

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN	COUNTY TODD	DATE 10-25-76
CREW NO. 6834	TERRAIN DIRT & PAVED ROADS	WEATHER CLEAR - WINDY	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		REMARKS
							LOCUT	60 ~	
1	933	PULSE	1	-	6	SEC			RECORDER SET UP BETWEEN STA'S 61 & 62.
2	934	ETNI	2	-	"	"			WILL START PUSHING LINE # 3. HIGHWAY # 210 (HEAVY TRAFFIC) CROSSES LINE BETWEEN STA'S 28 & 29.
3	936	DRD	4	-	"	"			STA # 79 OPEN DUE TO SWAMP. REELS # 440-442 MONTHLY TESTS. REELS # 440-442 MONTHLY TESTS. REELS # 440-442 MONTHLY TESTS.
4	934	SUM TEST	2	-	"	"			REELS # 440-442 MONTHLY TESTS. REELS # 440-442 MONTHLY TESTS.
5	936	NRT TEST	2	-	"	"			REELS # 440-442 MONTHLY TESTS. REELS # 440-442 MONTHLY TESTS.
6	932	Similarity	1	-	22	SEC			50% REQUESTED BACK IN LINE VIB # 12667 DOWN
7	001	Wind Strip	1	-	6	SEC			CHECKING WIRE BEING WELDED
8	002	1	4	-	99	15	4		70% 1-96 CORRELATION MADE ON FILE # 002.
9	003	3	6	-	101	17			STA'S 79+80 OFFSET TO THE WEST 810'
10	004	5	8	-	103	19			V.P.#5 STACKED ON FIRST HALF DUE TO GAS PIPELINE.
11	005	7	10	-	105	21			V.P.#7 STACKED ON LAST HALF DUE TO GAS PIPELINE.
12	006	9	12	-	107	23		443	E.D.T.#443
13	007	11	14	-	109	25	5	444	B.O.T.#444 FILE#900-10 SEC. ALONE'S. VIB#12667 BACK IN LINE.
14	008	12	15	-	100	26			50% V.P.#12 STACKED ON FIRST HALF DUE TO HOUSE
15	SKIP	13	16	-	111	27			V.P.#13 SKIPPED DUE TO HOUSE.
16	SKIP	15	18	-	113	29			
17	SKIP	17	20	-	115	31			V.P.#15-19 SKIPPED DUE TO HOUSES + BARNES.
18	SKIP	19	22	-	117	33			
19	009	20	23	-	118	34			V.P.#20 STACKED ON LAST HALF DUE TO HOUSES.
20	010	21	24	-	119	35			70%
21	011	22	25	-	120	36	4		VIB#12667 DOWN DUE TO POWER PROBLEMS.
22	012	23	26	-	121	37			
23	013	24	27	-	122	38		444	E.D.T.#444
24	014	25	28	-	123	39		445	B.O.T.#445 FILE#900-10 SEC. ALONE'S.
25	015	27	30	-	125	41	5		VIB#12667 BACK IN LINE.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
					M.D.S-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN # CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 1111222222211111	(CODE 2125)
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 1-4900	TYPE GEOPHONE ETL EV22B	FREQUENCY 75 Hz.	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE		OBSERVER SIMMONS/KRAMER		PARTY MGR.	
42 SEC. RECORD LENGTH					

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 2

CLIENT COCORP	AREA MINN LINE #3	STATE MINN	COUNTY TODD	DATE 6-25-79
CREW NO. 6834	TERRAIN DIRT + PAVED ROAD	WEATHER CLEAR + WINDY		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS	
							LOCUT	60 ~	75 ~		
1	016	29	32 - 127	43	5		445	Out	IN	70%	WIND PICKING UP! GUSTING TO 2 D.M.P.H.
2	017	31	34 - 129	45							STA #128 OPEN DUE TO INTERSECTION.
3	018	33	36 - 131	47							
4	019	35	38 - 133	49							RECORDER MOVE
5	020	37	40 - 135	9			445				RECORDER SET UP BETWEEN STAS 103 + 104 E.O.T #445
6	022	39	42 - 137	11			446				B.O.T. #446 FILE #900-10 SEC. ALLOWS, FILE #021 WIND STRIP.
7	023	41	44 - 139	13							1.96 CORRELATION MADE ON FILE #023.
8	024	43	46 - 141	15						50%	V.P. #43 STACKED ON FIRST HALF DUE TO HOG RANCH.
9	SKIP	45	48 - 143	17							V.P. #45 SKIPPED DUE TO HOUSE.
10	025	46	49 - 144	18							V.P. #46 STACKED ON LAST HALF DUE TO HOUSE.
11	026	47	50 - 145	19						70%	
12	027	49	52 - 147	21							
13	028	51	54 - 149	23			446				E.O.T #446
14	029	53	56 - 151	25			447				B.O.T. #447 FILE #900-10 SEC ALLOWS.
15	030	55	58 - 153	27							
16	031	57	60 - 155	29							3 RAW SWEEPS MADE ON FILE #030 (2 FOR QUALITY CONTROL + 1 FOR DR. KAUFMAN).
17	SKIP	59	62 - 157	31						50%	V.P. #57 STACKED ON FIRST HALF DUE TO HOUSE.
18	SKIP	61	64 - 159	33							
19	032	62	65 - 160	34							V.P. #59-61 SKIPPED DUE TO HOUSES + CHURCH.
20											
21											FINISHED FOR THE DAY.
22											
23											
24											
25											

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS 10 SEGB MPX-28
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE #5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1111 222222 1111	CODE #2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-9/180 1-4900	TYPE GEOPHONE FTLE/22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE 42 SEC. RECORD LENGTH.		OBSERVER / J.O. SIMMONS / KRAMER		PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Petty-Ray Geophysical
Division**
Geosource Inc. 3

CLIENT COCORP.	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 6-26-79
CREW NO. 6834	TERRAIN	WEATHER Overcast & Thunder Showers		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	HIGH	
1	933 PULSE	1 - 6 SEC.				447	Out	IN		RECORDER SET UP BETWEEN STA 128 & 129
2	934 FLINT	2 - " "								
3	935 DRD	4 - " "								
4	936 SUM TEST	2 - " "								STANDING BY FOR RAIN & LIGHTING
5	937 NRI TEST	2 - " "								
6	932 SIMILARIZED	1 - 22 SEC.		5					50%	CHECKING LINE
7	033 WIND STRIP	1 - 6 SEC.							70%	
8	034 63	66 - 161	10							
9										
10										DOWN DUE TO RAIN & THUNDER SHOWERS
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC.		SWEEP PATTERN CODE # 5163		SWEEPS PER PATTERN 16	
SWEPT PATTERNS PER SETUP 1		PATCH PATTERN 1111222222221111		CODE # 2125	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-2900	TYPE GEOPHONE ETH-EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 330'
REMARKS			OBSERVER SIMMONS / KRAMER	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 6-27-79
CREW NO. 6834	TERRAIN DIRT & PAVED ROADS	WEATHER CLEAR	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER		REMARKS
							LOCUT	60~	
1	933	PULSE	6			447	OUT	IN	RECORDER SETUP BETWEEN STA'S 152 & 153
2	934	EINT	2						STA # 128 OPEN DUE TO INTERSECTION
3	936-939	DRD	4			447			E.O.T. #447
4	939	Sum TEST	2			448			B.O.T. #448 FILE #900-10 SEC. ALONE'S.
5	940	NRT TEST	2						
6	933	Similarity	1	5					50%
7	034	WIND STRIP	1						CHECKING LINE
8	SKIP	63	66						50%
9	"	65	68						VP'S 65-79 SKIPPED DUE TO CROSS COUNTRY & BAD ROAD (DUE TO RAIN)
10	"	67	70						
11	"	69	72						
12	"	71	74						
13	"	73	76						
14	"	75	78						
15	"	77	80						
16	SKIP	79	82						
17	035	80	83	3	5				70% 1-96 CORRELATION MADE ON FILE #035
18	036	81	84	4					50% V.P. #81 STACKED ON FIRST HALF DUE TO HOUSE.
19	SKIP	82	85	5					
20	SKIP	83	86	6					V.P.'s #82-85 SKIPPED DUE TO HOUSE'S.
21	SKIP	84	87	7					
22	SKIP	85	88	8					
23	037	86	89	9					V.P. #86 STACKED ON LAST HALF DUE TO HOUSE.
24	038	87	90	10					70%
25	039	88	91	11		448			E.O.T. #448

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 111122222221111 (CODE 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 25 Hz.	STATION INTERVAL 330'
REMARKS 4MS SAMPLE RATE	42 SEC RECORD LENGTH.	OBSERVER TO SIMMONS/KRAMER	PARTY MGR.	LINE DIR. 1 TO 24 N → S	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 5

