

OBSERVER'S REPORT DIGITAL VIBROSEIS RECORDER

Exploration Services
Division
Geosource Inc.

CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Riley
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Partly Cloudy & Windy	DATE 6-20-81
			LINE NO. 4

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	1 - 6 sec			408	OUT	IN		Recorder set AT 56-57
2	934/935	EINT	2 - " "							BOT # 408 # 900 10sec All ones.
3	936/939	D.R.D.	4 - " "							B.O.L. #4 Vib's are Pushing line.
4	953/954	Sum TEST	2 - " "							
5	960/961	N.R.J. TEST	2 - " "							
6	932	Similarity	1 - 31 sec	225	5				50%	Vib # 14256 Down.
7	001	Wind Strip	1 - 6 sec	21						
8	002	1	5 - 100	21	4				70%	Station # 100-101 OFF set 995' east.
9	003	2	6 - 101	22						Vib # 16344 Down with bad ATF leak and broke bolt on colluma.
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 → 32 Hz / 31 sec		SWEEP PATTERN 4163		SWEEPS PER PATTERN 8	
SWEEP PATTERNS PER SETUP 1		PATCH PATTERN 11111 222 11222 11111			
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-V 1100's	TYPE GEOPHONE ETH EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 8 ms Sample Rate / 51 sec Record Length			OBSERVER R. Patton J Wings	PARTY MGR. L. Davis	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

Exploration Services Division 2
Geosource Inc.

CLIENT Cocorp	AREA Kansas	STATE Kansas	COUNTY Riley
CREW NO. 6834	TERRAIN Dirt Road + Rolling Hills	WEATHER Partly Cloudy + wet + windy	DATE 6-23-81
			LINE NO. 4

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	1 - 6 sec				408	OUT	IN		Recorder set AT 56-57.
2	934/935 EINT	2 - " "								He walked the line Replanted All jugs.
3	936/937 D.R.D.	4 - " "								Vib #12667 went down during Sims. Had to wait on part for Vib #14256 which was down earlier.
4	953/954 Sum TEST	2 - " "								Vib #12667 Down. Problem with back Hydraulic
5	960/961 NRT TEST	2 - " "								
6	932 Similarity	1 - 31 sec	225	4						50%
7	004 Wind strip	1 - 6 sec	23							
8	005 3	7 - 102	23							70%
9	006 4	8 - 103	24							70%
10	007 5	9 - 104	25							70%
11	008 6	10 - 105	26							70%
12	009 7	11 - 106	27							70%
13	010 8	12 - 107	28							70%
14	011 9	13 - 108	29			408				70% E.D.T. Tape MKTS. #408
15	013 10	14 - 109	30			409				70% B.D.T. #409 900 10 sec. All ones. #012 (6 sec. Wind Strip)
16	014 11	15 - 110	31							70%
17	015 12	16 - 111	32							70%
18	016 13	17 - 112	33							70%
19										
20										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 / 31 sec	SWEEP PATTERN 4/63	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 11111 2221122211111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4 - Y 1100's 1 - Y 900	TYPE GEOPHONE ETL EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 8ms Sample Rate / 51sec Record Length			OBSERVER R. Patton J Wingo	PARTY MGR. L. Davis	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

Exploration Services 3
Division
Geosource Inc.

CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Riley + Marshall	DATE 6-24-80
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Clear + Windy	LINE NO. 4	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	933	Pulse	1 - 6 sec			409	OUT	IN		Recorder set AT 68-69
2	934/935	EINT	2 - " "							
3	936/939	DRD.	4 - " "							Station #100-101 offset 995' east.
4	953/954	Sum TEST	2 - " "							
5	960/961	NR TEST	2 - " "							Vib #12667 Down. Problem with mass, want center.
6	932	Similarity	1 - 31 sec	225	4'					50%
7	017	Wind Strip	1 - 6 sec	22						
8	018	14	18 - 113	22						70%
9	019	15	19 - 114	23						70%
10	020	16	20 - 115	24						70%
11	021	17	21 - 116	25						50% Stacked 1st half due to water well.
12	022	18	22 - 117	26						70% Stacked 2nd half!
13	023	19	23 - 118	27						70%
14	024	20	24 - 119	28		409				70% E.D.T. #409 Tape MKT3.
15	026	21	25 - 120	29		410				70% B.D.T. #410 #90 10 sec. All ones #25 6 sec. Wind Strip
16	027	22	26 - 121	30						70% On V.P. #21 CDP off 1 position. Should be 29.
17	028	23	27 - 122	31						70%
18	029	24	28 - 123	32						70%
19	030	25	29 - 124	33						70%
20	031	26	30 - 125	34						30% Stacked 1st half.
21	Skip	27	31 - 126	35						50% skip due to High pressure pipeline.
22	Skip	28	32 - 127	36						50% skip
23	032	29	33 - 128	37						50%
24	033	30	34 - 129	38						70%
25	034	31	35 - 130	39						50% Stacked 1st half due to water well.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8 → 32Hz / 31 sec	SWEEP PATTERN 4/63	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 11111222 112221111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4 - V 1100's 1 - V 900	TYPE GEOPHONE ETL EV 22B	FREQUENCY 7.5Hz	STATION INTERVAL 330'
REMARKS 8 ms Sample Rate / 51 sec. Record Length	OBSERVER R. Patten	PARTY MGR. J Wings	LINE DIR. 1 TO 24 S → N		

