WEST RIDGE RESOURCES, INC.

WEST RIDGE MINE
C/007/041

2010 ANNUAL REPORT

Incoming
C0070041
#3789
OK

WEST RIDGE
RESOURCES, INC.

P.O. Box 910, East Carbon, Utah 84520
Telephone (435) 888-4000 Fax (435) 888-4002

Utah Division of Oil, Gas & Mining
Utah Coal Program
1594 West North Temple, Suite 1210
P.O.Box 145801
Salt Lake City, UT 84114-5801

March 28, 2011

Attn: Daron Haddock
Permit Supervisor

Re: West Ridge Mine C/007/041
2010 Annual Report

Dear Mr. Haddock:

Enclosed are two copies of the 2010 annual report.

If you have questions or comments please contact me at (435) 888-4017.

Sincerely,

David Shaver
Resident Agent

RECEIVED
MAR 29 2011
DIV. OF OIL, GAS & MINING

Form DOGM - C1 (Last Revised March 22, 2011)

File Folder # 3

APPLICATION FOR PERMIT PROCESSING

Permit Change ☐	New Permit ☐	Renewal ☐	Transfer ☐	Exploration ☐	Bond Release ☐

Permit Number: C/007/041

Title of Proposal: 2010 annual report

Mine: WEST RIDGE MINE

Permittee: **WEST RIDGE Resources, Inc.**

Description, include reason for application and timing required to implement:.

Instructions: *If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.*

☐ Yes	☐ No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	☐ No	2. Is the application submitted as a result of a Division Order?
☐ Yes	☐ No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes	☐ No	4. Does application include operations in hydrologic basins other than as currently approved?
☐ Yes	☐ No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	☐ No	6. Does the application require or include public notice/publication?
☐ Yes	☐ No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☐ Yes	☐ No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes	☐ No	9. Is the application submitted as a result of a Violation?
☐ Yes	☐ No	10. Is the application submitted as a result of other laws or regulations or policies? Explain:
☐ Yes	☐ No	11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes	☐ No	12. Does the application require or include underground design or mine sequence and timing?
☐ Yes	☐ No	13. Does the application require or include collection and reporting of any baseline information?
☐ Yes	☐ No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes	☐ No	15. Does application require or include soil removal, storage or placement?
☐ Yes	☐ No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☐ Yes	☐ No	17. Does the application require or include construction, modification, or removal of surface facilities?
☐ Yes	☐ No	18. Does the application require or include water monitoring, sediment or drainage control measures?
☐ Yes	☐ No	19. Does the application require or include certified designs, maps, or calculations?
☐ Yes	☐ No	20. Does the application require or include subsidence control or monitoring?
☐ Yes	☐ No	21. Have reclamation costs for bonding been provided for?
☐ Yes	☐ No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes	☐ No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

☐ **Attach _3_ complete copies of the application.**

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations herein. (R645-301-123)

Signed - Name - Position - Date 3/22/11

Subscribed and sworn to before me this 22nd day of March, 2011.

Notary Public

My Commission Expires: March 27, 2013

Attest: STATE OF Utah

COUNTY OF Carbon

Notary Public
LINDA KERNS
Commission #578211
My Commission Expires
March 27, 2013
State of Utah

Received by Oil, Gas & Mining

RECEIVED

MAR 29 2011

DIV. OF OIL, GAS & MINING

ASSIGNED TRACKING NUMBER

Application for Permit Processing
Detailed Schedule of Changes to the MRP

Title of Application: 2010 annual report

Permit Number: C/007/041

Mine: WEST RIDGE MINE

Permittee: WEST RIDGE RESOURCES

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit application. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. Include page, section and drawing numbers as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
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☐ ADD	☐ REPLACE	☐ REMOVE	

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

CHECK-SHEET

Submit by Email | Print Form | Reset Form

Annual Report

Date 3/22/11

This Annual Report shows information the Division has for your mine. Submit the completed document and any additional information identified in the Appendices to the Division by **March 31, 2011**. During a complete inspection an inspector will check and verify the information.

GENERAL INFORMATION

Company Name	West Ridge Resources	Mine Name	West Ridge Mine
Permit Number	C/007/0041	Permit expiration Date	2014-04-01
Operator Name	West Ridge Resources, Inc.	Phone Number	+1 (435) 888-4017
Mailing Address	P.O. Box 910	Email	dshaver@coalsource.com

City: East Carbon City State: UT Zip Code: 84520

CERTIFIED REPORTS

		DOGM File Location or Annual Report Location
Excess Spoil Piles	☐ Required ☐ Not Required	
Refuse Piles	☐ Required ☐ Not Required	
Impoundments	☒ Required ☐ Not Required	Sediment Pond Certification (included)
Other:		

OPERATOR COMMENTS

Sediment pond certification is included.

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

COMMITMENTS AND CONDITIONS

The Permittee is responsible for ensuring annual technical commitments in the MRP and conditions accepted with the permit are completed throughout the year. The Division has identified these commitments below and has provided space for you to report what you have done during the past year for each commitment. If additional written response is required, it should be filed as an attachment to this report.

Title: Experimental Practice Field Trials
Objective: Monitoring to support proposed Experimental Practice.
Frequency: Annual Evaluation in June.
Status: Ongoing
Reports: Provide in annual report a comparison of growth on field trials with Douglas/Fir reference area.
Citation: MRP, Vol. 1, App. 2-6 and Vol. A, Map 2-4

OPERATOR COMMENTS

The required report, "Vegetation Monitoring at the Experimental Test Plot, 2010" prepared by Mt. Nebo Scientific, is included.

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

Title: Soil Sampling of fill at T1, T2, T3
Objective: To protect buried substitute topsoil in the fill.
Frequency: Annual Evaluation during field season.
Status: ongoing. Beginning in 2010, a composite sample from several locations near each site will be collected to obtain a more average value.
Reports: Provide information in Annual Report
Citation: MRP, Vol. 1, App. 2-6 addendum and Vol. A, Map 2-4

OPERATOR COMMENTS

The required report, "Soil Monitoring at the West Ridge mine, 2010" prepared by Mt. Nebo Scientific, is included.

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

Title: SUBSIDENCE MONITORING
Objective: To monitor subsidence from longwall mining practices.
Frequency: plan commits to subsidence monitoring of panels until the effects of mining have stabilized and vertical movement is less than six inches per year.
Status: On going.
Reports: Part of annual report.
Citation: Volume 2, Chapter 5, page 5-23b to 5-23e

OPERATOR COMMENTS

Subsidence information is included

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

The following commitments are not required for the current annual report year, but will be required by the permittee in the future as indicated by the Status item. These commitments are included for information only,and do not currently require action.

Title: RECLAMATION MONITORING
Objective: Visually assess the revegetation success.
Frequency: Quarterly for the first three years and June of each year thereafter. (Report due for 2010)
Status: Implement at reclamation.
Reports: Annually.
Citation: volume I, chapter three, page 3-16, paragraph 2

OPERATOR COMMENTS (Optional)

Title: CULTURAL RESOURCES
Objective: If during the course of mining operations, previously unidentified cultural resources are discovered, the Permittee shall ensure that the site(s) is not disturbed and shall notify the Division of Oil, Gas, and Mining. The Division, after coordination with OSM, shall inform the Permittee of necessary actions required. The Permittee shall implement the mitigation measures required by the Division within the time frame specified by the Division.
Frequency: As needed.
Status: Ongoing.
Reports: Annual.
Citation: Permit Condition Sec. 16.

OPERATOR COMMENTS (Optional)

Title: MEXICAN SPOTTED OWL SURVEY
Objective: The permittee must conduct appropriate surveys for Mexican spotted owls on the lease tract areas with 40 percent or greater slopes, cliff habitat areas, riparian habitats, and mixed conifer forest habitats, prior to any future surface disturbing activity and/or any mining activity with the potential to interrupt surface spring flows. Inventory work must be conducted by parties approved and permitted for such survey work by the Fish and Wildlife Service and qualified in accordance with R645-301-132. Surveys must be done following current protocols established by the Fish and Wildlife Service.
Frequency: as needed
Status: ongoing
Reports: annual
Citation: Permit condition attachment A special condition #3

OPERATOR COMMENTS (Optional)

REPORTING OF OTHER TECHNICAL DATA

List other technical data and information as required under the approved plan, which must be periodically submitted to the Division. Specify whether the information is included as an attachment to this report or currently on file with the Division.

Please List Attachments:

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

LEGAL, FINANCIAL, COMPLIANCE AND RELATED INFORMATION

The Division is Requesting that each Permittee review and update the legal, financial, compliance and related information in the plan as part of the annual report. Please provide the Department of Commerce, Annual Report of Officers, or other equivalent information as necessary to ensure that the information provided in the plan is current. Provide any other change as necessary regarding land ownership, lease acquisitions, legal results from appeals of violations, or other changes as necessary to update information required in the mining and reclamation plan. Include certified financial statements, audits or worksheets, which may be required to meet bonding requirements. Specify whether the information is currently on file with the Division or included as an attachment to the report.

LEGAL/ FINANCIAL UPDATE	Included	DOGM File Location or Annual Report Location
	☐	
	☐	
	☐	
	☐	

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

MAPS

Copies of mine maps, current and up-to-date through at least December 31, 2010, are to be provided to the Division as an attachment to this report in accordance with the requirements of R 645-301-525.240. The map copies shall be made in accordance with 30 CFR 75.1200 as required by MSHA. Mine maps are not considered confidential.

Map Name	Map Number	Included		Confidential	
		Yes	No	Yes	No
Annual subsidence map		☐	☐	☐	☒
Mine Map		☐	☐	☐	☒
		☐	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐

REVIEWER COMMENTS ☐ Met Requirements ☐ Did Not meet Requirements

OTHER INFORMATION

Please provide any comments of further information to be included as part of the Annual Report. Any other attachments are to be provided as an attachment to this report. If information is submitted as a group rather then by individual mine, please identify each of the mine's data in the list below.

Please List Attachments:

REVIEWER COMMENTS

SEDIMENT POND CERTIFICATION

West Ridge Resources, Inc.
West Ridge Mine
2010 Annual Pond Certification Report

POND: Sediment Pond **LOCATION:** West Ridge Mine

IMPOUNDMENTS	
(1) Stability	Slopes stable
(2) Structural Weakness/Erosion	None noted
(3) Potential Safety Hazards	None noted
(4) Depth of Impounded Water	Upper Cell: 12" (est) Lower Cell: dry
(5) Existing Storage Capacity	5.5 ac-ft
(6) Monitoring Procedures	UPDES discharge, quarterly inspection

(7) Sediment Accumulation (Elevation)	Upper Cell: 6941.7' (est) Lower Cell: 6927.2' (est)
(8) Sediment Cleanout Level (Elevation)	Upper Cell: 6942.8' Lower Cell: 6929'
(9) Principle Spillway (Elevation)	Upper Cell: 6952.5' Lower Cell: 6937'
(10) Emergency Spillway (Elevation)	Upper Cell: 6952.5' Lower cell: 6938'
(11) Existing Sediment Capacity (To Cleanout)	0.59 ac-ft (est)

GENERAL	
(12) Comments/Recommendations	This pond was completed in 1999 No discharge has ever occurred during the life of the pond

STATEMENT

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself or under my direction, and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

David W. Hibbs

(Signature)

10/28/10

(Date)

REGISTERED PROFESSIONAL ENGINEER
5446561
DAVID W.
HIBBS
10/28/10
STATE OF UTAH

SUBSIDENCE INFORMATION

Olympus Aerial Surveys, Inc.
Report for Photography Date October 14, 2010
For
UTAH AMERICAN ENERGY
WESTRIDGE MINE SUBSIDENCE STUDY
OAS Job No. 201058

			2004/2006/2009	2010	2010	
POINT	EASTING	NORTHING	ELEVATION	DIFFERENCE	ELEVATION	POINT
1162	19228.042	43553.774	7829.914	0.00	7829.914	1162
1163	19260.272	43272.464	7700.153	0.01	7700.160	1163
1164	19488.620	43792.977	7594.755	2.58	7597.338	1164
1165	19545.637	43484.063	7600.146	0.64	7600.790	1165
1166	19557.833	42902.388	7269.319	0.16	7269.474	1166
1167	19783.485	42610.469	7193.919	0.00	7193.919	1167
1168	19849.964	43993.079	7299.519	1.14	7300.654	1168
1169	19852.950	44396.151	7487.614	0.00	7487.614	1169
1170	19889.292	43449.148	7278.845	0.16	7279.009	1170
1171	19909.589	43056.459	7250.915	0.60	7251.518	1171
1172	20015.066	42390.915	7106.107	0.46	7106.568	1172
1173	20077.561	42001.962	7126.686	-0.26	7126.430	1173
1174	20134.582	42784.604	7072.611	1.11	7073.722	1174
1175	20167.795	43774.827	7147.462	1.83	7149.291	1175
1176	20239.687	44310.781	7176.082	1.74	7177.819	1176
1177	20264.255	41640.852	6983.898	0.12	6984.017	1177
1178	20303.727	43240.455	7134.734	0.00	7134.734	1178
1179	20374.244	42686.535	7173.507	1.13	7174.640	1179
1180	20435.299	44722.337	7208.999	-0.12	7208.880	1180
1181	20478.778	43532.292	7273.980	NR2010		1181
1182	20503.659	42419.240	7203.744	0.00	7203.744	1182
1183	20542.300	45072.568	7243.537	0.93	7244.471	1183
1184	20616.253	43883.650	7438.117	1.43	7439.549	1184
1185	20682.928	42103.019	7244.208	0.95	7245.160	1185
1186	20702.065	44399.778	7449.265	0.96	7450.226	1186
1187	20721.952	43192.340	7482.636	0.83	7483.463	1187
1188	20779.028	44867.865	7437.428	0.55	7437.976	1188
1189	20786.538	41460.444	7418.536	0.36	7418.893	1189
1190	20839.794	43071.434	7547.306	-0.06	7547.251	1190
1191	20860.891	43342.278	7609.776	1.38	7611.157	1191
1192	20920.907	44061.388	7616.686	1.14	7617.822	1192
1193	20995.759	41670.536	7551.299	0.83	7552.132	1193
1194	21012.318	41305.340	7226.441	0.24	7226.679	1194
1195	21019.711	43725.759	7580.972	0.00	7580.972	1195
1196	21025.573	42636.475	7655.578	1.14	7656.720	1196
1197	21152.355	41919.795	7619.107	0.71	7619.821	1197
1198	21152.651	44954.185	7658.034	0.00	7658.034	1198
1199	21190.169	41021.080	6975.952	0.36	6976.309	1199
1200	21236.607	43292.152	7811.650	0.08	7811.727	1200
1201	21239.690	42163.326	7672.490	1.55	7674.037	1201

1202	21305.412	43695.437	7802.685	0.71	7803.396	1202
1203	21379.149	41547.281	7254.396	0.98	7255.380	1203
1204	21387.757	45865.803	7531.394	0.53	7531.928	1204
1205	21397.801	42451.134	7837.730	0.24	7837.968	1205
1206	21415.547	44572.819	7776.242	4.17	7780.410	1206
1207	21424.340	45499.745	7618.510	0.36	7618.867	1207
1208	21455.210	44947.014	7787.755	0.03	7787.788	1208
1209	21536.171	40581.568	7267.436	NR2010		1209
1210	21561.985	42796.032	7949.426	0.00	7949.426	1210
1211	21606.616	44117.839	8007.413	-0.12	8007.294	1211
1212	21681.774	43336.963	8032.637	0.09	8032.722	1212
1213	21686.038	46124.626	7628.604	0.24	7628.842	1213
1214	21702.718	41886.850	7295.757	0.36	7296.118	1214
1215	21712.395	39992.392	7572.978	0.96	7573.941	1215
1216	21729.217	45800.998	7714.625	0.69	7715.318	1216
1217	21743.971	41344.763	7012.708	0.00	7012.708	1217
1218	21753.500	45417.411	7785.525	0.36	7785.882	1218
1219	21779.942	39371.732	7985.267	-0.60	7984.665	1219
1220	21831.278	43753.602	8066.500	-0.46	8066.044	1220
1221	21841.715	44724.189	7919.882	-0.35	7919.529	1221
1222	21848.488	42332.230	7624.486	0.29	7624.772	1222
1223	21957.034	40883.058	7254.076	1.42	7255.499	1223
1224	22001.875	42797.293	7804.927	-0.24	7804.684	1224
1225	22048.451	46494.620	7617.375	0.24	7617.613	1225
1226	22056.426	43430.799	7996.614	0.55	7997.161	1226
1227	22079.232	46108.115	7731.407	0.36	7731.764	1227
1228	22079.402	41664.582	7076.726	0.12	7076.846	1228
1229	22096.512	45705.118	7921.042	0.03	7921.074	1229
1230	22152.640	44290.387	8065.237	-1.22	8064.021	1230
1231	22156.608	42198.830	7451.340	-0.95	7450.389	1231
1232	22258.839	45487.198	8034.102	0.00	8034.102	1232
1233	22275.592	44770.653	8042.354	-0.96	8041.392	1233
1234	22317.431	43776.403	7973.713	-0.24	7973.478	1234
1235	22379.500	43103.195	7876.361	-1.01	7875.351	1235
1236	22396.024	45154.225	8119.027	-1.00	8118.032	1236
1237	22408.574	41730.018	7076.523	-1.50	7075.025	1237
1238	22416.744	46882.566	7706.436	0.34	7706.778	1238
1239	22449.626	42156.969	7458.716	0.46	7459.177	1239
1240	22460.202	42654.447	7750.770	1.31	7752.076	1240
1241	22517.787	44511.587	8007.494	-2.86	8004.637	1241
1242	22550.059	43382.632	7855.660	-0.90	7854.765	1242
1243	22561.180	44148.921	7976.443	-1.68	7974.766	1243
1244	22573.048	45768.354	8009.617	-0.12	8009.498	1244
1245	22604.938	40655.844	7697.902	NR2010		1245
1246	22684.430	45541.689	8093.191	-0.75	8092.446	1246
1247	22685.977	44856.615	8013.444	-2.52	8010.926	1247
1248	22688.183	40132.799	7921.544	0.52	7922.062	1248
1249	22709.799	46109.109	7981.362	-0.36	7980.998	1249
1250	22711.062	43740.853	7902.074	-0.36	7901.717	1250
1251	22720.389	42019.836	7377.216	0.22	7377.435	1251
1252	22728.881	46675.628	7829.225	1.43	7830.650	1252
1253	22730.086	43035.174	7702.400	-0.16	7702.236	1253

1254	22798.709	45179.357	8007.372	0.46	8007.832	1254
1255	22817.920	39660.891	8055.461	1.20	8056.665	1255
1256	22852.196	38959.741	8145.715	2.11	8147.824	1256
1257	22891.475	42444.930	7426.238	-0.41	7425.833	1257
1258	22942.538	44316.211	7809.776	-0.48	7809.300	1258
1259	22942.802	46532.547	7947.513	-0.40	7947.115	1259
1260	22949.244	43505.084	7747.714	-2.38	7745.334	1260
1261	23039.923	45779.376	8246.003	-2.19	8243.816	1261
1262	23058.164	39172.793	8150.395	0.97	8151.363	1262
1263	23073.061	42856.445	7397.061	0.12	7397.181	1263
1264	23073.390	41558.890	7386.976	0.48	7387.458	1264
1265	23097.842	44802.705	7805.212	-0.67	7804.540	1265
1266	23100.058	43984.649	7705.741	-2.32	7703.421	1266
1267	23116.076	40474.695	7585.267	NR2010		1267
1268	23187.601	45375.724	7988.423	-1.70	7986.721	1268
1269	23219.489	44513.624	7749.548	-2.37	7747.178	1269
1270	23229.760	42512.467	7197.631	2.60	7200.230	1270
1271	23255.311	38706.549	7995.969	1.02	7996.991	1271
1272	23307.486	45894.353	8316.460	-1.14	8315.322	1272
1273	23337.445	43322.396	7523.019	-2.64	7520.375	1273
1274	23364.781	42098.370	7351.870	-0.24	7351.629	1274
1275	23385.072	39153.770	8124.759	0.37	8125.126	1275
1276	23396.816	46505.882	8218.629	-0.24	8218.386	1276
1277	23428.781	43775.454	7523.427	-2.85	7520.574	1277
1278	23441.960	41162.933	7443.497	0.24	7443.741	1278
1279	23445.291	38463.431	7940.588	1.24	7941.831	1279
1280	23448.779	42849.166	7271.307	-1.82	7269.491	1280
1281	23454.357	44218.738	7622.734	-1.90	7620.830	1281
1282	23466.262	44952.780	7797.714	0.12	7797.833	1282
1283	23473.251	41542.631	7612.612	1.29	7613.904	1283
1284	23535.251	45485.587	7997.185	-1.67	7995.516	1284
1285	23538.043	46049.193	8407.862	-0.49	8407.376	1285
1286	23570.347	43118.370	7347.224	-2.85	7344.371	1286
1287	23640.095	39681.288	7891.188	0.73	7891.920	1287
1288	23647.589	38942.706	8064.413	1.04	8065.452	1288
1289	23650.976	44526.872	7580.110	-1.20	7578.906	1289
1290	23721.353	38121.875	7726.834	0.10	7726.930	1290
1291	23753.118	41518.247	7759.265	0.85	7760.114	1291
1292	23753.725	42882.845	7215.317	-1.45	7213.872	1292
1293	23758.378	43645.064	7387.159	-0.60	7386.557	1293
1294	23765.745	38322.970	7767.037	-0.08	7766.957	1294
1295	23779.427	39302.726	8096.641	0.28	8096.919	1295
1296	23797.179	46269.747	8487.935	0.00	8487.935	1296
1900	23823.560	47149.079	8552.006	0.01	8552.016	1900
1297	23823.823	45146.517	7768.089	0.00	7768.089	1297
1298	23849.157	41046.788	7506.772	0.37	7507.138	1298
1299	23861.072	43088.474	7377.175	0.00	7377.175	1299
1300	23875.052	45709.986	8078.644	0.24	8078.885	1300
1301	23876.561	44061.839	7637.159	-2.82	7634.338	1301
1901	23895.094	46998.793	8542.133	-0.86	8541.275	1901
1902	23923.483	47401.506	8526.751	NR2010		1902
1302	24017.450	37859.976	7609.638	0.24	7609.882	1302

1303	24033.269	39630.343	8025.593	0.32	8025.913	1303
1304	24038.464	38614.163	7957.638	-0.81	7956.824	1304
1305	24044.793	40282.723	7845.247	NR2010		1305
1306	24080.484	39017.237	7963.335	0.45	7963.780	1306
1307	24128.919	45013.675	7907.209	-1.57	7905.641	1307
1308	24137.643	43537.354	7644.983	-2.87	7642.109	1308
1309	24142.386	41652.554	7915.888	-1.28	7914.609	1309
1903	24163.244	46553.088	8726.199	-1.10	8725.101	1903
1310	24168.084	44594.086	7839.605	-4.42	7835.185	1310
1311	24175.879	37450.075	7636.109	-2.61	7633.495	1311
1312	24184.762	43101.313	7307.941	-0.12	7307.821	1312
1313	24190.157	45495.593	8115.522	0.12	8115.641	1313
1904	24197.438	46315.105	8551.817	-0.29	8551.526	1904
1314	24209.708	45980.276	8314.422	-1.45	8312.976	1314
1315	24246.228	43860.629	7801.096	-3.45	7797.647	1315
1316	24284.532	39947.412	8039.021	0.80	8039.825	1316
1317	24306.958	39372.792	7924.311	-0.66	7923.649	1317
1318	24322.802	41061.065	7746.773	0.53	7747.301	1318
1319	24329.976	38296.854	7802.972	1.07	7804.038	1319
1905	24348.086	47591.340	8816.758	-1.46	8815.295	1905
1906	24352.641	46726.197	8848.404	-1.23	8847.173	1906
1320	24352.699	44299.141	7889.931	-5.11	7884.821	1320
1907	24356.388	47185.506	8881.332	-1.39	8879.940	1907
1321	24381.791	37132.131	7562.103	-2.45	7559.658	1321
1322	24395.492	45234.954	8096.900	-1.93	8094.972	1322
1323	24439.383	37836.075	7352.665	0.68	7353.347	1323
1324	24444.169	38915.578	7826.651	-0.89	7825.760	1324
1908	24463.311	47610.241	8807.565	-2.19	8805.376	1908
1325	24476.529	39671.993	7913.853	0.16	7914.008	1325
1909	24491.087	47349.902	8827.375	-2.10	8825.274	1909
1326	24524.119	43616.973	7609.205	-2.85	7606.354	1326
1910	24524.929	46933.616	8906.244	-0.85	8905.391	1910
1327	24553.760	45703.602	8387.935	-0.24	8387.697	1327
1328	24566.169	44740.256	8001.137	-2.55	7998.592	1328
1329	24571.149	43256.081	7345.472	0.24	7345.713	1329
1330	24572.731	41493.423	8012.287	0.32	8012.603	1330
1911	24583.065	46035.085	8566.003	-1.03	8564.973	1911
1331	24585.714	39301.068	7832.348	-0.96	7831.391	1331
1332	24631.064	37477.995	7349.386	-0.99	7348.401	1332
1333	24646.518	45030.778	8123.917	-3.04	8120.875	1333
1334	24647.139	43948.555	7706.842	-0.72	7706.119	1334
1335	24656.077	36811.408	7382.169	-1.80	7380.373	1335
1336	24657.131	40451.417	8022.256	0.01	8022.265	1336
1337	24680.600	38585.036	7565.177	-2.62	7562.553	1337
1912	24703.550	46854.772	8907.911	-1.93	8905.983	1912
1338	24710.606	38161.593	7508.832	0.27	7509.106	1338
1913	24732.283	46365.288	8826.861	-1.42	8825.445	1913
1339	24732.816	41972.920	7944.860	-2.69	7942.175	1339
1340	24735.159	39888.745	7928.299	0.37	7928.665	1340
1914	24739.099	47053.004	8875.640	-1.37	8874.268	1914
1341	24741.415	41023.489	7945.715	0.24	7945.959	1341
1915	24743.830	46621.025	8886.580	-1.11	8885.472	1915

1916	24754.102	47480.260	8764.021	-1.62	8762.400	1916
1342	24760.384	42727.205	7600.892	-2.44	7598.451	1342
1343	24765.118	44272.028	7817.600	-1.57	7816.030	1343
1917	24794.735	47878.262	8794.293	-2.48	8791.816	1917
1344	24803.926	39089.147	7679.224	-0.50	7678.727	1344
1345	24817.235	37166.067	7270.914	-1.30	7269.616	1345
1346	24827.814	37767.801	7205.267	0.04	7205.310	1346
1347	24838.713	36454.022	7144.251	0.85	7145.101	1347
1918	24853.598	47184.065	8809.165	-0.47	8808.693	1918
1919	24865.357	45896.283	8500.331	-2.62	8497.707	1919
1348	24900.623	44555.591	7875.342	-0.96	7874.382	1348
1349	24921.171	45466.151	8209.980	-1.04	8208.942	1349
1350	24926.193	39501.792	7774.199	-0.12	7774.077	1350
1351	24954.471	41944.312	7943.884	-2.56	7941.321	1351
1352	24959.683	43600.672	7448.406	0.12	7448.527	1352
1353	24971.300	41367.441	8130.781	-2.87	8127.912	1353
1920	24979.425	46100.192	8558.460	-2.90	8555.556	1920
1354	25002.062	37467.010	7079.260	0.94	7080.197	1354
1921	25017.732	48139.200	8773.080	-1.16	8771.918	1921
1355	25025.785	37993.635	7160.724	-1.50	7159.222	1355
1356	25026.977	36743.165	7166.584	1.32	7167.903	1356
1357	25033.591	43141.208	7543.924	-2.71	7541.217	1357
1358	25050.813	40820.346	8139.083	-0.76	8138.319	1358
1359	25060.661	37071.597	7122.901	-0.12	7122.780	1359
1360	25072.223	44945.414	7936.182	-1.32	7934.860	1360
1361	25081.412	38456.744	7299.762	0.86	7300.623	1361
1362	25091.604	36211.891	6960.423	0.00	6960.423	1362
1922	25103.822	47570.095	8674.707	-0.79	8673.920	1922
1363	25112.868	38870.757	7432.941	-0.21	7432.735	1363
1923	25121.336	46939.652	8849.628	-0.91	8848.720	1923
1364	25128.510	40323.593	7917.027	0.66	7917.682	1364
1924	25130.913	46695.139	8742.299	-0.23	8742.068	1924
1925	25161.505	46384.779	8602.203	-1.07	8601.132	1925
1365	25184.386	44015.152	7600.851	-1.85	7599.005	1365
1926	25200.061	47829.245	8683.431	-0.32	8683.107	1926
1927	25200.720	47205.742	8755.740	-1.62	8754.117	1927
1928	25213.687	45631.753	8206.404	-2.75	8203.656	1928
1366	25274.203	39831.069	7725.735	-0.13	7725.601	1366
101	25282.582	37088.596	7063.176	NR2010		101
1367	25287.534	39328.630	7528.296	-0.37	7527.927	1367
102	25315.264	35744.230	7130.453	-0.12	7130.332	102
1929	25315.618	48189.411	8692.342	-2.00	8690.346	1929
1368	25317.163	45152.157	7916.215	-0.48	7915.736	1368
103	25323.388	34805.468	7358.889	0.99	7359.880	103
104	25325.604	36781.657	7033.287	0.12	7033.408	104
1369	25336.468	41199.755	8289.113	-4.63	8284.481	1369
1370	25339.127	38080.975	7501.988	1.10	7503.091	1370
1371	25351.685	44402.829	7640.134	0.60	7640.736	1371
105	25358.892	33843.995	7052.873	0.00	7052.873	105
106	25359.440	36518.978	6968.382	0.48	6968.865	106
107	25362.041	35511.993	7199.003	NR2010		107
108	25363.798	37690.136	7349.213	0.00	7349.213	108

109	25368.610	33526.107	7059.297	1.46	7060.755	109
110	25375.684	37355.591	7208.496	2.85	7211.343	110
1930	25379.650	45983.969	8237.556	-2.19	8235.367	1930
1931	25380.254	47932.277	8660.325	-1.74	8658.581	1931
1932	25386.932	46975.934	8808.544	-0.49	8808.057	1932
111	25389.036	35184.230	7346.166	-0.10	7346.067	111
1372	25398.782	45409.366	8099.100	0.00	8099.100	1372
112	25421.306	34506.467	7371.927	0.00	7371.927	112
1933	25424.005	45768.346	8142.249	-1.09	8141.160	1933
1934	25434.468	47450.561	8667.225	-0.65	8666.572	1934
113	25455.568	34180.280	7292.504	0.00	7292.504	113
114	25467.636	36204.421	7087.728	NR2010		114
1935	25479.543	48433.559	8658.823	-1.28	8657.546	1935
1936	25501.029	46228.957	8321.603	-1.57	8320.031	1936
115	25501.371	36836.543	7126.946	-1.12	7125.825	115
1373	25509.074	40728.407	8022.867	-1.45	8021.415	1373
116	25510.821	35403.356	7327.720	NR2010		116
1374	25525.101	43801.488	7507.790	1.29	7509.077	1374
1375	25530.549	38845.641	7598.942	NR2010		1375
1376	25561.136	44874.010	7804.764	0.00	7804.764	1376
1937	25563.377	46973.968	8812.622	-0.68	8811.942	1937
117	25563.654	37083.522	7206.866	0.88	7207.746	117
118	25568.477	36592.115	7005.031	NR2010		118
1938	25580.870	47786.594	8622.736	-2.25	8620.482	1938
119	25581.105	36061.683	7200.713	NR2010		119
1939	25581.988	46525.544	8496.258	-1.45	8494.811	1939
1940	25586.174	48062.858	8633.216	-1.03	8632.186	1940
1377	25589.661	42589.331	7890.944	-1.95	7888.992	1377
1941	25594.518	47514.327	8657.490	-0.96	8656.535	1941
1378	25596.045	44195.766	7496.083	0.33	7496.408	1378
1942	25610.169	45070.803	7865.502	-0.87	7864.628	1942
120	25620.372	37245.464	7277.850	1.56	7279.412	120
1943	25621.115	45524.397	7962.382	-2.08	7960.306	1943
1379	25638.045	38498.004	7698.355	1.03	7699.388	1379
121	25640.832	35057.487	7497.890	0.00	7497.890	121
1380	25652.830	40191.933	7792.714	-0.12	7792.592	1380
122	25674.861	37482.887	7531.440	1.57	7533.012	122
123	25683.112	33498.034	7332.508	2.05	7334.561	123
1381	25704.882	39749.604	7720.401	-0.91	7719.494	1381
124	25713.230	37824.935	7692.462	0.65	7693.114	124
125	25722.208	35714.318	7381.303	NR2010		125
1944	25726.427	48587.559	8593.001	-0.76	8592.238	1944
126	25742.010	36892.385	7022.364	-0.12	7022.243	126
127	25749.156	33939.254	7399.180	0.61	7399.788	127
1382	25758.573	44494.566	7582.066	-0.36	7581.705	1382
1383	25777.156	41324.978	8425.227	-6.49	8418.741	1383
1945	25784.807	46797.698	8663.554	-0.85	8662.703	1945
1946	25798.646	45839.903	8035.187	-0.75	8034.433	1946
128	25818.025	34222.145	7580.704	1.15	7581.858	128
1947	25819.120	45218.768	7859.769	-2.21	7857.560	1947
1384	25832.680	38140.232	7812.192	-0.48	7811.713	1384
1385	25848.203	39409.497	7804.119	-1.23	7802.887	1385

