Site: 1043R-A

Priority: 2
Position: 9°39.2246'N, 86°11.1098'W
Water Depth: 4325 m
Sediment Thickness: 420 mbsf
Target Drilling Depth: 190 mbsf
Approved Maximum Penetration: 470 mbsf; permission to drill without coring to 283 mbsf
Seismic Coverage: Position of site at shotpoint 3174 on seismic line BGR-99-44 (C. Ranero, pers. comm., GEOMAR, Kiel, Germany and C. Reichert, pers. comm., BGR, Hannover, Germany, 2001).

Objectives: The objectives of Site 1043R are to:

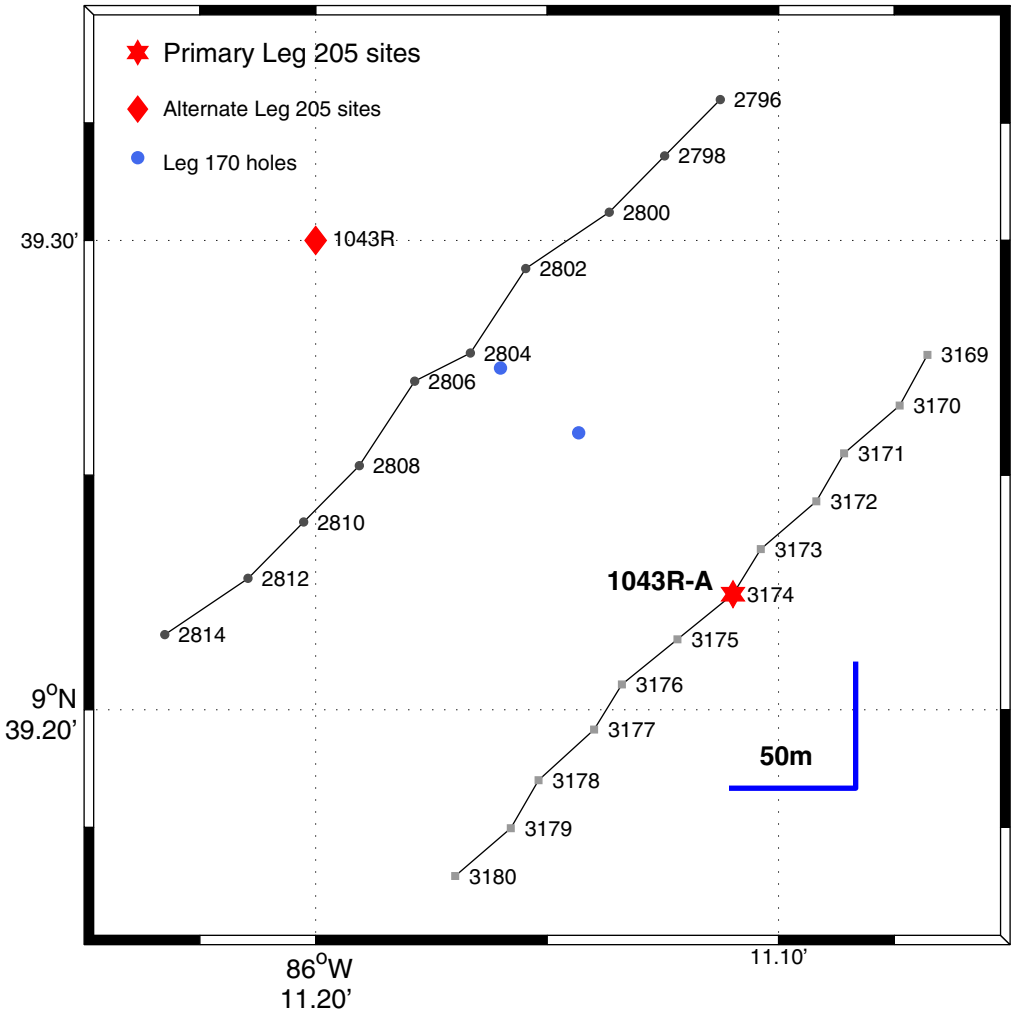
1. Investigate the décollement.
2. Investigate fluid flow within the décollement and underthrust sediments.
3. Install modified CORK to monitor pressure and temperature and to sample fluids within the décollement.

Drilling Program: Same decollement and underthrust objectives as at Sites 1040R-A, -B, -C

Logging and Downhole: Same as at Sites 1040R-B and -C

Nature of Rock Anticipated: Deformed claystones and hemipelagics

Navigation CR20 (circles) and BGR9944 (squares)



Site: 1039R

Priority: 2
Position: 9°38.4'N; 86°12'W
Water Depth: 4350 m
Sediment Thickness: 390 mbsf is the depth to top of sill; sill thickness is not reliably resolvable from seismic records; sediment thickness between first sill and second sill/basement is estimated to be ~100 m; top of basaltic basement is estimated at ~550 to 600 mbsf, depending on thickness of sills.
Target Drilling Depth: 700 mbsf
Approved Maximum Penetration: 780 mbsf; approved to drill without coring to 340 mbsf
Seismic Coverage: Position of site at shotpoint 2938 on seismic line CR-20 (K. McIntosh, pers. comm., UTIG, Austin, TX, USA, 2001) and at shotpoint 3259 on seismic line BGR-99-44 (C. Ranero, pers. comm., GEOMAR, Kiel, Germany and C. Reichert, pers. comm., BGR, Hannover, Germany, 2001).

