Atlantic Richfield Company

7UHDWPHQW└ 6\VWHP└ 2SHUDWLRQ└ 6XPPDU\

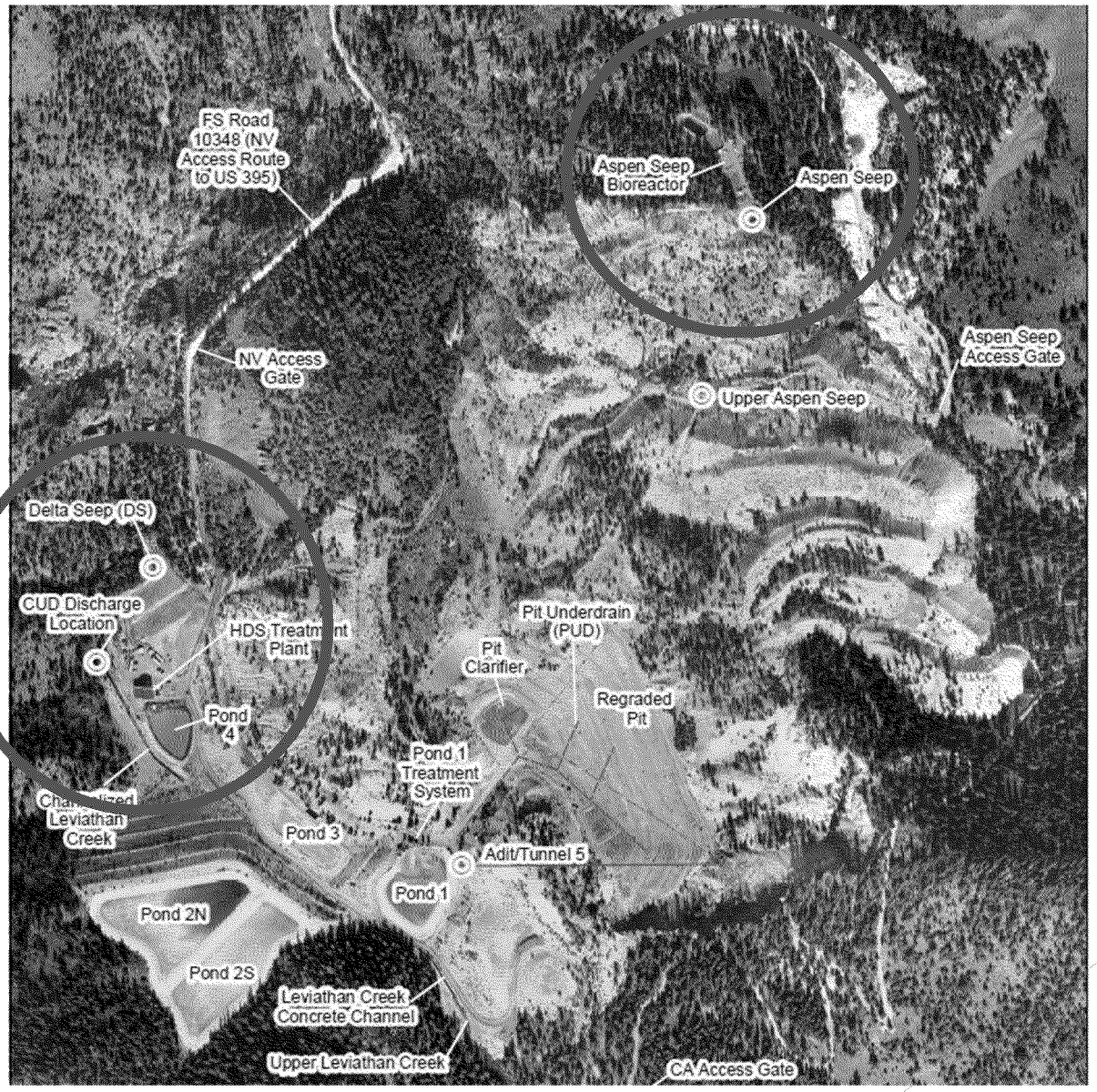
Draft

$QQXDO└ 7HFKQLFDO└ 6XPPDU\└ 0HHWLQJ

/HYLDWKDQ└ 0LQH└ 6LWH

-DQXDU\└ ⊥ ├ ☼ └ ⊥ ‼ ¶ →

/HYLDWKDQ L 0LQH L 6LWH



)LHOG└ 2SHUDWLQJ└ 6HDVRQ

3URYLGH└ VDIH└ DFFHVV└ DV└ VRRQ└ DV└ SRVVLEOH└

x $SULO└ ┤ ⌠ └ ┴ ‼ ¶ ├ └ ≤ 1RYHPEHU└ ¶ ⌠ └ ┴ ‼ ¶ ├

á 6LWH└ $FFHVV└ LQFOXGLQJ└ 0RELOL]DWLRQ└ DQG└ :LQWHUL]DWLRQ