1948	25849.840	47026.682	8815.300	-0.94	8814.361	1948
129	25850.846	34584.418	7785.375	-1.08	7784.295	129
130	25865.742	35951.996	7332.644	NR2010		130
131	25869.381	36690.126	7075.348	NR2010		131
1949	25878.752	46220.471	8328.802	-3.22	8325.583	1949
1386	25881.074	40940.725	8192.796	-5.68	8187.120	1386
1950	25887.639	48258.376	8546.580	-0.21	8546.367	1950
1387	25889.955	38866.544	7849.851	-2.08	7847.769	1387
1388	25902.485	43454.128	7628.970	0.49	7629.458	1388
132	25911.793	34955.402	7734.684	NR2010		132
133	25922.308	37196.491	7154.437	0.06	7154.498	133
1389	25923.088	44031.322	7661.727	-1.27	7660.455	1389
134	25927.660	35504.965	7612.397	0.00	7612.397	134
1951	25938.068	48897.115	8431.060	-0.80	8430.258	1951
135	25948.408	33489.089	7491.743	4.05	7495.795	135
1952	25950.953	45046.086	7748.670	0.68	7749.353	1952
1953	25966.254	45660.208	7962.719	-1.62	7961.104	1953
1390	25977.148	40672.872	8060.588	-3.78	8056.805	1390
1954	25982.342	47765.717	8628.783	-2.72	8626.065	1954
1391	25984.302	44855.159	7662.221	-0.12	7662.101	1391
136	25985.845	36202.398	7345.742	NR2010		136
1955	25995.202	46518.509	8550.356	-1.72	8548.633	1955
1392	26018.111	38401.134	7884.190	-0.93	7883.258	1392
1956	26020.960	48462.425	8495.513	0.04	8495.556	1956
1393	26035.555	40189.756	7896.484	-0.29	7896.199	1393
137	26052.071	33796.410	7593.114	0.00	7593.114	137
1957	26094.039	47981.663	8581.706	-0.86	8580.843	1957
1958	26117.138	47045.207	8833.599	-1.39	8832.212	1958
138	26117.252	37534.221	7286.821	-1.14	7285.681	138
139	26117.505	35307.509	7777.031	NR2010		139
1394	26119.219	41361.729	8524.271	-5.83	8518.442	1394
1959	26124.724	45351.287	7789.872	-2.29	7787.584	1959
140	26130.227	36853.129	7075.992	0.00	7075.992	140
141	26134.846	37875.341	7504.312	-0.26	7504.056	141
142	26142.747	34182.734	7835.086	1.63	7836.712	142
1960	26161.026	46068.201	8304.776	-1.10	8303.677	1960
143	26167.019	34529.137	7971.642	2.94	7974.584	143
1961	26170.399	46464.298	8614.225	-2.07	8612.154	1961
1395	26172.730	44236.191	7751.046	-2.24	7748.807	1395
1396	26181.255	39355.588	7889.271	-1.81	7887.462	1396
1397	26185.440	43973.679	7642.195	-2.49	7639.709	1397
1962	26192.086	48616.803	8360.660	-1.38	8359.278	1962
144	26195.229	35674.026	7671.738	0.00	7671.738	144
1963	26196.454	45796.445	8064.178	-2.57	8061.611	1963
1398	26215.047	39834.611	7959.549	-1.27	7958.284	1398
145	26215.193	34709.085	8008.781	1.62	8010.405	145
146	26221.129	35977.590	7590.654	NR2010		146
147	26237.664	33465.521	7396.649	0.61	7397.257	147
1399	26252.370	40864.033	8270.314	-4.15	8266.165	1399
148	26265.358	36540.863	7249.273	NR2010		148
1964	26269.302	47078.275	8831.985	-0.95	8831.037	1964
1400	26277.232	38104.538	7675.079	0.06	7675.137	1400

1401	26283.275	44549.623	7758.390	0.00	7758.390	1401
1965	26286.354	49192.950	8252.233	-1.69	8250.548	1965
1966	26287.587	46759.760	8752.123	-0.45	8751.674	1966
1402	26293.284	38933.161	7932.843	0.23	7933.068	1402
149	26320.150	35178.984	7918.184	0.00	7918.184	149
1403	26322.774	43006.130	7893.345	-1.34	7892.003	1403
1967	26327.806	47538.070	8653.500	-0.73	8652.770	1967
1968	26329.820	46314.153	8484.945	-0.28	8484.670	1968
150	26342.955	37022.043	7108.166	NR2010		150
151	26360.299	33894.769	7459.817	-0.33	7459.483	151
152	26377.593	37246.247	7074.403	NR2010		152
1969	26385.597	47968.021	8553.052	-1.20	8551.848	1969
1970	26385.874	48196.107	8438.294	1.19	8439.485	1970
1971	26394.865	45607.892	7927.557	-1.13	7926.423	1971
1972	26415.073	46590.397	8626.088	-1.60	8624.491	1972
153	26422.147	34505.082	7836.352	0.45	7836.800	153
1404	26424.061	40508.201	8168.086	-3.37	8164.715	1404
1405	26424.369	44790.434	7820.045	0.12	7820.166	1405
1406	26428.759	42072.565	8180.670	NR2010		1406
154	26441.619	34932.989	8073.799	1.31	8075.110	154
1973	26444.224	48637.836	8259.437	-1.68	8257.756	1973
1974	26445.371	48818.841	8246.367	-1.40	8244.966	1974
155	26455.972	33527.754	7248.607	0.02	7248.622	155
156	26456.501	37922.660	7484.585	1.62	7486.200	156
1407	26456.634	43455.650	7811.595	NR2010		1407
1408	26471.502	38605.071	7831.217	-1.17	7830.051	1408
157	26482.036	36621.978	7442.841	1.25	7444.094	157
158	26490.790	35621.447	7901.426	0.00	7901.426	158
1409	26504.876	39715.923	8038.923	-3.06	8035.861	1409
159	26507.174	34240.305	7689.517	1.52	7691.035	159
160	26517.475	36179.905	7548.262	NR2010		160
1410	26546.574	40163.992	8101.906	-5.00	8096.910	1410
1975	26554.613	46063.742	8279.385	-1.15	8278.236	1975
1976	26565.745	45270.213	7890.091	-2.72	7887.369	1976
1411	26570.002	41296.560	8692.695	-5.39	8687.304	1411
1977	26572.628	46331.367	8486.896	-1.40	8485.494	1977
1978	26575.185	46810.369	8734.125	-0.12	8734.003	1978
1979	26577.336	47466.986	8646.887	-0.95	8645.933	1979
1412	26592.004	39218.056	7938.457	-1.53	7936.929	1412
1980	26594.703	45734.308	8013.058	-2.42	8010.637	1980
161	26599.535	34808.139	8006.196	0.80	8006.996	161
162	26600.020	35103.910	8136.188	0.22	8136.407	162
1981	26614.754	46993.115	8816.435	-0.78	8815.656	1981
1413	26617.440	38458.051	7756.105	0.11	7756.214	1413
1982	26617.677	48396.026	8312.542	-1.58	8310.966	1982
1983	26617.704	44770.030	7942.641	NR2010		1983
163	26624.084	37559.260	7127.331	0.00	7127.331	163
1414	26635.926	43917.145	7713.290	-0.73	7712.557	1414
1415	26642.702	44282.038	7904.482	-2.65	7901.832	1415
1984	26652.685	49067.874	8156.045	0.01	8156.055	1984
164	26657.549	33869.231	7328.419	0.94	7329.354	164
1985	26660.418	49269.510	8230.555	-0.21	8230.348	1985

165	26663.309	36463.517	7573.392	NR2010		165
1986	26664.332	46548.631	8585.110	-1.31	8583.801	1986
166	26674.139	37236.836	7157.075	NR2010		166
1416	26677.079	40949.734	8520.813	-5.33	8515.480	1416
1417	26690.653	38188.375	7500.636	-1.04	7499.592	1417
167	26722.589	34434.205	7785.659	0.79	7786.453	167
1418	26734.025	38827.464	7775.405	-1.21	7774.191	1418
1987	26751.805	49444.001	8312.581	-1.60	8310.986	1987
1419	26760.038	42667.579	8163.620	-1.67	8161.948	1419
1420	26768.119	41490.715	8621.973	-7.04	8614.938	1420
168	26784.011	36847.101	7438.832	NR2010		168
169	26786.018	35319.600	8108.224	-0.28	8107.942	169
1988	26797.517	47397.425	8635.468	0.01	8635.478	1988
170	26802.191	37914.605	7322.521	0.56	7323.082	170
1989	26805.248	47936.421	8521.827	-0.72	8521.106	1989
171	26810.309	36071.187	7740.605	NR2010		171
1421	26814.980	39435.038	7954.397	-2.51	7951.889	1421
1990	26818.267	45603.787	8068.753	NR2010		1990
1991	26821.829	49629.638	8420.650	-0.01	8420.639	1991
1422	26826.133	39756.979	7957.675	-3.74	7953.940	1422
172	26832.773	34634.931	7940.084	0.36	7940.443	172
173	26834.594	34236.302	7668.348	1.15	7669.502	173
1992	26835.305	48759.861	8144.962	-1.83	8143.135	1992
1993	26841.651	44511.533	8114.941	NR2010		1993
174	26845.180	34776.786	8017.097	0.07	8017.163	174
1994	26845.791	46078.206	8285.059	-0.66	8284.400	1994
175	26847.742	37639.723	7104.392	NR2010		175
176	26851.937	33537.771	7215.028	2.01	7217.033	176
1423	26865.214	43002.801	8113.895	NR2010		1423
1995	26866.177	45290.564	8099.294	-1.06	8098.233	1995
177	26866.758	37293.418	7202.218	NR2010		177
178	26868.431	35055.767	8073.550	-0.11	8073.436	178
1424	26885.355	40577.769	8231.765	-4.19	8227.573	1424
179	26914.143	35453.108	8088.885	0.04	8088.925	179
1996	26918.668	46462.182	8545.356	-1.20	8544.153	1996
1997	26920.407	46755.506	8693.059	-1.42	8691.636	1997
1998	26927.965	46933.717	8792.196	-0.79	8791.410	1998
1425	26929.269	38374.479	7467.005	-0.71	7466.293	1425
180	26932.963	36340.570	7777.689	NR2010		180
181	26966.442	33835.353	7479.430	0.74	7480.174	181
1426	26966.620	40204.088	8021.630	-4.35	8017.281	1426
182	27003.523	34412.569	7820.991	1.09	7822.079	182
1999	27017.309	45844.029	8299.386	-2.53	8296.859	1999
2000	27026.623	49110.722	8291.974	-0.69	8291.288	2000
183	27040.316	35841.833	7993.043	NR2010		183
1427	27045.926	39207.949	7923.336	-3.60	7919.732	1427
184	27050.338	36964.317	7446.117	NR2010		184
841	27054.121	38135.886	7308.260	1.07	7309.328	841
2001	27061.425	49607.795	8534.192	-0.22	8533.977	2001
185	27067.537	35540.783	8107.573	0.43	8108.001	185
1428	27069.867	38745.002	7702.670	-0.75	7701.922	1428
1429	27070.110	43645.409	7942.589	NR2010		1429

1430	27074.822	41386.251	8450.456	-5.39	8445.067	1430
1431	27076.485	41882.584	8570.660	-5.15	8565.514	1431
186	27077.504	34151.188	7650.682	-0.46	7650.225	186
2002	27079.122	49853.507	8553.723	1.20	8554.924	2002
2003	27087.546	44664.275	8320.113	-2.57	8317.545	2003
2004	27094.409	48024.461	8413.789	-1.43	8412.356	2004
187	27099.676	34604.104	7842.053	0.66	7842.711	187
188	27100.595	37888.190	7136.582	NR2010		188
2005	27102.562	44338.249	8126.811	-0.74	8126.071	2005
2006	27102.808	47271.482	8641.851	-0.59	8641.263	2006
189	27110.390	33477.657	7172.494	0.00	7172.494	189
2007	27114.139	46270.080	8510.390	-1.28	8509.115	2007
2008	27118.842	48791.725	8142.125	-1.20	8140.930	2008
2009	27121.134	47120.857	8658.270	-0.53	8657.738	2009
1432	27122.884	39819.815	7857.279	-3.60	7853.681	1432
190	27134.911	35237.969	8023.624	0.95	8024.578	190
2010	27140.481	47747.245	8527.483	0.01	8527.493	2010
191	27140.884	36054.030	7988.514	-0.30	7988.212	191
1433	27150.619	41010.346	8244.223	-2.41	8241.810	1433
192	27152.535	36548.740	7659.430	NR2010		192
2011	27152.647	49347.094	8363.112	-0.23	8362.881	2011
842	27157.324	38297.027	7316.514	2.35	7318.859	842
193	27158.759	34821.309	7921.028	1.50	7922.523	193
2012	27168.290	48380.053	8258.798	-0.21	8258.590	2012
1434	27169.383	44086.965	7983.939	-4.86	7979.079	1434
194	27171.588	33827.341	7359.274	1.54	7360.810	194
1435	27210.684	43064.817	8211.423	NR2010		1435
2013	27211.417	45933.009	8468.650	-3.13	8465.520	2013
2014	27217.630	45163.547	8299.497	-2.26	8297.237	2014
2015	27218.015	44592.156	8361.641	-1.45	8360.187	2015
1436	27218.849	40327.690	7983.491	-5.06	7978.432	1436
2016	27223.452	46699.554	8706.163	-1.39	8704.777	2016
1437	27229.677	38572.079	7461.965	1.31	7463.277	1437
2017	27235.816	44887.368	8348.641	NR2010		2017
2018	27242.897	46380.711	8589.472	-1.79	8587.685	2018
2019	27249.003	48922.935	8195.355	-0.12	8195.239	2019
1438	27265.282	39546.841	7815.400	-4.62	7810.785	1438
2020	27266.689	46872.489	8706.251	-1.88	8704.375	2020
195	27268.902	35748.194	8094.848	-0.18	8094.666	195
2021	27283.053	45340.586	8388.593	-1.39	8387.208	2021
196	27292.402	35032.470	7984.059	0.00	7984.059	196
2022	27318.848	49659.397	8382.159	0.46	8382.614	2022
1439	27318.888	38989.881	7814.457	-3.31	7811.147	1439
197	27325.287	37405.849	7448.265	NR2010		197
1440	27339.258	40720.166	8003.436	-3.17	8000.270	1440
1441	27339.966	42233.165	8632.024	-2.93	8629.095	1441
843	27350.913	38401.228	7344.011	2.24	7346.247	843
844	27362.348	38196.739	7227.431	2.15	7229.579	844
2023	27362.511	44239.545	8176.371	-2.22	8174.148	2023
2024	27367.726	45719.265	8451.123	-1.80	8449.321	2024
198	27368.325	36884.578	7705.676	NR2010		198
2025	27391.377	46064.531	8584.649	-2.28	8582.373	2025

199	27399.930	34418.329	7610.962	2.31	7613.267	199
2026	27404.481	46604.837	8696.357	-1.84	8694.517	2026
1442	27405.436	40081.918	7863.057	-5.27	7857.783	1442
200	27405.973	35560.267	8102.533	-0.33	8102.201	200
201	27409.011	33870.873	7235.808	1.51	7237.314	201
202	27414.047	34633.301	7651.257	1.12	7652.378	202
203	27415.653	36640.553	7820.954	NR2010		203
2027	27417.620	44455.622	8371.428	-1.75	8369.683	2027
2028	27433.766	48629.163	8126.469	-1.12	8125.354	2028
2029	27443.794	49966.849	8440.253	0.01	8440.263	2029
204	27454.069	34164.227	7406.272	1.48	7407.749	204
205	27456.666	33482.145	7015.886	0.00	7015.886	205
1443	27470.038	43751.692	8174.667	-1.55	8173.121	1443
2030	27477.269	45236.818	8485.958	-1.36	8484.601	2030
2031	27480.185	48275.933	8216.509	-0.79	8215.721	2031
2032	27489.417	47628.503	8506.524	-0.39	8506.139	2032
845	27504.716	38474.741	7327.041	4.13	7331.166	845
1444	27515.594	41564.566	8251.271	-2.59	8248.678	1444
2033	27519.768	48062.627	8267.416	0.00	8267.416	2033
206	27523.402	36113.395	8060.222	0.18	8060.399	206
2034	27532.046	45826.550	8578.869	-1.62	8577.246	2034
1445	27536.096	39342.929	7739.181	-1.81	7737.371	1445
207	27550.164	37123.349	7720.737	0.00	7720.737	207
2035	27559.727	50239.802	8511.405	1.89	8513.291	2035
208	27559.780	35840.512	8073.735	0.12	8073.855	208
1446	27564.579	41800.992	8367.120	-3.80	8363.316	1446
1447	27564.664	42569.373	8602.644	-3.02	8599.628	1447
2036	27565.258	45491.968	8602.718	-1.40	8601.319	2036
1448	27565.390	39003.455	7706.276	-1.36	7704.917	1448
846	27566.628	38679.991	7429.533	0.00	7429.533	846
2037	27572.129	47834.423	8381.074	-1.34	8379.739	2037
2038	27574.746	46345.351	8688.077	-1.57	8686.509	2038
2039	27576.183	44187.587	8265.674	-2.27	8263.402	2039
1449	27581.297	39841.438	7755.367	-3.35	7752.017	1449
1450	27582.639	41253.238	8078.426	-2.13	8076.301	1450
2040	27582.723	49293.832	8312.081	-0.25	8311.835	2040
2041	27587.000	49504.792	8358.538	0.10	8358.640	2041
2042	27593.863	49668.527	8409.657	-1.37	8408.286	2042
847	27596.055	38277.412	7207.681	2.35	7210.034	847
209	27600.511	34818.830	7705.276	0.45	7705.721	209
2043	27601.739	48825.799	8203.352	-0.38	8202.971	2043
1451	27602.591	40412.612	7809.704	-2.84	7806.869	1451
1452	27609.481	43356.095	8364.584	-2.81	8361.777	1452
210	27609.990	35204.927	8055.646	0.24	8055.885	210
2044	27631.052	46522.801	8674.051	-0.93	8673.123	2044
2045	27631.701	44861.676	8608.252	-2.64	8605.613	2045
2046	27649.012	44658.229	8607.776	-2.38	8605.394	2046
211	27650.756	37819.730	7367.338	NR2010		211
2047	27654.538	49050.698	8328.518	-1.72	8326.794	2047
212	27660.190	36013.754	8066.611	0.25	8066.858	212
213	27672.716	34150.851	7258.862	1.66	7260.518	213
1453	27680.150	40840.252	7875.380	-2.75	7872.634	1453

214	27687.715	33519.231	6968.145	0.12	6968.265	214
2048	27697.399	46060.565	8687.500	-1.97	8685.531	2048
2049	27698.774	45755.353	8669.532	-1.36	8668.172	2049
848	27698.862	38668.881	7353.906	4.59	7358.491	848
215	27704.128	34545.070	7545.555	-0.32	7545.234	215
216	27706.257	35524.696	8041.657	-0.54	8041.114	216
217	27708.280	33836.194	7092.098	1.27	7093.372	217
218	27720.677	36782.233	7918.044	NR2010		218
2050	27726.973	43672.604	8364.051	-2.20	8361.849	2050
2051	27730.133	49756.698	8511.915	-1.45	8510.469	2051
2052	27739.792	48415.630	8097.371	-0.30	8097.073	2052
2053	27744.237	45134.779	8616.908	-1.97	8614.935	2053
219	27750.125	36497.835	8033.157	-1.27	8031.892	219
220	27759.461	36182.083	8074.346	-0.54	8073.811	220
1454	27765.681	40143.799	7705.825	-3.92	7701.904	1454
2054	27768.575	47689.345	8361.517	-0.18	8361.337	2054
221	27779.312	37349.791	7621.991	NR2010		221
2055	27781.194	48103.187	8203.157	-0.14	8203.021	2055
2056	27784.174	47291.015	8485.459	0.54	8485.999	2056
2057	27790.570	49140.463	8432.691	-0.39	8432.300	2057
2058	27823.445	48774.824	8216.783	-0.15	8216.633	2058
2059	27824.569	44254.749	8357.268	-2.79	8354.481	2059
2060	27825.572	50591.976	8614.751	0.85	8615.600	2060
222	27827.354	34994.001	0.000		7849.152	222
1455	27838.849	42917.445	8613.380	-2.08	8611.305	1455
849	27847.722	38490.858	7196.738	NR2010		849
2061	27858.521	44809.272	8712.935	-1.62	8711.315	2061
2062	27861.031	43927.984	8363.069	NR2010		2062
223	27863.980	35895.789	8055.558	-0.12	8055.436	223
1456	27869.775	42247.971	8370.538	-3.94	8366.600	1456
2063	27889.395	49321.006	8510.000	-1.30	8508.703	2063
2064	27899.657	49536.373	8552.697	-0.05	8552.646	2064
1457	27899.821	39707.780	7687.590	-3.02	7684.574	1457
850	27918.873	38880.083	7353.272	3.45	7356.722	850
2065	27922.758	50270.043	8614.608	1.50	8616.111	2065
1458	27928.162	41614.119	8065.313	-1.50	8063.817	1458
224	27928.416	32701.112	7466.243	0.00	7466.243	224
1459	27929.912	41141.351	7895.623	-4.42	7891.199	1459
2066	27930.417	48271.707	8089.286	-1.05	8088.238	2066
2067	27930.975	45699.720	8726.262	-1.91	8724.349	2067
1460	27934.101	39281.960	7608.830	0.00	7608.830	1460
2068	27941.841	45528.235	8784.568	-1.78	8782.790	2068
225	27955.310	33753.157	7013.343	NR2010		225
2069	27961.150	48486.897	8133.419	-1.15	8132.270	2069
2070	27965.001	50041.780	8613.959	-0.62	8613.343	2070
2071	27965.688	44541.844	8596.085	-2.00	8594.082	2071
226	27965.813	31341.857	7698.309	NR2010		226
2072	27971.524	48983.535	8409.480	0.01	8409.490	2072
851	27976.996	38676.180	7190.622	NR2010		851
227	27978.352	34407.336	7377.607	2.34	7379.942	227
2073	27978.533	48746.744	8255.589	-0.56	8255.034	2073
228	27980.196	32132.803	7348.930	0.00	7348.930	228

229	27985.503	35620.087	7952.284	-0.71	7951.579	229
1461	27994.321	40653.192	7734.907	-3.44	7731.467	1461
230	27998.479	34122.630	7200.999	0.02	7201.015	230
231	28003.219	34710.240	7639.653	1.33	7640.981	231
232	28005.950	36502.716	8048.528	-1.75	8046.776	232
2074	28007.157	43330.874	8628.599	-3.46	8625.140	2074
233	28024.756	36128.582	8038.685	-0.90	8037.785	233
1462	28038.169	42581.027	8374.507	-3.84	8370.663	1462
1463	28039.077	43152.054	8629.789	-2.99	8626.804	1463
1464	28046.019	43631.737	8610.639	-3.05	8607.588	1464
2075	28049.215	45245.733	8789.714	-1.19	8788.524	2075
2076	28066.280	44916.349	8798.847	-1.99	8796.853	2076
2077	28068.993	49700.694	8673.058	-1.00	8672.058	2077
234	28074.588	33052.009	7356.842	NR2010		234
235	28075.414	35260.117	7904.589	0.94	7905.529	235
236	28080.162	30917.712	7993.890	NR2010		236
2078	28083.022	50627.428	8731.956	-1.08	8730.880	2078
237	28098.345	31954.344	7433.605	NR2010		237
2079	28099.657	47850.841	8167.730	0.45	8168.183	2079
1465	28100.703	39990.166	7582.112	-2.62	7579.488	1465
238	28116.310	35045.198	7898.027	-0.40	7897.632	238
2080	28124.023	49958.928	8680.789	-0.50	8680.286	2080
239	28141.163	37774.736	7677.207	NR2010		239
1466	28152.285	41878.282	8023.228	-2.63	8020.602	1466
852	28165.342	39101.062	7430.892	0.00	7430.892	852
2081	28172.219	44260.231	8612.476	-1.86	8610.620	2081
240	28180.545	33387.076	7273.706	NR2010		240
2082	28188.277	48079.412	8076.147	-2.63	8073.519	2082
2083	28189.216	49203.955	8542.945	0.49	8543.430	2083
2084	28191.657	44021.240	8593.616	-3.72	8589.893	2084
2085	28193.218	49490.062	8669.778	-0.89	8668.886	2085
241	28205.323	32642.914	7680.405	0.96	7681.369	241
2086	28217.099	45437.491	8771.032	-1.48	8769.554	2086
2087	28223.921	48529.505	8194.876	-1.26	8193.621	2087
242	28227.164	34865.760	7782.086	NR2010		242
1467	28243.881	43536.092	8756.465	-3.97	8752.499	1467
243	28247.285	31067.009	7991.621	NR2010		243
244	28249.401	31271.531	7851.112	NR2010		244
2088	28251.728	50159.862	8785.516	-0.49	8785.024	2088
2089	28251.972	48983.126	8481.505	-0.51	8480.994	2089
853	28253.131	38839.108	7235.995	0.00	7235.995	853
245	28258.998	36206.129	7977.852	-0.70	7977.152	245
246	28269.474	31524.683	7755.422	0.28	7755.697	246
247	28271.677	34443.085	7469.378	1.41	7470.785	247
2090	28272.676	48768.858	8331.036	-0.84	8330.201	2090
248	28286.136	33911.057	7023.189	NR2010		248
1468	28292.167	41432.506	7850.875	-4.09	7846.785	1468
249	28295.476	35647.112	7835.152	-0.51	7834.645	249
2091	28297.076	48246.620	8135.352	-1.13	8134.218	2091
1469	28298.506	42811.502	8351.843	-3.56	8348.280	1469
250	28298.858	35861.633	7941.363	0.38	7941.747	250
2092	28301.028	43213.928	8546.703	-2.56	8544.146	2092

2093	28311.706	49696.868	8776.894	-1.04	8775.857	2093
1470	28314.111	42314.764	8089.328	-1.44	8087.892	1470
1471	28314.511	39665.636	7502.000	-2.02	7499.980	1471
251	28314.564	36508.277	8005.872	-1.93	8003.947	251
2094	28319.645	44487.510	8706.301	-2.90	8703.405	2094
252	28324.692	34143.667	7163.818	0.00	7163.818	252
1472	28328.281	40960.132	7686.389	-3.63	7682.764	1472
253	28328.394	35364.109	7756.027	1.06	7757.082	253
254	28333.946	32263.319	7683.836	1.11	7684.949	254
1473	28346.648	40435.371	7552.801	-3.96	7548.843	1473
255	28348.805	38152.120	7621.028	NR2010		255
854	28349.551	36990.279	7993.439	-0.24	7993.200	854
2095	28354.132	50913.642	8893.356	-0.87	8892.490	2095
2096	28354.466	43706.643	8769.575	-2.01	8767.568	2096
2097	28357.833	49435.115	8678.236	0.06	8678.293	2097
855	28362.573	39315.155	7360.803	1.15	7361.957	855
2098	28367.621	50732.297	8875.583	0.40	8875.980	2098
256	28375.708	36733.146	8044.039	-1.82	8042.220	256
2099	28407.546	44817.109	8839.899	-2.22	8837.679	2099
2100	28416.681	44617.473	8795.693	-1.14	8794.549	2100
2101	28420.424	46700.442	8349.069	-1.49	8347.576	2101
2102	28432.679	48853.732	8381.979	-0.94	8381.040	2102
257	28433.832	31786.526	7764.972	NR2010		257
856	28435.676	38869.622	7224.331	NR2010		856
2103	28452.854	47923.096	8072.689	-1.98	8070.708	2103
258	28459.190	37349.912	7928.308	0.00	7928.308	258
2104	28471.237	49065.013	8496.081	-0.36	8495.722	2104
259	28474.129	35633.213	7791.908	-1.31	7790.598	259
260	28476.589	36016.833	7904.461	-0.68	7903.777	260
2105	28483.453	45108.665	8775.138	-1.77	8773.364	2105
2106	28485.396	49892.807	8853.613	-0.34	8853.272	2106
1474	28487.342	40020.921	7536.709	-3.43	7533.279	1474
1475	28492.857	43294.976	8509.677	0.00	8509.677	1475
261	28493.215	33173.101	7505.539	NR2010		261
2107	28500.025	50529.577	8919.762	-0.79	8918.971	2107
262	28500.804	32632.173	7816.660	0.85	7817.513	262
263	28518.114	30897.220	8146.577	1.77	8148.349	263
264	28520.465	37047.317	8006.022	-0.30	8005.718	264
2108	28520.968	48527.478	8334.866	-1.33	8333.534	2108
2109	28532.558	43939.669	8833.295	-2.50	8830.797	2109
2110	28542.946	49197.547	8575.908	-0.16	8575.748	2110
2111	28549.227	48201.084	8237.237	-1.13	8236.110	2111
2112	28549.719	44486.636	8844.896	-2.99	8841.908	2112
2113	28555.096	50251.838	8936.187	-1.41	8934.779	2113
2114	28570.255	44150.410	8857.777	-2.49	8855.285	2114
265	28570.378	34659.754	7502.984	-1.39	7501.593	265
266	28571.810	35226.565	7610.875	-0.71	7610.166	266
2115	28576.511	43497.388	8579.634	-2.41	8577.222	2115
857	28592.626	38966.709	7344.424	2.43	7346.856	857
267	28598.671	36582.249	7973.367	-2.03	7971.333	267
268	28602.810	36292.684	7892.458	-1.44	7891.020	268
269	28609.913	32958.197	7708.778	NR2010		269