CLIENT CDCORP	AREA MINN LINE #3	STATE MINN	COUNTY TODD	DATE 6-27-79
CREW NO. 6834	TERRAIN DIRT & PAVED ROAD	WEATHER CLEAR		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	75 ~	
1	040	92 - 187	12	5		449	OUT	IN	70%	B.O.T. #449 FILE #900-10SEC. ALLOW'S.
2	041	93 - 188	13							
3	042	94 - 189	14							
4	043	95 - 190	15							
5	044	96 - 191	16							
6	045	97 - 192	17	4						VIB #14256 DOWN, DUE TO BROKEN FAN BELT; REPLACING NOW.
7	046	98 - 193	18			449				E.O.T. #449
8	047	99 - 194	19			450				B.O.T. #450 FILE #900-10SEC. ALLOW'S.
9	048	100 - 195	20							
10	049	101 - 196	21							VIB #14256 BACK IN LINE. VIB #12666 DOWN BROKEN BRAKE LINE
11	050	102 - 197	22							
12	051	103 - 198	23							
13	052	104 - 199	24							
14	053	105 - 200	25			450			50%	V.P. #102 STACKED ON FIRST HALF DUE TO HOUSE. E.D.T. #450
15	SKIP	106 - 201	26			451				V.P. #103 SKIPPED DUE TO HOUSE. B.O.T. #451, FILE #900-10SEC. ALLOW'S.
16	055	108 - 203	28							FILE #054 WIND STRIP. 1-96 CORRELATION MADE ON FILE #055
17	056	110 - 205	30						70%	
18	057	112 - 207	32							
19	058	114 - 209	34							
20	059	116 - 211	36							3 RAW SWEEPS MADE ON FILE #059 (2 FOR QUALITY CONTROL + 1 FOR DR. KROFMAN).
21	060	118 - 213	38							
22	061	120 - 215	40			451				E.O.T. #451
23	062	122 - 217	42			452				B.O.T. #452 FILE #900-10SEC. ALLOW'S.
24										
25										FINISHED FOR THE DAY.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEG-B MPX-128
SWEEP FREQUENCY 8-40 Hz/22sec.	SWEEP PATTERN CODE #5163+4163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 11112222221111	CODE #2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 21-P/100 1-4900	TYPE GEOPHONE E.T.L-EP22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE 42 SEC RECORD LENGTH.			OBSERVER SIMMONS/KRAMER	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 6-28-79
CREW NO. 6834	TERRAIN DIRT & PAVED ROAD	WEATHER OVERCAST - THUNDER SHOWERS	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	% ATTEN	
1	PULSE	1 - 6 SEC				452	Out	IN		RECORDER SET UP BETWEEN STA.'S 195 & 196
2	EINI	2 - " "								STA. # 128 OPEN DUE TO INTERSECTION.
3	DRD	4 - " "								
4	SUM TEST	2 - " "								
5	NRS TEST	2 - " "								STANDING BY FOR RAIN
6	Similarity	1 - 22 SEC		5					50%	
7	WIND STRIP	1 - 6 SEC								CHECKING LINE
8	064	121 - 123	219	1	5				70%	1-96 CORRELATION MADE ON FILE # 064
9	065	123	126 - 221	3						
10	066	125	128 - 223	5		452				E.O.T. # 452
11	067	127	130 - 225	7		453			50%	B.O.T. # 453 FILE # 900-10 SEC. ALLOW'S V.P. # 127 STACKED ON LAST HALF DUE TO HOUSE.
12	SKIP	129	132 - 227	9						V.P. # 129 SKIPPED DUE TO HOUSE.
13	068	131	134 - 229	11						
14	069	132	135 - 230	12					70%	
15	070	133	136 - 231	13						
16	071	135	138 - 233	15						
17	072	137	140 - 235	17						
18	073	139	142 - 237	19		453				E.O.T. # 453
19	074	141	144 - 239	21		454				B.O.T. # 454 FILE # 900-10 SEC. ALLOW'S V.P. # 141 STACKED ON FIRST HALF DUE TO HOUSE.
20	SKIP	143	146 - 241	23						V.P. # 143 SKIPPED DUE TO HOUSE
21	075	144	147 - 242	24						V.P. # 144 STACKED ON LAST HALF DUE TO HOUSE.
22	076	145	148 - 243	25						V.P. # 145 STACKED ON FIRST HALF DUE TO WELL.
23	SKIP	147	150 - 245	27						V.P. # 147 SKIPPED DUE TO WELL.
24	077	148	151 - 246	28					50%	V.P. # 148 STACKED ON LAST HALF DUE TO WELL.
25	078	149	152 - 247	29						V.P. # 149 STACKED ON FIRST HALF DUE TO HOUSE.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz/22 SEC	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 22222222 (CODE 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETG-EV22B	FREQUENCY 2.5 Hz	STATION INTERVAL 330'
REMARKS 4 MS. SAMPLE RATE	42 SEC. RECORD LENGTH	OBSERVER SIMMONS/KRAMER	PARTY MGR.	LINE DIR. 1 TO 24 N → S	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Petty-Ray Geophysical
Division
Geosource Inc.**

CLIENT CDCORP	AREA MINN LINE #3	STATE MINN	COUNTY TODD	DATE 6-28-79
CREW NO. 6834	TERRAIN DIRT + PAVED ROAD	WEATHER OVERCAST — THUNDER SHOWERS	LINE NO. 3	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	70%	
1	SKIP	154 - 249	31	5		454	OUT	IN		STNS # 248-249 OFFSET LINE 2, 635 WEST. V.P. # 151 SKIPPED DUE TO HOUSE
2	079	153	33						70%	
3	154	157 - 252	34							STANDING BY FOR RAIN + LIGHTING
4	155	158 - 253	35							DOWN FOR THE DAY DUE TO RAIN + LIGHTING
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 111122222221111	CODE # 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-9900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE 4/2 SEC RECORD LENGTH.			OBSERVER / S.O. SIMMONS / KRAMER	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. WINE #3	STATE MINN.	COUNTY TODD	DATE 6-29-78
CREW NO. 6834	TERRAIN Dirt Roads	WEATHER P/C	LINE NO. 5	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER		REMARKS
							LOCUT	60 ~	
1 933	PULSE	1 - 6 SEC.			454		Out	TN	RECORDER SET UP BETWEEN STA.'S 228 & 229
2 934	ETN	2 - " "							Highway # 71 Crosses WINE BETWEEN STA.'S 224 & 225
3 935	DRD	4 - " "			454				E.D.T.#454
4 936	SUM TEST	2 - " "			455				B.D.T.#455 FILE #900-10SEC. Allones.
5 937	NRT TEST	2 - " "							
6 938	SIMILAR TO	1 - 22 SEC.		5					50%
7 080	WIND STRIP	1 - 6 SEC.							CHECKING WINE
8 081	154	157 - 252	1	5					20% 1-96 CORRELATION MADE ON FILE #081
9 082	155	158 - 253	2						
10 083	157	160 - 255	3						
11 084	159	162 - 257	4						
12 085	161	164 - 259	5						
13 086	162	165 - 260	6		455				40% V.P.#162 STACKED ON FIRST HALF DUE TO HOUSE E.D.T.#455
14 087	163	166 - 261	7						V.P.#163 SKIPPED DUE TO HOUSE. B.D.T.#456 FILE #900-10SEC. Allones.
15 088	165	168 - 263	8		456				V.P.#165 STACKED ON LAST HALF DUE TO HOUSE.
16 088	167	170 - 265	9						70% V.P.#167 STACKED ON FIRST HALF DUE TO WELL.
17 089	169	172 - 267	10						V.P.#169 STACKED ON LAST HALF DUE TO WELL.
18 090	171	174 - 269	11						
19 091	173	176 - 271	12						
20 092	175	178 - 273	13						STAS #273-274 LINE OFFSET 2,518' WEST.
21 093	177	180 - 275	14		456				1-96 CORRELATION MADE ON FILE #093. E.D.T.#456
22 095	179	182 - 277	15		457				B.D.T.#457 FILE #900-10SEC. Allones; FILE #094 WIND STRIP.
23 096	181	184 - 279	16						
24 097	183	186 - 281	17						
25 098	185	188 - 283	18						FINISHED FOR THE DAY

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz/22 SEC.	SWEEP PATTERN CODE #5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN IIII 2222 X 2222 IIII (CODE 225)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 1-41900	TYPE GEOPHONE 5TW-EV22B	FREQUENCY 25 Hz	STATION INTERVAL 330'
REMARKS 4ms. SAMPLE RATE 4/2 SEC. RECORD LENGTH	OBSERVER TO SIMMONS/KRAMER	PARTY MGR.			

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 2-2-79
CREW NO. 6834	TERRAIN Dirt Road - Hill	WEATHER Overcast & Drizzle	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	80 ~	
1	933 PULSE	1 - 6 SEC				457	Out	LN		RECORDED SET UP BETWEEN STA'S 258 & 259
2	934 EINT	2 - " "								NOISE ON STA'S 219-226 DUE TO WORKING GRAVEL
3	936 DRD	4 - " "								Pit & Hiway # 71.
4	937 Sum TEST	2 - " "								BAD STORM MOVING IN FROM NORTH. WIND
5	938 NRT TEST	2 - " "								PICKING UP
6	932 Similarity	1 - 22 SEC		5					50%	
7	098 Wind Strip	1 - 6 SEC								CHECKING LINE
8	099 185	188 - 283	2			457			70%	1-96 CORRELATION MADE ON FILE # 099 EOT # 457
9	100 186	189 - 284	3			458				BOT # 459. FILE # 900-10 SEC. ALL ONE'S
10	SKIP 187	190 - 285	4	5						VP # 187 SKIPPED DUE TO HOUSE
11	101 189	192 - 287	6	4						VIB 2667 DOWN DUE TO BAD HANGER BEARING
12	102 191	194 - 289	8							
13	103 193	196 - 291	10							
14	104 195	198 - 293	12							
15	105 197	200 - 295	14			458				EOT # 458
16	106 199	202 - 297	16			459				BOT # 459. FILE # 900-10 SEC. ALL ONE'S
17	107 201	204 - 299	18							
18	108 203	206 - 301	20							
19	109 205	208 - 303	22							
20	110 207	210 - 305	24							RAW SWEEP MADE ON FILE # 110
21	111 209	212 - 307	26	4		459				EOT # 459
22	113 211	214 - 309	28	5		459				BOT # 460. FILE # 113 FILE # 113 WIND STRIP
23	114 212	215 - 310	30							FILE # 114 1-96 CORRELATION MADE ON FILE # 112
24	115 213	216 - 311	30							
25	SKIP 215	218 - 313	32							VP # 215 SKIPPED DUE TO HOUSE

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8 - 40 Hz / 22 SEC		SWEEP PATTERN # CODE # 5163		SWEEPS PER PATTERN 16	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 4-91100 1-4900	
TYPE GEOPHONE ETH-EV22B		FREQUENCY 25 Hz		STATION INTERVAL 530'	
REMARKS 4ms SAMPLE RATE 42 SEC. RECORD LENGTH.			OBSERVER SIMMONS		PARTY MGR.

