

**OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER**

**Exploration Services  
Division  
Geosource Inc.**

CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>KA</b>	COUNTY <b>Atchison</b>	DATE <b>11-8-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>Overcast Cold</b>	LINE NO. <b>2</b>	

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				682	OUT	IN	BOT. # 682. FILE # 900-10 SEC. ALL ONES
2 934	EINT	2 - " "							RECORDER SET UP BETWEEN STA'S 71472
3 935	DRD	4 - " "							STARTING LINE # 2. WILL BE PUSHING WINE
4 936	SUM TEST	2 - " "							SEA'S 1-83 IN JEFFERSON COUNTY, REST OF LINE # 2
5 937	NRJ TEST	2 - " "							IN ATCHISON COUNTY. LAYING OUT LINE # 2
6 938	Similarity	2 - 22 SEC		5					50%
7 001	Wind Strip	1 - 6 SEC							CHECKING WINE
8 002	16	1-12 X 20-103	2						70% 1-96 CORRELATION MADE ON FILE # 002
9 003	18	3-14 X 22-105	4						"
10 004	20	5-16 X 24-107	6						"
11 005	22	7-18 X 26-109	8						"
12 006	24	9-20 X 28-111	10						"
13 007	26	11-22 X 30-113	12			682			30% E.O.T. # 682
14 008	28	13-24 X 32-115	14			683			" B.O.T. # 683. FILE # 900-10 SEC. ALL ONES
15 009	30	15-26 X 34-117	16						70%
16 010	32	17-28 X 36-119	18						"
17 011	34	19-30 X 38-121	20						"
18 012	36	21-32 X 40-123	22						"
19 013	38	23-34 X 42-125	24						"
20									
21									FINISHED FOR THE DAY
22									
23									
24									
25									

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY <b>8-40 Hz / 22 SEC</b>	SWEEP PATTERN <b>660' SURFACE PATTERN</b>	SWEEPS PER PATTERN <b>16</b>	SWEEP PATTERNS PER SETUP <b>1</b>	PATCH PATTERN <b>      2222 X 2222      </b>	
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>14-41100'S 1-4900</b>	TYPE GEOPHONE <b>ET6-EV22B</b>	FREQUENCY <b>25 Hz</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms SAMPLE RATE 42 SEC RECORD LENGTH</b>	OBSERVER <b>SIMMONS</b>	PARTY MGR.	LINE DIR. 1 TO 24 <b>S. → N.</b>		

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DIGITAL VIBROSEIS RECORDER

Exploration Services Division  
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CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE # 2</b>	STATE <b>KA.</b>	COUNTY <b>JEFFERSON &amp; Atchison</b>	DATE <b>11-9-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR - COLD - WINDY</b>		LINE NO. <b>2</b>

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	CORP.	TAPE RL. NO.	FILTER		REMARKS
							LOCUT	60 ~	
1 933	PULSE	1 - 6 Sec.				683	Out	IN	RECORDER SET UP BETWEEN STA'S 86-87
<del>934</del> 935	EINT	2 - " "				↑	↑	↑	Wind picking up.
<del>936</del> 939	DRD	4 - " "				↑			
<del>940</del> 941	SUM TEST	2 - " "				↓			
<del>942</del> 944	NRT TEST	2 - " "				↓			
6 932	Similarity	1 - 22 Sec.		5		683			50% E.O.I. # 683
7 014	Wind Strip	1 - 6 Sec.		↑		684			CHECKING LINE. BOT. # 684. FILE # 900-10 SEC. ALL ONE'S
8 015	40	25-36X44-127	1		1-96	↑			70% 1-96 CORRELATION MADE ON FILE # 015
9 016	42	27-38X46-129	3		25-48				"
10 017	44	29-40X48-131	5		49-72				"
11 018	46	31-42X50-133	7		73-96				"
12 019	48	33-44X52-135	9		1-24				"
13 020	50	35-46X54-137	11		25-48				"
14 021	52	37-48X56-139	13		49-72	↓			"
15 022	54	39-50X58-141	15		23-96	684			30% VP # 54 STACKED ON FIRST HALF DUE TO HOUSE. E.O.I. # 684
16 SKIP	56	41-52X60-143	17		1-24	685			BOT. # 685. FILE # 900-10 SEC. ALL ONE'S
17 023	58	43-54X62-145	19		25-48	↑			30% VP # 56 SKIPPED DUE TO HOUSE. VP # 58 STACKED ON LAST HALF
18 024	60	45-56X64-147	21		49-72				30% VP # 60 STACKED ON FIRST HALF.
19 SKIP	62	47-58X66-149	23		73-96				VP # 62 SKIPPED DUE TO HOUSE
20 025	64	49-60X68-151	25		1-24				30% VP # 64 STACKED ON LAST HALF.
21 026	66	51-62X70-153	27		25-48				70% RAW SWEEP MADE ON FILE # 026
22 027	68	53-64X72-155	29		49-72				"
23 028	70	55-66X74-157	31		73-96				"
24 029	72	57-68X76-159	33		1-24				" FILE # 029 OFF 2 POSITIONS ON CDP. WAS ON POS. 3 SHOULD HAVE BEEN POS. # 33
25 030	74	59-70X78-161	35	↓	25-48	685	↓	↓	E.O.I. # 685

