

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Mich. Line 1	STATE Mich.	COUNTY MIDLAND	DATE 8-2-78
CREW NO. 6824	TERRAIN Flat + Brushy	WEATHER Cloudy		LINE NO. 1

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	
1 933	PULSE TEST			5	8:30	084				OB. SET UP BETWEEN STA'S 24455
2 934	EINT									STARTING ON NEW LINE & NEW PROJECT, WILL BE PUSHING SPREAD WITH 7 STA GAP PROBLEM WITH AUTOMATIC TEST FUNCTION, RUNNING DAILY TEST MANUALLY
3 935	DRD									
4 936	SUM TEST									
5 937	VRT TEST									
6 890	Time Lapse				9:30					
7 001	WIND STRIP				9:45					
8 002	1	8-103	26		9:55					1-96 CORRELATION MADE ON FILE # 002
9 003	3	10-105	28		10:15					" " " " " 003
10 004	5	12-107	30		10:35					
11 005	7	14-109	32		10:49					V.P. # 8 STACKED ON FIRST HALF DUE TO HOUSE
12 006	9	16-111	34		11:07					1-96 CORRELATION MADE ON FILE # 006
13 SKIP	11	18-113	36		SKIP					V.P. # 11 & 13 SKIPPED DUE TO BRIDGE & HOUSE
14 SKIP	13	20-115	38		SKIP					
15 007	15	22-117	40		11:40					WAITING ON CABLES & PHONE 1-96 CORRELATION MADE ON FILE # 007
16 008	17	24-119	42	5	12:10					V.P. 17 TO BE REDONE
17	1									
18										FINISHED FOR THE DAY PICKING UP NINE Cables ONLY
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz		SWEEP PATTERN		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP		PATCH PATTERN 112233X332211			
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETK-EV2B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

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**Petty-Ray Geophysical
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Geosource Inc.

CLIENT COCORP	AREA Mich. Line 1	STATE Mich.	COUNTY MIDLAND	DATE 8-2-78
CREW NO. 6834	TERRAIN FLAT - BRUSH	WEATHER CLOUDY	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP 8:00	TAPE RL. NO.	F I L T E R		REMARKS	
							LOCUT	60 ~		
1	932	PULSE TEST	1 - 6 SEC.		8:00	085	out	out	50%	O.B. SET UP BETWEEN STA. 93404
2	93403	EINT	2 - " "							
3	936-939	DRD	4 - " "							
4	933+964	SUM TEST	2 - " "							
5	940+961	NRI TEST	2 - " "							
6	890	SIMILARITY	1 - 31 SEC.	5	9:00					WAITING ON CABLES & PHONES (PICKED UP DURING CREW MOVE)
7	009	WIND STRIP	1 - 6 SEC.		9:15					RUNNING DR. KAUFMANN'S TESTS (WORK ON TAPE)
8	010	15	22 - 117	1	12:45					RESETTING UP #1541? 1-96 CORRELATION MADE ON FILE #010
9	011	17	24 - 119	3	1:10					UP #1? STACKED ON LAST HALF. DUE TO HOUSE.
10	012	19	26 - 121	5	1:35					WAITING ON TRAFFIC.
11	012	21	28 - 123	7	1:55					
12	014	23	30 - 125	9	2:15					
13	015	25	32 - 127	11	2:35					
14	016	27	34 - 129	13	2:55					
15	017	29	36 - 131	15	3:15					
16	018	31	38 - 133	17	3:35					
17	019	33	40 - 135	19	3:55					
18	020	35	42 - 137	21	4:26					WAITING ON TRAFFIC
19	021	37	44 - 139	23	4:46	085				EOF #021 ON REEL #085
20	023	39	46 - 141	25	5:16	086				BOF #022 (WIND STRIP) ON REEL #086 1-96 CORRELATION MADE ON FILE #023
21	024	41	48 - 143	27	5:46					RAW SWEEP MADE ON FILE #024
22	025	43	50 - 145	29	6:06					FINISHED FOR THE DAY
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP FDL	PATCH PATTERN 11 22 33 X 33 22 11	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 #-4900	TYPE GEOPHONE ETL-EU223	FREQUENCY 7.5 Hz	STATION INTERVAL 220
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Petty-Ray Geophysical
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Geosource Inc.**

CLIENT COCORP	AREA Mich. Line 1	STATE Mich.	COUNTY MIDLAND	DATE 8-8-78
CREW NO. 6834	TERRAIN Flat - Brushy	WEATHER CLEAR - Windy		LINE NO. 1

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	20 Drive	
1	933	PULSE TEST		5	8:00	086	OUT	OUT		O.B. SETUP BETWEEN STA'S 1234124
2	934	EXIT					↑	↑		
3	939	DRD					↑	↑		
4	954	SUM TEST					↑	↑		
5	961	NRJ					↑	↑		
6	890	SIMILARITY		5	9:00					
7	026	WIND STRIP		↑	10:30					Running DR Kaufman's test (NOT ON TAPE) WAITING ON TRAFFIC
8	027	45			10:55					1-96 CORRELATION MADE ON FILE # 027
9	028	47			11:25					} 36db K-GAIN
10	029	49			11:45					
11	030	51			12:05					48db K-GAIN
12	031	53			12:25					
13	032	55			12:45					WIND PICKING UP
14	033	57			1:05					STA'S 159 to 179 OPEN (NO PHONES) DUE TO RIVER
15	034	59			1:50					WAITING ON TRAFFIC
16	035	61			2:10	086				E.O.F. #035 ON REEL #086
17	037	63			2:40	087				B.O.F. #036 (WIND STRIP) ON NEW REEL #087 1-96 CORRELATION MADE ON FILE #037
18	038	65			2:50					FILE 037 Slot in FIXED PLAYBACK MODE 1-96 CORRELATION ALSO IN FIXED PLAYBACK
19	039	67			3:30					MODE AT 60db
20	040	69			3:50					
21	041	71			4:10					
22	042	73			4:30					
23	043	75			4:50					Raw SWEEP MADE ON FILE # 042
24	044	77			5:10					
25	045	79			5:25					

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz		SWEEP PATTERN 16		SWEEP PATTERNS PER SETUP 112233 X 332211	
SWEEPS PER PATTERN		PATCH PATTERN		STATION INTERVAL	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		FREQUENCY 7.5 Hz	
TYPE VIBRATOR 4-4100 1-4900		TYPE GEOPHONE ETL-EV22B		LINE DIR. 1 TO 24 N → S	
REMARKS			OBSERVER Simmons		PARTY MGR.

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA MICH. LINE 1	STATE MICH.	COUNTY MIDLAND	DATE 8-8-78
CREW NO. 6834	TERRAIN FLAT - BRUSHY	WEATHER CLEAR - WINDY		LINE NO. 1

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES RL. NO.	FILTER			REMARKS
						LOCUT	60 ~	AMP	
1	81	88 - 1033	37	5	087	OUT	OUT	50%	PROBLEM WITH NRT SYSTEM (
2	83	90 - 187	39						PROBLEM " " " CORRECTED
3		185							FINISHED FOR THE DAY
4	STOP								
5	TGEO								
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. M
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112223X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

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DIGITAL VIBROSEIS RECORDER**

**Petty-Ray Geophysical
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Geosource Inc.**

CLIENT COCORP	AREA Mich. Line 1	STATE Mich.	COUNTY MIDLAND	DATE 8-9-78
CREW NO. 6834	TERRAIN FLAT & BRUSHY	WEATHER Cloudy & Damp (Rain last Nite)		LINE NO. 1

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL. NO.	F I L T E R			RE MARKS
							LOCUT	60~		
1	933	Pulse Test		2	8:00	087	OUT	OUT		O.B. SET UP BETWEEN STA'S 158 & 159
2	934	EINT								Going to 4 STA. OFF SET AS / ONE GEAR KISER INST.
3	935	DRD								
4	936	Sum Test								STA'S # 158-199 OPEN DUE TO RIVER.
5	937	NRT								
6	890	Simularty		5	9:00				50%	RUNNING DR. BAUFMAN TEST (NOT ON TAPE)
7	048	Wind Strip			9:14	087				EOF # 048 ON REEL # 087
8	049	85	89-184	3	9:30	088				BOF # 049 ON REEL # 088 1-96 CORRELATION MADE ON FILE # 049
9	SKIP	87	91-186	2	SKIP					U.P. 87 SKIPPED DUE TO HOUSE
10	050	89	93-188	2	10:00					U.P. 89 STACKED ON LAST HALF DUE TO HOUSE
11	051	91	95-190	9	10:30					WAITING ON TRAFFIC
12	052	93	97-192	11	10:50					
13	053	95	99-194	12	11:10					U.P. 95 STACKED ON EAST HALF DUE TO HOUSE
14	SKIP	97	101-196	15	SKIP					U.P. 97 SKIPPED DUE TO HOUSE
15	054	99	103-198	17	11:35					
16	055	101	105-200	19	11:55					
17	056	103	107-202	21	12:20					U.P. 105 & 107 SKIPPED DUE TO HOUSES
18	SKIP	105	109-204	23	SKIP					STA. 109 STACKED ON LAST HALF DUE TO HOUSE
19	SKIP	107	111-206	25	SKIP					
20	057	109	113-208	27	12:50					
21	SKIP	111	115-210	29	SKIP					U.P.'S # 111-113 SKIPPED DUE TO HOUSES
22	SKIP	113	117-212	31	SKIP					
23	SKIP	115	119-214	33	SKIP					
24	058	117	121-216	35	1:20					
25	059	119	123-218	37	1:45					

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETL-EVR23	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

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**Petty-Ray Geophysical
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Geosource Inc.**

CLIENT COCORP	AREA Mich. Line 1	STATE Mich.	COUNTY MIDLAND	DATE 8-9-78
CREW NO. 6824	TERRAIN Flat - Brushy	WEATHER Cloudy - Damp (Rain last Nite)		LINE NO. 1