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Petty-Ray Geophysical
Division
Geosource Inc.**

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 7-2-79
CREW NO. 6834	TERRAIN Dirt Roads - Hillly	WEATHER Overcast	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	70 ~	
1	116	217 - 315	34	5		460	Out	IN	70%	
2	117	221 - 316	35							
3	118	222 - 317	36			460				EDL # 460
4	119	223 - 318	37			461				BOT # 461
5	SKIP	224 - 319	38							UPS 221-225 SKIPPED DUE TO RAILROAD & HOUSES
6	SKIP	226 - 321	40							
7	SKIP	228 - 323	42							
8										FINISHED FOR THE DAY
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz/22sec	SWEEP PATTERN # CODE 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 222 222 222 (CODE 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 1-4900	TYPE GEOPHONE ETH-EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 350'
REMARKS 4/MS. SAMPLE RATE 42 SEC. RECORD LENGTH		OBSERVER SIMMONS	PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP		AREA MINN. LINE #3		STATE MINN.	COUNTY TODD	DATE 7-3-79				
CREW NO. 6834		TERRAIN DIRT ROADS - HILLS		WEATHER OVERCAST - THUNDERSTORM		LINE NO. 3				
REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		RE MARKS	
							LOCUT	60 ~		
1	933	PULSE					OUT	IN	RECORDER SET UP BETWEEN STA'S	
2	934 935	EINI								
	936 937	DBD								
	938 939	SUM TEST								
	940 941	NRJ TEST								
6	932	SIMILARITY						50%		
7	130	WIND STRIP							CHECKING WINE	
8	227	230-325						70%		
9										
10										
11										
12									DOWN DUE TO WEATHER	
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
TOTAL SETUPS		TOTAL SWEEPS		TOTAL COVERAGE		TOTAL FIELD TIME		DRIVING TIME		SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC		SWEEP PATTERN CODE #5163		SWEEPS PER PATTERN 16		SWEEP PATTERNS PER SETUP 1		PATCH PATTERN 1111222222221111 (CODE #2125)		
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 4-4100 1-4900		TYPE GEOPHONE 576-EV22B		FREQUENCY 25 Hz		STATION INTERVAL 330'
REMARKS						OBSERVER SIMMONS		PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

12

CLIENT	COCORP	AREA	Minn. Line # 3	STATE	MINN.	COUNTY	TODD	DATE	7-5-79
CREW NO.	6834	TERRAIN	Dirt Roads - Hilly	WEATHER		LINE NO.	3		

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AP	
1	933	PULSE	1			461	Out	IM		RECORDER SET UP BETWEEN STA'S 3014302
2	934	ETNI	2							
3	935	DRD	4							
4	936	Sum Test	2							
5	937	DIRT TEST	2							
6	938	Similarity	1	4					50%	
7	120	Wind Strip	1							Checking Line
8	121	227	230-325	1		461			70%	1-96 CORRELATION MADE ON FILE # EOT # 461
9	122	228	231-326	2		462				BOT # 462. FILE # 900-10 SEC ALL ONE'S
10	123	229	232-327	3						
11	124	231	234-329	5						
12	125	233	236-331	7						V.P. # 233 STACKED ON FIRST HALF DUE TO HOUSE
13	126	235	238-333	9						" " " " LAST " " " "
14	127	237	240-335	11		462				EOT # 462
15	128	239	242-337	13		463				BOT # 463. FILE # 900-10 SEC ALL ONE'S
16	SKIP	241	244-339	15						V.P. # 241 SKIPPED DUE TO HOUSE
17	129	243	246-341	17						
18	130	244	247-342	18						
19	131	245	248-343	19						3 RAW SWEEPS (FOR DR. KAUFMAN - 21-48 94-96 FOR QUALITY CONTROL) MADE ON FILE # 131
20	132	247	250-345	21						
21	133	248	251-346	22		462				EOT # 463
22	SKIP	249	253-347	23		464				BOT # 464 FILE # 900-10 SEC ALL ONE'S. FILE # 134 WIND STRIP
23	135	251	254-349	25						1-96 CORRELATION MADE ON FILE # 135
24	136	253	256-351	27						
25	137	255	258-353	29						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY	SWEEP PATTERN	SWEEPS PER PATTERN	SWEEP PATTERNS PER SETUP	PATCH PATTERN	
8-40 Hz / 22 SEC	CODE # 163	16	1	22222222	
GEOPHONES PER PATCH	NO. OF RECORDING PATCHES	TYPE VIBRATOR	TYPE GEOPHONE	FREQUENCY	STATION INTERVAL
24	96	3-41100 1-4900	ETL-EV22B	75 Hz.	330'
REMARKS	OBSERVER		PARTY MGR.		
4ms SAMPLE RATE. 4/2 SEC RECORD LENGTH.	Simmons				

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 13

CLIENT COCORP	AREA MINN. LINE #3	STATE MINN	COUNTY TODD	DATE 7-5-79
CREW NO. 6834	TERRAIN Dirt Road - Hill	WEATHER		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TARE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	70 ~	
1	138 257	260 - 355	31	4		464	Out	IN	70%	2,635' OFFSETS WEST BETWEEN STA'S 248 & 249
2	139 258	261 - 356	32							V.P. # 258 STACKED ON FIRST HALF DUE TO HOUSE
3	SKIP 259	262 - 357	33							V.P. # 259 SKIPPED DUE TO HOUSE
4	SKIP 261	264 - 359	35							
5	140 262	265 - 360	36			464				E.O.T. # 464
6	141 263	266 - 361	37			465				B.O.T. # 465. FILE # 900-10 SEC. ALL ONE'S
7	142 265	268 - 363	39							
8	143 267	270 - 365	41							
9	144 269	272 - 367	43							STA'S 367 - 372 OPEN DUE TO RIVER & SWAMP
10	145 271	274 - 369	45							
11	146 273	276 - 371	47							
12	147 275	278 - 373	49			465				E.O.T. # 465
13										
14										
15										
16										FINISHED FOR THE DAY
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC		SWEEP PATTERN CODE 4163		SWEEPS PER PATTERN 16	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 3-91100	
TYPE GEOPHONE ET6-EV22B		FREQUENCY 7.5 Hz		STATION INTERVAL 330'	
REMARKS 40ms SAMPLE RATE - 42 SEC. RECORD LENGTH			OBSERVER SIMMONS		PARTY MGR.
PATCH PATTERN 1111222222221111 (CODE # 2125)					
LINE DIR. 1 TO 24 N → S					

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 14

CLIENT COCORP	AREA MINN. LINE #3	STATE MINN.	COUNTY TODD	DATE 7-6-79
CREW NO. 6834	TERRAIN Dirt Roads & Hills	WEATHER Clear	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		REMARKS
							LOCUT	60 ~	
1 933	Pulse	1 — 6 Sec.				466	Out	TN	301. #466 Recorder Setup Between Sta. 350 & 351
934-935	EINI	2 — " "							Sta. 362-372 open due to River & Swamp
936-939	DRD	4 — " "							
934-954	Sum Test	2 — " "							
960-961	NRI Test	2 — " "							
6 932	Similarity	1 — 22 Sec.		4					50%
7 148	Wind Strip	1 — 6 Sec.							Checking Line
8 149	277	280 - 375	2						70% 1-96 Correlation Made on File #149
9 150	279	282 - 377	4						VIB #14256 Had Bad T/O Card, Replaced, Ran Similarity on Paper Only
10 151	281	284 - 379	6						
11 152	283	286 - 381	8			466			E.O.I. #466
12 153	285	288 - 383	10			467			301 #467. File #900-10 Sec. All One's
13 154	287	290 - 385	12						
14 155	288	291 - 386	13						
15 156	289	292 - 387	14						
16	SKIP	294 - 389	16						V.P. #291 Skipped Due to house
17 157	293	296 - 391	18						
18 158	294	297 - 392	19			467			E.O.I. #467
19 159	295	298 - 393	20			468			301 #468. File #900-10 Sec. All One's
20	SKIP	300 - 395	22						V.P. #292 Skipped Due to house
21	SKIP	302 - 397	24						" 299 " " " "
22 160	301	304 - 399	26						V.P. 301 Stacked on last half
23 161	302	305 - 400	27						Raw Sweep Made on File #161
24 162	303	306 - 401	28						
25 163	305	308 - 403	30						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 Sec		SWEEP PATTERN CODE # 4163		SWEEPS PER PATTERN 16	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 3-4100	
TYPE GEOPHONE ET6 - EV22B		FREQUENCY 25 Hz.		STATION INTERVAL 330'	
REMARKS			OBSERVER Simmons		PARTY MGR.
					LINE DIR. 1 TO 24 N1 → S

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 7-6-79
CREW NO. 6834	TERRAIN Dirt Roads & Hills	WEATHER CLEAR	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	20%	
1	164	307	310 - 405	32	4	468	Out	IN	20%	
2	165	309	312 - 407	34		468				EOT #468. 1-96 CORRELATION MADE ON FILE #165
3	167	310	313 - 409	35		469				BOT #469. FILE #900-10 SEC. ALL ONE'S FILE #166 WIND STRIP
4	168	311	314 - 409	36						
5	SKIP	313	316 - 411	38						V.P. #313 SKIPPED DUE TO HOUSE
6	169	315	318 - 413	40						
7	170	317	320 - 415	42						
8	171	319	322 - 417	44						
9	172	321	324 - 419	46		469				EOT #469
10	173	323	326 - 421	48		470				BOT #470. FILE #900-10 SEC. ALL ONE'S
11										
12										FINISHED FOR THE DAY
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz/22 SEC.	SWEEP PATTERN CODE # 4163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 22222222 (CODE 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 25 Hz	STATION INTERVAL 330'
REMARKS	OBSERVER SIMMONS			PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. (SAT) 16