Objectives: The objectives of Site 1039R are to:

1. Investigate the petrology and alteration state of upper oceanic basement.

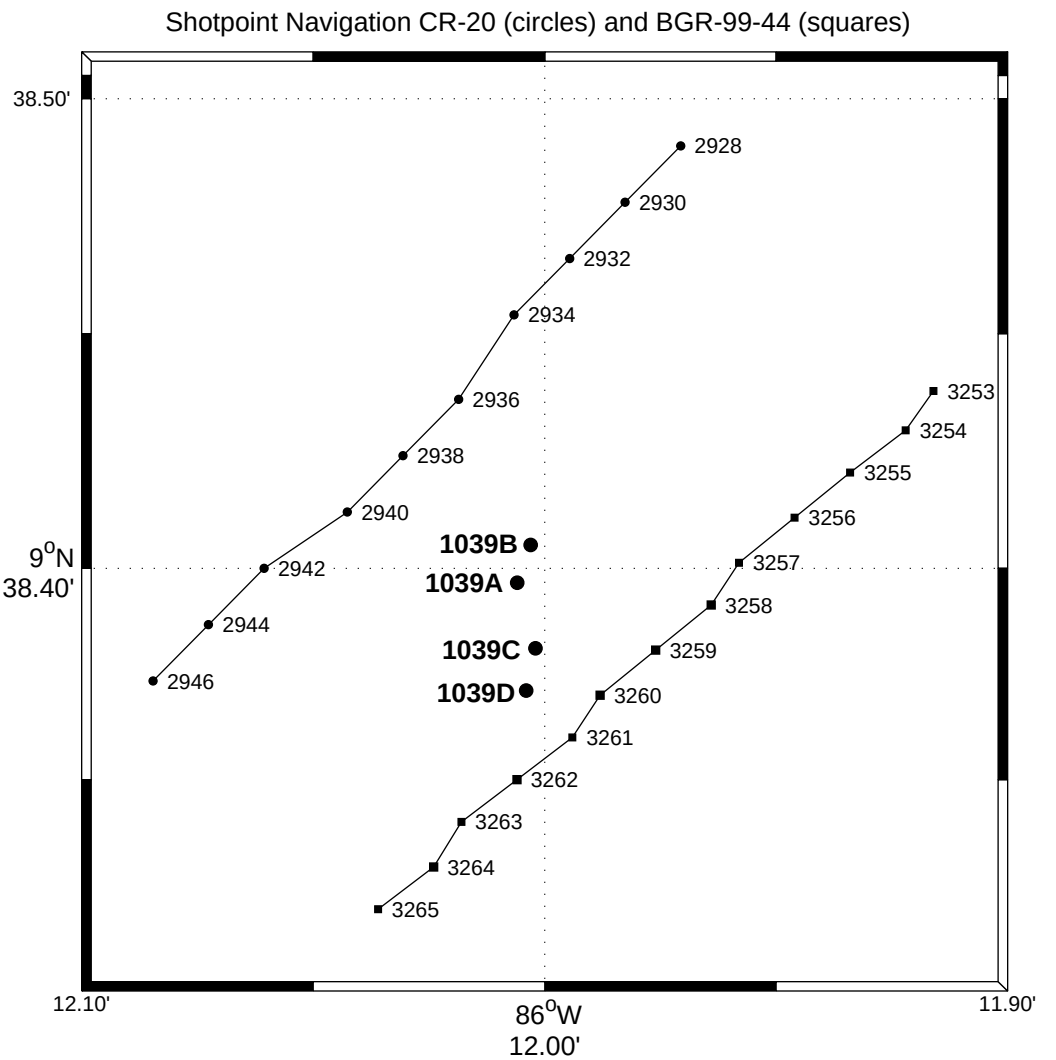
2. Determine fluid flow pattern in upper oceanic basement.

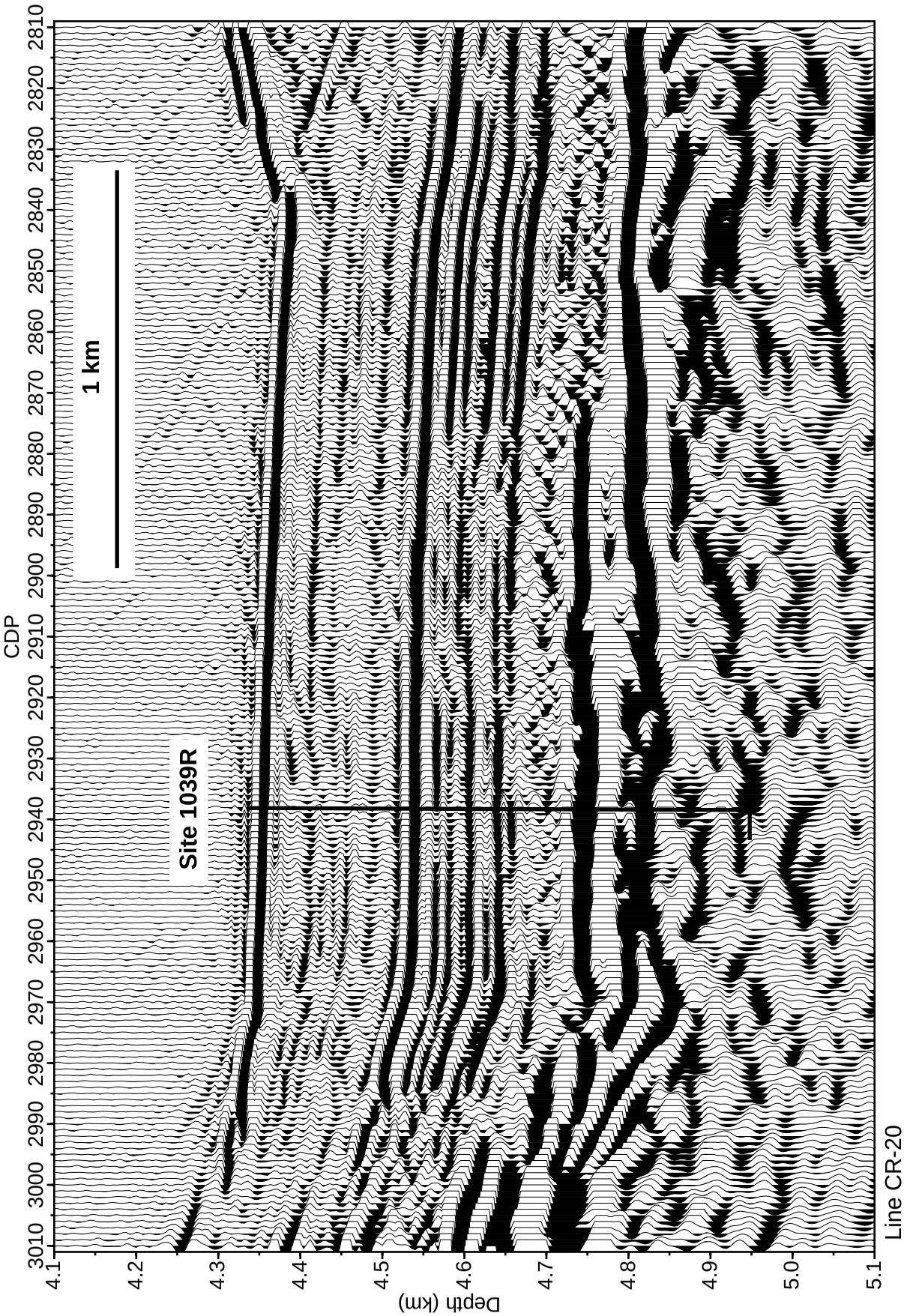
3. Install a modified CORK to monitor pressure and to sample basement fluids.

