

EXMOUTH PLATEAU CRUISE 55 1

CAST :

CHIEF DAVID FALVEY

CO-CHIEF PAUL WILLIAMSON

0000 - 0400
SHIFT 1 : 1200 - 1600

STEVE SCHERL

DAVE SIMMINGTON

(MAUREEN O'CONNOR)

IAN ROACH

ROD McMAHON

0400 - 0800
SHIFT 2 : 1600 - 2000

CRAIG PENNEY

JO LOCK

GRAY SAUNDERS

JIM BEDFORD

ROYER CURTIS - NUTALL

THE "A"
TEAM

0800 - 1200
SHIFT 3 : 2000 - 2400

ROY WHITHWORK

PAUL WILLIAMSON

KEN REVILL

FRANK BRASSIL

BRIAN MAPELSTONE

CAROLYN ZEHNDER

JACK PITTAR

TECHNICAL EQUIPMENT IN USE ON CRUISE

PHOENIX	SERIAL #	SGM # 119	
NTM-1 TIMER	SERIAL #	SGM # 703	
CHRONOLOG CLOCK	SERIAL #	SGM # 694	
SYNTRON "BIAD" CONTROL	SERIAL # 98321	SGM #	
TELEDYNE GUN DEPTH	SERIAL # 95	SGM # 284	
SMF AMP/FILT BOX1		SGM #	
BOX2		SGM #	
BOX3		SGM #	72:0110

HEWLETT PACKARD	2113 "E" COMPUTER	SERIAL #	SGM # 207
HEWLETT PACKARD	I/O EXTENDER 'A-MODEL'	SERIAL # 1542A00797	SGM # 691

72:0312

HEWLETT PACKARD	MAG TAPE DRIVE 7970E	'MASTER' SERIAL #	SGM # 342
		'SLAVE' SERIAL #	SGM # 208

72:0321

72.0358

72.0429

72.0836

THURSDAY

SHIP ON TRANSIT TO LEARMOUTH

WORK PROCEEDING WITH RE-TESTING OF SEISMIC AMPLIFIERS
AFTER MAJOR RE-WIRING AND RE-DESIGN OF CONTROL BOARDS
AND OSCILLATOR.

THE OSCILLATOR BOARD APPEARS TO BE HEAT DEPENDENT
WORKING BEST ON TURN OFF.

72:0110 PHASE TESTING OF SEISMIC AMPS COMPLETED, WITH ALL
CHANNELS NOW IN PHASE. CHANNEL 55 STILL BEING WORKED
UPON.

72:0317 ALL AMPS IN WORKING STATE

72:0321 Commenced Noise Test on amplifiers - amps are open circuited
- giving self noise of the whole system. The whole system is up & running
with deck leader disconnected.

2 ms, 7500 ms. 48 chnls. 2 guns 4 WB.

Shot interval 19.4 secs.

GAIN 512 BAND PASS 6, 128 Hz.

72.0358 Increase all gains to 1024 @ SP NO. 97.

72.0429 Change to OSCIL TEST KEEPING SAME PARAM. @ SP NO. 293

} streamer deployment & DDTX calibrations

72.0836 Commenced Phase Tests → to check input phasing

Parameters were set as follows

Pheonix connected to Amplifier inputs

Sig Input set to leakage test. Manual settings D4-PT

Allowing the test use signal to be feedback to

Pheonix input via Amp input wiring

72.0912

72.1016

* PROGRAMER'S NOTE : CALCULATION OF RMS CHANGED.

72.1026

72.1040

72.1053

72.1311

72.2049

12 2137

12:0912

Input phase Test

Results indicate Amp channels 37, 46 out of phase.

72. 1016

START OF CABLE NOISE TEST

TAPE # 55/007

SHIP SPEED 5.6 KTS.

FILTERS 6 Hz & 128 Hz

TRAILING SEA.
AND VERY CHOPPY.

GAIN 512 ON ALL CHANNELS

72. 1026

Channel 14 has high frequency noise upon it.

Channel 17 appears to be dead.

Noise on channel 14 is ≈ 110 Hz.

72. 1040

Balance cable using "birds"

72. 1053

GAINS ARE CHANGED TO 1024 all other parameters ^{SP # 747} left as are.

72:1311

Channel 37, 46 Input phase restored to normal ~~71~~.

72. 2049

Deck-leader noise test. Leader hooked into amps without the cable on.

Filters 6, 128 and Gain 512.

12 2137

Cable on reel plugged in for static noise test.
has a 9 Hz oscillation upon the traces (presumably from the ship vibration)

Channel 6 is showing a low amplitude

Channel 17 non-existent.

Channel 21 is showing a low amplitude.

Channel 26 is showing a low amplitude.

Channel 29 is showing a low amplitude

Channel 32 is showing a low amplitude

Channel 38 is showing a low amplitude

Channel 44 is showing a low amplitude

Channel 47 " " " " "

48 " " " " "

more than coincidental
the spacing of these

DAY 13

15

FRIDAY.

073: 1530

073: 1856

073: 1907

073: 1915

* COMPRESSOR #3 BEING USED

073: 1935

073: 1950

073: 1957

OBSERVERS BEDFORD/LOCK

073: 2004

DT1 Low 15-20m rest of birds ~ 10m.
 will attempt raise it on turn - to 55/003

073: 2031

073: 2056

073: 2106

073: 2222

Saturday 15th March

17
Day 73/74

073:1530 } Streamer Deployment

DDT Calibration

073:1856 Depth Calibration completed.

073:1907 Gun depth Calibration completed.

073:1915 Cable out & connected with 115m of leader length.

073:1935 Gundeck deployment completed

Testing → Testfiring

Guns trailing @ depth of 7m

073:1950 Leader length changed to 110m to try & raise DDT No.1

073:1957 Seismic acquisition started!

073:2004 Delay changed — several times → as we are in deep water now at 2200 ms.

073:2031 GAIN CHANGE FROM 512 to 1024

~~Channel~~ Channel 17 has been dead since start of acquisition

~~Channel~~ Channel 28 has high frequency noise but signal still there

073:2056 Channel 28 high frequency noise now intermittent down trace.

073:2100 Slugs speed change set to 5.2 kt firing rate now 18.7 sec.

* 073:2222 Have doubts about the operation of DT-1. After attempting to surface that bird it remained at about "16m" but the following section of cable began to rise indicating the first section was closer to the surface than their 10m. I suggest the cable be run such that DT-2-9 are level.

Craig.

Gun trigger box set up wrongly. "Zero" delay gives maximum delay of 1000 (msecs in this case). Also clock pulse at 1KHz rather than 10KHz.

Gun firing delay adjusted ~ SP 980 to ~~000~~ 001 creating apparent reduction in delay of ~ 1 sec. Delay corrected at SP 994.

* ALL SHOTS TO SP 980
OUT BY 999 msecs.

73.2305

73.2339

74.0016

74.003622

074.0120

074.0125

074.01411

074.0154

.0259

.0369

.032012

.032420

074.03449

DAY 73/74 19

SATURDAY 15TH MAR.

73.2305

Firing interval 5.4 kts 18.0 seconds.

73.2339

Firing interval 5.2 kts 18.7 sec.

74.0016

Delay to 2500 ms.

74.003622

All delays overstated by 999 ms from
survey start to this time

→ SP 980 delay too great by 999

SP 980-994 delay correct but beginning of
record missing

SP 995 → delay correct

Delay to 1500 ms

074.0120

Changed STB gun delay to 2.3 msecs from
4.1 msecs (PORT gun at 0.1 msecs)

074.0125

DC2 changed from 11m to 13m

DC7 changed from 14m to 12m

074.01411

SHOTS 1200-1203 OSCILLATOR TEST

SHOTS 1204-1207 NOISE TEST

1208 → DATA.

074.0154

Tr 28 has H F Noise, Channel 17 Dead.

.0259

Tr 28 Seems OK Now

.0369

DC7 Changed to 13M from 12m

DC9 Changed to 13M from 14m.

.032012

Shf Speed Changed from 5.2 to 5.1 kts.

Shf Interval now 19.1 seconds.

First Shot at 19.1 Interval 1520

.032420

LEAD IN TAKEN IN 3 WRAPS

LAST GOOD SHOT 1563 @ .033420

FIRST GOOD SHOT 1570 @ .033828.

12 Dead SHOTS

OFFSET is 97 Metres Leader.

074.03449

Set DC1 from 8m to 12m

LOCK/BEDFORD

ZEHNDER & BRASSIL

Schels. mob.

SUNDAY 16-3-86

074:0527

74:0530

74:0630

74:0859

74:0918

74:1209

74:1239

1240

74:1259/4

:130020

:130207

.133422

74:1431
~~74:1431~~

74:1452

74:1452

74:1501

74:150155

74:1600

74:1620

Saturday 15 March

Day 74.

074:0527

Channel 28 has been intermittantly noisy (high frequency ~50Hz) for a number of passes on the spit-out CRO.

74:053302

Delay changed to 2000 ms. at S.P. 1936

*

74:0630

Two compressors on line and firing at 1950 psi

74:0859

Slowing from 5.8 kts to 5.1 kts.

74:0918

Speed now at 5.1 kts.

74:1209

Changed Front Left Controller ~~to 12m~~
from 12m to 10m.

74:1239

Changed DC 2 from 13m to 14m.

1240

Changed Starboard Gun firing Delay from 2.3 msec to 1.7 msec.

74:125919

OSCILLATOR TEST (S.P. 3337 - 3340)

:130020

NOISE TEST (S.P. 3342 - 3345)

:130207

RESUME S.D. RECORDING SP 3346

* OSC+NOIS TEST PERFORMED 74:061249 -> 74:061408 SP 2000-2064

.133422

Delay Changed from 2000 to 2500 msec at Shot 3447.

74:1431

~~74:1431~~

Set DC 1 from 10m to 8m

74:1452

STBD gun delay set from 1.7 to 1.3 msec.

74:1452

Shot 3694 stbd gun off

Shot 3695 stbd gun on.

74:1501

Changed Shot rate from 19.1 to 17.7 sec

based on 20 min avg. of T set speeds @ 5.5 kts.

74:150155

Sp 3723 S.I. = 17.7

6-3-86

74:1600

crew change.

74:1620

twisted ribbon on self serve monitor
lost part of three sweeps.

074.1629

074.1718

074.181640

074.182713

074.184424

191614

*

074.192441

074.192953

074.200022

074.201601

074.213150

074.21.32

074.2144

074.2205

074.2244

074.2254

074.2337

074.2354

ZEHNPER/BRASSIL

075.0018

075.003025

075.003143

075.003307

* SYSTEM FAILURE WAS :

DUE TO A FAULTY TAPE 55/069. ON THE TAPE CHANGE, THE COMPUTER KEPT TRYING TO WRITE. MESSAGE ON SYSTEM CONSOLE SAID ACTIVE DRIVE WAS BUSY BITS 7 AND 8 CAME ON. IN THIS CASE SET BIT 10 TO ABORT THIS OPERATION. THIS MAY SAVE THIS SITUATION IF A DATA WRITE HAS NOT STARTED.

LOCK/BEDFORD.

SUNDAY 16 MARCH

DAY 23 74/75

- 074.1629 Delay changed from 2500 to 3000 msec on S.P. 4020.
- 074.1718 Delay changed from 3000 to 3500 msec on SP 4187
- 074.181640 Delay changed from 3500 ms to 4000 ms at S.P. 4388
- 074.182713 Gun delay reduced to 008 msec for alignment of firing point?
- 074.184424 Delay changed from 4000 to 4500 msec on SP 4478
- 191614 On tape change to tape 55/069 there
* was a system crash (due to bad tape?) SP 4585
- 074.192441 System ~~rebooted~~ rebooted.
- 074.192953 Acquisition started at SP 4600
- 074.200022 Gain set to 1024, 1024.
- 074.201601 Delay to 5000 msec at sp 4756
- 074.213150 Shot 5013 END OF LINE 2.
- 074.21.32 Delay set to ϕ , tests for Simon. Shots 5014 & 5015
- 074.2144 Shot 100 START OF LINE 3
ODP SITE SURVEY 1
one gun 500 cc 2400 cable.
- 074.2205 PORT GUN OUT AND FIRING, DEPTH $\sim 8.7m$
STB GUN BEING BROUGHT IN.
- 074.2244 STB GUN DEPLOY & FIRING (1000 cc)
turning on to site survey time.
- 074.2254 Shutting Down one compressor as no longer
need two to run 600 cc instead of 1000 cc
2 guns.
- 074.2337 Cable streaming level now established on line 3,
- 074.2354 2.5 delay changed to 1.8 sec on the 100 cubic
gun only.
- 075.0018 Std gun delay changed to 1.9 msec (from 1.8 msec.)
- 075.003025 OSCILLATOR TEST SP 619-617
- 075.003143 NOISE TEST SP 619-622
- 075.003307 Resume seismic data recording SP 623

075-003345

005300

.012000

075-0133

075-0196

.0158

075-022523

.0300

.0309

.032637

.0450

.051317

.0520

16.00.

LOCK/BEDFORD

075:0909

075:0913

075:0946

075:0951

075-003345

005300

STBD gun delay changed from 1.4 to 0.9 msec
 Shot Interval Changed from 19.4 to 18.7 Secs,
 Ship Speed 5.2 kts

012000

Commenced Turn at Shot 772.
 The entire sub Survey is Line 3. Individual
 components will be sorted out later.

075-0133

Port gun delay changed to 2.1 msec (from 0.1 msec.)
 STBD gun delay changed to 0.1 msec. (from .9 msec.)
 (Port gun being towed 4 m deeper than STBD gun.)

075-0146

0158

PC #1 changed from 8 m to 10 m
 DC #4 changed from 17 m to 13 m

075-022523

no wire ring on 55/088 → missed SP 1060-1064.
 tape 088 may not have a header written.

0300

Start of Next Part of Line, Coarse 0°.
 Cable is very uneven.

0304

Cable settled down now.

032637

Shot interval set to 18.3 seconds from 18.7 seconds,
 Ship Speed 5.3 kts. Shot 1177.

0450

Spare Compressor failed - not in use at the time.

051317

Shot interval set to 19.40 sec. as ship speed
 averages is 5.0 Kts. at S.P. 1524

0520

Bridge asked to keep speed on 5 Kt.

1600.

075:0909

075:0913

STBD GUN (100") being exchanged for the 500" gun
 START OF LINE 4

075:0946

Changed shot rate to 19.1 secs (at 5.1 m/sec).

075:0951

STBD Gun still not operating (suspect solenoid)

Port Gun Delay Stable at 17.5 msec

Starboard Gun delays are relative to Port.

Zehnder & Brassil + Mutter (Sometimes)

075.100804

075.1036

075.103320

075.1055

075.1101

075.1109

075.1154

95.123650

75.1302

75.1312

075.1401

075.1409

075.1413

075.143827

075.144690

075.144740

075.144929

075.150239

075:100804 Delay changed to 4000 ms. @ shot 273

075:1036 Starboard gun back under in the water - firing but missing shots.

075:103320 Delay changed from 4000 ms to 3500 ms see @ shot 352

075:1055 Starboard gun turned off to pull out & check & check gun box to correct misfires.

075:1101 still gun testing.

075:1109 STBD GUN REMOVED FROM WATER (FAULT IN FIRING LINE)

075:1154 Delay changed from 3500 ms to 3000 ms.

45:123650 Delay changed from 3000 msec to 2500 msec #739
(last shot on tape 55/110)

75:1302 DC #1 from 10 m to 8 m.

75:1312 2nd gun on line sp. 850. delay set at 2 msec.

075:1401 Changed DC 4 from 13m to 12m

075:1409 Changed Starboard Gun Delay from 2.0 msec to 1.7 msec

075:1413 Starboard gun delay changed from 1.7 msec to 0.8 msec.

DC #1 left at 8 m.

075:143827 Sp 1122 Delay changed from 2500 msec to 2000 msec.

075:144640 Oscillator test sp 1147-1150

075:144740 Noise test sp 1152-1155

075:144939 Seismic Data Acquisition Resumed. sp 1156

075:150239 Delay changed from 2000 msec to 2500 msec.
sp 1197

75.151052

* Monday 17th March, BEDFORD / LOCK

75.1600

75.2159

75.234618

Zehnder & Brasil

76.000396

76.000739

76.0029

76.0035

76.0113

76.0235

76.0318

76.031922

76.0353

76.0514

SUNDAY 16 MARCH 1986 DAY 75 LINE 4

75.151052 Shot interval changed to 19.9 sec at SP1223 based on speed of 5.0 Kts.

75.1600 Shift change

75.2159 Delay set to 2200 msec at sp 2485.

75.234618 oscillator test ^{shots} 2818-2819, nose texts 2820-2822

76.000396 Stbd gun delay changed to .2 msec

76.000939 DC #1 changed from 11m \rightarrow 13m.

76.0029 Recording delay changed from 2200 msec to 2000 msec.
3rd shot with updated value = 2953

76.0035 Cumulative Defect Controller Settings.
1 = 13, 2 = 14, 3 = 13, 4 = 13, 5 = 14, 6 = 14
7 = 13, 8 = 14, 9 = 13

Today is St Patrick's Day.

76.0113 Shot interval changed from 19.4 sec to 19.7 seconds,
ship speed = 5.2 Kts.

76.0225 Stbd gun delay changed from .2 msec to .5 msec.

76.0318 Stbd gun delay changed from .5 msec to .2 msec

76.031922 Recording delay changed from 2000 msec to 1500 msec
Sp3492

76.0353 Stbd gun delay changed from 0.2 to 0.6 msec.

76.0514 End of line 4 @ Tape 55/150 ; SP 3860.

~~XXXXXXXXXXXXXXXXXXXX~~
turn for line 5 in 1 hour

Lock/BEDFORD

Zehnder & Brassil

076.071649

76.073339

76.1023

076.114813

076.115013

076.1218

076.1318

076.139618

076.134755

076.1432

076.143749

76.143740

Monday 17th March - St Patrick's Day =
- CANBERRA DAY.

076.071649 Shot interval changed to 19.4 (5 Kts)
@ S.P. 492

76.073339 Delay set to 2000 ms. @ S.P. 545

76.1023 Change delay from 2000 ms. to 2500 ms. @ SP 1069.

076.114813 Oscillator tests shots 1331-1333
noise tests shots 1335-1336

076.115013 Resume seismic recording.

076.1218 Delay change on stbd gun from 10 msec to 5 msec.

076.1318 Starboard Gun Delay to 0.1 msec.

Gun ~~gutter~~ jitter on both guns is about ± 0.4 msec.

076.134618 Port gun misfiring Sp/697

076.134755 Port gun off sp 1702 tape 55/170

076.1432 Delay Reel to 3000 msec @ Shotfont. 184/
(Note, slots 1838, 1839 increased to 2000)

Power on to Auxiliary Channel Amplifier for shot 1783.

076.143349 format error sp 1844 Tape 55/171 may not have EOT marker
System has lost control.
Last known good shot ~~1844~~ 1844

76.143740 Seismic Acquisition off line. Reboot system
next sp will be 1900. shot interval 19.4 sec
based on speed of 5.0 Kts.

076.144500

076.1449

076.154544

076.159803

1600 GOOD MORNING NOW TUES. 18-3-86

076.164257

* On tape 55/176 Local date was written on
Ascii header instead of GMT date.

Today's Proverb.

Develop a system that is foolproof and
only a fool can use it. There were no
test subjects at first.

076.172023

076.175020

076.193114

195817

LOCK / BEDFORD

076: 2000

076: 201912

076: 201912

Monday 17 March 1986

Line 55/005

33

076.144500 ~~Begin~~ Resume Data Acquisition SP 1900
with a shot interval of 19.40.

076.1449 Reset delay from 2500 sec to 3000 sec at SP 1916

076.154544 OSC TEST SP 2087 - 2090

NOISE TEST SP 2092 - 2094

076.154803 Resume seismic data recording SP 2095.

076.164257 Recording delay change from 3000 to 3500 msec
at Shot point 2265.

~~///~~ START OF LINE 6

076.172023 System Crash. Computer crashed on
tape change. Reason could have been
because operator changed Line No. Appeared
to be out of Chaos in time. Had
to exit out of Chaos twice. New tape 55/178
Two guns now operating on system restart

076.175020 Change gain to 1024, 1024.

076.193114 Recording delay changed from 3500 to 3000
msec at Shot Point 463 line 55/006.

195817 Reset delay from 3000 msec to 3500 msec
at SP 546.

076:2000

076:201912 System failed to swap tape 183/184. Last good shot 079.
076:201810 Reboot, Slot in need to 600.