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 7-7-79
CREW NO. 6834	TERRAIN DIRT ROADS - HILLY	WEATHER CLEAR - WINDY	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER		REMARKS
							LOCUT	60 ~	
1 933	PULSE	1 - 6 SEC.				470	Out	IN	RECORDER SETUP BETWEEN STA'S 394 & 395
2 934	ELNI	2 - " "							STA'S 367-372 OPEN DUE TO RIVER & SWAMP
3 936	DRD	4 - " "							
4 933	SUM TEST	2 - " "							
5 936	DRD TEST	2 - " "							
6 932	Similarity	1 - 22 SEC.		4					50%
7 174	Wind Strip	1 - 6 SEC.							70% Checking WINE
8 175	325	328 - 423	6						1-96 CORRELATION MADE ON FILE # 175
9 176	327	330 - 425	8						
10 177	328	331 - 426	9			470			EOI # 470
11 178	329	332 - 427	10			471			BOI # 471. FILE # 900-10 SEC ALL ONE'S
12	SKIP	334 - 429	12						VP # 329 SKIPPED DUE TO HOUSE
13 179	333	336 - 431	14						VP # 333 STACKED ON LAST HALF DUE TO HOUSE
14 180	335	338 - 433	16						
15 181	337	340 - 435	18						
16 182	339	342 - 437	20						
17 183	341	344 - 439	22			471			EOI # 471
18	SKIP	346 - 441	24						VP # 343 & 344 SKIPPED DUE TO WATER WELL & HOUSE
19	SKIP	347 - 442	25						
20		348 - 443	26			472			BOI # 472 FILE # 900-10 SEC. ALL ONE'S
21		349 - 444	27						
22		350 - 445	28						DOWN DUE TO INST. FAILURE
23	SKIP	352 - 447	30						(NO SPARE PART)
24		354 - 449	32						
25	SKIP	356 - 451	34						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC.		SWEEP PATTERN CODE # 4163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 22222222 (CODE # 2125)
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 25 Hz	STATION INTERVAL 330'
REMARKS			OBSERVER Simmons	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

17

CLIENT COCORP	AREA MINN. LINE #344 (EXPERIMENTAL)	STATE MINN.	COUNTY TODD	DATE 7-14-79
CREW NO. 6834	TERRAIN PAVED & DIRT ROADS	WEATHER CLEAR	LINE NO. 344	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER		REMARKS
							LOCUT	60~	
1 933	PULSE	1 - 6 SEC.				472	Out	IN	Doing BROADSIDE Exp. AS PER DR. KAUFMAN'S REQUEST.
2 934	EINT	2 - " "							Will BE VIB ON LINE #4, PHONES ON LINE #3
3 935	DRD	4 - " "							RECORDED SET UP BETWEEN STA'S 394 & 395 LINE #3
4 936	SUM TEST	2 - " "							STA'S 362-372 OPEN DUE TO RIVER & SWAMP.
5 937	NRT TEST	2 - " "							
6 938	SIMILARITY	1 - 22 SEC		5					50%
7 184	WIND SCRIP	1 - 6 SEC							Checking line
8	LINE #4	LINE #3							70%
9 185	152	348 - 443	26	"					
10									
11 186	151	348 - 443	26	"					
12									
13 187	150	348 - 443	26	5					
14									
15 188	3	348 - 443	26	4					VIB #12666 Down DUE TO BROKEN FULF LINE
16									
17 189	2	348 - 443	26	"					
18									
19 190	1	348 - 443	26	4					
20									
21									
22									
23									
24									
25									

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8 - 40 Hz / 22 SEC	SWEEP PATTERN CODE #	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 222 222 (CODE # 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR	TYPE GEOPHONE ETL - EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 350'
REMARKS	OBSERVER SIMMONS		PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 7-14-79
CREW NO. 6834	TERRAIN Dirt Roads	WEATHER CLEAR	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	~ 250	
1	191	345	348 - 443	26	5	473	Out	IN	70%	1-96 CORRELATION MADE ON FILE # 191
2	192	346	349 - 444	27	4	473				VIB. # 12666 BACK ON LINE. VIB # 14256 DOWN DUE TO BAD SWEEP - IT CARD.
3	193	347	350 - 445	28						
4	SKIP	349	352 - 447	30						
5	194	351	354 - 449	32						
6	SKIP	353	356 - 451	34						
7	195	354	357 - 452	35						
8	196	355	358 - 453	36						
9	197	356	359 - 454	37		473				E.O.T. # 473. 3 RAW SWEEPS (FOR DR. KAUFMAN, 211-# 796) FOR QUALITY CONTROL MADE ON FILE # 197
10	SKIP	357	360 - 455	38		473				
11	SKIP	359	362 - 457	40						
12	199	360	363 - 458	41		474				B.O.T. # 473. FILE # 90-10 SEC. ALL ONE'S. FILE # 198, WIND STRIP
13	200	361	364 - 459	42		474				
14	SKIP	363	366 - 461	44						
15	201	364	367 - 462	45						
16	202	365	368 - 463	46		474				E.O.T. # 473. 474
17						474				
18										FINISHED FOR THE DAY
19										
20										DISCONTINUING LINE # 3 TO BE CONTINUED AFTER COMPLETION OF LINE # 4. MOVING TO LINE # 4 + PICKING UP LINE # 3
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE #	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 22222222 (CODE # 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR	TYPE GEOPHONE ET6-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS	OBSERVER SIMMONS	PARTY MGR.		LINE DIR. 1 TO 24 N → S	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical 19
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY TODD	DATE 7-27-79
CREW NO. 6834	TERRAIN Dirt Roads - Hilly	WEATHER OVERCAST - RAINING	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F L T E R	RE MARKS
1 933	PULSE	1 - 6 SEC.				498	OUT IN	RECORDER SET UP BETWEEN STA'S #453+454
2 934	EINT	2 - " "						B.O.T #498 FILE #900-10SEC. ALONE'S.
3 935	DRD	4 - " "						STARTING BACK ON LINE #3. WILL BE PUSHING LINE
4 936	SUM TEST	2 - " "						LINE EXTREMELY WET DUE TO OVERNITE RAIN.
5 937	NRT TEST	2 - " "						STAS #465+466 LINE OFFSET 887' WEST
6 938	SIMILARITY	1 - 22 SEC.		5				50%
7 203	WIND STRIP	1 - 6 SEC.						CHECKING WINE
8 204	379	382 - 477	1	5				70% 1-96 CORRELATION MADE ON FILE #204
9 205	380	383 - 478	2					70%
10 206	381	384 - 479	3					STARTING TO RAIN
11 207	382	385 - 480	4					
12 208	383	386 - 481	5			498		E.O.T #498
13 209	384	387 - 482	6			499		B.O.T #499 FILE #900-10SEC. ALONE'S
14 210	385	388 - 483	7					50% V.P #385 STACKED ON FIRST HALF DUE TO HOUSE.
15 211	387	390 - 485	9					V.P #387 STACKED ON LAST HALF DUE TO HOUSE.
16 212	388	391 - 486	10					70% STAS #484+485 LINE OFFSET 2645' WEST.
17 213	389	392 - 487	11					V.P'S 387-392 RECORDING 95 STA'S DUE TO FLAG FOR STA #485 OVER →
18 214	390	393 - 488	12					MISSING WHEN WINE LAYED OUT. ROLL OVER CABLE. TOOK UP MISSING STA.
19 215	391	394 - 489	13					3 RAW SWEEPS MADE ON FILE #215 (2 FOR QUALITY CONTROL + 1 FOR DR. KAUFMAN.)
20 216	392	395 - 490	14			499		E.O.T #499
21 218	393	396 - 491	15			500		B.O.T #500; FILE #900-10SEC. ALONE'S; FILE #217 WIND STRIP
22 219	394	397 - 492	16					1-96 CORRELATION MADE ON FILE #219. STAS. 492+493 LINE OFFSET 2660' WEST.
23 220	395	398 - 493	17					
24 221	396	399 - 494	18					
25								FINISHED FOR THE DAY.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
					MDS-10SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 222 X 222	(CODE # 2125)
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-9100'S 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 75 Hz	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE	42 SEC RECORD LENGTH.	OBSERVER / TO SIMMONS / KRAMER	PARTY MGR.	LINE DIR. W. → E.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical 20
Division
Geosource Inc.