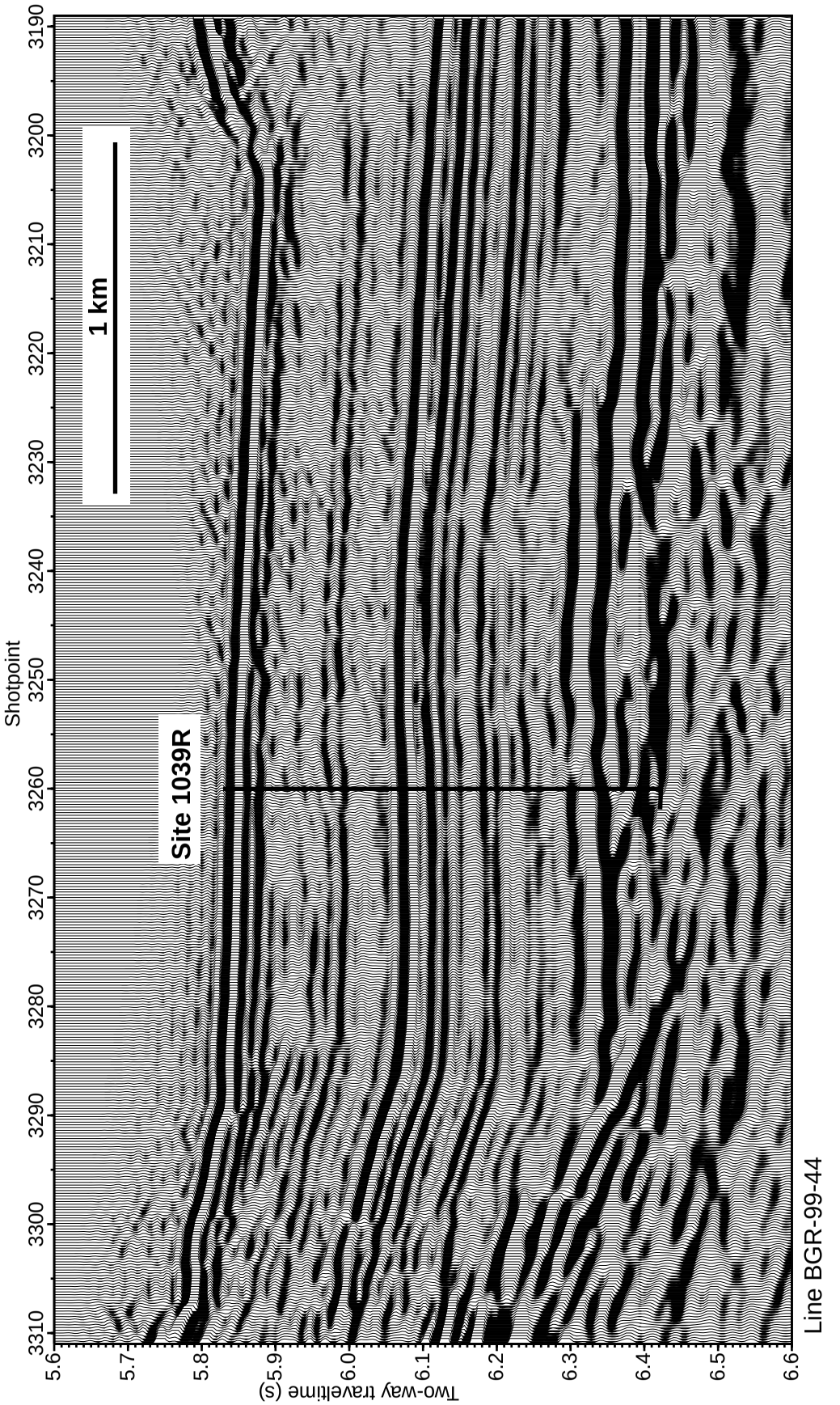
Drilling Program: Core with the RCB from 340 mbsf to total depth (TD); install modified CORK for monitoring fluid flow, pressure, and temperature in upper oceanic basement.

Logging and Downhole: Formation temperature measurements (~5 DVTP), downhole logging with triple combo and FMS/sonic tool strings.

Nature of Rock Anticipated: Hemipelagic and pelagic sediments, gabbro sill, and basalt


Shotpoint Navigation CR-20 (circles) and BGR-99-44 (squares)
38.50'
9°N
38.40'
12.10'
86°W
12.00'
11.90'
2928
2930
2932
2934
2936
2938
2940
2942
2944
2946
1039B
1039A
1039C
1039D
3253
3254
3255
3256
3257
3258
3259
3260
3261
3262
3263
3264
3265


CDP
3010
3000
2990
2980
2970
2960
2950
2940
2930
2920
2910
2900
2890
2880
2870
2860
2850
2840
2830
2820
2810
1 km
Site 1039R
Depth (km)
4.1
4.2
4.3
4.4
4.5
4.6
4.7
4.8
4.9
5.0
5.1
Line CR-20


Site 1039R
1 km
Shotpoint
3310
3300
3290
3280
3270
3260
3250
3240
3230
3220
3210
3200
3190
Two-way traveltime (s)
5.6
5.7
5.8
5.9
6.0
6.1
6.2
6.3
6.4
6.5
6.6
Line BGR-99-44

Site: 1040R

Priority: 2
Position: 9°39.7'N, 86°10.7'W
Water Depth: 4177 mbsf
Sediment Thickness: 670 m
Target Drilling Depth: 435 mbsf
Approved Maximum Penetration: 920 mbsf; approved to drill without coring to 620 mbsf
Seismic Coverage: Position of site at shotpoint 2736 on seismic line CR-20 (K. McIntosh, pers. comm., UTIG, Austin, TX, USA, 2001) and at shotpoint 3125 on seismic line BGR-99-44 (C. Ranero, pers. comm., GEOMAR, Kiel, Germany and C. Reichert, pers. comm., BGR, Hannover, Germany, 2001).

