

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Data Report for the 1983 Seismic-Refraction Experiment  
at Yucca Mountain, Beatty and Vicinity, Southwestern Nevada

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This report (map) is preliminary and has not been reviewed for conformity with U. S. Geological Survey editorial standards (and stratigraphic nomenclature). Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.

1. USGS, Menlo Park, CA 94025

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5. Record section- North-South Profile Shotpoint 14. Overlapping traces omitted: 918-924
6. Record section- North-South Profile Shotpoint 15. Overlapping traces omitted: 917-921
7. Record section- North-South Profile Shotpoint 16. Overlapping traces omitted: 917-924
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## INTRODUCTION

In June 1983, the U. S. Geological Survey (USGS) conducted a seismic-refraction survey in the vicinity of Yucca Mountain and Beatty, Nevada to better define the P(compressional)-wave velocity structure of the upper crust in this area. This experiment is part of continuing seismic investigations in the region of the Nevada Test Site (NTS) by the USGS on behalf of the Nevada Nuclear Waste Storage Investigations Project (NNWSI) to aid in determining the feasibility of the proposed nuclear waste disposal site at Yucca Mountain.

The 1983 seismic-refraction survey consisted of ten individual explosions at nine shotpoints, recorded by two deployments of 120 portable seismographs constituting North-South and East-West profiles (Plate 1). The North-South profile extended 45 kilometers along the western flank of Yucca Mountain. Recorder station spacing averaged .40 km, and seven shots spaced 8 km apart were fired. The East-West profile extended 60 km from Yucca Mountain west through Fluorspar Canyon and Titus Canyon to the floor of Death Valley, California. Recorder station spacing averaged .40 to .60 km and three shots were fired at Yucca Mountain, near Beatty, and at the Death Valley boundary.

This report includes record sections from the ten shotpoints (Plates 2-11), a list of seismograph locations (Appendix A), a list of shotpoint locations and shot times, DKDAT data files and Tape Grade Code (Appendix B), and a list of first-arrival traveltime picks (Appendix C). Detailed interpretation of these data will be published in a subsequent report.

#### ACKNOWLEDGMENTS

I wish to thank T. Conway for her diligent assistance in surveying, calculating, and field-checking the site locations, and for deploying seismic recorders. I also wish to thank the field crew: G. Bloomberg, M. Burns, B. Colburn, E. Criley, B. Echols, L. Greene, W. Mooney, P. Meador, J. Murphy, L. Pace, and D. Synder. This experiment was conducted on behalf of the Nevada Nuclear Waste Storage Investigations (NNWSI).

## SURVEYING SEISMIC-RECORDER AND SHOTPOINT SITES

Prior to deployment of the seismic recorders, recording sites were staked and surveyed using a Hewlett-Packard Electronic Distance Meter\* (model HP3820), which employs a laser and reflectors. The laser was positioned at various points along the profiles, and reflectors were positioned at the seismic recorder sites, benchmarks, road intersections, and other features distinguishable on topographic and orthophoto maps. Digital readings of horizontal and vertical distances and azimuths from the laser to each reflector were recorded in field notes. Locations of the recorder sites were calculated by the triangulation from known points (benchmarks and road intersections).

All locations were field-checked after the experiments using Brunton compass readings, vehicle mileage, and pacing. Most locations are estimated to be accurate within 20 m. The maximum estimated error is 50 m.

NOTE: Seismic recorder locations 792-820 and shotpoint locations 11 and 18 were not laser-sited, but located with 1:62500 scale topographical and 1:24000 scale orthophoto maps.

## SHOTPOINTS AND SEISMIC RECORDERS

Shotpoints were sited along the two profiles in as straight a line and with as even a spacing as possible, given the limitations of mobilizing a drilling rig. Typically, shotholes were drilled 36 meters deep (20 cm diameter), then loaded with 900 kilograms of high-velocity ammonium nitrate explosive, tamped to the surface with gravel and fired automatically according to clock time (Healy, et al, 1982).

The explosions were recorded by 120 portable seismic cassette-tape recorders. Each recorder contains a single vertical-component 2-Hz geophone, chronometer, calibrator, tape deck, tape-speed-compensation tone generator, three independent amplifiers commonly set 18 dB apart in gain (a factor of 8), and a WWVB radio receiver (Fig. 1). The system response peaks at about 20 Hz (Fig. 2).

The internal chronometers in the 120 instruments are synchronized to Greenwich Mean Time (GMT) the day prior to deployment and programmed for a maximum of ten recording times using a device called a Hand Held Tester (HHT; Healy et al, 1982). After the shots are fired, the instruments are picked up, chronometer drifts recorded, and tapes removed.

\* The use of trade names is for descriptive purposes only and does not constitute endorsement by the USGS.

## DATA PROCESSING AND PICKING FIRST-ARRIVAL TIMES

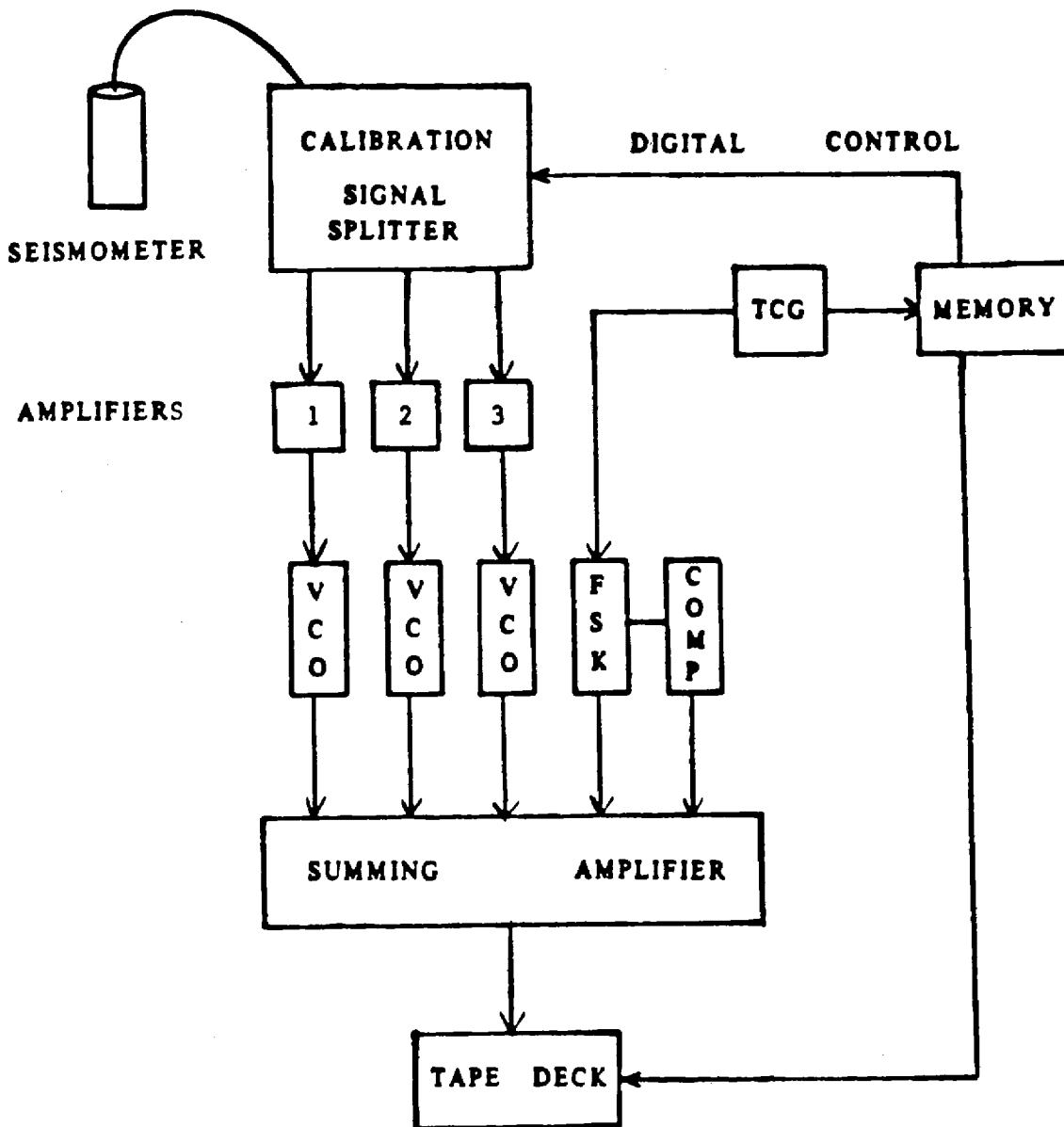
The data is converted from analog to digital formats via microprocessor systems (Fig. 3). The analog data from the cassette tapes is digitized at a rate of 200 samples/sec. Twenty seconds of data are digitized for each shot and each instrument spanning the time of the expected arrival. Time zero on each trace is calculated to be the shot-instrument spacing divided by 6 km/s; and the trace is digitized for -2 s to 18 s to the maximum peak-to-peak amplitude in whatever interval is plotted. In this report we plot the interval 0-4 seconds for each station (Plates 2-11). Record sections are plotted with maximum trace amplitudes normalized to a common value. Negative distances on the horizontal axis on the record sections indicate positions north of the shotpoints on the North-South profile and west of the shotpoints on the East-West profile (Plates 2-11).

First-arrival travel times were picked from the record sections using cross-hairs displayed on a computer graphics terminal (Appendix C). Weights were assigned for first-arrival times as follows:

- 0 - Excellent
- 1 - Good
- 2 - Fair
- 3 - Weak or Noisy
- 4 - Poor or highly emergent

#### REFERENCE

Healy, J. H., Mooney, W. D., Blank, H. R., Gettings, M. E., Kohler, W. M., Lamson, R. J., and Leone, L. E., 1982, Saudi Arabian Seismic Deep-Refraction Profile: Final Project Report. U S Geological Survey Open-File Report 02-37, 432 pp.



- COMP = TAPE SPEED TONE GENERATOR
- FSK = FREQUENCY SHIFT KEYING
- TCG = TIME CODE GENERATOR
- VCO = VOLTAGE-CONTROLLED OSCILLATOR

Figure 1 .--Schematic diagram of a recording unit.



# CASSETTE RECORDER RESPONSE

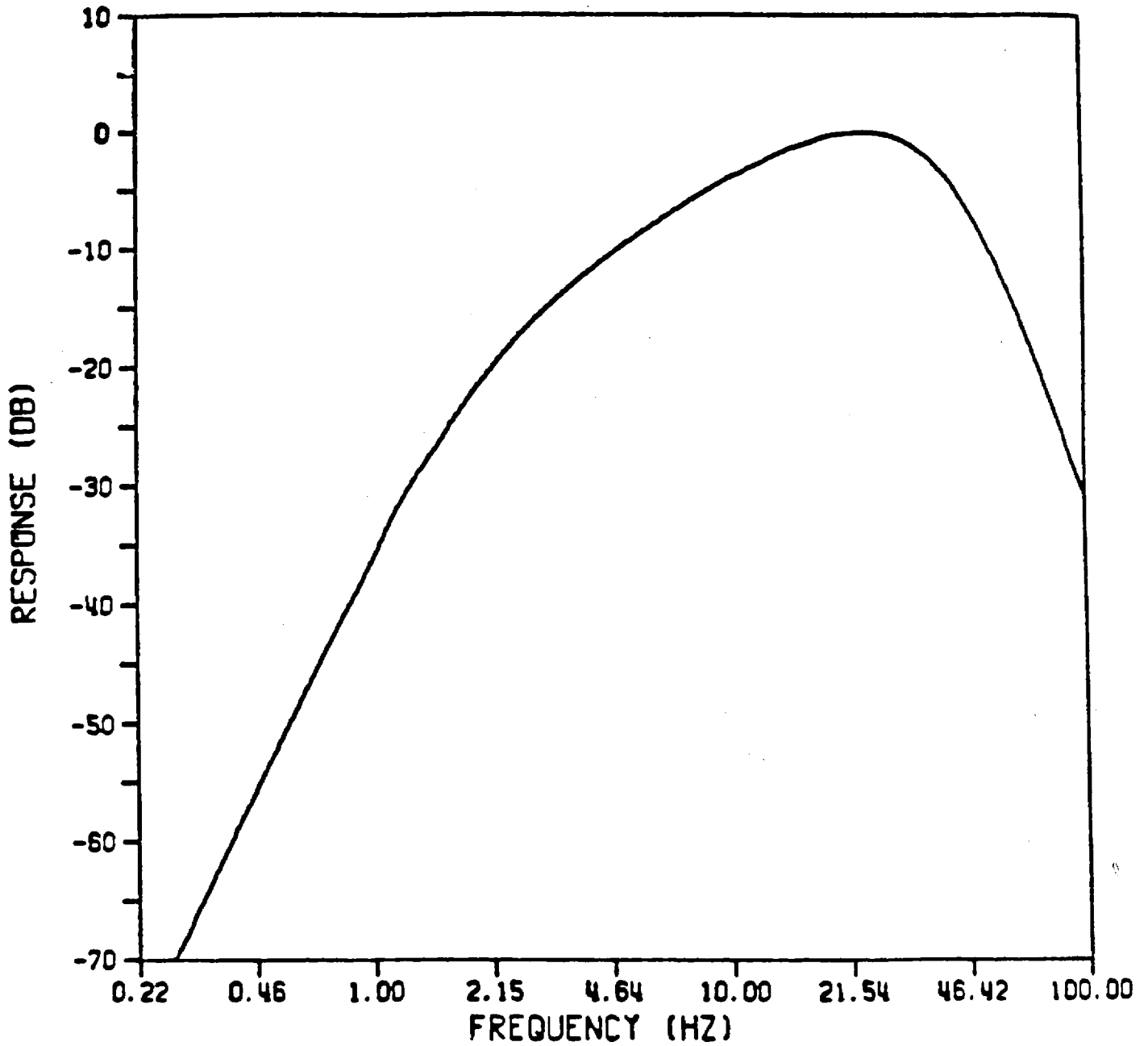


Figure 2 .--System Response Curve for Seismic Recording Units.

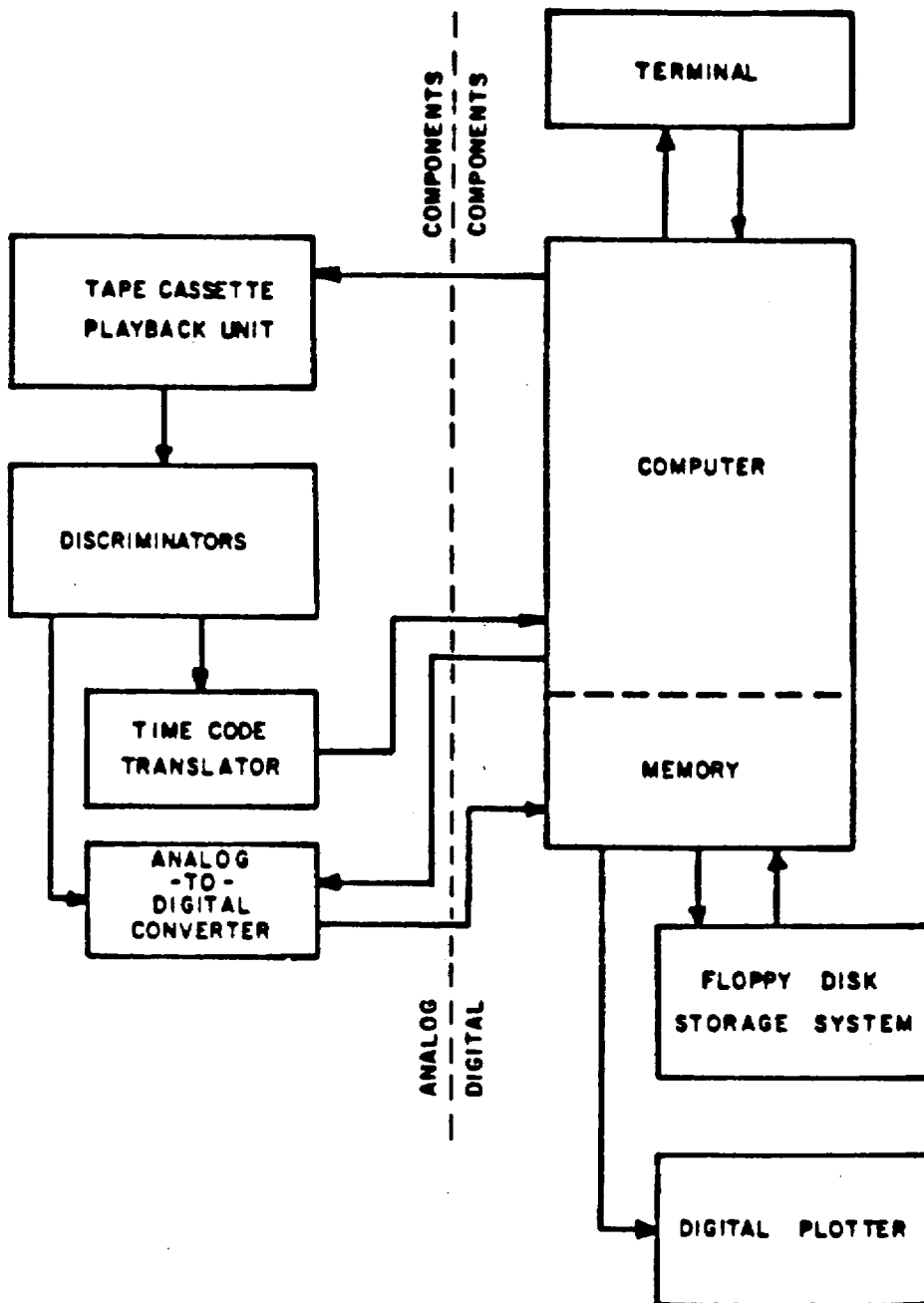


Figure 3 .--Schematic diagram of seismic data processing system showing control and data lines.

APPENDIX A

SEISMOGRAPH LOCATIONS

Location Number of each recorder site on the map corresponds to the Location Number above each seismogram on the record sections (Plates 2-11). Latitudes (North), longitudes (East), and elevations (m) are listed for each seismograph location number.