1476	28617.995	41638.020	7748.071	-2.48	7745.591	1476
1477	28618.991	42015.465	7816.163	-2.04	7814.128	1477
270	28631.047	34377.878	7188.603	1.95	7190.554	270
271	28640.441	34088.624	7061.015	1.26	7062.279	271
272	28640.555	35769.798	7808.354	-1.41	7806.940	272
273	28647.537	33811.105	7145.602	NR2010		273
2116	28659.765	49594.113	8757.343	-0.44	8756.900	2116
2117	28662.602	48803.116	8466.824	-0.80	8466.025	2117
274	28665.489	31080.495	8124.640	2.18	8126.818	274
2118	28668.186	47688.181	8056.748	-1.55	8055.196	2118
1478	28669.450	42719.170	8113.395	-1.51	8111.881	1478
858	28678.470	39546.034	7463.759	NR2010		858
275	28687.076	34953.371	7536.675	0.23	7536.900	275
2119	28689.831	51010.618	9148.840	-0.55	9148.289	2119
859	28703.321	38855.323	7280.589	NR2010		859
276	28705.508	32029.349	7910.708	0.00	7910.708	276
277	28719.865	36826.689	8029.710	-1.70	8028.014	277
1479	28722.210	41178.208	7639.838	NR2010		1479
2120	28737.805	44156.726	8853.434	-2.61	8850.826	2120
2121	28754.537	47928.113	8207.377	-1.59	8205.790	2121
2122	28755.566	50701.984	9139.758	-0.61	9139.151	2122
2123	28755.688	48498.777	8465.104	-0.40	8464.702	2123
1480	28761.711	40860.329	7673.645	-3.19	7670.458	1480
860	28778.757	39135.492	7545.837	2.75	7548.582	860
278	28789.999	32357.934	7967.369	1.94	7969.309	278
2124	28794.979	51182.197	9185.196	-1.24	9183.957	2124
2125	28798.832	44352.562	8823.180	-2.13	8821.051	2125
279	28809.678	32789.896	7770.239	0.00	7770.239	279
1481	28814.574	43172.115	8398.792	-1.32	8397.475	1481
861	28821.125	39913.960	7549.553	0.01	7549.567	861
2126	28821.601	47096.046	8151.718	-0.47	8151.245	2126
280	28824.226	38024.605	7682.682	NR2010		280
2127	28830.629	44663.837	8778.142	-2.62	8775.519	2127
281	28835.779	31344.048	8104.830	1.07	8105.896	281
282	28843.485	31593.076	8071.263	-0.43	8070.837	282
2128	28846.420	48921.368	8567.450	-0.99	8566.462	2128
283	28851.989	36239.435	7866.294	-0.40	7865.892	283
284	28852.948	35305.300	7499.398	0.37	7499.770	284
285	28855.233	35562.752	7642.577	0.00	7642.577	285
286	28859.125	37097.742	7977.469	0.83	7978.302	286
2129	28860.014	43576.462	8609.084	-1.80	8607.285	2129
1482	28861.216	42441.413	7905.272	-0.36	7904.913	1482
2130	28862.774	48286.430	8458.791	-0.52	8458.276	2130
862	28871.412	38912.680	7335.708	NR2010		862
1483	28873.595	40297.772	7753.880	-5.37	7748.513	1483
2131	28875.893	47502.488	8050.915	-1.47	8049.444	2131
2132	28878.478	49924.853	8938.704	-1.15	8937.558	2132
2133	28879.659	50143.845	9126.510	-0.87	9125.639	2133
287	28881.193	34401.938	7096.932	-0.12	7096.811	287
2134	28898.560	43873.395	8787.929	-2.47	8785.462	2134
288	28900.894	36566.702	7952.212	0.57	7952.784	288
289	28908.835	33691.818	7196.513	3.22	7199.729	289

2135	28909.385	49562.070	8801.282	-1.69	8799.589	2135
2136	28909.832	50367.555	9130.287	-0.88	9129.411	2136
863	28914.422	30781.022	7922.669	1.56	7924.228	863
2137	28916.340	48641.827	8551.030	-0.89	8550.138	2137
2138	28930.146	48031.871	8326.887	0.27	8327.158	2138
290	28939.094	34865.227	7405.042	-1.43	7403.611	290
864	28950.805	39341.111	7579.440	2.68	7582.122	864
2139	28951.640	44806.525	8713.470	-2.38	8711.092	2139
291	28952.880	35933.554	7794.229	0.02	7794.250	291
292	28970.447	30889.614	7901.441	-0.26	7901.177	292
293	28974.357	37521.681	7850.274	NR2010		293
2140	28977.641	49212.324	8717.420	-1.10	8716.316	2140
294	28980.314	33999.184	7245.066	0.18	7245.248	294
1484	28987.780	41146.642	7799.796	-1.44	7798.356	1484
295	28998.883	32096.918	8055.945	NR2010		295
2141	29001.158	46311.411	8405.995	0.01	8406.005	2141
2142	29004.925	51349.286	9170.540	-0.54	9170.005	2142
2143	29023.671	50781.699	9129.538	-0.89	9128.649	2143
2144	29034.331	47783.251	8185.390	-0.53	8184.858	2144
1485	29035.834	41747.274	7820.295	NR2010		1485
2145	29058.211	47326.104	8033.194	-2.09	8031.101	2145
2146	29059.749	43764.374	8722.960	-2.87	8720.088	2146
2147	29060.829	44179.971	8795.693	-3.10	8792.594	2147
1486	29064.830	42963.695	8245.376	-0.87	8244.504	1486
296	29069.123	33520.387	7300.553	-0.06	7300.492	296
2148	29080.894	51059.876	9143.145	-0.69	9142.451	2148
297	29090.021	35561.722	7749.981	0.04	7750.019	297
2149	29091.024	48597.628	8615.218	-0.54	8614.683	2149
865	29092.631	39519.737	7645.339	1.93	7647.273	865
298	29098.666	36826.178	8022.586	-1.41	8021.180	298
866	29104.833	39026.117	7475.311	4.38	7479.691	866
2150	29104.833	49871.920	8971.074	-0.56	8970.518	2150
2151	29107.023	47561.884	8174.911	-2.22	8172.690	2151
2152	29111.287	48005.548	8370.701	-0.26	8370.439	2152
2153	29112.759	48247.760	8496.382	-0.74	8495.644	2153
299	29117.053	34610.687	7118.791	NR2010		299
2154	29126.746	49670.606	8923.539	-1.37	8922.171	2154
300	29132.880	31246.677	7976.472	0.00	7976.472	300
2155	29134.619	44405.992	8763.179	-2.94	8760.237	2155
301	29161.673	31847.833	8183.973	-1.18	8182.790	301
302	29169.238	34058.105	7409.368	1.40	7410.771	302
2156	29179.942	48943.325	8735.013	-0.04	8734.970	2156
303	29181.034	35360.429	7591.078	1.27	7592.344	303
867	29183.777	40117.986	7779.003	0.36	7779.363	867
1487	29190.379	40748.062	7861.254	NR2010		1487
304	29195.313	37854.219	7762.854	0.00	7762.854	304
840	29198.243	31085.260	7914.255	-0.06	7914.192	840
2157	29202.791	49454.942	8850.166	-1.21	8848.959	2157
305	29206.627	37119.901	7965.510	0.59	7966.103	305
306	29208.001	34412.493	7244.711	0.00	7244.711	306
307	29209.683	33682.918	7570.147	2.19	7572.338	307
308	29209.746	31567.112	8046.443	1.60	8048.043	308

2158	29213.631	43582.205	8593.913	-2.94	8590.976	2158
1488	29218.389	42099.719	7946.389	-1.32	7945.069	1488
868	29219.397	39693.401	7763.856	1.17	7765.027	868
869	29227.842	30700.340	7706.515	0.00	7706.515	869
309	29231.126	30847.625	7766.180	1.40	7767.578	309
310	29235.627	34958.850	7340.265	0.00	7340.265	310
2159	29236.644	50170.717	8882.477	0.63	8883.103	2159
2160	29252.415	43328.488	8409.457	-0.60	8408.859	2160
870	29253.298	38116.881	7760.480	-0.02	7760.462	870
871	29267.567	39151.476	7444.867	0.00	7444.867	871
311	29272.120	36150.458	7795.351	0.87	7796.223	311
2161	29284.797	51515.166	9037.523	-1.39	9036.129	2161
312	29291.590	36483.196	7913.268	-0.49	7912.777	312
1489	29292.227	41515.605	7977.416	-0.48	7976.936	1489
872	29300.597	39391.893	7581.927	3.33	7585.259	872
2162	29302.237	50507.373	8882.656	-1.63	8881.027	2162
313	29305.435	33109.226	7543.666	NR2010		313
2163	29305.717	43907.193	8765.321	-2.66	8762.660	2163
2164	29309.570	47672.933	8322.153	-3.12	8319.038	2164
1490	29318.045	40436.311	7932.392	-4.08	7928.311	1490
873	29321.767	39907.135	7802.259	0.72	7802.979	873
2165	29339.258	49235.783	8820.704	-0.92	8819.787	2165
2166	29345.804	51153.491	8963.432	-0.90	8962.535	2166
2167	29354.792	50845.491	8904.027	-1.52	8902.503	2167
314	29361.532	33446.561	7540.529	2.57	7543.098	314
315	29369.679	34063.935	7510.495	0.57	7511.060	315
1491	29373.562	42693.790	8091.275	-1.79	8089.484	1491
2168	29376.035	47242.330	8140.197	-0.88	8139.317	2168
316	29383.498	35834.257	7738.424	-0.25	7738.179	316
2169	29394.855	44451.993	8694.729	-2.91	8691.821	2169
2170	29399.861	47952.638	8418.169	-1.66	8416.511	2170
874	29400.422	38943.017	7539.272	NR2010		874
2171	29406.492	48620.096	8703.842	-1.66	8702.181	2171
1492	29426.755	40955.564	8049.084	-0.60	8048.484	1492
2172	29429.594	48265.376	8497.127	-0.63	8496.496	2172
2173	29440.798	44142.216	8750.804	-2.47	8748.336	2173
2174	29446.805	47001.681	8001.750	-1.73	8000.024	2174
317	29452.972	34667.737	7273.974	NR2010		317
2175	29465.367	48884.438	8777.604	-1.38	8776.225	2175
318	29469.730	30895.973	7757.721	0.19	7757.908	318
319	29472.426	31229.796	7792.939	0.31	7793.244	319
875	29474.670	38535.790	7698.467	NR2010		875
2176	29477.239	49396.776	8779.702	-1.58	8778.120	2176
320	29480.712	36806.146	8006.698	0.19	8006.888	320
876	29488.167	39973.446	7817.664	0.00	7817.664	876
321	29490.462	32004.084	8107.625	-0.34	8107.287	321
322	29497.443	33922.483	7604.238	NR2010		322
2177	29500.576	51743.819	8878.550	-2.49	8876.063	2177
877	29500.712	30573.609	7428.721	1.73	7430.453	877
323	29501.030	35347.942	7412.410	-3.20	7409.208	323
324	29504.447	37076.767	7990.811	-0.55	7990.263	324
2178	29512.109	45443.432	8462.070	-0.69	8461.376	2178

325	29512.816	38141.533	7839.619	-0.48	7839.136	325
2179	29519.194	49084.028	8777.304	-1.20	8776.104	2179
326	29520.573	35615.077	7587.992	-0.04	7587.956	326
2180	29522.646	50626.231	8797.445	-1.07	8796.380	2180
327	29525.260	35072.645	7272.900	0.00	7272.900	327
2181	29546.312	47810.859	8477.285	-0.73	8476.551	2181
2182	29547.129	45699.941	8478.997	-1.56	8477.435	2182
328	29547.478	37816.846	7869.150	-1.66	7867.490	328
329	29549.388	36159.603	7857.047	0.71	7857.759	329
2183	29552.732	49620.659	8759.650	-0.70	8758.952	2183
330	29558.179	31707.921	7994.348	1.94	7996.290	330
878	29558.320	40142.370	7842.508	0.00	7842.508	878
879	29567.880	40353.684	7921.665	0.24	7921.905	879
1493	29568.923	41368.184	8167.710	-0.48	8167.230	1493
2184	29568.967	51436.942	8839.526	-2.02	8837.506	2184
1494	29570.095	40749.971	8103.987	-1.44	8102.547	1494
880	29573.392	39321.316	7520.284	1.03	7521.315	880
331	29585.288	33685.292	7782.590	-0.18	7782.408	331
332	29585.716	32219.990	8025.787	NR2010		332
2185	29586.931	47336.340	8198.206	-0.81	8197.400	2185
333	29592.377	34125.513	7605.763	0.18	7605.945	333
2186	29592.793	50285.672	8764.776	-1.55	8763.230	2186
881	29594.537	39600.298	7630.822	1.13	7631.951	881
2187	29599.860	43538.995	8570.023	-0.37	8569.650	2187
2188	29603.371	42890.788	8296.888	-0.65	8296.237	2188
334	29618.225	37323.909	7965.770	-0.86	7964.907	334
335	29622.354	33354.559	7683.992	NR2010		335
882	29630.231	39799.251	7725.783	-0.36	7725.423	882
2189	29635.114	43915.098	8751.339	-2.12	8749.224	2189
2190	29638.064	44293.444	8692.111	-2.06	8690.055	2190
2191	29638.158	43202.167	8414.585	-1.70	8412.885	2191
2192	29642.743	48529.426	8697.518	-1.27	8696.253	2192
2193	29675.293	48255.266	8600.228	-0.82	8599.413	2193
336	29679.345	36443.497	7935.158	-0.02	7935.143	336
337	29679.973	31449.128	7797.956	0.00	7797.956	337
338	29688.543	30857.807	7585.069	2.91	7587.977	338
1495	29688.979	41847.117	8321.295	-1.50	8319.800	1495
2194	29689.069	48817.660	8744.664	-0.96	8743.707	2194
883	29699.108	40440.321	7911.138	-0.23	7910.912	883
2195	29700.044	46839.261	7991.398	-2.90	7988.496	2195
2196	29701.986	49738.400	8691.374	-0.28	8691.096	2196
339	29717.340	33035.198	7688.203	NR2010		339
2197	29718.318	50062.739	8695.690	-1.04	8694.652	2197
2198	29720.527	50936.662	8750.779	-1.71	8749.068	2198
2199	29721.739	48037.020	8575.411	-0.44	8574.970	2199
1496	29726.947	42341.387	8319.508	-3.11	8316.396	1496
884	29732.343	30486.060	7398.874	0.96	7399.833	884
885	29735.280	39417.815	7512.368	0.02	7512.387	885
340	29742.259	36160.343	7926.315	0.00	7926.315	340
2200	29757.414	49473.678	8693.142	-0.88	8692.260	2200
2201	29757.894	49233.257	8710.346	-1.27	8709.081	2201
341	29759.516	36761.155	7988.090	-1.00	7987.093	341

886	29762.350	32411.404	7963.806	0.18	7963.989	886
2202	29762.880	47084.448	8113.365	-1.16	8112.210	2202
342	29770.334	37674.236	7939.693	-1.58	7938.116	342
343	29776.938	37096.954	7991.934	-0.36	7991.578	343
2203	29782.025	47502.652	8279.031	-0.46	8278.574	2203
344	29782.042	35771.678	7721.885	-0.81	7721.074	344
2204	29785.697	45185.585	8394.661	-2.14	8392.520	2204
1497	29787.425	41153.407	8332.181	-3.14	8329.043	1497
345	29789.459	31937.914	8018.649	-1.07	8017.577	345
346	29795.153	33697.780	7876.373	1.84	7878.213	346
347	29798.499	31704.411	7993.497	-0.49	7993.006	347
2205	29801.431	45638.976	8320.232	-1.23	8319.007	2205
348	29802.357	35142.130	7311.703	1.11	7312.808	348
2206	29804.169	50362.838	8670.753	-1.13	8669.626	2206
887	29808.539	40150.224	7790.720	0.12	7790.840	887
349	29812.111	31198.820	7682.976	4.62	7687.600	349
2207	29819.267	51748.171	8730.757	-2.68	8728.075	2207
2208	29833.776	47791.838	8453.472	-0.14	8453.329	2208
350	29849.540	37400.460	8002.468	-0.90	8001.565	350
351	29849.607	35433.692	7440.916	-0.06	7440.856	351
888	29854.695	39764.390	7609.389	0.12	7609.510	888
352	29874.730	38032.160	7918.023	0.00	7918.023	352
2209	29875.923	48280.418	8672.851	-1.33	8671.518	2209
2210	29876.368	42909.271	8488.786	-0.01	8488.781	2210
889	29880.186	30652.066	7417.931	0.51	7418.444	889
2211	29881.524	44170.346	8726.648	-2.46	8724.189	2211
2212	29884.437	45947.803	8252.109	-1.35	8250.760	2212
890	29887.223	39579.675	7525.858	0.00	7525.858	890
891	29897.485	38202.570	7903.656	NR2010		891
2213	29908.034	47303.078	8291.674	-0.61	8291.065	2213
892	29911.638	40460.154	7808.773	3.33	7812.100	892
1498	29915.817	42614.116	8394.115	-2.04	8392.076	1498
353	29916.930	36412.243	7918.794	0.02	7918.817	353
2214	29921.085	43506.010	8673.082	-2.53	8670.551	2214
354	29923.881	33354.203	7899.832	0.00	7899.832	354
893	29932.074	32440.664	7970.520	-0.12	7970.398	893
2215	29946.292	46684.843	7978.577	-2.08	7976.497	2215
2216	29952.923	49030.546	8672.641	-1.32	8671.317	2216
1499	29955.914	41458.201	8507.616	-1.63	8505.982	1499
894	29956.700	39927.070	7667.036	0.48	7667.516	894
2217	29960.509	52121.636	8663.499	0.01	8663.509	2217
2218	29972.785	50055.925	8545.499	-0.91	8544.587	2218
2219	29973.787	47669.470	8431.043	-1.50	8429.540	2219
895	29978.032	32595.021	7916.204	NR2010		895
355	29979.464	33077.167	7829.482	0.00	7829.482	355
356	29981.326	32275.131	8050.703	-0.77	8049.933	356
896	29983.037	40701.922	7903.323	2.46	7905.783	896
897	29992.134	30330.811	7265.321	0.00	7265.321	897
357	29996.406	30895.525	7378.059	0.00	7378.059	357
898	30001.592	40287.353	7729.593	NR2010		898
2220	30002.667	51128.500	8619.380	-0.33	8619.054	2220
2221	30004.487	51515.389	8614.345	-1.36	8612.985	2221

2222	30007.971	50526.079	8571.635	-1.75	8569.883	2222
2223	30010.713	48880.686	8666.826	-1.50	8665.329	2223
2224	30012.679	47942.690	8545.126	0.52	8545.645	2224
358	30017.004	36611.676	7928.724	-0.34	7928.385	358
2225	30018.457	48594.706	8678.516	-1.30	8677.215	2225
2226	30024.544	43795.721	8760.668	-0.53	8760.140	2226
359	30031.364	31170.120	7718.311	1.60	7719.909	359
1500	30038.024	41702.968	8576.185	-1.42	8574.765	1500
360	30055.950	34113.379	7733.385	NR2010		360
1501	30058.702	42265.905	8577.139	-1.65	8575.485	1501
361	30060.160	31661.776	7863.106	-1.29	7861.817	361
362	30062.437	36183.986	7866.103	1.43	7867.528	362
2227	30069.954	47448.697	8431.876	-0.98	8430.900	2227
363	30077.410	31995.066	7980.638	-0.28	7980.355	363
364	30086.982	35404.213	7347.149	1.49	7348.642	364
365	30094.127	36861.008	7923.198	-0.20	7923.003	365
366	30097.024	37126.983	7921.904	-0.64	7921.269	366
899	30098.568	39415.046	7549.748	-0.31	7549.437	899
367	30103.480	37395.769	7935.029	-0.72	7934.306	367
900	30110.541	30661.318	7304.276	1.73	7306.010	900
368	30112.605	35866.517	7708.993	0.00	7708.993	368
901	30121.106	38463.685	7877.768	NR2010		901
2228	30124.810	51877.385	8586.471	-0.39	8586.084	2228
2229	30125.333	51322.801	8565.550	-1.16	8564.388	2229
2230	30125.516	46890.651	8118.838	-1.41	8117.428	2230
369	30126.980	37953.644	8002.123	-0.36	8001.762	369
1502	30127.620	41112.057	8103.789	-1.74	8102.048	1502
2231	30129.709	48180.483	8663.225	0.03	8663.257	2231
2232	30129.844	44334.089	8700.589	-2.75	8697.836	2232
2233	30134.059	43036.481	8633.939	-1.47	8632.468	2233
370	30136.739	37702.032	7938.561	-0.19	7938.372	370
2234	30136.841	45678.469	8119.106	-1.93	8117.180	2234
902	30138.679	40362.353	7694.506	0.24	7694.746	902
903	30160.732	40008.010	7599.832	0.12	7599.952	903
371	30172.141	33742.087	7975.690	3.04	7978.728	371
904	30175.597	40597.227	7795.777	2.95	7798.724	904
1503	30180.879	42011.957	8654.885	0.43	8655.312	1503
905	30181.193	30476.222	7182.531	0.00	7182.531	905
372	30189.584	32905.368	7952.918	0.78	7953.695	372
2235	30191.186	44036.684	8736.789	-0.32	8736.472	2235
2236	30196.204	50093.396	8480.159	-0.48	8479.680	2236
2237	30197.904	45991.278	8109.319	-1.69	8107.634	2237
2238	30200.863	49091.861	8526.586	0.24	8526.827	2238
2239	30204.068	46484.583	7964.357	-2.55	7961.804	2239
2240	30209.807	49353.419	8512.829	-1.85	8510.979	2240
906	30213.808	40890.144	7943.648	0.67	7944.316	906
907	30225.189	40153.142	7610.563	NR2010		907
2241	30241.923	42667.464	8626.426	-1.52	8624.906	2241
2242	30259.250	43444.014	8776.975	-0.78	8776.196	2242
373	30259.429	33154.828	7962.641	1.26	7963.901	373
374	30263.033	36507.808	7857.754	-1.17	7856.584	374
2243	30266.345	47828.705	8575.499	-0.52	8574.981	2243

375	30273.708	33475.762	8007.035	0.43	8007.460	375
2244	30275.092	47061.118	8259.784	-1.44	8258.340	2244
376	30281.997	30910.874	7365.395	1.74	7367.134	376
377	30283.066	32401.365	8039.847	0.36	8040.202	377
2245	30284.770	48833.785	8521.941	-0.57	8521.371	2245
2246	30296.690	50526.730	8458.699	-1.84	8456.860	2246
2247	30300.053	48357.429	8649.619	-0.17	8649.451	2247
2248	30311.228	52289.806	8534.649	0.01	8534.659	2248
2249	30313.821	50745.295	8470.748	-0.38	8470.371	2249
378	30322.262	38020.272	7988.739	-0.55	7988.187	378
379	30323.406	31340.235	7681.814	0.00	7681.814	379
908	30333.552	30675.563	7312.232	0.00	7312.232	908
2250	30338.217	47217.354	8364.229	-1.72	8362.505	2250
2251	30344.548	47502.018	8437.796	-1.60	8436.197	2251
1504	30356.272	41588.751	8374.689	-1.47	8373.218	1504
380	30362.363	35420.239	7270.582	NR2010		380
2252	30369.147	44227.796	8698.541	-0.66	8697.879	2252
909	30373.005	39523.117	7713.619	-2.24	7711.380	909
2253	30373.986	44588.446	8673.786	-2.73	8671.053	2253
381	30379.049	36874.499	7795.251	-0.13	7795.120	381
2254	30379.632	43801.842	8724.209	-1.21	8722.998	2254
382	30380.624	35861.022	7661.223	-0.29	7660.935	382
2255	30384.065	46743.928	8120.831	-1.17	8119.662	2255
2256	30384.664	49890.796	8406.458	-0.41	8406.047	2256
383	30386.470	32713.894	8005.432	1.06	8006.488	383
384	30387.644	36189.053	7736.301	-0.16	7736.143	384
385	30388.201	32036.750	7989.053	-0.61	7988.444	385
910	30395.654	40593.923	7715.585	-0.41	7715.176	910
386	30397.777	37368.178	7838.209	0.45	7838.656	386
2257	30401.828	43191.472	8780.881	-0.59	8780.287	2257
1505	30414.474	42326.650	8748.284	-1.14	8747.142	1505
387	30415.593	37734.503	7876.735	-0.56	7876.178	387
2258	30417.703	49039.654	8466.072	-1.18	8464.889	2258
911	30418.209	30045.487	7191.874	0.06	7191.935	911
388	30426.885	32267.182	8020.042	0.09	8020.132	388
389	30440.116	31037.195	7698.103	-0.45	7697.649	389
912	30444.933	41091.078	7954.196	0.44	7954.639	912
913	30446.776	30422.186	7322.917	1.06	7323.975	913
2259	30451.625	48011.728	8645.373	0.56	8645.932	2259
390	30454.517	35553.875	7367.966	0.00	7367.966	390
2260	30460.533	46256.994	7941.600	-2.51	7939.091	2260
391	30462.498	38514.027	7845.260	NR2010		391
392	30473.910	37092.082	7778.931	-0.79	7778.137	392
2261	30479.433	50977.220	8417.068	-0.86	8416.206	2261
914	30488.120	40247.864	7693.734	-0.36	7693.374	914
2262	30493.156	44714.851	8635.203	-2.18	8633.020	2262
2263	30521.572	42669.140	8775.067	-1.28	8773.785	2263
915	30522.340	39642.640	7784.288	-1.40	7782.886	915
393	30533.469	34238.103	7862.990	NR2010		393
2264	30538.461	51382.118	8415.899	0.19	8416.086	2264
2265	30538.629	42931.792	8799.722	-0.62	8799.103	2265
1506	30539.567	42029.510	8546.588	-1.11	8545.475	1506

2266	30542.491	51645.399	8410.983	0.32	8411.301	2266
2267	30545.976	43919.372	8658.086	-1.67	8656.415	2267
916	30545.998	30185.551	7305.663	2.93	7308.588	916
2268	30547.981	47591.437	8536.261	-0.73	8535.530	2268
2269	30553.038	44408.904	8593.902	-0.12	8593.784	2269
394	30562.573	33005.310	8056.263	0.47	8056.730	394
395	30565.230	31664.264	7966.604	1.28	7967.887	395
396	30568.683	32423.155	8081.401	0.34	8081.742	396
2270	30572.289	43343.816	8732.586	-1.32	8731.271	2270
2271	30580.507	43584.523	8703.251	-0.99	8702.261	2271
2272	30583.917	52500.400	8566.629	-0.11	8566.519	2272
2273	30587.311	46510.428	8109.735	-1.83	8107.902	2273
397	30591.060	33317.619	8061.685	0.33	8062.015	397
398	30592.264	33805.770	8020.168	NR2010		398
399	30594.627	32732.366	8066.938	0.85	8067.787	399
2274	30597.753	50067.066	8407.477	-1.78	8405.698	2274
917	30598.086	40811.396	7767.963	0.63	7768.594	917
2275	30605.004	47231.613	8472.958	-1.01	8471.946	2275
400	30605.171	38061.814	7970.321	-0.43	7969.888	400
401	30617.629	33502.980	8084.810	0.29	8085.101	401
402	30618.642	30911.132	7696.280	0.37	7696.653	402
403	30626.898	36515.501	7701.502	-0.99	7700.514	403
2276	30634.164	50589.154	8356.764	-0.27	8356.496	2276
404	30641.144	39257.504	7652.743	-1.05	7651.698	404
405	30641.237	36840.537	7693.618	-0.64	7692.979	405
2277	30644.885	46922.303	8326.628	-2.10	8324.531	2277
918	30647.030	40082.116	7781.926	NR2010		918
406	30652.318	32261.673	8067.591	1.20	8068.788	406
407	30657.983	31994.886	8086.483	-0.36	8086.121	407
408	30664.349	36042.182	7606.392	-0.44	7605.955	408
409	30669.173	37713.186	7863.265	-1.23	7862.039	409
410	30672.742	34784.607	7711.273	NR2010		410
2278	30679.288	47765.266	8560.446	0.37	8560.815	2278
919	30689.564	30665.623	7639.711	1.00	7640.706	919
2279	30696.695	50338.844	8326.821	-0.01	8326.815	2279
411	30704.517	37489.200	7752.954	-0.95	7752.003	411
920	30704.892	41320.376	8029.823	-0.04	8029.784	920
2280	30711.221	46104.663	7929.641	-3.04	7926.603	2280
2281	30723.857	43978.081	8567.787	-0.96	8566.825	2281
2282	30724.075	44747.337	8537.422	-0.66	8536.764	2282
2283	30726.080	48023.232	8549.352	0.55	8549.897	2283
412	30741.787	37179.400	7695.474	-2.62	7692.859	412
921	30753.580	39480.928	7772.567	-0.33	7772.241	921
922	30758.055	39714.117	7880.442	-2.35	7878.090	922
923	30760.129	40899.767	7805.044	-0.80	7804.246	923
2284	30762.832	42631.702	8794.952	-0.31	8794.642	2284
1507	30767.273	41797.969	8378.383	-2.04	8376.339	1507
2285	30767.876	51640.438	8314.713	-0.85	8313.865	2285
2286	30770.153	49281.562	8360.300	0.09	8360.392	2286
2287	30771.027	52071.864	8424.891	0.27	8425.163	2287
2288	30778.397	46675.095	8283.139	-1.12	8282.019	2288
2289	30788.051	51088.866	8268.615	-0.53	8268.087	2289

2290	30791.948	47349.005	8558.453	0.03	8558.479	2290
413	30795.757	38936.118	7730.417	NR2010		413
414	30799.693	33611.466	8087.083	1.12	8088.199	414
2291	30805.740	49658.756	8340.639	-1.00	8339.639	2291
415	30810.942	36226.367	7644.213	-0.03	7644.187	415
2292	30812.156	43248.982	8703.907	-0.95	8702.961	2292
2293	30823.581	51337.300	8288.307	-0.93	8287.375	2293
924	30823.851	30781.138	7703.359	1.92	7705.274	924
2294	30823.974	50113.745	8277.817	-0.16	8277.659	2294
2295	30825.061	50622.771	8237.204	0.15	8237.354	2295
2296	30825.689	46364.716	8108.754	-2.39	8106.366	2296
925	30830.903	29913.231	7181.896	0.00	7181.896	925
2297	30844.738	51904.808	8343.606	-0.46	8343.144	2297
1508	30846.811	42272.007	8641.179	-0.87	8640.307	1508
416	30846.927	31114.528	7882.181	0.82	7883.000	416
417	30847.818	32903.090	7966.884	0.54	7967.425	417
418	30851.365	32595.835	7999.475	-0.10	7999.380	418
926	30855.350	30399.006	7484.627	1.68	7486.311	926
419	30855.575	37960.301	7963.868	-2.36	7961.509	419
2298	30862.238	48870.097	8349.805	-0.83	8348.974	2298
420	30863.755	33203.280	7990.969	0.88	7991.847	420
2299	30865.459	45021.384	8441.603	-1.94	8439.661	2299
2300	30867.885	44474.821	8490.783	-1.09	8489.690	2300
421	30870.715	31546.547	8030.565	0.08	8030.644	421
422	30877.547	35866.760	7389.431	0.00	7389.431	422
423	30881.941	34490.333	7874.475	2.01	7876.480	423
927	30894.434	41034.850	7814.569	0.48	7815.049	927
2301	30895.360	47089.859	8456.448	0.33	8456.775	2301
2302	30905.748	43609.011	8578.907	-0.01	8578.899	2302
928	30927.711	39742.122	7950.485	-0.87	7949.613	928
424	30939.988	38089.209	8038.474	-1.08	8037.398	424
929	30941.464	41479.737	8121.764	-1.47	8120.294	929
2303	30950.601	46580.942	8268.857	-2.26	8266.598	2303
425	30958.196	37085.494	7734.055	-0.47	7733.584	425
426	30958.602	32271.376	7930.429	0.42	7930.852	426
2304	30964.988	42891.149	8713.834	-0.41	8713.424	2304
427	30965.511	34086.153	7952.715	NR2010		427
428	30965.893	39297.685	7739.603	-0.37	7739.231	428
2305	30972.816	52038.894	8348.401	-0.71	8347.688	2305
2306	30974.098	45141.097	8355.513	-1.87	8353.639	2306
2307	30976.350	49495.752	8213.946	-0.53	8213.416	2307
2308	30978.879	41955.729	8425.296	-2.93	8422.371	2308
429	30984.127	37421.497	7826.955	-1.52	7825.440	429
430	30994.095	36845.814	7649.865	-1.08	7648.786	430
431	30998.719	30877.758	7683.054	1.00	7684.053	431
2309	31005.397	44726.286	8431.071	-0.95	8430.120	2309
2310	31007.195	50546.399	8298.857	-1.65	8297.209	2310
930	31009.738	39511.601	7871.044	1.13	7872.170	930
931	31014.794	30127.016	7260.716	0.00	7260.716	931
2311	31016.848	46190.730	8016.535	-2.07	8014.469	2311
432	31026.327	36449.376	7616.020	-0.54	7615.476	432
2312	31028.029	46900.229	8485.452	-0.29	8485.163	2312

