0B:>2>W  
B5@0?VW.  
5:×<5=4>20=> :=B@>;N20B8 ;01>@0B>@=V ?>:07=8:8 DC=:FVW =8@>..  
# E2>@8E ;VB=L>3> 2V:C @5:×<5=4CTBLAO 70AB>A>2C20B8 ?@5?0@0B C 4>7V 1 B01;5B:0 =0  
4>1C. V428I5==O 4>78 A;V4 ?@>2>48B8 7 >15@56=VABN.  
%2>@8< V7 =8@:>2>N =54>AB0B=VABN@5:×<5=4>20=> 70AB>A>2C20B8 ?@5?0@0B V?@8;-;NA 7  
<5=H8< 2< ;V78=>?@8;C.

>1VG=V @50:FVW.

:O 0<:>48?V=C E0@0:B5@=V B0:V ?>1VG=V @50:FVW:  
7 1>:C :@>2V B0 ;VW A8AB5<8: ;59:>F8B>?5=VO, B@><1>F8B>?5=VO;  
7 1>:C VW A8AB5<8: 0;5@3VG=V @50:FVW;  
<5B01>;VG=V ?>@CH5==O: 3V?5@3;V:5

?A8EVG=V?>@CH5==O: 157A>=O, 7N (2::NG0NG8 B@82>6=VABL), 45?@5AVO, A?;CB0=VABL  
A2V4><>ABV;  
7 1>:C =5@2>2>W A8AB5<8: A>=;82VABL, 70?0<>@>G5==O, 3>;>2=8< G8=>< =0  
>G0B:C ;V:C20==O), B@5<>@, 48A3527VO, 3V?5AB57VO, ?0@5AB57VO, 3V?5@B>=CA,  
?5@8D5@8G=0 =59@>?0BVO;  
7 1>:C >@30=V2 7>@C: ?>@CH5==O 7>@C (2::NG0NG8 48?;>?VN);  
7 1>:C >@30=V2 A;CEC B0 ;01V@8=BC: 472V= C 2CE0E;  
7 1>:C A5@F52>-AC48==>W A8AB5<8: 2V4GCBBO?>A8;5=>3> A5@F518BBO, V=D0@:B :0@40, 0@8B  
G:>2C B0EV:0@4VN B0<5@5EBV==O ?5@54A5@4L), ?@8?;828, 0@B5@V0;L=0 3V?>B5=7VO,  
20A:C;VB;  
7 1>:C 48E0;L=>W A8AB5<8: 48A?=>5, @8=VB, :0H5;L;  
7 1>:C B@02=>3> B@0:BC: 1V;L C 682>BV, =C4>B0,1;N20==O, 48A?5?AVO, ?>@CH5==O  
?5@8AB0;LB8:8 :8H5G=8:C (2::NG0NG8 70?>@ B0 4V0@5N), ACEVABL C @>BV, ?0=:@50B8B,  
30AB@8B, 3V?5@?;07VO OA5=;  
7 1>:C 35?0B>1V;V0@=>W A8AB5<8: 35?0B8B8, 6>2BO=8FO, ?V428I5==O @V2=O ?5GV=:>28E D5@  
<5=BV2 (I= =09G0ABVH5 0A>FVN20;>AO V7 E>;5AB07<<);  
7 1>:C H:V@8 B0 ?V4H:V@=>W B:0=8=8: 0;>?5FVO, ?C@?C@0, 7B>284V;5==O, A25@1V6,  
28A8?0==O, 5:70=B5<0, 0=3V>=52@>B8G=89 =01@O:, @<=0 5@8B5<0, :@>?82O=:0, 5:AD>;V0B82=89  
45@<0B8B, A8=4@<< !BV25=A0 6>=A>=0, =01@O: 2V=:5, D>B>GCB;82VABL;  
7 1>:C :VAB:>2>-< O7>2>W A8AB5<8: =01@O:0==O 3>;, 0@B@0;3VO, <8 <O7V2, 1V;L C A?8=V;  
7 1>:C A5G>284V;L=>W A8AB5<8: ?>@CH5==O A5G>284V;5==O, =V:BC@VO, ?V428I5=0 G0AB>B0  
A5G>28?CA:0==O;  
7 1>:C @5?@>4C:B82=>W A8AB5<8 B0 <>;>G=8E 70;>7: VB5=FVO, 3V=5:><0ABVO;  
7030;L=V ?>@CH5==O B0 AB0=8 C =01@O:, 1V;L 70 3@C4=8=>N, 0AB5=VO, 1V;L, =574C60==O, 2B>  
<;N20=VABL, 71V;LH5==O 01> 7<5=H5==O <0A8 BV;0.  
:O ;V78=>?@8;C E0@0:B5@=V B0:V ?>1VG=V @50:FVW:  
7 1>:C A8AB5<8 :@>2V: ?@83=VG5==O 4VO;L=>ABV :VAB:>2>3><>7:C, 0=5<1>F8B>?5=VO,  