U.S.G.S. SEISMIC STATION LOCATIONS

NEVADA TEST SITE 1983

LOCATION NUMBER	LATITUDE (DEG,MIN,SEC)	LONGITUDE (DEG,MIN,SEC)	ELEV (M)
701	36 55 20.6	116 33 39.0	1284
702	36 55 30.8	116 33 48.7	1280
703	36 55 38.9	116 33 59.0	1292
704	36 55 47.2	116 34 10.2	1292
705	36 55 56.5	116 34 21.5	1295
706	36 56 0.9	116 34 36.5	1286
707	36 56 2.1	116 34 52.0	1280
708	36 56 2.9	116 35 7.0	1267
709	36 55 59.4	116 35 20.9	1267
710	36 55 55.8	116 35 35.8	1267
711	36 55 59.8	116 35 50.5	1249
712	36 56 0.4	116 36 6.1	1249
713	36 55 57.0	116 36 22.9	1249
714	36 55 55.0	116 36 36.9	1243
715	36 55 53.6	116 36 52.8	1234
716	36 55 51.8	116 37 8.6	1225
717	36 55 47.3	116 37 24.7	1219
718	36 55 41.6	116 37 37.7	1213
719	36 55 42.6	116 37 53.2	1213
720	36 55 39.5	116 38 8.5	1219
721	36 55 33.7	116 38 22.9	1219
722	36 55 26.8	116 38 33.9	1228
723	36 55 14.5	116 38 35.8	1219
724	36 55 4.0	116 38 45.8	1219
725	36 54 55.3	116 38 56.0	1234
726	36 54 45.4	116 39 4.7	1249
727	36 54 34.3	116 39 11.5	1249
728	36 54 25.2	116 39 21.9	1270
729	36 54 18.7	116 39 35.8	1292
730	36 54 13.2	116 39 50.8	1304
731	36 54 2.6	116 40 1.7	1325
732	36 53 52.5	116 40 10.2	1341
733	36 53 42.0	116 40 19.9	1356
734	36 53 32.7	116 40 27.8	1371
735	36 53 24.7	116 40 40.9	1381
736	36 53 24.5	116 40 58.6	1333
737	36 53 21.0	116 41 9.7	1325
738	36 53 16.3	116 41 25.1	1304
739	36 53 11.3	116 41 39.7	1286
740	36 53 18.7	116 41 57.8	1274
741	36 53 21.8	116 42 13.6	1255
742	36 53 33.8	116 42 32.4	1237
743	36 53 41.6	116 42 47.0	1188
744	36 53 45.5	116 43 1.6	1158
745	36 53 45.5	116 43 17.6	1112
746	36 53 42.5	116 43 33.2	1112
747	36 53 40.0	116 43 49.3	1085
748	36 53 37.5	116 44 5.2	1060
749	36 53 34.5	116 44 21.0	1036
750	36 53 32.0	116 44 36.8	1024

U.S.G.S. SEISMIC STATION LOCATIONS

NEVADA TEST SITE 1983

LOCATION NUMBER	LATITUDE (DEG,MIN,SEC)	LONGITUDE (DEG,MIN,SEC)	ELEV (M)
751	36 53 29.5	116 44 52.7	987
752	36 52 56.9	116 45 25.9	975
753	36 53 3.1	116 45 37.1	987
754	36 53 6.4	116 45 56.1	999
755	36 53 4.1	116 46 14.0	1027
756	36 52 57.3	116 46 28.4	1024
757	36 52 54.5	116 46 39.6	1018
758	36 52 57.2	116 46 56.2	1005
759	36 53 2.6	116 47 9.1	1005
760	36 53 2.2	116 47 28.6	1005
761	36 53 9.6	116 47 37.9	1018
762	36 53 12.4	116 47 53.5	1018
763	36 53 16.4	116 48 10.7	1021
764	36 53 22.4	116 48 21.4	1024
765	36 53 9.7	116 48 37.3	1036
766	36 53 6.7	116 48 57.0	1036
767	36 53 11.7	116 49 12.0	1048
768	36 53 17.5	116 49 25.9	1066
769	36 53 24.1	116 49 40.6	1082
770	36 53 24.6	116 49 56.2	1097
771	36 53 22.2	116 50 11.9	1103
772	36 53 18.7	116 50 27.4	1106
773	36 53 19.3	116 50 43.3	1109
774	36 53 21.5	116 50 59.4	1112
775	36 53 22.9	116 51 14.4	1118
776	36 53 24.5	116 51 30.1	1124
777	36 53 26.9	116 51 46.1	1158
778	36 53 28.7	116 52 1.4	1158
779	36 53 32.6	116 52 16.5	1164
780	36 53 35.4	116 52 30.7	1173
781	36 53 37.9	116 52 57.1	1173
782	36 53 39.4	116 53 13.0	1179
783	36 53 39.6	116 53 29.3	1185
784	36 53 33.5	116 53 43.3	1207
785	36 53 36.2	116 53 58.2	1216
786	36 53 40.7	116 54 13.4	1222
787	36 53 44.3	116 54 28.5	1234
788	36 53 46.3	116 54 43.3	1249
789	36 53 54.5	116 54 55.8	1280
790	36 53 57.9	116 55 12.5	1292
791	36 53 58.8	116 55 29.3	1298
792	36 53 48.6	116 55 41.1	1292
793	36 50 54.3	116 55 22.5	1173
794	36 50 50.3	116 55 56.6	1219
795	36 50 50.1	116 56 32.1	1234
796	36 50 52.1	116 57 0.6	1280
797	36 50 14.0	116 57 35.7	1341
798	36 49 59.2	116 57 59.9	1341
799	36 49 33.7	116 58 40.3	1432
800	36 49 29.6	116 59 14.1	1493

U.S.G.S. SEISMIC STATION LOCATIONS

NEVADA TEST SITE 1983

LOCATION NUMBER	LATITUDE (DEG,MIN,SEC)	LONGITUDE (DEG,MIN,SEC)	ELEV (M)
801	36 49 36.3	117 0 0.0	1554
802	36 49 49.7	117 0 37.2	1554
803	36 49 37.3	117 1 19.6	1219
804	36 50 3.2	117 1 54.6	1524
805	36 50 19.7	117 2 37.5	1371
806	36 50 49.7	117 3 24.6	1280
807	36 51 4.7	117 4 17.9	1097
808	36 50 41.2	117 4 46.4	1036
809	36 50 27.8	117 5 24.3	975
810	36 49 58.0	117 6 6.9	853
811	36 49 41.8	117 6 37.0	822
812	36 49 42.4	117 7 14.6	731
813	36 49 28.6	117 7 48.1	640
814	36 49 20.5	117 8 20.1	548
815	36 49 10.6	117 8 50.1	487
816	36 49 21.5	117 9 32.3	396
817	36 49 23.2	117 10 17.5	335
818	36 48 44.0	117 10 50.4	198
819	36 48 14.6	117 11 11.8	121
820	36 48 45.6	117 12 38.8	93
902	36 55 33.5	116 33 29.9	1328
903	36 55 44.8	116 33 23.5	1328
904	36 55 53.8	116 33 12.5	1341
905	36 59 48.9	116 35 8.1	1292
906	36 59 51.9	116 35 3.0	1292
907	36 55 9.6	116 33 41.3	1280
908	36 54 57.4	116 33 39.1	1261
909	36 54 44.9	116 33 42.9	1237
910	36 54 32.6	116 33 47.8	1219
911	36 54 20.2	116 33 51.0	1207
912	36 54 7.7	116 33 55.3	1194
913	36 53 55.3	116 33 59.3	1182
914	36 53 42.9	116 34 3.1	1170
915	36 53 30.4	116 34 6.4	1182
916	36 53 17.9	116 34 10.3	1143
917	36 53 5.4	116 34 13.9	1133
918	36 52 52.3	116 34 17.8	1121
919	36 52 40.4	116 34 22.1	1109
920	36 52 28.0	116 34 25.1	1097
921	36 51 51.8	116 33 44.5	1109
922	36 51 59.9	116 33 31.7	1121
923	36 52 7.7	116 33 19.7	1136
924	36 52 13.6	116 33 5.2	1152
925	36 52 16.5	116 32 47.0	1164
926	36 52 22.4	116 32 33.0	1176
927	36 52 32.3	116 32 23.8	1194
928	36 52 44.5	116 32 19.2	1207
929	36 52 56.6	116 32 16.6	1219
930	36 53 8.4	116 32 12.7	1228
931	36 53 17.5	116 32 2.3	1240

U.S.G.S. SEISMIC STATION LOCATIONS

NEVADA TEST SITE 1983

LOCATION NUMBER	LATITUDE (DEG,MIN,SEC)	LONGITUDE (DEG,MIN,SEC)	ELEV (M)
932	36 53 27.5	116 31 53.0	1249
933	36 52 8.8	116 31 58.2	1158
934	36 51 56.7	116 32 2.7	1158
935	36 51 44.2	116 32 5.9	1152
936	36 51 31.7	116 32 8.7	1139
937	36 51 18.9	116 32 9.8	1127
938	36 51 6.3	116 32 11.6	1115
939	36 50 52.4	116 32 13.3	1103
940	36 50 42.1	116 32 17.0	1097
941	36 50 25.0	116 32 20.4	1097
942	36 50 13.1	116 32 23.6	1094
943	36 50 0.6	116 32 27.0	1085
944	36 49 47.9	116 32 29.9	1072
945	36 49 35.5	116 32 31.9	1060
946	36 49 23.1	116 32 34.6	1060
947	36 49 10.3	116 32 35.2	1042
948	36 48 58.2	116 32 30.6	1036
949	36 48 47.2	116 32 23.2	1036
950	36 48 35.1	116 32 18.0	1030
951	36 48 26.5	116 32 7.6	1036
952	36 48 16.4	116 31 57.9	1024
953	36 48 9.5	116 31 53.0	1024
954	36 47 59.1	116 31 44.9	1024
955	36 47 46.1	116 31 35.5	1024
956	36 47 31.9	116 31 27.2	1021
957	36 47 21.5	116 31 18.5	1011
958	36 47 11.6	116 31 7.9	999
959	36 47 1.4	116 30 58.7	999
960	36 46 50.9	116 30 49.6	996
961	36 46 41.0	116 30 40.1	990
962	36 46 29.6	116 30 32.8	975
963	36 46 17.6	116 30 28.3	975
964	36 46 5.0	116 30 30.7	963
965	36 45 52.3	116 30 31.9	950
966	36 45 40.0	116 30 35.4	938
967	36 45 27.2	116 30 37.3	926
968	36 45 14.8	116 30 39.2	914
969	36 45 1.6	116 30 40.4	908
970	36 44 48.8	116 30 41.6	902
971	36 44 38.2	116 30 42.8	902
972	36 44 31.3	116 30 17.0	950
973	36 44 23.0	116 30 15.5	938
974	36 44 11.3	116 30 19.5	914
975	36 44 0.4	116 30 26.7	914
976	36 43 50.0	116 30 34.6	914
977	36 43 40.1	116 30 37.3	914
978	36 43 28.1	116 30 37.1	908
979	36 43 16.4	116 30 43.3	902
980	36 43 4.9	116 30 48.0	890
981	36 42 54.4	116 30 49.9	883

U.S.G.S. SEISMIC STATION LOCATIONS

NEVADA TEST SITE 1983

LOCATION NUMBER	LATITUDE (DEG,MIN,SEC)	LONGITUDE (DEG,MIN,SEC)	ELEV (M)
982	36 42 41.2	116 30 47.3	877
983	36 42 30.1	116 30 52.1	871
984	36 42 17.5	116 30 53.4	865
985	36 42 5.4	116 30 54.8	865
986	36 41 52.9	116 30 56.0	853
987	36 41 40.9	116 30 58.3	853
988	36 41 29.5	116 30 52.0	841
989	36 41 18.5	116 30 45.7	829
990	36 41 6.8	116 30 43.0	816
991	36 40 54.5	116 30 38.9	804
992	36 40 41.7	116 30 39.9	792
993	36 40 29.0	116 30 39.8	780
994	36 40 16.6	116 30 35.8	780
995	36 39 56.4	116 30 23.2	774
996	36 39 44.0	116 30 19.3	774
997	36 39 31.1	116 30 19.4	774
998	36 39 19.7	116 30 19.6	774
999	36 39 7.0	116 30 19.7	774
1000	36 38 54.0	116 30 19.5	774
1001	36 38 41.5	116 30 19.6	774
1002	36 38 28.6	116 30 19.4	768
1003	36 38 15.7	116 30 19.4	768
1004	36 38 2.0	116 30 19.5	762
1005	36 37 50.0	116 30 19.4	762
1006	36 37 35.9	116 30 19.5	755
1007	36 37 24.2	116 30 19.3	755
1008	36 37 11.5	116 30 19.4	755
1009	36 36 58.6	116 30 19.5	755
1010	36 36 45.1	116 30 19.4	749
1011	36 36 32.9	116 30 19.7	749
1012	36 36 19.9	116 30 19.4	746
1013	36 36 7.3	116 30 19.2	743
1014	36 35 51.2	116 30 19.6	744
1015	36 35 40.1	116 30 19.6	743
1016	36 35 26.0	116 30 19.4	743
1017	36 35 13.7	116 30 19.5	743
1018	36 34 59.1	116 30 19.7	743
1019	36 30 19.3	116 29 4.0	701
1020	36 30 6.5	116 29 3.7	701



## APPENDIX B

SHOT LOCATIONS AND TIMES (p 16), TAPE-GRADE CODE (p 17), and DKDAT data files (pp 18-47).

### SHOT LOCATIONS AND TIMES

Shots are listed in the order that they were fired (Shot Number). Shotpoint Numbers correspond to numbers plotted on the map (Plate 1). Shot time includes the Julian Day (D), hour, minute, and second (H, M, S) in Greenwich Mean Time (GMT).

### TAPE-GRADE CODE

A number is assigned to each cassette tape as it is digitized. These codes appear in the last column of the DKDAT data file.

### DKDAT data file

DKDAT data file is organized by team-shots, and listed in the order of shots fired (Shot Number). A team-shot is twenty recordings of each shot accomplished by each of six teams. Header information for each team-shot includes team numbers, shot numbers, shotpoint numbers, and shot times. Columnized information includes station location numbers (LOC), distance from the shots (DIST; in km), azimuths (AZIM; in degrees from North), unit numbers (UNIT), chronometer corrections (CHRON; in milliseconds; these subtracted from chronometer readings during digitization), channel digitized and gain settings of the three channels (C1, C2, C3), and tape grade codes.

SHOT LOCATIONS AND TIMES

NEVADA 1983

	DATE	SHOT POINT	LATITUDE (East)	LONGITUDE (North)	SHOT TIME DAY HR MN SEC
1.	June 2, 1983	12	36 55.3008	116 33.7166	154 04 30 0.017
2.	June 2, 1983	19	36 53.3855	116 52.6653	154 04 45 0.012
3.	June 2, 1983	18	36 53.7675	116 43.8597	154 05 00 0.009
4.	June 5, 1983	11	36 59.6300	116 35.4150	157 02 00 0.011
5.	June 5, 1983	13	36 52.2469	116 33.0656	157 02 15 0.007
6.	June 5, 1983	17	36 35.0539	116 30.2779	157 04 30 0.010
7.	June 5, 1983	15	36 44.6429	116 30.6290	157 05 30 0.012
8.	June 5, 1983	12	36 55.3308	116 33.7166	157 06 15 0.008
9.	June 5, 1983	16	36 39.3521	116 30.3236	157 06 30 0.009
10.	June 5, 1983	14	36 48.1865	116 31.9221	157 08 30 0.005

TAPE GRADE CODE

- 0 - GOOD
- 1 - TAPE DID NOT RUN
- 2 - TAPE RAN BUT NO SIGNAL
- 3 - TAPE SKIPPED RECORD TIME
- 4 - TAPE RAN FAST FORWARD; NO SIGNAL
- 5 - TAPE REWOUND AND ERASED
- 6 - WEAK SIGNAL; CANNOT READ TIME CODE; LOW RECORD LEVEL
- 7 - NOISE, CONTINUOUS CALIBRATION OR PERIODIC OFFSETS
- 8 - NOISE, SINUSOIDAL
- 9 - NOISE, SPIKE
- 10 - NOISE, WWVB CROSS-FEED
- 11 - NOISE, PERIODIC TICKS
- 12 - NOISE, RANDOM
- 13 - BAD CLOCK
- 14 - OFF FREQUENCY, TAPE SPEED PROBLEM?
- 16 - INCOMPLETE RECORD; RECORDER STOPPED
- 17 - NOISY OR WEAK TIME CODE
- 19 - TURNED ON TOO EARLY
- 20 - IN FOR REPAIR; NOT DEPLOYED
- 21 - GEOPHONE DISCONNECTED OR SHORTED (?)
- 22 - WRONG UNIT NUMBER
- 23 - WRONG GAIN SETTINGS
- 24 - TURNED ON TOO LATE
- 25 - BAD GEOPHONE TEST
- 26 - ONE OR MORE CHANNELS MISSING
- 27 - NOISY OR WEAK WWVB
- 28 - INST OR TAPE DAMAGED IN FIELD
- 29 - WRONG TIME DURING TURN-ON
- 30 - DIGITIZED WITHOUT CALIBRATION
- 31 - AMPLIFIER OUT OF BALANCE
- 32 - LOCATION NOT ON MAP; WRONG LOCATION

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 1 SHOT POINT 12 TEAM 1

SHOT TIME: 154: 4:30: 0.017

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	801	40.453	254.9	1	-18	2	24	6	42	0
2	802	41.239	255.8	2	-15		24	6	42	2
3	803	42.357	255.6	3	7	2	24	6	42	0
4	804	43.003	257.0	4	-114	2	24	6	42	0
5	805	43.928	257.9	5	34		24	6	42	21
6	806	44.889	259.4	6	5	2	24	6	42	0/21
7	807	46.103	260.2	7	-15	2	24	6	42	0
8	808	46.928	259.5	8	47	2	24	6	42	0/21
9	809	47.927	259.2	9	8	2	24	6	42	0
10	810	49.144	258.4	10	-4	2	24	6	42	0
11	811	49.975	258.0	11	34	2	24	6	42	0
12	812	50.888	258.3	12	3	2	24	6	42	0
13	813	51.784	258.0	13	1	2	24	6	42	0
14	814	52.613	257.9	14	40	2	24	6	42	0
15	815	53.405	257.8	15	-2	2	24	6	42	0
16	816	54.354	258.3	16	17	2	24	6	42	0
17	817	55.443	258.6	17	26	2	24	6	42	0
18	818	56.491	257.6	18	1	2	24	6	42	0
19	819	57.213	256.8	19	35	2	24	6	42	0
20	820	59.107	258.2	20	-12	2	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 1 SHOT POINT 12 TEAM 2

SHOT TIME: 154: 4:30: 0.017

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	721	6.945	274.0	21	-6	3	24	6	42	0
2	722	7.205	272.2	22	9	3	24	6	42	0
3	723	7.249	269.1	23	15	3	24	6	42	0
4	724	7.508	266.7	24	-40		24	6	42	1
5	725	7.779	264.8	25	4	3	24	6	42	0
6	726	8.027	262.8	26	3	3	24	6	42	0
7	727	8.243	260.6	27	-5	3	24	6	42	0
8	728	8.546	259.0	28	11	1	24	6	42	0
9	729	8.922	258.2	29	9	1	24	6	42	0
10	730	9.321	257.6	30	4	1	24	6	42	0
11	731	9.658	256.1	31	7	1	24	6	42	0
12	732	9.942	254.6	32	--		24	6	42	1
13	733	10.262	253.2	33	--		24	6	42	1
14	734	10.536	252.0	34	5	1	24	6	42	0
15	735	10.921	251.3	35	-31	1	24	6	42	0
16	736	11.337	252.0	36	-5	1	24	6	42	0
17	737	11.633	251.9	37	15		24	6	42	2
18	738	12.039	251.8	38	--		24	6	42	1
19	739	12.432	251.7	39	3	1	24	6	42	0
20	740	12.791	253.3	40	--		24	6	42	1

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 1 SHOT POINT 12 TEAM 3

SHOT TIME: 154: 4:30: 0.017

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	741	13.138	254.2	41	4		24	6	82	25
2	742	13.493	256.2	42	3	1	24	6	42	0
3	743	13.793	257.6	43	-18	1	24	6	42	0
4	744	14.120	258.3	44	-23	1	24	6	42	0
5	745	14.509	258.7	45	1	1	24	6	42	0
6	746	14.906	258.6	46	-52	1	24	6	42	0
7	747	15.311	258.6	47	37		24	6	42	12
8	748	15.711	258.6	48	-38		24	6	42	1
9	749	16.114	258.6	49	4	1	24	6	42	0
10	750	16.513	258.6	50	5	1	24	6	42	0
11	751	16.913	258.6	51	10	1	24	6	42	12
12	752	17.939	256.0	52	-14	1	24	6	42	0
13	753	18.162	256.8	53	2		24	6	42	21
14	754	18.598	257.4	54	-15	2	24	6	42	0
15	755	19.047	257.5	55	-12		24	6	42	2
16	756	19.440	257.1	56	-3	1	24	6	42	0
17	757	19.729	257.0	57	-46	1	24	6	42	0
18	758	20.113	257.5	58	-5	1	24	6	42	0
19	759	20.390	258.2	59	-3	1	24	6	42	12
20	760	20.865	258.4	60	-7	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 1 SHOT POINT 12 TEAM 4

SHOT TIME: 154: 4:30: 0.017

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	761	21.044	259.2	61	6	1	24	6	42	0
2	762	21.410	259.6	62	5		24	6	42	2
3	763	21.806	260.1	63	4	1	24	6	42	0
4	764	22.035	260.7	64	--		24	6	42	1
5	765	22.492	259.9	65	0	1	24	6	42	0
6	766	22.988	259.9	66	-4	1	24	6	42	0
7	767	23.328	260.4	67	-7	1	24	6	42	0
8	768	23.637	261.0	68	-7	2	36	6	42	0
9	769	23.965	261.6	69	3	1	24	6	42	0
10	770	24.345	261.7	70	12	1	24	6	42	0
11	771	24.741	261.7	71	-6	1	24	6	42	0
12	772	25.136	261.6	72	7	1	24	6	42	0
13	773	25.523	261.8	73	-2		24	6	42	1
14	774	25.907	262.0	74	-4	1	24	6	42	0
15	775	26.270	262.2	75	6	1	24	6	42	0
16	776	26.649	262.5	76	0	1	24	6	42	0
17	777	27.031	262.7	77	0	1	24	6	42	0
18	778	27.402	262.9	78	3	1	24	6	42	0
19	779	27.758	263.3	79	5	1	24	6	42	0
20	780	28.097	263.5	80	6	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 1 SHOT POINT 12 TEAM 5

SHOT TIME: 154: 4:30: 0.017

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	781	28.738	263.8	81	-23	2	24	6	82	0
2	782	29.124	264.0	82	-8	2	24	6	82	0
3	783	29.525	264.1	83	13	2	24	6	82	0
4	784	29.888	263.8	84	12	2	24	6	82	0
5	785	30.247	264.0	85	-38	2	24	6	82	0
6	786	30.608	264.4	86	-55	2	24	6	82	0
7	787	30.968	264.6	87	9	2	24	6	82	0
8	788	31.328	264.8	88	20	1	24	6	42	0
9	789	31.614	265.3	89	10	1	24	6	42	0
10	790	32.016	265.6	90	5	2	24	6	42	0
11	791	32.430	265.7	91	5	2	24	6	42	0
12	792	32.747	265.2	92	6		24	6	42	25
13	793	33.191	255.8	93	-6	1	24	6	42	0
14	794	34.040	256.0	94	10	1	24	6	42	0
15	795	34.897	256.3	95	22	1	24	6	42	0
16	796	35.568	256.7	96	-25	1	24	6	42	0
17	797	36.699	255.2	97	6	2	24	6	42	0
18	798	37.397	254.8	98	9	2	24	6	42	0
19	799	38.573	254.0	99	8	2	24	6	42	0
20	800	39.413	254.2	100	7	2	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 1 SHOT POINT 12 TEAM 6