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAP RL. NO.	F I L T E R				RE MARKS
						LOCUT	60 ~	80 ~	100 ~	
1	SKIP 121	125-220	39	5	SKIP 088	out	out	50%	UP. 121 SKIPPED DUE to house	
2	060 123	127-222	41	↑	2:05 ↑	↑	↑	↑	1-96 Correlation maps on FILE # 060	
3	061 125	129-224	43	↑	2:35 ↓	↑	↑	↑	waiting on traffic	
4	062 127	131-226	45	↑	3:25 088	↑	↑	↑	EOF # 062 ON FILE # 088 * O.B. Mount Between FILES 06# & 065	
5	064 129	133-228	47	↑	4:00 089	↑	↑	↑	BOF # 063 (wind strip) on NEW REEL # 089	
* 6	SKIP 131	135-230			SKIP ↑				UP # 129 STACKED ON first half DUE to PIPE LINE	
7	SKIP 133	137-232			SKIP ↑				O.B. Setup BETWEEN STA'S # 179 & 180	
8	065 135	139-234	32	↑	5:00	↑	↑	↑	waiting on traffic	
9	066 137	141-236	34	↑	5:20	↑	↑	↑		
10	067 139	143-238	36	↑	5:50	↑	↑	↑	waiting on traffic UP # 139 STACKED ON first half DUE to house	
11	068 141	145-240	38	↑	6:10	↑	↑	↑	UP # 141 STACKED ON last half DUE to house	
12	069 143	147-242	40	↓	6:25 ↓	↓	↓	↓	2 Raw Sweeps 1-48 & 49-96 for CLEAN GEARHISER (Quality Control)	
13					6:40				FINISHED FOR THE DAY	
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 8-32 Hz		SWEEP PATTERN		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP		PATCH PATTERN 112233x322211			
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-9100 1-4900	TYPE GEOPHONE FTL-EV22B	FREQUENCY 9.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER JIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Mich Line 1	STATE Mich.	COUNTY B	DATE 8-10-78
CREW NO. 6834	TERRAIN Flat - Brushy	WEATHER Clear	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAP TIME	TAPE RL. NO.	F I L T E R		RE MARKS
							LOCUT	60 ~	
1 933	PULSE TEST	1-6 SEC.			8:00	089	OUT	OUT	50% OB. SET UP BETWEEN STAS # 224 & 225
2 934	ETNT	2- " "							
3 935	DRD	4- " "							LONG GO-AROUNDS DUE TO RIVER
4 936	SUM TEST	2- " "							STAS 139 TO 179 OPEN DUE TO RIVER
5 937	NRT TEST	2- " "							
6 890	Similarity	1-31 SEC.			8:45				50%
7 000	WIND STRIP	1-6 SEC.			9:45				RUNNING DR KAUFMAN TEST (NOT ON TAPE) LONG GO AROUND
8 SKIP	145	149-244			SKIP				VP # 145 & 147 SKIPPED DUE TO HOUSES
9 SKIP	147	151-246			SKIP				
10 021	149	153-248	1		10:30				1-96 CORRELATION MADE ON FILE # 021 RUNNING DOWN ROAD CAPABLE
11 SKIP	151	155-250	3		SKIP				VP # 151 SKIPPED DUE TO HOUSES
12 072	153	157-252	5		10:55				
13 SKIP	155	159-254	7		SKIP				VP # 155 SKIPPED DUE TO HOUSES
14 073	157	161-256	9		11:15				
15 SKIP	159	163-258	11		SKIP				VP 159-179 SKIPPED DUE TO RIVER
16 "	161	165-260	13		"				LONG GO AROUND
17 "	163	167-262	15		"				
18 "	165	169-264	17		"				
19 "	167	171-266	19		"				
20 "	169	173-268	21		"				
21 "	171	175-270	23		"				
22 "	173	177-272	25		"				
23 SKIP	175	179-274	27		"				
24 "	177	181-276	29		"				
25 SKIP	179	183-278	31		SKIP				

SKIP
SKIP

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz		SWEEP PATTERN		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP		PATCH PATTERN		1 1 2 2 3 3 X 3 3 2 2 1 1	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETH-EV22B	FREQUENCY 2.5 Hz.	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA <i>Mich. Line 1</i>	STATE <i>Mich.</i>	COUNTY	DATE 8-10-78
CREW NO. 6834	TERRAIN <i>Flat & Brushy</i>	WEATHER CLEAR	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAP E RL. NO.	F I L T E R			RE MARKS	
						LOCUT	60 ~	50%		
1	074	181	185-280	33	2	12:00	089	OUT OUT	50%	
2	075	183	187-282	35		12:20	089			EOF# 075 ON REEL# 089
3	077	185	189-284	37		1:20	090			BOF# 076 (wind strip) ON REEL# 090 1-96 CORRELATION MADE ON FILE #079
4	078	187	191-286	39		1:50				PROBLEM WITH CONTROL CABLE TO PREAMPS (1-48) PROBLEM CORRECTED
5	079	189	193-288	41		2:30				STA'S 288 TO 293 OPEN DUE TO OFFSET IN ROAD
6	080	191	195-290	43		2:50				VP. 187 STAKED ON FURTHER WAD DUE TO HOUSE LONG GO AROUND TO
7	081	193	197-292	45		3:10				189 DUE TO BRIDGE
8	082	195	199-294	47		3:30				OB. MOVE
9	083	197	201-296	3		4:00				OB SET UP BETWEEN STA'S 270 & 271
10	084	199	203-298	5		4:20				
11	085	201	205-300	7		4:45				
12	086	203	207-302	9		5:05				
13	SKIP	205	209-304	11		SKIP				
14	087	207	211-306	13		5:30				RAW SWEEP MADE ON FILE# 087
15	088	209	213-308	15		5:50				STA'S 306-311 OPEN DUE TO OFFSET IN ROAD
16	SKIP	211	215-310	17		SKIP				
17	089	213	217-312	19		6:10	090			EOF# 089 ON REEL# 090
18						6:40				FINISHED FOR THE DAY
19										
20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1122331332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 4-9900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER Simmons	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

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Division
Geosource Inc.

CLIENT COCORP	AREA Mich. Line 1	STATE Mich.	COUNTY Gratiot	DATE 8-11-78
CREW NO. 68B4	TERRAIN FLAT - BRUSHY	WEATHER CLEAR	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	70 ~	
1 933	PULSE TEST	1 - 6 SEC.		5	8:00	091	OUT	OUT		BOF# 090 (WIND STRIP) ON NEW REEL # 091
934 935	EINT	2 - " "				↑	↑	↑		O.B. SET UP BETWEEN STA'S # 289 & 290
936 937	DRD	4 - " "								STA'S # 288-293 AND STA'S # 306-311 OPEN DUE TO OFFSET IN ROAD
938 939	Sum TEST	2 - " "								NOSING ON HIGH END OF LINE DUE TO HOUSES & HIGHWAY 46 & PEOPLE WORKING IN FIELDS. HIGHWAY 46 BETWEEN STA'S # 311 & 312
940 941	NRI TEST	2 - " "								
6 890	Similarity	1 - 31 SEC.		5	8:45				50%	
7 090	WIND STRIP	1 - 6 SEC.		↑	9:30				↑	Running DR. KAUFMAN TEST (NOT ON TAPE) RUNNING DOWN BAD CABLES & PHONES
8 091	215	219 - 314	2		10:30					1-96 CORRELATION MADE ON FILE # 091
9 092	217	221 - 316	4		10:55					
10 093	219	223 - 318	6		11:15					
11 094	220	225 - 320	8		11:55					Waiting on traffic
12 095	223	227 - 322	10		12:20					
13 096	225	229 - 324	12		12:40					
14 097	227	231 - 326	14		1:05					
15 098	229	233 - 328	16		1:30					VP # 229 STACKED ON FIRST HALF DUE TO HOUSE
16 SKIP	231	235 - 330	18		SKIP					VP # 231 SKIPPED DUE TO HOUSE
17 099	233	237 - 332	20		1:55					VP # 233 STACKED ON LAST HALF DUE TO HOUSE
18 100	235	239 - 334	22		2:20					RUNNING DOWN BAD CABLE, REPLACING BAD CABLE
19 101	237	241 - 336	24		3:20	↓				RAW SWEEPS MADE ON FILE # 101, 1 FOR DR. KAUFMAN 2 FOR GRAN GEARHISERS
20 102	239	243 - 338	26		3:40	091				EOF # 102 ON REEL # 091 (Quality Control)
21 104	241	245 - 340	28		4:00	092				BOF # 103 (WIND STRIP) ON NEW REEL # 092, 1-96 CORRELATION MADE ON FILE # 104
22 105	243	247 - 342	30		4:20	↑				VP # 243 STACKED ON FIRST HALF DUE TO HOUSE
23 SKIP	245	249 - 344	32		SKIP					VP # 245 SKIPPED DUE TO HOUSE
24 106	247	251 - 346	34		4:40	↓				VP # 247 STACKED ON LAST HALF DUE TO HOUSE
25 107	249	253 - 348	36		5:00	↓	↓	↓	↓	

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1 1 2 2 3 3 x 3 3 2 2 1 1	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-9110 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER Simmons	PARTY MGR.	

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DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Mich. Line 1	STATE Mich.	COUNTY Gratiot	DATE 8-11-78
CREW NO. 6834	TERRAIN Flat + Fields	WEATHER Clear		LINE NO. 1

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60~	% Drive	
1	251	255-350	38	5	5:15	092	Out	Out	50%	
2	253	257-352	40	↑	5:35	↑	↑	↑	↑	
3	255	259-354	42	↑	5:45	↑	↑	↑	↑	
4	257	261-356	44	↓	6:05	↓	↓	↓	↓	VP# 257 STACKED ON first half DUE to HOUSES
5	SKIP	263-358	46	↓	SKIP	↓	↓	↓	↓	VP. 259 SKIPPED DUE to house
6	261	265-360	48	↓	6:20	↓	↓	↓	↓	VP. 261 STACKED ON last half DUE to house
7					6:40					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.
SWEEP FREQUENCY 8-22 Hz		SWEEP PATTERN		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP		PATCH PATTERN 112222X322211			
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 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line 1	STATE Mich.	COUNTY Gratiot	DATE 8-14-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLEAR	LINE NO. 1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL.NO.	FILTER		REMARKS
							LOCUT	60~	
1	933				8:00	092	Out	Out	OB SET UP BETWEEN STA'S # 338 & 339
2	934								STA'S 288-293 & 306-311 OPEN DUE TO ROAD
3	936-939								Hiway # 46 CROSSES LINE BETWEEN STA'S # 311 & 312 (HEAVY TRAFFIC)
4	934 & 94								
5	940 & 966								
6	890	Smudginess		5	9:30				50% NO FILE # 113. RUNNING DOWN BAD CABLES & PHONES
7	114	WIND STRIP			11:30				RUNNING DR KAUFMAN'S TEST (NOT ON TAPE)
8	115	263	267-362	1	11:40				1-96 CORRELATION MADE ON FILE # 114
9	116	265	269-364	3	12:18				TOP # 117 ON REEL # 092. BOF # 118 (WIND STRIP) ON NEW REEL # 093
10	117	267	271-366	5	12:55	092			HAVING T.B. PROBLEMS HUNTING PROBLEM NOW. RUNNING BAD CABLE
11	119	269	273-368	11	4:00	093			MOVED O.B. BECAUSE OF T.B. PROBLEM. O.B. BETWEEN STA'S # 334 & 335 -
12	SKIP	271	275-370	13	SKIP				NORTH SIDE OF HIGH LINE. RAW SWEEP ON FILE # 119
13	120	273	277-372	15	4:20				VP 273 STACKED ON LAST HALF DUE TO HOUSE. VP 273 SKIPPED DUE TO
14	121	275	279-374	17	4:40				HOUSE.
15	122	277	281-376	19	5:00				WAITING ON TRAFFIC
16	123	279	283-378	21	5:30				WAITING ON TRAFFIC
17	124	281	285-380	23	5:50				
18	125	283	287-382	25	6:10				
19	126	285	289-384	27	6:30				
20	SKIP	287	291-386	29	SKIP				VP 287 SKIPPED DUE TO HOUSE
21	"	289	293-388	31	"				VP 289-295 SKIPPED DUE TO OFFSET
22	"	291	295-390	33	"				
23	SKIP	293	297-392	35	SKIP				FINISHED FOR THE DAY (6:50 pm.)
24	295	299-394	37	37	6:50				
25	297	301-396	39	39	7:10				

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 1-9400	TYPE GEOPHONE ETH-EV223	FREQUENCY 7.5Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Mich. LINE 1	STATE Mich	COUNTY Gratiot	DATE 8-14-78
CREW NO. 6834	TERRAIN FLATS - FARMLAND	WEATHER CLEAR		LINE NO. 1