;59:>?5=VO, =59B@>?5=VO, 35<>;VB8G=0 0=5?0BVO;  
7 1>:C A5@F52>-AC48==>W A8AB5<8: >@B>AB0B8G=V 5D5:B8 (2::NG0NG8 0@B5@V0;L=C  
3V?>B5=7VN); 2V4GCBBO A5@F518BBO, B0EV:0@4VO, V=D0@:B :0@40 01> F5@51@>20A:C;O@=89  
V=AC;LB, <>6;82> 2B>@8==89 G5@57 =04B5=7VN C ?0FVT=BV2 3@C?8 28A>:>3> @878:C, A8=4@<<  
59=>, <O7>2V A?07<8;  
7 1>:C 48E0;L=>W A8AB5<8: 1@>=EVB; @8=VB, 7048H:0; 48A?=>5, 0=3V>=52@>B8G=89 =01@O:;  
1@>=E>A?07<, 3;>A8B, A8=CA8B, 0;5@3VG=89 0;L25>;8B/5>78=>DV;L=0 ?=52<>=VO, V=D5:FVW  
25@E=VE 48E0;L=8E H;OEV2;  
7 1>:C B@02=>3> B@0:BC: 4V0@5O, 1;N20==O; =C4>B0, ACEVABL C @>BV; ?0=:@50B8B, 1V;L C  
682>BV V 48A?5?AVO; 7<5=H5==O 0?5B8BC, V=B5AB8=0;L=89 0=3V>=52@>B8G=89 =01@O:, 70?>@;  
7 1>:C 35?0B>1V;V0@=>W A8AB5<8: 35?0B8B (35?0B>F5;N;O@=89 01> E>;5AB0B8G=89), 6>2BO=8FO,  
>@CH5==O DC=:FVW ?5GV=:8, E>;5AB07;  
7 1>:C H:V@8 B0 ?V4H:V@=>W ;:VB:>28=8: 28A8?0==O =0 H:V@V, A25@1V6, 2V4GCBBO 60@C,  
3V?5@5B>A5=A81V;V70FVO 01> V=HV H:V@=V ?@>O28, :@>?82O=:0, 0;>?5FVO, ?A>@V07;  
?V428I5=5 ?>B>284V;5==O, ?5:A8G=89 5?V45@<0;L=89 =5:@>;V7, A8=4@<< !BV25=A0 6>=A>=0, ?>;V  
<>@D=0 5@8B5<0, ;VF8B><0 H:V@8. >2V4><;O;>AO ?@> :>78B82=V 0=B8=C:;50@=V 0=B8BV;0 (),  
?V428I5==O H284:>ABV >AV40==O 5@8B@>F8BV2 ((), 5>78=>DV;VN V ;59:>F8B>7, 28A8?0==O,  
A2VB;>GCB;82VABL 01> 28=8:=5==O V=H8E 45@<0B>;>3VG=8E ?@>O2V2;  
7 1>:C A5G>284V;L=>W A8AB5<8: ?>@CH5==O DC=:FVW =8@>;C@5AB@0 =8@>20  
=54>AB0B=VABL;>;V3C@VO/0=C@VO;  
7 1>:C @5?@>4C:B82=>W A8AB5<8 B0 <>;>G=8E 70;>7: VB5=FVO;3V=5:><0ABVO;  
7030;L=V @>7;048: ?>@CH5==O A=C, ?V428I5=0 2B><;N20=VABL, ?>@CH5==O @V2=>2038,  
457>@VT=B0FVO; A?;CB0=VABL A2V4><>ABV; A8<8 45?@5AVW, =5?@8B>=VABL, 7N,  
?0@5AB57VW, ?>@CH5==O A<0:>28E 2V4GCBV2;  
;01>@0B>@=V ?>:07=8:8: 3V?>3;V:53> 3>@<>=0, ?V428I5==O @V2=O A5G>28=8 C A8@>20BFV  
:@>2V, ?5GV=:>28E D5@<5=BV2, ?V428I5==O @V2=O 1V;V@C1V=C C A8@>20BFV :@>2V,  
3V?>=0B@VTB5W=C@VO. @8 ?@89>@V2 0=3V>B5=78=?5@5B2>@NNG>3> D5@<5=BC (\$) 2 >:@5  
<8E 28?04:0E A?>AB5@V30;8 03@0=C;>F8B>7; =5 <>6=0 28::NG8B8 @>728B>: 03@0=C;>F8B>7C V

?@8 70AB>AC20==V ;V78=>?@8;C. >:07=8: 35<>3;>1V=C V 35<0B>:@8BC <>65 45I> 7=878B8AO ?@8 B@820;>28=8 :@>2V <>65 A?>AB5@V30B8AO 7451V;LH>3> ?@8 =0O2=>ABV 70E2>@N20=L =8@>; ?@8 FC:@>2> @5=>20A:C;O@=V9 3V?5@B=>VW.