2313	31031.986	43877.350	8502.648	-1.19	8501.454	2313
2314	31034.692	45964.375	7916.136	-2.60	7913.536	2314
2315	31036.488	49997.668	8193.835	-0.88	8192.952	2315
932	31037.185	30556.603	7557.854	2.19	7560.042	932
433	31040.640	34942.316	7730.123	NR2010		433
2316	31041.897	47182.288	8527.902	-0.06	8527.841	2316
2317	31042.896	48433.100	8320.081	1.04	8321.123	2317
434	31045.697	33493.993	8026.212	-0.47	8025.746	434
435	31051.300	33774.808	8045.546	1.04	8046.584	435
933	31055.188	41277.964	7938.649	0.12	7938.769	933
2318	31056.538	50893.288	8371.150	-1.98	8369.167	2318
2319	31059.342	44424.743	8413.929	-1.82	8412.114	2319
2320	31062.093	44405.212	8413.929	-2.92	8411.014	2320
436	31062.926	31984.461	7930.133	0.47	7930.605	436
437	31065.300	36131.184	7594.502	-0.37	7594.132	437
2321	31069.275	43365.323	8583.766	-1.18	8582.591	2321
438	31076.266	31162.416	7844.607	2.10	7846.708	438
2322	31081.874	44023.116	8482.108	-1.40	8480.707	2322
439	31088.830	35430.889	7614.621	0.30	7614.925	439
934	31095.340	40909.254	7854.289	NR2010		934
2323	31099.012	48891.442	8214.850	-0.41	8214.440	2323
935	31111.077	39791.944	8068.515	-0.63	8067.888	935
440	31118.905	37915.447	8071.977	-0.75	8071.225	440
2324	31118.980	49599.739	8151.574	-1.23	8150.344	2324
441	31122.072	34306.196	7963.092	0.97	7964.064	441
936	31128.530	41701.884	8208.940	0.66	8209.604	936
937	31134.106	29760.133	7049.976	NR2010		937
2325	31145.977	43005.681	8621.209	-1.32	8619.893	2325
2326	31146.943	48701.556	8211.561	0.12	8211.683	2326
938	31147.990	30329.218	7302.694	3.84	7306.532	938
2327	31156.228	42205.864	8518.299	-2.01	8516.288	2327
939	31158.439	41077.768	7928.152	0.02	7928.172	939
2328	31160.983	50730.861	8411.493	-1.54	8409.951	2328
940	31164.637	30708.247	7557.778	0.82	7558.595	940
2329	31174.437	46570.024	8303.246	-1.63	8301.619	2329
442	31174.756	32925.865	7860.238	0.51	7860.745	442
941	31176.222	40594.556	7955.191	NR2010		941
443	31180.297	35341.563	7650.859	NR2010		443
2330	31188.842	50186.114	8306.410	-0.42	8305.995	2330
444	31189.619	31463.935	7838.361	0.00	7838.361	444
2331	31190.723	49155.697	8120.235	0.46	8120.690	2331
2332	31191.251	42568.263	8713.625	-0.63	8712.999	2332
445	31195.085	32584.570	7842.298	0.10	7842.398	445
446	31222.404	36230.189	7570.206	-0.24	7569.967	446
942	31222.960	30034.149	7144.615	1.56	7146.170	942
447	31225.660	31759.109	7904.899	1.29	7906.184	447
2333	31234.178	46122.291	8005.796	-2.43	8003.368	2333
448	31234.995	36902.587	7700.568	-1.61	7698.959	448
943	31235.002	39608.767	8001.180	0.15	8001.329	943
2334	31236.108	50409.896	8391.531	-1.25	8390.281	2334
2335	31263.702	46387.964	8248.926	-1.80	8247.128	2335
449	31266.695	33207.092	7903.148	0.00	7903.148	449

450	31268.858	33827.516	8067.856	0.84	8068.698	450
451	31271.710	37167.734	7820.766	-2.26	7818.503	451
2336	31273.549	44724.467	8232.197	-0.29	8231.904	2336
452	31281.215	38275.746	8056.607	-1.69	8054.920	452
2337	31300.199	48331.712	8182.285	-0.56	8181.726	2337
453	31305.534	31079.029	7672.659	0.00	7672.659	453
944	31307.696	41541.121	8131.523	3.88	8135.405	944
2338	31309.812	41928.345	8416.970	-1.71	8415.257	2338
454	31310.646	34159.809	8007.824	1.40	8009.221	454
2339	31313.243	43760.816	8462.790	-0.37	8462.421	2339
1509	31316.526	29282.085	7236.136	NR2010		1509
455	31318.797	37586.268	7875.996	-0.44	7875.554	455
945	31323.559	39919.008	8271.410	-3.01	8268.404	945
456	31324.467	39307.395	7830.939	0.03	7830.967	456
2340	31335.311	49473.121	8225.825	-0.56	8225.268	2340
2341	31346.650	42454.546	8706.867	NR2010		2341
2342	31347.453	47707.226	8317.719	0.10	8317.814	2342
457	31348.320	33514.895	7985.437	0.52	7985.954	457
458	31349.245	35085.029	7744.305	NR2010		458
946	31349.758	41258.411	8113.113	1.72	8114.834	946
947	31351.113	40895.988	7968.163	1.59	7969.754	947
459	31352.063	36710.407	7601.137	-0.79	7600.346	459
948	31356.534	30474.294	7302.323	2.70	7305.027	948
2343	31358.814	46581.969	8385.499	-1.32	8384.179	2343
2344	31363.895	43934.567	8434.797	-1.05	8433.751	2344
460	31366.399	36548.742	7556.914	-1.12	7555.794	460
2345	31371.499	45864.107	7896.591	-3.25	7893.337	2345
949	31372.272	29535.215	7189.807	-0.12	7189.685	949
2346	31378.891	46851.242	8409.714	0.84	8410.557	2346
461	31382.520	30816.440	7531.172	0.30	7531.473	461
2347	31390.775	49945.963	8366.025	-0.92	8365.106	2347
462	31398.477	37937.581	7962.572	-2.02	7960.552	462
463	31400.889	32234.894	7728.585	1.56	7730.146	463
950	31408.627	40259.798	8211.000	NR2010		950
2348	31417.808	45525.603	7995.176	-1.55	7993.624	2348
2349	31424.855	48492.921	8072.539	0.28	8072.817	2349
2350	31428.900	51221.846	8571.695	-1.51	8570.188	2350
2351	31432.547	42246.520	8607.982	-2.24	8605.745	2351
2352	31438.615	47178.581	8392.448	0.40	8392.852	2352
2353	31448.069	50948.528	8535.698	-1.47	8534.228	2353
951	31450.845	39630.923	8083.907	-1.85	8082.061	951
952	31455.525	30043.399	7085.107	0.00	7085.107	952
953	31460.052	30228.013	7170.464	1.33	7171.792	953
2354	31460.950	50589.362	8492.148	-1.64	8490.505	2354
2355	31461.081	42636.554	8649.322	-0.02	8649.298	2355
2356	31463.956	47446.550	8322.354	0.75	8323.103	2356
464	31466.211	31397.424	7650.651	1.12	7651.772	464
2357	31468.390	46110.342	8041.273	-1.08	8040.194	2357
2358	31474.342	49247.992	8263.145	0.29	8263.435	2358
2359	31483.471	47912.344	8176.813	1.02	8177.836	2359
465	31484.683	32885.902	7763.237	2.98	7766.215	465
954	31489.036	39469.989	7986.558	0.00	7986.558	954

2360	31490.674	46347.088	8225.723	-1.19	8224.535	2360
955	31492.624	30613.963	7291.777	5.06	7296.836	955
2361	31505.715	48964.034	8201.364	0.25	8201.617	2361
956	31505.873	41089.769	8164.925	1.34	8166.269	956
2362	31519.044	48745.172	8147.836	0.70	8148.532	2362
2363	31529.470	43332.115	8464.877	-0.50	8464.381	2363
2364	31535.620	44719.608	8082.811	-2.19	8080.624	2364
2365	31546.287	50222.381	8475.574	-1.02	8474.558	2365
2366	31547.043	47054.798	8378.812	0.51	8379.317	2366
2367	31560.483	41833.605	8360.536	-1.46	8359.076	2367
467	31565.872	31833.058	7730.855	-1.99	7728.867	467
468	31566.642	35302.241	7765.696	NR2010		468
469	31567.195	33151.946	7899.823	1.75	7901.570	469
2368	31573.996	43951.290	8311.615	-0.33	8311.281	2368
470	31578.202	34011.232	8099.914	-0.06	8099.853	470
471	31578.550	38205.326	8028.543	-0.71	8027.837	471
957	31582.538	39994.307	8430.903	0.86	8431.763	957
2369	31594.404	44264.335	8265.258	-2.03	8263.225	2369
2370	31595.156	48213.049	8051.786	-0.53	8051.252	2370
2371	31595.537	43658.534	8362.325	-1.08	8361.247	2371
472	31597.621	35713.972	7642.516	NR2010		472
473	31599.065	34338.679	8047.048	NR2010		473
958	31605.591	39773.829	8287.625	0.93	8288.557	958
1510	31608.525	28998.042	7421.950	NR2010		1510
2372	31609.149	42232.601	8580.427	-2.29	8578.136	2372
474	31611.514	30856.934	7492.734	1.08	7493.810	474
959	31611.916	41267.702	8317.388	-0.77	8316.620	959
2373	31613.169	51289.250	8674.469	-0.81	8673.661	2373
475	31627.574	37208.687	7696.260	-0.65	7695.610	475
2374	31628.305	46095.300	8039.798	-1.68	8038.119	2374
476	31629.116	33732.788	8063.239	1.15	8064.385	476
2375	31634.923	49514.657	8383.537	0.49	8384.025	2375
477	31637.759	34935.580	7907.219	2.07	7909.285	477
478	31639.778	34683.474	7955.092	NR2010		478
2376	31648.669	45811.625	7887.607	-1.96	7885.647	2376
479	31649.982	38459.793	8136.010	-0.83	8135.181	479
480	31652.984	31563.446	7602.833	-0.12	7602.711	480
481	31654.967	36195.286	7556.965	-0.48	7556.482	481
482	31655.182	39302.757	7987.932	-1.61	7986.319	482
483	31660.294	36484.406	7579.522	0.00	7579.522	483
2377	31663.936	44866.364	8009.713	-1.08	8008.630	2377
2378	31686.106	44141.196	8225.877	-0.86	8225.022	2378
484	31686.403	31128.302	7539.869	0.00	7539.869	484
2379	31688.622	49868.289	8359.641	0.11	8359.753	2379
485	31689.905	37810.382	7827.857	-0.36	7827.493	485
960	31691.094	40772.660	8162.896	NR2010		960
2380	31702.716	50695.320	8651.930	0.96	8652.889	2380
2381	31707.322	45469.142	7867.914	-0.43	7867.483	2381
486	31709.704	37516.945	7685.985	-1.66	7684.328	486
2382	31712.570	46794.212	8196.699	-1.11	8195.588	2382
487	31713.881	32024.489	7592.691	-1.93	7590.766	487
488	31721.348	32326.863	7561.186	1.18	7562.366	488

961	31724.046	29290.726	7343.191	NR2010		961
962	31725.491	39614.016	8144.941	-0.57	8144.375	962
489	31727.656	36869.845	7543.940	-3.34	7540.604	489
2383	31728.498	46557.668	8128.506	0.10	8128.606	2383
2384	31730.566	50516.741	8628.552	-1.41	8627.141	2384
963	31735.102	29608.105	7289.904	0.42	7290.326	963
2385	31747.447	42637.072	8612.206	0.01	8612.216	2385
2386	31747.991	45051.282	7950.596	-1.95	7948.650	2386
964	31755.649	30398.872	7128.171	0.64	7128.815	964
2387	31758.859	48480.582	8203.427	-0.15	8203.282	2387
490	31765.984	32944.707	7802.039	1.90	7803.942	490
491	31772.276	33430.633	7942.881	-0.06	7942.820	491
965	31773.963	40072.810	8520.280	-1.63	8518.655	965
492	31777.701	34076.211	8144.222	0.18	8144.404	492
966	31781.739	41068.626	8268.925	0.36	8269.289	966
967	31784.995	39847.581	8345.899	-0.79	8345.111	967
2388	31798.332	47228.218	8185.754	-0.79	8184.960	2388
2389	31798.657	47879.761	8031.122	-1.17	8029.957	2389
1511	31803.490	28592.982	7712.273	0.17	7712.443	1511
2390	31804.922	46344.860	8025.578	-0.59	8024.992	2390
2391	31805.669	50982.788	8716.850	-0.74	8716.111	2391
2392	31808.279	43398.477	8291.522	-1.10	8290.424	2392
2393	31809.391	45604.323	7883.859	-1.34	7882.518	2393
2394	31825.235	41389.779	8478.296	-0.48	8477.814	2394
2395	31827.613	48840.402	8371.455	-0.55	8370.901	2395
2396	31880.083	49982.528	8479.258	-0.91	8478.346	2396
2397	31880.566	41553.958	8479.011	-0.59	8478.417	2397
493	31882.984	36068.794	7637.534	-0.24	7637.291	493
968	31889.160	30719.160	7224.733	0.44	7225.170	968
494	31895.218	38042.066	7913.747	-1.33	7912.419	494
2398	31895.617	46052.359	7908.253	-0.47	7907.782	2398
969	31895.719	39664.098	8236.998	-0.61	8236.391	969
495	31902.188	33898.195	8091.204	1.82	8093.027	495
2399	31907.531	43591.562	8203.131	-0.79	8202.344	2399
2400	31908.292	45363.227	7867.153	-0.77	7866.383	2400
2401	31912.047	49496.360	8486.196	0.47	8486.667	2401
2402	31912.650	48352.232	8249.209	-0.78	8248.427	2402
496	31914.851	38566.015	8307.905	-1.33	8306.573	496
2403	31920.579	50206.061	8553.479	0.39	8553.870	2403
2404	31920.766	41912.240	8493.705	-0.69	8493.020	2404
497	31921.622	39306.387	8151.592	0.00	8151.592	497
498	31923.698	31367.303	7400.802	0.00	7400.802	498
499	31923.926	35504.733	7834.089	NR2010		499
2405	31925.522	50608.755	8712.384	-0.37	8712.018	2405
970	31925.575	30501.443	7132.022	0.00	7132.022	970
500	31927.978	37197.327	7570.054	NR2010		500
2406	31928.774	48994.676	8422.770	-0.71	8422.062	2406
501	31929.731	34397.138	8129.105	0.49	8129.591	501
2407	31932.269	46948.210	8106.749	-0.83	8105.918	2407
2408	31932.768	42360.218	8681.578	-0.12	8681.457	2408
502	31940.606	32711.802	7653.344	0.14	7653.479	502
503	31959.872	34961.711	7998.977	NR2010		503

971	31970.788	29594.354	7431.423	NR2010		971
504	31977.553	37715.161	7748.323	-0.24	7748.084	504
972	31979.864	39843.611	8396.148	-2.36	8393.789	972
2409	31980.628	46174.430	7917.355	0.00	7917.355	2409
505	31982.594	38272.243	8054.658	0.63	8055.286	505
2410	31984.479	44020.865	8083.139	-1.71	8081.434	2410
2411	31987.904	46688.893	8042.456	0.57	8043.027	2411
506	31992.345	33213.199	7827.624	0.24	7827.867	506
507	31993.892	30953.459	7250.085	-1.28	7248.803	507
973	32000.013	30270.592	7221.037	NR2010		973
508	32000.684	32240.434	7461.694	-0.13	7461.564	508
509	32001.670	37492.855	7672.595	-1.78	7670.813	509
510	32007.421	31776.551	7477.843	-0.37	7477.470	510
511	32011.399	36349.738	7734.284	-1.03	7733.257	511
512	32015.561	36775.261	7615.228	NR2010		512
1512	32044.469	28304.229	7417.488	0.27	7417.760	1512
974	32045.391	40134.557	8563.069	-1.53	8561.537	974
975	32051.102	40887.666	8367.910	NR2010		975
2412	32052.178	48057.827	8219.934	-1.19	8218.742	2412
976	32053.616	40534.063	8410.054	NR2010		976
2413	32055.943	45781.693	8026.977	-0.87	8026.106	2413
2414	32057.236	44542.614	7942.845	-2.15	7940.698	2414
2415	32057.674	45100.870	7866.378	-0.17	7866.208	2415
513	32061.367	34182.644	8242.861	0.49	8243.347	513
2416	32069.066	49123.865	8509.969	-0.96	8509.005	2416
1513	32072.207	41195.556	8473.930	-1.50	8472.435	1513
2417	32076.923	41661.014	8555.124	-0.24	8554.883	2417
514	32079.401	33481.282	7924.556	0.30	7924.860	514
515	32081.559	38972.439	8269.581	NR2010		515
2418	32093.523	48479.464	8384.493	-0.05	8384.446	2418
2419	32099.571	50419.467	8686.191	0.05	8686.238	2419
977	32103.873	30083.865	7324.916	NR2010		977
2420	32116.867	50842.446	8948.415	-2.09	8946.329	2420
2421	32120.163	47388.439	7993.474	-1.34	7992.137	2421
516	32120.340	32417.523	7563.020	0.50	7563.524	516
2422	32120.924	42000.817	8606.125	-0.26	8605.865	2422
2423	32123.028	41452.181	8620.305	-0.47	8619.835	2423
517	32125.445	33740.384	8039.440	0.37	8039.805	517
518	32137.355	34592.113	8158.673	0.00	8158.673	518
2424	32139.320	44170.616	8029.180	-1.19	8027.987	2424
2425	32157.790	46443.529	7943.572	0.01	7943.582	2425
2426	32159.194	45534.708	8060.214	-0.17	8060.047	2426
2427	32161.206	42509.014	8622.074	-0.15	8621.927	2427
519	32164.751	34049.121	8140.858	-0.30	8140.554	519
520	32164.814	36395.704	7783.506	-1.21	7782.298	520
978	32166.381	29300.110	7531.260	NR2010		978
2428	32167.280	47821.841	8209.258	0.20	8209.462	2428
979	32168.518	30396.368	7176.942	NR2010		979
980	32172.224	39954.476	8524.035	-1.26	8522.776	980
1514	32181.370	28516.752	7561.935	1.00	7562.931	1514
981	32185.392	40631.229	8510.298	0.00	8510.298	981
521	32185.696	39177.760	8322.292	NR2010		521

2429	32195.808	48230.247	8373.040	0.01	8373.046	2429
2430	32196.550	48815.387	8510.507	0.34	8510.849	2430
522	32196.702	34320.273	8253.027	0.00	8253.027	522
523	32197.245	38699.331	8446.869	-1.77	8445.099	523
524	32207.664	32992.205	7854.602	-0.01	7854.596	524
525	32211.274	35895.741	7783.402	NR2010		525
526	32214.564	36147.455	7744.323	-0.12	7744.202	526
2431	32215.809	44752.146	7832.452	-1.19	7831.262	2431
527	32219.660	39418.016	8360.100	0.00	8360.100	527
528	32221.735	31524.011	7416.063	0.10	7416.160	528
529	32224.207	36877.232	7638.823	0.00	7638.823	529
530	32230.014	37966.647	7843.836	0.00	7843.836	530
2432	32231.733	47603.630	8148.793	-1.74	8147.053	2432
531	32236.569	35231.630	8018.157	NR2010		531
2433	32238.820	42937.363	8455.814	0.10	8455.913	2433
532	32242.935	33438.943	7948.023	-0.06	7947.962	532
2434	32243.448	49473.720	8657.663	0.47	8658.137	2434
2435	32251.040	42771.132	8524.262	-0.96	8523.307	2435
2436	32253.869	47195.192	7990.603	-0.91	7989.697	2436
982	32253.979	39752.583	8472.775	-2.56	8470.211	982
1515	32258.430	28781.444	7751.765	-0.32	7751.449	1515
533	32258.897	31034.417	7172.224	0.00	7172.224	533
983	32260.957	40154.543	8649.031	-2.44	8646.593	983
534	32267.171	37369.917	7653.258	0.00	7653.258	534
2437	32269.620	46919.018	7965.753	-0.47	7965.282	2437
535	32270.687	38328.817	8056.660	-0.12	8056.541	535
2438	32270.693	44131.360	7920.457	-0.66	7919.801	2438
2439	32271.444	47955.630	8354.650	-0.13	8354.523	2439
984	32290.677	29676.617	7587.555	NR2010		984
985	32290.710	32013.977	7391.880	NR2010		985
2440	32296.773	45864.421	8175.984	-0.51	8175.475	2440
2441	32299.047	42311.894	8663.184	-0.87	8662.315	2441
536	32299.210	32022.477	7396.634	0.51	7397.146	536
2442	32300.358	46764.095	7958.008	-1.37	7956.635	2442
537	32305.918	32713.463	7770.095	-0.67	7769.425	537
2443	32312.045	42024.582	8671.335	-0.01	8671.330	2443
1516	32315.141	41023.780	8516.243	-1.07	8515.174	1516
2444	32325.460	49763.664	8687.178	-0.08	8687.101	2444
2445	32329.327	41606.312	8694.631	-0.36	8694.269	2445
2446	32332.550	41338.286	8620.454	-1.82	8618.630	2446
1517	32335.927	28169.028	7396.202	-0.21	7395.996	1517
2447	32336.634	41813.669	8683.221	-0.72	8682.498	2447
1518	32337.322	27901.537	7262.508	0.86	7263.364	1518
2448	32341.254	45673.451	8224.953	-0.83	8224.121	2448
538	32348.927	34538.813	8272.343	0.00	8272.343	538
2449	32361.818	49090.468	8648.811	-0.21	8648.603	2449
986	32362.347	40449.593	8567.933	NR2010		986
987	32366.989	28894.789	7753.381	NR2010		987
2450	32370.472	45267.016	8106.690	-1.83	8104.862	2450
539	32373.537	37689.721	7697.327	0.00	7697.327	539
540	32375.882	34868.066	8192.053	NR2010		540
2451	32376.931	47766.915	8341.552	-0.29	8341.259	2451

2452	32382.942	50565.744	8877.245	1.27	8878.510	2452
2453	32390.598	47342.968	8011.536	NR2010		2453
2454	32395.254	50263.749	8763.013	-0.81	8762.203	2454
2455	32405.626	44364.729	7819.276	-2.92	7816.356	2455
2456	32412.377	43146.275	8438.673	-0.24	8438.432	2456
988	32414.885	40002.297	8641.782	-2.97	8638.817	988
541	32422.154	30894.463	7314.860	0.00	7314.860	541
2457	32430.475	42920.486	8471.704	-0.60	8471.104	2457
2458	32433.327	48760.036	8597.646	-0.25	8597.393	2458
2459	32441.251	48216.884	8486.764	0.73	8487.492	2459
542	32441.839	32931.843	7844.018	-1.51	7842.513	542
1519	32452.824	28432.026	7673.004	1.04	7674.040	1519
543	32453.894	36284.548	7871.826	0.00	7871.826	543
989	32454.860	30668.981	7398.259	0.00	7398.259	989
2460	32455.176	44962.734	7956.737	-2.05	7954.692	2460
990	32463.919	30413.989	7452.204	-0.78	7451.424	990
544	32464.173	34558.443	8349.099	-0.12	8348.978	544
2461	32467.125	48539.539	8572.767	0.47	8573.241	2461
545	32473.152	31322.460	7199.545	NR2010		545
546	32481.482	38826.906	8568.681	-0.81	8567.872	546
991	32497.288	40199.679	8750.270	-3.37	8746.900	991
2462	32499.236	42527.208	8574.852	-0.19	8574.666	2462
992	32504.441	29847.497	7553.603	NR2010		992
547	32505.534	35108.559	8181.836	NR2010		547
548	32509.748	39054.462	8556.740	-1.09	8555.655	548
549	32512.054	37907.082	7797.541	1.03	7798.566	549
550	32518.598	34106.988	8068.974	-0.37	8068.609	550
551	32519.019	33218.967	7828.429	-1.27	7827.155	551
552	32520.762	35488.705	8028.436	NR2010		552
2463	32521.062	41507.995	8681.642	-0.60	8681.039	2463
553	32521.118	39357.148	8561.826	NR2010		553
554	32522.626	37072.640	7745.146	0.00	7745.146	554
555	32522.708	31941.910	7282.509	-0.61	7281.900	555
556	32523.041	35846.149	7944.963	2.01	7946.968	556
557	32525.105	38655.522	8443.443	0.10	8443.544	557
2464	32525.752	47579.161	8127.442	-0.34	8127.102	2464
558	32526.101	31665.311	7246.681	0.00	7246.681	558
993	32527.851	29292.440	7775.444	NR2010		993
2465	32529.285	47958.140	8357.132	0.72	8357.852	2465
2466	32529.857	49819.674	8843.783	NR2010		2466
559	32534.553	33825.348	7946.332	0.61	7946.940	559
560	32538.638	38335.950	8146.658	1.29	8147.952	560
2467	32545.028	42223.538	8579.880	-0.87	8579.007	2467
561	32546.614	32440.823	7585.650	2.22	7587.871	561
562	32557.408	31170.504	7305.302	0.24	7305.545	562
2468	32557.526	44526.808	7827.325	-1.55	7825.780	2468
994	32584.249	39692.524	8626.347	0.00	8626.347	994
995	32588.655	29504.156	7759.071	NR2010		995
563	32589.666	32139.718	7370.595	-0.42	7370.177	563
564	32591.676	33577.554	7865.509	0.89	7866.403	564
2469	32597.736	47116.287	8165.629	0.60	8166.228	2469
2470	32598.013	43017.643	8440.730	-0.30	8440.430	2470

2471	32601.998	45890.885	8356.929	0.55	8357.475	2471
2472	32613.136	49099.506	8727.907	0.48	8728.387	2472
565	32613.669	36682.424	7780.565	NR2010		565
2473	32613.870	41940.451	8579.641	-0.48	8579.159	2473
2474	32614.055	46217.414	8274.926	-0.94	8273.987	2474
566	32624.355	37480.713	7754.927	0.00	7754.927	566
1520	32626.388	28211.322	7513.116	-1.37	7511.747	1520
2475	32627.973	44716.400	7844.496	-1.78	7842.715	2475
2476	32631.821	50216.919	8973.027	-0.10	8972.932	2476
1521	32632.815	28755.769	7935.972	0.06	7936.032	1521
1522	32642.554	40712.099	8738.317	-1.98	8736.333	1522
2477	32644.253	48676.305	8577.850	0.32	8578.173	2477
2478	32645.627	49303.918	8839.537	0.58	8840.113	2478
2479	32647.575	41233.101	8699.248	-0.24	8699.007	2479
2480	32655.689	45402.003	8222.777	-0.20	8222.581	2480
567	32657.895	34704.796	8411.283	-0.91	8410.372	567
2481	32671.660	46941.426	8194.785	-0.50	8194.290	2481
568	32672.296	32997.926	7761.316	-1.69	7759.628	568
2482	32674.848	41711.476	8590.634	-1.09	8589.549	2482
2483	32687.725	48933.179	8659.547	0.18	8659.722	2483
996	32688.603	39052.395	8603.459	-0.30	8603.156	996
2484	32690.962	46704.040	8186.412	-1.65	8184.766	2484
2485	32691.021	49494.482	8961.454	-0.10	8961.353	2485
569	32696.739	31305.851	7372.935	NR2010		569
570	32716.427	35282.075	8201.309	NR2010		570
2486	32719.377	44209.528	7802.432	-0.53	7801.902	2486
571	32723.111	38751.564	8450.608	-0.37	8450.242	571
2487	32725.709	48354.143	8472.290	0.08	8472.373	2487
572	32726.822	31610.687	7333.102	NR2010		572
2488	32731.521	40912.736	8722.842	-1.09	8721.757	2488
2489	32732.212	45693.762	8368.794	0.28	8369.069	2489
2490	32741.961	46129.488	8350.728	-0.32	8350.413	2490
573	32744.943	30863.605	7476.621	NR2010		573
574	32757.664	36173.263	7989.271	NR2010		574
2491	32765.667	47801.039	8183.541	-1.51	8182.030	2491
2492	32777.363	49656.960	8990.759	0.45	8991.209	2492
997	32779.095	30238.028	7471.302	1.40	7472.705	997
2493	32796.128	48031.415	8329.172	-0.28	8328.896	2493
998	32803.896	29864.802	7548.701	NR2010		998
575	32804.019	34426.485	8185.633	0.24	8185.876	575
576	32804.235	37818.030	7752.983	0.00	7752.983	576
577	32807.137	39374.857	8746.900	-3.83	8743.068	577
999	32812.017	29093.808	7957.624	-0.67	7956.952	999
2494	32814.158	47535.251	8183.003	0.01	8183.013	2494
578	32814.530	31890.017	7407.095	-0.44	7406.660	578
579	32815.524	36458.364	7891.239	NR2010		579
580	32815.985	38523.671	8217.860	0.36	8218.219	580
2495	32819.696	47059.737	8331.923	0.54	8332.463	2495
2496	32820.054	42775.055	8450.299	0.38	8450.678	2496
581	32820.966	34879.555	8437.122	-0.36	8436.758	581
582	32824.271	33189.682	7731.944	-1.39	7730.558	582
583	32825.684	32673.211	7614.202	-0.90	7613.300	583

2497	32832.901	45922.892	8439.448	0.16	8439.612	2497
1523	32834.579	28533.926	7783.582	-1.40	7782.179	1523
1524	32835.033	40424.455	8810.590	-3.25	8807.344	1524
2498	32835.988	49896.122	9018.031	0.52	9018.549	2498
584	32839.571	34052.214	8007.669	0.12	8007.791	584
585	32839.625	37275.725	7852.265	NR2010		585
2499	32840.457	42395.150	8445.172	-1.33	8443.846	2499
2500	32843.407	41440.262	8599.184	-0.36	8598.822	2500
1000	32843.611	40080.548	8849.815	NR2010		1000
586	32849.098	35905.918	8097.701	NR2010		586
2501	32851.525	45040.303	7949.195	0.49	7949.680	2501
2502	32856.958	44374.330	7810.243	-1.17	7809.074	2502
587	32867.469	32138.878	7324.190	0.00	7324.190	587
2503	32868.018	42140.637	8452.259	-0.96	8451.295	2503
2504	32868.769	40978.520	8709.109	-0.60	8708.506	2504
1001	32878.543	30483.932	7614.390	0.00	7614.390	1001
588	32888.929	38068.075	7913.490	-1.04	7912.452	588
1002	32894.686	39793.117	8821.175	NR2010		1002
2505	32897.496	48830.807	8584.339	0.05	8584.389	2505
1003	32900.744	39530.437	8791.799	-3.04	8788.761	1003
589	32911.092	32357.355	7390.975	2.94	7393.911	589
590	32912.631	33468.954	7808.821	-0.99	7807.835	590
2506	32914.165	41557.164	8538.999	-0.24	8538.758	2506
2507	32917.703	48456.301	8458.804	-0.42	8458.387	2507
591	32918.016	35499.356	8222.796	NR2010		591
592	32918.223	39015.587	8539.331	-0.84	8538.487	592
593	32920.528	36917.206	7921.538	0.00	7921.538	593
2508	32946.656	45369.804	8086.865	-0.52	8086.345	2508
2509	32948.389	49125.147	8675.994	1.11	8677.106	2509
2510	32953.964	41129.686	8664.245	-0.36	8663.883	2510
1525	32971.426	40888.332	8707.219	-1.39	8705.831	1525
1004	32976.171	38341.959	8037.664	-0.53	8037.139	1004
1005	32976.967	28918.643	8007.310	-0.32	8006.990	1005
2511	32992.428	47489.301	8307.342	1.05	8308.394	2511
594	32993.888	31030.761	7527.735	NR2010		594
595	32995.215	39341.298	8668.416	-2.22	8666.193	595
2512	32998.754	44731.139	7940.848	-0.93	7939.917	2512
596	33000.958	34401.740	8104.546	0.06	8104.607	596
2513	33006.152	42110.026	8396.522	-0.60	8395.919	2513
597	33006.769	33089.467	7716.882	-0.89	7715.992	597
1006	33013.570	38896.885	8401.275	0.00	8401.275	1006
1007	33024.146	30134.565	7594.823	0.00	7594.823	1007
2514	33034.733	46718.744	8412.932	-0.23	8412.703	2514
2515	33045.769	45950.652	8340.443	1.55	8341.990	2515
2516	33047.118	48088.883	8285.184	-0.29	8284.893	2516
598	33050.724	33247.281	7723.856	-1.71	7722.147	598
599	33051.661	36734.106	7971.511	0.00	7971.511	599
600	33054.426	31436.713	7504.044	NR2010		600
2517	33054.577	42371.883	8371.431	-0.24	8371.190	2517
2518	33056.794	46321.389	8477.660	-1.33	8476.334	2518
2519	33058.080	43086.272	8332.573	0.68	8333.251	2519
1526	33066.902	28467.462	7694.468	0.78	7695.245	1526