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 ~	70 ~	
1	SKIP 295	294 - 394	37	2			OUT	OUT		V.P. 295 - 311 SKIPPED DUE TO OFFSET
2	" 297	301 - 396	39							
3	" 299	303 - 398	41							
4	" 301	305 - 400	43							
5	" 303	307 - 402	45							
6	" 305	309 - 404	47							
7	" 307	311 - 406								
8	" 309	313 - 408								
9	SKIP 311	112 - 410								FINISHED FOR THE DAY
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
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1 1 2 2 3 3 X 3 3 2 2 1 1	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 1-4900	TYPE GEOPHONE ETL-EU27B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT **COCORP** AREA **MICHIGAN LINE # 1** STATE **Mich.** COUNTY **GRATIOT** DATE **8-15-78**
 CREW NO. **6834** TERRAIN **FLAT - FARMLAND** WEATHER **CLEAR - HOT** LINE NO. **1**

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL.NO.	LOCUT	60~	F I L T E R	REMARKS	
1	933	PULSE TEST	1	-	6 SEC.						
2	934	EINT	2	-	" "						
3	936	DRD	4	-	" "						
4	933 & 934	SUM TEST	2	-	" "						
5	930 & 931	NRT TEST	2	-	" "						
6	890	Similarity	1	-	31 SEC.						
7	127	WIND STRIP	1	-	6 SEC.						
8	128	313	317	-	412	1					
9	129	315	319	-	414	1					
10	130	317	321	-	416	16					
11	131	319	323	-	418	18					
12	133	321	325	-	420	20					
13	134	323	327	-	422	22					
14	SKIP	325	329	-	424	24					
15	135	327	331	-	426	26					
16	136	329	333	-	428	28					
17	137	331	335	-	430	30					
18	SKIP	333	337	-	432	32					
19	138	335	339	-	434	34					
20	SKIP	337	341	-	436	36					
21	139	339	343	-	438	38					
22	SKIP	341	345	-	440	40					
23	141	343	347	-	442	42					
24	142	345	349	-	444	44					
25	SKIP	347	351	-	446	46					

TOTAL SETUPS: [] TOTAL SWEEPS: [] TOTAL COVERAGE: [] TOTAL FIELD TIME: [] DRIVING TIME: [] SYSTEM NO. **MDS-10**

SWEEP FREQUENCY: **8-32 Hz.** SWEEP PATTERN: [] SWEEPS PER PATTERN: **16** SWEEP PATTERNS PER SETUP: [] PATCH PATTERN: **112232x222211**

GEOPHONES PER PATCH: **24** NO. OF RECORDING PATCHES: **96** TYPE VIBRATOR: **4-41100 / 1-4900** TYPE GEOPHONE: **ETL-EV22B** FREQUENCY: **7.5 Hz** STATION INTERVAL: **220'** LINE DIR. 1 TO 24: **N → S**

REMARKS: [] OBSERVER: **SIMMONS** PARTY MGR.: []

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Mich. Line #1	STATE Michigan	COUNTY Gratiot	DATE 8-15-78
CREW NO. 6824	TERRAIN Flat - Farmland	WEATHER Clear & Hot		LINE NO. 1

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES	FILTER		REMARKS
						LOCUT	60~	
1	SKIP 349	353-448	48	5	SKIP 094	out	out	FINISHED FOR THE DAY
2	SKIP 351	355-450			SKIP			
3								
4								
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. WDS-10
SWEEP FREQUENCY 8-32 Hz.	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 1-4900	TYPE GEOPHONE ETL-EV228	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Mich. Line 1	STATE MICHIGAN	COUNTY GRATIOT	DATE 8-16-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLOUDY - WET & WINDY	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	90 ~	
1 933	Pulse Test	1 - 6 SEC.			8:00	094	OUT	OUT		OB. Set up BETWEEN SEA ^{15'}
934 935	EINT	2 - " "								VERY WET FROM ALL NIGHT RAIN, HIGH LEAKAGE
936-939	DRD	4 - " "								GOING DOWN HINE NOW GETTING ALL CABLE HEADS, TAKEOUTS, & DIGTAILS OFF GROUND. MOST OF THE LEAKAGE SEEMS TO BE FROM THE PHONES (BURIED). DO NOT SEEM TO BE
933 & 954	SUM TEST	2 - " "								ABLE TO REDUCE LEAKAGE APPRECIABLE. MORE RAIN COMING
940 & 961	NRT TEST	2 - " "								IN. CAMERA MONITORS OF 1-96 SENT TO INDICATE LEAKAGE
6 890	Similarity	1 - 31 SEC.			9:00					RUNNING DOWN BAD CABLES, PHONES & TRYING TO ELIMINATE
7 143	WIND STRIP	1 - 6 SEC.								LEAKAGE UNTIL 2:00 PM THEN RAIN STARTED
8 144	353	337 - 452								DOWN DUE TO RAIN.
9										
10					2:00					
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 → 32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 11 22 33 X 33 22 11	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETL-EV 22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER Simmons	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line # 2	STATE Michigan	COUNTY GRATIOT	DATE 8-17-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Clear - Wet	LINE NO. 1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES	F I L T E R		REMARKS
						RL.NO.	LOCUT	
1	922 Pulse Test	1 - 6 Sec.						O.B. Set up Between Sta.'s
2	924 FINT	2 - " "						
3	926-939 DRD	4 - " "						Waiting on weather till 10:00
4	933-954 Sum Test	2 - " "						
5	960-960 NRT Test	2 - " "						
6	890 Similarity	1 - 31 Sec.						WORKING ON STARTER till 1:30
7	143 Wind Strip	1 - 6 Sec.						STARTER BURNT OUT ON POWER
8	144 353	357 - 452						Supply Down for Day
9	357	359 - 452						
10	359	361 - 452						
11	361	363 - 452						
12	363	365 - 460						
13	365	367 - 462						
14	367	369 - 464						
15	369	371 - 466						
16	371	373 - 468						
17	373	375 - 470						
18	375	377 - 472						
19	377	379 - 474						
20	379	381 - 476						
21	381	383 - 478						
22	383	385 - 480						
23	385	387 - 482						
24	387	389 - 484						
25	389	391 - 486						

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS		OBSERVER Simmons		PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT **COCORP** AREA **Michigan Line # 1** STATE **Michigan** COUNTY **Gratiot** DATE **8-18-78**
 CREW NO. **6834** TERRAIN **Flat - Farmland** WEATHER **Clear - Damp (Cloudy - 10:30)** LINE NO. **1**

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL.NO.	FILTER		REMARKS
							LOCUT	60 ~	
1	933	PULSE TEST	1 - 6 SEC.		8:00	095	Out	Out	BOF # 143 ON REEL # 095 FILE # 900-10 SEC. ALL ONE'S
2	934	EINT	2 - " "						O.B. SET UP BETWEEN STA'S 428 & 429
3	936-939	DRD	4 - " "						Hi LINE (POWER LINE) RUNNING ENTIRE LENGTH OF LINE. 30 Hz LEAKAGE
4	933 & 934	SUM TEST	2 - " "						WOULD APPEAR TO BE CAUSED BY SUBHARMONICS FROM POWER LINE + O.D
5	940 & 961	NRT TEST	2 - " "						LEAKY PHONES
6	890	Similarity	1 - 31 SEC.	5	9:00			50%	RUNNING DOWN BAD CABLES & PHONES, REPLANTING PHONES
7	143	WIND STRIP	1 - 6 SEC.		9:30				RUNNING DR. KAUFMANS TEST (NOT ON TAPE)
8	144	353	357 - 452	1	10:30				1-96 CORRELATION MADE ON FILE # 144
9	145	355	359 - 454	3	10:50				
10	146	357	361 - 456	5	11:10				UP # 357 STACKED ON LAST HALF DUE TO HOUSE
11	147	359	363 - 458	7	11:30			70%	UP # 359 STACKED ON FIRST HALF DUE TO HOUSE
12	148	361	365 - 460	9	11:50			70%	
13	SKIP	363	367 - 462	11	SKIP			90%	UP # 363 SKIPPED DUE TO HOUSE & BARN
14	149	365	369 - 464	13	12:45			90%	RUNNING DOWN BAD CABLES & PHONES. STARTING TO RAIN
15	150	367	371 - 466	15	1:05			70%	LEAKAGE STARTING TO PICK UP 90% DRIVE TO HIGH REDUCING TO 70%
16	SKIP	369	373 - 468	17	SKIP				CONTINUOUS LIGHT RAIN. TRYING TO KEEP LEAKAGE TO MINIMUM
17	151	371	375 - 470	19	1:45				SUM. ERROR ON 10 th SWEEP REDOING SWEEP
18	SKIP	373	377 - 472	21	SKIP				UP # 373 SKIPPED DUE TO HOUSE
19	152	375	379 - 474	23	2:15				UP # 375 STACKED ON LAST HALF DUE TO HOUSE
20	153	377	381 - 476	25	2:45				UP. 379 STACKED ON FIRST HALF " " " " " " CHANGING CABLE ACROSS
21	154	379	383 - 478	27	3:05				UP. 381 " " " " " " " " " "
22	155	381	385 - 480	29	3:25	095			EOF # 155 ON REEL # 095 (NO NRT. ON FILE # 157)
23	157	383	387 - 482	31	3:55	096			BOF # 156 (WIND STRIP) ON NEW REEL # 096 FILE # 900-10 SEC. ALL ONE'S
24	158	385	389 - 484	33	4:25				1-96 CORRELATION MADE ON FILE # 157 UP # 385 STACKED ON LAST HALF
25	159	387	391 - 486	35	4:45				RAW SWEEP MADE ON FILE # 159

TOTAL SETUPS _____ TOTAL SWEEPS _____ TOTAL COVERAGE _____ TOTAL FIELD TIME _____ DRIVING TIME _____ SYSTEM NO. **MDS-10**

SWEEP FREQUENCY **8-32 Hz** SWEEP PATTERN _____ SWEEPS PER PATTERN **16** SWEEP PATTERNS PER SETUP _____ PATCH PATTERN **112233X332211**

GEOPHONES PER PATCH **24** NO. OF RECORDING PATCHES **96** TYPE VIBRATOR **4-41100** TYPE GEOPHONE **ETL-EV22B** FREQUENCY **7.5 Hz** STATION INTERVAL **220'** LINE DIR. **N1 → S**

REMARKS _____ OBSERVER **SIMMONS** PARTY MGR. _____

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Michigan Line # 1	STATE Michigan	COUNTY Graziot	DATE 8-18-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLOUDY - WET (intermittent RAIN)		LINE NO. 1

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL.NO.	FILTER		REMARKS
							LOCUT	60 ~	
1	389	392 - 488	37	5	5:05	096	OUT	OUT	70%
2	391	395 - 490	39		SKIP				
3	393	397 - 492	41		SKIP				
4	395	399 - 494	43		5:30				
5	397	401 - 496	45		5:50				
6	399	403 - 498	47		6:10				
7					6:30				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.
SWEEP FREQUENCY 8-22 Hz		SWEEP PATTERN		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP		PATCH PATTERN 112233x222211			
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-01100 4-0900	TYPE GEOPHONE FTL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

(Reshoot)

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line 1	STATE Michigan	COUNTY Gratiot	DATE 10-2-78
CREW NO. 6834	TERRAIN Flat - FARMLAND	WEATHER CLEAR - WET - WINDY		LINE NO. 1

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPE RL. NO.	FILTER		REMARKS
						LOCUT	60.~	
1	933 Pulse TEST	1 - 6 SEC.						
2	934 EINI	2 - " "						
3	936 DRD	4 - " "						
4	944 Sum TEST	2 - " "						
5	949 NRJ TEST	2 - " "						
6	890 Similarity	1 - 31 SEC.		5	10:30			
7	001 WIND STRIP	1 - 6 SEC.			11:30			
8	002 353	357 - 452	1		11:45			
9	003 355	359 - 454	3		12:15			
10	004 357	361 - 456	5		12:35			
11	005 359	363 - 458	7		12:55			
12	006 361	365 - 460	9		1:15			
13	SKIP 363	367 - 462	11		SKIP			
14	007 365	369 - 464	13		1:35			
15	008 367	371 - 466	15		1:55			
16	SKIP 369	373 - 468	17		SKIP			
17	009 371	375 - 470	19		2:15			
18	SKIP 373	377 - 472	21		SKIP			
19	010 375	379 - 474	23		2:35			
20	011 377	381 - 476	25		2:55			
21	012 379	383 - 478	27		3:15			
22	013 381	385 - 480	29		3:35	133		
23	015 383	387 - 482	31		4:10	134		
24	016 385	389 - 484	33		4:40			
25	017 387	391 - 486	35		5:00			

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz.		SWEEP PATTERN		SWEEPS PER PATTERN 16	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 4-9100	
TYPE GEOPHONE ETL-EV22B		FREQUENCY 7.5 Hz		STATION INTERVAL 220'	
REMARKS		OBSERVER Simmons		PARTY MGR.	