Objectives: The objectives of Site 1040R are to:

1. Investigate the décollement.

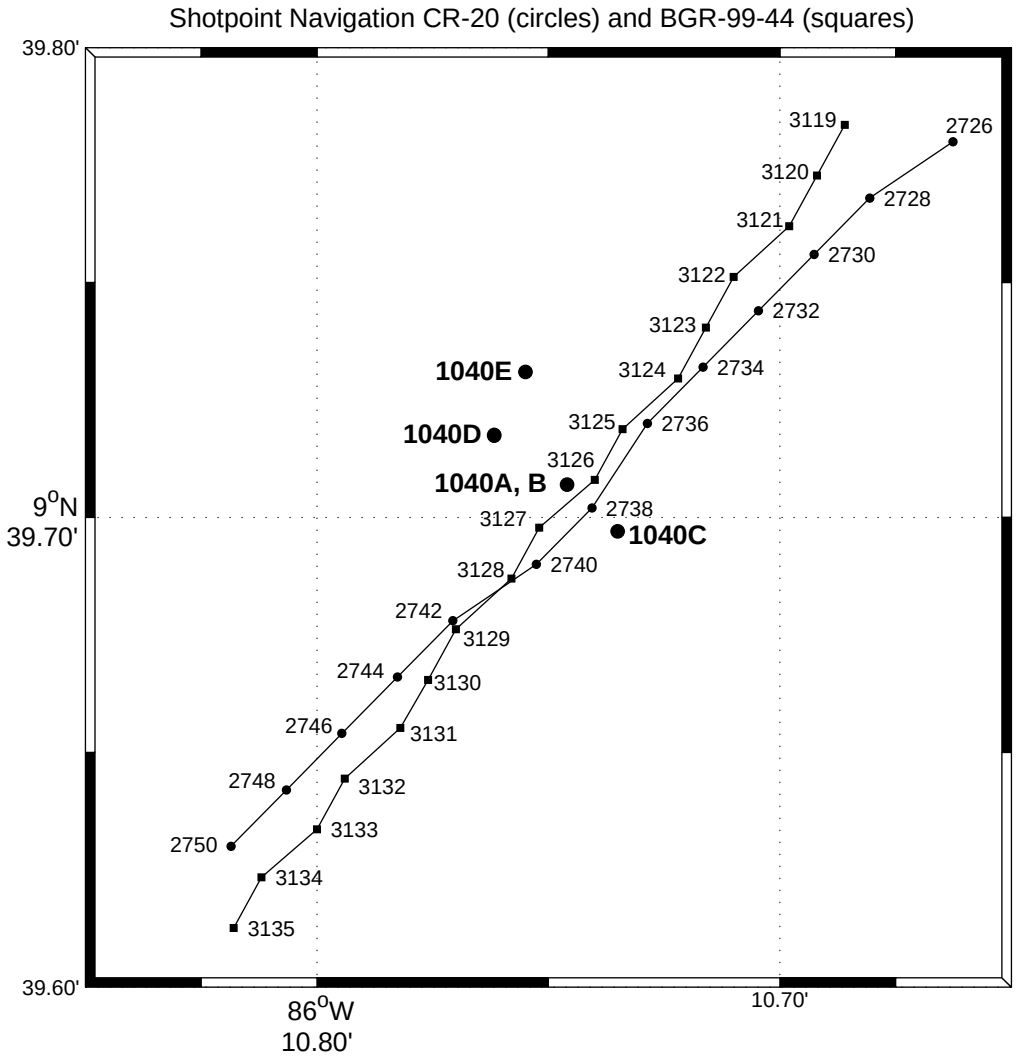
2. Investigate fluid flow within the décollement and underthrust sediments.

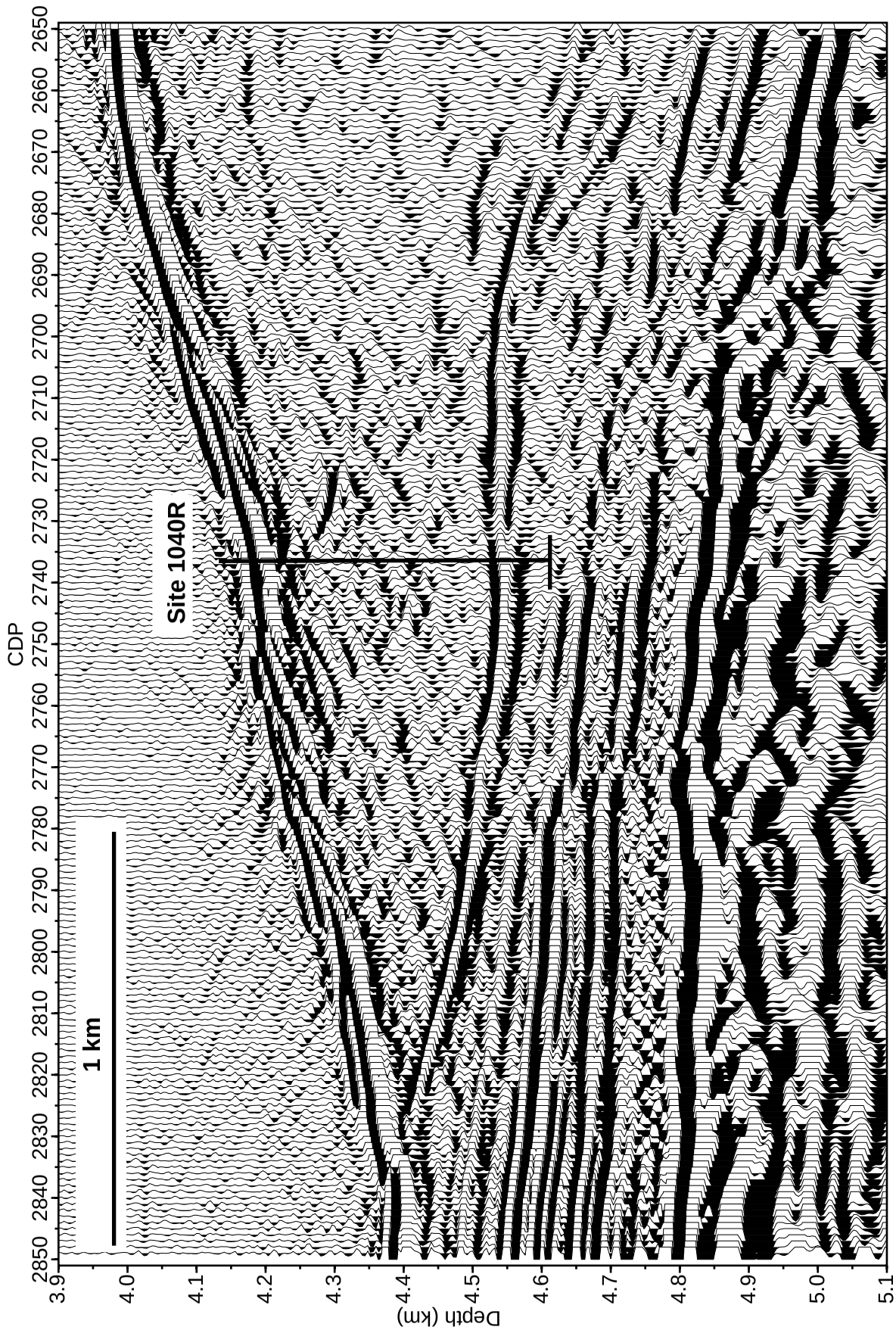
3. Install modified CORKs to monitor pressure and temperature and to sample fluids within the décollement and underthrust sediments.