On tape change Dynamic status check passed as movement
detected on Tape Drive 0 but failed to write the header.
Bit 9 came on saying that the drive was accessible
and a write had begun and the other tape drive had begun

076:223804

076: 2238

076: 2239

076:225056

076: 2254

Schnider & Brasel

077: 000714

077:007925

00

011705

012598

012700

0136

to rewind. When bit 9 did come on, neither bits 7 or 8 were on indicating a failure to do a tape motion or to do a tape read, it in fact points to the drive and driver being asked to write from address etc., that it doesn't know where it is. Suggesting that the error may be connected to regaining or massaging of the trace header in the system map.

Acquisition refused to continue until tape write completed.

076:223804 More leader let out now 102 m. as.

076:2238 Yens up + found end of cable up.

076:2238 Oscillator test slots 1033-1035

076:2239 cable... reconnected,

076:225056 Delay changed from 3500ms to 3000ms.

076:2254 standard gun is erratic, jumping about 4-5ms. Either is close to cable leader or wrapped around it.

077:000714 (Sp 1309) port air gun delay changed from 1 msec to 1.1 msec.

077:009925 stbd gun off to attempt to unwrap it from cable.

011705 stbd gun on; delay set at 20 msec.

012598 Port gun mistired.

012700 Adjusted gun firing delays

PORT from 1.1 to 0.7ms

STB from 2.0 to 1.7ms

0136 DC's 1 = 13, 2 = 14, 3 = 14, 4 = 14, 5 = 14, 6 = 13

7 = 13, 8 = 13, 9 = 13

Reset DC's as follows.

2 = 16, 3 = 16, 4 = 16, 5 = 16. ~~6 = 14, 7 = 14, 8 = 14, 9 = 14~~

6 = 14, 8 = 14.

Port Gun is erratic.

77.0144

Gen Delay Resel. Port 0.9 msec. Subload 0.2 Msec

015826

Firing interval changed to 19.1 sec based on a speed of 5.1 kts sp. 1652.

02007

Port gun delay changed from 0.9 msec to 1.2 msec.

021228

Stbd gun off sp 1697

021940

No. 2 compressor turned off.

028524

S.I. changed to 18.0 based on ship speed 5.4 kts

030809

DT 5 → 15 m. DT 6 → 13 m.

031745

Stbd gun on SP 1909

0322

Port gun out

0328

Stbd gun out Compressor is down

033021

OSCILLATOR TEST SP 1951 - 1954

033127

NOISE TEST SP 1956 - ~~1963~~ 1959

033248

ON line still no guns operative.

035121

Sp 2022 Stbd gun operative

043021

Shot interval changed to 19.40 sec. @ SP. 2151

044215

going 5.0 kts.

044215

Delay set to 2500 msec at S.P. 2189

0512

Several shots missed due to trigger pulse change over → NTMI

051339

Both guns are operating at S.P. 2286

053222

DC depth 13, 16, 16, 16, 15, 13, 13, 14, 13

changed to

0538

DC depth ↓ 10, 13, 14, 15, 15, 13, 13, 14, 13

changed to

0538

DC depth ↓ 8, 14, 14, 14, 14, 13, 13, 14, 12

77.0655

Air guns cable lengthened. - Depth increased. Port = 10.

Subload = 8.5

077.0824

077.0939

077.1153

Zehnder & Brassin

077.124612

Check Shot Records to determine short of line.
8.

077.129758

077.125738

077.13070

077.133

077.1425

077.1417

077.1431

077.1504

077.1518

1606. Cable streaming about 2 metres too low.
 To compensate the cable was brought in
 two turns.

1606

16105

077.0824 Changed delay from 2500 to 2000 msec @ SP# 2875.

077.0939 Change delay from 2000ms to 1500ms @ SP# 3107

077.1153 End of LINE 6 ^{NOTE.} (over-run on line end will appear on Tape & 220 the turning tape. under the heading of LINE #7)

077.124612 Cable is stabilizing, guns at 8.8 m.
Steady on 302°

077.124612 1:08 / 2:14 / 3:14 / 4:14 / 5:14 / 6:13 / 7:13 / 8:14 / 9:12

077.12478 Port
~~Star~~ gun off Sp 307

077.125738 Sp 337 both guns on

077.130701 Snd gun delay 1.0 ms. Port delay 0.1 msec.
Total Delay = 27.5 msec, drift = 10.3 msec

077.133031 OSC + NOIS TEST SP 463 - 470

077.1425 Delay Reset to 2000 msec., SP = 608.

077.1477 Starboard Gun Delay reset to 0.7 msec.

077.1431 Shot Interval changed to 19.1 for 19.4.
Shot speed = 19.1 knots.?

077.1504 Shot Interval changed from 19.4 to 18.3
Shot speed 5.3 kts.

077.1518 Delay changed to 2500 msec @ shot 777

#

low. 160640 Winding in cable two turns

161050 Back on line. Shots being recorded

077.162225

077.163836

077.180958

077: 191257

077.192230

077.1935

077.194212

077:195317

077:200606

077:212425

077.220102

077: 222651

078: 0105

078: 0122

078: 0137

078-013008

078-019298

078-019627

077-0222

078. 02 45

078. 0340

BRASSIL & ZEHNDER

077.162225 Shot interval changed to 19.1 secs for 5.1 k.
 at SP 986
 077.163836 Shot interval changed to 19.4 secs at SP 1036
 Speed 5.0 k.
 Reset delay from 3000 msec to 3500 msec at
 077.180958 SP 1320
 077.191257 Shot interval changed to 19.1 sec at S.P. 1514 → speed 5.1 kts
 077.192230 Reset delay from 3500 to 4000 msec at SP 1545
 077.1935 Adjusted birds to level cable.
 077.194212 Osc. & noise test SP 1606-1609
 077.195317 Reset delay from 4000 to 4500 msec at SP 1642
 077.200606 Firing rate to 5 knots → 19.4 sec.
 077.212425 Delay to 5000 msec at SP 1924.
 077.220102 Delay to 5500 msec at SP # 2037
 077.222651 Delay to 6000 msec at SP # 2117.
 078.0105 Commenced Turn to Line 8.
 078.0122 Changed to Line 8, first shot #100.
 Cable not yet steady.
 078.0137 Cable steady Now
 078.014008 OSC TEST SP 156-158
 NOISE TEST SP 161-163
 078.014248 Resume data acquisition SP 167.
 078.019627 7 Stpd gen delay changed from 0.5 to 0.8 msec. SP 176
 077.0222 Shot interval changed to 18.7 sec for 14.4 sec.
 Shot speed 5.2 kts.
 078.0245 Recording Delay reset from 6000 to 5500 msec @ Shot 359
 078.0340 Recording Delay reset from 5500 to 6000 msec @ Shot 535

078.044512

078.051540

078.052203

078.061057

078.063038

078.063712

078.075521

078.084814

078.100926

078.104830

078.1133

BRASSER

078.1122

078.1230

078.1236

078.1254

078.1346

ZEINBER

078.1425

- 078.044512 Reset delay from 6000 to 5500 msec at SP 745
- 078.051540 Reset delay from 5500 to 5000 msec at S.P. 843.
- 078.052203 Reset delay from 5000 to 5500 msec at SP 864
- 078.061057 Reset delay from 5500 to 5000 msec at SP 1021
- 078.063038 Reset delay from 5000 to 4500 msec at SP 1084
- 078.063712 Reset delay from 4500 to 3500 msec at SP 1106.
- 078.075521 Reset delay from 3500 ms to 4000 msec @ SP 1355
- 078.084814 Reset delay from 4000 ms to 3500 ms @ SP 1526.
- 078.100926 Delay to 3000 msec at sp 1786.
- 078.104830 STARBOARD. GUN BEING SHUT DOWN. AIR LEAK DETECTED IN STARBOARD GUN. GUN BEING RETRENED.
- 078.11233 STBD GUN BACK IN WATER AND FIRING.
- 078.11220 Changed 'Self-Sen' Monitor Pmtra.
- 078.11230 Starboard gun delay reset to 0.9 msec.
- 078.1236 Recording delay reset to 2000 msec @ Shot 2257
- 078.1254 Shot Rate Changed from 18.7 Sen to 14.4 Sen, speed = 5.0 kts.
- 078.1346 Shot Rate Changed from 14.4 Sen to 18.7 Sen speed = 5.2 kts.
- 078.1425 Shot rate set to 5.0 kts (19.45) from 5.2 kts

78.152117

78.152351

0781716

078190827

078.195340

078: 210649

078: 210808

078: 230654

079: 0009

079: 0037

0106

0112

0126

BRASSIL & ZEHNDER

78.152127 OSC Test Shots 2774 - 2777
 Noise test shots 2778 - 2780
 78.152351 Resume Seismic Data Recording.

078.1716 Turning on to Line 9. New tape 55/290 SP 100.

078.190827 Shot rate set to 4.8 kts (20.2 sec) at SP 436

078.195340 Reset shot rate to 5.0 kts (19.4 sec) at SP 570

078: 210649 Firing rate to 5.2 kts / 18.7 sec at SP 796.

078: 210808 delay to 2500 msec at sp 802

078: 230654 Firing rate to 5.0 kts / 19.4 sec. at sp 1182.

079: 0009 Shot rate reset to 18.7 ^{sec} from 19.4 ^{sec}, ship speed 5.2 KTS.

079: 0037 misfire. mixed shots. system malfunction.
 HP CPU stopped with a HLT 4B. (Memory Parity).
 Last Good shot 1459 on tape 55/306

reboot system

Recording commenced 079.00 4500 shot 1500
 Ship speed 5.2 kts, shot interval = 18.7 seconds.
 Tape = 55/307.

0106 may have lost wire #4 or 5.

Cable going shallow, signal quality very poor.
 Possible Tangle and Log Line or Sea Monster.

0112 operator failure - lost ~5 shots in tape change.
 Fine Good shot @ 011737, SP 1591.

Cable problems propagating along the cable.
 It seems to have caught something.
 Check shot log for cable depths. Signal very poor
 where the cable is shallow.

0126 Cable seems ok now.

Mr. Penney
directed to see a medical
practitioner in Borneo on
22/3/86

21 March 1986

Re: C Penney

To: D.A. Falvey

Chief Scientist, Exmouth Cruise 3

Mr C. Penney reported that he has injured or
strained his back while retrieving seismic cable
from 1-3 pm of 20 March 1986 during the Exmouth
Plateau Cruise Leg 1. He was performing normal
data at that time and no accident was involved.
Handling of cable can however be arduous and
sprains or injuries could result. At this time the
injury is causing some discomfort but does not appear
serious

Paul E Williamson
BTR Party Chief

cc C. Penney

079.0130

.0138

.0203

.0213

.0220

0235

023928

0244

0251

79.0303

79.0320

.0348

.034958

79.042209

79.0429

79.0529

20 March 1986

- 079.0130 That was an entertaining shambles.
On tps 307 & 308, careful QC checking of the Data will be required. 307 Overran EOT because the CHANGE was omitted after the re-boot, because of the cable going bananas. 308 is probably OK, but a data gap will exist between 306 & 307, and 307 & 308, plus the last shot on 307 may be incomplete.
- 0138 Birds Reset as follows:
1=13, 2=13, 3=14, 4=14, 5=14, 6=13, 7=12, 8=13, 9=12
- 0203 Recording Delay Reset to 2000 msec from 2500 msec.
- 0213 SONARBOY Commenced in Channel 49
- 0220 SPECIAL MONITOR ASSIGNED TO SONARBOY
- 0220 RECORDING DELAY RESET TO 2500 msec from 2000 msec.
- DT #1 → 14 m.
- 0235 Delay change from 2500ms → 2300ms.
- 023928 Sonarboy deployed after much ado.
- 0244 Starboard Gun delay Reset to 1.2 msec.
- 0251 Cable running a little shallow.
- 79.0303 Recording Delay reset to 2100 msec.
Shot of 200 msec on Special Monitor.
- 79.0316 Shot Interval changed to 18.0 sec, Shy-foot 5.4 kts.
- 0348 Recording Delay reset to 2000 msec. Sp 2077
- 034958 Shot interval change to 18.7 sec at Sp 2082
based on speed of 5.2 kts.
- 79.042209 Firing rate set to 19.4 secs (5.0 Knts)
- 79.0429 DC, 14, 15, 15, 15, 16, 15, 12, 11, 12.
- 79.0529 Finished with Sonarboy record - switched back to normal record 1, 0, 2.

and.

* I. C. ON CHANNEL 50 ENCOUNTERED MELT-DOWN
CARD # IS REPLACED.

079.061306 De

079.0654 h

070.070006 d


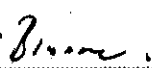
H.A.9

DEPARTMENT OF HOSPITAL AND ALLIED SERVICES

MEDICAL CERTIFICATE

(To be completed by the Medical Officer only)

TO WHOM IT MAY CONCERN

I hereby certify that Craig Lynton PENNEYis fit/ ^{not fit} ~~work~~ for work as from 24/3/86for days until Remarks Pulled muscle in back

 Doctor's Signature
23.1.7.19.16

 Hospital

079061306 Delay reset to 1500 ms at S.P. 2531

079.0654. Lost power to auxiliary channels & D.T.
channels in control box. Seismic
acquisition still O.K.

070.070006 Suspended acquisition.

084: 06 40 ..
: 07 00

2
Co

F
at
th
N.B
7

* CRO:

55.084: 192543

Acc

55.084: 1935

No

De

084: 195931

- "

JOB: TO DO BEFORE CABLE IS DEPLOYED. 25/3/85

- 1: TAKE CABLE WORK TOOL BOX AND CABLE REPAIR GEAR PLUS BULLDOG AND OTHER TAPES TO REAR DECK.
- 2: CONNECT UP DEPTH INDICATOR SYSTEM. FIND THE AIR VALVE, THE AIR HOSES AND THE D.I. ADAPTER, PLUS THE CONTROL BOX AND MAKE SURE IT ALL WORKS.
- 3: PREPARE CABLE CLAMP AND CONNECT TO SUPPORTS, THE RIGHT WAY UP, SO WE ARE READY TO BREAK THE CABLE.
- 4: TAKE CABLE TESTER, METER, LEADS ETC TO REAR DECK. TEST CABLE AND DECK LEADER BEFORE DEPLOYMENT. LOG RESULTS ON LOG SHEETS.
- 5: PREPARE BIRDS ONE HOUR PRIOR TO DEPLOYMENT. CODE AND CHECK. LOG SERIAL NUMBERS ON LOG SHEETS.
- 6: PUT SAFETY BELTS, GLOVES, COMMUNICATIONS HEADSET, ON REAR DECK.
- 7: TAILBUOY, INSTALL AND CHECK LIGHT, CHECK CHAINS, CLAMPS, REPLACE AS NEEDED. IS THE BUOY FULL OF WATER?
- 8: REMOVE REEL COVER.
- 9: PREPARE FOLDER WITH LOG SHEETS, SPARES ARE IN LOG BOOKS.
- 10: REASSEMBLE MAG SNATCH BLOCK AND INSTALL. IT IS IN GUN SHACK.
- 11: WAKE UP PEOPLE YOU REQUIRE HALF AN HOUR BEFORE DEPLOYMENT.

25th March 1986

084: 0640 .. Deploying streamer for ESP work.
 : 0700 Calibration of DDT's commenced.

E.S.P. LINES.

PROGRAM. 3.

For this section of the cruise, the recording delay will be changed as a function of distance from the centre of the line. Change delay in these steps only.

N.B. EACH SET OF INPUT WAYPOINTS IS $\frac{1}{2}$ a LINE.

DISTANCE FROM LINE CENTRE
 (NAUTICAL MILES)

DELAY

S.O.L. → 20

10 SECS

20 → 16

8 SECS

16 → 10

5 SECS

10 → 0

0 SECS

* CROSS OVER POINT.

0 → 10

0 SECS

10 → 16

5 SECS

16 → 20

8 SECS

20 → E.O. L.

10 SECS

CRAIG. L. PENNEY

55.084:192543 Acquisition started

NOTE THAT CHANNEL 17 IS STILL FAULTY.

55.084:1935 Delay changed to zero to observe direct arrival @ S.P. 109

084:195731 - " - " to 10000ms for normal operation @ S.P. 134

TAIL BUOY BEARING LOG - ESP-5

Line No	Time GMT	Bearing ° 100 . 1	COMESHOW
55/012	084:2025.50	024	1225
	084:2030.00	024	1230
	084:2100.00	019	1260
	084:2134.00	013	1294
	084:2202.00	010	1322
	084:2234.00	011	1330 - 5° course adjustment
	084:2302.00	014	1353
	084:2332.00	019	1412
	085:0002.00	022	1442
	085:0032.22	020	1472
	085:0102.24	020	1502
	085:0132.15	014	1532
	085:0201.16	015	1561
	085:0301.00	016	1622
	085:0332.34	012	1653
	085:0400.00	015	1681
	085:0430.00	019	1711
	085:0459.30	021	1740
	085:0530.00	016	1772
	085:0602.02	016	1803
	085:0630.00	017	1832
	085:0705.00	019	1861

084:2006	Ch
	as
084:2025.50	Ta
	h
	m
	or
084:2037	C
084:2010.25	St
	8
	i
084:2154.00	Sh
	S
084:2312.41	Sh
	te
085:0433.54	cd
	ran
085:0522.12	cd
	the
	up
085:0707.42	cd

26TH MARCH 1986

WEDNESDAY

- 084: 2006 Changed Number of shots to (42) from original 45 per Aape, as length of record was increased from 3000 ms to 3200 ms.
- 084: 202550 Tail buoy bearing 024° from line on will log a tail buoy bearing every 30 mins on hour + half hour, in table on page 52⁺:
- 084: 2037 Penned on radar at 49 nm, bearing 23.5° T
- 084: 201028 Shot point 204 delay changed from 10 sec to 8 sec, at 20 nm range from cross over point.
- 084: 215400 Shot point 249 delay changed from 8 sec to 5 sec at 16 nm range from cross over.
- 084: 231241 Shot point 327 delay changed from ~~8~~ 5 sec to 0 sec at 10 nm range from cross over.
- 085: 043354 old shot point 648 delay change to 8000 ms for the 16 \rightarrow 20 nm range
- 085: 052212 old shot point 696 the delay change to 10000 ms was made for the 20 nm ++ range \rightarrow till end of line. There was a satellite update at the same time!
- 085: 070742 observation suspended after S.P. 801

26TH MARCH 1986

CONT'D NEXT PAGE.

R.V. CONRAD OPPOSITE R.V. RIG SEISMIC MAST

085:0115 57

26 TH MARCH 1986

WEDNESDAY

SHIP TO SHIP BEARINGSESP-5

BEARINGS TAKEN ON THE MINUTE + 1 SEC FROM THE RADAR.

R/S SHOT	CONF SHOT	TIME	BEARING (°)	DISTANCE (nmi)
	1457	085 : 0047	201	5.1
		: 0048	201	5.0
		: 0049	201	4.8
		: 0050	201	4.6
		: 0051	200	4.4
		: 0052	200	4.3
		: 0053	200	4.1
		: 0054	200	3.9
		: 0055	200	3.8
		: 0056	199	3.6
		: 0057	199	3.4
		: 0058	199	3.2
		: 0059	198	3.1
		085 : 0100	198	2.9
		: 0101	198	2.7
		: 0102	198	2.5
		: 0103	198	2.4
	4	: 0104	198	2.2
		: 0105	197	2.0
	6	: 0106	196	1.8
		: 0107	196	1.6
	8	: 0108	196	1.5
		: 0109	195	1.3
	10	: 0110	195	1.1
		: 0111	197 (SUSPECT)	0.8
	12	: 0112	NO DATA	NO DATA
447		: 0113	NO DATA	NO DATA
448	14	: 0114	183	0.38
49	15	: 0115	169	0.23
450	1516	: 0116	098	0.13

RADAR LOSING
TRACE

p.t.o.

