UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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

Patricia J. Meador, Elizabeth L. Ambos and Gary Fuis[1]

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.

[1]USGS, Menlo Park, California

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TAPE

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

INTRODUCTION

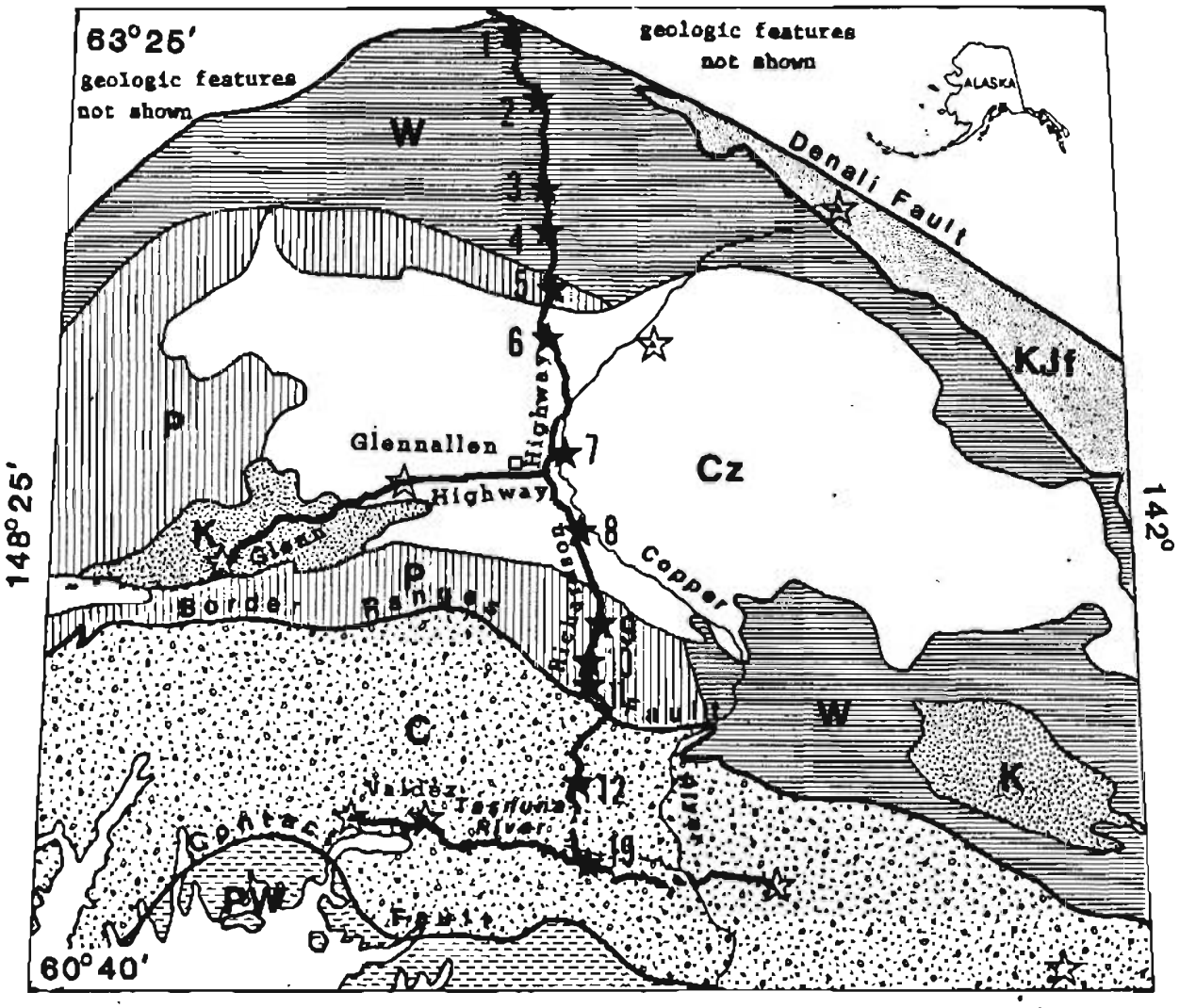
The U.S. Geological Survey conducted a seismic-refraction survey in south-central Alaska in June and July, 1984, in order to develop velocity models along transects (1) in the Chugach Mountains, within the Chugach terrane, (2) on the Glenn Highway west of Glenallen, within the Peninsular-Wrangellia composite 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 accommmodate phases with high apparent velocities at these distances.



(terrane divisions and descriptions taken from Jones and others, 1981)

0 50 km

0 50 mi

EXPLANATION

- Cz — Cenozoic sedimentary and volcanic rocks
- PW — Cenozoic Prince William Terrane
- C — Cretaceous Chugach Terrane
- P — Middle Paleozoic to Mesozoic Peninsular Terrane
- W — Upper Paleozoic to Mesozoic Wrangellia Terrane
- K — Middle to Upper Cretaceous sedimentary rocks
- KJf — Deformed Upper Mesozoic flysch
- ☆★ — Shotpoint location
- Fault
- 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 synchronzing 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.

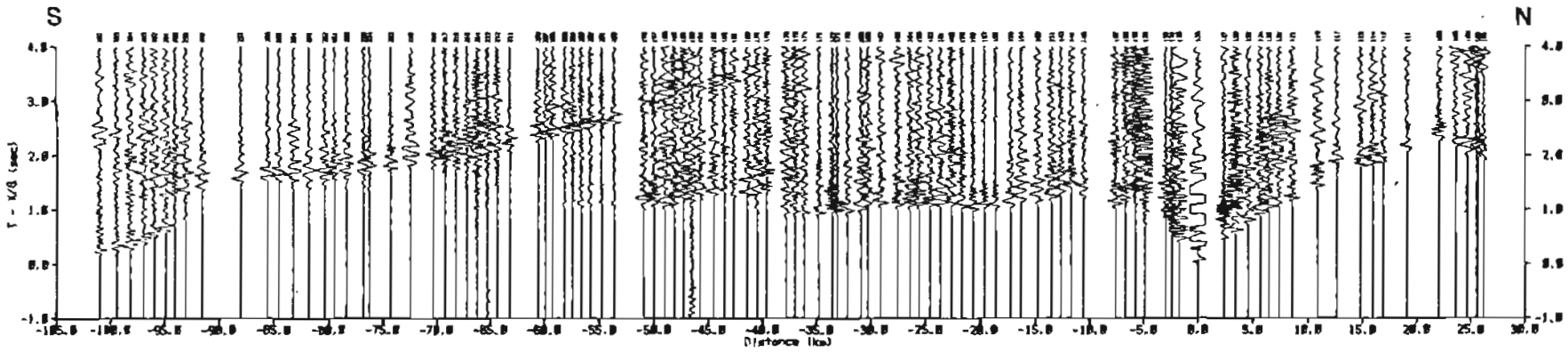
The record sections are plotted with maximum trace amplitudes normalized to a common value and a reducing velocity of 6 km/s.

TAPE

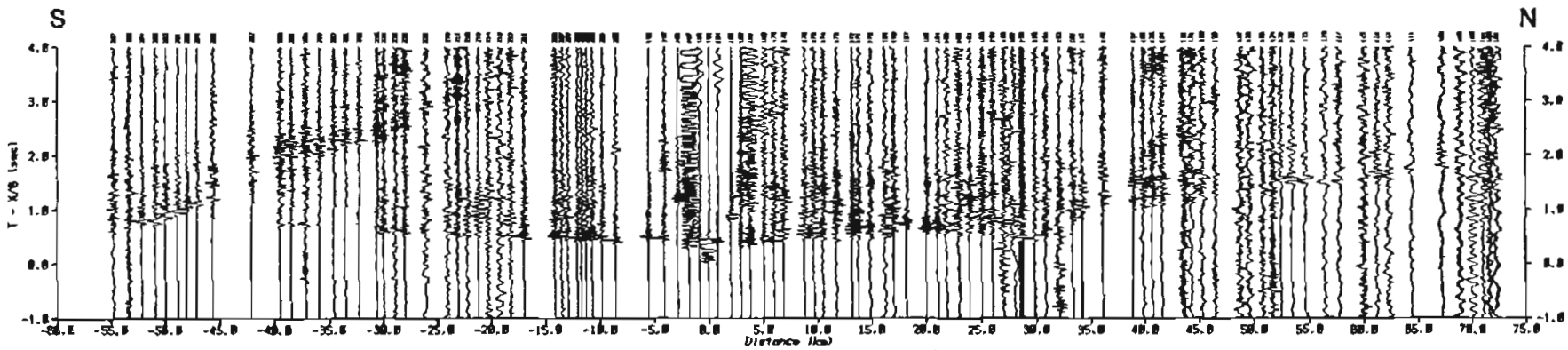
Data included in this report is available on SEGY format tapes recorded at 1600 BPI (Appendix B) from the following:

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

Telephone: (303) 497-6123

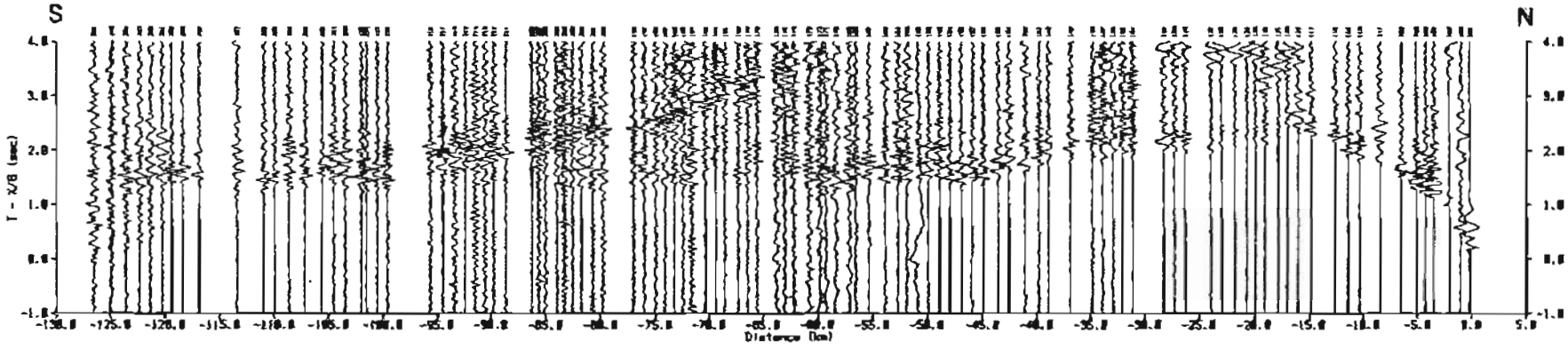


Shot 1, Shotpoint 8

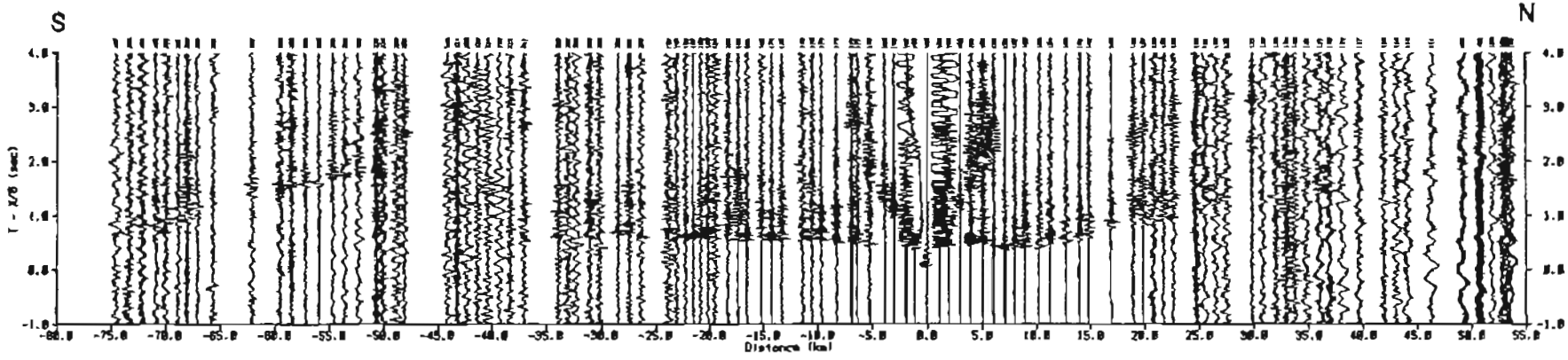


Shot 2, Shotpoint 11

Figure 2: Record sections from the South Richardson profile

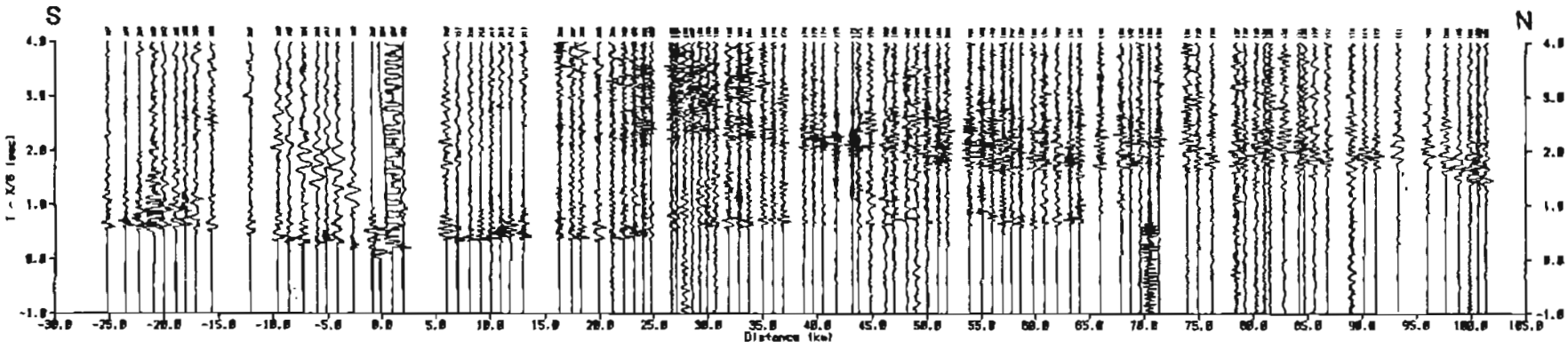


Shot 4, Shotpoint 7

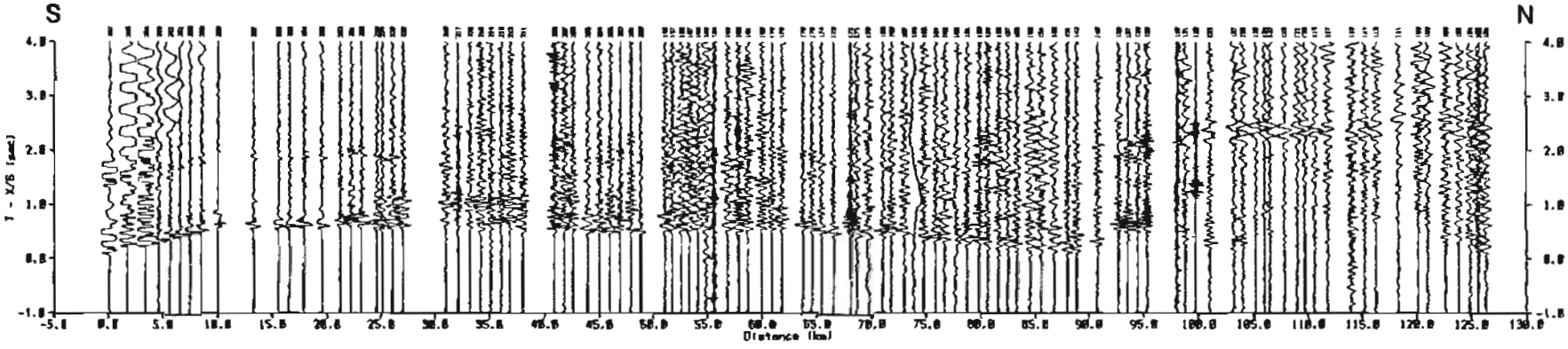


Shot 5, Shotpoint 9

Figure 3: Record sections from the South Richardson profile

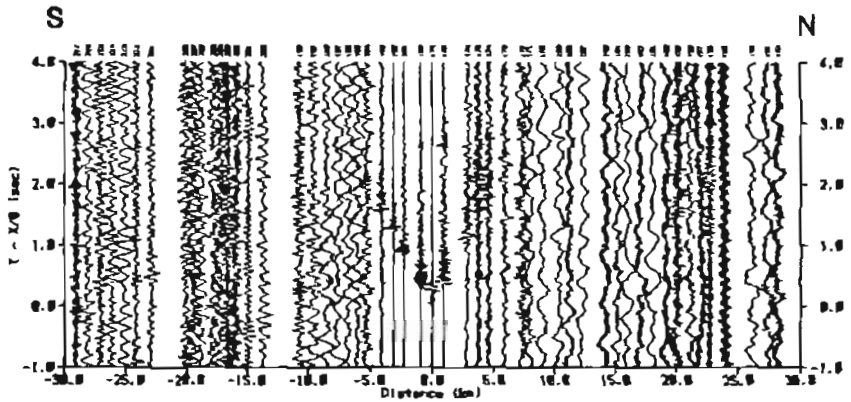


Shot 6, Shotpoint 12



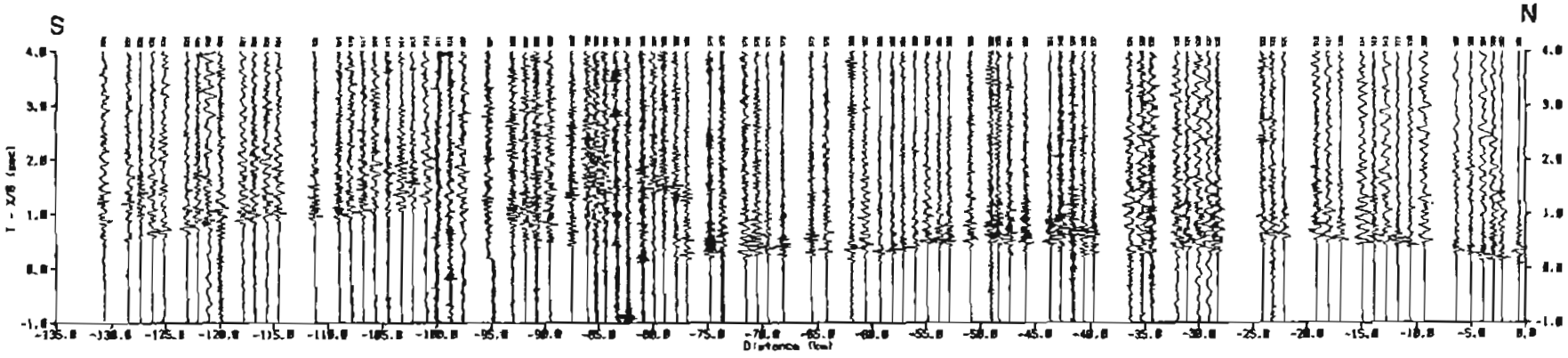
Shot 7, Shotpoint 19

Figure 4: Record sections from the South Richardson profile

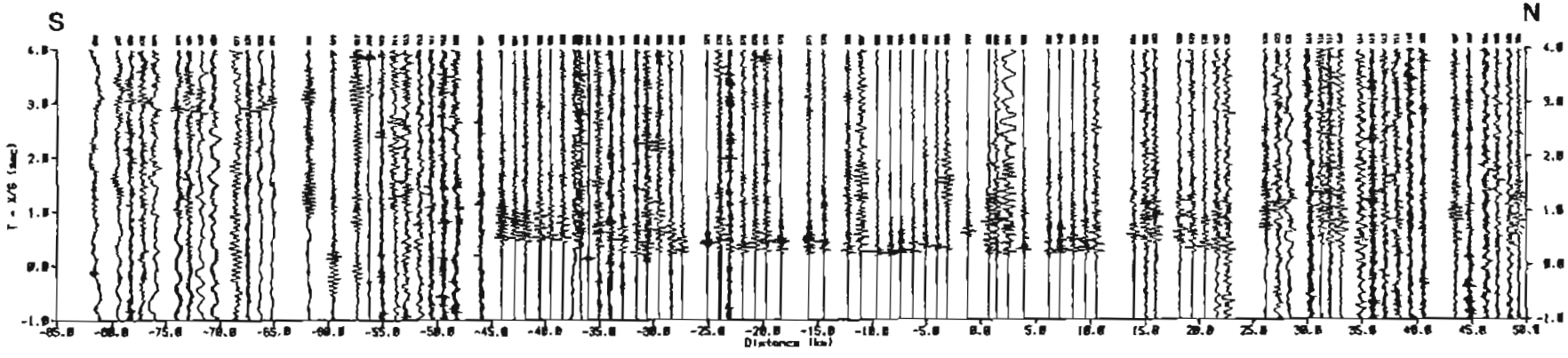


Shot 8, Shotpoint 10

Figure 5: Record section from the South Richardson Highway profile

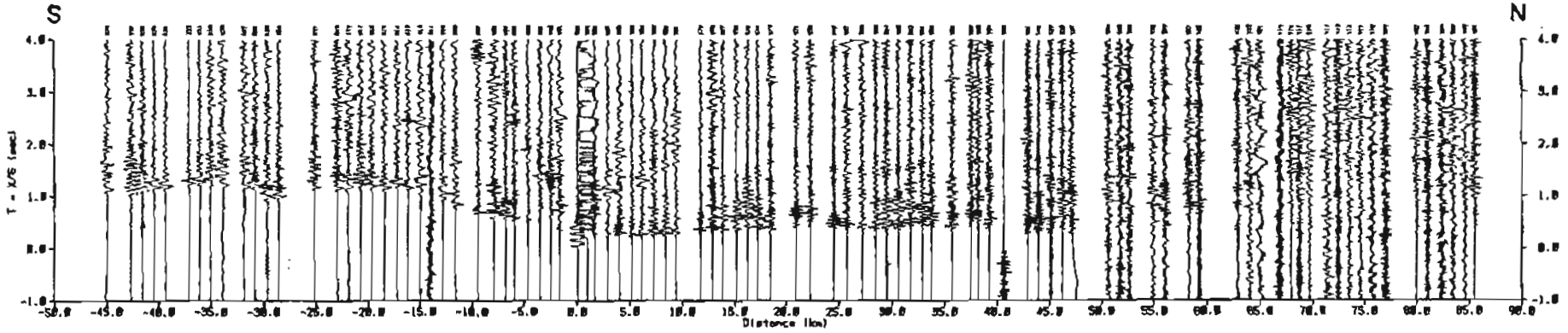


Shot 14, Shotpoint 1

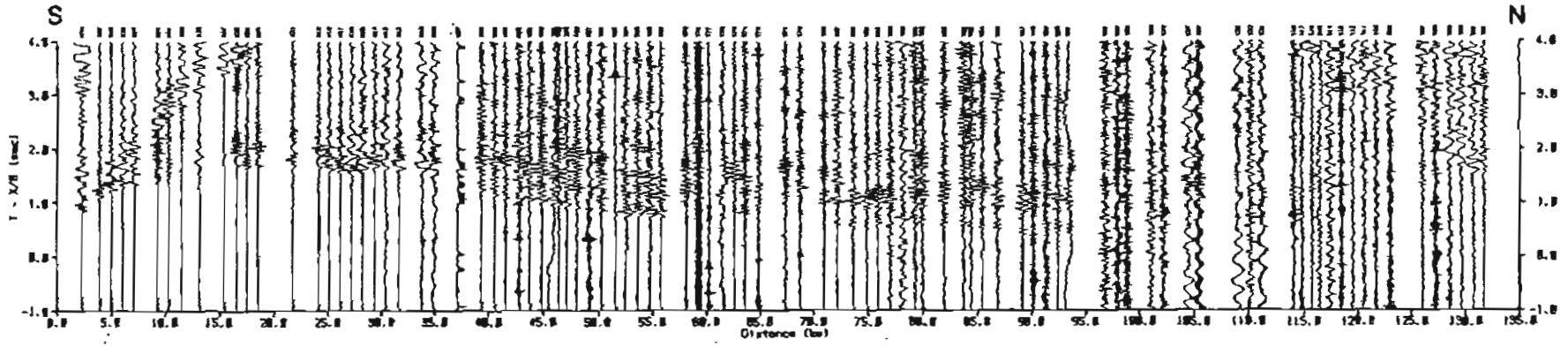


Shot 15, Shotpoint 3

Figure 6: Record sections from the North Richardson Highway profile

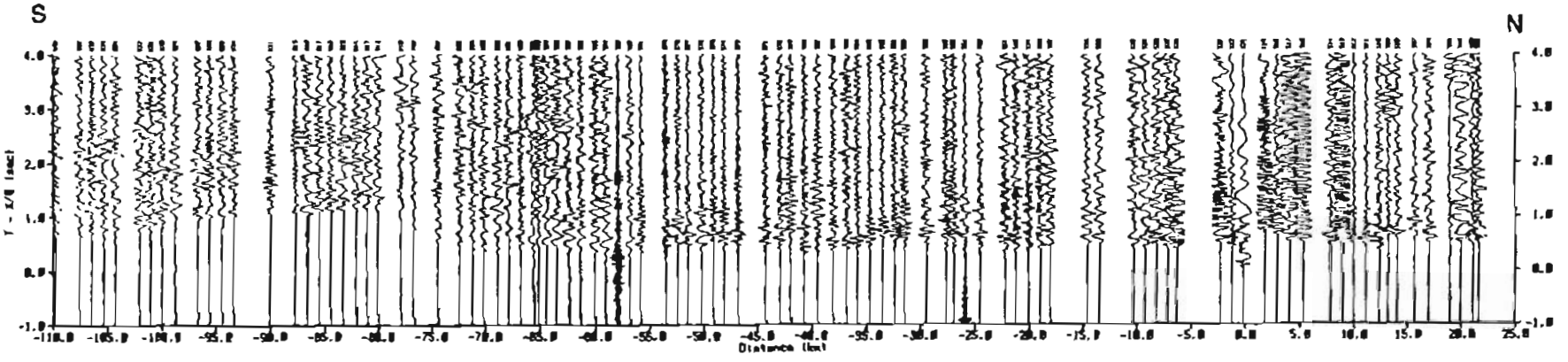


Shot 16, Shotpoint 5

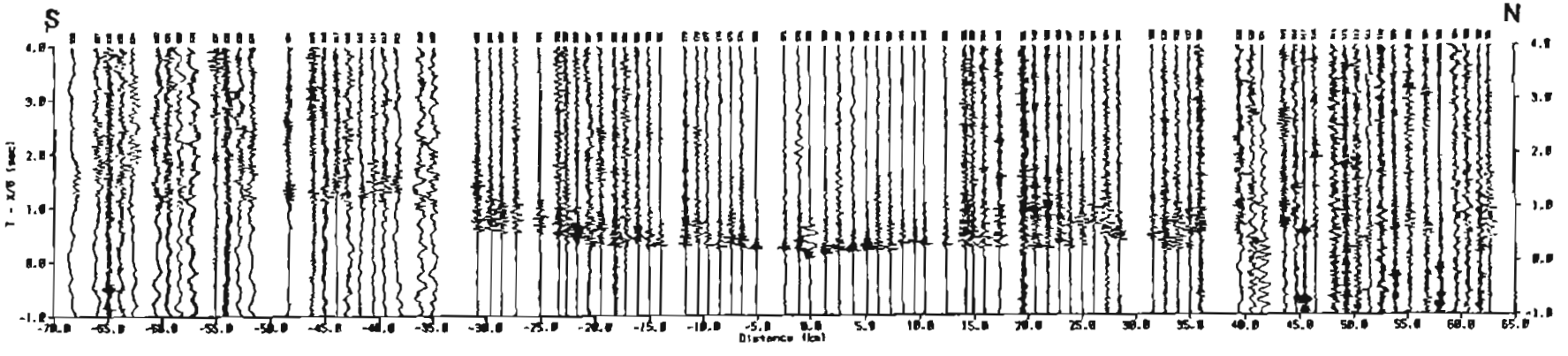


Shot 17, Shotpoint 7

Figure 7: Record sections from the North Richardson Highway profile

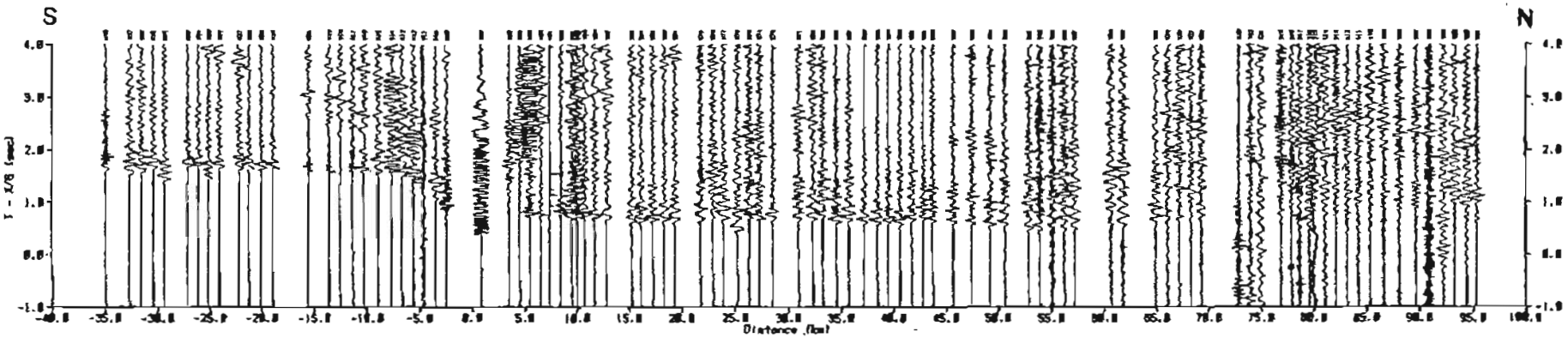


Shot 18, Shotpoint 2

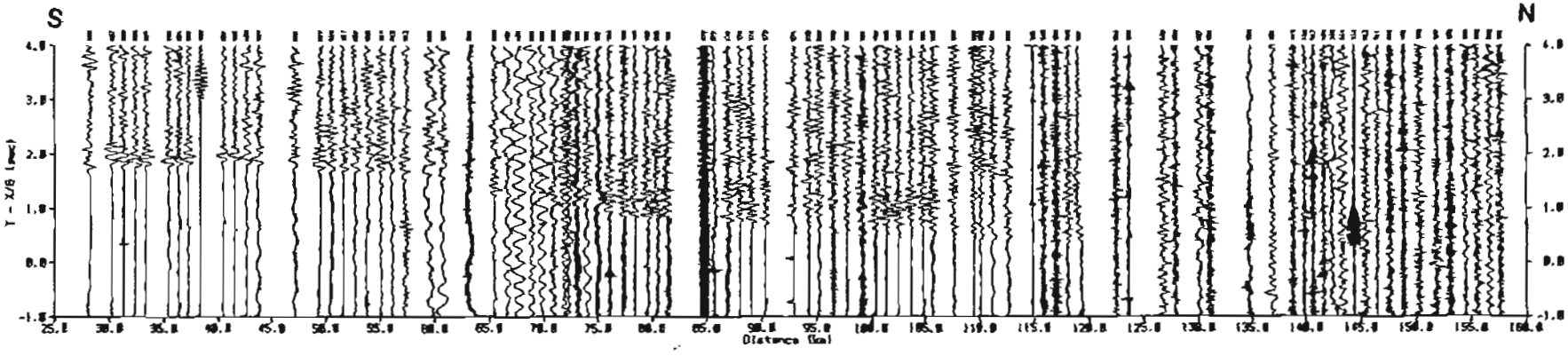


Shot 19, Shotpoint 4

Figure 8: Record sections from the North Richardson Highway profile

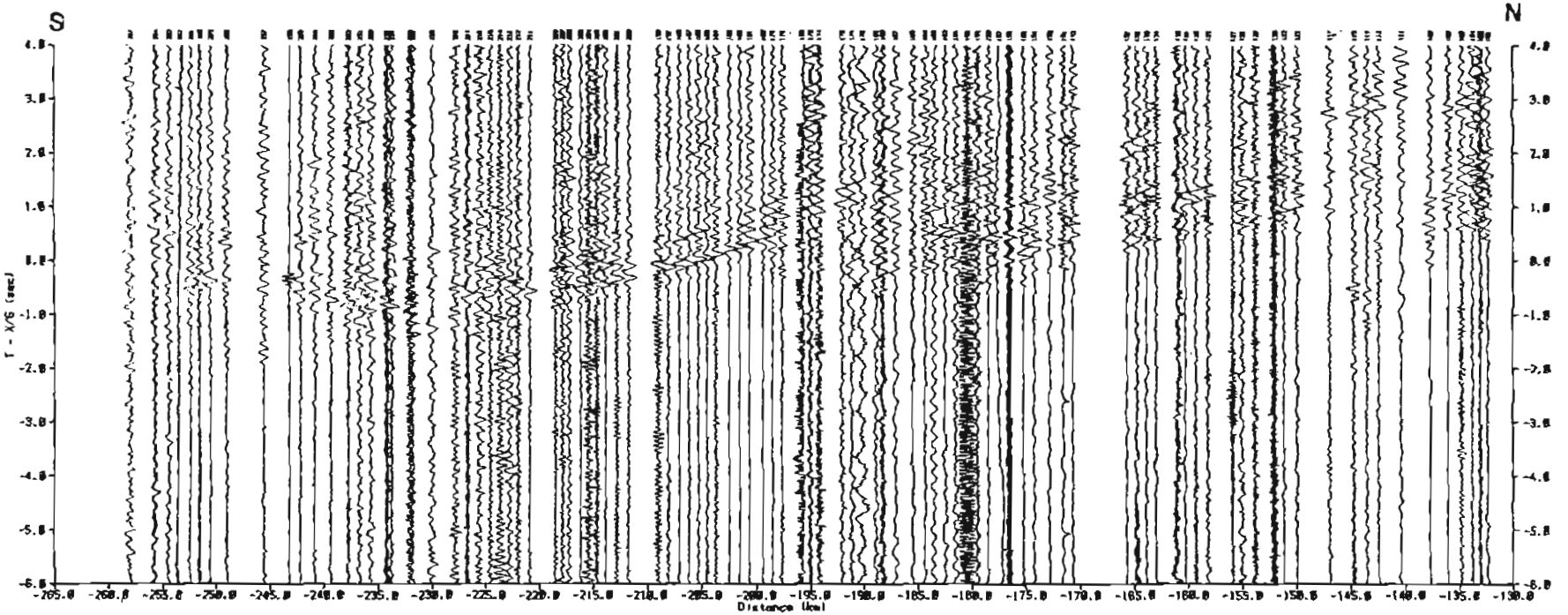


Shot 20, Shotpoint 6



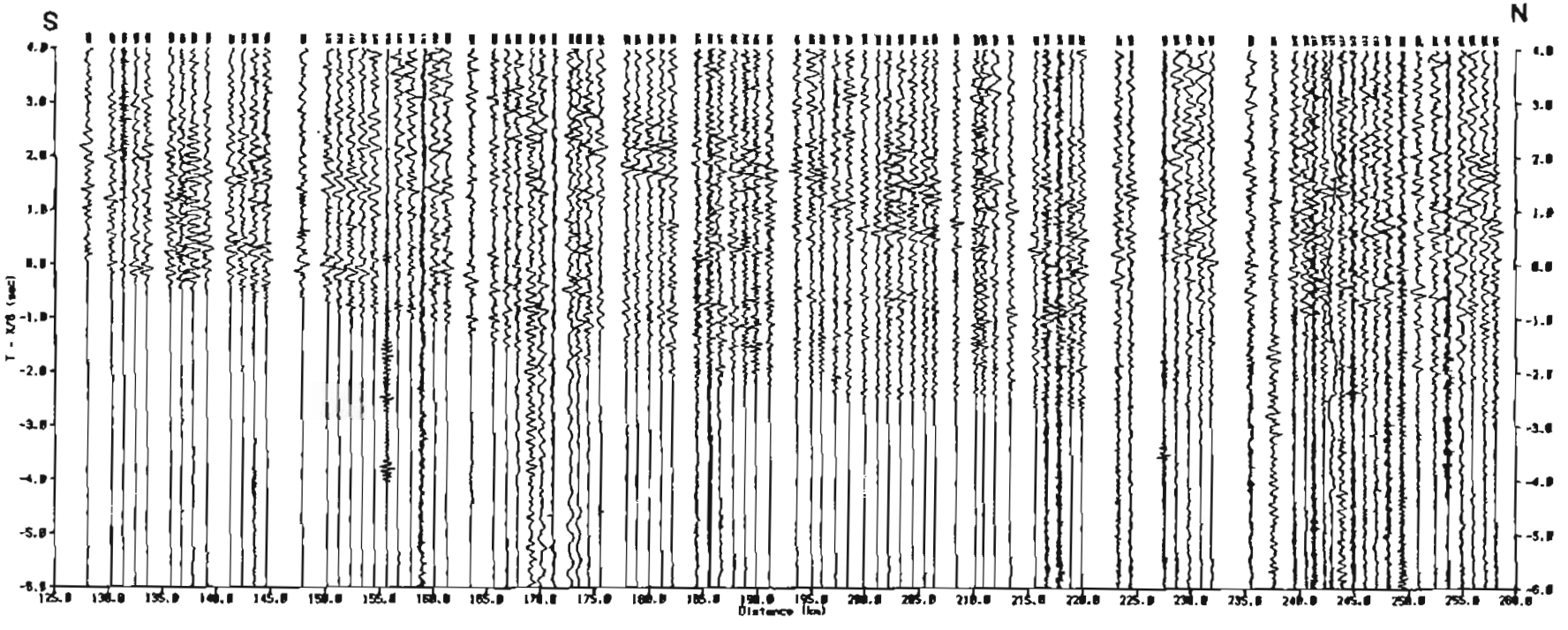
Shot 22, Shotpoint 8

Figure 9: Record sections from the North Richardson Highway profile



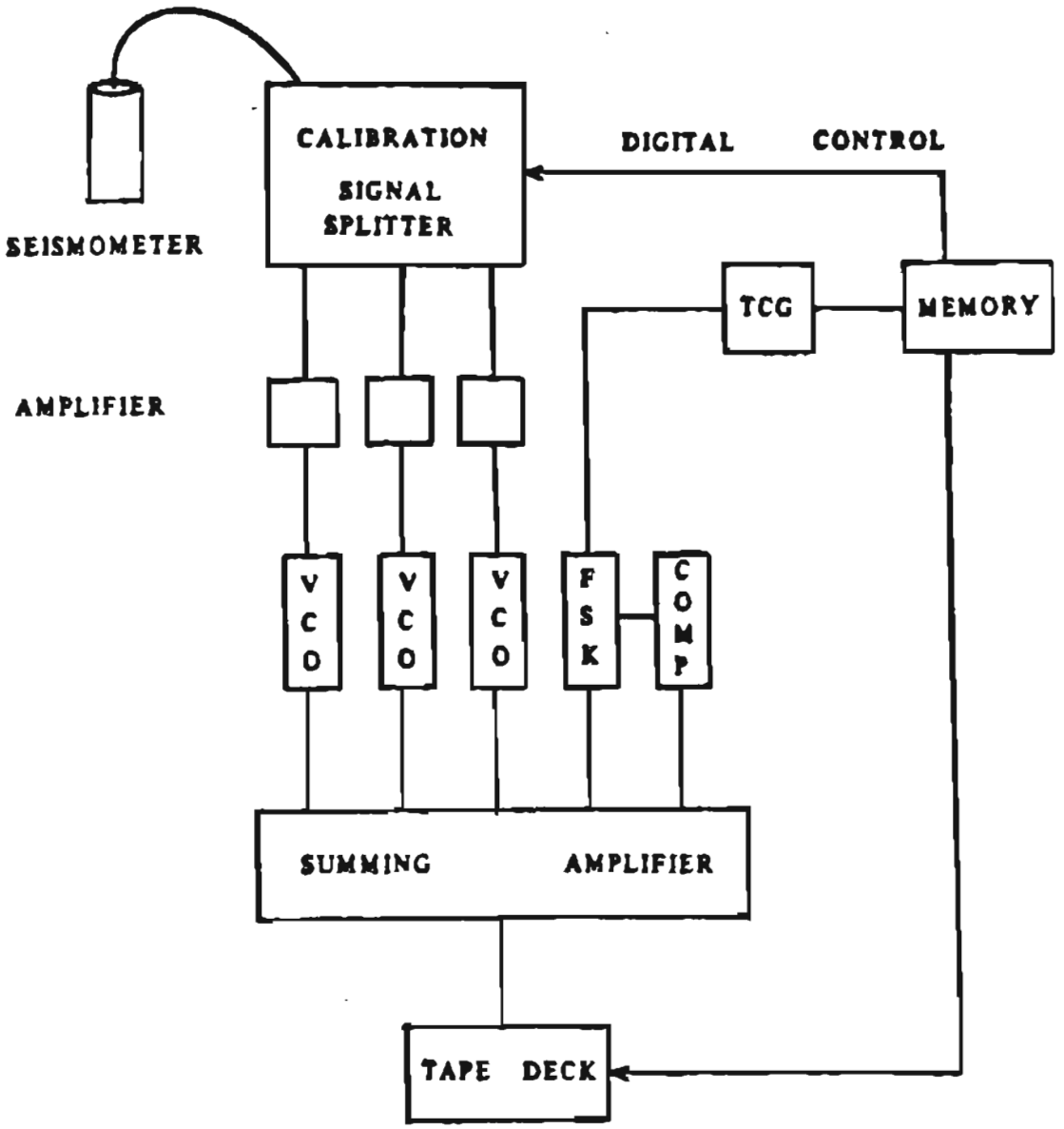
Shot 3, Shotpoint 1

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

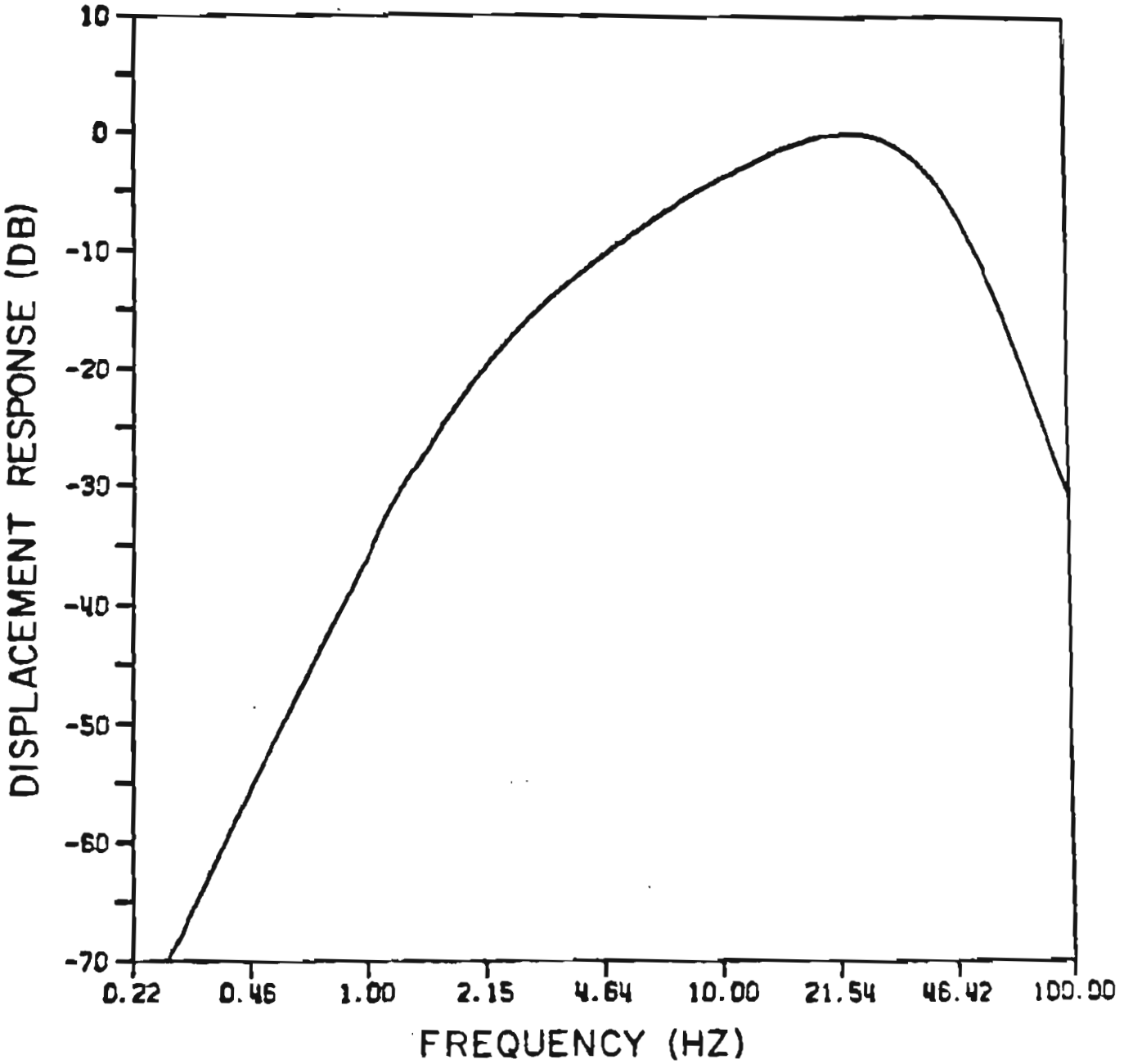


Figure 13: System response curve for cassette recording units with 2-Hz seismometers

ACKNOWLEDGMENTS

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Will Kohler provided description of tape format.

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Healy, J. H., Mooney, W. D., Blank, H. R., Gettings, M. E., Kohler, W. M., Lamson, R. J., and Leone, L. E., 1982, Saudi Arabian Seismic Deep-refraction Profile: Final Project Report: U.S. Geological Survey Open-File Report USGS-OF-02-37, 429 pp.

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Page, R. A., Plafker, G., Fuis, G. S., Nokleberg, W. J., Ambos, E. L., and Mooney, W. D., 1985, Accretion and subduction tectonics in the Chugach Mountains and Copper River Basin, Alaska: Initial results of TACT: Geology, in press.

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)
101	62 9 53.1	145 25 5.5	411
102	62 9 30.9	145 25 36.6	449
103	62 9 23.6	145 27 1.9	478
104	62 8 57.6	145 28 24.6	473
105	62 8 24.2	145 28 36.5	472
106	62 7 45.4	145 28 34.3	469
107	62 7 15.9	145 28 42.7	466
108	62 6 51.3	145 28 30.5	461
109	62 6 24.1	145 28 24.8	460
110	62 5 55.9	145 27 42.0	457
111	62 5 27.6	145 26 56.2	449
112	62 4 56.1	145 26 0.4	434
113	62 4 24.0	145 25 45.2	364
114	62 3 49.4	145 25 43.1	358
115	62 3 10.5	145 25 34.9	344
116	62 2 41.5	145 25 56.8	381
117	62 1 59.9	145 24 50.0	403
118	62 1 47.7	145 23 50.7	411
119	62 1 24.3	145 23 4.6	405
120	62 0 56.9	145 21 42.3	393
121	62 0 36.0	145 20 33.5	393
122	61 59 57.6	145 20 16.2	335
123	61 59 29.7	145 19 57.0	335
124	61 59 4.4	145 19 43.9	327
125	61 58 35.1	145 18 58.2	320
126	61 57 55.8	145 18 43.5	316
127	61 57 31.2	145 17 46.1	312
128	61 56 57.1	145 18 8.7	350
129	61 56 19.8	145 16 44.9	304
130	61 55 38.3	145 18 2.3	358
131	61 55 7.4	145 17 42.8	365
132	61 54 45.5	145 17 9.4	403
133	61 54 20.3	145 16 39.9	411
134	61 53 43.3	145 16 9.2	420
135	61 53 15.6	145 15 45.4	422
136	61 52 48.2	145 15 26.0	426
137	61 52 19.6	145 14 59.6	434
138	61 51 51.1	145 14 36.6	434
139	61 51 23.5	145 14 17.1	443
140	61 50 48.5	145 13 52.4	449
141	61 50 14.7	145 13 21.7	445
142	61 49 45.7	145 13 1.0	435
151	61 49 18.3	145 12 52.8	435
152	61 48 38.0	145 12 32.9	437
153	61 48 15.9	145 11 43.2	438
154	61 47 56.6	145 11 17.7	425
155	61 47 23.9	145 11 23.0	423
156	61 46 43.8	145 10 39.8	426
157	61 46 14.9	145 10 6.2	426
158	61 45 46.3	145 9 21.6	451
159	61 45 13.1	145 9 16.0	457
160	61 44 41.6	145 9 16.4	530
161	61 44 6.0	145 9 30.7	576
162	61 43 34.1	145 9 36.7	609
163	61 42 59.1	145 9 43.6	609
164	61 42 32.5	145 9 38.9	609
165	61 41 57.1	145 9 16.1	615
166	61 41 29.2	145 10 5.2	591
167	61 41 0.8	145 10 4.9	569
168	61 40 22.1	145 10 0.0	548
169	61 39 59.0	145 10 37.8	481
170	61 39 16.0	145 11 1.5	472
171	61 38 43.1	145 11 27.9	478
172	61 38 24.7	145 11 28.3	484
173	61 37 40.9	145 12 3.2	484
174	61 37 0.1	145 12 30.4	493
175	61 36 32.7	145 12 34.3	512
176	61 36 5.9	145 12 56.7	512
177	61 35 43.6	145 13 9.1	515
178	61 35 5.1	145 13 22.1	518
179	61 34 35.7	145 13 35.0	533
180	61 34 6.4	145 13 46.6	548
181	61 33 24.3	145 14 11.1	551
182	61 32 56.2	145 14 4.2	563
183	61 32 24.7	145 14 9.4	557
184	61 31 44.8	145 14 3.0	548
185	61 31 20.2	145 13 37.3	557
186	61 30 55.7	145 13 12.4	563
187	61 30 30.1	145 12 37.3	560
188	61 30 4.3	145 11 48.1	554
197	61 29 34.9	145 10 58.8	563
198	61 29 9.1	145 9 24.9	560
199	61 28 22.2	145 8 34.0	563
200	61 27 48.2	145 7 29.5	579
201	61 27 15.1	145 6 45.5	579
202	61 26 41.9	145 6 34.4	579
203	61 26 13.3	145 6 57.5	479
204	61 25 45.8	145 7 43.3	548
205	61 25 15.8	145 9 3.6	518
206	61 24 36.1	145 10 19.8	487
207	61 24 13.4	145 10 59.6	487
208	61 23 47.6	145 12 24.7	457
209	61 23 17.1	145 13 38.9	457
210	61 22 52.7	145 14 47.2	441
211	61 22 18.6	145 16 3.7	411
212	61 21 40.7	145 16 49.0	402
213	61 21 12.5	145 17 44.0	363
214	61 20 41.9	145 18 26.2	411
215	61 20 11.9	145 18 32.6	422
216	61 19 39.2	145 18 39.9	396
217	61 19 4.8	145 17 44.1	396
218	61 18 30.2	145 16 35.7	373
219	61 17 51.3	145 16 17.9	358
220	61 17 21.6	145 16 10.7	396
222	61 16 20.8	145 16 45.7	360
223	61 15 49.5	145 16 53.4	350
224	61 15 18.0	145 17 6.6	335
225	61 15 0.8	145 17 56.8	411
250	61 14 10.9	145 18 59.2	762
251	61 13 35.1	145 20 4.1	1005
252	61 13 0.5	145 20 19.0	1127
253	61 12 11.4	145 18 52.5	670