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC.		SWEEP PATTERN 660' SOURCE ARRAY		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP 1		PATCH PATTERN 		SWEPT PATTERNS PER SETUP 1	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100'S 1-4900	TYPE GEOPHONE ET6-EV22B	FREQUENCY 25 Hz.	STATION INTERVAL 220'
REMARKS 4ms SAMPLE RATE = 42 SEC. RECORD LENGTH			OBSERVER SIMMONS	PARTY MGR.	

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DIGITAL VIBROSEIS RECORDER**

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CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE # 2</b>	STATE <b>KA.</b>	COUNTY <b>JEFFERSON - Atchison</b>	DATE <b>11-9-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR - COLD - WINDY</b>		LINE NO. <b>2</b>

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDF SW.	NO VIB	TAPE RL. NO.	F I L T E R		REMARKS
						LOCUT	60 ~	
1	76	61-72 X 80-163	37	5	49-76 68%	Out	TN 70%	BOT. #68% FILE #90-090 ALL ONE'S. FILE #031 - WIND STRIP.
2	78	63-74 X 82-165	39	↑	73-96	↑	↑	"
3	80	65-76 X 84-167	41	↓	1-24	↓	↓	"
4								
5								FINISHED FOR THE DAY
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY <b>8-40 Hz / 22 SEC.</b>		SWEEP PATTERN <b>660' SOURCE ARRAY</b>		SWEEPS PER PATTERN <b>16</b>	
SWEEP PATTERNS PER SETUP <b>1</b>		PATCH PATTERN <b>      222 X 222      </b>			
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>1-400</b>	TYPE GEOPHONE <b>ET6 - EV23</b>	FREQUENCY <b>25 Hz</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms SAMPLE RATE 42 SEC. RECORDED LENGTH.</b>			OBSERVER <b>SIMMONS</b>	LINE DIR. 1 TO 24 <b>S → N.</b>	

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DIGITAL VIBROSEIS RECORDER**