2520	33078.998	42843.602	8407.430	-0.56	8406.867	2520
2521	33085.693	49332.757	8696.448	0.60	8697.047	2521
2522	33088.728	45168.799	7922.573	-0.39	7922.181	2522
601	33096.741	35142.632	8485.836	-0.55	8485.289	601
602	33097.590	36201.142	8109.308	NR2010		602
2523	33102.236	42575.882	8356.157	-1.33	8354.831	2523
1008	33102.357	39095.010	8488.219	-1.27	8486.953	1008
1009	33110.525	29944.647	7610.494	-0.06	7610.434	1009
2524	33116.919	47747.238	8305.967	-1.07	8304.894	2524
603	33117.499	37628.832	7880.720	NR2010		603
604	33124.502	30823.225	7640.605	NR2010		604
2525	33124.692	48864.614	8543.042	0.65	8543.696	2525
605	33126.115	31756.836	7456.704	NR2010		605
606	33127.147	34643.703	8173.391	-0.97	8172.419	606
607	33129.132	38721.245	8212.485	-0.90	8211.581	607
2526	33134.048	41215.194	8565.968	-0.12	8565.847	2526
608	33136.248	32820.180	7627.722	-7.74	7619.980	608
1010	33140.677	39618.257	8788.597	-4.37	8784.223	1010
2527	33147.284	45594.750	8136.144	0.41	8136.552	2527
2528	33148.568	44347.617	7791.402	-1.98	7789.427	2528
1011	33152.156	30256.117	7707.143	0.00	7707.143	1011
2529	33157.088	49649.202	8820.010	0.49	8820.503	2529
2530	33169.973	48646.721	8451.238	-0.27	8450.968	2530
2531	33170.363	47049.767	8466.190	-1.85	8464.336	2531
609	33171.458	33755.528	7812.751	-0.53	7812.223	609
1012	33173.162	29115.521	8010.012	-0.67	8009.342	1012
610	33174.168	31953.024	7462.291	NR2010		610
2532	33178.517	46598.523	8479.138	-1.93	8477.206	2532
1527	33179.155	40787.084	8620.907	-1.69	8619.219	1527
1013	33185.521	28785.800	7841.311	-1.02	7840.296	1013
1528	33185.906	40272.996	8795.649	-2.95	8792.695	1528
2533	33198.906	48334.769	8331.235	NR2010		2533
2534	33209.454	44113.527	7781.743	-1.36	7780.384	2534
2535	33209.956	42225.518	8256.897	-0.12	8256.776	2535
2536	33213.755	41898.000	8351.122	-0.24	8350.881	2536
2537	33214.095	41721.847	8387.079	-0.48	8386.597	2537
2538	33216.809	40956.426	8553.754	0.12	8553.875	2538
611	33220.027	38460.570	8077.736	-0.24	8077.494	611
2539	33222.252	41341.614	8496.944	-0.48	8496.462	2539
612	33223.304	37124.869	8038.336	0.00	8038.336	612
1014	33224.797	30497.599	7864.098	0.00	7864.098	1014
613	33232.112	35757.843	8401.095	NR2010		613
614	33232.183	31159.930	7658.910	NR2010		614
2540	33233.607	46844.267	8539.971	0.54	8540.510	2540
1015	33234.806	29380.080	7908.922	NR2010		1015
615	33243.105	37942.047	7867.315	NR2010		615
616	33251.120	36512.625	8087.323	NR2010		616
617	33256.429	32340.642	7437.841	0.00	7437.841	617
1529	33257.733	39898.990	8848.276	-4.13	8844.142	1529
2541	33262.871	45358.604	7951.341	-1.41	7949.930	2541
618	33267.969	34061.066	7894.510	-2.56	7891.950	618
619	33276.977	38199.096	8007.993	-1.32	8006.673	619

2542	33278.590	48501.860	8359.883	0.17	8360.055	2542
2543	33289.346	48880.642	8504.377	-0.10	8504.273	2543
2544	33289.673	46205.667	8363.927	-1.48	8362.447	2544
620	33291.102	33487.354	7700.268	-1.40	7698.867	620
1016	33312.009	38872.257	8394.546	-0.42	8394.124	1016
2545	33316.223	44803.929	8009.027	-0.47	8008.560	2545
621	33329.177	34870.929	8243.969	0.12	8244.091	621
622	33329.361	39398.654	8684.179	-4.37	8679.812	622
1017	33329.562	29166.142	8015.815	-0.63	8015.189	1017
2546	33338.741	44501.471	7827.235	-1.28	7825.959	2546
2547	33345.453	42610.933	8217.395	-1.38	8216.018	2547
2548	33345.461	42377.003	8178.221	-0.12	8178.100	2548
623	33349.131	39067.948	8547.168	-1.69	8545.480	623
624	33354.483	30941.122	7797.377	0.00	7797.377	624
2549	33380.781	41994.456	8219.353	-0.12	8219.232	2549
2550	33381.709	48982.077	8518.282	0.15	8518.429	2550
625	33393.612	32723.574	7439.988	-2.27	7437.718	625
2551	33395.194	45968.406	8235.415	-2.57	8232.844	2551
2552	33398.099	47386.244	8500.759	-0.38	8500.377	2552
626	33404.587	34367.182	7945.293	0.00	7945.293	626
627	33410.717	36183.887	8357.465	NR2010		627
2553	33419.404	49340.538	8619.506	1.28	8620.781	2553
2554	33419.692	42985.634	8208.288	-0.47	8207.820	2554
2555	33420.305	41643.798	8290.887	0.12	8291.008	2555
628	33424.488	33112.065	7650.507	0.00	7650.507	628
629	33428.365	31388.573	7746.124	-0.36	7745.762	629
1018	33432.037	30034.324	7874.425	2.11	7876.539	1018
1019	33442.156	28942.603	7926.878	0.53	7927.411	1019
630	33445.236	34689.000	8097.831	0.55	8098.378	630
2556	33459.684	43209.408	8149.768	-0.67	8149.103	2556
2557	33460.958	41849.171	8187.784	-0.58	8187.204	2557
631	33470.504	35403.487	8607.472	-1.87	8605.599	631
2558	33477.909	47697.188	8493.103	-0.33	8492.774	2558
1020	33480.762	28676.901	7731.600	1.75	7733.347	1020
2559	33487.923	47199.181	8553.868	-1.16	8552.708	2559
2560	33493.288	43670.789	7926.717	-0.36	7926.355	2560
1021	33497.027	30318.225	7986.827	0.93	7987.755	1021
632	33500.433	35106.884	8405.800	-1.15	8404.646	632
2561	33501.123	44878.863	8110.923	0.19	8111.114	2561
633	33504.043	38027.850	8004.578	0.85	8005.424	633
1022	33510.701	29645.469	7890.599	-0.25	7890.347	1022
2562	33513.747	44225.544	7776.258	-1.38	7774.882	2562
634	33516.843	31841.419	7687.559	0.00	7687.559	634
2563	33518.149	47992.617	8500.669	-0.95	8499.722	2563
2564	33527.521	48213.452	8504.168	-1.42	8502.750	2564
2565	33527.811	43509.971	8011.054	-1.32	8009.734	2565
635	33528.225	36747.915	8323.958	-0.91	8323.052	635
1023	33531.628	39378.143	8751.313	-5.37	8745.940	1023
636	33531.791	37129.595	8233.662	NR2010		636
637	33533.825	38853.960	8449.982	-2.32	8447.666	637
638	33533.866	31215.942	7813.073	NR2010		638
2566	33535.852	46988.506	8536.744	0.22	8536.959	2566

639	33547.601	38313.139	8209.695	0.00	8209.695	639
2567	33547.741	42709.954	8109.973	-0.17	8109.803	2567
2568	33550.080	48425.773	8490.352	-0.45	8489.907	2568
640	33550.190	37437.041	8122.475	NR2010		640
641	33555.565	38571.644	8404.816	-2.29	8402.527	641
642	33555.684	39067.592	8618.989	-3.56	8615.432	642
2569	33556.584	45591.681	7952.243	0.01	7952.253	2569
2570	33562.210	42103.491	8098.733	-0.87	8097.868	2570
643	33575.730	37684.694	8079.957	0.00	8079.957	643
1530	33576.820	40424.591	8720.709	-2.77	8717.936	1530
644	33580.888	33749.119	7691.351	-0.37	7690.985	644
2571	33582.098	46475.963	8331.053	-1.26	8329.789	2571
645	33585.902	36398.640	8360.738	0.00	8360.738	645
2572	33591.774	42324.822	8033.642	-0.64	8033.006	2572
1531	33598.946	40062.552	8753.728	-3.85	8749.880	1531
646	33601.098	36105.073	8468.777	NR2010		646
647	33604.098	32394.654	7446.920	NR2010		647
1532	33608.070	39700.803	8765.022	-4.65	8760.369	1532
648	33609.251	31555.354	7742.801	NR2010		648
1024	33611.154	30662.183	7962.552	NR2010		1024
1025	33619.422	30401.531	8032.855	2.25	8035.108	1025
2573	33621.867	43978.945	7766.807	-1.39	7765.419	2573
2574	33633.220	46211.128	8232.731	-1.67	8231.062	2574
649	33635.396	32994.070	7446.555	NR2010		649
2575	33636.301	45838.245	8023.632	-2.51	8021.124	2575
2576	33643.860	47409.491	8600.637	-0.53	8600.111	2576
2577	33644.658	47227.340	8561.505	-0.50	8561.008	2577
2578	33645.150	48850.614	8504.736	-0.35	8504.385	2578
650	33662.749	33174.039	7542.630	-0.12	7542.508	650
651	33673.652	34067.265	7796.425	-1.85	7794.573	651
1026	33688.980	30103.641	8013.943	1.73	8015.676	1026
652	33689.978	34738.430	8115.761	-0.43	8115.328	652
2579	33691.643	42929.935	8039.400	-0.61	8038.793	2579
1027	33696.464	29847.968	7948.053	-0.28	7947.772	1027
1028	33696.766	29254.227	8081.332	0.23	8081.566	1028
653	33705.197	34346.572	7886.183	-0.43	7885.750	653
2580	33712.608	44433.631	7869.508	-0.87	7868.643	2580
2581	33719.979	49307.638	8619.715	0.02	8619.738	2581
2582	33720.176	44940.818	8266.570	-0.35	8266.225	2582
1029	33721.943	28856.052	7919.552	-0.34	7919.212	1029
2583	33734.658	47737.197	8595.763	-1.16	8594.606	2583
654	33750.160	33516.788	7599.569	0.00	7599.569	654
2584	33756.291	42543.806	7927.590	0.29	7927.876	2584
2585	33758.002	43079.477	8022.599	-0.32	8022.276	2585
655	33758.471	39281.591	8743.463	-4.94	8738.526	655
2586	33766.827	43369.569	7893.388	0.49	7893.874	2586
656	33772.494	32058.008	7651.213	-37.73	7613.484	656
657	33782.418	32616.058	7613.484	NR2010		657
658	33784.577	31390.905	7826.938	NR2010		658
659	33789.358	35662.623	8682.458	-0.12	8682.337	659
2587	33793.323	44695.869	8112.891	-0.54	8112.354	2587
1030	33798.272	29534.129	8058.417	0.06	8058.477	1030

2588	33798.791	47511.650	8607.439	-0.69	8606.746	2588
2589	33800.644	46743.243	8346.464	-1.17	8345.291	2589
660	33807.090	33028.884	7577.871	NR2010		660
661	33817.295	30943.926	7991.133	NR2010		661
662	33823.960	37752.265	8241.377	0.00	8241.377	662
1031	33829.871	30275.265	8121.545	0.60	8122.146	1031
2590	33833.935	44002.004	7771.935	-1.73	7770.201	2590
663	33834.136	38092.267	8176.615	0.00	8176.615	663
664	33846.521	38870.511	8652.636	-1.81	8650.823	664
665	33852.496	37349.642	8298.142	NR2010		665
2591	33869.657	46423.359	8242.201	-0.89	8241.307	2591
666	33879.901	38257.491	8278.736	-0.34	8278.401	666
667	33879.953	33824.602	7656.838	-0.31	7656.533	667
1533	33884.741	40650.887	8674.985	-2.89	8672.092	1533
2592	33885.091	43684.771	7753.213	-1.24	7751.973	2592
668	33894.206	31833.803	7696.420	0.55	7696.969	668
2593	33894.889	47008.814	8424.488	-1.76	8422.728	2593
2594	33898.476	47784.315	8630.270	-0.56	8629.710	2594
669	33901.757	36994.624	8528.762	-1.32	8527.440	669
670	33902.509	36282.251	8566.977	NR2010		670
2595	33903.130	44190.585	7811.584	-1.20	7810.384	2595
1032	33908.461	30527.150	8107.638	2.01	8109.644	1032
671	33916.887	34983.706	8222.150	0.00	8222.150	671
1534	33917.180	39578.837	8732.278	-4.64	8727.636	1534
672	33924.234	38530.925	8514.631	-1.79	8512.838	672
1033	33926.853	29814.958	8055.839	2.20	8058.038	1033
2596	33935.192	42804.948	7866.908	-1.12	7865.787	2596
2597	33944.366	47974.960	8643.160	-0.01	8643.147	2597
673	33948.719	33236.972	7608.392	-0.37	7608.026	673
674	33952.258	34754.504	8094.243	-1.34	8092.901	674
2598	33953.174	46172.864	8062.961	-0.40	8062.557	2598
675	33954.203	36521.756	8613.848	NR2010		675
2599	33955.583	47283.714	8520.186	-1.24	8518.942	2599
2600	33958.539	45034.858	8327.132	-2.13	8325.004	2600
1034	33959.253	28966.406	8008.462	-1.41	8007.051	1034
1535	33961.485	41419.152	8442.558	NR2010		1535
676	33966.907	32703.492	7687.079	0.03	7687.105	676
677	33974.734	34120.033	7758.656	0.76	7759.412	677
2601	33977.416	45763.299	8113.087	-2.11	8110.976	2601
1035	33988.009	29261.149	8099.706	1.69	8101.400	1035
678	33990.379	35308.519	8458.168	-0.12	8458.047	678
679	33990.465	32284.859	7527.653	NR2010		679
680	33990.640	34441.621	7936.818	-3.17	7933.653	680
1036	33994.642	30127.794	8152.496	0.00	8152.496	1036
681	33998.708	31185.593	7906.358	NR2010		681
682	34006.062	35832.812	8770.058	0.00	8770.058	682
683	34007.451	36822.877	8588.552	-2.32	8586.236	683
1037	34019.093	29661.156	8117.631	1.31	8118.945	1037
684	34021.119	30740.143	8093.526	NR2010		684
1536	34027.559	39940.487	8690.867	-4.46	8686.409	1536
2602	34031.475	44458.108	8016.062	-1.06	8015.002	2602
2603	34041.015	45280.289	8302.340	-2.81	8299.526	2603

685	34044.351	31614.027	7751.292	NR2010		685
2604	34049.481	43707.946	7748.115	-0.36	7747.753	2604
1537	34053.728	40254.120	8673.377	-5.35	8668.024	1537
2605	34055.673	48238.311	8698.182	-0.37	8697.808	2605
2606	34058.893	43436.612	7728.529	-0.74	7727.789	2606
2607	34060.623	45861.030	8139.989	-1.91	8138.078	2607
2608	34062.015	47466.119	8528.269	-0.80	8527.471	2608
1538	34070.364	40860.135	8646.005	-3.21	8642.795	1538
1038	34073.211	38766.596	8603.016	-2.20	8600.821	1038
686	34080.027	32616.948	7687.243	1.08	7688.324	686
2609	34089.464	43051.579	7824.019	-1.88	7822.143	2609
2610	34089.737	48826.557	8707.154	0.15	8707.302	2610
687	34092.635	32052.022	7648.916	NR2010		687
1039	34092.823	38372.549	8394.971	-1.84	8393.131	1039
2611	34099.283	46884.059	8324.840	0.40	8325.240	2611
2612	34121.632	43865.439	7775.393	-1.60	7773.795	2612
1040	34129.686	29973.471	8205.121	0.07	8205.190	1040
2613	34135.688	48432.548	8751.231	-0.57	8750.664	2613
688	34139.917	33441.432	7685.061	NR2010		688
689	34156.213	32368.774	7661.879	-0.50	7661.376	689
1539	34156.223	41149.336	8571.849	-1.75	8570.096	1539
1540	34162.129	39073.118	8717.611	-4.11	8713.501	1540
1541	34166.996	39396.517	8712.474	-3.93	8708.546	1541
2614	34167.558	47742.382	8548.023	-0.42	8547.601	2614
2615	34168.506	48660.759	8771.805	-0.06	8771.747	2615
2616	34176.812	44638.936	8252.124	-1.85	8250.270	2616
1542	34182.997	41592.390	8430.754	NR2010		1542
2617	34184.537	45068.411	8403.587	-2.13	8401.460	2617
1543	34184.584	41990.033	8324.207	-0.36	8323.849	1543
2618	34197.459	46659.488	8280.535	-2.14	8278.395	2618
690	34198.141	34785.779	8122.612	-1.26	8121.348	690
2619	34202.635	43484.552	7735.215	-0.12	7735.094	2619
2620	34206.258	46365.150	8096.076	-1.26	8094.817	2620
691	34213.395	33589.615	7712.218	NR2010		691
1041	34229.063	37179.809	8578.526	NR2010		1041
1042	34230.465	38462.974	8492.362	-1.70	8490.661	1042
1043	34232.570	30288.281	8272.682	1.19	8273.874	1043
2621	34242.938	47006.883	8318.205	-0.35	8317.858	2621
692	34244.444	33077.281	7703.073	NR2010		692
1044	34251.116	29466.865	8151.103	0.76	8151.862	1044
2622	34254.407	44289.975	7969.616	-0.92	7968.696	2622
693	34259.261	35932.084	8815.462	-1.93	8813.528	693
694	34264.223	35596.531	8651.366	-0.06	8651.306	694
1045	34266.081	29155.411	8051.348	0.92	8052.268	1045
2623	34272.072	47980.049	8574.202	-1.83	8572.371	2623
2624	34283.103	47554.082	8437.336	-1.45	8435.886	2624
2625	34286.213	43965.281	7858.329	-0.26	7858.067	2625
2626	34293.360	42440.196	8042.937	1.16	8044.097	2626
1046	34297.961	36949.498	8689.483	NR2010		1046
2627	34298.049	45707.850	8296.278	-0.75	8295.531	2627
1047	34301.018	37708.080	8581.841	-1.57	8580.270	1047
695	34302.866	33927.928	7728.463	-2.28	7726.183	695

2628	34312.888	42625.529	7942.217	-0.60	7941.620	2628
696	34314.557	32157.117	7658.351	NR2010		696
697	34316.823	36715.951	8743.853	-0.60	8743.249	697
698	34319.644	34174.598	7784.960	-1.85	7783.106	698
699	34325.777	31752.493	7753.795	0.12	7753.916	699
2629	34327.041	42096.292	8190.695	0.85	8191.544	2629
700	34327.275	35305.690	8516.411	-3.43	8512.977	700
701	34328.763	34999.666	8259.791	-0.95	8258.839	701
2630	34338.835	43606.977	7766.345	-0.63	7765.717	2630
702	34338.861	34416.826	7915.495	-0.32	7915.172	702
2631	34340.367	47264.124	8342.574	-0.81	8341.768	2631
703	34343.996	32573.635	7783.112	-2.93	7780.187	703
704	34348.011	36309.657	8789.908	-1.75	8788.156	704
1544	34359.266	39802.643	8641.887	-4.19	8637.702	1544
1545	34359.928	41338.120	8438.911	NR2010		1545
1546	34368.502	40591.681	8591.222	-2.98	8588.241	1546
2632	34376.446	44869.441	8399.576	-3.49	8396.088	2632
1048	34384.352	29775.867	8323.013	0.00	8323.013	1048
2633	34388.733	46972.578	8303.788	-1.15	8302.635	2633
2634	34404.342	45548.131	8337.809	-2.89	8334.924	2634
705	34411.106	33349.135	7816.706	2.18	7818.886	705
2635	34414.688	46608.014	8212.313	-0.22	8212.098	2635
2636	34417.927	47687.213	8415.109	-0.28	8414.829	2636
2637	34433.857	43163.212	7726.389	0.36	7726.750	2637
1049	34439.682	38231.790	8546.665	-3.55	8543.112	1049
1547	34448.508	38807.386	8667.860	-3.55	8664.313	1547
1548	34463.252	40240.236	8557.771	-4.25	8553.519	1548
1549	34482.183	40966.856	8440.440	NR2010		1549
1050	34482.360	37394.863	8698.789	-1.69	8697.097	1050
2638	34485.109	43386.456	7735.057	-0.83	7734.225	2638
2639	34487.880	44507.445	8208.483	-1.69	8206.795	2639
1051	34497.720	37083.737	8702.493	-0.91	8701.587	1051
1550	34497.961	39104.723	8677.764	-4.23	8673.534	1550
1052	34499.283	37927.097	8595.923	NR2010		1052
2640	34504.853	43665.766	7823.691	0.86	7824.551	2640
1053	34508.018	37623.303	8693.755	-1.69	8692.063	1053
1551	34508.081	41555.351	8394.598	-0.66	8393.935	1551
1054	34514.115	29399.489	8136.301	0.01	8136.308	1054
2641	34518.174	42878.178	7742.326	-0.60	7741.723	2641
2642	34523.242	45104.314	8512.284	-1.02	8511.261	2642
706	34525.048	32870.274	7883.782	1.06	7884.839	706
2643	34525.470	48303.648	8577.490	-0.35	8577.139	2643
707	34537.366	34497.614	7926.540	-0.15	7926.386	707
1552	34542.543	39509.494	8652.319	-4.83	8647.490	1552
708	34546.183	31498.762	7874.792	NR2010		708
2644	34551.939	46279.737	8204.833	NR2010		2644
709	34562.147	35878.136	8803.082	-0.60	8802.478	709
710	34563.944	34766.174	8064.425	-0.91	8063.511	710
711	34565.635	36735.525	8729.685	-1.39	8728.295	711
2645	34566.563	44134.930	8103.321	0.09	8103.410	2645
712	34577.890	31890.251	7739.725	NR2010		712
713	34579.616	34124.061	7815.350	NR2010		713

2646	34579.736	47354.810	8288.376	0.15	8288.530	2646
714	34580.487	35334.072	8533.289	-1.42	8531.870	714
2647	34586.378	47728.298	8410.977	-0.73	8410.250	2647
715	34587.594	32551.084	7788.486	0.00	7788.486	715
2648	34589.646	48030.844	8508.906	-0.83	8508.079	2648
716	34594.903	33838.369	7857.110	0.00	7857.110	716
1553	34599.078	38558.541	8659.600	-3.51	8656.095	1553
1554	34608.540	41259.834	8349.030	0.08	8349.107	1554
717	34614.170	32043.899	7804.484	4.11	7808.595	717
2649	34620.663	46820.255	8195.333	-0.99	8194.342	2649
1055	34622.752	29763.736	8383.089	-1.23	8381.858	1055
2650	34649.480	43848.822	7984.492	0.65	7985.139	2650
718	34650.699	35543.950	8662.517	0.93	8663.450	718
2651	34658.899	45497.714	8492.137	0.08	8492.218	2651
2652	34661.798	44726.822	8381.118	-1.87	8379.252	2652
719	34665.964	33267.195	7918.652	0.00	7918.652	719
720	34670.535	36400.896	8756.059	-1.75	8754.307	720
1555	34673.105	40600.780	8561.261	-3.34	8557.920	1555
2653	34682.034	43001.845	7715.664	0.14	7715.808	2653
721	34685.821	35029.838	8292.347	0.32	8292.663	721
1056	34686.148	37944.852	8677.081	-0.60	8676.477	1056
2654	34687.542	47006.370	8215.148	-0.72	8214.432	2654
1556	34703.317	41693.585	8232.875	0.50	8233.375	1556
1557	34711.067	42719.930	7752.022	-0.96	7751.058	1557
2655	34718.006	47449.244	8283.098	-0.63	8282.465	2655
2656	34727.518	47186.505	8237.647	-0.14	8237.505	2656
722	34727.677	33566.917	7912.745	0.00	7912.745	722
723	34735.899	31273.167	7991.214	NR2010		723
1558	34737.176	38862.799	8598.613	-3.39	8595.220	1558
1559	34742.868	40216.735	8448.401	NR2010		1559
2657	34753.022	44325.192	8320.225	-3.15	8317.072	2657
2658	34754.877	43399.520	7788.539	-0.40	7788.142	2658
1057	34756.709	30052.741	8562.211	-1.21	8561.005	1057
724	34758.771	32007.251	7871.302	-0.06	7871.246	724
2659	34763.565	48001.352	8437.065	-0.60	8436.465	2659
725	34764.307	32308.927	7829.295	0.00	7829.295	725
1058	34768.869	29527.582	8174.940	0.30	8175.237	1058
1560	34772.949	39940.520	8482.596	NR2010		1560
2660	34780.859	45058.583	8543.711	-0.59	8543.123	2660
1561	34785.448	41063.737	8347.658	-1.33	8346.332	1561
726	34791.439	32909.773	7973.991	0.00	7973.991	726
1059	34803.735	37161.511	8684.250	-2.30	8681.954	1059
2661	34813.246	43103.935	7713.609	-0.48	7713.127	2661
1562	34817.860	39151.256	8527.357	NR2010		1562
2662	34824.499	43946.373	8159.692	0.26	8159.954	2662
727	34832.276	34491.560	8096.929	-0.37	8096.563	727
728	34840.931	31131.306	8053.219	NR2010		728
729	34842.675	31777.094	7866.774	0.51	7867.285	729
730	34849.298	36747.207	8693.849	-1.75	8692.097	730
1060	34850.369	37463.109	8732.787	-2.24	8730.547	1060
1563	34852.530	38317.731	8715.343	-3.03	8712.310	1563
1061	34855.902	37756.061	8752.193	-1.83	8750.367	1061

2663	34862.144	42909.200	7700.054	-0.40	7699.653	2663
1564	34862.986	41456.455	8152.249	-1.88	8150.369	1564
2664	34866.693	45357.932	8564.853	-1.51	8563.343	2664
731	34880.244	36161.460	8754.928	-0.91	8754.022	731
732	34884.869	35257.609	8563.735	-0.66	8563.074	732
1565	34886.322	41705.174	8116.564	-0.98	8115.587	1565
733	34891.272	35828.925	8797.499	-0.52	8796.979	733
1062	34891.860	36941.103	8666.658	-2.84	8663.818	1062
734	34897.369	33171.472	8043.976	2.07	8046.047	734
2665	34899.286	44553.651	8448.737	-1.82	8446.915	2665
735	34900.109	35591.601	8760.148	-0.77	8759.376	735
1063	34904.715	29706.113	8292.857	1.60	8294.458	1063
736	34906.285	34819.351	8363.468	-1.53	8361.942	736
2666	34938.950	43693.590	8040.592	-0.60	8039.995	2666
1566	34939.555	39592.807	8482.066	-3.05	8479.018	1566
737	34940.802	32602.684	7892.197	0.06	7892.258	737
2667	34945.356	44829.128	8506.041	-1.12	8504.917	2667
738	34948.109	33755.514	8008.656	0.12	8008.778	738
2668	34950.356	43473.942	7911.899	-0.79	7911.114	2668
1567	34958.943	40426.691	8432.715	-2.89	8429.823	1567
739	34967.610	34062.711	8040.893	0.55	8041.442	739
1568	34971.853	42421.006	7777.629	NR2010		1568
2669	34972.590	47470.215	8265.002	-0.28	8264.718	2669
1569	34989.451	41923.363	7993.194	0.00	7993.194	1569
2670	34991.456	43200.606	7766.784	0.26	7767.043	2670
1570	35014.187	41586.549	8054.683	-0.40	8054.281	1570
2671	35019.013	45835.432	8512.616	0.01	8512.626	2671
1571	35020.145	38757.629	8547.607	NR2010		1571
1064	35023.200	37273.870	8681.993	-2.18	8679.818	1064
2672	35039.323	45580.995	8546.727	-1.02	8545.707	2672
1572	35043.906	40783.272	8403.970	-1.69	8402.282	1572
1065	35052.255	37544.211	8731.092	-2.48	8728.614	1065
2673	35057.968	45103.822	8516.989	-1.14	8515.850	2673
740	35063.718	32289.411	8000.524	0.00	8000.524	740
1573	35068.284	42769.408	7690.589	-0.72	7689.866	1573
741	35069.048	32879.461	8036.263	1.07	8037.332	741
742	35081.636	31939.594	8010.011	0.00	8010.011	742
1574	35083.533	39090.751	8465.312	NR2010		1574
1575	35085.678	40067.532	8404.755	-0.91	8403.847	1575
743	35098.075	30701.067	8272.936	NR2010		743
744	35098.921	31308.831	7996.749	NR2010		744
1576	35100.262	42178.199	7834.961	NR2010		1576
745	35103.030	31678.936	7955.165	3.72	7958.884	745
2674	35108.850	42962.785	7710.362	-0.34	7710.021	2674
746	35110.664	36449.959	8691.105	-0.48	8690.622	746
1577	35121.932	38011.442	8728.378	-2.30	8726.076	1577
1066	35130.009	30092.481	8619.583	0.00	8619.583	1066
2675	35132.626	47027.965	8388.899	-0.76	8388.144	2675
2676	35141.522	45852.101	8538.644	-1.14	8537.505	2676
1578	35146.546	43167.355	7803.611	-0.69	7802.921	1578
2677	35146.546	43167.355	7803.790	NR2010		2677
747	35149.098	33545.571	8139.637	NR2010		747

