

# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole  
Casing Elevation: 657 m above G.L.

Reference Phone: Offset:      m

Azimuth x-axis: 90

Azimuth 0 m below G.L.

Azimuth y-axis: 0

X = 0 m

Well Coord: X = 10008.22 Y = 9999.97 Z = 850.25

Channel Configuration:

Reference Phone

V=Channel 1

V=Channel 4

R=Channel 2

R=Channel 5

T=Channel 3

T=Channel 6

Ref. Polarization: Az 0 Vert. 0

V 0

R 0

T 270

Date: 13 July 98

Location: C2 URISP

High-Cut 1000 Low-Cut 4 Sample Int. .0002

Number Samples 2500

Shot		Borehole Phone			Source			Source Polarization		
Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Azimuth	Vertical
<u>RXC20001</u>	<u>1</u>	<u>5.0</u>					<u>0</u>	<u>-50</u>	<u>270</u>	<u>135</u>
	<u>2</u>	<u>5.0</u>							<u>90</u>	<u>135</u>
	<u>3</u>	<u>4.90</u>							<u>270</u>	<u>1</u>
	<u>4</u>	<u>4.90</u>							<u>90</u>	<u>1</u>
	<u>5</u>	<u>4.90</u>							<u>270</u>	<u>1</u>
	<u>6</u>	<u>4.80</u>							<u>90</u>	<u>1</u>
	<u>7</u>	<u>4.70</u>							<u>270</u>	<u>1</u>
	<u>8</u>	<u>4.70</u>							<u>90</u>	<u>1</u>
	<u>9</u>	<u>4.60</u>							<u>270</u>	<u>1</u>
	<u>10</u>	<u>4.60</u>					<u>0</u>		<u>90</u>	<u>1</u>

Detailed Axial Radiation Test  
0.1 m Δz [1 to 5 m]



# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole  
Casing Elevation: 657 m above G.L.

Reference Phone: 0 m

Azimuth x-axis: 90

Azimuth 0 m below G.L.

Azimuth y-axis: 0

X = 0 m

Well Coord: X = 10008.22 Y = 9999.97 Z = 850.25

Channel Configuration: Borehole Phone  
V=Channel 1

Reference Phone  
V=Channel 4

R=Channel 2

R=Channel 5

T=Channel 3

T=Channel 6

Ref. Polarization: Az 0

V 0  
R 90  
T 90

Date: 13 July 98

Location: C2 URSP

High-Cut 1000 Low-Cut 4 Sample Int. .0002

Number Samples 2500

Shot		Borehole Phone			Source			Source Polarization		
Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Azimuth	Vertical
	<u>11</u>	<u>4.50</u>					<u>0</u>	<u>-0.50</u>	<u>270</u>	<u>135</u>
	<u>12</u>	<u>4.50</u>							<u>90</u>	<u>135</u>
	<u>13</u>	<u>4.40</u>							<u>270</u>	
	<u>14</u>	<u>4.40</u>							<u>90</u>	
	<u>15</u>	<u>4.30</u>							<u>270</u>	
	<u>16</u>	<u>4.30</u>							<u>90</u>	
	<u>17</u>	<u>4.20</u>							<u>270</u>	
	<u>18</u>	<u>4.20</u>							<u>90</u>	
	<u>19</u>	<u>4.10</u>							<u>270</u>	
	<u>20</u>	<u>4.10</u>							<u>90</u>	

# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole  
Casing Elevation: 65.7 m above G.L.

Reference Phone: \_\_\_\_\_ m

Azimuth x-axis: 90

Azimuth \_\_\_\_\_ m below G.L.

Azimuth y-axis: 0

X = 0 m

Well Coord: X = 10008.22

Y = -1.40 m

Channel Configuration:

Reference Phone

V=Channel 1

V=Channel 4

R=Channel 2

R=Channel 5

T=Channel 3

T=Channel 6

Location: C2 URISP

Vert. 0

Date: 13 July 98

Number Samples 2500

High-Cut 1000

Low-Cut 4 Sample Int. .0002

Shot		Borehole Phone			Source			Source Polarization		
Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Azimuth	Vertical
	<u>21</u>	<u>4.0</u>					<u>0</u>	<u>-1.50</u>	<u>270</u>	<u>135</u>
	<u>22</u>	<u>4.0</u>							<u>90</u>	<u>135</u>
	<u>23</u>	<u>3.90</u>								
	<u>24</u>	<u>3.90</u>								
	<u>25</u>	<u>3.80</u>								
	<u>26</u>	<u>3.80</u>								
	<u>27</u>	<u>3.70</u>								
	<u>28</u>	<u>3.70</u>								
	<u>29</u>	<u>3.60</u>								
	<u>30</u>	<u>3.60</u>								

# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole

Casing Elevation: -657 m above G.L.