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Exploration Services
Division
Geosource Inc.**

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CLIENT <i>COCORP</i>	AREA <i>Kansas</i>	STATE <i>Kansas</i>	COUNTY <i>Riley + Marshall</i>
CREW NO. <i>6834</i>	TERRAIN <i>Rolling Hills</i>	WEATHER <i>Clear + Windy</i>	DATE <i>6/24/81</i>
			LINE NO. <i>4</i>

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	<i>Skip</i>	<i>32</i>	<i>36-131</i>	<i>40</i>	<i>4</i>	<i>410</i>	<i>OUT</i>	<i>FW</i>	<i>Skip</i>	<i>Due to water well.</i>
2	<i>035</i>	<i>33</i>	<i>37-132</i>	<i>41</i>					<i>50%</i>	
3	<i>036</i>	<i>34</i>	<i>38-133</i>	<i>42</i>					<i>70%</i>	
4	<i>037</i>	<i>35</i>	<i>39-134</i>	<i>43</i>					<i>70%</i>	
5	<i>038</i>	<i>36</i>	<i>40-135</i>	<i>44</i>		<i>410</i>			<i>70%</i>	<i>EOT * 410 Tape MKTs</i>
6	<i>040</i>	<i>37</i>	<i>41-136</i>	<i>45</i>		<i>411</i>			<i>70%</i>	<i>BOT * 411 * 900 10 sec F11 ones. * 039 6sec wind strip.</i>
7	<i>041</i>	<i>38</i>	<i>42-137</i>	<i>46</i>					<i>70%</i>	
8	<i>042</i>	<i>39</i>	<i>43-138</i>	<i>47</i>					<i>70%</i>	
9	<i>043</i>	<i>40</i>	<i>44-139</i>	<i>48</i>					<i>70%</i>	
10	<i>044</i>	<i>41</i>	<i>45-140</i>	<i>49</i>					<i>70%</i>	
11	<i>Skip</i>	<i>42</i>	<i>46-141</i>	<i>31</i>					<i>Skip</i>	<i>Due to house's Moved Recorder to 87-88</i>
12	<i>Skip</i>	<i>43</i>	<i>47-142</i>	<i>32</i>					<i>Skip</i>	<i>Due to house's</i>
13	<i>045</i>	<i>44</i>	<i>48-143</i>	<i>33</i>					<i>70%</i>	<i>Stacked last half.</i>
14	<i>046</i>	<i>45</i>	<i>49-144</i>	<i>34</i>					<i>70%</i>	
15	<i>047</i>	<i>46</i>	<i>50-145</i>	<i>35</i>					<i>70%</i>	
16	<i>048</i>	<i>47</i>	<i>51-146</i>	<i>36</i>					<i>70%</i>	
17	<i>049</i>	<i>48</i>	<i>52-147</i>	<i>37</i>					<i>50%</i>	<i>Stacked 1st half.</i>
18	<i>Skip</i>	<i>49</i>	<i>53-148</i>	<i>38</i>					<i>Skip</i>	<i>Due to house</i>
19	<i>Skip</i>	<i>50</i>	<i>54-149</i>	<i>39</i>					<i>Skip</i>	<i>" " "</i>
20	<i>050</i>	<i>51</i>	<i>55-150</i>	<i>40</i>					<i>50%</i>	
21	<i>051</i>	<i>52</i>	<i>56-151</i>	<i>41</i>		<i>411</i>			<i>50%</i>	<i>EOT * 411 Tape MKTs.</i>
22	<i>Skip</i>	<i>53</i>	<i>57-152</i>	<i>42</i>					<i>Skip</i>	<i>Due to water well.</i>
23										<i>Finished For the Day.</i>
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	
GEOPHONES PER PATCH	NO. OF RECORDING PATCHES	TYPE VIBRATOR	TYPE GEOPHONE	FREQUENCY	STATION INTERVAL
REMARKS	OBSERVER		PARTY MGR.		