2678	35150.518	43551.518	8085.455	-1.09	8084.362	2678
748	35161.900	35064.344	8609.145	-1.52	8607.622	748
1579	35163.871	41898.747	7906.058	0.00	7906.058	1579
749	35172.196	35889.696	8776.256	0.00	8776.256	749
750	35175.320	34125.653	8127.123	-0.24	8126.879	750
1067	35177.209	29905.264	8486.253	1.51	8487.767	1067
1580	35179.237	38334.334	8696.005	-3.17	8692.840	1580
1581	35200.155	41031.340	8260.443	-2.17	8258.271	1581
2679	35202.224	46423.563	8475.459	-0.69	8474.770	2679
751	35204.737	36190.549	8722.751	-0.12	8722.630	751
2680	35207.303	44346.317	8427.086	0.03	8427.118	2680
2681	35208.428	44588.687	8438.322	-1.07	8437.248	2681
1582	35214.968	39376.121	8318.949	-1.09	8317.858	1582
2682	35219.621	46263.726	8499.949	-1.21	8498.741	2682
2683	35220.774	45974.869	8535.025	-2.04	8532.986	2683
752	35222.912	36694.255	8604.698	-1.51	8603.186	752
753	35227.097	35605.454	8790.741	-2.48	8788.262	753
754	35232.293	34879.983	8535.888	0.06	8535.952	754
755	35232.680	35347.057	8711.277	-0.66	8710.619	755
1583	35236.746	42463.526	7698.876	0.00	7698.876	1583
756	35238.355	33238.067	8250.644	NR2010		756
2684	35242.460	44025.054	8353.528	-1.52	8352.008	2684
757	35243.085	34444.664	8190.452	NR2010		757
2685	35248.208	45308.020	8487.915	-1.30	8486.620	2685
758	35249.972	32663.114	8062.075	0.00	8062.075	758
1584	35266.008	40610.596	8392.049	-2.43	8389.623	1584
2686	35274.492	47598.901	8375.237	-0.48	8374.757	2686
2687	35284.680	46558.876	8490.509	-1.18	8489.334	2687
1068	35288.824	37297.404	8666.340	-2.38	8663.956	1068
1069	35292.164	36998.237	8557.822	-1.81	8556.009	1069
759	35294.324	31939.692	8123.972	0.00	8123.972	759
2688	35313.533	44857.200	8412.195	-2.32	8409.877	2688
760	35320.421	32304.662	8102.394	NR2010		760
1585	35327.965	39710.730	8235.766	-0.21	8235.556	1585
1586	35338.560	42882.324	7705.120	-0.70	7704.422	1586
1587	35346.331	38559.751	8609.221	-2.67	8606.550	1587
1588	35362.042	43421.624	8075.995	-1.03	8074.968	1588
2689	35365.720	46100.359	8546.485	-0.85	8545.635	2689
1070	35367.156	30016.878	8608.035	0.00	8608.035	1070
2690	35371.994	43703.463	8246.351	-1.76	8244.588	2690
2691	35375.962	43187.917	7875.785	0.85	7876.634	2691
761	35383.032	33736.253	8265.535	NR2010		761
1589	35388.757	37729.154	8713.503	-3.20	8710.304	1589
1590	35393.549	42120.255	7776.711	0.00	7776.711	1590
1591	35400.292	40226.584	8259.566	-0.06	8259.506	1591
762	35429.573	31661.420	8164.779	0.00	8164.779	762
1592	35434.167	41869.466	7763.786	NR2010		1592
2692	35438.681	45527.827	8430.098	-0.90	8429.202	2692
2693	35459.997	46820.385	8541.871	-1.92	8539.950	2693
2694	35460.523	44684.496	8315.266	-0.74	8314.531	2694
763	35461.705	36169.144	8696.637	-0.06	8696.576	763
764	35465.764	35040.380	8683.578	0.88	8684.461	764

2695	35472.194	46246.068	8552.457	-1.99	8550.463	2695
765	35473.553	34029.349	8319.117	-2.43	8316.686	765
766	35476.742	33183.998	8451.746	0.00	8451.746	766
1593	35486.756	39604.231	8133.480	0.00	8133.480	1593
1594	35487.354	38011.160	8654.145	-2.21	8651.931	1594
767	35488.302	31919.626	8231.041	3.27	8234.312	767
1595	35489.082	42569.026	7684.424	-0.80	7683.625	1595
768	35492.981	35921.666	8726.823	-0.37	8726.452	768
769	35506.384	31397.719	8189.168	NR2010		769
770	35506.867	35584.398	8771.934	-0.44	8771.490	770
771	35513.147	35287.845	8789.858	-1.49	8788.372	771
772	35516.666	33492.545	8389.465	NR2010		772
773	35524.617	34796.643	8543.939	-1.42	8542.521	773
1071	35529.380	30049.969	8677.160	-0.13	8677.035	1071
1596	35532.188	41451.211	7893.980	-0.24	7893.740	1596
774	35535.378	32903.758	8336.431	0.00	8336.431	774
1597	35538.444	38348.048	8487.739	-3.31	8484.426	1597
1598	35539.863	43111.290	7778.321	-0.90	7777.422	1598
1599	35557.056	39937.022	8063.841	1.47	8065.313	1599
2696	35557.783	44184.028	8286.802	-1.22	8285.579	2696
2697	35558.104	44950.517	8298.637	-0.53	8298.104	2697
775	35558.716	36598.641	8567.259	-2.18	8565.084	775
2698	35559.818	45727.219	8406.603	-0.06	8406.548	2698
1600	35574.819	42328.132	7669.226	-1.10	7668.124	1600
776	35577.158	36777.749	8535.145	-0.91	8534.239	776
777	35583.765	32240.938	8284.904	-0.71	8284.192	777
1601	35586.379	41003.006	8047.702	-1.78	8045.924	1601
2699	35588.746	44361.233	8261.903	-1.42	8260.486	2699
778	35592.223	34453.366	8440.363	-0.43	8439.936	778
2700	35606.470	46453.623	8588.227	-1.49	8586.734	2700
1602	35611.485	40607.537	8187.661	-1.90	8185.759	1602
779	35622.628	31160.796	8299.620	NR2010		779
1603	35623.060	37506.118	8641.672	-3.10	8638.577	1603
1604	35630.742	39729.074	8032.486	0.00	8032.486	1604
780	35645.476	32497.774	8316.040	0.00	8316.040	780
1605	35659.252	38889.357	8475.893	-3.26	8472.635	1605
1072	35668.061	37112.554	8518.352	-4.01	8514.338	1072
781	35672.377	31568.943	8365.293	0.00	8365.293	781
1606	35682.629	42800.401	7706.848	-0.50	7706.351	1606
1607	35686.080	39828.638	7986.334	0.00	7986.334	1607
1608	35691.143	43700.114	8068.651	0.06	8068.711	1608
2701	35707.823	46798.852	8619.050	-1.49	8617.559	2701
2702	35716.060	46033.592	8466.561	-0.93	8465.632	2702
1609	35724.377	42133.591	7673.781	-0.30	7673.483	1609
2703	35726.625	45146.571	8263.551	-0.64	8262.913	2703
1610	35746.286	41582.607	7761.904	-0.18	7761.724	1610
1611	35753.336	40912.609	7974.449	-0.52	7973.934	1611
782	35754.644	33974.598	8551.051	0.00	8551.051	782
2704	35761.485	44531.883	8193.828	-1.07	8192.760	2704
1612	35769.155	41221.324	7813.197	0.15	7813.349	1612
1613	35770.559	38166.390	8466.797	NR2010		1613
2705	35774.285	45631.604	8300.531	-0.92	8299.611	2705

1614	35776.284	41823.554	7716.508	0.00	7716.508	1614
783	35776.458	32942.833	8549.708	0.33	8550.042	783
784	35781.451	34924.771	8642.577	-1.08	8641.495	784
785	35791.189	35928.278	8688.890	-0.49	8688.404	785
786	35793.592	35212.551	8777.261	-0.30	8776.957	786
787	35793.774	33580.333	8616.277	NR2010		787
788	35795.922	33209.206	8670.643	0.00	8670.643	788
1615	35800.171	40182.959	8075.780	-0.88	8074.905	1615
1073	35801.122	30205.036	8760.018	0.13	8760.150	1073
789	35809.311	34627.597	8585.078	-0.57	8584.512	789
790	35815.988	36380.456	8567.789	NR2010		790
791	35823.705	32154.117	8437.927	-0.18	8437.745	791
2706	35832.827	43942.209	8119.071	-2.88	8116.190	2706
792	35837.947	31117.097	8490.104	0.97	8491.073	792
793	35841.815	35597.541	8744.144	-0.55	8743.593	793
794	35844.647	34333.006	8603.283	-0.12	8603.161	794
795	35848.148	31760.290	8504.875	NR2010		795
1616	35869.142	43361.005	7785.900	-0.21	7785.693	1616
1617	35872.196	42488.783	7683.049	-1.23	7681.817	1617
1618	35873.964	39021.054	8415.218	-1.26	8413.960	1618
796	35874.340	36741.438	8509.638	NR2010		796
1619	35880.924	38595.308	8284.107	-3.51	8280.597	1619
2707	35893.751	45284.078	8235.865	-0.86	8235.004	2707
1620	35895.323	43011.385	7816.846	-0.66	7816.185	1620
2708	35901.884	46757.621	8698.431	-1.19	8697.243	2708
2709	35904.148	45949.104	8401.808	-0.85	8400.961	2709
797	35933.472	32474.234	8565.225	-1.12	8564.108	797
1621	35936.840	37907.917	8534.062	-4.02	8530.041	1621
2710	35938.999	44133.583	8059.296	-2.18	8057.115	2710
2711	35958.658	44776.533	8118.622	-0.14	8118.487	2711
1622	35959.812	37557.129	8512.102	-3.57	8508.537	1622
798	35977.819	30943.024	8551.190	NR2010		798
2712	35981.222	46456.095	8548.205	-0.75	8547.451	2712
799	35981.921	31492.088	8598.012	0.24	8598.254	799
1623	35990.758	41839.845	7661.097	-1.34	7659.754	1623
1624	35997.070	40489.595	7989.231	0.57	7989.798	1624
800	36006.934	32811.099	8703.471	0.00	8703.471	800
2713	36009.402	45050.902	8171.595	-0.48	8171.120	2713
2714	36011.214	46139.107	8450.305	-1.44	8448.864	2714
1625	36019.172	41157.200	7744.571	-1.81	7742.760	1625
1626	36033.807	41414.961	7707.199	NR2010		1626
1627	36035.967	37164.549	8446.065	-4.48	8441.583	1627
1628	36042.518	42737.036	7844.296	-2.01	7842.286	1628
801	36044.749	35014.866	8783.288	-0.43	8782.863	801
802	36060.230	31917.312	8641.347	NR2010		802
2715	36065.876	44422.274	8103.011	-1.22	8101.792	2715
1629	36077.851	41599.315	7677.866	-0.30	7677.568	1629
1630	36080.052	40773.258	7838.562	0.00	7838.562	1630
803	36081.599	36420.240	8537.085	NR2010		803
804	36083.438	33585.577	8765.354	0.54	8765.895	804
805	36085.913	33232.092	8801.864	-0.80	8801.060	805
2716	36088.000	45513.029	8248.150	-2.01	8246.138	2716

1631	36089.926	43730.654	7879.051	0.00	7879.051	1631
1074	36098.906	30352.972	8811.824	0.79	8812.612	1074
806	36136.218	31684.153	8738.617	NR2010		806
807	36137.199	34740.385	8783.927	-1.98	8781.947	807
808	36142.312	32284.424	8694.667	-0.42	8694.243	808
1632	36143.688	40013.599	7789.212	NR2010		1632
809	36147.963	36664.225	8481.222	NR2010		809
810	36152.276	35978.141	8632.452	NR2010		810
1633	36153.642	42933.431	7994.626	-1.76	7992.868	1633
2717	36166.528	45847.818	8386.155	-2.70	8383.451	2717
811	36170.976	35599.747	8734.680	-0.45	8734.226	811
1634	36174.538	42279.408	7695.380	-0.90	7694.476	1634
812	36183.555	34131.536	8801.947	-1.01	8800.939	812
1635	36188.767	43223.205	7975.579	1.56	7977.135	1635
813	36195.631	35329.037	8764.387	-0.93	8763.458	813
814	36222.682	33883.494	8776.552	-1.45	8775.098	814
815	36232.444	32824.490	8826.416	-0.48	8825.938	815
816	36233.662	34378.700	8799.100	-1.51	8797.587	816
1636	36237.721	39185.847	8176.395	-1.06	8175.332	1636
1637	36238.163	38030.726	8447.317	-4.53	8442.784	1637
1638	36238.197	41777.747	7626.569	-0.93	7625.635	1638
2718	36260.651	46501.172	8543.952	-1.21	8542.743	2718
1639	36263.164	42482.930	7811.387	-0.81	7810.579	1639
817	36268.087	36244.227	8563.521	NR2010		817
1640	36275.402	41942.252	7650.886	-1.38	7649.506	1640
1641	36277.292	38763.648	8018.900	0.83	8019.731	1641
1642	36277.502	43480.854	8007.938	0.00	8007.938	1642
818	36280.147	32559.155	8796.645	-1.28	8795.370	818
1643	36282.072	41529.424	7661.804	NR2010		1643
2719	36294.200	44380.170	8212.555	-1.37	8211.187	2719
1075	36296.417	33359.990	8769.579	-0.26	8769.320	1075
2720	36303.073	46107.880	8463.636	-1.71	8461.930	2720
819	36312.213	31173.487	8827.000	0.00	8827.000	819
1644	36313.497	39477.996	7997.071	0.00	7997.071	1644
1076	36317.688	30497.865	8878.689	0.74	8879.432	1076
1645	36337.875	41330.539	7681.321	NR2010		1645
1646	36346.239	40443.801	7784.385	-0.10	7784.283	1646
2721	36352.143	44108.404	8034.098	-0.40	8033.698	2721
1647	36358.523	42698.151	7977.268	-0.38	7976.893	1647
1648	36373.312	41041.978	7704.698	NR2010		1648
1649	36374.912	37613.308	8237.187	-2.09	8235.095	1649
1650	36383.640	37182.482	8168.413	-2.07	8166.343	1650
2722	36393.152	44661.370	8275.835	-1.65	8274.184	2722
1651	36413.088	40756.473	7734.174	0.00	7734.174	1651
820	36416.968	32306.640	8809.658	-1.03	8808.628	820
2723	36419.389	45539.662	8381.813	-0.37	8381.441	2723
1652	36421.748	39987.130	7759.461	0.00	7759.461	1652
821	36428.314	33888.851	8773.198	0.94	8774.134	821
822	36436.416	34214.779	8802.359	-0.56	8801.803	822
823	36442.099	32597.840	8782.134	-0.70	8781.437	823
2724	36443.449	44822.516	8321.737	-0.53	8321.206	2724
824	36446.652	33636.504	8741.973	-1.12	8740.858	824

1653	36448.467	41531.555	7634.942	-2.21	7632.731	1653
825	36466.141	30837.671	8928.450	0.00	8928.450	825
826	36468.582	31724.511	8881.091	-0.73	8880.364	826
827	36469.266	33040.735	8760.123	0.97	8761.093	827
1654	36471.852	42176.153	7771.645	-2.18	7769.465	1654
2725	36474.407	45203.949	8339.626	0.03	8339.653	2725
1655	36496.053	42471.668	7961.599	-2.67	7958.930	1655
1656	36502.174	41432.884	7632.036	-0.42	7631.614	1656
828	36504.533	33375.905	8714.957	-0.06	8714.896	828
829	36504.755	31993.927	8850.563	-1.27	8849.291	829
1657	36507.831	42947.601	8246.038	-1.92	8244.118	1657
830	36512.125	34969.720	8780.638	-0.47	8780.171	830
831	36513.288	35904.773	8695.176	-1.79	8693.387	831
832	36517.175	35619.680	8740.097	-1.43	8738.663	832
2726	36517.522	44963.679	8354.727	-1.08	8353.651	2726
833	36518.317	31452.503	8898.490	-0.55	8897.945	833
2727	36521.429	46251.533	8544.779	-1.22	8543.556	2727
834	36525.265	36701.664	8463.086	NR2010		834
835	36526.675	35333.738	8761.219	-1.77	8759.447	835
836	36534.244	34614.812	8792.696	-0.86	8791.839	836
1077	36535.239	34022.539	8795.171	-0.80	8794.368	1077
1658	36536.064	38300.574	8180.999	-0.17	8180.831	1658
1659	36536.291	43824.900	8132.506	0.30	8132.807	1659
1660	36538.346	41761.545	7645.213	-0.71	7644.503	1660
1078	36549.724	30679.385	8955.908	-0.99	8954.914	1078
837	36550.795	31237.938	8914.081	-0.55	8913.536	837
838	36554.534	36270.287	8562.535	NR2010		838
2728	36567.809	45770.133	8494.712	-0.37	8494.338	2728
1661	36567.890	43308.494	8226.678	0.00	8226.678	1661
1662	36584.646	41101.582	7676.848	NR2010		1662
1663	36592.104	39112.406	7926.884	0.15	7927.036	1663
839	36593.865	36593.865	8943.218	NR2010		839
1664	36598.874	41289.265	7638.197	NR2010		1664
1079	36608.663	34370.569	8792.377	-0.92	8791.457	1079
2729	36610.308	45975.697	8543.011	-1.69	8541.317	2729
1080	36610.720	32502.582	8770.185	0.00	8770.185	1080
2730	36632.162	44437.341	8149.184	-0.49	8148.691	2730
1665	36635.117	42041.538	7791.760	-1.14	7790.623	1665
1666	36641.979	40487.049	7722.693	-0.49	7722.207	1666
1081	36658.307	34802.540	8778.801	-0.94	8777.861	1081
1667	36661.666	39840.887	7755.860	-0.29	7755.575	1667
1082	36670.503	31807.363	8855.597	0.09	8855.685	1082
1083	36675.165	32222.249	8809.069	-0.18	8808.887	1083
1084	36685.379	32857.979	8705.038	-0.24	8704.796	1084
1668	36685.479	42314.086	7937.054	-1.45	7935.601	1668
1085	36691.693	33612.748	8723.206	-0.45	8722.758	1085
1086	36691.716	33403.767	8672.285	0.80	8673.088	1086
1087	36694.168	35607.102	8729.795	-1.28	8728.514	1087
1088	36696.544	31466.975	8888.301	-0.53	8887.767	1088
1669	36703.134	38958.362	7784.030	0.82	7784.850	1669
1670	36710.314	39434.764	7792.578	-0.24	7792.335	1670
1671	36716.337	42958.962	8318.533	-1.54	8316.998	1671

1672	36717.227	40837.582	7681.563	0.24	7681.803	1672
1089	36722.834	35798.913	8702.324	-0.49	8701.835	1089
1090	36727.221	35103.084	8759.858	-0.17	8759.690	1090
1673	36728.718	42711.561	8235.828	-2.56	8233.268	1673
1674	36742.688	41186.874	7616.826	-0.38	7616.445	1674
2731	36751.276	44112.318	8202.607	0.01	8202.617	2731
1091	36753.834	33913.775	8789.421	-0.29	8789.127	1091
1092	36755.002	31240.263	8909.989	-0.60	8909.394	1092
1093	36759.477	34620.448	8751.888	0.02	8751.911	1093
1675	36759.703	38025.138	8035.120	0.26	8035.382	1675
1094	36767.710	31958.915	8833.867	0.00	8833.867	1094
2732	36769.398	45647.317	8504.599	-0.62	8503.978	2732
1095	36775.982	35369.208	8745.368	-1.30	8744.072	1095
1676	36784.253	37536.064	7901.556	0.00	7901.557	1676
1096	36786.053	33151.307	8658.197	-0.06	8658.136	1096
1677	36796.279	38380.537	7962.335	0.00	7962.335	1677
1678	36797.384	39085.993	7769.546	-0.59	7768.958	1678
2733	36801.346	43444.269	8319.641	0.01	8319.651	2733
1097	36802.678	31005.142	8932.537	-0.10	8932.439	1097
2734	36811.414	44567.808	8195.356	-0.12	8195.235	2734
1679	36817.135	41469.728	7628.373	0.83	7629.203	1679
1680	36818.627	41973.368	7814.374	-1.71	7812.669	1680
2735	36831.521	45890.399	8595.056	-0.59	8594.468	2735
1681	36842.610	36073.514	8593.745	NR2010		1681
1682	36845.426	40098.888	7665.866	NR2010		1682
1683	36853.544	40496.857	7709.305	-0.80	7708.506	1683
1098	36855.446	31709.675	8843.607	-0.06	8843.546	1098
2736	36859.550	45358.727	8477.543	-1.26	8476.279	2736
1099	36870.574	34412.862	8703.494	1.58	8705.070	1099
1100	36876.617	32624.617	8686.388	-0.18	8686.206	1100
1101	36905.405	34827.558	8676.417	0.68	8677.100	1101
1684	36914.840	36345.367	8524.759	NR2010		1684
2737	36916.143	45070.934	8385.918	-1.28	8384.635	2737
1102	36916.237	34163.148	8730.217	-0.31	8729.908	1102
1103	36921.692	33502.161	8680.758	1.11	8681.864	1103
1104	36922.498	32271.912	8761.354	-0.20	8761.151	1104
1105	36923.115	35556.951	8702.483	-0.83	8701.652	1105
1685	36943.109	35780.588	8627.271	0.00	8627.271	1685
1686	36953.248	42249.860	8035.457	-1.74	8033.719	1686
1687	36972.968	41079.910	7595.295	-0.12	7595.172	1687
1106	36975.506	35129.865	8698.766	0.09	8698.857	1106
1688	36980.037	39163.717	7696.007	0.00	7696.007	1688
1689	36985.766	41731.644	7778.449	-1.20	7777.252	1689
1107	36993.819	31975.159	8801.130	-0.23	8800.896	1107
1108	37004.308	31260.895	8888.055	0.26	8888.313	1108
1690	37005.180	39501.573	7675.691	-0.30	7675.395	1690
2738	37009.872	43587.190	8394.607	0.02	8394.624	2738
1691	37011.388	39856.921	7663.791	0.85	7664.639	1691
1692	37029.068	36534.224	8448.464	-0.38	8448.085	1692
1109	37031.536	31519.737	8841.814	-1.06	8840.758	1109
2739	37034.770	43829.523	8373.184	-1.64	8371.541	2739
1693	37035.123	42458.799	8195.418	-2.92	8192.499	1693

2740	37036.253	45743.459	8626.367	-0.11	8626.258	2740
1110	37047.170	33920.690	8737.804	-0.32	8737.480	1110
2741	37047.327	44764.009	8312.180	0.03	8312.213	2741
2742	37051.613	43048.574	8475.056	-0.90	8474.157	2742
2743	37053.443	43264.493	8468.465	-1.09	8467.371	2743
1694	37056.675	36007.343	8550.590	NR2010		1694
1695	37065.596	37697.980	7758.325	NR2010		1695
1696	37070.991	42040.043	7941.515	-0.51	7941.001	1696
1111	37080.217	32975.498	8609.407	-0.91	8608.498	1111
1112	37081.264	34504.133	8583.038	1.38	8584.422	1112
1697	37092.100	40177.201	7620.614	0.46	7621.072	1697
1698	37097.230	38054.166	7797.923	1.19	7799.111	1698
1699	37106.518	41285.377	7636.232	0.48	7636.715	1699
2744	37111.025	42747.802	8298.487	-0.45	8298.042	2744
1113	37114.101	35347.506	8652.408	0.26	8652.670	1113
1700	37121.523	36380.959	8469.268	-0.34	8468.931	1700
1114	37124.746	31763.190	8793.984	0.61	8794.596	1114
1701	37126.867	41552.589	7723.478	-0.85	7722.629	1701
1702	37128.947	40802.382	7585.552	-0.72	7584.836	1702
1703	37136.014	38831.367	7650.325	-0.24	7650.082	1703
1704	37142.105	38408.763	7751.906	1.95	7753.851	1704
1705	37142.925	35731.630	8560.644	NR2010		1705
1115	37150.725	34839.958	8558.466	1.34	8559.809	1115
1116	37185.522	33443.082	8725.759	-1.87	8723.894	1116
1117	37206.558	32177.489	8723.788	-1.27	8722.516	1117
1706	37209.705	36142.528	8490.536	-2.40	8488.135	1706
2745	37212.952	44896.882	8408.330	-0.93	8407.400	2745
2746	37217.970	45439.144	8554.008	-1.41	8552.602	2746
2747	37229.658	44482.994	8322.517	-0.23	8322.288	2747
2748	37236.751	43479.549	8468.824	-0.32	8468.506	2748
1118	37248.705	33718.268	8766.190	-1.04	8765.149	1118
1707	37250.030	35969.041	8500.513	NR2010		1707
1119	37255.404	32770.712	8612.571	-0.56	8612.012	1119
1708	37261.316	37021.738	8029.018	NR2010		1708
1120	37261.886	31502.317	8803.839	0.39	8804.228	1120
2749	37274.571	45139.608	8486.562	-0.17	8486.388	2749
1121	37284.509	35152.674	8565.961	-0.44	8565.522	1121
1122	37285.164	34478.917	8471.073	0.00	8471.073	1122
1709	37294.719	36658.031	8201.792	NR2010		1709
1710	37310.189	41030.887	7627.411	-0.91	7626.499	1710
2750	37316.256	43676.014	8479.281	-0.39	8478.896	2750
1711	37320.904	36485.920	8298.775	0.73	8299.504	1711
2751	37322.052	43361.339	8459.146	0.27	8459.412	2751
1123	37323.109	33200.792	8644.500	-0.63	8643.868	1123
2752	37325.596	43842.119	8464.480	-0.59	8463.892	2752
1124	37326.748	32018.008	8709.931	-0.74	8709.188	1124
2753	37328.424	42437.278	8225.256	0.89	8226.150	2753
1125	37340.651	33886.976	8699.479	-0.85	8698.628	1125
2754	37350.663	44556.124	8381.723	-0.96	8380.766	2754
1712	37352.692	37966.129	7634.777	0.32	7635.093	1712
1713	37356.962	41784.948	7950.175	-1.18	7949.000	1713
2755	37361.859	43132.333	8461.873	-0.28	8461.591	2755

1714	37363.708	36567.886	8198.583	NR2010		1714
1126	37376.459	32308.207	8673.457	-0.50	8672.962	1126
1715	37384.980	42166.787	8127.836	-0.28	8127.554	1715
1716	37389.445	35726.475	8542.392	-0.12	8542.271	1716
1127	37395.174	34691.047	8360.612	2.60	8363.209	1127
1128	37398.212	32562.039	8641.763	0.00	8641.763	1128
2756	37399.460	42859.310	8468.075	-0.04	8468.039	2756
1717	37406.057	41372.110	7788.111	-1.30	7786.813	1717
2757	37414.146	44873.274	8477.423	-0.03	8477.395	2757
1718	37449.885	38853.241	7592.273	-1.26	7591.011	1718
1719	37453.247	36177.266	8308.249	0.49	8308.735	1719
1720	37457.750	38399.673	7609.332	2.12	7611.453	1720
2758	37460.572	44128.461	8460.764	-0.85	8459.912	2758
1129	37475.842	34937.666	8388.128	0.42	8388.551	1129
1721	37490.312	36470.418	8194.561	NR2010		1721
1722	37495.051	36375.919	8228.088	1.09	8229.182	1722
1723	37510.370	35449.775	8535.122	-1.41	8533.714	1723
1724	37511.329	40811.680	7612.215	0.00	7612.215	1724
2759	37542.091	44625.805	8478.592	-0.50	8478.092	2759
2760	37545.262	45256.592	8578.936	-1.06	8577.874	2760
2761	37548.896	43877.642	8469.303	-0.78	8468.528	2761
2762	37565.635	44364.053	8468.225	-0.61	8467.611	2762
1130	37566.149	33506.991	8723.212	-0.95	8722.258	1130
1131	37566.318	31638.549	8726.545	-0.11	8726.434	1131
1725	37568.755	41074.813	7752.267	0.41	7752.681	1725
1132	37574.479	32941.967	8587.828	-0.72	8587.105	1132
2763	37578.102	42611.026	8412.943	-0.63	8412.314	2763
2764	37582.276	43248.935	8377.498	0.20	8377.698	2764
2765	37587.348	43607.995	8446.502	-1.01	8445.494	2765
1726	37624.598	38197.392	7562.040	0.43	7562.470	1726
1133	37626.765	34337.901	8385.340	0.00	8385.340	1133
1727	37628.826	35174.738	8361.110	0.38	8361.485	1727
1134	37628.931	32167.211	8637.438	0.25	8637.685	1134
1728	37634.772	35995.819	8324.761	0.00	8324.761	1728
2766	37635.046	43383.419	8386.817	-0.56	8386.254	2766
1729	37642.036	37663.044	7678.751	NR2010		1729
1730	37654.859	37003.470	7872.291	NR2010		1730
2767	37659.216	44809.673	8554.366	-1.79	8552.574	2767
1731	37677.899	40674.053	7619.111	0.00	7619.111	1731
2768	37681.175	42758.927	8368.456	-0.11	8368.347	2768
1135	37684.268	31801.352	8674.820	-0.18	8674.638	1135
1136	37686.894	33241.292	8658.340	-1.33	8657.014	1136
2769	37697.544	42344.478	8316.748	-0.08	8316.670	2769
2770	37723.198	44976.397	8587.326	-1.31	8586.014	2770
1137	37729.234	33696.617	8626.381	NR2010		1137
1138	37731.101	32608.871	8589.122	-0.12	8589.001	1138
1732	37731.269	35835.942	8349.857	-0.53	8349.330	1732
1733	37738.015	41237.457	7982.532	-0.24	7982.293	1733
2771	37743.825	42050.254	8249.762	-1.03	8248.735	2771
1734	37746.058	41883.737	8211.153	-1.34	8209.816	1734
1735	37752.419	40945.230	7733.703	-0.25	7733.451	1735
1139	37756.001	34757.599	8151.211	0.00	8151.211	1139

1140	37762.472	32410.701	8593.692	-0.24	8593.450	1140
1736	37765.665	36137.808	8159.024	0.63	8159.658	1736
1737	37771.034	41582.559	8137.258	-0.87	8136.389	1737
1738	37773.567	36554.669	7992.901	-0.67	7992.230	1738
1141	37790.048	34124.858	8392.581	0.00	8392.581	1141
1739	37790.745	38608.896	7509.071	0.41	7509.476	1739
1740	37792.713	35546.334	8358.480	0.21	8358.689	1740
2772	37803.030	43947.630	8448.120	-0.58	8447.544	2772
2773	37808.148	43532.180	8379.056	0.03	8379.081	2773
2774	37817.250	42832.681	8296.227	-0.62	8295.607	2774
2775	37821.430	44655.916	8584.749	-0.40	8584.349	2775
2776	37850.947	44174.175	8447.850	-0.81	8447.037	2776
2777	37854.096	44808.380	8655.700	-0.48	8655.222	2777
1741	37856.226	38226.704	7527.013	0.45	7527.465	1741
2778	37858.101	42528.145	8258.899	0.20	8259.103	2778
2779	37864.446	44434.858	8498.487	-1.29	8497.201	2779
1142	37895.656	32812.696	8580.434	-1.08	8579.351	1142
1742	37901.808	37311.920	7684.745	NR2010		1742
1143	37902.599	34498.552	8155.749	0.85	8156.600	1143
1743	37920.464	40730.689	7600.948	-0.48	7600.467	1743
1744	37942.292	35912.596	8155.737	1.00	8156.741	1744
1144	37946.000	32115.275	8510.631	2.87	8513.497	1144
1745	37948.588	35128.185	8183.038	-0.59	8182.448	1745
1746	37972.418	40975.828	7650.225	0.06	7650.284	1746
1145	37974.555	33252.912	8688.142	-1.81	8686.335	1145
1747	37975.304	37954.209	7545.226	1.44	7546.669	1747
1748	37976.099	38991.817	7593.917	-1.92	7591.994	1748
1749	37982.399	41274.530	7763.573	-0.02	7763.558	1749
2780	37982.930	44490.004	8490.787	0.23	8491.012	2780
2781	37991.683	43688.003	8364.255	-0.60	8363.660	2781
2782	37998.343	42234.236	8176.425	-1.60	8174.821	2782
2783	38004.529	43227.638	8210.248	-0.76	8209.493	2783
1750	38024.968	36932.694	7772.602	NR2010		1750
2784	38034.701	42850.998	8217.767	0.80	8218.567	2784
1146	38040.875	32964.490	8625.070	-1.38	8623.695	1146
2785	38049.375	41538.341	7873.760	-1.12	7872.637	2785
1751	38054.699	39725.019	7705.356	0.00	7705.356	1751
1752	38059.914	34844.628	7970.009	-0.39	7969.622	1752
1753	38073.332	40073.221	7686.310	NR2010		1753
1754	38083.116	36383.007	7874.341	-0.57	7873.775	1754
1147	38091.686	32348.406	8361.931	0.00	8361.931	1147
2786	38094.584	41753.368	7956.953	-1.30	7955.654	2786
1755	38096.013	35427.060	8095.181	0.53	8095.713	1755
1756	38099.520	39396.958	7709.405	-0.34	7709.064	1756
2787	38102.483	42540.344	8149.253	-1.52	8147.729	2787
1148	38116.752	34239.471	8156.379	0.00	8156.379	1148
2788	38144.370	43377.121	8236.221	-0.15	8236.068	2788
1757	38148.588	38391.895	7504.044	1.79	7505.830	1757
2789	38164.254	41913.182	7906.294	-1.21	7905.087	2789
1149	38172.261	32723.080	8605.509	-2.53	8602.977	1149
2790	38182.018	43940.002	8298.577	-0.81	8297.764	2790
2791	38183.197	44214.570	8350.892	-0.88	8350.009	2791