Azimuth x-axis: 90

Azimuth y-axis: 0

Well Coord: X = 10008.22 Y = 9999.97 Z = 850.25

Channel Configuration: Borehole Phone

V=Channel 1

R=Channel 2

T=Channel 3

Location: C2 URSP

High-Cut 1000 Low-Cut 4 Sample Int. .0002 Number Samples 2500

Reference Phone: Offset: 0 m

Azimuth 0 m below G.L.

Elev. 0 m

X = 0 m

Y = -1.40 m

Ref. Polarization: Az 0 Vert. 0

V 0 R 90 T 90

Date: 13 July 98

Shot		Borehole Phone			Source			Source Polarization		
Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Azimuth	Vertical
	<u>31</u>	<u>3.50</u>					<u>0</u>	<u>-1.50</u>	<u>270</u>	<u>135</u>
	<u>32</u>	<u>3.50</u>							<u>90</u>	<u>135</u>
	<u>33</u>	<u>3.40</u>							<u>270</u>	
	<u>34</u>	<u>3.40</u>							<u>90</u>	
	<u>35</u>	<u>3.30</u>							<u>270</u>	
	<u>36</u>	<u>3.30</u>							<u>90</u>	
	<u>37</u>	<u>3.20</u>							<u>270</u>	
	<u>38</u>	<u>3.20</u>							<u>90</u>	
	<u>39</u>	<u>3.10</u>							<u>270</u>	
	<u>40</u>	<u>3.10</u>							<u>90</u>	

# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole  
 Casing Elevation: 65.7 m above G.L.  
 Azimuth x-axis: 90  
 Azimuth y-axis: 0  
 Well Coord: X = 10008.22 Y = 9999.97 Z = 850.25  
 Channel Configuration: Borehole Phone Reference Phone  
 V=Channel 1 V=Channel 4  
 R=Channel 2 R=Channel 5  
 T=Channel 3 T=Channel 6

Reference Phone: Offset: \_\_\_\_\_ m  
 Azimuth \_\_\_\_\_ m below G.L.  
 Elev. \_\_\_\_\_ m  
 X = 0  
 Y = -1.90  
 Ref. Polarization: Az \_\_\_\_\_ Vert. \_\_\_\_\_  
 V 0 \_\_\_\_\_  
 R 0 \_\_\_\_\_  
 T 270 \_\_\_\_\_

Date: 13 July 98 Location: C2 URSP Number Samples 2500  
 High-Cut 1000 Low-Cut 4 Sample Int. .0002

Shot		Borehole Phone			Source			Source Polarization		
Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Azimuth	Vertical
	<u>41</u>	<u>3.0</u>					<u>0</u>	<u>-50</u>	<u>270</u>	<u>135</u>
	<u>42</u>	<u>3.0</u>							<u>90</u>	<u>135</u>
	<u>43</u>	<u>2.90</u>							<u>270</u>	
	<u>44</u>	<u>2.90</u>							<u>90</u>	
	<u>45</u>	<u>2.80</u>							<u>270</u>	
	<u>46</u>	<u>2.80</u>							<u>90</u>	
	<u>47</u>	<u>2.70</u>							<u>270</u>	
	<u>48</u>	<u>2.70</u>							<u>90</u>	
	<u>49</u>	<u>2.60</u>							<u>270</u>	
	<u>50</u>	<u>2.60</u>							<u>90</u>	

# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole  
Casing Elevation: 657 m above G.L.

Reference Phone: \_\_\_\_\_ m

Azimuth x-axis: 90

Azimuth 0 m below G.L.