+'6↕ 3RQG└ ┤

x 0D\└ ¶ ├ ⌠ └ ┴ ‼ ¶ ├ └ ≤ 2FWREHU└ ¶ ┬ ⌠ └ ┴ ‼ ¶ ├

á &DSXXUH└ DW└ &KDQQHO└ 8QGHUGUDLQ└ ♂ &8'□ └ DQG└ 'HOWD└ 6HHS└ ♂

$6%

x 2SHUDWHG└ DOO└ ┴ ‼ ¶ ├

Draft

+'6└ 7UHDWPHQW└ 6\VWHP└ ≤ %URXQG

+'6└ 6\VWHP└ &RPSRQHQWV

x &DSWXUH└ DQG└ &RQYH\DQFH

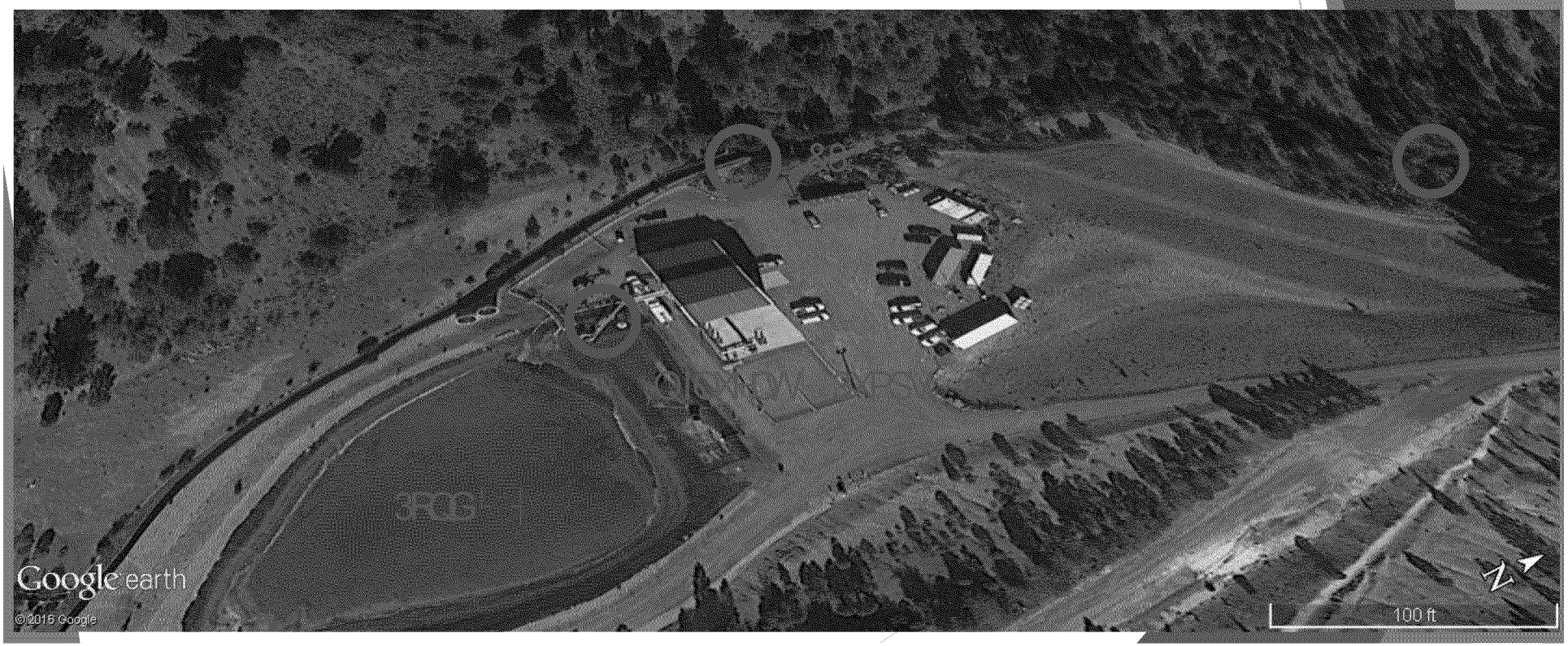
x ┴└ FDSWXUH└ ORFDWLRQV

á &KDQQHO└ 8QGHUGUDLQ♂ &8'□

á 'HOWD└ 6HHS└ ♂ '6□

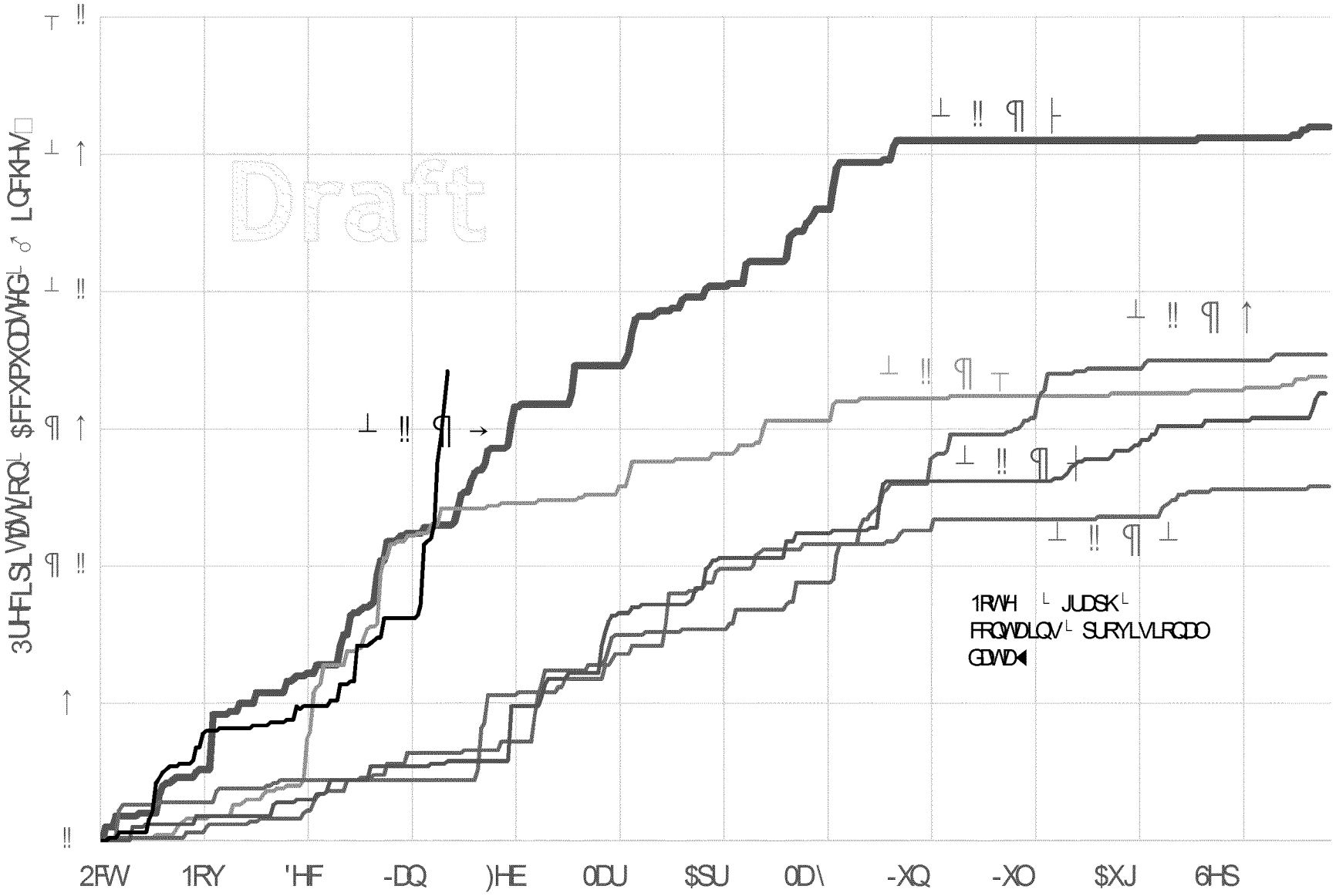