BOF. # 001 (WIND STRIP) ON REEL # 133 FOR RESHOOT ON LINE 1
OB. SET UP BETWEEN STA. 34884429
LAYING OUT LINE TO RESHOOT.

RUNNING DOWN BAD CABLES & PHONES
1-96 CORRELATION MADE ON FILE # 353
V.P. # 355 STACKED ON FIRST HALF DUE TO HOUSE
" 357 " " LAST HALF " " "
" 359 " " FIRST " " " "
" 361 " " LAST HALF " " "
" 363 SKIPPED DUE TO HOUSE
V.P. # 365 STACKED ON LAST HALF DUE TO HOUSE
V.P. # 369 SKIPPED DUE TO HOUSE
V.P. # 373 SKIPPED DUE TO HOUSE
V.P. # 379 STACKED ON LAST HALF DUE TO HOUSE
E.O.F. # 013 ON REEL # 133
BOF. # 014 (WIND STRIP) ON NEW REEL # 134; FILE # 900-10 SEC. (2) ONES
1-96 CORRELATION MADE ON FILE # 015

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MICHIGAN LINE 1	STATE MICHIGAN	COUNTY GRATIOT	DATE 10-2-48
CREW NO. 6834	TERRAIN FLAT FARMLAND	WEATHER CLEAR - WET - WINDY		LINE NO. 1

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES GAIN	TAPE RL. NO.	F I L T E R			REMARKS	
							LOCUT	60 ~	70%		
1	018	389	393-488	37	5	5:20	134	Out	Out	70%	
2	SKIP	391	395-490	39	↑	SKIP	↑	↑	↑	↑	VP'S# 391+393 SKIPPED DUE TO HOUSE.
3	SKIP	393	397-402	41	↑	SKIP	↑	↑	↑	↑	
4	019	395	398-494	43	↑	5:30	↑	↑	↑	↑	
5	020	397	401-496	45	↑	6:00	↑	↑	↑	↑	
6	021	399	403-498	47	↓	6:20	↓	↓	↓	↓	
7											
8											
9						6:40					FINISHED FOR THE DAY (FINISHED WITH SEC. OF LINE 1 TO BE RESHOT)
10											
11											
12											
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY B-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 4-9900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 220'
REMARKS	OBSERVER SIMMONS		PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line 7	STATE Michigan	COUNTY Gratiot	DATE 8-21-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Clear - Wet (RAIN OVER WEEKEND)	LINE NO. 1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL.NO.	F I L T E R	REMARKS
							LOCUT 60 ~	
1	923	PULSE TEST	1 - 6	SEC.	8:00	096	Out Out	OB. SET UP BETWEEN STA.'S 478 & 479
2	924	EINT	2 - "	"				
3	925	DRD	4 - "	"				Waiting for line to be laid out, Picked up over weekend to dry out due to leakage. Running down noise + leaky phones
4	926	Sum Test	2 - "	"				
5	927	NRT Test	2 - "	"				
6	890	Similarity	1 - 31	SEC.	9:00			50%
7	164	WIND STRIP	1 - 6	SEC.	12:45			
8	SKIP	401	405 - 500		SKIP			
9	165	403	407 - 502	1	1:40			70%
10	166	405	409 - 504	3	2:10			
11	167	407	411 - 506	5	2:30			
12	168	409	413 - 508	7	2:55			
13	SKIP	411	415 - 510	9	SKIP			
14	169	413	417 - 512	11	3:20	096		
15	171	415	419 - 514	13	3:55	097		
16	173	417	421 - 516	15	4:25			
17	SKIP	419	423 - 518	17	SKIP			
18	173	421	425 - 520	19	4:50			
19	174	423	427 - 522	21	5:10			
20	SKIP	425	429 - 524	23	SKIP			
21	175	427	431 - 526	25	5:30			
22	176	429	433 - 528	27	5:50			
23	177	431	435 - 530	29	6:10			
24	178	433	437 - 532	31	6:25			
25	179	435	439 - 534	33	6:40			

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-3900	TYPE GEOPHONE ETL-EV220	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Michigan LINE # 1	STATE Michigan	COUNTY GRAND	DATE 8-22-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Clear	LINE NO. 1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL.NO.	LOCUT	F I L T E R	REMARKS
1	933	PULSE TEST			8:00	097	Out	Out	OB. SET UP BETWEEN STA'S 512+513
2	934	FIINT							VIB # 14256 DOWN ON THE WAY TO THE FIELD (TRANSMISSION)
3	936	DRD							STA'S 504 & 511 ON WASHINGTON ROAD (VERY BUSY) STA'S 505-510 OPEN DUE OFF SET
4	934	Sum TEST							RUNNING DOWN BAD PHONES & CABLES
5	934	NRJ TEST							PAPER MONITOR ONLY
6	890	Similarity		4	9:00			50%	VIB # 14256 FIXED, WILL RUN A SIMILARITY (NOT ON TAPE) AFTER DR KAUFMAN'S TEST
7	180	WIND STRIP			10:00				RUNNING DR. KAUFMAN'S TEST (NOT ON TAPE)
8	181	437	441-536	1	5	10:50		70%	1-96 CORRELATION MADE ON FILE # 181
9	SKIP	439	443-538	3		SKIP			VP # 439 SKIPPED DUE TO HOUSE
10	182	441	445-540	5		11:20			VP # 441 STACKED ON LAST HALF DUE TO HOUSE
11	183	443	447-542	7		11:50	097		WAITING ON TRAFFIC EOF # 183 ON REEL # 097
12	184	445	449-544	9		12:15	098		BOF # 184 ON NEW REEL # 098 FILE # 900-10 SEC'S ALL ONE'S
13	185	447	451-546	11		12:35			
14	186	449	453-548	13		12:55			
15	187	451	455-550	15		1:15			
16	188	453	457-552	17		1:35			
17	189	455	459-554	19		2:00			WAITING ON TRAFFIC
18	190	457	461-556	21		2:20			1 RAW SWEEP FOR DR. KAUFMAN & 2 SWEEPS (1-48 & 49-96) FOR GEAN GEORGE (Guilt)
19	191	459	463-558	23		2:50			(Control)
20	192	461	465-560	25		3:10			
21	193	463	467-562	27		3:30			
22	194	465	469-564	29		3:50			
23	SKIP	467	471-566	31		SKIP			VP # 467 SKIPPED DUE TO HOUSE
24	195	469	473-568	33		4:10			VP # 469 STACKED ON LAST HALF DUE TO HOUSE
25	SKIP	471	475-570	35		SKIP			VP # 471 SKIPPED DUE TO HOUSE

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-01100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS	OBSERVER SIMMONS	PARTY MGR.		LINE DIR. 1 TO 24 N → S	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line # 2	STATE Michigan	COUNTY GRATIOT	DATE 8-22-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Clear	LINE NO. 2	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	70 DRIVE	
1	473	477 - 572	37	5	4:30	098	Out	Out	70%	VP# 473 Stacked on last half Due to house
2	475	479 - 574	39		4:50	098				EOF# 197 ON REEL# 098
3	477	481 - 576	41		5:10	099				BOF# 198 ON NEW REEL# 099 FILE# 198 wind strip FILE# 900-10
4	479	483 - 578	43		5:40					1-96 Correlation made on file # 199
5	481	485 - 580	45		6:00					
6	483	487 - 582	47		6:20					
7					6:40					FINISHED FOR THE DAY
8										
9										
10										
11										
12										
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 4-4900	TYPE GEOPHONE ETL-EV223	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER Simmons	PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Michigan Line #1	STATE Michigan	COUNTY Gratiot	DATE 8-23-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLEAR		LINE NO. 1

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES RL. NO.	F I L T E R			REMARKS
						LOCUT	60 ~	90 DRIVE	
1	933	PULSE TEST	1 - 6 SEC.		099	OUT	OUT		OB. SET UP BETWEEN STA.'S 560 & 561
2	4035	EI NT	2 - " "						
3	939	DRD	4 - " "						STA.'S # 505 - 511 OPEN DUE TO OFFSET IN LINE
4	054	SUM TEST	2 - " "						
5	496	NRI TEST	2 - " "						
6	890	Similarity	1 - 31 SEC.	5	9:00			50%	RUNNING DOWN BAD CABLES AND PHONES
7	203	WIND STRIP	1 - 6 SEC.		10:15				RUNNING DR. KAUFMAN'S TESTS (NOT ON TAPE)
8	204	485	489 - 584	1	10:30			70%	1-96 CORRELATION MADE ON FILE # 204
9	205	487	491 - 586	3	11:00				
10	206	489	493 - 588	5	11:20				
11	207	491	495 - 590	7	11:40				
12	208	493	497 - 592	9	12:00				
13	209	495	499 - 594	11	12:20				VP# 495 STACKED ON FIRST HALF DUE TO HOUSES
14	SKIP	497	501 - 596	13	SKIP				VP# 497 SKIPPED DUE TO HOUSE
15	210	499	503 - 598	15	12:40				VP# 499 STACKED ON LAST HALF DUE TO HOUSE
16	211	501	505 - 600	17	1:00				EOF# 211 ON REEL # 099
17	213	503	507 - 602	19	1:30				BOF# 212 (WIND STRIP) ON NEW REEL # 100 1-96 CORRELATION MADE ON FILE # 213
18	SKIP	505	509 - 604	21	SKIP				
19	SKIP	507	511 - 606	23	SKIP				VP# 505 - 511 SKIPPED DUE TO OFFSET & HOUSE
20	SKIP	509	513 - 608	25	SKIP				
21	SKIP	511	515 - 610	27	SKIP				
22	214	513	517 - 612	29	2:00				
23	SKIP	515	519 - 614	31	SKIP				VP# 515 SKIPPED DUE TO HOUSE
24	SKIP	517	521 - 616	33	SKIP				VP# 517 & 519 SKIPPED DUE TO HOUSE
25	SKIP	519	523 - 618	35	SKIP 099				

