

UNITED STATES DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Data Report for the North and South Richardson Highway  
Profiles, TACT, Seismic-refraction Survey, southern Alaska

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Open-File Report 86-274

This report 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.

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## TAPE

1. SEG Y, 1600 BPI format: National Geophysical Data Center  
                                   NOAA/EGCI  
                                   325 Broadway  
                                   Boulder, CO 80303  
                                   (303) 497-6123

## INTRODUCTION

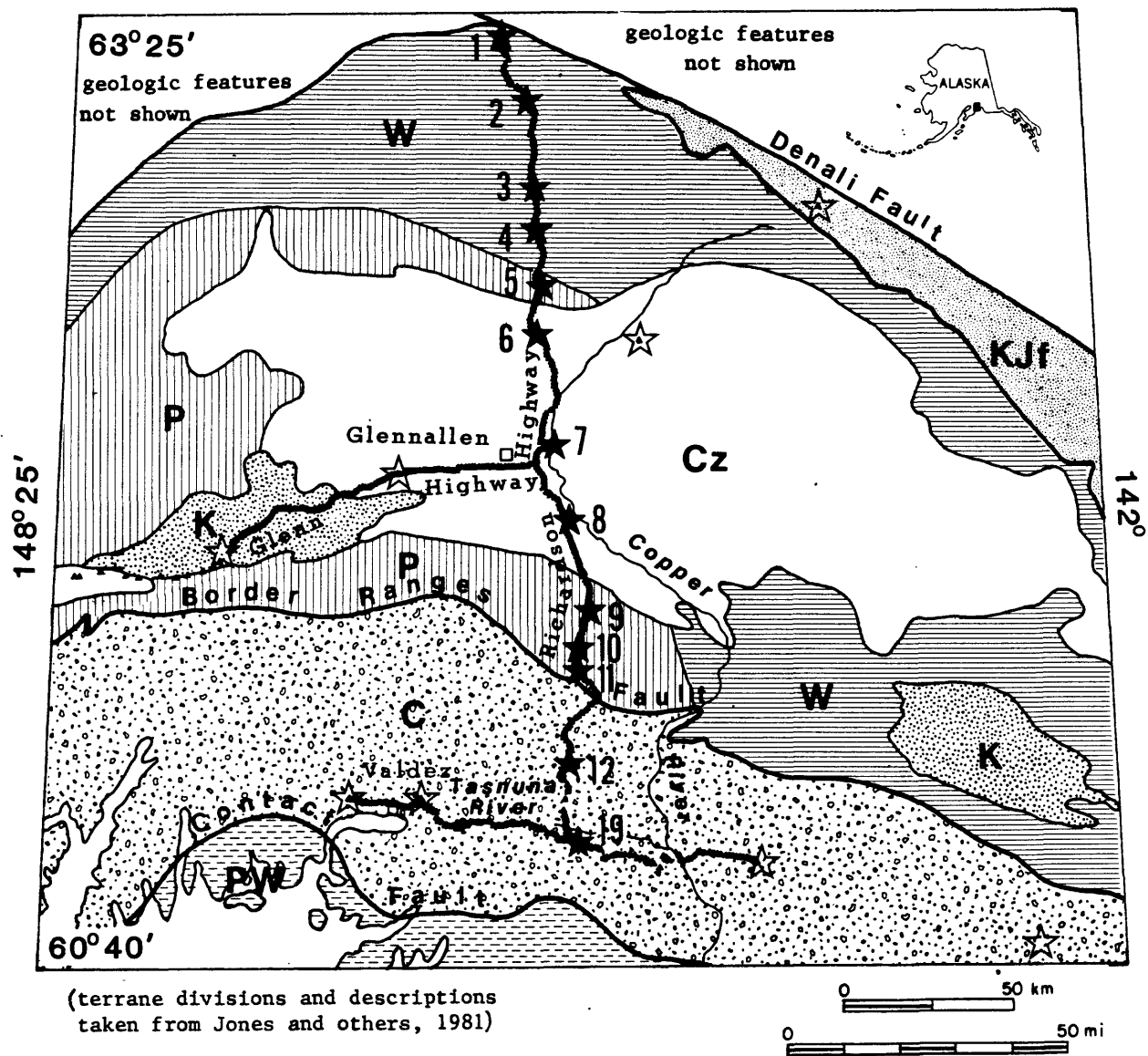
The U.S. Geological Survey conducted a seismic-refraction survey in south-central Alaska in June and July, 1984, in order to develop velocity models along transects (1) in the Chugach Mountains, within the Chugach terrane, (2) on the Glenn Highway west of Glenallen, within the Peninsular-Wrangellia composite terrane (see Jones and others, 1981 for a description of tectono-stratigraphic terranes in Alaska), and (3) along the Richardson Highway from a point east of Valdez to the Denali fault crossing the Border Ranges fault terrane boundary (fig. 1). This experiment is part of a continuing investigation designed to characterize deep crustal structure along a transect extending north from the Gulf of Alaska to Prudhoe Bay.

This report is a compilation of the seismic-refraction data obtained perpendicular to structural trend from the South and North Richardson Highway deployments. Seismic-refraction data parallel to structural trend from the Chugach Mountains and Glenn Highway deployments were presented by Daley and others, 1985. An interpretation of the seismic-refraction data along strike has been published by Fuis and others (1984) and Page and others (in press).

## DESCRIPTION OF SURVEY

The South and North Richardson Highway deployments run roughly from a point east of Valdez in the south to the Denali fault; each was approximately 140 km long. The South Richardson Highway profile extended south from shotpoint 7, near Glennallen, to shotpoint 19, in the Tasnuna River valley at Woodworth Glacier Lake; it recorded shots 1-8. The North Richardson Highway profile extended south from shotpoint 1 at the Denali fault to shotpoint 7 (Plate 1) and recorded shots 14 - 22. Shotpoints 1, 7, 8, and 19 were used for both profiles. Average spacing for seismic recorders on both deployments was approximately one km. A total of 17 shots, approximately 25 km apart, loaded with 1100-6000 pounds (500-2727 kg) of ammonium nitrate explosive were fired in 8 inch (20 cm) diameter, 160 feet (50 m) deep holes. The southernmost 18 stations on the South Richardson Highway profile were deployed by helicopter over Mt. Billy Mitchell, between shotpoint 12 on the Richardson Highway and shotpoint 19 in Woodworth Glacier lake. Recorder and shotpoint locations are listed (Tables 1, 2) and shown on Plate 1.

We present record sections for shots 1 - 2 (shotpoints 8 and 11) and 4 - 8 (shotpoints 7, 9, 12, 19) in figures 2 - 5 and record sections for shots 14 - 20 (shotpoints 1, 3, 5, 7, 2, 4 and 6) and 22 (shotpoint 8) in figures 6 - 9. Shots 5 and 8 were weak due to incomplete detonation of explosives resulting in seismic energy near or below ambient noise levels. Data beyond 30 km range for shot 8 are not presented because of this problem. Shot 3, shotpoint 1 (fig. 10) and shot 21, shotpoint 19 (fig. 11) were offset shots extending the profiles to approximately 240 km; the time scales on these record sections are extended to accommodate phases with high apparent velocities at these distances.



## EXPLANATION

- |                                                          |                                                       |
|----------------------------------------------------------|-------------------------------------------------------|
| <b>Cz</b> Cenozoic sedimentary and volcanic rocks        | <b>K</b> Middle to Upper Cretaceous sedimentary rocks |
| <b>PW</b> Cenozoic Prince William Terrane                | <b>KJf</b> Deformed Upper Mesozoic flysch             |
| <b>C</b> Cretaceous Chugach Terrane                      | ☆☆ Shotpoint location                                 |
| <b>P</b> Middle Paleozoic to Mesozoic Peninsular Terrane | — Fault                                               |
| <b>W</b> Upper Paleozoic to Mesozoic Wrangellia Terrane  | — Terrane boundary/geologic contact                   |
|                                                          | • Seismic recorder location                           |

Figure 2: A geologic map of southern Alaska with recorder and shot locations.

## INSTRUMENTATION AND DATA REDUCTION

### Seismic Recorders

Field operations involved the deployment of 120 seismic recorders by six observers, each of whom was responsible for 20 instruments. The seismic recorders (Healy and others, 1982) are portable, weigh approximately 40 pounds, are powered by two 6-volt rechargeable batteries, and contain 30-minute cassette tapes to record data. Packaged with each seismic recorder is a single vertical-component 2-Hz geophone, which is removed, oriented, and buried when the seismograph is deployed. Each recorder also includes a chronometer, three independent amplifiers with pre-set attenuation settings, a calibrator, a tape deck, and a tape-speed-compensation tone generator (fig. 12). Ten minutes prior to the expected seismic energy arrival time, a pre-programmed microprocessor in the seismic recorder performs a geophone release test, an amplification check, and a calibration sequence of 1, 10, 100, and 1000 mv at a frequency of 10-Hz. The response curve for the system peaks at about 20-Hz (fig. 13).

Observers are responsible, before shots are fired, for synchronizing the clock in the seismic recorders, preprogramming the microprocessors with up to 10 distinct recording times, and establishing accurate site locations. For this experiment recording locations were surveyed prior to deployment of seismic recorders.

After shots have been fired observers retrieve the seismic recorders, record chronometer drifts, and remove the tapes.

### Data Reduction

Shot times are picked from a paper record on which WWVB, the master clock time code, and the detonation pulse are recorded. Shot times are accurate to  $\pm 2$  milliseconds. Recorder locations and elevations were determined with an accuracy of  $\pm 25$  meters using 1:63,360 orthophoto maps, topographic maps and/or color infrared aerial photos.

Information pertaining to the performance of the seismic recorders is summarized in the Field Data Tables (Appendix A). After checking for errors in time and site locations the field observers digitize the analog data from the cassette tapes for a total of 20 seconds at a rate of 200 samples/sec. Digitization begins at time = shot time - 2.0 sec. + distance/6.0 km/s. For offset shots 3 and 21 digitization begins at time = shot time - 4.0 sec. + distance/8.0 km/s.

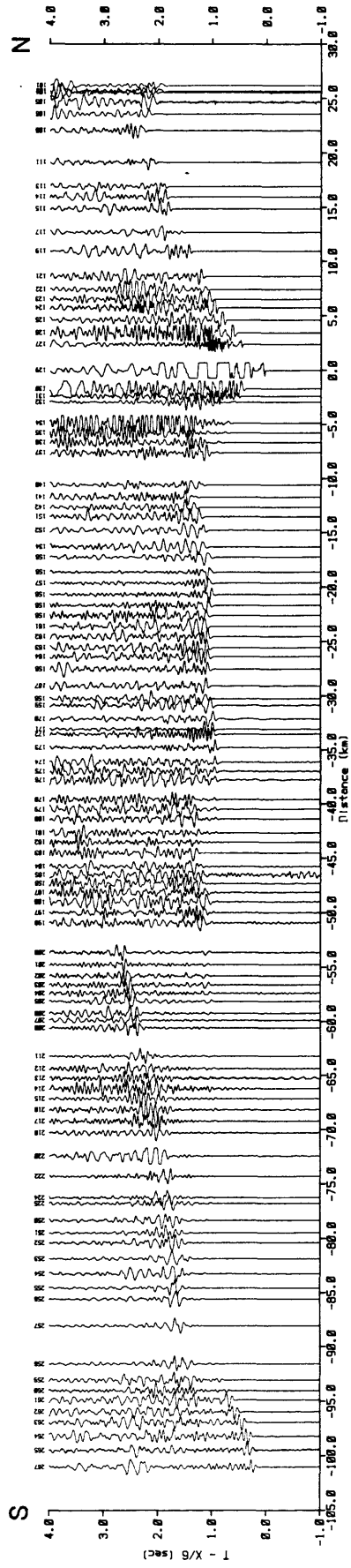
The record sections are plotted with maximum trace amplitudes normalized to a common value and a reducing velocity of 6 km/s.

TAPE

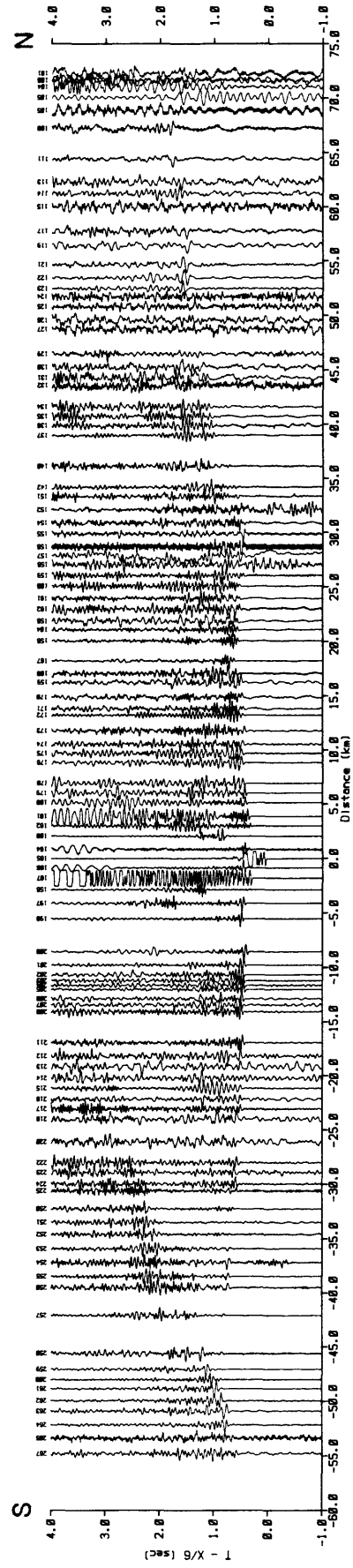
Data included in this report is available on SEG-Y format tapes recorded at 1600 BPI (Appendix B) from the following:

National Geophysical Data Center  
NOAA/EGCI  
325 Broadway  
Boulder, CO 80303

Telephone: (303) 497-6123

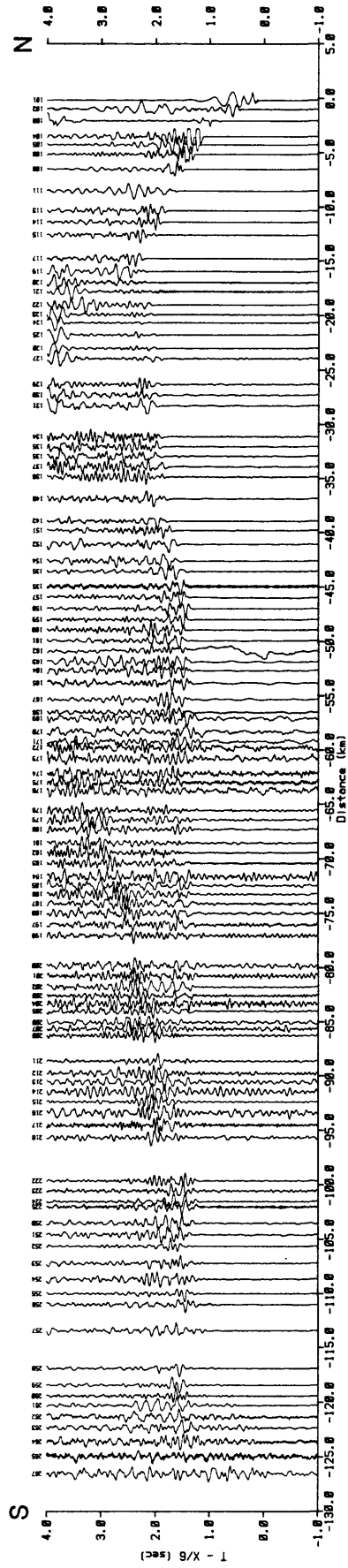


Shot 1, Shotpoint 8

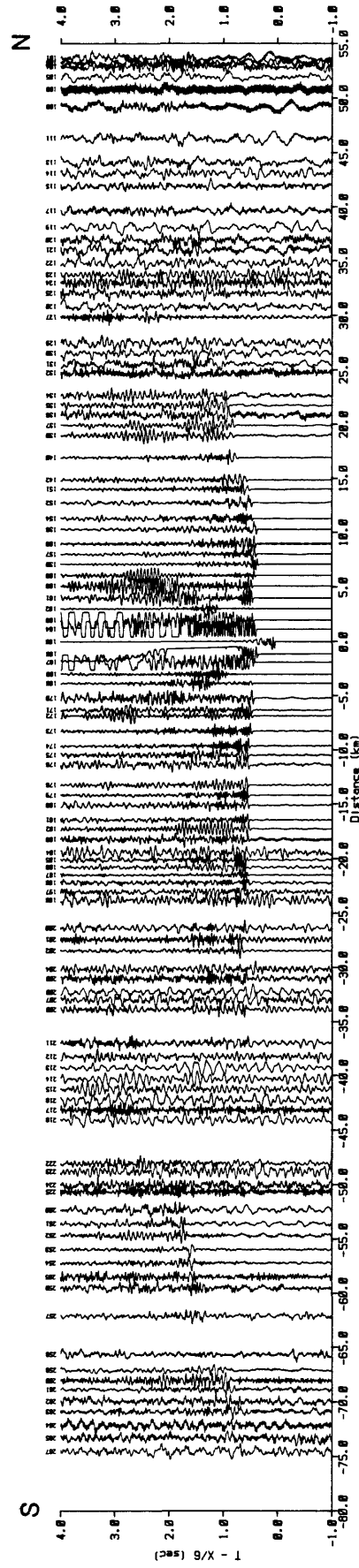


Shot 2, Shotpoint 11

Figure 2: Record sections from the South Richardson profile



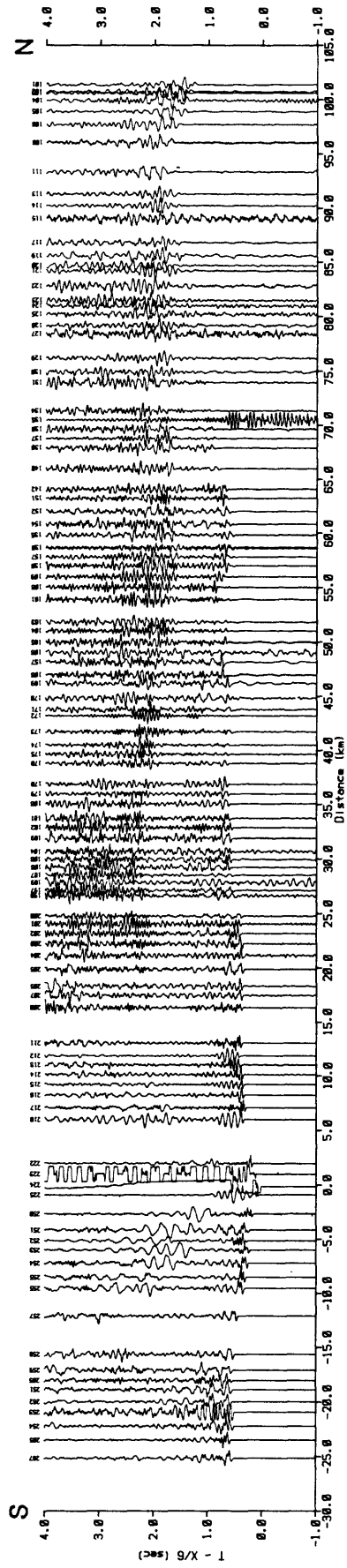
Shot 4, Shotpoint 7



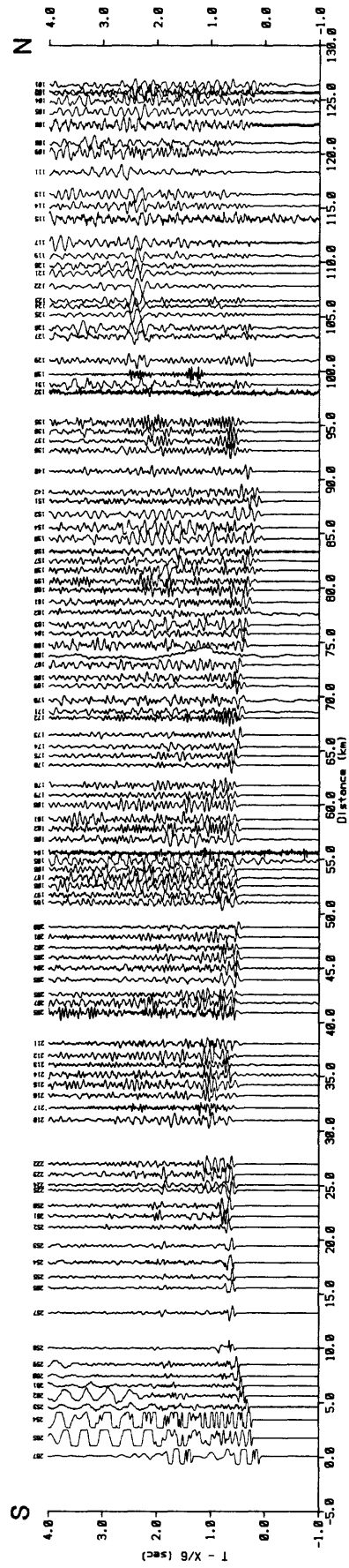
Shot 5, Shotpoint 9

Figure 3: Record sections from the South Richardson profile



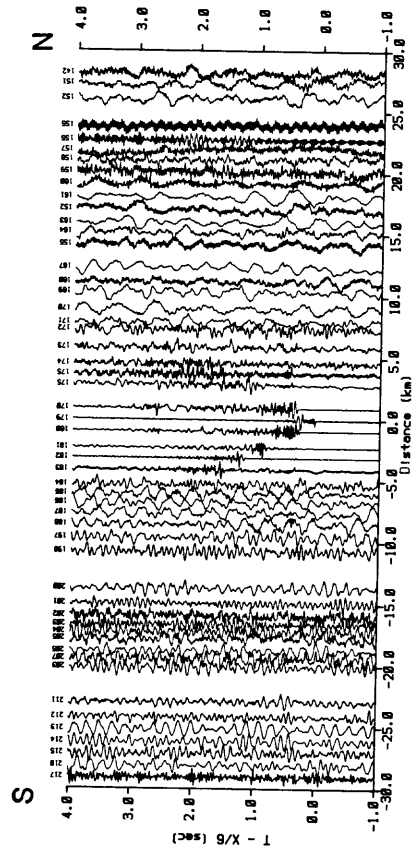


Shot 6, Shotpoint 12



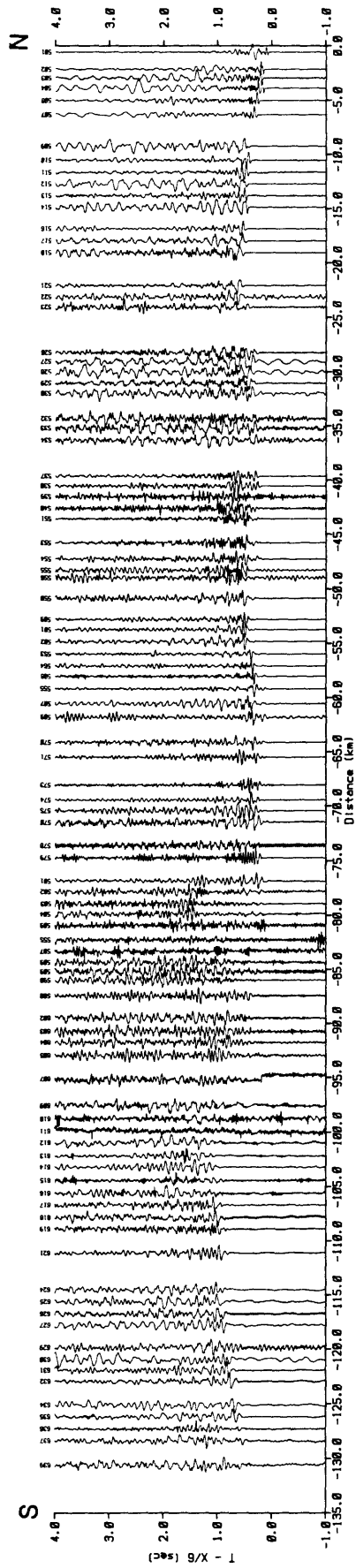
Shot 7, Shotpoint 19

Figure 4: Record sections from the South Richardson profile

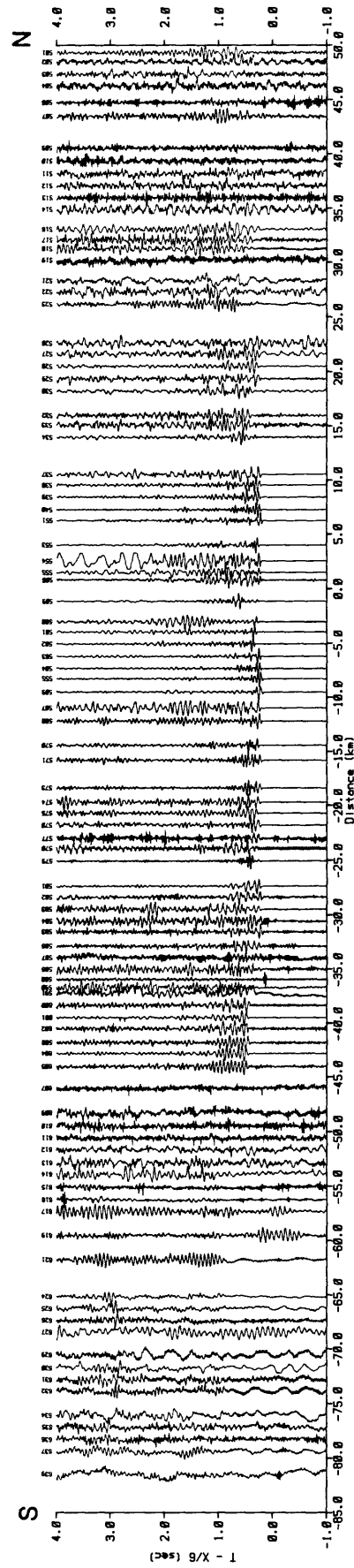


Shot 8, Shotpoint 10

Figure 5: Record section from the South Richardson Highway profile

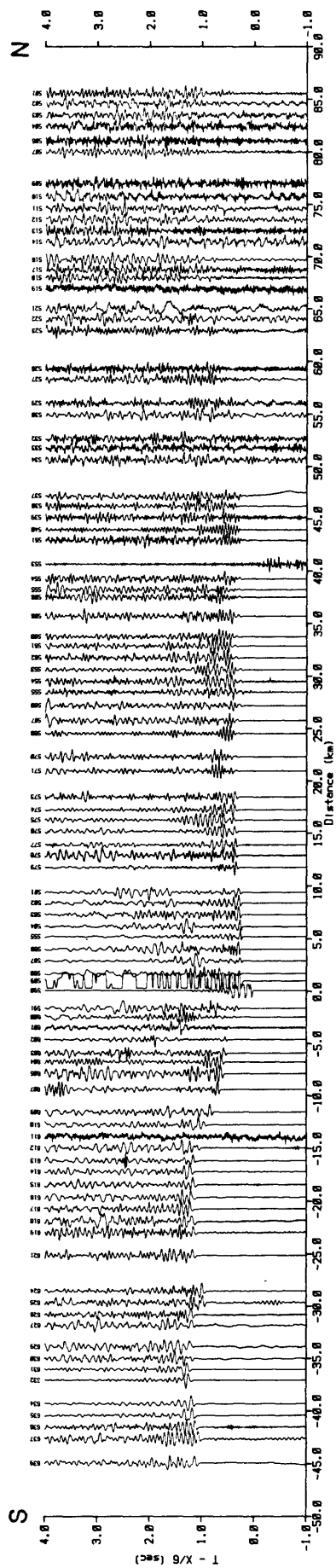


Shot 14, Shotpoint 1

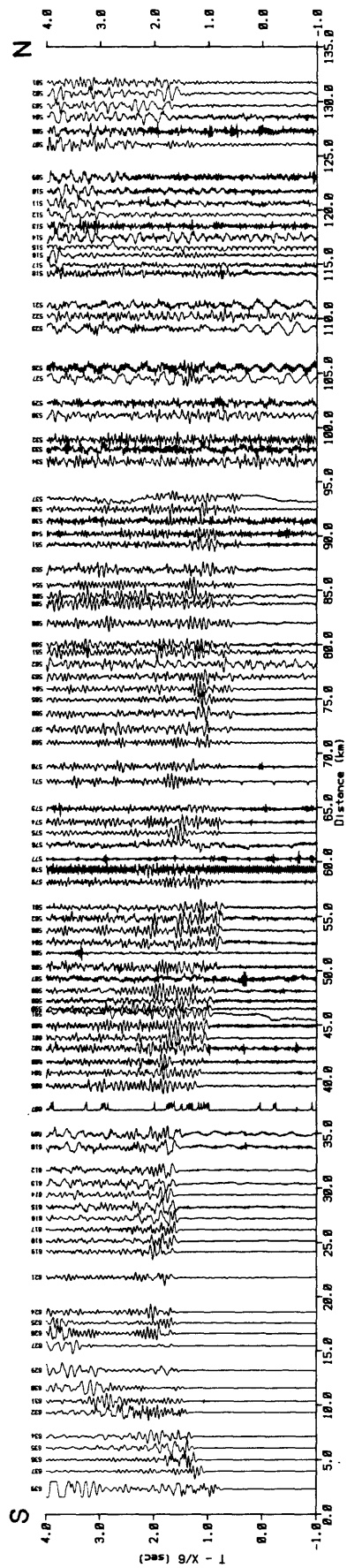


Shot 15, Shotpoint 3

Figure 6: Record sections from the North Richardson Highway profile

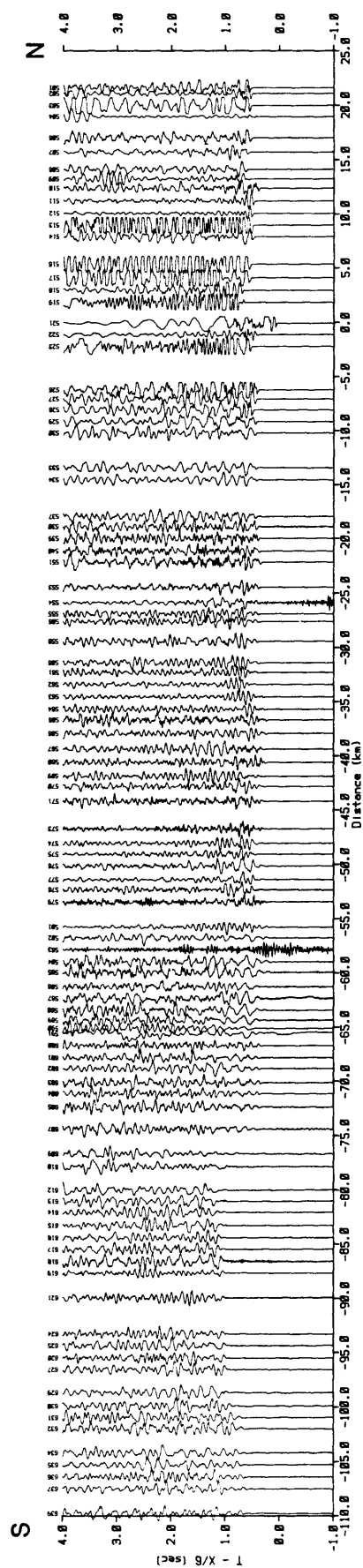


Shot 16, Shotpoint 5

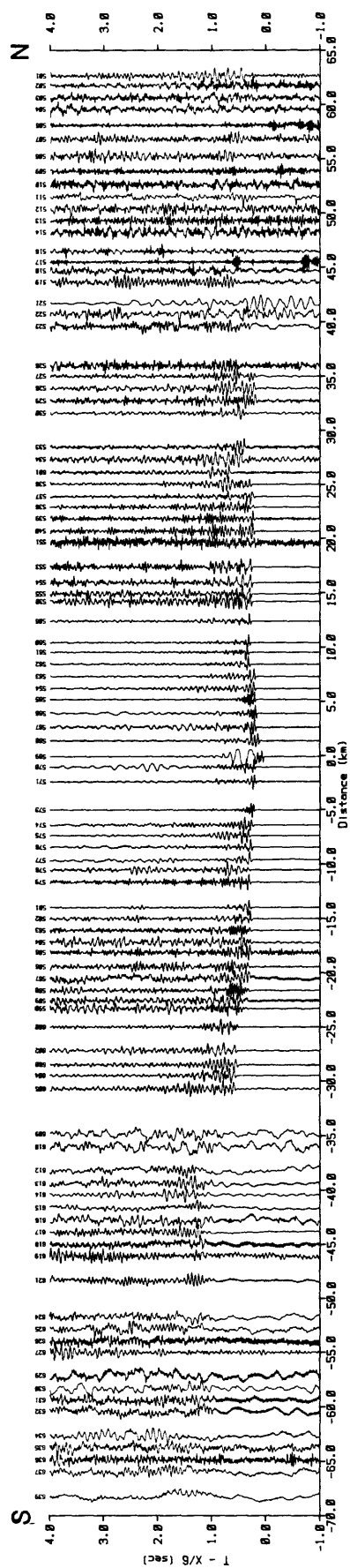


Shot 17, Shotpoint 7

Figure 7: Record sections from the North Richardson Highway profile

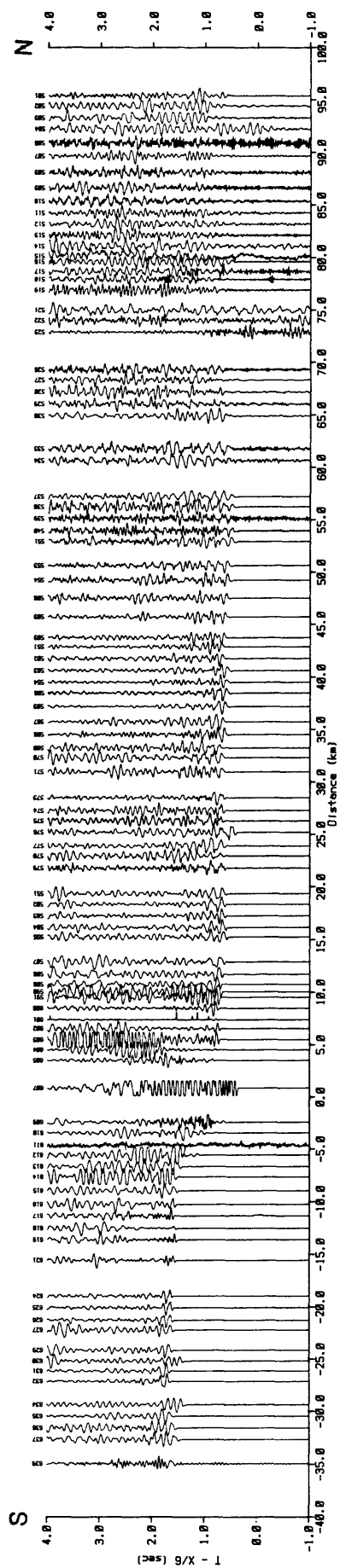


Shot 18, Shotpoint 2

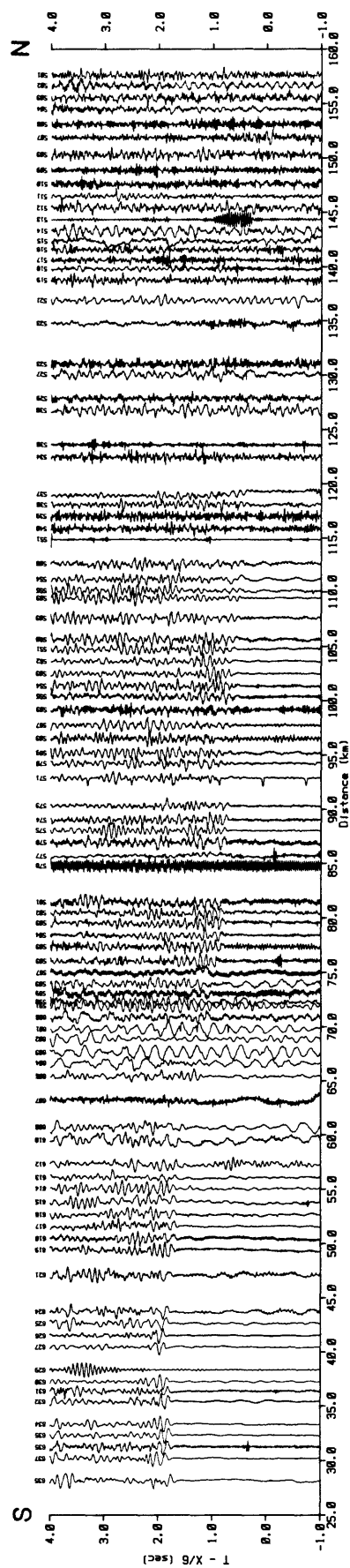


Shot 19, Shotpoint 4

Figure 8: Record sections from the North Richardson Highway profile

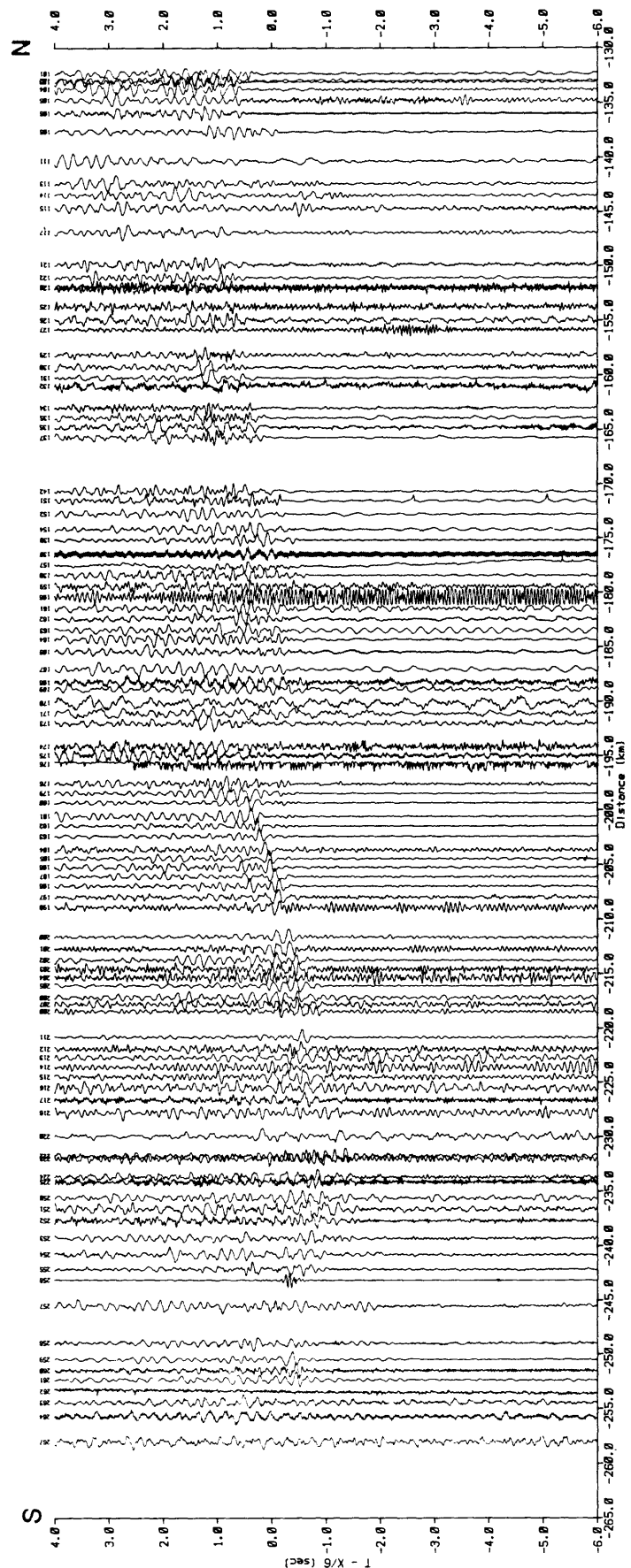


Shot 20, Shotpoint 6



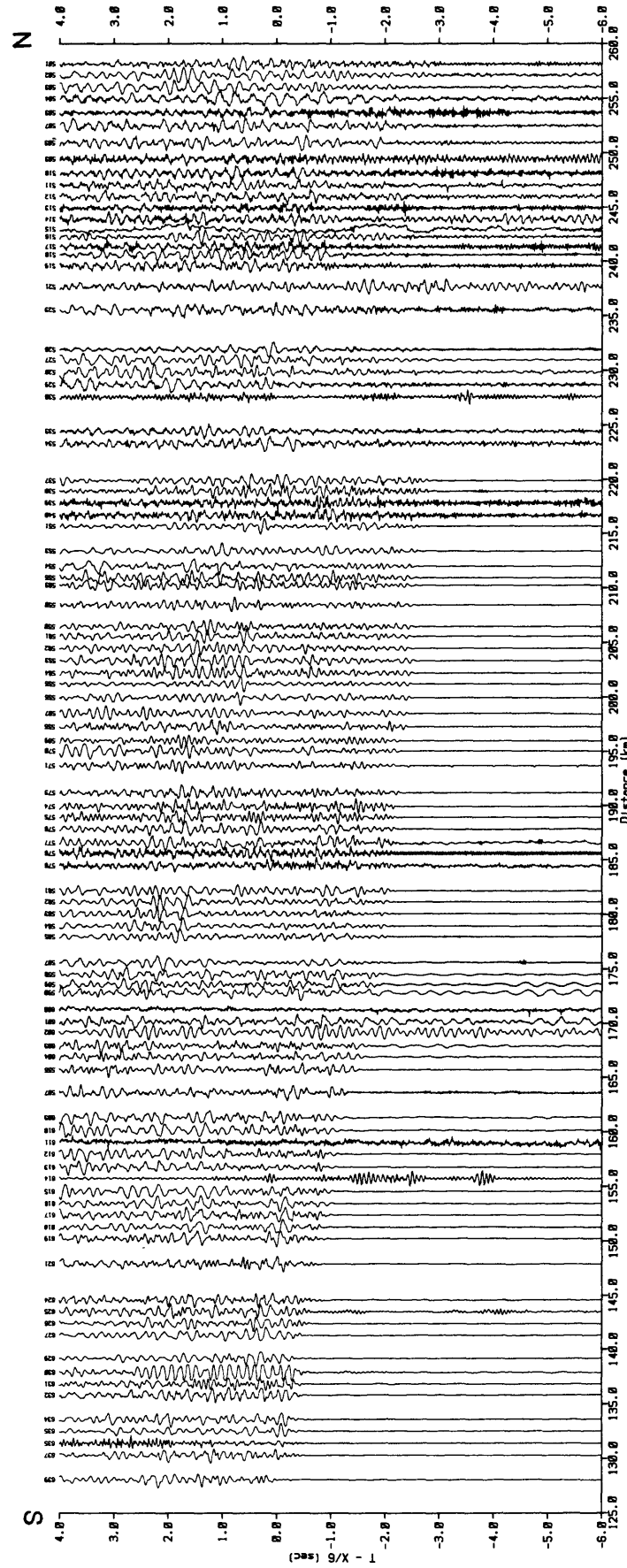
Shot 22, Shotpoint 8

Figure 9: Record sections from the North Richardson Highway profile



Shot 3, Shotpoint 1

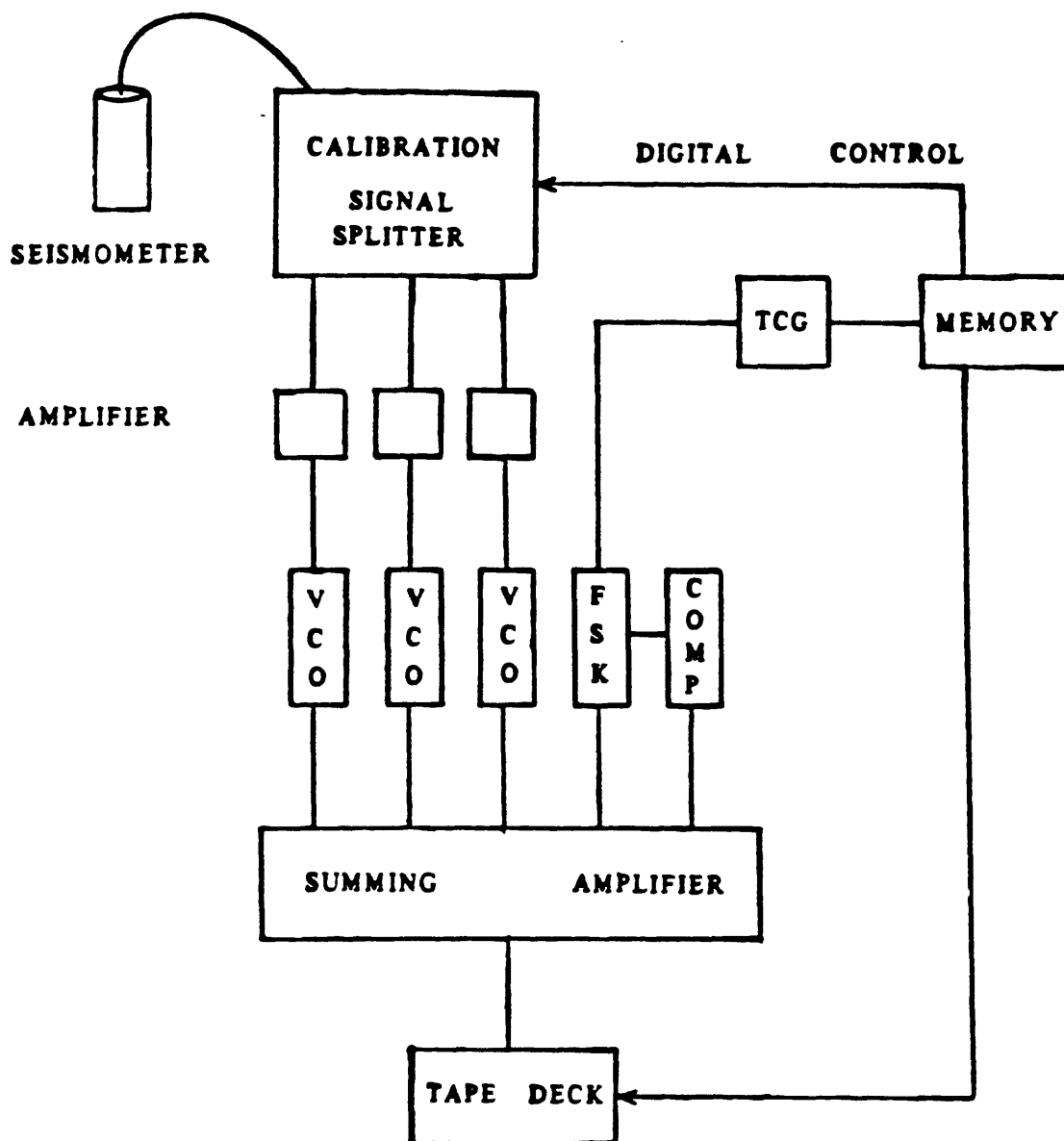
Figure 10: Record section from the South Richardson Highway profile (offset shot)



Shot 21, Shotpoint 19

Figure 11: Record section from the North Richardson Highway profile (offset shot)





COMP = COMPENSATION  
 FSK = FREQUENCY SHIFT KEYING  
 TCG = TIME CODE GENERATOR  
 VCO = VOLTAGE-CONTROLLED OSCILLATOR

Figure 12: Schematic diagram of seismic recorders

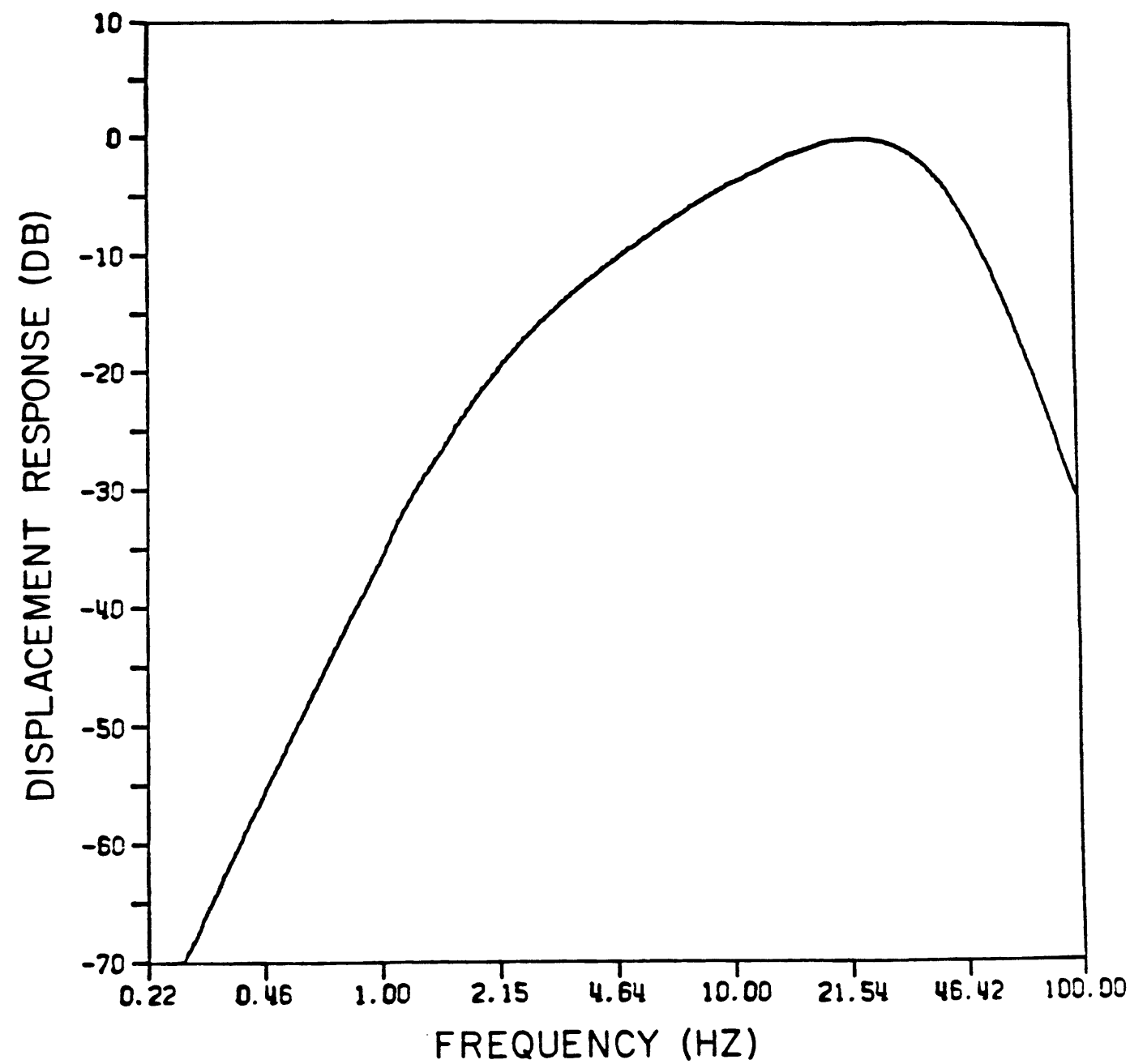


Figure 13: System response curve for cassette recording units with 2-Hz seismometers

## ACKNOWLEDGMENTS

The authors wish to express their appreciation to R. Colburn, E. Criley, E. Cruz, M. Daley, S. Gallanthine, L. Hodgen, L. Hsu, L. Hwang, R. Kaderabek, W. Kohler, N. MacGregor-Scott, R. McClearn, W. Mooney, J. Murphy, R. Page, D. Reneau, D. Russell, and J. VanSchaack for their assistance in field work and data processing.

Will Kohler provided description of tape format.

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- Daley, M. A., Ambos, E. L., and Fuis, G. S., 1985, Seismic Refraction Data collected in the Chugach Mountains and along the Glenn Highway in southern Alaska in 1984: U.S. Geological Survey Open-File Report 85-531, 32 pp., 12 plates.