SHOT TIME: 154: 4:30: 0.017

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	0.126	51.5	101	15	3	24	6	82	0
2	702	0.419	340.2	102	--		24	6	82	1
3	703	0.755	328.2	103	4	3	24	6	82	0
4	704	1.123	323.2	104	0	3	24	6	82	0
5	705	1.520	321.1	105	15	1	24	6	82	0
6	706	1.871	314.9	106	-9		24	6	82	20
7	707	2.182	308.5	107	-37		24	6	82	21
8	708	2.497	303.7	108	9	1	24	6	82	0
9	709	2.738	297.7	109	3	3	24	6	42	0
10	710	3.024	292.6	110	18	3	24	6	42	0
11	711	3.408	292.2	111	15		24	6	42	21
12	712	3.775	290.2	112	-2		24	6	42	21
13	713	4.135	286.9	113	-6		24	6	42	21
14	714	4.452	284.8	114	-3	3	24	6	42	0
15	715	4.823	283.1	115	0		24	6	42	21
16	716	5.196	281.6	116	9	3	24	6	42	0
17	717	5.560	279.3	117	4	3	24	6	42	0
18	718	5.854	277.1	118	5	3	24	6	42	0
19	719	6.240	277.0	119	0	3	24	6	42	0
20	720	6.603	275.7	120	-4	3	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 2 SHOT POINT 19 TEAM 3

SHOT TIME: 154: 4:45: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	741	15.510	90.2	41	4	2	24	6	82	21
2	742	15.047	88.7	42	3	1	24	6	42	0
3	743	14.691	87.8	43	-18	1	24	6	42	0
4	744	14.336	87.2	44	-23	1	24	6	42	0
5	745	13.940	87.2	45	1	1	24	6	42	0
6	746	13.549	87.5	46	-53	1	24	6	42	0
7	747	13.148	87.7	47	37		24	6	42	12
8	748	12.754	88.0	48	-38		24	6	42	1
9	749	12.359	88.4	49	4	1	24	6	42	0
10	750	11.965	88.7	50	6	1	24	6	42	0
11	751	11.571	89.0	51	10	1	24	6	42	0
12	752	10.777	94.3	52	-14	1	24	6	42	0
13	753	10.489	93.4	53	3	2	24	6	42	0
14	754	10.013	93.0	54	-15	2	24	6	42	0
15	755	9.573	93.5	55	-12		24	6	42	2
16	756	9.235	94.9	56	-3	1	24	6	42	0
17	757	8.966	95.6	57	-46	3	24	6	42	0
18	758	8.548	95.4	58	-5	3	24	6	42	0
19	759	8.215	94.4	59	-4	3	24	6	42	0
20	760	7.735	94.8	60	-7	3	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 2 SHOT POINT 19 TEAM 4

SHOT TIME: 154: 4:45: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	761	7.492	93.2	61	6	3	24	6	42	0
2	762	7.099	92.7	62	5	3	24	6	42	0
3	763	6.670	91.8	63	4	3	24	6	42	0
4	764	6.403	90.2	64	--		24	6	42	1
5	765	6.021	93.9	65	0	3	24	6	42	0
6	766	5.543	95.2	66	-4	3	24	6	42	0
7	767	5.160	93.9	67	-7	3	24	6	42	0
8	768	4.807	92.1	68	-7	2	36	6	42	0
9	769	4.441	89.6	69	3	3	24	6	42	0
10	770	4.055	89.4	70	12	3	24	6	42	0
11	771	3.666	90.5	71	-6	3	24	6	42	0
12	772	3.285	92.4	72	8	3	24	6	42	0
13	773	2.891	92.4	73	-2		24	6	42	1
14	774	2.490	91.1	74	-4	3	24	6	42	0
15	775	2.118	90.2	75	6	3	24	6	42	0
16	776	1.729	88.6	76	0	3	24	6	42	0
17	777	1.338	85.0	77	0	3	24	6	42	0
18	778	0.968	79.8	78	3	3	24	6	42	0
19	779	0.649	63.3	79	5	3	24	6	42	0
20	780	0.441	31.1	80	6	3	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 2 SHOT POINT 19 TEAM 5  
 SHOT TIME: 154: 4:45: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	781	0.624	316.9	81	-23	3	24	6	82	0
2	782	0.961	301.5	82	-8	2	24	6	82	0
3	783	1.325	292.5	83	13	1	24	6	82	0
4	784	1.601	281.6	84	12	1	24	6	82	0
5	785	1.980	281.8	85	-39	1	24	6	82	0
6	786	2.378	283.2	86	-55	1	24	6	82	0
7	787	2.767	283.7	87	10	1	24	6	82	0
8	788	3.138	283.2	88	20	3	24	6	42	0
9	789	3.501	286.0	89	10	3	24	6	42	0
10	790	3.926	285.8	90	5	3	24	6	42	0
11	791	4.335	284.7	91	5	3	24	6	42	0
12	792	4.555	279.9	92	6		24	6	42	25
13	793	6.104	221.3	93	-6	1	24	6	42	0
14	794	6.777	225.9	94	10	1	24	6	42	0
15	795	7.440	230.6	95	22	1	24	6	42	0
16	796	7.961	234.2	96	-25	3	24	6	42	0
17	797	9.364	231.5	97	6	3	24	6	42	0
18	798	10.117	231.6	98	9	1	24	6	42	0
19	799	11.389	231.6	99	8	1	24	6	42	0
20	800	12.131	233.6	100	7	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 2 SHOT POINT 19 TEAM 6  
 SHOT TIME: 154: 4:45: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	28.476	82.7	101	0	1	24	6	82	0
2	702	28.279	82.0	102	--		24	6	82	1
3	703	28.061	81.4	103	4		24	6	82	2
4	704	27.828	80.8	104	0	1	24	6	82	0
5	705	27.598	80.1	105	15	1	24	6	82	0
6	706	27.256	79.7	106	-10		24	6	82	1
7	707	26.886	79.5	107	-38	1	24	6	82	0
8	708	26.527	79.3	108	9	1	24	6	82	0
9	709	26.168	79.4	109	3	1	24	6	42	0
10	710	25.786	79.5	110	18	1	24	6	42	0
11	711	25.450	79.1	111	15	2	24	6	42	0/12
12	712	25.074	78.9	112	-2	2	24	6	42	0/12
13	713	24.648	78.9	113	-7		24	6	42	12
14	714	24.295	78.9	114	-3	2	24	6	42	0
15	715	23.901	78.8	115	0		24	6	42	17
16	716	23.505	78.8	116	9	2	24	6	42	0
17	717	23.089	78.9	117	4	2	24	6	42	0
18	718	22.739	79.2	118	5	1	24	6	42	0
19	719	22.367	78.9	119	0	1	24	6	42	0
20	720	21.979	79.0	120	-4	1	24	6	42	0



DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 3 SHOT POINT 18 TEAM 1

SHOT TIME: 154: 5: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	801	25.193	252.2	1	-18	1	24	6	42	0
2	802	25.953	253.7	2	-16	2	24	6	42	0
3	803	27.074	253.6	3	7	2	24	6	42	0
4	804	27.692	255.6	4	-117	1	24	6	42	0
5	805	28.604	257.1	5	35	2	24	6	42	0
6	806	29.558	259.4	6	5	2	24	6	42	0
7	807	30.776	260.7	7	-15	1	24	6	42	0
8	808	31.597	259.6	8	48	2	24	6	42	0
9	809	32.597	259.2	9	8	2	24	6	42	0
10	810	33.815	258.0	10	-4	1	24	6	42	0
11	811	34.649	257.5	11	35	1	24	6	42	0
12	812	35.560	257.8	12	3	1	24	6	42	0
13	813	36.458	257.4	13	1	1	24	6	42	0
14	814	37.288	257.3	14	41	2	24	6	42	0
15	815	38.081	257.1	15	-2	2	24	6	42	0
16	816	39.026	257.9	16	17	2	24	6	42	0
17	817	40.114	258.3	17	27	2	24	6	42	0
18	818	41.169	256.9	18	1	2	24	6	42	0
19	819	41.901	255.9	19	35	2	24	6	42	0
20	820	43.779	257.8	20	-12	2	24	6	42	0

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 3 SHOT POINT 18 TEAM 2

SHOT TIME: 154: 5: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	721	8.787	67.8	21	-6	3	24	6	42	0
2	722	8.456	68.4	22	10	3	24	6	42	0
3	723	8.278	70.8	23	16	3	24	6	42	0
4	724	7.941	72.4	24	-40		24	6	42	1
5	725	7.623	73.7	25	5	3	24	6	42	0
6	726	7.333	75.6	26	3	3	24	6	42	0
7	727	7.091	77.9	27	-5	3	24	6	42	0
8	728	6.785	79.8	28	11	3	24	6	42	0
9	729	6.413	81.0	29	9	3	24	6	42	0
10	730	6.020	82.0	30	4	3	24	6	42	0
11	731	5.715	84.9	31	7	3	24	6	42	0
12	732	5.485	87.9	32	--		24	6	42	1
13	733	5.243	91.4	33	--		24	6	42	1
14	734	5.062	94.7	34	5		24	6	42	17
15	735	4.766	97.9	35	-31	3	24	6	42	0
16	736	4.335	98.8	36	-5	3	24	6	42	0
17	737	4.081	100.9	37	16		24	6	42	2
18	738	3.742	104.2	38	--		24	6	42	1
19	739	3.437	108.2	39	3	3	24	6	42	0
20	740	2.940	106.7	40	--		24	6	42	1

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 3 SHOT POINT 18 TEAM 3

SHOT TIME: 154: 5: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	741	2.540	107.1	41	4		24	6	82	17
2	742	1.997	100.9	42	3	1	24	6	42	0
3	743	1.604	94.9	43	-19	1	24	6	42	0
4	744	1.237	90.8	44	-23	1	24	6	42	0
5	745	0.841	91.1	45	1	1	24	6	42	0
6	746	0.467	103.6	46	-53	1	24	6	42	0
7	747	0.194	163.3	47	37		24	6	42	3
8	748	0.427	231.9	48	-39		24	6	42	1
9	749	0.811	244.0	49	4	3	24	6	42	0
10	750	1.201	248.8	50	6	3	24	6	42	0
11	751	1.596	251.4	51	10	1	24	6	42	0
12	752	2.785	237.0	52	-15	1	24	6	42	0
13	753	2.929	243.1	53	3	2	24	6	42	0
14	754	3.317	248.3	54	-16	1	24	6	42	0
15	755	3.757	249.9	55	-12	1	24	6	42	0
16	756	4.164	248.8	56	-3	3	24	6	42	0
17	757	4.453	249.1	57	-46	3	24	6	42	0
18	758	4.814	251.8	58	-5	3	24	6	42	0
19	759	5.072	254.7	59	-4	3	24	6	42	0
20	760	5.542	255.9	60	-7	3	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 3 SHOT POINT 18 TEAM 4

SHOT TIME: 154: 5: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	761	5.714	258.7	61	6	3	24	6	42	0
2	762	6.080	260.2	62	5	3	24	6	42	0
3	763	6.481	261.9	63	4	3	24	6	42	0
4	764	6.719	263.8	64	--		24	6	42	1
5	765	7.164	261.0	65	0	3	24	6	42	0
6	766	7.659	260.9	66	-4	3	24	6	42	0
7	767	8.005	262.4	67	-7	3	24	6	42	0
8	768	8.325	263.9	68	-8		36	6	42	2
9	769	8.667	265.5	69	3	3	24	6	42	0
10	770	9.051	265.8	70	12	3	24	6	42	0
11	771	9.445	265.5	71	-6	3	24	6	42	0
12	772	9.836	265.1	72	8	3	24	6	42	0
13	773	10.227	265.4	73	-2		24	6	42	1
14	774	10.619	265.9	74	-5	3	24	6	42	0
15	775	10.987	266.3	75	6	1	24	6	42	0
16	776	11.373	266.6	76	0	3	24	6	42	0
17	777	11.764	267.1	77	0	2	24	6	42	0
18	778	12.141	267.5	78	3	1	24	6	42	0
19	779	12.509	268.1	79	5	1	24	6	42	0
20	780	12.858	268.5	80	6	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 3 SHOT POINT 18 TEAM 5

SHOT TIME: 154: 5: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	781	13.510	268.9	81	-24	1	24	6	82	0
2	782	13.902	269.2	82	-8	1	24	6	82	0
3	783	14.306	269.2	83	13	1	24	6	82	0
4	784	14.655	268.5	84	13	1	24	6	82	0
5	785	15.023	268.8	85	-39	1	24	6	82	0
6	786	15.398	269.4	86	-56	1	24	6	82	0
7	787	15.770	269.8	87	10	1	24	6	82	0
8	788	16.137	270.0	88	21	1	24	6	42	0
9	789	16.448	270.9	89	10	1	24	6	42	0
10	790	16.862	271.2	90	5	1	24	6	42	0
11	791	17.279	271.3	91	5	1	24	6	42	0
12	792	17.568	270.3	92	6	2	24	6	42	25
13	793	17.913	252.8	93	-6	1	24	6	42	0
14	794	18.756	253.2	94	11	1	24	6	42	0
15	795	19.603	253.9	95	22	1	24	6	42	0
16	796	20.265	254.7	96	-26	1	24	6	42	0
17	797	21.434	252.2	97	7	1	24	6	42	0
18	798	22.146	251.6	98	10	1	24	6	42	0
19	799	23.348	250.5	99	8		24	6	42	17
20	800	24.180	250.9	100	8	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 3 SHOT POINT 18 TEAM 6

SHOT TIME: 154: 5: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	15.442	79.1	101	15	1	24	6	82	0
2	702	15.269	77.8	102	--		24	6	82	1
3	703	15.074	76.7	103	4		24	6	82	3
4	704	14.869	75.5	104	0		24	6	82	3
5	705	14.672	74.1	105	15	1	24	6	82	0
6	706	14.355	73.2	106	-10		24	6	82	1
7	707	13.999	72.6	107	-38	2	24	6	82	21
8	708	13.655	72.0	108	10	2	24	6	82	0
9	709	13.293	72.0	109	3	2	24	6	42	0
10	710	12.909	72.0	110	18	3	24	6	42	0
11	711	12.601	70.9	111	15	2	24	6	42	21
12	712	12.244	70.2	112	-2	2	24	6	42	21
13	713	11.819	70.0	113	-7		24	6	42	12
14	714	11.471	69.7	114	-3	1	24	6	42	0
15	715	11.087	69.2	115	-2		24	6	42	17
16	716	10.701	68.8	116	9	1	24	6	42	0
17	717	10.282	68.7	117	4	1	24	6	42	0
18	718	9.917	69.0	118	5	3	24	6	42	0
19	719	9.571	68.0	119	0	3	24	6	42	0
20	720	9.186	67.6	120	-4	3	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 4 SHOT POINT 11 TEAM 1  
 SHOT TIME: 157: 2: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	1001	39.460	168.9	1	15	2	24	6	62	0
2	1002	39.850	169.0	2	-30	2	24	6	42	0
3	1003	40.241	169.2	3	6	2	24	6	42	0
4	1004	40.655	169.3	4	0	2	24	6	42	0
5	1005	41.019	169.4	5	41	2	24	6	42	0
6	1006	41.444	169.5	6	9		24	6	42	1
7	1007	41.802	169.6	7	-5	2	24	6	42	0
8	1008	42.187	169.7	8	45		24	6	42	21
9	1009	42.578	169.8	9	-6	2	24	6	42	0
10	1010	42.988	169.9	10	-11		24	6	42	3
11	1011	43.356	170.0	11	32	2	24	6	42	0
12	1012	43.753	170.0	12	0	2	24	6	42	0
13	1013	44.134	170.1	13	-2	2	24	6	42	0
14	1014	44.623	170.2	14	327	2	24	6	62	0
15	1015	44.960	170.3	15	-4	2	24	6	62	0
16	1016	45.388	170.4	16	6	2	24	6	82	0
17	1017	45.763	170.5	17	29	2	24	6	82	0
18	1018	46.205	170.6	18	4	2	24	6	82	0
19	1019	55.024	170.1	19	39		24	6	82	21
20	1020	55.414	170.2	20	-16		24	6	82	3

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 4 SHOT POINT 11 TEAM 2  
 SHOT TIME: 157: 2: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	921	14.579	170.2	21	4	1	24	6	82	0
2	922	14.392	168.8	22	7	1	24	6	82	0
3	923	14.216	167.4	23	12		24	6	82	2
4	924	14.124	165.8	24	-11	3	24	6	42	0
5	925	14.154	164.0	25	--		24	6	82	1
6	926	14.081	162.4	26	4	1	24	6	82	0
7	927	13.860	161.1	27	-21	1	24	6	82	0
8	928	13.546	160.2	28	--		24	6	82	1
9	929	13.217	159.4	29	8	1	24	6	82	0
10	930	12.911	158.4	30	3	1	24	6	42	0/15
11	931	12.750	156.8	31	8	1	24	6	42	0
12	932	12.561	155.3	32	-3	1	24	6	42	0
13	933	14.757	159.7	33	-82	1	24	6	42	0
14	934	15.070	160.6	34	3	1	24	6	42	0
15	935	15.407	161.4	35	-86		24	6	42	2
16	936	15.753	162.0	36	-6	1	24	6	42	0
17	937	16.120	162.6	37	--		24	6	82	1
18	938	16.478	163.1	38	2		24	6	42	3
19	939	16.877	163.7	39	6	1	24	6	42	0
20	940	17.156	164.3	40	4	1	24	6	42	0

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 4 SHOT POINT 11 TEAM 3

SHOT TIME: 157: 2: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	941	17.643	165.0	41	7		24	6	42	21
2	942	17.978	165.5	42	0	2	24	6	42	0/21
3	943	18.330	166.1	43	-21		24	6	42	1
4	944	18.694	166.6	44	-21	1	24	6	42	0
5	945	19.054	167.0	45	2		24	6	42	3
6	946	19.412	167.5	46	-52	1	24	6	42	0
7	947	19.796	167.7	47	33	1	24	6	42	0
8	948	20.183	167.7	48	-37		24	6	82	2
9	949	20.555	167.4	49	2	1	24	6	42	0
10	950	20.946	167.2	50	-4	1	24	6	42	0
11	951	21.263	166.7	51	3	1	24	6	42	0
12	952	21.620	166.3	52	-16	1	24	6	42	0
13	953	21.855	166.1	53	3	1	24	6	42	0
14	954	22.216	165.8	54	-14	2	24	6	42	0
15	955	22.663	165.5	55	-14	2	24	6	42	0
16	956	23.137	165.3	56	-2	1	24	6	82	0
17	957	23.504	165.0	57	-39		24	6	42	2
18	958	23.865	164.5	58	-5	1	24	6	42	0
19	959	24.232	164.2	59	-4		24	6	42	1
20	960	24.603	163.9	60	-6	2	24	6	42	0

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 4 SHOT POINT 11 TEAM 4

SHOT TIME: 157: 2: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	961	24.962	163.6	61	8	1	24	6	42	0
2	962	25.350	163.4	62	8	1	24	6	42	0
3	963	25.738	163.4	63	7		24	6	42	1
4	964	26.094	163.8	64	10	1	24	6	42	0
5	965	26.460	164.1	65	0		24	6	42	1
6	966	26.804	164.5	66	-6	2	24	6	42	0
7	967	27.169	164.8	67	-21	2	24	6	62	0
8	968	27.528	165.1	68	-13	1	24	6	62	0
9	969	27.913	165.4	69	4	1	24	6	82	0
10	970	28.289	165.6	70	7	1	24	6	82	0
11	971	28.597	165.9	71	-15	2	24	6	82	0
12	972	28.967	164.7	72	10	2	24	6	82	0
13	973	29.221	164.8	73	-2		24	6	82	12
14	974	29.544	165.2	74	0	2	24	6	62	0
15	975	29.827	165.7	75	8	2	24	6	62	0
16	976	30.089	166.2	76	-3	1	24	6	42	0
17	977	30.370	166.4	77	-2	1	24	6	42	0
18	978	30.729	166.6	78	--	2	24	6	42	0
19	979	31.045	167.0	79	7	2	24	6	42	0
20	980	31.366	167.4	80	10	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 4 SHOT POINT 11 TEAM 5

