ELEVATION OF SURFICIAL SEDIMENT/BASALT CONTACT
IN THE SUBSURFACE DISPOSAL AREA,
IDAHO NATIONAL ENGINEERING LABORATORY

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ABSTRACT

The elevation of the surficial sediment/basalt contact at the Subsurface Disposal Area (SDA), within the Radioactive Waste Management Complex (RWMC) is presented to provide a data base for future remedial actions at this site. About 1300 elevation data from published and unpublished reports, maps, and surveyors notes were compiled to generate maps and cross-sections of the surficial sediment/basalt contact. In general, an east to west trending depression exists in the south central portion of the SDA with basalt closer to land surface on the northern and southern boundaries of the SDA. The lowest elevation of the surficial sediment/basalt contact is 4979 ft and the greatest is land surface at 5012 ft. The median elevation of the sediment/basalt interface is 4994 ft. The median depth to basalt in the SDA is 16 ft if land surface elevation is assumed to be 5010 ft. The depth from land surface to the sediment/basalt interface ranges from 24 ft in the southeast corner of the SDA to less than 3 ft at the north-central boundary of the SDA.

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1.0 INTRODUCTION

The Radioactive Waste Management Complex (RWMC) is located in the southeastern portion of the Idaho National Engineering Laboratory (INEL) in Southeastern Idaho (Figure 1). The INEL covers about 894 mi² of the Eastern Snake River Plain. The Eastern Snake River Plain is an arcuate depression that ranges from 30- to 70-mi wide and is approximately 200-mi long. The plain has an average elevation of 4900 ft and is bounded by mountains and high plateaus.

The RWMC was established in 1952 and has served as a storage and disposal site for low-level and transuranic radioactive waste. Hazardous waste, primarily organic solvents, were disposed with the radioactive waste in the 1960's and 1970's. The RWMC is made up of two areas: the Subsurface Disposal Area (SDA) and the Transuranic Storage Area (TSA). This report will focus on the elevation of the surficial sediment/basalt contact within the SDA. The SDA contains waste materials disposed of below land surface within the surficial sediments in shallow pits, trenches, and soil vaults. The depth to basalt in the SDA has determined how and where wastes were buried at the SDA (Schmalz, 1972). From 1952 to 1970 wastes were often disposed directly on top of the basalt without a sediment layer underlying the waste. A two foot layer of sediment has been placed beneath waste buried after 1970 (Anonymous, 1985) since fine grained sediments attenuate the migration of waste materials.

Data presented in this report may be used to predict areas within the SDA which are more or less likely to allow migration of waste products into the underlying basalt. The depth to the surficial sediment/basalt contact or thickness of the surficial sediment can be used to calculate the total volume of sediment present at a given location.

1.1 Purpose and Scope

The purpose of this investigation is to define the elevation of the surficial sediment/basalt interface beneath the SDA at the RWMC using all pertinent information. This interface is referred to as the elevation of the basalt, the base of the surficial sediment, or the surficial sediment/basalt interface or contact. Plan-view drawings and cross-sections are used to present this information. This report builds upon work presented by Schmalz (1972), Barraclough (1976), Anonymous (1983), Laney et al. (1988), Rightmire and Lewis (1987), and Anderson and Lewis (1989), all of which generated figures presenting the depth of basalt. Several sources of unpublished data (primarily drawings) have also been used to complete this report.

1.2 Approach

Data on depth (elevation) of basalt at the SDA were compiled from 15 sources including published reports and unpublished drawings and documents. The reliability of the data sources were confirmed by cross-checking with other data sources, field checks, and from discussions with site personnel. Recorded coordinates, using the INEL Coordinate system, were input into the data base along with the elevation of the basalt. Appendix A contains a paper copy of the data base used to generate the drawings of the SDA. It contains over 1300 data points with easting, northing, elevation of basalt, and a reference as to the source of information. Some data sources contained information on land surface elevation and the depth to basalt from a measuring point. Data from drawings of the SDA were digitized to obtain the northing and easting for many sites within the SDA.

Drawings by Aerial Mapping Co. (1980, 1987) were used to determine the land surface elevation for the boreholes that were not surveyed. Elevations of the surficial sediment/basalt interface were calculated using depth below land surface along with the land surface elevation from the Aerial Mapping drawings. The drawing with the date closest to the date the borehole was drilled was used for the elevation determination. Soil recontouring efforts within the SDA in the 1980's has changed the land surface elevation up to 8

feet, making surface elevation determination difficult.

Data were input into a LOTUS data base and input into the SURFER (Golden Software Inc., 1989) plotting/contouring computer program for generating Figures 2 through 4. The contour maps were generated using the minimum curvature option and a smoothing function. Boundary points were placed outside the border of the SDA on approximate 500 ft intervals with known basalt elevations to provide reasonable contours near the borders of the SDA (Figure 5). The elevations for these points were estimated based on drilling data from wells outside the SDA. Figure 5 presents the locations of cross-sections A-A' to H-H' presented in Figures 6 through 12. All the north-south cross sections have the same scale and have the same end points as shown in Figure 5. The cross sections were digitized from the contour map presented in Figure 2. Land surface was approximated for these figures with a horizontal line at 5010 ft which is the average surface elevation in the SDA. It should be noted that the figures are presented with the contact of the surficial sediment/basalt interface intact within pits 17 through 20. Sediment and basalt was removed to an elevation of 4980 ft while excavating materials to construct these pits.

2.0 SOURCES OF DATA

Data on the elevation of the surficial sediment/basalt interface were obtained from 5 published reports and 10 unpublished sources. These data are compiled in Appendix A and a description of the sources of data are presented in subsequent sections.

2.1 Published Sources of Data

Data on the elevation of basalt within the SDA were obtained from 5 reports. Anderson and Lewis, 1989, compiled elevation data for the base of the surficial sediments from wells drilled into basalt at the RWMC from 1972 to 1989. These data were input directly into the data base and combined with the surveyed coordinates from wells presented in a drawing by Scott, 1988. Data from Hubbell et al., (1986, 1987) and Laney (1987) provide information on depths to basalt from shallow and deep wells drilled within the SDA. The

FIGURE 4: Elevation of Surficial Sediment/Basalt Contact Contour

Figure 5. Elevation of Surficial Sediment/Basalt Contact with Cross-Section Profiles.

SCALE 1 inch = 400 FEET

Figure 6. SDA Cross Section: Profile A-A'

Figure 7. SDA Cross Section: Profile B-B'

Figure 8. SDA Cross Section: Profile C-C'

Figure 9. SDA Cross Section: Profile D-D'

Figure 10. SDA Cross Section: Profile E-E'

Figure 11. SDA Cross Section: Profile F-F'

Figure 12. SDA Cross Section: Profile G-G'

coordinate and elevation data is compiled in a report by Paarmann, 1991. Coordinate and elevation data from all the published sources were taken from actual survey notes.

2.2 Unpublished Sources of Data

Ten sources of unpublished data were compiled to delineate the depth (elevation) of basalt. The unpublished sources are from maps and drawings of drill holes and exposures of the surficial sediment/basalt contact in the SDA.

Seven hundred and seventy one holes were augured in the eastern portion of the SDA in the late 1960's or 1970. The location and elevation of basalt was recorded in a series of 11 drawings (Idaho Nuclear Corporation, 1970 - Drawings 1230-BFG-003-1 through 11). Data from the Idaho Nuclear Corporation drawings were digitized using AutoCAD to obtain the coordinates and the data were combined with the elevation printed on the drawings. The Idaho Nuclear Corporation drawings were plotted at a scale of 1 inch equals 20 ft.

Johnson (1960) provides a drawing for the SDA showing depth of surficial sediments from auger holes drilled prior to 1960. Original surveyor notes are not available for this data. The locations of these auger holes were digitized off the original map to determine the northing and easting coordinates. The scale of the drawing is 1 inch equals 200 ft. Depths to basalt recorded as greater than 12.5 feet (marked as 12.5+) are included in the LOTUS data base but the elevations were not used in generation of Figures 2 through 13. Depths of basalt were input to the data base and the depth subtracted from the elevation at these sites from the drawing by Aerial Mapping Co., 1980. The Aerial Mapping Co. drawing provides the best estimate of the elevation at the time of placement of the borings. A map generated from these data was presented by Schmalz (1972).

Locations of "monitoring stations" were digitized from a drawing by Scott, 1991. The scale of the drawing is 1 inch equals approximately 143 ft. The drawing by Scott (1991) includes the location and depths to basalt in these holes. A report by Barraclough (1976) provided additional locations for

the access tubes labeled as "removed". Depth was subtracted from land surface elevation from the drawing by Aerial Mapping Co., 1980. Several monitoring stations still exist and the surveyed coordinates included in the data base.

Elevation of the surficial sediment/basalt interface was surveyed in the wall of open pits 17 through 20 in 1989. The data was input directly into the data base from survey notes by Sutherlin and King, 1989.

Soil vaults have been placed in the SDA at approximately 600 locations. Soil vaults are 1.5 to 5 ft diameter cylinders which are buried in the surficial sediments. Auger holes are drilled to the bottom of the surficial sediments, the depth recorded, at least two feet of sediment backfilled in the hole and then the vault placed in the hole. Soil vaults are installed in long rows at 4 to 20 ft intervals. Location of the soil vaults are measured in the field from the surveyed end markers. Data were obtained from numerous record books at the RWMC which contain the distance from a surveyed end marker and the depth of basalt. Surveyed end markers and distances were plotted and the information digitized to calculate the coordinates. Land surface elevation was taken from drawings produced by Aerial Mapping Co. (1980, 1987). Only a limited number of the soil vault row data points were obtained for soil vaults prior to 1982, since these records have been sent to records storage. Twenty soil vault rows have been placed in the SDA; however, data was only available for 360 points in Soil Vault Rows 9 through 20.

Twenty two auger holes were drilled through and around the asphalt pad of Pad A. Data were obtained from an original drawing by Bob Brown, recorded in 1986. Data were digitized from a photocopy of his drawing. This drawing has a scale of 1 inch equals 50 ft. The points were measured with a tape and the data referenced to land surface elevation (Aerial Mapping Co., 1987). The auger holes running down the center of Pad A use the land surface elevations from the asphalt pad and not sediment overlaying the pad, which is consistent with the field measurements.

Data were obtained from sonic drilled holes around the Acid Pit and Pit 9. All sonic drilled holes were surveyed with north-east coordinates and

elevation accurate to at least 0.1 ft. The depth to basalt was obtained from Kuhns (1992, personal communication).

2.3 Estimated Accuracy of Data

The relative accuracy of the various data sets have been estimated for the northing and easting coordinates and elevation. It is difficult to assign an absolute accuracy to any of the data except those points that were surveyed. Data from Anderson and Lewis (1989), Hubbell, et al. (1986, 1987), Paarmann et al. (1991), Sutherlin and King (1989) and Kuhns (1992), was obtained from actual surveyed sites which have the best accuracy of 0.1 ft or better. Data presented in Appendix A contains a column labeled "Reference Number" that corresponds to these references (refer to page A-2 for cross reference).

Northing and easting coordinates for data from Idaho Nuclear Corporation (1970), Johnson (1960), Brown (1986), and Scott (1991) were obtained from digitizing points from maps. The elevations were obtained by subtracting field measurements of depth to basalt from the elevation on drawings by Aerial Mapping Co. (1980, 1987). The elevations from the Aerial Mapping Co. contour maps are assumed to be plus or minus the contour interval (0.5 ft) or 1 ft. For points obtained from digitizing the northing and easting coordinates it is assumed that the maps are correct and the digitizing accuracy is within 1/10 (0.1) of an inch, using the scale of the map. The "relative accuracy" is then calculated by multiplying the scale in feet times 0.1. The drawing by Idaho Nuclear Corporation (1970) is at a scale of 1 inch equals 30 ft so the relative accuracy is within 3 ft. The drawing by Johnson (1960) has a scale of 1 inch equals 200 ft, so the relative accuracy is within 20 ft. Data from Brown (1986) is at a scale of 1 inch equals 50 ft, so the relative accuracy is within 5 ft. The monitoring stations presented in Scott (1991) are plotted at a scale of approximately 1 inch equals 143 feet, so the relative accuracy is 14 ft.

Yokuda (1991) estimated the accuracy of the surveyed markers for the soil vault rows. Rows 17 through 20 were surveyed in 1991 and are probably

accurate to within 0.1 ft, rows 9, 10, 11, 14 and 16 are probably accurate within plus or minus 4 ft, rows 12 and 13 are plus or minus 5 ft, and row 13 is plus or minus 5 ft in the north-south direction and plus or minus 30 feet in the east-west direction. Locations of the soil vaults were measured relative to these markers and were probably measured within a foot of the location.

2.3 Data Validation (Verification of Data)

Data used in this report were transcribed from various sources and placed in an ASCE file. All data in the ASCE file were checked against the original file or the original data. Data were plotted and checked for accurate locations and elevations.

3.0 CONCLUSIONS

The surface of the surficial sediment/basalt contact within the SDA ranges from an elevation of 4979 to 5012 ft. The mean elevation of the interface is 4994 ft. The depth to basalt from land surface varies from 0 to over 25 feet with a mean depth of 16 feet. The elevation of the basalt reflects the depositional pattern of the basalt flows, with sediment deposited on top of the basalt. The elevation of the surficial sediment/basalt interface is lowest in the central portion of the SDA near the eastern boundary and highest on the northern and southern borders of the SDA. Data from this report were input into the ERIS data base system.

5.0 ACKNOWLEDGEMENTS

I wish to acknowledge Mike Carpenter for digitizing data, inputting data into the database, and producing cross sections and plan view drawings for this report. I also want to thank Lee Frieburger, Mike Towler, Mary Walker, and Kent Sorenson for inputting data into the data base. I appreciate Kirk Dooley for supporting this project to get these data into a useable database. Mention of specific products and/or manufacturers in this document implies neither endorsement of preference nor disapproval by the U.S. Government, any of its agencies, or EG&G Idaho Inc. of the use of a specific product for any purpose.