* A.V. CONRAD OPPOSITE MID-POINT OF R.V. RIG SEISMIC STREAMER
085 : 0119 35

Cond. from	p. 55	Time	Bearing (°)	Distance (nm)	
17		085 : 01 17			
18		085 : 01 18	No data		
Mid. Point	19	→ 19	022°	0.58	CONRAD * TAIL BUOY
: 0119 35	20	→ 20	020°	0.77	
	21	21	019°	0.95	
	22	22	018°	1.13	
	23	23	016°	1.31	
	24	24	no data		
	25	25	018°	1.66	Sail buoy
	26	26	014°	1.90	
	27	27	015°	2.07	
Last airgun shot	28	→ 28	015°	2.25	
	29	29	015°	2.42	
	30	30	014°	2.61	
1531	31	31	014°	2.80	
	32		} no data taken		
	33				
	34				
					EXPL SHOT #
					1
					2
					3
					4
					5
					6
					7
					8
					9
					10
					11
					12
					13
					14

26TH MARCH 1986

WEDNESDAY

SHIP TO SHIP BEARINGS E-S-P-5 (CONT'D)

TIME	BEARING °	DISTANCE (nmi)
085 : 0117	NO DATA	NO DATA
: 0118	NO DATA	NO DATA
: 0119	022	0.58
: 0120	020	0.77
: 0121	019	0.95
: 0122	018	1.13
: 0123	016	1.31
: 0124	NO DATA	NO DATA
: 0125	018	1.66
: 0126	014 (SUSPECT)	1.90
: 0127	015	2.07
: 0128	015	2.25
: 0129	015	2.42
: 0130	014	2.61
: 0131	014	2.80

*
CONRAD OPPOSITE
TAIL BUOY

SHOT TIMES ON EXPLOSIONS ESP-5

(SP NUMA)

EXPLOS SHOT #	DETONATION TIME	EXPLOS SHOT#	DETONATION TIME	EXPLOS SHOT#	DETONATION TIME
1	085 : 0239.15 (538)	15	085 : 0415.00 (629)	29	085 : 0551.08 (732)
2	: 0244.04 (545)	16	: 0422.04 (638)	30	: 0558.03 (737)
3	: 0251.04 (552)	17	: 0429.06 (650)	31	: 0605.01 (746)
4	: 0258.01 (559)	18	: 0436.06 (657)	32	: 0612.06 (753)
5	: 0305.04 (566)	19	: 0443.05 (664)	33	: 0619.06 (760)
6	: 0312.02 (573)	20	: 0450.00 (671)	34	: 0626.01
7	: 0319.05 (579)	21	: 0457.05 (678)	35	EXPLOSIVE FAILED
8	: 0325.59 (587)	22	: 0504.05 (683)	36	EXPLOSIVE FAILED
9	: 0333.01 (594)	23	: 0509.07 (690)	37	085 : 0644.14 (785)
10	: 0340.05 (601)	24	: 0516.06 (697)	38	: 0651.15
11	: 0347.06 (608)	25	: 0523.09 (704)		
12	: 0354.08 (615)	26	: 0530.03 (711)		
13	: 0401.01 (622)	27	: 0537.04 (718)		
14	: 0408.01	28	: 0544.03		

STREAMER

buoy

26TH MARCH 1986

WEDNESDAY

085:1146

Fault in channel 17 found to be in stretch section #2.

Stretch section has been replaced and channel 17 now active.

However Channel 17 has 110 Hz noise upon it.

(nmi)

* ST
IN SHOT.27TH MARCH 1986

THURSDAY.

SHIP TO SHIP BEARINGS E-S-P-4

CONRAD SP

BEARINGS TAKEN ON THE MINUTE \pm 1 SEC.

Entered in Index 97

	Time (GMT)	BEARING ($^{\circ}$)	DISTANCE (nmi)
339	086 : 0038	027 207	3.3
340	0039	027 207	3.1
341	: 0040	027 207	2.88
342	: 0041	028 208	2.69
343	: 0042	028 208	2.51
344	: 0043	028 208	2.33
345	: 0044	028 208	2.14
346	: 0045	029	1.95
347	: 0046	030	1.76
348	: 0047	030	1.58
349	: 0048	031	1.42
350	: 0049	031	1.23
351	: 0050	033	1.05
352	: 0051	035	0.88
353	: 0052	037	0.70
354	: 0053	039	0.53
355	: 0054	045	0.37
356	: 0055	059	0.20
357	: 0056	114 $^{\circ}$	0.11
358	: 0057	170	0.20
359	: 0058	189 9 $^{\circ}$	0.36
360	: 0059	193	0.53
361	086 : 0100	197	0.70
362	: 0101	198	0.88
363	: 0102	200 20	1.05

SHIP TO SHIP BEARINGS

E-S-P-4 CONT'D

OBS: 1146

	<u>TIME (GMT)</u>	<u>BEARING (°)</u>	<u>DISTANCE (nmi)</u>	
64	086 : 0103	201 21	1.26	* LAST AIRGUN SHOT.
365	: 0104	201 21	1.42	
366	: 0105	202 22	1.59	
367	: 0106	202 22	1.77	

* R.V. CONRAD ABEAM ON R.V. RIG SEISMIC.

* R.V. CONRAD AT STREAMER MIDPOINT.

* " " ORIGINAL NOMINATED STREAMER MIDPOINT.

TAIL BODY BEARING LOG - ESP-4

Line No.	Time GMT	Bearing	CONRAD SP #
55/014	20 00	206 26	60 ✓
	2030	208 28	90 ✓
	2100	210 33	120 ✓
	2130	214 34	150 ✓
	2200	215 35	180 ✓
	2230	216 30	210 ✓
	2300	207 27	240 ✓
	2330	207 27	270 ✓
	086:0002	207 27	300 ✓
	086:0031	209 27	330 ✓
	086:0103	207 27	364 ✓
	086:0131	203 23	392 ✓
	086:0	206	
	086:0231	206 26	435 ✓
	086:030	205 25	464 ✓
	086:0331	205 25	495 ✓
	086:0402	201 21	526 ✓
	086:0430	201 21	555 ✓
	086:0500	200 20	584
	086:0530	202 22	614
	086:0601	202 22	645
55/16	086:1206	351	
	086:1238	351	
	086:1302	350	
	086:1330	351	
	086:1400	352	
	086:1430	352	
	086:1501	354	
	086:1531	351	

085:170000	Sta
	is,
085:183000	De
085:184600	alc
085:191830	Pa
	Tra
085:204721	C
085:2134	S
	(
	-
085:21446	D
	f
085:221413	N
	upo
**	SPE
	KEE
	ANI
	EA
	SE
085:225237	C
086:042141	Char
	dila

27th March 1986

Thursday

085:170000 Streamer extended to 103m of armoured leader - the whole system is ready for line 55/014

085:183000 Depth Det. No 6 shows great variation on display C.R.O.

085:184600 Acquisition started for line 55/014 (ie E.S.P -4)

085:191800 Rased over hard point of line
Troubles with DDT's 4 & 6 → out of range & varying

085:204721 Changed delay to 8000 mSecs. from 10000 mSec @ SP # 221

085:2134 Shot point 265 tape 55/343 partly error
Failed to start writing correctly.
Tape 55/344 mounted started at shot point. 273

085:21446 Delay changed from 8 sec to 5 sec at 16 km
from cross over on ESP 4 (line 14)

085:221413 Note: Chnls 26 and 27 appear to have high frequency noise upon them. (This has been since start of line)

** SPECIAL NOTE.

MONITORS HAVE BEEN GOING OFF-LINE BY THEMSELVES
KEEP AN EYE ON THIS. EVENTUALLY BUFFER WILL FILL
AND THE UNSERVICED INTERRUPT WILL PREVENT YOU FROM
ENTERING THE CHADS PROGRAM TO CONTROL THE
SEISMIC SYSTEM.

085:225237 Changed delay from 5000ms to 0ms @ SP# 346.

086:042141 Changed delay from 5000 ms to 8000 msec @ S.P. 676
- delay annotation missing

Line No	Time GMT	Bearing	COMP STN	Local Date 28-3-86	
55/016	086:1600	342° 162	3860		086:045451
-11-	086:163000	344° 164	3870		
-11-	086:170000	347° 167	3400		086:0600
-11-	086:183400	350° 170	3496		
-11-	086:190000	347° 167	4021		086:0622
-11-	086:193000	345° 165	4052		
"	086:200000	338° 158	4081		086:115500
	086:203000	341° 161	4112		
	086:210000	350° 170	4141		
	086:213000	352° 172	4171		
	086:220000	352° 172	4202		
	086:223000	353° 173	4231		
	086:220000				086:1316
					086:1410
					086:1435
					086:1440
					086:152546
					086:203103
					086:203700
					086:211127
					086:214000
					086:220000

27th March 1986

086:045451 Changed delay from 8000 ms to 10000 msec for distance above 20 nm from centre of E.S.P..

086:0600 Last shot fired by Conrad

086:0622 Suspended acquisition after shot 796 -- end of line 55/014

086:08300 Acquisition started on ESP03, (Line 16) ~ 10 mins before midpoint streamer crosses 1st waypoint start of line.

Depth controller depths 9, 13, 13, 13, 13, 13, 13, 15, 17 m at 86:1200

086:1316 Delay changed from 10000 to 8000 msec @ S.P. 181

086:1410 Delayed changed from 8000 to 5000 msec @ SP 235

086:1435 Stranded DC2 from 13 to 14 metres

086:1440 Cable under reduced to 99m after airgun work by Conrad complete & before explosives deployed in after two ship crossed at midpoint of line

086:152546 Recording delay changed from 5000 ms to 8000 ms @ S.P. 311

086:20303 Delay changed from 5000 ms to 8000 ms @ SP# 616

086:20370 SEISMIC SYSTEM STOPPED WITH HLT360 IN FOC. SP # 622

086:21127 Delay changed from 8000 ms to 10000 ms @ SP # 658

~~086:22400 Last shot actually taken at 086:224000~~
~~had shot actually at 086:223700.~~ PTO.

~~086:22400 Acquisition stopped on line 55/014 ESP3.~~

27/28 March 86

1643 = 40 STOP Watch

True Radar Bearing to Conrad from Rig Seismic

GMT	CONRAD STATION	Bearing
1645	3885	172°
1647	3887	172°
1649	3888	171°
50	3889	172°
51	40	172°
52	41	172°
53	42	173°
54	43	173°
55	44	172°
56	45	173°
57	46	173°
58	47	173°
1659	48	174°
1700	49	173°
01	50	174°
02	51	174°
03	52	175°
04	53	175°
05	54	176°
06	55	177°
07	56	—
08	57	177°
09	58	177°
1710	59	—
11	60	177°
12	61	177°
13	62	177°
14	63	169°
17:15:11	ABEAM	230°
16	64	218°
17	65	208°
18	66	219°
19	67	—
20	68	—
21	69	—
22	70	—
23	71	354°
24	72	353°
25	73	353°
26	74	353°

Port to Port

} Lost Lock

~086:1712 Conrad

086:18.21 Conrad

086:191804 Del

086:223000 Conrad

086:224600 Ag

087:0425 Check

087:045000 Set mid

087:0740

087:21536 Struck Lead

28th March

~086:1712

Conrad has just passed us - approx. S.P. 409

086:1821

Conrad commences shooting with explosives - good arrivals received

086:191804

Delay reset ad S.P. 543 to 5000 msec for range above 10 m.

086:223000

Conrad reports last shot to be @ 086:224200

Last shot actually at 086:223700

086:224800

Acquisition stopped on line 65/016, ESP 3

087:0425

Checking work on streamer commenced

087:045000

Set up Seis. ~~DAS~~ with version #7 & changed parameters suitable for testing streamer!

channels 50 & 52 are open
col. & wiring on multiplex
C.R.D.

087:0740

Channels 26 & 27 pick up rubbish @ 4th stretch section

087:21536

Stretch section 2, exchanged and problems removed.

Leader set at 103 m \therefore offset \sim 320 m to chan. 1.

087: 171252

087: 1732

087: 1749

087: 1812

087: 1826

087: 1840

087: 1914

087: 2000 R.V. ROBERT CONRAD PULLING IN AIRGUNS AND STREAMER
CURRENTLY 15 MILES FROM NTH RANKIN A.

087: 2010 EL SUPREMO FALVEY HAS ISSUED THE FOLLOWING ORDERS
R.V. RIG SEISMIC TO GO BACK TO WITHIN 2 HOURS OF START POINT.
WAIT UNTIL CONRAD HAS ASSESSED DAMAGE APPROX. MID MORNING
NO SEISMIC UNTIL TIME ASSESSMENT MADE ON CONRAD. MAY
SHOOT LINE IN NORMAL SEISMIC AFTER CONRAD MESSAGE.

087: 194642

087: 2100

088: 0235

088: 04053

088: 050209

088: 054100

088: 054300

088: 070651

088: 074828

088: 084900

088: 130243

088: 141251

29th March

SATURDAY

STREAMER

16 ORDERS

TART POINT:

10 MORNING

MAY

F

087: 171252 Initialized System with version 3 for ESP-E2 - changing gain to 1024 & setting the fast & special monitors for more display gain (50)

087: 1732 Conrad notified that they can't be ready till 1850 GMT - we have slowed down.....

087: 1749 We will now start our line at 1830 GMT - latest message.....

087: 1812 Acquisition started for ESP-E2

087: 1826 Conrad notified problems with propulsion unit → start of Line indefinite! - Will leave system running just in case they affect repair quickly.

087: 1840 Fine trimming streamer....

087: 1914 We have just finished executing a turn - system very noisy - streamer sail riding high - No word yet from Conrad

Message from bridge - Conrad has faulty propulsion.....

Message from Frank Brussil → Conrad cannot participate in this line.....

087: 194642 Acquisition suspended because of Conrad's fouled propeller!?

087: 2100 Have instructed ROGER TO ASSESS READINESS OF COMPRESSORS AND AIRGUNS, IN ANTICIPATION OF A MID-MORNING START ON SEISMIC

088: 0235 Special Noise Tests started as per tape annotation (Tapes 377 → 379)

088: 044053 Special Noise Tests with streamer at various depths - suspended

088: 050209 Initialized system with version 3 for another try on ESP-E2 line 55/018!

088: 054100 acquisition started

088: 054300 Conrad confirmed start of line at 1400 hrs local time

088: 070651 Delay set to 8000 ms for 16 - 20 nm range...

088: 074828 Delay set to 5000 ms for 10 → 16 nm range....

088: 084400 Delay set to 0 ms for 10 → 0 nm range - shot point 288.

088: 130243 Delay set to 5000ms at SP542

088: 141251 Delay set to 8000 ms at SP612

Tail Buoy Bearing Log for -ESP-2

Line	Time	Bearing	Comments		
55/018	088.0700 088.0700	231°		088:101300	Check earlier
	088.0730	235°			
	088:0800	—			
	088:0830	233°		088.1438	Ch
	088:0900	233°			
	088:0930	231°			
	088:1000	235°		088145639	2
	088:1030	237			
	088:1100	—	Cross over	ESP2	At
	088:1130	238°			to Port
	088:1204	240			in the
	088.1230	240			was
	088.1303	233			
	088.1334	230		188:162000	Merray
	088.1401	228			ring 12
	088.1442	230		088:162900	Merray
	088.1501	230			radial
	088.1531	228		088:163146	acquir

29TH MARCH

SATURDAY.

088:101300

Checked time pulse with Conrad. We appear to be about 1 sec earlier than their time.

088:11438

Changed DCs 1, 2 & 3 to 13m (from 15, 15, 14)

088:145639

Delay reset to 10 sec at SP 655

ESP-E2

At crossover Rio Seismic found to be 1 nm to Port off ~~course~~ ^{track} and Conrad 0.5 nm off track in the same direction. After crossing Conrad's track was taken as new ESP line.

30th March

188:162000

Message from Conrad: They stopped firing at 0012 this morning.?? (GMT 161200....)

088:162900

Message from Conrad obtains information that airguns are actually retracted & they are over (beyond) end of line!!

088:163146

Acquisition for ESP-E2 is suspended after shot 750!!

29 March 1986

ESP 02

True radar bearing to Conrad from Rig Seismic,

<u>Time</u>	<u>Bearing</u>	<u>Distance nm</u>
088-1034	59	4.5
1035	60	4.3
1036	59	4.1
1037	60	4.0
1038	60	3.8
1039	61	3.7
1040	61	3.5
1041	61	3.3
1042	62	3.1
1043	63	3.0
1044	64	2.8
1045	65	2.6
1046	66	2.48
1047	66	2.33
1048	68	2.16
1049	69	2.02
1050	70	1.86
1051	72	1.69
1052	74	1.55
1053	78	1.41
1054	81	1.25
1055	86	1.11
1056	93	.98
1057	101	.88
1058	111	.77
1059	124	.72
1100	138	.69
1101	151	.70
1102	165	.75
1103	176	.83
1104	185	.94
1105	192	1.06

Time
088-1106

1107

1108

1109

1110

1111

1112

1113

1114

1115

1116

1117

TB

1118

1119

1120

1121

1122

TB

1123

1124

1125

1126

1127

TB

1128

1129

1130

1131

1132

TB

1133

1134

1135

1136

1137

1138

1139

1140

1141

	<u>Time</u>	<u>Bearing</u>	<u>Distance</u>
088	1106	198	1.19
	1107	201	1.33
	1108	204	1.48
	1109	207	1.64
	1110	209	1.8
	1111	212	1.95
	1112	213	2.13
	1113	214	2.30
	1114	215	2.45
	1115	217	2.63
	1116	217	2.80
	1117	218	3.0
	TB	236	
	1118	218	3.1
	1119	220	3.3
	1120	220	3.5
	1121	220	3.6
	1122	221	3.8
	TB	237	
	1123	221	4.0
	1124	222	4.1
	1125	222	4.3
	1126	222	4.5
	1127	222	4.7
	TB	238	
	1128	223	4.8
	1129	223	5.1
	1130	224	5.3
	1131	223	5.4
	1132	224	5.5
	TB	239	
	1133	224	5.7
	1134	224	5.9
	1135	224	6.1
	1136	224	6.3
	1137	224	6.5
	1138	224	6.6
	1139	225	6.8
	1140	224	6.9
	1141	225	7.1

	<u>Time</u>	<u>Bearing</u>	<u>Distance</u>
088	1142	226	7.3
	1143	226	7.41
	1144	225	7.6
	1145	225	7.8
	TB	239	
	1146	No display	
	1147	226	8.1
	1148	226	8.3
	1149	226	8.5
	1150	226	8.6
	1151	226	8.8
	1152	226	9.0
	1153	227	9.1
	1154	226	9.3
	1155	226	9.5
	1156	227	9.6

Tail buoy log for ESP E1

30 March 86

Time	Bearing
089	0057
	0130
	0210
	0229
	0256
	0320
	0354
	0500
	0620
	0700
	0730
	0800
	0830
	0900
	0930
	1000
	1036
	1100
	1130
	1200

55.089.004056

89.005453

089.0219

0224

089.022154

089.031027

089.041734

089.061900

089.083443

089.092200

089.100655

089.120147

* Conrad advised could not keep firing rate up at current speed, had to drop to 4.8 kts until line end.

30th March 1986

30 March 86

55.089.006056 - Initialized version 3 for ESPEI
Run oscillator and noise test
Gain set to 1024

89.005453 - Completed noise test began acquisition
DC values 12, 14, 13, 13, 13, 15, 13, 15, 15

089.0219 DC 4 from 13m to 12m
0224 DC 7 from 13m to 12m
DC 8 from 15m to 14m
DC 9 from 15m to 14m

089.022154 Delay set to 8 sec at SP 201
089.031027 Delay set to 5 sec at SP 249
089.041734 Delay set to zero at SP 317

089.061900 approx. + send News to Conrad - not in time window \therefore no locking
- Peter asked them for certain adjustments with trigger delay etc....
and result was that we were 15 ms after a minute mark or
firing time....