2792	38184.168	42291.913	8036.521	-1.86	8034.666	2792
1758	38197.438	40957.108	7586.434	0.09	7586.526	1758
1759	38201.155	37703.283	7481.925	-0.47	7481.460	1759
1760	38202.093	38700.281	7600.021	0.55	7600.574	1760
1761	38203.595	35988.008	7958.176	1.24	7959.412	1761
2793	38203.784	42975.617	8136.881	-0.30	8136.583	2793
1762	38215.196	40298.614	7666.905	NR2010		1762
2794	38231.685	42458.141	8023.849	-0.41	8023.438	2794
1763	38233.923	35647.228	7999.977	-0.71	7999.267	1763
2795	38248.345	42105.664	7953.568	-1.40	7952.169	2795
2796	38252.264	41160.091	7606.984	-1.07	7605.912	2796
2797	38258.428	43602.450	8234.214	-1.17	8233.043	2797
2798	38271.716	44385.691	8417.948	-1.66	8416.292	2798
1764	38274.454	34619.374	7922.242	0.61	7922.850	1764
1765	38278.563	35256.652	7952.453	0.02	7952.472	1765
1766	38280.665	36588.375	7735.634	1.95	7737.583	1766
1767	38289.945	39806.147	7904.186	0.00	7904.186	1767
1150	38297.057	34008.272	8177.786	5.44	8183.230	1150
1151	38298.043	33185.876	8556.984	-3.06	8553.924	1151
1768	38302.036	37300.953	7547.779	1.81	7549.586	1768
2799	38302.058	42691.073	8140.296	-1.25	8139.049	2799
1769	38313.461	36316.851	7807.095	0.92	7808.019	1769
1770	38320.850	39680.620	7912.646	0.00	7912.646	1770
1771	38337.526	36884.868	7694.258	2.18	7696.440	1771
1772	38341.917	39394.525	7846.074	-2.04	7844.031	1772
1773	38354.172	39016.425	7765.680	-1.54	7764.140	1773
1152	38359.614	32549.037	8394.903	0.00	8394.903	1152
2800	38377.539	43110.459	8011.896	0.01	8011.906	2800
2801	38383.040	43455.716	8164.352	-0.50	8163.855	2801
1153	38388.469	32827.210	8502.410	-0.24	8502.168	1153
1774	38391.655	40597.129	7641.845	0.00	7641.845	1774
2802	38408.597	42887.432	8023.340	-1.38	8021.959	2802
2803	38410.369	41340.528	7613.695	-1.46	7612.237	2803
2804	38415.028	44069.708	8289.588	-0.38	8289.207	2804
1154	38417.401	33774.982	8148.986	3.52	8152.507	1154
1775	38418.438	38420.227	7566.959	0.86	7567.818	1775
1776	38432.961	34910.957	7788.108	0.12	7788.230	1776
2805	38434.605	41786.383	7725.019	-0.11	7724.910	2805
1777	38436.639	38121.144	7516.340	0.61	7516.951	1777
2806	38451.713	43681.157	8148.534	-0.70	8147.836	2806
2807	38454.072	42101.880	7802.130	0.59	7802.723	2807
2808	38494.978	43181.486	8003.388	-0.44	8002.951	2808
1155	38507.631	33408.707	8263.869	0.00	8263.869	1155
1778	38512.962	34302.208	7926.437	0.00	7926.437	1778
2809	38515.934	41563.165	7629.123	-2.24	7626.879	2809
2810	38530.180	42377.150	7873.011	-0.08	7872.930	2810
1779	38534.392	36742.231	7629.912	1.20	7631.110	1779
1780	38534.876	35571.650	7842.052	1.27	7843.324	1780
2811	38554.992	42700.917	7995.659	-1.73	7993.926	2811
1781	38557.366	37492.760	7464.717	-0.46	7464.261	1781
1782	38560.783	36219.437	7744.876	0.00	7744.876	1782
2812	38572.261	40896.846	7650.214	-0.21	7650.000	2812

1783	38572.611	38729.936	7765.603	-0.67	7764.930	1783
2813	38583.180	43519.376	8040.326	-1.02	8039.308	2813
1784	38591.238	39633.697	8151.097	-1.17	8149.925	1784
1785	38628.367	34668.645	7809.083	0.00	7809.083	1785
1786	38632.653	35282.100	7758.913	2.00	7760.916	1786
1156	38638.256	33152.293	8226.144	0.00	8226.144	1156
1157	38647.706	32769.533	8285.901	-2.00	8283.900	1157
2814	38650.758	41179.439	7622.413	0.40	7622.808	2814
1787	38661.470	37796.443	7486.333	1.99	7488.327	1787
1788	38663.462	36987.360	7559.882	1.37	7561.254	1788
2815	38668.911	41357.809	7602.431	-0.40	7602.036	2815
1158	38669.615	33741.946	7994.166	0.00	7994.166	1158
2816	38673.909	42071.169	7665.762	-0.62	7665.142	2816
2817	38676.026	43774.588	8180.350	-0.43	8179.923	2817
2818	38679.786	42864.408	7871.633	-2.06	7869.575	2818
1789	38691.593	39390.810	8129.713	-2.94	8126.770	1789
2819	38692.454	43989.973	8256.772	-0.71	8256.066	2819
2820	38695.757	41871.383	7631.250	-1.72	7629.527	2820
1790	38696.254	38520.151	7723.453	-0.03	7723.422	1790
2821	38719.572	43426.306	8003.777	-2.93	8000.843	2821
1791	38735.666	39108.643	8146.225	-2.92	8143.301	1791
1792	38736.368	35931.613	7701.450	1.12	7702.574	1792
2822	38753.560	42443.908	7759.680	-1.14	7758.545	2822
2823	38768.121	43162.213	7888.499	-1.87	7886.631	2823
1793	38768.974	34119.651	7871.544	-0.09	7871.455	1793
1794	38773.349	39558.378	8297.383	-1.30	8296.083	1794
1795	38780.645	34569.438	7821.120	0.12	7821.235	1795
2824	38809.649	41624.484	7611.268	-1.08	7610.187	2824
1796	38809.895	38136.424	7631.072	0.46	7631.534	1796
1797	38813.310	37322.057	7450.796	0.00	7450.796	1797
1798	38822.828	38937.593	8146.611	-1.37	8145.245	1798
2825	38822.947	42674.594	7842.993	-2.05	7840.941	2825
2826	38824.658	43797.526	8192.243	-1.37	8190.877	2826
1159	38826.937	32954.982	8084.433	-0.57	8083.866	1159
1799	38837.657	35063.906	7663.302	1.29	7664.595	1799
1800	38845.173	36559.230	7566.108	0.77	7566.873	1800
2827	38858.053	42200.034	7645.990	-0.83	7645.159	2827
1801	38877.715	38665.067	7848.471	-1.07	7847.399	1801
1160	38884.057	33473.817	7944.142	5.33	7949.472	1160
1802	38890.988	35533.009	7634.823	1.27	7636.089	1802
2828	38898.457	43567.728	8138.079	-2.04	8136.037	2828
2829	38903.063	42922.903	7758.092	-0.35	7757.740	2829
2830	38905.558	40833.043	7825.827	0.01	7825.837	2830
2831	38914.476	43341.474	8053.058	-1.28	8051.783	2831
2832	38920.280	42010.311	7615.912	-1.55	7614.360	2832
2833	38921.847	41800.458	7619.597	-1.82	7617.779	2833
2834	38941.421	42656.140	7764.983	-1.23	7763.753	2834
1803	38956.064	36151.708	7595.574	2.35	7597.928	1803
2835	38965.101	41043.167	7819.776	3.25	7823.025	2835
2836	38976.732	42429.556	7649.255	-0.83	7648.424	2836
2837	38980.577	43125.949	7921.573	-1.99	7919.588	2837
1804	38989.013	37553.335	7496.426	1.23	7497.652	1804

1805	38991.421	36975.114	7483.781	-0.01	7483.769	1805
1806	38995.977	35271.458	7583.706	1.54	7585.247	1806
1807	39001.791	34784.796	7690.631	1.18	7691.811	1807
2838	39015.657	41360.785	7770.824	0.01	7770.834	2838
1808	39016.677	39322.725	8359.215	-2.12	8357.099	1808
1809	39017.794	34375.349	7734.153	1.14	7735.295	1809
2839	39020.068	43351.022	7961.057	-0.64	7960.416	2839
1810	39030.616	37886.626	7632.696	-0.31	7632.385	1810
2840	39040.220	40645.100	7968.277	0.12	7968.396	2840
1811	39047.205	38270.641	7749.903	0.56	7750.466	1811
1812	39050.911	35824.485	7577.322	1.22	7578.537	1812
1813	39051.986	33990.264	7785.361	-0.82	7784.546	1813
2841	39056.291	43568.591	8011.477	0.01	8011.487	2841
2842	39061.194	42213.642	7647.068	-0.23	7646.839	2842
1161	39089.455	33175.900	7916.981	2.11	7919.089	1161
2843	39116.284	42854.830	7732.149	-1.48	7730.668	2843
1814	39138.146	38989.490	8170.200	-2.04	8168.157	1814
1815	39145.853	37156.152	7466.534	-0.24	7466.293	1815
1816	39161.499	38683.397	7932.809	-1.18	7931.629	1816
1817	39167.581	36321.162	7492.481	0.31	7492.791	1817
1818	39176.539	35642.839	7500.817	1.03	7501.846	1818
2844	39180.507	40329.609	8077.534	NR2010		2844
2845	39189.007	42604.759	7666.301	-1.27	7665.027	2845
1819	39196.290	39492.965	8457.358	-1.63	8455.733	1819
2846	39216.998	41613.669	7882.058	NR2010		2846
1820	39219.901	36726.391	7449.326	0.35	7449.676	1820
2847	39221.217	43145.091	7742.784	-3.38	7739.401	2847
1821	39244.049	34687.690	7673.967	2.60	7676.570	1821
1822	39254.675	37534.919	7543.177	0.72	7543.900	1822
2848	39271.403	42278.203	7661.088	-1.91	7659.178	2848
2849	39275.082	42971.785	7667.200	-1.78	7665.423	2849
1823	39282.730	34299.129	7734.506	1.09	7735.597	1823
2850	39289.421	43317.590	7755.126	-2.48	7752.642	2850
2851	39293.425	40676.206	8168.336	-0.05	8168.283	2851
1824	39301.077	35092.458	7626.797	1.87	7628.671	1824
1825	39308.597	36007.241	7474.848	1.47	7476.322	1825
1826	39314.820	37945.439	7741.821	0.32	7742.140	1826
1827	39347.431	39098.230	8289.804	-2.17	8287.636	1827
1828	39348.584	35528.731	7543.791	0.11	7543.901	1828
1829	39364.072	38295.643	8000.480	-0.16	8000.322	1829
2852	39368.753	40354.580	8215.234	-0.95	8214.283	2852
2853	39375.231	41842.633	7850.243	NR2010		2853
1830	39401.480	35766.055	7460.078	0.08	7460.156	1830
2854	39403.965	42755.212	7660.729	-1.24	7659.494	2854
1831	39409.587	36086.528	7427.053	0.29	7427.339	1831
1832	39419.107	36461.750	7438.615	0.00	7438.615	1832
2855	39428.426	40998.387	8193.861	-1.08	8192.786	2855
1833	39429.220	36896.833	7445.382	0.31	7445.691	1833
2856	39456.529	43001.514	7666.960	-1.24	7665.724	2856
2857	39486.611	41584.244	8029.871	NR2010		2857
2858	39500.692	39362.977	8442.993	0.68	8443.674	2858
2859	39517.148	41269.432	8187.569	-0.71	8186.857	2859

2860	39522.229	43122.708	7668.578	-0.05	7668.528	2860
2861	39524.858	42491.620	7758.482	0.01	7758.492	2861
1834	39526.430	35011.662	7591.548	2.83	7594.379	1834
1835	39536.904	37232.300	7539.658	-0.32	7539.342	1835
1836	39547.642	38704.699	8141.275	-2.53	8138.743	1836
1837	39558.753	34419.870	7659.459	0.42	7659.878	1837
1838	39561.540	35375.185	7510.345	1.04	7511.387	1838
1839	39571.410	37885.926	7802.416	-1.27	7801.151	1839
2862	39591.216	39549.913	8483.109	-0.14	8482.974	2862
1840	39599.659	36273.710	7432.828	0.95	7433.773	1840
1841	39604.966	34698.373	7621.151	1.29	7622.442	1841
2863	39611.663	42100.179	7730.321	-0.41	7729.910	2863
1842	39615.844	37501.715	7675.271	-1.14	7674.136	1842
1843	39616.053	35775.118	7431.494	1.19	7432.687	1843
1844	39628.460	36023.647	7421.261	0.55	7421.808	1844
2864	39637.961	40610.332	8361.569	1.46	8363.031	2864
1845	39654.873	38295.512	8205.659	-0.59	8205.065	1845
1846	39672.441	36600.762	7440.239	0.59	7440.829	1846
2865	39683.532	42304.573	7908.841	-0.75	7908.092	2865
2866	39740.428	40315.108	8418.345	2.76	8421.106	2866
2867	39744.606	41816.153	7823.820	NR2010		2867
2868	39754.265	42557.012	7921.153	-0.53	7920.622	2868
1847	39756.259	39130.067	8347.846	-1.02	8346.828	1847
1848	39757.684	35533.533	7453.844	1.09	7454.930	1848
1849	39791.461	35208.272	7470.743	1.47	7472.212	1849
1850	39808.874	36944.713	7524.654	-0.20	7524.453	1850
2869	39809.464	39767.565	8498.189	-0.16	8498.027	2869
2870	39811.547	41976.859	7783.736	0.01	7783.746	2870
2871	39816.085	40588.527	8433.336	0.58	8433.915	2871
1851	39819.770	35339.472	7431.141	2.18	7433.324	1851
2872	39827.288	40789.102	8365.742	0.01	8365.752	2872
2873	39840.097	41430.112	8092.183	NR2010		2873
2874	39845.105	39456.014	8445.675	-1.01	8444.665	2874
1852	39850.417	34978.891	7485.996	1.46	7487.453	1852
1853	39868.188	36031.214	7431.220	-0.30	7430.916	1853
2875	39870.739	40381.738	8460.011	-1.02	8458.994	2875
1854	39883.857	37616.195	7872.253	-1.50	7870.755	1854
2876	39905.703	42730.306	7953.568	NR2010		2876
1855	39905.938	34660.661	7519.363	1.78	7521.139	1855
1856	39915.455	36301.511	7451.296	0.28	7451.579	1856
1857	39926.676	37283.338	7719.470	-2.23	7717.243	1857
2877	39943.191	40161.799	8495.775	-0.83	8494.944	2877
1858	39955.464	38019.223	8164.167	-0.61	8163.558	1858
2878	39984.673	42148.146	7994.101	0.20	7994.305	2878
1859	40004.814	38705.673	8385.317	-0.18	8385.135	1859
2879	40024.560	42405.483	8128.642	-1.45	8127.189	2879
1860	40034.001	37050.443	7664.947	-0.82	7664.128	1860
1861	40037.908	36671.659	7488.460	0.20	7488.661	1861
1862	40041.266	35228.102	7448.080	0.55	7448.625	1862
2880	40042.629	40461.864	8447.076	-0.71	8446.365	2880
1863	40051.695	35602.210	7408.165	0.00	7408.165	1863
2881	40055.881	39945.726	8497.146	-0.83	8496.315	2881

2882	40063.294	41832.477	7830.561	0.01	7830.571	2882
2883	40101.534	40769.310	8321.633	-2.09	8319.540	2883
1864	40103.153	35983.888	7434.985	-0.06	7434.927	1864
1865	40132.993	37421.877	7975.925	-0.52	7975.405	1865
2884	40159.593	42260.457	8129.271	-1.33	8127.940	2884
1866	40193.311	34895.448	7420.791	2.49	7423.285	1866
2885	40214.182	42386.946	8167.557	-1.36	8166.199	2885
1867	40228.320	38360.185	8431.914	-1.20	8430.714	1867
1868	40230.907	36424.404	7478.899	0.77	7479.666	1868
2886	40235.328	40213.283	8482.274	0.01	8482.284	2886
1869	40237.352	37798.457	8279.363	-1.80	8277.567	1869
1870	40282.437	37146.430	7689.695	-1.14	7688.558	1870
1871	40293.457	35264.188	7414.439	1.32	7415.757	1871
1872	40294.576	38149.168	8425.533	-1.87	8423.665	1872
1873	40295.049	36289.900	7501.641	1.00	7502.639	1873
1874	40334.396	36915.441	7546.889	0.30	7547.185	1874
2887	40340.467	42050.168	8121.422	-0.76	8120.663	2887
2888	40355.097	41677.249	7898.332	-0.47	7897.861	2888
2889	40365.464	40823.972	8268.463	-1.13	8267.331	2889
1875	40374.828	35662.543	7431.260	-0.52	7430.744	1875
2890	40427.011	41826.701	8021.752	0.58	8022.332	2890
1876	40453.035	37455.913	7870.126	-1.32	7868.810	1876
1877	40454.936	36049.062	7576.022	0.46	7576.477	1877
2891	40496.305	42168.659	8192.692	-1.92	8190.771	2891
1878	40542.559	36635.967	7547.869	0.73	7548.594	1878
1879	40603.273	36378.019	7631.111	1.69	7632.802	1879
1880	40611.863	37936.142	8191.197	-1.81	8189.386	1880
2892	40618.088	41564.008	7949.475	-1.91	7947.562	2892
1881	40624.615	37125.342	7626.703	0.28	7626.979	1881
2893	40629.919	41892.893	8151.007	-0.05	8150.960	2893
1882	40638.520	35447.250	7451.531	0.21	7451.742	1882
1883	40638.869	35818.362	7556.338	-0.34	7555.997	1883
2894	40748.884	40877.419	8231.358	-1.79	8229.565	2894
1884	40783.943	36201.328	7747.250	-1.70	7745.547	1884
2895	40797.569	41465.405	7986.759	-1.79	7984.966	2895
2896	40822.807	41600.321	8073.965	-0.93	8073.031	2896
1885	40863.780	36862.887	7584.256	-0.24	7584.013	1885
1886	40873.221	37551.065	7781.960	0.49	7782.452	1886
1887	40893.889	35535.476	7589.823	1.08	7590.903	1887
1888	40946.498	35912.978	7815.946	-1.12	7814.828	1888
2897	40997.449	41623.181	8141.768	-0.86	8140.906	2897
2898	41088.912	41371.521	8046.575	-2.27	8044.307	2898
1889	41158.507	37222.819	7602.488	0.00	7602.488	1889
1890	41188.851	36017.377	8028.305	-3.45	8024.858	1890
2890	40427.011	41826.701	8021.752	2890		
2891	40496.305	42168.659	8192.692	2891		
2892	40618.088	41564.008	7949.475	2892		
2893	40629.919	41892.893	8151.007	2893		
2894	40748.884	40877.419	8231.358	2894		
2895	40797.569	41465.405	7986.759	2895		
2896	40822.807	41600.321	8073.965	2896		
2897	40997.449	41623.181	8141.768	2897		

2898	41088.912	41371.521	8046.575	2898		

TEST PLOT EVALUATION

Vegetation Monitoring at the Experimental Test Plot

2010

at the
West Ridge Mine,
Carbon County, Utah

Prepared by

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March 2011

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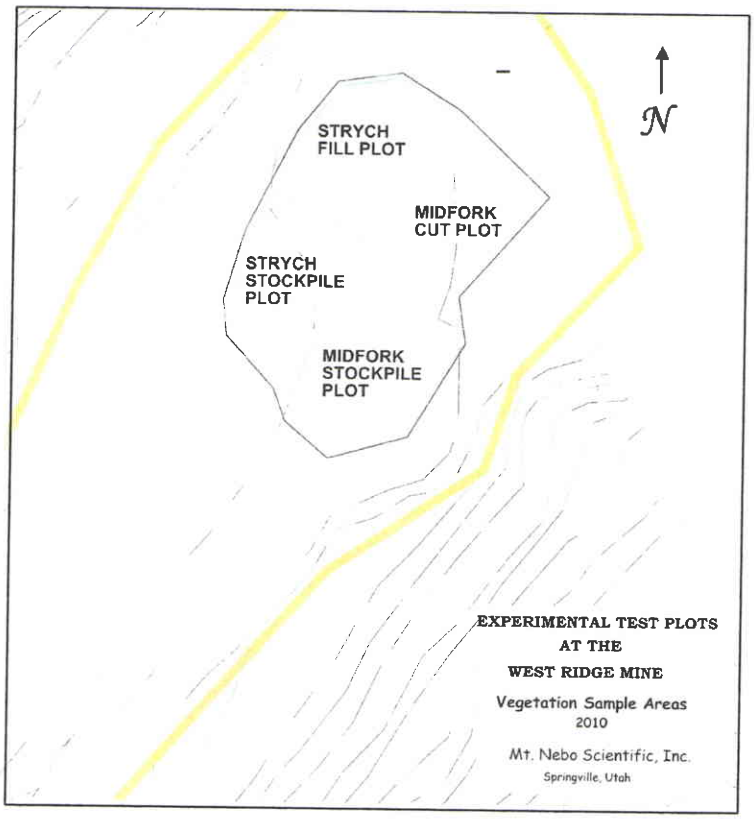
INTRODUCTION

Experimental Practice Test Plots were constructed at the West Ridge Mine in Carbon County, Utah in 1999 (see insert on this page and COLOR PHOTOGRAPHS OF THE SAMPLE AREAS, page 14). These plots were created to simulate final reclamation of those soils that have been left in-place (as opposed the more common practice to remove and stockpile them). They were covered by a geotextile layer (as a means for preservation of the in-place topsoil), identified with marker strips (to facilitate locating them at the time of reclamation), then covered with fill (to simulate the material used to cover the mine pad areas during operations), then covered with other topsoil material, and finally seeded with the *interim* seed mixture for erosion control.



In 2005, or six years following the initial test plot construction, the above procedures were reversed in an attempt to imitate final reclamation and revegetation of the mine site. Or, the fill and topsoil were removed until the marker strips were exposed. These materials were then returned to their place of origin. The geotextile material was then removed exposing the topsoil and subsoil that was left "in-place", followed by re-seeding the area with the seed mixture formulated for *final* revegetation.

In a letter to West Ridge Resources (Burton 2009)[1], the following additional comments regarding the history of the Experimental Test Plots were stated:

- The work began with removing stinging nettle seed heads from a patch of nettle that completely covered the Midfork Stockpile Area.
- Certified noxious weed-free alfalfa hay was gouged into the regraded site (copy of certification was attached to the Inspection Report #717).
- There was no application of straw and wood fiber mulch tackifier.
- There was no soil amendment added based upon visual observation of vegetative cover, but soil samples were taken to document the soil chemistry.
- Soils were sampled from the test plots after they were regraded. The Brigham Young University Soil and Plant Analysis Lab analysis is dated October 4, 2005. *(**NOTE**: The 2005 laboratory report has been provided in the appendix of this report)*.
- The seeding was done on October 31, 2005.
- According to information received by the Division on September 10, 2005, the seed mix outlined in Table 3-2B (*in MRP, Appendix 2-6*) was modified due to availability: Sandberg bluegrass replaced muttongrass (*Poa fendleriana*) and neither canyon sweetvetch nor rocky mountain maple were commercially available and were not included in the seed mix.
- Containerized plants shown on Table 3-2B (*in MRP, Appendix 2-6*) were not available and not planted.
- A vegetative analysis was conducted in August 2008 and results are presented in an addendum to Appendix 2-6 (*in MRP*) .
- Burton (2009) speculates that the predominance of stinging nettle in the Midfork Cut plot may have resulted from the Midfork Stockpile area (the source of the Midfork Cut topsoil) that was covered with stinging nettle and the root propagules and seed were more than likely carried over with the soil.
- The Strych Stockpile Area is the only plot that represents the experimental practice of burial and storage in place. A comparison of the Strych Stockpile area and the Strych Fill area is the test of the conventional technique versus the experimental technique in the same soil type.

This document was prepared to report the current (2010) status and condition of specific parameters for the vegetation of the Experimental Test Plots at the West Ridge Mine.

---

1 Burton, P. 2009. Test plot evaluation and soil monitoring reports, C/007/00041, West Ridge Mine, Task ID #3111. *In:* Letter from D. Haddock. April 16, 2009, State of Utah, Division of Oil, Gas & Mining, Salt Lake City, UT.

METHODS

Methodologies used for this study were performed in accordance with the guidelines supplied by the State of Utah, Division of Oil, Gas and Mining (DOGM). Quantitative and qualitative data were recorded July 22, 2010. The reference area proposed to ultimately be compared with this plot for revegetation success standards, was sampled during the growing season of 1998. These data were also presented herein for general comparisons with the results of quantitative sampling conducted in 2010 on the test plots.

Sampling Design and Transect/Quadrat Placement

Transect lines for vegetation sampling were placed randomly within the boundaries of the test plots. The transect placement technique was employed with the goal to adequately sample a representative subset of the plot. Once the transects were established, quadrat locations for sampling were chosen using random numbers from the transect lines with the objective to record data without preconceived bias.

Cover and Composition

Cover estimates were made using ocular methods with meter square quadrats. Species composition, cover by species, and relative frequencies were also assessed from the quadrats. Plant nomenclature follows "A Utah Flora" (Welsh et al., 2008).

Woody Species Density

Density of woody plant species was not assessed because very few or no trees or shrubs were present on the plots.

Photographs

Color photographs of the sample areas were taken at the time of sampling and have been submitted with this report.

Raw Data

The raw data have been summarized on a spreadsheet and is available upon request by the operator or DOGM.

RESULTS

Midfork Cut

The Midfork Cut plot was largely dominated by stinging nettle *(Urtica dioica)*. Other dominant plant species were western wheatgrass *(Elymus smithii)*, bluebunch wheatgrass *(E. spicatus)* and thickspike wheatgrass *(E. lanceolatus)*. For a list of all plant species by cover and frequency found in the test plot, refer to Table 1.

Table 1: West Ridge Mine Experimental Test Plots. Living Cover and Frequency by Plant Species (2010).

MIDFORK CUT	Mean Percent	Standard Deviation	Percent Frequency
TREES & SHRUBS			
FORBS			
Linum lewisii	1.50	4.50	10.00
Medicago sativa	1.50	4.50	10.00
Tragopogon dubius	1.50	3.20	20.00
Urtica dioica	33.00	10.05	100.00
GRASSES			
Elymus lanceolatus	5.00	5.48	50.00
Elymus smithii	11.50	10.26	70.00
Elymus spicatus	6.00	4.90	70.00

Table 2: West Ridge Mine Experimental Test Plots. Total Cover and Composition (2010).

MIDFORK CUT		
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
Total Living Cover	67.50	5.59
Litter	17.50	9.29
Bareground	6.00	2.00
Rock	9.00	4.90
B. % COMPOSITION		
Shrubs	0.00	0.00
Forbs	55.52	14.39
Grasses	44.48	14.39

Total living cover of the plot was estimated at 67.50% (Table 2-A). The living cover was comprised of 55.52% forbs (mostly due to the stinging nettle), 44.48% grasses with no shrubs present in the sample quadrats (Table 2-B).

Midfork Stockpile

The dominant plant species represented in this plot were Lewis flax (*Linum lewisii*), western wheatgrass, thickspike wheatgrass, and bluebunch wheatgrass (Table 3).

Table 3: West Ridge Mine Experimental Test Plots. Living Cover and Frequency by Plant Species (2010).

MIDFORK STOCKPILE	Mean Percent	Standard Deviation	Percent Frequency
TREES & SHRUBS			
Rosa woodsii	1.00	3.00	10.00
FORBS			
Hedysarum boreale	0.50	1.50	10.00
Linum lewisii	18.50	12.66	90.00
Urtica dioica	5.00	8.37	30.00
GRASSES			
Elymus lanceolatus	10.00	6.32	90.00
Elymus smithii	13.00	10.05	90.00
Elymus spicatus	9.00	5.83	80.00

The total living cover for the Midfork Stockpile plot was estimated at 57.00% (Table 4-A). The composition of the living understory cover was comprised of 55.44% grasses, 42.56% forbs and 2.00% shrubs (Table 4-B.) .

Table 4: West Ridge Mine Experimental Test Plots. Total Cover and Composition (2010).

MIDFORK STOCKPILE		
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
TREES & SHRUBS		
Total Living Cover	57.00	6.00
Litter	28.00	6.00
Bareground	9.80	5.67
Rock	5.20	2.86
B. % COMPOSITION		
Shrubs	2.00	6.00
Forbs	42.56	19.41
Grasses	55.44	17.96

Strych Stockpile

The Strych Stockpile plot was dominated by Lewis flax and bluebunch wheatgrass (Table 5). Other dominant species for this plot included western wheatgrass and thickspike wheatgrass.

Table 5: West Ridge Mine Experimental Test Plots.
Living Cover and Frequency by Plant Species (2010).

STRYCH STOCKPILE	Mean Percent	Standard Deviation	Percent Frequency
TREES & SHRUBS			
FORBS			
Achillea millefolium	0.50	1.50	10.00
Geranium richardsonii	1.50	2.29	30.00
Hedysarum boreale	3.00	4.00	40.00
Linum lewisii	29.50	11.06	100.00
Urtica dioica	3.50	7.09	20.00
GRASSES			
Elymus lanceolatus	7.00	2.45	100.00
Elymus smithii	7.50	4.61	80.00
Elymus spicatus	11.50	7.09	100.00

The total living cover of the plot was estimated at 64.00% (Table 6-A); this cover consisted of 58.31% forbs and 41.69% grasses with no woody species present (Table 6-B).

Table 6: West Ridge Mine Experimental Test Plots.
Total Cover and Composition (2010).

STRYCH STOCKPILE		
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
Total Living Cover	64.00	8.60
Litter	17.00	4.58
Bareground	9.00	4.36
Rock	10.00	5.92
B. % COMPOSITION		
Shrubs	0.00	0.00
Forbs	58.31	16.63
Grasses	41.69	16.63

Strych Fill

The Strych Fill plot's dominant plant species were Lewis flax, bluebunch wheatgrass and western wheatgrass. Stinging nettle and thickspike wheatgrass were also important components in the cover measurements (Table 7).

Table 7: West Ridge Mine Experimental Test Plots. Living Cover and Frequency by Plant Species (2010).

STRYCH FILL	Mean Percent	Standard Deviation	Percent Frequency
TREES & SHRUBS			
FORBS			
Artemisia dracunculus	1.50	4.50	10.00
Descurainia pinnata	1.00	3.00	10.00
Linum lewisii	17.50	10.06	100.00
Urtica dioica	8.00	17.35	20.00
GRASSES			
Elymus lanceolatus	7.00	4.00	80.00
Elymus smithii	13.50	9.23	80.00
Elymus spicatus	15.00	15.33	80.00
Poa pratensis	1.50	4.50	10.00

Total living cover of the Strych Fill plot was estimated at 65.00% (Table 8-A). The living understory cover composition was comprised of 57.83% grasses and 42.17% forbs (Table 8-B).