Azimuth y-axis: 0

X = 0 m

Well Coord: X = 10008.22 Y = 9999.97 Z = 850.25

Y = -1.40 m

Channel Configuration:

Reference Phone

V=Channel 1

V=Channel 4

R=Channel 2

R=Channel 5

T=Channel 3

T=Channel 6

Ref. Polarization: Az 0 Vert. 0

V 0 R 90 T 90

Date: 13 July 98

Location: C2 CRISP

High-Cut 1000 Low-Cut 4 Sample Int. .0002 Number Samples 2500

Shot		Borehole Phone			Source			Source Polarization		
Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Azimuth	Vertical
	<u>51</u>	<u>2.50</u>					<u>0</u>	<u>-1.50</u>	<u>270</u>	<u>135</u>
	<u>52</u>	<u>2.50</u>							<u>90</u>	<u>135</u>
	<u>53</u>	<u>2.40</u>							<u>270</u>	
	<u>54</u>	<u>2.40</u>							<u>90</u>	
	<u>55</u>	<u>2.30</u>							<u>270</u>	
	<u>56</u>	<u>2.30</u>							<u>90</u>	
	<u>57</u>	<u>2.20</u>							<u>270</u>	
	<u>58</u>	<u>2.20</u>							<u>90</u>	
	<u>59</u>	<u>2.10</u>							<u>270</u>	
	<u>60</u>	<u>2.10</u>							<u>90</u>	

# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole

Casing Elevation: 657 m above G.L.

Reference Phone: Offset: \_\_\_\_\_ m

Azimuth x-axis: 90

Azimuth \_\_\_\_\_ m below G.L.

Azimuth y-axis: 0

X = 0 m

Well Coord: X = 10008.22

Y = 9999.97

Y = -1.4 m

Channel Configuration:

Borehole Phone

V=Channel 1

Reference Phone

V=Channel 4

R=Channel 2

R=Channel 5

T=Channel 3

T=Channel 6

Ref. Polarization: Az

V

R

T

Vert.

0

90

270

Date: 13Jul98

Location: 02 Ukisp

High-Cut 1000

Low-Cut 4 Sample Int. -0002

Number Samples 2500

Shot		Borehole Phone			Source			Source Polarization		
Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Azimuth	Vertical
	<u>61</u>	<u>2.0</u>					<u>0</u>	<u>-0.50</u>	<u>270</u>	<u>135</u>
	<u>62</u>	<u>2.0</u>						<u>1</u>	<u>90</u>	<u>135</u>
	<u>63</u>	<u>1.9</u>						<u>1</u>	<u>270</u>	<u>1</u>
	<u>64</u>	<u>1.9</u>						<u>1</u>	<u>90</u>	<u>1</u>
	<u>65</u>	<u>1.8</u>						<u>1</u>	<u>1</u>	<u>1</u>
	<u>66</u>	<u>1.8</u>						<u>1</u>	<u>1</u>	<u>1</u>
	<u>67</u>	<u>1.7</u>						<u>1</u>	<u>1</u>	<u>1</u>
	<u>68</u>	<u>1.7</u>						<u>1</u>	<u>1</u>	<u>1</u>
	<u>69</u>	<u>1.6</u>						<u>1</u>	<u>1</u>	<u>1</u>
	<u>70</u>	<u>1.6</u>						<u>1</u>	<u>1</u>	<u>1</u>



# BSU GEOPHYSICS VSP OBSERVER'S LOG

Coordinate System Origin at Borehole

Casing Elevation: 857 m above G.L.

Azimuth x-axis: 96

Azimuth y-axis: 0

Well Coord: X = 10008.22 Y = 9999.92 Z = 850.25

Channel Borehole Phone

V=Channel 1

R=Channel 2

T=Channel 3 C2 CRSP

Reference Phone

V=Channel 4

R=Channel 5

T=Channel 6

Ref. Polarization: Az

V 0

R 90

T 90

Offset: 0 m below G.L.

Azimuth 0

Elev. -1.4 m

X = 0

Y = -0.5

Number Samples 2500

Date: 13 July 98

High-Cut 1000

Location: 4

Low-Cut 4

Sample Int. .0002

Source

Borehole Phone

Depth

Elev.

Offset

Azimuth

Elev.

X

Y

Source Polarization

Vertical

Shot	Rec.	File	Depth	Elev.	Offset	Azimuth	Elev.	X	Y	Source Polarization	Vertical
		71	1.5					0	-0.5	270	85
		72	1.5							90	135
		73	1.4							270	135
		74	1.4							90	135
		75	1.3								
		76	1.3								
		77	1.2								
		78	1.2								
		79	1.1								
		80	1.1								
		81	1.0								
		82	1.0								

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81 1.0  
82 1.0

87=80°  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100