x 3RQG└ ┤└ ♂ 3UH├ WUHDWPHQW└ :DWHU└ 6WF

x ,QIOXHQW└ 3XPSV



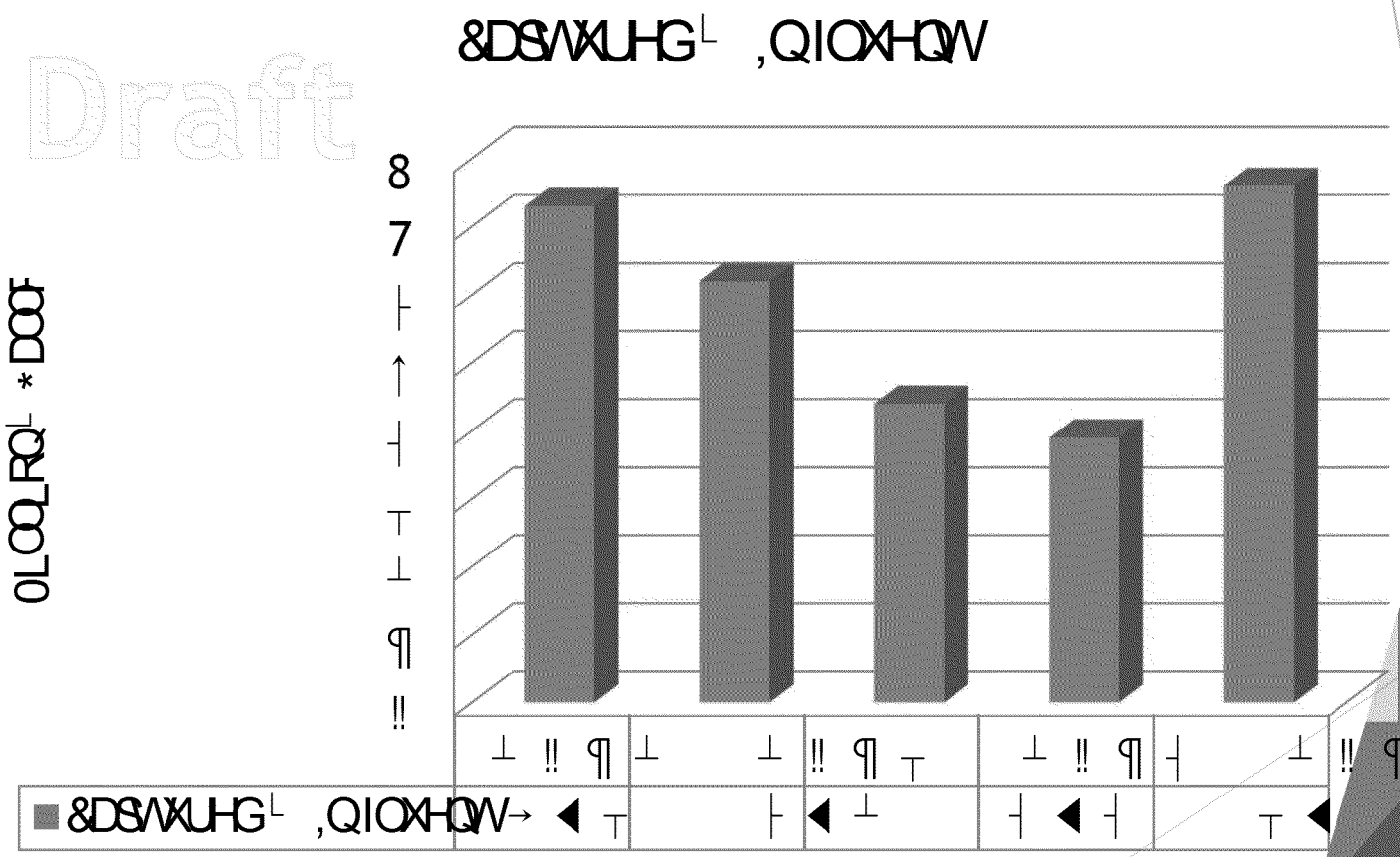
Draft

6127(/└ ┼ 0RQLWRU└ 3DVV

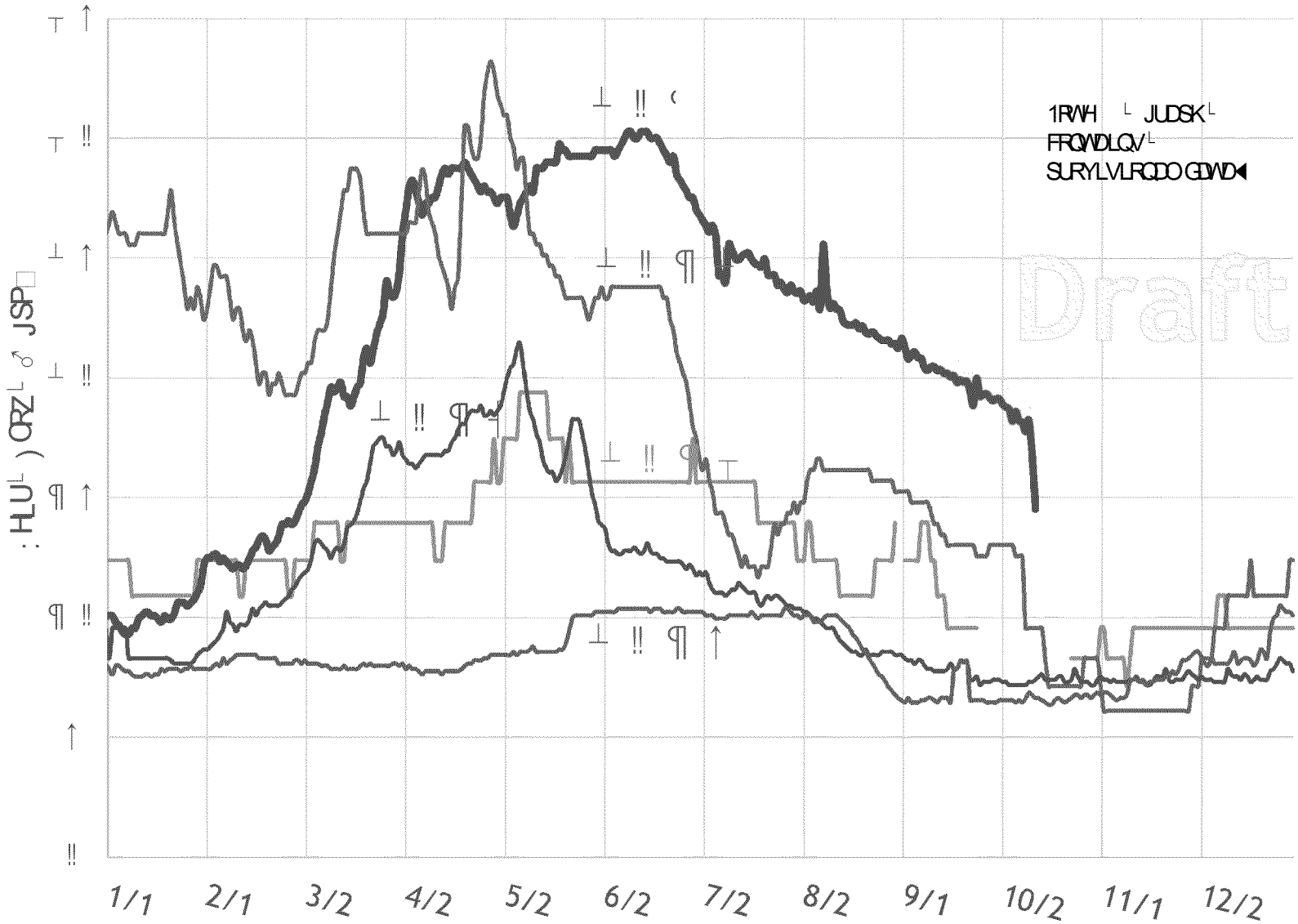


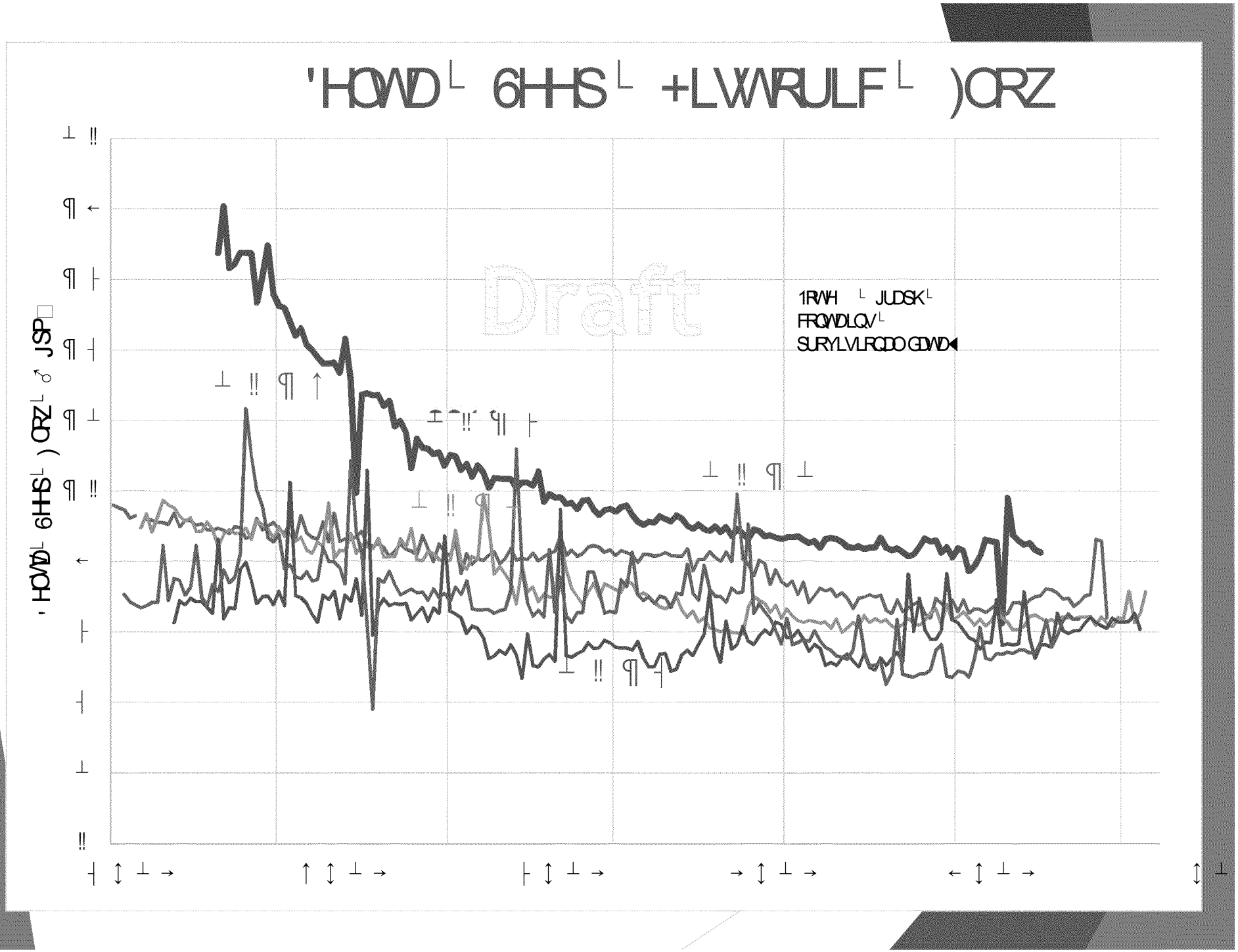
+'6 7UHDWPHQW 6\VWHP

x $OO GLVFKDUJH WR /HYLDWKDQ &UHHN PHW GLVFKDUJH FU



&KDQQHO 8QGHUGUDLQ +LVWRULF)ORZ




'HOWD└ 6HHS└ +LWWRULF└)ORZ
Draft
1RWH └ JUDSK└
FRQWDLQV└