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8 - 32 Hz		SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100 1-4900	TYPE GEOPHONE ETL-EU22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Michigan	STATE Michigan	COUNTY Gratiot	DATE 8-23-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLEAR		LINE NO. 1

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAP TIME	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	2500	
1	215	525 - 620	37	5	2:30	100	OUT	OUT	70%	
2	216	527 - 622	39		2:50					
3	217	529 - 624	41		3:10					
4	218	531 - 626	43		3:30					
5	219	533 - 628	45		3:50					
6	220	535 - 630	47		4:10					Moving O.B.
7	221	537 - 632	28		4:40					O.B. SET up BETWEEN Sta.'s 581 & 582
8	222	539 - 634	30		5:00					RAW SWEEP MADE ON FILE # 222 VP# 535 STACKED ON FIRST HALF
9	SKIP	541 - 636	32		SKIP					VP# 537 SKIPPED DUE TO HOUSE
10	223	543 - 638	34		5:20					VP# 539 STACKED ON LAST HALF DUE TO HOUSE
11	224	545 - 640	36		5:40					VP# 541 STACKED ON FIRST HALF DUE TO HOUSE
12	SKIP	547 - 642	38		SKIP					VP# 543 SKIPPED DUE TO HOUSE
13	SKIP	549 - 644	40		SKIP					" " " " " "
14	SKIP	551 - 646	42		SKIP					" " " " " "
15	225	553 - 648	44		6:00					VP# 549 STACKED ON LAST HALF DUE TO HOUSE
16	226	555 - 650	46		6:20	100				EOF# 226 ON REEL # 100
17					6:40					FINISHED FOR THE DAY
18										
19										
20										
21										
22										
23										
24										
25										

DUE TO HOUSE

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233 x 322211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-9100 1-4900	TYPE GEOPHONE ETL-EV223	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER S. INNONIS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MICHIGAN LINE #1	STATE MICHIGAN	COUNTY GRATIOT	DATE 8-24-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLOUDY - OVERCAST - RAINY	LINE NO. 2	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPE RL. NO.	F I L T E R		RE MARKS
						LOCUT	60 ~	
1	933	PULSE TEST	1 - 6 SEC.					BOF# 900 (10 SEC. ALL ONE'S) ON NEW REEL # 101
	934	EINT	2 - " "					O.B. SET UP BETWEEN STA.'S 620 & 621
	936	DRD	4 - " "					STANDING BY FOR RAIN
	934	SUM TEST	2 - " "					
	934	NRT TEST	2 - " "					
6	890	SIMILARITY	1 - 31 SEC.	5	8:45		50%	RUNNING DOWN BAD CABLES & PHONES (FIGHTING LEAKAGE)
7	277	WIND STRIP	1 - 6 SEC.		12:20			RUNNING DR. HAUPTMAN'S TEST (NOT ON TAPE) WAITING ON TRAIN
8	228	553	557 - 652	9	12:45			1-96 CORRELATION MADE ON FILE # 228
9	229	555	559 - 654	11	1:15			WRONG FILE # PUT IN AT BEGINNING OF DAY (277 PUT IN SHOULD HAVE BEEN 227) <i>CONTINUE FROM FILE # 277</i>
10	SKIP	557	561 - 656	13	SKIP			V.P. # 557 SKIPPED DUE TO HOUSE
11	280	559	563 - 658	15	1:40			WAITING ON TRAFFIC V.P. # 559 STACKED ON LAST HALF DUE TO HOUSE
12	SKIP	561	565 - 660	17	SKIP			V.P. # 561 SKIPPED DUE TO HOUSE
13	281	563	567 - 662	19	2:00			
14	282	565	569 - 664	21	2:30			WAITING ON TRAFFIC
15	SKIP	567	571 - 666	23	SKIP			V.P. # 567 SKIPPED DUE TO HOUSE
16	SKIP	569	573 - 668	25	SKIP			
17	SKIP	571	575 - 670	27	SKIP			
18	SKIP	573	577 - 672	29	SKIP			V.P. # 567-575 SKIPPED DUE TO HOUSES & BARN'S
19	SKIP	575	579 - 674	31	SKIP			
20	SKIP	577	581 - 676	33	SKIP			
21	283	579	583 - 678	35	3:00			
22	284	581	585 - 680	37	3:20			
23	SKIP	583	587 - 682	39	SKIP			
24	SKIP	585	589 - 684	41	SKIP			V.P. 583 - 587 SKIPPED DUE TO HOUSES
25	SKIP	587	591 - 686	43	SKIP			

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 HZ	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 HZ	STATION INTERVAL 220'
REMARKS	OBSERVER SIMMONS	PARTY MGR.			

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line # 7	STATE Michigan	COUNTY GRATIOT	DATE 8-24-78
CREW NO. 6834	TERRAIN FLAC - FARM LAND	WEATHER CLEAR	LINE NO. 1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	STOP TIME	TAPE RL.NO.	FILTER		REMARKS
							LOCUT	60 ~	
1	285	589	593 - 688	45	3:50	101	OUT	OUT	70%
2	SKIP	591	595 - 690	47	SKIP				OB MOVE
3	SKIP	593	597 - 692		SKIP				OB SET UP BETWEEN STA'S 660 & 661
4	SKIP	595	599 - 694		SKIP				STA. # 695 OPEN DUE TO PARKING LOT
5	286	597	601 - 696	13	4:45				WAITING ON CABLES & PHONES DUE TO SKIP'S. VI. # 597 STACKED ON LAST 1/2
6	287	599	603 - 698	15	5:10				RAW SWEEP MADE ON FILE # 287
7	288	601	604 - 700	17	5:30				
8	289	602	605 - 702	19	5:50				
9	290	603	607 - 704	21	6:10	101			EOF # 290 ON REEL # 101
10	292	605	609 - 706	23	6:30	102			BOF # 291 ON REEL # 102 (FILE # 291 - WIND STRIP) 1-96 CORRELATION MADE ON FILE 292
11	607 - 708				6:50				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.
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4110 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan line # 1	STATE Michigan	COUNTY Gratiot	DATE 8-25-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER Cloudy - Overcast	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES RL. NO.	F I L T E R				REMARKS
						LOCUT	60~	70~	80~	
1 933	PULSE TEST	1 - 6 SEC.			102	Out	Out			O.B. Setup BETWEEN STA'S 682 & 683
2 935	EINT	2 - " "								
3 939	DRD	4 - " "								Highway # 57 FALLS BETWEEN STA'S 702 & 703 (Heavy Traffic (Large Trucks))
4 954	Sum TEST	2 - " "								STA # 695 OPEN DUE to PARKING Lot
5 961	NRT TEST	2 - " "								
6 890	Similarity	1 - 31 SEC.		5	9:00				50%	RUNNING DOWN BAD & LEAKY PHONES & CABLES
7 293	Wind Strip	1 - 6 SEC.			10:30					RUNNING DR. KAUFMAN'S TEST (NOT ON TAPE)
8 294	607	611 - 708	1		11:30				70%	1-96 CORRELATION MADE ON FILE # 294
9 295	609	613 - 710	3		12:00					
10 296	611	615 - 712	5	5	12:30					PROBLEM WITH VIB. FIXING NOW
11 297	613	617 - 714	7	4	1:20					17311 DOWN AGAIN FIXING NOW, WILL GO WITH 4
12 298	615	619 - 716	9		1:40					
13 299	617	621 - 718	11		2:00					VP# 617 STACKED ON FIRST HALF DUE to HOUSE
14 SKIP	619	623 - 720	13		SKIP					VP# 619 SKIPPED DUE to HOUSE
15 SKIP	621	625 - 722	15		SKIP					
16 SKIP	623	627 - 724	17	4	SKIP					
17 300	625	629 - 726	19	5	2:20					VIB# 17311 BACK ON LINE
18 301	627	631 - 728	21		2:40					VP# 627 STACKED ON FIRST HALF DUE to HOUSE
19 SKIP	629	633 - 730	23		SKIP					VP# 629 SKIPPED DUE to HOUSE
20 302	631	635 - 732	25		3:00					VP# 631 STACKED ON LAST HALF DUE to HOUSE
21 303	633	637 - 734	27		3:20					
22 304	635	639 - 736	29		3:40	102				EOF# 304 ON REEL # 102
23 306	637	641 - 738	31		4:10	103				BOF# 305 (WIND STRIP) ON NEW REEL # 103
24 SKIP	639	643 - 740	33		SKIP					1-96 CORRELATION MADE ON FILE # 306
25 SKIP	641	645 - 742	35		SKIP					

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 1 1 2 2 3 3 x 3 3 2 2 1 1	
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 220'
REMARKS	OBSERVER SIMMONS	PARTY MGR.	LINE DIR. 1 TO 24 N → S		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line #1	STATE Michigan	COUNTY Gratiot	DATE 8-25-78
CREW NO. 6824	TERRAIN Flat-FARMLAND	WEATHER CLOUDY	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO. VIB	TAPES	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	AMP DRIVE	
1	SKIP 643	647-744	37	5	SKIP	103	Out	Out	70%	UP# 639-645 SKIPPED DUE TO HOUSES
2	SKIP 645	649-746	39		SKIP					
3	307 647	651-748	41		4:40					UP# 647 STACKED ON FIRST HALF DUE TO HOUSE
4	SKIP 649	653-750	43		SKIP					
5	SKIP 651	655-752	45		SKIP					UP# 649-655 SKIPPED DUE TO HOUSES
6	SKIP 653	657-754	47		SKIP					AT STA. # 638 LINE OFFSET 90° TO THE EAST FOR 23 STA'S
7	SKIP 655	659-756			SKIP					O.B. MOVE
8	308 657	661-758	38		5:20					O.B. SET UP BETWEEN STA'S # 695 & 696
9	309 659	663-760	40		5:40					RAW SWEEP FOR DR. KAUFMANN & 2 FOR GEAN GEARHISER (GUILTY CONTROL) ON FILE # 308
10	310 661	665-762	42		6:00					
11	SKIP 663	667-764	44		SKIP					UP# 663 & 665 SKIPPED DUE TO HOUSE
12	SKIP 665	669-766	46		SKIP					
13					6:20					FINISHED FOR THE DAY
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 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-01100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS	OBSERVER S.		PARTY MGR.		LINE DIR. 1 TO 24 N → S

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

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

CLIENT **COCORP** AREA **Michigan Line #1** STATE **Michigan** COUNTY **Gratiot** DATE **8-26-78**
 CREW NO. **6834** TERRAIN **Flat-FARMLAND** WEATHER **Clear (Front moving in)** LINE NO. **1**