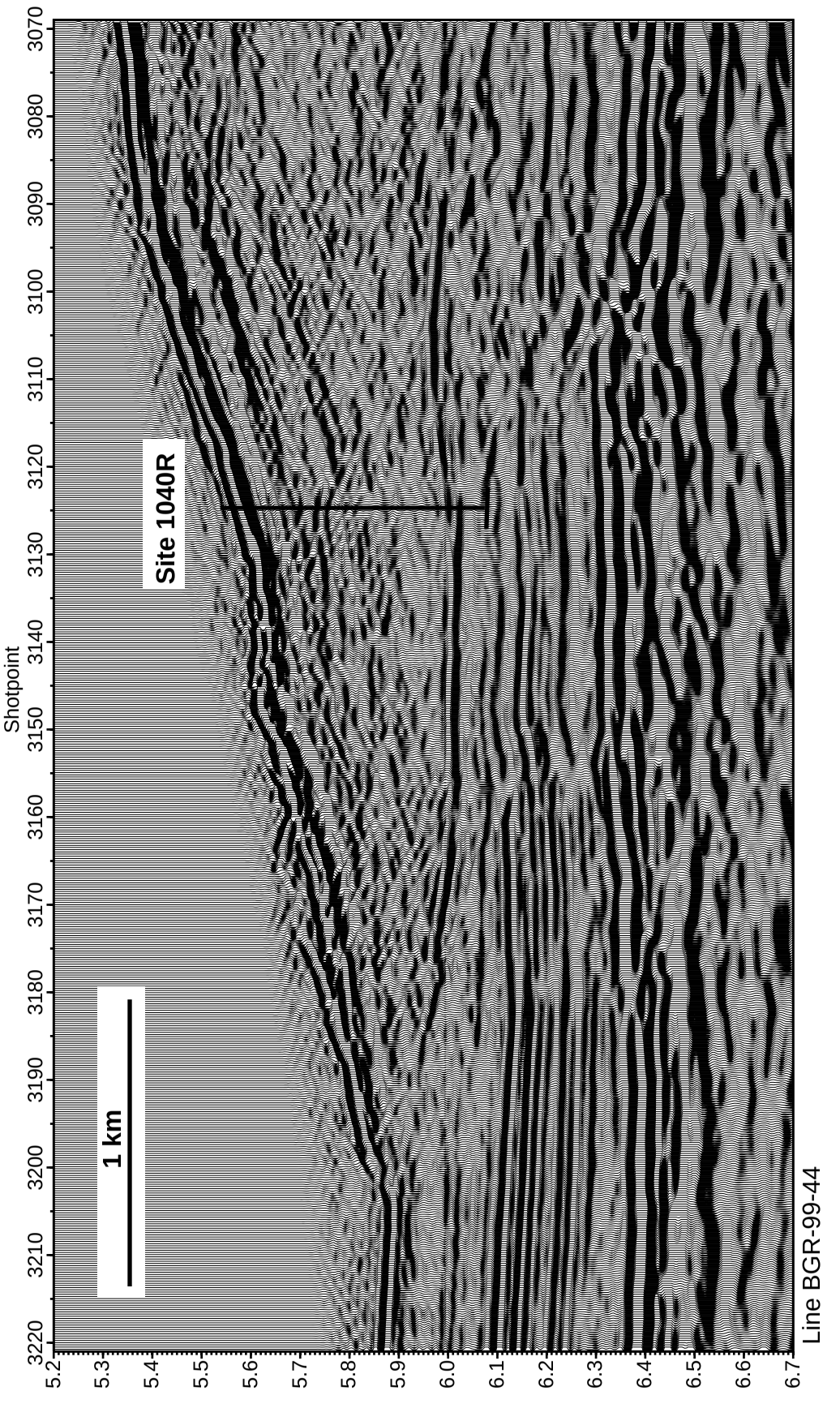
Drilling Program: Three adjacent holes will be drilled at Site 1040R. The first will be cored with the RCB from 180 to 410 mbsf and then a modified CORK will be installed for monitoring fluid flow, pressure, and temperature in the uppermost underthrust sediments (~425 mbsf). The next two holes will be drilled (likely without coring) and a modified CORK will be installed in each hole for monitoring fluid flow, pressure, and temperature in the décollement.

Logging and Downhole: Formation temperature measurements (~5 DVTP); no downhole logging is planned at this site.