6.0 REFERENCES

- Aerial Mapping Co. 1980, Idaho National Engineering Laboratory, Radioactive Waste Management Complex, Land Surface Contour Map of the Subsurface Disposal Area, Scale 1 inch equals 100 ft, contour interval 0.5 ft, April 8, 1980, Boise ID.
- Aerial Mapping Co., 1987, SDA-Contour Map, INEL (RWMC) SDA, Scale 1 inch equals 100 ft, Contour interval 0.5 ft, Index Number 098 0000 -- 601 356697, December 4, 1987, Boise ID.
- Anderson, S. R. and B. D. Lewis, 1989, Stratigraphy of the Unsaturated Zone at the Radioactive Waste Management Complex, Idaho National Engineering Laboratory, U. S. Geological Survey, Water Resources Investigations Report 89-4065, DOE/ID-22080.
- Anonymous, 1983, A Plan for Studies of Subsurface Radionuclide Migration at the Radioactive Waste Management Complex of the Idaho National Engineering Laboratory, Vol. 1 and 2, November, DOE/ID-i0116
- Anonymous, 1985, A History of the Radioactive Waste Management Complex at the Idaho National Engineering Laboratory, Internal Technical Report, WM-F1-81-003, Rev. 3, July.
- Barracough, J. T., J.B. Robertson, and V.J. Jazner, 1976, Hydrology of the Solid Waste Burial Ground, As Related to the Potential Migration of Radionuclides, Idaho National Engineering Laboratory, IDO-22056, August.
- Brown, B., 1986, Unpublished drawing of auger borings around Pad A.
- Golden Software, Inc., 1989, SURFER®, Reference Manual, Version 4.01, Golden Software, Inc., Golden, Colorado.
- Hubbell, J. M., L. C. Hull, T. G. Humphrey, B. F. Russell, J. R. Pittman, and P. R. Fischer, 1987, Annual Progress Report: FY-86, Subsurface Investigations Program at the Radioactive Waste Management Complex of the Idaho National Engineering Laboratory, DOE-ID 10153, Jan.
- Hubbell, J. M., L. C. Hull, T. G. Humphrey, B. F. Russell, J. R. Pittman, and R. M. Cannon, 1986, Annual Progress Report: FY-85, Subsurface Investigations Program at the Radioactive Waste Management Complex of the Idaho National Engineering Laboratory, DOE-ID 10136, Dec.
- Idaho Nuclear Corporation, 1970, Drawings entitled "Burial Ground Probe Hole Logs and Burial Elevations", Drawings Generated by Idaho Nuclear Corporation, DWG. NOS. 1230-BGF-003-1 to 1230-BEG-003-11, 11 figures.
- Johnson, B. M., 1960, Map of the SDA entitled "National Reactor Testing Station Plan of BURIAL GROUND AREA Showing SOIL PROFILE SURVEY", DWG No. BGF-001-IDO-2, sheet 1 of 1.

- Kuhns, D. L., 1992, Personal communication on depth to basalt in sonic drilled wells at the acid pit and Pit 9.
- Laney, P. T., S. C. Minkin, R. G. Baca, D. L. McElroy, J. M. Hubbell, L. C. Hull, B. F. Russell, and G. J. Stormberg, 1988, Annual Progress Report: FY-1987, Subsurface Investigations Program at the Radioactive Waste Management Complex of the Idaho National Engineering Laboratory, DOE-ID 10183, April.
- Paarmann, M. L., K. L. Ruebelmann and P. B. Swain, 1991, Radioactive Waste Management Complex Investigations Report, EGG-WM-9707, December, Chapter 3.
- Rightmire, C. T. and B. D. Lewis, 1987, Hydrogeology and Geochemistry of the Unsaturated Zone, Radioactive Waste Management Complex, Idaho National Engineering Laboratory, Idaho, U. S. Geological Survey, Water-Resources Investigations Report 87-4198, November, DOE/ID-22073.
- Schmalz, B. L., 1972, Radionuclide Distribution in Soil Mantle of the Lithosphere as a Consequence of Waste Disposal at the National Reactor Testing Station, IDO-10049, October.
- Scott, B. L. 1988, Drawing of RWMC entitled " RWMC BOREHOLE LOCATION", drawing number 426699, August.
- Scott, B. L., 1991, Drawing of RWMC entitled "RADIOACTIVE WASTE MANAGEMENT COMPLEX DIAGRAM", drawing Number 416511, drawn 3-9-82.
- Sutherlin and King, 1989, Surveying notes for job: SDA Monument Locations, 8/14/89 to 9/27/89, MK-Ferguson of Idaho Company
- Yokuda, E., 1991, Locations of Pits, Trenches, and Soil Vault Rows, Engineering Design File ERP WAG7 05, November.

APPENDIX A
COORDINATES AND ELEVATIONS OF THE SURFICIAL
SEDIMENT/BASALT CONTACT IN THE SDA

Data in Appendix A contain information used to calculate the elevation of basalt within the Subsurface Disposal Area, of the Radioactive Waste Management Complex. The data is referenced to various sources of data. The guide to the references are as follows:

Reference Number	Reference
1	Idaho Nuclear Corporation, 1970
2	Anderson and Lewis, 1989
3	Hubbell et al., 1986, 1987, Parmann et al. 1991
4	Sutherlin and King, 1989
5	Johnson, 1960, Aerial Mapping Co., 1980
6	Brown, 1986, Aerial Mapping Co., 1987
7	RWMC Notebooks-Soil Vault rows, Aerial Mapping Co., 1980 and 1987
8	Scott, 1991, Aerial Mapping Co., 1980
9	Kuhns, 1992

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP	Comments or Reference
1	1	266954.7	669197.2	4979.4	1			Idaho Nuclear Corporation, 1970
2	2	267768.0	668853.0	4981.6	1			
3	3	267441.8	669063.3	4982.6	1			
4	4	267842.4	668534.6	4982.6	1			
5	5	267387.7	669156.8	4982.8	1			
6	6	267865.4	669103.9	4983.2	1			
7	7	267373.2	669157.3	4983.3	1			
8	8	267774.2	668892.7	4983.3	1			
9	9	267344.0	669174.6	4983.4	1			
10	10	267357.7	669158.3	4984.3	1			
11	11	267576.1	668790.2	4984.3	1			
12	12	267908.3	669071.2	4984.5	1			
13	13	267907.8	669055.8	4984.5	1			
14	14	266939.3	669198.1	4984.6	1			
15	15	267878.5	669072.9	4984.6	1			
16	16	267877.8	669057.7	4984.6	1			
17	17	266825.7	669074.8	4984.7	1			
18	18	267519.3	668853.3	4984.7	1			
19	19	266855.7	669073.4	4984.8	1			
20	20	266869.9	669057.8	4984.8	1			
21	21	266840.0	669059.2	4984.8	1			
22	22	267359.0	669174.1	4984.8	1			
23	23	266841.8	669089.3	4984.9	1			
24	24	267767.1	668959.7	4984.9	1			
25	25	267826.0	668956.2	4984.9	1			
26	26	267938.9	669069.4	4984.9	1			
27	27	267937.9	669053.9	4984.9	1			
28	28	267631.7	668726.7	4985.0	1			
29	29	267924.1	669070.0	4985.0	1			
30	30	266692.0	669098.3	4985.1	1			
31	31	266854.3	669043.1	4985.1	1			
32	32	267958.3	669128.4	4985.1	1			
33	33	267987.5	669126.8	4985.1	1			
34	34	268050.7	669183.0	4985.1	1			
35	35	267883.7	668892.6	4985.1	1			
36	36	267357.1	669144.1	4985.2	1			
37	37	267372.1	669143.3	4985.2	1			
38	38	268017.8	669124.7	4985.2	1			
39	39	267955.4	669098.3	4985.2	1			
40	40	268058.3	669190.9	4985.2	1			
41	41	266827.2	669104.8	4985.3	1			
42	42	268021.3	669184.7	4985.3	1			
43	43	267985.4	669096.3	4985.3	1			
44	44	268069.0	669227.1	4985.3	1			
45	45	268067.8	669218.8	4985.3	1			
46	46	266938.5	669183.6	4985.4	1			
47	47	268015.9	669094.6	4985.4	1			
48	48	268077.3	669247.8	4985.4	1			
49	49	268072.3	669232.8	4985.4	1			

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
50	50	268034.9	669119.0	4985.4	1		
51	51	268015.9	669094.2	4985.4	1		
52	52	268020.6	669075.9	4985.4	1		
53	53	268016.3	669061.8	4985.4	1		
54	54	268010.9	669048.2	4985.4	1		
55	55	266797.7	669106.6	4985.5	1		
56	56	267329.1	669175.6	4985.5	1		
57	57	267386.9	669142.2	4985.5	1		
58	58	268030.0	669104.3	4985.5	1		
59	59	268025.6	669090.6	4985.5	1		
60	60	268091.3	669290.6	4985.6	1		
61	61	267964.5	668905.4	4985.6	1		
62	62	267359.7	669188.9	4985.7	1		
63	63	267961.8	669188.4	4985.7	1		
64	64	267887.2	668952.2	4985.7	1		
65	65	267865.7	668606.2	4985.7	1		
66	66	267470.7	669036.1	4985.8	1		
67	67	267894.2	669071.9	4985.8	1		
68	68	267771.9	669049.3	4985.9	1		
69	69	267763.3	668899.7	4986.0	1		
70	70	267763.3	668899.7	4986.0	1		
71	71	266968.4	669181.8	4986.0	1		
72	72	267822.7	668896.6	4986.0	1		
73	73	268063.1	669204.2	4986.0	1		
74	74	267953.9	669068.1	4986.1	1		
75	75	267057.4	669160.9	4986.2	1		
76	76	267597.8	669149.4	4986.2	1		
77	77	267345.0	669189.7	4986.2	1		
78	78	267468.5	669006.9	4986.2	1		
79	79	267438.5	669008.6	4986.2	1		
80	80	268096.1	669305.8	4986.2	1		
81	81	267329.5	669190.3	4986.3	1		
82	82	267373.9	669172.8	4986.3	1		
83	83	267406.8	668980.9	4986.3	1		
84	84	267926.9	669130.4	4986.4	1		
85	85	267925.3	669100.5	4986.4	1		
86	86	268016.3	669061.8	4986.4	1		
87	87	267411.7	669065.1	4986.5	1		
88	88	267466.7	668977.8	4986.5	1		
89	89	267481.1	668961.4	4986.5	1		
90	90	267965.2	669248.6	4986.6	1		
91	91	267043.5	668864.6	4986.7	1		
92	92	267297.2	669147.8	4986.7	1		
93	93	267386.1	669126.6	4986.7	1		
94	94	267473.8	669091.9	4986.7	1		
95	95	267496.5	668975.6	4986.7	1		
96	96	266969.3	669196.6	4986.8	1		
97	97	267835.8	669105.3	4986.8	1		

Number	Map ID	Easting	Northing	Basalt Ref Elevation	MP Elev.	Depth Below MP
98	98	267314.3	669176.5	4986.8	1	
99	99	267428.3	669094.5	4986.8	1	
100	100	266868.2	669027.7	4986.9	1	
101	101	267375.2	669188.2	4986.9	1	
102	102	267579.8	668850.2	4986.9	1	
103	103	267867.5	668653.3	4986.9	1	
104	104	267315.2	669191.7	4987.0	1	
105	105	267293.6	669102.8	4987.1	1	
106	106	267440.5	669038.7	4987.1	1	
107	107	267590.3	669029.8	4987.1	1	
108	108	267959.6	668890.9	4987.1	1	
109	109	267308.5	669102.0	4987.2	1	
110	110	267740.7	668539.7	4987.2	1	
111	111	267897.8	669132.0	4987.2	1	
112	112	268081.8	669261.9	4987.2	1	
113	113	267452.6	668993.8	4987.3	1	
114	114	268088.4	669300.9	4987.3	1	
115	115	267800.7	668535.9	4987.5	1	
116	116	266781.9	669092.9	4987.5	1	
117	117	267299.0	669177.6	4987.5	1	
118	118	267298.0	669161.9	4987.5	1	
119	119	267447.0	669138.6	4987.5	1	
120	120	267514.3	669019.4	4987.6	1	
121	121	267901.2	669192.1	4987.6	1	
122	122	267875.1	668634.6	4987.6	1	
123	123	267029.5	668870.1	4987.7	1	
124	124	267896.0	669102.1	4987.7	1	
125	125	267832.5	668506.2	4987.7	1	
126	126	267057.4	668859.6	4987.8	1	
127	127	267343.0	669159.3	4987.8	1	
128	128	267477.4	669136.4	4987.8	1	
129	129	267461.3	669122.8	4987.8	1	
130	130	267454.4	669022.8	4987.8	1	
131	131	267870.3	668620.3	4987.8	1	
132	132	266953.8	669182.8	4987.9	1	
133	133	267001.1	668880.2	4987.9	1	
134	134	267313.5	669161.3	4987.9	1	
135	135	267312.4	669146.2	4987.9	1	
136	136	267401.3	669126.3	4987.9	1	
137	137	267371.0	669127.8	4987.9	1	
138	138	266706.4	669005.9	4988.1	1	
139	139	267327.2	669145.9	4988.1	1	
140	140	267833.9	669075.1	4988.2	1	
141	141	267398.7	669096.6	4988.2	1	
142	142	267413.9	669095.9	4988.2	1	
143	143	267464.8	668947.4	4988.2	1	
144	144	267833.4	669075.8	4988.2	1	
145	145	266677.7	669113.7	4988.3	1	
146	146	267402.4	669141.3	4988.3	1	