Table 1: The Master Shot List includes the shot number, shotpoint number, date (calendar and Julian), and shot time (GMT), latitude and longitude, charge size, and notes pertaining to each shot. Shots 9 through 21 and 23 through 29 were shots from the Chugach Mountains and West Glenn Highway profiles (Daley and others, 1985).

	Shot Number	Shot Point	Date Shot Time	Latitude Longitude	Size (lbs)	Notes
South Richardson Highway	1	8	JUN 24, 1984 176 10 0 0.011	61 56.3303 145 16.7487	2000	
	2	11	JUN 24, 1984 176 10 3 57.594	61 31.3367 145 13.6217	2000	
	3	1	JUN 24, 1984 176 10 6 0.012	63 20.8559 145 42.1500	6000	
	4	7	JUN 24, 1984 176 12 0 0.009	62 9.9422 145 24.9930	2000	
	5	9	JUN 24, 1984 176 12 2 0.010	61 41.9517 145 9.2683	2000	INCOMPLETE DETONATION
	6	12	JUN 24, 1984 176 12 3 57.009	61 15.3000 145 17.1100	2000	
	7	19	JUN 24, 1984 176 12 6 0.008	61 1.8251 145 15.6821	2000	WOODWORTH GLACIER LAKE
	8	10	JUN 25, 1984 177 10 0 0.008	61 34.5950 145 13.5833	2000	INCOMPLETE DETONATION
North Richardson Highway	14	1	JUL 8, 1984 191 10 10 0.010	63 20.8559 145 42.1500	2000	
	15	3	JUL 8, 1984 191 10 12 0.009	62 54.6586 145 29.8132	2000	
	16	5	JUL 8, 1984 191 10 14 0.011	62 34.9283 145 27.4631	2040	
	17	7	JUL 8, 1984 191 10 15 59.810	62 9.9422 145 24.9930	2000	
	18	2	JUL 8, 1984 191 12 0 0.011	63 9.8936 145 32.1771	2000	
	19	4	JUL 8, 1984 191 12 2 0.010	62 47.4488 145 28.4207	2000	
	20	6	JUL 8, 1984 191 12 4 0.012	62 29.5123 145 28.0682	2040	
	21	19	JUL 8, 1984 191 12 6 0.008	61 1.8251 145 15.6821	6000	WOODWORTH GLACIER LAKE - 2 HOLES
	22	8	JUL 8, 1984 191 12 7 59.811	61 56.3303 145 16.7487	1100	

Table 2: Seismic Recorder locations. Includes location number (see Plate 1), latitude, longitude, and elevation.

### South Richardson Highway

Location number	Latitude (deg,min,sec)	Longitude (deg,min,sec)	Elev (m)	Location number	Latitude (deg,min,sec)	Longitude (deg,min,sec)	Elev (m)	Location number	Latitude (deg,min,sec)	Longitude (deg,min,sec)	Elev (m)
101	62 9 53.1	145 25 5.5	411	159	61 45 13.1	145 9 16.0	457	217	61 19 4.8	145 17 44.1	396
102	62 9 30.9	145 25 36.6	449	160	61 44 41.6	145 9 16.4	530	218	61 18 30.2	145 16 35.7	373
103	62 9 23.6	145 27 1.9	478	161	61 44 6.0	145 9 30.7	576	219	61 17 51.3	145 16 17.9	358
104	62 8 57.6	145 28 24.6	473	162	61 43 34.1	145 9 36.7	609	220	61 17 21.6	145 16 10.7	396
105	62 8 24.2	145 28 36.5	472	163	61 42 59.1	145 9 43.6	609	222	61 16 20.8	145 16 45.7	360
106	62 7 45.4	145 28 34.3	469	164	61 42 32.5	145 9 38.9	609	223	61 15 49.5	145 16 53.4	350
107	62 7 15.9	145 28 42.7	466	165	61 41 57.1	145 9 16.1	615	224	61 15 18.0	145 17 6.6	335
108	62 6 51.3	145 28 30.5	461	166	61 41 29.2	145 10 5.2	591	225	61 15 0.8	145 17 56.8	411
109	62 6 24.1	145 28 24.8	460	167	61 41 0.8	145 10 4.9	569	250	61 14 10.9	145 18 59.2	762
110	62 5 55.9	145 27 42.0	457	168	61 40 22.1	145 10 0.0	548	251	61 13 35.1	145 20 4.1	1005
111	62 5 27.6	145 26 56.2	449	169	61 39 59.0	145 10 37.8	481	252	61 13 0.5	145 20 19.0	1127
112	62 4 56.1	145 26 0.4	434	170	61 39 16.0	145 11 1.5	472	253	61 12 11.4	145 18 52.5	670
113	62 4 24.0	145 25 45.2	364	171	61 38 43.1	145 11 27.9	478	254	61 11 25.8	145 17 39.2	1158
114	62 3 49.4	145 25 43.1	350	172	61 38 24.7	145 11 28.3	484	255	61 10 43.0	145 17 16.8	1280
115	62 3 10.5	145 25 34.9	344	173	61 37 40.9	145 12 3.2	484	256	61 10 10.0	145 17 21.5	1219
116	62 2 41.5	145 25 56.8	381	174	61 37 0.1	145 12 30.4	493	257	61 8 49.4	145 18 34.8	1676
117	62 1 59.9	145 24 50.0	403	175	61 36 32.7	145 12 34.3	512	258	61 6 56.1	145 19 10.0	1874
118	62 1 47.7	145 23 50.7	411	176	61 36 5.9	145 12 56.7	512	259	61 6 7.7	145 18 51.5	1706
119	62 1 24.3	145 23 4.6	405	177	61 35 43.6	145 13 9.1	515	260	61 5 36.0	145 18 21.9	1219
120	62 0 56.9	145 21 42.3	393	178	61 35 5.1	145 13 22.1	518	261	61 5 8.6	145 18 9.2	1264
121	62 0 36.0	145 20 33.5	393	179	61 34 35.7	145 13 35.0	533	262	61 4 33.9	145 18 24.5	960
122	61 59 57.6	145 20 16.2	335	180	61 34 6.4	145 13 46.6	548	263	61 4 2.1	145 18 2.2	640
123	61 59 29.7	145 19 57.0	335	181	61 33 24.3	145 14 11.1	551	264	61 3 20.8	145 17 51.2	251
124	61 59 4.4	145 19 43.9	327	182	61 32 56.2	145 14 4.2	563	265	61 2 39.6	145 16 38.2	152
125	61 58 35.1	145 18 58.2	320	183	61 32 24.7	145 14 9.4	557	266	61 2 19.8	145 15 26.9	152
126	61 57 55.8	145 18 43.5	316	184	61 31 44.8	145 14 3.0	548	267	61 1 47.0	145 15 35.4	152
127	61 57 31.2	145 17 46.1	312	185	61 31 20.2	145 13 37.3	557	290	61 6 3.0	145 18 29.5	1493
128	61 56 57.1	145 16 8.7	350	186	61 30 53.7	145 13 12.4	560				
129	61 56 13.8	145 16 44.9	304	187	61 30 30.1	145 12 37.3					
130	61 55 38.3	145 16 2.3	358	188	61 30 4.3	145 11 48.1	554				
131	61 55 7.4	145 17 42.8	365	197	61 29 34.9	145 10 50.0	563				
132	61 54 45.5	145 17 9.4	403	198	61 29 9.1	145 9 24.9	560				
133	61 54 20.3	145 16 39.9	411	199	61 28 22.2	145 8 34.0	563				
134	61 53 43.3	145 16 9.2	420	200	61 27 48.2	145 7 29.5	579				
135	61 53 15.6	145 15 45.4	422	201	61 27 15.1	145 6 45.5	579				
136	61 52 48.2	145 15 26.0	426	202	61 26 41.9	145 6 34.4	579				
137	61 52 15.6	145 14 59.6	434	203	61 26 13.3	145 6 57.5	479				
138	61 51 51.1	145 14 36.6	434	204	61 25 45.0	145 7 43.3	548				
139	61 51 23.5	145 14 17.1	443	205	61 25 15.8	145 9 3.6	518				
140	61 50 48.5	145 13 52.4	449	206	61 24 36.1	145 10 19.8	487				
141	61 50 14.7	145 13 21.7	445	207	61 24 13.4	145 10 59.6	487				
142	61 49 45.7	145 13 1.0	435	208	61 23 47.6	145 12 24.7	457				
143	61 49 18.3	145 12 52.8	435	209	61 23 17.1	145 13 38.9	457				
144	61 48 38.0	145 12 32.9	437	210	61 22 52.7	145 14 47.2	441				
145	61 48 15.9	145 11 43.2	438	211	61 22 18.6	145 16 3.7	411				
146	61 47 56.6	145 11 17.7	425	212	61 21 40.7	145 16 49.0	402				
147	61 47 23.9	145 11 23.0	423	213	61 21 12.5	145 17 44.0	363				
148	61 46 43.8	145 10 39.8	426	214	61 20 41.9	145 18 26.2	411				
149	61 46 14.9	145 10 6.2	426	215	61 20 11.9	145 18 32.6	422				
150	61 45 46.3	145 9 21.6	451	216	61 19 39.2	145 18 39.9	396				

## North Richardson Highway

Location number	Latitude (deg,min,sec)	Longitude (deg,min,sec)	Elev (m)	Location number	Latitude (deg,min,sec)	Longitude (deg,min,sec)	Elev (m)	Location number	Latitude (deg,min,sec)	Longitude (deg,min,sec)	Elev (m)
501	63 20 34.2	145 42 25.5	822	561	62 52 35.7	145 28 31.7	899	619	62 22 50.9	145 21 32.9	542
502	63 19 57.5	145 43 48.5	807	562	62 52 0.1	145 28 22.8	893	620	62 22 12.4	145 21 53.2	539
503	63 19 22.1	145 43 26.3	777	563	62 51 23.3	145 28 13.4	893	621	62 21 35.4	145 22 14.0	533
504	63 18 48.8	145 43 11.0	777	564	62 50 47.1	145 28 5.4	899	622	62 20 57.9	145 21 54.2	518
505	63 18 40.2	145 41 11.8	807	565	62 50 14.5	145 28 18.4	868	623	62 20 23.7	145 21 53.8	509
506	63 18 14.0	145 40 36.0	807	566	62 49 32.4	145 29 3.2	829	624	62 19 47.9	145 21 20.0	502
507	63 17 36.5	145 39 48.6	822	567	62 48 44.5	145 29 43.5	822	625	62 19 13.3	145 20 59.4	502
508	63 16 47.2	145 39 13.2	838	568	62 48 5.6	145 29 14.4	801	626	62 18 37.9	145 20 29.6	502
509	63 15 55.5	145 40 35.0	853	569	62 47 25.1	145 28 27.5	777	627	62 18 2.3	145 20 55.6	481
510	63 15 12.1	145 41 5.6	853	570	62 46 55.4	145 28 0.7	783	628	62 17 26.5	145 21 4.0	496
511	63 14 37.7	145 40 25.8	883	571	62 46 11.6	145 27 47.8	792	629	62 16 51.5	145 21 42.8	475
512	63 14 5.5	145 39 42.8	883	572	62 45 31.1	145 27 31.4	822	630	62 16 7.7	145 23 34.4	445
513	63 13 33.0	145 39 6.5	899	573	62 44 51.6	145 26 45.9	838	631	62 15 30.7	145 25 10.7	487
514	63 13 0.9	145 38 31.6	914	574	62 44 10.9	145 26 1.8	807	632	62 14 57.2	145 25 37.5	487
515	63 12 32.4	145 37 50.8	914	575	62 43 39.0	145 25 54.3	798	633	62 14 20.3	145 25 58.7	484
516	63 12 13.8	145 35 51.6	937	576	62 43 3.6	145 25 54.8	807	634	62 13 44.5	145 26 8.5	484
517	63 11 46.0	145 34 41.9	975	577	62 42 22.0	145 26 17.6	769	635	62 13 8.7	145 26 23.8	487
518	63 11 24.3	145 33 11.4	1005	578	62 41 50.7	145 26 43.1	722	636	62 12 32.9	145 26 26.1	484
519	63 10 52.6	145 32 17.6	990	579	62 41 13.9	145 26 52.1	786	637	62 11 57.1	145 26 27.1	484
520	63 10 21.5	145 31 52.0	990	580	62 40 36.4	145 27 48.7	774	638	62 11 19.4	145 26 54.7	484
521	63 9 51.2	145 32 7.9	990	581	62 39 55.9	145 28 52.4	716	639	62 10 42.8	145 27 5.8	484
522	63 9 19.2	145 31 43.2	990	582	62 39 23.2	145 28 56.8	740	640	62 10 2.1	145 24 54.7	396
523	63 8 42.0	145 32 11.8	1005	583	62 38 48.2	145 28 41.7	746				
524	63 8 6.8	145 30 25.3	981	584	62 38 12.6	145 28 16.0	731				
525	63 7 35.5	145 29 28.4	981	585	62 37 43.1	145 27 12.0	679				
526	63 6 49.1	145 29 14.8	981	586	62 37 1.8	145 26 30.3	676				
527	63 6 17.5	145 29 28.4	981	587	62 36 26.3	145 26 42.8	676				
528	63 5 40.9	145 29 49.6	1005	588	62 35 49.3	145 27 34.8	676				
529	63 5 3.5	145 30 3.7	944	589	62 35 18.4	145 28 11.7	670				
530	63 4 26.2	145 30 37.8	944	590	62 34 55.7	145 27 24.7	670				
531	63 3 54.9	145 30 37.0	944	591	62 34 37.1	145 29 17.4	640				
532	63 3 14.4	145 29 47.8	893	600	62 34 0.9	145 29 37.4	624				
533	63 2 45.9	145 29 37.5	893	601	62 33 24.0	145 29 51.6	603				
534	63 2 9.3	145 29 31.6	898	602	62 32 51.3	145 30 29.6	600				
535	63 1 27.6	145 29 31.6	813	603	62 32 9.1	145 30 55.4	594				
536	63 0 55.9	145 29 12.7	795	604	62 31 36.6	145 30 44.4	579				
537	63 0 18.4	145 29 27.6	792	605	62 30 57.1	145 30 43.2	594				
538	62 59 46.9	145 29 36.2	792	606	62 30 28.4	145 30 6.0	594				
539	62 59 10.9	145 30 2.1	792	607	62 29 53.5	145 28 40.3	594				
540	62 58 32.6	145 30 19.8	792	608	62 29 25.8	145 27 57.4	582				
551	62 57 59.7	145 30 27.5	792	609	62 28 44.1	145 25 48.8	585				
552	62 57 18.7	145 30 25.4	792	610	62 28 6.4	145 25 26.8	579				
553	62 56 45.0	145 30 43.0	792	611	62 27 32.1	145 24 50.3	569				
554	62 56 0.2	145 30 9.9	807	612	62 26 58.1	145 24 39.3	563				
555	62 55 26.8	145 29 59.2	822	613	62 26 18.4	145 24 40.1	569				
556	62 55 4.3	145 29 58.2	822	614	62 25 45.4	145 24 30.5	569				
557	62 54 38.5	145 29 52.4	807	615	62 25 8.0	145 23 47.2	563				
558	62 54 7.2	145 29 7.5	893	616	62 24 33.4	145 22 49.4	542				
559	62 53 36.1	145 29 0.3	899	617	62 23 59.4	145 22 39.1	554				
560	62 53 3.8	145 28 59.0	899	618	62 23 24.2	145 21 57.0	533				

## APPENDIX A

**Field Data Tables.** These include information related to the seismic recorders. Each set of 20 recorders is given a team number under which data is stored and referenced. Each table contains shot number, shotpoint numbers, team number, and shot time given in Julian day, hour, minute, and second. Column headings for the table are explained below:

Loc	- location number from the seismic recorder location (see Table 2)
Dist (km)	- distance in kilometers from the shotpoint to the recorder
Azim	- azimuth from the shotpoint to the recorder (in degrees clockwise from north)
Unit	- I.D. number of the recording unit
Chron	- chronometer correction for the recorder at shot time (interpolated from the total clock drift)
Chan	- channel number (1, 2, or 3) which was selected to be digitized by the computer. 1 = high gain; 2 = low gain; 3 = medium gain
C1, C2, C3	- amplifier attenuation setting (db) for each data-recording channel
Tape Grade	- value used to rate the performance of the seismic recorder (see Tape Grade Scale)



## TAPE GRADE SCALE

Tape Grade Scale is a listing of all tape grade numbers used on the Field Data Tables. Each number corresponds to a specific problem with the recording unit.

0	Good
1	Tape did not run
2	Tape ran, no signal
3	Skipped record time
6	Weak signal - low record level
9	Noise, spike(s)
12	Noise, random
17	Bad time code
21	Geophone disconnected or shorted
25	Bad geophone test
26	One or more channels missing
30	Digitized without calibrations
31	Amplifier out of balance

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 1 SHOT POINT 8 TEAM 1  
SHOT TIME: 176:10: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	224	76.208	180.2	1	19	1	30	12 88	0/30
2	225	76.747	180.8	2	51	1	30	12 88	0
3	230	78.309	181.4	3	13	1	30	12 68	0
4	231	79.447	182.1	4	-96	1	30	12 68	0
5	252	80.344	182.2	5	19	1	30	12 48	0
6	253	81.821	181.3	6	9	1	30	12 48	0
7	254	83.213	180.6	7	-3	1	30	12 48	0
8	255	84.531	180.3	8	35	1	30	12 48	0
9	256	85.550	180.4	9	106	1	30	12 48	0
10	257	88.052	181.1	10	37	1	30	12 48	0
11	258	91.564	181.3	11	-24	1	30	12 48	0
12	259	93.050	181.1	12	19	1	30	12 48	0
13	260	94.022	180.9	13	15	1	30	12 48	0
14	261	94.866	180.8	14	38	2	30	12 48	0
15	262	95.942	180.9	15	11	2	30	12 48	0
16	263	96.917	180.7	16	9	2	30	12 48	0/30
17	264	98.193	180.6	17	17	2	30	12 68	0
18	265	99.459	179.9	18	-16	2	30	12 88	0
19	266	100.078	179.3	19	-31		30	12 88	31
20	267	101.000	179.4	20	13	1	30	12 88	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 1 SHOT POINT 8 TEAM 2  
SHOT TIME: 176:10: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	202	55.764	170.7	21	-6	1	30	12 48	0
2	203	56.587	171.2	22	13	1	30	12 48	0
3	204	57.354	172.0	23	1	1	30	12 48	0
4	205	58.102	173.3	24	-6	1	30	12 48	0
5	206	59.204	174.5	25	21	1	30	12 48	0
6	207	59.851	175.1	26	4	1	30	12 48	0
7	208	60.555	176.4	27	10	1	30	12 48	0
8	210	62.156	178.4	28	--		30	12 48	1
9	211	63.192	179.4	29	12	1	30	12 48	0
10	212	64.362	180.1	30	6	1	30	12 48	0
11	213	65.242	180.8	31	7	3	30	12 48	17
12	214	66.197	181.3	32	12	1	30	12 48	0
13	215	67.130	181.4	33	32	1	30	12 48	0
14	216	68.144	181.4	34	9	1	30	12 48	0
15	217	69.193	180.7	35	-36	1	30	12 48	0
16	218	70.259	179.9	36	-2	3	30	12 48	0
17	220	72.383	179.6	37	4	1	30	12 68	0
18	221			38	2	1	30	12 68	2
19	222	74.262	180.0	39	2	1	30	12 68	0/30
20	223	75.000	180.1	40	7		30	12 88	17

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 1 SHOT POINT 8 TEAM 3  
SHOT TIME: 176:10: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	201	54.725	170.7	41	24	1	30	12 48	0
2	200	53.609	171.2	42	-20	1	30	12 48	0
3	198	50.894	172.7	43	-29	1	30	12 48	0
4	197	49.957	174.0	44	-29	1	30	12 48	0
5	188	48.967	174.9	45	3	1	30	12 68	0
6	187	48.112	175.7	46	4	1	30	12 68	0
7	186	47.285	176.2	47	14	1	30	12 88	0
8	185	46.504	176.6	48	-22	1	30	12 88	0/12
9	184	45.723	177.0	49	9	1	30	12 88	0
10	183	44.485	177.1	50	-13	1	30	12 68	0
11	182	43.515	176.9	51	28	1	30	12 48	0
12	181	42.642	177.0	52	11	1	30	12 68	0
13	180	41.360	176.4	53	7	1	30	12 88	0
14	179	40.468	176.1	54	-16	1	30	12 88	0
15	178	39.573	175.7	55	9	1	30	12 88	0
16	177	38.400	175.3	56	12	1	30	12 68	1
17	176	37.728	174.9	57	66	1	30	12 68	0
18	175	36.932	174.3	58	13	1	30	12 68	0
19	174	36.094	174.1	59	-3	1	30	12 48	0
20	173	34.750	173.2	60	-8	1	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 1 SHOT POINT 8 TEAM 4  
SHOT TIME: 176:10: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	152	14.765	165.6	61	12	1	30	12 48	0
2	154	16.295	162.9	62	6	3	30	12 48	0
3	155	17.246	164.2	63	9	1	30	12 48	0
4	156	18.615	163.3	64	15	1	30	12 48	0
5	157	19.613	162.7	65	-18	3	30	12 48	0
6	158	20.658	161.7	66	63	3	30	12 48	0
7	159	21.659	162.3	67	-4	1	30	12 48	0
8	160	22.589	163.1	68	-9	1	30	12 48	0
9	161	23.589	164.4	69	5	1	30	12 68	0
10	162	24.520	165.2	70	31	1	30	12 68	0
11	164	26.360	166.3	71	8	1	30	12 88	0
12	163	25.544	166.0	72	17	1	30	12 88	0
13	165	27.505	166.2	73	-14	1	30	12 88	0
14	166	28.184	168.0	74	0		30	12 88	2
15	167	29.047	168.4	75	15	1	30	12 88	0
16	168	30.235	168.7	76	9	1	30	12 68	0
17	169	30.836	170.0	77	5	1	30	12 48	0
18	170	32.090	171.0	78	3	1	30	12 48	0
19	171	33.042	171.9	79	25	1	30	12 48	0
20	172	33.605	172.1	80	14	1	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 1 SHOT POINT 8 TEAM 5  
SHOT TIME: 176:10: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	151	13.484	165.4	81	-9	3	30	12 48	0
2	142	12.632	165.0	82	-8	3	30	12 48	0
3	141	11.685	165.3	83	17	3	30	12 48	0
4	140	10.562	166.2	84	20	3	30	12 48	0
5	139	9.424	166.8	85	--		30	12 48	1
6	138	8.527	167.3	86	0	3	30	12 48	3
7	137	7.595	168.3	87	--		30	12 48	0
8	136	6.631	170.0	88	25	3	30	12 48	0
9	135	5.767	171.3	89	12	3	30	12 48	0
10	134	4.874	173.9	90	18	3	30	12 48	0
11	133	3.700	178.9	91	6	3	30	12 48	1
12	132	2.942	187.0	92	6	3	30	12 48	0
13	131	2.397	200.6	93	12	3	30	12 68	0
14	130	1.711	221.3	94	22	3	30	12 68	0
15	129	0.000	180.0	95	27	3	30	12 68	0/17
16	128	1.680	313.3	96	-13	3	30	12 68	1
17	127	2.384	338.0	97	7	3	30	12 68	0
18	126	3.437	329.8	98	7	3	30	12 48	0
19	125	4.617	335.1	99	17	3	30	12 48	0
20	124	5.719	332.9	100	15	3	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 2 SHOT POINT 11 TEAM 1  
SHOT TIME: 176:10: 3:57.594

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	224	29.946	186.0	1	19	2	30	12 88	0
2	225	30.560	187.2	2	51	2	30	12 88	0
3	250	32.218	188.5	3	13	2	30	12 68	0
4	251	33.466	189.5	4	-36	2	30	12 68	0
5	252	34.560	189.9	5	19	2	30	12 48	0
6	253	35.868	187.5	6	9	2	30	12 48	0
7	254	37.148	185.6	7	-3	2	30	12 48	0
8	255	38.436	184.9	8	35	2	30	12 48	0
9	256	39.459	184.8	9	106	2	30	12 48	0
10	257	42.046	186.0	10	37	2	30	12 48	0
11	258	45.592	186.2	11	-24	2	30	12 48	0
12	259	47.051	185.7	12	19	2	30	12 48	0
13	260	47.987	185.1	13	15	1	30	12 48	0
14	261	48.817	184.8	14	38	2	30	12 48	0
15	262	49.907	184.9	15	11	2	30	12 48	0
16	263	50.859	184.4	16	9	2	30	12 48	0
17	264	52.123	184.2	17	17	2	30	12 68	0
18	265	53.327	182.9	18	-16	2	30	12 88	6
19	266	53.898	181.7	19	-31	2	30	12 88	2
20	267	54.750	181.8	20	13	2	30	12 88	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 1 SHOT POINT 8 TEAM 6  
SHOT TIME: 176:10: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	101	26.206	343.9	101	17	1	30	12 88	0
2	102	25.682	342.5	102	9	1	30	12 88	0
3	103	25.868	339.7	103	0	3	30	12 68	17
4	104	25.569	336.6	104	0	3	30	12 48	0
5	105	24.697	335.2	105	22	3	30	12 48	0
6	106	23.596	334.1	106	-8	1	30	12 48	0/30
7	108	22.079	332.3	107	-55	3	30	12 48	0
8	109	21.298	331.4	108	0	3	30	12 48	3
9	110	20.233	331.6	109	--		30	12 48	1
10	111	19.149	332.3	110	19	3	30	12 48	0
11	113	16.926	332.3	111	12	3	30	12 48	0
12	114	15.971	330.6	112	11	3	30	12 48	0
13	115	14.872	328.8	113	-11	3	30	12 48	0
14	116	14.288	325.8	114	--		30	12 48	1
15	117	12.679	326.1	115	4	3	30	12 48	0
16	119	10.929	329.6	116	20	3	30	12 48	0
17	120	9.609	333.2	117	3	3	30	12 48	3
18	121	8.602	337.2	118	11	3	30	12 48	0
19	122	7.411	335.5	119	4	3	30	12 48	0
20	123	6.311	334.5	120	2	3	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 2 SHOT POINT 11 TEAM 2  
SHOT TIME: 176:10: 3:57.594