CLIENT COCORP	AREA MINN LINE #3	STATE MINN	COUNTY TODD	DATE 7-28-79
CREW NO. 6834	TERRAIN DIRT ROAD	WEATHER CLEAR-HUMID	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	200 ~	
1	933	PULSE	1			500	OUT	IN		RECORDER SET UP BETWEEN ST. 465 & 466
934-935	EINT	2								
936-939	DRD	4								
953-954	Sum Test	2								
960-961	NRJ Test	2								
6	932	Similarity	1						50%	CHECKING LINE
7	222	WIND STRIP	1							ST. #496 & 497 LINE OFFSET 2,100' WEST.
8	223	397	400 - 495	7					70%	1-96 CORRELATION MADE ON FILE #223
9	SKIP	399	402 - 497	9		500				V.P. #399 SKIPPED DUE TO HOUSE. E.D.T. #500
10	224	401	404 - 499	11		501			40%	B.O.T. #501; FILE #900-10SEC. ALLOW'S. V.P. #401 STACKED ON LAST HALF DUE TO HOUSE.
11	225	403	406 - 501	13					70%	
12	226	405	408 - 503	15						
13	227	407	410 - 505	17						
14	228	409	412 - 507	19						
15	229	410	413 - 508	20					40%	V.P. #410 STACKED ON FIRST HALF DUE TO HOUSE.
16	SKIP	411	414 - 509	21						V.P. #411 SKIPPED DUE TO HOUSE.
17	230	413	416 - 511	23					70%	
18	231	415	418 - 513	25		501				E.D.T. #501
19	232	416	419 - 514	26		502				B.O.T. #502; FILE #900-10SEC. ALLOW'S.
20	SKIP	417	420 - 515	27						V.P. #417 SKIPPED DUE TO HOUSE.
21	SKIP	419	422 - 517	29						V.P. #419 SKIPPED DUE TO HOUSE.
22	233	420	423 - 518	30						V.P. #420 STACKED ON LAST HALF DUE TO HOUSE.
23	234	421	424 - 519	32						
24	235	422	425 - 520	32						
25	236	423	426 - 521	33						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-RB
SWEEP FREQUENCY 8-40Hz/22SEC.	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 110	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1111222222221111	CODE # 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-9/1100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5Hz	STATION INTERVAL LINE DIR. 1 TO 24 W → E
REMARKS 4M.S. SAMPLE RATE	42SEC. RECORD LENGTH.	OBSERVER J.A. SIMMONS/KRAMER	PARTY MGR.		

GEO-252-A

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical 21
Division
Geosource Inc.

CLIENT COCORP	AREA MINN LINE #3	STATE MINN	COUNTY TODD	DATE 7-28-79
CREW NO. 6834	TERRAIN DIRT ROAD	WEATHER CLEAR - HUMID	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		REMARKS	
							LOCUT	60 ~		
1	238	424	427-522	34	5	502	OUT	IN	50%	V.P.#424 SKIPPED ON FIRST HALF DUE TO HOUSE.
2	SKIP	425	428-523	35						V.P.#425 SKIPPED DUE TO HOUSE.
3	SKIP	427	430-525	37						V.P.#427 SKIPPED DUE TO HOUSE.
4	238	429	432-527	39						V.P.#429 SKIPPED ON FIRST HALF DUE TO GAS PIPE LINE.
5	239	431	434-529	41		502				V.P.#431 SKIPPED ON LAST HALF DUE TO GAS PIPE LINE. E.O.T.#502
6	241	433	436-531	43		503			70%	B.O.T.#503 FILE #900-10SEC. ALONE'S. FILE #240 WIND STRIP.
7	SKIP	435	438-533	45						V.P.#435 SKIPPED DUE TO HOUSE.
8	242	436	439-534	46						V.P.#436 SKIPPED ON LAST HALF DUE TO HOUSE.
9	243	437	440-535	47						
10	244	439	442-537	49						RECORDER MOVE
11	245	441	444-539	5						RECORDER SET UP BETWEEN STAS.#511 & 512
12	246	443	446-541	7						1-96 CORRELATION MADE ON FILE #246
13	247	445	448-543	9						RAW SWEEP MADE ON FILE #247
14	248	447	450-545	11		503				E.O.T.#503
15	SKIP	449	452-547	13		504				B.O.T.#504 FILE #900-10SEC. ALONE'S. V.P.#449 SKIPPED DUE TO HOUSE.
16	249	450	453-548	14						V.P.#450 SKIPPED ON LAST HALF DUE TO HOUSE.
17										
18										FINISHED FOR THE DAY
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGBMPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE #5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1111222222211111	CODE #2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-Y1100 1-Y900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE 1/2 SEC. RECORD LENGTH			OBSERVER SIMMONS/KRAMER	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical 22
Division
Geosource Inc.

CLIENT CDCORP	AREA MINN LINE #3	STATE MINN	COUNTY TODD	DATE 7-29-79
CREW NO. 10834	TERRAIN DIRT ROAD	WEATHER CLEAR - HUMID	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	200 ~	
1	933	PULSE	1			504	OUT	IN		RECORDER SET UP BETWEEN STNS 522 + 523.
2	934-935	EINT	2							
3	936-939	DRD	4							
4	953-954	SUM TEST	2							
5	960-961	NRJ TEST	2							
6	932	SIMILARITY	1	22					50%	
7	250	WIND STRIP	1	6						CHECKING LINE.
8	251	451	454 - 549	4	5				70%	1-96 CORRELATION MADE ON FILE # 251
9	252	452	455 - 550	5						V.P. # 452 STACKED ON FIRST HALF DUE TO HOUSE.
10	SKIP	453	456 - 551	6						V.P. # 453 SKIPPED DUE TO HOUSE.
11	253	455	458 - 553	8						
12	254	457	460 - 555	10						
13	255	459	462 - 557	12		504				E.D.T. # 504
14	256	461	464 - 559	14	4	505				B.O.T. # 505, FILE # 900-10 SEC. ALLOW'S VIB # 17311 DOWN DUE TO PRESSURE LOSS.
15	257	463	466 - 561	16	5					VIB # 17311 BACK IN LINE.
16	258	465	468 - 563	18						
17	259	467	470 - 565	20						
18	260	469	472 - 567	22						
19	261	471	474 - 569	24						
20	262	473	476 - 571	26						
21	263	475	478 - 573	28		505				E.D.T. # 505
22	264	477	480 - 575	30		505			50%	B.O.T. # 506, FILE # 900-10 SEC. ALLOW'S V.P. # 477 STACKED ON FIRST HALF DUE TO HOUSE.
23	265	479	482 - 577	32						V.P. # 479 STACKED ON LAST HALF DUE TO HOUSE. STATION # 570 OPEN DUE TO HOUSE.
24	266	481	484 - 579	34					70%	
25	267	483	486 - 581	36						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
					MDS-10 SEGB MPX-12B
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1111 222 222 1111	CODE # 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE			OBSERVER/S.O. SIMMONS / KRAMER		LINE DIR. 1 TO 24 W → E
42 SEC. RECORD LENGTH			PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

23

CLIENT GCDORP	AREA MINN LINE #3	STATE MINN	COUNTY TODD	DATE 7-29-79
CREW NO. 6834	TERRAIN DIRT ROAD	WEATHER CLEAR	LINE NO. 3	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	30 ~	
1	SKIP	488-583	38	5		506	OUT	IN	70%	V.P.#485 SKIPPED DUE TO HOUSE
2	268	489-584	39							V.P.#486 SKIPPED ON LAST HALF DUE TO HOUSE.
3	269	490-585	40	4						VIB#17311 DOWN DUE TO BROKEN HOSE ON SERVO.
4	270	492-587	42							
5	271	494-589	44			506			50%	E.D.T.#506:1-96 CORRELATION MADE ON FILE #271. DRIVES TURNED TO 50% FOR HOUSE.
6	273	496-591	46			507				T.D.T.#507, FILE #900-10 SEC. ALONE'S; FILE #272 WIND SERVO. V.P.#493 SKIPPED ON LAST HALF.
7	274	498-593	48						70%	RECORDED MOVE: RAW SWEEP MADE ON FILE #274
8	275	500-595	12							RECORDED SET UP BETWEEN STAS. 560 & 561
9	276	502-597	14							STAS. #597+598 LINE OFFSET 5,080' WEST.
10	277	504-599	16							
11	278	506-601	18							
12										FINISHED FOR THE DAY
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-105EG-B MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE #5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1111222222221111	CODE # 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-Y1100 1-Y900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 4 MS. SAMPLE RATE		1/2 SEC. RECORD LENGTH		OBSERVER J.S.O SIMMONS/KRAMER	LINE DIR. 1 TO 24 W → E

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 24

CLIENT COCORP	AREA MINN. LINE #3	STATE MINN.	COUNTY TODD	DATE 7-30-79
CREW NO. 6834	TERRAIN DIRT ROADS & HILLY	WEATHER OVERCAST - WINDY		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		REMARKS
							LOCUT	60 ~	
1	933 PULSE	1 - 6 SEC.				507	Out	IN	RECORDER SET UP BETWEEN STA'S 578 + 579
934	EINT	2 - " "							
936-937	DRD	4 - " "							
933-954	SUM TEST	2 - " "							
940-961	NRI TEST	2 - " "							
6	932 Similarity	1 - 22 SEC.		5					50%
7	279 Wind Strip	1 - 6 SEC.		7		507			CHECKING LINE E.O.T. 507
8	280 505	508 - 603	2	5		508			70% 1-96 CORRELATION MADE ON FILE #280. B.O.T. #508
9	281 507	510 - 605	4						
10	282 509	512 - 607	6						
11	283 511	514 - 609	8						
12	284 513	516 - 611	10						
13	285 515	518 - 613	12						STAS. #613, 614, 615, WILL BE OPEN, DUE TO TOWN OF WEST UNION.
14	286 517	520 - 615	14						
15	287 519	522 - 617	16			508			E.O.T. #508
16	288 521	524 - 619	18			509			B.O.T. #509, FILE #900-10 SEC. ALLOWE'S.
17	289 523	526 - 621	20						
18	290 525	528 - 623	22						
19	291 527	530 - 625	24						STAS. #625 + 626, WILL BE OPEN, DUE TO INTERSTATE #94 OVERPASS.
20	292 529	532 - 627	26						
21	293 531	534 - 629	28						
22	294 533	536 - 631	30						
23	295 535	538 - 633	32			509			E.O.T. #509
24	296 537	540 - 635	34			510			B.O.T. #510 FILE #900-10 SEC. ALLOWE'S.
25	297 538	541 - 636	35						50% V.D. #538 STACKED ON FIRST HALF DUE TO HOUSE.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEG B MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN # CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 222 X 222 (CODE # 225)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100'S 1-0900	TYPE GEOPHONE ETH-EV223	FREQUENCY 25 Hz.	STATION INTERVAL 350'
REMARKS 4ms SAMPLE RATE 42 SEC RECORD LENGTH.	OBSERVER / TO SIMMONS / KRAMER		PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 25