089.0800 Shot point 539 Delay changed from 0 to 5 sec.
at 9.2 nm.

089.083443 Cycling monitor was cycling from 1-57 but
what was appearing on the chart was
1-101 but this fault was rectified by resetting
cycling monitor parameters

089.092200 Shot point 621 Delay changed from 5 to 8 sec.
at 10.1 nm.

089.100655 delay changed from 8000ms to 10000ms @ SP 666

089.120147 End of line 08/020 ESP1 Shot 780

Bearings to Conrad from Rig Seismic for ESP -1

30-3-86

089: 182300

Peter

	Time	Bearing°	Comments		
089:	0602	242°		089: 190000	The dis
	03	240°			down
	06	243°			conditio
	07	243°			certain
	08	245°			line?
	09	246°			
	10	247°			
	11	250°			
	12	253°		090: 042932	Chang
	13	259°		090: 043015	2nd
	14	270°			
	15	298°	ABEAM @ 061524 GMT 690m.	090: 070000	Conrad
	16	345°			them?
	17	016°			After ad
	18	030°			can be
	19	038°			results
	21	042°			cord
	22	045°			from b
	23	045°			
	24	047°		090: 073612	Chang
	25	048°			less n
				090: 0751	Time,
				090: 090000	Cable
					reco
				090: 1045	8h
					cable
				090: 1120	NOT

31st March 1986

Monday

1

30-3-86

089:182300

Peter Buhl left Rig Seismic for his return trip to the USA.

089:190000

The temperature in instrument room is approx. 33.2°C - due to broken down air conditioner - we cannot operate the seismic system under these conditions - we cannot be sure it will keep going? The preamplifiers certainly will not! - Informed D. Falvey \rightarrow postpone start of WACDP line?

090:042932

Changed fast channel Monitor to channel 2 from channel 1

090:043015

2nd gun has been deployed & fired 2nd shot at this time!

690-m.

090:070000

Conrad notified us re Sonobuoy deployment ~ 5 hrs - can we record them? No, as they have military types, this is not possible with our receiver. Offer of one of 4 of their receivers - but we need serials too! If receiver can be gotten hold of at the moment, we have no means of displaying results for a QC \rightarrow no C.R.O. or MX printer - we would have to record blind - in any case Conrad is recording the data (quote from big chief - "Why didn't they think of this last night?")

090:073612

Changed Slow Monitor to channel 2 from channel 1 for less noisy display

090:0751

Time pips transferred to CONRAD.

090:090000

Cable has been disconnected to bring in 2 wraps reconnected 070002. 93 m leadout now out

090:10445

Speed increased from 4.7k to 5.0k. as cable was drawn slightly.

090:1120

NOTE: Tape N^o 247 is labelled incorrectly it should read 427

Time	Tailbuoy	Conrad		
652	090.0903	106°	104°	652 P
SP 210	.0330	108°	105°	090.1250
240	.0400	106°	103°	
300	.0500	104°	103°	
330	.0530	103°	103°	
360	0600	101°	101°	
390	0630	103°	104°	
420	0700	103°	104°	
450	0730	104°	104°	
484	0804	096°	095°	
512	0832	091°	098°	
540	0900	090°	098°	
572	0932	096°	100°	090.154812
600	1000	094°	099°	
632	1032	096°	101°	1600
660	1100	099°	101°	164428
690	1130	102°	102°	
720	1200	102°	102°	182613 Rec
747	1227	102	102	
781	1301	101	101	090.1900
811	1331	104	102	090
840	1400	104	102	090.19015 T
847	1407	104	102	
870	1430	106	103	
903	1503	106	103	091.0128 Co
933	1533	110	105	
953	1559	109°	103°	
990	1630	104°	102°	
1020	1700	103	101	
1050	1730	104	103	091.0155 C
1080	1800	103	103	
1110	1830	102	102	091.02325 D
1200	2000	102	103	
1230	2030	103	103	091.0705 T
1260	2100	104	104	
1290	2130	104	102	091.12000 M

0969/10339

1st APRIL 1986

TUESDAY

090.1250

Delays to both guns from start of work set
at 4.0 msecs. Total firing delays were

Port 20.5

Std 19.7

using 1 kHz timing pulses.

Reset to using 10 kHz pulses and
adjusted to coincide by delaying std gun.

Port firing delay 0.1 msecs

Std firing delay 1.4 msecs

Total observed delay 17.0 msecs ± 0.2 msecs.

090.154812

Delay set to 1 sec from zero at SP 1631

~~1600~~

164428

Changed gain from 512,512 to 1024,1024.

182613

Recording delay reset from 1000 to 1500 msec

090.1900

START NEW SHIFT.

090

090: 0015

Tape 444 partly error. Shots 2631-2642
are suspect.

091: 0128

Conrad will shut down each ^{of the} compressors in
turn for about 15 mins each for routine
maintenance while we turn onto new heading
for WACDP through ESP's 3, 4 & 5.

091: 0155

Conrad finish maintenance on compressors both
gun arrays now firing.

091: 02325

Delay set to 1 sec at SP 2934

091: 0705

Time check with Conrad.

091: 120000

INCREASING SPEED BY 0.5 kt to 50 kt.

Time	TAIL BUOY	CONRAD	
2200	103	102	1320
2230	104	104	1350
2300	109	101	1380
2330	106	101	1410
091.0000	105	102	1440
00030	100	100	1470
0100	102°	101°	1500
0130	110°	107°	1530
0200	117°	117°	1560
0230	113°	119°	1590
0302	115°	112°	1622
0330	113°	113°	1650
0400	113°	114°	1680
0430	114°	114°	1710
0500	120°	117°	1740
0530	120°	117	1770
0600	121°	119°	1800
0630	122°	117°	1830
0700	122°	116°	1860
0730	122°	113	1890
0800	107°	105°	1920
0830	071°	071°	1950
0900	075°	071°	1980
0930	076°	072°	2010
1000	081°	072°	2040
1030	081°	073°	2070
1100	082°	074°	2100
1130	082°	072°	2130
1200	079°	072°	2160
1232	078°	070°	2192
1306	077°	071°	2226
1331	073° ←	073° (?)	2251
1400	077°	072°	2280
1430	080°	073°	2310
1504	083°	075°	2344

1ST APRIL CONTINUED (TUES)

- | | |
|------------|--|
| 091.1147 | CHANGED DELAY TO 500 AT S.P. 4030. |
| 091.1200 | With change speed increased to 5.5 kts on request of Conrad as their streamer was sinking. They required a higher speed. |
| 091.1236 | Changed DC 1 from 9m to 11m
DC 2 from 13m to 14m |
| 091.154000 | Conrad + his Seismic slowed down from ~ 5.5 kts. ~ 5.0 kts. |

~~OFF.~~

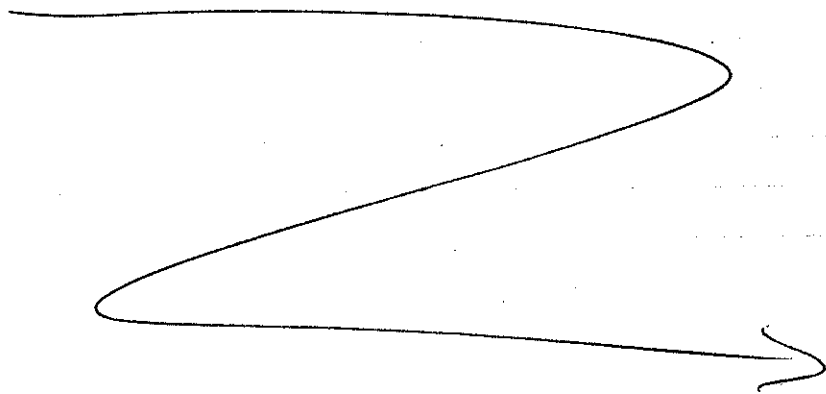
Bearings Conrad/Hailbuoy

Time GMT	TAILBUOY	CONRAD		
1530	076°	078°	2370	091.1600 New
1600	077°	073°	2400	091.164805 Rese
1630	080	075	2430	at
1700	081	074	2460	
1730	078	073	2490	091.221522 Dela
1800	081	071	2520	
1830	079	075	2550	091.001800 Com
1930	077	071	2610	Daw
2000	074	071	2640	
2030	076	073	2670	091.002600 Com
2100	085	076	2700	
2130	080	071	2730	091.005000 Com
2200	077	071	2760	
2230	135	116	2790	091.023428 Syg
2300	133	132	2820	cha
2330	131	129	2850	Syg
092.0000	136°	131°	2880	un
0030	125°	131°	2910	092.024639 Nec
0100	123°	131°	2940	group
0130	124°	131°	2970	pon
0200	117°	129°	3000	
0230	120°	130°	3030	092.040455 Rese
0300	124°	132°	3060	
0330	124°	132°	3090	092.052221 Rese
0403	126°	132°	3123	
0430	129°	132°	3150	092.080944 Dela
0500	128°	130°	3180	
0530	128°	129°	3210	
0600	124°	128°	3240	
0700	117	121	3300	
0730	130	134	3330	
0800	130	130	3360	
0830	133	131	3390	
0900	133	131	3420	
0930	132	132	3450	

2ND APRIL 1986

WEDNESDAY

- 091.1600 New shift.
- 091.164805 Reset recording delay from 500 to 1000 msec at S.P. 4631
- 091.221522 Delay changed from 1000ms to 1500ms @ SP # 5286
- 091.001800 Compressor 3 started up compressor 2 to be shut down ~~for~~ ⁱⁿ a while.
- 091.002600 Compressor 2 shut down, compressor 3 running
- 091.005000 Compressor 2 running, compressor 3 shut down
- 091.023428 System crash. Tape 55/496 loaded, automatic change done, ~~did~~ ^{no} data written to tape system stopped clock still working lit 3 was on. Error 55?
- 091.024639 New line 55/022 Shot point 100 acquisition restarted ~~sample~~ ^{interval} incorrect, corrected, various other parameters reset see fly listing.
- 092.040455 Reset delay to 2000 msec S.P. 256
- 092.052221 Reset delay from 2000 to 2500 msec at SP 411
- 092.080944 Delay to 3000 msec at sp 745.



TIME GMT	TAILBUOY	CONRAD
092:1000	127°	129°
092:1030	126°	129°
092:1100	127°	131°
092:1130	130°	131°
092:1200	131°	131°
092:1230	134°	131°
092:1300	136°	132°
092:1330	136°	131°
092:1400	138°	132°
092:1430	140°	131°
092:1500	138°	130°
092:1530	135°	132°
092:1600	132°	132°
092:1630	132°	132°
092:1700	132 132	127 127
092:1730	132°	131°
092:1800	132°	130°
092:1830	134°	138°
092:1930	132°	132°
092:2000	133°	131°
092:2030	132°	130°
092:2100	137°	132°
092:2130	139°	135°
092:2200	140°	133°
092:2230	134°	132°
092:2300	134°	131°
092:2330	132°	128°
093:0000	132°	132°
093:0044	129°	131°
093:0104	128°	131°
093:0136		
093:0200		
093:0230		
093:0300		
093:0330		

3480

3510

3540

3370

3600

3630

3660

3691

3720

3750

3780

3810

3840

3870

3900

3930

3960

3990

4050

4080

4110

4140

4170

4200

4230

4260

4290

4320

4364

EOL 55/022 4380

092.095323

092.105237

092.111719

092.121905

092.1240

092.1241

092.132446

092.141139

092.1446

092.161515

092.203148

092.233605

093.0051

093.0100

093.0101

2nd April 1986 cont. Wensday, JA 092.

092.095323 Delay changed from 3000 ms to 3500 ms @ SP# 953.

092.105237 Delay to 3000 msec at sp 1071.

092.111719 Delay to 3500 msec at sp 1121.

092.121905 Delay to 4000 ms at shot point 1244.

092.1240 11, 13, 13, 11, 14, 15, 12, 14, 14 m. Depth controller settings on the heads 1-9.

092.1241 ~~Test~~ heads
13, 14, rest unchanged.

092.132446 Delay to 4500 ms at shot point 1375.

092.141139 Delay to 5000 ms at shot point 1469.

092.1446 Depth controls 8+9 down to 15 m. from 14 m.
Settings now are 13, 14, 13, 11, 14, 15, 12, 15, 15 m for heads 1-9

092.161515 Reset delay from 5000 to 5500 msec at SP 1716

092.203148 Delay reset to 6000 msec at sp 2230.

092.233603 Delay reset to 5500 from 6000 @ SP# 2578

093.0051 Found delays on NTM timer for gun control at 0.1 ms (PORT) & 4.0 ms (STB). Gun firing somewhat erratic and earlier than start of line. Adjusted to give total firing delay of 1.7 msec by 1.0 ms (PORT) & 1.7 ms (STB).

093.0100 DCI changed from 13m to 14m

093.0101 EOL 55/022 estimated at 0120 GMT.

TAIL BUOY BEARING		LOG	for ESP-9	
Time (GMT)	BEARING	(°)	Comments	
LINE 55/024	1046	217		
	1100	218		093.0122
	1130	216		
	1200	219		093.0127
	1230	218		
	1302	218°		093.0129
	1322	217°		
	1400	215°		093.0132
	1443	221°		
	1501	221°		093.064050
	1530			
	1600			093.1045
<hr/>				
9 ESP - 9A	The crossover (ESP 9)			
Time	Distance	Bearing	Comments	
1459	2.2 nm	041°		093.1115
1500	2.0	042°		
1501	1.82 nm	042°		
02	1.66	043°		093.120300
03	1.44	044°		
04	1.33	046°		
05	1.16	048°		
06	0.98	051°		093.131313
07	0.83	053°		
08	0.67	054°		
09	0.52	068°		
10	0.39	081°		
11	0.31	107°	{ ABEAM 1511:30 @ 0.30 nm	
12	0.31	140°		093.1332
13	0.39	163°		
14	0.52	178°		
15	0.66	187°	{ 1516:40 ESP mid point	
16	0.81	193°		
17	0.98	196°		
18	1.16	198°		
19	1.33	201°		
1520	1.50	203°		
21	1.67	203°		
22	1.84	205°		
23	2.01	205°	← EOL	
24				
25				
26				
27				
<hr/>				
				093.1434
				093.152229

THURSDAY 3RD APRIL 1986 - DAY 092/093

See previous page

093.0122

CONRAD stopped firing

093.0127

RIG SEISMIC stopped firing END OF WACOP 1

093.0129

Oscillator test (preceded by noise traces)

093.0132

Suspend acquisition

093.064050

On oscillator test notice Channel 50 is dead.

093.1045

Cable disconnected to allow more streamer out.

Start of ESP-9 line to be 093:104800

093.1115

CHANGEA DELAY FROM 10000 to 8000 shotpt 187

093:120300

Changed Delay from 8000ms to 5000ms shotpt 186

093:131313

Changed Delay from 500ms to 0ms. @ 10nm.
Shot point 255

093:1332

Cable has been streaming badly since start of line. Move leader let out to try to get front down (see cable leader log). - but has not stabilised. Large swell strong winds not helping - can't cope with the speed variations either in RIG seismic speed or requested by Conrad. On the whole streaming deeper than 10m (~14m) + undulating.

093.1430

Set DCI from 18m to 16m

093:152229

END of ESP 9. Line 55/024.

Tail Buoy Bearing Log for ESP-9B

Line SS/025	Time (GMT)	Bearing (°)	Comments
	2200	215°	093: 1740
	2230	213	
	2300	215	1755
	2330	216	1850
			093: 2129
			093: 222619
			093: 230729
			093: 235200

E.S.P. - ~~9B~~ 9A The crossover (ESP 9A)

Time	Distance nm	Bearing	Comments
1844	2.8	036°	093: 23 58.00
1847	2.2	037°	094: 0540
1850	1.67	041°	094: 0544
51	1.55	041°	094: 054500
52	1.39	041°	
53	1.22	043°	094: 062722
54	1.03	043°	
55	0.86	046°	094: 063500
56	0.69	049°	
57	0.53	054°	094: 063700
58	0.38	064°	
59	0.25	084°	
59:30	0.22	~090°	← abeam position
1900	0.20	133	
01	0.28	166	
02	0.41	180°	
03			} lost lock in clutter
04			

4th April

Comments

093: 1740 Initialized system with version (4) ready for line 55/025 ie. ESP-9B.

1755 Started acquisition on Tape 55/544 at S.P. 100
Delay set to 0 sec.

1850 Conrad started firing guns.

093: 2129 CHANGED DELAY FROM 0-5000ms @ SP 34

093: 222619 Changed Delay from 5000ms to 8000ms @ SP# 371

093: 230729 Changed Delay from 8000ms to 10000ms @ SP# 412

093: 235200 CONRAD STOPPED SHOOTING AT 230000 !!
THANKS FOR LETTING US KNOW CONRAD.

093: 235800 END OF ESPQA

094: 0540 Initialized system for ESP-8

094: 0544 Oscillator test - Noise Test

094: 054500 Seismic Data recording at S.P. 104 → recording streamer noise

094: 062722 Suspended acquisition after S.P. 104 Tape 55/553/554
because of fault with tape drive switching - tape has Osc. & Noise Test on it

094: 063500 Rebooting system prior to start of line 28

Restart with Tape 55/554

094: 063700 Restarted acquisition with -841 min to start of line -----
Delay 10 sec.

TAIL BUOY BEARING FOR ESPO8

GMT TIME	BEARING(°)	GMT TIME	BEARING°		
094.0700 ¹²³		094.1330 ⁵¹³	042° 222	094.0700	Co
094.0730 ¹⁵³	039 219	:1400 ³⁴³	040° 220		
094.0800 ¹⁹²	037° 217	:1430 ⁵⁷³	036° 216	094.073316	Rese
094.0830 ²¹³	042° 222	:1500 ⁶⁰³	038° 218		
:0900 ²⁴³	042° 222	:1530 ⁶³³		094.081936	Reel
0930 ²⁷³	043° 223	:1600 ⁶⁶³			done
094.1000 ³⁰³	039° 219				further
1030 ³³³	041° 221	average 220			
1100 ³⁶³	042° 222			094.084952	Delay
1130 ³⁹³	044° 224				
094.1200 ⁴²³	044° 224			094.113705	* 1
:1230 ⁴⁵³	041° 221				
:1300 ⁴⁸³	041° 221				

ESPE08

CROSS OVER

TIME	DISTANCE ^{n.m}	BEARING	COMMENTS			
			TIME	DIST	BEARING	
094.1035 ³²⁸	4.3	226 ⁴⁶				
1037 ³⁴⁰	4.0	227 ⁴⁷	1101 ³⁶³	0.56	338 ¹⁵⁶	
1039 ³⁴²	3.6	227 ⁴⁷	1102 ³⁶⁵	0.67	351 ¹⁷¹	094.1225
1041 ³⁴⁴	3.3	228 ⁴⁸	1103 ³⁶⁶	0.8	359 ¹⁷⁹	of 1
1043 ³⁴⁶	2.9	229 ⁴⁹	1104 ³⁶⁷	0.95	006 ¹⁸⁶	094.122753
1045 ³⁴⁸	2.59	229 ⁴⁹	1105 ³⁶⁸	1.09	011 ¹⁹¹	
1047 ³⁵⁰	2.22	231 ⁵¹	1106 ³⁶⁹	1.27	016 ¹⁹⁶	094.1305
1049 ³⁵²	1.91	234 ⁵⁴	1107 ³⁷⁰	1.42	018 ¹⁹⁸	Comm
1051 ³⁵⁴	1.58	238 ⁵⁸	1108 ³⁷¹	1.59	019 ¹⁹⁹	+ 1
1052 ³⁵⁵	1.42	240 ⁶⁰	1109 ³⁷²	1.77	021 ²⁰¹	Loca
1053 ³⁵⁶	1.25	243 ⁶³	1111 ³⁷⁴	2.1	025 ²⁰⁵	094.132210
1054 ³⁵⁷	1.09	247 ⁶⁷	1113 ³⁷⁶	2.5	026 ²⁰⁶	Delay
1055 ³⁵⁸	0.94	251 ⁷¹	1115 ³⁷⁸	2.8	027 ²⁰⁷	094.141027
1056 ³⁵⁹	0.78	259 ⁷⁹	1117 ³⁸⁰	3.1	029 ²⁰⁹	
1057 ³⁶⁰	0.66	268 ⁸⁸	1119 ³⁸²	3.5	030 ²¹⁰	094.150441
1058 ³⁶¹	0.56	283 ¹⁰³	1121 ³⁸⁴	3.9	032 ²¹²	4.5
1059 ³⁶²	0.52	298 ¹¹⁸	1123 ³⁸⁶	4.2	032 ²¹²	lost
1100 ³⁶³	0.50	319 ¹³⁷				ENC

OPPOSITE

✓ checked

094.0700 Conrad started firing guns.

094.073316 Reset delay to 8 sec at SP 156

094.081936 Reset delay to 5 sec at SP 203. This was done after satellite update put us 3 miles further down line than anticipated.