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

Exploration Services 5
Division
Geosource Inc.

CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Riley + Marshall	DATE 6-25-81
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Clear + windy	LINE NO. 4	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60~	AMP	
1	933 Pulse	1 - 6 sec				412	out	IN		Box # 412 * 900 10 sec All ones.
2	934/935 EPNT	2 - " "								Recorder set AT 112-113
3	936/939 D.R.D.	4 - " "								
4	953/954 Sum TEST	2 - " "								
5	960/961 NRT TEST	2 - " "								
6	932 Simplicity	1 - 31 sec	225	4						50%
7	052 Wind Strip	1 - 6 sec	18							
8	053 54	58 - 153	18	4						50% stacked last half
9	054 55	59 - 154	19							70%
10										Having to shut down due to Vib. #12666
11										Rear end going out.
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 / 31 sec	SWEEP PATTERN 4163	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 111112221 ^x 22211111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4 - Y 1100's 1 - Y 900	TYPE GEOPHONE ETL EV22.B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 8ms Sample Rate 1/31 sec Record Length	OBSERVER R. Patton - J. Wings	PARTY MGR. P. Davis	LINE DIR. 1 TO 24 S → N		

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Exploration Services
Division
Geosource Inc.**

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CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Riley + Marshall	DATE 6-28-81
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Clear + Windy		LINE NO. 4

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	933	Pulse	1 - 6 sec			412	OUT	IN		Recorder set AT 112-113
2	934/935	E.P.T	2 - " "							From STA's *100 - *101 995' offset East.
3	936/939	D.R.D.	4 - " "							
4	953/954	Supra Test	2 - " "							
5	960/961	NRT Test	2 - " "							
6	932	Similarity	1 - 31 sec	225	5					50%
7	055	Wind Strip	1 - 6 sec	20						
8	056	56	60 - 155	20	5					70%
9	057	57	61 - 156	21						70%
10	058	58	62 - 157	22						76%
11	059	59	63 - 158	23						70%
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										

Shutting down due to wind gusting 25-30mph.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8 → 32 Hz / 31 sec		SWEEP PATTERN 4163		SWEEPS PER PATTERN 8	
SWEEP PATTERNS PER SETUP 1		PATCH PATTERN 111112221 ^x 122211111			
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-Y1100s 1-Y900	TYPE GEOPHONE ETL EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 8ms Sample Rate / 51 sec Record Length			OBSERVER R. Patton	PARTY MGR. J. Wingo	
			L. Davis		

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

Exploration Services
Division
Geosource Inc.

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CLIENT Cocopp	AREA Kansas	STATE Kansas	COUNTY Riley + Marshall	DATE 6-29-81
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Partly Cloudy + Wet.	LINE NO. 4	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60~	AMP	
1	933	Pulse	1 - 6 sec			412	OUT	IN		Recorder set At 129-130
2	934/935	EINT	2 - " "							From STA #100-101 995' OFFset East.
3	936/939	D.R.D	4 - " "							
4	953/954	Sum TEST	2 - " "							
5	960/961	N.R.J. TEST	2 - " "							
6	932	Similarity	1 - 31 sec	225	5	412			50%	EOT # 412 Tape MKTs
7	060	Wind strip	1 - 6 sec	7		413				Bot # 413 *900 10 sec All ones.
8	061	60	64 - 159	7	4				50%	Stacked 1 st half? Vib 1266de off Line repairing Air
9	Skip	61	65 - 160	8					Skip	due to house. bags.
10	Skip	62	66 - 161	9					Skip	" " "
11	062	63	67 - 162	10					50%	
12	063	64	68 - 163	11	5				50%	Stacked 1 st half? Vib # 12666 on Line.
13	Skip	65	69 - 164	12					Skip	due to house.
14	064	66	70 - 165	13	4				50%	Stacked 2 nd half? Vib # 14256 off Line having
15	065	67	71 - 166	14					50%	pad Legs welded.
16	Skip	68	72 - 167	15					Skip	due to School.
17	Skip	69	73 - 168	16					Skip	" " "
18	066	70	74 - 169	17					70%	
19	067	71	75 - 170	18					70%	
20	068	72	76 - 171	19					70%	
21	069	73	77 - 172	20					70%	
22	070	74	78 - 173	21					70%	Wind picking up, bring in dark clouds
23	071	75	79 - 174	22					70%	and getting Flicks on scope. Standing by.
24	072	76	80 - 175	23					70%	
25	073	77	81 - 176	24					70%	E.O.T.# 413 Finished For The Day