254	61 11 25.8	145 17 39.2	1158
255	61 10 43.0	145 17 16.8	1280
256	61 10 18.0	145 17 21.5	1219
257	61 8 49.4	145 18 34.8	1676
258	61 6 56.1	145 19 10.0	1874
259	61 6 7.7	145 18 51.5	1706
260	61 5 36.0	145 18 21.9	1219
261	61 5 8.6	145 18 9.2	1264
262	61 4 33.9	145 18 24.5	960
263	61 4 2.1	145 18 2.2	648
264	61 3 20.8	145 17 51.2	251
265	61 2 39.6	145 16 38.2	152
266	61 2 19.8	145 15 26.9	152
267	61 1 47.0	145 15 35.4	152
290	61 6 3.0	145 18 29.5	1493

North Richardson Highway

Location number	Latitude (deg,min,sec)	Longitude (deg,min,sec)	Elev (m)
501	63 20 34.2	145 42 25.5	822
502	63 19 57.5	145 43 48.5	807
503	63 19 22.1	145 43 26.3	777
504	63 18 48.8	145 43 11.0	777
505	63 18 40.2	145 41 11.8	807
506	63 18 14.0	145 40 36.0	807
507	63 17 36.5	145 39 48.6	822
508	63 16 47.2	145 39 13.2	838
509	63 15 55.5	145 40 35.0	853
510	63 15 12.1	145 41 5.6	853
511	63 14 37.7	145 40 25.8	883
512	63 14 8.5	145 39 42.8	883
513	63 13 33.0	145 39 6.5	899
514	63 13 0.9	145 38 31.6	914
515	63 12 32.4	145 37 58.8	914
516	63 12 13.8	145 35 51.6	937
517	63 11 46.0	145 34 41.9	975
518	63 11 24.3	145 33 11.4	1005
519	63 10 52.6	145 32 17.6	990
520	63 10 21.5	145 31 52.0	990
521	63 9 51.2	145 32 7.9	990
522	63 9 19.2	145 31 43.2	990
523	63 8 42.0	145 32 11.8	1005
524	63 8 6.8	145 30 25.3	981
525	63 7 35.5	145 29 28.4	981
526	63 6 49.1	145 29 14.8	981
527	63 6 17.5	145 29 28.4	981
528	63 5 40.9	145 29 49.6	1005
529	63 5 3.5	145 30 3.7	944
530	63 4 26.2	145 30 37.8	944
531	63 3 54.9	145 30 37.0	944
532	63 3 14.4	145 29 47.8	883
533	63 2 45.9	145 29 37.5	853
534	63 2 9.3	145 29 31.6	838
535	63 1 27.6	145 29 31.6	813
536	63 0 55.9	145 29 12.7	795
537	63 0 18.4	145 29 27.6	792
538	62 59 46.9	145 29 36.2	792
539	62 59 10.9	145 30 2.1	792
540	62 58 32.6	145 30 19.8	792
551	62 57 59.7	145 30 27.5	792
552	62 57 18.7	145 30 28.4	792
553	62 56 45.0	145 30 43.0	792
554	62 56 0.2	145 30 9.9	807
555	62 55 26.8	145 29 59.2	822
556	62 55 4.3	145 29 58.2	822
557	62 54 38.5	145 29 52.4	807
558	62 54 7.2	145 29 7.5	883
559	62 53 36.1	145 29 0.3	899
560	62 53 3.8	145 28 59.0	899
561	62 52 35.7	145 28 31.7	899
562	62 52 0.1	145 28 22.8	893
563	62 51 23.3	145 28 13.4	893
564	62 50 47.1	145 28 5.4	899
565	62 50 14.5	145 28 18.4	868
566	62 49 32.4	145 29 3.2	829
567	62 48 44.5	145 29 43.5	822
568	62 48 5.6	145 29 14.4	801
569	62 47 25.1	145 28 27.5	777
570	62 46 55.4	145 28 0.7	783
571	62 46 11.6	145 27 47.8	792
572	62 45 31.1	145 27 31.4	822
573	62 44 51.6	145 26 45.9	838
574	62 44 10.9	145 26 1.8	807
575	62 43 39.0	145 25 54.3	798
576	62 43 3.6	145 25 54.8	807
577	62 42 22.0	145 26 17.6	769
578	62 41 50.7	145 26 43.1	722
579	62 41 13.9	145 26 52.1	786
580	62 40 36.4	145 27 48.7	774
581	62 39 55.9	145 28 52.4	716
582	62 39 23.2	145 28 56.8	748
583	62 38 48.2	145 28 41.7	746
584	62 38 12.6	145 28 16.0	731
585	62 37 43.1	145 27 12.0	679
586	62 37 1.8	145 26 30.3	676
587	62 36 26.3	145 26 42.8	676
588	62 35 49.3	145 27 34.8	676
589	62 35 18.4	145 28 11.7	670
590	62 34 55.7	145 27 24.7	670
591	62 34 37.1	145 29 17.4	640
600	62 34 0.9	145 29 37.4	624
601	62 33 24.8	145 29 51.6	603
602	62 32 51.3	145 30 29.6	600
603	62 32 9.1	145 30 55.4	594
604	62 31 36.6	145 30 44.4	579
605	62 30 57.1	145 30 43.2	594
606	62 30 28.4	145 30 6.0	594
607	62 29 53.5	145 28 40.3	594
608	62 29 25.8	145 27 57.4	582
609	62 28 44.1	145 25 48.8	585
610	62 28 6.4	145 25 26.8	579
611	62 27 32.1	145 24 50.3	569
612	62 26 58.1	145 24 39.3	563
613	62 26 18.4	145 24 40.1	569
614	62 25 45.4	145 24 38.5	569
615	62 25 8.0	145 23 47.2	563
616	62 24 33.4	145 22 49.4	542
617	62 23 59.4	145 22 30.1	554
618	62 23 24.2	145 21 57.0	533
619	62 22 50.9	145 21 32.9	542
620	62 22 12.4	145 21 53.2	539
621	62 21 35.4	145 22 14.8	533
622	62 20 57.9	145 21 54.2	533
623	62 20 23.7	145 21 53.8	518
624	62 19 47.9	145 21 20.0	509
625	62 19 13.3	145 20 59.4	502
626	62 18 37.9	145 20 29.6	502
627	62 18 2.3	145 20 55.6	481
628	62 17 26.5	145 21 4.8	456
629	62 16 51.5	145 21 42.8	475
630	62 16 7.7	145 23 34.4	445
631	62 15 30.7	145 25 19.7	487
632	62 14 57.2	145 25 37.5	487
633	62 14 20.3	145 25 58.7	484
634	62 13 44.5	145 26 8.5	484
635	62 13 8.7	145 26 23.8	487
636	62 12 32.9	145 26 26.1	484
637	62 11 57.1	145 26 27.1	484
638	62 11 19.4	145 26 54.7	484
639	62 10 42.8	145 27 5.8	484
640	62 10 2.1	145 24 54.7	396

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 0 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	60	0/30
2	225	76.747	180.0	2	31	1	30	12	80	0
3	250	78.309	181.4	3	13	1	30	12	60	0
4	251	79.447	182.1	4	-96	1	30	12	60	0
5	252	80.344	182.2	5	19	1	30	12	40	0
6	253	81.021	181.3	6	9	1	30	12	40	0
7	254	83.213	180.6	7	-3	1	30	12	40	0
8	255	84.531	180.3	8	35	1	30	12	40	0
9	256	85.550	180.4	9	106	1	30	12	40	0
10	257	88.052	181.1	10	37	1	30	12	40	0
11	258	91.564	181.3	11	-24	1	30	12	40	0
12	259	93.050	181.1	12	19	1	30	12	40	0
13	260	94.022	180.9	13	15	1	30	12	40	0
14	261	94.866	180.8	14	38	2	30	12	40	0
15	262	95.942	180.9	15	11	2	30	12	40	0
16	263	96.917	180.7	16	9	2	30	12	40	0/30
17	264	98.193	180.6	17	17	2	30	12	60	0
18	265	99.459	179.9	18	-16	2	30	12	80	0
19	266	100.078	179.3	19	-31		30	12	88	31
20	267	101.000	179.4	20	13	1	30	12	80	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 1 SHOT POINT 0 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	40	0
2	203	56.587	171.2	22	13	1	30	12	40	0
3	204	57.354	172.0	23	1	1	30	12	40	0
4	205	58.102	173.3	24	-6	1	30	12	40	0
5	206	59.204	174.5	25	21	1	30	12	40	0
6	207	59.851	175.1	26	4	1	30	12	40	0
7	208	60.555	176.4	27	10	1	30	12	40	0
8	210	62.156	178.4	28	--		30	12	40	1
9	211	63.192	179.4	29	12	1	30	12	40	0
10	212	64.362	180.1	30	6	1	30	12	40	0
11	213	65.242	180.8	31	7	3	30	12	40	17
12	214	66.197	181.3	32	12	1	30	12	40	0
13	215	67.130	181.4	33	22	1	30	12	40	0
14	216	68.144	181.4	34	9	1	30	12	40	0
15	217	69.193	180.7	35	-36	1	30	12	40	0
16	218	70.259	179.9	36	-2	3	30	12	40	0
17	220	72.383	179.6	37	4	1	30	12	60	0
18	221			38	2		30	12	60	2
19	222	74.262	180.8	39	2	1	30	12	60	0/30
20	223	75.000	180.1	40	7		30	12	80	17