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CLIENT <b>C.O.C.O.R.P.</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>KA.</b>	COUNTY <b>JEFFERSON &amp; Atchison</b>	DATE <b>11-10-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR &amp; COLD</b>	LINE NO. <b>2</b>	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60~	FREQ %	
1 933	PULSE	1 - 6 SEC.				686	Out	IN		RECORDER SET UP BETWEEN STA'S 138 & 139
2 934	ETNT	2 - " "				↑	↑	↑		NOISE ON STA'S 150 → 160 DUE TO THE TOWN OF
3 935	DRD	4 - " "								WARKINBURG & HIGHWAY #116. STA #176 OPEN DUE TO
4 936	SUM TEST	2 - " "								BRIDGE.
5 937	NRT TEST	2 - " "								
6 938	Similarity	1 - 22 SEC.		5					50%	
7 035	Wind Strip	1 - 6 SEC.								Checking WINE
8 036	82	67-78x86-169	1						70%	1-96 CORRELATION MADE ON FILE # 036
9 037	84	69-80x88-171	3						50%	
10 038	86	71-82x90-173	5			686			50%	E.O.I # 686
11 039	88	73-84x92-175	7			687			30%	B.O.I # 687. FILE # 900-10 SEC. ALL ONE'S. VP # 88 STACKED ON FIRST HALF
12 040	90	75-86x94-177	9			↑				VP # 90 SKIPPED DUE TO HOUSE.
13 041	92	77-88x96-179	11						30%	VP # 92 STACKED ON LAST HALF
14 042	94	79-90x98-181	13						70%	
15 043	96	81-92x100-183	15						30%	VP # 96 STACKED ON FIRST HALF
16 044	98	83-94x102-185	17						30%	" 98 " " " LAST "
17 045	100	85-96x104-187	19						70%	
18 046	102	87-98x106-189	21						"	
19 047	104	89-100x108-190	23			687			"	E.O.I # 687
20 048	106	91-102x110-193	25			688			"	B.O.I # 688. FILE # 900-10 SEC. ALL ONE'S. FILE # 047 - WIND STRIP
21 049	108	93-104x112-195	27			↑			"	1-96 CORRELATION MADE ON FILE # 049
22 050	110	95-106x114-197	29						"	
23 051	112	97-108x116-199	31						"	
24 052	114	99-110x118-201	33						"	
25 053	116	101-112x120-203	35						"	RAW SWEEP MADE ON FILE # 053

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC.		SWEEP PATTERN 660 SOURCE ARRAY		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP 1		PATCH PATTERN IIIIII2222X2222IIII			
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100'S 1-4900	TYPE GEOPHONE ATL-EV223	FREQUENCY 25 Hz	STATION INTERVAL 220'
REMARKS 4ms. SAMPLE RATE 42 SEC. RECORD LENGTH			OBSERVER SIMMONS	PARTY MGR.	

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CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-10-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR - COLD</b>		LINE NO. <b>2</b>

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	30 ~	
1	118	103-114x122-205	37	5		688	Out	TN	30%	VP# 118 Stacked on first half.
2	120	105-116x124-207	39	↑		688	↑	↑	30%	E.O.L. #688
3	122	107-118x126-209	41	↓		689	↓	↓	70%	BOT #689. FILE #900-10 SEC. ALL ONES
4	124	109-120x128-211	43	↓		↓	↓	↓	"	
5										
6										FINISHED FOR THE DAY
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY <b>8-40Hz / 22 SEC.</b>	SWEEP PATTERN <b>660' SOURCE ARRAY</b>	SWEEPS PER PATTERN <b>16</b>	SWEEP PATTERNS PER SETUP <b>1</b>	PATCH PATTERN <b>     22222222     </b>	
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>4-4100's 1-1000</b>	TYPE GEOPHONE <b>ETH - EV22B</b>	FREQUENCY <b>25 Hz.</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms. SAMPLE RATE</b>	<b>4 1/2 SEC. RECORD LENGTH</b>	OBSERVER <b>SIMMONS</b>	PARTY MGR.	LINE DIR. <b>1 TO 24 S. → N.</b>	

OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER

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CLIENT <b>COCORP</b>	AREA <b>KANISAS WINE #2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-13-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>HILLY</b>	WEATHER <b>CLEAR &amp; COLD &amp; WET</b>	LINE NO. <b>6</b>	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	% BW	
1 933	PULSE	1 - 6 SEC.				689	Out	IN		RECORDER SET UP BETWEEN STA'S 182-183
<del>2 1935</del>	EINT	2 - " "								STA. #176 OPEN DUE TO BRIDGE.
<del>3 1939</del>	DRD	4 - " "								LINE VERY WET DUE TO RAIN ON 11-12-79
<del>4 1941</del>	SUM TEST	2 - " "								
<del>5 1961</del>	NRT TEST	2 - " "								
6 933	SINHAPITU	1 - 22 SEC.		5					50%	CHECKING LINE
7 058	Wind Strip	1 - 6 SEC.								1-96 CORRELATION MADE ON FILE #059
8 059	126	111-122X130-213	1						70%	
9 060	128	113-124X132-215	3						"	
10 061	130	115-126X134-217	5						"	
11 062	132	117-128X136-219	7			689			30%	E.O.T. #689. U.P. #132 STACKED ON FIRST HALF DUE TO HOUSE
12 SKIP	134	119-130X138-221	9			690				U.P. #134 SKIPPED DUE TO HOUSE
13 063	136	121-132X140-223	11						30%	U.P. #136 STACKED ON LAST HALF DUE TO HOUSE
14 064	138	123-134X142-225	13						70%	
15 065	140	125-136X144-227	15						"	HIPOWER LINE RUNNING PARALLEL TO LINE ON STA'S 244 TO 252. STRONG GROUND CURRENT.
16 066	142	127-138X146-229	17						"	
17 067	144	129-140X148-231	19						"	
18 068	146	131-142X150-233	21						30%	
19 SKIP	148	133-144X152-235	23							U.P. #148 SKIPPED DUE TO HOUSE
20 069	150	135-146X154-237	25						30%	U.P. #150 STACKED ON FIRST HALF
21 070	152	137-148X156-239	27			690				E.O.T. #690
22 SKIP	154	139-150X158-241	29							
23 SKIP	156	141-152X160-243	31							U.P.'S 154-158 SKIPPED DUE TO TOWN OF WARKINBURG.
24 SKIP	158	143-154X162-245	33							
25 072	160	145-156X164-247	35			691			30%	E.O.T. #691 FILE #002-10 SEC ALLOWES. FILE #021 WIND STRIP

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 1/2 SEC.		SWEEP PATTERN 660' SOURCE PRRAY		SWEEPS PER PATTERN 16	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 4-9100'S 1-9900	
REMARKS 4ms SAMPLE RATE 4/2 SEC RECORD LENGTH		TYPE GEOPHONE 5TB-EV22B		FREQUENCY 25 Hz	
OBSERVER SIMMONS		STATION INTERVAL 220'		LINE DIR. S. → N.	
PARTY MGR.					

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CLIENT <b>COCORD</b>	AREA <b>KANISAS LINE #2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-13-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR-COLD &amp; WET</b>	LINE NO. <b>2</b>	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	90 ~	
1	162	147-158x166-249	37	5		691	Out	IN	30%	3 Raw Sweeps (for Dr. Koffman 21-48 49-96 for Qully Control) MADE ON FILE #073
2	164	149-160x168-251	39	↑		↑	↑	↑	70%	
3	166	151-162x170-253	41	↑		↑	↑	↑		1-96 CORRELATION MADE ON FILE #075
4	168	153-164x172-255	43	↓		↓	↓	↓		
5										
6										FINISHED FOR THE DAY
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25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY <b>8-40 Hz / 22.9 SEC</b>	SWEEP PATTERN <b>660' SOURCE ARRAY</b>	SWEEPS PER PATTERN <b>16</b>	SWEEP PATTERNS PER SETUP <b>1</b>	PATCH PATTERN <b>      222 222      </b>	
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>14-9100'S 1-4900</b>	TYPE GEOPHONE <b>FW-5V22B</b>	FREQUENCY <b>25 Hz</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms SAMPLE RATE 42 SEC RECORD LENGTH.</b>	OBSERVER <b>SIMMONS</b>		PARTY MGR.		

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CLIENT <b>C.O.C.O.R.P.</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-14-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR-COOL-DAMP</b>		LINE NO. <b>2</b>