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8 → 32#2 / 31 sec	SWEEP PATTERN 4163	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 111112221122211111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-Y 1100s 1-Y 900	TYPE GEOPHONE ETL EV22B	FREQUENCY 7.5Hz	STATION INTERVAL 330'
REMARKS 8 ms Sample Rate / 51 sec Record Length	OBSERVER R. Patten	PARTY MGR. J. Wings	L. Davis		

OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER

Exploration Services
Division
Geosource Inc.

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CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Riley & Marshall	DATE 6/30/81
CREW NO. 6834	TERRAIN Dirt Road & Rolling Hills	WEATHER Cloudy & wet	LINE NO. 4	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	AMP	
1	933 Pulse	1-6sec.				414	OUT	IN		Recorder set at 146-147 B.O.T. #414
2	934 935 E.I.M.T	2-... ..								900 10sec. All ones.
3	936 939 D.R.D.	4-... ..								
4	953 954 Sum Test	2-... ..								
5	966 961 N. RJ. Test	2-... ..								
6	932 Similarity	1-31sec.	225	5					50%	
7	074 Wind Strip	1-6sec.	8							
8	075 78	82-177	8						70%	
9	076 79	83-178	9						70%	
10	077 80	84-179	10						70%	
11	078 81	85-180	11						70%	Stacked 1 st half.
12	5Kip 82	86-181	12						50%	Skip due to Cemetery
13	079 83	87-182	13						50%	Stacked 2 nd half?
14	080 84	88-183	14						70%	
15	081 85	89-184	15						70%	
16	082 86	90-185	16						70%	
17	083 87	91-186	17	4					70%	Vib #14256 down temp. Radio Problem.
18	084 88	92-187	18						70%	E.O.T. #414 Tape MKTS. on VP 89
19	085 89	93-188	19			414			70%	Stack 1 st half!
20	086 90	94-189	20			415			70%	B.O.T. #415 #900 10 sec. All ones. #085 6sec. Wind Strip.
21	087 91	95-190	21						70%	Note: File #085 Last Record on Tape #414. By mistake
22	088 92	96-191	22						70%	File #085 was set in on B.O.T. #415.
23	089 93	97-192	23						70%	
24	090 94	98-193	24						70%	
25	091 95	99-194	25						70%	

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32 Hz. / 31 sec.	SWEEP PATTERN 4/63	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 11111222112221111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-V1100's 1-V900	TYPE GEOPHONE ETLEV22B	FREQUENCY 7.5 Hz.	STATION INTERVAL 330'
REMARKS Bms. Sample Rate 15/sec. Record		OBSERVER R. Patton / J. Wingo		PARTY MGR. J. Davis	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

Exploration Services 9
Division
Geosource Inc.

CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Riley + Marshall	DATE 6/30/81
CREW NO. 6834	TERRAIN Rolling Hills	WEATHER Cloudy + wet		LINE NO. 4