Nature of Rock Anticipated: Deformed claystones and hemipelagics


Shotpoint Navigation CR-20 (circles) and BGR-99-44 (squares)
39.80'
9°N
39.70'
39.60'
86°W
10.80'
10.70'
1040E
1040D
1040A, B
1040C
2726
2728
2730
2732
2734
2736
2738
2740
2742
2744
2746
2748
2750
3119
3120
3121
3122
3123
3124
3125
3126
3127
3128
3129
3130
3131
3132
3133
3134
3135


CDP
2850
2840
2830
2820
2810
2800
2790
2780
2770
2760
2750
2740
2730
2720
2710
2700
2690
2680
2670
2660
2650
1 km
Site 1040R
Depth (km)
3.9
4.0
4.1
4.2
4.3
4.4
4.5
4.6
4.7
4.8
4.9
5.0
5.1
Line CR-20


Site 1040R
1 km
Shotpoint
3070
3080
3090
3100
3110
3120
3130
3140
3150
3160
3170
3180
3190
3200
3210
3220
Time (s)
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
6.0
6.1
6.2
6.3
6.4
6.5
6.6
6.7
Line BGR-99-44

Site: 1043R

Priority: 2
Position: 9°39.3'N, 86°11.2'W
Water Depth: 4310 m
Sediment Thickness: 490 mbsf
Target Drilling Depth: 180 mbsf
Approved Maximum Penetration: 200 mbsf; permission to drill without coring to 200 mbsf
Seismic Coverage: Position of site at shotpoint 2806 on seismic line CR-20 (K. McIntosh, pers. com., UTIG, Austin, TX, USA, 2001) and at shotpoint 3171 on seismic line BGR-99-44 (C. Ranero, pers. comm., GEOMAR, Kiel, Germany and C. Reichert, pers. comm., BGR, Hannover, Germany, 2001).

Objectives: The objectives of Site 1043R are to:

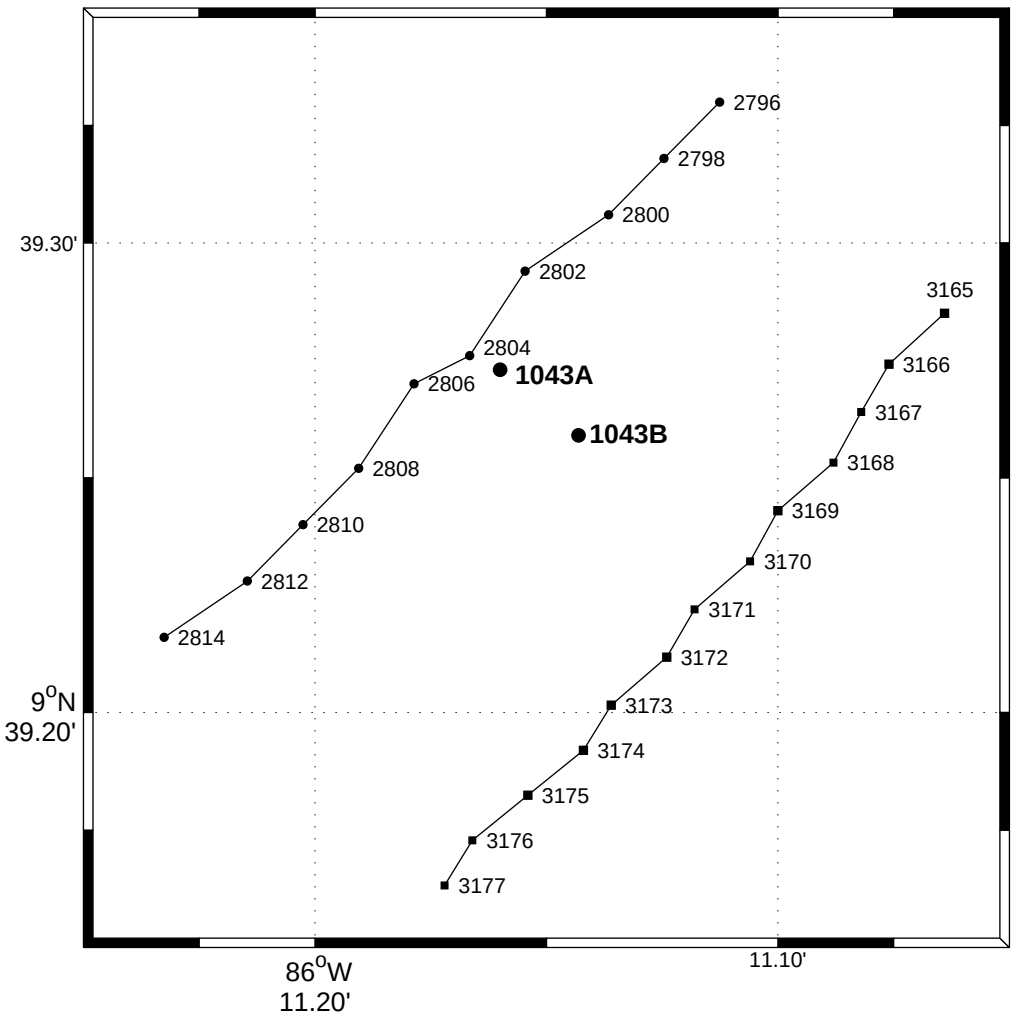
1. Investigate the décollement.
2. Investigate fluid flow within the décollement and underthrust sediments.
3. Install modified CORK to monitor pressure and temperature and to sample fluids within the décollement.