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
147	147	267415.5	669110.6	4988.3	1		
148	148	267430.4	669109.4	4988.3	1		
149	149	267494.7	668945.7	4988.3	1		
150	150	267801.8	669047.6	4988.3	1		
151	151	267863.7	669073.9	4988.3	1		
152	152	267505.4	668931.2	4988.3	1		
153	153	267420.9	668965.1	4988.4	1		
154	154	267769.8	669018.6	4988.4	1		
155	155	268104.4	669315.6	4988.4	1		
156	156	267384.9	669112.1	4988.5	1		
157	157	267383.7	669097.5	4988.5	1		
158	158	267807.6	668655.9	4988.5	1		
159	159	267748.0	668659.3	4988.5	1		
160	160	266847.8	669103.2	4988.6	1		
161	161	267456.1	669053.1	4988.7	1		
162	162	267969.4	669082.2	4988.7	1		
163	163	268053.6	669176.3	4988.7	1		
164	164	266912.2	669009.7	4988.8	1		
165	165	267295.2	669117.5	4988.8	1		
166	166	267909.4	669086.1	4988.8	1		
167	167	266973.2	668890.8	4988.9	1		
168	168	267478.3	669152.1	4988.9	1		
169	169	267342.2	669144.9	4988.9	1		
170	170	267400.4	669111.2	4988.9	1		
171	171	267884.5	668662.9	4988.9	1		
172	172	267403.1	669156.0	4989.0	1		
173	173	267861.0	668591.9	4989.1	1		
174	174	267837.6	668520.4	4989.1	1		
175	175	266903.6	668933.1	4989.2	1		
176	176	267326.0	669129.9	4989.2	1		
177	177	267410.7	669040.3	4989.2	1		
178	178	267811.8	668715.8	4989.2	1		
179	179	267879.9	668649.2	4989.2	1		
180	180	266917.6	669099.6	4989.3	1		
181	181	266812.5	669091.2	4989.3	1		
182	182	267804.3	669077.0	4989.3	1		
183	183	267290.2	669046.9	4989.3	1		
184	184	267436.2	668979.5	4989.3	1		
185	185	267376.5	668983.2	4989.3	1		
186	186	267803.7	669077.1	4989.3	1		
187	187	268033.6	669138.5	4989.3	1		
188	188	266103.2	669211.3	4989.4	1		
189	189	267404.7	669186.6	4989.4	1		
190	190	267296.3	669131.9	4989.4	1		
191	191	267443.5	669093.5	4989.4	1		
192	192	268025.1	669244.9	4989.4	1		
193	193	268086.8	669271.3	4989.4	1		
194	194	267311.3	669131.4	4989.5	1		
195	195	267489.2	669091.0	4989.5	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
196	196	267426.4	669054.8	4989.5	1		
197	197	268086.2	669276.7	4989.5	1		
198	198	267416.2	669125.4	4989.6	1		
199	199	267621.2	668546.6	4989.6	1		
200	200	267939.7	669084.1	4989.6	1		
201	201	267512.9	668989.9	4989.7	1		
202	202	267774.4	669078.8	4989.9	1		
203	203	267424.3	669025.0	4989.9	1		
204	204	267773.2	669079.4	4989.9	1		
205	205	266619.4	669116.7	4990.0	1		
206	206	266987.3	668885.4	4990.0	1		
207	207	267299.9	669192.4	4990.0	1		
208	208	266959.3	668895.9	4990.1	1		
209	209	266089.9	669233.7	4990.1	1		
210	210	266959.3	668895.9	4990.1	1		
211	211	267388.8	669172.1	4990.1	1		
212	212	267515.8	668793.6	4990.1	1		
213	213	267817.7	669061.3	4990.1	1		
214	214	267739.0	668684.9	4990.1	1		
215	215	267628.5	668666.9	4990.2	1		
216	216	267624.8	668606.9	4990.2	1		
217	217	266131.0	669201.3	4990.2	1		
218	218	266898.2	669026.1	4990.2	1		
219	219	266917.6	668927.8	4990.2	1		
220	220	267484.3	669021.1	4990.2	1		
221	221	267450.6	668963.2	4990.2	1		
222	222	266088.7	669216.7	4990.3	1		
223	223	267029.2	669193.0	4990.3	1		
224	224	266885.8	669071.2	4990.3	1		
225	225	266883.8	669041.4	4990.3	1		
226	226	267819.8	669090.4	4990.3	1		
227	227	267370.6	669113.2	4990.3	1		
228	228	267391.2	668967.0	4990.3	1		
229	229	267219.7	668871.7	4990.3	1		
230	230	267879.5	669087.9	4990.3	1		
231	231	267893.7	669072.1	4990.3	1		
232	232	267892.3	669042.5	4990.3	1		
233	233	266889.3	668921.9	4990.4	1		
234	234	267462.2	669137.7	4990.4	1		
235	235	267924.1	669070.0	4990.4	1		
236	236	267922.0	669040.4	4990.4	1		
237	237	267418.0	669155.3	4990.5	1		
238	238	267530.3	669033.5	4990.5	1		
239	239	267498.7	669005.1	4990.5	1		
240	240	267685.0	668603.2	4990.6	1		
241	241	266889.5	668938.5	4990.6	1		
242	242	267759.9	668839.6	4990.6	1		
243	243	267127.8	668833.7	4990.7	1		
244	244	267500.3	669035.0	4990.7	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
245	245	267787.6	669063.3	4990.7	1		
246	246	267128.9	668850.4	4990.8	1		
247	247	267404.6	668950.9	4990.8	1		
248	248	266984.4	669195.3	4990.9	1		
249	249	266871.9	669087.8	4990.9	1		
250	250	266874.3	668927.1	4990.9	1		
251	251	267460.4	669107.8	4990.9	1		
252	252	267445.3	669108.3	4991.0	1		
253	253	267955.0	668876.4	4991.0	1		
254	254	266132.3	669217.9	4991.1	1		
255	255	267507.9	669150.0	4991.1	1		
256	256	267417.2	669140.4	4991.1	1		
257	257	267262.2	669074.7	4991.2	1		
258	258	267291.7	669072.3	4991.2	1		
259	259	267320.5	669045.7	4991.2	1		
260	260	267848.3	669314.8	4991.3	1		
261	261	267431.1	669124.5	4991.3	1		
262	262	267355.2	669113.8	4991.3	1		
263	263	267458.6	669092.7	4991.3	1		
264	264	267815.8	668775.9	4991.3	1		
265	265	267444.6	668617.4	4991.4	1		
266	266	267844.6	669254.8	4991.4	1		
267	267	267404.2	669171.5	4991.4	1		
268	268	267523.1	669149.1	4991.4	1		
269	269	267447.7	669153.8	4991.4	1		
270	270	267310.3	669116.4	4991.4	1		
271	271	267350.4	669043.8	4991.4	1		
272	272	267375.3	668952.6	4991.4	1		
273	273	267446.2	669123.4	4991.5	1		
274	274	267356.0	669128.6	4991.5	1		
275	275	267459.4	668857.1	4991.5	1		
276	276	268028.7	669304.9	4991.5	1		
277	277	266116.9	669206.6	4991.6	1		
278	278	266999.1	669194.6	4991.6	1		
279	279	266722.1	669096.9	4991.6	1		
280	280	267419.2	669170.5	4991.6	1		
281	281	267493.2	669150.8	4991.7	1		
282	282	267323.5	669101.1	4991.7	1		
283	283	267015.3	668875.2	4991.8	1		
284	284	267837.6	669134.7	4991.8	1		
285	285	267508.9	669165.1	4991.8	1		
286	286	267341.1	669129.4	4991.8	1		
287	287	267434.6	668949.3	4991.8	1		
288	288	267681.9	669054.6	4991.8	1		
289	289	266144.7	669195.7	4991.9	1		
290	290	267396.4	669056.4	4991.9	1		
291	291	267422.7	668995.4	4991.9	1		
292	292	267729.7	668648.5	4991.9	1		
293	293	267419.9	669185.9	4992.0	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
294	294	267389.6	669187.6	4992.0	1		
295	295	267681.0	668543.2	4992.0	1		
296	296	267968.7	669309.0	4992.0	1		
297	297	267849.3	669089.8	4992.0	1		
298	298	267983.9	669066.3	4992.0	1		
299	299	268039.4	669133.3	4992.0	1		
300	300	267014.8	669193.8	4992.1	1		
301	301	267058.8	668876.1	4992.1	1		
302	302	267276.1	669063.6	4992.1	1		
303	303	268048.9	669161.7	4992.1	1		
304	304	266523.3	669055.1	4992.2	1		
305	305	267043.5	669177.3	4992.2	1		
306	306	267058.2	669176.5	4992.2	1		
307	307	267394.5	669026.7	4992.2	1		
308	308	267392.6	668996.8	4992.2	1		
309	309	267523.2	668913.9	4992.3	1		
310	310	267044.2	669191.9	4992.4	1		
311	311	267169.1	669184.3	4992.4	1		
312	312	267113.3	668838.9	4992.4	1		
313	313	267781.1	669198.8	4992.4	1		
314	314	267524.2	669164.4	4992.4	1		
315	315	267432.0	669139.8	4992.4	1		
316	316	267507.1	669134.9	4992.4	1		
317	317	267381.0	669041.7	4992.4	1		
318	318	267856.7	668577.6	4992.4	1		
319	319	267568.2	668670.6	4992.5	1		
320	320	266951.6	669153.2	4992.5	1		
321	321	266974.4	668907.2	4992.5	1		
322	322	267650.4	669026.0	4992.5	1		
323	323	267908.1	669312.7	4992.5	1		
324	324	267044.4	668881.3	4992.6	1		
325	325	267408.3	669010.6	4992.6	1		
326	326	267973.1	668933.6	4992.6	1		
327	327	267504.7	668614.1	4992.7	1		
328	328	266899.9	669055.9	4992.7	1		
329	329	267071.5	668854.1	4992.7	1		
330	330	267744.8	668599.5	4992.8	1		
331	331	266104.2	669228.8	4992.8	1		
332	332	267340.6	669115.0	4992.8	1		
333	333	267364.8	669028.3	4992.8	1		
334	334	266158.9	669190.8	4992.9	1		
335	335	267042.7	669162.4	4992.9	1		
336	336	267353.9	669099.1	4992.9	1		
337	337	267905.0	669252.4	4992.9	1		
338	338	267030.5	668886.7	4993.0	1		
339	339	267832.7	669060.6	4993.0	1		
340	340	267847.3	669059.4	4993.0	1		
341	341	267992.0	668991.2	4993.0	1		
342	342	267028.3	669178.4	4993.1	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
343	343	266692.8	669010.7	4993.1	1		
344	344	267072.5	668871.1	4993.1	1		
345	345	267086.0	668848.9	4993.1	1		
346	346	267482.7	668991.8	4993.1	1		
347	347	267343.1	668924.5	4993.1	1		
348	348	267451.7	668738.0	4993.1	1		
349	349	267027.2	669163.3	4993.2	1		
350	350	267712.1	669052.6	4993.2	1		
351	351	267968.8	669067.7	4993.2	1		
352	352	267968.0	669051.8	4993.2	1		
353	353	267828.0	668492.6	4993.2	1		
354	354	267114.8	668855.7	4993.3	1		
355	355	266983.5	669180.9	4993.3	1		
356	356	266887.0	669101.5	4993.3	1		
357	357	267114.6	668855.3	4993.3	1		
358	358	267325.4	669115.8	4993.3	1		
359	359	267741.4	669051.5	4993.3	1		
360	360	267866.8	669134.1	4993.3	1		
361	361	267789.8	669092.2	4993.4	1		
362	362	267274.5	669034.0	4993.4	1		
363	363	268006.1	669033.8	4993.4	1		
364	364	266173.3	669185.4	4993.5	1		
365	365	267369.0	669097.9	4993.5	1		
366	366	267378.7	669012.1	4993.5	1		
367	367	267511.5	668734.3	4993.5	1		
368	368	267998.6	669065.9	4993.5	1		
369	369	267997.9	669050.4	4993.5	1		
370	370	266901.7	669086.1	4993.6	1		
371	371	267345.1	668954.8	4993.6	1		
372	372	267586.8	668970.1	4993.6	1		
373	373	266368.1	669130.4	4993.7	1		
374	374	267193.8	669183.1	4993.7	1		
375	375	267178.1	669169.1	4993.7	1		
376	376	267492.2	669135.9	4993.7	1		
377	377	267475.8	669106.8	4993.7	1		
378	378	267304.8	669031.9	4993.7	1		
379	379	267528.1	669003.4	4993.8	1		
380	380	267134.5	669186.2	4993.8	1		
381	381	267149.1	669185.4	4993.8	1		
382	382	267177.0	669154.0	4993.8	1		
383	383	267016.3	668891.8	4993.8	1		
384	384	266902.8	668916.6	4993.8	1		
385	385	267099.7	668844.1	4993.8	1		
386	386	267246.6	669065.5	4993.8	1		
387	387	267334.5	669030.4	4993.8	1		
388	388	267242.8	669005.9	4993.8	1		
389	389	268011.8	669035.2	4993.8	1		
390	390	266188.3	669197.6	4993.9	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
391	391	267014.0	669178.9	4993.9	1		
392	392	267163.3	669170.1	4993.9	1		
393	393	267059.1	669190.6	4994.0	1		
394	394	266795.6	669076.7	4994.0	1		
395	395	267223.1	668931.4	4994.0	1		
396	396	267757.6	669065.2	4994.0	1		
397	397	267104.5	669188.1	4994.1	1		
398	398	266998.3	669180.1	4994.1	1		
399	399	267073.5	669175.3	4994.1	1		
400	400	266997.2	669165.1	4994.1	1		
401	401	266664.6	669021.6	4994.1	1		
402	402	266988.2	668902.1	4994.1	1		
403	403	266916.9	668911.8	4994.1	1		
404	404	266944.8	668901.4	4994.1	1		
405	405	267476.1	669121.8	4994.1	1		
406	406	267486.3	669050.9	4994.1	1		
407	407	267969.0	668919.1	4994.1	1		
408	408	266466.5	669076.6	4994.2	1		
409	409	267119.2	669187.3	4994.2	1		
410	410	267012.7	669164.2	4994.2	1		
411	411	266932.1	668922.7	4994.2	1		
412	412	267002.3	668897.2	4994.2	1		
413	413	267382.1	669067.1	4994.2	1		
414	414	267244.4	669035.7	4994.2	1		
415	415	266767.8	669108.5	4994.3	1		
416	416	266947.3	669097.6	4994.3	1		
417	417	268044.4	669147.4	4994.3	1		
418	418	266496.4	669082.9	4994.4	1		
419	419	266967.0	669151.9	4994.4	1		
420	420	266931.6	669083.9	4994.4	1		
421	421	266914.2	669039.7	4994.4	1		
422	422	266650.2	669026.4	4994.4	1		
423	423	267788.6	669318.4	4994.4	1		
424	424	267831.6	669045.8	4994.4	1		
425	425	267583.2	668909.9	4994.4	1		
426	426	267997.1	669005.1	4994.4	1		
427	427	266481.8	669088.3	4994.5	1		
428	428	266509.8	669078.0	4994.5	1		
429	429	267148.2	669170.7	4994.5	1		
430	430	267041.4	669147.7	4994.5	1		
431	431	266649.4	669010.2	4994.5	1		
432	432	267572.1	668730.3	4994.5	1		
433	433	268048.8	669152.6	4994.5	1		
434	434	267988.2	668976.7	4994.5	1		
435	435	267871.6	668712.9	4994.5	1		
436	436	267723.0	668617.9	4994.5	1		
437	437	267447.8	668677.4	4994.6	1		
438	438	266552.6	669061.9	4994.6	1		
439	439	267103.8	669173.4	4994.6	1		