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL. NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	092	96	100 - 195	26	4	415	OUT	IN	70%	
2	093	97	101 - 196	27					70%	
3	094	98	102 - 197	28					70%	
4	095	99	103 - 198	29					70%	
5	096	100	104 - 199	30					70%	
6	097	101	105 - 200	31					70%	
7	098	102	106 - 201	32		415			70%	E.D.T. #415 Tape MKTS.
8	100	103	107 - 202	33		416			70%	B.O.T. #416 *900 10sec Allones. *099 6sec. Wind Strip
9	101	104	108 - 203	34					70%	
10	102	105	109 - 204	35					70%	
11	103	106	110 - 205	36					70%	
12	104	107	111 - 206	37					70%	
13	105	108	112 - 207	38					70%	
14	106	109	113 - 208	39					70%	Station #208 open due to bridge.
15	107	110	114 - 209	40					70%	
16	108	111	115 - 210	41					70%	
17	109	112	116 - 211	42					70%	
18									70%	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			SWEEP PATTERN		SWEEPS PER PATTERN		SWEEP PATTERNS PER SETUP		PATCH PATTERN		
GEOPHONES PER PATCH		NO. OF RECORDING PATCHES		TYPE VIBRATOR		TYPE GEOPHONE		FREQUENCY		STATION INTERVAL	
REMARKS		OBSERVER				PARTY MGR.					

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

Exploration Services 10
Division
Geosource Inc.

CLIENT <i>COCORP</i>	AREA <i>Kansas</i>	STATE <i>Kansas</i>	COUNTY <i>Riley + Marshall</i>	DATE <i>7/1/81</i>
CREW NO. <i>6834</i>	TERRAIN <i>Dirt Road + Rolling Hills</i>	WEATHER <i>Clear To Partly Cloudy</i>	LINE NO. <i>4</i>	

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				416				Recorder Set at 188-189
2	934 935	EI NT								
3	936 939	D.R.D.								Station #208 open due to bridge.
4	953 954	Sum Test								
5	960 961	N.R.T. Test								
6	932	Similarity	225	5		416			50%	E.O.T. #416 TAPE MKTS.
7	110	Wind Strip	1			417				B.O.T. #417 #900 All ones.
8	111	113	117-212	1					70%	
9	112	114	118-213	2					70%	
10	113	115	119-214	3	4				70%	Vib #12667 down.
11	114	116	120-215	4					70%	
12	115	117	121-216	5	4				70%	Vib. #12667 on line. Vib #14256 off line.
13	116	118	122-217	6					70%	
14	117	119	123-218	7					70%	
15	118	120	124-219	8					70%	
16	119	121	125-220	9					70%	
17	120	122	126-221	10					70%	
18	121	123	127-222	11					70%	
19	122	124	128-223	12					70%	
20	123	125	129-224	13		417			70%	E.O.T. #417 TAPE MKTS.
21	124	126	130-225	14		418			70%	B.O.T. #418 #900 10sec. All ones #124 6sec. Wind
22	125	127	131-226	15					70%	Strip.
23	126	128	132-227	16					70%	Vib #16344 Down
24										
25										

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. <i>MD5-10</i>
SWEEP FREQUENCY <i>8 → 32 Hz / 31 sec.</i>	SWEEP PATTERN <i>4163</i>	SWEEPS PER PATTERN <i>8</i>	SWEEP PATTERNS PER SETUP <i>1</i>	PATCH PATTERN <i>11111222112221111</i>	
GEOPHONES PER PATCH <i>24</i>	NO. OF RECORDING PATCHES <i>96</i>	TYPE VIBRATOR <i>4-Y1100's 1-Y900</i>	TYPE GEOPHONE <i>ETLEV22B</i>	FREQUENCY <i>7.5 Hz.</i>	STATION INTERVAL <i>330'</i>
REMARKS <i>8ms. Sample Rate / 51 sec. Record</i>			OBSERVER <i>J. Wings</i>	PARTY MGR. <i>Z. Davis</i>	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Exploration Services
Division
Geosource Inc.**

CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Marshall	DATE 7/2/81
CREW NO. 6834	TERRAIN Dirt Road + Rolling Hills	WEATHER Partly Cloudy	LINE NO. 4	

REC. NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB.	AMP GAIN	TAPE RL. NO.	FILTER			REMARKS
							LOCUT	60 ~	AMP	
1	933	Pulse	1-6sec.			418	OUT	TN		Recorder Set at
2	934 935	EINT	2-...							
3	936 939	D.R.D.	4-...							
4	953 954	Sum Test	2-...							
5	960 961	N.R.J. Test	2-...							
6	932	Similarity	1-31sec.	225	4				50%	vib # 12666 out Insts.
7	127	Wind Strip	1-6sec.	8						
8	128	129	133-228	8					70%	
9	129	130	134-229	9					70%	
10	130	131	135-230	10					70%	
11	131	132	136-231	11					70%	
12	132	133	137-232	12					70%	
13	133	134	138-233	13					70%	
14	134	135	139-234	14		418			70%	E.O.T. #418 TAPE MKTS.
15	136	136	140-235	15		419			70%	B.O.T. #419 *900 10sec. #10NES. #135 6sec.
16	137	137	141-236	16					70%	Wind Strip
17	138	138	142-237	17					70%	
18	139	139	143-238	18					70%	
19	140	140	144-239	19					70%	
20	141	141	145-240	20					70%	
21	142	142	146-241	21					70%	
22	143	143	147-242	22					70%	
23	144	144	148-243	23					70%	
24	145	145	149-244	24					70%	
25	146	146	150-245	25					70%	