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 1 SHOT POINT 0 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	40	0
2	200	53.609	171.2	42	7	1	30	12	40	0
3	198	50.894	172.7	43	-20	1	30	12	40	0
4	197	49.957	174.8	44	-29	1	30	12	40	0
5	188	48.967	174.9	45	3	1	30	12	60	0
6	187	48.112	175.7	46	4	1	30	12	60	0
7	186	47.285	176.2	47	14	1	30	12	80	0
8	185	46.504	176.6	48	-22	1	30	12	80	0/12
9	184	45.723	177.0	49	9	1	30	12	80	0
10	183	44.485	177.1	50	-13	1	30	12	60	0
11	182	43.515	176.9	51	28	1	30	12	40	0
12	181	42.642	177.0	52	11	1	30	12	60	0
13	180	41.360	176.4	53	7	1	30	12	80	0
14	179	40.468	176.1	54	-16	1	30	12	80	0
15	178	39.573	175.7	55	9	1	30	12	80	0
16	177	38.400	175.3	56	12		30	12	60	1
17	176	37.728	174.9	57	66	1	30	12	60	0
18	175	36.932	174.3	58	13	1	30	12	60	0
19	174	36.094	174.1	59	-3	1	30	12	40	0
20	173	34.750	173.2	60	-8	1	30	12	40	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 1 SHOT POINT 0 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	40	0
2	154	16.295	162.9	62	6	3	30	12	40	0
3	155	17.246	164.2	63	9	1	30	12	40	0
4	156	18.615	163.3	64	15	1	30	12	40	0
5	157	19.613	162.7	65	-18	3	30	12	40	0
6	158	20.658	161.7	66	63	3	30	12	40	0
7	159	21.659	162.3	67	-4	1	30	12	40	0
8	160	22.589	163.1	68	-9	1	30	12	40	0
9	161	23.589	164.4	69	5	1	30	12	60	0
10	162	24.528	165.2	70	31	1	30	12	60	0
11	164	26.360	166.3	71	8	1	30	12	80	0
12	163	25.544	166.0	72	17	1	30	12	80	0
13	165	27.505	166.2	73	-14	1	30	12	80	0
14	166	28.184	168.0	74	0		30	12	80	2
15	167	29.047	168.4	75	15	1	30	12	80	8
16	168	30.235	168.7	76	9	1	30	12	60	0
17	169	30.836	170.0	77	5	1	30	12	40	0
18	170	32.090	171.0	78	3	1	30	12	40	0
19	171	33.042	171.5	79	25	1	30	12	40	0
20	172	33.605	172.1	80	14	1	30	12	40	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	13.404	165.4	81	-9	3	30	12	40	0
2	142	12.632	165.0	82	-8	3	30	12	40	0
3	141	11.605	165.3	83	17	3	30	12	40	0
4	140	10.562	166.2	84	20	3	30	12	40	0
5	139	9.424	166.8	85	--		30	12	40	1
6	138	8.527	167.3	86	8		30	12	40	3
7	137	7.595	168.3	87	--	3	30	12	40	0
8	136	6.651	170.8	88	25	3	30	12	40	0
9	135	5.767	171.3	89	12	3	30	12	40	0
10	134	4.874	173.9	90	18	3	30	12	40	0
11	133	3.700	178.9	91	6		30	12	40	1
12	132	2.942	187.0	92	6	3	30	12	40	0
13	131	2.397	208.6	93	12	3	30	12	60	0
14	130	1.711	221.3	94	22	3	30	12	60	0
15	129	0.000	180.0	95	27	3	30	12	80	0/17
16	128	1.680	313.3	96	-13	3	30	12	60	1
17	127	2.384	338.8	97	7	3	30	12	60	0
18	126	3.437	329.8	98	7	3	30	12	40	0
19	125	4.617	335.1	99	17	3	30	12	40	0
20	124	5.719	332.9	100	15	3	30	12	40	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	80	0
2	102	25.682	342.5	102	9	1	30	12	80	0
3	103	25.060	339.7	103	0		30	12	60	17
4	104	25.569	336.6	104	0	3	30	12	40	0
5	105	24.697	335.2	105	22	3	30	12	40	0
6	106	23.596	334.1	106	-8	1	30	12	40	0/30
7	108	22.879	332.3	107	-55	3	30	12	40	0
8	109	21.290	331.4	108	0		30	12	40	3
9	110	20.233	331.0	109	--		30	12	40	1
10	111	19.149	332.3	110	19	3	30	12	40	0
11	113	16.926	332.3	111	12	3	30	12	40	0
12	114	15.971	330.6	112	11	3	30	12	40	0
13	115	14.872	328.0	113	-11	3	30	12	40	0
14	116	14.288	325.0	114	--		30	12	40	1
15	117	12.679	326.1	115	4	3	30	12	40	0
16	119	10.925	329.6	116	20	3	30	12	40	0
17	120	9.609	333.2	117	3		30	12	40	3
18	121	8.602	337.2	118	11	3	30	12	40	0
19	122	7.411	335.5	119	4	3	30	12	40	0
20	123	6.511	334.5	120	2	3	30	12	40	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	80	8
2	225	30.560	187.2	2	51	2	30	12	80	0
3	250	32.210	188.5	3	13	2	30	12	60	0
4	251	33.466	189.9	4	-96	2	30	12	60	0
5	252	34.560	189.9	5	19	2	30	12	40	0
6	253	35.868	187.5	6	9	2	30	12	40	0
7	254	37.148	185.6	7	-3	2	30	12	40	8
8	255	38.436	184.9	8	25	2	30	12	40	8
9	256	39.459	184.8	9	106	2	30	12	40	0
10	257	42.046	186.0	10	37	2	30	12	40	0
11	258	45.592	186.2	11	-24	2	30	12	40	0
12	259	47.051	185.7	12	19	2	30	12	40	0
13	260	47.987	185.1	13	15	1	30	12	40	0
14	261	48.817	184.0	14	38	2	30	12	40	0
15	262	49.907	184.9	15	11	2	30	12	40	0
16	263	50.859	184.4	16	9	2	30	12	40	0
17	264	52.123	184.2	17	17	2	30	12	60	0
18	265	53.327	182.9	18	-16	2	30	12	80	6
19	266	53.898	181.7	19	-31		30	12	80	2
20	267	54.758	181.0	20	13	2	30	12	80	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 2 SHOT POINT 11 TEAM 2
SHOT TIME: 176:18: 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	40	0
2	203	11.193	149.1	22	13	1	30	12	40	0
3	204	11.624	153.2	23	1	1	30	12	40	8
4	205	11.987	160.2	24	-6	1	30	12	40	0
5	206	12.846	166.8	25	21	1	30	12	40	0
6	207	13.417	170.0	26	4	1	30	12	40	0
7	208	14.852	175.6	27	10	1	30	12	40	0
8	210	15.743	183.8	28	--		30	12	40	1
9	211	16.906	187.4	29	12	2	30	12	40	0
10	212	18.162	189.0	30	6	1	30	12	40	8
11	213	19.165	191.0	31	7	1	30	12	40	0
12	214	20.216	192.2	32	12	1	30	12	40	0
13	215	21.147	192.0	33	32	1	30	12	40	0
14	216	22.159	191.7	34	10	1	30	12	40	0
15	217	23.057	189.1	35	-36	1	30	12	40	0
16	218	23.982	186.3	36	-2	1	30	12	40	0
17	220	26.058	185.8	37	4	2	30	12	60	8
18	221			38	2		30	12	60	2
19	222	27.988	185.7	39	2	2	30	12	60	0
20	223	28.675	185.8	40	7	2	30	12	80	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 2 SHOT POINT 11 TEAM 3
SHOT TIME: 176:10: 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	0
2	200	8.525	140.3	42	7	1	30	12	48	0
3	198	5.514	137.4	43	-28	3	30	12	48	0
4	197	4.093	142.8	44	-29	3	30	12	48	0
5	188	2.851	145.5	45	3	3	30	12	68	0
6	187	1.786	150.3	46	4	1	30	12	68	0
7	186	0.843	154.2	47	14	3	30	12	88	0
8	185	0.001	360.0	48	-22	3	30	12	88	0
9	184	0.851	333.5	49	9	3	30	12	88	0
10	183	2.052	346.6	50	-13	3	30	12	68	0
11	182	2.999	352.4	51	28	3	30	12	48	0
12	181	3.873	352.6	52	11	1	30	12	68	0
13	180	5.147	358.5	53	7	1	30	12	88	0
14	179	6.052	0.3	54	-16	1	30	12	88	0
15	178	6.966	1.8	55	9	1	30	12	88	0
16	177	8.164	2.9	56	12		30	12	68	1
17	176	8.864	3.9	57	66	1	30	12	68	0
18	175	9.718	5.5	58	13	1	30	12	68	0
19	174	10.569	5.4	59	-3	1	30	12	48	0
20	173	11.813	6.7	60	-8	2	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 2 SHOT POINT 11 TEAM 4
SHOT TIME: 176:10: 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	0
2	154	30.914	3.8	62	6	2	30	12	48	0
3	155	29.897	3.8	63	9	2	30	12	48	0
4	156	28.709	5.2	64	15	2	30	12	48	0
5	157	27.870	6.4	65	-10	2	30	12	48	0
6	158	27.873	8.8	66	63	1	30	12	48	0
7	159	26.869	8.5	67	-4	2	30	12	48	0
8	160	25.184	8.8	68	-9	2	30	12	48	0
9	161	23.983	8.7	69	5	2	30	12	68	0
10	162	22.993	8.9	70	31	2	30	12	68	0
11	164	21.186	9.6	71	8	2	30	12	88	0
12	163	21.907	9.8	72	17	2	30	12	88	0
13	165	20.887	11.1	73	-14	2	30	12	88	0
14	166	19.111	9.4	74	8		30	12	88	2
15	167	18.243	9.9	75	15	1	30	12	88	0
16	168	17.879	10.0	76	9	1	30	12	68	0
17	169	16.277	9.4	77	5	2	30	12	48	0
18	170	14.908	8.9	78	3	2	30	12	48	0
19	171	13.842	7.9	79	25	2	30	12	48	0
20	172	13.276	8.2	80	14	1	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 2 SHOT POINT 11 TEAM 5
SHOT TIME: 176:10: 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	0
2	142	34.226	0.9	82	-8	1	30	12	48	0
3	141	35.122	0.4	83	17		30	12	48	3
4	140	36.167	359.6	84	20	2	30	12	48	0
5	139	37.254	359.1	85	--		30	12	48	1
6	138	38.115	358.7	86	0		30	12	48	2
7	137	39.084	358.2	87	--	1	30	12	48	0/17
8	136	39.909	357.7	88	25	2	30	12	48	0
9	135	40.765	357.4	89	12	2	30	12	48	0
10	134	41.637	356.9	90	18	2	30	12	48	0
11	133	42.808	356.4	91	6		30	12	48	1
12	132	43.614	355.9	92	6	2	30	12	48	0
13	131	44.327	355.3	93	12	2	30	12	68	0
14	130	45.305	355.1	94	22	2	30	12	68	0
15	129	46.505	356.6	95	27	1	30	12	88	9
16	128	47.743	355.2	96	-13		30	12	68	1
17	127	48.771	355.7	97	7	2	30	12	68	0/ 9
18	126	49.598	354.8	98	7	2	30	12	48	0/ 9
19	125	50.829	354.7	99	17	2	30	12	48	0/ 9
20	124	51.750	354.0	100	15	2	30	12	48	0/ 9

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 2 SHOT POINT 11 TEAM 6
SHOT TIME: 176:10: 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	25
2	102	71.691	351.6	102	9	2	30	12	88	25
3	103	71.661	350.5	103	0	2	30	12	68	0
4	104	71.078	349.5	104	0	3	30	12	48	0
5	105	70.096	349.2	105	22	1	30	12	48	12
6	106	68.908	349.0	106	-8	2	30	12	48	12
7	108	67.257	348.8	107	-55	2	30	12	48	21
8	109	66.415	348.7	108	1		30	12	48	3
9	110	65.436	349.1	109	--		30	12	48	1
10	111	64.453	349.5	110	19	2	30	12	48	21
11	113	62.331	350.1	111	12	2	30	12	48	21
12	114	61.271	350.0	112	12	2	30	12	48	12
13	115	60.866	349.9	113	-11	2	30	12	48	12
14	116	59.238	349.5	114	--		30	12	48	1
15	117	57.800	350.2	115	4	2	30	12	48	12
16	119	56.466	351.5	116	20	2	30	12	48	12
17	120	55.459	352.6	117	3		30	12	48	3
18	121	54.696	353.6	118	11		30	12	48	0
19	122	53.485	353.7	119	4	2	30	12	48	0
20	123	52.590	353.9	120	2	2	30	12	48	0

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	08	0
2	225	234.136	174.9	2	51	2	30	12	08	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	40	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	40	0
10	257	245.520	175.2	10	37	2	30	12	40	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	40	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	40	0/ 9
17	264	255.690	175.3	17	17	2	30	12	68	0/ 9
18	265	257.045	175.1	18	-16		30	12	08	2
19	266	257.746	174.9	19	-31		30	12	08	2
20	267	258.000	174.9	20	13	2	30	12	08	0/ 9

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	40	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	40	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	40	0
10	212	221.926	174.4	30	6	2	30	12	40	0
11	213	222.719	174.6	31	7	1	30	12	40	0
12	214	223.602	174.8	32	12	1	30	12	40	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	40	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		30	12	68	2
19	222	231.767	174.6	39	2	2	30	12	68	0
20	223	232.088	174.6	40	7	2	30	12	08	0

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	40	0
3	198	208.982	172.3	43	-20	2	30	12	40	0/12
4	197	207.952	172.6	44	-29	2	30	12	40	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	08	0
8	185	204.424	173.1	48	-22	2	30	12	08	0
9	184	203.627	173.2	49	9	2	30	12	08	0/12
10	183	202.392	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	08	0
14	179	198.433	172.9	54	-16	2	30	12	08	0
15	178	197.554	172.8	55	9	2	30	12	08	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	40	0/12

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	40	0
2	154	174.193	171.3	62	6	2	30	12	48	0
3	155	175.172	171.4	63	9	2	30	12	40	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	40	0
6	158	178.419	171.0	66	64	2	30	12	40	0
7	159	179.443	171.0	67	-4	2	30	12	40	0
8	160	180.403	171.0	68	-9	1	30	12	40	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	08	0
12	163	183.475	171.3	72	17	2	30	12	08	0
13	165	185.429	171.3	73	-14	2	30	12	08	0
14	166	186.175	171.5	74	0		30	12	08	2
15	167	187.045	171.6	75	15	2	30	12	08	0
16	168	188.238	171.6	76	9	2	30	12	68	0
17	169	189.867	171.8	77	5	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	40	0
20	172	191.653	172.1	80	14		30	12	40	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 GRADE
1	151	171.487	171.6	01	-9	2	30	12	48	0/ 9
2	142	170.632	171.6	02	-8	2	30	12	48	0
3	141	169.701	171.7	03	17		30	12	48	17
4	140	168.606	171.8	04	20		30	12	48	2
5	139	167.406	171.9	05	--		30	12	48	1
6	138	166.601	171.9	06	0		30	12	48	3
7	137	165.685	172.0	07	--	2	30	12	48	0
8	136	164.756	172.0	08	29	2	30	12	48	0
9	135	163.879	172.1	09	12	2	30	12	48	0
10	134	162.987	172.2	90	18	2	30	12	48	0/ 9
11	133	161.794	172.3	91	6		30	12	48	1
12	132	160.967	172.4	92	6	2	30	12	49	0
13	131	160.235	172.5	93	12	2	30	12	68	0
14	130	159.252	172.6	94	22	1	30	12	68	0
15	129	158.126	172.1	95	27	2	30	12	08	8/ 9
16	128	156.826	172.5	96	-13		30	12	68	1
17	127	155.822	172.3	97	7	1	30	12	68	0/ 9
18	126	154.963	172.6	98	7	2	30	12	48	8/ 9
19	125	153.732	172.6	99	17	2	30	12	48	0/ 9
20	124	152.800	172.8	100	15	2	30	12	48	0/ 9

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 GRADE
1	101	132.316	173.7	101	18	2	30	12	08	0
2	102	132.940	173.9	102	9	2	30	12	08	0
3	103	133.052	174.5	103	0	2	30	12	68	0
4	104	133.744	175.0	104	0	2	30	12	48	0
5	105	134.757	175.1	105	23	2	30	12	40	0
6	106	135.956	175.1	106	-8	2	30	12	40	0/12
7	108	137.623	175.2	107	-55	2	30	12	40	0
8	109	138.468	175.2	108	1		30	12	40	3
9	110	139.389	174.9	109	--		30	12	40	1
10	111	140.316	174.7	110	19	2	30	12	48	0
11	113	142.369	174.4	111	12	2	30	12	48	0/12
12	114	143.435	174.4	112	12	2	30	12	40	0/12
13	115	144.642	174.4	113	-11	1	30	12	40	0/12
14	116	145.505	174.6	114	--		30	12	40	1
15	117	146.875	174.2	115	4	2	30	12	40	0
16	119	148.125	173.7	116	20		30	12	40	17
17	120	149.099	173.3	117	3		30	12	48	1
18	121	149.836	173.0	118	11	2	30	12	40	0/12
19	122	151.865	172.9	119	4	2	30	12	48	0
20	123	151.952	172.8	120	2	2	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 4 SHOT POINT 7 TEAM 1
SHOT TIME: 176:12: 0: 0.085

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	224	101.497	176.1	1	20	2	30	12	80	0
2	225	101.980	176.5	2	54	2	30	12	08	0
3	250	103.467	177.1	3	14	2	30	12	68	0
4	251	104.520	177.6	4	-101	2	30	12	68	0
5	252	105.587	177.0	5	20	2	30	12	40	0
6	253	107.159	177.1	6	9	2	30	12	40	0
7	254	108.626	176.6	7	-3	2	30	12	40	0
8	255	109.964	176.5	8	37	2	30	12	40	0
9	256	110.976	176.5	9	111	2	30	12	40	0
10	257	113.402	177.1	10	38	2	30	12	40	0
11	258	116.877	177.5	11	-25	2	30	12	40	0
12	259	118.380	177.4	12	20	2	30	12	40	0
13	260	119.379	177.2	13	16	2	30	12	40	0
14	261	120.234	177.1	14	40	2	30	12	40	0
15	262	121.295	177.3	15	12	2	30	12	40	0
16	263	122.289	177.1	16	10	2	30	12	40	0
17	264	123.573	177.1	17	19	2	30	12	68	0
18	265	124.901	176.6	18	-17	2	30	12	80	6
19	266	125.579	176.2	19	-33	2	30	12	08	8/ 6
20	267	126.580	176.2	20	13	2	30	12	08	0