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPE RL. NO.	FILTER			REMARKS
						LOCUT	60~	NO DR. W.	
1	933 Pulse test	1-6 SEC.			103	Out	Out		OB. SET UP BETWEEN STA'S 742 & 743
2	934 EINT	2- " "							STARTING TO GET OVERCAST & SPRINKLE, LEAKS STARTING TO INCREASE
3	936-939 DRD	4- " "							AT STA. # 738 LINE MAKES A 90° OFFSET FOR 24 STA'S
4	953-954 Sum TEST	2- " "							STA. # 695 OPEN DUE TO PARKING LOT STA. # 777 OPEN DUE TO BRIDGE
5	960-961 NRT TEST	2- " "							
6	890 Similarity	1-31 SEC.		5	9:00			50%	WAITING ON CABLES & PHONES RUNNING DOWN BAD CABLES & PHONES
7	311 Wind Strip	1-6 SEC.			10:30				RUNNING DR. KAUFMAN'S TEST (NOT ON TAPE)
8	312 667	671-766	1		11:30			70%	1-96 CORRELATION MADE ON FILE # 312 VP 667 STACKED ON LAST HALF
9	SKIP 669	673-768	3		SKIP				VP # 669 SKIPPED DUE TO HOUSE
10	313 671	675-770	5		12:00				VP # 671 STACKED ON LAST HALF DUE TO HOUSE
11	314 673	677-772	7		12:20				VP # 673 " " FIRST " " " "
12	SKIP 675	679-774	9		SKIP				VP # 675 SKIPPED DUE TO HOUSE
13	SKIP 677	681-776	11		SKIP				VP # 677-681 SKIPPED DUE TO PIPELINE SUBSTATION
14	SKIP 679	683-778	13		SKIP				
15	SKIP 681	685-780	15		SKIP				
16	315 683	687-782	17		12:40				
17	SKIP 685	689-784	19		SKIP				VP # 685-693 SKIPPED DUE TO HOUSES, BARNES, Silo's & Church.
18	SKIP 687	691-786	21		SKIP				
19	SKIP 689	693-788	23		SKIP				
20	SKIP 691	695-790	25		SKIP				
21	SKIP 693	697-792	27		SKIP				
22	316 695	699-794	29		1:00				VP # 695 STACKED ON LAST HALF DUE TO Church
23	317 697	701-796	31		1:20				VP # 697 " " FIRST " " " house
24	SKIP 699	703-798	33		SKIP				VP # 699 SKIPPED DUE TO HOUSE
25	318 701	705-800	35		1:40	103			VP # 701 STACKED ON LAST HALF DUE TO HOUSE

TOTAL SETUPS _____ TOTAL SWEEPS _____ TOTAL COVERAGE _____ TOTAL FIELD TIME _____ DRIVING TIME _____ SYSTEM NO. **MDS-10**

SWEEP FREQUENCY **8-32 Hz** SWEEP PATTERN _____ SWEEPS PER PATTERN **16** SWEEP PATTERNS PER SETUP _____ PATCH PATTERN **112233X332211**

GEOPHONES PER PATCH **24** NO. OF RECORDING PATCHES **96** TYPE VIBRATOR **4-91100 1-4900** TYPE GEOPHONE **ETL-EV22B** FREQUENCY **2.5 Hz** STATION INTERVAL **220'** LINE DIR. 1 TO 24 **N→S**

REMARKS _____ OBSERVER **Simmons** PARTY MGR. _____

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

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

CLIENT	COCORP	AREA	Michigan Line # 1	STATE	Michigan	COUNTY	Gratiot	DATE	8-26-78
CREW NO.	6834	TERRAIN	Flat - Farmland	WEATHER	Overcast - Drizzling	LINE NO.		1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES	F I L T E R		REMARKS
						RL.NO.	LOCUT	
1	703	707-802	37	5	2:30	104	Out Out	70% FOF # 318 ON REEL # 103 REVIBRATING STA # 703 (ANA. PROBLEM)
2	705	709-804	39		3:00	104		BOF # 319 (WIND STRIP) ON NEW REEL # 104 FILE 900-10 SEC ALL ONES
3	707	711-806	41		3:20			1-96 CORRELATION MADE ON FILE # 320
4	709	713-808	43		3:40			
5	SKIP	715-810	45		SKIP			
6	713	717-812	47		4:00			O.B. MOVE
7	715	719-814	28		4:45			O.B. SET UP BETWEEN STA'S 763 & 764
8	717	721-816	30		5:05			
9	719	723-818	32		5:30			WAITING ON TRAFFIC
10	721	725-820	34		5:50			V.P. # 723 STACKED ON FIRST HALF DUE TO HOUSES
11	SKIP	723	36		SKIP			V.P.'S # 723-727 SKIPPED DUE TO HOUSES
12	SKIP	725	38		SKIP			
13	SKIP	727	40		SKIP			
14	729	733-828	42		6:10			
15					6:30			FINISHED FOR THE DAY
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		SWEEP PATTERN	SWEEPS PER PATTERN	SWEEP PATTERNS PER SETUP	PATCH PATTERN
8-32 Hz			16		112233x332211
GEOPHONES PER PATCH	NO. OF RECORDING PATCHES	TYPE VIBRATOR	TYPE GEOPHONE	FREQUENCY	STATION INTERVAL
24	96	4-41100 1-4900	ETL AEU 22B	7.5 Hz	220'
REMARKS	OBSERVER			PARTY MGR.	
	SIMMONS				

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line # 2	STATE Michigan	COUNTY Gratiot	DATE 8-28-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Overcast - wet	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	% DRIVE	
1	933 Pulse Test	1 - 6 Sec.			8:00	104	Out	Out		O.B. Set up BETWEEN STA.'S 797 & 798
2	934+935 EINT	2 - " "								Noise ON STA.'S 761-796 CAUSED BY CONSTRUCTION WORK ON ROAD
3	936+939 DRD	4 - " "								Noise ON STA.'S 797 - CAUSED BY TRAFFIC ON HWYWAY
4	934+934 SUM TEST	2 - " "								STA. # 777 OPEN DUE TO BRIDGE
5	940+961 NRJ TEST	2 - " "								
6	890 Similarity	1 - 31 Sec.		5	9:00				50%	Running Down Bad Cables & Phones & LEAKAGE. Waiting on Traffic
7	330 Wind Strip	1 - 6 Sec.			9:30					Running Dr. Kaufman's test (Not on tape)
8	331 731	735 - 830	10		11:30				70%	1-96 Correlation MADE ON FILE # 331
9	332 733	737 - 832	12		12:00	104				EOF # 332 ON REEL # 104
10	334 735	739 - 834	14		12:30	105				BOF # 333 (Wind Strip) ON NEW REEL # 105 Wind picking up
11	SKIP 737	741 - 836	16		SKIP					
12	SKIP 739	743 - 838	18		SKIP					V.P.'S # 737 & 739 SKIPPED DUE TO HOUSES
13	SKIP 741	745 - 840	20		SKIP					V.P.'S # 741 - 76 SKIPPED DUE TO OFFSET IN LINE
14	SKIP 743	747 - 842	22		SKIP					
15	SKIP 745	749 - 844	24		SKIP					
16	SKIP 747	751 - 846	26		SKIP					
17	SKIP 749	753 - 848	28		SKIP					
18	SKIP 751	755 - 850	30		SKIP					
19	SKIP 753	757 - 852	32		SKIP					
20	SKIP 755	759 - 854	34		SKIP					
21	SKIP 757	761 - 856	36		SKIP					
22	SKIP 759	763 - 858	38		SKIP					
23	SKIP 761	765 - 860	40		SKIP					
24	335 763	767 - 862	42		1:00					V.P. # 763 STACKED ON FIRST HALF DUE TO HOUSE
25	SKIP 765	769 - 864	44		SKIP					

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 220'
REMARKS			OBSERVER Simmons	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT **COCORP** AREA **Michigan Line # 2** STATE **Michigan** COUNTY **Gratiot** DATE **8-28-78**
 CREW NO. **6834** TERRAIN **Flat - Farmland** WEATHER **Overcast - wet** LINE NO. **1**

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	% Drive	
1	SKIP	771-866	46	5	SKIP	105	Out	Out	70%	Noise on Sta ¹⁵ # 798-822 Due to Highway
2	336	773-868	48	↑	1:30		↑	↑	↑	O.B. MOVE VP.# 369 Stacked on last half Due to houses
3	SKIP	775-870	SKIP		SKIP					O.B. Setup BETWEEN STA'S
4	337	777-872	50		2:10					VP.# 771 & 775 Skipped Due to houses VP.# 773 Stacked on first half
5	SKIP	779-874	SKIP		SKIP					
6	338	777-876	5		2:30					VP. 777 Stacked on first half Due to BRIDGE
7	339	779-878	7	↓	2:50					VP. 779 REVIB. Due to ANA. PROBLEM
8	340	781-880	9	5	3:20					WAITING ON traffic
9	341	783-882	11	4	3:40					VIB# 17311 Down? (Lost OIL PRESSURE ON POWER Supply)
10	342	785-884	13	↑	4:00					
11	SKIP	787-886	15		SKIP					V.P.# 787 & 789 Skipped Due to houses
12	SKIP	789-888	17		SKIP					
13	343	791-890	19		4:30					Waiting on traffic VIB# 12667 Down Due to hyp. LEAK (Fixing Now)
14	SKIP	793-892	21		SKIP					VP.# 793 Skipped Due to house
15	344	795-894	23		4:50					1-96 Correlation MADE ON FILE # 344 VP.# 795 Stacked on last half
16	345	801-896	25		5:20					RAW SWEEP MADE ON FILE # 345
17	SKIP	803-898	27		SKIP					VP. 799-72 Skipped Due to OFFSET
18	SKIP	805-900	29		SKIP					
19	SKIP	807-902	31		SKIP					
20	SKIP	809-904	33		SKIP					
21	SKIP	811-906	35		SKIP					
22	SKIP	813-908	37		SKIP					
23	SKIP	815-910	39		SKIP					
24	SKIP	819-912	41		SKIP					
25	SKIP	819-914	43	↓	SKIP		↓	↓	↓	

TOTAL SETUPS _____ TOTAL SWEEPS _____ TOTAL COVERAGE _____ TOTAL FIELD TIME _____ DRIVING TIME _____ SYSTEM NO. **MD5-10**

SWEEP FREQUENCY **8-32 Hz** SWEEP PATTERN _____ SWEEPS PER PATTERN **16** SWEEP PATTERNS PER SETUP _____ PATCH PATTERN **112233x332211**

GEOPHONES PER PATCH **24** NO. OF RECORDING PATCHES **96** TYPE VIBRATOR **4-41100** TYPE GEOPHONE **ETL-EV22B** FREQUENCY **7.5 Hz** STATION INTERVAL **220'** LINE DIR. **N → S**

REMARKS _____ OBSERVER _____ PARTY MGR. _____

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line # 1	STATE Michigan	COUNTY Gratiot	DATE 8-28-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Overcast - wet	LINE NO. 1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES	TAPES RL.NO.	FILTER			REMARKS
							LOCUT	60 ~	% DRIVE	
1	SKIP 817	823 - 916	45	4	SKIP	105	Out	Out	70%	
2	SKIP 819	823 - 918	47	↑	SKIP	↑	↑	↑	↑	
3	SKIP 821	825 - 920	49	↓	SKIP	↓	↓	↓	↓	
4	SKIP 823	827 - 922		↓	SKIP	↓	↓	↓	↓	Finished For the Day (Vibrating [Sta.'s 797-830 to be picked up AND swung to FRONT of LINE AFTER long SKIP])
5	SKIP 825	829 - 924		↓	SKIP	↓	↓	↓	↓	
6					3:50					
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
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21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-91100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Michigan Line #1	STATE Michigan	COUNTY	DATE 8-29-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLEAR - DAMP		LINE NO. 1