SHOT TIME: 157: 2: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	981	31.673	167.6	81	-14	1	24	6	42	0
2	982	32.084	167.6	82	7	1	24	6	42	0
3	983	32.393	168.0	83	8	2	24	6	42	0
4	984	32.767	168.2	84	7	1	24	6	42	0
5	985	33.124	168.3	85	-37		24	6	42	3
6	986	33.497	168.5	86	-34	2	24	6	42	0
7	987	33.848	168.7	87	5	1	24	6	42	0
8	988	34.221	168.6	88	16	2	24	6	42	0
9	989	34.586	168.5	89	8	2	24	6	42	0
10	990	34.951	168.5	90	0	2	24	6	42	0
11	991	35.345	168.4	91	9	2	24	6	42	0
12	992	35.726	168.6	92	5	2	24	6	42	0
13	993	36.109	168.7	93	-8	2	24	6	42	0
14	994	36.504	168.7	94	7	2	24	6	42	0
15	995	37.177	168.4	95	18		24	6	82	2
16	996	37.571	168.4	96	-21	2	24	6	82	0
17	997	37.960	168.5	97	6	2	24	6	82	0
18	998	38.304	168.6	98	9	2	24	6	82	0
19	999	38.686	168.7	99	3	2	24	6	82	0
20	1000	39.081	168.8	100	6	2	24	6	82	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 4 SHOT POINT 11 TEAM 6

SHOT TIME: 157: 2: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	8.351	161.7	101	13	1	24	6	82	0
2	902	8.051	159.3	102	3		24	6	82	1
3	903	7.784	157.3	103	9	1	24	6	82	0
4	904	7.644	154.6	104	0	1	24	6	82	0
5	905	0.539	50.6	105	12		24	6	62	21
6	906	0.695	51.2	106	-12		24	6	62	21
7	907	8.656	162.8	107	-6	1	24	6	82	0
8	908	9.031	163.2	108	7	2	24	6	82	0
9	909	9.376	164.4	109	2	1	24	6	82	0
10	910	9.709	165.7	110	17	1	24	6	62	0
11	911	10.064	166.7	111	-2	2	24	6	62	0
12	912	10.413	167.7	112	-6	2	24	6	62	0
13	913	10.769	168.7	113	-6	1	24	6	42	0
14	914	11.126	169.5	114	1	1	24	6	42	0
15	915	11.492	170.3	115	-4	1	24	6	42	0
16	916	11.856	171.0	116	6	1	24	6	42	0
17	917	12.223	171.7	117	2	1	24	6	42	0
18	918	12.609	172.4	118	-4	1	24	6	42	0
19	919	12.962	173.1	119	0	3	24	6	42	0
20	920	13.333	173.6	120	-5	3	24	6	42	0/12

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 5 SHOT POINT 13 TEAM 1

SHOT TIME: 157: 2:15: 0.007

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	1001	25.401	170.8	1	15	2	24	6	62	12
2	1002	25.794	170.9	2	-30	1	24	6	42	0
3	1003	26.187	171.0	3	7	1	24	6	42	0
4	1004	26.603	171.2	4	0	1	24	6	42	0
5	1005	26.969	171.3	5	41	1	24	6	42	0
6	1006	27.397	171.4	6	9		24	6	42	1
7	1007	27.756	171.5	7	-5	1	24	6	42	0
8	1008	28.143	171.7	8	45		24	6	42	21
9	1009	28.537	171.8	9	-6	2	24	6	42	0
10	1010	28.949	171.9	10	-12		24	6	42	2
11	1011	29.320	172.0	11	33	2	24	6	42	0
12	1012	29.718	172.1	12	0	2	24	6	42	0
13	1013	30.102	172.2	13	-2	2	24	6	42	0
14	1014	30.593	172.3	14	337	2	24	6	62	0
15	1015	30.932	172.4	15	-4	2	24	6	62	0
16	1016	31.362	172.5	16	6	2	24	6	82	0/21
17	1017	31.740	172.6	17	29	2	24	6	82	0
18	1018	32.185	172.7	18	4	2	24	6	82	0
19	1019	40.986	171.6	19	40		24	6	82	21
20	1020	41.377	171.7	20	-16		24	6	82	3

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 5 SHOT POINT 13 TEAM 2

SHOT TIME: 157: 2:15: 0.007

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	921	1.231	234.8	21	4	3	24	6	82	0
2	922	0.826	236.2	22	7	3	24	6	82	0
3	923	0.447	240.8	23	12		24	6	82	2
4	924	0.050	219.4	24	-11	3	24	6	42	0
5	925	0.422	82.9	25	--		24	6	82	1
6	926	0.801	73.1	26	4	3	24	6	82	0
7	927	1.131	61.5	27	-21	3	24	6	82	0
8	928	1.436	50.5	28	--		24	6	82	1
9	929	1.741	42.3	29	8	3	24	6	82	0
10	930	2.083	37.5	30	3	3	24	6	42	15
11	931	2.464	38.3	31	8	3	24	6	42	0
12	932	2.848	38.1	32	-3	3	24	6	42	0
13	933	1.639	96.5	33	-83	1	24	6	42	0
14	934	1.617	110.2	34	3	1	24	6	42	0
15	935	1.719	123.3	35	-87		24	6	42	2
16	936	1.908	134.2	36	-6	3	24	6	42	0
17	937	2.184	142.1	37	--		24	6	82	1
18	938	2.478	148.4	38	2	3	24	6	42	24
19	939	2.834	153.7	39	6	3	24	6	42	0
20	940	3.085	157.9	40	4	3	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 5 SHOT POINT 13 TEAM 3  
 SHOT TIME: 157: 2:15: 0.007

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	941	3.554	162.3	41	7		24	6	42	25
2	942	3.884	165.1	42	0	2	24	6	42	0
3	943	4.237	167.5	43	-21		24	6	42	1
4	944	4.607	169.4	44	-21	3	24	6	42	0
5	945	4.974	170.8	45	2		24	6	42	0
6	946	5.343	172.2	46	-52	3	24	6	42	12
7	947	5.734	172.9	47	34	3	24	6	42	25
8	948	6.117	172.2	48	-38		24	6	82	1
9	949	6.480	171.0	49	2	1	24	6	42	0
10	950	6.868	170.5	50	-4	1	24	6	42	0
11	951	7.176	168.8	51	3	1	24	6	42	0
12	952	7.528	167.4	52	-17	1	24	6	42	0
13	953	7.762	166.9	53	3	1	24	6	42	0
14	954	8.122	166.0	54	-14	1	24	6	42	0
15	955	8.569	165.2	55	-14	1	24	6	42	0
16	956	9.044	164.6	56	-2	1	24	6	82	0
17	957	9.412	163.9	57	-39		24	6	42	1
18	958	9.778	162.9	58	-5	3	24	6	42	0
19	959	10.148	162.2	59	-4		24	6	42	1
20	960	10.524	161.6	60	-6	3	24	6	42	12

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 5 SHOT POINT 13 TEAM 4  
 SHOT TIME: 157: 2:15: 0.007

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	961	10.889	160.9	61	8	3	24	6	42	0
2	962	11.280	160.6	62	8	3	24	6	42	0
3	963	11.668	160.7	63	7		24	6	42	1
4	964	12.016	161.6	64	10	3	24	6	42	0
5	965	12.378	162.3	65	0		24	6	42	1
6	966	12.716	163.2	66	-6	1	24	6	42	0
7	967	13.078	163.9	67	-21	1	24	6	62	0
8	968	13.435	164.5	68	-13	1	24	6	62	0
9	969	13.819	165.1	69	4		24	6	82	21
10	970	14.194	165.6	70	7	1	24	6	82	0
11	971	14.503	166.0	71	-15	1	24	6	82	0
12	972	14.876	163.9	72	10	1	24	6	82	0
13	973	15.130	164.0	73	-2	1	24	6	82	0
14	974	15.450	164.7	74	0	1	24	6	62	0
15	975	15.732	165.7	75	8	1	24	6	62	0
16	976	15.996	166.6	76	-3	3	24	6	42	0
17	977	16.278	167.1	77	-2	1	24	6	42	0
18	978	16.638	167.4	78	--	1	24	6	42	0
19	979	16.958	168.1	79	7	1	24	6	42	0
20	980	17.282	168.8	80	11	1	24	6	42	0



DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 5 SHOT POINT 13 TEAM 5

SHOT TIME: 157: 2:15: 0.007

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	981	17.593	169.1	81	-15	3	24	6	42	0
2	982	18.004	169.2	82	7		24	6	42	21
3	983	18.319	169.7	83	8	1	24	6	42	0
4	984	18.696	170.0	84	7		24	6	42	21
5	985	19.056	170.3	85	-38		24	6	42	21
6	986	19.432	170.6	86	-34	1	24	6	42	0
7	987	19.789	170.9	87	5	1	24	6	42	0
8	988	20.158	170.7	88	16	1	24	6	42	0
9	989	20.519	170.4	89	8	1	24	6	42	0
10	990	20.885	170.4	90	0	1	24	6	42	0
11	991	21.277	170.3	91	9	1	24	6	42	0
12	992	21.661	170.5	92	5	1	24	6	42	0
13	993	22.047	170.7	93	-9	1	24	6	42	0
14	994	22.441	170.6	94	7	1	24	6	42	0
15	995	23.108	170.1	95	18		24	6	82	1
16	996	23.502	170.0	96	-21	1	24	6	82	0
17	997	23.893	170.2	97	6	1	24	6	82	0
18	998	24.239	170.3	98	9	1	24	6	82	0
19	999	24.623	170.5	99	3		24	6	82	1
20	1000	25.020	170.6	100	6	1	24	6	82	0

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 5 SHOT POINT 13 TEAM 6

SHOT TIME: 157: 2:15: 0.007

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	5.792	351.4	101	13	1	24	6	82	0
2	902	6.158	354.0	102	3		24	6	82	1
3	903	6.492	355.7	103	10	1	24	6	82	0
4	904	6.753	358.2	104	0	1	24	6	82	0
5	905	14.331	347.6	105	12		24	6	62	21
6	906	14.396	348.2	106	-12		24	6	62	21
7	907	5.467	350.2	107	-6	1	24	6	82	0
8	908	5.088	350.1	108	7	2	24	6	82	0
9	909	4.726	348.2	109	2	1	24	6	82	0
10	910	4.385	345.7	110	17	3	24	6	62	0
11	911	4.036	343.2	111	-2	3	24	6	62	0
12	912	3.706	339.9	112	-6	2	24	6	62	0
13	913	3.387	336.1	113	-6		24	6	42	12
14	914	3.086	331.6	114	1	3	24	6	42	0
15	915	2.796	326.4	115	-4	3	24	6	42	0
16	916	2.545	319.8	116	6	3	24	6	42	0
17	917	2.331	312.0	117	2	3	24	6	42	0
18	918	2.165	302.3	118	-4	3	24	6	42	0
19	919	2.089	292.1	119	0	3	24	6	42	0
20	920	2.050	281.4	120	-5	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 6 SHOT POINT 17 TEAM 1  
 SHOT TIME: 157: 4:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	1001	6.727	359.4	1	17	1	24	6	62	0
2	1002	6.330	359.4	2	-33	3	24	6	42	0
3	1003	5.932	359.3	3	7	3	24	6	42	0
4	1004	5.510	359.3	4	-2		24	6	42	1
5	1005	5.140	359.2	5	45	3	24	6	42	0
6	1006	4.707	359.1	6	10		24	6	42	1
7	1007	4.345	359.1	7	-5	3	24	6	42	0
8	1008	3.953	359.0	8	49		24	6	42	1
9	1009	3.555	358.9	9	-7	3	24	6	42	0
10	1010	3.139	358.8	10	-13		24	6	42	7
11	1011	2.764	358.4	11	35	3	24	6	42	0
12	1012	2.363	358.3	12	0	3	24	6	42	0
13	1013	1.976	358.2	13	-2	3	24	6	42	0
14	1014	1.479	357.2	14	432		24	6	62	2
15	1015	1.138	356.3	15	-5	3	24	6	62	0
16	1016	0.706	354.5	16	6		24	6	82	3
17	1017	0.329	347.7	17	32	3	24	6	82	0
18	1018	0.148	210.3	18	5	3	24	6	82	0
19	1019	8.938	168.3	19	43		24	6	82	21
20	1020	9.325	168.8	20	-18		24	6	82	17

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 6 SHOT POINT 17 TEAM 2  
 SHOT TIME: 157: 4:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	921	31.513	350.6	21	4	1	24	6	82	0
2	922	31.709	351.2	22	7	1	24	6	82	0
3	923	31.905	351.8	23	13		24	6	82	21
4	924	32.033	352.5	24	-12	1	24	6	42	21
5	925	32.068	353.3	25	--		24	6	82	1
6	926	32.209	354.0	26	4	1	24	6	82	0
7	927	32.492	354.4	27	-23	1	24	6	82	0
8	928	32.853	354.7	28	--		24	6	82	1
9	929	33.219	354.9	29	9	1	24	6	82	0
10	930	33.574	355.1	30	3	1	24	6	42	0/30
11	931	33.833	355.6	31	8	2	24	6	42	0
12	932	34.124	356.0	32	-4	1	24	6	42	0
13	933	31.712	355.4	33	-90	1	24	6	42	0
14	934	31.350	355.2	34	3	1	24	6	42	0
15	935	30.974	355.0	35	-95		24	6	42	2
16	936	30.595	354.8	36	-6	1	24	6	42	0
17	937	30.205	354.7	37	--		24	6	82	1
18	938	29.823	354.5	38	2	1	24	6	42	0
19	939	29.400	354.4	39	6	1	24	6	42	0
20	940	29.094	354.1	40	4	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 6 SHOT POINT 17 TEAM 3

SHOT TIME: 157: 4:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	941	28.577	353.8	41	8		24	6	42	17
2	942	28.222	353.6	42	0	2	24	6	42	0
3	943	27.849	353.3	43	-24		24	6	42	1
4	944	27.469	353.1	44	-23	1	24	6	42	0
5	945	27.096	352.9	45	3	1	24	6	42	0
6	946	26.725	352.6	46	-57	1	24	6	42	12
7	947	26.334	352.5	47	37		24	6	42	21
8	948	25.951	352.6	48	-42		24	6	82	1
9	949	25.590	353.0	49	2	1	24	6	42	0
10	950	25.206	353.1	50	-4	1	24	6	42	0
11	951	24.912	353.7	51	4	1	24	6	42	0
12	952	24.579	354.1	52	-18	1	24	6	42	0
13	953	24.355	354.4	53	4	1	24	6	42	0
14	954	24.016	354.8	54	-15	1	24	6	42	0
15	955	23.595	355.2	55	-15	1	24	6	42	0
16	956	23.144	355.7	56	-3	1	24	6	82	0
17	957	22.808	356.1	57	-43		24	6	42	1
18	958	22.489	356.8	58	-5	1	24	6	42	0
19	959	22.161	357.3	59	-5		24	6	42	1
20	960	21.830	357.9	60	-6	1	24	6	42	12

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 6 SHOT POINT 17 TEAM 4

SHOT TIME: 157: 4:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	961	21.517	358.5	61	9	1	24	6	42	0
2	962	21.162	358.9	62	9	1	24	6	42	0
3	963	20.788	359.2	63	8		24	6	42	1
4	964	20.401	359.0	64	11	1	24	6	42	0
5	965	20.011	358.9	65	0		24	6	42	1
6	966	19.632	358.6	66	-6	1	24	6	42	0
7	967	19.242	358.5	67	-23	1	24	6	62	0
8	968	18.859	358.3	68	-15	1	24	6	62	0
9	969	18.454	358.2	69	5	1	24	6	82	0
10	970	18.060	358.0	70	8	1	24	6	82	0
11	971	17.735	357.9	71	-16	1	24	6	82	0
12	972	17.509	360.0	72	11	1	24	6	82	33
13	973	17.256	0.1	73	-2	1	24	6	82	0
14	974	16.895	359.8	74	0	1	24	6	62	0
15	975	16.558	359.1	75	9	1	24	6	62	0
16	976	16.243	358.4	76	-3	1	24	6	42	0
17	977	15.940	358.2	77	-2	3	24	6	42	0
18	978	15.572	358.1	78	--	3	24	6	42	0
19	979	15.217	357.5	79	8	1	24	6	42	0
20	980	14.868	357.0	80	12	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 6 SHOT POINT 17 TEAM 5

SHOT TIME: 157: 4:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	981	14.545	356.8	81	-16		24	6	42	12
2	982	14.136	356.9	82	8		24	6	42	12
3	983	13.801	356.3	83	9	3	24	6	42	21
4	984	13.416	356.1	84	8	3	24	6	42	0
5	985	13.047	355.8	85	-41	3	24	6	42	12
6	986	12.664	355.6	86	-37	3	24	6	42	0
7	987	12.300	355.2	87	6	3	24	6	42	0
8	988	11.940	355.8	88	18	3	24	6	42	0
9	989	11.589	356.4	89	8	3	24	6	42	0
10	990	11.227	356.7	90	0	3	24	6	42	0
11	991	10.841	357.1	91	10	3	24	6	42	0
12	992	10.449	356.8	92	5	2	24	6	42	0
13	993	10.059	356.7	93	-9	3	24	6	42	0
14	994	9.672	357.2	94	7	1	24	6	42	0
15	995	9.038	359.0	95	20		24	6	82	6
16	996	8.654	359.6	96	-24	1	24	6	82	0
17	997	8.256	359.5	97	6	1	24	6	82	0
18	998	7.905	359.5	98	10	1	24	6	82	0
19	999	7.515	359.4	99	4	1	24	6	82	0
20	1000	7.114	359.4	100	6	1	24	6	82	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 6 SHOT POINT 17 TEAM 6

SHOT TIME: 157: 4:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	37.859	352.4	101	15	1	24	6	82	0
2	902	38.224	352.8	102	3		24	6	82	1
3	903	38.552	353.1	103	10	1	24	6	82	0
4	904	38.793	353.5	104	0	1	24	6	82	21
5	905	46.362	351.0	105	13		24	6	62	21
6	906	46.435	351.2	106	-14		24	6	62	21
7	907	37.531	352.2	107	-7	1	24	6	82	0
8	908	37.152	352.2	108	8	2	24	6	82	21
9	909	36.782	352.0	109	2	1	24	6	82	0
10	910	36.425	351.7	110	19	1	24	6	62	0
11	911	36.056	351.5	111	-3	2	24	6	62	0
12	912	35.694	351.3	112	-7	1	24	6	62	21
13	913	35.329	351.0	113	-7	2	24	6	42	0
14	914	34.968	350.8	114	1	1	24	6	42	0
15	915	34.600	350.5	115	-5	1	24	6	42	0
16	916	34.237	350.3	116	6	1	24	6	42	0
17	917	33.873	350.0	117	2		24	6	42	0
18	918	33.494	349.7	118	-4	1	24	6	42	0
19	919	33.150	349.4	119	0	1	24	6	42	0
20	920	32.788	349.2	120	-6	2	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 7 SHOT POINT 15 TEAM 1

SHOT TIME: 157: 5:30: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	1001	11.017	177.7	1	17	1	24	6	62	0
2	1002	11.414	177.7	2	-34	1	24	6	42	0
3	1003	11.812	177.8	3	7	1	24	6	42	0
4	1004	12.233	177.9	4	-2	1	24	6	42	0
5	1005	12.603	177.9	5	46	1	24	6	42	0
6	1006	13.036	178.0	6	10		24	6	42	1
7	1007	13.398	178.0	7	-6	1	24	6	42	0
8	1008	13.790	178.1	8	51	2	24	6	42	0
9	1009	14.187	178.2	9	-7	1	24	6	42	0
10	1010	14.603	178.2	10	-13		24	6	42	1
11	1011	14.978	178.3	11	37	1	24	6	42	0
12	1012	15.380	178.3	12	0	1	24	6	42	0
13	1013	15.766	178.3	13	-2	1	24	6	42	0
14	1014	16.263	178.4	14	474	1	24	6	62	0
15	1015	16.605	178.4	15	-5	1	24	6	62	0
16	1016	17.038	178.5	16	7	2	24	6	82	0
17	1017	17.419	178.5	17	33	1	24	6	82	0
18	1018	17.868	178.6	18	5	1	24	6	82	0
19	1019	26.590	175.0	19	45		24	6	82	21
20	1020	26.983	175.0	20	-18		24	6	82	17