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 GRADE
1	202	81.744	168.6	21	-6	2	30	12	48	0
2	203	82.347	169.0	22	14	2	30	12	48	0
3	204	83.279	169.5	23	1	2	30	12	48	0
4	205	83.966	170.4	24	-6	2	30	12	48	0
5	206	85.000	171.3	25	22	2	30	12	40	0
6	207	85.608	171.7	26	4	2	30	12	40	0
7	208	86.229	172.6	27	11	1	30	12	40	0
8	210	87.673	174.1	28	--		30	12	40	1
9	211	88.610	174.9	29	12	2	30	12	40	0
10	212	89.728	175.4	30	7	1	30	12	40	0
11	213	90.537	176.0	31	0	1	30	12	40	0
12	214	91.436	176.4	32	13	1	30	12	40	0
13	215	92.358	176.5	33	34	2	30	12	40	0
14	216	93.359	176.6	34	10	2	30	12	40	0
15	217	94.471	176.1	35	-30	2	30	12	40	0
16	218	95.609	175.6	36	-2	1	30	12	40	0
17	220	97.749	175.5	37	4		30	12	60	2
18	221			38	3		30	12	60	2
19	222	99.583	175.8	39	2	2	30	12	60	0
20	223	100.500	175.9	40	0	1	30	12	08	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		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	53.783	165.2	73	-15	2	30	12	88	0
14	166	54.440	166.1	74	0		30	12	88	2
15	167	55.297	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	59.196	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 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	164.6	81	-9	1	30	12	48	0
2	142	38.917	164.4	82	-9	1	30	12	48	0
3	141	37.970	164.5	83	18		30	12	48	1
4	140	36.843	164.7	84	22	2	30	12	48	0
5	139	35.703	164.8	85	--		30	12	48	1
6	138	34.803	164.9	86	0	1	30	12	48	0
7	137	33.865	165.1	87	--	1	30	12	48	0
8	136	32.909	165.3	88	26	2	30	12	48	0
9	135	32.016	165.4	89	12	2	30	12	48	0
10	134	31.101	165.6	90	20	1	30	12	48	0
11	133	29.880	165.9	91	7		30	12	48	1
12	132	29.020	166.4	92	7		30	12	48	25/21
13	131	28.249	167.0	93	13	1	30	12	68	0
14	130	27.253	167.1	94	23	1	30	12	68	0
15	129	26.286	164.1	95	29	1	30	12	88	0
16	128	24.858	166.1	96	-14		30	12	68	1
17	127	23.916	164.7	97	7	1	30	12	68	0
18	126	22.971	166.2	98	8	1	30	12	48	0
19	125	21.739	166.0	99	18	1	30	12	48	0
20	124	20.625	167.2	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
9	110	7.814	197.5	109	--		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	--		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 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	00	0
2	225	50.623	188.0	2	54	2	30	12	00	0
3	250	52.295	189.5	3	14	2	30	12	60	0
4	251	53.553	190.3	4	-101	2	30	12	60	0
5	252	54.646	190.4	5	20	2	30	12	40	0
6	253	55.933	190.0	6	9	2	30	12	40	0
7	254	57.170	187.5	7	-3	2	30	12	40	0
8	255	58.449	187.0	8	37	2	30	12	40	0
9	256	59.471	187.0	9	111	2	30	12	40	0
10	257	62.084	187.7	10	30	2	30	12	40	0
11	258	65.633	187.7	11	-25	2	30	12	40	0
12	259	67.079	187.3	12	20	2	30	12	40	0
13	260	68.000	186.8	13	16	2	30	12	40	0
14	261	68.821	186.6	14	40	2	30	12	40	0
15	262	69.915	186.7	15	12	2	30	12	40	0
16	263	70.853	186.3	16	10	2	30	12	40	0
17	264	72.108	186.1	17	10	2	30	12	60	0
18	265	73.270	185.1	18	-17	2	30	12	00	0
19	266	73.795	184.3	19	-33	2	30	12	00	0
20	267	74.500	184.3	20	13	2	30	12	00	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	28.438	175.2	21	-6	2	30	12	40	0
2	203	29.289	176.0	22	14		30	12	40	2
3	204	30.122	177.4	23	1	2	30	12	40	2
4	205	30.998	179.7	24	-6	2	30	12	40	0
5	206	32.239	181.7	25	22	2	30	12	40	0
6	207	32.964	182.7	26	4	2	30	12	40	0
7	208	33.841	184.7	27	11	2	30	12	40	0
8	210	35.761	187.9	28	--		30	12	40	1
9	211	36.977	189.4	29	12	2	30	12	40	0
10	212	38.245	190.1	30	7	2	30	12	40	0
11	213	39.254	191.0	31	8	1	30	12	40	0
12	214	40.302	191.6	32	13	1	30	12	40	0
13	215	41.234	191.5	33	34	2	30	12	40	0
14	216	42.247	191.4	34	10	2	30	12	40	0
15	217	43.140	190.0	35	-30	2	30	12	40	0
16	218	44.034	188.5	36	-2	2	30	12	40	0
17	220	46.084	187.7	37	4		30	12	60	2
18	221			38	3		30	12	60	2
19	222	48.019	188.0	39	2	2	30	12	60	0
20	223	48.750	187.9	40	8	2	30	12	00	0

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	175.3	41	25	2	30	12	40	0
2	200	26.324	176.6	42	8	2	30	12	40	0
3	198	23.775	180.3	43	-22	1	30	12	40	0
4	197	23.018	183.4	44	-31	2	30	12	40	0
5	188	22.179	185.8	45	4	2	30	12	60	0
6	187	21.473	187.9	46	4	2	30	12	60	0
7	186	20.770	189.7	47	14	2	30	12	00	0
8	185	20.080	191.1	48	-24	2	30	12	00	0
9	184	19.421	192.6	49	9	2	30	12	00	0
10	183	18.239	193.7	50	-14	2	30	12	60	0
11	182	17.274	194.2	51	30	2	30	12	40	0
12	181	16.460	195.3	52	11	2	30	12	60	0
13	180	15.106	195.3	53	7	2	30	12	00	0
14	179	14.187	195.6	54	-17	2	30	12	00	0
15	178	13.258	195.9	55	9	2	30	12	00	0
16	177	12.061	196.5	56	12		30	12	60	1
17	176	11.347	196.6	57	71	2	30	12	60	0
18	175	10.458	196.2	58	14	1	30	12	60	0
19	174	9.628	197.3	59	-2	1	30	12	40	0
20	173	8.250	197.2	60	-9	1	30	12	40	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	346.9	61	13	2	30	12	40	0
2	154	11.272	350.9	62	7	2	30	12	40	0
3	155	10.286	349.6	63	9	2	30	12	40	0
4	156	8.959	352.1	64	16	2	30	12	40	0
5	157	8.814	354.7	65	-19	1	30	12	40	0
6	158	7.094	359.3	66	68	1	30	12	40	0
7	159	6.067	0.0	67	-4	1	30	12	40	0
8	160	5.093	359.9	68	-9	1	30	12	40	0
9	161	3.996	356.9	69	5	1	30	12	60	0
10	162	3.017	354.2	70	33	3	30	12	60	0/12
11	164	1.145	343.0	71	0	1	30	12	00	0
12	163	1.961	348.1	72	10	1	30	12	00	0
13	165	0.001	180.0	73	-15	3	30	12	00	0
14	166	1.125	220.0	74	0	1	30	12	00	0/12
15	167	1.885	202.4	75	16	1	30	12	00	0
16	168	3.011	192.4	76	10	3	30	12	60	0
17	169	3.849	190.2	77	5	1	30	12	40	0
18	170	5.222	197.3	78	3	2	30	12	40	0
19	171	6.312	197.9	79	27	1	30	12	40	0
20	172	6.859	196.5	80	15	1	30	12	40	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 GRADE
1	151	14.822	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	346.0	83	10		30	12	48	1
4	140	16.942	346.2	84	22	2	30	12	48	0
5	139	18.080	345.9	85	--		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
9	135	21.767	344.8	89	12	2	30	12	48	0
10	134	22.684	344.5	90	28	2	30	12	48	0/ 9
11	133	23.909	344.2	91	7		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/ 9
15	129	27.504	346.2	95	29	2	30	12	68	0/ 9
16	128	28.931	344.4	96	-14		30	12	68	1
17	127	29.866	343.5	97	7	1	30	12	68	0/ 9
18	126	30.818	344.4	98	8	2	30	12	48	0/ 9
19	125	32.048	344.6	99	18	2	30	12	48	0/ 9
20	124	33.000	343.9	100	16	2	30	12	48	0/ 9

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 GRADE
1	101	53.700	345.1	101	19	2	30	12	88	0
2	102	53.160	344.4	102	10	2	30	12	88	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	341.8	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		30	12	48	3
9	110	47.378	340.1	109	--		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	43.189	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	--		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	33.988	343.9	120	2	2	30	12	48	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 GRADE
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	251	4.141	219.7	4	-101	1	30	12	68	0
5	252	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	254	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	48	0
17	264	22.211	181.7	17	18	1	30	12	68	0
18	265	23.478	179.8	18	-17	2	30	12	88	0
19	266	24.134	176.5	19	-33		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 GRADE
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	21.148	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	--		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		30	12	68	2
19	222	1.978	9.1	39	2	3	30	12	68	0
20	223	0.992	11.4	40	8	1	30	12	88	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 GRADE
1	201	24.040	22.6	41	25	1	30	12	40	0
2	200	24.757	20.3	42	8	1	30	12	40	0
3	198	26.625	14.9	43	-22	1	30	12	40	0
4	197	27.108	11.9	44	-31	1	30	12	40	0
5	190	27.840	9.0	45	4	3	30	12	60	0/12
6	187	28.515	8.1	46	4	1	30	12	60	0
7	186	29.233	6.0	47	14	1	30	12	00	0
8	185	29.947	6.0	48	-24	1	30	12	00	0
9	184	30.667	5.1	49	9	1	30	12	00	0
10	183	31.890	4.7	50	-14	2	30	12	60	0
11	182	32.869	4.7	51	30	1	30	12	40	0
12	181	33.726	4.4	52	11	1	30	12	60	0
13	180	35.056	4.9	53	7	1	30	12	00	0
14	179	35.973	5.0	54	-17	1	30	12	00	0
15	178	36.890	5.2	55	9	1	30	12	00	0
16	177	38.101	5.3	56	13		30	12	60	1
17	176	38.806	5.5	57	71	1	30	12	60	0
18	175	39.665	5.8	58	14	1	30	12	60	0
19	174	40.515	5.8	59	-2	1	30	12	40	0
20	173	41.758	6.2	60	-9	1	30	12	40	0

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 GRADE
1	152	62.042	3.7	61	13	2	30	12	40	0
2	154	60.849	4.9	62	7	2	30	12	40	0
3	155	59.833	4.9	63	9	2	30	12	40	0
4	156	58.654	5.6	64	16	2	30	12	40	0
5	157	57.816	6.2	65	-19	2	30	12	40	0/12
6	158	57.011	6.9	66	60	2	30	12	40	0
7	159	56.002	7.1	67	-4	2	30	12	40	0
8	160	55.035	7.3	68	-9	1	30	12	40	0
9	161	53.915	7.2	69	5	2	30	12	60	0
10	162	52.923	7.2	70	33	1	30	12	60	0
11	164	51.020	7.5	71	0	2	30	12	00	0
12	163	51.036	7.3	72	10	2	30	12	00	0
13	165	49.987	8.0	73	-15	2	30	12	00	0
14	166	49.037	7.3	74	0	2	30	12	00	0/12
15	167	48.164	7.4	75	16	2	30	12	00	0
16	168	46.987	7.7	76	10	1	30	12	60	0
17	169	46.285	7.2	77	5	2	30	12	40	0
18	170	44.842	6.9	78	3	2	30	12	40	0/12
19	171	43.783	6.6	79	27	2	30	12	40	0/12
20	172	43.216	6.7	80	15	1	30	12	40	0/12

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 GRADE
1	151	63.269	3.4	81	-9	1	30	12	40	0
2	142	64.110	3.2	82	-9	1	30	12	40	0
3	141	64.991	2.9	83	10		30	12	40	1
4	140	66.013	2.5	84	22	2	30	12	40	0
5	139	67.081	2.1	85	--		30	12	40	1
6	138	67.926	1.9	86	0	2	30	12	40	0
7	137	68.796	1.6	87	--	1	30	12	40	0
8	136	69.673	1.2	88	26	2	30	12	40	0
9	135	70.516	1.0	89	12		30	12	40	2
10	134	71.367	0.7	90	28	1	30	12	40	0
11	133	72.509	0.3	91	7		30	12	40	1
12	132	73.287	360.0	92	7		30	12	40	2
13	131	73.967	359.6	93	13	2	30	12	60	0/ 9
14	130	74.926	359.4	94	23	2	30	12	60	0/ 9
15	129	76.200	0.2	95	29	1	30	12	00	0/ 9
16	128	77.366	359.3	96	-14		30	12	60	1
17	127	78.421	359.6	97	7	2	30	12	60	0/ 9
18	126	79.192	359.0	98	0	2	30	12	40	0/ 9
19	125	80.231	358.0	99	10	2	30	12	40	0/ 9
20	124	81.000	358.4	100	16	2	30	12	40	0/ 9

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 GRADE
1	101	101.396	356.0	101	19	2	30	12	00	0/12
2	102	100.740	355.7	102	10	2	30	12	00	0/12
3	103	100.621	355.0	103	0	2	30	12	60	0/12
4	104	99.935	354.3	104	8	2	30	12	40	0/12
5	105	98.927	354.1	105	24	2	30	12	40	0
6	106	97.730	354.1	106	-9	2	30	12	40	0/12
7	108	96.064	354.0	107	-59	2	30	12	40	0/12
8	109	95.220	354.0	108	1	2	30	12	40	3
9	110	94.288	354.3	109	--		30	12	40	1
10	111	93.356	354.7	110	21	2	30	12	40	0/12
11	113	91.307	355.2	111	13	2	30	12	40	0
12	114	90.240	355.2	112	12	2	30	12	40	0
13	115	89.034	355.2	113	-12	2	30	12	40	12/21
14	116	88.167	354.9	114	--		30	12	40	1
15	117	86.807	355.5	115	4	2	30	12	40	0/12
16	119	85.602	356.5	116	21	2	30	12	40	0/12
17	120	84.690	357.3	117	3	2	30	12	40	0/12
18	121	84.004	357.9	118	12	2	30	12	40	0
19	122	82.808	358.1	119	4	2	30	12	40	0/12
20	123	81.940	358.2	120	2	2	30	12	40	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	08	0/ 9
2	225	24.578	355.1	2	54	1	30	12	08	0
3	230	23.141	352.6	3	14	1	30	12	68	0
4	231	22.194	349.0	4	-101	1	30	12	68	0
5	232	21.184	348.7	5	20	3	30	12	48	0
6	233	19.463	351.5	6	9	3	30	12	48	0
7	234	17.925	354.3	7	-3	3	30	12	48	0
8	235	16.576	355.0	8	37	3	30	12	48	0
9	236	15.566	354.4	9	111	2	30	12	48	0
10	237	13.257	348.7	10	38	3	30	12	48	0
11	238	9.993	341.7	11	-26	3	30	12	48	0
12	239	8.489	340.3	12	21	3	30	12	48	0
13	240	7.416	341.0	13	16	3	30	12	48	0
14	241	6.552	340.1	14	40	2	30	12	48	0
15	242	5.649	334.2	15	12	3	30	12	48	0
16	243	4.620	332.7	16	18	3	30	12	48	0
17	244	3.436	325.3	17	18	1	30	12	68	0
18	245	1.774	331.0	18	-17	1	30	12	08	0
19	246	0.961	12.6	19	-33		30	12	08	2
20	247	0.112	132.7	20	13	3	30	12	08	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	9.0	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	5.0	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	--		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	0	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	32.039	356.7	35	-30	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		30	12	68	2
18	221			38	3		30	12	68	2
19	222	26.989	357.9	39	2	1	30	12	68	0
20	223	26.025	357.6	40	0	1	30	12	08	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	196	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	08	0
8	185	54.843	1.9	48	-24	1	30	12	08	0
9	184	55.591	1.5	49	9	2	30	12	08	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	08	0
14	179	60.891	1.8	54	-17	1	30	12	08	0
15	178	61.808	1.9	55	9	1	30	12	08	0
16	177	63.004	2.1	56	13		30	12	68	1
17	176	63.792	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 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	85.954	2.6	62	7	2	30	12	48	0
3	155	84.540	2.6	63	9	2	30	12	48	0
4	156	83.334	3.1	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	08	0
12	163	76.629	4.0	72	18	2	30	12	08	0
13	165	74.745	4.4	73	-15	2	30	12	08	0
14	166	73.833	3.9	74	8	2	30	12	08	0/12
15	167	72.954	3.9	75	16	1	30	12	08	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 5
SHOT TIME: 176:12: 6: 0.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	151	88.022	1.6	81	-9	1	30	12	40	0
2	142	88.866	1.5	82	-9	1	30	12	40	0
3	141	89.755	1.3	83	18		30	12	40	1
4	140	90.788	1.0	84	22	1	30	12	40	0
5	139	91.863	0.8	85	--		30	12	40	1
6	138	92.713	0.6	86	0	1	30	12	40	0
7	137	93.589	0.4	87	--	1	30	12	40	0
8	136	94.472	0.1	88	26	2	30	12	40	0
9	135	95.319	360.0	89	12	2	30	12	40	0
10	134	96.173	359.8	90	20		30	12	40	1
11	133	97.320	359.5	91	7		30	12	40	1
12	132	98.102	359.2	92	7		30	12	40	2
13	131	98.786	359.0	93	13	1	30	12	60	0/ 9
14	130	99.746	358.8	94	23	1	30	12	60	0/ 9
15	129	101.012	359.5	95	29	1	30	12	80	0/ 9
16	128	102.181	358.8	96	-14		30	12	60	1
17	127	103.230	359.0	97	7	1	30	12	60	0/ 9
18	126	104.007	358.5	98	0	2	30	12	48	0/ 9
19	125	105.225	358.4	99	18	1	30	12	40	0/ 9
20	124	106.000	358.1	100	16	1	30	12	40	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 7 SHOT POINT 19 TEAM 6
SHOT TIME: 176:12: 6: 0.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	101	126.397	356.2	101	19	2	30	12	80	0
2	102	125.747	356.0	102	10	2	30	12	80	0
3	103	125.614	355.4	103	0	2	30	12	60	0
4	104	124.917	354.8	104	0	2	30	12	48	0
5	105	123.907	354.7	105	24	2	30	12	48	0
6	106	122.788	354.7	106	-9	2	30	12	48	0/12
7	108	121.042	354.6	107	-59	2	30	12	48	0
8	109	120.197	354.6	108	1	2	30	12	48	0
9	110	119.271	354.9	109	--		30	12	48	1
10	111	118.344	355.2	110	21	2	30	12	48	0
11	113	116.302	355.6	111	13	2	30	12	48	0
12	114	115.234	355.6	112	12	2	30	12	48	0
13	115	114.028	355.6	113	-12	2	30	12	48	12/21
14	116	113.159	355.4	114	--		30	12	48	1
15	117	111.804	355.8	115	4	2	30	12	48	0/12
16	119	110.605	356.6	116	21	2	30	12	48	0/12
17	120	109.694	357.2	117	3	2	30	12	48	0/12
18	121	109.806	357.7	118	12	2	30	12	48	0
19	122	107.809	357.8	119	4	1	30	12	48	0
20	123	106.939	358.0	120	2	1	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 8 SHOT POINT 10 TEAM 1
SHOT TIME: 177:10: 0: 0.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	224	35.973	185.0	1	31	2	30	12	80	0
2	225	36.575	186.1	2	82	2	30	12	80	0
3	250	38.217	187.2	3	21	2	30	12	60	0/ 9
4	251	39.446	188.4	4	-154	2	30	12	60	0/ 9
5	252	40.538	188.5	5	31	2	30	12	40	0/ 9
6	253	41.879	186.5	6	14	2	30	12	40	0/ 9
7	254	43.178	184.8	7	-5	2	30	12	40	0/ 9
8	255	44.472	184.2	8	56	2	30	12	40	0/ 9
9	256	45.494	184.2	9	170	2	30	12	40	0/ 9
10	257	48.071	185.3	10	59	2	30	12	40	0/ 9
11	258	51.615	185.5	11	-39	2	30	12	40	0/ 9
12	259	53.079	185.1	12	31	2	30	12	40	0/ 9
13	260	54.820	184.5	13	25	2	30	12	40	0/ 9
14	261	54.852	184.3	14	61	2	30	12	40	0/ 9
15	262	55.941	184.4	15	18	3	30	12	40	0/ 9
16	263	56.896	184.0	16	15	2	30	12	40	0/ 9
17	264	58.162	183.8	17	28	2	30	12	60	0/ 9
18	265	59.373	182.6	18	-25	2	30	12	80	0/ 9
19	266	59.948	181.6	19	-58	2	30	12	80	0/ 9
20	267	60.965	181.7	20	20	2	30	12	80	0/ 9