**5@54>7C20==O.**

!8<8: 28@065=5 @>7H8@5==O ?5@8D5@8G=8E AC48=, O:5 <>65 AC?@>2>46C20B8AO =04 V:C20==O: A8<0B8G=0 B5@0?VO. %2>@>1EV4=> =040B8 3>@87>=B0;L=5 ?>;>65==O =0 A?8=V, 74V9A=N20B8 :>=B@>;L @>1>B8 A5@FO, :>=B@>;N20B8 0@B5@V0;L=89 B8A: V ?>:07=8:8 >1;VVBV2 B0 >148, 0 B0:>6 ?@>25AB8 :>@5:FVN F8E ?>:07=8:V2 C @07V ?>B@518. @8 BO6:V9 0@B5@V0;L=V9 3V?>B5=7VW B@510 =040B8 E2>@>@87>=B0;L=5 ?>;>65==O 7 ?V4=OB8<8 :V=V2:0<8 V ?@87=0G8B8 2=CB@VH=L>25==5 22545==O @>7G8=V2 4;O V=DC7VW, 0;5 ?@8 =55D5:B82=>ABV FVTW B5@0?VW =5>1EV4=> ?@87=0G0B8 AC48=>72C6C20;L=V 70A>18 (207?>@5A>@8) ?5@8D5@8G=>W 4VW, O:I> =5 ?@>B8?>:070=> WE 70AB>AC20==O. ;O ?5@5@820==O 1;>:C20==O :0;LFVT28E :0=0;LFV2 <>6=0 22>48B8 2=CB@VH=L>25==> :0;LFVN 3;N:>=0B. # 72 O7:C 7 B8<, I> 2A<>:BC20==O 0<;>48?V=C T B@820;8<, <>65 1CB8 5D5:B82=8<820==O H;C=:0. V78=>?@8; 282>48BLAO 7 >@30=V7AC20==V 35<>4V0;V7C, 0;5 0<;>48?V= G5@57 25;8:C 740B=VABL 7T4=C20B8AL 7 1V;;0<8 ?;07<8 :@>2V =5 282>48BLAO ?@8 ?@>2545==V 35<>4V0;V7C.

**0AB>AC20==O 2 ?5@V>4 203VB=>ABV 01> 3>4C20==O 3@C44N.**

V:0@AL:89 70AV1 ?@>B8?>:070=> 70AB>A>2C20B8 203VB=8< 01> 6V=:0<, O:V ?;0=CNBL 70203VB=VB8. /:I> ?V4 G0A ;V:C20==O F8< 70A>1<> ?V4B25@46CTBLAO 203VB=VABL, 9>3> 70AB>AC20==O =5>1EV4=> =5309=> ?@8?8=8B8 V 70 @>B8?>:070=89 ?V4 G0A 3>4C20==O 3@C44N.

**VB8.**

@5?0@0B ?@>B8?>:070=89 (=5 70AB>A>2CNBL 4VBO<).

**A>1;82>ABV 70AB>AC20==O.**

0H5;L. /: ?@028;>, :0H5;L A?>AB5@V30TBLAO ?@8 ;V:C20==V V=3V1VB>@0<8 \$. V= ACE89, ?>ABV9=89 B0 7=8:0T ?VA;O 2V4 %V@C@3VG=5 2B@CG0==O, 0=5AB57VO: ?@8 >1H8@=8E >?5@0FVOE 01> ?@8 70AB>AC20==V 70A>1V2 4;O =0@:>7C, I> A?@8G8=NNBL 0@B5@V0;L=C 3V?>B5=7VN, ;V78=>?@8; 30;L@=5 282V;L=5==O 0=3V>B5=78=C-II. @B5@V0;L=C 3V?>B5=7VN, I> 28=8:0T 2 FL>2V4=> 4> >?8A0=>3> <5E0=V7 VB=V9 2V.: @8 70AB>AC20==V AB0=40@B=>W 4>78 ?@5?0@0BC 2 >AV1 ;VB=L>3> 2V:C A?>AB5@V302AO 28I89 @V25=L 4VNG8E @5G>28= C ?;072V, B>7C ?@5?0@0BC F8< E2>@8< B@510 2AB0=>2;N20B8 7 >15@56=VABN. V?5@:0;VT V428I5==O @V2=O :0;VN C A8@>20BFV :@>2V 1C;8 28O2;5=V C 45O:8E ?0FVT=V2, O:V >B@8@0<8 \$. > ?0FVT=V2 7 @878:>< @>728B:C 3V?5@:0;VTAOBLAO ;N48 7 ?>@CH5==O< DC=:FVW =8@>:, FC:@>28< 4V015B><, 3>AB@>N A5@F52>N =54>AB0B=VABN, 7=52>4=5==O<, <5B01>;VG=8< 0F84>7>< 01> AC?CB=V< 70AB>AC20==O< :0;V9715@V30NG8E 4VC@5B8:V2, ?@5?0@0BV2 :0;VN 01> 70;V :0;VN 01> 1C4L-O:>W V=H>W @5G>28=8, O:0 7C<>2;NT 71V;LH5==O @V2=O :0;VN C A8@>20BFV :@>2V. /:I> =5>1EV4=> 70AB>A>2C20B8 AC?CB=V 28I5707=0G5=V ;V:0@AL:V 70A>18 70A>18, @5:>5=4CTBLAO ?@>2>48B8 @53C;O@=89 :>=B@>;L @V2=O :0;VN 2 A8@>20BFV :@>2V. &C:@>289 4V015B. @8 V=AC;V=70;56=>2> 3V?5@:0;VT7?>G8=0B8 7 =87L:8E 4>7 B0 ?@>2>48B8 ?V4 =03;O4>< ;V:0@O. >@CH5==O DC=:FVW =8@>.: 525;8:5 B825 ?V428I5==O @V2=O A5G>28=8 2 :@>2V V :@50B8=V=C <>65 A?>AB5@V30B8AO C 28?04:C =54V03=>AB>20=8E AC48==8E 7A>1;82> ?@8 >4=>G0A=> 3V?>2>;56 C @07V 7<5=H5==O >1TW :@>2V ;V78=>?@8; <>65 ?@8725AB8 4> 7=865==O DC=:FVW =8@>: 7 =0ABC?>8< @>728B:>< 3>AB@>W =8@>:2>W =54>AB0B=>ABV, O:0 ?VA;O 2V4>@>B=>N. 5?0B>B>:A8G=VABL. C65 @V4:> 70AB>AC20==O V=3V1VB>@V2 \$ AC?@>2>46C20;>AO A8=4@>>>, O:89 ?>G8=02AO 7 E>;5AB0B8G=>W 6>2BO=8FV 01> 35?0B8BC V ?@872>482 4> <8BBT2>3> =5:@>7C ?5GV=:8 B0 V=>4V 4> ;5B0;L=>3> =0A;V4:C. 5E0=V7< FL>3> A8=4@>>89. 0FVT=B0<, C O:8E =0 D>=V ?@89>72820TBLAO 6>2BO=8FO, 01> 2V428E D5@<5=V2 =5>1EV4=> ?@8?8=8B8 ?@89><