Number	Map ID	Easting	Northing	Basalt Ref Elevation	MP Elev.	Depth Below MP
440	440	266647.5	669115.7	4994.6	1	
441	441	266945.0	669067.9	4994.6	1	
442	442	267432.7	669154.4	4994.6	1	
443	443	267396.7	668800.9	4994.6	1	
444	444	267072.0	669145.9	4994.7	1	
445	445	266960.3	668912.5	4994.7	1	
446	446	267101.1	668860.9	4994.7	1	
447	447	267852.0	668563.0	4994.7	1	
448	448	267804.3	668596.0	4994.8	1	
449	449	266117.8	669223.4	4994.8	1	
450	450	266982.8	669166.1	4994.8	1	
451	451	266707.7	669111.9	4994.8	1	
452	452	267331.6	668744.9	4994.8	1	
453	453	266580.7	669051.6	4994.9	1	
454	454	266537.3	669049.9	4994.9	1	
455	455	267074.3	669190.1	4994.9	1	
456	456	267089.5	669188.8	4994.9	1	
457	457	266928.2	669024.4	4994.9	1	
458	458	267142.5	668844.8	4994.9	1	
459	459	267552.8	669147.4	4994.9	1	
460	460	267241.0	668975.4	4994.9	1	
461	461	266202.5	669192.2	4995.0	1	
462	462	267026.6	669148.2	4995.0	1	
463	463	266961.7	669082.5	4995.0	1	
464	464	266942.2	669007.9	4995.0	1	
465	465	266636.3	669031.8	4995.0	1	
466	466	266875.2	668943.3	4995.0	1	
467	467	266635.6	669015.1	4995.0	1	
468	468	267339.0	669099.8	4995.0	1	
469	469	267321.9	669070.8	4995.0	1	
470	470	267953.9	669068.1	4995.0	1	
471	471	267952.3	669038.6	4995.0	1	
472	472	267514.8	668960.4	4995.0	1	
473	473	266915.8	669069.6	4995.1	1	
474	474	266930.0	669054.2	4995.1	1	
475	475	267086.7	668865.7	4995.1	1	
476	476	267257.1	668990.0	4995.1	1	
477	477	267846.7	668548.9	4995.1	1	
478	478	266187.1	669180.4	4995.2	1	
479	479	267118.1	669172.7	4995.2	1	
480	480	267133.6	669171.8	4995.2	1	
481	481	267147.2	669156.1	4995.2	1	
482	482	266766.0	669078.6	4995.2	1	
483	483	266823.8	669044.9	4995.2	1	
484	484	267829.8	669015.4	4995.2	1	
485	485	266452.5	669081.7	4995.3	1	
486	486	266579.6	669034.3	4995.3	1	
487	487	267088.5	669174.6	4995.3	1	
488	488	267162.3	669155.1	4995.3	1	

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
489	489	266946.2	668917.6	4995.3	1		
490	490	268001.7	669019.6	4995.3	1		
491	491	267889.5	668676.7	4995.3	1		
492	492	266480.7	669070.8	4995.4	1		
493	493	267056.5	669146.5	4995.4	1		
494	494	267101.3	669143.9	4995.4	1		
495	495	266720.5	669000.4	4995.4	1		
496	496	266860.7	668932.1	4995.4	1		
497	497	267306.3	669061.9	4995.4	1		
498	498	267404.0	668920.9	4995.4	1		
499	499	266453.5	669098.9	4995.5	1		
500	500	266538.4	669067.3	4995.5	1		
501	501	266566.3	669039.8	4995.5	1		
502	502	267117.2	669157.6	4995.5	1		
503	503	266662.0	669100.2	4995.5	1		
504	504	267538.0	669148.1	4995.5	1		
505	505	267444.9	668753.6	4995.5	1		
506	506	266981.7	669151.4	4995.6	1		
507	507	266996.7	669149.9	4995.6	1		
508	508	267012.1	669149.3	4995.6	1		
509	509	267539.8	669178.2	4995.6	1		
510	510	267086.8	669144.8	4995.7	1		
511	511	267116.6	669142.9	4995.7	1		
512	512	267131.6	669142.3	4995.7	1		
513	513	266736.2	669080.1	4995.7	1		
514	514	266956.8	668991.9	4995.7	1		
515	515	267978.2	668948.1	4995.7	1		
516	516	266467.9	669093.4	4995.8	1		
517	517	267102.3	669158.6	4995.8	1		
518	518	267132.4	669156.4	4995.8	1		
519	519	267161.0	669139.9	4995.8	1		
520	520	267471.9	669061.6	4995.8	1		
521	521	267983.9	669066.3	4995.8	1		
522	522	267981.5	669036.6	4995.8	1		
523	523	266958.1	669022.1	4995.9	1		
524	524	266439.5	669104.3	4996.0	1		
525	525	266494.4	669065.7	4996.0	1		
526	526	267176.2	669139.3	4996.0	1		
527	527	267950.5	668862.4	4996.0	1		
528	528	267983.0	668962.6	4996.0	1		
529	529	266567.0	669056.8	4996.1	1		
530	530	266509.0	669060.4	4996.1	1		
531	531	267433.7	669169.5	4996.1	1		
532	532	267228.8	669021.6	4996.1	1		
533	533	267339.3	668864.3	4996.1	1		
534	534	266382.7	669125.6	4996.2	1		
535	535	266438.3	669087.0	4996.2	1		
536	536	266960.0	669052.2	4996.2	1		
537	537	267841.1	669194.9	4996.2	1		

Number	Map ID	Easting	Northing	Basalt Ref Elevation	MP Elev.	Depth Below MP
538	538	267539.0	669163.1	4996.2	1	
539	539	267348.7	669014.3	4996.2	1	
540	540	267211.5	668752.1	4996.2	1	
541	541	267391.8	668741.4	4996.2	1	
542	542	266524.2	669072.6	4996.3	1	
543	543	266609.1	669040.9	4996.3	1	
544	544	266810.3	669061.1	4996.3	1	
545	545	266943.8	669037.7	4996.3	1	
546	546	267346.8	668984.9	4996.3	1	
547	547	266594.5	669046.3	4996.4	1	
548	548	266367.8	669113.3	4996.4	1	
549	549	267261.2	669048.8	4996.4	1	
550	550	266551.2	669044.9	4996.5	1	
551	551	266752.2	669094.9	4996.5	1	
552	552	266805.1	668969.7	4996.5	1	
553	553	266719.9	668984.7	4996.5	1	
554	554	266832.5	668942.7	4996.5	1	
555	555	267552.0	669132.5	4996.5	1	
556	556	267510.6	668959.4	4996.5	1	
557	557	266146.2	669212.8	4996.6	1	
558	558	267526.3	668973.9	4996.6	1	
559	559	267863.9	669073.8	4996.6	1	
560	560	267861.7	669044.3	4996.6	1	
561	561	267537.9	669045.5	4996.6	1	
562	562	266354.3	669135.8	4996.7	1	
563	563	267554.7	669177.5	4996.7	1	
564	564	267501.9	669059.4	4996.7	1	
565	565	267336.9	669060.1	4996.7	1	
566	566	267463.3	668917.3	4996.7	1	
567	567	267333.2	669000.8	4996.8	1	
568	568	267652.2	669056.4	4996.8	1	
569	569	267823.1	668477.6	4996.8	1	
570	570	266623.1	669035.6	4996.9	1	
571	571	267434.5	669184.6	4996.9	1	
572	572	267283.0	668927.9	4996.9	1	
573	573	267336.1	668804.1	4996.9	1	
574	574	267621.8	669058.3	4996.9	1	
575	575	267707.0	668962.6	4996.9	1	
576	576	266174.0	669202.4	4997.0	1	
577	577	267806.3	669107.1	4997.0	1	
578	578	267363.2	668998.9	4997.0	1	
579	579	267710.0	669022.6	4997.0	1	
580	580	267818.7	668836.1	4997.0	1	
581	581	267462.8	669152.3	4997.1	1	
582	582	266677.7	668999.8	4997.2	1	
583	583	266691.7	668994.5	4997.2	1	
584	584	266353.6	669118.8	4997.3	1	
585	585	266861.5	668949.1	4997.3	1	
586	586	267491.2	669120.9	4997.4	1	

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
587	587	267591.8	669054.6	4997.4	1		
588	588	267647.1	668966.4	4997.4	1		
589	589	267768.9	668815.3	4997.4	1		
590	590	266705.7	668989.6	4997.5	1		
591	591	267601.5	669209.2	4997.5	1		
592	592	267524.7	669179.3	4997.5	1		
593	593	267522.3	669134.1	4997.5	1		
594	594	267352.1	669068.7	4997.5	1		
595	595	267224.6	668961.4	4997.5	1		
596	596	267894.2	668691.9	4997.5	1		
597	597	267753.5	668738.6	4997.5	1		
598	598	266780.3	669062.8	4997.6	1		
599	599	266339.3	669124.3	4997.7	1		
600	600	267494.0	669165.9	4997.7	1		
601	601	267553.9	669162.3	4997.7	1		
602	602	267366.5	669058.4	4997.7	1		
603	603	267318.3	669016.4	4997.7	1		
604	604	266737.5	669109.9	4997.8	1		
605	605	266734.3	668979.3	4997.8	1		
606	606	267507.9	668673.9	4997.9	1		
607	607	266678.6	669015.8	4997.9	1		
608	608	266663.8	669004.7	4997.9	1		
609	609	266159.9	669207.4	4998.0	1		
610	610	266339.9	669140.9	4998.0	1		
611	611	266593.9	669029.0	4998.0	1		
612	612	267531.5	669058.1	4998.0	1		
613	613	267361.0	668968.8	4998.0	1		
614	614	267945.6	668848.3	4998.0	1		
615	615	267903.8	668720.4	4998.0	1		
616	616	267537.2	669133.1	4998.1	1		
617	617	267808.2	669136.7	4998.2	1		
618	618	267490.7	669105.8	4998.2	1		
619	619	267314.7	668956.4	4998.2	1		
620	620	267879.6	668832.3	4998.2	1		
621	621	267727.8	669067.1	4998.3	1		
622	622	267692.3	668722.9	4998.3	1		
623	623	267875.9	668772.6	4998.3	1		
624	624	267564.7	668610.4	4998.5	1		
625	625	267898.8	668705.9	4998.5	1		
626	626	266201.5	669174.8	4998.6	1		
627	627	266833.3	668959.1	4998.6	1		
628	628	267216.1	668811.3	4998.6	1		
629	629	267503.8	669090.2	4998.7	1		
630	630	267668.8	669325.3	4998.8	1		
631	631	266410.8	669115.0	4998.9	1		
632	632	266804.4	668953.2	4998.9	1		
633	633	267258.7	669019.7	4998.9	1		
634	634	266215.5	669170.0	4999.0	1		
635	635	266215.2	669170.1	4999.0	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
636	636	267276.0	668807.9	4999.0	1		
637	637	266396.0	669120.1	4999.1	1		
638	638	266423.8	669092.4	4999.1	1		
639	639	266818.4	668947.8	4999.1	1		
640	640	267448.8	669168.6	4999.1	1		
641	641	266847.2	668953.9	4999.2	1		
642	642	266748.3	668974.3	4999.2	1		
643	643	267463.9	669167.6	4999.2	1		
644	644	267941.1	668833.9	4999.2	1		
645	645	266762.7	668985.1	4999.3	1		
646	646	267776.0	669108.9	4999.3	1		
647	647	267509.7	669180.4	4999.3	1		
648	648	267505.5	669105.1	4999.3	1		
649	649	267667.8	669070.7	4999.3	1		
650	650	266621.9	669018.4	4999.4	1		
651	651	267479.0	669166.8	4999.4	1		
652	652	267636.0	668786.4	4999.4	1		
653	653	267751.7	668719.4	4999.4	1		
654	654	266216.4	669186.8	4999.5	1		
655	655	267912.8	668748.8	4999.5	1		
656	656	267907.8	668733.8	4999.5	1		
657	657	266748.7	668990.0	4999.6	1		
658	658	266776.1	668963.7	4999.6	1		
659	659	266396.0	669102.9	4999.7	1		
660	660	266607.8	669023.9	4999.7	1		
661	661	267506.0	669120.3	4999.7	1		
662	662	267640.0	668846.5	4999.7	1		
663	663	266424.8	669109.4	4999.8	1		
664	664	266790.2	668958.4	4999.8	1		
665	665	267725.0	669261.8	4999.8	1		
666	666	267759.8	669094.2	4999.8	1		
667	667	267638.0	669072.6	4999.8	1		
668	668	266777.0	668979.9	4999.9	1		
669	669	266791.2	668974.8	4999.9	1		
670	670	267657.4	669145.7	4999.9	1		
671	671	267516.2	669049.6	4999.9	1		
672	672	266819.1	668964.7	5000.0	1		
673	673	267449.4	669183.7	5000.0	1		
674	674	267520.5	669103.9	5000.0	1		
675	675	266381.7	669108.1	5000.1	1		
676	676	267518.7	669089.1	5000.1	1		
677	677	267400.5	668860.8	5000.1	1		
678	678	267456.1	668797.4	5000.1	1		
679	679	267697.7	669068.8	5000.2	1		
680	680	267926.8	668790.9	5000.2	1		
681	681	267936.5	668819.6	5000.2	1		
682	682	267669.9	669099.9	5000.3	1		
683	683	267654.3	669086.2	5000.4	1		
684	684	267521.3	669119.4	5000.4	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
685	685	267653.7	669086.1	5000.4	1		
686	686	267921.9	668769.9	5000.5	1		
687	687	267922.0	668769.9	5000.5	1		
688	688	267922.4	668777.1	5000.5	1		
689	689	267463.9	668807.4	5000.5	1		
690	690	267700.1	669097.9	5000.6	1		
691	691	267744.3	669080.7	5000.6	1		
692	692	267464.6	669182.9	5000.6	1		
693	693	267331.2	668970.8	5000.6	1		
694	694	267743.8	669080.9	5000.6	1		
695	695	267643.1	668906.6	5000.7	1		
696	696	267610.2	669103.3	5000.8	1		
697	697	267533.3	669088.2	5000.8	1		
698	698	267254.6	668959.9	5000.8	1		
699	699	267608.3	669074.3	5000.9	1		
700	700	267699.8	668843.1	5000.9	1		
701	701	267272.0	668748.8	5000.9	1		
702	702	267931.8	668805.6	5000.9	1		
703	703	267917.6	668763.7	5000.9	1		
704	704	267684.3	669084.2	5001.0	1		
705	705	267535.8	669118.3	5001.0	1		
706	706	267684.1	669084.6	5001.0	1		
707	707	267703.2	668903.3	5001.0	1		
708	708	267756.1	668779.3	5001.0	1		
709	709	266326.1	669146.3	5001.1	1		
710	710	266327.8	669128.0	5001.1	1		
711	711	266762.3	668968.7	5001.1	1		
712	712	267535.5	669103.5	5001.1	1		
713	713	266229.2	669164.8	5001.2	1		
714	714	267728.8	669321.9	5001.2	1		
715	715	267640.0	669101.6	5001.2	1		
716	716	267594.4	669089.4	5001.2	1		
717	717	267479.6	669181.8	5001.2	1		
718	718	267279.2	668867.9	5001.2	1		
719	719	266410.0	669097.9	5001.3	1		
720	720	267784.8	669258.6	5001.3	1		
721	721	267730.0	669096.1	5001.3	1		
722	722	267288.5	669018.2	5001.3	1		
723	723	267665.1	669265.9	5001.4	1		
724	724	267721.3	669202.0	5001.4	1		
725	725	267624.4	669087.7	5001.4	1		
726	726	267551.1	669117.4	5001.4	1		
727	727	267303.0	669002.5	5001.4	1		
728	728	267271.0	668974.3	5001.4	1		
729	729	267623.5	669087.9	5001.4	1		
730	730	267387.9	668681.2	5001.6	1		
731	731	266230.6	669181.6	5001.6	1		
732	732	266243.1	669159.6	5001.6	1		
733	733	266257.3	669154.3	5001.6	1		