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 8 SHOT POINT 10 TEAM 2
SHOT TIME: 177:10: 0: 0.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	202	15.930	157.0	21	-10	2	30	12	40	0
2	203	16.627	159.3	22	23	2	30	12	40	0
3	204	17.231	162.4	23	2	2	30	12	40	0
4	205	17.792	167.0	24	-10	2	30	12	40	0
5	206	18.784	171.2	25	37	2	30	12	40	0
6	207	19.481	173.2	26	7	2	30	12	40	0
7	208	20.089	177.0	27	18	2	30	12	40	0
8	210	21.787	182.8	28	--		30	12	40	1
9	211	22.924	185.5	29	21	2	30	12	40	0
10	212	24.162	186.8	30	12	2	30	12	40	0
11	213	25.137	188.4	31	13	1	30	12	40	0
12	214	26.167	189.5	32	21	2	30	12	40	0
13	215	27.102	189.4	33	56	2	30	12	40	0
14	216	28.117	189.2	34	17	2	30	12	40	0
15	217	29.052	187.3	35	-63	2	30	12	40	0
16	218	30.007	185.1	36	-2	2	30	12	40	0
17	220	32.093	184.1	37	7	2	30	12	60	0
18	221			38	4		30	12	60	2
19	222	34.809	184.8	39	3	2	30	12	60	0
20	223	34.985	184.8	40	13	2	30	12	80	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 8 SHOT POINT 18 TEAM 3
SHOT TIME: 177:10: 0: 8.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	201	14.923	156.1	41	42	2	30	12	48	0/12
2	200	13.722	156.8	42	13	2	30	12	48	0/12
3	198	10.765	159.9	43	-36	2	30	12	48	0/12
4	197	9.626	165.3	44	-52	2	30	12	48	0/12
5	188	8.548	169.4	45	6	2	30	12	68	0/12
6	187	7.651	173.6	46	6	2	30	12	68	0/12
7	186	6.819	177.2	47	24	2	30	12	88	0/12
8	185	6.051	180.3	48	-48	2	30	12	88	0/12
9	184	5.387	184.5	49	15	2	30	12	88	0/12
10	183	4.087	187.1	50	-23	2	30	12	68	0
11	182	3.118	188.8	51	50	1	30	12	48	0
12	181	2.275	193.6	52	19	1	30	12	68	0
13	180	0.922	190.7	53	12	1	30	12	88	0
14	179	0.001	242.3	54	-28	3	30	12	88	0
15	178	0.930	11.8	55	16	1	30	12	88	0
16	177	2.136	18.3	56	21		30	12	68	1
17	176	2.849	11.4	57	117	2	30	12	68	0
18	175	3.731	13.9	58	22	1	30	12	68	0
19	174	4.571	12.8	59	-6	2	30	12	48	0/12
20	173	5.875	13.3	60	-15	2	30	12	48	0/12

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 8 SHOT POINT 18 TEAM 4
SHOT TIME: 177:10: 0: 8.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	152	26.889	2.0	61	22	2	30	12	48	0
2	154	24.875	4.7	62	12	1	30	12	48	0
3	155	23.859	4.7	63	16	2	30	12	48	0
4	156	22.685	6.5	64	26	2	30	12	48	0
5	157	21.861	8.1	65	-31	2	30	12	48	0
6	158	21.898	18.2	66	113	2	30	12	48	0
7	159	20.096	10.9	67	-7	2	30	12	48	0
8	160	19.139	11.5	68	-15	2	30	12	48	0
9	161	18.017	11.5	69	9	2	30	12	68	0/12
10	162	17.031	11.9	70	55	2	30	12	68	0/12
11	164	15.163	13.3	71	14	2	30	12	88	0/ 9
12	163	15.951	12.3	72	38	2	30	12	88	0/ 9
13	165	14.185	15.6	73	-25	2	30	12	88	0/ 9
14	166	13.169	13.6	74	8		30	12	88	2
15	167	12.316	14.6	75	27	2	30	12	88	0/ 9
16	168	11.181	16.5	76	17	2	30	12	68	0/ 9
17	169	10.343	14.6	77	9	2	30	12	48	0/ 9
18	170	8.968	14.6	78	5	2	30	12	48	0/ 9
19	171	7.884	13.7	79	45	2	30	12	48	0/ 9
20	172	7.329	14.8	80	26	2	30	12	48	0/ 9

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 8 SHOT POINT 18 TEAM 5
SHOT TIME: 177:18: 0: 8.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	151	27.928	1.3	81	-15	2	30	12	48	0
2	142	28.175	1.0	82	-15	2	30	12	48	0
3	141	29.878	0.4	83	38		30	12	48	17
4	140	30.115	359.5	84	36	2	30	12	48	0/ 9
5	139	31.204	358.9	85	--		30	12	48	2
6	138	32.066	358.4	86	8	2	30	12	48	0/ 9
7	137	32.957	357.8	87	--	2	30	12	48	0/ 9
8	136	33.860	357.2	88	44	3	30	12	48	0/ 9
9	135	34.723	356.8	89	21	2	30	12	48	0/ 9
10	134	35.597	356.4	90	33	2	30	12	48	0/ 9
11	133	36.772	355.8	91	11		30	12	48	1
12	132	37.583	355.2	92	11	2	30	12	48	0/ 9
13	131	38.381	354.6	93	21	2	30	12	68	0/ 9
14	130	39.281	354.3	94	39	2	30	12	68	0/ 9
15	129	40.467	356.1	95	48	2	30	12	88	0/ 9
16	128	41.718	354.5	96	-23		30	12	68	1
17	127	42.741	355.1	97	13	2	30	12	68	0/ 9
18	126	43.578	354.0	98	13	2	30	12	48	0/ 9
19	125	44.818	353.9	99	38	2	30	12	48	0/ 9
20	124	45.758	353.2	100	26	2	30	12	48	0/ 9

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 8 SHOT POINT 18 TEAM 6
SHOT TIME: 177:18: 0: 8.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	101	66.320	351.2	101	32		30	12	88	21
2	102	65.715	350.8	102	17		30	12	88	21
3	103	65.703	349.7	103	0		30	12	68	21
4	104	65.142	348.5	104	-2	2	30	12	48	12/21
5	105	64.166	348.1	105	41		30	12	48	21
6	106	62.903	347.9	106	-15	1	30	12	48	12
7	109	61.337	347.7	107	-100		30	12	48	21
8	109	60.496	347.6	108	1		30	12	48	21
9	110	59.509	348.0	109	--		30	12	48	1
10	111	58.317	348.4	110	35	2	30	12	48	12/21
11	113	56.383	349.1	111	23	2	30	12	48	12/21
12	114	55.326	348.9	112	21		30	12	48	17
13	115	54.123	348.8	113	-28	2	30	12	48	12/21
14	116	53.305	348.2	114	--		30	12	48	1
15	117	51.852	349.8	115	8		30	12	48	21
16	119	50.492	350.5	116	36		30	12	48	21
17	120	49.467	351.7	117	5	2	30	12	48	21
18	121	48.690	352.8	118	21		30	12	48	21
19	122	47.478	352.9	119	7		30	12	48	17
20	123	46.588	353.1	120	4		30	12	48	21

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	0.500	203.3	1	19	3	30	12	00	0
2	502	2.167	219.7	2	23	3	30	12	60	0
3	503	2.965	201.3	3	11	3	30	12	60	0
4	504	3.893	192.0	4	-19	3	30	12	60	0
5	505	4.139	160.9	5	-10		30	12	40	17
6	506	5.042	165.1	6	6	3	30	12	40	0
7	507	6.341	162.1	7	2	3	30	12	40	0
8	508	7.946	162.1	8	14		30	12	40	3
9	509	9.255	171.9	9	55	1	30	12	40	0
10	510	10.543	175.2	10	-25	3	30	12	40	0
11	511	11.660	172.9	11	-22	3	30	12	40	0
12	512	12.729	170.0	12	12	1	30	12	40	0
13	513	13.809	169.4	13	6	3	30	12	40	0
14	514	14.880	168.2	14	26	1	30	12	40	0/12
15	515	15.862	166.9	15	7		30	12	40	2
16	516	16.867	161.8	16	-7	3	30	12	40	0
17	517	18.001	159.7	17	6	1	30	12	40	0
18	518	19.092	156.9	18	-13	1	30	12	60	0
19	519	20.292	156.0	19	-28		30	12	60	2
20	520	21.318	156.2	20	12		30	12	00	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 GRADE
1	521	22.095	157.7	21	-9	1	30	12	00	0
2	522	23.141	157.0	22	-12	1	30	12	00	0
3	523	24.872	159.7	23	-39	1	30	12	60	0
4	524	25.630	157.5	24	-2		30	12	40	2
5	525	26.833	156.7	25	8		30	12	40	2
6	526	28.233	157.5	26	1	1	30	12	40	0
7	527	29.067	158.6	27	10	1	30	12	40	0
8	528	30.023	159.9	28	-52	1	30	12	40	0
9	529	31.050	161.0	29	12	1	30	12	40	0
10	530	31.996	162.4	30	7	2	30	12	40	0
11	532	34.328	162.4	31	7	1	30	12	40	0
12	533	35.212	162.6	32	28	2	30	12	40	17
13	534	36.320	163.0	33	43	2	30	12	40	0
14	535	37.559	163.6	34	7		30	12	40	1
15	536	38.576	163.6	35	-30		30	12	40	2
16	537	39.634	164.4	36	1	1	30	12	40	0
17	538	40.544	164.9	37	0	2	30	12	40	0
18	539	41.532	165.8	38	1	2	30	12	40	0
19	540	42.624	166.5	39	8	2	30	12	40	0
20	551	43.593	167.0	40	7	2	30	12	40	0

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	167.3	41	-3		30	12	40	1
2	553	45.803	167.9	42	9	2	30	12	40	0
3	554	47.258	167.7	43	-12	2	30	12	60	0
4	555	48.299	167.8	44	41	2	30	12	60	0
5	556	48.984	167.9	45	1	2	30	12	00	0
6	557	49.783	168.0	46	0		30	12	00	2
7	558	50.863	167.6	47	14	2	30	12	60	0
8	559	51.826	167.7	48	9		30	12	60	2
9	560	52.808	167.9	49	12	2	30	12	40	0
10	561	53.738	167.7	50	-11	2	30	12	40	0
11	562	54.842	167.8	51	18	2	30	12	40	0
12	563	55.986	167.9	52	21	2	30	12	40	0
13	564	57.106	168.0	53	7	2	30	12	40	0
14	565	58.055	168.4	54	-11	2	30	12	40	0
15	566	59.215	169.3	55	7	2	30	12	40	0
16	567	60.572	170.1	56	12	1	30	12	60	0
17	568	61.829	169.9	57	11	1	30	12	60	0
18	569	63.181	169.5	58	14		30	12	00	3
19	570	64.154	169.3	59	-2	2	30	12	60	0
20	571	65.521	169.4	60	-7	2	30	12	60	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	169.4	61	--		30	12	60	1
2	573	68.118	169.0	62	4	2	30	12	40	0
3	574	69.475	168.7	63	0	2	30	12	40	0
4	575	70.466	168.0	64	15	2	30	12	40	0
5	576	71.540	169.0	65	-12	2	30	12	40	0
6	577	72.744	169.4	66	1		30	12	40	2
7	578	73.633	169.0	67	-13	2	30	12	40	0/12
8	579	74.734	170.1	68	-5	2	30	12	40	0
9	580	75.746	170.0	69	5		30	12	40	2
10	581	76.849	171.6	70	31	2	30	12	40	0
11	582	77.843	171.0	71	4	2	30	12	40	0
12	583	78.946	171.7	72	15	2	30	12	40	0
13	584	79.890	171.6	73	-16	2	30	12	40	0
14	585	80.926	171.0	74	-2	2	30	12	40	0
15	586	82.279	170.0	75	13	2	30	12	40	0/30
16	587	83.331	171.0	76	4	2	30	12	60	0/12
17	588	84.353	171.6	77	0	2	30	12	60	0/12
18	589	85.224	172.1	78	-0	2	30	12	00	0
19	590	86.012	171.7	79	6	2	30	12	00	0
20	591	86.369	172.8	80	11		30	12	60	2

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	—		30	12	68	1
8	607	95.128	173.1	88	24	1	30	12	68	8/ 6
9	608	96.049	172.8	89	-11		30	12	88	2
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	8/ 6
13	612	100.950	171.6	93	23	2	30	12	48	0
14	613	102.161	171.7	94	23	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 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		30	12	48	1
3	623	113.345	171.3	103	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	10	2	30	12	48	0
6	626	116.757	171.0	106	0	2	30	12	48	0
7	627	117.708	171.2	107	35	2	30	12	48	0
8	629	119.053	171.7	108	1	2	30	12	48	12
9	630	120.977	172.5	109	2	2	30	12	48	0
10	631	121.944	173.2	110	12	2	30	12	48	12
11	632	122.929	173.5	111	27	2	30	12	48	0
12	633	124.027	173.6	112	6		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	0	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		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		30	12	48	1

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	49.291	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		30	12	48	17
6	506	44.726	348.3	6	6	2	30	12	48	8/12
7	507	43.458	348.8	7	2	2	30	12	48	0
8	508	41.865	349.1	8	14		30	12	48	3
9	509	40.534	347.1	9	55	2	30	12	48	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	8/ 6
12	512	37.054	347.8	12	12	2	30	12	48	8/ 6
13	513	35.959	347.4	13	6	2	30	12	48	0/ 6/12
14	514	34.883	347.8	14	26	2	30	12	48	8/ 6/12
15	515	33.904	348.5	15	7		30	12	48	2
16	516	33.039	351.1	16	-7	2	30	12	48	8
17	517	32.048	352.6	17	6	2	30	12	48	0/ 6/12
18	518	31.241	354.8	18	-13	2	30	12	68	0/12/ 6
19	519	30.201	356.8	19	-28	2	30	12	68	21
20	520	29.217	356.6	20	12		30	12	88	17

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	27.286	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		30	12	48	2
5	525	24.028	0.7	25	0		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	532	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		30	12	48	1
15	536	11.664	2.5	35	-30		30	12	48	2
16	537	10.497	1.6	36	1	1	30	12	48	0
17	538	9.510	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 2 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	48	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	8		30	12	88	2
7	558	1.158	149.8	47	14	3	30	12	60	0
8	559	2.080	169.8	48	9		30	12	69	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	5.003	166.2	51	10	3	30	12	48	0
12	563	6.224	167.5	52	21	1	30	12	48	0
13	564	7.344	169.5	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	12.286	177.7	57	11	1	30	12	68	0
18	569	13.500	175.1	58	14		30	12	88	3
19	570	14.451	173.5	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 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	18.386	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	23.940	173.7	67	-13	2	30	12	48	0/12
8	579	25.069	174.2	68	-5	1	30	12	48	0
9	580	26.159	176.3	69	5		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 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	181.2	84	22	2	30	12	68	0
5	604	42.924	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		30	12	88	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		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 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	0		30	12	48	1
3	623	64.007	173.9	103	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	10	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		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	0	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		30	12	48	1
18	639	81.472	178.4	118	16	2	30	12	48	2/12
19	267	289.541	176.6	119	2		30	12	48	2
20	640	82.802	177.1	120	3		30	12	48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 16 SHOT POINT 5 TEAM 1
SHOT TIME: 191:10:14: 0.013

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	501	85.514	351.5	1	19	2	30	12	60	0
2	502	84.577	350.6	2	23	2	30	12	60	0
3	503	83.440	350.7	3	11	2	30	12	60	0/12
4	504	82.397	350.7	4	-19	2	30	12	60	0/ 6
5	505	81.882	351.9	5	-10		30	12	48	17
6	506	81.011	352.1	6	6	2	30	12	40	0/12
7	507	79.974	352.5	7	2	2	30	12	40	0
8	508	78.396	352.7	8	14		30	12	40	2
9	509	76.965	351.7	9	35	2	30	12	40	0/ 6
10	510	75.701	351.2	10	-25	2	30	12	40	0/ 6/12
11	511	74.564	351.5	11	-22	2	30	12	40	2
12	512	73.492	351.9	12	12	2	30	12	40	0/ 6/12
13	513	72.424	352.2	13	6	2	30	12	40	0/12/ 6
14	514	71.372	352.5	14	26	2	30	12	40	0/12
15	515	70.425	352.8	15	7		30	12	40	2
16	516	69.661	354.1	16	-7	2	30	12	40	0
17	517	68.709	354.9	17	6	2	30	12	40	0/ 6/12
18	518	67.937	355.9	18	-13	2	30	12	60	0/12
19	519	66.907	356.5	19	-20	2	30	12	60	21
20	520	65.924	356.8	20	12		30	12	80	17

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	80	0
2	522	63.993	356.8	22	-12	1	30	12	80	0
3	523	62.866	356.3	23	-39	2	30	12	60	0
4	524	61.699	357.7	24	-2		30	12	40	2
5	525	60.703	358.4	25	0		30	12	40	2
6	526	59.260	358.5	26	1	2	30	12	40	0
7	527	58.290	358.3	27	10	2	30	12	40	0
8	528	57.166	358.8	28	-52		30	12	40	3
9	529	56.015	357.7	29	12	2	30	12	40	4
10	530	54.884	357.2	30	7	2	30	12	40	0
11	532	52.631	357.8	31	7	2	30	12	40	0
12	533	51.746	358.0	32	21	2	30	12	40	0
13	534	50.610	358.0	33	43	2	30	12	40	0
14	535	49.218	358.0	34	7		30	12	40	1
15	536	48.328	358.2	35	-30		30	12	40	2
16	537	47.176	357.9	36	1	2	30	12	40	0
17	538	46.205	357.7	37	8	2	30	12	40	0
18	539	45.107	357.2	38	1	2	30	12	40	0
19	540	43.937	356.8	39	0	1	30	12	40	0
20	541	42.925	356.6	40	7	2	30	12	40	0

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	40	1
2	553	40.632	356.1	42	9	1	30	12	40	0
3	554	39.217	356.6	43	-12	2	30	12	60	0
4	555	38.177	356.8	44	41	2	30	12	60	0
5	556	37.481	356.7	45	1	2	30	12	80	0
6	557	36.678	356.8	46	0		30	12	80	2
7	558	35.680	357.7	47	14	2	30	12	60	0
8	559	34.713	357.8	48	9		30	12	60	2
9	560	33.712	357.8	49	13	2	30	12	40	0
10	561	32.832	358.4	50	-11	2	30	12	40	0
11	562	31.727	358.6	51	10	2	30	12	40	0
12	563	30.583	358.8	52	21	2	30	12	40	0
13	564	29.460	359.0	53	7	1	30	12	40	0
14	565	28.457	358.6	54	-11	2	30	12	40	0
15	566	27.176	357.1	55	7	2	30	12	40	0
16	567	25.732	355.7	56	12	1	30	12	60	0
17	568	24.503	356.5	57	11	1	30	12	60	0
18	569	23.217	357.9	58	14		30	12	80	3
19	570	22.288	358.8	59	-2	1	30	12	60	0
20	571	20.929	359.2	60	-7	1	30	12	60	0

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	60	1
2	573	18.460	1.9	62	4	1	30	12	40	0/12
3	574	17.232	4.1	63	8	1	30	12	40	0
4	575	16.255	4.7	64	15	3	30	12	40	0
5	576	15.162	5.0	65	-12	1	30	12	40	0
6	577	13.854	4.1	66	1	1	30	12	40	0
7	578	12.865	2.8	67	-13	1	30	12	40	0
8	579	11.720	2.5	68	-5	3	30	12	40	0
9	580	10.553	358.4	69	5		30	12	40	2
10	581	9.372	352.6	70	31	1	30	12	40	0
11	582	8.378	351.3	71	4	1	30	12	40	0
12	583	7.274	351.7	72	15	1	30	12	40	0
13	584	6.134	353.6	73	-16	3	30	12	40	0
14	585	5.187	2.5	74	-2	3	30	12	40	0
15	586	3.988	11.9	75	14	3	30	12	40	0
16	587	2.879	12.9	76	4	3	30	12	60	0
17	588	1.663	356.5	77	8	3	30	12	60	0
18	589	0.942	318.3	78	-8	1	30	12	80	0
19	590	0.044	90.0	79	6	3	30	12	88	0
20	591	1.668	249.8	80	11	3	30	12	60	0