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAP TIME	TAPE RL.NO.	F I L T E R				REMARKS
							LOCUT	60 ~	100 ~	1000 ~	
1	933	PULSE TEST			8:15	105	Out	Out			O.B. Set up BETWEEN STA.'S 896 + 897
2	934	EINT									VIB# 17311 Down with power supply PROBLEMS (NO OIL PRESSURE)
3	935	DRD									
4	939	Sum TEST									
5	941	NRJ TEST									
6	890	Similarity		4	9:00	↓				50%	RUNNING DOWN BAD CABLES + PHONES
7	346	WIND STRIP		↑	9:45	105					E.O.F.# 346 ON REEL# 105
8	347	827			10:30	106				70%	BOF # 347 ON NEW REEL# 106 FILE# 900-10 SEC. ALL ONES 1-96 CORR. ON FILE# 347
9	348	828	7		11:00	↑					
10	349	831	9		11:20						
11	350	833	11		11:40						VP# 833 STACKED ON FIRST HALF DUE TO HOUSE
12	351	835	13		12:00						" 835 " " LAST " " " "
13	352	837	15		12:20						
14	353	839	17		12:40						VP# 839 STACKED ON FIRST HALF DUE TO HOUSE
15	354	841	19		1:00						" 841 " " LAST " " " "
16	355	843	21		1:20						
17	SKIP	845	23		SKIP						VP# 845 SKIPPED DUE TO HOUSE
18	356	847	25		1:40						VP# 847 STACKED ON LAST HALF DUE TO HOUSE
19	357	849	27		2:00						
20	358	851	29		2:20						
21	359	853	31		2:40						VP# 853 STACKED ON FIRST HALF DUE HOUSE
22	SKIP	855	33		SKIP						VP# 855 SKIPPED DUE TO HOUSES + BARN
23	SKIP	857	35		SKIP						VP# 857-861 " " " " " "
24	SKIP	859	37		SKIP						
25	SKIP	861	39		SKIP						
		863	41		SKIP	↓	↓	↓	↓	↓	

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS		OBSERVER Simmons		PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line #1	STATE Michigan	COUNTY Clinton	DATE 8-29-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLEAR - DAMP	LINE NO. 1	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	REEL NO.	FILTER		REMARKS
							LOCUT	60 ~	
1	863	867-962	43	4	3:00	106	Out	Out	70% EOF # 360 ON REEL # 106
2	865	869-964	45		3:30	107			BOF # 361 (WIND STRIP) ON NEW REEL # 107. FILE # 900-10 SEC ALL ONE'S
3	869	871-966	47		4:00				1-96 CORRELATION MADE ON FILE 362. OB MOVE
4	869	873-968	28		4:45				OB. SET UP BETWEEN STA'S 917 & 918 VP. 869 STACKED ON FIRST HALF
5	SKIP	875-970	30		SKIP				RAW SWEEP FOR DR KAUFMAN & 2 (1-48 & 89-96) FOR GEAN GEAR USER (PULLER CONTROL) ON FILE 365
6	875	877-972	32		5:20				VP # 875 SKIPPED DUE TO HOUSE
7	875	879-974	34		5:40				
8	877	881-976	36		6:00	107		EOF.	VP # 877 LAST VP. PUSHING SPREAD WILL START WITH VP # 943 PULLING
9	SKIP	883-978	38		SKIP				SPREAD DUE TO NOW PERMITTED AREA. WILL START NEW REEL
10									AT BEGINNING OF PULL. REEL # 107 ENDED ON FILE # 36
11									(END OF PUSHING)
12					6:20				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
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
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 220'
REMARKS			OBSERVER SIMPSONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line #1	STATE Michigan	COUNTY	DATE 8-30-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Clear	LINE NO. 2 ONE	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	START TIME	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	% DAVE	
1	933 Pulse Test	1-6 SEC.			8:15	108	Out	Out		BOF ON NEW REEL # 108 IS 368 (WIND STRIP)
2	935 EINT	2- " "								OB. SET UP BETWEEN STA.'S 917 & 918
3	939 DRD	4- " "								VIB # 17311 DOWN (lost oil pump in power supply)
4	954 Sum Test	2- " "								WILL START PULLING LINE DUE TO NO PERMIT (NEW REEL)
5	961 NRJ TEST	2- " "								
6	890 Similarity	1-31 "		4	9:00				50%	RUNNING DOWN BAD CABLES & PHONES
7	368 Wind Strip	1-6 "			10:00					SPURATIC NOISIES ON LINE DUE TO TRAFFIC ON NUMEROUS CROSS ROADS
8	369 943	844-939	239		10:20				70%	FARMERS PICKING CROP & PLOWING FIELDS. 1-96 CORRELATION MADE ON FILE # 369
9	370 945	848-941	1		10:30					
10	371 947	848-943	3		11:10					
11	372 949	850-945	5		11:30					
12	373 951	852-947	7		11:50					
13	374 953	854-949	9		12:10					
14	375 955	856-951	11		12:30					
15	376 957	858-953	13		12:50					
16	377 959	860-955	15		1:10					
17	378 961	862-957	17		1:30					V.P. # 961 STACKED ON FIRST HALF DUE TO HOUSE
18	SKIP 963	864-959	19		SKIP					V.P. # 963 SKIPPED DUE TO HOUSE
19	379 965	866-961	21		1:50					
20	380 967	868-963	23		2:10	108				EOF # 380 ON REEL # 108
21	382 969	870-965	25		2:40	109				BOF # 381 (WIND STRIP) ON NEW REEL # 109. FILE # 900-10 SEC. ALL ONE'S
22	383 971	872-967	27		3:00					1-96 CORRELATION MADE ON FILE # 382
23	384 973	874-969	29		3:20					
24	385 975	876-971	31		3:40					
25	386 977	878-973	33		4:00					

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
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 220'
REMARKS			OBSERVER Simmons	PARTY MGR.	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA Michigan Line #1	STATE Michigan	COUNTY	DATE 8-30-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER CLEAR		LINE NO. 1

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	START TIME	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	% LINE	
1	979	880-975	35	4	4:20	109	Out	Out	70%	RAW SWEEP MADE ON FILE # 387
2	981	882-977	37	↑	4:40	↑	↑	↑	↑	
3	983	884-979	39	↑	5:00	↑	↑	↑	↑	
4	985	886-981	41	↑	5:20	↑	↑	↑	↑	
5	987	888-983	43	↑	5:40	↑	↑	↑	↑	VP#987 STACKED ON 1 st HALF DUE TO HOUSE
6	SKIP	890-985	45	↑	SKIP	↑	↑	↑	↑	VP#989 SKIPPED DUE TO HOUSE
7	991	892-987	47	↓	6:00	↓	↓	↓	↓	VP#991 STACKED ON LAST HALF DUE TO HOUSE
8										
9					6:20					FINISHED FOR THE DAY
10										
11										
12										
13										
14										
15										
16										
17										
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20										
21										
22										
23										
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-41100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line #1	STATE Michigan	COUNTY Clinton	DATE 8-31-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Clear - Cool	LINE NO. 2	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES RL.NO.	F I L T E R			REMARKS
						LOCUT	60 ~	60 ~	
1	933 Pulse Test	1 - 6 Sec.			8:30 109	Out	Out		O.B. Set up BETWEEN STA'S 954 & 955
2	934-935 EINT	2 - " "				↑	↑		
3	936-939 DRD	4 - " "							FROM STA.# 970 to 1026 HEAVILY POPULATED. AT STA'S 979-981 READY MIX CEMENT PLANT
4	933-954 Sunn TEST	2 - " "							
5	938-961 NRI TEST	2 - " "							
6	890 Similarity	1 - 31 "		5	9:30 109			50%	EOF. 890 ON REEL # 109
7	393 Wind Strip	1 - 6 "		↑	10:45 110				RUNNING DOWN BAD CABLES & PHONES BOF.# 393 ON REEL # 110
8	394 993	894-989	12		11:50			70%	
9	395 995	896-991	14		12:10			↑	
10	396 997	898-993	16		12:30				VP# 997 STACKED ON FIRST HALF DUE TO HOUSE.
11	SKIP 999	900-995	18		SKIP				VP# 999 SKIPPED DUE TO HOUSE
12	397 1001	902-997	20		12:50				
13	398 1003	904-999	22		1:10				
14	399 1005	906-1001	24		1:30				VP# 1005 STACKED ON FIRST HALF DUE TO HOUSE
15	SKIP 1007	908-1003	26		SKIP				VP# 1007 SKIPPED DUE TO HOUSE
16	400 1009	910-1005	28		1:50				RAW SWEEP FOR DR. BAUFMAN & Z. H. 48, 49-96 FOR GEAN GEAR HISSES (Quilby CONTROL) MADE ON FILE # 400. VP. 1009 STACKED ON LAST HALF DUE TO HOUSE
17	401 1061	912-1007	30		2:10				
18	402 1013	914-1009	32		2:30				
19	403 1015	916-1011	34		2:50				
20	404 1017	918-1013	36		3:10				
21	SKIP 1019	920-1015	38		SKIP				VP# 1019-1025 SKIPPED DUE TO HOUSES
22	SKIP 1021	922-1017	40		SKIP				EOF# 404 ON REEL # 110
23	SKIP 1023	924-1019	42		SKIP				3:30 FINISHED VIBRATING FOR THE DAY. ENTIRE LINE TO BE
24	SKIP 1025	926-1021	46	↓	SKIP	↓	↓	↓	PICKED UP DUE TO LARGE SKIP & HOLIDAY. WILL START PUSHING SPREAD ON SOUTH SIDE OF SKIP AFTER HOLIDAY.
25					3:30				

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-41100¹⁵ 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
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 Michigan Line I	STATE Michigan	COUNTY Clinton	DATE 9-5-78
CREW NO. 6834	TERRAIN Flat - FARMLAND	WEATHER Overcast - Cool	LINE NO. 1	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TIME	TAPE RL.NO.	F I L T E R		REMARKS
							LOCUT	60 ~	
1	933	Pulse Test			8:30	112	Out	Out	BOF # 900 (10 SEC. ALL ONES) ON NEW REEL # 112
2	935	EINT							O.B. SET UP BETWEEN STA # 1138 & 1139
3	939	DRD							Will start pushing line starting with VP # 1064
4	954	Sum Test							Laying out cables & phone which were picked up due to
5	961	NRI Test							large skip & holiday. line heavily populated, road will be traveled causing
6	890	Similarity		4	10:00			50%	Running Down Bad Cables & phones
7	405	Wind Strip			11:30				Waiting on cables & phones
8	406	1064	1068-1163	2	12:30			70%	1-96 Correlation made on file # 406. VP # 1064 stacked on last half
9	407	1066	1070-1165	4	1:45				waiting on traffic
10	408	1068	1072-1167	6	2:20				
11	409	1070	1074-1169	8	2:55				waiting on traffic. Running Down Bad Cable
12	410	1072	1076-1171	10	3:36				" " "
13	411	1074	1078-1173	12	4:00				
14	412	1076	1080-1175	14	4:45				waiting on traffic
15	SKIP	1078	1082-1177	16	SKIP				
16	SKIP	1080	1084-1179	18	SKIP				
17	413	1082	1086-1181	20	5:10				
18	414	1084	1088-1183	22	5:30				
19	415	1086	1090-1185	24	5:50				RAW SWEEP MADE ON FILE # 415. Long Go Around Due to Bridge
20					6:10				FINISHED FOR THE DAY
21									
22									
23									
24									
25									

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-41100 1-4900	TYPE GEOPHONE ETL-EV223	FREQUENCY 7.5 Hz	STATION INTERVAL 220'
REMARKS	OBSERVER SIMMONS		PARTY MGR.		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT **COCORP** AREA **MICHIGAN LINE 1 (ONE)** STATE **MICHIGAN** COUNTY **CLINTON** DATE **9-6-78**
 CREW NO. **6834** TERRAIN **Flat - Farmland** WEATHER **Clear - Windy** LINE NO. **1 (ONE)**

