

5/17/04 at TTR

Arrived ~ 1:30p, checked in at gate

Jim Balli ~ got walkie talkies, batteries
to receiving, got IRTS gear
got room keys & meal info

Went to Main Lake, Chris Raytman
recommended west end of the drilled
area as softest, avoids gravel layer
seen in some other holes

Chose site near MLR65 as center point,
lines roughly N-S, E-W; inserted N-S sensors

Center: 37N 50.210' 116W 44.101' 1625m⁽¹⁶⁵²⁾
30m Bob's GPS: 12.64" 5.92"

Send: 37N 50.195' 116W 44.103' 1625m
0m (?) 11.74" 6.08"

N end: 37N 50.228' 116W 44.099' 1625m
60m (?) 13.68" 5.95"

W end: 37N 50.209' 116W 44.128' 1655?
0m

E end: 37N 50.204' 116W 44.085 1652
60m

checked for sensor response, but high
wind nearly clipping the signals
even at minimal gain

→ will try for early start in AM,
hope to complete a site by lunch

Plan ~ hammer at center, ~5m off each end,
~20m off each end; also drive vehicle
past ends of lines

chan 1
at Send
and W end

Note - we left a gap at center of spread,
 ie sensors from 0-~~29~~ m, 1m apart,
 then from 31-60 m, 1m apart,
 so 60 sensors w/ 60m end-to-end

5/18 7am breeze from West

Source loc 1 ~ 5m S

250 sps, 60s record, contin. hammer blows
 and trucks at both ends, toward & away

	vert. compt		
	281.dat ~ 7:37a	~	1st record
S	282.dat ~ 7:53a	~	2nd record
	283.dat ~ 7:59a	~	single hammer blow } at 5m
	284.dat ~ 8:00a	~	same } center
center	285.dat ~ 8:01a	~	5th record, hammer at center and trucks at ends
	286.dat ~ 8:02a	~	6th record
	287.dat ~ 8:05a	~	7th record, hammer at N end + trucks
N	288.dat ~ 8:07a	~	8th record
	Switch to <u>N-S</u> compt	~	radial, yellow
N	289.dat ~ 8:19a	~	9th record, hammer at <u>N</u> + trucks
	290.dat ~ 8:21a	~	10th record
center	291.dat ~ 8:23a	~	11th record
	292.dat ~ 8:25a	~	12th record
S	293.dat ~ 8:27a	~	13th record
	294.dat ~ 8:29a	~	14th record
	Switch to <u>EW</u> compt	~	transverse, red
	295.dat ~ 8:39	~	15th record
S	296.dat ~ 8:41	~	16th record

center 8:43a 297.dat 17th record
 8:45a 298.dat 18th record

N 8:47a 299.dat 19th record
 8:49a 300.dat 20th record

Switch to all 3 compts, every 3rd phone from ends:

0th, 3rd, 6, 9, 12, 15, 18, 21, 24, 27m (gap at 30m)
 60, 57, 54, 51, 48, 45, 42, 39, 36, 33m

~ 9:02a 301.dat 21st rec, hammer at N

~ 9:07a 302.dat 22nd hammer at center

~ 9:10a 303.dat 23rd hammer at S

Move sensors to EW line, same center

10 35a 304.dat 24th
 10 36a 305.dat 25th
 10 37a 306.dat 26th
 10 38a 307.dat 27th

single hammer at W end, 55
 same, on dirt
 single at center, on dirt
 single ~~at the~~ end, on dirt

W 10:39a 308.dat 28th
 10:41a 309.dat 29th

hammer at W } + trucks
 " " " }

Center 10 44 310.dat 30th
 10 46 311.dat 31st

center + trucks
 "

E 10 49 312.dat 32nd
 10 53 313.dat 33rd

hammer + trucks W
 " " "

switch to E+W component (radial) yellow

E	10:68	314.dat	347h	hammer & Trucks " " "
	11:01	315.dat	387h	
center	11:04	316.dat	36 th	w/ trucks
	11:05	317.dat	37 th	
W	11:08	318.dat	38 th	w/ trucks
	11:10	319.dat	39 th	

Switch to N+S component (transverse) red

W	11:12	320.dat	40 th	hammer & Trucks " " "
	11:20	321.dat	41 st	
center	11:23	322.dat	42 nd	hammer & Trucks
	11:26	323.dat	43 rd	
E	11:30	324.dat	44 th	"
	11:32	325.dat	45 th	

Lunch

switch to 3 compts on every 3rd phone, as before

E	12 12:53p	326.dat	46 th	hammer & trucks
center	12:56p	327.dat	47 th	center
W	12:59p	328.dat	48 th	west