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP	Comment or Reference
734	734	267777.5	669138.4	5001.6	1			
735	735	267495.1	669181.2	5001.6	1			
736	736	267226.9	668991.6	5001.6	1			
737	737	267696.3	668783.1	5001.6	1			
738	738	267208.0	668692.3	5001.7	1			
739	739	267550.3	669102.7	5001.7	1			
740	740	267593.8	669089.6	5001.7	1			
741	741	267415.9	668685.5	5001.7	1			
742	742	267661.3	669205.9	5001.8	1			
743	743	267548.5	669087.4	5001.8	1			
744	744	266311.6	669151.5	5001.9	1			
745	745	266244.3	669176.4	5002.2	1			
746	746	266270.9	669149.0	5002.2	1			
747	747	266285.1	669143.4	5002.2	1			
748	748	267272.8	669004.4	5002.2	1			
749	749	267890.7	669012.4	5002.2	1			
750	750	266297.2	669157.3	5002.3	1			
751	751	266313.4	669133.3	5002.3	1			
752	752	267747.9	669140.4	5002.3	1			
753	753	267301.1	668972.4	5002.3	1			
754	754	267746.0	669111.1	5002.4	1			
755	755	267267.9	668688.8	5002.5	1			
756	756	266299.2	669138.7	5002.5	1			
757	757	267316.7	668986.2	5002.6	1			
758	758	267284.7	668958.1	5002.6	1			
759	759	266258.3	669171.2	5002.7	1			
760	760	267605.0	669268.7	5002.7	1			
761	761	266283.7	669161.8	5002.8	1			
762	762	266930.9	668906.7	5002.8	1			
763	763	267714.3	669082.4	5002.8	1			
764	764	267713.5	669082.8	5002.8	1			
765	765	267286.6	668988.4	5002.9	1			
766	766	266269.5	669167.4	5003.0	1			
767	767	267717.8	669142.1	5003.0	1			
768	768	266735.0	668995.7	5003.2	1			
769	769	266846.1	668937.7	5003.3	1			
770	770	267609.1	669328.8	5003.6	1			
771	771	267328.2	668684.6	5004.2	1			
772	772	267384.5	668621.3	5004.2	1			
773	91	268150.0	669100.0	4995.0	2			Wells at the SDA
774	92	266109.6	669411.0	4988.0	2			
775	93	265066.8	669566.0	4995.0	2			
776	94	266050.0	669150.0	5000.0	2			
777	95	267037.7	668770.3	4986.0	2			
778	96	265700.0	669750.0	4993.0	2			
779	76-1	265342.6	669749.0	5002.0	2			
780	76-2	266117.8	669352.3	4999.0	2			
781	76-3	265160.9	669286.4	4990.0	2			
782	76-4	266520.2	668889.3	5003.0	2			

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP	Comment or Reference
783	76-4A	266495.1	668896.1	5005.0	2			
784	76-5	266045.0	669810.7	5000.0	2			
785	77-2	265632.6	669579.4	4996.0	2			
786	78-1	267306.0	669032.9	4991.0	2			
787	78-2	268098.9	669781.7	5001.0	2			
788	78-3	266151.1	669787.6	5000.0	2			
789	78-5	265931.0	669365.0	4998.0	2			
790	79-2	267160.5	669689.5	4998.0	2			
791	79-3	267806.7	668243.0	4995.0	2			
792	96B	265337.2	669753.8	4996.0	2			
793	D-10	265320.9	669746.8	5005.0	2			
794	DO-2	267168.0	669679.2	4999.0	2			
795	DO-6	266853.5	669806.2	5009.0	2			
796	DO-6A	266850.5	669795.1	5009.0	2			
797	PA-01	266949.6	669469.5	4994.1	3	5008.8		
798	PA-02	267011.2	669450.6	5002.2	3	5011.2		
799	T-12	266707.2	669643.9	5008.9	3	5014.1		
800	T-23	265147.1	669405.2	4992.1	3	5013.4		Wells
801	TW-1	267166.3	669686.2	4994.0	2			
802	W-02	267991.1	669736.2	4992.1	3	5008.6		
803	W-03	267805.2	669434.4	4996.3	3	5008.3		
804	W-04	268016.4	668607.7	4985.5	3	5010.5		
805	W-05	267785.9	668241.9	4994.6	3	5010.6		
806	W-06	267431.5	668378.3	4998.4	3	5010.2		
807	W-08	266999.4	668966.1	4989.3	3	5012.0		
808	W-09	267391.2	669816.5	4994.0	3	5009.5		
809	W-12	266716.4	669645.0	5009.4	3	5013.8		
810	W-13	266986.0	669105.0	4995.5	3	5014.3		
811	W-17	266158.5	669028.8	4993.1	3	5014.2		
812	W-18	266363.6	669755.2	4994.6	3	5011.6		
813	W-20	266138.0	669733.6	5002.7	3	5010.6		
814	W-23	265147.8	669397.0	4992.5	3	5013.4		
815	W-24	264897.7	669639.0	5002.4	3	5012.8		
816	W-25	266113.7	669341.6	4995.4	3	5011.6		
817	8801D	267046.0	669237.6	4989.0	6			
818	8802D	267705.5	669435.1	5003.0	6			
819	8901D	267120.3	669231.1	4991.7	8	5014.7	23.0	
820	8902D	267007.3	669111.9	4996.8	8	5014.7	17.9	
821	773	267415.9	668685.5	5001.7	4			Surveying Notes
822	774	267444.9	668753.6	4995.5	4			
823	775	267463.9	668807.4	5000.5	4			
824	776	267505.4	668931.2	4988.3	4			
825	777	267514.8	668960.4	4995.0	4			
826	778	267591.9	669045.5	4996.6	4			
827	779	267789.0	668617.9	4994.5	4			
828	780	267729.7	668648.5	4991.9	4			
829	781	267739.0	668684.9	4990.1	4			
830	782	267759.5	668738.6	4997.5	4			
831	783	267768.9	668815.3	4997.4	4			

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP	Comments or References
832	784	267768.0	668853.0	4981.6	4			
833	785	267774.2	668892.7	4983.3	4			
834	786	267874.7	668215.8	4994.5	8	5009.0	14.5	Neutron Access Tubes
835	787	267979.3	668429.8	4994.0	8	5007.0	13.0	
836	788	268114.7	668872.2	4997.5	8	5008.0	10.5	
837	789	268230.9	669314.5	4996.5	4	5006.5	10.0	
838	790	268378.3	669802.9	4997.7	8	5006.7	9.0	
839	791	267965.3	669587.9	4992.6	8	5008.0	15.4	
840	792	268111.8	669330.3	4997.0	4	5007.0	10.0	
841	793	267336.9	668419.7	5002.6	8	5009.0	6.4	
842	794	267076.7	668733.6	4989.1	8	5009.5	20.4	
843	795	267551.5	669142.3	5003.0	4	5012.0	9.0	
844	796	267177.0	668966.9	4992.0	8	5008.0	16.0	
845	797	266532.0	668250.0	5004.5	8	5010.0	5.5	
846	798	266503.8	669118.9	4993.6	8	5007.0	13.4	
847	799	266580.5	669490.0	4996.6	8	5008.0	11.4	
848	800	266612.6	669856.7	4996.0	8	5011.0	15.0	
849	801	266136.1	669512.9	5005.0	8	5009.0	4.0	
850	802	265860.0	670630.0	4992.6	4	5011.0	18.4	
851	803	266020.0	670195.0	5007.0	4	5015.0	8.0	
852	804	266281.4	669842.2	5006.0	4	5012.0	6.0	
853	805	265525.3	669153.0	4995.0	8	5011.0	16.0	
854	806	265367.6	669446.5	5001.8	8	5011.8	10.0	
855	807	265185.0	669729.0	5000.1	8	5011.5	11.4	
856	808	264896.4	669590.4	4999.6	8	5012.0	12.4	
857	809	266832.1	669535.7	5007.1	6	5011.0	3.9	Pad A, B.Brown
858	810	266828.1	669572.3	5008.5	6	5010.5	2.0	
859	811	266836.2	669614.2	5009.2	6	5011.0	1.8	
860	812	266838.5	669660.5	5012.0	6	5012.0	0.0	
861	813	266840.2	669717.7	5012.5	6	5012.5	0.0	
862	814	266839.4	669771.3	5012.0	6	5012.5	0.5	
863	815	266905.3	669489.6	4992.5	6	5009.5	17.0	
864	816	266911.8	669519.5	4997.1	6	5010.5	13.4	
865	817	266915.4	669553.9	4997.6	6	5011.0	13.4	
866	818	266914.8	669595.6	5004.2	6	5011.0	6.8	
867	819	266920.2	669642.2	5002.2	6	5011.0	8.8	
868	820	266923.1	669692.7	5006.1	6	5011.0	4.9	
869	821	266928.5	669735.8	5007.2	6	5012.0	4.8	
870	822	266932.4	669778.3	5008.5	6	5012.0	3.5	
871	823	266935.0	669820.0	5012.0	6	5015.0	3.0	
872	824	267104.3	669489.8	5002.2	6	5015.0	12.8	
873	825	267103.4	669519.8	5009.0	6	5016.0	7.0	
874	826	267103.8	669555.3	5010.6	6	5017.0	6.4	
875	827	267104.3	669598.4	5010.2	6	5017.5	7.3	
876	828	267106.2	669684.1	5009.0	6	5017.5	8.5	
877	829	267107.5	669724.1	5007.5	6	5017.5	10.0	
878	830	267109.1	669772.4	5011.0	6	5015.0	4.0	
879	831	266981.4	669024.0	4994.7	9	5012.7	18.0	Acid Pit/ Pit 9 Wells
880	832	267061.3	669096.8	4994.7	9	5013.5	18.8	

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP	
881	833	267161.0	669101.8	4996.0	9	5013.8	17.8	
882	834	267212.1	669077.2	4993.6	9	5013.1	19.5	
883	835	267117.5	668980.5	4989.8	9	5012.6	22.8	
884	836	266989.4	668987.3	4993.6	9	5012.5	18.9	
885	837	267151.1	669049.2	4996.0	9	5013.2	17.2	
886	838	267001.0	669072.6	4996.7	9	5013.0	16.3	
887	839	267112.8	669008.5	4995.0	9	5012.7	17.7	
888	840	267020.0	669016.4	4993.3	9	5013.1	19.8	
889	841	267069.1	669032.4	4995.7	9	5013.0	17.3	
890	842	267087.3	669052.2	4996.3	9	5013.0	16.7	
891	843	267079.4	669056.8	4996.4	9	5013.0	16.6	
892	844	267082.2	669047.0	4996.1	9	5013.0	16.9	
893	845	267079.1	669047.5	4994.0	9	5013.0	19.0	
894	846	267072.1	669044.2	4996.2	9	5013.0	16.8	
895	847	268298.2	669571.9	4986.0	9	5008.0	22.0	
896	848	268328.1	669666.8	4991.1	9	5008.0	16.9	
897	849	268288.9	669780.9	4997.8	9	5007.6	9.8	
898	850	268256.1	669466.7	4990.0	9	5008.0	18.0	
899	851	268089.5	669456.4	4986.6	9	5008.3	21.7	
900	852	268179.2	669710.8	5000.6	9	5008.3	7.7	
901	853	268141.4	669588.4	4995.8	9	5011.1	15.3	
902	854	268313.4	669619.3	4993.0	9	5008.0	15.0	
903	855	267390.0	668423.4	4999.9	5	5008.4	8.5	Johnson, 1960 (Schmalz, 1972)
904	856	267300.0	668456.0	5001.7	5	5008.7	7.0	
905	857	267200.0	668488.6	4998.6	5	5008.6	10.0	
906	858	267020.0	668562.9	5000.6	5	5009.1	8.5	
907	859	267330.0	668545.8	5006.2	5	5008.2	2.0	
908	860	267230.0	668582.6	5000.7	5	5008.7	8.0	
909	861	266760.0	668769.4	4997.8	5	5009.8	12.0	
910	862	266580.0	668838.8	5005.0	5	5010.0	5.0	
911	863	266480.0	668875.7	5002.5	5	5010.5	8.0	
912	864	266400.0	668925.0	5005.9	5	5009.9	4.0	
913	865	266300.0	668952.0	4999.7	5	5009.7	10.0	
914	866	266220.0	669000.0	5006.7	5	5009.7	3.0	
915	867	266130.0	669038.2	5000.7	5	5009.7	9.0	
916	868	267830.0	668454.9	5000.5	5	5009.0	8.5	
917	869	267360.0	668636.2	5006.0	5	5008.5	2.5	
918	870	267270.0	668673.7	5003.8	5	5008.3	4.5	
919	871	267180.0	668711.2	4996.5	5	5008.0	11.5	
920	872	266790.0	668864.1	5000.3	5	5009.3	9.0	
921	873	266520.0	668967.4	5003.3	5	5009.8	6.5	
922	874	266430.0	669004.3	5008.1	5	5009.6	1.5	
923	875	266330.0	669041.8	4999.1	5	5009.6	10.5	
924	876	266240.0	669084.2	5004.2	5	5009.7	5.5	
925	877	267300.0	668769.0	4997.5	5	5007.5	10.0	
926	878	266830.0	668950.3	4998.6	5	5008.6	10.0	
927	879	266750.0	668983.5	5000.1	5	5009.1	9.0	
928	880	266370.0	669132.2	4998.6	5	5009.6	11.0	
929	881	267910.0	668636.4	4998.5	5	5010.0	11.5	