CLIENT COCORP	AREA MINNLINE #3	STATE MINN	COUNTY TODD + STERNS	DATE 7-30-79
CREW NO. 6834	TERRAIN DIRT ROAD	WEATHER OVERCAST - WINDS		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	30 ~	
1	SKIP	542-637	36	5		510	OUT	IN		V.P. #539 SKIPPED DUE TO HOUSE
2	298	544-639	38						50%	V.P. #541 STUCKED ON LAST HALF DUE TO HOUSE.
3	299	546-641	40						70%	
4	300	548-643	42							STAS. #643+644 LINE OFFSET 1320' WEST
5	301	550-645	44							
6	302	552-647	46							
7	303	554-649	48			510				RECORDER MOVE. E.D.T #510
8	305	556-651	3			511				RECORDER SET UP BETWEEN STAS 625-626 B.O.T. #511 FILE #900-10SEC
9	306	558-653	5							Alone's; File #304 Wind Strip 1-96 CORRELATION MADE ON FILE #306.
10	307	559-654	6							V.P. #556 STUCKED ON FIRST HALF DUE TO HOUSE.
11	SKIP	560-655	7							V.P. #557 SKIPPED DUE TO HOUSE.
12	308	562-657	9							3 RAW SWEEPS MADE ON FILE #308 (2 FOR QUALITY CONTROL + 1 FOR DR. KAUFMAN.)
13	309	564-659	11							
14										FINISHED FOR THE DAY
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE #5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 111122222221111	CODE # 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-9100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE		OBSERVER/S.O. SIMMONS/KRAMER		PARTY MGR.	
		42 SEC. RECORD LENGTH			

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 26

CLIENT C.O.C.O.R.P.	AREA MINN. LINE #3	STATE MINN.	COUNTY TODD & STERNS	DATE 7-31-79
CREW NO. 6834	TERRAIN DIRT & PAVED ROADS	WEATHER OVERCAST - COOL		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		REMARKS
							LOCUT	60 ~	
1	933 PULSE	1 - 6 SEC.				511	Out	IN	RECORDER SET UP BETWEEN STA'S 637 & 638
2	934 ELNI	2 - " "							
3	935 DRD	4 - " "							
4	936 SUM TEST	2 - " "							
5	937 NRI TEST	2 - " "							
6	932 Similarity	1 - 22 SEC.		5					50%
7	310 Wind Strip	1 - 6 SEC.				511			Checking LINE E.D.T #511
8	311 563	566 - 661	1	5		512			70% B.D.T. #512 FILE #900-10 SEC. ALLONES. 1-96 CORRELATION MADE ON FILE #311.
9	312 564	567 - 662	2	4					VIB #17311 DOWN DUE TO PUMP PROBLEMS.
10	313 565	568 - 663	3						40% V.P. #565 SKIPPED ON FIRST HALF DUE TO HOUSE.
11	SKIP 567	570 - 665	5						V.P. #567 SKIPPED DUE TO BARN.
12	314 569	572 - 667	7						V.P. #569 SKIPPED ON LAST HALF DUE TO BARN & HOUSE.
13	SKIP 571	574 - 669	9						V.P. #571 SKIPPED DUE TO HOUSE.
14	315 572	575 - 670	10						70%
15	316 573	576 - 671	11						
16	317 575	578 - 673	13						
17	318 577	580 - 675	15			512			E.D.T #512
18	319 579	582 - 677	17			513			B.D.T. #513, FILE #900-10 SEC. ALLONES.
19	320 581	584 - 679	19						
20	321 583	586 - 681	21						
21	322 585	588 - 683	23						
22	323 587	590 - 685	25						
23	324 589	592 - 687	27						
24	325 591	594 - 689	29						
25	326 593	596 - 691	31			513			E.O.T #513

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEG B MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE #5163+4163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 22222222 (CODE #2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-Y1100 1-Y900	TYPE GEOPHONE 576-EV22B	FREQUENCY 25 Hz.	STATION INTERVAL 530'
REMARKS 4 M.S. SAMPLE RATE		42 SEC. RECORD LENGTH.		OBSERVER SIMMONS/KRAMER	PARTY MGR.

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Petty-Ray Geophysical
Division**
Geosource Inc. 27

CLIENT CDCORP	AREA MINN LINE #3	STATE MINN.	COUNTY TODD + SEARNS	DATE 7-31-79
CREW NO. 6834	TERRAIN DIRT ROAD	WEATHER OVERCAST		LINE NO. 3

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			RE MARKS	
							LOCUT	60 ~	AMP		
1	328	595	598 - 693	33	4		514	Out	IN	70%	B.O.T.#514 FILE#900-10SEC. ALLONES. FILE# 327 WIND STRIP.
2	329	597	600 - 695	35							1-96 CORRELATION MADE ON FILE# 329.
3	330	599	602 - 697	37							1 ROW SWEEP MADE ON FILE# 330
4	331	600	603 - 698	38							
5	332	601	604 - 699	39							STAS.#699+700 LINE OFFSET 2, 10 208' WEST.
6	333	602	605 - 700	40							STANDING BY FOR TRAIN
7	334	603	606 - 701	41							
8	335	604	607 - 702	42		514				50%	V.P.#604 SKIPPED ON FIRST HALF DUE TO HOUSE. E.O.T.#514
9	SKIP	605	608 - 703	43		515					B.O.T.#515, FILE#900-10SEC. ALLONES.
10	SKIP	606	609 - 704	44							
11	336	607	610 - 705	45							V.P.s#605+606 SKIPPED DUE TO HOUSE.
12	SKIP	608	611 - 706	46							V.P.#607 SKIPPED ON FIRST HALF DUE TO HOUSE. V.P.#608 SKIPPED DUE TO HOUSE.
13	337	609	612 - 707	47							V.P.#609 SKIPPED ON LAST HALF DUE TO HOUSE.
14	338	610	613 - 708	48						70%	
15	339	611	614 - 709	49						40%	V.P.#611 SKIPPED ON FIRST HALF DUE TO HOUSE. RECORDER MOVE.
16	SKIP	612	615 - 710								RECORDER SET UP BETWEEN STAS. 651 + 652.
17	"	613	616 - 711								
18	"	614	617 - 712								
19	"	615	618 - 713								V.P.s#612-618 SKIPPED DUE TO TOWN OF WEST UNION.
20	"	616	619 - 714								
21	"	617	620 - 715								
22	SKIP	618	621 - 716								
23	340	619	622 - 717	43						70%	
24	341	621	624 - 719	45							
25	342	623	626 - 721	47							FINISHED FOR THE DAY

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE# 21163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 1111222222221111	CODE# 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 4MS. SAMPLE RATE			OBSERVER 73.0 SIMMONS/KRAMER		PARTY MGR.

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 28

CLIENT COCORP	AREA MINN. LINE #3	STATE MINN.	COUNTY TODD & STERNS	DATE 8-1-79
CREW NO. 6834	TERRAIN DIRT + PAVED ROADS	WEATHER CLEAR		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	933	PULSE	1 - 6 SEC.			515	Out	IN		RECORDER SETUP BETWEEN STA'S #1699 + 700.
2	934	ETNI	2 - " "							
3	935	DRD	4 - " "							
4	936	Sum TEST	2 - " "							
5	937	NRJ TEST	2 - " "			515				E.D.T. #515
6	938	Similarity	1 - 22 SEC.	5		516			50%	B.O.T. #516, FILE #900-10 SEC. ALLOWS.
7	343	Wind Strip	1 - 6 SEC.							Checking LINE.
8	SKIP	625	628 - 723						20%	
9	SKIP	627	630 - 725							
10	344	628	631 - 726	4	5				40%	1-96 CORRELATION MADE ON FILE #344
11	SKIP	629	632 - 727	5						STANDING BY FOR MOVING HOSE.
12	SKIP	631	634 - 729	7						V.P.S #629 + 631 SKIPPED DUE TO HOUSE + BARN.
13	345	633	636 - 731	9	4				70%	VIB #17311 DOWN DUE TO BROKEN HOSE.
14	346	634	637 - 732	10						
15	347	635	638 - 733	11	5					VIB #17311 BACK IN LINE.
16	348	636	639 - 734	12						
17	SKIP	637	640 - 735	13						
18	SKIP	638	641 - 736	14						V.P.S #638 - 641 SKIPPED DUE TO VIBRATOR PADS PICKING UP PAVEMENT.
19	"	639	642 - 737	15						MOVE TO DIRT ROAD.
20	"	641	644 - 739	17						
21	SKIP	643	646 - 741	19						
22	350	644	647 - 742	20		516				V.P. #644 SKIPPED ON LAST HALF DUE TO INTERSECTION. F.O.T #516
23	351	645	648 - 743	21		517				B.O.T. #517, FILE #900-10 SEC. ALLOWS.
24	352	646	649 - 744	22						
25	353	647	650 - 745	23						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEG B MPX-128
SWEEP FREQUENCY 8-40 Hz/22 SEC.	SWEEP PATTERN 4163 CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 2222 X 2222 (CODE # 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 1-4900	TYPE GEOPHONE ETG-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE	42 SEC. RECORD LENGTH.	OBSERVER TO SIMMONS/KRAMER	PARTY MGR.	LINE DIR. 1 TO 24 N. → S.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 29