~3p Antelope 37N 38.691 116W 34.430 1680m

325p Setting up on Sidewinder

N-S line; (or NW to SE)

gentle slope
w/ S end high

N end 37N 37.667 116W 35.463 1690m
0m

channel
at N end

center 37N 37.654 116W 35.453 1694m
30m

S end 37N 37.641 116W 35.440 1694m
60m

as before, 0-29m, skip 30, 31-60m

5/19/04 at Sidewinder site ~7a
calm & clear
all verticals

	7:22a	1 st 329.dat	hammer N, 2 trucks 30s "60s!
N:	7:24a	2 330.dat	
	7:26	3 331.dat	hammer on rock, w/ trucks (signals not apparent)
	7:30	4 332.dat	single hammer, no trucks 6s record
center	7:31	5 333.dat	same
	7:32	6 334.dat	hammer + trucks, 30s 60s
	7:34	7 335.dat	"
	7:48	8 336.dat	hammer! trying hammer head drop at center, w/ trucks

Send	7 51a	9 337.dat	} <u>head drop + trucks</u>
	7 52a	10 338.dat	
	8a ~ switched to N-S, radial, yellow, all phones		
Send	8 03	11 339.dat	<u>head drop + trucks</u>
	8 05	12 340.dat	"
	~		
center	8 08	13 341.dat	"
	8 09	14 342.dat	"
	~		
Send	8 14	15 343.dat	"
	8 15	16 344.dat	"
	switch to E-W, trans, red		
Send	8 28	17 345.dat	Chris Rootman brought hammer - 12# <u>hammer + trucks</u>
	8 30	18 346.dat	"
	~		
center	8 32	19 347.dat	"
	8 34	20 348.dat	"
	~		
Send	8 37	21 349.dat	"
	8 39	22 350.dat	"

switched to all 3 compts, every 3rd phone

Send	8 51a	23	hammer + trucks
		351.dat	
center	8 54	24	"
		352.dat	
Nend	8 57	25	"
		353.dat	

9-10_a Move to Antelope Site E-W line along road very gently up to E

Wend	37N	38.686	116W	34.400	1677m
0m					
Wend center	37N	38.686	116W	34.378	1677m
30m					
E end	37N	38.685	116W	34. 360 ³⁵⁷	1676m
60m					

Verticals, blue

Wend	10:20a	26	hammer & trucks
		354.dat	
	10:22	27	"
		355.dat	
center	10:25	28	"
		356.dat	
	10 26	29	"
		357.dat	
Wend	10:29	30	single hammer
		358.dat	6sec
	10:30	31	"
		359.dat	

End	10:33	32	hammer & trucks
		360.dat	605
	10:34	33	"
		361.dat	

switch to E-W, radial, yellow

End	10:42	34	hammer & trucks
		362.dat	
	10:43	35	"
		363.dat	

center	10:46	36	"
		364.dat	
	10:47	37	"
		365.dat	

Wend	10:50	38	"
		366.dat	
	10:52	39	"
		367.dat	

switch to N-S comp, transv, red
 > channel 20 pin broke! (19m)

Wend	11 11a	40	"
		368.dat	
	11 13a	41	"
		369.dat	

center	~ 11 20	42	"
		370.dat	
	~ 11 22	43	"
		371.dat	

End.	~ 11 25	44 372. det	hammer & touch 3
	~ 11 26	45 373	"
			switch to 3 compts, every 3 rd phone
	~ 11 29	46 374	"
center	~ 11 31	47 375	"
W	11 33	48 376. det	"

for 3 compts:

chans 1, 2, 3 for phone at 0m, compts Z, R, T

so chans 1 4 7 10 ... are vert
 2 5 8 11 ... are radial
 3 6 9 12 ... are transverse

N/S line rises on both sides from drainage S of road
 steep near the drainage

	South 60m	37N 38.670	116W 34.379	1682m
chan 1 at S end	Center 30m	37N 38.686	116W 34.388	1680m
	North 0m	37N 38.708	116W 34.381	1682

for the N/S line, we'll only use every
 3m, all 3 compts

	2:20p	49 377.dat	noise sample, no sources (some wind)
	2:24p	50 378.dat	"
Nend	2:23p	51 379.dat	hammer & trucks
	2:27p	52 380.dat	foot hammer
	2:28p	53 381.dat	just trucks
center	2:31	54 382.dat	hammer & trucks
	2:33	55 383.dat	single hammer 65
	2:34	56 384.dat	same
<u>south</u>	2:30	#57: 385.dat	hammer & trucks, 60s
30m 35m West broadside	2:45	58 386.dat	hammer, 60s
30m Northwest	2:48	59 387.dat	hammer, 60s

All data acquired using Mark Products L28
3-comp, 4.5 Hz geophones

data recorder was a Geometrics 60-chan recorder
(model & S/N ?) StrataView

all data recorded at 250 sps
gain ?