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 7 SHOT POINT 15 TEAM 2

SHOT TIME: 157: 5:30: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	921	14.134	340.9	21	4	1	24	6	82	0
2	922	14.270	342.4	22	8	1	24	6	82	0
3	923	14.416	343.8	23	14		24	6	82	21
4	924	14.493	345.4	24	-12	3	24	6	42	0
5	925	14.475	347.2	25	--		24	6	82	1
6	926	14.579	348.7	26	5		24	6	82	17
7	927	14.838	349.8	27	-24	1	24	6	82	0
8	928	15.187	350.5	28	--		24	6	82	1
9	929	15.545	350.9	29	9	1	24	6	82	0
10	930	15.891	351.5	30	3	1	24	6	42	0/30
11	931	16.133	352.5	31	9	1	24	6	42	0
12	932	16.412	353.5	32	-4	1	24	6	42	0
13	933	14.019	351.8	33	-93	1	24	6	42	0
14	934	13.668	351.1	34	3	1	24	6	42	0
15	935	13.301	350.5	35	-98		24	6	42	2
16	936	12.932	350.0	36	-7	1	24	6	42	0
17	937	12.549	349.5	37	--		24	6	82	1
18	938	12.176	349.0	38	2		24	6	42	1
19	939	11.763	348.4	39	7	1	24	6	42	0
20	940	11.473	347.6	40	4	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 7 SHOT POINT 15 TEAM 3  
 SHOT TIME: 157: 5:30: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	941	10.977	346.6	41	8		24	6	42	21
2	942	10.640	345.7	42	0	1	24	6	42	0
3	943	10.289	344.7	43	-25		24	6	42	1
4	944	9.932	343.7	44	-24	1	24	6	42	0
5	945	9.581	342.8	45	3	1	24	6	42	0
6	946	9.237	341.7	46	-60	1	24	6	42	0
7	947	8.866	340.8	47	39	1	24	6	42	0
8	948	8.478	340.7	48	-43		24	6	82	1
9	949	8.096	341.2	49	2	1	24	6	42	0
10	950	7.703	341.2	50	-4	1	24	6	42	0
11	951	7.370	342.4	51	4	1	24	6	42	0
12	952	7.004	343.5	52	-19	1	24	6	42	0
13	953	6.766	344.0	53	4	1	24	6	42	0
14	954	6.402	344.9	54	-16	1	24	6	42	0
15	955	5.954	346.1	55	-16	1	24	6	42	0
16	956	5.482	347.1	56	-3	1	24	6	82	0
17	957	5.122	348.6	57	-45		24	6	42	1
18	958	4.777	351.0	58	-6	3	24	6	42	0
19	959	4.432	353.3	59	-5		24	6	42	1
20	960	4.090	355.9	60	-7	3	24	6	42	0/12

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 7 SHOT POINT 15 TEAM 4  
 SHOT TIME: 157: 5:30: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	961	3.775	359.1	61	9	1	24	6	42	0
2	962	3.426	2.0	62	9	3	24	6	42	0
3	963	3.061	4.4	63	8		24	6	42	1
4	964	2.669	3.7	64	11	3	24	6	42	0
5	965	2.278	3.6	65	0		24	6	42	1
6	966	1.893	1.8	66	-7	3	24	6	42	0
7	967	1.500	0.4	67	-24	1	24	6	62	0
8	968	1.117	358.1	68	-15	3	24	6	62	0
9	969	0.713	354.7	69	5	3	24	6	82	0
10	970	0.329	342.9	70	8	3	24	6	82	0
11	971	0.126	265.0	71	-17	3	24	6	82	0
12	972	0.561	113.7	72	12	1	24	6	82	0
13	973	0.731	130.9	73	-2	1	24	6	82	0
14	974	0.954	151.7	74	0	3	24	6	62	0
15	975	1.210	166.9	75	10	3	24	6	62	0
16	976	1.500	177.0	76	-3	3	24	6	42	0
17	977	1.803	179.6	77	-3	3	24	6	42	0
18	978	2.171	179.6	78	--	3	24	6	42	0
19	979	2.536	183.1	79	8	3	24	6	42	0
20	980	2.898	185.0	80	12	1	24	6	42	0

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 7 SHOT POINT 15 TEAM 5  
 SHOT TIME: 157: 5:30: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	981	3.227	185.3	81	-17	3	24	6	42	0
2	982	3.627	183.8	82	8		24	6	42	21
3	983	3.977	185.2	83	9	3	24	6	42	0
4	984	4.367	185.1	84	9	3	24	6	42	0
5	985	4.741	185.1	85	-43	3	24	6	42	0
6	986	5.128	185.1	86	-39	3	24	6	42	0
7	987	5.502	185.3	87	6	3	24	6	42	0
8	988	5.838	183.5	88	18	3	24	6	42	0
9	989	6.171	181.8	89	9	1	24	6	42	0
10	990	6.528	181.1	90	0	1	24	6	42	0
11	991	6.908	180.2	91	10	1	24	6	42	0
12	992	7.301	180.4	92	5	1	24	6	42	0
13	993	7.692	180.4	93	-10	1	24	6	42	0
14	994	8.075	179.7	94	8	1	24	6	42	0
15	995	8.705	177.6	95	21		24	6	82	6
16	996	9.092	177.1	96	-24	1	24	6	82	0
17	997	9.489	177.2	97	7	1	24	6	82	0
18	998	9.840	177.4	98	11	1	24	6	82	0
19	999	10.230	177.5	99	4		24	6	82	0
20	1000	10.631	177.6	100	7	1	24	6	82	0

DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 7 SHOT POINT 15 TEAM 6  
 SHOT TIME: 157: 5:30: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	20.294	347.2	101	15	1	24	6	82	0
2	902	20.634	348.1	102	3		24	6	82	1
3	903	20.944	348.7	103	11	1	24	6	82	0
4	904	21.163	349.6	104	0	1	24	6	82	21
5	905	28.849	346.6	105	13		24	6	62	21
6	906	28.911	346.9	106	-14		24	6	62	21
7	907	19.977	346.8	107	-7	1	24	6	82	0
8	908	19.599	346.7	108	8		24	6	82	0
9	909	19.245	346.2	109	2	1	24	6	82	0
10	910	18.908	345.6	110	19	1	24	6	62	0
11	911	18.556	345.0	111	-3	1	24	6	62	0
12	912	18.215	344.4	112	-7	1	24	6	62	21
13	913	17.873	343.8	113	-7	2	24	6	42	0
14	914	17.534	343.1	114	1	1	24	6	42	0
15	915	17.189	342.5	115	-5	1	24	6	42	0
16	916	16.852	341.8	116	7	1	24	6	42	0
17	917	16.516	341.1	117	2	1	24	6	42	0
18	918	16.169	340.3	118	-4	1	24	6	42	0
19	919	15.858	339.5	119	0	1	24	6	42	0
20	920	15.527	338.7	120	-6	2	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 8 SHOT POINT 12 TEAM 1  
 SHOT TIME: 157: 6:15: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	1001	31.131	170.7	1	18	2	24	6	62	0
2	1002	31.524	170.8	2	-35	2	24	6	42	0
3	1003	31.917	170.9	3	8	2	24	6	42	0
4	1004	32.333	171.0	4	-2	2	24	6	42	0
5	1005	32.699	171.1	5	47	2	24	6	42	0
6	1006	33.126	171.2	6	10		24	6	42	2
7	1007	33.485	171.3	7	-6	2	24	6	42	0
8	1008	33.873	171.4	8	52	2	24	6	42	0
9	1009	34.266	171.5	9	-7	2	24	6	42	0
10	1010	34.678	171.6	10	-13		24	6	42	2
11	1011	35.048	171.7	11	38	2	24	6	42	0
12	1012	35.446	171.8	12	0	2	24	6	42	0
13	1013	35.830	171.9	13	-3	2	24	6	42	0
14	1014	36.321	172.0	14	505	2	24	6	62	0
15	1015	36.660	172.1	15	-5	2	24	6	62	0
16	1016	37.089	172.2	16	7		24	6	82	2
17	1017	37.466	172.3	17	34	2	24	6	82	0
18	1018	37.911	172.4	18	5	2	24	6	82	0
19	1019	46.716	171.5	19	46		24	6	82	21
20	1020	47.106	171.5	20	-19		24	6	82	17

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983  
 SHOT NUMBER 8 SHOT POINT 12 TEAM 2  
 SHOT TIME: 157: 6:15: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	921	6.358	180.3	21	4	1	24	6	42	0
2	922	6.115	177.4	22	8	1	24	6	42	0
3	923	5.895	174.4	23	14		24	6	42	21
4	924	5.764	170.7	24	-12	3	24	6	42	0
5	925	5.765	166.1	25	--		24	6	42	1
6	926	5.686	162.2	26	5		24	6	42	17
7	927	5.472	159.0	27	-24	1	24	6	42	0
8	928	5.169	156.3	28	--		24	6	42	1
9	929	4.857	153.9	29	9	1	24	6	42	0
10	930	4.579	150.8	30	3	3	24	6	42	0
11	931	4.474	146.1	31	9	3	24	6	42	0
12	932	4.361	141.4	32	-4	3	24	6	42	0
13	933	6.386	156.0	33	-96	1	24	6	42	0
14	934	6.685	158.2	34	3	1	24	6	42	0
15	935	7.016	160.0	35	-101		24	6	42	1
16	936	7.358	161.5	36	-7	3	24	6	42	0
17	937	7.725	162.6	37	--		24	6	42	1
18	938	8.084	163.7	38	2	3	24	6	42	0
19	939	8.486	164.8	39	7	3	24	6	42	0
20	940	8.768	165.9	40	4	3	24	6	42	1



## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 8 SHOT POINT 12 TEAM 3

SHOT TIME: 157: 6:15: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	941	9.263	167.2	41	8		24	6	42	1
2	942	9.605	168.2	42	0	3	24	6	42	0
3	943	9.965	169.1	43	-25		24	6	42	1
4	944	10.337	169.9	44	-24	3	24	6	42	0
5	945	10.705	170.5	45	3	3	24	6	42	0
6	946	11.072	171.2	46	-61	3	24	6	42	12
7	947	11.461	171.6	47	40	3	24	6	42	21
8	948	11.846	171.3	48	-44		24	6	82	1
9	949	12.211	170.7	49	2	1	24	6	42	0
10	950	12.598	170.4	50	-4	1	24	6	42	0
11	951	12.906	169.5	51	4	1	24	6	42	0
12	952	13.255	168.7	52	-20	1	24	6	42	0
13	953	13.487	168.3	53	4	1	24	6	42	0
14	954	13.843	167.8	54	-16	1	24	6	42	0
15	955	14.286	167.2	55	-16	1	24	6	42	0
16	956	14.757	166.8	56	-3	1	24	6	82	0
17	957	15.120	166.3	57	-46		24	6	42	1
18	958	15.478	165.6	58	-6	1	24	6	42	0
19	959	15.842	165.1	59	-5		24	6	42	1
20	960	16.212	164.6	60	-7	1	24	6	42	12

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 8 SHOT POINT 12 TEAM 4

SHOT TIME: 157: 6:15: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	961	16.569	164.1	61	10	1	24	6	42	0
2	962	16.956	163.9	62	9	1	24	6	42	0
3	963	17.344	163.9	63	9		24	6	42	1
4	964	17.702	164.4	64	12	1	24	6	42	0
5	965	18.070	164.8	65	0		24	6	42	1
6	966	18.416	165.4	66	-7	1	24	6	42	0
7	967	18.784	165.8	67	-24	1	24	6	62	0
8	968	19.145	166.2	68	-16	1	24	6	62	0
9	969	19.533	166.6	69	5	1	24	6	82	0
10	970	19.911	167.0	70	9	1	24	6	82	0
11	971	20.222	167.2	71	-17	1	24	6	82	0
12	972	20.581	165.6	72	12	1	24	6	82	0
13	973	20.835	165.7	73	-2	1	24	6	82	0
14	974	21.161	166.2	74	0	1	24	6	62	0
15	975	21.449	166.9	75	10	1	24	6	62	0
16	976	21.718	167.6	76	-3	1	24	6	42	0
17	977	22.002	167.9	77	-3	1	24	6	42	0
18	978	22.363	168.1	78	--	1	24	6	42	0
19	979	22.685	168.7	79	8	1	24	6	42	0
20	980	23.011	169.1	80	12	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 8 SHOT POINT 12 TEAM 5

SHOT TIME: 157: 6:15: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	981	23.323	169.4	81	-17	1	24	6	42	0
2	982	23.734	169.4	82	9		24	6	42	21
3	983	24.049	169.9	83	9	1	24	6	42	0
4	984	24.426	170.1	84	9	1	24	6	42	0
5	985	24.787	170.3	85	-44	1	24	6	42	12
6	986	25.163	170.5	86	-40	2	24	6	42	0
7	987	25.519	170.8	87	6	2	24	6	42	0
8	988	25.889	170.6	88	19	2	24	6	42	0
9	989	26.250	170.4	89	9	2	24	6	42	0
10	990	26.615	170.3	90	0	2	24	6	42	0
11	991	27.008	170.3	91	10	2	24	6	42	0
12	992	27.392	170.5	92	5	2	24	6	42	0
13	993	27.777	170.6	93	-10	2	24	6	42	0
14	994	28.171	170.5	94	8	2	24	6	42	0
15	995	28.839	170.1	95	21		24	6	82	6
16	996	29.232	170.0	96	-25	2	24	6	82	0
17	997	29.624	170.2	97	7	2	24	6	82	0
18	998	29.969	170.3	98	11	2	24	6	82	0
19	999	30.353	170.4	99	4		24	6	82	3
20	1000	30.750	170.6	100	7	2	24	6	82	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 8 SHOT POINT 12 TEAM 6

SHOT TIME: 157: 6:15: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	0.126	51.5	101	16		24	6	82	17
2	902	0.576	34.3	102	3		24	6	82	1
3	903	0.956	30.3	103	11	3	24	6	82	0
4	904	1.335	34.4	104	0	3	24	6	82	21
5	905	8.610	345.9	105	14		24	6	62	21
6	906	8.672	346.8	106	-14		24	6	62	21
7	907	0.264	171.1	107	-7	1	24	6	82	0
8	908	0.643	171.4	108	9	2	24	6	82	21
9	909	1.022	179.9	109	2	3	24	6	82	0
10	910	1.405	184.8	110	20	3	24	6	62	0
11	911	1.795	186.3	111	-3	3	24	6	62	0
12	912	2.188	188.0	112	-8	3	24	6	62	0
13	913	2.584	189.0	113	-8	3	24	6	42	0
14	914	2.975	189.6	114	1	3	24	6	42	0
15	915	3.370	189.9	115	-5	3	24	6	42	0
16	916	3.765	190.3	116	7	3	24	6	42	0
17	917	4.160	190.6	117	2	3	24	6	42	0
18	918	4.574	190.9	118	-4	3	24	6	42	0
19	919	4.956	191.3	119	0	3	24	6	42	0
20	920	5.346	191.2	120	-6	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 9 SHOT POINT 16 TEAM 1

SHOT TIME: 157: 6:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	1001	1.223	180.2	1	18	3	24	6	62	0
2	1002	1.620	180.0	2	-36	3	24	6	42	0
3	1003	2.018	180.0	3	8	3	24	6	42	0
4	1004	2.440	180.0	4	-2	3	24	6	42	0
5	1005	2.810	180.0	5	48	3	24	6	42	0
6	1006	3.243	180.0	6	10		24	6	42	1
7	1007	3.605	180.0	7	-6	3	24	6	42	0
8	1008	3.997	180.0	8	53	3	24	6	42	0
9	1009	4.395	180.0	9	-7	3	24	6	42	0
10	1010	4.811	180.0	10	-13		24	6	42	1
11	1011	5.186	180.1	11	38	3	24	6	42	0
12	1012	5.588	180.0	12	0	3	24	6	42	0
13	1013	5.974	179.9	13	-3	3	24	6	42	0
14	1014	6.472	180.0	14	516	1	24	6	62	0
15	1015	6.814	180.0	15	-5	1	24	6	62	0
16	1016	7.247	180.0	16	7		24	6	82	1
17	1017	7.628	180.0	17	34	1	24	6	82	0
18	1018	8.077	180.0	18	5	1	24	6	82	0
19	1019	16.807	173.6	19	46		24	6	82	21
20	1020	17.200	173.7	20	-19		24	6	82	17

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 9 SHOT POINT 16 TEAM 2

SHOT TIME: 157: 6:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	921	23.692	347.6	21	5	2	24	6	82	0
2	922	23.870	348.5	22	8	2	24	6	82	0
3	923	24.050	349.3	23	14		24	6	82	2
4	924	24.162	350.2	24	-13	2	24	6	42	0
5	925	24.180	351.3	25	--		24	6	82	1
6	926	24.309	352.2	26	5		24	6	82	0
7	927	24.583	352.8	27	-24	2	24	6	82	0
8	928	24.940	353.2	28	--		24	6	82	1
9	929	25.304	353.4	29	10	2	24	6	82	0
10	930	25.655	353.7	30	3	2	24	6	42	15
11	931	25.908	354.3	31	9	2	24	6	42	0
12	932	26.194	354.9	32	-4	2	24	6	42	0
13	933	23.789	354.1	33	-97	2	24	6	42	0
14	934	23.431	353.7	34	3	2	24	6	42	0
15	935	23.057	353.4	35	-102		24	6	42	2
16	936	22.682	353.1	36	-7	2	24	6	42	0
17	937	22.294	352.9	37	--		24	6	82	1
18	938	21.914	352.7	38	2	2	24	6	42	24
19	939	21.494	352.4	39	7	2	24	6	42	0
20	940	21.193	352.1	40	5	2	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 9 SHOT POINT 16 TEAM 3

SHOT TIME: 157: 6:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	941	20.682	351.7	41	8		24	6	42	25
2	942	20.331	351.3	42	0	2	24	6	42	0
3	943	19.964	350.9	43	-25		24	6	42	1
4	944	19.589	350.5	44	-25	2	24	6	42	0
5	945	19.221	350.2	45	3	2	24	6	42	0
6	946	18.856	349.8	46	-62	2	24	6	42	12
7	947	18.469	349.5	47	40	2	24	6	42	25
8	948	18.083	349.6	48	-45		24	6	82	1
9	949	17.716	350.0	49	2	2	24	6	42	0
10	950	17.328	350.2	50	-4	2	24	6	42	0
11	951	17.023	350.9	51	4	2	24	6	42	0
12	952	16.681	351.6	52	-20	2	24	6	42	0
13	953	16.453	351.9	53	4	1	24	6	42	0
14	954	16.107	352.4	54	-16	1	24	6	42	0
15	955	15.679	353.1	55	-17	1	24	6	42	0
16	956	15.222	353.7	56	-3	1	24	6	82	0
17	957	14.879	354.3	57	-46		24	6	42	1
18	958	14.553	355.3	58	-6	1	24	6	42	0
19	959	14.220	356.1	59	-5		24	6	42	1
20	960	13.885	356.9	60	-7	1	24	6	42	12

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 9 SHOT POINT 16 TEAM 4

SHOT TIME: 157: 6:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	961	13.570	357.8	61	10	1	24	6	42	0
2	962	13.213	358.6	62	9	1	24	6	42	0
3	963	12.839	359.0	63	9		24	6	42	1
4	964	12.452	358.7	64	12	1	24	6	42	0
5	965	12.062	358.5	65	0		24	6	42	1
6	966	11.684	358.1	66	-7	1	24	6	42	0
7	967	11.294	357.7	67	-24	1	24	6	62	0
8	968	10.913	357.4	68	-16	1	24	6	62	0
9	969	10.508	357.2	69	5	1	24	6	82	0
10	970	10.115	356.9	70	9	1	24	6	82	0
11	971	9.791	356.6	71	-17	1	24	6	82	0
12	972	9.560	0.4	72	12	1	24	6	82	0
13	973	9.307	0.6	73	-2	1	24	6	82	0
14	974	8.946	360.0	74	0	1	24	6	62	0
15	975	8.609	358.8	75	10	1	24	6	62	0
16	976	8.296	357.4	76	-3	3	24	6	42	0
17	977	7.995	356.8	77	-3	1	24	6	42	0
18	978	7.627	356.7	78	--	1	24	6	42	0
19	979	7.278	355.3	79	8	1	24	6	42	0
20	980	6.935	354.1	80	12	1	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 9 SHOT POINT 16 TEAM 5

SHOT TIME: 157: 6:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	981	6.616	353.4	81	-17	1	24	6	42	0
2	982	6.205	353.6	82	9		24	6	42	21
3	983	5.880	352.1	83	9	1	24	6	42	25
4	984	5.500	351.2	84	9	1	24	6	42	0
5	985	5.139	350.1	85	-45	1	24	6	42	12
6	986	4.764	349.0	86	-41	1	24	6	42	0
7	987	4.414	347.4	87	6	3	24	6	42	0
8	988	4.040	348.4	88	19	1	24	6	42	0
9	989	3.676	349.8	89	9	3	24	6	42	0
10	990	3.311	349.8	90	0	3	24	6	42	0
11	991	2.918	350.5	91	10	3	24	6	42	0
12	992	2.536	348.4	92	6	2	24	6	42	0
13	993	2.154	346.4	93	-10	3	24	6	42	0
14	994	1.758	346.6	94	8	1	24	6	42	0
15	995	1.091	355.1	95	22		24	6	82	6
16	996	0.705	0.3	96	-25	1	24	6	82	0
17	997	0.307	0.1	97	7	1	24	6	82	0
18	998	0.045	184.4	98	11	1	24	6	82	0
19	999	0.435	181.1	99	4	1	24	6	82	0
20	1000	0.836	180.1	100	7	1	24	6	82	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 9 SHOT POINT 16 TEAM 6