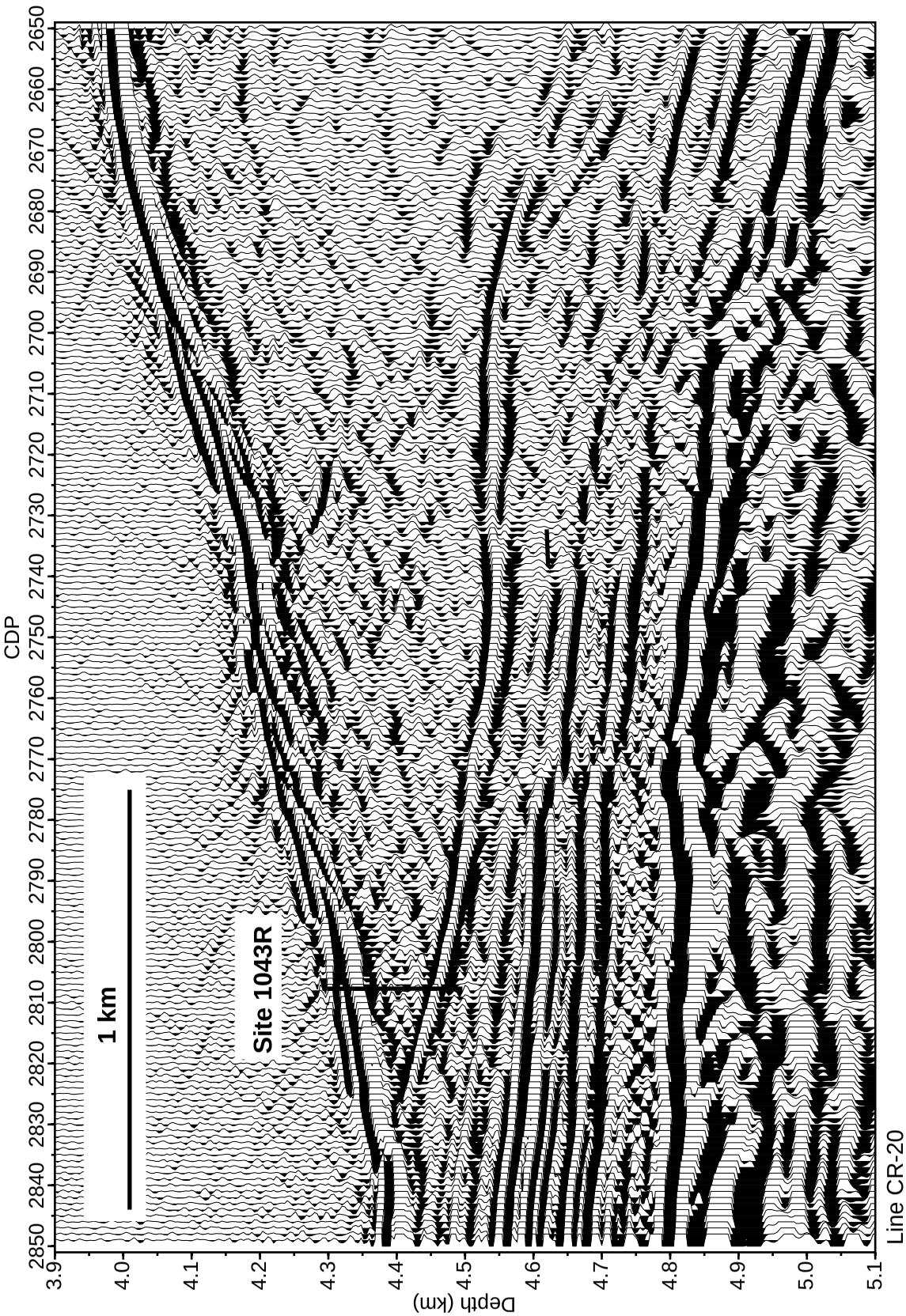
Drilling Program: Same as Site 1040R

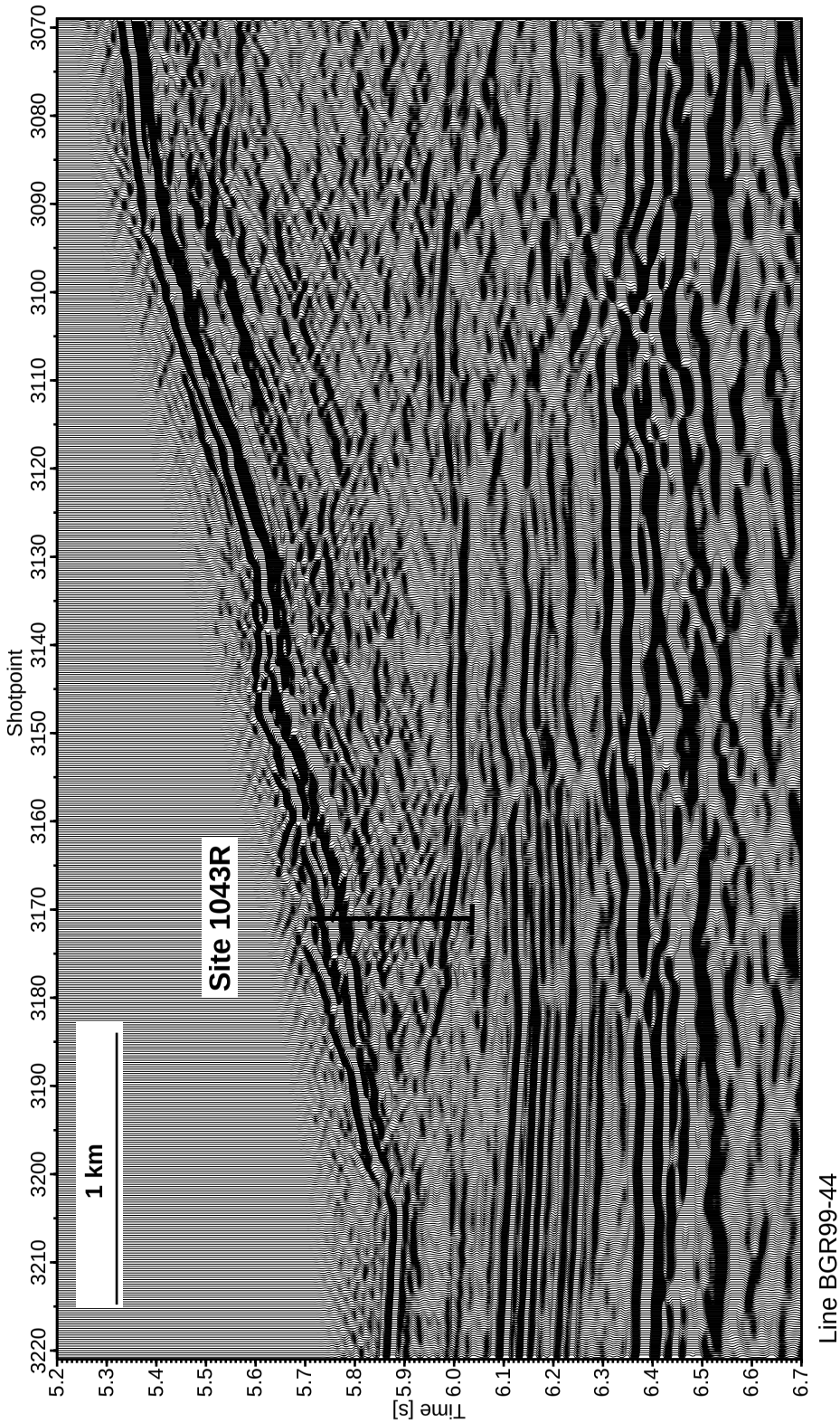
Logging and Downhole: Same as Site 1040R