FIELD DATA TABLE

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

	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	7.898	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		30	12	88	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

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 16 SHOT POINT 5 TEAM 6
SHOT TIME: 191:10:14: 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		30	12	48	1
3	623	27.417	169.9	103	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	30.860	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		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	0
17	638	43.850	179.4	117	10		30	12	48	1
18	639	44.983	179.6	118	16	2	30	12	48	0
19	267	172.924	176.5	119	2		30	12	48	2
20	640	46.295	177.3	120	3		30	12	48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 17 SHOT POINT 7 TEAM 1
SHOT TIME: 191:10:15:59.810

	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		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		30	12	48	3
9	509	122.991	353.8	9	55	2	30	12	48	0/ 6/12
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		30	12	68	2
20	520	112.113	357.0	20	12		30	12	88	17

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 17 SHOT POINT 7 TEAM 2
SHOT TIME: 191:10:15:59.810

	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		30	12	48	2
5	525	106.902	358.0	25	0		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		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		30	12	48	1
15	536	94.559	357.8	35	-30		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: 191:10:15:59.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	552	87.907	357.0	41	-3	.	30	12	48	1
2	553	86.080	356.0	42	9	2	30	12	48	0
3	554	85.472	357.0	43	-12	2	30	12	60	0
4	555	84.436	357.1	44	41	2	30	12	60	0
5	556	83.741	357.1	45	1	2	30	12	00	0
6	557	82.940	357.1	46	0		30	12	00	2
7	558	81.945	357.5	47	14	2	30	12	60	0
8	559	80.900	357.6	48	9		30	12	60	2
9	560	79.982	357.6	49	13	2	30	12	40	0
10	561	79.291	357.0	50	-11	2	30	12	48	0
11	562	78.185	357.9	51	18	3	30	12	48	0
12	563	77.040	357.9	52	21	2	30	12	48	0
13	564	75.915	358.0	53	7	2	30	12	40	0
14	565	74.915	357.8	54	-11	2	30	12	48	0
15	566	73.639	357.3	55	7	2	30	12	49	0
16	567	72.180	356.8	56	12	2	30	12	60	0
17	568	70.963	357.1	57	11	2	30	12	60	0
18	569	69.679	357.5	58	14		30	12	08	2
19	570	68.745	357.0	59	-2	2	30	12	60	0
20	571	67.284	357.9	60	-7	2	30	12	60	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 17 SHOT POINT 7 TEAM 4
SHOT TIME: 191:10:15:59.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	572	66.122	358.1	61	--		30	12	60	1
2	573	64.881	358.7	62	4	2	30	12	48	0
3	574	63.608	359.2	63	8	2	30	12	40	0/12
4	575	62.619	359.2	64	15	2	30	12	48	0
5	576	61.523	359.3	65	-12	2	30	12	48	0
6	577	60.242	358.9	66	1	2	30	12	48	0
7	578	59.281	358.6	67	-13	2	30	12	48	0/12
8	579	58.144	358.4	68	-5	2	30	12	48	0
9	580	57.014	357.6	69	5		30	12	48	2
10	581	55.800	356.6	70	31	2	30	12	48	0
11	582	54.800	356.4	71	4	2	30	12	48	0
12	583	53.706	356.6	72	15	2	30	12	48	0
13	584	52.584	356.9	73	-16	2	30	12	48	0
14	585	51.631	357.9	74	-2	2	30	12	48	0
15	586	50.333	358.5	75	14	2	30	12	48	0
16	587	49.242	358.3	76	4	2	30	12	68	0/12
17	588	48.125	357.3	77	0	2	30	12	60	0
18	589	47.197	356.6	78	-8	2	30	12	00	8
19	590	46.460	357.4	79	6	2	30	12	00	0/12
20	591	45.987	355.4	80	11	2	30	12	68	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 17 SHOT POINT 7 TEAM 5
SHOT TIME: 191:10:15:59.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	600	44.894	354.9	81	-17	2	30	12	60	0
2	601	43.777	354.5	82	-8	2	30	12	60	0
3	602	42.825	353.6	83	26	2	30	12	60	0
4	603	41.573	352.9	84	22	2	30	12	60	0
5	604	40.553	353.0	85	-5	2	30	12	60	0
6	605	39.338	352.8	86	0	2	30	12	60	0
7	606	38.393	353.4	87	--		30	12	60	1
8	607	37.192	355.1	88	24	3	30	12	60	1
9	608	36.291	356.0	89	-11		30	12	00	2
10	609	34.915	358.8	90	22	2	30	12	60	0
11	610	33.745	359.3	91	7	2	30	12	60	0
12	611	32.670	0.2	92	6		30	12	60	2
13	612	31.628	0.5	93	23	2	30	12	48	0
14	613	30.398	0.5	94	23	2	30	12	48	0
15	614	29.380	0.8	95	24	1	30	12	48	0
16	615	28.237	2.1	96	-7	2	30	12	48	0
17	616	27.212	4.0	97	7	2	30	12	40	0
18	617	26.184	4.7	98	-4	2	30	12	40	0
19	618	25.144	6.0	99	17	2	30	12	48	0
20	619	24.150	7.1	100	13	2	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 17 SHOT POINT 7 TEAM 6
SHOT TIME: 191:10:15:59.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	621	21.767	6.3	101	11	2	30	12	40	0
2	622	20.650	7.4	102	0		30	12	40	1
3	623	19.602	7.9	103	2		30	12	40	17
4	624	18.582	9.8	104	1	1	30	12	40	0
5	625	17.584	11.4	105	10	1	30	12	40	0
6	626	16.607	13.6	106	0	1	30	12	40	0
7	627	15.447	13.2	107	35	1	30	12	40	0
8	629	13.159	12.5	108	1	1	30	12	40	0
9	630	11.550	6.1	109	2	1	30	12	40	0
10	631	10.347	359.1	110	12	3	30	12	40	0
11	632	9.323	356.6	111	27	1	30	12	40	0
12	633	8.211	354.0	112	6		30	12	40	1
13	634	7.127	352.0	113	-6	3	30	12	40	0
14	635	6.073	348.4	114	2	3	30	12	40	0
15	636	5.800	345.5	115	8	3	30	12	40	0
16	637	3.940	341.3	116	12	3	30	12	40	0
17	638	3.059	327.0	117	10		30	12	40	1
18	639	2.320	308.1	118	16	3	30	12	40	0
19	267	126.580	176.2	119	2		30	12	40	2
20	640	8.185	22.3	120	3		30	12	40	1

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	21.618	336.6	1	21	1	30	12	80	1
2	502	21.083	332.5	2	25	1	30	12	60	0/ 9
3	503	19.970	331.8	3	12	1	30	12	60	8
4	504	18.962	330.9	4	-20	3	30	12	60	0/12
5	505	17.969	335.1	5	-19		30	12	40	17
6	506	17.024	335.5	6	6	3	30	12	40	0/12
7	507	15.696	335.9	7	3	3	30	12	40	0
8	508	14.101	335.3	8	15	3	30	12	40	0
9	509	13.235	327.8	9	59	3	30	12	40	0
10	510	12.374	322.8	10	-27	3	30	12	40	0
11	511	11.192	321.8	11	-23	3	30	12	40	0
12	512	10.040	321.0	12	12	3	30	12	40	0
13	513	8.942	319.4	13	6	1	30	12	40	0
14	514	7.874	317.4	14	27	3	30	12	40	0
15	515	6.843	315.9	15	8		30	12	40	2
16	516	5.329	324.5	16	-7	3	30	12	40	0
17	517	4.073	328.7	17	8	3	30	12	40	0
18	518	2.934	343.2	18	-14	3	30	12	60	8
19	519	1.828	356.9	19	-30	3	30	12	60	0
20	520	0.901	16.9	20	13		30	12	80	17

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	80	17
2	522	1.132	160.1	22	-13	3	30	12	80	0
3	523	2.210	180.4	23	-41	3	30	12	60	8
4	524	3.621	156.8	24	-3		30	12	40	2
5	525	4.843	152.8	25	-2		30	12	40	2
6	526	6.223	156.7	26	1	3	30	12	40	0
7	527	7.866	161.2	27	11	3	30	12	40	0
8	528	8.078	165.8	28	-55	3	30	12	40	0
9	529	9.158	168.8	29	13	3	30	12	40	0
10	530	10.221	172.7	30	7	3	30	12	40	0
11	532	12.522	170.0	31	7		30	12	40	17
12	533	13.415	170.8	32	22	3	30	12	40	0
13	534	14.540	171.2	33	46	3	30	12	40	0
14	535	15.827	171.9	34	0		30	12	40	1
15	536	16.836	171.5	35	-32		30	12	40	17
16	537	17.956	172.7	36	1	3	30	12	40	0
17	538	18.911	173.4	37	0	3	30	12	40	0
18	539	19.983	174.8	38	1	1	30	12	40	0
19	540	21.143	175.8	39	0	1	30	12	40	0
20	551	22.153	176.3	40	7	1	30	12	40	0

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	40	1
2	553	24.449	177.1	42	10	1	30	12	40	0
3	554	25.861	176.2	43	-13	1	30	12	60	0
4	555	26.982	176.1	44	43	1	30	12	60	0
5	556	27.590	176.1	45	1	1	30	12	80	0
6	557	28.481	176.1	46	0		30	12	00	2
7	558	29.417	175.0	47	15	1	30	12	60	0
8	559	30.385	174.9	48	10		30	12	60	2
9	560	31.384	175.1	49	13	1	30	12	40	0
10	561	32.283	174.5	50	-11	1	30	12	40	0
11	562	33.392	174.5	51	19	1	30	12	40	0
12	563	34.541	174.5	52	22	1	30	12	40	0
13	564	35.668	174.4	53	0	1	30	12	40	0
14	565	36.654	174.9	54	-12	1	30	12	40	0
15	566	37.905	176.0	55	7	1	30	12	40	0
16	567	39.358	177.8	56	13	1	30	12	60	0
17	568	40.575	176.5	57	12	1	30	12	60	0
18	569	41.872	175.7	58	15	1	30	12	00	0
19	570	42.817	175.3	59	-2	1	30	12	60	0
20	571	44.184	175.2	60	-7	1	30	12	60	0

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	60	1
2	573	46.730	174.4	62	4	1	30	12	40	0
3	574	48.049	173.8	63	0	1	30	12	40	0
4	575	49.843	173.8	64	16	2	30	12	40	0
5	576	50.132	173.9	65	-13	1	30	12	40	0
6	577	51.379	174.4	66	1	1	30	12	40	0
7	578	52.311	174.9	67	-14	1	30	12	40	0
8	579	53.436	175.2	68	-6	2	30	12	40	0
9	580	54.532	176.1	69	5		30	12	40	2
10	581	55.731	177.1	70	33	1	30	12	40	0
11	582	56.740	177.2	71	5	2	30	12	40	0
12	583	57.833	177.1	72	16	1	30	12	40	0/12
13	584	58.954	176.0	73	-17	2	30	12	40	0/12
14	585	59.921	176.0	74	-2	2	30	12	40	0/12
15	586	61.242	175.5	75	14	1	30	12	40	0
16	587	62.321	175.7	76	4	1	30	12	60	0
17	588	63.415	176.5	77	9	2	30	12	60	0
18	589	64.341	177.0	78	-9	2	30	12	80	0
19	590	65.881	176.4	79	6	1	30	12	00	0
20	591	65.578	177.9	80	11	2	30	12	60	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 18 SHOT POINT 2 TEAM 5
SHOT TIME: 191:12: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	600	66.688	178.1	81	-10	1	30	12	68	0
2	601	67.822	178.3	82	-8	1	30	12	68	0
3	602	68.822	178.8	83	27	1	30	12	68	0
4	603	70.120	179.1	84	23	1	30	12	68	0
5	604	71.130	179.0	85	-5	1	30	12	68	0
6	605	72.353	179.0	86	0	1	30	12	68	1
7	606	73.231	178.6	87	--		30	12	68	
8	607	74.372	177.7	88	26	1	30	12	68	0
9	608	75.253	177.3	89	-12		30	12	88	2
10	609	76.651	176.0	90	24	1	30	12	68	0
11	610	77.837	175.8	91	7	1	30	12	68	0
12	611	78.937	175.5	92	6		30	12	68	2
13	612	79.998	175.4	93	24	1	30	12	48	0
14	613	81.025	175.5	94	24	1	30	12	48	0
15	614	82.158	175.5	95	23	1	30	12	48	0
16	615	83.253	175.1	96	-7	1	30	12	48	0
17	616	84.390	174.6	97	7	1	30	12	48	0
18	617	85.461	174.5	98	-4	1	30	12	48	0
19	618	86.588	174.2	99	18	1	30	12	48	0
20	619	87.648	174.1	100	14	1	30	12	48	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 18 SHOT POINT 2 TEAM 6
SHOT TIME: 191:12: 0: 0.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	621	89.912	174.6	101	13	1	30	12	48	0
2	622	91.091	174.5	102	9		30	12	48	1
3	623	92.142	174.6	103	3		30	12	49	17
4	624	93.289	174.3	104	1	1	30	12	48	0
5	625	94.381	174.2	105	20	1	30	12	48	0
6	626	95.512	174.0	106	0	1	30	12	48	0
7	627	96.569	174.3	107	39	2	30	12	48	0
8	629	98.683	174.0	108	1	1	30	12	48	0
9	630	99.903	175.0	109	2	1	30	12	48	0
10	631	100.954	176.6	110	13	1	30	12	48	0
11	632	101.967	176.9	111	30	2	30	12	48	0
12	633	103.088	177.1	112	7		30	12	48	1
13	634	104.185	177.2	113	-7	1	30	12	48	0
14	635	105.280	177.3	114	2	1	30	12	48	0
15	636	106.383	177.4	115	9	1	30	12	48	0
16	637	107.488	177.4	116	13	2	30	12	48	0
17	638	108.633	177.6	117	11		30	12	48	1
18	639	109.757	177.7	118	18	1	30	12	48	0
19	267	237.843	176.5	119	2	2	30	12	48	0
20	640	111.102	176.8	120	4		30	12	48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 19 SHOT POINT 4 TEAM 1
SHOT TIME: 191:12: 2: 0.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	501	62.651	349.1	1	21	2	30	12	00	0
2	502	61.772	347.9	2	25	2	30	12	68	0
3	503	60.635	347.9	3	12	2	30	12	68	0/ 6/12
4	504	59.581	347.9	4	-20	2	30	12	68	0/ 6
5	505	58.992	349.5	5	-19		30	12	48	17
6	506	58.104	349.8	6	6	2	30	12	48	0/12
7	507	56.847	350.3	7	3	2	30	12	48	0/12
8	508	55.259	350.5	8	15	2	30	12	48	8/ 6/12
9	509	53.886	349.0	9	59	2	30	12	48	0/12/ 6
10	510	52.654	348.3	10	-27	2	30	12	48	0/12/ 6
11	511	51.499	348.6	11	-23	2	30	12	48	0/ 6/12
12	512	50.407	349.1	12	12	2	30	12	48	0/ 6/12
13	513	49.322	349.5	13	6	2	30	12	48	0/ 6/12
14	514	48.255	349.8	14	28	2	30	12	48	0/ 6/12
15	515	47.289	350.3	15	8		30	12	48	17/ 9
16	516	46.464	352.2	16	-7	2	30	12	48	0/12
17	517	45.486	353.3	17	8	2	30	12	48	0/12
18	518	44.687	354.8	18	-14	2	30	12	68	0/ 6/12
19	519	43.645	355.7	19	-30	2	30	12	68	0
20	520	42.659	356.1	20	13		30	12	00	17

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 19 SHOT POINT 4 TEAM 2
SHOT TIME: 191:12: 2: 0.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	521	41.738	355.7	21	-9	1	30	12	00	0
2	522	40.728	356.1	22	-13	1	30	12	00	0
3	523	39.688	355.4	23	-41	1	30	12	68	0
4	524	38.427	357.5	24	-3		30	12	48	2
5	525	37.431	358.6	25	-2		30	12	48	2
6	526	35.989	358.9	26	1	2	30	12	48	0
7	527	35.018	358.5	27	11	2	30	12	48	0
8	528	33.693	358.0	28	-55	2	30	12	48	0
9	529	32.742	357.6	29	13	2	30	12	48	0
10	530	31.614	356.6	30	7	2	30	12	48	0
11	532	29.358	357.7	31	7		30	12	48	17
12	533	28.473	357.9	32	22	1	30	12	48	0
13	534	27.307	358.0	33	46	2	30	12	48	0
14	535	26.045	357.9	34	8		30	12	48	1
15	536	25.055	358.5	35	-32	2	30	12	48	0
16	537	23.983	357.9	36	1	1	30	12	48	0
17	538	22.932	357.5	37	8	2	30	12	48	0
18	539	21.838	356.4	38	1	1	30	12	48	0
19	540	20.674	355.5	39	0	2	30	12	48	0
20	551	19.667	355.0	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
2	553	17.380	353.6	42	10	2	30	12	48	0
3	554	15.960	354.7	43	-13	2	30	12	60	0
4	555	14.917	354.9	44	43	2	30	12	60	0
5	556	14.222	354.7	45	1	2	30	12	80	0
6	557	13.418	354.7	46	0		30	12	80	2
7	558	12.407	357.2	47	15	1	30	12	68	0
8	559	11.448	357.5	48	10		30	12	68	2
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	40	0
12	563	7.319	1.3	52	22	3	30	12	40	0
13	564	6.203	2.6	53	0	3	30	12	40	0
14	565	5.190	1.1	54	-12	3	30	12	40	0
15	566	3.921	352.1	55	7	1	30	12	40	0
16	567	2.645	335.2	56	13	3	30	12	60	0
17	568	1.385	329.0	57	12	3	30	12	60	0
18	569	0.065	209.3	58	15	3	30	12	80	0
19	570	1.036	160.4	59	-2	3	30	12	60	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 4
SHOT TIME: 191:12: 2: 0.010

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	572	3.667	168.8	61	--		30	12	68	1
2	573	5.011	163.7	62	4	3	30	12	48	0
3	574	6.402	161.5	63	0	1	30	12	48	0
4	575	7.376	163.1	64	16	3	30	12	40	0
5	576	8.429	165.3	65	-12	1	30	12	48	0
6	577	9.613	169.1	66	1	1	30	12	48	0
7	578	10.518	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		30	12	48	2
10	581	13.970	181.6	70	33	1	30	12	40	0
11	582	14.985	181.7	71	5	2	30	12	40	0/12
12	583	16.063	180.0	72	16	2	30	12	40	0/12
13	584	17.164	179.6	73	-17	2	30	12	40	0/12
14	585	18.106	176.7	74	-2	2	30	12	40	0/12
15	586	19.425	175.2	75	14	2	30	12	40	0
16	587	20.504	175.9	76	4	2	30	12	60	0/12
17	588	21.611	178.1	77	9	2	30	12	60	0
18	589	22.556	179.5	78	-9	2	30	12	80	0/12
19	590	23.275	177.9	79	6	2	30	12	80	0
20	591	23.847	181.8	80	11		30	12	60	2

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	-10	1	30	12	60	0
2	601	26.126	182.7	82	-9	1	30	12	60	0/17
3	602	27.169	183.7	83	27	2	30	12	60	0
4	603	28.496	184.3	84	23	2	30	12	60	0
5	604	29.490	183.9	85	-5	2	30	12	60	0
6	605	30.709	183.7	86	0	2	30	12	60	0
7	606	31.566	182.6	87	--		30	12	60	1
8	607	32.617	180.4	88	26		30	12	60	17
9	608	33.474	179.3	89	-12		30	12	80	2
10	609	34.835	176.3	90	24	2	30	12	60	0
11	610	36.028	176.0	91	7	2	30	12	60	0
12	611	37.121	175.3	92	6		30	12	60	2
13	612	38.182	175.2	93	24	2	30	12	40	0
14	613	39.406	175.3	94	24	2	30	12	40	0
15	614	40.434	175.2	95	25	2	30	12	40	0
16	615	41.644	174.5	96	-7	2	30	12	40	0
17	616	42.794	173.6	97	7	2	30	12	40	0
18	617	43.871	173.4	98	-4	2	30	12	40	0
19	618	45.009	172.9	99	10	2	30	12	40	0
20	619	46.077	172.7	100	14	2	30	12	40	0