?@5?0@0BC B0 725@=CB8AO 4> ;V:0@O. @8 C@065==V ?5GV=:8 G0A =0?V2282545==O 0<;>48?V=C 71V;LHCTBLAO. 0FVT=B0< 7 C@065==O< ?5GV=:8 ?@5?0@0BA;V4 70AB>A>2C20B8 7 >15@56=VABN, 7 V=482V4C0;L=>N >FV=>N :>@8ABV V @878:C B5@0?VW.

59B@>?5=VO/03@0=C;>F8B>7. 5 <>6=0 28;;NG0B8 ?>B5=FV9=89 @878: 28=8:=5==O 03@0=C;>F8B>7C, ?>B@V15=?5@V>48G=89 :>=B@>;L ?>:07=8:V2 0=0;V7C :@>2V. 0AB>AC20==O ?@5?0@0BC 2 C<>20E 4V0;V7C 7 <5<1@0=>N V7 ?>;V0:@8;=VB@8;C <>65 ?@8725AB8 4> 28=8:=5==O 0=0DV;0:B8G=>3> H>;C, B<5=4CTBLAO 01> V=H89 B8? <5<1@0=8 4;O 4V0;V7C, 01> ?@87=0G5==O 0=B83V?5@B5=782=>3> ?@5?0@0BC V=H>3> B8?C.

@B5@V0;L=0 3V?>B5=7VO. >65 A?>AB5@V30B8AO 7=0G=0 A8<0B8G=0 0@B5@V0;L=0 3V?>B5=7VO C E2>@8E 7 3V?>=0B@VT 3V?>2>;5<< 4VC@5B8:V2 01> ?@8 2B@0BV 25;8:>W :V;L:>ABV @V48=8 7 V=H>W ?@8G8=8 (V=B5=A82=5 ?>B>284V;5==O, B@820;5 1;N20==O, 4V0@5O). ?>O2>N 0@B5@V0;L=>W 3V?>B5=7VW E2>@>1EV4=> =040B8 3>@87=>=B0;L=5 ?>;>65==O, C @07V ?>B@518 22>48B8 @V48=C (V=DC7VO 0,9 % @>7G8=C =0B@VN E;>@84C). > ?>G0B:C :C@AC B5@0?VW =5>1EV4=> A:>@83C20B8 3V?>=0B@VT 3V?>2>;5G0B:C B5@0?VW =5>1EV4=> AB568B8 70 ?>:07=8:0 <8 0@B5@V0;L=>3> B8A:C.

@8 F5@51@>20A:C;O@=8E 70E2>@N20==OE B0 VH5@>1V A5@FO A;V4 2@0EC20B8 B5, I> 7=0G=5 7=865==O B8A:C :@>2V <>65 ?@8725AB8 4> <>7:>2>3> V=AC;LBC 01> V=D0@:BC :0@40. # 28?04:C 3> AB5=>7C B0/01> AB5=>7C 0>@B8, 01> >1AB@C:B82=>W 3V?5@B@>DVG=>W :0@4V> ?0BVW ?@5?0@0B =5>1EV4=> 70AB>A>2C20B8 7 >15@56=VABN.

0A>20 ?@8=0;56=VABL. =3V1VB>@8 \$ G0ABVH5 A?@8G8=ONBL @>728B>: 0=3V>=52@>B8G=>3> =01@O:C C ?0FVT=BV2 =53@>W4=>W @0A8 ?>@V2=O=> 7 ?0FVT=B0<8 V=H>W @0A8. /: V V=HV V=3V1VB>@8 \$, ?@5?0@0B <>65 1CB8 <5=H 5D5:B82=8< C 7=865==V 0@B5@V0;L=>3> B8A:C C ?0FVT=BV2 =53@>W4=>W @0A8 ?>@V2=O=> 7 >A>10<8 V=H8E @0A, <>6;82>, 2=0A;V4>: 28I>W G0AB>B8 >AV1 7 =87L:8< @V2=5< @5=V=C 2 ?>?C;OFVW ?0FVT=BV2 =53@>W4=>W @0A8 7 0@B5@V0;L=>N 3V?5@B5=7VTN.