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	202	10.648	144.0	21	-6	1	30	12 48	0
2	203	11.193	148.1	22	13	1	30	12 48	0
3	204	11.624	153.2	23	1	1	30	12 48	0
4	205	11.987	160.2	24	-6	1	30	12 48	0
5	206	12.846	166.8	25	21	1	30	12 48	0
6	207	13.417	170.0	26	4	1	30	12 48	0
7	208	14.052	175.6	27	10	1	30	12 48	0
8	210	15.743	183.8	28	--		30	12 48	1
9	211	16.906	187.4	29	12	2	30	12 48	0
10	212	18.162	189.0	30	6	1	30	12 48	0
11	213	19.165	191.0	31	7	1	30	12 48	0
12	214	20.216	192.2	32	12	1	30	12 48	0
13	215	21.147	192.0	33	32	1	30	12 48	0
14	216	22.139	191.7	34	10	1	30	12 48	0
15	217	23.057	189.1	35	-36	1	30	12 48	0
16	218	23.982	186.3	36	-2	1	30	12 48	0
17	220	26.058	185.0	37	4	2	30	12 68	0
18	221			38	2	2	30	12 68	2
19	222	27.980	185.7	39	2	2	30	12 68	0
20	223	28.875	185.8	40	7	2	30	12 88	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 2 SHOT POINT 11 TEAM 5  
SHOT TIME: 1761101 3:57.594

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	151	33.380	1.1	81	-9	1	30	12	48
2	142	34.226	0.9	82	-8	1	30	12	48
3	141	35.122	0.4	83	17	1	30	12	48
4	140	36.167	359.6	84	20	2	30	12	48
5	139	37.254	359.1	85	--	0	30	12	48
6	138	38.115	358.7	86	0	1	30	12	48
7	137	39.004	358.2	87	--	1	30	12	48
8	136	39.905	357.7	88	25	2	30	12	48
9	135	40.765	357.4	89	12	2	30	12	48
10	134	41.637	356.9	90	18	2	30	12	48
11	133	42.808	356.4	91	6	2	30	12	48
12	132	43.614	355.9	92	6	2	30	12	48
13	131	44.327	355.3	93	12	2	30	12	48
14	130	45.305	355.1	94	22	2	30	12	48
15	129	46.505	355.6	95	27	1	30	12	48
16	128	47.743	355.2	96	-13	1	30	12	48
17	127	48.771	355.7	97	7	2	30	12	48
18	126	49.598	354.8	98	7	2	30	12	48
19	125	50.829	354.7	99	17	2	30	12	48
20	124	51.750	354.0	100	15	2	30	12	48

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 2 SHOT POINT 11 TEAM 6  
SHOT TIME: 1761101 3:57.594

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	101	72.304	352.0	101	17	2	30	12	88
2	102	71.691	351.6	102	9	2	30	12	88
3	103	71.661	350.5	103	0	2	30	12	68
4	104	71.078	349.5	104	0	3	30	12	48
5	105	70.096	349.2	105	22	1	30	12	48
6	106	68.908	349.0	106	-8	2	30	12	48
7	108	67.257	348.8	107	-55	2	30	12	48
8	109	66.415	348.7	108	1	1	30	12	48
9	110	65.436	349.1	109	--	1	30	12	48
10	111	64.453	349.5	110	19	2	30	12	48
11	113	62.331	350.1	111	12	2	30	12	48
12	114	61.871	350.0	112	12	2	30	12	48
13	115	60.066	349.9	113	-11	2	30	12	48
14	116	59.238	349.5	114	--	1	30	12	48
15	117	57.800	350.2	115	4	2	30	12	48
16	119	56.466	351.5	116	20	2	30	12	48
17	120	55.459	352.6	117	3	3	30	12	48
18	121	54.696	353.6	118	11	2	30	12	48
19	122	53.485	353.7	119	4	2	30	12	48
20	123	52.598	353.9	120	2	2	30	12	48

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 2 SHOT POINT 11 TEAM 3  
SHOT TIME: 1761101 3:57.594

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	201	9.732	141.2	41	24	1	30	12	48
2	200	8.525	140.3	42	7	1	30	12	48
3	198	5.514	137.4	43	-20	3	30	12	48
4	197	4.093	142.8	44	-29	3	30	12	48
5	188	2.851	145.5	45	3	3	30	12	68
6	187	1.786	150.3	46	4	1	30	12	68
7	186	0.843	154.2	47	14	3	30	12	68
8	185	0.001	360.0	48	-22	3	30	12	68
9	184	0.851	333.5	49	9	3	30	12	88
10	183	2.052	346.6	50	-13	3	30	12	68
11	182	2.999	352.4	51	28	3	30	12	48
12	181	3.873	352.6	52	11	1	30	12	68
13	180	5.147	358.5	53	7	1	30	12	88
14	179	6.052	0.3	54	-16	1	30	12	88
15	178	6.966	1.8	55	9	1	30	12	88
16	177	8.164	2.9	56	12	1	30	12	68
17	176	8.864	3.9	57	66	1	30	12	68
18	175	9.718	5.5	58	13	1	30	12	68
19	174	10.569	5.4	59	-3	1	30	12	48
20	173	11.813	6.7	60	-8	2	30	12	48

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 2 SHOT POINT 11 TEAM 4  
SHOT TIME: 1761101 3:57.594

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	152	32.139	1.7	61	12	2	30	12	48
2	154	30.914	3.6	62	6	2	30	12	48
3	155	29.897	3.8	63	9	2	30	12	48
4	156	28.709	5.2	64	15	2	30	12	48
5	157	27.870	6.4	65	-18	2	30	12	48
6	158	27.073	8.0	66	63	1	30	12	48
7	159	26.069	8.5	67	-4	2	30	12	48
8	160	25.104	8.8	68	-9	2	30	12	48
9	161	23.983	8.7	69	5	2	30	12	68
10	162	22.993	8.9	70	31	2	30	12	68
11	164	21.106	9.6	71	8	2	30	12	88
12	163	21.907	9.0	72	17	2	30	12	88
13	165	20.087	11.1	73	-14	2	30	12	88
14	166	19.111	9.4	74	0	1	30	12	88
15	167	18.243	9.9	75	15	1	30	12	68
16	168	17.079	10.8	76	9	1	30	12	68
17	169	16.277	9.4	77	5	2	30	12	48
18	170	14.908	8.9	78	3	2	30	12	48
19	171	13.842	7.9	79	25	2	30	12	48
20	172	13.276	8.2	80	14	1	30	12	48

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 3 SHOT POINT 1 TEAM 1  
SHOT TIME: 176:10; 6; 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	224	233.672	174.7	1	20	2	30	12 88	0
2	225	234.136	174.9	2	51	2	30	12 88	0/12
3	250	235.593	175.1	3	13	2	30	12 68	0/12
4	251	236.619	175.4	4	-96	2	30	12 68	0/12
5	252	237.667	175.5	5	19	2	30	12 48	0/12
6	253	239.281	175.2	6	9	2	30	12 48	0/12
7	254	240.776	175.0	7	-3	2	30	12 48	0/12
8	255	242.121	174.9	8	35	2	30	12 48	0
9	256	243.129	174.9	9	106	2	30	12 48	0
10	257	245.520	175.2	10	37	2	30	12 48	0
11	258	248.970	175.4	11	-24	2	30	12 48	0
12	259	250.479	175.4	12	20	2	30	12 48	0
13	260	251.490	175.3	13	15	2	30	12 48	0/ 9
14	261	252.350	175.3	14	38	2	30	12 48	0
15	262	253.401	175.4	15	11	3	30	12 48	0
16	263	254.404	175.3	16	9	2	30	12 48	0/ 9
17	264	255.590	175.3	17	17	2	30	12 68	0/ 9
18	265	257.045	175.1	18	-16		30	12 88	2
19	266	257.746	174.9	19	-31		30	12 88	2
20	267	258.000	174.9	20	13	2	30	12 88	0/ 9

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 3 SHOT POINT 1 TEAM 3  
SHOT TIME: 176:10; 6; 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	201	212.707	171.8	41	24	2	30	12 48	0
2	200	211.604	171.9	42	7	2	30	12 48	0
3	198	208.902	172.3	43	-20	2	30	12 48	0/12
4	197	207.952	172.6	44	-29	2	30	12 48	0/12
5	188	206.944	172.8	45	3	2	30	12 68	0
6	187	206.066	172.9	46	4	2	30	12 68	0
7	186	205.220	173.0	47	14	2	30	12 88	0
8	185	204.424	173.1	48	-22	2	30	12 88	0
9	184	203.627	173.2	49	9	2	30	12 88	0/12
10	183	202.592	173.2	50	-13	2	30	12 68	0
11	182	201.433	173.1	51	28	2	30	12 48	0
12	181	200.561	173.1	52	11	2	30	12 68	0
13	180	199.311	173.0	53	7	2	30	12 88	0
14	179	198.433	172.9	54	-16	2	30	12 88	0
15	178	197.554	172.8	55	9	2	30	12 88	0/12
16	177	196.398	172.7	56	12		30	12 68	1
17	176	195.736	172.6	57	66	2	30	12 68	9/12
18	175	194.956	172.5	58	13	2	30	12 68	0/12
19	174	194.123	172.5	59	-3	2	30	12 48	0/12
20	173	192.000	172.3	60	-8	2	30	12 48	0/12

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 3 SHOT POINT 1 TEAM 2  
SHOT TIME: 176:10; 6; 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	202	213.744	171.8	21	-6	2	30	12 48	0
2	203	214.574	171.9	22	13	2	30	12 48	0
3	204	215.347	172.1	23	1	2	30	12 48	0
4	205	216.089	172.4	24	-6	2	30	12 48	0
5	206	217.164	172.8	25	21	2	30	12 48	0
6	207	217.790	172.9	26	4	2	30	12 48	0
7	208	218.435	173.3	27	10	2	30	12 48	0
8	210	219.891	173.9	28	--		30	12 48	1
9	211	220.827	174.2	29	12	2	30	12 48	0
10	212	221.926	174.4	30	6	2	30	12 48	0
11	213	222.719	174.6	31	7	1	30	12 48	0
12	214	223.602	174.8	32	12	1	30	12 48	0
13	215	224.519	174.8	33	32	2	30	12 48	0
14	216	225.515	174.9	34	10	2	30	12 48	0
15	217	226.646	174.7	35	-36	2	30	12 48	0
16	218	227.803	174.5	36	-2	2	30	12 48	0
17	220	229.946	174.4	37	4	2	30	12 68	0
18	221			38	2	2	30	12 68	2
19	222	231.767	174.6	39	2	2	30	12 68	0
20	223	232.000	174.6	40	7	2	30	12 68	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 3 SHOT POINT 1 TEAM 4  
SHOT TIME: 176:10; 6; 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	152	172.761	171.6	61	12	2	30	12 48	0
2	154	174.183	171.3	62	6	2	30	12 48	0
3	155	175.172	171.4	63	9	2	30	12 48	0
4	156	176.490	171.2	64	15	2	30	12 48	0
5	157	177.445	171.1	65	-18	2	30	12 48	0
6	158	178.419	171.0	66	64	2	30	12 48	0
7	159	179.443	171.0	67	-4	2	30	12 48	0
8	160	180.403	171.0	68	-9	1	30	12 48	0
9	161	181.459	171.1	69	5	2	30	12 68	0
10	162	182.421	171.2	70	31	2	30	12 68	0
11	164	184.298	171.3	71	8	2	30	12 88	0
12	163	183.475	171.3	72	17	2	30	12 88	0
13	165	185.429	171.3	73	-14	2	30	12 88	0
14	166	186.175	171.5	74	0		30	12 88	2
15	167	187.045	171.6	75	15	2	30	12 88	0
16	168	188.238	171.6	76	5	2	30	12 68	0
17	169	188.867	171.8	77	9	2	30	12 48	0
18	170	190.134	171.9	78	3	2	30	12 48	0
19	171	191.090	172.1	79	25	2	30	12 48	0
20	172	191.653	172.1	80	14		30	12 48	2

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 3 SHOT POINT 1 TEAM 5  
SHOT TIME: 176:10: 6: 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	151	171.487	81	-9	2	30	12	48	0/ 9
2	142	170.632	82	-8	2	30	12	48	0
3	141	169.701	83	17	30	12	48	17	0
4	140	168.606	84	20	30	12	48	2	0
5	139	167.486	85	--	30	12	48	1	0
6	138	166.601	86	0	30	12	48	3	0
7	137	165.685	87	--	2	30	12	48	0
8	136	164.756	88	25	2	30	12	48	0
9	135	163.879	89	12	2	30	12	48	0
10	134	162.987	90	18	2	30	12	48	0/ 9
11	133	161.794	91	6	2	30	12	48	1
12	132	160.967	92	6	2	30	12	48	0
13	131	160.235	93	12	2	30	12	48	0
14	130	159.252	94	22	1	30	12	68	0
15	129	158.126	95	27	2	30	12	68	0/ 9
16	128	156.826	96	-13	2	30	12	68	1
17	127	155.822	97	7	1	30	12	68	0/ 9
18	126	154.563	98	7	2	30	12	48	0/ 9
19	125	153.732	99	17	2	30	12	48	0/ 9
20	124	152.000	100	15	2	30	12	48	0/ 9

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 4 SHOT POINT 7 TEAM 1  
SHOT TIME: 176:12: 0: 0.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	224	101.497	176.1	1	20	2	30	12	88
2	225	101.980	176.5	2	54	2	30	12	88
3	250	103.467	177.1	3	14	2	30	12	68
4	251	104.528	177.6	4	-101	2	30	12	68
5	252	105.587	177.8	5	20	2	30	12	48
6	253	107.159	177.1	6	9	2	30	12	48
7	254	108.626	176.6	7	-3	2	30	12	48
8	255	109.964	176.5	8	37	2	30	12	48
9	256	110.976	176.5	9	111	2	30	12	48
10	257	113.402	177.1	10	38	2	30	12	48
11	258	116.877	177.5	11	-25	2	30	12	48
12	259	118.380	177.4	12	20	2	30	12	48
13	260	119.379	177.2	13	16	2	30	12	48
14	261	120.234	177.1	14	40	2	30	12	48
15	262	121.295	177.3	15	12	2	30	12	48
16	263	122.289	177.1	16	10	2	30	12	48
17	264	123.573	177.1	17	18	2	30	12	68
18	265	124.901	176.6	18	-17	2	30	12	88
19	266	125.579	176.2	19	-33	2	30	12	88
20	267	126.500	176.2	20	13	2	30	12	88

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 3 SHOT POINT 1 TEAM 6  
SHOT TIME: 176:10: 6: 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	101	132.316	173.7	101	18	2	30	12	88
2	102	132.948	173.9	102	9	2	30	12	88
3	103	133.032	174.5	103	0	2	30	12	68
4	104	133.744	175.0	104	0	2	30	12	48
5	105	134.757	175.1	105	23	2	30	12	48
6	106	135.956	175.1	106	-8	2	30	12	48
7	108	137.623	175.2	107	-55	2	30	12	48
8	109	138.468	175.2	108	1	30	12	48	0
9	110	139.389	174.9	109	--	30	12	48	1
10	111	140.316	174.7	110	19	2	30	12	48
11	113	142.369	174.4	111	12	2	30	12	48
12	114	143.435	174.4	112	12	2	30	12	48
13	115	144.642	174.4	113	-11	1	30	12	48
14	116	145.505	174.6	114	--	30	12	48	1
15	117	146.875	174.2	115	4	2	30	12	48
16	119	148.125	173.7	116	20	30	12	48	17
17	120	149.099	173.3	117	3	30	12	48	1
18	121	149.856	173.0	118	11	2	30	12	48
19	122	151.065	172.9	119	4	2	30	12	48
20	123	151.952	172.8	120	2	2	30	12	48

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 4 SHOT POINT 7 TEAM 2  
SHOT TIME: 176:12: 0: 0.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	202	81.744	168.6	21	-6	2	30	12	48
2	203	82.547	169.0	22	14	2	30	12	48
3	204	83.279	169.5	23	1	2	30	12	48
4	205	83.966	170.4	24	-6	2	30	12	48
5	206	85.000	171.3	25	22	2	30	12	48
6	207	85.608	171.7	26	4	2	30	12	48
7	208	86.229	172.6	27	11	1	30	12	48
8	210	87.673	174.1	28	--	30	12	48	1
9	211	88.618	174.9	29	12	2	30	12	48
10	212	89.728	175.4	30	7	1	30	12	48
11	213	90.537	176.0	31	8	1	30	12	48
12	214	91.436	176.4	32	13	1	30	12	48
13	215	92.358	176.5	33	34	2	30	12	48
14	216	93.359	176.6	34	10	2	30	12	48
15	217	94.471	176.1	35	-38	2	30	12	48
16	218	95.609	175.6	36	-2	1	30	12	48
17	220	97.749	175.5	37	4	30	12	68	2
18	221	99.583	175.8	38	3	2	30	12	68
19	222	100.500	175.9	39	2	1	30	12	88
20	223	100.500	175.9	40	8	1	30	12	88

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 4 SHOT POINT 7 TEAM 5  
SHOT TIME: 176:12: 0: 0.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	151	39.767	81	-9	1	30	12	48	0
2	142	38.917	82	-9	1	30	12	48	0
3	141	37.970	83	18	2	30	12	48	1
4	140	36.843	84	22	2	30	12	48	0
5	139	35.703	85	--	0	30	12	48	1
6	138	34.803	86	0	1	30	12	48	0
7	137	33.965	87	--	1	30	12	48	0
8	136	32.909	88	26	2	30	12	48	0
9	135	32.016	89	12	2	30	12	48	0
10	134	31.101	90	20	1	30	12	48	0
11	133	29.980	91	7	7	30	12	48	1
12	132	29.020	92	7	7	30	12	48	25/21
13	131	28.249	93	13	1	30	12	68	0
14	130	27.253	94	23	1	30	12	68	0
15	129	26.286	95	29	1	30	12	68	0
16	128	24.858	96	-14	7	30	12	68	1
17	127	23.916	97	7	1	30	12	68	0
18	126	22.971	98	8	1	30	12	48	0
19	125	21.739	99	18	1	30	12	48	0
20	124	20.625	100	16	3	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 4 SHOT POINT 7 TEAM 6  
SHOT TIME: 176:12: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	101	0.137	218.3	101	19	3	30	12	88	0
2	102	0.956	214.1	102	10	3	30	12	88	0
3	103	2.044	240.1	103	0	3	30	12	68	0
4	104	3.485	238.4	104	0	3	30	12	48	0
5	105	4.247	227.7	105	24	3	30	12	48	0
6	106	5.115	217.4	106	-9	3	30	12	48	0
7	108	6.497	208.1	107	-59	3	30	12	48	0
8	109	7.217	204.3	108	1	30	12	48	3	3
9	110	7.814	197.5	109	--	1	30	12	48	1
10	111	8.495	191.5	110	21	3	30	12	48	0
11	113	10.316	183.7	111	13	3	30	12	48	0
12	114	11.383	183.2	112	12	3	30	12	48	0
13	115	12.579	182.3	113	-12	3	30	12	48	0
14	116	13.494	183.5	114	--	4	30	12	48	1
15	117	14.755	179.5	115	4	3	30	12	48	0
16	119	15.945	174.0	116	21	3	30	12	48	0/17
17	120	16.950	170.3	117	3	3	30	12	48	0
18	121	17.777	167.5	118	12	3	30	12	48	0
19	122	18.993	167.5	119	4	3	30	12	48	0
20	123	19.896	167.2	120	2	3	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 4 SHOT POINT 7 TEAM 3  
SHOT TIME: 176:12: 0: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	201	80.707	168.6	41	25	2	30	12	48	0
2	200	79.764	168.9	42	8	2	30	12	48	0
3	198	76.991	169.8	43	-22	1	30	12	48	0/12
4	197	75.992	170.6	44	-31	2	30	12	48	0
5	188	74.957	171.1	45	4	2	30	12	68	0
6	187	74.059	171.6	46	4	2	30	12	68	0
7	186	73.201	171.9	47	14	2	30	12	88	0
8	185	72.397	172.1	48	-24	2	30	12	88	0
9	184	71.593	172.3	49	9	2	30	12	88	0/12
10	183	70.356	172.2	50	-14	2	30	12	68	0
11	182	69.399	172.1	51	30	2	30	12	48	0
12	181	68.525	172.0	52	11	2	30	12	68	0
13	180	67.284	171.6	53	7	2	30	12	88	0
14	179	66.413	171.3	54	-17	2	30	12	88	0
15	178	65.542	171.1	55	9	2	30	12	88	0
16	177	64.396	170.7	56	12	2	30	12	68	1
17	176	63.744	170.5	57	70	2	30	12	68	0/12
18	175	62.981	170.0	58	14	2	30	12	68	0/12
19	174	62.155	169.9	59	-3	2	30	12	48	0/12
20	173	60.750	169.3	60	-9	2	30	12	48	0/12

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 4 SHOT POINT 7 TEAM 4  
SHOT TIME: 176:12: 0: 0.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	152	41.048	164.6	61	13	2	30	12 48	0
2	154	42.578	163.7	62	7	2	30	12 48	0
3	155	43.532	164.1	63	9	2	30	12 48	0
4	156	44.899	163.8	64	15	2	30	12 48	0
5	157	45.895	163.5	65	-19	2	30	12 48	0
6	158	46.932	163.1	66	67	1	30	12 48	0
7	159	47.939	163.3	67	-4	1	30	12 48	0
8	160	48.872	163.7	68	-9	1	30	12 48	0
9	161	49.874	164.2	69	5	1	30	12 68	0
10	162	50.803	164.6	70	33	1	30	12 68	0/12
11	164	52.637	165.2	71	8	2	30	12 88	0
12	163	51.823	165.1	72	18	2	30	12 88	0
13	165	53.793	165.2	73	-15	2	30	12 88	0
14	166	54.440	166.1	74	0	2	30	12 88	2
15	167	55.237	166.3	75	16	2	30	12 88	0/12
16	168	56.478	166.6	76	10	1	30	12 68	0/12
17	169	57.051	167.3	77	5	2	30	12 48	0/12
18	170	58.276	167.9	78	3	2	30	12 48	0/12
19	171	59.156	168.5	79	27	2	30	12 48	0/12
20	172	59.753	168.6	80	15	2	30	12 48	0/12

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 5 SHOT POINT 9 TEAM 3  
SHOT TIME: 176:12: 2: 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	201	27.394	41	25	2	30	12	48	0
2	200	26.324	42	8	2	30	12	48	0
3	198	23.775	43	-22	1	30	12	48	0
4	197	23.018	44	-31	2	30	12	48	0
5	188	22.179	45	4	2	30	12	68	0
6	187	21.473	46	4	2	30	12	68	0
7	186	20.770	47	14	2	30	12	88	0
8	185	20.088	48	-24	2	30	12	88	0
9	184	19.421	49	9	2	30	12	88	0
10	183	18.239	50	-14	2	30	12	68	0
11	182	17.274	51	30	2	30	12	48	0
12	181	16.460	52	11	2	30	12	68	0
13	180	15.106	53	7	2	30	12	88	0
14	179	14.187	54	-17	2	30	12	88	0
15	178	13.258	55	9	2	30	12	88	0
16	177	12.061	56	12	2	30	12	68	1
17	176	11.347	57	71	2	30	12	68	0
18	175	10.458	58	14	1	30	12	68	0
19	174	9.628	59	-3	1	30	12	48	0
20	173	8.250	60	-9	1	30	12	48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 5 SHOT POINT 9 TEAM 4  
SHOT TIME: 176:12: 2: 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	152	12.741	61	13	2	30	12	48	0
2	154	11.272	62	7	2	30	12	48	0
3	155	10.286	63	9	2	30	12	48	0
4	156	8.959	64	16	2	30	12	48	0
5	157	8.014	65	-19	1	30	12	48	0
6	158	7.094	66	68	1	30	12	48	0
7	159	6.067	67	-4	1	30	12	48	0
8	160	5.093	68	-9	1	30	12	48	0
9	161	3.996	69	5	1	30	12	68	0
10	162	3.017	70	33	3	30	12	68	0/12
11	163	1.145	71	8	1	30	12	88	0
12	163	1.961	72	18	1	30	12	88	0
13	165	0.001	73	-15	3	30	12	88	0
14	166	1.125	74	0	1	30	12	88	0/12
15	167	1.885	75	16	1	30	12	88	0
16	168	3.011	76	10	3	30	12	68	0
17	169	3.849	77	5	1	30	12	48	0
18	170	5.222	78	3	2	30	12	48	0
19	171	6.312	79	27	1	30	12	48	0
20	172	6.859	80	15	1	30	12	48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 5 SHOT POINT 9 TEAM 1  
SHOT TIME: 176:12: 2: 0.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	224	49.988	188.0	1	20	2	30	12	88	0
2	225	50.623	188.8	2	54	2	30	12	88	0
3	250	52.295	189.5	3	14	2	30	12	68	0
4	251	53.553	190.3	4	-101	2	30	12	68	0
5	252	54.646	190.4	5	20	2	30	12	48	0
6	253	55.933	188.8	6	9	2	30	12	48	0
7	254	57.178	187.5	7	-3	2	30	12	48	0
8	255	58.449	187.0	8	37	2	30	12	48	0
9	256	59.471	187.0	9	111	2	30	12	48	0
10	257	62.084	187.7	10	38	2	30	12	48	0
11	258	65.633	187.7	11	-25	2	30	12	48	0
12	259	67.079	187.3	12	20	2	30	12	48	0
13	260	68.000	186.8	13	16	2	30	12	48	0
14	261	68.821	186.6	14	40	2	30	12	48	0
15	262	69.915	186.7	15	12	2	30	12	48	0
16	263	70.853	186.3	16	10	2	30	12	48	0
17	264	72.108	186.1	17	18	2	30	12	68	0
18	265	73.270	185.1	18	-17	2	30	12	88	0
19	266	73.795	184.3	19	-33	2	30	12	88	0
20	267	74.500	184.3	20	13	2	30	12	88	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 5 SHOT POINT 9 TEAM 2  
SHOT TIME: 176:12: 2: 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	202	28.430	175.2	21	-6	2	30	12 48	0
2	203	29.289	176.0	22	14	2	30	12 48	2
3	204	30.122	177.4	23	1	2	30	12 48	2
4	205	30.998	179.7	24	-6	2	30	12 48	0
5	206	32.239	181.7	25	22	2	30	12 48	0
6	207	32.964	182.7	26	4	2	30	12 48	0
7	208	33.841	184.7	27	11	2	30	12 48	0
8	210	35.761	187.9	28	--	2	30	12 48	1
9	211	36.977	189.4	29	12	2	30	12 48	0
10	212	38.245	190.1	30	7	2	30	12 48	0
11	213	39.254	191.0	31	8	1	30	12 48	0
12	214	40.302	191.6	32	13	1	30	12 48	0
13	215	41.234	191.5	33	34	2	30	12 48	0
14	216	42.247	191.4	34	10	2	30	12 48	0
15	217	43.140	190.0	35	-38	2	30	12 48	0
16	218	44.034	188.5	36	-2	2	30	12 48	0
17	220	46.084	187.7	37	4	30	12	68	2
18	221			38	3	30	12	68	2
19	222	48.019	188.0	39	2	2	30	12 68	0
20	223	48.750	187.9	40	8	2	30	12 88	0



## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 6 SHOT POINT 12 TEAM 1  
SHOT TIME: 176:12; 3:57.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	224	0.000	360.0	1	20	3	30	12 88	0
2	225	0.918	234.6	2	54	3	30	12 88	0
3	250	2.670	219.0	3	14	3	30	12 68	0
4	231	4.141	215.7	4	-101	1	30	12 68	0
5	232	5.133	214.0	5	20	3	30	12 48	0
6	253	5.988	195.3	6	9	3	30	12 48	0
7	205	7.205	183.9	7	-3	1	30	12 48	0
8	255	8.514	181.0	8	37	1	30	12 48	0
9	256	9.536	181.3	9	111	1	30	12 48	0
10	257	12.099	186.3	10	38	1	30	12 48	0
11	258	15.646	186.8	11	-26	2	30	12 48	0
12	259	17.105	185.3	12	20	1	30	12 48	0
13	260	18.050	183.6	13	16	1	30	12 48	0
14	261	18.887	182.8	14	40	1	30	12 48	0
15	262	19.973	183.3	15	12	2	30	12 48	0
16	263	20.937	182.3	16	10	2	30	12 68	0
17	264	22.211	181.7	17	18	1	30	12 68	0
18	265	23.478	179.0	18	-17	2	30	12 88	0
19	266	24.134	176.5	19	-33	1	30	12 88	2
20	267	25.139	176.9	20	13	1	30	12 88	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 6 SHOT POINT 12 TEAM 2  
SHOT TIME: 176:12; 3:57.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	202	23.163	23.9	21	-6	1	30	12 48	0
2	203	22.213	24.1	22	14	2	30	12 48	0
3	204	21.140	23.3	23	1	1	30	12 48	0
4	205	19.849	21.2	24	-6	1	30	12 48	0
5	206	18.304	19.3	25	22	1	30	12 48	0
6	207	17.448	18.2	26	4	1	30	12 48	0
7	208	16.322	14.9	27	11	1	30	12 48	0
8	210	14.228	8.4	28	--	1	30	12 48	1
9	211	13.052	4.1	29	12	1	30	12 48	0
10	212	11.849	1.3	30	7	3	30	12 48	0
11	213	10.986	357.1	31	8	3	30	12 48	0
12	214	10.097	353.3	32	13	3	30	12 48	0
13	215	9.186	352.0	33	34	3	30	12 48	0
14	216	8.203	350.3	34	10	3	30	12 48	0
15	217	7.042	355.4	35	-38	3	30	12 48	0
16	218	5.967	4.4	36	-2	3	30	12 48	0
17	220	3.916	12.3	37	4	3	30	12 68	0
18	221			38	3	3	30	12 68	2
19	222	1.970	9.1	39	2	3	30	12 68	0
20	223	0.992	11.4	40	8	1	30	12 68	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 5 SHOT POINT 9 TEAM 5  
SHOT TIME: 176:12; 2: 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	151	14.022	346.9	81	-9	2	30	12 48	0
2	142	14.876	347.2	82	-9	1	30	12 48	0
3	141	15.821	346.8	83	18	2	30	12 48	1
4	140	16.942	346.2	84	22	2	30	12 48	0
5	139	18.080	345.9	85	--	0	30	12 48	1
6	138	18.980	345.7	86	0	2	30	12 48	0
7	137	19.917	345.4	87	--	2	30	12 48	0
8	136	20.873	344.9	88	26	2	30	12 48	0
9	135	21.767	344.8	89	12	2	30	12 48	0
10	134	22.684	344.5	90	20	2	30	12 48	0
11	133	23.909	344.2	91	7	2	30	12 48	1
12	132	24.777	343.7	92	7	2	30	12 48	0
13	131	25.565	343.1	93	13	2	30	12 68	0
14	130	26.563	343.1	94	23	2	30	12 68	0
15	129	27.504	346.2	95	29	2	30	12 88	0
16	128	28.931	344.4	96	-14	1	30	12 68	0
17	127	29.866	345.5	97	7	1	30	12 68	0
18	126	30.818	344.4	98	8	2	30	12 48	0
19	125	32.048	344.6	99	18	2	30	12 48	0
20	124	33.000	343.9	100	16	2	30	12 48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 5 SHOT POINT 9 TEAM 6  
SHOT TIME: 176:12; 2: 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	101	53.700	345.1	101	19	2	30	12 88	0
2	102	53.160	344.4	102	10	2	30	12 68	0
3	103	53.290	343.0	103	0	2	30	12 68	0
4	104	52.891	341.5	104	0	2	30	12 48	0
5	105	51.970	341.0	105	24	2	30	12 48	0
6	106	50.824	340.6	106	-9	2	30	12 48	0
7	108	49.232	340.0	107	-59	2	30	12 48	0
8	109	48.413	339.7	108	1	1	30	12 48	3
9	110	47.378	340.1	109	--	1	30	12 48	1
10	111	46.330	340.5	110	21	2	30	12 48	0
11	113	44.129	340.9	111	13	2	30	12 48	0
12	114	43.109	340.5	112	12	2	30	12 48	0
13	115	41.937	340.1	113	-12	1	30	12 48	0
14	116	41.205	339.2	114	--	1	30	12 48	1
15	117	39.660	339.9	115	4	2	30	12 48	0
16	119	38.110	341.5	116	21	2	30	12 48	0
17	120	36.934	342.8	117	3	2	30	12 48	0
18	121	36.028	344.0	118	12	2	30	12 48	0
19	122	34.814	343.9	119	4	2	30	12 48	0
20	123	33.908	343.9	120	2	2	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 6 SHOT POINT 12 TEAM 3  
SHOT TIME: 176:12: 3:57.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	201 24.040	22.6	41	25	1	30	12	48	0
2	200 24.757	20.3	42	8	1	30	12	48	0
3	198 26.625	14.9	43	-22	1	30	12	48	0
4	197 27.108	11.9	44	-31	1	30	12	48	0
5	188 27.840	9.8	45	4	3	30	12	48	0/12
6	187 28.515	8.1	46	4	1	30	12	48	0
7	186 29.233	6.8	47	14	1	30	12	48	0
8	185 29.947	5.0	48	-24	1	30	12	48	0
9	184 30.667	5.1	49	9	1	30	12	48	0
10	183 31.890	4.7	50	-14	2	30	12	48	0
11	182 32.869	4.7	51	30	1	30	12	48	0
12	181 33.726	4.4	52	11	1	30	12	48	0
13	180 35.056	4.9	53	7	1	30	12	48	0
14	179 35.973	5.0	54	-17	1	30	12	48	0
15	178 36.898	5.2	55	9	1	30	12	48	0
16	177 38.101	5.3	56	13	1	30	12	48	1
17	176 38.806	5.5	57	71	1	30	12	48	0
18	175 39.655	5.8	58	14	1	30	12	48	0
19	174 40.515	5.8	59	-3	1	30	12	48	0
20	173 41.750	6.2	60	-9	1	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 6 SHOT POINT 12 TEAM 5  
SHOT TIME: 176:12: 3:57.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	131 63.269	3.4	81	-9	1	30	12	48	0
2	142 64.110	3.2	82	-9	1	30	12	48	0
3	141 64.991	2.9	83	18	1	30	12	48	1
4	140 66.013	2.5	84	22	2	30	12	48	0
5	139 67.081	2.1	85	--	2	30	12	48	1
6	138 67.926	1.9	86	0	2	30	12	48	0
7	137 68.796	1.6	87	--	1	30	12	48	0
8	136 69.673	1.2	88	26	2	30	12	48	0
9	135 70.516	1.0	89	12	2	30	12	48	2
10	134 71.367	0.7	90	20	1	30	12	48	0
11	133 72.509	0.3	91	7	7	30	12	48	1
12	132 73.287	360.0	92	7	7	30	12	48	2
13	131 73.967	359.6	93	13	2	30	12	68	0/9
14	130 74.926	358.4	94	23	2	30	12	68	0/9
15	129 76.208	0.2	95	29	1	30	12	68	0/9
16	128 77.366	359.3	96	-14	7	30	12	68	1
17	127 78.421	359.6	97	7	2	30	12	68	0/9
18	126 79.192	359.0	98	8	2	30	12	48	0/9
19	125 80.231	358.8	99	18	2	30	12	48	0/9
20	124 81.000	358.4	100	16	2	30	12	48	0/9

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 6 SHOT POINT 12 TEAM 4  
SHOT TIME: 176:12: 3:57.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	152 62.042	3.7	61	13	2	30	12	48	0
2	154 60.849	4.9	62	7	2	30	12	48	0
3	155 59.833	4.9	63	9	2	30	12	48	0
4	156 58.654	5.6	64	16	2	30	12	48	0
5	157 57.816	6.2	65	-19	2	30	12	48	0/12
6	158 57.011	6.9	66	68	2	30	12	48	0
7	159 56.002	7.1	67	-4	2	30	12	48	0
8	160 55.035	7.3	68	-9	1	30	12	48	0
9	161 53.915	7.2	69	5	2	30	12	48	0
10	162 52.923	7.2	70	33	1	30	12	48	0
11	164 51.028	7.5	71	8	2	30	12	48	0
12	163 51.836	7.3	72	18	2	30	12	48	0
13	165 49.987	8.0	73	-15	2	30	12	48	0
14	166 49.037	7.3	74	0	2	30	12	48	0/12
15	167 48.164	7.4	75	16	2	30	12	48	0
16	168 46.987	7.7	76	10	1	30	12	48	0
17	169 46.205	7.2	77	5	2	30	12	48	0
18	170 44.842	6.9	78	3	2	30	12	48	0/12
19	171 43.783	6.6	79	27	2	30	12	48	0/12
20	172 43.216	6.7	80	15	1	30	12	48	0/12

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 6 SHOT POINT 12 TEAM 6  
SHOT TIME: 176:12: 3:57.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	101 101.396	356.0	101	19	2	30	12	88	0/12
2	102 100.748	353.7	102	10	2	30	12	88	0/12
3	103 100.621	353.0	103	0	2	30	12	68	0/12
4	104 99.935	354.3	104	0	2	30	12	48	0/12
5	105 98.927	354.1	105	24	2	30	12	48	0
6	106 97.730	354.1	106	-9	2	30	12	48	0/12
7	108 96.064	354.0	107	-59	2	30	12	48	0/12
8	109 95.220	354.0	108	1	2	30	12	48	3
9	110 94.288	354.3	109	--	2	30	12	48	0/12
10	111 93.356	354.7	110	21	2	30	12	48	0/12
11	113 91.307	353.2	111	13	2	30	12	48	0
12	114 90.240	353.2	112	12	2	30	12	48	0
13	115 89.034	353.2	113	-12	2	30	12	48	12/21
14	116 88.167	354.9	114	--	2	30	12	48	1
15	117 86.807	355.5	115	4	2	30	12	48	0/12
16	119 85.602	356.5	116	21	2	30	12	48	0/12
17	120 84.690	357.3	117	3	2	30	12	48	0/12
18	121 84.004	357.9	118	12	2	30	12	48	0
19	122 82.808	358.1	119	4	2	30	12	48	0/12
20	123 81.940	358.2	120	2	2	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 7 SHOT POINT 19 TEAM 1  
SHOT TIME: 176:12: 6: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	224	25.059	357.1	1	21	3	30	12 88	0/ 9
2	225	24.578	355.3	2	54	1	30	12 88	0
3	250	23.141	352.6	3	14	1	30	12 68	0
4	251	22.194	349.8	4	-101	1	30	12 68	0
5	252	21.184	348.7	5	20	3	30	12 48	0
6	253	19.463	351.5	6	9	3	30	12 48	0
7	254	17.925	354.3	7	-3	3	30	12 48	0
8	255	16.576	355.0	8	37	3	30	12 48	0
9	256	15.566	354.4	9	111	3	30	12 48	0
10	257	13.257	348.7	10	38	3	30	12 48	0
11	258	9.993	341.7	11	-26	3	30	12 48	0
12	259	8.489	340.3	12	21	3	30	12 48	0
13	260	7.416	341.0	13	16	3	30	12 48	0
14	261	6.552	340.1	14	40	3	30	12 48	0
15	262	5.649	339.2	15	12	3	30	12 48	0
16	263	4.620	332.7	16	10	3	30	12 48	0
17	264	3.436	325.3	17	18	1	30	12 68	0
18	265	1.774	331.0	18	-17	1	30	12 88	0
19	266	0.961	12.6	19	-33	1	30	12 88	2
20	267	0.112	132.7	20	13	3	30	12 88	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 7 SHOT POINT 19 TEAM 3  
SHOT TIME: 176:12: 6: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	201	47.894	9.6	41	25	1	30	12 48	0
2	200	48.803	8.6	42	8	1	30	12 48	0
3	198	51.061	6.3	43	-22	1	30	12 48	0/12
4	197	51.732	4.8	44	-31	1	30	12 48	0
5	188	52.576	3.8	45	4	3	30	12 68	0
6	187	53.330	2.9	46	4	1	30	12 68	0
7	186	54.097	2.3	47	15	1	30	12 88	0
8	185	54.843	1.9	48	-24	1	30	12 88	0
9	184	55.591	1.5	49	9	2	30	12 88	0
10	183	56.824	1.4	50	-14	1	30	12 68	0
11	182	57.801	1.4	51	30	1	30	12 48	0
12	181	58.666	1.3	52	11	1	30	12 68	0
13	180	59.980	1.6	53	7	1	30	12 88	0
14	179	60.891	1.8	54	-17	1	30	12 88	0
15	178	61.808	1.9	55	9	1	30	12 88	0
16	177	63.004	2.1	56	13	1	30	12 68	1
17	176	63.702	2.2	57	71	1	30	12 68	0
18	175	64.544	2.5	58	14	1	30	12 68	0
19	174	65.395	2.5	59	-3	1	30	12 48	0
20	173	66.500	2.8	60	-9	1	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 7 SHOT POINT 19 TEAM 2  
SHOT TIME: 176:12: 6: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	202	46.911	10.0	21	-6	3	30	12 48	0
2	203	45.978	9.8	22	14	1	30	12 48	0
3	204	45.004	9.1	23	1	1	30	12 48	0
4	205	43.932	7.8	24	-6	1	30	12 48	0
5	206	42.572	6.5	25	22	1	30	12 48	0
6	207	41.810	5.8	26	4	1	30	12 48	0
7	208	40.905	4.1	27	11	1	30	12 48	0
8	210	39.111	1.2	28	--	1	30	12 48	1
9	211	38.046	359.5	29	12	1	30	12 48	0
10	212	36.886	358.4	30	7	3	30	12 48	0
11	213	36.045	357.1	31	8	3	30	12 48	0
12	214	35.141	356.0	32	13	1	30	12 48	0
13	215	34.219	355.7	33	34	1	30	12 48	0
14	216	33.218	355.4	34	10	1	30	12 48	0
15	217	32.099	356.7	35	-38	3	30	12 48	0
16	218	30.986	358.5	36	-2	3	30	12 48	0
17	220	28.856	359.1	37	4	3	30	12 68	2
18	221	26.989	357.9	38	3	1	30	12 68	2
19	222	26.025	357.6	39	2	1	30	12 68	0
20	223	26.025	357.6	40	8	1	30	12 88	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 7 SHOT POINT 19 TEAM 4  
SHOT TIME: 176:12: 6: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	152	86.787	1.8	61	13	2	30	12 48	0
2	154	85.554	2.6	62	7	2	30	12 48	0
3	155	84.540	3.1	63	9	2	30	12 48	0
4	156	83.334	3.4	64	16	2	30	12 48	0
5	157	82.472	3.4	65	-19	2	30	12 48	0
6	158	81.632	3.9	66	68	1	30	12 48	0
7	159	80.616	4.1	67	-4	1	30	12 48	0
8	160	79.824	4.1	68	-9	1	30	12 48	0
9	161	78.709	4.0	69	5	1	30	12 68	0
10	162	77.717	4.0	70	33	1	30	12 68	0
11	164	75.813	4.1	71	8	1	30	12 88	0
12	163	76.629	4.0	72	18	2	30	12 88	0
13	165	74.745	4.4	73	-15	2	30	12 88	0
14	166	73.833	3.9	74	0	2	30	12 88	0/12
15	167	72.954	3.9	75	16	1	30	12 88	0
16	168	71.765	4.0	76	10	1	30	12 68	0/12
17	169	71.014	3.6	77	5	1	30	12 48	0
18	170	69.664	3.4	78	3	2	30	12 48	0/12
19	171	68.624	3.1	79	27	1	30	12 48	0/12
20	172	68.054	3.2	80	15	1	30	12 48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 7 SHOT POINT 19 TEAM 3  
SHOT TIME: 176112; 6: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	151	88.022	81	-9	1	30	12	48	0
2	142	88.856	82	-9	1	30	12	48	0
3	141	89.755	83	18	1	30	12	48	1
4	140	90.788	84	22	1	30	12	48	0
5	139	91.863	85	--	1	30	12	48	1
6	138	92.713	86	0	1	30	12	48	0
7	137	93.589	87	--	1	30	12	48	0
8	136	94.472	88	26	2	30	12	48	0
9	135	95.319	89	12	2	30	12	48	0
10	134	96.173	90	20	2	30	12	48	1
11	133	97.320	91	7	7	30	12	48	1
12	132	98.102	92	7	7	30	12	48	2
13	131	98.786	93	13	1	30	12	68	0/9
14	130	99.746	94	23	1	30	12	68	0/9
15	129	101.012	95	29	1	30	12	68	0/9
16	128	102.181	96	-14	1	30	12	68	1
17	127	103.230	97	7	1	30	12	68	0/9
18	126	104.007	98	8	2	30	12	68	0/9
19	125	105.225	99	18	1	30	12	48	0/9
20	124	106.000	100	16	1	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 8 SHOT POINT 10 TEAM 1  
SHOT TIME: 177110; 0: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	224	35.973	195.0	1	31	2	30	12	88
2	225	36.575	196.1	2	82	2	30	12	88
3	230	38.217	187.2	3	21	2	30	12	68
4	231	39.446	188.4	4	-154	2	30	12	68
5	232	40.538	188.5	5	31	2	30	12	68
6	253	41.879	186.5	6	14	2	30	12	48
7	254	43.178	184.8	7	-5	2	30	12	48
8	255	44.472	184.2	8	56	2	30	12	48
9	256	45.494	184.2	9	170	2	30	12	48
10	257	48.071	185.3	10	59	2	30	12	48
11	258	51.615	185.5	11	-39	2	30	12	48
12	259	53.079	185.1	12	31	2	30	12	48
13	260	54.020	184.5	13	25	2	30	12	48
14	261	54.852	184.3	14	61	2	30	12	48
15	262	55.941	184.4	15	18	3	30	12	48
16	263	56.896	184.0	16	15	2	30	12	48
17	264	58.162	183.8	17	28	2	30	12	68
18	265	59.373	182.6	18	-25	2	30	12	68
19	266	59.948	181.6	19	-50	2	30	12	88
20	267	60.965	181.7	20	20	2	30	12	88

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 7 SHOT POINT 19 TEAM 6  
SHOT TIME: 176112; 6: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	101	126.397	356.2	101	19	2	30	12	88
2	102	125.747	356.0	102	10	2	30	12	88
3	103	125.614	355.4	103	0	2	30	12	68
4	104	124.917	354.8	104	0	2	30	12	48
5	105	123.907	354.7	105	24	2	30	12	48
6	106	122.708	354.7	106	-9	2	30	12	48
7	108	121.042	354.6	107	-59	2	30	12	48
8	109	120.197	354.6	108	1	2	30	12	48
9	110	119.271	354.9	109	--	2	30	12	48
10	111	118.344	355.2	110	21	2	30	12	48
11	113	116.302	355.6	111	13	2	30	12	48
12	114	115.234	355.6	112	12	2	30	12	48
13	115	114.028	355.6	113	-12	2	30	12	48
14	116	113.159	355.4	114	--	2	30	12	48
15	117	111.804	355.8	115	4	2	30	12	48
16	119	110.605	356.6	116	21	2	30	12	48
17	120	109.694	357.2	117	3	2	30	12	48
18	121	109.006	357.7	118	12	2	30	12	48
19	122	107.809	357.8	119	4	1	30	12	48
20	123	106.939	358.0	120	2	1	30	12	48

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 8 SHOT POINT 10 TEAM 2  
SHOT TIME: 177110; 0: 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	202	15.930	157.0	21	-10	2	30	12	48
2	203	16.627	159.3	22	23	2	30	12	48
3	204	17.231	162.4	23	2	2	30	12	48
4	205	17.792	167.0	24	-10	2	30	12	48
5	206	18.784	171.2	25	37	2	30	12	48
6	207	19.401	173.2	26	7	2	30	12	48
7	208	20.089	177.0	27	18	2	30	12	48
8	210	21.787	182.8	28	--	2	30	12	48
9	211	22.924	185.5	29	21	2	30	12	48
10	212	24.162	186.8	30	12	2	30	12	48
11	213	25.137	188.4	31	13	1	30	12	48
12	214	26.167	189.5	32	21	2	30	12	48
13	215	27.102	189.4	33	56	2	30	12	48
14	216	28.117	189.2	34	17	2	30	12	48
15	217	29.052	187.3	35	-63	2	30	12	48
16	218	30.007	185.1	36	-2	2	30	12	48
17	220	32.093	184.1	37	7	2	30	12	68
18	221			38	4	2	30	12	68
19	222	34.009	184.8	39	3	2	30	12	68
20	223	34.985	184.8	40	13	2	30	12	88

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 8 SHOT POINT 10 TEAM 5  
SHOT TIME: 177:10; 0; 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	151	27.328	1.3	61	-15	2	30	12	48
2	142	28.175	1.0	82	-15	2	30	12	48
3	141	29.070	0.4	83	30	2	30	12	48
4	140	30.115	359.5	84	36	2	30	12	48
5	139	31.204	358.9	85	--	0	30	12	48
6	138	32.066	358.4	86	0	2	30	12	48
7	137	32.957	357.8	87	--	2	30	12	48
8	136	33.860	357.2	88	44	3	30	12	48
9	135	34.723	356.8	89	21	2	30	12	48
10	134	35.597	356.4	90	33	2	30	12	48
11	133	36.772	355.8	91	11	1	30	12	48
12	132	37.583	355.2	92	11	2	30	12	48
13	131	38.301	354.6	93	21	2	30	12	48
14	130	39.281	354.3	94	39	2	30	12	48
15	129	40.467	356.1	95	48	2	30	12	48
16	128	41.718	354.5	96	-23	3	30	12	48
17	127	42.741	355.1	97	13	2	30	12	48
18	126	43.578	354.0	98	13	2	30	12	48
19	125	44.810	353.9	99	30	2	30	12	48
20	124	45.750	353.2	100	26	2	30	12	48

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 8 SHOT POINT 10 TEAM 6  
SHOT TIME: 177:10; 0; 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	101	66.320	351.2	101	32		30	12	88
2	102	65.715	350.8	102	17		30	12	88
3	103	65.703	349.7	103	0		30	12	68
4	104	65.142	348.5	104	-2	2	30	12	48
5	105	64.166	348.1	105	41		30	12	48
6	106	62.983	347.9	106	-15	1	30	12	48
7	108	61.337	347.7	107	-100		30	12	48
8	109	60.496	347.6	108	1		30	12	48
9	110	59.509	348.0	109	--		30	12	48
10	111	58.517	348.4	110	35	2	30	12	48
11	113	56.383	349.1	111	23	2	30	12	48
12	114	55.326	348.9	112	21		30	12	48
13	115	54.123	348.8	113	-20	2	30	12	48
14	116	53.305	348.2	114	--		30	12	48
15	117	51.852	349.0	115	8		30	12	48
16	119	50.492	350.5	116	36		30	12	48
17	120	49.467	351.7	117	5	2	30	12	48
18	121	48.690	352.8	118	21		30	12	48
19	122	47.478	352.9	119	7		30	12	48
20	123	46.588	353.1	120	4		30	12	48

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 8 SHOT POINT 10 TEAM 3  
SHOT TIME: 177:10; 0; 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	201	14.923	156.1	41	42	2	30	12	48
2	200	13.722	156.8	42	13	2	30	12	48
3	198	10.765	159.9	43	-36	2	30	12	48
4	197	9.626	165.3	44	-52	2	30	12	48
5	188	8.548	169.4	45	6	2	30	12	48
6	187	7.651	173.6	46	6	2	30	12	48
7	186	6.819	177.2	47	24	2	30	12	48
8	185	6.031	180.3	48	-40	2	30	12	48
9	184	5.307	184.5	49	15	2	30	12	48
10	183	4.087	187.1	50	-23	2	30	12	48
11	182	3.110	188.0	51	50	1	30	12	48
12	181	2.275	193.6	52	19	1	30	12	48
13	180	0.922	190.7	53	12	1	30	12	48
14	179	0.001	242.3	54	-28	3	30	12	48
15	178	0.930	11.8	55	16	1	30	12	48
16	177	2.136	10.3	56	21		30	12	48
17	176	2.849	11.4	57	117	2	30	12	48
18	175	3.731	13.9	58	22	1	30	12	48
19	174	4.571	12.0	59	-6	2	30	12	48
20	173	5.875	13.3	60	-15	2	30	12	48