SURYLVLRQDO GDWD◄
' HOWD└ 6HHS└) ORZ└ ♂ JSP□

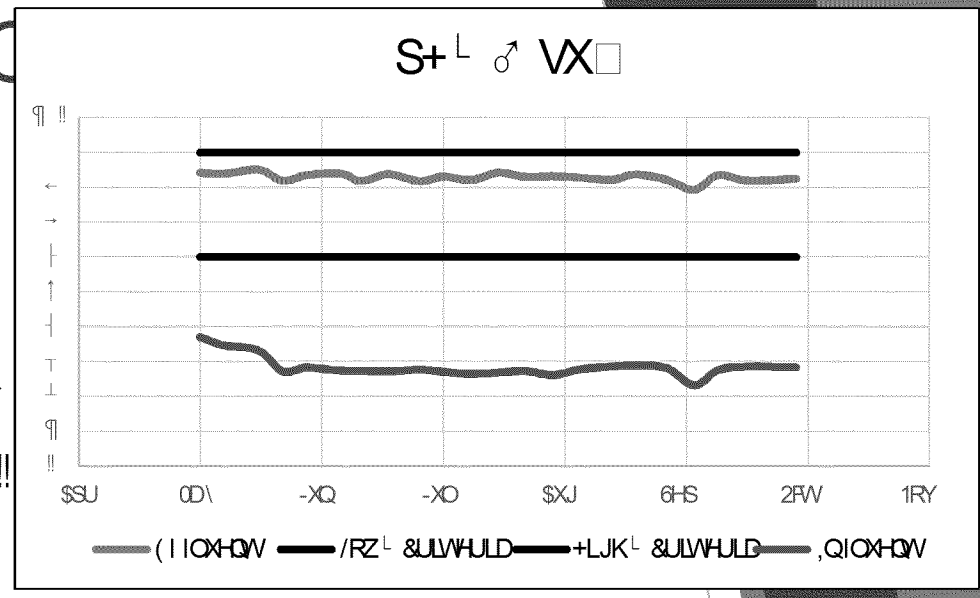
+'6└ 7UHDWPHQW└ 6\VWHP└ ⊥ !! ¶ ├ └ 2SWLPL]DWLRQ

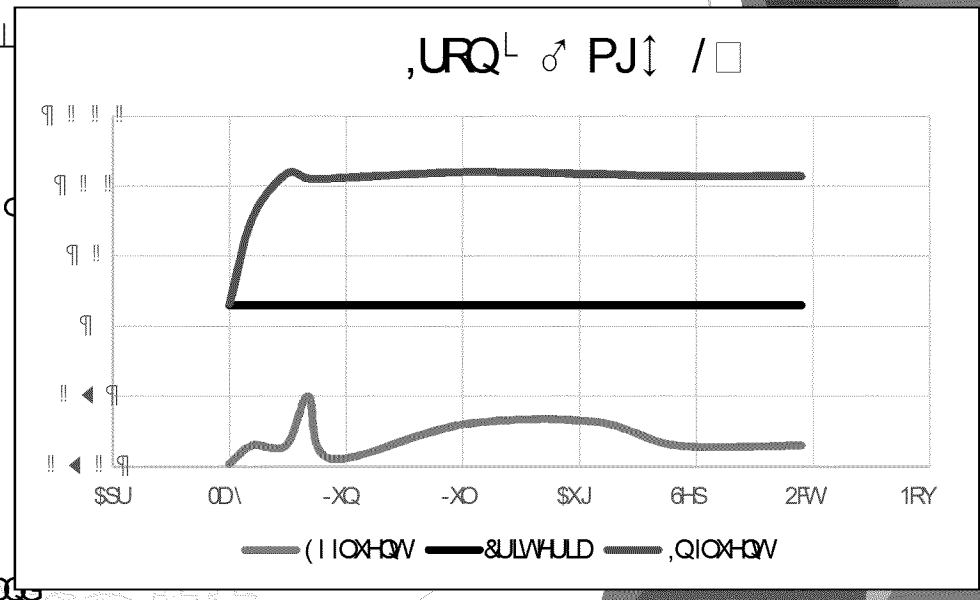
- ,QWDOOHG└ LQWHOOLJHQW└ 9)'V└ DW└ WKH└ &8'☼ └ '6☼ └ DQG└ '67└ FRQQHFWLRQ└ WDQN FRQWURO└ SDQHOV
- ,QWDOOHG└ WDLQOHVV└ WWHO└ SLSH└ DW└ &8'☼ └ '6☼ └ DQG└ '67└ FRQQHFWLRQ└ WDQN
- 3UHSDUHG└ IRU└ WUHDWPHQW└ RI└ ZDWHU└ IURP└ XSSHU└ SRQGV