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	BELIEF	
1 933	Pulse	1 - 6 SEC				691	Out	In		RECORDER SET UP BETWEEN STA'S 226 & 227
2 934	EINT	2 - " "								STA #176 OPEN DUE TO BRIDGE. ELECTRIC FENCE
3 935	DRD	4 - " "								RUNNING FROM STA #244 TO 252, STRONG GROUND
4 936	Sum Test	2 - " "								CURRENT.
5 937	NRJ Test	2 - " "								
6 938	Similarity	1 - 22 SEC.		5		691			50%	CHECKING LINE. E.O.T. #691
7 077	Wind Strip	1 - 6 SEC.				691				
8 078	170	155-166x174-257	1			692			70%	BOT. #692. FILE #900-10 SEC. ALL ONE'S. 1% CORRELATION MADE ON FILE #078
9 079	172	157-168x176-259	3						"	
10 080	174	159-170x178-261	5						"	
11 081	176	161-172x180-263	7						30%	V.P. #176 STACKED ON FIRST HALF DUE TO HOUSE
12 SKIP	178	163-174x182-265	9							V.P. 178 SKIPPED DUE TO HOUSE.
13 082	180	165-176x184-267	11						30%	
14 083	182	167-178x186-269	13						30%	
15 SKIP	184	169-180x188-271	15							V.P. #184 SKIPPED DUE TO CEMETERY
16 084	186	171-182x190-273	17						30%	V.P. #186 STACKED ON LAST HALF DUE TO HOUSE
17 085	188	173-184x192-275	19			692			30%	E.O.T. #692
18 086	190	175-186x194-277	21			693			70%	BOT. #693. FILE #900-10 SEC. ALL ONE'S.
19 087	192	177-188x196-279	23						"	
20 088	194	179-190x198-281	25						"	
21 089	196	181-192x200-283	27						"	RAW SWEEP MADE ON FILE #089
22 090	198	183-194x202-285	29						"	
23 091	200	185-196x204-287	31						"	
24 092	202	187-198x206-289	33						"	E.O.T. #693
25 093	204	189-200x208-291	35			693			"	<del>RAW SWEEP MADE ON FILE #093</del>

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. <b>MDS-10</b>
SWEEP FREQUENCY <b>8-40 Hz / 22 SEC.</b>	SWEEP PATTERN <b>660' SOURCE ARRAY</b>	SWEEPS PER PATTERN <b>16</b>	SWEEP PATTERNS PER SETUP <b>1</b>	PATCH PATTERN <b>     2222222222     </b>	
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>14-4100'S 1-4900</b>	TYPE GEOPHONE <b>ETH-EV22</b>	FREQUENCY <b>25 Hz</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms SAMPLE RATE 4/2 SEC. RECORD LENGTH</b>	OBSERVER <b>SIMPSON'S</b>		PARTY MGR.		

**OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER**

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

CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-14-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR-COLD &amp; Damp</b>	LINE NO. <b>2</b>	

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	306	191-202x210-293	37	5		694	Out	IN	70%	BOT #694. FILE #900-10 SEC. ALL ONE'S. FILE #094-WIND STRIP
2	308	193-204x212-295	39	↑		↑	↑	↑		1-96 CORRELATION MADE ON FILE #096
3	310	195-206x214-297	41	↑		↑	↑	↑		
4	312	197-208x216-299	43	↓		↓	↓	↓		FILE #098 OFF 2 CDP POSITIONS (WAS ON CDP POS #41 SHOULD HAVE BEEN ON CDP POS #42)
5										
6										
7										FINISHED FOR THE DAY
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY <b>8-40 Hz / 22 SEC.</b>	SWEEP PATTERN <b>660 SOURCE ARRAY</b>	SWEEPS PER PATTERN <b>16</b>	SWEEP PATTERNS PER SETUP <b>1</b>	PATCH PATTERN <b>      2222x2222      </b>	
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>4-4100'S 1-2900</b>	TYPE GEOPHONE <b>ETG - EV22B</b>	FREQUENCY <b>25 Hz</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms SAMPLE RATE</b>	<b>4.2 SEC. RECORD LENGTH</b>	OBSERVER <b>SIMMONS</b>	PARTY MGR.		

**OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER**

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

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CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE # 2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-15-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>Clear &amp; Cool &amp; Windy</b>	LINE NO. <b>2</b>	