=3V>=52@>B8G=89 =01@O: @8 ?@89>3> ?@5?0@0BC 3@C?8 V=3V1VB>@V2 \$, O: V ?@8 ?@89> ?@8;C, <>65 28=8:0B8 0=3V>=52@>B8G=89 =01@O: 7 =01@O:<> >1;8GGO, :V=FV2>:, 3C1, =043>@B0==8:0 V 3>@B0=V. # B0:>1EV4=> =5309=> ?5@5@20B8 ?@89>< ?@5?0@0BC V 70AB>AC20B8 =5>1EV4=V 70E>48 =52V4;:04=>W <548G=>W 4>?><>38 =3V>=52@>B8G=89 =01@O: 7 =01@O:<> 3>@B0=V <>65 ?@8725AB8 4> ;5B0;L=>3> =0A;V4:C. =B5AB8=0;L=89 0=3V>=52@>B8G=89 =01@O: 2V4 C ?0FVT=BV2, O:V >B@8@0<8 \$ . &V ?0FVT=B8 A:0@68;8AO =0 1V;L C 682>BV (7 01> 157 =C4>B8 B0 1;N20==O); 2 45O:8E 28?04:0E =5 A?>AB5@V30;8 ?5@54 F8< 0=3V=52@>B8G=>3> =01@O:C >1;8GGO, B0 @V25=L !-1 5AB5@078 1C2 2=>@AB8:0 0=3V>=52@>B8G=>3> =01@O:C ?>28==0 2;;NG0B8 :><>3@0DVN 01> #-4V03=>AB8:C, 01> >3;04 EV@C@30, A8<8 ?>28==V 7=8:=CB8 ?VA;O ?@8?8=5==O 70AB>AC20==O V=3V1VB>@V2 \$. =B5AB8=0;L=89 0=3V>=52@>B8G=89 =01@O: ?>28=5= @>73;040B8AO ?@8 4V03=>AB8FV C ?0FVT=BV2, O:V ?@89<0NBL V=3V1VB>@8 \$ B0 A:0@60BLAO =0 1V;L C 682>BV.

=0DV;0:B8G=V @50:FVW ?@8 ?@>2545==V 35<>4V0;V7C. @>2545==O 35<>4V0;V7C <5<1@0=>N 7 ?>;V0:@8;=VB@8;C (=0?@8;:04 AN 69) E2>@> >45@6CT V=3V1VB>@ \$, <>65 ?@8725AB8 4> 0=0DV;0:B8G=>3> H>;C, B>4=>G0A=>3> 70AB>AC20==O. !;V4 70AB>A>2C20B8 DV;LB@ V=H>3> B8?C 01> ?@87=0G0B8 0=B83V?5@B5=782=89 ?@5?0@0B V=H>W 3@C?8.

=0DV;0:B8G=V @50:FVW ?V4 G0A ?@>2545==O 0D5@57C ;V?>?@>B5W=V2 =87L:>W IV;L=>ABV. V4:> ?0FVT=B8, O:V >B@8@0<8 \$ ?@8 ?@>2545==V 0D5@57C ;V?>?@>B5W=V2 =87L:>W IV;L=>ABV, 2V47;82V 4;O 68BBO 0=0DV;0:B8G=V @50:FVW. &VTW =5157?5G=>W 4;O 68BBO @50:FVW<>6=0 C=8:=CB8 B828< ?5@5@820==O< :C@AC B5@0?VW V=3V1VB>@< 0=3V>B5=78=?5@5B2>@NNG>3> D5@<5=BC ?5@54 :>6=8< ?@>2545==O< 0D5@57C.

5A5=A81V;V70FVO 4> ?5@5B8=G0B>:@8;8E :><0E (146>;8. >B@CB0 >A8). # 45O:8E 28?04:0E, :>;8 E2>@89 ?@89<02 V=3V1VB>@ \$ V ?@>2>48;0AO 45A5=A81V;V70FVO 4> ?5@5B8=G0B>:@8;8E :><0E (>B@CB0 146>;8, >A8), 1C;0 2V4W 4;O 68BBO @50:FVW <>6=0 C=8:=CB8 B828< ?5@5@820==O< :C@AC B5@0?VW V=3V1VB>@<>□\$.

@8 ?;0=C20==V 203VB=>ABV 01> ?@8 2AB0=>2;5==V 203VB=>ABV ?@5?0@0B =5>1EV4=> 2V4<>30 H284H5.

@5?0@0B 7C, B>3> =5 A;V4 ?@87=0G0B8 ?0FVT=B0< 7 @V4:VA=8<8 A?04:>28<8 D>@<0<8 =5?5@5=>A8<>ABV 30;0:B>78, 45DVFB8>< ;0:B078 01> A8=4@<><> 3;N:>7>-30;0:B>7=>W <0;L01A>@1FVW.

40B=VABL 2?;820B8 =0 H284:VABL @50:FVW ?@8 :5@C20==V 02B>B@0=A?>@B< 01> @>I>BV 7  
V=H8<8 <5E0=V7<0<8.