Draft

⊥ ‼ ¶ ⊢ └ +'6└ (IIO

$QDO\WH	0D[	05$0 &ULWHULD	
$OXPLQXP	¶ ◀ ⊢	⊣	
$UVHQLF	‼ ◀ ‼ ‼	⊥ ↑	‼ ◀ ⊤
&DGPLXP	‼ ◀ ‼ ‼	¶ ‼ ‼	◀ ‼ ‼
&KURPLXP	└ ‼ ◀ ‼	‼ ⊥ ‼	‼ ◀
&RSSHU	‼ ◀ ‼ ‼	⊥ ⊤ ‼	◀ ‼ ⊥
,URQ	‼ ◀ ‼ ¶	⊤ -	⊥
/HDG	└ ‼ ◀	‼ ‼ ¶ ‼	‼ ◀
1LFNHO	‼ ◀ ‼	⊤ ‼	◀ ← ⊣
=LQF	‼ ◀ ‼ ‼	⊢ → -	‼ ◀ ⊥





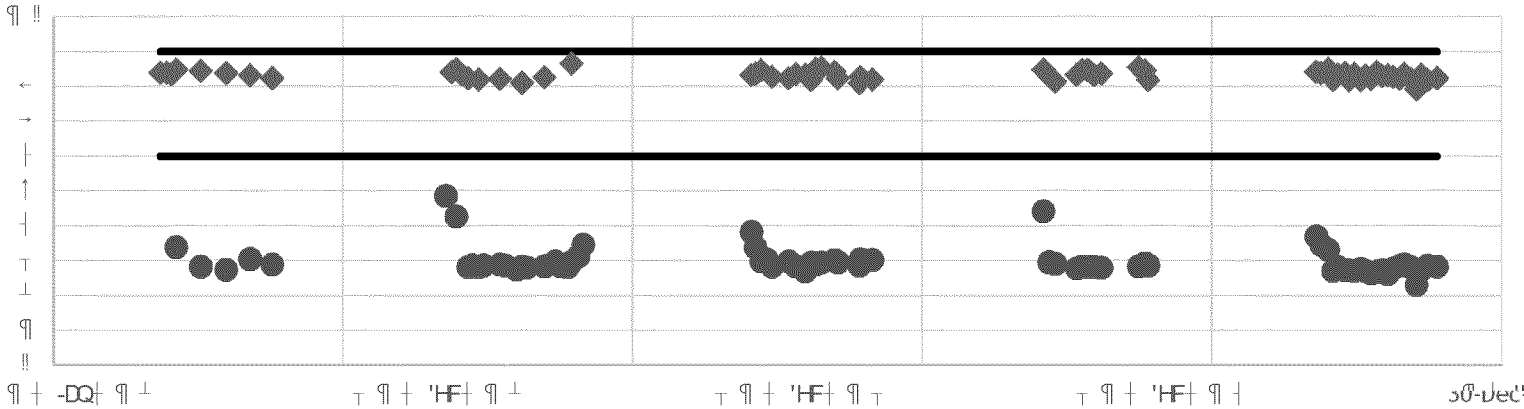
1RWH └ &ULWHULD└ LV└ 'LVFKDUJH└ 'DLO\└
*UDE◀ └ $OO└ DQDO\WHV└ DUH└ GLVVROYHG└ DQG
LQ└ PJ↕ /└ H[FHSW└ S+☼ └ ZKLFK└ LV└ VX