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO. MDS-10
SWEEP FREQUENCY 8-32Hz / 31sec.	SWEEP PATTERN 4163	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 1111222112221111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-1100's 1-1900	TYPE GEOPHONE ETLEV22B	FREQUENCY 7.5Hz	STATION INTERVAL 330'
REMARKS 8ms Sample Rate / 51sec Record		OBSERVER J. Wingo		PARTY MGR. L. Davis	

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Exploration Services
Division**
Geosource Inc.

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CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Marshall	DATE 7/2/81
CREW NO. 6834	TERRAIN Rolling Hills	WEATHER Partly cloudy		LINE NO. 4

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	147	151-246	26	4		419	OUT	IN	70%	
2	148	152-247	27			419			70%	E.O.T.#419 TAPE MKTS.
3	150	153-248	28			420			70%	B.O.T.#418. #900 10 sec. All ONES. #149 6sec.
4	151	154-249	29						70%	Wind Strip.
5	152	155-250	30						70%	
6	153	156-251	31						70%	
7	154	157-252	32						70%	Finished For The Day.
8										
9										
10										
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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		
GEOPHONES PER PATCH		NO. OF RECORDING PATCHES		TYPE VIBRATOR		TYPE GEOPHONE		FREQUENCY		STATION INTERVAL	
REMARKS		OBSERVER					PARTY MGR.				

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Exploration Services
Division** 13
Geosource Inc.

CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Marshall	DATE 7-6-81
CREW NO. 6834	TERRAIN Dist Road Rolling Hills	WEATHER Clear & wet	LINE NO. 4	

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	1 - 6 sec				420	OUT	IN		Recorder set AT 227-228
2 934/935	EINT	2 - " "								STA's # 208 Dead due to Bridge.
3 936/939	D.R.D.	4 - " "								He walked line Replanted All Jugs.
4 953/954	Sum TEST	2 - " "								
5 960/961	N.R.T. TEST	2 - " "								Vib * 12666 Down INST. Problem.
6 932	Similarity	1 - 31 sec	225	4					50%	
7 155	Windstrip	1 - 6 sec	3							
8 156	154	158 - 253	3						70%	
9 157	155	159 - 254	4						70%	
10 158	156	160 - 255	5						70%	
11 159	157	161 - 256	6						70%	
12 160	158	162 - 257	7			420			70%	EOT * 420 Tape MKTs.
13 162	159	163 - 258	8			421			70%	Bot * 421 * 900 10 sec All axes * 161 6 sec wind strip.
14 163	160	164 - 259	9						70%	
15 164	161	165 - 260	10						70%	
16 165	162	166 - 261	11						70%	
17 166	163	167 - 262	12						70%	
18 167	164	168 - 263	13						70%	
19 168	165	169 - 264	14						70%	
20 169	166	170 - 265	15						70%	
21 170	167	171 - 266	16						70%	
22 171	168	172 - 267	17						70%	
23 172	169	173 - 268	18						70%	
24 173	170	174 - 269	19						70%	
25 174	171	175 - 270	20			421			70%	EOT * 421 Tape MKTs.

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8 → 32 Hz / 31 sec	SWEEP PATTERN 4163	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 111112221 ^x 122211111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4-Y 1100's 1-Y 900	TYPE GEOPHONE ETLEV 22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 8ms sample rate / 51 sec Record length	OBSERVER R. Patten	PARTY MGR. L. Davis	LINE DIR. 1 TO 24 S → N		

OBSERVER'S REPORT DIGITAL VIBROSEIS RECORDER

Exploration Services
Division
Geosource Inc.