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	Pulse	1 - 6 SEC				694	Out	IN.		RECORDER SET UP BETWEEN STA'S 220 & 221
2	EINI	2 - " "								
3	DRD	4 - " "								
4	Sum Test	2 - " "								
5	NRT Test	2 - " "								
6	Similarity	1 - 22 SEC		5					50%	
7	Wind Strip	1 - 6 SEC								CHECKING LINE
8	214	199-210x218-301	1			694			70%	1-96 CORRELATION MADE ON FILE #100. E.O.I. #694
9	216	201-212x220-303	3			695			"	B.O.I. #695. FILE #900-10 SEC. ALL ONE'S
10	218	203-214x222-305	5						"	
11	220	205-216x224-307	7						"	
12	222	207-218x226-309	9						"	
13	224	209-220x228-311	11						"	
14	226	211-222x230-313	13						"	
15	228	213-224x232-315	15						"	
16	230	215-226x234-317	17			695			"	E.O.I. #695
17	232	217-228x236-319	19			696			"	B.O.I. #696. FILE #900-10 SEC. ALL ONE'S
18	234	219-230x238-321	21						"	
19	236	221-232x240-323	23						"	
20	238	223-234x242-325	25						"	
21	240	225-236x244-327	27						30%	DUE TO WELL
22	242	227-238x246-329	29						30%	UP #242 STACKED ON FIRST HALF DUE TO WELL
23	244	229-240x248-331	31						70%	UP #244 " " LAST " " " "
24	246	231-242x250-333	33			696			"	E.O.I. #696. RAW SWEEP MADE ON FILE #116
25	248	233-244x252-335	35			697			"	B.O.I. #697. FILE #900-10 SEC. ALL ONE'S. FILE #117 WIND STRIP

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC		SWEEP PATTERN 660' SOURCE PARALLEL		SWEEPS PER PATTERN 16	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 14-7100'S 1-900	
TYPE GEOPHONE ETL-EV22		FREQUENCY 25 Hz		STATION INTERVAL 220'	
REMARKS 4ms SAMPLE RATE 4/2 SEC. RECORD LENGTH		OBSERVER SIMMONS		PARTY MGR.	

OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical  
Division  
Geosource Inc.

CLIENT **COCORP** AREA **KANSAS LINE #2** STATE **KA.** COUNTY **Atchison** DATE **11-15-17**  
 CREW NO. **6834** TERRAIN **Hilly** WEATHER **CLEAR-Cool-Windy** LINE NO. **2**

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	250	245-246X254-337	37	5		697	Out	IN	20%	
2	252	237-248X256-339	39	↑		↑	↑	↑	"	
3	254	239-250X258-341	41	↑		↑	↑	↑	"	
4	256	241-252X260-343	43	↑		↑	↑	↑	"	RECORDER MOVE
5	258	243-254X262-345	32	↓		↓	↓	↓	30%	RECORDER SET UP BETWEEN STA'S 283 & 284
6	260	245-256X264-347	34	↓		↓	↓	↓	30%	V.P.# 260 STACKED ON LAST HALF DUE TO HOUSE
7	262	247-258X266-349	36	↓		697	↓	↓		E.O.L.# 697
8										
9										
10										FINISHED FOR THE DAY
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TOTAL SETUPS: \_\_\_\_\_ TOTAL SWEEPS: \_\_\_\_\_ TOTAL COVERAGE: \_\_\_\_\_ TOTAL FIELD TIME: \_\_\_\_\_ DRIVING TIME: \_\_\_\_\_ SYSTEM NO.: \_\_\_\_\_

SWEEP FREQUENCY: **8-40 Hz / 22 SEC.** SWEEP PATTERN: **660' SOURCE ARRAY** 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: **4-91100'S 1-4900** TYPE GEOPHONE: **ETL-EV22B** FREQUENCY: **25 Hz.** STATION INTERVAL: **220'** LINE DIR.: **S. → N.**

REMARKS: **4ms SAMPLE RATE 4/2 SEC RECORD LENGTH** OBSERVER: **SIMMONS** PARTY MGR.: \_\_\_\_\_

OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical  
Division  
Geosource Inc. 12

CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>Ka.</b>	COUNTY <b>Atchison</b>	DATE <b>11-16-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>Clear &amp; Cool</b>		LINE NO. <b>2</b>