094.084952 Delay reset to 0 sec at s.p. 233.

094.113705 * NOTE: From 2 1049 to 1057 GMT CONRAD SHOT FIRING 1 SEC EARLY. HAVE CONFIRMED WITH CONRAD LAB. THIS WAS THE TIME THEY WERE DOING A TIME CHECK WITH US.

R16 SEISMIC / CONRAD CLOCK 360 ms different.
Drift of 60 msec per day.

094.1225 Cable disconnected to bring in two wraps of leader. Missing shots 447-454

094.122753 Cable reconnected now 110m leader out.

094.1305 Conrad plans to end ESP 8 @ 2300 Local time & begin the next ESP 7 between 06-0700 local time 5/4/86.

094.132210 Delay reset from 0 to 5 sec @ shot point 505

094.141027 Delay reset from 5 sec to 8 sec @ shot point 503

094.150441 4 shots oscillator noise test, 4 shots cable noise test. Acquisition stopped. Conrad's last shot 23.00 local time, 1500 GMT.
END of LINE 55/028 ESP 8

Esp 07

Crossover

TIME	RIG SEISMIC TAILBUOY	TIME	ROBERT BEARING	CONNAD DISTANCE
094:2330	224°	1214	036°	4.9 nm
095:0000	225°	1215	037°	4.8
095:0030	225°	1216	037°	4.6
095:0104	226°	1217	037°	4.4
095:0136	226°	1218	036°	4.3
095:0202	226°	1219	035°	4.1
095:0230	225°	1220	035°	3.9
095:0308	228°	1221	035°	3.8
095:0330	230°	1222	036°	3.6
095:0400	230°	1223	035°	3.4
095:0430	230°	1224	035°	3.2
095:0530	227°	1225	035°	3.1
095:0602	228°	1226	034°	2.9
095:0630	228°	1227	034°	2.7
095:0700	227	1228	033°	2.5
095:0730	224	1229	033°	2.4
095:0800	223	1230	031°	2.2
095:0830	226	1231	030°	2.0
095:0900	229	1232	031°	1.8
095:0950	226	1233	030°	1.6
		1234	028°	1.5
		1235	027°	1.27
		1236	025°	1.13
		1237	021°	0.95
		1238	018°	0.80
		1238:15 sec	018°	0.73
		:30	016°	0.69
		:45	015°	0.64
		1239:00	014°	0.61
		:15	013°	0.58
		:30	010°	0.53
		:45	009°	0.50
		1240:00	007°	0.47
		:15	002°	0.44
		:30	000°	0.41
		:45	355°	0.36
		1241:00	347°	0.23
		:15	340°	0.30
		:30	334°	0.27
		:45		
		1242:00	313°	0.25
		:15	304°	0.25
		:30	300°	0.25
		:45	286°	0.27
		1243	276°	0.28
		1244	261°	0.39
		1245	246°	0.55
		1246	237°	0.75
		1246:50	236°	0.83
		1247	234°	0.91
		1248	232°	1.06
		1249	231°	1.25
		1250	230°	1.42
		1251	229°	1.58
		1252	228°	1.77
		1253	227°	1.97
		1254	226°	2.15
		1255	227°	2.30

← ABEAM position

Mid point of Line

094:2309	Rel
094:2330	55/5
094:2330	Due
094:2330	delta
094:051400	Delay
094:013208	Delay
094:013333	Spec
094:014520	to
094:014731	Cable
095:0156	Change
095:0156	DC
095:024442	Delay
095:0213	DC
0454	Connac
053800	explo
064603	Connac
074343	Reset
095:0800	Cable
095:083226	to
095:0953	Cha
095:0953	Con

5th April 1986

JD 095.

094:2309

Reboot system. First tape of ESP07 is 55/567. Oscillator test & noise test.

094:2330

Due start time of line. System acquiring data at 232044.

094:051400

Delay changed from 10sec to 8sec @ shot point 203

094:013208

Delay changed from 8sec to 5sec @ shot point 243

094:013333

Speed slipped a bit so gradually increasing back to 5 knots.

094:014520

Cable disconnected in order to bring leader in 1 wrap. (~3.5m) last shots 256-258

094:014731

Cable reconnected. now 106m leader out.

095:0156

Changed DCs 7-9 from 16,17,17m to 15,16,16m respectively
DCs now at 11,17,17, 13,16,18, 15,16,16m

095:024442

Delay changed from 5sec to 0sec @ shot point 316

095:0213

DC 7 changed from 15m to 14m.

AM position

0454

Conrad has shut down airguns and has switched to explosives.

053800

Conrad started to fire explosives.

064603

Reset delay from 0 to 5000 msec at SP. 557

074343

Reset delay from 5000 to 8000 msec at SP. 615

095:0800

Cable depth down requested extra 0.2 kt to bring it up.

095:083226

changed delay to 10msecs. @ SP 663.

095:0953

Conrad has finished firing.

TAIL BUOY BEARING

ESP 06 CROSSOVER.

GMT TIME	BEARING (°)	GMT TIME	DIST (nm)	BEARING (°)	TO CONRAD
095: 1706	10°	2141	4.6	207	
095: 1730	12°	2143	4.3	207	
095: 1800	10°	2145	4.0	208	
095: 1830	11°	2147	3.7	210	
095: 1900	11°	2149	3.4	211	
095: 1930	12°	2151	3.1	212	
095: 2000	011°	2153	2.8	214	
095: 2030	004°	2154	2.66	214	
095: 2100	002°	2155	2.5	216	
095: 2130	009°	2156	2.34	217	
095: 2209	011°	2157	2.19	218	
095: 2230	009°	2158	2.03	219	
095: 2300	005°	2159	1.89	221	
095: 2330	007°	2200	1.73	222	
096: 0000	007°	2201	1.58	225	
096: 0030	003°	2202	1.44	226	
096: 0100	008°	2203	1.30	228	
096: 0138	009°	2204	1.16	232	
096: 0202	011°	2205	1.03	237	
096: 0232	015°	2206	.89	242	
096: 0300	019°	2207	.78	250	
096: 0330	021°	2208	.67	260	
		2209	.61	273	
		2210	.58	290	
		2211	.59	307	
		2212	.66	320	
		2213	.73	333	
		2214	.84	340	
		2215	.92	346	
		2216	1.09	351	
		2217	1.23	356	
		2218	1.38	359	
		2219	1.53	001	
		2220	1.67	002	
		2222	1.97	006	

095: 1151

095: 1204

095: 1626

095: 163400

095: 175637

095: 190010

095: 200727

095: 22401

095: 231315

096: 000733

096: 012823

096: 020102

096: 0326

Cont,

5TH APRIL 1985 SATURDAY

CONRAD

095: 1151

Start time for ESP-6 to be 2330 W.S.T. or 1530 GMT.

095: 1204

Start of ESP 6 to be 0100 WST or 1700 GMT.

095: 1626

Initialising system with version 4 after bringing in streamer by 8m (98m)

095: 163400

acquisition started for ESP-6

095: 175637

Reset delay from 10000 to 8000 msec at SP 182

095: 190010

" " " " from 8000 to 5000 msec @ S.P. 246

095: 200727

Reset delay from 5000 msec to 0 msec at s.p. 313.

095: 2240.

Conrad pulling in guns ready to use explosives.

095: 231315

First explosive shot from Conrad.

096: 000733

Delay changed from 0 to 5 sec, shot no. 554

096: 012523

Delay changed from 5 to 8 sec, shot no. 631

096: 020102

Delay change from 8 to 10 sec, shot no. 667

096: 0326

Last shot from Conrad will be 0327 GMT.

BEARINGS TO CONRAD.

Cont,

GMT	DIST nm	BEARING °
2223	2.13	006
2224	2.30	008
2225	2.45	008
2226	2.63	008
2227	2.80	009
2228	2.95	010
223130	3.60	011
2232	3.6	011

Tail buoy Bearing

ESP-CR3 Cross over

Mon

GMT Time	Bearing (°)	GMT TIME	Dist (nm)	Bearing (°)	To Conrad / Comments	096: 170334	Compu
096 -1805	314	096: 2300	4.5	130	-		DT N.
1830	315	2303	4.0	130		096: 173500	elcqu
130	314	2305	3.7	130		096: 175000	ed nh
2000	313	2307	3.3	131		096: 180300	Conn
2030	2045/308	2309	3.0	132		096: 193152	Rese
2100	307°	2310	2.8	131		096: 200500	Rese
2130	307°	2311	-	-		096: 201100	Spe
2200	305°	2312	2.4	133			had
2230	301°	2313	2.3	134			just
2300	305°	2314	2.1	134			just
2330	301°	2315	1.9	135			a
0002	305°	2316	1.8	135		096: 212300	delu
0030	305°	2317	1.6	136			again
0104	305°	2318	1.4	137	Card problem supp Roy. ←	096: 232100	Dx
0130	307°	2319	1.3	138		096: 233900	SP
0200	307°	2320	1.1	140		097: 0010	Tim
0230	308°	2321	0.9	142		097: 0020	Fur
0300	308°	2322	0.72	146			Mar
0330	308°	2323	0.56	151		097: 0028	Fur
0400	308°	2324	0.41	162			-
0430	307°	2325	0.28	181			
0500	310	2326	0.22	219		097: 010420	Calc
		2327	0.28	254		097: 010740	Ca
		2328	0.41	273		097: 012500	Dele
		2329	0.56	283		097: 0146	"
		2330	0.73	288			f
		2331	0.94	290		097: 020145	Delu
		2332	1.06	293		097: 031419	D.
		2333	1.23	294		097: 0337	hat
		2334	1.41	296		097: 0500	Con
		2335	1.56	296			
		2336	1.73	297			
		2337	1.92	297			
		2339	2.25	298			
		2341	2.59	299			
		096: 2343	2.94	300			

Monday 7th April 1986

rad
Comments

096:170334 Completed initialization with version 4 ready for ESP-CR3 → line 55/034
DT No8 is erratic

096:173500 acquisition commenced - oscillator & noise tests

096:175000 at starting point 28 nm from centre of ESP

096:180300 Conrad started firing.

096:193152 Reset delay from 10000 to 8000 msec at SP. 217

096:200500 Reset delay to 5000 msec at sp. 250.

096:201100 Speed at 4.2 knots; called bridge, told us they had slowed down because we were going too fast. Had not informed us. (We are going to fast to meet Conrad at m.p.). Cable sinking like a rock.

096:212300 Delay to 0 msec at sp 328. Running a proper speed again after Craig visited the bridge.

096:232100 D+8 has been U/S for all this shift. ie since 2000.

096:233900 SP 464: Conrads last shot with arizon.

097:0010 Time check with Conrad 5 tone tones supplied by his Sinst

097:0020 First explosive shot from Conrad expected.

097:0028 Maybe later up to 0025 - still getting organised
First shot - received loud & clear on oscilloscope
- nothing on spit out crew gain may be too low

097:010420 Cable disconnected to Larry in 1 wrap.

097:010740 Cable reconnected leader out 93M.

097:012500 Delay changed from 0 sec to 8 sec at shot no 570

097:0140 11, 17, 17, 13, 16, 18, 14, 13, 17m DT depths on cable.
following change of DC 9 from 16m to 17m

097:023145 Delay change from 5 sec to 8 sec @ shot no. 636

097:031419 Delay changed to 10 secs at SP 679

097:0337 latest estimate EOL CR3 now 1300 WGT.

097:0500 Conrad stopped ~~firing~~ firing.

and problem
Roy.

TAIL BOUY		ESP - C2A CROSSOVER.			COMMENTS	
GMT Time	Bearing (°)	GMT TIME	Dist (nm)	Bearing (°)		
097.						55:097:10350
1050	153°	097.1547	3.7	332		55:097:11201
1100	155°	1548	3.5	332		55:097:1303
1130	159°	1549	3.3	332		55:097:1427
1200	158°	1550	3.2	331		55:097:1445
1237	154°	1551	3.0	331		
1302	156°	1552	2.9	332		
1331	160°	1553	2.7	331		
1402	162°	1554	2.55	331		
1429	161°	1555	2.39	330		
1456	159°	1556	2.20	330		
1530	158°	1557	2.06	330		55:097:182242
1600	157	1558	1.88	329		55:097:191851
1630	160	1559	1.73	329		097:195916
1700	159	1600	1.52	328		097:2130
1800	159	1601	1.41	327		
1830	158°	1602	1.20	325		098:0227
1900	159°	1603	1.08	324		
1930	159°	1604	0.91	322		098:030903
2000	160°	1605	0.77	318		
2030	157°	1606	0.59	313		
2100	156°	1607	0.47	306		
2130°	156°	1608	0.69 ?	286	? Anti-coll. radar turned off. Distances suspect. Bearings OK! 1 mile.	
2200°	160°	1609	0.56	259		
		1610	0.63	208		
		1611	0.78	197		
		1612	1.08	182		
		1613	1.33	176		
		1614	1.69	172		
		1615	2.00	168		
		1616	1.80	167		
		1617	1.25	165		
		1618	1.53	164		
		1619	1.63	163		
		1620	1.84	162		
		1621	1.95	162		
		1622	2.17	161		
		1623	2.31	161		
		1624	2.47	160		
		1625	2.64	161		
		1626	2.81	160		
		1627	Last Radar lock.			

MONDAY 7TH APRIL 1986

SS:097:103500

START O/N TEST FOR C2A.

SS:097:11201

delay changed from 10000 to 8000 ms @ SP.4 186

SS:097:1303

Delay changed from 8 to 5 sec @ shot no. 248

SS:097:1427

Delay changed from 5 to 0 sec @ shot no 332

SS:097:1445

Mid point - latest estimate 0015 WST.

Tuesday 8th April 1986

SS:097:182242

Delay reset to 5000 ms at S.P. 568 → -10 nm from centre of line

SS:097:191851

Reset delay from 5000 to 8000 msec at SP 624

097:195916

Reset delay from 8000 to 10000 msec at SP 664

097:2130

End of line.

097:0227

Acquisition started on line CH2, shot position
oscillator & main tests corrected aut.

098:030903

Tape drive 0 runs off line so tape did not
switch automatically. Did a CH & tape 50/637
began to write ~~many~~ have missed shots 140, 141
at the start of the tape.

Channel 28 moving from the start of this line.

all. radar
off.

res
part.

SS OK!

TAIL BUOY

ESP CR2

TUE

GMT Time	Bearing	GMT Time	Distance (nm)	Bearing °T	Comments		
0236	355°	0748	3.5	167		098.042704	Reset
0256	350°	0750	3.2	166			S.P. 1
0300	353°	0751	3.0	167		051221	Reset
0400	351°	0752	2.9	166		053000	There
0430	350°	0753	2.2	166			It is
0500	349°	0754	2.5	166			some
0530	350°	0755	2.3	165		053900	Reset
0600	347°	0756	2.2	167			(Tailbu
0630	340°	0757	2.0	165		098: 052000	approx.
0700	342°	0758	1.9	166			muster
0730	342°	0759	-	159	NO DATA.		the DAS
0800	340°	0800	1.44	164			at 022
0930	340°	0901	1.31	163		098: 060716	Recording
0900	336°	0802	1.14	162			
0930	342°	0903	0.98	160		098: 0824	Re
1030	341°	0804	0.81	158			Conva
1100	341°	0805	0.66	156			of
1130	341°	0806	0.44	150			70m
1200	341°	0807	0.34	140			cross
1300	342°	0808 (A BETA)	0.22	114			
1300	341°	0809	0.19	069		098: 0851	De
1330	340°	0810	0.28	034			Conva
		0811	0.44	018			an
		0812	0.61	011			change
		0813	0.77	009			in the
		0814	0.95	007			between
		0815	1.11	006			
		0816	1.28	006		098: 101535	Delay
		0817 (CONRAD *TAIL BUOY *ABEAM)	1.45	004			
		0818	1.63	004		098: 120059	Delay
		0819	1.80	002			
		0820	1.97	000		098: 135000	Aquis
		0821	2.1	359			
		0822	2.3	357		098.1550	Cable
		0823	2.5	357			chur

TUESDAY 8th APRIL

Comments

098.042704 Reset recording delay from 10000 to 8000 msec at S.P. 198

051221 Reset recording delay from 8000 to 5000 msec at SP 243

053000 There is a clock error in the seismic system. It is 22 mins ahead of GMT time introduced somehow at ~~022~~ 098.0324 at SP 157

053900 Reset music clock from SP 270 - 274 using Cat No (Tail buoy bearing are at GMT correct time)

098:052000 approx. a discrepancy in time of 22 minutes on the seismic master clock (Chrono-Log) was observed w.r.t. the G.E.D. clock on the DAS system. Checking the shot logger revealed that errors occurred at 022747, 022843, 034743 & corrections at 051933, 052438 & 053338.

098:060716 Recording delay set to 0 msec at S.P. 316.

098:0824 Ran a time differential test between CONRAD HATS and RIG-SEISMIC for a period of ~~10~~ 5 mins — RIG-SEISMIC is firing 70ms before Conrad. Next check at next crossover.

098.0851 During time test between the 2 ships the Conrad changed its cycling rate to receive our timing signal, this causes an obvious change on our seismic monitors displays in the form of a delay change this occurred between 098.0812 and 098.0828.

098:101535 Delay changed from 0Sec to 5000mSec @ SP# 565

098:120059 Delay changed from 8000 mSec to 10000 mSec @ SP# 670

098:135000 Acquisition suspended Line 55/038 CR2

098.1550 Cable put out 4 wraps to try & make it run deeper during transit at vbkts. With little success

TAIL BUOY

ESP CR2

SHIP TO SHIP

GMT TIME	BEARING ^(*)	GMT TIME	DISTANCE (nm)	BEARING (°)	COMMENTS
		0824	2.6	356	098: 1910
		0825	2.8	355	ESP
		0826	2.9	354	098: 195000
		0827	3.1	354	098: 21460t Delay
		0828	3.3	353	
		0830	3.4	353	098: 2200
		0832	3.9	352	
		0833	4.1	352	
		ESP - CR1			098: 220853
098: 2100	162°	0100	3.2	349	098: 231602
098: 2130	162°	0101	3.1	348	
098: 2200	162°	0102	2.9	348	099: 001719
098: 2230	161°	0103	2.8	350	099: 001920
098: 2300	160°	0104	2.6	349	
098: 2330	159°	0105	2.4	350	099: 002200
099: 0000	155°	0106	2.3	349	
099: 0030	154°	0107	2.1	351	099: 0130
099: 0100	167°	0108	1.9	350	
099: 0130	169°	0109	1.8	351	
099: 0206	164°	0110	1.5	351	099: 0159
099: 0230	163°	0111	1.4	351	
099: 0300	164°	0112	1.3	352	
099: 0330	164°	0113	1.1	353	
099: 0400	164°	0114	0.9	352	
099: 0430		0115	0.7	351	099: 020303
		0116	0.8?	291?	099: 020405
		0117	0.5	301?	
		0118	1.3?	280?	099: 00205
		0119	abeam	285	
		0120	lost radar	lock	099: 020700
		0121	lost radar	lock	
		0122	lost radar	lock	
		0123	0.69	153	099: 032040
		0124	0.86	155	099: 032230

readings seem
unreliable

Wednesday 9th April 1986

ENTS

098:1910 Initialized system with version ④ for line 55/040 → CR1 the last ESP line for EXMOUTH-1 cruise.

098:195000 acquisition started → Oncl. / Noise Tests

098:214608 Delay to 8000 msec at sp. 216

098:2200 Channel # 28 appears to have a higher gain. No excessive noise level observed on multiplexed scope.