CLIENT COCORP	AREA MINN LINE #3	STATE MINN	COUNTY STEARNS	DATE 8-1-79
CREW NO. 6834	TERRAIN PAVED + DIRT ROADS	WEATHER CLEAR		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	200 ~	
1	354	648	651-746	24	5	517	OUT	IN	70%	
2	355	649	652-747	25						
3	356	650	653-748	26						
4	357	651	654-749	27					40%	V.P.#651 SKIPPED ON FIRST HALF DUE TO HOUSE.
5	SKP	653	656-751	29						V.P.#653 SKIPPED DUE TO HOUSE.
6	358	655	658-753	31		517			70%	V.P.#655 SKIPPED ON LAST HALF DUE TO HOUSE. F.D.T.#517
7	360	656	659-754	32		518				B.D.T.#518, FILE#900-10SEC. ALLOWED; FILE#359 WIND STRIP.
8	361	657	660-755	33						STAS.#755-756 LINE OFFSET 2,636' EAST.
9	362	659	662-757	35						
10	363	661	664-759	37						1-96 CORRELATION MADE ON FILE#363
11	364	663	666-761	39						RAW SWEEP MADE ON FILE#364
12	365	665	668-763	41						
13										
14										FINISHED FOR THE DAY.
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS10 SEGB MPX-128
SWEEP FREQUENCY 8-40Hz/22SEC.	SWEEP PATTERN CODE#5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 111122222221111	CODE# 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-8100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY	STATION INTERVAL 330
REMARKS 4 M.S. SAMPLE RATE		42 SEC. RECORD LENGTH		OBSERVER J.S.O. SIMMONS/KRAMER	PARTY MGR.

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 30

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY STEARNS	DATE 8-2-79
CREW NO. 6834	TERRAIN DIRT & PAVED ROADS	WEATHER CLEAR & STORMY		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	% ATTEN	
1	933 PULSE	1 - 6 SEC.				518	Out	IN		RECORDER SET UP BETWEEN STA.'S 735 & 736
934-935	FINI	2 - " "								LINE VANDALIZED OVERNITE. 13 CABLES
936-939	DRD	4 - " "								MISSING, 26 CABLES DAMAGED (CUT, PINS IN
954-954	SUM TEST	2 - " "								HEADS HAMMERED FLAT & BROKE, CABLES DRUG &
961-961	NRT TEST	2 - " "								STRETCHED, WIRES PULLED LOOSE FROM PINS)
6	932 Similarity	1 - 22 SEC.		5					50%	
7	366 WIND STRIP	1 - 6 SEC.				518				CHECKING LINE. E.O.T. # 518
8	367 667	660 - 765	7	5		519			70%	B.O.T. # 519, FILE # 900-10 SEC, 11 LINES; 1-96 CORRELATION MADE ON FILE # 367.
9	368 669	672 - 767	9							
10	369 671	674 - 769	11							STANDING BS FOR LIGHTING STORM. (NOT OUR DAY!)
11	370 673	676 - 771	13							
12	371 675	678 - 773	15							
13	372 677	680 - 775	17	4						RAW SWEEP MADE ON FILE # 372. VIB # 674 DOWN DUE INST. PROBLEMS.
14	373 678	681 - 776	18							V.P. # 678 STACKED ON FIRST HALF DUE TO HOUSE.
15	SKIP 679	682 - 777	19							V.P. # 679 SKIPPED DUE TO HOUSE.
16	374 681	684 - 779	21			519				V.P. # 681 STACKED ON LAST HALF DUE TO HOUSE. E.O.T. # 519
17										
18										FINISHED FOR THE DAY.
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
					MDS-10 SEG 13 MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 2222 X 2222 (CODE 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETH-EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 330'
REMARKS 4 M.S. SAMPLE RATE	42 SEC. RECORD LENGTH.	OBSERVER SIMMONS/KRAMER	PARTY MGR.	LINE DIR. 1 TO 24 N → S	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY STERNS	DATE 8-3-79
CREW NO. 6834	TERRAIN DIRT & PAVED ROADS	WEATHER CLEAR to PARTLY CLOUDY	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	2.5 Hz	
1	933	PULSE	1 - 6 SEC			520	Out	IN		BOT # 520. FILE # 900-10 SEC. ALL ONE'S
2	934	EINI	2 - " "							RECORDER SETUP BETWEEN STA. 'S # 755+756.
3	936	DRD	4 - " "							
4	937	SUM TEST	2 - " "							
5	938	NRT TEST	2 - " "							
6	932	Similarity	1 - 22 SEC		5				50%	
7	375	Wind Strip	1 - 6 SEC							CHECKING LINE.
8	376	683	686 - 781	3	5				70%	1-96 CORRELATION MADE ON FILE # 376.
9	377	685	688 - 783	5						
10	378	687	690 - 785	7						
11	379	689	692 - 787	9						
12	380	691	694 - 789	11						
13	381	693	696 - 791	13		520				E.D.T. # 520
14	382	695	698 - 793	15		521				B.D.T. # 521, FILE # 900-10 SEC. ALL ONE'S.
15	383	697	700 - 795	17						
16	384	699	702 - 797	19					50%	STNS # 798+799 LINE OFFSET 2,670' EAST.
17	385	701	704 - 799	21						V.P. # 701 STACKED ON LAST HALF DUE TO HOUSE.
18	386	703	706 - 801	23					70%	
19	387	705	708 - 803	25						
20	388	707	710 - 805	27						3 RAW SWEEPS MADE ON FILE # 388 (2 FOR QUALITY CONTROL + 1 FOR DR. KRAMER).
21	389	709	712 - 807	29		521				E.D.T. # 521
22	391	711	714 - 809	31		522				B.O.T. # 522, FILE # 900-10 SEC. ALL ONE'S. FILE # 390 WIND STRIP.
23	392	713	716 - 801	33						
24	393	715	718 - 813	35						1-96 CORRELATION MADE ON FILE # 393.
25	394	717	720 - 815	37						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-12B
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN IIII2222X222IIII (CODE # 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 25 Hz.	STATION INTERVAL 330'
REMARKS 4ms SAMPLE RATE 42 SEC. RECORD LENGTH.		OBSERVER / TO SIMMONS / KRAMER		PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 32

CLIENT CDCORP		AREA MINN LINE #3			STATE MINN		COUNTY STEARNS		DATE 8-3-79		
CREW NO. 6834		TERRAIN DIRT + PAVED ROAD			WEATHER CLEAR / PARTLY CLOUDY				LINE NO. 3		
REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS	
							LOCUT	60 ~	STOP DRIVE		
1	719	722-817	39	5		522	OUT	IN	70%		
2	721	724-819	41								
3	722	725-820	42						40%	V.P.# 722 STUCKED ON FIRST HALF DUE TO HOUSE	
4	SKIP	726-821	43							V.P.# 723 SKIPPED DUE TO HOUSE. STA # 821 OPEN DUE TO CHURCH.	
5											
6											
7										FINISHED FOR THE DAY.	
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
TOTAL SETUPS		TOTAL SWEEPS		TOTAL COVERAGE			TOTAL FIELD TIME		DRIVING TIME		SYSTEM NO. MDS-10 SEG B MPX-28
SWEEP FREQUENCY 8-40 Hz / 22 SEC.		SWEEP PATTERN CODE # 5163		SWEEPS PER PATTERN 16		SWEEP PATTERNS PER SETUP 1		PATCH PATTERN 1111222222221111		CODE # 2125	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 4-41100 1-9900		TYPE GEOPHONE ETLEV22B		FREQUENCY 7.5 Hz		STATION INTERVAL 330'	
REMARKS 4 M.S. SAMPLE RATE		42 SEC RECORD LENGTH		OBSERVER 15.0 SIMMONS/KRAMER		PARTY MGR.					

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

33

CLIENT COCORP	AREA MINN. LINE #3	STATE MINN.	COUNTY STERNS	DATE 8-6-79
CREW NO. 6834	TERRAIN PAVED & DIRT ROADS	WEATHER OVERCAST & WINDY	LINE NO. 3	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	80 ~	
1	PULSE	1 - 6 SEC.				522	Out	IN		RECORDER SET UP BETWEEN STA'S 798-799
934	EINI	2 - " "								STA # 821 OPEN DUE TO CHURCH PARKING LOT.
936-939	DRD	4 - " "								WINDS GUSTING TO 20-25 MPH.
941-954	SUM TEST	2 - " "								
960-961	NRJ TEST	2 - " "				522				E.D.T.#522
6	Similarity	1 - 22 SEC.		5		523			50%	B.O.T.#523 FILE #900-10 SEC. ALONE'S.
7	Wind Strip	1 - 6 SEC.								CHECKING LINE
8	725	728 - 823	2	5					70%	1-96 CORRELATION MADE ON FILE #399
9	727	730 - 825	4							
10	729	732 - 827	6							
11	731	734 - 829	8							
12	733	736 - 831	10							
13	735	738 - 833	12							
14	737	740 - 835	14			523				E.D.T.#523
15	738	741 - 836	15			524			50%	B.O.T.#524 FILE #900-10 SEC. ALONE'S. V.P.#738 STACKED ON FIRST HALF DUE TO HOUSE.
16	SKIP	742 - 837	16							V.P.#739 SKIPPED DUE TO HOUSE.
17	741	744 - 839	18						40%	V.P.#741 STACKED ON LAST HALF DUE TO HOUSE.
18	743	746 - 841	20						70%	
19	745	748 - 843	22							
20	747	750 - 845	24							
21	748	751 - 846	25						50%	V.P.#748 STACKED ON FIRST HALF DUE TO HOUSE.
22	SKIP	752 - 847	26							V.P.#749 SKIPPED DUE TO HOUSE.
23	751	754 - 849	28						70%	V.P.#751 STACKED ON LAST HALF DUE TO HOUSE.
24	753	756 - 851	30			524				E.D.T.#524
25	755	758 - 853	32			525				B.O.T.#525 FILE #900-10 SEC. ALONE'S. FILE #414 WIND STRIP.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
					MDS-10 SEG 3 MPX-120
SWEEP FREQUENCY 8-40 Hz	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 2222 X 2222	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ET6-EL223	FREQUENCY 25 Hz	STATION INTERVAL 330'
REMARKS 4 MS. SAMPLE RATE. 42 SEC. RECORD LENGTH.		OBSERVER SIMMONS/KRAMER	PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 34