Draft

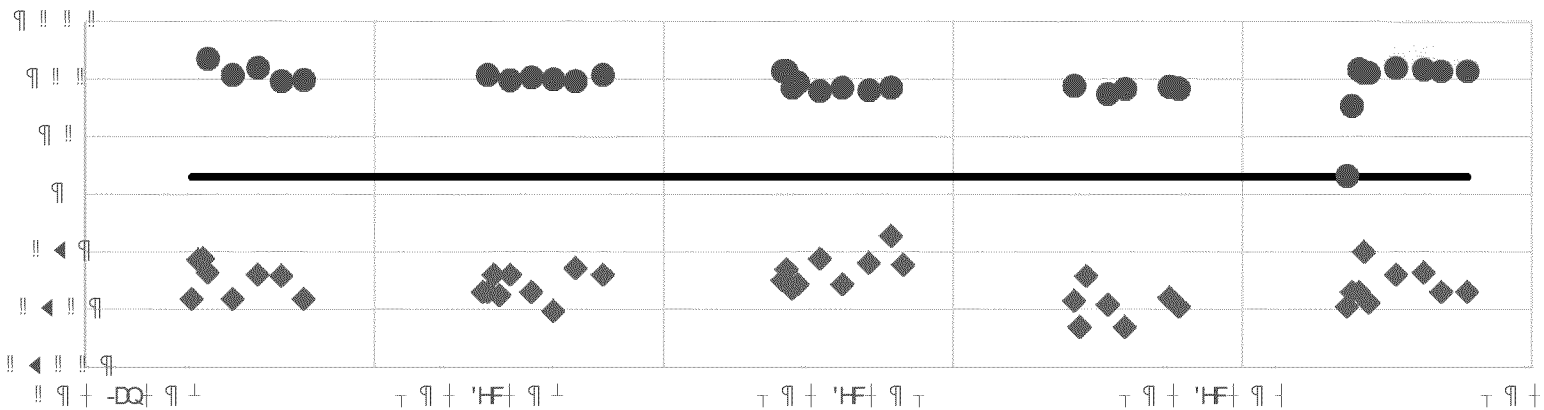
+'6└ 7UHDWPHQW└ 6\VWHP└

S+└ DQG└ ,URQ└ ≤ ↑ └ \HDUV

S+└ ♂ VX□



,URQ└ ♂ PJ↕ /□



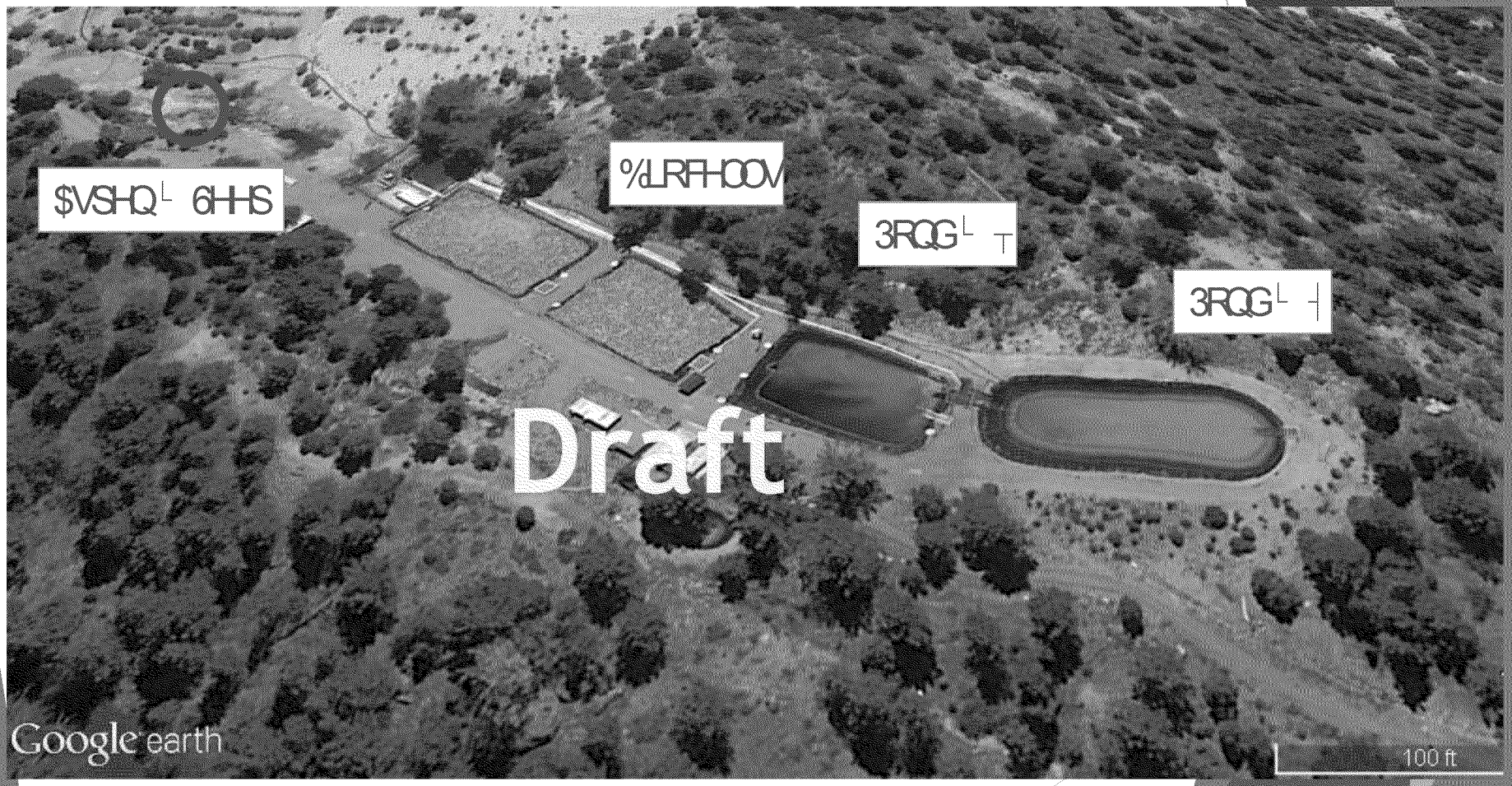
Draft

+'6└ (IIOXHQW└ 0HWDO└ 5HGXF

+'6└ 0HWDO└ 5HPRYDO						
<HDU	0HWDO└ 5HPRYDO└ ♂ ◘ □				&RPSOLDQW└ (IIOXHQW└ Samples	
	$O	&X	)H	1L	=Q	
⊥ ‼ ¶ ⊤	←	◀ ┤ ¶	→ ⊥ ◀ ‼	¶	◀ →	8/8 ◀ ↑ ←
⊥ ‼ ¶ ┬	←	◀ ┬ ├	← → ◀ ‼	├	◀ →	← ◀ ┤ ↑ ↑ ◀ ↑ ┤
⊥ ‼ ¶ ┤	←	◀ ← ⊥	‼ ◀ →	⊥	◀ ⊥	← ◀ ┬ ¶ ┬ ◀ ├ ↑
⊥ ‼ ¶ ↑	←	◀ ┤	← ├ ◀ →	├	◀ ←	← ◀ ┬ ┤ ┬ ◀ ⊥ →
⊥ ‼ ¶ ├	→	◀ ↑	◀ ↑	→	◀ →	← ◀ ├ ├ ← ◀ ┤ ←

Draft

$6%L7UHDWPHQW 6\VWHP



$6%└ 7UHDWPHQW└ 6\VWHP└ ≤ 2SH RQV

- <HDU┼ URXQG└ 2SHUDWLRQ
- /$6└ 2SHUDWLRQV└ 2FWREHU└ ¶ └ ≤ 0D\└ ┬ ¶
  - á0RQWKO\└ YLVLWV└ IRU└ V\VWHP└ 2 0☼ └ FROG└ ZHDWKHU└ V\VWHP└ XSVHWV☼ └ DQG└ FRPSOLDQFH└ VDPSOLQJ└
  - á6SHFLDOL]HG└ WUDLQLQJ└ IRU└ :LQWHU└ $FFHVV
  - á'HWDLOHG└ SODQQLQJ☼ └ SUHSDUDWLRQ☼ └ DQG└ FRRUGLQDWLRQ└
- $5:6└ 2SHUDWLRQV└ └ -XQH└ ¶ └ ≤ 6HSWHPEHU└ ┬ ‼
  - á3HUIRUPHG└ V\VWHP└ 2 0└ DQG└ LPSURYHPHQWV└
  - á0RQWKO\└ FRPSOLDQFH└ VDPSOLQJ
  - á6ROLGV└ PDQDJHPHQW└

Draft

$6%└ ,QIOXHQW└ +LVWRULF└)ORZ└ 5DWHV
1RWH └ JUDSK└
FRQWDLQV└
SURYLVLRQDO GDWD◄
Draft
$6%└ : HLU└) ORZ└ ♂ JSP└

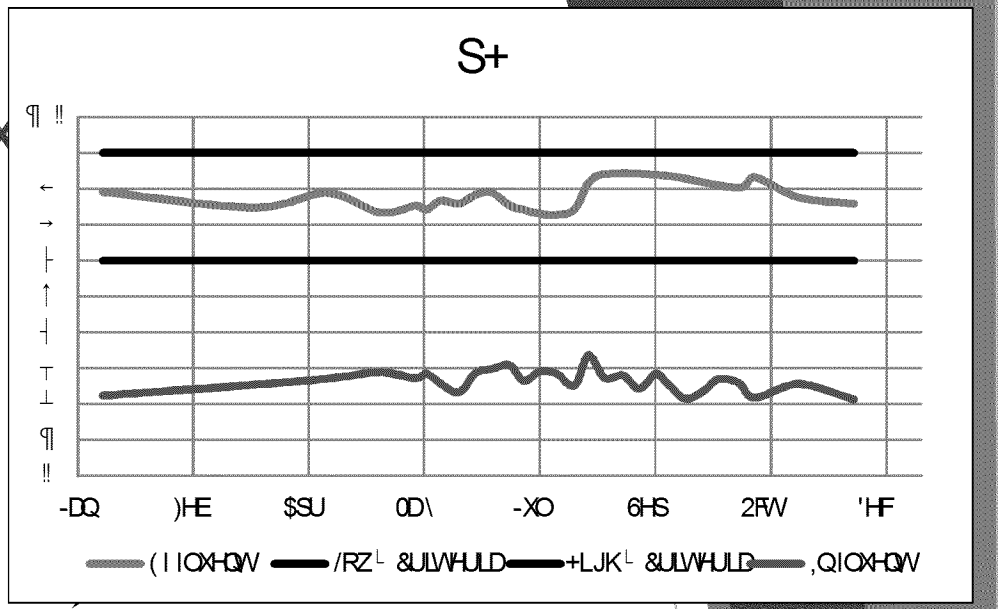
$6%└ 7UHDWPHQW└ 6\VWHP
⊥ !! ¶ ├ └ 2SWLPL]DWLRQ