Nature of Rock Anticipated: Deformed claystones and hemipelagics

Shotpoint Navigation CR-20 (circles) and BGR-99-44 (squares)




CDP
2650
2660
2670
2680
2690
2700
2710
2720
2730
2740
2750
2760
2770
2780
2790
2800
2810
2820
2830
2840
2850
1 km
Site 1043R
Depth (km)
3.9
4.0
4.1
4.2
4.3
4.4
4.5
4.6
4.7
4.8
4.9
5.0
5.1
Line CR-20


Shotpoint
3070
3080
3090
3100
3110
3120
3130
3140
3150
3160
3170
3180
3190
3200
3210
3220
Time [s]
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
6.0
6.1
6.2
6.3
6.4
6.5
6.6
6.7
1 km
Site 1043R
Line BGR99-44

blank

SCIENTIFIC PARTICIPANTS*

Co-Chief
Julie D. Morris
Department of Earth and Planetary Sciences
Washington University
One Brookings Drive
CB 1169
St. Louis, MO 63130-4899
USA
Internet: jmorris@levee.wustl.edu
Work: (314) 935-6926
Fax: (314) 935-7361

Co-Chief
Heinrich W. Villinger
Fachbereich Geowissenschaften
Universität Bremen
Postfach 330 440
Bremen 28334
Germany
Internet: vill@uni-bremen.de
Work: (49) 421-218-4509
Fax: (49) 421-218-7163

Staff Scientist
Adam Klaus
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet : aklaus@odpemail.tamu.edu
Work: (979) 845-3055
Fax: (979) 845-0876

Inorganic Geochemist
Miriam Kastner
Scripps Institution of Oceanography
University of California, San Diego
Geoscience Research Division
9500 Gilman Drive
La Jolla, CA 92093-0212
USA

*Staffing is incomplete and subject to change.

Internet: mkastner@ucsd.edu
Work: (858) 534-2065
Fax: (858) 534-0784

Physical Properties Specialist
Marion Pfender
Geowissenschaften 5
Universität Bremen
Postfach 33 04 40
Bremen 28334
Germany
Internet: pfender@geophys2.uni-bremen.de
Work: (49) 421- 2187165
Fax: (49) 421-2187163

Physical Properties Specialist
Demian M. Saffer
Department of Geology and Geophysics
University of Wyoming
16th and Gibbon St.
Laramie, WY 82071-3006
USA
Internet: dsaffer@uwyo.edu
Work: (307) 766-2981
Fax: (307) 766-6679

Logging Staff Scientist
Masanori Ienaga
Ocean Research Institute
University of Tokyo
1-15-1 Minamidai
Nakano, Tokyo 164-8639
Japan
Internet: ienaga@ori.u-tokyo.ac.jp
Work: (81) 3-5351-6538
Fax: (81) 3-5351-6438

Schlumberger Engineer
Kerry Swain
Schlumberger Offshore Services
369 Tristar Drive
Webster, TX 77598
USA
internet: swaink@webster.oilfield.slb.com
Work: (281) 480-2000
Fax: (281) 480-9550

*Staffing is incomplete and subject to change.

Operations Manager
Thomas L. Pettigrew
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet: pettigrew@odpemail.tamu.edu
Work: (979) 845-2329
Fax: (979) 845-2308

Laboratory Officer
William G. Mills
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet: mills@odpemail.tamu.edu
Work: (979) 845-2478
Fax: (979) 845-0876

Assistant Laboratory Officer
Chieh Peng
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet: peng@odpemail.tamu.edu
Work: (979) 845-3602
Fax: (979) 845-0876

Marine Lab Specialist: Yeoperson
Michiko Hitchcox
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet: hitchcox@odpemail.tamu.edu
Work: (979) 845-2483
Fax: (979) 845-0876

Marine Lab Specialist: Chemistry
Dennis Graham
Ocean Drilling Program

*Staffing is incomplete and subject to change.

Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet: graham@odpemail.tamu.edu
Work: (979) 845-3602
Fax: (979) 845-0876

Marine Lab Specialist: Curator
Jessica Huckemeyer
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845
USA
Internet: huckemeyer@odpemail.tamu.edu
Work: (979) 845-4822
Fax: (979) 845-1303

Marine Lab Specialist: Downhole Tools, Thin Sections
Ted Gustafson
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet: gustafson@odpemail.tamu.edu
Work: (979) 845-3602
Fax: (979) 845-0876

Marine Lab Specialist: Paleomagnetics
Charles A. Endris
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845
USA
Internet: endris@odpemail.tamu.edu
Work: (979) 845-3602
Fax: (979) 845-0876

Marine Lab Specialist: Photographer
Cyndi J. Prince
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845

*Staffing is incomplete and subject to change.

USA
Internet: prince@odpemail.tamu.edu
Work: (979) 845-2480
Fax: (979) 845-0876

Marine Lab Specialist: Underway Geophysics
Paula Weiss
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845
USA
Internet: pweiss@qwest.net
Work: (979) 845-3602
Fax: (979) 845-0876

Marine Electronics Specialist
Michael Meiring
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845
USA
Internet: meiring@odpemail.tamu.edu
Work: (979) 845-3602
Fax: (979) 845-0876

Marine Computer Specialist
Randy W. Gjesvold
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station , TX 77845-9547
USA
Internet: gjesvold@odpemail.tamu.edu
Work: (979) 845-3602
Fax: (979) 845-0876

Marine Computer Specialist
John Davis
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845
USA

*Staffing is incomplete and subject to change.

Internet: jdavis@odpemail.tamu.edu
Work: (979) 862-4849
Fax: (979) 458-1617

Marine Computer Specialist
Michael J. Hodge
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77845-9547
USA
Internet: hodge@odpemail.tamu.edu
Work: (979) 862-4845
Fax: (979) 458-1617

ODP/TAMU Programmer
Weining Chen
Ocean Drilling Program
Texas A&M University
1000 Discovery Drive
College Station, TX 77840
USA
Internet: chen@odpemail.tamu.edu
Work: (979) 845-1918
Fax: (979) 458-1617

*Staffing is incomplete and subject to change.