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60~	DRIVE	
1	PLUSE	1 - 6 SEC.				698	OUT	TN		B.O.T. #698. FILE #900-10 SEC. ALL ONE'S RECORDER SET UP BETWEEN STA'S 300 & 301 SHORT SET UP DUE TO CROSS COUNTRY BETWEEN STA'S 302-329. THERE ARE APPARENTLY 2 OTHER SEISMIC CREWS IN GENERAL AREA. 50% STARTED PICKING UP SLIGHT ENERGY SOURCE FROM NORTH END CHECKING WIND STRIP OF LINES 70% 1-96 CORRELATION MADE ON FILE #128 CAN HEAR OTHER CREW'S ON RADIO.
<del>2</del>	<del>FINI</del>	<del>2 - " "</del>								
<del>3</del>	<del>DRD</del>	<del>4 - " "</del>								
<del>4</del>	<del>SUM TEST</del>	<del>2 - " "</del>								
<del>5</del>	<del>NRT TEST</del>	<del>2 - " "</del>								
6	Similarity	1 - 22 SEC.		5						
7	Wind Strip	1 - 6 SEC.								
8	264	249-260x268-351	21							
9	266	251-262x270-353	23							
10	268	253-264x272-355	25							
11	270	255-266x274-357	27							
12	272	257-268x276-359	29							
13	274	259-270x278-361	31			698				
14	276	261-272x280-363	33			699				
15	278	263-274x282-365	35							
16	280	265-276x284-367	37							
17	282	267-278x286-369	39							
18	284	269-280x288-371	41							
19	Skip	271-282x290-373								
20	288	275-284x292-375	16							
21	290	275-286x294-377	18							
22	292	278-288x296-380	20			699				
23	293	278-289x297-380	22			700				
24	294	278-290x298-380	23							
25	295	280-291x299-382	25							

Note:

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40 Hz / 22 SEC.		SWEEP PATTERN 660' SOURCE ARRAY		SWEEPS PER PATTERN 16	
SWEEP PATTERNS PER SETUP 1		PATCH PATTERN       222x222		REMARKS 4 hrs SAMPLE RATE 4 1/2 SEC RECORD LENGTH	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-4100'S 1-4900	TYPE GEOPHONE ETH-ENV22	FREQUENCY 2.5 Hz	STATION INTERVAL 220'
OBSERVER Simmons			PARTY MGR.		

OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical  
Division  
Geosource Inc. 13

CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>Ka.</b>	COUNTY <b>Atchison</b>	DATE <b>11-16-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hills</b>	WEATHER <b>CLEAR &amp; COOL</b>		LINE NO. <b>2</b>

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	SPR	
1	296	281-292X300-385	24	↓		700	Out	TN	70%	VIB #12667 Down With SHAKER LEGS (Bolts gone in
2	297	282-293X301-394	25	↑		↑	↑	↑	"	ONE SIDE, OTHER SIDE CRACKED)
3	298	283-294X302-385	26	↑		↑	↑	↑	"	
4	299	284-295X303-386	27	↑		↑	↑	↑	30%	
5	300	285-296X304-387	28	↑		700	↓	↓	30%	E.O.T. #700
6	301	286-297X305-388	29	↓		701	↓	↓		B.O.T. #701. FILE #900-10 SEC. ALL ONE'S
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9										FINISHED FOR THE DAY
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TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY <b>8-40Hz / 22 SEC</b>		SWEEP PATTERN <b>660' SOURCE ARRAY</b>		SWEEPS PER PATTERN <b>16</b>	
SWEEP PATTERNS PER SETUP <b>1</b>		PATCH PATTERN <b>     2222X222     </b>			
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>14-1100'S 1-400</b>	TYPE GEOPHONE <b>ETH-EV22B</b>	FREQUENCY <b>25Hz</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms SAMPLE RATE 42 SEC RECORD LENGTH.</b>			OBSERVER <b>SIMMONS</b>	LINE DIR. <b>1 TO 24 S → N.</b>	

OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER

Petty-Ray Geophysical  
Division  
Geosource Inc. 14

CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-17-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR &amp; Cool</b>	LINE NO. <b>2</b>	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	DRIVE	
1 933	PULSE	1 - 6 SEC.				701	Out	TN		RECORDER SETUP BETWEEN STA'S 386 & 387
2 934	ELNI	2 - " "								Highway #9 Crosses Line Between Sta's
3 936	DRD	4 - " "								
4 934	SUM TEST	2 - " "								
5 961	DIRT TEST	2 - " "								
6 932	SIMILARITY	1 - 22 SEC.		5					50%	Checking Line  Sta's 302-32 Skipped Due to Cross Country (Walk Only)
7 150	WIND STRIP	1 - 6 SEC.								
8 Skip	302	287-298X306-389								
9 "	304	289-300X308-391								
10 "	306	291-302X310-393								
11 "	308	293-304X312-395								
12 "	310	295-306X314-397								
13 "	312	297-308X316-399								
14 "	314	299-310X318-401								
15 "	316	301-312X320-403								
16 "	318	303-314X322-405								
17 "	320	305-316X324-407								
18 "	322	307-318X326-409								
19 "	324	309-320X328-411								
20 "	326	311-322X330-413								
21 Skip	328	313-324X332-415								
22 151	330	315-326X334-417	1						70%	1-96 CORRELATION MADE ON FILE #151
23	<del>332</del>	<del>317-328X336-419</del>								
24 152	332	317-328X336-419	3						"	
25	<del>334</del>	<del>319-330X342-421</del>								