CLIENT CDCORP	AREA MINN LINE #3	STATE MINN	COUNTY STEARNS	DATE 8-6-79
CREW NO. 6834	TERRAIN PAVED + DIRT ROADS	WEATHER OVERCAST + WINDY-GUSTLING WINDS		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	70 ~	
1	416	757	760 - 855	34	5	525	OUT	IN	40%	V.P.# 757 STACKED ON LAST HALF DUE TO HOUSE.
2	417	759	762 - 857	36					50%	
3	418	760	763 - 858	37						V.P.# 760 STACKED ON FIRST HALF DUE TO HOUSE.
4	SKIP	761	764 - 859	38						V.P.# 761 SKIPPED DUE TO HOUSE.
5	419	763	766 - 861	40						V.P.# 763 STACKED ON LAST HALF DUE TO HOUSE.
6	420	765	768 - 863	42					70%	1-96 CORRELATION MADE ON FILE #420.
7	421	767	770 - 865	44						
8	422	769	772 - 867	46		525				3 RAW SWEEPS MADE ON FILE #422 (2 FOR QUALITY CONTROL + 1 FOR DR. KAUFMAN) E.T. #525
9	423	771	774 - 869	48		526				B.O.T. #526. FILE #900-10 SEC. ALONE'S.
10										
11										FINISHED FOR THE DAY
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE #5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 1111222222221111	CODE #2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 4/MS SAMPLE RATE	42 SEC RECORD LENGTH	OBSERVER / S.O. SIMMONS / KRAMER	PARTY MGR.	LINE DIR. 1 TO 24 N → S	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 35

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY STEARNS	DATE 8-7-79
CREW NO. 6834	TERRAIN PAVED & DIRT ROADS	WEATHER Clear to Partly Cloudy Humid		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		RE MARKS
							LOGUT	60 ~	
1	933 PULSE	1 - 6 SEC				526	Out	IN	RECORDER SETUP BETWEEN STA'S #847 + 848
2	934 EINT	2 - " "							STA'S #885 + 886 LINE OFF SET 1330' WEST.
3	935 DAD	4 - " "							
4	936 SUM TEST	2 - " "							
5	937 NRT TEST	2 - " "							
6	938 Similarity	1 - 22 SEC		5					50%
7	424 Wind Strip	1 - 6 SEC							CHECKING LINE
8	425 773	776 - 871	1	5					70% 1-96 CORRELATION MADE ON FILE #425.
9	426 775	778 - 873	3						
10	427 777	780 - 875	5						
11	428 779	782 - 877	7						
12	429 780	784 - 879	9	4		526			E.O.T. #526 VIB #216 DOWN DUE TO BROKEN GUIDE COLUMN Bolt.
13	430 782	785 - 880	10			527			B.O.T. #527 FILE #900-10 SEC ALLONE'S V.P. #782 STACKED ON FIRST HALF DUE TO HOUSE.
14	SKIP	786 - 881	11						V.P. #783 SKIPPED DUE TO HOUSE.
15	431 785	788 - 883	13						V.P. #785 STACKED ON LAST HALF DUE TO HOUSE.
16	432 787	790 - 885	15						V.P. #787 STACKED ON FIRST HALF DUE TO HOUSE.
17	SKIP	789 - 887	17						V.P. #789 SKIPPED DUE TO HOUSE.
18	433 790	793 - 888	18						V.P. #790 STACKED ON LAST HALF DUE TO HOUSE.
19	434 791	794 - 889	19						
20	435 792	795 - 890	20						
21	436 793	796 - 891	21						V.P. #793 STACKED ON FIRST HALF DUE TO HOUSE.
22	SKIP	795 - 893	23						
23	SKIP	800 - 895	25						V.P. #795 + 797 SKIPPED DUE TO HOUSE.
24	437 799	802 - 897	27			527			V.P. #799 STACKED ON LAST HALF DUE TO INTERSECTION. E.O.T. #527
25	438 800	803 - 898	28			528			B.O.T. #528 FILE #900-10 SEC ALLONE'S.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 2222 X 2222 	CODE # 2125
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 1-9900	TYPE GEOPHONE 5th - EV223	FREQUENCY 25 Hz.	STATION INTERVAL 330'
REMARKS 4ms SAMPLE RATE, 4/2 SEC RECORD LENGTH.			OBSERVER Simmons/KRAMER	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 36

CLIENT COCORP	AREA MINN. LINE #3	STATE MINN.	COUNTY STEARNS	DATE 8-7-79
CREW NO. 6834	TERRAIN PAVED & DIRT ROADS	WEATHER OVERCAST - LIGHT RAIN		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	70 ~	
1	439	801	804-899	29	4	528	Out	IN	70%	
2	440	803	806-901	31						
3	441	805	808-903	33						St. As # 902+903 will be open due to church.
4	442	807	810-905	35						
5	443	809	812-907	37						
6	444	811	814-909	39						
7	445	813	816-911	41		528				E.O.T # 528
8	447	815	818-913	43		529				B.O.T # 529 File # 900-10 sec. All ones. File # 486 Wind Strip.
9	448	816	819-914	44						RAW SWEEP MADE ON FILE # 448
10	449	817	820-915	45						1-96 CORRELATION MADE ON FILE # 449
11	450	818	821-916	46						
12	451	819	822-917	47						VP # 819 SKIPPED ON FIRST HALF DUE TO INTERSECTION.
13	SKIP	821	824-919	49						V.P.s 821+823 SKIPPED DUE TO CHURCH + HOUSES.
14	SKIP	823	826-921	-						
15										
16										FINISHED FOR THE DAY.
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN CODE # 5163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 22222222 	(CODE # 2125)
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETH-EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 330'
REMARKS 4ms. SAMPLE RATE 42 SEC RECORD LENGTH			OBSERVER/JO SIMMONS/KRAMER	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 37

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY STEARNS	DATE 8-8-79
CREW NO. 6834	TERRAIN PAVED & DIRT ROADS	WEATHER OVERCAST		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R		REMARKS
							LOCUT	60 ~	
1	PULSE	1 - 6 SEC.				529	OUT	IN	RECORDER SETUP BETWEEN STA'S # 897 & 898
934	EINI	2 - " "							
936	DRD	4 - " "							
937	Sum Test	2 - " "							
938	NRT Test	2 - " "							
6	932 Similarity	1 - 22 SEC.		4					50%
7	452 Wind Strip	1 - 6 SEC.							70%
8	453 825	828 - 923	3	4		529			70%
9	454 827	830 - 925	5			530			
10	455 829	832 - 927	7						
11	456 830	833 - 928	8						50%
12	SKIP 831	834 - 929	9						
13	457 833	836 - 931	11						40%
14	458 835	838 - 933	13						70%
15	459 837	840 - 935	15						
16	460 839	842 - 937	17						
17	461 841	844 - 939	19			530			
18	462 843	846 - 941	21			531			
19	463 845	848 - 943	23						
20	464 847	850 - 945	25						
21	465 849	852 - 947	27						
22	466 851	854 - 949	29						
23	467 853	856 - 951	31						
24	468 855	858 - 953	33						
25	469 857	860 - 955	35			531			

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEG B MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC.	SWEEP PATTERN CODE # 4163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 22222222 (CODE # 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 25 Hz.	STATION INTERVAL 330'
REMARKS 42 SEC. RECORD LENGTH 4 MS. SAMPLE RATE		OBSERVER SIMMONS/KRAMER		PARTY MGR.	

GEO-252-A

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc. 38

CLIENT COCORP	AREA MINN. LINE # 3	STATE MINN.	COUNTY SEARNS	DATE 8-8-79
CREW NO. 6834	TERRAIN PAVED + DIRT ROADS	WEATHER OVERCAST		LINE NO. 3

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	2000	
1	859	862 - 957	37	4		532	OUT	IN	70%	B.O.T # 532, FILE # 900-10SEC. ALLONES FILE # 470 WIND STRIP.
2	861	864 - 959	39							
3	863	866 - 961	41							RAW SWEEP MADE ON FILE # 473
4	865	868 - 963	43	5						1-96 CORRELATION MADE ON FILE # 474. VIB. # 10344 BACK IN LINE.
5	867	870 - 965	45							
6	869	872 - 967	47							
7	871	874 - 969	49							RECORDER MOVE
8	873	876 - 971	34			532				RECORDER SET UP BETWEEN STAS. # 914 + 915. E.O.T # 532
9	875	878 - 973	36			533				B.O.T # 533 FILE # 900-10SEC. ALLONES.
10	877	880 - 975	38							
11	879	882 - 977	40							
12										FINISHED FOR THE DAY.
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10 SEGB MPX-128
SWEEP FREQUENCY 8-40 Hz / 22 SEC	SWEEP PATTERN 5163 CODE # 4163	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 2222 x 2222 (CODE # 2125)	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 25 Hz	STATION INTERVAL 330'
REMARKS 42 SEC. RECORD LENGTH. 4 MS SAMPLE RATE	OBSERVER SIMMONS/KRAMER	PARTY MGR.			LINE DIR. 1 TO 24 N. → S.