098:220853 Delay changed from 8000 ms to 5000 ms @ SP # 239

098:231602 Delay to 0 msec at SP 306

099:001719 Cable disconnected to bring in 3 wraps of leader
099:001920 Cable reconnected cable leader now 97 m.

099:00200 Channel 28 now appears dead. Has been noisy at least since it was logged 098:0000 up till now.

099:0130 Bearing to tail buoy not 100% reliable as there is not a good echo on the sea (?).

099:0159 New EOL CR1 1300 not 1830 to enable us to rendezvous with Contrad at 1615 + transfer personnel in daylight + give us the required streaming time for ETA Exmouth 0730 WST, 20/4/86

099:020303 Cable disconnected to bring in one more wrap
099:020403 Cable reconnected leader now 93 m out

099:00205 Channel 28 noisy again - problem may be intermittent

099:020700 Last shot CR1 now to be 1230 to give Big Seismic 30 mins to turn into wind in order to recover streamer.

099:032040 Cable disconnected to let out 2 wraps of leader
099:032230 Cable reconnected 101 m of leader now out.

Tail Buoy Bearings

ESP

CRI

Ship to Ship Bearings

GMT Time	Bearing (°)	GMT Time	Distance (nm)	Bearing (°)	Comments		
		0125	1.03	155		099:034440	Delay
		0126	1.22	157		043000	Conrad
		0127	1.39	158		043439	Susp
		0128	1.56	158	Conrad's tail buoy ahead		
		0129	1.72	158			Magne
		0130	1.92	159		099:053500	Stream
		0131	2.05	159		099:	active
		0132	2.22	159		099:083000	Stream
		0133	2.39	158			
		0134	2.56	158			
		0135	2.73	159			

p Bearings

Comments

Conrad
at buoy ahead

099:034440

Delay reset from 0 to 5 sec at shot point 575

043000

Conrad has finished firing.

043439

Suspend acquisition

099:053500

Magnetometer retracted & secured onboard

Streamer being brought in.

099:

active section replaced because of fishbite (No 37 is one after DT 7)

099:083000

Streamer completely retrieved.

Tape N°	GMT START	SHOT N°	GMT STOP	SHOT N°	LINE 6°	Data Type	O/P TEST
55/648	098:103435	582	098:11152	621	55/038	CR2	
55/649	098:111252	622	098:115255	661	" "	"	
55/650	098:115255	662	098:123257	701			
55/651	098:123257	702	098:131257	741			
55/652	098:131257	751	098:135000	779	55/038	CR2	ESP OT-NT
					55/039	TRANSIT	
55/653	098:145000	100	098:202957	139	55/040	CR1	Osc. & Noise Tests
55/654	098:202957	140	098:210957	179	"	"	
55/655	098:210957	180	098:214955	219	"	"	
55/656	098:214955	220	098:222952	259	"	"	
55/657	098:222952	260	098:230952	299	"	"	
55/658	098:230952	300	098:234947	339	"	"	
55/659	098:234947	340	099:002947	379	"	"	
55/660	099:002947	380	099:010947	419	"	"	
55/661	099:010947	420	099:014947	459			
55/662	099:014947	460	099:022947	499			
55/663	099:022947	500	099:030947	539			
55/664	099:030947	540	099:034952	579			
55/665	099:034952	580	099:043354	624			Osc. & Noise Tests Suspended acquisition

END EXMOUTH 1

Tape No	GMT Start	Shot No	GMT Stop	Shot No	Line No	Data Type	O/N Test	Tape No	GMT Start
55/615	097:025501	660	097:033457	699	55/634	CR3		55/582	095:09
55/616	097:033457	700	097:041457	739	"	"		55/583	095:01
55/617	097:041457	740	097:045457	779	"	"			
55/618	097:045457	780	097:053535	820	"	"	EOL O/T + N/T	55/584	095:063
					55/635		TRANSIT	55/585	095:1713
55/619	097:103500	100	097:111457	139	55/636	CR2A	O/N SOL	55/586	095:1753
55/620	097:111457	140	097:115457	179	55/636	" "		55/587	095:1833
55/621	097:115457	180	097:123455	219	"	"		55/588	095:1913
55/622	097:123455	220	097:131452	259	"	"		55/589	095:19535
55/623	097:131452	260	097:135452	299	"	"		55/590	095:2033
55/624	097:135452	300	097:143447	339	"	"		55/591	095:2113
55/625	097:143447	340	097:151447	379	"	"		55/592	095:2153
55/626	097:151447	380	097:155447	419	"	"		55/593	095:223
55/627	097:155447	420	097:163447	459	"	"		55/594	095:231
55/628	097:163447	460	097:171447	499	"	"		55/595	095:233
55/629	097:171447	500	097:175447	539	"	"		55/596	096:003
55/630	097:175447	540	097:183452	579	"	"		55/597	096:011
55/631	097:183452	580	097:191452	619	"	"		55/598	096:015
55/632	097:191452	620	097:195455	659	"	"		55/599	096:023
55/633	097:195455	660	097:203457	699	55/636	"		55/600	096:031
55/634	097:203457	700	097:211457	739	"	"			
55/635	097:211457	740	097:214945	774	"	"	O/N EOL	55/601	096:173
					55/637		TRANSIT	55/602	096:181
55/636	098:022700	100	098:030657	139	55/638	CR2	O/T + N/T SOL	55/603	096:185
55/637	098:030657	140	098:041057	181	"	"	Clock ERROR *JUMPED 22min	55/604	096:1934
55/638	098:041057	182	098:045055	221	"	"		55/605	096:2014
55/639	098:045055	222	098:053052	261	"	"		55/606	098:205
55/640	098:053052	262	098:055253	301	"	"	Reset Clock.	55/607	096:213
55/641	098:055253	302	098:063248	341	"	"		55/608	096:221
55/642	098:063248	342	098:071247	381	"	"		55/609	096:223
55/643	098:071247	382	098:075247	421	"	"		55/610	096:23
55/644	098:075247	422	098:083247	461	"	"		55/611	097:001
55/645	098:083247	462	098:091247	501	"	"		55/612	097:003
55/646	098:091247	502	098:095247	541	"	"		55/613	097:01
55/647	098:095247	542	098:103252	581	"	"		55/614	097:02

Test	Tape No	GMT Start	Shot No	GMT Stop	Shot No	Line No	Data Type	O/N Test
	55/582	095: 091057	702	095: 095211	741	55/030	ESP-7	EOL
	55/583	095: 095211	742	095: 101342	764	55/030	ESP-7	O/N
						55/031	TRANSIT	SIT.
N/T	55/584	095: 0963400	100	095: 171357	139	55/032	ESP-6	SOL
TRANSIT	55/585	095: 171337	140	095: 175357	179	"	"	
N S.O.L.	55/586	095: 175357	180	095: 183355	219	"	"	
	55/587	095: 183355	220	095: 191352	259	"	"	
	55/588	095: 191352	260	095: 195352	299	"	"	
	55/589	095: 195352	300	095: 203347	339	"	"	
	55/590	095: 203347	340	095: 211347	379	"	"	
	55/591	095: 211347	380	095: 215347	419	"	"	
	55/592	095: 215347	420	095: 223347	459	"	"	
	55/593	095: 223347	460	095: 231347	499	"	"	
	55/594	095: 231347	500	095: 235347	539	"	"	
	55/595	095: 235347	540	096: 003352	579	"	"	
	55/596	096: 003352	580	096: 011352	619	"	"	
	55/597	096: 011352	620	096: 015355	659	"	"	
	55/598	096: 015355	660	096: 023357	699	"	"	
	55/599	096: 023357	700	096: 031357	739	"	"	
	55/600	096: 031357	740	096: 033800	764	55/032	ESP-6	EOL
						55/033	TRANSIT	
EOL	55/601	096: 173500	100	096: 181457	139	55/034	CR-3	SOL
TRANSIT	55/602	096: 181457	140	096: 185457	179	"	"	
TRANSIT	55/603	096: 185457	180	096: 193455	219	"	"	
LOCK ERROR RETRY 22 min	55/604	096: 193455	220	096: 201452	259	"	"	
	55/605	096: 201452	260	096: 205452	299	"	"	
	55/606	096: 205452	300	096: 213447	339	"	"	
CL. J.	55/607	096: 213447	340	096: 221447	379	"	"	
	55/608	096: 221447	380	096: 225447	419	"	"	
	55/609	096: 225447	420	096: 233447	459	"	"	
	55/610	096: 233447	460	097: 001447	499	"	"	
	55/611	097: 001447	500	097: 005447	539	"	"	
	55/612	097: 005447	540	097: 013452	579	"	"	
	55/613	097: 013452	580	097: 021455	619	"	"	
	55/614	097: 021455	620	097: 025501	659	55/034	CR-3	

Oscillator
& Noise
Tests

Tape No	GMT Start	Shot No	GMT Stop	Shot No	Line No	Date Type	O/N Test	Tape No	GMT St.
55/549	093:212747	313	093:220952	354	26	ESP9A		55/514	092:1242
55/550	093:220952	355	093:225155	396	26	ESP9A		55/515	092:1319
55/551	093:225155	397	093:233357	438	26	ESP9A		55/516	092:1352
55/552	093:233357	439	093:235843	463	55/026	ESP9A	YES (END OF LINE)	55/517	092:1425
					55/027	TRANS		55/518	092:1500
55/553	094:054108	100	094:062257	141	55/028	ESP8	START OF LINE Notice test.	55/519	092:1530
55/554	094:063700	100	094:071857	141	55/028	-11-		55/520	092:1610
55/555	094:071857	142	094:080055	183	-11-	-11-		55/521	092:1640
55/556	094:080055	184	094:084252	225	55/28	-11-		55/522	092:1722
55/557	094:084252	226	094:092447	267	55/28	-11-		55/523	092:1757
55/558	094:092447	268	094:100647	309	55/28	-11-		55/524	092:1832
55/559	094:100647	310	094:104847	351	55/028	-11-		55/525	092:1907
55/560	094:104847	352	094:113047	393	-11-	-11-		55/526	092:1942
55/561	094:113047	394	094:121247	435	-11-	-11-		55/527	092:2010
55/562	094:121247	436	094:125247	475	-11-	-11-		55/528	092:2050
55/563	094:125247	476	094:133252	515	-11-	-11-		55/529	092:2120
55/564	094:133252	516	094:141255	555	-11-	-11-		55/530	092:2200
55/565	094:141255	556	094:145255	595	-11-	-11-		55/531	092:2230
55/566	094:145255	596	094:150400	612	55/028	ESP8	EOL O/N Test	55/532	092:2310
					55/029	TRANS		55/533	092:2340
55/567	094:230900	100	094:235057	141	55/030	ESP7	SOL OSC/MOS	55/534	093:0000
55/568	094:235057	142	095:003057	181	55/030	ESP7		55/535	093:0005
55/569	095:003057	182	095:011055	221	55/030	ESP7		55/536	093:1038
55/570	095:011055	222	095:015052	261	55/030	ESP7		55/537	093:1119
55/571	095:015052	262	095:023052	301	55/030	ESP7		55/538	093:1201
55/572	095:023052	302	095:031047	341	55/030	ESP7		55/539	093:1241
55/573	095:031047	342	095:035047	381	55/030	ESP7		55/540	093:1321
55/574	095:035047	382	095:043047	421	55/030	ESP7		55/541	093:1401
55/575	095:043047	422	095:051047	461	-11-	-11-		55/542	093:1441
55/576	095:051047	462	095:055047	501	-11-	-11-		55/543	093:1520
55/577	095:055047	502	095:063047	541	-11-	-11-		55/544	093:1756
55/578	095:063047	541	095:071052	581	-11-	-11-		55/545	093:1836
55/579	095:071052	582	095:075055	621	"	"		55/546	093:1918
55/580	095:075055	622	095:083055	663	55/030	ESP7		55/547	093:2000
55/581	095:083055	664	095:091057	701	55/030	"		55/548	093:2045

Y/N Test	Tape No	GMT Start	Shot No	GMT Stop	Shot No	Line No	Data Type	O/N Test
	55/514	092: 124201	1290	092: 131701	1359	55/022	WACDP	
	55/515	092: 131701	1360	092: 135201	1429	"	"	
	55/516	092: 135201	1499	092: 142702	1500	"	"	
YES (END OF LINE)	55/517	092: 142702	1501	092: 150202	1569	"	"	
	55/518	092: 150202	1570	092: 153702	1639	"	"	
START OF LINE	55/519	092: 153702	1640	092: 161202	1707	"	"	
	55/520	092: 161202	1710	092: 164702	1779	"	"	
	55/521	092: 164702	1780	092: 172202	1849	"	"	
	55/522	092: 172202	1850	092: 175702	1919	"	"	
	55/523	092: 175702	1920	092: 183202	1989	"	"	
	55/524	092: 183202	1990	092: 190702	2059	"	"	
	55/525	092: 190702	2060	092: 194202	2129	"	"	
	55/526	092: 194202	2130	092: 201702	2199	55/022	WACDP	
	55/527	092: 201702	2200	092: 205203	2269	"	"	
	55/528	092: 205203	2270	092: 212703	2339	"	"	
	55/529	092: 212703	2340	092: 220203	2409	"	"	
	55/530	092: 220203	2410	092: 223703	2479	"	"	
	55/531	092: 223703	2480	092: 231203	2549	"	"	
END OF LINE	55/532	092: 231203	2550	092: 234702	2619	"	"	
	55/533	092: 234702	2620	092: 002202	2689			
	55/534	093: 002202	2689	093: 005702	2759			
	55/535	093: 005702	2760	093: 013203	2829	55/022	WACDP	END OF LINE
	55/536	093: 103800	100	093: 111955	141	55/024	ESP9	START OF LINE
	55/537	093: 111955	142	093: 120155	183	55/024		
	55/538	093: 120155	184	093: 124152	223	55/024		
	55/539	093: 124152	224	093: 132147	263	55/024		
	55/540	093: 132147	264	093: 140147	303	55/024		
	55/541	093: 140147	304	093: 144147	343	55/024		
	55/542	093: 144147	344	093: 152153	383	55/024		
	55/543	093: 152153	384	093: 152800	390	55/024	ESP9	End of line
	55/544	093: 175500	100	093: 183647	141	55/026	ESP9A	START OF LINE
	55/545	093: 183647	142	093: 191847	183	55/026	ESP9A	
	55/546	093: 191847	184	093: 200047	225	"	"	
	55/547	093: 200047	226	093: 204547	270	"	"	
	55/548	093: 204547	271	093: 212747	312			

Tape No	GMT START	SHOT NO	GMT STOP	SHOT NO	LINE NO	TYPE DATA	O/N TEST	Tape No	GMT STOP
55/479	091.163857	4613	091.171358	4682	55/021	WACDP		55/444	090.2
55/480	091.171358	4683	091.174858	4752	"			55/445	090.2
55/481	091.174858	4753	091.182358	4822	"			55/446	090.2
55/482	091.182358	4823	091.185858	4892	"			55/447	090.2
55/483	091.185858	4893	091.193358	4962	"			55/448	090.2
55/484	091.193358	4963	091.200858	5032	"			55/449	090.0
55/485	091.200858	5033	091.204358	5102	"			55/450	091.0
55/486	091.204358	5103	091.211858	5172	"			55/451	091.0
55/487	091.211858	5173	091.215358	5242	"			55/452	091.0
55/488	091.215358	5243	091.222858	5312	"			55/453	091.0
55/489	091.222858	5313	091.230358	5382	"			55/454	091.0
55/490	091.220358	5383	091.233858	5452	"			55/455	091.0
55/491	091.233858	5453	091.240358	5522				55/456	091.0
55/492	091.240358	5523	091.244858	5592				55/457	091.0
55/493	091.244858	5593	091.251358	5662				55/458	091.0
55/494	091.251358	5663	091.255858	5732				55/459	091.0
55/495	091.255858	5733	091.263358	5802				55/460	091.05
55/496	091.263358	5803	091.270358	—	55/021	WACDP		55/461	091.06
55/497	091.270358	100	091.272159	169	55/022	WACDP	System check, new line started	55/462	091.06
55/498	091.272159	170	091.275658	239				55/463	091.07
55/499	091.275658	240	091.283159	309				55/464	091.07
55/500	091.283159	310	091.290659	379				55/465	091.08
55/501	091.290659	380	091.295159	449				55/466	091.09
55/502	091.295159	450	091.301659	519				55/467	091.09
55/503	091.301659	520	091.306159	589				55/468	091.10
55/504	091.306159	590	091.312659	659				55/469	091.10
55/505	091.312659	660	091.320159	729				55/470	091.11
55/506	091.320159	730	091.323700	799				55/471	091.11
55/507	091.323700	800	091.329200	869				55/472	091.12
55/508	091.329200	870	091.334700	939				55/473	091.13
55/509	091.334700	940	091.342200	1009				55/474	091.13
55/510	091.342200	1010	091.349700	1079				55/475	091.14
55/511	091.349700	1080	091.357200	1149				55/476	091.14
55/512	091.357200	1150	091.364700	1219				55/477	091.15
55/513	091.364700	1220	091.372201	1289				55/478	091.15

OP	O/N TEST	TAKE N°	GMT START	SHOT N°	GMT STOP	SHOT N°	LINE N°	DATE TYPE	O/N TEST
OP		55/444	090.211258	2281	090.214758	2350	55/021	WACDP	
		55/445	090.214758	2351	090.222258	2420	21	" "	
		55/446	090.222258	2421	090.225758	2490	21	" "	
		55/447	090.225758	2491	090.233258	2560	21		
		55/448	090.233258	2561	090.000758	2630	55/021	WACDP	
		55/449	090.000758	2631	090.001408	2642	55/021		Penalty empty
		55/450	091.001408	2643	091.001858	2652	55/021		10 shots
		55/451	091.001858	2653	091.005358	2722	55/021		
		55/452	091.005358	2723	091.012858	2792	55/021		
		55/453	091.012858	2793	091.020358	2862	55/021		
		55/454	091.020358	2863	091.023859	2932	55/021		
		55/455	091.023859	2933	091.031358	3002	55/021		
		55/456	091.031358	3003	091.034858	3072	55/021		
		55/457	091.034858	3073	091.042358	3142	55/021		
		55/458	091.042358	3143	091.045858	3212	55/021		
		55/459	091.045858	3213	091.053358	3282	55/021		
		55/460	091.053358	3282	091.060858	3352	55/021		
OP	System check. No line started	55/461	091.060858	3353	091.064358	3422	55/021		
OP		55/462	091.064358	3423	091.071858	3493	55/021		
		55/463	091.071858	3494	091.075358	3563	55/021		
		55/464	091.075358	3564	091.082858	3632	55/021		
		55/465	091.082858	3633	091.090358	3702	55/021		
		55/466	091.090358	3703	091.093858	3772	55/021		
		55/467	091.093858	3773	091.101359	3842	55/021		
		55/468	091.101359	3843	091.104858	3912	55/021		
		55/469	091.104858	3913	091.112358	3982	55/021		
		55/470	091.112358	3983	091.115857	4052	55/021		
		55/471	091.115857	4053	091.123357	4122	55/021		
		55/472	091.123357	4123	091.130857	4192	55/021		
		55/473	091.130857	4193	091.134357	4262	55/021		
		55/474	091.134357	4263	091.141857	4332	55/021		
		55/475	091.141857	4333	091.145357	4402	55/021		
		55/476	091.145357	4403	091.152857	4472	55/021		
		55/477	091.152857	4473	091.160357	4542	55/021		
		55/478	091.160357	4543	091.163857	4612	55/021	WACDP	