SHOT TIME: 157: 6:30: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	29.987	350.5	101	16	2	24	6	82	0
2	902	30.343	351.0	102	3		24	6	82	1
3	903	30.664	351.4	103	11	2	24	6	82	0
4	904	30.898	352.0	104	-2	2	24	6	82	0/25
5	905	38.517	349.3	105	14		24	6	62	21
6	906	38.586	349.5	106	-15		24	6	62	21
7	907	29.662	350.3	107	-7	2	24	6	82	0
8	908	29.283	350.3	108	9	2	24	6	82	0/25
9	909	28.918	350.0	109	2	2	24	6	82	0
10	910	28.569	349.6	110	20	2	24	6	62	0
11	911	28.205	349.3	111	-3	2	24	6	62	0
12	912	27.849	348.9	112	-8	2	24	6	62	25
13	913	27.492	348.6	113	-8	2	24	6	42	0
14	914	27.138	348.2	114	1	2	24	6	42	0
15	915	26.776	347.9	115	-5	2	24	6	42	0
16	916	26.421	347.5	116	7	2	24	6	42	0
17	917	26.065	347.1	117	2		24	6	42	0
18	918	25.695	346.7	118	-4	2	24	6	42	0
19	919	25.361	346.3	119	0	1	24	6	42	0
20	920	25.007	345.9	120	-6	2	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 10 SHOT POINT 14 TEAM 1

SHOT TIME: 157: 8:30: 0.005

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	1001	17.722	172.3	1	19	1	24	6	62	0
2	1002	18.116	172.5	2	-38	1	24	6	42	0
3	1003	18.511	172.6	3	8	1	24	6	42	0
4	1004	18.929	172.8	4	-2	1	24	6	42	0
5	1005	19.296	172.9	5	51	1	24	6	42	0
6	1006	19.726	173.1	6	11	1	24	6	42	1
7	1007	20.086	173.2	7	-6	1	24	6	42	0
8	1008	20.475	173.3	8	56	1	24	6	42	2
9	1009	20.870	173.5	9	-8	1	24	6	42	0
10	1010	21.284	173.6	10	-14	1	24	6	42	1
11	1011	21.656	173.7	11	41	1	24	6	42	0
12	1012	22.056	173.8	12	1	1	24	6	42	0
13	1013	22.440	173.9	13	-3	1	24	6	42	0
14	1014	22.934	174.0	14	600	1	24	6	62	0
15	1015	23.274	174.1	15	-5	1	24	6	62	0
16	1016	23.706	174.2	16	7	1	24	6	82	0
17	1017	24.084	174.3	17	37	1	24	6	82	0
18	1018	24.531	174.4	18	5	1	24	6	82	0
19	1019	33.314	172.7	19	49	1	24	6	82	21
20	1020	33.706	172.7	20	-20	1	24	6	82	17

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 10 SHOT POINT 14 TEAM 2

SHOT TIME: 157: 8:30: 0.005

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	921	7.318	338.3	21	5	1	24	6	82	0
2	922	7.443	341.3	22	8	1	24	6	82	0
3	923	7.586	344.0	23	15	1	24	6	82	2
4	924	7.669	346.9	24	-13	3	24	6	42	17
5	925	7.670	350.4	25	--	1	24	6	82	1
6	926	7.799	353.1	26	5	1	24	6	82	25
7	927	8.081	355.0	27	-26	1	24	6	82	0
8	928	8.444	356.0	28	--	1	24	6	82	1
9	929	8.813	356.6	29	10	1	24	6	82	0
10	930	9.172	357.3	30	3	3	24	6	42	0/15
11	931	9.445	359.0	31	10	3	24	6	42	0
12	932	9.752	0.3	32	-4	1	24	6	42	1
13	933	7.323	359.4	33	-103	1	24	6	42	0
14	934	6.954	358.5	34	3	1	24	6	42	0
15	935	6.572	357.7	35	-109	1	24	6	42	2
16	936	6.189	356.9	36	-7	3	24	6	42	0
17	937	5.797	356.5	37	--	1	24	6	82	1
18	938	5.413	355.7	38	2	1	24	6	42	24
19	939	4.988	354.9	39	7	3	24	6	42	0
20	940	4.683	353.4	40	5	3	24	6	42	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 10 SHOT POINT 14 TEAM 3

SHOT TIME: 157: 8:30: 0.005

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	941	4.170	351.4	41	9		24	6	42	21
2	942	3.822	349.4	42	0	3	24	6	42	0
3	943	3.463	346.9	43	-27		24	6	42	1
4	944	3.101	344.0	44	-27	3	24	6	42	0
5	945	2.753	340.8	45	3	3	24	6	42	0
6	946	2.421	336.3	46	-67	3	24	6	42	12
7	947	2.071	331.5	47	43	3	24	6	42	25
8	948	1.692	328.9	48	-48		24	6	82	1
9	949	1.306	328.1	49	2	1	24	6	42	0
10	950	0.927	322.7	50	-5	1	24	6	42	0
11	951	0.561	327.1	51	4	3	24	6	42	0
12	952	0.174	338.4	52	-21	3	24	6	42	0
13	953	0.077	131.3	53	4	3	24	6	42	0
14	954	0.454	145.2	54	-18	3	24	6	42	0
15	955	0.918	147.6	55	-18	3	24	6	42	0
16	956	1.396	150.1	56	-3	3	24	6	82	0
17	957	1.784	149.2	57	-50		24	6	42	1
18	958	2.180	147.3	58	-6	3	24	6	42	0
19	959	2.570	146.9	59	-5		24	6	42	1
20	960	2.963	146.6	60	-7	3	24	6	42	12

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 10 SHOT POINT 14 TEAM 4

SHOT TIME: 157: 8:30: 0.005

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	961	3.347	146.1	61	10	3	24	6	42	0
2	962	3.740	146.8	62	10	3	24	6	42	0
3	963	4.113	148.4	63	9		24	6	42	1
4	964	4.420	151.7	64	13	3	24	6	42	0
5	965	4.754	154.2	65	0		24	6	42	1
6	966	5.065	157.0	66	-7	3	24	6	42	0
7	967	5.411	159.1	67	-26		24	6	62	21
8	968	5.756	160.9	68	-17	3	24	6	62	0
9	969	6.132	162.4	69	5	1	24	6	82	0
10	970	6.501	163.7	70	9	1	24	6	82	0
11	971	6.807	164.7	71	-19	1	24	6	82	0
12	972	7.204	160.2	72	13	1	24	6	82	0
13	973	7.456	160.6	73	-2	1	24	6	82	0
14	974	7.766	162.2	74	0	1	24	6	62	0
15	975	8.038	164.1	75	11	1	24	6	62	0
16	976	8.297	166.0	76	-3	3	24	6	42	0
17	977	8.578	167.0	77	-3	3	24	6	42	0
18	978	8.938	167.5	78	--	3	24	6	42	0
19	979	9.260	168.9	79	9	3	24	6	42	0
20	980	9.587	170.0	80	13		24	6	42	21

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 10 SHOT POINT 14 TEAM 5

SHOT TIME: 157: 8:30: 0.005

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	981	9.900	170.6	81	-19	3	24	6	42	0
2	982	10.312	170.6	82	9		24	6	42	1
3	983	10.631	171.5	83	10	3	24	6	42	25
4	984	11.011	172.0	84	10		24	6	42	21
5	985	11.375	172.4	85	-48	3	24	6	42	12
6	986	11.754	172.8	86	-44	3	24	6	42	0
7	987	12.115	173.3	87	7	3	24	6	42	0
8	988	12.480	172.8	88	20	1	24	6	42	0
9	989	12.838	172.3	89	10	1	24	6	42	0
10	990	13.203	172.2	90	0	1	24	6	42	0
11	991	13.594	172.0	91	11	1	24	6	42	0
12	992	13.981	172.3	92	6		24	6	42	21
13	993	14.368	172.5	93	-11	1	24	6	42	0
14	994	14.761	172.3	94	9	1	24	6	42	17
15	995	15.422	171.5	95	23		24	6	82	6
16	996	15.815	171.3	96	-27	1	24	6	82	0
17	997	16.208	171.6	97	7	1	24	6	82	0
18	998	16.555	171.7	98	12	1	24	6	82	0
19	999	16.941	172.0	99	4	1	24	6	82	0
20	1000	17.339	172.1	100	7	1	24	6	82	0

## DKDAT FIELD DATA TABLE

NEVADA TEST SITE 1983

SHOT NUMBER 10 SHOT POINT 14 TEAM 6

SHOT TIME: 157: 8:30: 0.005

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	701	13.483	349.0	101	17	1	24	6	82	0
2	902	13.834	350.3	102	3		24	6	82	1
3	903	14.153	351.1	103	12	1	24	6	82	0
4	904	14.387	352.4	104	-2	1	24	6	82	0
5	905	22.030	347.5	105	15		24	6	62	21
6	906	22.095	347.9	106	-16		24	6	62	21
7	907	13.162	348.5	107	-8	1	24	6	82	0
8	908	12.784	348.4	108	9		24	6	82	21
9	909	12.425	347.6	109	3	1	24	6	82	0
10	910	12.084	346.7	110	22	1	24	6	62	0
11	911	11.729	345.9	111	-3		24	6	62	21
12	912	11.386	344.9	112	-8		24	6	62	21
13	913	11.043	343.8	113	-8	3	24	6	42	0
14	914	10.704	342.8	114	1	3	24	6	42	0
15	915	10.361	341.7	115	-5	3	24	6	42	0
16	916	10.028	340.5	116	7	3	24	6	42	0
17	917	9.697	339.3	117	2	3	24	6	42	0
18	918	9.358	337.8	118	-5	3	24	6	42	0
19	919	9.059	336.3	119	0	3	24	6	42	0
20	920	8.741	334.9	120	-7		24	6	42	21



## APPENDIX C

### FIRST-ARRIVAL TIMES (pp 49-66)

Columnized information includes shotpoint number, seismograph location number, travel-time picks in real time (difference between chronometer reading and origin time of shot) and reduced time ( $T - x/6$ ;  $x$  is distance), and distance (km) and azimuth (degrees from North) of the seismograph from the shot point, and weight of pick.

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	NORTH-SOUTH PROFILE SHOTPOINT 11		
				DISTANCE	AZIMUTH	WEIGHT
11	701	2.154	0.762	8.351	161.714	1
11	903	1.952	0.655	7.784	157.906	1
11	904	1.917	0.643	7.644	154.620	1
11	907	2.147	0.704	8.656	162.780	1
11	909	2.374	0.811	9.376	164.384	1
11	913	2.621	0.826	10.769	168.663	2
11	914	2.692	0.838	11.126	169.519	2
11	915	2.756	0.840	11.492	170.269	1
11	916	2.822	0.846	11.856	171.036	2
11	917	2.863	0.826	12.223	171.729	2
11	918	2.997	0.896	12.609	172.435	2
11	921	3.366	0.936	14.579	170.188	1
11	922	3.294	0.896	14.392	168.768	2
11	926	3.239	0.893	14.081	162.411	2
11	927	3.188	0.878	13.860	161.133	2
11	929	3.095	0.893	13.217	159.356	2
11	930	3.033	0.881	12.911	158.384	2
11	931	3.006	0.881	12.750	156.840	2
11	932	2.951	0.858	12.561	155.323	1
11	933	3.346	0.887	14.757	159.717	1
11	934	3.453	0.942	15.070	160.602	1
11	936	3.582	0.956	15.753	162.044	1
11	939	3.723	0.910	16.877	163.675	2
11	940	3.804	0.945	17.156	164.270	2
11	944	3.985	0.869	18.694	166.597	3
11	946	4.189	0.953	19.412	167.455	2
11	947	4.244	0.945	19.796	167.742	2
11	949	4.232	0.806	20.555	167.354	3
11	950	4.358	0.867	20.946	167.235	3
11	951	4.439	0.896	21.263	166.718	3
11	952	4.490	0.887	21.620	166.286	3
11	953	4.509	0.867	21.855	166.108	4
11	954	4.569	0.867	22.216	165.805	4
11	955	4.644	0.867	22.663	165.482	4
11	958	4.844	0.867	23.865	164.531	3
11	960	5.028	0.927	24.603	163.909	3
11	961	5.056	0.896	24.962	163.586	3
11	962	5.016	0.791	25.350	163.420	4
11	964	5.140	0.791	26.094	163.786	4
11	966	5.450	0.982	26.804	164.484	4
11	967	5.464	0.936	27.169	164.802	4
11	968	5.518	0.930	27.528	165.104	4
11	969	5.609	0.956	27.913	165.376	4
11	970	5.654	0.939	28.289	165.639	4
11	971	5.656	0.890	28.597	165.856	4
11	972	5.703	0.875	28.967	164.735	4
11	974	5.840	0.916	29.544	165.163	4
11	975	5.971	1.000	29.827	165.660	4
11	976	5.905	0.890	30.089	166.172	4
11	977	5.948	0.887	30.370	166.430	4
11	978	6.005	0.884	30.729	166.585	4
11	979	6.058	0.884	31.045	167.014	4

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	NORTH-SOUTH PROFILE SHOTPOINTS 11, 12		
				DISTANCE	AZIMUTH	WEIGHT
11	980	6.112	0.884	31.366	167.367	4
11	981	6.163	0.884	31.673	167.576	4
11	982	6.231	0.884	32.084	167.624	4
11	983	6.283	0.884	32.393	167.958	4
11	984	6.345	0.884	32.767	168.153	4
11	986	6.458	0.875	33.497	168.526	4
11	987	6.517	0.875	33.848	168.744	4
11	988	6.579	0.875	34.221	168.604	4
11	989	6.640	0.875	34.586	168.462	4
11	990	6.700	0.875	34.951	168.469	4
11	991	6.766	0.875	35.345	168.432	4
11	992	6.829	0.875	35.726	168.598	4
11	993	6.893	0.875	36.109	168.715	4
11	994	6.959	0.875	36.504	168.682	4
11	996	7.137	0.875	37.571	168.368	4
11	997	7.202	0.875	37.960	168.494	4
11	998	7.259	0.875	38.304	168.605	4
11	999	7.323	0.875	38.686	168.726	4
11	1000	7.389	0.875	39.081	168.832	4
11	1001	7.452	0.875	39.460	168.942	4
11	1002	7.517	0.875	39.850	169.047	4
11	1003	7.556	0.849	40.241	169.153	4
11	1004	7.625	0.849	40.655	169.268	4
11	1005	7.686	0.849	41.019	169.363	4
11	1007	7.816	0.849	41.802	169.559	4
11	1009	7.945	0.849	42.578	169.757	4
11	1011	8.075	0.849	43.356	169.951	4
11	1012	8.141	0.849	43.753	170.032	4
11	1013	8.205	0.849	44.134	170.111	4
11	1014	8.286	0.849	44.623	170.232	4
11	1015	8.342	0.849	44.960	170.307	4
11	1016	8.414	0.849	45.388	170.392	4
11	1017	8.476	0.849	45.763	170.475	4
11	1018	8.550	0.849	46.205	170.572	4
12	903	0.443	0.284	-0.956	30.300	2
12	904	0.564	0.342	-1.335	34.400	2
12	907	0.102	0.058	0.264	171.100	0
12	908	0.327	0.220	0.643	171.400	3
12	909	0.486	0.316	1.022	179.900	3
12	910	0.706	0.472	1.405	184.800	2
12	911	0.789	0.490	1.795	186.300	2
12	912	0.883	0.519	2.188	188.000	2
12	913	1.002	0.571	2.584	189.000	2
12	914	1.072	0.577	2.975	189.600	2
12	915	1.185	0.623	3.370	189.900	2
12	916	1.291	0.664	3.765	190.300	2
12	917	1.412	0.719	4.160	190.600	3
12	918	1.585	0.823	4.574	190.900	2
12	919	1.620	0.794	4.956	191.300	2
12	921	2.028	0.968	6.358	180.300	1
12	922	1.941	0.922	6.115	177.400	1

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	NORTH-SOUTH PROFILE SHOTPOINT 12	
					AZIMUTH	WEIGHT
12	927	1.793	0.861	5.472	159.000	1
12	929	1.662	0.852	4.857	153.900	2
12	931	1.589	0.843	4.474	146.100	2
12	932	1.506	0.780	4.361	141.400	2
12	933	2.021	0.956	6.386	156.000	1
12	934	2.131	1.017	6.685	158.200	1
12	936	2.293	1.067	7.358	161.500	2
12	939	2.547	1.133	8.486	164.800	2
12	940	2.621	1.159	8.768	165.900	2
12	942	2.804	1.203	9.605	168.200	2
12	944	2.943	1.220	10.337	169.900	2
12	945	2.996	1.211	10.705	170.500	1
12	946	3.080	1.235	11.072	171.200	1
12	947	3.145	1.235	11.461	171.600	2
12	949	3.296	1.261	12.211	170.700	1
12	950	3.387	1.287	12.598	170.400	1
12	951	3.426	1.275	12.906	169.500	1
12	952	3.490	1.281	13.255	168.700	1
12	953	3.543	1.296	13.487	168.300	1
12	954	3.623	1.316	13.843	167.800	1
12	955	3.697	1.316	14.286	167.200	1
12	956	3.741	1.281	14.757	166.800	1
12	958	3.855	1.275	15.478	165.600	1
12	960	4.009	1.307	16.212	164.600	1
12	961	4.031	1.269	16.569	164.100	1
12	962	4.040	1.214	16.956	163.900	1
12	964	4.110	1.159	17.702	164.400	2
12	966	4.194	1.124	18.416	165.400	3
12	967	4.200	1.069	18.784	165.800	3
12	968	4.260	1.069	19.145	166.200	2
12	969	4.334	1.078	19.533	166.600	3
12	970	4.446	1.127	19.911	167.000	2
12	971	4.428	1.058	20.222	167.200	2
12	972	4.468	1.038	20.581	165.600	3
12	974	4.544	1.017	21.161	166.200	3
12	975	4.644	1.069	21.449	166.900	3
12	976	4.640	1.020	21.718	167.600	3
12	977	4.719	1.052	22.002	167.900	3
12	978	4.779	1.052	22.363	168.100	3
12	979	4.784	1.003	22.685	168.700	3
12	980	4.835	1.000	23.011	169.100	3
12	981	4.896	1.009	23.323	169.400	3
12	983	5.017	1.009	24.049	169.900	4
12	984	5.080	1.009	24.426	170.100	4
12	985	5.140	1.009	24.787	170.300	4
12	986	5.202	1.009	25.163	170.500	4
12	987	5.227	0.974	25.519	170.800	3
12	988	5.274	0.959	25.889	170.600	3
12	989	5.334	0.959	26.250	170.400	4
12	990	5.343	0.907	26.615	170.300	4
12	991	5.432	0.930	27.008	170.300	4
12	992	5.496	0.930	27.392	170.500	4

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	NORTH-SOUTH PROFILE SHOTPOINTS 12, 13	
					AZIMUTH	WEIGHT
12	993	5.661	1.032	27.777	170.600	4
12	994	5.860	1.165	28.171	170.500	4
12	996	5.970	1.098	29.232	170.000	4
12	997	6.036	1.098	29.624	170.200	4
12	998	6.093	1.098	29.969	170.300	4
12	1000	6.105	0.980	30.750	170.600	4
12	1001	6.168	0.980	31.131	170.700	4
12	1002	6.234	0.980	31.524	170.800	4
12	1003	6.374	1.055	31.917	170.900	4
12	1004	6.444	1.055	32.333	171.000	4
12	1005	6.505	1.055	32.699	171.100	4
12	1007	6.636	1.055	33.485	171.300	4
12	1008	6.700	1.055	33.873	171.400	4
12	1009	6.769	1.058	34.266	171.500	4
12	1011	6.896	1.055	35.048	171.700	4
12	1012	6.963	1.055	35.446	171.800	4
12	1013	7.027	1.055	35.830	171.900	4
12	1014	7.108	1.055	36.321	172.000	4
12	1015	7.165	1.055	36.660	172.100	4
12	1017	7.279	1.035	37.466	172.300	4
12	1018	7.353	1.035	37.911	172.400	4
13	701	1.806	0.840	-5.792	351.400	1
13	903	1.922	0.840	-6.492	355.700	1
13	904	1.989	0.864	-6.753	358.200	1
13	907	1.647	0.736	-5.467	350.200	1
13	909	1.466	0.678	-4.726	348.200	1
13	910	1.392	0.661	-4.385	345.700	2
13	911	1.325	0.652	-4.036	343.200	2
13	914	1.117	0.603	-3.086	331.600	1
13	915	1.025	0.559	-2.796	326.400	1
13	916	0.972	0.548	-2.545	319.800	1
13	917	0.933	0.545	-2.331	312.000	1
13	918	0.894	0.533	-2.165	302.300	1
13	921	0.608	0.403	1.231	234.800	2
13	922	0.503	0.365	0.826	236.200	1
13	924	-0.029	-0.038	0.050	219.400	0
13	926	0.475	0.342	-0.801	73.100	1
13	927	0.597	0.409	-1.131	61.500	2
13	929	0.731	0.440	-1.741	42.300	2
13	930	0.857	0.510	-2.083	37.500	1
13	931	0.964	0.553	-2.464	38.300	1
13	932	1.051	0.577	-2.848	38.100	1
13	933	0.780	0.507	1.639	96.500	1
13	936	0.877	0.559	1.908	134.200	0
13	939	1.066	0.594	2.834	153.700	1
13	940	1.155	0.640	3.085	157.900	1
13	944	1.533	0.765	4.607	169.400	2
13	946	1.714	0.823	5.343	172.200	1
13	947	1.825	0.869	5.734	172.900	1
13	949	1.999	0.919	6.480	171.000	1
13	950	2.124	0.980	6.868	170.500	1