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP	Comment or Reference
930	882	267340.0	668865.1	5001.0	5	5008.0	7.0	
931	883	267990.0	668823.5	5002.2	5	5009.7	7.5	
932	884	266910.0	669357.7	4998.0	5	5009.0	11.0	
933	885	266520.0	669510.6	5004.0	5	5009.0	5.0	
934	886	266350.0	669571.5	4997.4	5	5009.4	12.0	
935	887	266240.0	669612.6	5002.7	5	5009.2	6.5	
936	888	266150.0	669650.1	4997.6	5	5009.6	12.0	
937	889	268060.0	669010.0	5002.8	5	5010.3	7.5	
938	890	267490.0	669228.1	5000.8	5	5009.8	9.0	
939	891	266760.0	669528.0	5006.2	5	5010.2	4.0	
940	892	266660.0	669564.9	4999.5	5	5010.0	10.5	
941	893	266570.0	669602.4	5004.0	5	5010.0	6.0	
942	894	266470.0	669644.2	5008.7	5	5009.7	1.0	
943	895	266380.0	669672.4	5005.9	5	5009.9	4.0	
944	896	266290.0	669714.2	5006.4	5	5009.9	3.5	
945	897	266200.0	669746.8	5007.1	5	5010.1	3.0	
946	898	267080.0	669507.3	5008.0	5	5011.0	3.0	
947	899	266980.0	669534.3	5009.5	5	5011.0	1.5	
948	900	266890.0	669576.0	5002.0	5	5011.0	9.0	
949	901	266790.0	669613.5	5010.1	5	5012.1	2.0	
950	902	266700.0	669650.4	5012.5	5	5013.5	1.0	
951	903	266600.0	669687.2	5003.5	5	5010.0	6.5	
952	904	266510.0	669725.4	5005.5	5	5010.0	4.5	
953	905	266420.0	669757.9	5003.5	5	5010.5	7.0	
954	906	266330.0	669870.4	4999.6	5	5010.6	11.0	
955	907	267120.0	669598.4	5010.0	5	5012.0	2.0	
956	908	267030.0	669630.9	5009.0	5	5012.0	3.0	
957	909	266930.0	669667.8	5006.0	5	5012.0	6.0	
958	910	266840.0	669705.3	5009.8	5	5012.3	2.5	
959	911	266740.0	669756.9	5012.7	5	5013.7	1.0	
960	912	266640.0	669788.8	5010.0	5	5013.0	3.0	
961	913	266560.0	669827.0	4999.5	5	5010.0	10.5	
962	914	266470.0	669860.9	5006.0	5	5010.0	4.0	
963	915	267610.0	669505.6	5002.4	5	5007.4	5.0	
964	916	267060.0	669715.8	5008.5	5	5012.0	3.5	
965	917	266970.0	669753.9	5002.0	5	5012.0	10.0	
966	918	266870.0	669795.0	5007.5	5	5012.0	4.5	
967	919	266770.0	669826.3	5010.7	5	5014.2	3.5	
968	920	266680.0	669863.8	5009.3	5	5013.8	4.5	
969	921	268210.0	669383.5	4997.5	5	5008.5	11.0	
970	922	267830.0	669526.6	4997.8	5	5006.8	9.0	
971	923	267650.0	669601.6	5004.9	5	5007.4	2.5	
972	924	267560.0	669644.0	4998.0	5	5008.0	10.0	
973	925	267190.0	669774.9	5002.8	5	5012.3	9.5	
974	926	267100.0	669812.4	5008.5	5	5013.0	4.5	
975	927	267000.0	669843.7	5007.0	5	5013.0	6.0	
976	928	267690.0	669687.7	5002.6	5	5007.1	4.5	
977	929	267910.0	669718.6	4996.2	5	5006.7	10.5	
978	930	267820.0	669746.3	5002.2	5	5006.7	4.5	

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP	
979	931	267720.0	669787.4	5004.7	5	5006.7	2.0	Soil Vault Row
980	932	265148.0	669271.2	4998.5	7	5011.0	12.5	
981	933	265488.4	669387.6	4999.0	7	5011.0	12.0	
982	934	265775.6	669405.0	4992.5	7	5012.5	20.0	
983	935	265785.5	669404.4	4992.5	7	5012.5	20.0	
984	936	265795.5	669403.7	4988.5	7	5012.5	24.0	
985	937	266650.8	669090.6	5003.0	7	5010.0	7.0	
986	938	266658.3	669087.8	4996.0	7	5010.0	14.0	
987	939	266667.7	669084.3	4994.0	7	5010.0	16.0	
988	940	266671.4	669082.9	4992.0	7	5010.0	18.0	
989	941	266675.2	669081.5	4990.0	7	5010.0	20.0	
990	942	266678.9	669080.1	4988.5	7	5010.0	21.5	
991	943	266682.7	669078.7	4988.0	7	5010.0	22.0	
992	944	266697.7	669073.1	4992.5	7	5009.5	17.0	
993	945	266702.4	669071.4	4992.5	7	5009.5	17.0	
994	946	266706.1	669070.0	4994.5	7	5009.5	15.0	
995	947	266709.9	669068.6	4994.5	7	5009.5	15.0	
996	948	266713.6	669067.2	4998.5	7	5009.5	11.0	
997	949	266717.4	669065.8	4995.0	7	5009.5	14.5	
998	950	266724.9	669063.0	4998.5	7	5009.5	11.0	
999	951	266728.6	669061.6	4996.5	7	5009.5	13.0	
1000	952	266732.4	669060.2	4997.0	7	5009.5	12.5	
1001	953	266736.1	669058.8	4996.5	7	5009.5	13.0	
1002	954	266739.9	669057.4	4996.5	7	5009.5	13.0	
1003	955	266743.6	669056.0	4995.5	7	5009.5	14.0	
1004	956	266768.0	669046.9	4997.0	7	5009.0	12.0	
1005	957	266771.7	669045.5	4998.0	7	5009.0	11.0	
1006	958	266775.5	669044.1	4997.0	7	5009.0	12.0	
1007	959	266779.2	669042.7	4998.0	7	5009.0	11.0	
1008	960	266783.0	669041.3	4998.0	7	5009.0	11.0	
1009	961	266786.7	669039.9	4998.0	7	5009.0	11.0	
1010	962	266790.5	669038.5	4997.5	7	5009.0	11.5	
1011	963	266837.3	669021.1	5000.0	7	5009.0	9.0	
1012	964	266841.1	669019.7	4999.0	7	5009.0	10.0	
1013	965	266844.8	669018.3	4995.0	7	5009.0	14.0	
1014	966	266848.6	669016.9	4995.0	7	5009.0	14.0	
1015	967	266852.3	669015.5	4995.0	7	5009.0	14.0	
1016	968	266856.0	669014.1	4992.0	7	5009.0	17.0	
1017	969	266859.8	669012.7	4993.0	7	5009.0	16.0	
1018	970	266867.3	669009.9	4992.5	7	5009.0	16.5	
1019	971	266871.0	669008.5	4995.0	7	5009.0	14.0	
1020	972	266951.4	669398.0	4990.5	7	5009.5	19.0	
1021	973	266961.4	669397.5	4990.5	7	5009.5	19.0	
1022	974	266973.4	669396.8	4992.5	7	5009.5	17.0	
1023	975	266983.4	669396.3	4993.5	7	5009.5	16.0	
1024	976	266993.4	669395.7	4994.5	7	5009.5	15.0	
1025	977	267003.4	669395.2	4988.5	7	5009.5	21.0	
1026	978	267013.3	669394.6	4989.0	7	5009.0	20.0	
1027	979	267023.3	669394.1	4987.0	7	5009.0	22.0	

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
1028	980	267033.3	669393.5	4985.5	7	5009.0	23.5
1029	981	267043.3	669393.0	4987.5	7	5009.0	21.5
1030	982	267053.3	669392.4	4987.5	7	5009.0	21.5
1031	983	267063.3	669391.9	4988.0	7	5009.0	21.0
1032	984	267073.3	669391.3	4987.0	7	5009.0	22.0
1033	985	267083.2	669390.8	4989.0	7	5009.0	20.0
1034	986	267093.2	669390.2	4988.0	7	5009.0	21.0
1035	987	267103.2	669389.7	4988.0	7	5009.0	21.0
1036	988	267104.2	668724.9	4990.3	7	5008.3	18.0
1037	989	267113.2	669389.1	4989.0	7	5009.0	20.0
1038	990	267113.5	668721.3	4993.3	7	5008.3	15.0
1039	991	267122.8	668717.7	4995.3	7	5008.3	13.0
1040	992	267123.2	669388.6	4985.5	7	5009.0	23.5
1041	993	267132.2	668714.0	4996.3	7	5008.3	12.0
1042	994	267133.2	669388.0	4992.0	7	5009.0	17.0
1043	995	267141.5	668710.4	4995.3	7	5008.3	13.0
1044	996	267143.2	669387.5	4989.0	7	5009.0	20.0
1045	997	267150.8	668706.8	4995.3	7	5008.3	13.0
1046	998	267158.1	669386.7	4987.0	7	5009.0	22.0
1047	999	267160.1	668703.2	4996.3	7	5008.3	12.0
1048	1000	267168.1	669386.1	4990.0	7	5009.0	19.0
1049	1001	267169.5	668699.6	4996.3	7	5008.3	12.0
1050	1002	267178.1	669385.6	4990.5	7	5009.0	18.5
1051	1003	267178.8	668696.0	4996.3	7	5008.3	12.0
1052	1004	267188.1	669385.0	4992.0	7	5009.0	17.0
1053	1005	267198.1	669384.5	4992.0	7	5009.0	17.0
1054	1006	267208.1	669383.9	4991.5	7	5009.0	17.5
1055	1007	267218.0	669383.4	4991.0	7	5009.0	18.0
1056	1008	267228.0	669382.8	4992.0	7	5009.0	17.0
1057	1009	267238.0	669382.3	4991.5	7	5009.0	17.5
1058	1010	266835.5	669247.5	5001.0	7	5009.0	8.0
1059	1011	266822.7	669252.3	5001.0	7	5009.0	8.0
1060	1012	266811.0	669256.6	4992.0	7	5009.0	17.0
1061	1013	266798.5	669260.8	4991.0	7	5009.0	18.0
1062	1014	266788.0	669264.9	4991.0	7	5009.0	18.0
1063	1015	266775.5	669269.6	4987.0	7	5009.0	22.0
1064	1016	266749.9	669279.0	4989.0	7	5009.0	20.0
1065	1017	266740.5	669282.5	4988.0	7	5009.0	21.0
1066	1018	266731.1	669285.8	4985.0	7	5009.0	24.0
1067	1019	266720.7	669289.5	4987.0	7	5009.0	22.0
1068	1020	266711.5	669293.0	4987.5	7	5009.0	21.5
1069	1021	266702.2	669296.6	4988.0	7	5009.0	21.0
1070	1022	266693.1	669300.4	4986.6	7	5009.0	22.4
1071	1023	266683.8	669303.4	4983.0	7	5009.0	26.0
1072	1024	266674.1	669307.2	4986.0	7	5009.0	23.0
1073	1025	266665.0	669310.6	4987.0	7	5009.0	22.0
1074	1026	266655.5	669313.8	4989.0	7	5009.0	20.0
1075	1027	266646.0	669317.4	4990.0	7	5009.0	19.0
1076	1028	266632.1	669322.7	4991.5	7	5009.0	17.5

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
1077	1029	266622.0	669326.1	4994.5	7	5009.0	14.5
1078	1030	266612.9	669329.5	4994.0	7	5009.0	15.0
1079	1031	266604.3	669333.3	4994.0	7	5009.0	15.0
1080	1032	266594.0	669336.3	4994.6	7	5009.0	14.4
1081	1033	266585.3	669340.0	4994.6	7	5009.0	14.4
1082	1034	266575.6	669342.9	4994.0	7	5009.0	15.0
1083	1035	266564.1	669348.1	4994.0	7	5009.0	15.0
1084	1036	266555.4	669351.2	4993.0	7	5009.0	16.0
1085	1037	266532.3	669359.3	4995.0	7	5009.0	14.0
1086	1038	266508.4	669368.0	4996.0	7	5009.0	13.0
1087	1039	266496.2	669372.6	4996.0	7	5009.0	13.0
1088	1040	266484.8	669377.0	4997.0	7	5009.0	12.0
1089	1041	266475.2	669380.1	4998.0	7	5009.0	11.0
1090	1042	266465.2	669383.9	4997.0	7	5009.0	12.0
1091	1043	266456.4	669387.1	4997.0	7	5009.0	12.0
1092	1044	266446.6	669390.3	4998.0	7	5009.0	11.0
1093	1045	266437.3	669394.3	4996.6	7	5009.0	12.4
1094	1046	266427.8	669397.8	4996.6	7	5009.0	12.4
1095	1047	266418.4	669401.7	4997.0	7	5009.0	12.0
1096	1048	266409.2	669405.0	4997.0	7	5009.0	12.0
1097	1049	266397.3	669409.3	4997.5	7	5009.5	12.0
1098	1050	266388.0	669412.2	4998.5	7	5009.5	11.0
1099	1051	266376.1	669417.1	4998.1	7	5009.5	11.4
1100	1052	266363.9	669422.2	4999.5	7	5009.5	10.0
1101	1053	266353.8	669425.8	4996.5	7	5009.5	13.0
1102	1054	266341.5	669430.1	4996.0	7	5009.5	13.5
1103	1055	266334.7	669433.5	4999.5	7	5009.5	10.0
1104	1056	266324.8	669436.0	4996.5	7	5009.5	13.0
1105	1057	266316.2	669439.0	4996.9	7	5009.5	12.6
1106	1058	266307.3	669443.2	4996.0	7	5009.5	13.5
1107	1059	266297.0	669447.2	4995.5	7	5009.5	14.0
1108	1060	266288.8	669449.6	5000.1	7	5009.5	9.4
1109	1061	266279.2	669453.2	4996.0	7	5009.5	13.5
1110	1062	266470.4	669421.8	4993.0	7	5010.0	17.0
1111	1063	266449.6	669423.0	4991.0	7	5010.0	19.0
1112	1064	266439.0	669423.3	4992.2	7	5010.0	17.8
1113	1065	266429.8	669423.8	4993.0	7	5010.0	17.0
1114	1066	266419.8	669424.1	4989.0	7	5010.0	21.0
1115	1067	266409.6	669424.6	4989.6	7	5010.0	20.4
1116	1068	266399.7	669425.6	4991.0	7	5010.0	19.0
1117	1069	266389.6	669426.1	4992.0	7	5010.0	18.0
1118	1070	266380.1	669426.8	4989.2	7	5010.0	20.8
1119	1071	266369.7	669426.6	4989.2	7	5010.0	20.8
1120	1072	266359.5	669427.3	4989.0	7	5010.0	21.0
1121	1073	266349.7	669427.9	4992.0	7	5010.0	18.0
1122	1074	266339.4	669428.4	4991.0	7	5010.0	19.0
1123	1075	266329.9	669429.1	4992.0	7	5010.0	18.0
1124	1076	266319.6	669429.7	4990.5	7	5009.5	19.0
1125	1077	266309.7	669430.2	4991.5	7	5009.5	18.0