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8-40Hz / 22 SEC.		SWEEP PATTERN 660' SOURCE ARRAY		SWEEPS PER PATTERN 16	
GEOPHONES PER PATCH 24		NO. OF RECORDING PATCHES 96		TYPE VIBRATOR 14-4100'S 1-0900	
TYPE GEOPHONE ETL-EV22B		FREQUENCY 25 Hz		STATION INTERVAL 220'	
REMARKS 4ms SAMPLE RATE 4/2 SEC RECORD LENGTH			OBSERVER SIMMONS		PARTY MGR.

**OBSERVER'S REPORT  
DIGITAL VIBROSEIS RECORDER**

**Petty-Ray Geophysical  
Division**  
Geosource Inc. 15

CLIENT <b>COCORP</b>	AREA <b>KANSAS LINE #2</b>	STATE <b>KA.</b>	COUNTY <b>Atchison</b>	DATE <b>11-17-79</b>
CREW NO. <b>6834</b>	TERRAIN <b>Hilly</b>	WEATHER <b>CLEAR &amp; COOL</b>	LINE NO. <b>2</b>	

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	334	319-330X338-421	5	5		701	Out	IN	70%	
2	336	321-332X340-423	7	↑		↑	↑	↑	"	
3	338	323-334X342-425	9	↑		701	↑	↑	"	E.O.T. #701
4	340	325-336X344-427	11	↑		702	↑	↑	"	B.O.T. #702. FILE #90-10 SEC. ALL ONE'S
5	342	327-338X346-429	13	↑		↑	↑	↑	30%	UP #342 STACKED ON FIRST HALF DUE TO GAS LINE PUMP STA. UP #344 SKIPPED DUE TO PIPE LINE
6	SKIP	329-340X348-431	15	↑		↑	↑	↑	50%	UP #346 STACKED ON WASH HALF
7	346	331-342X350-433	17	↑		↑	↑	↑	70%	
8	348	333-344X352-435	19	↑		↑	↑	↑	70%	
9	350	335-346X354-437	21	↓		↓	↓	↓	30%	UP #350 STACKED ON FIRST HALF DUE TO HOUSE
10	SKIP	337-348X356-439	23	↓		702	↓	↓		UP #352 SKIPPED DUE TO HOUSE. E.O.T. #702.
11										Will BE PICKING UP LINE #2 DUE TO INTERFERENCE FROM ANOTHER SEISMIC CREW IN AREA, AS PER CLIENT'S REQUEST. PICKING UP ENERGY SOURCE FROM NORTH END OF LINE #2 <del>AND</del> APPROX. EVERY 15 SEC. <sup>15</sup>
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24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY <b>8-40 Hz / 22 SEC.</b>	SWEEP PATTERN <b>660' SOURCE ARRAY</b>	SWEEPS PER PATTERN <b>16</b>	SWEEP PATTERNS PER SETUP <b>1</b>	PATCH PATTERN <b>     2222X2222     </b>	
GEOPHONES PER PATCH <b>24</b>	NO. OF RECORDING PATCHES <b>96</b>	TYPE VIBRATOR <b>14-91100'S 1-4900</b>	TYPE GEOPHONE <b>ETH-EV22B</b>	FREQUENCY <b>25 Hz</b>	STATION INTERVAL <b>220'</b>
REMARKS <b>4ms. SAMPLE RATE. 4/2 SEC. RECORD LENGTH.</b>	OBSERVER <b>SIMMONS</b>	PARTY MGR.	LINE DIR. <b>1 TO 24 S → N</b>		