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CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Marshall	DATE 7-6-81
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Partly cloudy	LINE NO. 4	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	176	176-271	21	4		422	OUT	IN	70%	BOT * 422 * 900 10 sec All ones * 175 6 sec wind strip.
2	177	177-272	22						70%	STA's * 272 Dead due to Bridge.
3	178	178-273	23						70%	
4	179	179-274	24						70%	
5	1									Finished For The Day.
6										
7										
8										
9										
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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		
GEOPHONES PER PATCH		NO. OF RECORDING PATCHES		TYPE VIBRATOR		TYPE GEOPHONE		FREQUENCY		STATION INTERVAL	
REMARKS						OBSERVER			PARTY MGR.		

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

Exploration Services 15
Division
Geosource Inc.

CLIENT COCORP	AREA Kansas	STATE Kansas	COUNTY Marshall	DATE 7-7-81
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Clear + windy	LINE NO. 4	

REC.NO.	SWEEP POINT	PATCH LOCATIONS	CDP SW.	NO VIB	AMP GAIN	TAPE RL.NO.	F I L T E R			REMARKS
							LOCUT	60 ~	AMP	
1	933	Pulse	1 - 6 sec			422	OUT	IN		Recorder set AT 250-251
2	934/935	EINT	2 - " "							STA's # 208 + 272 Both open Due TO Bridges.
3	934/939	D.R.D.	4 - " "							
4	953/954	Sum TEST	2 - " "							
5	960/961	NRT TEST	2 - " "							Vib # 14256 Down INST. Problem.
6	932	Similarity	1 - 31 sec	225	4					50%
7	180	Wind strip	1 - 6 sec	2						
8	SKIP 176	180 - 275	2							50% Skip Due TO Bridges.
9	181	177	181 - 276	3	4					70% Stacked last half.
10	182	178	182 - 277	4						70%
11	183	179	183 - 278	5						70%
12	184	180	184 - 279	6						70% Wind Picking up.
13	185	181	185 - 280	7						70% had to Re place Jugs on STA's # 215 & Reconnect
14	186	182	186 - 281	8						70% Cables un Hooked BY Grader. Then A Combine
15	187	183	187 - 282	9		422				70% Pulled up the line AT # 215 TORE UP ABOUT 4
16	189	184	188 - 283	10		423				70% Cables. Also pulled up Jugs. VP # 183 EOT # 422.
17	190	185	189 - 284	11						70% VP # 184 BOT # 423 # 900 10 sec All ones. # 188 6 sec wind strip.
18	191	186	190 - 285	12						70%
19	192	187	191 - 286	13						70%
20	193	188	192 - 287	14						70%
21	194	189	193 - 288	15						70%
22	195	190	194 - 289	16						70%
23	196	191	195 - 290	17						70%
24	197	192	196 - 291	18						70%
25	198	193	197 - 292	19						70%

down →

TOTAL SETUPS	TOTAL SWEEPS	TOTAL COVERAGE	TOTAL FIELD TIME	DRIVING TIME	SYSTEM NO.
SWEEP FREQUENCY 8 → 32 Hz / 31 sec	SWEEP PATTERN 4163	SWEEPS PER PATTERN 8	SWEEP PATTERNS PER SETUP 1	PATCH PATTERN 11111222112221111	
GEOPHONES PER PATCH 24	NO. OF RECORDING PATCHES 96	TYPE VIBRATOR 4 - 1100 1 - 900	TYPE GEOPHONE ETL EV22B	FREQUENCY 7.5 Hz	STATION INTERVAL 330'
REMARKS 8ms Sample Rate / 51 sec Record Length	OBSERVER R. Patten.	PARTY MGR. L. Davis	LINE DIR. 1 TO 24 S → N		

**OBSERVER'S REPORT
DIGITAL VIBROSEIS RECORDER**

**Exploration Services
Division
Geosource Inc.**

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CLIENT Cocorp	AREA Kansas	STATE Kansas	COUNTY Marshall	DATE 7-7-81
CREW NO. 6834	TERRAIN Dirt Road Rolling Hills	WEATHER Clear + windy		LINE NO. 4

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	199	198 - 293	20	4		423	OUT	IN	70%	
2	200	199 - 294	21			423			70%	EOT * 423 Tape MKTs.
3										
4										Finished for the Day.
5										
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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		
GEOPHONES PER PATCH		NO. OF RECORDING PATCHES		TYPE VIBRATOR		TYPE GEOPHONE		FREQUENCY		STATION INTERVAL	
REMARKS		OBSERVER					PARTY MGR.				