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	NORTH-SOUTH PROFILE SHOTPOINT 13		
				DISTANCE	AZIMUTH	WEIGHT
13	951	2.184	0.988	7.176	168.800	1
13	952	2.255	1.000	7.528	167.400	1
13	953	2.343	1.049	7.762	166.900	1
13	954	2.414	1.061	8.122	166.000	1
13	955	2.547	1.119	8.569	165.200	1
13	956	2.594	1.087	9.044	164.600	1
13	958	2.690	1.061	9.778	162.900	2
13	960	2.852	1.098	10.524	161.600	1
13	961	2.963	1.148	10.889	160.900	2
13	962	3.002	1.122	11.280	160.600	2
13	964	3.087	1.084	12.016	161.600	2
13	966	3.174	1.055	12.716	163.200	2
13	967	3.249	1.069	13.078	163.900	1
13	968	3.280	1.040	13.435	164.500	1
13	970	3.473	1.107	14.194	165.600	2
13	971	3.510	1.093	14.503	166.000	2
13	972	3.546	1.067	14.876	163.900	2
13	973	3.588	1.067	15.130	164.000	2
13	974	3.642	1.067	15.450	164.700	2
13	975	3.729	1.107	15.732	165.700	2
13	976	3.741	1.075	15.996	166.600	2
13	977	3.788	1.075	16.278	167.100	2
13	978	3.848	1.075	16.638	167.400	2
13	979	3.867	1.040	16.958	168.100	2
13	980	3.944	1.064	17.282	168.800	2
13	981	3.996	1.064	17.593	169.100	3
13	983	4.047	0.994	18.319	169.700	3
13	986	4.181	0.942	19.432	170.600	3
13	987	4.237	0.939	19.789	170.900	3
13	988	4.183	0.823	20.158	170.700	3
13	989	4.269	0.849	20.519	170.400	4
13	990	4.394	0.913	20.885	170.400	4
13	991	4.459	0.913	21.277	170.300	4
13	992	4.523	0.913	21.661	170.500	4
13	993	4.576	0.901	22.047	170.700	4
13	994	4.595	0.855	22.441	170.600	4
13	996	4.853	0.936	23.502	170.000	4
13	997	4.941	0.959	23.893	170.200	4
13	998	4.999	0.959	24.239	170.300	4
13	1000	5.257	1.087	25.020	170.600	4
13	1002	5.386	1.087	25.794	170.900	3
13	1003	5.457	1.093	26.187	171.000	3
13	1004	5.486	1.052	26.603	171.200	3
13	1005	5.605	1.110	26.969	171.300	3
13	1007	5.626	1.000	27.756	171.500	3
13	1009	5.756	1.000	28.537	171.800	3
13	1011	5.913	1.026	29.320	172.000	3
13	1012	5.982	1.029	29.718	172.100	3
13	1013	6.026	1.009	30.102	172.200	4
13	1015	6.164	1.009	30.932	172.400	4
13	1017	6.299	1.009	31.740	172.600	4
13	1018	6.373	1.009	32.185	172.700	4

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	NORTH-SOUTH PROFILE SHOTPOINT 14		
				DISTANCE	AZIMUTH	WEIGHT
14	701	3.551	1.304	-13.483	349.000	1
14	903	3.640	1.281	-14.153	351.100	1
14	904	3.647	1.249	-14.387	352.400	1
14	907	3.408	1.214	-13.162	348.500	1
14	909	3.323	1.252	-12.425	347.600	1
14	910	3.246	1.232	-12.084	346.700	1
14	913	3.008	1.168	-11.043	343.800	2
14	914	2.984	1.200	-10.704	342.800	2
14	915	2.886	1.159	-10.361	341.700	2
14	916	2.810	1.139	-10.028	340.500	2
14	917	2.787	1.171	-9.697	339.300	3
14	918	2.716	1.156	-9.358	337.800	2
14	919	2.629	1.119	-9.059	336.300	2
14	921	2.324	1.104	-7.318	338.300	1
14	922	2.368	1.127	-7.443	341.300	1
14	927	2.434	1.087	-8.081	355.000	1
14	929	2.596	1.127	-8.813	356.600	1
14	930	2.647	1.119	-9.172	357.300	2
14	931	2.696	1.122	-9.445	359.000	2
14	933	2.229	1.009	-7.323	359.400	1
14	934	2.173	1.014	-6.954	358.500	1
14	936	2.017	0.985	-6.189	356.900	2
14	953	0.094	0.081	0.077	131.300	0
14	954	0.307	0.232	0.454	145.200	1
14	955	0.477	0.324	0.918	147.600	2
14	956	0.607	0.374	1.396	150.100	3
14	958	0.853	0.490	2.180	147.300	1
14	960	1.100	0.606	2.963	146.600	1
14	961	1.210	0.652	3.347	146.100	1
14	962	1.275	0.652	3.740	146.800	2
14	964	1.432	0.696	4.420	151.700	2
14	966	1.595	0.751	5.065	157.000	2
14	968	1.756	0.797	5.756	160.900	4
14	969	1.900	0.878	6.132	162.400	1
14	970	2.031	0.948	6.501	163.700	2
14	971	2.114	0.980	6.807	164.700	2
14	972	2.180	0.980	7.204	160.200	2
14	973	2.222	0.980	7.456	160.600	2
14	974	2.274	0.980	7.766	162.200	2
14	975	2.392	1.052	8.038	164.100	2
14	976	2.444	1.061	8.297	166.000	2
14	977	2.490	1.061	8.578	167.000	2
14	978	2.550	1.061	8.938	167.500	2
14	979	2.604	1.061	9.260	168.900	2
14	981	2.734	1.084	9.900	170.600	2
14	983	2.766	0.994	10.631	171.500	2
14	985	2.803	0.907	11.375	172.400	3
14	986	2.823	0.864	11.754	172.800	3
14	987	2.923	0.904	12.115	173.300	3
14	988	3.028	0.948	12.480	172.800	2
14	989	3.087	0.948	12.838	172.300	2

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	NORTH-SOUTH PROFILE SHOTPOINTS 14, 15	
					AZIMUTH	WEIGHT
14	990	3.119	0.919	13.203	172.200	2
14	991	3.202	0.936	13.594	172.000	2
14	993	3.374	0.980	14.368	172.500	3
14	994	3.469	1.009	14.761	172.300	3
14	996	3.656	1.020	15.815	171.300	3
14	997	3.721	1.020	16.208	171.600	2
14	998	3.817	1.058	16.555	171.700	3
14	999	3.902	1.078	16.941	172.000	3
14	1000	3.968	1.078	17.339	172.100	3
14	1001	4.032	1.078	17.722	172.300	3
14	1002	4.112	1.093	18.116	172.500	3
14	1003	4.198	1.113	18.511	172.600	3
14	1004	4.297	1.142	18.929	172.800	3
14	1005	4.372	1.156	19.296	172.900	3
14	1007	4.469	1.122	20.086	173.200	3
14	1009	4.545	1.067	20.870	173.500	3
14	1011	4.632	1.023	21.656	173.700	3
14	1012	4.728	1.052	22.056	173.800	3
14	1013	4.804	1.064	22.440	173.900	3
14	1014	4.877	1.055	22.934	174.000	4
14	1015	4.931	1.052	23.274	174.100	4
14	1016	5.102	1.151	23.706	174.200	3
14	1017	5.101	1.087	24.084	174.300	3
14	1018	5.175	1.087	24.531	174.400	4
15	701	4.463	1.081	-20.294	347.200	3
15	903	4.528	1.038	-20.944	348.700	3
15	904	4.565	1.038	-21.163	349.600	3
15	907	4.329	1.000	-19.977	346.800	3
15	909	4.268	1.061	-19.245	346.200	3
15	910	4.241	1.090	-18.908	345.600	3
15	911	4.171	1.078	-18.556	345.000	2
15	912	4.114	1.078	-18.215	344.400	2
15	913	4.074	1.096	-17.873	343.800	3
15	914	3.989	1.067	-17.534	343.100	3
15	915	3.984	1.119	-17.189	342.500	3
15	916	3.936	1.127	-16.852	341.800	3
15	917	3.880	1.127	-16.516	341.100	3
15	918	3.813	1.119	-16.169	340.300	2
15	919	3.857	1.214	-15.858	339.500	2
15	921	3.419	1.064	-14.134	340.900	2
15	922	3.497	1.119	-14.270	342.400	2
15	927	3.592	1.119	-14.838	349.800	2
15	929	3.672	1.081	-15.545	350.900	2
15	930	3.724	1.075	-15.891	351.500	2
15	932	3.793	1.058	-16.412	353.500	2
15	933	3.423	1.087	-14.019	351.800	2
15	934	3.400	1.122	-13.668	351.100	1
15	936	3.257	1.101	-12.932	350.000	1
15	939	3.076	1.116	-11.763	348.400	1
15	940	3.019	1.107	-11.473	347.600	1
15	942	2.866	1.093	-10.640	345.700	1



NORTH-SOUTH PROFILE  
SHOTPOINT 15

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	AZIMUTH	WEIGHT
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15	944	2.742	1.087	-9.932	343.700	1
15	945	2.684	1.087	-9.581	342.800	1
15	946	2.597	1.058	-9.237	341.700	1
15	947	2.533	1.055	-8.866	340.800	1
15	949	2.343	0.994	-8.096	341.200	1
15	950	2.333	1.049	-7.703	341.200	1
15	951	2.257	1.029	-7.370	342.400	1
15	952	2.156	0.988	-7.004	343.500	1
15	953	2.098	0.971	-6.766	344.000	1
15	954	2.023	0.956	-6.402	344.900	1
15	955	1.868	0.875	-5.954	346.100	1
15	956	1.801	0.887	-5.482	347.100	1
15	958	1.558	0.762	-4.777	351.000	2
15	960	1.418	0.736	-4.090	355.900	2
15	961	1.299	0.669	-3.775	359.100	1
15	962	1.223	0.652	-3.426	2.000	1
15	964	0.966	0.522	-2.669	3.700	1
15	966	0.733	0.417	-1.893	1.800	1
15	967	0.638	0.388	-1.500	0.400	1
15	968	0.574	0.388	-1.117	358.100	2
15	969	0.458	0.339	-0.713	354.700	2
15	970	0.084	0.029	-0.329	342.900	1
15	971	0.050	0.029	0.126	265.000	0
15	972	0.398	0.304	0.561	113.700	0
15	973	0.461	0.339	0.731	130.900	0
15	974	0.518	0.359	0.954	151.700	1
15	975	0.575	0.374	1.210	166.900	1
15	976	0.653	0.403	1.500	177.000	1
15	977	0.718	0.417	1.803	179.600	1
15	978	0.817	0.455	2.171	179.600	1
15	979	0.901	0.478	2.536	183.100	1
15	980	0.961	0.478	2.898	185.000	1
15	981	1.056	0.519	3.227	185.300	1
15	983	1.237	0.574	3.977	185.200	3
15	984	1.351	0.623	4.367	185.100	3
15	985	1.474	0.684	4.741	185.100	3
15	986	1.539	0.684	5.128	185.100	2
15	987	1.618	0.701	5.502	185.300	2
15	988	1.674	0.701	5.838	183.500	2
15	989	1.765	0.736	6.171	181.800	2
15	990	1.839	0.751	6.528	181.100	2
15	991	1.940	0.788	6.908	180.200	2
15	993	2.177	0.896	7.692	180.400	1
15	994	2.241	0.896	8.075	179.700	2
15	996	2.437	0.922	9.092	177.100	2
15	997	2.529	0.948	9.489	177.200	2
15	998	2.579	0.939	9.840	177.400	2
15	1000	2.708	0.936	10.631	177.600	2
15	1001	2.798	0.962	11.017	177.700	2
15	1002	2.865	0.962	11.414	177.700	2
15	1003	2.931	0.962	11.812	177.800	3
15	1004	3.010	0.971	12.233	177.900	3

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	NORTH-SOUTH PROFILE	
					SHOTPOINTS AZIMUTH	15, 16 WEIGHT
15	1005	3.071	0.971	12.603	177.900	3
15	1007	3.204	0.971	13.398	178.000	3
15	1008	3.269	0.971	13.790	178.100	3
15	1009	3.335	0.971	14.187	178.200	3
15	1011	3.467	0.971	14.978	178.300	3
15	1012	3.479	0.916	15.380	178.300	4
15	1013	3.543	0.916	15.766	178.300	4
15	1014	3.574	0.864	16.263	178.400	4
15	1015	3.686	0.919	16.605	178.400	3
15	1016	3.758	0.919	17.038	178.500	3
15	1017	3.857	0.953	17.419	178.500	2
15	1018	3.931	0.953	17.868	178.600	2
16	701	5.972	0.974	-29.987	350.500	4
16	903	6.125	1.014	-30.664	351.400	3
16	904	6.147	0.997	-30.898	352.000	3
16	907	5.932	0.988	-29.662	350.300	4
16	908	5.869	0.988	-29.283	350.300	4
16	909	5.808	0.988	-28.918	350.000	4
16	910	5.750	0.988	-28.569	349.600	4
16	911	5.704	1.003	-28.205	349.300	4
16	912	5.644	1.003	-27.849	348.900	4
16	913	5.567	0.985	-27.492	348.600	4
16	914	5.505	0.982	-27.138	348.200	4
16	915	5.463	1.000	-26.776	347.900	4
16	916	5.522	1.119	-26.421	347.500	4
16	918	5.375	1.093	-25.695	346.700	4
16	919	5.421	1.194	-25.361	346.300	4
16	920	5.232	1.064	-25.007	345.900	4
16	921	5.061	1.113	-23.692	347.600	4
16	922	5.053	1.075	-23.870	348.500	4
16	927	5.161	1.064	-24.583	352.800	4
16	929	5.327	1.110	-25.304	353.400	4
16	930	5.421	1.145	-25.655	353.700	4
16	931	5.379	1.061	-25.908	354.300	4
16	932	5.426	1.061	-26.194	354.900	4
16	933	5.078	1.113	-23.789	354.100	4
16	934	5.018	1.113	-23.431	353.700	3
16	936	4.856	1.075	-22.682	353.100	3
16	939	4.689	1.107	-21.494	352.400	3
16	939	1.672	0.840	-4.988	354.900	3
16	940	4.639	1.107	-21.193	352.100	3
16	940	1.549	0.768	-4.683	353.400	2
16	942	4.443	1.055	-20.331	351.300	3
16	942	1.332	0.696	-3.822	349.400	2
16	944	4.262	0.997	-19.589	350.500	3
16	944	1.117	0.600	-3.101	344.000	2
16	945	4.256	1.052	-19.221	350.200	3
16	945	1.018	0.559	-2.753	340.800	2
16	946	4.119	0.977	-18.856	349.800	3
16	946	0.902	0.498	-2.421	336.300	2
16	947	0.762	0.417	-2.071	331.500	3

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	NORTH-SOUTH PROFILE SHOTPOINT 16		
				DISTANCE	AZIMUTH	WEIGHT
16	949	3.903	0.951	-17.716	350.000	3
16	949	0.571	0.353	-1.306	328.100	0
16	950	3.949	1.061	-17.328	350.200	3
16	950	0.479	0.324	-0.927	322.700	0
16	951	3.921	1.084	-17.023	350.900	2
16	951	0.372	0.278	-0.561	327.100	0
16	952	3.893	1.113	-16.681	351.600	2
16	952	0.174	0.145	-0.174	338.400	0
16	953	3.841	1.098	-16.453	351.900	2
16	954	3.754	1.069	-16.107	352.400	2
16	955	3.683	1.069	-15.679	353.100	2
16	956	3.609	1.072	-15.222	353.700	2
16	958	3.423	0.997	-14.553	355.300	3
16	960	3.317	1.003	-13.885	356.900	3
16	961	3.235	0.974	-13.570	357.800	3
16	962	3.176	0.974	-13.213	358.600	2
16	964	3.069	0.994	-12.452	358.700	2
16	966	2.976	1.029	-11.684	358.100	2
16	967	2.920	1.038	-11.294	357.700	2
16	968	2.865	1.046	-10.913	357.400	2
16	969	2.725	0.974	-10.508	357.200	2
16	970	2.660	0.974	-10.115	356.900	2
16	971	2.588	0.956	-9.791	356.600	2
16	972	2.526	0.933	-9.560	0.400	2
16	973	2.484	0.933	-9.307	0.600	2
16	974	2.413	0.922	-8.946	360.000	1
16	975	2.345	0.910	-8.609	358.800	2
16	976	2.278	0.896	-8.296	357.400	2
16	977	2.228	0.896	-7.995	356.800	1
16	978	2.178	0.907	-7.627	356.700	1
16	979	2.094	0.881	-7.278	355.300	1
16	980	2.019	0.864	-6.935	354.100	1
16	981	1.940	0.838	-6.616	353.400	1
16	983	1.794	0.814	-5.880	352.100	1
16	984	1.711	0.794	-5.500	351.200	1
16	985	1.630	0.774	-5.139	350.100	1
16	986	1.556	0.762	-4.764	349.000	1
16	987	1.507	0.771	-4.414	347.400	1
16	988	1.404	0.730	-4.040	348.400	1
16	989	1.343	0.730	-3.676	349.800	1
16	990	1.262	0.710	-3.311	349.800	0
16	991	1.173	0.687	-2.918	350.500	0
16	993	0.930	0.571	-2.154	346.400	1
16	994	0.800	0.507	-1.758	346.600	0
16	996	0.358	0.240	-0.705	0.300	0
16	996	0.355	0.238	-0.705	0.300	0
16	997	0.210	0.159	-0.307	0.100	0
16	997	0.222	0.171	-0.307	0.100	0
16	998	0.022	0.014	0.045	184.400	0
16	999	0.229	0.156	0.435	181.100	0
16	1000	0.412	0.272	0.836	180.100	0
16	1001	0.624	0.420	1.223	180.200	1

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	NORTH-SOUTH PROFILE SHOTPOINTS 16, 17	
					AZIMUTH	WEIGHT
16	1002	0.777	0.507	1.620	180.000	1
16	1003	0.945	0.609	2.018	180.000	0
16	1004	1.070	0.664	2.440	180.000	0
16	1005	1.158	0.690	2.810	180.000	0
16	1007	1.375	0.774	3.605	180.000	1
16	1008	1.446	0.780	3.997	180.000	1
16	1009	1.498	0.765	4.395	180.000	2
16	1011	1.690	0.826	5.186	180.100	3
16	1012	1.644	0.713	5.588	180.000	3
16	1013	1.746	0.751	5.974	179.900	3
16	1015	1.933	0.797	6.814	180.000	2
16	1017	2.117	0.846	7.628	180.000	1
16	1018	2.236	0.890	8.077	180.000	2
17	701	7.388	1.078	-37.859	352.400	3
17	903	7.463	1.038	-38.552	353.100	3
17	904	7.494	1.029	-38.793	353.500	3
17	907	7.281	1.026	-37.531	352.200	3
17	909	7.156	1.026	-36.782	352.000	3
17	910	7.106	1.035	-36.425	351.700	3
17	912	6.946	0.997	-35.694	351.300	4
17	913	6.929	1.040	-35.329	351.000	4
17	914	6.883	1.055	-34.968	350.800	4
17	915	6.819	1.052	-34.600	350.500	3
17	916	6.755	1.049	-34.237	350.300	3
17	918	6.684	1.101	-33.494	349.700	3
17	919	6.667	1.142	-33.150	349.400	3
17	921	6.322	1.069	-31.513	350.600	3
17	926	6.513	1.145	-32.209	354.000	3
17	927	6.514	1.098	-32.492	354.400	2
17	929	6.638	1.101	-33.219	354.900	3
17	930	6.714	1.119	-33.574	355.100	3
17	931	6.737	1.098	-33.833	355.600	3
17	932	6.725	1.038	-34.124	356.000	2
17	933	6.358	1.072	-31.712	355.400	3
17	934	6.329	1.104	-31.350	355.200	3
17	936	6.232	1.133	-30.595	354.800	2
17	939	5.990	1.090	-29.400	354.400	2
17	940	5.942	1.093	-29.094	354.100	2
17	942	5.773	1.069	-28.222	353.600	3
17	944	5.668	1.090	-27.469	353.100	3
17	945	5.606	1.090	-27.096	352.900	3
17	946	5.512	1.058	-26.725	352.600	2
17	949	5.248	0.982	-25.590	353.000	3
17	950	5.224	1.023	-25.206	353.100	3
17	951	5.201	1.049	-24.912	353.700	2
17	952	5.189	1.093	-24.579	354.100	2
17	953	5.175	1.116	-24.355	354.400	2
17	954	5.118	1.116	-24.016	354.800	2
17	955	5.048	1.116	-23.595	355.200	2
17	956	4.962	1.104	-23.144	355.700	2
17	958	4.800	1.052	-22.489	356.800	2