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
1126	1078	266299.0	669430.6	4993.5	7	5009.5	16.0
1127	1079	266289.3	669430.8	4992.5	7	5009.5	17.0
1128	1080	266279.9	669431.8	4993.0	7	5009.5	16.5
1129	1081	266269.1	669432.4	4992.5	7	5009.5	17.0
1130	1082	266260.0	669432.7	4993.5	7	5009.5	16.0
1131	1083	266249.0	669433.1	4993.5	7	5009.5	16.0
1132	1084	266239.6	669434.0	4994.5	7	5009.5	15.0
1133	1085	266229.5	669434.3	4993.5	7	5009.5	16.0
1134	1086	266219.7	669434.6	4993.5	7	5009.5	16.0
1135	1087	266210.1	669435.3	4994.0	7	5009.5	15.5
1136	1088	266200.1	669435.9	4994.2	7	5009.5	15.3
1137	1089	266192.0	669436.1	4991.5	7	5009.5	18.0
1138	1090	266904.9	669406.9	4996.5	7	5009.0	12.5
1139	1091	266895.1	669406.8	4995.0	7	5009.0	14.0
1140	1092	266884.7	669407.4	4992.5	7	5009.0	16.5
1141	1093	266875.1	669407.7	4989.0	7	5009.0	20.0
1142	1094	266864.8	669408.3	4993.5	7	5009.0	15.5
1143	1095	266855.9	669408.5	4994.5	7	5009.5	15.0
1144	1096	266845.1	669409.3	4993.5	7	5009.5	16.0
1145	1097	266835.4	669410.0	4994.0	7	5009.5	15.5
1146	1098	266824.7	669410.2	4994.5	7	5009.5	15.0
1147	1099	266815.1	669411.0	4994.0	7	5009.5	15.5
1148	1100	266805.5	669411.5	4996.5	7	5009.5	13.0
1149	1101	266795.3	669412.2	4997.5	7	5009.5	12.0
1150	1102	266785.2	669412.7	4994.0	7	5009.5	15.5
1151	1103	266774.8	669413.1	4994.5	7	5009.5	15.0
1152	1104	266765.4	669413.3	4994.0	7	5009.0	15.0
1153	1105	266755.5	669414.1	4994.0	7	5009.0	15.0
1154	1106	266744.9	669414.4	4994.0	7	5009.0	15.0
1155	1107	266735.2	669415.2	4991.0	7	5009.0	18.0
1156	1108	266724.9	669415.4	4989.5	7	5009.5	20.0
1157	1109	266715.2	669416.0	4987.7	7	5009.5	21.8
1158	1110	266705.4	669416.5	4988.0	7	5009.5	21.5
1159	1111	266695.3	669417.2	4991.5	7	5009.5	18.0
1160	1112	266684.8	669417.7	4993.0	7	5009.5	16.5
1161	1113	266675.1	669418.3	4994.5	7	5009.5	15.0
1162	1114	266665.2	669418.7	4995.5	7	5009.5	14.0
1163	1115	266655.6	669419.4	4993.5	7	5009.5	16.0
1164	1116	266645.6	669419.9	4994.7	7	5009.5	14.8
1165	1117	266635.2	669420.6	4994.9	7	5009.5	14.6
1166	1118	266623.9	669421.3	4992.1	7	5009.5	17.4
1167	1119	266615.5	669422.0	4995.7	7	5009.5	13.8
1168	1120	266604.8	669422.3	4999.0	7	5009.0	10.0
1169	1121	266595.0	669423.0	4994.5	7	5009.0	14.5
1170	1122	266585.2	669423.6	4997.3	7	5009.0	11.7
1171	1123	266574.8	669423.9	5000.7	7	5009.0	8.3
1172	1124	266565.2	669424.4	5002.7	7	5009.0	6.3
1173	1125	266556.1	669424.6	5003.0	7	5009.0	6.0
1174	1126	266534.9	669426.2	5003.6	7	5009.0	5.4

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
1175	1127	266515.1	669427.0	4996.5	7	5009.5	13.0
1176	1128	266504.5	669427.6	4992.5	7	5009.5	17.0
1177	1129	266494.6	669428.0	4994.0	7	5009.5	15.5
1178	1130	266484.3	669428.8	4995.5	7	5009.5	14.0
1179	1131	266474.6	669429.1	4995.5	7	5009.5	14.0
1180	1132	266464.6	669429.5	4991.5	7	5009.5	18.0
1181	1133	266454.0	669430.3	4994.5	7	5009.5	15.0
1182	1134	266444.2	669430.8	4993.5	7	5009.5	16.0
1183	1135	266434.6	669431.4	4993.5	7	5009.5	16.0
1184	1136	266423.8	669431.5	4995.5	7	5009.5	14.0
1185	1137	266414.9	669432.3	4988.1	7	5009.5	21.4
1186	1138	266404.9	669433.0	4992.5	7	5009.5	17.0
1187	1139	266393.2	669433.7	4993.0	7	5009.0	16.0
1188	1140	266384.3	669433.8	4992.0	7	5009.0	17.0
1189	1141	266374.3	669434.6	4989.0	7	5009.0	20.0
1190	1142	266364.7	669435.2	4988.5	7	5009.0	20.5
1191	1143	266355.1	669435.6	4988.0	7	5009.0	21.0
1192	1144	266344.7	669436.0	4988.5	7	5009.0	20.5
1193	1145	266335.1	669436.6	4988.0	7	5009.0	21.0
1194	1146	266324.0	669437.5	4988.5	7	5009.5	21.0
1195	1147	266314.4	669437.9	4990.0	7	5009.5	19.5
1196	1148	266305.0	669438.2	4990.0	7	5009.5	19.5
1197	1149	266293.9	669438.7	4989.5	7	5009.5	20.0
1198	1150	266285.0	669439.1	4989.5	7	5009.5	20.0
1199	1151	266274.6	669439.8	4992.1	7	5009.5	17.4
1200	1152	266255.9	669441.1	4992.5	7	5009.5	17.0
1201	1153	266245.4	669441.6	4991.5	7	5009.5	18.0
1202	1154	266235.2	669442.5	4997.5	7	5009.5	12.0
1203	1155	266224.9	669443.1	4988.5	7	5009.5	21.0
1204	1156	266215.2	669443.6	4990.5	7	5009.5	19.0
1205	1157	266204.3	669444.3	4990.5	7	5009.5	19.0
1206	1158	266193.9	669445.0	4991.5	7	5009.5	18.0
1207	1159	266184.9	669445.2	4993.1	7	5009.5	16.4
1208	1160	265507.3	669445.6	5003.9	7	5013.9	10.0
1209	1161	265510.4	669453.6	5003.4	7	5013.9	10.5
1210	1162	265513.7	669462.2	5004.9	7	5013.9	9.0
1211	1163	265516.8	669470.6	5004.9	7	5013.9	9.0
1212	1164	265519.9	669478.5	5005.5	7	5013.9	8.4
1213	1165	265523.2	669486.9	5004.5	7	5014.0	9.5
1214	1166	265526.2	669495.2	5005.0	7	5014.0	9.0
1215	1167	265529.5	669503.7	5004.0	7	5014.0	10.0
1216	1168	265532.7	669512.0	5000.5	7	5014.0	13.5
1217	1169	265535.7	669520.1	4994.0	7	5014.0	20.0
1218	1170	265538.9	669528.5	5003.0	7	5014.0	11.0
1219	1171	265542.8	669538.9	5001.0	7	5014.0	13.0
1220	1172	265546.1	669547.7	4996.6	7	5014.0	17.4
1221	1173	265549.1	669555.6	5001.0	7	5014.0	13.0
1222	1174	265552.4	669564.1	5000.0	7	5014.0	14.0
1223	1175	265555.5	669572.3	5003.6	7	5014.1	10.5

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
1224	1176	265558.6	669580.5	5003.5	7	5014.1	10.6
1225	1177	265561.8	669589.0	5002.1	7	5014.1	12.0
1226	1178	265561.8	669588.9	5001.6	7	5014.1	12.5
1227	1179	265565.0	669597.2	5001.1	7	5014.1	13.0
1228	1180	265568.2	669605.5	5002.1	7	5014.1	12.0
1229	1181	265572.1	669615.9	5002.1	7	5014.1	12.0
1230	1182	265575.2	669624.2	5002.1	7	5014.1	12.0
1231	1183	265578.4	669632.4	5003.1	7	5014.1	11.0
1232	1184	265581.3	669640.3	5002.3	7	5014.1	11.8
1233	1185	265587.7	669657.0	5004.0	7	5014.0	10.0
1234	1186	265590.8	669665.1	5004.0	7	5014.0	10.0
1235	1187	265594.9	669675.7	5004.2	7	5013.7	9.5
1236	1188	266893.3	669212.4	4995.5	7	5011.5	16.0
1237	1189	266858.5	669225.1	4995.0	7	5011.5	16.5
1238	1190	266848.8	669228.3	4994.2	7	5011.5	17.3
1239	1191	266839.3	669231.9	4993.5	7	5011.5	18.0
1240	1192	266830.5	669235.1	4994.1	7	5011.5	17.4
1241	1193	266811.2	669241.9	4994.1	7	5011.5	17.4
1242	1194	266802.3	669245.0	4993.0	7	5011.5	18.5
1243	1195	266792.9	669249.2	4993.5	7	5011.5	18.0
1244	1196	266783.1	669252.7	4992.7	7	5011.7	19.0
1245	1197	266773.6	669256.4	4991.2	7	5011.7	20.5
1246	1198	266763.9	669259.5	4988.7	7	5011.7	23.0
1247	1199	266755.2	669262.8	4985.7	7	5011.7	26.0
1248	1200	266745.8	669266.3	4986.2	7	5011.7	25.5
1249	1201	266736.3	669269.7	4981.7	7	5011.7	30.0
1250	1202	266726.1	669273.8	4982.7	7	5011.7	29.0
1251	1203	266717.2	669276.9	4992.7	7	5011.7	19.0
1252	1204	266708.0	669280.2	5003.2	7	5011.7	8.5
1253	1205	266399.1	669394.6	5002.5	7	5011.5	9.0
1254	1206	266390.9	669396.8	5002.3	7	5011.5	9.2
1255	1207	266381.4	669400.3	5002.9	7	5011.5	8.6
1256	1208	266372.0	669403.5	5002.5	7	5011.5	9.0
1257	1209	266362.2	669407.5	5002.5	7	5011.5	9.0
1258	1210	266353.6	669410.6	4999.5	7	5011.5	12.0
1259	1211	266343.7	669414.2	5000.0	7	5012.0	12.0
1260	1212	266334.7	669417.8	5000.0	7	5012.0	12.0
1261	1213	266325.1	669421.0	5000.0	7	5012.0	12.0
1262	1214	266315.4	669424.6	4998.0	7	5012.0	14.0
1263	1215	266306.9	669427.6	5000.0	7	5012.0	12.0
1264	1216	266297.0	669431.2	4998.0	7	5012.0	14.0
1265	1217	266287.7	669434.2	4998.0	7	5012.0	14.0
1266	1218	266275.9	669438.8	4996.0	7	5012.0	16.0
1267	1219	266268.8	669441.5	4998.0	7	5012.0	14.0
1268	1220	266257.5	669446.1	4998.0	7	5012.0	14.0
1269	1221	266245.2	669450.3	4998.0	7	5012.0	14.0
1270	1222	266233.6	669454.5	4998.0	7	5012.0	14.0
1271	1223	266222.0	669458.6	4995.0	7	5012.0	17.0
1272	1224	266213.1	669462.0	4996.0	7	5012.0	16.0