@0E>2CNG8, I> 2 GCB;828E E2>@8E ?@8 70AB>AC20==V ?@5?0@0BC <>6CBL 28=8:=CB8 ?>1VG=V  
@50:FVW =0 G0A ?@89>@B=8<8 70A>10<8 B0 28:>=0==O V=H8E @>1VB, I> ?>B@51CNBL  
:>=F5=B@0FVW C2038.

70T<>4VO 7 V=H8<8 ;V:0@AL:8<8 70A>10<8 B0 V=HV 2848 270T<>4V9.

<;>48?V=.

=3V1VB>@8 CYP3A4: 4>A;V465==O C E2>@8E ;VB=L>3> 2V:C ?>:070;8, I> 48;BV075< V=3V1CT  
<5B01>;V7< 0<;>48?V=C, 9<>2V@=>, G5@57 CYP3A4 (71V;LHCTBLAO :>=F5=B@0FVO 2 ?;072V  
?@81;87=> =0 50% B0 7@>AB0T 5D5:B 0<;>48?V=C). >6;82VABL B>3>, I> 1V;LH ?>BC6=V  
V=3V1VB>@8 CYP3A4 (=0?@8::04 :5B>:>=07>;, VB@0:>=07>;, @8B>=02V@) <>6CBL 71V;LHC20B8  
:>=F5=B@0FVN 0<;>48?V=C 2 ?;072V 1V;LH>NN, =V6 48;BV075<, =5 <>65 1CB8 28::NG5=0. >B@V1=0  
>15@56=VABL ?@8 ACAC20==V 7 0<;>48?V=>

=4C:B>@8 CYP3A4: ACAC20==O 7 ?@>B8AC4<<=8<8 ?@5?0@0B0<8 (=0?@8::04 :0@10<075?V=,  
D5=>10@1VB0;, D5=VB>W=, D>AD5=VB>W=, ?@8=), @8D0<, ;V:0@AL:8<8 70A>10<8, O:V 1V9 (  
*Hypericum perforatum*), <>65 ?@8725AB8 4> 7<5=H5==O :>=F5=B@0FVW 0<;>48?V=C 2 ?;072V. V:0@N  
=5>1EV4=> 1CB8 >15@56=8< ?@8 ACAC20==V F8E ?@5?0@0BV2 B0 =03;040B8 70 ?0FVT=B>

=H5: O: <>=>B5@0?VO 70AB>AC20==O 0<;>48?V=C T 157?5G=8< A?V;L=> 7 BV0784=8<8 4VC@5B8:0  
<8, 15B0-1;>:0B>@0<8, V=3V1VB>@0<8 \$, =VB@0B0<8, AC1;V=320;L=8<8 ?@5?0@0B0<8  
=VB@>3;VF5@8=C, 483>:A8=><, 20@D0@8=><, 0B>@20AB0B8=><, A8;45=0DV;><, 0=B0F84=8<8  
;V:0@AL:8<8 70A>10<8 (0;N:A84, 3V4@>:A84 <03=VN, 48<5B8:>=), F8<5B848=><, =5AB5@>W4=8<8  
?@>B870?0;L=8<8 70A>10<8, 0=B81V>B8:0<8 V ?5@>@0;L=8<8 ?@>B84V015B8G=8<8 70A>10<8.  
!8;45=0DV; =5 2?;8202 =0 D0@<0:>:V=5B8:C 0<;>48?V=C, 0;5 ?@8 :><1V=>20=>AC20==V 0<;>48?V=C V  
A8;45=0DV;C :>65= 7 ?@5?0@0BV2 =570;56=> >48= 2V4 >4=>3> 28O282 3V?>B5=782=89 5D5:B.  
<;>48?V= VAB>B=> =5 2?;820T =0 D0@<0:>:V=5B8:C F8::>A?>@8=C, 0B>@20AB0B8=C.

V78=>?@8;.

VC@5B8:8. !: ?@028;>, ?@8 ACAC20==V 4VC@5B8:V2 B0 ;V78=>?@8;C 0=B83V?5@B5=782=89 5D5:B  
71V;LHCTBLAO. # ?0FVT=BV2, O:V ?@89<0NBL 4VC@5B8:8, >A>1;82> O:I> B5@0?VO 4VC@5B8:0<8  
1C;0 @>7?>G0B0 =5I>402=>, V=>4V 2V47=0G0TBLAO =043> B8A:C ?@8 ACAC20==V 7 ;V78=>?@8;>  
18 ?5@54 ?>G0B:>< B5@0?VW ?@5?0@0B>

0;V9715@V30NGV 4VC@5B8G=V 70A>18 01> 70AB>AC20==O ?@5?0@0BV2 :0;VN. VA;O  
70AB>AC20==O :0;V9715@V30NG8E 4VC@5B8:V2 @V25=L :0;VN ?@>4>26CT ?V428IC20B8AO,  
>A>1;82> C ?0FVT=BV2 7V 7=865=>N DC=:FVTN =8@>:. =3V1VB>@8 \$ A?>2V;L=NNBL 282545==O  
:0;VN, A?@8G8=5=5 4VC@5B8G=8<8 70A>10<8. 0;V9715@V30NGV 4VC@5B8:8 B8?C  
A?V@=>=>:0B>=C, B@80 0@84C, 0 B0:>6 ?@5?0@0B8 :0;VN B0 E0@G>2V 4>102:8, I>

V?>B5=782=V ;V:0@AL:V 70A>18. 5B0-04@5=>1;>:0B>@8, 0;LD0-04@5=>1;>:0B>@8, 0=B03>=VAB8  
:0;LNVN B0 V=HV ?>B5=FNBNBL 3V?>B5=782=89 5D5:B ;V78=>?@8;C.