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES	TAPES RL.NO.	FILTER			REMARKS
							LOCUT	60~	% DRIVE	
1	933	PULSE TEST	1 - 6 Sec.		8:45	112	Out	Out		O.B. SET UP BETWEEN STA'S 1157 & 1158
2	934	EINT	2 - " "				↑	↑		Vib # 12667 Down with Blown Engine
3	935	DRD	4 - " "							Vib # 17311 Down with BAD AIR BAG ON PAD (NO SPARE, going to town to get one off of Vib # 12667)
4	939	Sum Test	2 - " "							Sta's 1159-1165 offset 90° to line East. *Note
5	940	NRI Test	2 - " "							Sta's 1185-1191 offset 90° Back to line West. *Note
6	890	Similarity	1 - 31 Sec.	4	10:00				50%	EOI # 416 ON REEL # 112. Running Down Bad Cables & Phones
7	416	Wind Strip	1 - 6 Sec.		11:30	112				BOF # 417 ON NEW REEL # 113 File # 900-10 SER. ALL ONE'S 1-96 CORR. MADE ON FILE # 417
8	417	1088	1092 - 1187	7	11:50	113			70%	Sta's 1159-1165 fall on Hwy # 27. (Wind picking up)
9	418	1090	1094 - 1189	9	12:20					VP # 1092 Stacked on the 1st half due to house.
10	419	1092	1096 - 1191	11	1:20					VP # 1094 Skipped due to house
11	SKIP	1094	1098 - 1193	13	SKIP					waiting on traffic
12	420	1096	1100 - 1195	15	1:40					VP # 1098 Skipped due to house
13	SKIP	1098	1102 - 1197	17	SKIP					
14	421	1100	1104 - 1199	19	2:00					
15	422	1102	1106 - 1201	21	2:35					
16	SKIP	1104	1108 - 1203	23	SKIP					VP # 1104 Skipped due to house
17	423	1106	1110 - 1205	25	2:55					waiting on traffic VP # 1096 Stacked on last half due to house
18	424	1108	1112 - 1207	27	SKIP					
19	SKIP	1110	1114 - 1209	29	SKIP					VP # 1110 Skipped due to house
20	SKIP	1112	1116 - 1211	31	SKIP					VP # 1112 " " " "
21	425	1114 - 1116	1118 - 1213 - 33	33	3:20					File # 422 2 CDP Positions out (in 31 should have been in 32)
22	426	1116	1120 - 1215	35	3:40					
23	427	1118	1122 - 1217	37	4:00					
24	428	1120	1124 - 1219	39	4:30					waiting on traffic VP # 1120 Stacked on first half due to house
25	429	1122	1126 - 1221	41	4:50					Raw Sweep for Dr Kaufman 2(1-48 149-96) FOR GEAR GRABBER (GUILTY CONTROL) FILE # 429

TOTAL SETUPS: _____ TOTAL SWEEPS: _____ TOTAL COVERAGE: _____ TOTAL FIELD TIME: _____ DRIVING TIME: _____ SYSTEM NO.: _____

SWEEP FREQUENCY: **8-32 Hz** SWEEP PATTERN: _____ SWEEPS PER PATTERN: **16** SWEEP PATTERNS PER SETUP: _____ PATCH PATTERN: **112233x332211**

GEOPHONES PER PATCH: **24** NO. OF RECORDING PATCHES: **96** TYPE VIBRATOR: **3-41100 1-4900** TYPE GEOPHONE: **ETH-EV22B** FREQUENCY: **7.5 Hz** STATION INTERVAL: **220'** LINE DIR. 1 TO 24: **N → S**

REMARKS: _____ OBSERVER: **SIMMONS** PARTY MGR.: _____

*Note
N
1159-1165
1195-1191

MADE ON FILE # 417

MADE ON FILE # 429

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

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

CLIENT COCORP	AREA MICHIGAN LINE I	STATE MICHIGAN	COUNTY Clinton	DATE 9- -78
CREW NO. 6834	TERRAIN Flat - FARMLAND	WEATHER Clear		LINE NO. 1

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPES	TAPES RL.NO.	FILTER			REMARKS	
							LOCUT	60 ~	% DRIVE		
1	430	1124	1128 - 1223	43	4	5:20	113	Out	Out	70%	EOF # 430 ON REEL # 113
2	432	1126	1130 - 1225	45	↑	5:50	114	↑	↑	↑	B.O.F. # 431 ON NEW REEL # 114. FILE # 431 (WIND STRIP) FILE # 900-10 SEC ALL ONES
3	433	1128	1132 - 1227	47	↓	6:10	↓	↓	↓	↓	1-96 CORRELATION MADE ON FILE # 432
4						6:30					FINISHED FOR THE DAY
5											
6											
7											
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
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 220'
REMARKS			OBSERVER Simmons	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line One	STATE Michigan	COUNTY Clinton	DATE 9-7-78
CREW NO. 6834	TERRAIN Flat - Farmland	WEATHER Clear	LINE NO. ONE	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPE RL. NO.	F I L T E R			REMARKS
						LOCUT	60 ~	% DRIVE	
1 933	PULSE TEST	1-6 SEC.			114	Out	Out		OB. SET UP BETWEEN STA'S
2 934	ETNT	2- " "			↑	↑	↑		VIB.# 12667 DOWN DUE TO BLOWN ENGINE. ALL PROGRAM PLUGS ON
3 939	DRD	4- " "							SWEEPITS TESTED GOOD
4 954	SUM TEST	2- " "							STA'S 1159-1165 OFFSET 90° TO LINE EAST. STA'S 1185-1191 OFFSET 90° BACK TO LINE.
5 961	NRJ TEST	2- " "							
6 890	Similarity	1-31 SEC.		4	9:30			50%	RUNNING DOWN BAD CABLES & PHONES
7 434	Wind Strip	1-6 SEC.		↑	10:30				
8 435	1130	1134-1229	1		11:00			70%	1-96 CORRELATION MADE ON FILE # 435
9 SKIP	1132	1136-1231	3		SKIP			↑	V.P.# 1132 SKIPPED DUE TO HOUSE
10 436	1134	1138-1233	5		11:30				
11 437	1136	1140-1235	7		12:10				WAITING ON TRAFFIC. V.P.# 1136 STACKED ON FIRST HALF DUE TO HOUSE
12 438	1138	1142-1238	9		12:30				V.P. 1138 STACKED ON LAST HALF DUE TO HOUSE
13 439	1140	1144-1239	11		12:50				
14 440	1142	1146-1241	13		1:30				WAITING ON TRAFFIC
15 SKIP	1144	1148-1243	15		SKIP				V.P.# 1144 SKIPPED DUE TO HOUSE
16 441	1146	1150-1242	17		1:50				
17 442	1148	1152-1247	19		2:10				
18 443	1150	1154-1249	21		2:30	↓			RAW SWEEP MADE ON FILE # 443
19 444	1152	1156-1251	23		2:50	114			EOF # 444 ON REEL # 114
20 446	1154	1158-1253	25		3:10	115			BOF # 445 (WIND STRIP) ON NEW REEL # 115 FILE # 900-10 SEC. ALL ONE'S
21 447	1156	1160-1255	27		3:30	↑			1-96 CORRELATION MADE ON FILE # 447
22 SKIP	1158	1162-1257	29		SKIP				V.P. 1158 SKIPPED DUE TO HOUSE
23 SKIP	1160	1164-1259	31		SKIP				
24 SKIP	1162	1166-1261	33		SKIP				V.P.# 1160-1164 SKIPPED DUE TO OFFSET IN THE LINE
25 SKIP	1164	1168-1263	35	↓	SKIP	↓	↓	↓	

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233 X 332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA Michigan Line One	STATE Michigan	COUNTY Clinton	DATE 9-2-78
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLEAR	LINE NO. ONE	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAP TIME	TAPE RL.NO.	F I L T E R			REMARKS	
							LOCUT	60 ~	% DRIVE		
1	448	1166	1170-1265	37	4	4:00	115	Out	Out	70%	V.P.# 1166 Stacked on last half due to Highway
2	449	1168	1172-1267	39	↑	4:20	↑	↑	↑	↑	
3	450	1170	1174-1269	41	↑	4:40	↑	↑	↑	↑	
4	451	1172	1176-1271	43	↑	5:00	↑	↑	↑	↑	V.P.# 1172 Stacked on first half due to House
5	SKIP	1174	1178-1273	45	SKIP	SKIP					V.P.# 1174 Skipped due to house
6	452	1176	1180-1275	47	↓	5:35	↓	↓	↓	↓	waiting on traffic
7											
8						6:00					FINISHED FOR THE DAY
9											
10											
11											
12											
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233x332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-4100 1-4900	TYPE GEOPHONE ETL-EV22B	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS	OBSERVER Simmons	PARTY MGR.		LINE DIR. 1 TO 24 N → S	

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical
Division
Geosource Inc.

CLIENT COCORP	AREA MICHIGAN LINE ONE	STATE MICHIGAN	COUNTY CLINTON	DATE 9-8-76
CREW NO. 6834	TERRAIN FLAT - FARMLAND	WEATHER CLOUDY - OVERCAST	LINE NO. ONE	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	TAPE RL. NO.	F I L T E R			REMARKS
						LOCUT	60 ~	% DRIVE	
1	933 Pulse Test	1 - 6 Sec.			115	Out	Out		OIB Set up BETWEEN STA.'S
2	934 EINT	2 - " "				↑	↑		Adjusting MFB. ON VIB. TO BRING UP FRONT END OF SIMILARITY
3	936-939 DRD	4 - " "							WILL HAVE VIB. ON MANUAL LIFE INSTEAD OF AUTO. TO TEST EFFECT ON POSSIBLE LATE ARRIVAL PROBLEM
4	953-954 Sum Test	2 - " "							
5	910-961 NRJ TEST	2 - " "							
6	890 Similarity	1 - 31 Sec.		4	10:00			50%	RUNNING DOWN BAD CABLES & WAITING ON TRAFFIC
7	453 Wind Strip	1 - 6 Sec.		↑	11:00				
8	454 1178	1182-1277	34		11:20			70%	VIB. PROBLEM, FIXING NOW. 1-96 CORRELATION MADE ON FILE #454
9	455 1180	1184-1279	36		12:05			↑	WAITING ON TRAFFIC
10	456 1182	1186-1281	38		12:25				
11	457 1184	1188-1283	40		1:10				EOF #457 ON REEL #115 WAITING ON TRAFFIC
12	SKIP 1186	1190-1285	42		SKIP				
13	SKIP 1188	1192-1287	44		SKIP				V.P. #1186-1190 SKIPPED DUE TO OFFSET IN LINE
14	SKIP 1190	1194-1289	46		SKIP				
15					1:30				FINISHED VIBRATING, PICKING UP LINE.
16									EOL #1 PICKING UP ENTIRE LINE TO LAY OUT ON
17									BEGINNING OF LINE #2
18									
19									
20									
21									
22									
23									
24									
25									

E.O.L.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz	SWEEP PATTERN	SWEEPS PER PATTERN 16	SWEEP PATTERNS PER SETUP	PATCH PATTERN 112233X332211	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 3-41100 1-4900	TYPE GEOPHONE ETL-EU22B	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
REMARKS			OBSERVER SIMMONS	PARTY MGR.	