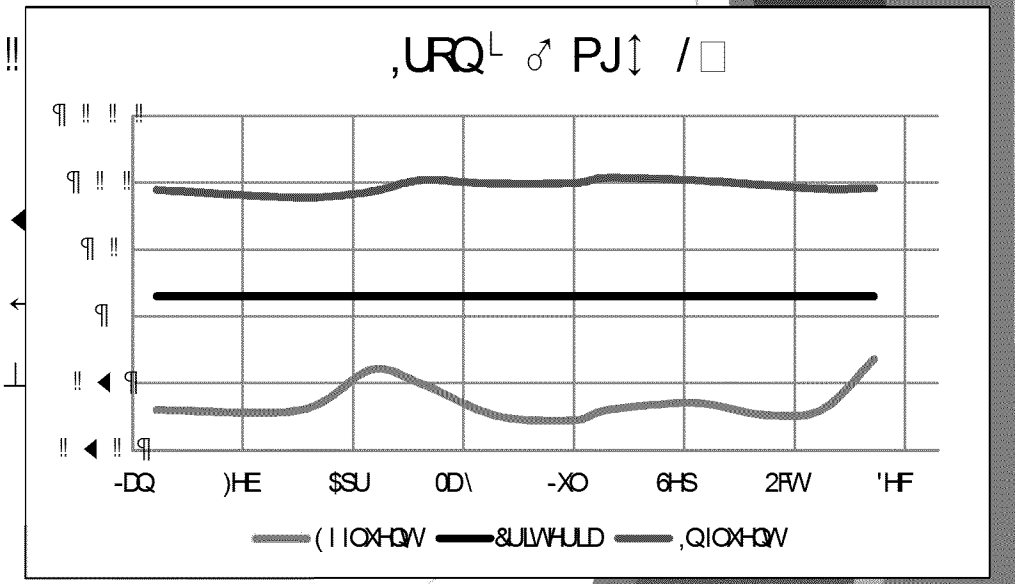
- ,QVWDOOHG└ QHZ└ K\GURJHQ└ GHWHFWRU└ LQ└ WKH└ EDWWHU URRP
- 8SGDWHG└ SURJUDPPLQJ└ IRU HWKDQRO└ EDWFK└ GRVLQJ└ IR CRZ└ ICRZ└ VLWXDWLRQV
- 0DLQWDLQHG└ D└ SRUWLRQ└ R $VSHQ└ 6HHS└ &RORHFWLRQ└

Draft

⊥ ‼ ¶ ⊢ └ $6%└ (IIOX

$QDO\WH	0D[	05$0 &ULWHULD	
$OXPLQXP	‼ ◀ ⊣ ↑	‼ ⊣	
$UVHQLF	‼ ◀ ‼ ‼	¶ ⊣	‼ ◀
&DGPLXP	└ ‼ ◀ ‼	‼ ↑ ‼	‼ ◀
&KURPLXP	└ ‼ ◀ ‼	¶ ‼	‼ ◀
&RSSHU	‼ ◀ ‼ ‼	⊤ - ‼	◀ ‼
,URQ	‼ ◀ ⊥	⊤ ‼	⊥
/HDG	└ ‼ ◀	‼ ‼ ↑ ‼	‼ ◀
1LFNHO	‼ ◀ ‼	→ ¶ ‼	◀ ←
=LQF	‼ ◀ ‼	⊤ ¶ ‼	◀ ⊥





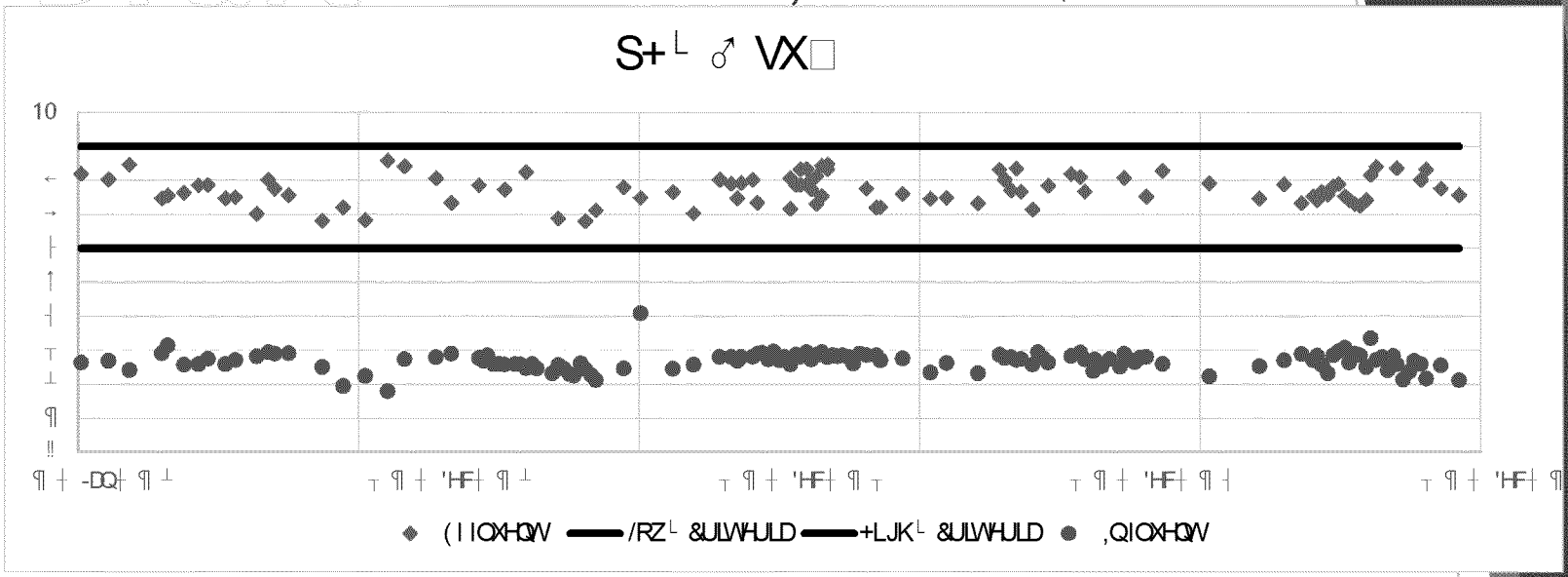
1RWH └ &ULWHULD└ LV└ 'LVFKDU
*UDE◀ └ $OO└ DQDO\WHV└ DUH└ Gand
LQ└ PJ↕ /└ H[FHSW└ S+☼ └ ZKLFI
\WDQGDUG└ XQLW└ ♂ VX□