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	40	0
2	622	49.513	173.5	102	9		30	12	40	1
3	623	50.565	173.7	103	3		30	12	40	17
4	624	51.721	173.3	104	1	2	30	12	40	0/12
5	625	52.819	173.1	105	20	2	30	12	40	0/12
6	626	53.960	172.8	106	0	2	30	12	40	2/12
7	627	55.009	173.3	107	39	1	30	12	40	0
8	629	57.115	174.2	108	1	2	30	12	40	2
9	630	58.329	175.9	109	2	2	30	12	40	12
10	631	59.392	177.3	110	13	2	30	12	40	12
11	632	60.413	177.7	111	20	2	30	12	40	12
12	633	61.542	178.0	112	7		30	12	40	1
13	634	62.645	178.2	113	-7	2	30	12	40	0/12
14	635	63.747	178.4	114	2	2	30	12	40	12
15	636	64.854	178.5	115	9	2	30	12	40	12
16	637	65.962	178.5	116	13	2	30	12	40	12
17	638	67.119	178.9	117	11		30	12	40	1
18	639	68.250	179.0	118	18	2	30	12	40	12
19	267	196.134	176.7	119	2		30	12	40	2
20	640	69.567	177.5	120	4		30	12	40	1

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	80	0
2	502	94.424	351.9	2	25	2	30	12	60	0
3	503	93.298	352.0	3	12	2	30	12	60	0
4	504	92.248	352.0	4	-20	2	30	12	60	0/12
5	505	91.760	353.1	5	-19		30	12	40	17
6	506	90.905	353.3	6	6	2	30	12	40	0/12
7	507	89.681	353.6	7	3	1	30	12	40	0
8	508	88.113	353.9	8	15	2	30	12	40	0/12
9	509	86.656	353.0	9	59	2	30	12	40	0/12
10	510	85.381	352.6	10	-27	2	30	12	40	0/12
11	511	84.257	352.9	11	-23	2	30	12	40	0/12
12	512	83.199	353.2	12	12	2	30	12	40	0/12
13	513	82.142	353.5	13	6	1	30	12	40	0/12
14	514	81.101	353.7	14	28	2	30	12	40	0/12
15	515	80.166	354.1	15	8	2	30	12	40	0/12
16	516	79.632	355.2	16	-7	1	30	12	40	0/12
17	517	78.697	355.9	17	8	2	30	12	40	0/12
18	518	77.946	356.8	18	-14	2	30	12	60	0/12
19	519	76.926	357.3	19	-30	1	30	12	60	0
20	520	75.947	357.6	20	13		30	12	80	17

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	80	0
2	522	74.017	357.6	22	-13	1	30	12	80	0
3	523	72.883	357.2	23	-41	1	30	12	60	0
4	524	71.737	358.4	24	-3		30	12	40	2
5	525	70.750	359.0	25	-2		30	12	40	2
6	526	69.309	359.2	26	1	1	30	12	40	0
7	527	68.336	359.0	27	11	2	30	12	40	2
8	528	67.208	358.7	28	-55	1	30	12	40	0
9	529	66.054	358.5	29	13	2	30	12	40	0
10	530	64.915	358.1	30	7	1	30	12	40	0
11	532	62.672	358.7	31	7		30	12	40	2
12	533	61.788	358.8	32	22	2	30	12	40	0
13	534	60.653	358.8	33	46	2	30	12	40	0
14	535	59.361	358.8	34	8		30	12	40	1
15	536	58.374	359.0	35	-32		30	12	40	2
16	537	57.219	358.8	36	1	1	30	12	40	0
17	538	56.245	358.7	37	8	2	30	12	40	0
18	539	55.141	358.3	38	1	1	30	12	40	0
19	540	53.965	358.0	39	0	1	30	12	40	0
20	551	52.949	357.8	40	7	2	30	12	40	0

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	40	1
2	553	50.648	357.4	42	10	1	30	12	40	0
3	554	49.243	357.9	43	-13	1	30	12	60	0
4	555	48.205	358.1	44	43	1	30	12	60	0
5	556	47.508	358.0	45	1	1	30	12	80	0
6	557	46.707	358.1	46	0		30	12	80	2
7	558	45.721	358.9	47	15	1	30	12	60	0
8	559	44.756	359.0	48	10		30	12	60	2
9	560	43.755	359.0	49	13	1	30	12	40	2
10	561	42.882	359.5	50	-11	1	30	12	40	0
11	562	41.779	359.6	51	19	1	30	12	40	0
12	563	40.637	359.8	52	22	1	30	12	40	0
13	564	39.516	360.0	53	8	1	30	12	40	0
14	565	38.509	359.7	54	-12	1	30	12	40	0
15	566	37.213	358.7	55	7	1	30	12	40	0
16	567	35.749	357.7	56	13	1	30	12	60	0
17	568	34.532	358.3	57	12	1	30	12	60	0
18	569	33.264	359.4	58	15	1	30	12	80	0
19	570	32.344	0.1	59	-2	1	30	12	60	0
20	571	30.989	0.4	60	-7	1	30	12	60	0

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	60	1
2	573	28.533	2.2	62	4	1	30	12	40	0
3	574	27.305	3.7	63	8	1	30	12	40	0
4	575	26.327	4.0	64	16	1	30	12	40	0
5	576	25.233	4.2	65	-13	1	30	12	40	0
6	577	23.928	3.6	66	1	1	30	12	40	0
7	578	22.939	2.9	67	-14	1	30	12	40	0
8	579	21.794	2.7	68	-6	2	30	12	40	0
9	580	20.611	0.6	69	5		30	12	40	2
10	581	19.368	358.0	70	33	1	30	12	40	0
11	582	18.357	357.6	71	5	1	30	12	40	0
12	583	17.267	358.2	72	16	1	30	12	40	0
13	584	16.157	359.4	73	-17	1	30	12	40	0
14	585	15.262	2.8	74	-2	1	30	12	40	0
15	586	14.028	5.5	75	14	1	30	12	40	0
16	587	12.920	5.2	76	4	1	30	12	60	0/12
17	588	11.728	2.0	77	9	1	30	12	60	0/12
18	589	10.765	359.4	78	-9	1	30	12	80	0
19	590	10.077	3.2	79	6	1	30	12	80	0
20	591	9.542	353.7	80	11	1	30	12	60	0/12

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 20 SHOT POINT 6 TEAM 5
SHOT TIME: 191:12: 4: 0.812

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	600	8.469	358.5	81	-18	3	30	12	60	0
2	601	7.384	348.0	82	-9	1	30	12	60	0
3	602	6.549	341.5	83	27	3	30	12	60	0
4	603	5.483	333.4	84	23	3	30	12	60	0
5	604	4.521	329.5	85	-5	3	30	12	60	0
6	605	3.812	319.6	86	0	3	30	12	60	0
7	606	2.490	315.7	87	--		30	12	60	1
8	607	0.874	323.6	88	26	3	30	12	60	0
9	608	0.179	147.9	89	-12		30	12	88	2
10	609	2.417	126.7	90	24	3	30	12	60	0
11	610	3.408	139.2	91	7	3	30	12	60	0
12	611	4.606	142.9	92	6		30	12	60	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 20 SHOT POINT 6 TEAM 6
SHOT TIME: 191:12: 4: 0.812

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	621	15.552	161.1	101	13	3	30	12	48	0
2	622	16.741	161.5	102	9		30	12	48	1
3	623	17.750	162.6	103	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	35	1	30	12	48	0
8	629	24.135	166.9	108	1	1	30	12	48	0
9	630	25.161	171.1	109	2	3	30	12	48	0
10	631	26.126	174.8	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		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	9	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		30	12	48	1
18	639	34.931	178.6	118	18	1	30	12	48	0
19	267	162.942	176.1	119	2	2	30	12	48	8/12
20	640	36.284	175.7	120	4		30	12	48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 21 SHOT POINT 19 TEAM 1
SHOT TIME: 191:12: 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	60	0/ 6
3	503	256.017	354.6	3	12	2	30	12	60	0/ 6
4	504	254.971	354.6	4	-20	2	30	12	60	0/ 6
5	505	254.553	355.0	5	-19		30	12	48	17
6	506	253.703	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	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	245.995	355.1	12	12	2	30	12	48	0/ 6
13	513	244.950	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	355.5	15	0	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	60	0/ 6
19	519	239.586	356.5	19	-30	2	30	12	60	0/ 6
20	520	238.605	356.6	20	13		30	12	80	17

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 21 SHOT POINT 19 TEAM 2
SHOT TIME: 191:12: 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	-19		30	12	88	2
3	523	235.556	356.5	23	-42	2	30	12	60	0
4	524	234.382	356.9	24	-3		30	12	48	2
5	525	233.373	357.1	25	-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	-55	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		30	12	48	2
12	533	224.458	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	0		30	12	48	1
15	536	221.036	356.9	35	-32		30	12	48	2
16	537	219.893	356.9	36	1	2	30	12	48	0
17	538	218.927	356.8	37	0	2	30	12	48	0
18	539	217.838	356.7	38	1	2	30	12	48	0
19	540	216.673	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: 0.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	552	214.401	356.6	41	-4		30	12	48	1
2	553	213.376	356.5	42	10	2	30	12	48	0
3	554	211.965	356.6	43	-13	2	30	12	60	0
4	555	210.928	356.6	44	44	2	30	12	68	0
5	556	210.233	356.6	45	1	2	30	12	00	0
6	557	209.432	356.6	46	0		30	12	00	2
7	558	208.430	356.8	47	15	2	30	12	68	0
8	559	207.465	356.8	48	10		30	12	60	2
9	560	206.467	356.8	49	13	2	30	12	48	0
10	561	205.500	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	202.285	356.9	53	0	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	00	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 4
SHOT TIME: 191:12: 6: 0.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	572	192.439	356.9	61	--		30	12	60	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	185.684	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		30	12	48	2
10	581	182.173	356.4	70	33	2	30	12	48	0/12
11	582	181.160	356.3	71	5	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	176.603	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	173.503	356.4	78	-9	2	30	12	00	0/12
19	590	172.041	356.6	79	6	2	30	12	00	0/12
20	591	172.373	356.0	80	11	2	30	12	60	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 21 SHOT POINT 19 TEAM 5
SHOT TIME: 191:12: 6: 0.000

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	600	171.277	355.9	81	-18	2	30	12	60	0
2	601	170.159	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	--		30	12	68	-1
8	607	163.598	356.0	88	26	1	30	12	68	0/26
9	608	162.704	356.2	89	-12		30	12	00	2
10	609	161.303	356.8	90	24	2	30	12	60	0
11	610	160.124	356.9	91	7	2	30	12	68	0
12	611	159.036	357.1	92	6		30	12	68	2
13	612	157.900	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 6
SHOT TIME: 191:12: 6: 0.000

	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		30	12	48	1
3	623	145.707	357.8	103	3		30	12	48	2
4	624	144.584	358.0	104	1	2	30	12	48	0
5	625	143.586	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	629	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	135.880	356.3	111	30	1	30	12	48	0
12	633	134.685	356.1	112	7		30	12	48	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	131.483	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		30	12	48	1
18	639	128.056	355.5	118	18	1	30	12	48	0
19	267	0.112	132.7	119	2	3	30	12	48	3
20	640	126.664	356.3	120	4		30	12	48	1

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 22 SHOT POINT 0 TEAM 1
SHOT TIME: 191:12: 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	00	0/ 6
2	502	156.681	351.5	2	25	2	30	12	60	0/ 6
3	503	155.553	351.6	3	12	2	30	12	60	0/ 6
4	504	154.503	351.6	4	-20	2	30	12	60	0/ 6
5	505	154.003	352.2	5	-19		30	12	40	17
6	506	153.133	352.4	6	6	2	30	12	40	0/ 6
7	507	151.099	352.6	7	3	2	30	12	40	0/ 6
8	508	150.325	352.7	8	16	2	30	12	40	0/ 6
9	509	148.094	352.1	9	59	2	30	12	40	0/ 6
10	510	147.628	351.9	10	-27	2	30	12	40	0/ 6
11	511	146.497	352.1	11	-23	2	30	12	40	0/ 6/12
12	512	145.431	352.2	12	12	2	30	12	40	0/ 6
13	513	144.367	352.4	13	6	3	30	12	40	0/12/ 6
14	514	143.319	352.5	14	28	2	30	12	40	0/ 6/12
15	515	142.373	352.7	15	0	2	30	12	40	12
16	516	141.598	353.4	16	-7	2	30	12	40	0/ 6
17	517	140.633	353.7	17	8	2	30	12	40	0/ 6
18	518	139.832	354.2	18	-14	2	30	12	60	0/ 6
19	519	138.782	354.5	19	-30	2	30	12	60	0/ 6
20	520	137.792	354.6	20	13		30	12	00	17

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 22 SHOT POINT 0 TEAM 2
SHOT TIME: 191:12: 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	00	0
2	522	135.066	354.6	22	-13		30	12	00	2
3	523	134.761	354.4	23	-42	1	30	12	60	0
4	524	133.530	355.0	24	-3		30	12	40	2
5	525	132.506	355.3	25	-2		30	12	40	2
6	526	131.061	355.3	26	1	2	30	12	40	0
7	527	130.107	355.2	27	11	1	30	12	40	0
8	528	129.006	355.0	28	-55		30	12	40	2
9	529	127.871	354.9	29	13	2	30	12	40	0
10	530	126.770	354.6	30	7	2	30	12	40	0
11	532	124.496	354.0	31	7		30	12	40	2
12	533	123.608	354.9	32	22	1	30	12	40	0
13	534	122.474	354.9	33	46	2	30	12	40	0
14	535	121.190	354.8	34	8		30	12	40	1
15	536	120.191	354.9	35	-32		30	12	40	2
16	537	119.058	354.7	36	1	2	30	12	40	0
17	538	118.100	354.6	37	8	2	30	12	40	0
18	539	117.028	354.4	38	1	2	30	12	40	0
19	540	115.877	354.2	39	8	2	30	12	40	0
20	551	114.876	354.1	40	7	2	30	12	40	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 22 SHOT POINT 0 TEAM 3
SHOT TIME: 191:12: 7:59.811

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	552	113.616	354.1	41	-4		30	12	40	1
2	553	112.605	353.9	42	10	2	30	12	40	0/12
3	554	111.100	354.1	43	-13	2	30	12	60	0/12
4	555	110.139	354.1	44	44	2	30	12	60	0/12
5	556	109.447	354.0	45	1	2	30	12	00	0/12
6	557	108.645	354.0	46	0		30	12	00	2
7	558	107.619	354.3	47	15	2	30	12	60	0
8	559	106.653	354.3	48	10		30	12	60	2
9	560	105.657	354.3	49	13	2	30	12	40	0/12
10	561	104.757	354.5	50	-11	2	30	12	40	0/12
11	562	103.651	354.5	51	19	2	30	12	40	0/12
12	563	102.505	354.5	52	22	2	30	12	40	0/12
13	564	101.301	354.5	53	0	2	30	12	40	0/12
14	565	100.399	354.3	54	-12	2	30	12	40	0/12
15	566	99.170	353.9	55	7	2	30	12	40	0/12
16	567	97.764	353.4	56	13	2	30	12	60	0/12
17	568	96.524	353.6	57	12	2	30	12	60	0/12
18	569	95.280	353.9	58	15	2	30	12	00	0/12
19	570	94.256	354.1	59	-2	2	30	12	60	0/12
20	571	92.092	354.1	60	-7	2	30	12	60	0/12

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 22 SHOT POINT 0 TEAM 4
SHOT TIME: 191:12: 7:59.811

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	572	91.623	354.2	61	--		30	12	60	1
2	573	90.345	354.5	62	4	2	30	12	40	0
3	574	89.035	354.0	63	0	2	30	12	40	0
4	575	88.043	354.9	64	16	2	30	12	40	0
5	576	86.955	354.0	65	-13	2	30	12	40	0
6	577	85.708	354.5	66	1	2	30	12	40	0/12
7	578	84.702	354.2	67	-14	2	30	12	40	0/12
8	579	83.664	354.0	68	-6		30	12	40	2
9	580	82.603	353.4	69	5		30	12	40	2
10	581	81.472	352.6	70	33	2	30	12	40	0
11	582	80.479	352.5	71	5	2	30	12	40	0
12	583	79.568	352.5	72	16	2	30	12	40	0
13	584	78.427	352.7	73	-17	2	30	12	40	0
14	585	77.418	353.3	74	-2	2	30	12	40	0
15	586	76.070	353.6	75	14	2	30	12	40	0
16	587	75.001	353.4	76	4	2	30	12	60	0/12
17	588	73.954	352.7	77	9	2	30	12	60	0
18	589	73.075	352.2	78	-9	2	30	12	00	0
19	590	72.289	352.7	79	6	2	30	12	00	0/12
20	591	71.945	351.3	80	11	1	30	12	60	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 22 SHOT POINT 8 TEAM 5
SHOT TIME: 191:12: 7:59.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	600	70.882	350.9	81	-10	2	30	12	60	0
2	601	69.789	350.6	82	-9	2	30	12	60	0
3	602	68.882	350.0	83	20	1	30	12	60	0/12
4	603	67.664	349.5	84	23	1	30	12	60	0
5	604	66.645	349.5	85	-5	2	30	12	60	0
6	605	65.440	349.3	86	0	2	30	12	60	0
7	606	64.470	349.7	87	—		30	12	60	1
8	607	63.191	350.6	88	26	1	30	12	60	0/26
9	608	62.248	351.0	89	-12		30	12	00	1
10	609	60.703	352.6	90	24	2	30	12	60	0
11	610	59.506	352.7	91	7	2	30	12	60	0
12	611	58.385	353.1	92	6	2	30	12	60	0
13	612	57.322	353.1	93	24	2	30	12	40	0
14	613	56.104	353.0	94	24	2	30	12	40	0
15	614	55.074	353.0	95	25	2	30	12	40	0
16	615	53.849	353.5	96	-7	2	30	12	40	0
17	616	52.695	354.3	97	7	2	30	12	40	0
18	617	51.621	354.4	98	-4	2	30	12	40	0
19	618	50.492	354.9	99	10	2	30	12	40	0
20	619	49.433	355.2	100	14	2	30	12	40	0

FIELD DATA TABLE

ALASKA - SUMMER 1984
SHOT NUMBER 22 SHOT POINT 8 TEAM 6
SHOT TIME: 191:12: 7:59.011

	LOC	DIST(KM)	AZIM	UNIT	CHRON	CHAN	C1	C2	C3	TAPE GRADE
1	621	47.160	354.2	101	13	2	30	12	40	12
2	622	45.978	354.4	102	9		30	12	40	1
3	623	44.925	354.3	103	2		30	12	40	17
4	624	43.775	354.8	104	1	2	30	12	40	12
5	625	42.682	355.0	105	20	2	30	12	40	0
6	626	41.554	355.5	106	0	2	30	12	40	0
7	627	40.487	354.9	107	39	2	30	12	40	0
8	629	38.375	353.5	108	1	2	30	12	40	0
9	630	37.252	350.8	109	2	2	30	12	40	0
10	631	36.377	348.4	110	13	2	30	12	40	0/12
11	632	35.444	347.4	111	30	2	30	12	40	0
12	633	34.402	346.5	112	7		30	12	40	1
13	634	33.360	345.8	113	-7	2	30	12	40	0
14	635	32.344	344.9	114	2	2	30	12	40	0
15	636	31.284	344.4	115	9	2	30	12	40	12
16	637	30.222	343.0	116	13	2	30	12	40	0
17	638	29.224	342.4	117	11		30	12	40	1
18	639	28.197	341.3	118	18	2	30	12	40	0
19	267	101.088	179.4	119	2	2	30	12	40	12
20	640	26.431	344.4	120	4		30	12	40	1

APPENDIX B

Archive Tape Data Format

Archive data tapes are written in SEGY 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

$$10^{(att/20)} .$$

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.