Tape Number	GMT Start Time	Shot Number	GMT Stop Time	Shot Number	Line Number	Data Type	O/N Test
55/410	089:101004	669	089:104957	708	55/020	EXP1	
55/411	089:104957	709	089:112957	748	55/020	EXP1	
55/412	089:112957	749	089:120147	780	55/020	EXP1	
55/413	090:03058	106	090:034257	180	55/021	WACDP	
55/414	090:034257	181	090:041757	250	"		
55/415	090:041757	251	090:045257	320	-11-	-11-	
55/416	090:045257	321	090:052757	390	-11-	-11-	
55/417	090:052757	391	090:060257	460	-11-	-11-	
55/418	090:060257	461	090:063757	530	-11-	-11-	
55/419	090:063757	531	090:071257	600	-11-	-11-	
55/420	090:071257	601	090:074757	670	-11-	-11-	
55/421	090:074757	671	090:082257	740	-11-	-11-	
55/422	090:082257	741	090:085757	810	55/021	WACDP	
55/423	090:085757	811	090:093257	880	55/021	WACDP	
55/424	090:093257	881	090:100757	950	55/021	WACDP	
55/425	090:100757	951	090:104257	1020	55/021	WACDP	
55/426	090:104257	1021	090:111757	1090	55/021	WACDP	
55/427	090:111757	1091	090:115257	1160	55/021	WACDP	
55/428	090:115257	1161	090:122757	1230	55/021	WACDP	
55/429	090:122757	1231	090:130313	1300	55/021	WACDP	
55/430	090:130313	1301	090:133757	1370	55/021	WACDP	
55/431	090:133757	1371	090:141257	1440	"	"	
55/432	090:141257	1441	090:144757	1510	"	"	
55/433	090:144757	1511	090:152257	1580	"	"	
55/434	090:152257	1581	090:155758	1650	-11-	-11-	
55/435	090:155758	1651	090:163250	1720	-11-	-11-	
55/436	090:163250	1721	090:170758	1790	-11-	-11-	
55/437	090:170758	1791	090:174258	1860	-11-	-11-	
55/438	090:174258	1861	090:181758	1930	-11-	-11-	
55/439	090:181758	1931	090:185258	2000	"	"	
55/440	090:185258	2001	090:192758	2070	"	"	
55/441	090:192758	2071	090:200258	2140			
55/442	090:200258	2141	090:203758	2210			
55/443	090:203758	2211	090:211258	2280	55/021	WACDP	

Tape Number	GMT Start Time	Shot Number	GMT Stop Time	Shot Number	Line Number	Data Type	O/N Test	
55/377	088:0235	100	088:030238	179	017	24 fold	NT	Ne
55/378	088:030238	180	088:033829	296	"	reflection	NT	SP
55/379	088:041132	500	088:044048	589	55/017	mode (V2)	N/T	Area
55/380	088:054024	100	088:062257	141	55/018	ESP-2		Start
55/381	088:062257	142	088:070457	183	-11-	-11-		
55/382	088:070457	184	088:074655	225	-11-	-11-		
55/383	088:074655	226	088:082852	267	-11-	ESP-2		
55/384	088:082852	268	088:091047	309	55/018	ESP-2		
55/385	088:091047	310	088:095247	351	55/018	ESP-2		
55/386	088:095247	352	088:103447	393	55/018	ESP-2		
55/387	088:103447	394	088:111647	435	55/018	ESP-2		
55/388	088:111647	436	088:115847	477	55/018	ESP-2		
55/389	088:115847	478	088:124047	519	"	"		
55/390	088:124047	520	088:132253	561	"	"		
55/391	088:132253	562	088:140452	603	"	"		
55/392	088:140452	604	088:144655	645	"	"		
55/393	088:144655	646	088:152857	687	"	"		
55/394	088:152857	688	088:161103	729	-11-	-11-		
55/395	088:161103	730	088:163142	750	-11-	ESP-2		End
55/396	089:004957	100			LINE 19	Transit		
"	089:005453	"	089:012957	148	LINE 20	ESP-1	O/N	
55/397	089:012957	149	089:020957	186	55/20	"		
55/398	089:020957	189	089:024955	228	"	"		
55/399	089:024955	229	089:032952	268	"	"		
55/400	089:032952	269	089:040952	308	-11-	-11-		
55/401	089:040952	309	089:044947	348	-11-	-11-		
55/402	089:044947	349	089:052947	388	-11-	-11-		
55/403	089:052947	389	089:060947	428	-11-	-11-		
55/404	089:060947	429	089:064947	468	-11-	-11-		
55/405	089:064947	469	089:072947	508	-11-	-11-		
55/406	089:072947	509	089:080952	548	-11-	-11-		
55/407	089:080952	549	089:084952	588	-11-	-11-		
55/408	089:084952	589	089:092959	628	-11-	-11-		
55/409	089:092959	629	089:101004	668	-11-	-11-		

For Cataloging this line changed to 18, line 55/018) E/M Howard 2016/66.
Comments

Data Type	O/N Test	
24 fold	NT	Noise test 15m, SP 158 → 20m, 216 → 15m, 212 → 10m
reflection	NT	SP 295 acquisition suspended for turn
mode (v)	N/T	Acquirer at 10m for record duration
ESP-2		Started acquisition on line 55/018 → ESP-E2 again
-11-		
-11-		
ESP-2		
ESP-2		
ESP-2		
ESP-2		
ESP-2		
ESP-2		
"		
"		Delay reset to 5 sec at SP 542
"		Delay reset to 8 sec at SP 612
"		Delay reset to 10 sec at SP 655
"		
-11-		
ESP-2		End of Line - suspended acquisition end of ESP-2 (line 55/018)
Trans. +		
ESP-1	O/N	Beginning of Tape
"		Began acquisition SP 1 Line 55/020
"		
"		Delay set to 8 sec at SP 201 55 089.022154
"		Delay set to 5 sec at SP 249 55 089.031027
-11-		
-11-		Delay set to 0 sec at SP 317 55 089.041713
-11-		
-11-		
-11-		
-11-		
-11-		Delay set to 8 sec shotpoint 539 55 089.080000
-11-		Delay set to 8 sec shotpoint 621 55 089.092200

Tape Number	GMT Start time	Shot Number	GMT Stop Time	Shot Number	Line Number	Data Type	D/N Test	Cor
55/343	085: 213355	268	085: 213900	272	55/014	ESP-04 AIR GUN		Tape
55/344	085: 213900	273	085: 222052	314	"			
55/345	085: 222052	315	085: 230247	356	"			
55/346	085: 230247	357	085: 234447	398	55/014			
55/347	085: 234447	399	086: 002647	440				
55/348	086: 002647	441	086: 010847	482				
55/349	086: 010847	483	086: 015047	524				
55/350	086: 015047	525	086: 023247	566				
55/351	086: 023247	567	086: 031252	606				
55/352	086: 031252	607	086: 035252	646				
55/353	086: 035252	607	086: 043255	686				
55/354	086: 043255	687	086: 051257	726				
55/355	086: 051257	727	086: 055257	766				
55/356	086: 055257	767	086: 062242	796	5/014	ESP4		Susp.
55/357	086: 113500	100	086: 123657	141	55/016	ESP-3		Ague
55/358	086: 123657	142	086: 131647	181	-11-			Del
55/359	086: 131647	182	086: 135655	221	-11-			De
55/360	086: 135655	222	086: 143652	261	-11-			Re
55/361	086: 143652	262	086: 151652	301	-11-			
55/362	086: 151652	302	086: 155647	341	-11-			
55/363	086: 155647	342	086: 163647	381	-11-			
55/364	086: 163647	382	086: 171647	421	-11-			
55/365	086: 171647	422	086: 175647	461	-11-			
55/366	086: 175647	462	086: 183647	501	-11-			
55/367	086: 183647	502	086: 191647	541	-11-			
55/368	086: 191647	542	086: 195652	581	-11-			Del
55/369	086: 195652	582	086: 203635	621	-11-			only
55/370	086: 203635	622	086: 203735	622	"			
55/371	086: 204300	630	086: 212457	671	"			
55/372	086: 212457	672	086: 220657	713	"			
55/373	086: 220657	714	086: 224800	755	55/016			hine
55/374	087: 181200	100	087: 185357	141	55/018	ESP-2		hine
55/375	087: 185357	142	087: 193557	183	55/018			obeg.
55/376	087: 193557	184	087: 194642	194	55/018			Costr

Comments

Data Type	P/N Test
ESP-04 AIR GUN	<p>Tape parity errors - all shots suspect.</p> <p>Stopped firing ^{explosive} airguns 086 0104 last shot 086 0103 First shot 086 0208 next observed 0222 Delay reset to 5000 ms at SP 593</p>
ESP4 ESP-3	<p>← Suspended acquisition after shot 796 - end of line 55/014! Acquisition started 086 115500 line 16, <u>ESP 03</u> Delay set to 8 sec at SP 181</p> <p>Delay set to 5 sec at SP 235</p> <p>Delay set to zero at SP 311</p>
x	<p>↑ airgun ↓ explosives</p> <p>Delay reset to 5000 ms at S.P. 543</p> <p>only one shot on tape 55/370. SYSTEM STOPPED ON HLT568.</p> <p>line 55/016 ESP 3 ends. line 55/017 transit - Acquisition started for line ESP-E2</p> <p>acquisition suspended after shot 194 (= troubles with Conrads fouled propeller!)</p>
0-2	

TAPE NUMBER	GMT START TIME	SHOT NUMBER	GMT STOP TIME	SHOT NUMBER	LINE NUMBER	DATA TYPE	U/W BST
55/310	079.020729	1751	079.023206	1838	9	48ch MCS.	
55/311	079.023225	1831	079.025702	1910	9	"	
55/312	079.025721	1911	079.032158	1940	9	"	
55/313	079.032236	1941	079.034607	2070	9	"	
55/314	079.034625	2071	079.041111	2150	9	"	
55/315	079.041111	2152	079.043636	2230	9	"	
55/316	079.043636	2231	079.050228	2310	"	"	
55/317	079.050228	2311	079.052820	2390	"	"	O+N Test QSP 2331
55/318	079.052820	2391	079.055412	2470	"	"	
079.055412 2471 079.062004 2550							
55/319	079.055412 062004	2471 2551	079.062004	2550	-4-	-11-	
55/320	079.062004	2551	079.064556	2630	-4-	-11-	
55/321	079.064556	2631	079.070006	2674	"	"	
55/322	084.192534	100	084.200757	141	55/012	ESP AIRGUNS	ESP
55/323	084.200757	142	084.204957	183	55/012	<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">AIRGUNS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">ESP-5</div> </div>	
55/324	084.204957	183	084.213155	225	55/012		
55/325	084.213155	226	084.221352	267	55/012		
55/326	084.221352	268	084.225552	309	55/012		
55/327	084.225552	309	084.233747	351	55/012		
55/328	084.233747	352	084.241947	393	55/012		
55/329	085.001947	394	085.010147	435	55/012		
55/330	085.010147	436	085.014347	477	55/012		
55/331	085.014347	478	085.022547	519	55/012		
55/332	085.022547	520	085.030747	561	55/012		
55/333	085.030747	562	085.034952	603	55/012		
55/334	085.034952	604	085.043152	645	55/012		
55/335	085.043152	646	085.051355	687	55/012		
55/336	085.051355	688	085.055557	729	55/012		
55/337	085.055557	730	085.063757	771	55/012		
55/338	085.063757	772	085.070742	801	55/012		
55/339	085.184600 072757	100	085.192757	141	55/014	ESP-4 AIRGUNS	Acqu
55/340	085.192757	142	085.200957	183	55/014	<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">AIRGUNS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">ESP-4</div> </div>	
55/341	085.200957	184	085.205155	225	55/014		
55/342	085.205155	225	085.213355	267	55/014		

DATA
TYPE

u/w BST

48ch
MCS.

SONO 6 DEPLOYED 079/023928.

O & N Test
WSP 2331

Sono. record completed 079: 0529

Acquisition stopped END LINE 9 55/009

ESP 5

ESP
AIRGUNS

ESP-5

QUESTIONABLE.

Last airgun shot 085.0131

First change to be at 085.0227 — Dud.

First two detonations not registered — next at 085.0305

Delay reset to 5000 at 085.030719

next shot 085.0319 and every 7mins after that

Shot 26, 33, 40, ? 401

Acquisition suspended @ S.P. 801 for ESP line (12)

Acquisition started for ESP line 55/014 (ESP-4.)

TAPE NO	GMT Start time	S.P. NO	STOP TIME	S.P. NO	LINE NO	Data Type	O/N TEST
55/275	078/105727	1940	078/112222	1980 ²⁰⁹⁹	8	48ch	
55/276	078/112222	2020	078/114718	2099	8	"	
55/277	078/114718	2100	078/121156	2179	8	"	
55/278	078/121214	2180	078/123652	2259	8	"	
55/279	078/123710	2260	078/130204	2339	8	"	
55/280	078/130223	2340	078/132756	2419	8	"	
55/281	078/132815	2420	078/135322	2499	8	"	
55/282	078/135351	2500	078/141828	2579	8	"	
55/283	078/141847	2580	078/144405	2659	8	"	
55/284	078/144424	2660	078/150457	2739	8	"	
55/285	078/151016	2740	078/153549	2819	8	"	
55/286	078/153608	2820	078/160159	2899	8	"	
55/287	078/160159	2900	078/162751	2979	8	"	
55/288	078/162751	2980	078/165343	3059	8	"	
55/289	078/165343	3060	078/171935	3139	8	"	
55/290	078/171935	100	078/174527	179	9	"	
55/291	078/174527	180	078/181119	259	9	"	
55/292	078/181119	260	078/183711	339	9	"	
55/293	078/183711	340	078/190303	419	9	"	
55/294	078/190303	420	078/192944	499	9	"	
55/295	078/192944	500	078/195635	579	9	"	
55/296	078/195635	580	078/202227	659	9	"	
55/297	078/202227	660	078/204819	739	9	"	
55/298	078/204819	740	078/211357	819	9	"	
55/299	078/211357	820	078/213853	899	9	"	
55/300	078/213853	900	078/220349	979	9	"	
55/301	078/220349	980	078/222845	1059	9	"	
55/302	078/222845	1060	078/225341	1139	9	"	
55/303	078/225341	1140	078/231902	1219	9	"	
55/304	078/231902	1220	078/234454	1299	9	"	
55/305	078/234454	1300	079/001025	1379	9	"	
55/306	079/001044	1380	079/003521	1459	9	"	
55/307	079/004555	1500	079/011555	1587	9	"	
55/308	079/011737	1591	079/014214	1670	9	"	
55/309	079/014233	1671	079/020710	1750	9	"	

End
StartSyr
app

e

Data Type	O/N TEST
USCh	
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End LINE 8 55/008
 Start LINE 9 55/009

System failure , 30 shots lost .
 operator failure , 5 shots lost .

Tape No	GMT Start Time	S.P. No.	Stop time	S.P. No.	Line No	Data Type	O/N Test.
55/240	077:201203	1700	077:203755	1779	7	48 ch.	
55/241	077:203755	1780	077:210347	1859	7	"	
55/242	077:210347	1860	077:212939	1939	7	"	
55/243	077:212939	1840	077:215531	2019	7	"	
55/244	077:215531	2020	077:222124	2099	7	"	
55/245	077:222124	2100	077:224716	2179	7	"	
55/246	077:224716	2180	077:231308	2259	7	"	
55/247	077:231308	2260	077:233900	2339	7	"	
55/248	077:233900	2340	078:000430	2419	7	"	
55/249	078:000509	2420	078:03022	2499	7	"	
55/250	078:003042	2500	078:005614	2579	7	"	
55/251	078:005634	2580	078:012108	2656	7	"	✓
55/252	078:012226	100	078:014719	179	8	"	✓
55/253	078:014758	180	078:021311	259	8	"	
55/254	078:021331	260	078:023828	339	8	"	
55/255	078:023905	340	078:030324	419	8	"	
55/256	078:030401	420	078:032820	499	8	"	
55/257	078:032857	500	078:035316	579	8	"	
55/258	078:035353	580	078:041834	659	8	"	
55/259	078:041834	660	078:044330	739	8	"	
55/260	078:044330	740	078:050825	819	8	"	
55/261	078:050825	820	078:053321	899	8	"	
55/262	078:053321	900	078:055817	979	8	"	
55/263	078:055817	980	078:062313	1059	8	"	
55/264	078:062313	1060	078:064807	1139	8	"	
55/265	078:064807	1140	078:071303	1219	8	"	
55/266	078:071303	1220	078:073759	1299	8	"	
55/267	078:073759	1300	078:080256	1379	8	"	
55/268	078:080256	1380	078:082752	1459	8	"	
55/269	078:082752	1460	078:085247	1539	8	"	
55/270	078:085247	1540	078:091743	1619	8	"	
55/271	078:091743	1620	078:094239	1699	8	"	
55/272	078:094239	1700	078:100735	1779	8	"	
55/273	078:100735	1780	078:103231	1859	8	"	
55/274	078:103231	1860	078:105727	1939	8	"	

Ab	Deter Type	O/N Test.
48	Ch.	
"	"	
"	"	
"	"	
"	"	
"	"	
"	"	
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Sp 156-163

Sp 156-163

End of LINE 7

Start of Line 8

SS/007

SS/008

TAPE NUMBER	START TIME	SHOT POINT NUMBER	STOP TIME	SHOT POINT NUMBER	LINE NUMBER	DATA TYPE	O/N
55/205	077:051259	2284	077:053851	2363	6	2400 m cable.	
55/206	077:053851	2364	077:060443	2443	"	"	
55/207	077:060443	2444	077:063035	2523	-11-	-11-	
55/208	077:063035	2524	077:065627	2603	"	"	
55/209	077:065627	2604	077:072219	2683	"	"	
55/210	077:072219	2684	077:074811	2763	"	-11-	
55/211	077:074811	2764	077:081403	2843	-11-	-11-	
55/212	077:081403	2844	077:083955	2923	6	-11-	
55/213	077:083955	2924	077:090547	3003	6	"	
55/214	077:090547	3004	077:093139	3083	6	"	
55/215	077:093139	3084	077:095730	3163	6	"	
55/216	077:095730	3164	077:102322	3243	6	"	
55/217	077:102322	3244	077:104914	3323	6	"	
55/218	077:104914	3324	077:111506	3403	6	"	
55/219	077:111506	3404	077:114058	3483	6	"	
55/220	077:114058	100	077:120633	179	7	"	
55/221	077:120633	180	077:123225	259	7	"	
55/222	077:123225	260	077:125817	339	7	"	
55/223	077:125817	340	077:132409	419	7	"	
55/224	077:132409	420	077:135001	499	7	"	
55/225	077:135001	500	077:141610	579	7	"	
55/226	077:141610	580	077:144136	659	7	"	
55/227	077:144136	660	077:150656	739	7	"	
55/228	077:150656	740	077:153120	819	7	"	
55/229	077:153120	820	077:155544	899	7	"	
55/230	077:155544	900	077:162027	979	7	"	
55/231	077:162027	980	077:164555	1059	7	"	
55/232	077:164555	1060	077:171147	1139	7	"	
55/233	077:171147	1140	077:173739	1219	7	"	
55/234	077:173739	1220	077:180331	1299	7	"	
55/235	077:180331	1300	077:182924	1379	7	"	
55/236	077:182924	1380	077:185516	1459	7	"	
55/237	077:185516	1460	077:192100	1539	7	"	
55/238	077:192100	1540	077:194629	1619	7	"	
55/239	077:194629	1620	077:201203	1699	7	48 chum	

B21

En

B2

S

SP

Tape No	Start time	S.P. No	Stop time	S.P. No.	Line No	Data Type
55/171	076/141308	1780	14 33 49	1844	5	240 m multi channel seismic (MCS)
55/172	076/144500	1900	076/151632	1974	5	
55/173	076/151052	1980	076/153624	2054	5	
55/174	076/153644	2060	076/160235	2139	5	
55/175	076/160235	2140	076/162827	2219	5	
55/176	076/162827	2220	076/165420	2299	5	
55/177	076/165420	2300	076/172012	2379	5	
55/178	076/172012	100	076/175952	179	6	
55/179	076/175952	180	076/182544	259	6	
55/180	076/182544	260	076/185136	339	6	
55/181	076/185136	340	076/191728	419	6	
55/182	076/191728	420	076/194319	499	6	
55/183	076/194319	500	076/200912	579	6	
55/184	076/201800	600	076/204352	679	6	
55/185	076/204352	680	076/210944	759	6	
55/186	076/210944	760	076/213536	839	6	
55/187	076/213536	840	076/220128	919	6	
55/188	076/220128	920	076/222720	999	6	
55/189	076/222720	1000	076/225311	1079	6	
55/190	076/225311	1080	076/231903	1159	6	
55/191	076/231903	1160	076/234455	1239	6	
55/192	076/234455	1240	077/001028	1314	6	
55/193	077/001048	1320	077/003620	1399	6	
55/194	077/003690	1400	077/010212	1479	6	
55/195	077/010232	1480	077/012804	1559	6	
55/196	077/012824	1560	077/015356	1639	6	
55/197	077/015416	1640	077/022104	1723	6	
55/198	077/022104	1724	077/024539	1803	6	
55/199	077/024557	1804	077/030939	1883	6	
55/200	077/030957	1884	077/033339	1963	6	
55/201	077/033415	1964	077/035758	2043	6	
55/202	077/035758	2044	077/042158	2123	-11-	
55/203	077/042158	2124	077/044707	2203	-11-	
55/204	077/044707	2204	077/051259	2283	-11-	