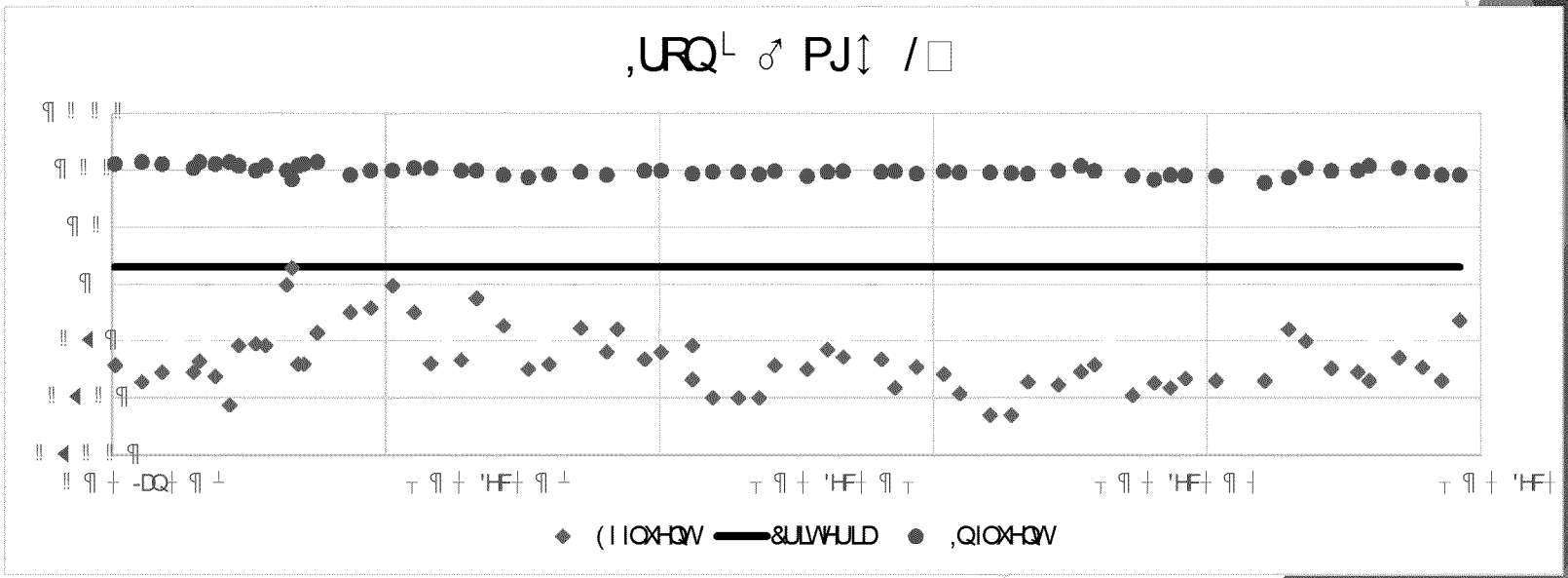
Draft

Draft

/56%L 7UHDWPHQWL 6\VWHP

S+L DQGL ,URQL ≤ ↑ L \HDUV

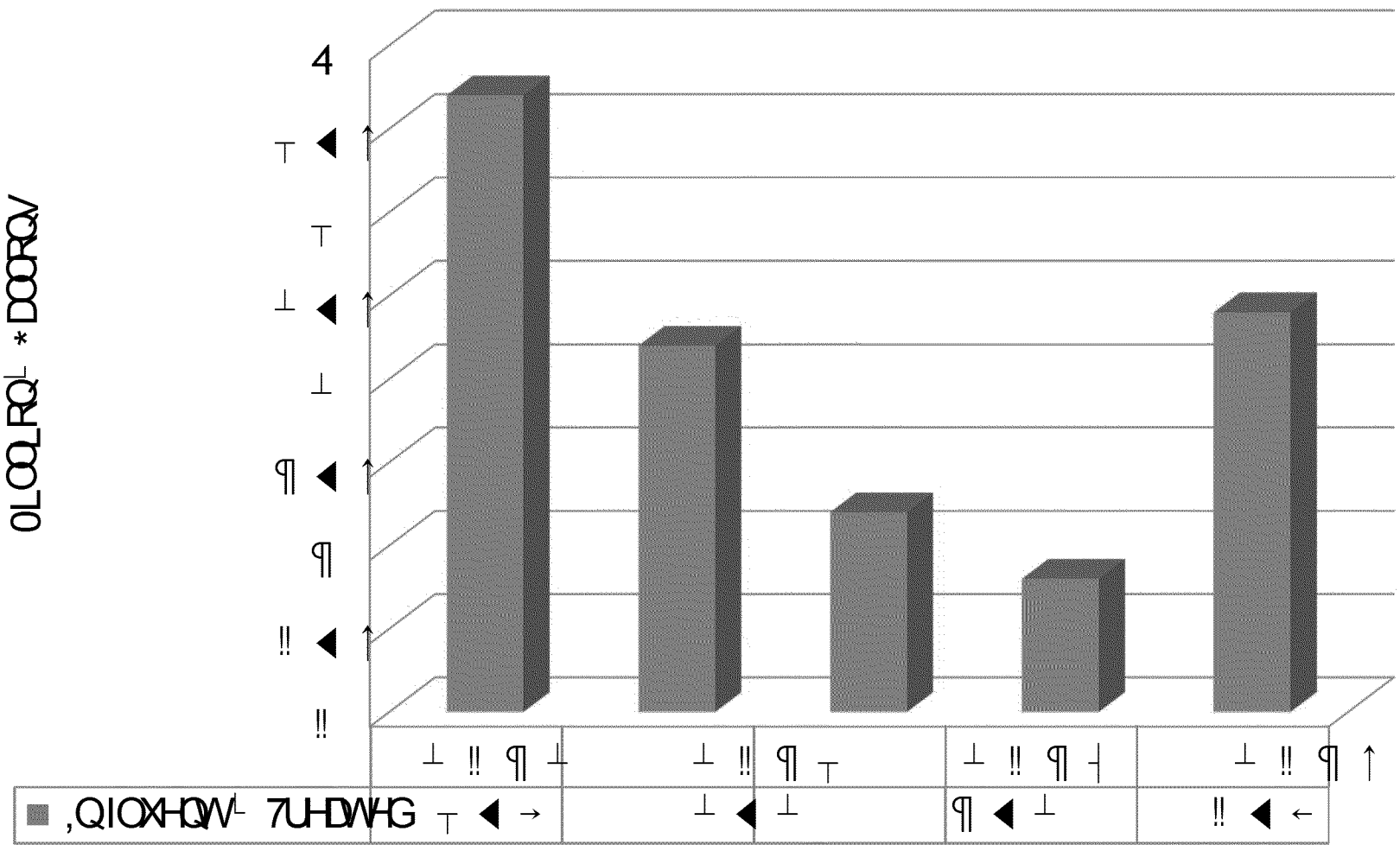




$6%└ 7UHDWPHQW└ 6\VWHP└ ≤ 3HU QFH

Draft

$VSHQ└ 6HHS└ 7UHDWHG└ ,QIOXHQW



$6%└ ..7└HDWPHQW└ 6\VWHP└ ≤ 0HW
5HPRYDO

Draft

$6%└ 0HWDO└ 5HPRYDO							
<HDU	0HWDO└ 5HPRYDO└ ♂ ◘ □					&RPSOLDQW└ (IIOXHQ 6DPSOHV	
	$O	&X	)H	1L	=Q		
┴ ‼ ¶ ┴		◀ ├ ↑	◀ → ←		◀ →	↑ ◀ ┴	← ◀ ┤ ‼
┴ ‼ ¶ ┬		◀ ↑ ¶	◀ → ┤		◀ → ┬	↑ ◀ ┬	← ◀ ‼ ↑
┴ ‼ ¶ ┤		◀ ├ ←	◀ → ↑		◀ ├	├ ◀ ↑ ←	← ◀ ‼ ┤
┴ ‼ ¶ ↑		◀ ↑ ¶	◀ ├ ←		◀ ←	→ ◀ ¶ ¶	← ◀ ├ ┬
┴ ‼ ¶ ├		◀ ↑ ┤	◀ ├ ‼		◀ ┬	┬ ◀ ┬ ‼	├ ◀ ├ ┤

4XHVWLRQV"