Table 8: West Ridge Mine Experimental Test Plots. Total Cover and Composition (2010).

STRYCH FILL		
A. TOTAL COVER	**Mean Percent**	**Standard Deviation**
Total Living Cover	65.00	8.66
Litter	18.00	9.80
Bareground	8.50	5.02
Rock	8.50	5.94
B. % COMPOSITION		
Shrubs	0.00	0.00
Forbs	42.17	26.95
Grasses	57.83	26.95

Douglas Fir/Maple Reference Area

The existing Douglas Fir/Maple Reference Area was chosen to ultimately be compared to the test plots. Although this is an early comparison considering the length of time the test plot has been "reclaimed" (re-worked), data from quantitative sampling of this reference area in 1998 have been presented in this report. Moreover, when the final revegetation is compared to the reference area, the sampling will be accomplished during the same growing season.

Understory in the Douglas Fir/Maple Reference Area was dominated by bigtooth maple (*Acer grandidentatum*), mountain lover (*Pachistima myrsinites*), and Oregon grape (*Mahonia repens*). Overstory dominants were bigtooth maple and Douglas fir (*Pseudotsuga menziesii*). A list of all species present in the sample quadrats for the reference area is shown in Table 9.

The total living cover of the reference area was estimated at 63.63% of which overstory and understory cover was nearly equally represented at 31.38% and 32.25%, respectively (Table 10-A). Woody species comprised 61.57% of the total living understory cover, followed by forbs at 25.33% and grasses at 13.11% (Table 10-B).

Table 9. West Ridge Mine: Reference Area. Total Cover, Standard Deviation and Frequency by Species (1998).

DOUGLAS FIR/ MAPLE COMMUNITY REFERENCE AREA (NEW)	Mean Percent	Standard Deviation	Percent Frequency
OVERSTORY COVER			
Acer grandidentatum	15.88	21.30	50.00
Juniperus scopulorum	1.38	6.22	5.00
Pseudotsuga menziesii	14.13	20.67	45.00
UNDERSTORY COVER			
TREES & SHRUBS			
Acer grandidentatum	6.18	11.30	47.50
Juniperus scopulorum	1.30	2.90	20.00
Mahonia repens	3.33	5.82	40.00
Pachistima myrsinites	5.73	11.04	35.00
Pseudotsuga menziesii	1.95	6.19	6.00
Symphoricarpos oreophilus	1.43	3.35	20.00
FORBS			
Antennaria parvifolia	0.25	1.09	5.00
Artemisia dracunculus	0.88	3.33	10.00
Aster sp.	3.13	7.65	30.00
Circium sp.	0.13	0.78	2.50
Descurania pinnata	1.78	7.12	10.00
Erigeron engelmannii	0.25	1.09	5.00
Erysimum asperum	0.13	0.78	2.50
Fragaria vesca	0.38	1.73	5.00
Mitella stauropetala	0.05	0.31	2.50
Senecio pudicus	0.15	0.79	5.00
Smilacina racemosa	0.33	1.03	10.00
Stellaria jamesiana	0.03	0.16	2.50
Taraxicum officinale	0.13	0.78	2.50
Thalictrum fendleri	0.13	0.78	2.50
Viola adunca	0.13	0.78	2.50
GRASSES			
Bromus inermis	1.25	5.67	7.50
Poa fendleriana	2.90	4.15	45.00
Poa pratensis	0.38	1.73	5.00

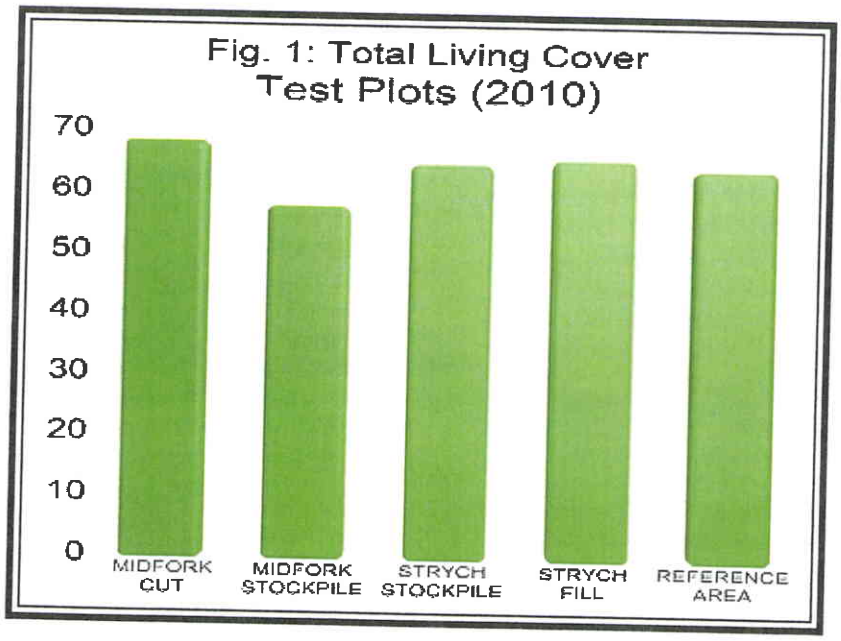
Table 10. West Ridge Mine: Reference Area. Total Cover, Standard Deviation and Sample Size (1998).

DOUGLAS FIR/ MAPLE COMMUNITY REFERENCE AREA (NEW)	Mean Percent	Standard Deviation	Sample Size
A. TOTAL COVER			
Overstory Cover (O)	31.38	25.69	40
Understory Cover (U)	32.25	19.27	40
Cryptogams	0.25	1.09	40
Litter	18.20	12.80	40
Bareground	8.20	9.39	40
Rock	9.73	9.67	40
O+U	63.63	13.51	40
B. % COMPOSITION			
Trees & Shrubs	61.57	33.67	40
Forbs	25.33	29.49	40
Grasses	13.11	19.14	40

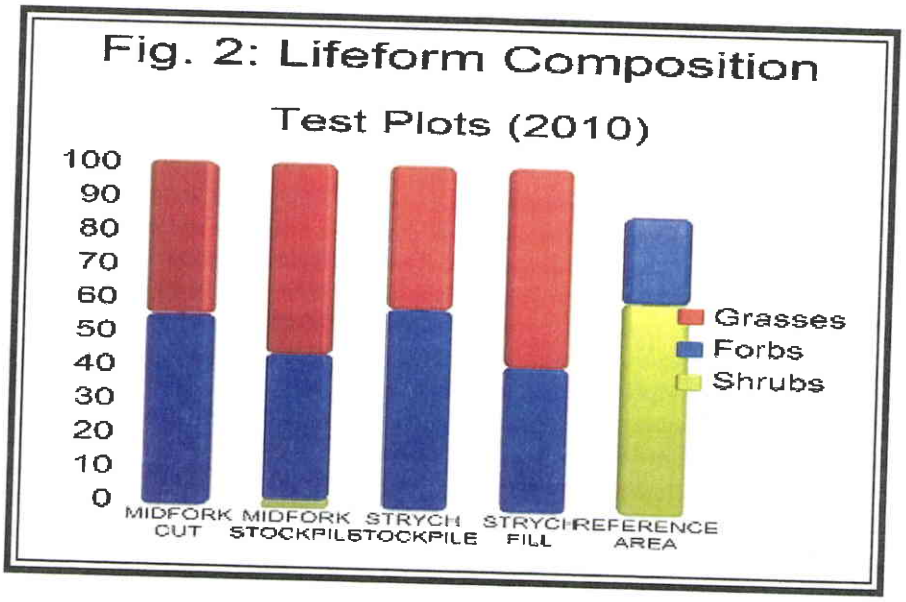
DISCUSSION

Similar to the 2008 and 2009 sample years, in 2010 there was a prevalence of stinging nettle in the Midfork Cut plot of the Experimental Test Plots. Stinging nettle was also an important species in the Strych Fill plot, but less so than in 2009. Although not necessarily and undesirable species, it is interesting to note where the plant was a dominant species. Comments about this have been provided by (Burton 2009)[1] described in the INTRODUCTION of this document.

A graphic representation of the *total living cover* can be observed on Fig 1. As can be noted from the figure and also the data summary tables in this report, there was not a great deal of difference between the total living cover in the plots that represented soils that remained *in-place* to those that represented soils of the more typical scenario of first *stockpiling* the topsoil and then returning it at the time of revegetation. Moreover, the total living cover values for the test plots were similar to that of the reference area, with the possible exception of the Midfork Stockpile where the cover was less than all other cover values in 2010.



For lifeform composition, the most obvious observation was that there were very few woody species present in the test plots, especially when the reference area is compared (Fig. 2). This is most likely because the *interim* seed mixture was used on the plots, not the *final* mixture. Interim seed mixtures generally have very few woody plant species included in them.

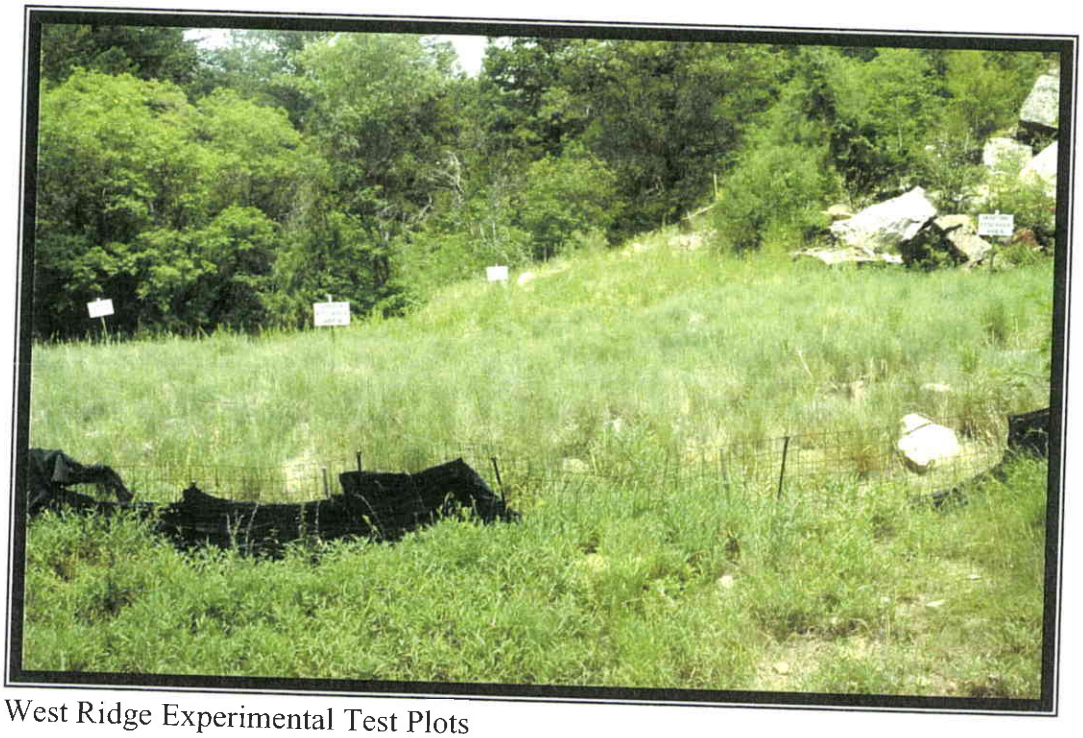


COLOR PHOTOGRAPHS
OF THE
SAMPLE AREAS

Midfork Cut Plot

Midfork Stockpile Plot

Strych Fill Plot



West Ridge Experimental Test Plots

Douglas Fir/Maple Reference Area

APPENDIX

Laboratory Analyses
(2005)

BRIGHAM YOUNG UNIVERSITY

Soil and Plant Analysis Laboratory
255 WIDB
Provo, UT 84602
801-422-2147

Plant and Animal Science Department

SOIL TEST REPORT
AND
RECOMMENDATIONS

Name Gary Gray-West Ridge Resources
Street PO Box 790
Lehi UT 84043
City State Zip

Date: 04-Oct-05
Time: 11:12 AM
Telephone:
Fax:

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Strych Fill area	Turf	7.31	43.00	35.16	21.84	Loam		4.56

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recomendations
Nitrate-Nitrogen ppm N	7.17	X					apply 2.8 lbs of N/1000 sq ft
Phosphorus ppm P	9.29		X				apply 1.4 lbs of P2O5/1000 sq ft
Potassium ppm K	672.00					X	no fertilizer needed
Salinity-ECe dS/m	1.06		X				no salinity problem
SAR-Sodium Absorption Ratio	0.17	X					no sodium hazard
Calcium-SAR ppm Ca	227.20						
Potassium SAR ppm K	33.60						
Magnesium SAR ppm Mg	25.12						
Sodium SAR ppm Na	10.08						
HCO3 ppm HCO3	592.29						
% moisture sat. % sat	30.60						
Ca Carbonate %CaCO3	19.47						
Total N ppm total N	983.70						
% rock %	20.14						

BRIGHAM YOUNG UNIVERSITY

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AND
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Street PO Box 790
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City State Zip

Date: 04-Oct-05
Time: 11:12 AM
Telephone:
Fax:

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Strych stockpile area	Turf	7.62	42.00	33.16	24.84	Loam		2.89

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recomendations
Nitrate-Nitrogen ppm N	10.50		X				apply 2.1 lbs of N/1000 sq ft
Phosphorus ppm P	5.70	X					apply 2.1 lbs of P2O5/1000 sq ft
Potassium ppm K	448.00					X	no fertilizer needed
Salinity-ECe dS/m	0.77	X					no salinity problem
SAR-Sodium Absorption Ratio	0.34	X					no sodium hazard
Calcium-SAR ppm Ca	136.48						
Potassium SAR ppm K	22.40						
Magnesium SAR ppm Mg	32.32						
Sodium SAR ppm Na	17.28						
HCO3 ppm HCO3	432.63						
% moisture sat. % sat	30.05						
Ca Carbonate %CaCO3	20.25						
Total N ppm total N	502.60						
% rock %	15.14						

BRIGHAM YOUNG UNIVERSITY

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SOIL TEST REPORT AND RECOMMENDATIONS

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Fax:

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Midfork cut area	Turf	7.27	40.00	36.16	23.84	Loam		6.67

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recomendations
Nitrate-Nitrogen ppm N	16.80		X				apply 2.1 lbs of N/1000 sq ft
Phosphorus ppm P	13.14		X				apply 1.4 lbs of P2O5/1000 sq ft
Potassium ppm K	566.40					X	no fertilizer needed
Salinity-ECe dS/m	0.99	X					no salinity problem
SAR-Sodium Absorption Ratio	0.13	X					no sodium hazard
Calcium-SAR ppm Ca	205.12						
Potassium SAR ppm K	28.32						
Magnesium SAR ppm Mg	24.64						
Sodium SAR ppm Na	7.20						
HCO3 ppm HCO3	659.54						
%moisture sat % sat	52.97						
Ca Carbonate %CaCO3	16.00						
Total N ppm total N	923.60						
% rock %	10.11						

BRIGHAM YOUNG UNIVERSITY

Soil and Plant Analysis Laboratory
255 WIDB
Provo, UT 84602
801-422-2147

Plant and Animal Science Department

SOIL TEST REPORT
AND
RECOMMENDATIONS

Name Gary Gray-West Ridge Resources
Street PO Box 790
Lehi UT 84043
City State Zip

Date: 04-Oct-05
Time: 11:12 AM
Telephone:
Fax:

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
Midfork stockpile area	Turf	7.39	35	39.16	25.84	Loam		4.59

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recomendations
Nitrate-Nitrogen ppm N	7.46	X					apply 2.8 lbs of N/1000 sq ft
Phosphorus ppm P	13.76		X				apply 1.4 lbs of P2O5/1000 sq ft
Potessium ppm K	592.00					X	no fertilizer needed
Salinity-ECe dS/m	0.90	X					no salinity problem
SAR-Sodium Absorption Ratio	0.19	X					no sodium hazard
Calcium-SAR ppm Ca	188.48						
Potassium SAR ppm K	29.60						
Magnesium SAR ppm Mg	23.84						
Sodium SAR ppm Na	10.56						
HCO3 ppm HCO3	545.94						
%moisture sat. % sat.	48.25						
Ca Carbonate %CaCO3	10.83						
Total N ppm total N	975.80						
% rock %	10.65						

SOILS MONITORING REPORT

Soil Monitoring
at the
West Ridge Mine, Utah
2010

Prepared
for
West Ridge Resources, Inc.

Prepared by

MT. NEBO SCIENTIFIC, INC.
330 East 400 South, Suite 6
Springville, Utah 84663
(801) 489-6937

Patrick D. Collins, Ph.D.

for

WEST RIDGE RESOURCES, INC.
West Ridge Mine
P.O. Box 910
East Carbon, Utah 84520

March 2011

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INTRODUCTION

As described in previous monitoring reports for the West Ridge Mine, an "experimental practice" for the protection of soil resources was designed and implemented at the site. The experimental practice was designed to test the effectiveness of burying soils in-place rather than salvaging (removing) them and returning them at the time of final reclamation. The in-situ topsoil was covered with a geotextile material and layer markers followed by fill material to create working areas for surface operations of the mine.

As a method to monitor the buried soil resources, West Ridge Resources committed to sampling mine pad areas in specific locations to determine whether or not they are being affected by coal and surface operations. In the document called *West Ridge Mine Experimental Practice Annual Evaluation 2000: Addendum to Appendix 2-6*, page 4, it stated that a monitoring program, starting in the year 2000, will be implemented to sample and determine if the mine pad areas affected by the coal are being "acidified". The same document states that the samples will be analyzed for acid/toxic-forming potential per Division Guidelines. In consulting with soils specialist, Priscilla Burton, from the State of Utah, Division of Oil, Gas & Mining (Division) prior to sampling in 2001, it was determined that the most appropriate parameters to be analyzed on the mine pad areas were: pH, electrical conductivity (EC), sodium adsorption ratio (SAR) and calcium carbonate ($CaCO_3$). Moreover, it was determined that sampling should be done at the depth of 6-12 inches as opposed to 3 inches as stated in the addendum cited above.

METHODS

Soil samples of the mine **pad areas** were taken by Patrick Collins (*Mt. Nebo Scientific, Inc.*) at the West Ridge Mine site in specified locations on September 11, 2001, November 25, 2008, July 2, 2009 and July 22, 2010. The *approximate* (see below) same locations were sampled all years and are shown in Figure 1. Below are brief descriptions of these locations:

T1 *Located in the right fork, it was originally described to be 64 ft northwest of the jersey barrier in the center of the canyon. Because this location was so close to construction and where equipment was placed at the time, the sample was taken about 25 ft north of that location in 2008 and 2009. In 2010 there was a new building at the previous sample area, so the soil sample pit was re-located very closeby, but 10 ft west of the northwest corner of the new building (2010 GPS name and UTM coordinates: WR T1, NAD 27, 12 S 548475 E, 4385176 N).*

T2 *Located in the left fork in the coal storage area, the sample was taken at the base of the dike in the center of the canyon. In 2009, coal covered the previous sample pit location so the sample was taken at the outside base of the dike that encloses the coal storage area. In 2010, the coal pile had been removed from the original sample location, so the soil sample was taken once again at the toe of the inside dike (2010 GPS name and UTM coordinates: WR T2, NAD 27,12 S 548098 E, 4385201 N).*

T3 *Located in the load-out area, the sample was taken 54 ft uphill from the conveyor belt footing on the north side of the ditch. In 2010, because of the equipment stored in the area, the pit location was slightly different from 2009, or 60 ft from the concrete conveyor belt footing on the north side of the drainage ditch in the area (2010 GPS name and UTM coordinates: WR T3, NAD 27,12 S 548175 E, 4384956 N).*

Soil sampling in the **Experimental Test Plots** was also conducted by Gary Gray, *P.E. (West Ridge Resources)* in the fall of 2005 (more information about that is given later in the report).

Soil sample pits were hand-dug with a pick and shovel. A composite sample was taken at depths between 6 and 12 inches at each of the locations described above. Small amounts or soil material

were taken at each depth and mixed in the field. Soils were analyzed by the Brigham Young University, Soil and Plant Analysis Laboratory, Provo, Utah. Parameters and laboratory methods used are shown below.

pH	*ASA Mono. No. 9, Part 2, (2 ed), 1982. Method 10-3.2, page 171. Perform pH on saturated paste.*
ECe	*Electrical conductivity reported as mmhos/cm 25°C. ASA Mono. No. 9, Part 2, (2 ed), 1982. Method 10-3.3, page 172-173.*
SAR	*Sodium Adsorption Ratio. Calculated from soluble Ca, Mg and Na.*
$CaCO_3$	*Method S-13.20. Acetic acid dissolution method. Western States Laboratory Proficiency Testing Program. Soil and Plant Analytical Methods. 1998.*

RESULTS

The laboratory results for 2001, 2008, 2009 and 2010 for the soils in the pad areas are shown on Table 1. The entire 2010 lab report has been included in the Appendix of this report; original lab reports for the other years were included in the respective sample reports for those years. The only values that exceeded acceptable levels according to DOGM soil guidelines were from 2008 samples; the parameters that exceeded the standards were EC and SAR in sample T3. The high concentration of salts (EC and SAR) may likely be the result of road salt that is placed in the travel areas at the mine to treat snow and ice. The road salts can also accumulate in the snow and on the coal trucks while using the haul road to and from the mine. This snow and salt most-likely drops off the trucks while idling at the loadout site. By 2009, however, the salts appear to have leached below the sampling depths. In 2010, the SAR in T3 was high again and would be considered "poor" by Division standards, but again was not in the "unacceptable" range. The

mean values for the sample years rendered all parameter values within the acceptable limits according to Division Guidelines. Additionally, "acidification" of the soils will probably not be a problem due to the neutralizing or "buffering" effect caused by the high percentage of calcium carbonates (% $CaCO_3$) present in all samples.

Table 1: Laboratory Results for Soil Sampling in Mine Pad Areas at West Ridge Mine (2001, 2008, 2009, 2010).

Sample No.	2001	2008	2009	2010
A. pH				
T1	8.04	7.75	7.81	8.15
T2	7.52	7.23	7.91	7.63
T3	7.83	8.42	8.21	7.82
Mean	7.80	7.80	7.98	7.87
SDev.	0.26	0.60	0.21	0.21
B. EC (Salinity or ECe dS/m)				
T1	6.20	4.80	14.20	1.55
T2	2.70	4.80	0.62	1.90
T3	4.20	17.50*	3.50	4.80
Mean	4.37	9.03	6.11	2.75
SDev.	1.76	7.33	7.16	1.46
C. SAR (Sodium Adsorption Ration; see Appendix A for lab data and units to calculate the SAR's)				
T1	2.19	5.83	2.53	3.65
T2	0.74	4.14	0.14	0.74
T3	1.94	31.31*	7.07	12.26
Mean	1.62	13.76	3.25	5.55
SDev.	0.78	15.22	3.52	4.89
D. $CaCO_3$ (% Calcium Carbonate)				
T1	19.21	11.85	16.60	7.96
T2	5.10	11.25	10.77	6.18
T3	15.00	12.02	12.25	17.67
Mean	13.10	11.71	13.21	10.60
SDev.	7.24	0.40	3.03	5.05

** Value considered "unacceptable" according evaluation in the Division soil guidelines.*

As a means for comparison, Table 2 shows results of soil sampling in the **Experimental Test Plots** at the West Ridge Mine in 2005. These plots were created to simulate final reclamation of those soils that were left in-place, covered by a geotextile layer, marked with strips, then covered with fill material for the life of the mine. At the time of final reclamation the geotextile fabric, markers and fill will be removed thus exposing the native soils enabling revegetation to proceed. A similar process to test this reclamation design was implemented in the Experimental Test Plot area by placing material over existing soils, then later removing it, followed by revegetation techniques.

Table 2: Laboratory Results for Soil Sampling in Experimental Test Plot at West Ridge Mine (2005).*

	pH	EC	SAR	$CaCO_3$
Subplot Name				
Strych Fill	7.31	1.06	0.17	19.47
Strych Stockpile	7.62	0.77	0.34	20.25
Midfork Cut	7.27	0.98	0.13	16.00
Midfork Stockpile	7.39	0.90	0.19	10.83
Mean	7.40	0.93	0.21	16.64
SDev.	0.16	0.12	0.09	4.29

** Results are a subset showing specific parameters from the complete soil laboratory report prepared by Brigham Young University (October 4, 2005). Sampling was conducted by Gary Gray, P.E. from the West Ridge Mine. A complete copy of the lab report has been provided to DOGM.*

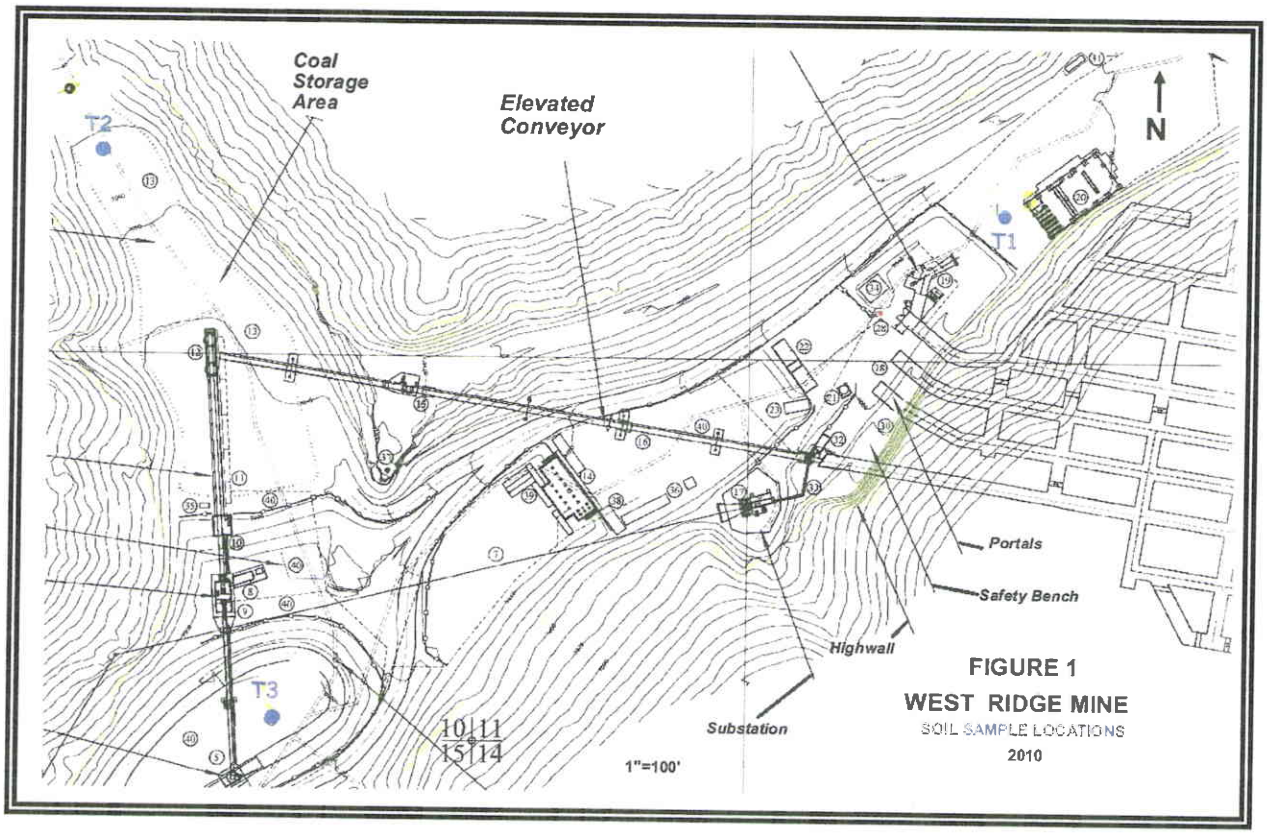

FIGURE 1
WEST RIDGE MINE
SOIL SAMPLE LOCATIONS
2010

APPENDIX

(Laboratory Report)

BRIGHAM YOUNG UNIVERSITY

Soil and Plant Analysis Laboratory
255 WIDB
Provo, UT 84602
801-422-2147

Plant and Wildlife Sciences Department

Name: Mt. Nebo Scientific
Street: PO Box 337
Springville (City) Utah (State) 84663 (Zip)

SOIL TEST REPORT AND RECOMMENDATIONS

Date: 28-Jul-10
Telephone: 801-489-6937
Fax: 801-489-6779

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
WR-T1 6-12"	Turf	8.15						

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Salinity-ECe dS/m	1.55		X				no salinity problem
SAR-Sodium Absorption Ratio	3.65		X				no sodium hazard
Calcium-SAR ppm Ca	78.24						
Magnesium SAR ppm Mg	53.12						
Sodium SAR ppm Na	171.52						
Ca Carbonate %CaCO3	7.96						

Notes:

BRIGHAM YOUNG UNIVERSITY

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SOIL TEST REPORT AND RECOMMENDATIONS

Date: 28-Jul-10
Telephone: 801-489-6937
Fax: 801-489-6779

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
WR-T2 6-12"	Turf	7.63						

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Salinity-ECe dS/m	1.90		X				no salinity problem
SAR-Sodium Absorption Ratio	0.74	X					no sodium hazard
Calcium-SAR ppm Ca	283.04						
Magnesium SAR ppm Mg	30.72						
Sodium SAR ppm Na	49.28						
Ca Carbonate %CaCO3	6.18						

Notes:

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Name Mt. Nebo Scientific
Street PO Box 337
Springville Utah 84663
City State Zip

SOIL TEST REPORT AND RECOMMENDATIONS

Date: 28-Jul-10
Telephone: 801-489-6937
Fax: 801-489-6779

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	Cation Exchange meq/100g	% Organic Matter
WR-T3 6-12"	Turf	7.82						

Soil Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Salinity-ECe dS/m	4.80				X		salinity a problem for sensitive crops
SAR-Sodium Absorption Ratio	12.26			X			potential sodium hazard
Calcium-SAR ppm Ca	246.08						
Magnesium SAR ppm Mg	56.32						
Sodium SAR ppm Na	821.76						
Ca Carbonate %CaCO3	17.67						

Notes:

MINE MAP

STATE LEASE
ML 51744

STATE LEASE
ML 47711

FEDERAL LEASE
UTU-78562

Potential Future Fault Zone

FEE

STATE LEASE
ML 49287

STATE LEASE
ML 47711

Whitmore Canyon

BEAR CANYON
GVH SITE

FEE

Potential Future Fault Zone

Grassy Trail
Reservoir

FEDERAL LEASE
UTU-78562

Fault

FEE

FEE

FEDERAL LEASE
SL-068754

Fault

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

COUNTY ROAD

46KV POWERLINE

I STATION
NT AREA

I CERTIFY THIS MAP TO BE TRUE AND CORRECT
TO THE BEST OF MY KNOWLEDGE.

UTAH REGISTERED
#6449561
David W. Hibbs
1/25/11
PROFESSIONAL ENGINEER

Strike

13%

Kaiser Steel Corp.
Sunnyside Mine Workings
(Inactive)

YEAR KEY:

2011
2012
2013
2014
2015

Mined Area

NOTE:
Mine projections are subject to change depending on conditions encountered in the underground mine workings.
Actual mine works are shown as of January 23, 2011.
Mine projections depicted in the fringe areas beyond the existing permit area are speculative and based on future reserve acquisitions.
No mining will be conducted in these areas unless those reserves are acquired in the future and permitted according to federal, state, and local permitting requirements.
West Ridge Resources acknowledges that permission to mine within the permit boundary does not imply permission to mine beyond the permit boundary.

WEST RIDGE MINE

Map 5-4A

~~Mining Projections~~
Mine Map 2010

.TE: 1-26-11 REV: 18 ACAD REF: WRTIMEA REV18

LEGEND:
Permit Boundary
Federal Lease
State Lease
Penta Creek Fee
Surface Facility Area
GVH Site
Outcrop

N

WEST RIDGE
RESOURCES, INC.

SCALE: 1"=2000'