5AB5@>W4=V ?@>B870?0;L=V 70A>18 () (C B>20 :8A;>B0 ≥ 3 3 =0 4>1C). >23>B@820;5  
70AB>AC20==O <>65 ?>A;018B8 3V?>B5=782=89 5D5:B ;V78=>?@8;C. B0 V=3V1VB>@8 \$ 048B82=>  
2?;820NBL =0 71V;LH5==O 220BFV :@>2V, I> <>65 ?@8725AB8 4> ?>3V@H5==O DC=:FVW =8@>:.  
>:@5<8E 28?04:0E <>65 28=8:=CB8 3>AB@0 =8@>:20 =54>AB0B=VABL, >A>1;82> C ?0FVT=BV2 7  
453V4@0B0FVTN, E2>@8E ;VB=L>3> 2V:C.

@5?0@0B8 ;VBN. @8 ?@89>@0<8 \$ 2V41C20TBLAO >1>@>B=5 71V;LH5==O :>=F5=B@0FVW  
;VBN C A8@>20BFV :@>2V,?V428I5==O @878:C 9>3> ?>1VG=>W B0 B>:A8G=>W 4VW, >A>1;82>  
?@8 >4=>G0A=><1V=0FVO ;VBN B0 ;V78=>?@8;C 7030;>< =5 @5:><5=4CTBLAO.

>;>B>. VB@8B>W4=V @50:FVW (A8<8 207>48;0B0FVW, 2;;NG0NG8 ?@8?;828, 70?0<>@>G5==O,  
0@B5@V0;L=C 3V?>B5=7VN, O:0 <>65 1CB8 B06:>N) <>6CBL 28=8:0B8 G0ABVH5 ?@8 >4=>G0A=>  
AC20==V V=3V1VB>@V2 \$ B0 ?@5?0@0BV2 V=T:FV9=>3> 7>;>B0, =0?@8::04 =0B@VN 0C@>BV>  
<0;OBC.

!8. >6CBL ?>A;01;OB8 3V?>B5=782=89 5D5:B V=3V1VB>@V2 \$.

"@8F8.;VG=V 0=B845?@5A0=B8/0=B8?A8E>B8G=V 035=B8/0=5AB5B8:8 ?@8 >4=>G0A=>AC20==V 7  
;V78=>?@8;>< ?>A8;NNBL 3V?>B5=782=89 5D5:B.

- =B84V015B8G=V 70A>18. =3V1VB>@8 \$ A?@><>6=V ?V428IC20B8 FC:@>7=86CNG89 5D5:B  
0=B84V015B8G=8E 70A>1V2, >A>1;82> ?@>BO3>< ?5@H>3> B86=O ACW B5@0?VW B0 C ?0FVT=BV2  
7 =8@:>2>N =54>AB0B=VABN.
- 0A>18, I> ?@83=VGCNBL DC=:FVN :VAB:>2>3> <>7:C. 07>< V7 ;V78=>?@8;>< ?V428ICNBL @878:  
@>728B:C =59B@>?5=VW B0/01> 03@0=C;>F8B>7C. ;>?C@8=>:, F8B>AB0B8:8, V45?@5A0=B8,  
:>@B8:>AB5@>W48, ?@>:0W=04=>G0A=>AC20==V 7 ;V78=>?@8;>< <>6CBL ?@8725AB8 4> 7  
<5=H5==O :V;L:>ABV ;59:>F8BV2 C :@>2V, @>728B:C ;59:>?5=VW.
- □AB@>35=8. 0 @0EC=>: 70B@8@30=V74=>G0A=>?@8;>< <>6CBL 7<5=H8B8 9>3>  
0=B83V?5@B5=782=C 5D5:B82=VABL.
- V78=>?@8; A;V4 7 >15@56=VABN ?@87=0G0B8 E2>@8< V7 3>AB@8< V=D0@:B>< :0@40 ?@>BO3><  
6-12 3>48= ?VA;O 22545==O AB@5?B>:V=078 (@878: @>728B:C 0@B5@V0;L=>W 3V?>B5=7VW).
- V78=>?@8; ?>A8;NT ?@>O28 0;:>3>;L=>W V=B>:A8:0FVW. 0@:>B8G=V B0 A=>4V9=V 70A>18,  
0=5AB5B8:8, 0;:>3>;L=V =0?>W C ?>T4=0==V 7 ;V78=>?@8;>< A?@8G8=ONBL ?>A8;5==O  
3V?>B5=782=>3> 5D5:BC.

**\$0@<0:>3VG=V 2;0AB82>ABV.**

\$0@<0:>48=0.