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 8 SHOT POINT 10 TEAM 4  
SHOT TIME: 177:10; 0; 0.008

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	152	26.089	2.0	61	22	2	30	12	48
2	154	24.875	4.7	62	12	1	30	12	48
3	155	23.859	4.7	63	16	2	30	12	48
4	156	22.685	6.5	64	26	2	30	12	48
5	157	21.861	8.1	65	-31	2	30	12	48
6	158	21.090	10.2	66	113	2	30	12	48
7	159	20.096	10.9	67	-7	2	30	12	48
8	160	19.139	11.5	68	-15	2	30	12	48
9	161	18.017	11.5	69	9	2	30	12	48
10	162	17.031	11.9	70	55	2	30	12	48
11	164	15.163	13.3	71	14	2	30	12	48
12	163	15.951	12.3	72	30	2	30	12	48
13	165	14.185	15.6	73	-25	2	30	12	48
14	166	13.169	13.6	74	0		30	12	48
15	167	12.316	14.6	75	27	2	30	12	48
16	168	11.181	16.3	76	17	2	30	12	48
17	169	10.343	14.6	77	9	2	30	12	48
18	170	8.968	14.6	78	5	2	30	12	48
19	171	7.884	13.7	79	45	2	30	12	48
20	172	7.329	14.8	80	26	2	30	12	48

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 14 SHOT POINT 1 TEAM 3  
SHOT TIME: 191.10:10; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	552	44.835	41	-3		30	12	48	1
2	553	45.803	42	9	2	30	12	48	0
3	554	47.258	43	-12	2	30	12	68	0
4	555	48.299	44	41	2	30	12	68	0
5	556	48.984	45	1	2	30	12	88	0
6	557	49.783	46	0	2	30	12	88	2
7	558	50.863	47	14	2	30	12	68	0
8	559	51.826	48	9	2	30	12	68	2
9	560	52.808	49	12	2	30	12	48	0
10	561	53.738	50	-11	2	30	12	48	0
11	562	54.842	51	18	2	30	12	48	0
12	563	55.986	52	21	2	30	12	48	0
13	564	57.106	53	7	2	30	12	48	0
14	565	58.055	54	-11	2	30	12	48	0
15	566	59.215	55	7	2	30	12	48	0
16	567	60.572	56	12	1	30	12	68	0
17	568	61.829	57	11	1	30	12	68	0
18	569	63.181	58	-2	2	30	12	88	3
19	570	64.154	59	-2	2	30	12	68	0
20	571	65.521	60	-7	2	30	12	68	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 14 SHOT POINT 1 TEAM 4  
SHOT TIME: 191.10:10; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	572	66.796	61	--		30	12	68	1
2	573	68.118	62	4	2	30	12	48	0
3	574	69.475	63	8	2	30	12	48	0
4	575	70.466	64	15	2	30	12	48	0
5	576	71.540	65	-12	2	30	12	48	0
6	577	72.744	66	1	2	30	12	48	2
7	578	73.633	67	-13	2	30	12	48	0/12
8	579	74.734	68	-5	2	30	12	48	0
9	580	75.746	69	5	2	30	12	48	2
10	581	76.849	70	31	2	30	12	48	0
11	582	77.843	71	4	2	30	12	48	0
12	583	78.946	72	15	2	30	12	48	0
13	584	79.890	73	-16	2	30	12	48	0
14	585	80.926	74	-2	2	30	12	48	0
15	586	82.279	75	13	2	30	12	48	0/30
16	587	83.331	76	4	2	30	12	68	0/12
17	588	84.353	77	8	2	30	12	68	0/12
18	589	85.224	78	-8	2	30	12	88	0
19	590	86.012	79	6	2	30	12	88	0
20	591	86.369	80	11		30	12	68	2

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 14 SHOT POINT 1 TEAM 1  
SHOT TIME: 191.10:10; 0.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	501	0.580	203.3	1	19	3	30	12	88	0
2	502	2.167	219.7	2	23	3	30	12	68	0
3	503	2.965	201.3	3	11	3	30	12	68	0
4	504	3.893	192.8	4	-19	3	30	12	68	0
5	505	4.139	168.9	5	-18	3	30	12	48	17
6	506	5.042	165.1	6	6	3	30	12	48	0
7	507	6.341	162.1	7	2	3	30	12	48	0
8	508	7.946	162.1	8	14	1	30	12	48	3
9	509	9.255	171.9	9	55	1	30	12	48	0
10	510	10.543	175.2	10	-25	3	30	12	48	0
11	511	11.660	172.9	11	-22	3	30	12	48	0
12	512	12.729	170.8	12	12	1	30	12	48	0
13	513	13.809	169.4	13	6	3	30	12	48	0
14	514	14.880	168.2	14	26	1	30	12	48	0/12
15	515	15.862	166.9	15	7	3	30	12	48	2
16	516	16.867	161.8	16	-7	3	30	12	48	0
17	517	18.001	159.7	17	6	1	30	12	48	0
18	518	19.092	156.9	18	-13	1	30	12	68	0
19	519	20.292	156.0	19	-28		30	12	68	2
20	520	21.318	156.2	20	12		30	12	88	17

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 14 SHOT POINT 1 TEAM 2  
SHOT TIME: 191.10:10; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
1	521	22.095	157.7	21	-9	1	30	12 88	0
2	522	23.141	157.8	22	-12	1	30	12 88	0
3	523	24.072	159.7	23	-39	1	30	12 68	0
4	524	25.630	157.5	24	-2		30	12 48	2
5	525	26.833	156.7	25	0		30	12 48	2
6	526	28.233	157.5	26	1	1	30	12 48	0
7	527	29.067	158.6	27	10	1	30	12 48	0
8	528	30.023	159.9	28	-52	1	30	12 48	0
9	529	31.050	161.0	29	12	1	30	12 48	0
10	530	31.996	162.4	30	7	2	30	12 48	0
11	532	34.328	162.4	31	7	1	30	12 48	17
12	533	35.212	162.6	32	20	2	30	12 48	
13	534	36.320	163.0	33	43	2	30	12 48	
14	535	37.559	163.6	34	7		30	12 48	
15	536	38.576	163.6	35	-30		30	12 48	2
16	537	39.634	164.4	36	1	1	30	12 48	0
17	538	40.544	164.9	37	8	2	30	12 48	0
18	539	41.532	165.8	38	1	2	30	12 48	0
19	540	42.624	166.5	39	0	2	30	12 48	0
20	551	43.593	167.0	40	7	2	30	12 48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 14 SHOT POINT 1 TEAM 5  
SHOT TIME: 191:10:10; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	600	87.444	173.1	81	-17	2	30	12 68	0
2	601	88.551	173.3	82	-8	2	30	12 68	0
3	602	89.495	173.7	83	26	2	30	12 68	0
4	603	90.751	174.0	84	22	2	30	12 68	0
5	604	91.767	174.0	85	-4	2	30	12 68	0
6	605	92.982	174.0	86	0	2	30	12 68	0
7	606	93.917	173.8	87	--	2	30	12 68	0
8	607	95.128	173.1	88	24	1	30	12 68	0/ 6
9	608	96.049	172.8	89	-11	2	30	12 68	0
10	609	97.568	171.9	90	22	2	30	12 68	0
11	610	98.763	171.8	91	7	2	30	12 68	0
12	611	99.888	171.6	92	6	2	30	12 68	0/ 6
13	612	100.950	171.6	93	23	2	30	12 48	0
14	613	102.161	171.7	94	24	2	30	12 48	0
15	614	103.188	171.7	95	24	2	30	12 48	0
16	615	104.422	171.4	96	-7	2	30	12 48	0
17	616	105.602	171.1	97	7	2	30	12 48	0
18	617	106.681	171.0	98	-4	2	30	12 48	0
19	618	107.828	170.9	99	17	2	30	12 48	0
20	619	108.899	170.8	100	13	2	30	12 48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 15 SHOT POINT 3 TEAM 1  
SHOT TIME: 191:10:12; 0.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	501	49.231	347.6	1	19	2	30	12 88	0
2	502	48.453	345.9	2	23	2	30	12 68	0/ 6
3	503	47.314	346.0	3	11	2	30	12 68	0/ 6
4	504	46.261	345.9	4	-19	2	30	12 68	0/ 6
5	505	45.623	347.9	5	-18	2	30	12 48	0/ 6
6	506	44.766	348.3	6	6	2	30	12 48	0/ 6
7	507	43.458	348.8	7	2	2	30	12 48	0
8	508	41.865	349.1	8	14	2	30	12 48	0
9	509	40.534	347.1	9	55	2	30	12 48	0/ 6
10	510	39.328	346.0	10	-25	2	30	12 48	0/ 6
11	511	38.161	346.4	11	-22	2	30	12 48	0/ 6
12	512	37.054	347.0	12	12	2	30	12 48	0/ 6
13	513	35.959	347.4	13	6	2	30	12 48	0/ 6
14	514	34.883	347.8	14	26	2	30	12 48	0/ 6
15	515	33.904	348.5	15	7	2	30	12 48	0
16	516	33.039	351.1	16	-7	2	30	12 48	0
17	517	32.048	352.6	17	6	2	30	12 48	0/ 6
18	518	31.241	354.8	18	-13	2	30	12 68	0/ 6
19	519	30.201	356.0	19	-28	2	30	12 68	21
20	520	29.217	356.6	20	12	2	30	12 88	17

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 14 SHOT POINT 1 TEAM 6  
SHOT TIME: 191:10:10; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	621	111.114	171.3	101	11	2	30	12 48	0
2	622	112.300	171.2	102	8	2	30	12 48	1
3	623	113.345	171.3	103	2	2	30	12 48	17
4	624	114.510	171.1	104	1	2	30	12 48	0
5	625	115.611	171.1	105	18	2	30	12 48	0
6	626	116.757	171.0	106	0	2	30	12 48	0
7	627	117.788	171.2	107	35	2	30	12 48	0
8	629	119.853	171.7	108	1	2	30	12 48	12
9	630	120.977	172.5	109	2	2	30	12 48	12
10	631	121.944	173.2	110	12	2	30	12 48	0
11	632	122.929	173.5	111	27	2	30	12 48	0
12	633	124.027	173.6	112	6	2	30	12 48	1
13	634	125.111	173.8	113	-6	2	30	12 48	0
14	635	126.188	173.9	114	2	2	30	12 48	0
15	636	127.285	174.0	115	8	2	30	12 48	12
16	637	128.384	174.0	116	12	2	30	12 48	0
17	638	129.501	174.3	117	9	2	30	12 48	1
18	639	130.612	174.4	118	16	2	30	12 48	0
19	267	258.743	174.9	119	2	2	30	12 48	0
20	640	132.056	173.6	120	3	2	30	12 48	1

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 15 SHOT POINT 3 TEAM 2  
SHOT TIME: 191:10:12; 0.009

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	521	28.294	356.0	21	-9	2	30	12 88	0
2	522	27.266	356.6	22	-12	1	30	12 88	0
3	523	26.163	355.6	23	-39	2	30	12 68	0
4	524	25.001	358.8	24	-2	2	30	12 48	2
5	525	24.028	0.7	25	0	1	30	12 48	2
6	526	22.594	1.2	26	1	1	30	12 48	0
7	527	21.615	0.8	27	10	2	30	12 48	0
8	528	20.479	360.0	28	-52	1	30	12 48	0
9	529	19.320	359.4	29	12	2	30	12 48	0
10	530	18.179	357.8	30	7	2	30	12 48	0
11	531	15.942	0.0	31	7	1	30	12 48	0
12	533	15.062	0.6	32	20	2	30	12 48	0
13	534	13.929	1.0	33	43	1	30	12 48	0
14	535	12.637	1.1	34	7	1	30	12 48	1
15	536	11.664	2.5	35	-30	1	30	12 48	2
16	537	10.497	1.6	36	1	1	30	12 48	0
17	538	9.518	1.1	37	8	1	30	12 48	0
18	539	8.404	358.7	38	1	3	30	12 48	0
19	540	7.230	356.5	39	0	3	30	12 48	0
20	551	6.221	355.0	40	7	1	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 15 SHOT POINT 3 TEAM 3  
SHOT TIME: 191:10:12: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	552	4.957	354.0	41	-3		30	12	68	1	
2	553	3.959	348.9	42	9	3	30	12	48	0	
3	554	2.515	353.2	43	-12	1	30	12	68	0	
4	555	1.472	354.3	44	41	3	30	12	68	0	
5	556	0.779	350.2	45	1	3	30	12	88	0	
6	557	0.060	237.7	46	0		30	12	88	2	
7	558	1.158	149.8	47	14	3	30	12	68	0	
8	559	2.080	160.8	48	9		30	12	68	2	
9	560	3.047	166.7	49	12	3	30	12	48	0	
10	561	3.985	164.1	50	-11	3	30	12	48	0	
11	562	5.083	166.2	51	18	3	30	12	48	0	
12	563	6.224	167.5	52	21	1	30	12	48	0	
13	564	7.344	168.5	53	7	3	30	12	48	0	
14	565	8.304	171.1	54	-11	1	30	12	48	0	
15	566	9.532	176.1	55	7	1	30	12	48	0	
16	567	10.993	179.6	56	12	1	30	12	68	0	
17	568	12.206	177.7	57	11	1	30	12	68	0	
18	569	13.500	175.1	58	14	1	30	12	88	3	
19	570	14.451	173.9	59	-2	1	30	12	68	0	
20	571	15.818	173.8	60	-7	1	30	12	68	0	

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 15 SHOT POINT 3 TEAM 5  
SHOT TIME: 191:10:12: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	600	38.350	179.8	81	-17	2	30	12	68	0	
2	601	39.491	180.1	82	-8	2	30	12	68	0	
3	602	40.509	180.8	83	26	2	30	12	68	0	
4	603	41.820	181.3	84	22	2	30	12	68	0	
5	604	42.824	181.1	85	-5	2	30	12	68	0	
6	605	44.047	181.0	86	0	2	30	12	68	0	
7	606	44.927	180.3	87	--		30	12	68	1	
8	607	46.020	178.8	88	24	2	30	12	68	0/21	
9	608	46.892	178.1	89	-11	2	30	12	68	2	
10	609	48.278	175.9	90	22	2	30	12	68	0	
11	610	49.464	175.7	91	7	2	30	12	68	0	
12	611	50.566	175.2	92	6	2	30	12	68	0/21	
13	612	51.628	175.1	93	23	2	30	12	48	0	
14	613	52.851	175.2	94	23	2	30	12	48	0	
15	614	53.879	175.2	95	24	2	30	12	48	0	
16	615	55.089	174.6	96	-7	2	30	12	48	0	
17	616	56.237	173.9	97	7	2	30	12	48	0	
18	617	57.312	173.7	98	-4	2	30	12	48	0/12	
19	618	58.448	173.4	99	17	2	30	12	48	17	
20	619	59.514	173.2	100	13	2	30	12	48	0	

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 15 SHOT POINT 3 TEAM 4  
SHOT TIME: 191:10:12: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	572	17.091	173.5	61	--		30	12	68	1	
2	573	18.366	171.9	62	4	2	30	12	48	0	
3	574	19.727	170.6	63	8	2	30	12	48	0	
4	575	20.720	170.8	64	15	1	30	12	48	0	
5	576	21.801	171.3	65	-12	2	30	12	48	0	
6	577	23.029	172.5	66	1	2	30	12	48	0/12	
7	578	23.948	173.7	67	-13	2	30	12	48	0/12	
8	579	25.069	174.3	68	-5	1	30	12	48	0	
9	580	26.159	176.3	69	5	3	30	12	48	2	
10	581	27.370	178.3	70	31	2	30	12	48	0	
11	582	28.381	178.5	71	4	2	30	12	48	0	
12	583	29.470	178.1	72	15	2	30	12	48	0	
13	584	30.586	177.5	73	-16	2	30	12	48	0	
14	585	31.548	176.0	74	-2	2	30	12	48	0	
15	586	32.871	175.1	75	14	2	30	12	48	0	
16	587	33.949	175.5	76	4	2	30	12	68	0/12	
17	588	35.044	176.9	77	8	2	30	12	68	0	
18	589	35.976	177.8	78	-8	2	30	12	88	0	
19	590	36.709	176.8	79	6	2	30	12	88	0	
20	591	37.232	179.3	80	11	2	30	12	68	0	

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 15 SHOT POINT 3 TEAM 6  
SHOT TIME: 191:10:12: 0.009

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	621	61.772	174.0	101	11	2	30	12	48	0	
2	622	62.955	173.8	102	8	2	30	12	48	1	
3	623	64.007	173.9	103	2	2	30	12	48	17	
4	624	65.162	173.6	104	1	2	30	12	48	0	
5	625	66.259	173.5	105	18	2	30	12	48	0	
6	626	67.397	173.2	106	0	2	30	12	48	12	
7	627	68.450	173.6	107	35	2	30	12	48	12	
8	629	70.560	174.4	108	1	2	30	12	48	2	
9	630	71.773	175.7	109	2	2	30	12	48	2	
10	631	72.829	176.9	110	12	2	30	12	48	12	
11	632	73.846	177.2	111	27	2	30	12	48	12	
12	633	74.971	177.5	112	6	2	30	12	48	1	
13	634	76.073	177.6	113	-6	2	30	12	48	2	
14	635	77.172	177.8	114	2	2	30	12	48	12	
15	636	78.279	177.9	115	8	2	30	12	48	12	
16	637	79.387	177.9	116	12	2	30	12	48	0	
17	638	80.345	178.2	117	10	2	30	12	48	1	
18	639	81.472	178.4	118	16	2	30	12	48	2/12	
19	639	81.472	178.4	118	16	2	30	12	48	17	
20	640	82.802	177.1	120	3	3	30	12	48	1	



## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 16 SHOT POINT 5 TEAM 3  
SHOT TIME: 191:10:14; 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	552	41.658	356.5	41	-3	30	12	48	1
2	553	40.632	356.1	42	9	1	30	12	48
3	554	39.217	356.6	43	-12	2	30	12	68
4	555	38.177	356.8	44	41	2	30	12	68
5	556	37.481	356.7	45	1	2	30	12	88
6	557	36.678	356.8	46	0	30	12	88	2
7	558	35.680	357.7	47	14	2	30	12	68
8	559	34.713	357.8	48	9	30	12	68	2
9	560	33.712	357.8	49	13	2	30	12	48
10	561	32.832	358.4	50	-11	2	30	12	48
11	562	31.727	358.6	51	18	2	30	12	48
12	563	30.583	358.8	52	21	2	30	12	48
13	564	29.460	359.0	53	-7	1	30	12	48
14	565	28.457	358.6	54	-11	2	30	12	48
15	566	27.176	357.1	55	7	2	30	12	48
16	567	25.732	355.7	56	12	1	30	12	68
17	568	24.503	356.5	57	11	1	30	12	68
18	569	23.217	357.9	58	14	1	30	12	88
19	570	22.288	358.8	59	-2	1	30	12	68
20	571	20.929	359.2	60	-7	1	30	12	68

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 16 SHOT POINT 5 TEAM 1  
SHOT TIME: 191:10:14; 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	501	85.514	351.5	1	19	2	30	12	88
2	502	84.577	350.6	2	23	2	30	12	68
3	503	83.448	350.7	3	11	2	30	12	68
4	504	82.397	350.7	4	-19	2	30	12	68
5	505	81.882	351.9	5	-18	2	30	12	48
6	506	81.011	352.1	6	6	2	30	12	48
7	507	79.974	352.5	7	2	2	30	12	48
8	508	78.396	352.7	8	14	2	30	12	48
9	509	76.965	351.7	9	55	2	30	12	48
10	510	75.701	351.2	10	-25	2	30	12	48
11	511	74.564	351.5	11	-22	2	30	12	48
12	512	73.492	351.9	12	12	2	30	12	48
13	513	72.424	352.2	13	6	2	30	12	48
14	514	71.372	352.5	14	26	2	30	12	48
15	515	70.425	352.8	15	7	2	30	12	48
16	516	69.661	354.1	16	-7	2	30	12	48
17	517	68.709	354.9	17	6	2	30	12	48
18	518	67.937	355.9	18	-13	2	30	12	68
19	519	66.907	356.5	19	-28	2	30	12	68
20	520	65.924	356.8	20	12	2	30	12	88

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 16 SHOT POINT 5 TEAM 4  
SHOT TIME: 191:10:14; 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	572	19.673	359.9	61	--	30	12	68	1
2	573	18.460	1.9	62	4	1	30	12	48
3	574	17.232	4.1	63	8	1	30	12	48
4	575	16.255	4.7	64	15	3	30	12	48
5	576	15.162	5.0	65	-12	1	30	12	48
6	577	13.854	4.1	66	1	1	30	12	48
7	578	12.865	2.8	67	-13	1	30	12	48
8	579	11.720	2.5	68	-5	3	30	12	48
9	580	10.553	358.4	69	5	30	12	48	2
10	581	9.372	352.6	70	31	1	30	12	48
11	582	8.378	351.3	71	4	1	30	12	48
12	583	7.274	351.7	72	15	1	30	12	48
13	584	6.134	353.6	73	-16	3	30	12	48
14	585	5.187	2.5	74	-2	3	30	12	48
15	586	3.988	11.9	75	14	3	30	12	48
16	587	2.879	12.9	76	4	3	30	12	68
17	588	1.663	356.5	77	8	3	30	12	68
18	589	0.942	318.3	78	-8	1	30	12	88
19	590	0.044	90.0	79	6	3	30	12	68
20	591	1.668	249.8	80	11	3	30	12	68

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 16 SHOT POINT 5 TEAM 2  
SHOT TIME: 191:10:14; 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	521	65.000	356.5	21	-9	2	30	12	88
2	522	63.993	356.8	22	-12	1	30	12	88
3	523	62.866	356.3	23	-39	2	30	12	68
4	524	61.699	357.7	24	-2	2	30	12	48
5	525	60.703	358.4	25	0	2	30	12	48
6	526	59.260	358.5	26	1	2	30	12	48
7	527	58.290	358.3	27	10	2	30	12	48
8	528	57.166	358.0	28	-52	2	30	12	48
9	529	56.015	357.7	29	12	2	30	12	48
10	530	54.884	357.2	30	7	2	30	12	48
11	531	52.631	357.8	31	7	2	30	12	48
12	532	51.746	358.0	32	21	2	30	12	48
13	533	50.610	358.0	33	43	2	30	12	48
14	534	49.518	358.0	34	7	2	30	12	48
15	535	48.328	358.2	35	-30	2	30	12	48
16	537	47.176	357.9	36	1	2	30	12	48
17	538	46.205	357.7	37	8	2	30	12	48
18	539	45.107	357.2	38	1	2	30	12	48
19	540	43.937	356.8	39	0	1	30	12	48
20	551	42.925	356.6	40	7	2	30	12	48

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 17 SHOT POINT 7 TEAM 1  
SHOT TIME: 191.10115:59.810

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	600	2.511	227.5	81	-17	3	30	12 68	0
2	601	3.504	215.9	82	-8	3	30	12 68	0
3	602	4.646	214.0	83	26	3	30	12 68	0
4	603	5.949	209.9	84	22	3	30	12 68	0
5	604	6.775	204.5	85	-5	3	30	12 68	0
6	605	7.698	200.7	86	0	1	30	12 68	0
7	606	8.578	195.3	87	--	--	30	12 68	1
8	607	9.415	186.3	88	24	1	30	12 68	0
9	608	10.221	182.4	89	-11	1	30	12 68	2
10	609	11.592	173.0	90	22	1	30	12 68	0
11	610	12.789	172.2	91	7	1	30	12 68	0
12	611	13.919	170.7	92	6	2	30	12 68	0/21
13	612	14.982	170.7	93	23	1	30	12 48	0
14	613	16.195	171.5	94	23	1	30	12 48	0
15	614	17.224	171.5	95	24	1	30	12 48	0
16	615	18.468	170.2	96	-7	2	30	12 48	0
17	616	19.675	168.3	97	7	2	30	12 48	0
18	617	20.761	168.1	98	-4	1	30	12 48	0
19	618	21.926	167.5	99	17	2	30	12 48	0
20	619	23.009	167.2	100	13	2	30	12 48	0

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	501	131.717	353.5	1	19	2	30	12 88	0/12
2	502	130.730	353.0	2	23	2	30	12 68	0
3	503	129.607	353.1	3	11	2	30	12 68	0
4	504	128.559	353.1	4	-19	2	30	12 68	0/6
5	505	128.103	353.8	5	-18	2	30	12 48	17
6	506	127.246	354.0	6	6	2	30	12 48	0/12
7	507	126.027	354.3	7	2	2	30	12 48	0
8	508	124.462	354.4	8	14	2	30	12 48	0/6/12
9	509	122.991	353.8	9	55	2	30	12 48	0/12
10	510	121.707	353.5	10	-25	2	30	12 48	0/12
11	511	120.589	353.7	11	-22	2	30	12 48	0/12
12	512	119.538	354.0	12	12	2	30	12 48	0/12
13	513	118.485	354.2	13	6	1	30	12 48	0/12
14	514	117.449	354.4	14	26	2	30	12 48	0/12
15	515	116.519	354.6	15	7	1	30	12 48	0
16	516	115.800	355.4	16	-7	1	30	12 48	0
17	517	114.868	355.9	17	6	2	30	12 48	0
18	518	114.114	356.5	18	-13	2	30	12 68	0
19	519	113.092	356.8	19	-28	2	30	12 68	2
20	520	112.113	357.0	20	12	2	30	12 88	17

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 16 SHOT POINT 5 TEAM 6  
SHOT TIME: 191.10114: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	621	25.183	169.7	101	11	2	30	12 48	0
2	622	26.375	169.6	102	8	2	30	12 48	1
3	623	27.417	169.9	103	2	2	30	12 48	17
4	624	28.594	169.4	104	1	2	30	12 48	0
5	625	29.702	169.2	105	18	2	30	12 48	0/12
6	626	30.960	168.8	106	0	2	30	12 48	0
7	627	31.874	169.8	107	35	2	30	12 48	0
8	629	33.929	171.6	108	1	2	30	12 48	0
9	630	35.082	174.5	109	2	2	30	12 48	0
10	631	36.122	176.9	110	12	1	30	12 48	0
11	632	37.140	177.6	111	27	1	30	12 48	0
12	633	38.268	178.1	112	6	1	30	12 48	1
13	634	39.372	178.3	113	-6	2	30	12 48	0
14	635	40.475	178.7	114	2	2	30	12 48	0
15	636	41.582	178.8	115	8	2	30	12 48	0/12
16	637	42.691	178.8	116	12	2	30	12 48	1
17	638	43.850	179.4	117	10	2	30	12 48	0
18	639	44.983	179.6	118	16	2	30	12 48	0
19	267	172.924	176.5	119	2	2	30	12 48	2
20	640	46.295	177.3	120	3	3	30	12 48	1