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
1273	1225	266200.8	669466.6	4996.0	7	5012.0	16.0
1274	1226	266191.8	669470.2	4995.0	7	5012.0	17.0
1275	1227	266182.5	669473.6	4995.5	7	5012.0	16.5
1276	1228	266174.7	669476.1	5000.0	7	5012.0	12.0
1277	1229	266163.0	669480.9	4997.0	7	5012.0	15.0
1278	1230	266153.3	669484.0	4997.0	7	5012.0	15.0
1279	1231	266143.5	669487.5	4997.0	7	5012.0	15.0
1280	1232	267825.7	668252.9	4993.2	7	5009.6	16.4
1281	1233	267816.6	668256.6	4993.2	7	5009.6	16.4
1282	1234	267806.7	668260.6	4992.6	7	5009.6	17.0
1283	1235	267797.9	668264.1	4993.6	7	5010.0	16.4
1284	1236	267788.7	668267.6	4993.6	7	5010.0	16.4
1285	1237	267779.3	668271.0	4993.0	7	5010.0	17.0
1286	1238	267770.3	668274.5	4993.7	7	5010.1	16.4
1287	1239	267760.0	668278.1	4991.7	7	5010.1	18.4
1288	1240	267751.3	668282.6	4992.1	7	5010.1	18.0
1289	1241	267742.6	668285.7	4992.6	7	5010.1	17.5
1290	1242	267732.7	668289.6	4992.5	7	5010.0	17.5
1291	1243	267723.7	668292.5	4992.0	7	5010.0	18.0
1292	1244	267714.4	668295.8	4991.6	7	5010.0	18.4
1293	1245	267704.8	668299.7	4992.0	7	5010.0	18.0
1294	1246	267695.5	668303.1	4992.0	7	5010.0	18.0
1295	1247	267685.8	668307.1	4992.0	7	5010.0	18.0
1296	1248	267676.6	668310.7	4992.0	7	5010.0	18.0
1297	1249	267667.4	668314.5	4993.0	7	5010.0	17.0
1298	1250	267657.5	668317.7	4992.7	7	5009.7	17.0
1299	1251	267648.5	668321.1	4991.2	7	5009.7	18.5
1300	1252	267639.0	668324.3	4992.2	7	5009.7	17.5
1301	1253	267629.9	668328.3	4992.2	7	5009.7	17.5
1302	1254	267621.0	668332.4	4992.2	7	5009.7	17.5
1303	1255	267610.9	668336.3	4992.5	7	5010.0	17.5
1304	1256	267602.3	668339.3	4992.5	7	5010.0	17.5
1305	1257	267593.1	668342.8	4992.0	7	5010.0	18.0
1306	1258	267582.6	668346.4	4991.5	7	5010.0	18.5
1307	1259	267574.2	668349.7	4991.5	7	5010.0	18.5
1308	1260	267564.5	668353.7	4992.0	7	5010.0	18.0
1309	1261	267554.7	668357.8	4991.3	7	5010.0	18.7
1310	1262	267546.2	668361.6	4993.0	7	5010.0	17.0
1311	1263	267536.3	668365.0	4987.0	7	5010.0	23.0
1312	1264	267527.5	668368.3	4990.0	7	5010.0	20.0
1313	1265	267518.4	668371.7	4993.5	7	5010.0	16.5
1314	1266	267508.7	668375.4	4994.5	7	5010.0	15.5
1315	1267	267499.8	668379.2	4994.5	7	5010.0	15.5
1316	1268	267491.0	668383.0	4997.0	7	5010.0	13.0
1317	1269	267480.6	668386.9	4995.8	7	5009.8	14.0
1318	1270	267471.9	668390.0	4994.8	7	5009.8	15.0
1319	1271	267461.7	668393.6	4994.0	7	5010.0	16.0
1320	1272	267453.2	668396.9	4995.0	7	5010.0	15.0
1321	1273	267444.4	668400.5	4995.5	7	5010.0	14.5

1322	1274	267434.0	668404.2	4996.7	7	5010.2	13.5
1323	1275	267425.1	668408.1	4998.2	7	5010.2	12.0
1324	1276	267415.6	668411.7	4999.2	7	5010.2	11.0
1325	1277	267885.2	668221.4	4992.5	7	5009.5	17.0
1326	1278	267876.2	668225.1	4995.5	7	5009.5	14.0
1327	1279	267866.7	668229.2	4979.5	7	5009.5	30.0
1328	1280	267857.3	668232.3	4996.7	7	5009.5	12.8
1329	1281	267848.0	668236.1	4996.5	7	5009.5	13.0
1330	1282	267838.7	668239.5	4992.5	7	5009.5	17.0
1331	1283	267829.2	668243.1	4992.6	7	5009.6	17.0
1332	1284	267820.2	668246.7	4992.1	7	5009.6	17.5
1333	1285	267811.1	668249.7	4992.6	7	5009.6	17.0
1334	1286	267802.0	668254.0	4992.6	7	5009.6	17.0
1335	1287	267793.3	668257.3	4992.4	7	5010.0	17.6
1336	1288	267783.1	668261.2	4992.0	7	5010.0	18.0
1337	1289	267773.9	668264.8	4991.0	7	5010.0	19.0
1338	1290	267765.1	668267.9	4992.0	7	5010.0	18.0
1339	1291	267746.0	668274.9	4992.0	7	5010.0	18.0
1340	1292	267736.6	668279.2	4992.5	7	5010.0	17.5

Files from Johnson, 1960 (not used in drawings) All Depths >12.5 ft
Johnson, 1960

1341	267760.0	668269.2	4996.6	5	5009.1	>12.5
1342	267580.0	668349.1	4995.5	5	5008.0	>12.5
1343	266950.0	668690.2	4996.9	5	5009.4	>12.5
1344	266860.0	668727.0	4997.0	5	5009.5	>12.5
1345	266670.0	668802.0	4997.7	5	5010.2	>12.5
1346	267640.0	668524.3	4992.5	5	5005.0	>12.5
1347	267460.0	668604.3	4985.0	5	4997.5	>12.5
1348	267090.0	668748.7	4995.8	5	5008.3	>12.5
1349	266980.0	668784.9	4997.0	5	5009.5	>12.5
1350	266900.0	668823.0	4998.0	5	5010.5	>12.5
1351	266710.0	668897.4	4997.1	5	5009.6	>12.5
1352	266620.0	668934.8	4997.5	5	5010.0	>12.5
1353	266160.0	669117.4	4997.3	5	5009.8	>12.5
1354	267400.0	668737.1	4995.1	5	5007.6	>12.5
1355	266560.0	669058.5	4997.5	5	5010.0	>12.5
1356	266460.0	669089.7	4997.5	5	5010.0	>12.5
1357	266190.0	669207.8	4996.9	5	5009.4	>12.5
1358	267160.0	668935.1	4995.0	5	5007.5	>12.5
1359	266920.0	669138.0	4996.5	5	5009.0	>12.5
1360	266830.0	669170.6	4996.5	5	5009.0	>12.5
1361	266640.0	669249.9	4997.5	5	5010.0	>12.5
1362	266460.0	669320.6	4996.5	5	5009.0	>12.5
1363	266270.0	669390.0	4996.5	5	5009.0	>12.5
1364	267790.0	668897.2	4982.0	5	4994.5	>12.5
1365	267420.0	669047.2	4996.5	5	5009.0	>12.5
1366	267230.0	669120.9	4998.4	5	5010.9	>12.5
1367	266990.0	669319.5	4996.5	5	5009.0	>12.5
1368	266440.0	669549.5	4997.5	5	5010.0	>12.5
1369	267870.0	669073.8	4979.5	5	4992.0	>12.5
1370	267310.0	669303.1	4998.4	5	5010.9	>12.5
1371	266850.0	669491.2	4998.4	5	5010.9	>12.5

Number	Map ID	Easting	Northing	Basalt Elevation	Ref	MP Elev.	Depth Below MP
1372		266320.0	669804.6	4998.3	5	5010.8	>12.5
1373		266230.0	669837.2	4997.4	5	5009.9	>12.5
1374		268130.0	669201.4	4997.0	5	5009.5	>12.5
1375		267950.0	669265.8	5001.4	5	5013.9	>12.5
1376		267380.0	669489.5	4998.7	5	5011.2	>12.5
1377		267150.0	669683.9	4999.5	5	5012.0	>12.5
1378		268020.0	669456.5	4994.0	5	5006.5	>12.5
1379		267750.0	669559.8	4994.5	5	5007.0	>12.5
1380		267460.0	669675.9	4995.6	5	5008.1	>12.5
1381		268250.0	669479.5	4996.5	5	5009.0	>12.5
1382		268280.0	669568.6	4997.0	5	5009.5	>12.5
1383		268090.0	669642.3	4993.8	5	5006.3	>12.5
1384		268350.0	669755.1	4995.0	5	5007.5	>12.5

FIGURE 2:

URE 2: Elevation of Surficial Sediment/Basalt Contact

This topographic map displays a coastal region with various land features and elevation data. The map is bounded by a coordinate grid with Easting values (267100 to 268500) along the top and Northing values (668600 to 670400) along the right side. Key features include:

- Contour Lines:** Elevation contours are shown for 4980, 4990, 5000, and 5010 feet. The 5000-foot contour is particularly prominent, forming a large loop in the upper left and another in the lower right.
- Spot Elevations:** Numerous individual elevation points are marked with dots and numerical values, such as 4985, 4995, 5000, 5004, 5005, 5006, 5008, 5009, 5010, 5011, 5012, 5013, 5014, 5015, 5016, 5017, 5018, 5019, 5020, 5021, 5022, 5023, 5024, 5025, 5026, 5027, 5028, 5029, 5030, 5031, 5032, 5033, 5034, 5035, 5036, 5037, 5038, 5039, 5040, 5041, 5042, 5043, 5044, 5045, 5046, 5047, 5048, 5049, 5050, 5051, 5052, 5053, 5054, 5055, 5056, 5057, 5058, 5059, 5060, 5061, 5062, 5063, 5064, 5065, 5066, 5067, 5068, 5069, 5070, 5071, 5072, 5073, 5074, 5075, 5076, 5077, 5078, 5079, 5080, 5081, 5082, 5083, 5084, 5085, 5086, 5087, 5088, 5089, 5090, 5091, 5092, 5093, 5094, 5095, 5096, 5097, 5098, 5099, 5100, 5101, 5102, 5103, 5104, 5105, 5106, 5107, 5108, 5109, 5110, 5111, 5112, 5113, 5114, 5115, 5116, 5117, 5118, 5119, 5120, 5121, 5122, 5123, 5124, 5125, 5126, 5127, 5128, 5129, 5130, 5131, 5132, 5133, 5134, 5135, 5136, 5137, 5138, 5139, 5140, 5141, 5142, 5143, 5144, 5145, 5146, 5147, 5148, 5149, 5150, 5151, 5152, 5153, 5154, 5155, 5156, 5157, 5158, 5159, 5160, 5161, 5162, 5163, 5164, 5165, 5166, 5167, 5168, 5169, 5170, 5171, 5172, 5173, 5174, 5175, 5176, 5177, 5178, 5179, 5180, 5181, 5182, 5183, 5184, 5185, 5186, 5187, 5188, 5189, 5190, 5191, 5192, 5193, 5194, 5195, 5196, 5197, 5198, 5199, 5200, 5201, 5202, 5203, 5204, 5205, 5206, 5207, 5208, 5209, 5210, 5211, 5212, 5213, 5214, 5215, 5216, 5217, 5218, 5219, 5220, 5221, 5222, 5223, 5224, 5225, 5226, 5227, 5228, 5229, 5230, 5231, 5232, 5233, 5234, 5235, 5236, 5237, 5238, 5239, 5240, 5241, 5242, 5243, 5244, 5245, 5246, 5247, 5248, 5249, 5250, 5251, 5252, 5253, 5254, 5255, 5256, 5257, 5258, 5259, 5260, 5261, 5262, 5263, 5264, 5265, 5266, 5267, 5268, 5269, 5270, 5271, 5272, 5273, 5274, 5275, 5276, 5277, 5278, 5279, 5280, 5281, 5282, 5283, 5284, 5285, 5286, 5287, 5288, 5289, 5290, 5291, 5292, 5293, 5294, 5295, 5296, 5297, 5298, 5299, 5300, 5301, 5302, 5303, 5304, 5305, 5306, 5307, 5308, 5309, 5310, 5311, 5312, 5313, 5314, 5315, 5316, 5317, 5318, 5319, 5320, 5321, 5322, 5323, 5324, 5325, 5326, 5327, 5328, 5329, 5330, 5331, 5332, 5333, 5334, 5335, 5336, 5337, 5338, 5339, 5340, 5341, 5342, 5343, 5344, 5345, 5346, 5347, 5348, 5349, 5350, 5351, 5352, 5353, 5354, 5355, 5356, 5357, 5358, 5359, 5360, 5361, 5362, 5363, 5364, 5365, 5366, 5367, 5368, 5369, 5370, 5371, 5372, 5373, 5374, 5375, 5376, 5377, 5378, 5379, 5380, 5381, 5382, 5383, 5384, 5385, 5386, 5387, 5388, 5389, 5390, 5391, 5392, 5393, 5394, 5395, 5396, 5397, 5398, 5399, 5400, 5401, 5402, 5403, 5404, 5405, 5406, 5407, 5408, 5409, 5410, 5411, 5412, 5413, 5414, 5415, 5416, 5417, 5418, 5419, 5420, 5421, 5422, 5423, 5424, 5425, 5426, 5427, 5428, 5429, 5430, 5431, 5432, 5433, 5434, 5435, 5436, 5437, 5438, 5439, 5440, 5441, 5442, 5443, 5444, 5445, 5446, 5447, 5448, 5449, 5450, 5451, 5452, 5453, 5454, 5455, 5456, 5457, 5458, 5459, 5460, 5461, 5462, 5463, 5464, 5465, 5466, 5467, 5468, 5469, 5470, 5471, 5472, 5473, 5474, 5475, 5476, 5477, 5478, 5479, 5480, 5481, 5482, 5483, 5484, 5485, 5486, 5487, 5488, 5489, 5490, 5491, 5492, 5493, 5494, 5495, 5496, 5497, 5498, 5499, 5500, 5501, 5502, 5503, 5504, 5505, 5506, 5507, 5508, 5509, 5510, 5511, 5512, 5513, 5514, 5515, 5516, 5517, 5518, 5519, 5520, 5521, 5522, 5523, 5524, 5525, 5526, 5527, 5528, 5529, 5530, 5531, 5532, 5533, 5534, 5535, 5536, 5537, 5538, 5539, 5540, 5541, 5542, 5543, 5544, 5545, 5546, 5547, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600, 5601, 5602, 5603, 5604, 5605, 5606, 5607, 5608, 5609, 5610, 5611, 5612, 5613, 5614, 5615, 5616, 5617, 5618, 5619, 5620, 5621, 5622, 5623, 5624, 5625, 5626, 5627, 5628, 5629, 5630, 5631, 5632, 5633, 5634, 5635, 5636, 5637, 5638, 5639, 5640, 5641, 5642, 5643, 5644, 5645, 5646, 5647, 5648, 5649, 5650

Figure 13. SDA West/East Cross Section: Profile H-H'

FIGURE 3: Elevation of Sur

fact (without well points)

FIGURE 3: Eleva

of Surficial Sediment/Basalt Contact (without well poi

(without well points)

nd
n
vation
0 feet.

SCALE 1 inch = 200 FEET

END

**DATE
FILMED**

10 / 7 / 93