<;>48?V= 1;>:0B>@ :0;LFVT28E :0=0;V2 3@C?8 483V4@>?V@848=C, O:89 V=3V1CT B@0=A<5  
<1@0==5 ?5@5=5A5==O V>=V2 :0;LFVN C ;;VB8=8 :0@40 B0 AC48=. 5E0=V7< 0=B83V?5@B5=782=>V  
4VW ?@5?0@0BC >1C<>2;5=89 @>7A;01;N20;L=8< 5D5:B>< =0 3;04:V <O78 AC48=. ">G=89 <5E0=V7<  
4VW 0<;>48?V=C ?@8 AB5=>:0@4VW =5 2AB0=>2;5=>, 0;5 2V4<>, I> 0<;>48?V= 7<5=HCT VH5:0@40.  
<;>48?V= @>7H8@NT ?5@8D5@8G=V 0@B5@V>;8 V 7=86CT 7030;L=89 ?5@8D5@8G=89 >?V@.  
A:V;L:8 G0AB>B0 A5@F528E A:>@>G5=L ?@0:B8G=> =5 77<5=H5==O =020=B065==O =0 A5@F5  
?@872>48BL 4> 7=865==O ?>B@518 C :8A=V. 5E0=V7< 4VW 0<;>48?V=C B0:>6 2;;NG0T 2 A515  
@>7H8@5==O 3>;>2=8E :>@>=0@=8E 0@B5@V9 B0 :>@>=0@=8E 0@B5@V>; O: C =57 VH520=8E  
7>=0E :0@40.

V78=>?@8; 2V4=>A8BLAO 4> V=3V1VB>@V2 0=3V>B5=78=-:>=25@BCNG>3> D5@<5=BC, 7=86CT  
@V25=L 0=3V>B5=78=C II V 0;L4>AB5@>=C C ?;07B0 A5@F528E A:>@>G5=L ?@0:B8G=> =5 7289  
:@>2>BV: <>65 ?>A8;N20B8AO.

D5:B82=VABL ?@5?0@0BC 715@V30TBLAO ?@8 B@820;>AC20==V. !8=4@< 2V4

\$0@<0:>:V=5B8:0.

VA;O 70AB>AC20==O 2=CB@VH=L> 0<;>48?V= ?>2V;L=> B0 <0965 ?>2=VABN 01A>@1CTBLAO  
7B@02=>3> B@0:BC =570;56=> 2V4 ?@89>2V A?>AB5@V30TBLAO G5@57 6-12 3>48=.  
V>4>ABC?>VABL 0<;>48?V=C AB0=>28BL 60-65 %. 1 T< @>7?>4V;C ?@5?0@0BC AB0=>28BL  
?@81;87=> 20 ;/:3. 97,5 % 0<;>48?V=C 72O7CNBLAO 7 1V;:0<8 ?;07<8 :@>2V. <;>48?V= 4>1@5 ?@>=8:0T  
2>@30=8 B0 B:0=8=8 >@30=V7=F5=B@0FVO 0<;>48?V=C C ?;072V 4>AO30TBLAO G5@57 7-8 4V1  
157?5@5@2=>3> 70AB>AC20==O ?@5?0@0BC. <;>48?V= 1V>B@0=AD>@ =50:B82=8E <5B01>;VBV2.  
<;>48?V= 282>48BLAO 7 >@30=V778 C=57 60 % C283;O4V =50:B82=8E <5B01>;VBV2. 82545==O  
<5B01>;VBV2 0<;>48?V=C T 42>D07=8<, ?5@V>4 =0?V2282545==O C A5@54=L>  
AB0=>28BL

35-50 3>48=.

\$0@<0:>:V=5B8:0 2 >A>1;828E ;;V=VG=8E 28?04:0E. @8 ?>@CH5==V DC=:FVW ?5GV=:8 B5@  
@8 ?5@>@0;L=>AC20==V ;V78=>?@8; 4>1@5 2A<>:BCTBLAO C B@02=> 2V4 26820==O W6V. 5  
72O7CTBLAO 7 V=H8<8 1V;:0<8 A8@>20B:8 :@>2V, :@V< 0=3V>B5=78=-:>=25@BCNG>3> D5@<5=BC.  
=B83V?5@B5=782=89 5D5:B A?>AB5@V30TBLAO ?@81;87=> G5@57 1 3>48=C ?VA;O ?@89>, 4>AO30T  
<0:A848= V 715@V30TBLAO ?@>BO3>< 24 3>48=8. "@820;VABL 5D5:BC 70;568BL B0:>6 2V4  
70AB>A>20=>W 4>78.  
>@30=V7

**\$0@<0F52B8G=V E0@0:B5@8AB8:8.**

A=>2=V DV78:>-EVABV: ?>A:V, :@C3;V B01;5B:8 1V;>3> :>;L>@C 7V A:>H5=8:8 :@00<8 V @8A:>N 7  
>4=>3> 1>:C.

"5@ABV. 3 @>:8.

#<>28 715@V30==O.  
15@V30B8 ?@8 B5ABC?=>

#?0:>2:0.  
> 10 B01;5B>: C 1;VAB5@V; ?> 3 1;VAB5@8 C :>@>1FV 7 :0@B>=C.

0B53>@VO 2V4?CA:C. 0 @5F5?B>

8@>1=8.:  
V:@> 01A V

VAF57=0E>465==O.  
92, !V?:>B, =40AB@80; >AC@ 635126, "0