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 17 SHOT POINT 7 TEAM 2  
SHOT TIME: 191.10115:59.810

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	521	111.190	356.9	21	-9	2	30	12 88	0
2	522	110.187	357.0	22	-12	1	30	12 88	0
3	523	109.061	356.8	23	-39	2	30	12 68	0
4	524	107.900	357.5	24	-3	2	30	12 48	2
5	525	106.902	358.0	25	0	2	30	12 48	2
6	526	105.462	358.0	26	1	2	30	12 48	0
7	527	104.496	357.9	27	10	2	30	12 48	0
8	528	103.377	357.7	28	-52	2	30	12 48	3
9	529	102.230	357.6	29	12	2	30	12 48	0
10	530	101.102	357.3	30	7	2	30	12 48	0
11	532	98.854	357.6	31	7	2	30	12 48	0
12	533	97.971	357.7	32	21	2	30	12 48	0
13	534	96.837	357.7	33	43	2	30	12 48	0
14	535	95.549	357.7	34	-7	2	30	12 48	1
15	536	94.359	357.8	35	-30	2	30	12 48	2
16	537	93.412	357.7	36	1	2	30	12 48	0
17	538	92.444	357.6	37	8	2	30	12 48	0
18	539	91.350	357.3	38	1	2	30	12 48	0
19	540	90.181	357.1	39	0	2	30	12 48	0
20	551	89.171	357.0	40	7	2	30	12 48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 17 SHOT POINT 7 TEAM 3  
SHOT TIME: 191:10:13:59.810

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	532	87.907	357.0	41	-3	30	12	48	1
2	533	86.880	356.8	42	9	30	12	48	0
3	534	85.472	357.0	43	-12	30	12	68	0
4	535	84.436	357.1	44	41	30	12	68	0
5	536	83.741	357.1	45	1	30	12	88	0
6	537	82.940	357.1	46	0	30	12	88	2
7	538	81.945	357.3	47	14	30	12	68	0
8	539	80.980	357.6	48	9	30	12	68	2
9	560	79.982	357.6	49	13	30	12	48	0
10	561	79.291	357.8	50	-11	30	12	48	0
11	562	78.183	357.9	51	18	30	12	48	0
12	563	77.040	357.9	52	21	30	12	48	0
13	564	75.915	358.0	53	7	30	12	48	0
14	565	74.915	357.8	54	-11	30	12	48	0
15	566	73.639	357.3	55	7	30	12	48	0
16	567	72.188	356.8	56	12	30	12	68	0
17	568	70.963	357.1	57	11	30	12	68	0
18	569	69.679	357.5	58	14	30	12	88	3
19	570	68.745	357.8	59	-2	30	12	68	0
20	571	67.384	357.9	60	-7	30	12	68	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 17 SHOT POINT 7 TEAM 5  
SHOT TIME: 191:10:15:59.810

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	600	44.894	354.9	81	-17	2	30	12	68
2	601	43.777	354.5	82	-8	2	30	12	68
3	602	42.825	353.6	83	26	2	30	12	68
4	603	41.573	352.9	84	22	2	30	12	68
5	604	40.553	353.0	85	-5	2	30	12	68
6	605	39.338	352.8	86	0	2	30	12	68
7	606	38.393	353.4	87	--	2	30	12	68
8	607	37.192	355.1	88	24	3	30	12	68
9	608	36.291	356.0	89	-11	30	12	88	2
10	609	34.915	358.8	90	22	2	30	12	68
11	610	33.743	359.3	91	7	2	30	12	68
12	611	32.678	0.2	92	6	2	30	12	68
13	612	31.628	0.5	93	23	2	30	12	48
14	613	30.398	0.5	94	23	2	30	12	48
15	614	29.380	0.8	95	24	1	30	12	48
16	615	28.237	2.1	96	-7	2	30	12	48
17	616	27.212	4.0	97	7	2	30	12	48
18	617	26.184	4.7	98	-4	2	30	12	48
19	618	25.144	6.0	99	17	2	30	12	48
20	619	24.158	7.1	100	13	2	30	12	48

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 17 SHOT POINT 7 TEAM 4  
SHOT TIME: 191:10:13:59.810

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	572	66.122	358.1	61	--	30	12	48	1
2	573	64.881	358.7	62	4	2	30	12	48
3	574	63.608	359.2	63	8	2	30	12	48
4	575	62.619	359.3	64	15	2	30	12	48
5	576	61.523	359.3	65	-12	2	30	12	48
6	577	60.242	358.9	66	1	2	30	12	48
7	578	59.281	358.6	67	-13	2	30	12	48
8	579	58.144	358.4	68	-5	2	30	12	48
9	580	57.014	357.6	69	5	2	30	12	48
10	581	55.808	356.6	70	31	2	30	12	48
11	582	54.800	356.4	71	4	2	30	12	48
12	583	53.706	356.6	72	15	2	30	12	48
13	584	52.584	356.9	73	-16	2	30	12	48
14	585	51.631	357.9	74	-2	2	30	12	48
15	586	50.333	358.5	75	14	2	30	12	48
16	587	49.242	358.3	76	4	2	30	12	68
17	588	48.125	357.3	77	8	2	30	12	88
18	589	47.197	356.6	78	-8	2	30	12	88
19	590	46.460	357.4	79	6	2	30	12	88
20	591	45.987	355.4	80	11	2	30	12	68

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 17 SHOT POINT 7 TEAM 6  
SHOT TIME: 191:10:15:59.810

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	621	21.767	6.3	101	11	2	30	12	48
2	622	20.650	7.4	102	8	2	30	12	48
3	623	19.602	7.9	103	2	1	30	12	48
4	624	18.582	9.8	104	1	1	30	12	48
5	625	17.584	11.4	105	18	1	30	12	48
6	626	16.607	13.6	106	0	1	30	12	48
7	627	15.447	13.2	107	35	1	30	12	48
8	629	13.559	12.5	108	1	1	30	12	48
9	630	11.558	6.1	109	2	1	30	12	48
10	631	10.347	359.1	110	12	3	30	12	48
11	632	9.323	356.6	111	27	1	30	12	48
12	633	8.211	354.0	112	6	3	30	12	48
13	634	7.127	352.0	113	-6	3	30	12	48
14	635	6.073	348.4	114	2	3	30	12	48
15	636	5.000	345.5	115	8	3	30	12	48
16	637	3.940	341.3	116	12	3	30	12	48
17	638	3.059	327.0	117	10	3	30	12	48
18	639	2.320	308.1	118	16	3	30	12	48
19	640	1.762	176.2	119	2	2	30	12	48
20	640	0.185	22.3	120	3	3	30	12	48

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 18 SHOT POINT 2 TEAM 3  
SHOT TIME: 191:12: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	552	23.420	176.4	41	-4	30	12	48	1
2	553	24.449	177.1	42	10	1	30	12	48
3	554	25.861	176.2	43	-13	1	30	12	68
4	555	26.902	176.1	44	43	1	30	12	68
5	556	27.598	176.1	45	1	1	30	12	68
6	557	28.401	176.1	46	0	1	30	12	88
7	558	29.417	175.0	47	15	1	30	12	68
8	559	30.385	174.9	48	10	1	30	12	68
9	560	31.384	175.1	49	13	1	30	12	48
10	561	32.283	174.5	50	-11	1	30	12	48
11	562	33.392	174.5	51	19	1	30	12	48
12	563	34.541	174.5	52	22	1	30	12	48
13	564	35.668	174.4	53	8	1	30	12	48
14	565	36.634	174.9	54	-12	1	30	12	48
15	566	37.905	176.0	55	7	1	30	12	48
16	567	39.350	177.0	56	13	1	30	12	68
17	568	40.575	176.5	57	12	1	30	12	68
18	569	41.872	175.7	58	15	1	30	12	88
19	570	42.817	175.3	59	-2	1	30	12	68
20	571	44.184	175.2	60	-7	1	30	12	68

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 18 SHOT POINT 2 TEAM 4  
SHOT TIME: 191:12: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	572	45.453	175.0	61	--	30	12	68	1
2	573	46.730	174.4	62	4	1	30	12	48
3	574	48.049	173.8	63	8	1	30	12	48
4	575	49.043	173.8	64	16	3	30	12	48
5	576	50.132	173.9	65	-13	1	30	12	48
6	577	51.379	174.4	66	1	1	30	12	48
7	578	52.311	174.9	67	-14	1	30	12	48
8	579	53.436	175.2	68	-6	2	30	12	48
9	580	54.532	176.1	69	5	30	12	48	2
10	581	55.731	177.1	70	33	1	30	12	48
11	582	56.740	177.2	71	5	2	30	12	48
12	583	57.833	177.1	72	16	1	30	12	48
13	584	58.954	176.8	73	-17	2	30	12	48
14	585	59.921	176.0	74	-2	2	30	12	48
15	586	61.242	175.5	75	14	1	30	12	48
16	587	62.321	175.7	76	4	1	30	12	68
17	588	63.415	176.5	77	9	2	30	12	68
18	589	64.341	177.0	78	-9	2	30	12	88
19	590	65.081	176.4	79	6	1	30	12	88
20	591	65.578	177.9	80	11	2	30	12	68

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 18 SHOT POINT 2 TEAM 1  
SHOT TIME: 191:12: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	501	21.610	336.6	1	21	1	30	12	88
2	502	21.083	332.5	2	25	1	30	12	68
3	503	19.970	331.8	3	12	1	30	12	68
4	504	18.962	330.9	4	-20	3	30	12	68
5	505	17.969	335.1	5	-19	3	30	12	48
6	506	17.024	335.5	6	6	3	30	12	48
7	507	15.696	335.9	7	3	3	30	12	48
8	508	14.101	335.3	8	15	3	30	12	48
9	509	13.235	327.8	9	59	3	30	12	48
10	510	12.374	322.8	10	-27	3	30	12	48
11	511	11.192	321.8	11	-23	3	30	12	48
12	512	10.040	321.0	12	12	3	30	12	48
13	513	8.942	319.4	13	6	1	30	12	48
14	514	7.874	317.4	14	27	3	30	12	48
15	515	6.843	315.9	15	8	3	30	12	48
16	516	5.329	324.5	16	-7	3	30	12	48
17	517	4.073	328.7	17	8	3	30	12	48
18	518	2.934	343.2	18	-14	3	30	12	68
19	519	1.828	356.9	19	-30	3	30	12	68
20	520	0.901	16.9	20	13	3	30	12	88

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 18 SHOT POINT 2 TEAM 2  
SHOT TIME: 191:12: 0: 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	521	0.085	153.7	21	-9	3	30	12	88
2	522	1.132	160.1	22	-13	3	30	12	88
3	523	2.218	180.4	23	-41	3	30	12	68
4	524	3.621	156.0	24	-3	3	30	12	48
5	525	4.843	152.0	25	-2	3	30	12	48
6	526	6.223	156.7	26	1	3	30	12	48
7	527	7.066	161.2	27	11	3	30	12	48
8	528	8.070	165.8	28	-55	3	30	12	48
9	529	9.158	168.8	29	13	3	30	12	48
10	530	10.221	172.7	30	7	3	30	12	48
11	532	12.522	170.8	31	7	3	30	12	48
12	533	13.415	170.8	32	22	3	30	12	48
13	534	14.548	171.2	33	46	3	30	12	48
14	535	15.827	171.9	34	8	3	30	12	48
15	536	16.836	171.5	35	-32	3	30	12	48
16	537	17.956	172.7	36	1	3	30	12	48
17	538	18.911	173.4	37	8	3	30	12	48
18	539	19.983	174.8	38	1	1	30	12	48
19	540	21.143	175.8	39	0	1	30	12	48
20	551	22.153	176.3	40	7	1	30	12	48

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 18 SHOT POINT 2 TEAM 5  
SHOT TIME: 191.121 01 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	600	66.688	81	-18	1	30	12	68	0
2	601	67.822	82	-8	1	30	12	68	0
3	602	68.822	83	27	1	30	12	68	0
4	603	70.120	84	23	1	30	12	68	0
5	604	71.130	85	-5	1	30	12	68	0
6	605	72.353	86	0	1	30	12	68	1
7	606	73.251	87	--	1	30	12	68	0
8	607	74.372	88	26	1	30	12	68	0
9	608	75.253	89	-12	1	30	12	68	0
10	609	76.651	90	24	1	30	12	68	0
11	610	77.837	91	7	1	30	12	68	0
12	611	78.937	92	6	1	30	12	68	2
13	612	79.998	93	24	1	30	12	48	0
14	613	81.025	94	24	1	30	12	48	0
15	614	82.050	95	25	1	30	12	48	0
16	615	83.253	96	-7	1	30	12	48	0
17	616	84.390	97	7	1	30	12	48	0
18	617	85.461	98	-4	1	30	12	48	0
19	618	86.588	99	18	1	30	12	48	0
20	619	87.648	100	14	1	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 19 SHOT POINT 4 TEAM 1  
SHOT TIME: 191.121 21 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	501	62.651	1	21	2	30	12	88	0
2	502	61.772	2	25	2	30	12	68	0
3	503	60.635	3	12	2	30	12	68	0/6/12
4	504	59.581	4	-20	2	30	12	68	0/6
5	505	58.992	5	-19	2	30	12	48	17
6	506	58.104	6	6	2	30	12	48	0/12
7	507	56.847	7	3	2	30	12	48	0/12
8	508	55.259	8	15	2	30	12	48	0/6/12
9	509	53.886	9	59	2	30	12	48	0/12/6
10	510	52.654	10	-27	2	30	12	48	0/12/6
11	511	51.499	11	-23	2	30	12	48	0/6/12
12	512	50.407	12	12	2	30	12	48	0/6/12
13	513	49.322	13	6	2	30	12	48	0/6/12
14	514	48.255	14	28	2	30	12	48	0/6/12
15	515	47.289	15	8	2	30	12	48	17/9
16	516	46.464	16	-7	2	30	12	48	0/12
17	517	45.486	17	8	2	30	12	48	0/12
18	518	44.687	18	-14	2	30	12	68	0/6/12
19	519	43.645	19	-30	2	30	12	68	0
20	520	42.659	20	13	3	30	12	88	17

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 18 SHOT POINT 2 TEAM 6  
SHOT TIME: 191.121 01 0.011

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	621	89.312	101	13	1	30	12	48	0
2	622	91.091	102	9	1	30	12	48	1
3	623	92.142	103	3	1	30	12	48	17
4	624	93.289	104	1	1	30	12	48	0
5	625	94.381	105	20	1	30	12	48	0
6	626	95.512	106	0	1	30	12	48	0
7	627	96.569	107	39	2	30	12	48	0
8	629	98.683	108	1	1	30	12	48	0
9	630	99.903	109	2	1	30	12	48	0
10	631	100.954	110	13	1	30	12	48	0
11	632	101.967	111	30	2	30	12	48	0
12	633	103.088	112	7	1	30	12	48	1
13	634	104.185	113	-7	1	30	12	48	0
14	635	105.280	114	2	1	30	12	48	0
15	636	106.383	115	9	1	30	12	48	0
16	637	107.488	116	13	2	30	12	48	0
17	638	108.633	117	11	1	30	12	48	1
18	639	109.757	118	18	1	30	12	48	0
19	640	110.843	119	2	2	30	12	48	0
20	640	111.102	120	4	4	30	12	48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 19 SHOT POINT 4 TEAM 2  
SHOT TIME: 191.121 21 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	521	41.738	21	-9	1	30	12	88	0
2	522	40.728	22	-13	1	30	12	88	0
3	523	39.608	23	-41	1	30	12	68	0
4	524	38.427	24	-3	1	30	12	48	2
5	525	37.431	25	-2	2	30	12	48	2
6	526	35.989	26	1	2	30	12	48	0
7	527	35.018	27	11	2	30	12	48	0
8	528	33.893	28	-55	2	30	12	48	0
9	529	32.742	29	13	2	30	12	48	0
10	530	31.614	30	7	2	30	12	48	0
11	532	29.358	31	7	2	30	12	48	17
12	533	28.473	32	22	1	30	12	48	0
13	534	27.337	33	46	2	30	12	48	0
14	535	26.045	34	8	2	30	12	48	1
15	536	25.055	35	-32	2	30	12	48	0
16	537	23.903	36	1	1	30	12	48	0
17	538	22.932	37	8	2	30	12	48	0
18	539	21.838	38	1	1	30	12	48	0
19	540	20.674	39	0	2	30	12	48	0
20	551	19.667	40	7	3	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 19 SHOT POINT 4 TEAM 3

SHOT TIME: 191.12; 2; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	552	18.402	354.7	41	-4	30	12	48	1	0
2	553	17.388	353.6	42	10	2	30	12	48	0
3	554	15.960	354.7	43	-13	2	30	12	68	0
4	555	14.917	354.9	44	43	2	30	12	68	0
5	556	14.222	354.7	45	1	2	30	12	88	0
6	557	13.418	354.7	46	0	2	30	12	88	0
7	558	12.407	357.2	47	15	1	30	12	88	0
8	559	11.440	357.5	48	10	1	30	12	68	0
9	560	10.440	357.4	49	13	1	30	12	48	0
10	561	9.561	359.4	50	-11	3	30	12	48	0
11	562	8.458	0.2	51	19	3	30	12	48	0
12	563	7.319	1.3	52	22	3	30	12	48	0
13	564	6.203	2.6	53	8	3	30	12	48	0
14	565	5.190	1.1	54	-12	3	30	12	48	0
15	566	3.921	352.1	55	7	1	30	12	48	0
16	567	2.645	335.2	56	13	3	30	12	68	0
17	568	1.385	329.8	57	12	3	30	12	68	0
18	569	0.065	209.3	58	15	3	30	12	88	0
19	570	1.036	160.4	59	-2	3	30	12	68	0
20	571	2.391	167.2	60	-7	3	30	12	68	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 19 SHOT POINT 4 TEAM 5

SHOT TIME: 191.12; 2; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	600	24.978	182.4	81	-18	1	30	12	68	0
2	601	26.126	182.7	82	-9	1	30	12	68	0/17
3	602	27.169	183.7	83	27	2	30	12	68	0
4	603	28.496	184.3	84	23	2	30	12	68	0
5	604	29.490	183.9	85	-5	2	30	12	68	0
6	605	30.709	183.7	86	0	2	30	12	68	0
7	606	31.566	182.6	87	--	1	30	12	68	0
8	607	32.617	180.4	88	26	2	30	12	68	17
9	608	33.474	179.3	89	-12	2	30	12	68	2
10	609	34.835	176.3	90	24	2	30	12	68	0
11	610	36.020	176.0	91	7	2	30	12	68	0
12	611	37.121	175.3	92	6	2	30	12	68	2
13	612	38.182	175.2	93	24	2	30	12	48	0
14	613	39.406	175.3	94	24	2	30	12	48	0
15	614	40.434	175.2	95	25	2	30	12	48	0
16	615	41.644	174.5	96	-7	2	30	12	48	0
17	616	42.794	173.6	97	7	2	30	12	48	0
18	617	43.871	173.4	98	-4	2	30	12	48	0
19	618	45.009	172.9	99	18	2	30	12	48	0
20	619	46.077	172.7	100	14	2	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 19 SHOT POINT 4 TEAM 4

SHOT TIME: 191.12; 2; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	572	3.667	168.0	61	--	30	12	68	1	0
2	573	5.011	163.7	62	4	3	30	12	48	0
3	574	6.402	161.5	63	8	1	30	12	48	0
4	575	7.376	163.1	64	16	3	30	12	48	0
5	576	8.429	165.3	65	-13	1	30	12	48	0
6	577	9.613	169.1	66	1	1	30	12	48	0
7	578	10.510	172.1	67	-14	1	30	12	48	0
8	579	11.626	173.5	68	-6	2	30	12	48	0
9	580	12.720	177.7	69	5	3	30	12	48	2
10	581	13.970	181.6	70	33	1	30	12	48	0
11	582	14.985	181.7	71	5	2	30	12	48	0/12
12	583	16.063	180.8	72	16	2	30	12	48	0/12
13	584	17.164	179.6	73	-17	2	30	12	48	0/12
14	585	18.106	176.7	74	-2	2	30	12	48	0/12
15	586	19.425	175.2	75	14	2	30	12	48	0
16	587	20.504	175.9	76	4	2	30	12	68	0/12
17	588	21.611	178.1	77	9	2	30	12	68	0
18	589	22.556	179.5	78	-9	2	30	12	88	0/12
19	590	23.275	177.9	79	6	2	30	12	88	0
20	591	23.847	181.8	80	11	3	30	12	68	2

FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 19 SHOT POINT 4 TEAM 6

SHOT TIME: 191.12; 2; 0.010

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	621	48.329	173.7	101	13	2	30	12	48	0
2	622	49.513	173.5	102	9	3	30	12	48	1
3	623	50.565	173.7	103	3	2	30	12	48	17
4	624	51.721	173.3	104	1	2	30	12	48	0/12
5	625	52.819	173.1	105	20	2	30	12	48	0/12
6	626	53.960	172.8	106	0	2	30	12	48	2/12
7	627	55.009	173.3	107	39	1	30	12	48	0
8	629	57.115	174.2	108	1	2	30	12	48	2
9	630	58.329	173.9	109	2	2	30	12	48	12
10	631	59.392	177.3	110	13	2	30	12	48	12
11	632	60.413	172.7	111	30	2	30	12	48	12
12	633	61.542	178.0	112	7	2	30	12	48	1
13	634	62.645	178.2	113	-7	2	30	12	48	0/12
14	635	63.747	178.4	114	2	2	30	12	48	12
15	636	64.854	178.5	115	9	2	30	12	48	12
16	637	65.962	178.5	116	13	2	30	12	48	12
17	638	67.119	178.9	117	11	2	30	12	48	1
18	639	68.250	179.0	118	18	2	30	12	48	12
19	640	69.367	176.7	119	2	2	30	12	48	2
20	640	69.567	177.5	120	4	2	30	12	48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 20 SHOT POINT 6 TEAM 3  
SHOT TIME: 191:12: 4: 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	552	51.682	357.8	41	-4	30	12	48	1
2	553	50.648	357.4	42	10	1	30	12	48
3	554	49.243	357.9	43	-13	1	30	12	68
4	555	48.205	358.1	44	43	1	30	12	68
5	556	47.508	358.0	45	1	1	30	12	68
6	557	46.707	358.1	46	0	1	30	12	68
7	558	45.721	358.9	47	15	1	30	12	68
8	559	44.756	359.0	48	10	1	30	12	68
9	560	43.755	359.0	49	13	1	30	12	48
10	561	42.882	359.5	50	-11	1	30	12	48
11	562	41.779	359.6	51	19	1	30	12	48
12	563	40.637	359.8	52	22	1	30	12	48
13	564	39.516	360.0	53	8	1	30	12	48
14	565	38.509	359.7	54	-12	1	30	12	48
15	566	37.213	358.7	55	7	1	30	12	48
16	567	35.749	357.7	56	13	1	30	12	68
17	568	34.532	358.3	57	12	1	30	12	68
18	569	33.264	359.4	58	15	1	30	12	68
19	570	32.344	0.1	59	-2	1	30	12	68
20	571	30.989	0.4	60	-7	1	30	12	68

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 20 SHOT POINT 6 TEAM 1  
SHOT TIME: 191:12: 4: 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	501	95.389	352.7	1	21	1	30	12	68
2	502	94.424	351.9	2	25	2	30	12	68
3	503	93.298	352.0	3	12	2	30	12	68
4	504	92.248	352.0	4	-20	2	30	12	68
5	505	91.768	353.1	5	-19	2	30	12	68
6	506	90.905	353.3	6	6	2	30	12	68
7	507	89.681	353.6	7	3	1	30	12	68
8	508	88.113	353.9	8	15	2	30	12	68
9	509	86.656	353.0	9	59	2	30	12	68
10	510	85.381	352.6	10	-27	2	30	12	68
11	511	84.257	352.9	11	-23	2	30	12	68
12	512	83.199	353.2	12	12	2	30	12	68
13	513	82.142	353.5	13	6	1	30	12	68
14	514	81.101	353.7	14	28	2	30	12	68
15	515	80.166	354.1	15	8	2	30	12	68
16	516	78.632	355.2	16	-7	1	30	12	68
17	517	78.697	355.9	17	8	2	30	12	68
18	518	77.946	356.8	18	-14	2	30	12	68
19	519	76.926	357.3	19	-30	1	30	12	68
20	520	75.947	357.6	20	13	2	30	12	68

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 20 SHOT POINT 6 TEAM 4  
SHOT TIME: 191:12: 4: 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	572	29.737	0.9	61	--	30	12	68	1
2	573	28.533	2.2	62	4	1	30	12	48
3	574	27.305	3.7	63	8	1	30	12	48
4	575	26.327	4.0	64	16	1	30	12	48
5	576	25.233	4.2	65	-13	1	30	12	48
6	577	23.928	3.6	66	1	1	30	12	48
7	578	22.939	2.9	67	-14	1	30	12	48
8	579	21.794	2.7	68	-6	2	30	12	48
9	580	20.611	0.6	69	5	30	12	48	2
10	581	19.368	358.0	70	33	1	30	12	48
11	582	18.357	357.6	71	5	1	30	12	48
12	583	17.267	358.2	72	16	1	30	12	48
13	584	16.157	359.4	73	-17	1	30	12	48
14	585	15.262	2.8	74	-2	1	30	12	48
15	586	14.028	5.5	75	14	1	30	12	48
16	587	12.920	5.2	76	4	1	30	12	68
17	588	11.728	2.0	77	9	1	30	12	68
18	589	10.765	359.4	78	-9	1	30	12	68
19	590	10.077	3.2	79	6	1	30	12	68
20	591	9.542	353.7	80	11	1	30	12	68