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	NORTH-SOUTH PROFILE SHOTPOINT 17	
					AZIMUTH	WEIGHT
17	960	4.632	0.994	-21.830	357.900	2
17	961	4.627	1.040	-21.517	358.500	2
17	962	4.591	1.064	-21.162	358.900	2
17	964	4.435	1.035	-20.401	359.000	2
17	966	4.362	1.090	-19.632	358.600	2
17	967	4.297	1.090	-19.242	358.500	1
17	968	4.233	1.090	-18.859	358.300	1
17	969	4.148	1.072	-18.454	358.200	2
17	970	4.065	1.055	-18.060	358.000	2
17	971	3.973	1.017	-17.735	357.900	2
17	972	3.912	0.994	-17.509	360.000	2
17	973	3.870	0.994	-17.256	0.100	2
17	974	3.810	0.994	-16.895	359.800	2
17	975	3.754	0.994	-16.558	359.100	2
17	976	3.716	1.009	-16.243	358.400	2
17	977	3.697	1.040	-15.940	358.200	2
17	978	3.581	0.985	-15.572	358.100	2
17	979	3.533	0.997	-15.217	357.500	2
17	980	3.452	0.974	-14.868	357.000	2
17	981	3.392	0.968	-14.545	356.800	2
17	983	3.242	0.942	-13.801	356.300	2
17	984	3.152	0.916	-13.416	356.100	2
17	985	3.076	0.901	-13.047	355.800	2
17	986	2.989	0.878	-12.664	355.600	2
17	987	3.009	0.959	-12.300	355.200	2
17	988	2.914	0.924	-11.940	355.800	2
17	989	2.839	0.907	-11.589	356.400	2
17	990	2.738	0.867	-11.227	356.700	2
17	991	2.673	0.867	-10.841	357.100	2
17	993	2.520	0.843	-10.059	356.700	2
17	994	2.429	0.817	-9.672	357.200	1
17	996	2.271	0.829	-8.654	359.600	2
17	997	2.228	0.852	-8.256	359.500	1
17	998	2.175	0.858	-7.905	359.500	2
17	999	2.134	0.881	-7.515	359.400	1
17	1000	2.032	0.846	-7.114	359.400	1
17	1001	1.924	0.803	-6.727	359.400	2
17	1002	1.849	0.794	-6.330	359.400	1
17	1003	1.762	0.774	-5.932	359.300	1
17	1005	1.584	0.727	-5.140	359.200	1
17	1007	1.362	0.638	-4.345	359.100	1
17	1009	1.172	0.580	-3.555	358.900	1
17	1011	0.988	0.527	-2.764	358.400	1
17	1012	0.921	0.527	-2.363	358.300	1
17	1013	0.845	0.516	-1.976	358.200	1
17	1015	0.616	0.426	-1.138	356.300	0
17	1017	0.243	0.188	-0.329	347.700	0
					EAST-WEST PROFILE	
12	701	0.024	0.003	-0.126	51.500	0
12	703	0.392	0.267	-0.755	328.200	2
12	704	0.538	0.351	-1.123	323.200	2
12	705	0.760	0.507	-1.520	321.100	0

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	EAST-WEST PROFILE SHOTPOINT 12	
					AZIMUTH	WEIGHT
12	708	1.042	0.626	-2.497	303.700	1
12	709	1.166	0.710	-2.738	297.700	1
12	710	1.217	0.713	-3.024	292.600	2
12	714	1.597	0.855	-4.452	284.800	3
12	716	1.785	0.919	-5.196	281.600	3
12	717	1.770	0.843	-5.560	279.300	3
12	718	1.860	0.884	-5.854	277.100	3
12	719	2.011	0.971	-6.240	277.000	3
12	720	1.979	0.878	-6.603	275.700	3
12	721	1.934	0.777	-6.945	274.000	3
12	722	1.891	0.690	-7.205	272.200	3
12	723	1.927	0.719	-7.249	269.100	3
12	725	2.035	0.739	-7.779	264.800	3
12	726	2.103	0.765	-8.027	262.800	3
12	727	2.055	0.681	-8.243	260.600	3
12	728	2.146	0.722	-8.546	259.000	3
12	729	2.232	0.745	-8.922	258.200	3
12	730	2.208	0.655	-9.321	257.600	3
12	731	2.291	0.681	-9.658	256.100	3
12	734	2.420	0.664	-10.536	252.000	3
12	734	2.420	0.664	-10.536	252.000	3
12	735	2.498	0.678	-10.921	251.300	3
12	735	2.501	0.681	-10.921	251.300	3
12	736	2.579	0.690	-11.337	252.000	2
12	736	2.579	0.690	-11.337	252.000	3
12	739	2.854	0.782	-12.432	251.700	3
12	739	2.762	0.690	-12.432	251.700	4
12	742	2.968	0.719	-13.493	256.200	3
12	742	2.953	0.704	-13.493	256.200	3
12	743	2.881	0.582	-13.793	257.600	3
12	743	3.003	0.704	-13.793	257.600	3
12	744	2.971	0.617	-14.120	258.300	3
12	744	3.058	0.704	-14.120	258.300	3
12	745	3.050	0.632	-14.509	258.700	3
12	745	3.076	0.658	-14.509	258.700	3
12	746	3.171	0.687	-14.906	258.600	2
12	749	3.352	0.667	-16.114	258.600	3
12	750	3.410	0.658	-16.513	258.600	3
12	751	3.459	0.640	-16.913	258.600	3
12	752	3.630	0.640	-17.939	256.000	3
12	754	3.760	0.661	-18.598	257.400	2
12	756	3.898	0.658	-19.440	257.100	2
12	757	3.978	0.690	-19.729	257.000	2
12	759	4.146	0.748	-20.390	258.200	3
12	760	4.199	0.722	-20.865	258.400	3
12	761	4.264	0.756	-21.044	259.200	2
12	763	4.370	0.736	-21.806	260.100	3
12	765	4.514	0.765	-22.492	259.900	3
12	766	4.547	0.716	-22.988	259.900	3
12	767	4.595	0.707	-23.328	260.400	2
12	768	4.690	0.751	-23.637	261.000	2
12	769	4.745	0.751	-23.965	261.600	2

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	EAST-WEST PROFILE SHOTPOINTS 12, 18	
					AZIMUTH	WEIGHT
12	770	4.808	0.751	-24.345	261.700	2
12	771	4.894	0.771	-24.741	261.700	2
12	772	4.975	0.785	-25.136	261.600	2
12	774	5.089	0.771	-25.907	262.000	2
12	775	5.132	0.753	-26.270	262.200	2
12	776	5.163	0.722	-26.649	262.500	2
12	777	5.244	0.739	-27.031	262.700	2
12	778	5.291	0.724	-27.402	262.900	2
12	779	5.351	0.724	-27.758	263.300	2
12	780	5.430	0.748	-28.097	263.500	2
12	781	5.537	0.748	-28.738	263.800	2
12	782	5.535	0.681	-29.124	264.000	3
12	783	5.642	0.722	-29.525	264.100	3
12	784	5.743	0.762	-29.888	263.800	3
12	785	5.751	0.710	-30.247	264.000	3
12	786	5.843	0.742	-30.608	264.400	3
12	787	5.918	0.756	-30.968	264.600	3
12	788	6.015	0.794	-31.328	264.800	3
12	789	6.051	0.782	-31.614	265.300	3
12	790	6.124	0.788	-32.016	265.600	3
12	791	6.193	0.788	-32.430	265.700	3
12	793	6.462	0.930	-33.191	255.800	2
12	794	6.618	0.945	-34.040	256.000	3
12	795	6.761	0.945	-34.897	256.300	3
12	796	6.870	0.942	-35.568	256.700	3
12	797	6.902	0.785	-36.699	255.200	3
12	798	7.140	0.907	-37.397	254.800	3
12	799	7.226	0.797	-38.573	254.000	2
12	800	7.450	0.881	-39.413	254.200	3
12	801	7.583	0.840	-40.453	254.900	3
12	803	7.891	0.832	-42.357	255.600	3
12	804	8.013	0.846	-43.003	257.000	3
12	807	8.461	0.777	-46.103	260.200	3
12	809	8.756	0.768	-47.927	259.200	3
12	810	8.990	0.800	-49.144	258.400	3
12	811	9.129	0.800	-49.975	258.000	4
12	812	9.261	0.780	-50.888	258.300	4
12	813	9.312	0.681	-51.784	258.000	4
12	814	9.450	0.681	-52.613	257.900	4
12	815	9.541	0.640	-53.405	257.800	4
12	816	9.699	0.640	-54.354	258.300	4
12	817	9.910	0.669	-55.443	258.600	4
12	818	10.085	0.669	-56.491	257.600	4
12	819	10.422	0.887	-57.213	256.800	4
12	820	10.723	0.872	-59.107	258.200	4
18	701	3.269	0.696	15.442	79.100	1
18	705	3.100	0.655	14.672	74.100	1
18	708	2.884	0.609	13.655	72.000	1
18	709	2.812	0.597	13.293	72.000	0
18	710	2.725	0.574	12.909	72.000	3
18	711	2.584	0.484	12.601	70.900	4

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	EAST-WEST PROFILE SHOTPOINT 18	
					AZIMUTH	WEIGHT
18	712	2.527	0.487	12.244	70.200	4
18	714	2.399	0.487	11.471	69.700	1
18	716	2.236	0.452	10.701	68.800	1
18	717	2.096	0.382	10.282	68.700	2
18	718	2.035	0.382	9.917	69.000	1
18	719	1.992	0.397	9.571	68.000	1
18	720	1.908	0.377	9.186	67.600	2
18	721	1.783	0.319	8.787	67.800	2
18	722	1.870	0.461	8.456	68.400	3
18	723	1.707	0.327	8.278	70.800	2
18	725	1.598	0.327	7.623	73.700	2
18	726	1.660	0.438	7.333	75.600	2
18	727	1.477	0.296	7.091	77.900	2
18	728	1.397	0.267	6.785	79.800	2
18	729	1.347	0.278	6.413	81.000	1
18	730	1.310	0.307	6.020	82.000	1
18	731	1.239	0.287	5.715	84.900	1
18	735	0.994	0.200	4.766	97.900	1
18	736	0.940	0.217	4.335	98.800	1
18	739	0.770	0.197	3.437	108.200	0
18	742	0.475	0.142	1.997	100.900	0
18	743	0.374	0.107	1.604	94.900	0
18	744	0.276	0.069	1.237	90.800	0
18	745	0.198	0.058	0.841	91.100	0
18	746	0.110	0.032	0.467	103.600	0
18	749	0.196	0.061	-0.811	244.000	0
18	750	0.270	0.069	-1.201	248.800	1
18	751	0.359	0.093	-1.596	251.400	0
18	752	0.551	0.087	-2.785	237.000	0
18	754	0.672	0.119	-3.317	248.300	0
18	755	0.745	0.119	-3.757	249.900	0
18	756	0.810	0.116	-4.164	248.800	0
18	757	0.904	0.162	-4.453	249.100	0
18	758	0.999	0.197	-4.814	251.800	0
18	759	1.057	0.211	-5.072	254.700	0
18	760	1.124	0.200	-5.542	255.900	0
18	761	1.164	0.211	-5.714	258.700	0
18	762	1.225	0.211	-6.080	260.200	0
18	763	1.323	0.243	-6.481	261.900	0
18	765	1.437	0.243	-7.164	261.000	0
18	766	1.537	0.261	-7.659	260.900	0
18	767	1.578	0.243	-8.005	262.400	0
18	769	1.682	0.238	-8.667	265.500	0
18	770	1.764	0.255	-9.051	265.800	0
18	771	1.829	0.255	-9.445	265.500	0
18	772	1.915	0.275	-9.836	265.100	0
18	774	2.036	0.267	-10.619	265.900	1
18	775	2.098	0.267	-10.987	266.300	0
18	776	2.162	0.267	-11.373	266.600	0
18	777	2.227	0.267	-11.764	267.100	0
18	778	2.290	0.267	-12.141	267.500	0
18	779	2.366	0.281	-12.509	268.100	0



SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	EAST-WEST PROFILE SHOTPOINTS 18, 19		
				DISTANCE	AZIMUTH	WEIGHT
18	780	2.424	0.281	-12.858	268.500	0
18	781	2.510	0.258	-13.510	268.900	0
18	782	2.566	0.249	-13.902	269.200	0
18	783	2.645	0.261	-14.306	269.200	0
18	784	2.741	0.298	-14.655	268.500	0
18	785	2.817	0.313	-15.023	268.800	0
18	786	2.879	0.313	-15.398	269.400	0
18	787	2.941	0.313	-15.770	269.800	0
18	788	3.052	0.362	-16.137	270.000	0
18	789	3.089	0.348	-16.448	270.900	0
18	790	3.158	0.348	-16.862	271.200	0
18	791	3.230	0.351	-17.279	271.300	1
18	793	3.524	0.539	-17.913	252.800	0
18	794	3.665	0.539	-18.756	253.200	1
18	795	3.786	0.519	-19.603	253.900	0
18	796	3.876	0.498	-20.265	254.700	0
18	797	4.071	0.498	-21.434	252.200	0
18	798	4.181	0.490	-22.146	251.600	1
18	800	4.499	0.469	-24.180	250.900	1
18	801	4.692	0.493	-25.193	252.200	1
18	802	4.725	0.400	-25.953	253.700	4
18	803	4.912	0.400	-27.074	253.600	1
18	804	5.015	0.400	-27.692	255.600	2
18	805	5.112	0.345	-28.604	257.100	2
18	806	5.190	0.264	-29.558	259.400	4
18	807	5.393	0.264	-30.776	260.700	3
18	808	5.504	0.238	-31.597	259.600	4
18	809	5.670	0.238	-32.597	259.200	3
18	810	6.013	0.377	-33.815	258.000	3
18	811	6.076	0.301	-34.649	257.500	3
18	812	6.190	0.264	-35.560	257.800	3
18	813	6.355	0.278	-36.458	257.400	3
18	814	6.493	0.278	-37.288	257.300	4
18	815	6.605	0.258	-38.081	257.100	4
18	816	6.762	0.258	-39.026	257.900	2
18	817	6.943	0.258	-40.114	258.300	2
18	818	7.322	0.461	-41.169	256.900	2
18	819	7.493	0.510	-41.901	255.900	1
18	820	7.830	0.533	-43.779	257.800	2
19	701	5.468	0.722	28.476	82.700	2
19	704	5.299	0.661	27.828	80.800	2
19	705	5.260	0.661	27.598	80.100	1
19	708	5.009	0.588	26.527	79.300	2
19	709	4.973	0.611	26.168	79.400	2
19	710	4.909	0.611	25.786	79.500	2
19	714	4.524	0.475	24.295	78.900	2
19	716	4.393	0.475	23.505	78.800	2
19	717	4.289	0.440	23.089	78.900	2
19	718	4.230	0.440	22.739	79.200	2
19	719	4.163	0.435	22.367	78.900	2
19	720	4.040	0.377	21.979	79.000	2

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	EAST-WEST SHOTPOINT AZIMUTH	PROFILE 19 WEIGHT
19	721	3.955	0.356	21.594	79.300	3
19	722	3.948	0.400	21.289	79.700	2
19	723	3.906	0.377	21.177	80.700	2
19	725	3.780	0.348	20.595	82.100	2
19	726	3.752	0.362	20.341	82.800	2
19	727	3.718	0.362	20.135	83.700	2
19	728	3.575	0.267	19.851	84.500	2
19	729	3.469	0.220	19.490	85.000	2
19	730	3.506	0.322	19.106	85.400	2
19	731	3.417	0.281	18.814	86.300	2
19	735	3.303	0.336	17.803	89.800	1
19	736	3.228	0.333	17.366	89.900	1
19	739	3.050	0.324	16.353	91.300	1
19	742	2.809	0.301	15.047	88.700	0
19	743	2.730	0.281	14.691	87.800	0
19	744	2.659	0.269	14.336	87.200	0
19	745	2.564	0.240	13.940	87.200	0
19	746	2.496	0.238	13.549	87.500	0
19	749	2.283	0.223	12.359	88.400	0
19	750	2.206	0.211	11.965	88.700	0
19	751	2.140	0.211	11.571	89.000	0
19	752	2.002	0.206	10.777	94.300	0
19	754	1.863	0.194	10.013	93.000	0
19	756	1.751	0.211	9.235	94.900	0
19	757	1.720	0.226	8.966	95.600	1
19	758	1.714	0.290	8.548	95.400	0
19	759	1.647	0.278	8.215	94.400	0
19	760	1.556	0.267	7.735	94.800	0
19	761	1.533	0.284	7.492	93.200	0
19	762	1.464	0.281	7.099	92.700	0
19	763	1.375	0.264	6.670	91.800	0
19	765	1.253	0.249	6.021	93.900	0
19	766	1.150	0.226	5.543	95.200	0
19	767	1.069	0.209	5.160	93.900	1
19	768	1.001	0.200	4.807	92.100	0
19	769	0.972	0.232	4.441	89.600	0
19	770	0.879	0.203	4.055	89.400	0
19	771	0.817	0.206	3.666	90.500	0
19	772	0.756	0.209	3.285	92.400	0
19	774	0.595	0.180	2.490	91.100	0
19	775	0.509	0.156	2.118	90.200	0
19	776	0.415	0.127	1.729	88.600	0
19	777	0.339	0.116	1.338	85.000	0
19	778	0.260	0.098	0.968	79.800	0
19	779	0.262	0.153	0.649	63.300	0
19	780	0.134	0.061	-0.441	31.100	0
19	781	0.182	0.078	-0.624	316.900	1
19	782	0.273	0.113	-0.961	301.500	0
19	783	0.351	0.130	-1.325	292.500	0
19	784	0.449	0.182	-1.601	281.600	0
19	785	0.530	0.200	-1.980	281.800	0
19	786	0.587	0.191	-2.378	283.200	0

EAST-WEST PROFILE  
SHOTPOINT 19

SHOT POINT	RECORDER LOCATION	TRAVEL TIME (REAL)	TRAVEL TIME (T-X/6)	DISTANCE	AZIMUTH	WEIGHT
19	787	0.673	0.211	-2.767	283.700	0
19	788	0.781	0.258	-3.138	283.200	0
19	789	0.841	0.258	-3.501	286.000	0
19	790	0.912	0.258	-3.926	285.800	0
19	791	0.977	0.255	-4.335	284.700	1
19	793	1.472	0.455	-6.104	221.300	1
19	794	1.561	0.432	-6.777	225.900	1
19	795	1.724	0.484	-7.440	230.600	0
19	796	1.770	0.443	-7.961	234.200	1
19	797	2.024	0.464	-9.364	231.500	1
19	798	2.150	0.464	-10.117	231.600	1
19	799	2.289	0.391	-11.389	231.600	1
19	800	2.468	0.446	-12.131	233.600	1
19	801	2.619	0.461	-12.951	237.300	1
19	803	2.831	0.391	-14.640	241.600	1
19	804	2.930	0.420	-15.059	245.800	1
19	805	2.986	0.345	-15.846	249.100	2
19	807	3.318	0.351	-17.806	256.100	2
19	809	3.644	0.362	-19.690	254.100	2
19	810	3.813	0.319	-20.967	252.400	2
19	811	3.902	0.264	-21.829	251.800	3
19	812	4.038	0.252	-22.715	252.600	2
19	813	4.240	0.301	-23.631	252.200	3
19	814	4.402	0.324	-24.463	252.200	2
19	815	4.527	0.316	-25.265	252.100	2
19	816	4.688	0.327	-26.161	253.500	2
19	817	4.905	0.368	-27.224	254.200	2
19	818	5.192	0.467	-28.352	252.300	1
19	819	5.390	0.533	-29.143	251.000	0
19	820	5.731	0.580	-30.909	253.900	1