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 20 SHOT POINT 6 TEAM 2  
SHOT TIME: 191:12: 4: 0.012

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
GRADE									
1	521	75.020	357.4	21	-9	1	30	12	68
2	522	74.017	357.6	22	-13	1	30	12	68
3	523	72.883	357.2	23	-41	1	30	12	68
4	524	71.737	358.4	24	-3	2	30	12	68
5	525	70.750	359.0	25	-2	1	30	12	68
6	526	69.309	359.2	26	1	2	30	12	68
7	527	68.336	359.0	27	11	2	30	12	68
8	528	67.208	358.7	28	-55	1	30	12	68
9	529	66.054	358.5	29	13	2	30	12	68
10	530	64.915	358.1	30	7	1	30	12	68
11	531	62.672	358.7	31	7	2	30	12	68
12	532	61.788	358.8	32	22	2	30	12	68
13	533	60.653	358.8	33	46	2	30	12	68
14	534	59.361	358.8	34	8	2	30	12	68
15	535	58.374	359.0	35	-32	1	30	12	68
16	536	57.219	358.8	36	1	2	30	12	68
17	537	56.245	358.7	37	6	2	30	12	68
18	538	55.141	358.3	38	1	1	30	12	68
19	539	53.965	358.0	39	0	1	30	12	68
20	540	52.949	357.8	40	7	2	30	12	68

## FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 20 SHOT POINT 6 TEAM 5

SHOT TIME: 1911:21 4: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	600	8.469	350.9	81	-18	3	30	12	68	0
2	601	7.384	348.0	82	-27	1	30	12	68	0
3	602	6.549	341.5	83	20	3	30	12	68	0
4	603	5.483	333.4	84	23	3	30	12	68	0
5	604	4.521	329.5	85	-5	3	30	12	68	0
6	605	3.512	319.6	86	0	3	30	12	68	0
7	606	2.498	315.7	87	--	3	30	12	68	1
8	607	0.874	323.6	88	26	3	30	12	68	0
9	608	0.179	147.9	89	-12	3	30	12	68	2
10	609	2.417	126.7	90	24	3	30	12	68	0
11	610	3.448	139.2	91	7	3	30	12	68	0
12	611	4.606	142.9	92	6	3	30	12	68	2
13	612	5.564	148.2	93	24	3	30	12	48	0
14	613	6.634	153.9	94	24	3	30	12	48	0
15	614	7.618	156.3	95	25	3	30	12	48	0
16	615	8.930	155.6	96	-7	3	30	12	48	0
17	616	10.252	153.9	97	7	3	30	12	48	0
18	617	11.321	155.0	98	-4	3	30	12	48	0
19	618	12.509	155.1	99	18	3	30	12	48	0
20	619	13.593	155.6	100	14	3	30	12	48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 21 SHOT POINT 19 TEAM 1

SHOT TIME: 1911:21 6: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	501	258.152	354.9	1	21	2	30	12	88	0/ 6
2	502	257.135	354.6	2	25	2	30	12	68	0/ 6
3	503	256.017	354.6	3	12	2	30	12	68	0/ 6
4	504	254.971	354.6	4	-20	2	30	12	68	0/ 6
5	505	253.703	355.0	5	-19	3	30	12	68	17
6	506	252.493	355.1	6	6	2	30	12	48	0/ 6
7	507	252.493	355.2	7	3	2	30	12	48	0/ 6
8	508	250.934	355.3	8	16	2	30	12	48	0/ 6
9	509	249.440	355.0	9	59	2	30	12	48	0/ 6
10	510	248.144	354.9	10	-27	2	30	12	48	0/ 6/12
11	511	247.036	355.0	11	-23	2	30	12	48	0/ 6/12
12	512	245.985	355.1	12	12	2	30	12	48	0/ 6
13	513	244.930	355.2	13	6	2	30	12	48	0/ 6/12
14	514	243.919	355.3	14	28	2	30	12	48	0/ 6/12
15	515	242.997	355.3	15	8	2	30	12	48	0
16	516	242.294	355.9	16	-7	2	30	12	48	0
17	517	241.366	356.1	17	8	2	30	12	48	0
18	518	240.612	356.4	18	-14	2	30	12	68	0/ 6
19	519	239.586	356.5	19	-30	2	30	12	68	0/ 6
20	520	238.605	356.6	20	13	2	30	12	88	17

## FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 20 SHOT POINT 6 TEAM 6

SHOT TIME: 1911:21 4: 0.012

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	621	15.952	161.1	101	13	3	30	12	48	0
2	622	16.741	161.5	102	9	3	30	12	48	1
3	623	17.750	162.6	103	3	3	30	12	48	17
4	624	18.953	162.2	104	1	3	30	12	48	0
5	625	20.064	162.3	105	20	3	30	12	48	0
6	626	21.238	162.1	106	0	3	30	12	48	0
7	627	22.184	163.9	107	39	1	30	12	48	0
8	629	24.135	166.9	108	2	3	30	12	48	0
9	630	25.161	171.1	109	2	3	30	12	48	0
10	631	26.126	174.5	110	13	3	30	12	48	0
11	632	27.127	175.5	111	30	3	30	12	48	0
12	633	28.244	176.3	112	7	3	30	12	48	1
13	634	29.342	176.8	113	-7	3	30	12	48	0/17
14	635	30.438	177.3	114	2	3	30	12	48	0
15	636	31.544	177.4	115	13	1	30	12	48	0
16	637	32.651	177.5	116	13	1	30	12	48	0
17	638	33.801	178.3	117	11	1	30	12	48	1
18	639	34.931	178.6	118	18	1	30	12	48	0
19	640	36.284	175.7	120	4	4	30	12	48	0/12

## FIELD DATA TABLE

ALASKA - SUMMER 1984

SHOT NUMBER 21 SHOT POINT 19 TEAM 2

SHOT TIME: 1911:21 6: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	521	237.684	356.6	21	-9	1	30	12	88	0
2	522	236.679	356.6	22	-13	2	30	12	88	2
3	523	235.556	356.5	23	-42	2	30	12	68	0
4	524	234.382	356.9	24	-3	2	30	12	48	2
5	525	233.373	357.1	25	-2	2	30	12	48	2
6	526	231.931	357.1	26	1	1	30	12	48	0
7	527	230.969	357.0	27	11	2	30	12	48	0
8	528	229.855	356.9	28	-35	2	30	12	48	0
9	529	228.712	356.9	29	13	2	30	12	48	0
10	530	227.590	356.7	30	7	1	30	12	48	0
11	532	225.335	356.9	31	7	1	30	12	48	2
12	533	224.430	356.9	32	22	2	30	12	48	0
13	534	223.316	356.9	33	46	2	30	12	48	0
14	535	222.029	356.9	34	8	2	30	12	48	1
15	536	221.036	356.9	35	-32	1	30	12	48	2
16	537	219.893	356.9	36	1	2	30	12	48	0
17	538	218.927	356.8	37	8	2	30	12	48	0
18	539	217.838	356.7	38	1	2	30	12	48	0
19	540	216.623	356.6	39	0	2	30	12	48	0
20	551	215.664	356.6	40	7	2	30	12	48	0



## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 21 SHOT POINT 19 TEAM 3  
SHOT TIME: 191.12; 6: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	532	214.401	356.6	41	-4					1
2	533	213.376	356.5	42	10	2	30	12	48	0
3	534	211.965	356.6	43	-13	2	30	12	68	0
4	535	210.928	356.6	44	44	2	30	12	68	0
5	536	210.233	356.6	45	1	2	30	12	88	0
6	537	209.432	356.6	46	0					2
7	538	208.430	356.8	47	15	2	30	12	68	0
8	539	207.465	356.8	48	10	2	30	12	68	2
9	560	206.467	356.8	49	13	2	30	12	48	0
10	561	205.580	356.9	50	-11	2	30	12	48	0
11	562	204.475	356.9	51	19	2	30	12	48	0
12	563	203.332	356.9	52	22	2	30	12	48	0
13	564	202.209	356.9	53	8	2	30	12	48	0
14	565	201.216	356.9	54	-12	2	30	12	48	0
15	566	199.953	356.7	55	7	2	30	12	48	0
16	567	198.511	356.5	56	13	1	30	12	68	0
17	568	197.287	356.6	57	12	2	30	12	68	0
18	569	195.999	356.7	58	15	1	30	12	88	0
19	570	195.062	356.8	59	-2	2	30	12	68	0
20	571	193.701	356.9	60	-7	2	30	12	68	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 21 SHOT POINT 19 TEAM 5  
SHOT TIME: 191.12; 6: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	600	171.277	355.9	81	-18	2	30	12	68	0
2	601	170.158	355.8	82	-9	1	30	12	68	0
3	602	169.191	355.6	83	27	1	30	12	68	0/12
4	603	167.923	355.4	84	23	2	30	12	68	0
5	604	166.908	355.5	85	-5	2	30	12	68	0
6	605	165.691	355.4	86	0	2	30	12	68	0
7	606	164.766	355.6	87	--					1
8	607	163.598	356.0	88	26	1	30	12	68	0/26
9	608	162.704	356.2	89	-12					2
10	609	161.303	356.8	90	24	2	30	12	68	0
11	610	160.124	356.9	91	7	2	30	12	68	0
12	611	159.036	357.1	92	6					2
13	612	157.980	357.1	93	24	2	30	12	48	0
14	613	156.756	357.1	94	24	2	30	12	48	0
15	614	155.733	357.1	95	25	3	30	12	48	0/12
16	615	154.547	357.4	96	-7	2	30	12	48	0
17	616	153.443	357.7	97	7	2	30	12	48	0
18	617	152.384	357.7	98	-4	2	30	12	48	0
19	618	151.279	357.9	99	18	2	30	12	48	0
20	619	150.237	358.0	100	14	2	30	12	48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 21 SHOT POINT 19 TEAM 4  
SHOT TIME: 191.12; 6: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	572	192.439	356.9	61	--					1
2	573	191.186	357.1	62	4	2	30	12	48	0
3	574	189.898	357.3	63	8	2	30	12	48	0
4	575	188.908	357.3	64	16	1	30	12	48	0
5	576	187.817	357.3	65	-13	2	30	12	48	0
6	577	186.551	357.1	66	1	2	30	12	48	0/12
7	578	185.604	357.0	67	-14	2	30	12	48	0/12
8	579	184.475	357.0	68	-6	2	30	12	48	0
9	580	183.366	356.7	69	5					2
10	581	182.173	356.4	70	33	2	30	12	48	0/12
11	582	181.168	356.3	71	58	2	30	12	48	0
12	583	180.076	356.4	72	16	2	30	12	48	0
13	584	178.955	356.5	73	-17	2	30	12	48	0/12
14	585	177.991	356.7	74	-2	2	30	12	48	0
15	586	176.683	356.9	75	14	2	30	12	48	0
16	587	175.601	356.8	76	4	2	30	12	68	0/12
17	588	174.502	356.6	77	9	2	30	12	68	0
18	589	173.583	356.4	78	-9	2	30	12	88	0/12
19	590	172.841	356.6	79	6	2	30	12	88	0/12
20	591	172.373	356.0	80	11	2	30	12	68	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 21 SHOT POINT 19 TEAM 6  
SHOT TIME: 191.12; 6: 0.008

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
										GRADE
1	621	147.928	357.8	101	13	2	30	12	48	0
2	622	146.761	357.9	102	9					1
3	623	145.707	357.8	103	3					2
4	624	144.584	358.0	104	1	2	30	12	48	0
5	625	143.506	358.1	105	20	2	30	12	48	0/12
6	626	142.399	358.3	106	0	1	30	12	48	0
7	627	141.312	358.1	107	39	2	30	12	48	0
8	628	139.151	357.8	108	1	1	30	12	48	0
9	630	137.872	357.1	109	2	1	30	12	48	0
10	631	136.809	356.5	110	13	1	30	12	48	0
11	632	135.800	356.3	111	30	1	30	12	48	0
12	633	134.585	356.1	112	7					1
13	634	133.591	356.0	113	-7	1	30	12	48	0
14	635	132.504	355.9	114	2	1	30	12	48	0
15	636	131.403	355.9	115	9	1	30	12	48	0
16	637	130.301	355.8	116	13	1	30	12	48	0
17	638	129.171	355.6	117	11					1
18	639	128.056	355.5	118	18	1	30	12	48	0
19	627	0.112	132.7	119	2	3	30	12	48	0
20	640	126.664	356.3	120	4					1

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 22 SHOT POINT 8 TEAM 1  
SHOT TIME: 191.121, 7:59.811

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	501	157.632	352.0	1	21	2	30	12	88	0/6	0/6
2	502	156.681	351.5	2	25	2	30	12	68	0/6	0/6
3	503	155.553	351.6	3	12	2	30	12	68	0/6	0/6
4	504	154.503	351.6	4	-20	2	30	12	68	0/6	0/6
5	505	154.003	352.2	5	-19	2	30	12	48	17	0/6
6	506	153.133	352.4	6	6	2	30	12	48	0/6	0/6
7	507	151.899	352.6	7	3	2	30	12	48	0/6	0/6
8	508	150.325	352.7	8	16	2	30	12	48	0/6	0/6
9	509	148.894	352.1	9	59	2	30	12	48	0/6	0/6
10	510	147.628	351.9	10	-27	2	30	12	48	0/6	0/6
11	511	146.497	352.1	11	-23	2	30	12	48	0/6	6/12
12	512	145.431	352.2	12	12	2	30	12	48	0/6	0/6
13	513	144.367	352.4	13	6	3	30	12	48	0/12	6
14	514	143.319	352.5	14	28	2	30	12	48	0/6	12
15	515	142.373	352.7	15	8	2	30	12	48	0/6	0/6
16	516	141.598	353.4	16	-7	2	30	12	48	0/6	0/6
17	517	140.633	353.7	17	8	2	30	12	48	0/6	0/6
18	518	139.832	354.2	18	-14	2	30	12	68	0/6	0/6
19	519	138.782	354.5	19	-30	2	30	12	68	0/6	0/6
20	520	137.792	354.6	20	13	2	30	12	68	17	0/6

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 22 SHOT POINT 8 TEAM 3  
SHOT TIME: 191.121, 7:59.811

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	552	113.616	354.1	41	-4	2	30	12	48	1	0/12
2	553	112.605	353.9	42	10	2	30	12	48	0/12	0/12
3	554	111.180	354.1	43	-13	2	30	12	68	0/12	0/12
4	555	110.139	354.1	44	44	2	30	12	68	0/12	0/12
5	556	109.447	354.0	45	1	2	30	12	88	0/12	0/12
6	557	108.645	354.0	46	0	2	30	12	88	2	0
7	558	107.619	354.3	47	15	2	30	12	68	0	0
8	559	106.653	354.3	48	10	2	30	12	68	2	0
9	560	105.657	354.3	49	13	2	30	12	48	0/12	0/12
10	561	104.757	354.5	50	-11	2	30	12	48	0/12	0/12
11	562	103.651	354.5	51	19	2	30	12	48	0/12	0/12
12	563	102.505	354.5	52	22	2	30	12	48	0/12	0/12
13	564	101.381	354.5	53	8	2	30	12	48	0/12	0/12
14	565	100.399	354.3	54	-12	2	30	12	48	0/12	0/12
15	566	99.170	353.9	55	7	2	30	12	48	0/12	0/12
16	567	97.764	353.4	56	13	2	30	12	68	0/12	0/12
17	568	96.524	353.6	57	12	2	30	12	68	0/12	0/12
18	569	95.208	353.9	58	15	2	30	12	68	0/12	0/12
19	570	94.256	354.1	59	-2	2	30	12	68	0/12	0/12
20	571	92.892	354.1	60	-7	2	30	12	68	0/12	0/12

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 22 SHOT POINT 8 TEAM 2  
SHOT TIME: 191.121, 7:59.811

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	521	136.881	354.5	21	-9	1	30	12	88	0	0
2	522	135.866	354.6	22	-13	1	30	12	88	2	0
3	523	134.761	354.4	23	-42	1	30	12	68	0	0
4	524	133.538	355.0	24	-3	1	30	12	48	0	0
5	525	132.506	355.3	25	-2	2	30	12	48	2	0
6	526	131.061	355.3	26	1	2	30	12	48	0	0
7	527	130.107	355.2	27	11	1	30	12	48	0	0
8	528	129.006	355.0	28	-55	1	30	12	48	2	0
9	529	127.871	354.9	29	13	2	30	12	48	0	0
10	530	126.770	354.6	30	7	2	30	12	48	0	0
11	532	124.496	354.8	31	7	2	30	12	48	2	0
12	533	123.608	354.9	32	22	1	30	12	48	0	0
13	534	122.474	354.9	33	46	2	30	12	48	0	0
14	535	121.190	354.8	34	8	2	30	12	48	1	0
15	536	120.191	354.9	35	-32	1	30	12	48	2	0
16	537	119.058	354.7	36	1	2	30	12	48	0	0
17	538	118.100	354.6	37	8	2	30	12	48	0	0
18	539	117.028	354.4	38	1	2	30	12	48	0	0
19	540	115.877	354.2	39	0	2	30	12	48	0	0
20	551	114.876	354.1	40	7	2	30	12	48	0	0

FIELD DATA TABLE

ALASKA - SUMMER 1984  
SHOT NUMBER 22 SHOT POINT 8 TEAM 4  
SHOT TIME: 191.121, 7:59.811

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE	GRADE
1	572	91.623	354.2	61	--	4	2	30	12	48	0
2	573	90.345	354.5	62	4	2	30	12	48	0	0
3	574	89.035	354.9	63	8	2	30	12	48	0	0
4	575	88.043	354.9	64	16	2	30	12	48	0	0
5	576	86.955	354.8	65	-13	2	30	12	48	0	0
6	577	85.708	354.5	66	1	2	30	12	48	0/12	0/12
7	578	84.782	354.2	67	-14	2	30	12	48	0/12	0/12
8	579	83.664	354.0	68	-6	2	30	12	48	2	2
9	580	82.603	353.4	69	5	2	30	12	48	0	0
10	581	81.472	352.6	70	33	2	30	12	48	0	0
11	582	80.478	352.5	71	5	2	30	12	48	0	0
12	583	79.568	352.5	72	16	2	30	12	48	0	0
13	584	78.427	352.7	73	-17	2	30	12	48	0	0
14	585	77.410	353.3	74	-2	2	30	12	48	0	0
15	586	76.070	353.6	75	14	2	30	12	48	0	0
16	587	75.001	353.4	76	4	2	30	12	68	0/12	0/12
17	588	73.954	352.7	77	9	2	30	12	68	0	0
18	589	73.075	352.2	78	-9	2	30	12	68	0	0
19	590	72.289	352.7	79	6	2	30	12	68	0/12	0/12
20	591	71.945	351.3	80	11	1	30	12	68	0	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
 SHOT NUMBER 22 SHOT POINT 8 TEAM 5  
 SHOT TIME: 191.121 7:59.811

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	600	70.882	350.9	81	-18	2	30	12 68	0
2	601	69.789	350.6	82	-9	2	30	12 68	0
3	602	68.882	350.0	83	28	1	30	12 68	0/12
4	603	67.664	349.5	84	23	1	30	12 68	0
5	604	66.645	349.5	85	-5	2	30	12 68	0
6	605	65.440	349.3	86	0	2	30	12 68	0
7	606	64.470	349.7	87	--	--	30	12 68	1
8	607	63.191	350.6	88	26	1	30	12 68	0/26
9	608	62.248	351.0	89	-12	1	30	12 88	1
10	609	60.703	352.6	90	24	2	30	12 68	0
11	610	59.506	352.7	91	7	2	30	12 68	0
12	611	58.385	353.1	92	6	2	30	12 68	0
13	612	57.322	353.1	93	24	2	30	12 48	0
14	613	56.104	353.0	94	24	2	30	12 48	0
15	614	55.074	353.0	95	25	2	30	12 48	0
16	615	53.849	353.5	96	-7	2	30	12 48	0
17	616	52.695	354.3	97	7	2	30	12 48	0
18	617	51.621	354.4	98	-4	2	30	12 48	0
19	618	50.492	354.9	99	18	2	30	12 48	0
20	619	49.433	355.2	100	14	2	30	12 48	0

## FIELD DATA TABLE

ALASKA - SUMMER 1984  
 SHOT NUMBER 22 SHOT POINT 8 TEAM 6  
 SHOT TIME: 191.121 7:59.811

LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE
									GRADE
1	621	47.160	354.2	101	13	2	30	12 48	12
2	622	45.978	354.4	102	9	3	30	12 48	1
3	623	44.925	354.3	103	3	3	30	12 48	17
4	624	43.775	354.8	104	1	2	30	12 48	12
5	625	42.682	355.0	105	20	2	30	12 48	0
6	626	41.554	355.5	106	0	2	30	12 48	0
7	627	40.487	354.9	107	39	2	30	12 48	0
8	629	38.375	353.5	108	1	3	30	12 48	0
9	630	37.252	350.8	109	2	2	30	12 48	0
10	631	36.377	348.4	110	13	2	30	12 48	0/12
11	632	35.444	347.4	111	30	2	30	12 48	0
12	633	34.402	346.5	112	7	3	30	12 48	1
13	634	33.360	345.8	113	-7	2	30	12 48	0
14	635	32.344	344.9	114	2	2	30	12 48	0
15	636	31.284	344.4	115	9	2	30	12 48	12
16	637	30.222	343.8	116	13	2	30	12 48	0
17	638	29.224	342.4	117	11	2	30	12 48	1
18	639	28.197	341.3	118	18	2	30	12 48	0
19	267	101.088	179.4	119	2	2	30	12 48	12
20	640	26.431	344.4	120	4	4	30	12 48	1

## APPENDIX B

## Archive Tape Data Format

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Archive data tapes are written in SEG Y standard format (Barry et al, 1975). Recording density is 1600 bpi, phase encoded (PE). In order to accomodate seismic refraction data, some minor changes have been made to the tape header fields. A complete list of header fields is provided in the card image portion of the reel identification header, shown below:

```

C 1  REEL IDENTIFICATION HEADER BYTES :
C 2  3217 -3218  SAMPLING INTERVAL (MICROSECS).
C 3  3221 -3222  NUMBER OF SAMPLES PER TRACE.
C 4  3225 -3226  DATA SAMPLE FORMAT CODE.
C 5  3255 -3256  MEASUREMENT SYSTEM (1 = METERS; 2 = FEET)
C 6
C 7
C 8  TRACE IDENTIFICATION HEADER BYTES :
C 9      1 -   4  TRACE SEQUENCE NUMBER WITHIN REEL.
C10     5 -   8  TRACE SEQUENCE NUMBER WITHIN REEL.
C11     9 -  12  STATION LOCATION NUMBER.
C12    29 -  30  TRACE ID CODE (1 = SEISMIC DATA).
C13    37 -  40  SHOTPOINT-RECEIVER DISTANCE (M).
C14    41 -  44  STATION ELEVATION (M).
C15    45 -  48  SHOTPOINT ELEVATION (M).
C16    49 -  52  SOURCE DEPTH (M).
C17    69 -  70  SCALAR TO BE APPLIED TO ALL ELEVATIONS.
C18    71 -  72  SCALAR TO BE APPLIED TO ALL COORDINATES.
C19    73 -  76  SHOTPOINT COORDINATE - X.
C20    77 -  80  SHOTPOINT COORDINATE - Y.
C21    81 -  84  RECEIVER COORDINATE - X.
C22    85 -  88  RECEIVER COORDINATE - Y.
C23    89 -  90  COORDINATE UNITS (1 = METERS; 2 = SECONDS OF ARC).
C24   115 - 116  NUMBER OF SAMPLES IN THIS TRACE.
C25   117 - 118  SAMPLE INTERVAL IN MICROSECONDS FOR THIS TRACE.
C26   121 - 122  INSTRUMENT ATTENUATION IN DB.
C27   157 - 158  SHOT TIME - YEAR.
C28   159 - 160  SHOT TIME - DAY OF YEAR.
C29   161 - 162  SHOT TIME - HOUR OF DAY (24 HOUR CLOCK).
C30   163 - 164  SHOT TIME - MINUTE OF HOUR.
C31   165 - 166  SHOT TIME - SECOND OF MINUTE.
C32   167 - 168  TIME BASIS CODE (2 = GMT).
C33   181 - 182  SHOT TIME - MILLISECONDS.
C34   183 - 184  SHOTPOINT LOCATION NUMBER.
C35   185 - 186  RECORDING INSTRUMENT UNIT NUMBER.
C36   191 - 192  DISTANCE WEIGHTING EXPONENT (HUNDREDTHS).
C37   193 - 194  SHOT SEQUENCE NUMBER (SHOT NUMBER).
C38   195 - 196  SHOT SIZE (KG).
C39   197 - 200  SHOTPOINT - STATION AZIMUTH (SEC OF ARC).
C40   201 - 204  TIME OF FIRST POINT MINUS SHOT TIME (MSEC)

```

The data point format is "32 bit floating point", and the appropriate bytes (3225-3226) of the binary reel id header contain a value of 1. The trace amplitudes have not been adjusted for instrument gain, but the gain correction factor can be estimated from the instrument attenuation value (att) specified in bytes 121-122. To correct for gain, the data should be demeaned and then multiplied by

$$\frac{(att/20)}{10}.$$

The measurement system (bytes 3255-3256 of the binary reel header) is set to 1, meters.

Shotpoint and receiver coordinates are in seconds of arc (byte field 89-90). The coordinate scalar multiplier (bytes 71-72) is set to -100, so the coordinates (bytes 73-88) are in hundredths of a second of arc.

Bytes 157-166 and bytes 181-182 refer to the shot detonation time. The time of the first data sample is found by adding the shot detonation time to the time specified in bytes 201-204.

Since there is no weighting of amplitudes with distance for archive tapes, the distance weighting exponent (bytes 191-192) is not used.

Shot sequence number (bytes 193-194) refers to the order in which shots were fired during the field campaign.

#### REFERENCE

Barry, K.M., D.A. Cavers, and C.W. Kneale (1975). Recommended Standards for Digital Tape Formats, *Geophysics* 40, 344-352.