Tape
o/N

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ma

sp

END

ST

Syst

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STB

1100

sp

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SSP

SP

2000000

Tape No.	Start time	S.P. No	Stop time	S.P. No	Line No	Data Type	O/N
55/137	076/234716	2821	076/001299	2900	55/064	2400 MULTICHAN	
55/138	076/001309	2901	076/003871	2980	55/079	"	
55/139	076/003401	2981	076/010433	3060	"	"	
55/140	076/010453	3061	076/012448	3140	"	"	
55/141	076/013007	3141	076/015444	3220	"	"	
55/142	076/015503	3221	076/021958	3300	"	"	
55/143	076/021959	3301	076/024436	3380	"	"	
55/144	076/024455	3381	076/030922	3460	"	"	
55/145	076/030951	3461	076/033428	3540	"	"	
55/146	076/033447	3541	076/035942	3620	"	"	
55/147	076/035942	3621	076/042437	3700	"	"	Oscill/Noise Q SP 3647
55/148	076/042437	3701	076/044933	3780	"	"	
55/149	076/044933	3781	076/051430	3860	"	"	
55/150	076/051430	180	076/053925	179	55/005	"	
55/151	076/053925	180	076/060421	259	"	"	
55/152	076/060421	260	076/062918	339	"	"	
55/153	076/062918	340	076/065413	419	"	"	
55/154	076/065413	420	076/071914	499	"	"	
55/155	076/071914	500	076/074506	579	"	"	
55/156	076/074506	580	076/081058	659	"	"	
55/157	076/081058	660	076/083650	739	"	"	
55/158	076/083650	740	076/090242	819	"	"	
55/159	076/090242	820	076/092834	899	"	"	
55/160	076/092834	900	076/095426	979	"	"	
55/161	076/095426	980	076/102818	1059	"	"	
55/162	076/102818	1060	076/104611	1139	"	"	
55/163	076/104611	1140	076/111203	1219	"	"	
55/164	076/111203	1220	076/113755	1299	"	"	
55/165	076/113755	1300	076/120328	1379	"	"	Oscillator homotests
55/166	076/120328	1380	076/122920	1459	"	"	sheet
55/167	076/122940	1460	076/125512	1539	"	"	
55/168	076/125532	1540	076/132104	1619	"	"	
55/169	076/132124	1620	076/139656	1699	"	"	
55/170	076/139716	1700	076/141248	1779	"	"	mis pos

END

STA

Tape No	Start time	S.P. No	Stop time	S.P. No	Line No	Data Type	O/N
55/103	075/0913	100	075/0938	179	55/004	2400 m MUCH CHAD	STAP
55/104	075/0938	180	075/100404	259	55/004		
55/105	075/100404	260	075/102931	339	55/004		
55/106	075/102931	340	075/105459	419	55/004		
55/107	075/105459	420	075/112027	499	55/004		
55/108	075/112027	500	075/114555	579	55/004		
55/109	075/114555	580	075/121104	659	55/004		
55/110	075/121123	660	075/123632	739	"		
55/111	075/123651	740	075/130200	819	"		
55/112	075/130219	820	075/132728	899	"		STBil
55/113	075/132747	900	075/135314	979	"		
55/114	075/135314	980	075/141824	1059	"		
55/115	075/141843	1060	075/144352	1139	"		
55/116	075/144411	1140	075/150920	1219	"		✓ SP
55/117	075/150939	1220	075/153510	1299	"		
55/118	075/153529	1300	075/160120	1379	"		
55/119	075/160120	1380	075/162712	1459	-11-		
55/120	075/162712	1460	075/165324	1540	-11-		
55/121	075/165324	1541	075/171916	1620	-11-		
55/122	075/171916	1621	075/174508	1700	-11-		
55/123	075/174508	1701	075/181100	1780	-11-		
55/124	075/181100	1781	075/183652	1860	-11-		
55/125	075/183652	1861	075/190244	1940	-11-		O/N leads 0 / 100
55/126	075/190244	1941	075/192836	2020	-11-		
55/127	075/192836	2021	075/195428	2100	-11-		
55/128	075/195428	2101	075/202020	2180	-11-		
55/129	075/202020	2181	075/204612	2260	-11-		
55/130	075/204612	2261	075/211204	2340	-11-		
55/131	075/211204	2341	075/213756	2420	-11-		
55/132	075/213756	2421	075/220347	2500	-11-		
55/133	075/220347	2501	075/222939	2580	55/004		
55/134	075/222939	2581	075/225531	2660	"		
55/135	075/225531	2661	075/232123	2740			
55/136	075/232123	2741	075/234716	2820	55/004		6500

Data
Type

O/N

2400 m
MUED CHAD

START OF LINE 4

Stbd gun on line delay at 2 msec.

✓

SP 1147-1155

O/N tests 0 land @ S.P. 1914 & 1915 Noise test and 1917 → 1919 & Dada recording
at S.P. 1920

oscillator test shots 2818, - 2819, noise test 2820 - 2821

Tape No	Start time	S.P. No	Stop time	S.P. No	Line No	Data Type	O/N
55/069	074.191614	4584	System Crash.		55/002	Two multich	
55/070	074.192953	4600	074.195338	4679	55/002		
55/071	074.195338	4780	074:201915	4759	55/002		
55/072	074:201915	4760	074:204051	4839	55/002		
55/073	074:204051	4840	074:210427	4919	55/002		
55/074	074:210427	4920	074:212803	4999	55/002		
55/075	074:212803	5000	074:213150	5013	55/002		
55/076	074:2144	100	074:220953	179	55/003	WPS 51	running
55/077	074:220953	180	074:223545	259	55/003		
55/078	074:223545	260	074:230137	339	55/003		
55/079	074:230137	340	074:232729	419	55/003		
55/080	074:232729	420	074:235321	499	55/003		
55/081	074:235321	500	075:001853	579	55/003		
55/082	075:001912	580	075:004444	654	55/003		
55/083	075:004523	660	075:010958	739	55/003		
55/084	075:011017	740	075:013454	819	55/003		
55/085	075:013531	820	075:015950	899	55/003		
55/086	075:020027	900	075:022946	979	55/003		
55/087	075:022523	980	075:024942	1059	55/003		
55/088	075:025218	1065	075:031655	1144	55/003		
55/089	075:031714	1145	075:034132	1224	55/003		
55/090	075:034208	1226	075:040617	1304	55/003		
55/091	075:040617	1305	075:043040	1384	55/003		
55/092	075:043040	1385	075:045505	1464	"		
55/093	075:045505	1465	075:051948	1544	"		
55/094	075:051948	1545	075:054540	1624	"		
55/095	075:054540	1625	075:061132	1704	"		
55/096	075:061132	1705	075:063724	1784	"		
55/097	075:063724	1785	075:070316	1864	"		
55/098	075:070316	1865	075:072908	1944	"		
55/099	075:072908	1945	075:075500	2024	"		
55/100	075:075500	2025	075:082052	2104			
55/101	075:082052	2105	075:084644	2184			
55/102	075:084644	2185	075:091236	2264	55/003		

END
500
one
STAR
both

OPEN
System
may

O/N Test

and

END

Data
Type

O/N

Data
SwitchData
Switch

Survey

END OF LINE 55/002
 50000
 one gun only firing 2400 cable ODP SITE SURVEY
 START of LINE 55/003

Both guns firing

OPERATION
 System failure no writ ~~ing~~ on T/P tape. #088
 may not have header due to ~~no write ing.~~
 * WILL HAVE COMPLETE HEADER, SYSTEM
 CAN HANDLE THIS ERROR. CRAIG.

O/N Text

ad S.P. 1681

END OF LINE 55/003.

Tape No.	Start time	S.P. No.	Stop time	S.P. No.	Date Type	Line No.	O/N.
55/035	74.051026	1865	74.053554	1944	2400 Mult. chn	55/002	rank test
55/036	74.053554	1945	74.060123	2024	"	"	Oscill + Noise Test
55/037	74.060123	2025	74.062651	2104	"	"	2 SP# 2061 -
55/038	74.062651	2105	74.065204	2184	"	"	
55/039	74.065201	2185	74.071747	2264	"	"	
55/040	74.071747	2265	74.074315	2344	"	"	
55/041	74.074315	2345	74.0809	2424	"	"	
55/042	74.0809	2425	74.0834	2504	"	"	
55/043	74.0834	2505	74.085939	2584	"	"	
55/044	74.085939	2585	74.092506	2664	"	"	
55/045	74.092506	2665	74.095035	2744	"	"	
55/046	74.095035	2745	74.101603	2824	"	"	
55/047	74.101603	2825	74.104130	2904	"	"	
55/048	74.104130	2905	74.110659	2984	"	"	
55/049	74.110659	2985	74.113227	3064	"	"	
55/050	74.113227	3065	74.115754	3144	"	"	
55/051	74.115754	3145	74.122305	3224	"	"	
55/052	74.122324	3225	74.124833	3304	"	"	
55/053	74.124852	3305	74.131401	3384	"	"	Oscill 343337 -
55/054	74.131420	3385	74.133929	3464	"	"	NOIS 3345
55/055	74.133948	3465	74.140957	3544	"	"	
55/056	74.140958	3545	74.143025	3624	"	"	
55/057	74.143044	3625	74.145553	3704	"	"	
55/058	74.145612	3705	74.151959	3784	"	"	
55/059	74.152012	3785	74.154330	3864	"	"	
55/060	74.154348	3865	74.160724	3944	"	"	
55/061	74.160724	3945	74.163101	4024	"	"	
55/062	74.163101	4025	74.165437	4104	"	"	
55/063	74.165437	4105	74.171813	4184	"	"	
55/064	74.171813	4185	74.174149	4264	"	"	
55/065	74.174149	4265	74.180525	4344	"	"	
55/066	74.180525	4345	74.182902	4424	"	"	
55/067	74.182902	4425	74.185238	4504	"	"	
55/068	74.185238	4505	74.191614	4584	"	55/002	

O/N.

Line
No.

551002

aavvttst

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Osc. II + Noise Test
@ SP# 2061 -

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did not use DA after the O & N test.

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OSC. II 343337 -
NOIS 3345

Tape No.	Start time GMT	S.P. No	Stop time GMT	S.P. No	Line No	Data Type	O/N	Sound N
55/001	72.0327	100	72.0352	179		No IMP	Noise	
55/002	72.0352	180	72.0418	259		"	Noise	
55/003	72.0418	260	72.0444	339		"	Noise/Oscill	
55/004	72.0444	340	72.0500	395		"	"	
55/005	72.0839	400	72.0904	479		"	PHASE TEST LEAKAGE	
55/006	72.0904	480	72.0916	514		"	"	
55/007	72.1006	600	72.1032	679		CABLE NOISE	CABLE NOISE TEST.	
55/008	72.1032	680	72.1057	759		"	"	
55/009	72.1057	760	72.1123	839		"	"	
55/010	72.2053	900	72.2119	979		NO INPUT	DECK LEADER NOISE TEST.	
55/011	72.2119	980	72.2144	1059		CABLE	CABLE ON REEL	
55/012	72.2144	1060	72.2208	1131		"	"	
55/013	73.1957	100	73.2023	179	55/002	2400m MULTI- CHAN.		
55/014	73.2023	180	73.2049	259	55/002			
55/015	73.2049	260	73.2114	339	55/002			
55/016	73.2114	340	73.2139	419	55/002			
55/017	73.2139	420	73.2204	499	55/002			
55/018	73.2204	500	73.2229	579	55/002			
55/019	73.2229	580	73.2254	659	55/002			
55/020	73.2254	660	73.2318	739	55/002			
55/021	73.2318	740	73.2342	819	55/002			
55/022	73.2342	820	74.0007	899	55/002			
55/023	74.0007	900	74.0032	979	55/002			
55/024	74.0032	980	74.0056	1059	55/002			
55/025	74.005710	1060	74.0122	1139	55/002			
55/026	74.012212	1140	74.014649	1219	55/002			
55/027	74.014708	1220	74.021203	1299	55/002			
55/028	74.021203	1300	74.023642	1379	55/002			
55/029	74.023700	1380	74.030137	1459	55/002			
55/030	74.030156	1460	74.032641	1539	55/002			
55/031	74.032700	1540	74.035345	1623	55/002			
55/032	74.035404	1625	74.041930	1704	55/002			
55/033	74.041936	1705	74.044458	1784	55/002			
55/034	74.044458	1785	74.051026	1864	55/002			

O/N	Sonde No	Sonde Start GMT.	Sonde Stop GMT	Comment
Noise				Testing with No input
Noise				Turn on "Oscill Test.
Noise/Oscill.				2 S.P. # 293
" "				
PHASE TEST				
LEAKAGE				
" "				
CABLE NOISE				5.6 KTS AVERAGE SPEED
TEST.				
" "				
DECK LEADER				
NOISE TEST.				
CABLE ON				
REEL				
" "				
				START OF Line 55/002.
				5.2 kts ships av. speed
				firing rate 18.7 sec.
				Note Delay Problems in Log

TESTS.

Tape Sequence No.	Start time	Stop time	Line No.		Sequence No.	
55/001	72.0327	72.0500	2	1	55/001	
55/002	72.0839	72.0916	2		55/002	
55/026	74.017111	74.019324	2	OSL + NOIS	55/003	
55/037	74.061244	74.061908	2	OSL + NOIS	55/004	
55/053	74.125914	74.130207	2	OSL + NOIS	55/005	
55/082	75.003025	75.003307	3	OSL + NOIS	55/006	
55/116	75.144640	75.144929	4	OSL + NOIS	55/007	
55/136	75.234618		4	OSL + NOIS	55/008	
55/165	76.114813		5	OSL + NOIS	55/009	
55/174	76.154544	76.154804	5	OSL + NOIS	55/010	
55/189	76.2238	76.2239	6	OSL	55/011	
55/200	77.03021	77.033248	6	OSL + NOIS	55/012	
55/224	77.133821	77.134038	7	OSL + NOIS	55/013	
55/252	78.014008	78.014245	8	OSL + NOIS	55/014	
55/285	78.152127	78.152347	8	OSL + NOIS	55/015	
					55/016	
					55/017	
					55/018	
					55/019	
					55/020	
					55/021	
					55/022	
					55/023	
					55/024	
					55/025	

Sequence No	Start time	Stop time	Line No.	
55/001	073.1957	074.2132	55/002	
55/002	074.2132	075.0912	55/003	
55/003	075.091545	076.044933	55/004	
55/004	076.045217	076.172644	55/005	
55/005	076.172644	077.114058	55/006	
55/006	077.1141	078.0126	55/007	
55/007	078.012226	078.171935	55/008	
55/008	078.171935	079.070006	55/009	
55/009	084.192534	085.070742	55/012	ESP 5
55/010	085.184600	086.062242	55/014	ESP 4
55/011	086.115500	086.224800	55/016	ESP 3
55/012	088.054024	088.163142	55/018	ESP 2
55/013	088.063352	088.064048	55/017	NISE TESTS
55/014	088.054024	088.163142	55/020	ESP E1 + G/T + N/T
55/015	090.030538	092.023358	55/021	WACDP
55/016	092.024639	093.013203	55/022	WACDP
55/017	093.103800	093.152800	55/024	ESP 9
55/018	093.175512	093.235543	55/026	ESP 9A.
55/019	094.054108	094.150900	55/028	ESP 8
55/020	094.230900	095.101342	55/030	ESP 7
55/021	095.163400	096.033800	55/032	ESP 6
55/022	096.173500	097.053500	55/034	CR 3 + G/T + N/T
55/023	097.103500	097.214945	55/036	CR 2A.
55/024	098.022700	098.135000	55/038	CR 2
55/025	098.195000	099.043433	55/040	CR 1

Sequence No	Start time	Stop time	Line No.		Sequence No
55/001	073.1957	074.2132	55/002		
55/002	074.2132	075.0912	55/003		
55/003	075.091545	076.044933	55/004		
55/004	076.0515	076.1722	55/005		
55/005	076.172644	077.114058	55/006		
55/006	077.1141	078.0120	55/007		
55/007	078.012226	078.171935	55/008		
55/008	078.171935	079.070006	55/009		
55/009	084.192534	085.070742	55/012	ESP5	
55/010	085.184600	085.062242	55/014	ESP4	
55/011	086.115500	086.224800	55/016	ESP3	
55/012	088.054024	088.163142	55/018	ESP2	
55/013	088.063352	088.044088	55/017	NOISE TEST	
55/014	089.184514	089.062200	55/020	ESPEI + O/T + N/T	
55/015	090.030538	092.023358	55/021	WACDP	
55/016	092.024639	093.013203	55/022	WACDP	
55/017	093.103800	093.152800	55/024	ESP9	
55/018	093.175512	093.235843	55/026	ESP9A	
55/019	094.054108	094.150900	55/028	ESP8	
55/020	094.230900	095.101342	55/030	ESP7	
55/021	095.163400	096.033800	55/032	ESP6	
55/022	096.173500	097.053500	55/034	CR3 + O/T + N/T	
55/023	097.103500	097.214945	55/036	CR2A.	
55/024	098.022700	098.135000	55/038	CR2	
55/025	098.195000	099.043354	55/040	CR1	

Sequence
No

Start time

Stop time

Line No.

1/11/5

1/11/5

~~1/11/5~~?

SPECIAL MONITOR

Sequence No	Start time	Stop time	Line No.		Sequence No
55/001	073:1957	074:2132	55/002		
55/002	074:2132	075:0912	55/003		
55/003	075:0912	076:0449	55/004		
55/004	076:0515	076:1722	55/005		
55/005	076:172644	077:114058	55/006		
55/006	077:1141	078:0120	55/007		
55/007	078:012226	078:171935	55/008		
55/008	078:171935	079:070006	55/009		
55/009	084:192534	085:070742	55/012	ESP 5	
55/010	085:184600	086:062242	55/014	ESP 4	
55/011	086:115500	086:224800	55/016	ESP 3	
55/012 (PT2)	088:054000	088:163142	55/018	ESP 2	
55/013	088:023352	088:004048	55/017	NOISE TEST	
55/014	089:0500	089:1200	55/020	ESP E1 + N1 + O1	
55/015	090:030538	092:023358	55/021	WACDP	
55/016	092:024639	093:013203	55/022	WACDP	
55/017	093:103800	093:152800	55/024	ESP 07	
55/018	093:175512	093:235843	55/025	ESP 9A	
55/019	094:054108	094:150900	55/028	ESP 8	
55/020	094:230900	095:101342	55/030	ESP 7	
55/021	095:1163400	096:033800	55/032	ESP 6	
55/022	096:173500	097:05	55/034	CR 3 + N/T + O1	
55/023	097:103500	097:214945	55/036	CR 2A	
55/024	098:022700	098:135000	55/038	CR 2	
55/025	098:195000	099:043354	55/040	CR 1	

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FAST MONITOR

Sequence No	Start time	Stop time	Line No		Sequence No	Start
55/001	073:1957	074:2132	55/002			
55/002	074:2132	075:0912	55/003			
55/003	075:091545	076:044935	55/004			
55/004	076:0515	076:1722	55/005			
55/005	076:172644	077:114058	55/006			
55/006	077:1141	078:0120	55/007			
55/007	078:012226	078:171935	55/008			
55/008	078:171935	079:070006	55/009			
55/009	084:192534	085:070742	55/012	ESP 5		
55/010	085:184600	085:062242	55/014	ESP 4		
55/011	086:115500	086:224800	55/016	ESP 3		
55/012 (PT1)	087:181200	087:194842	55/018	ESP E2		
55/012 (PT2)	088:054024	088:163142	55/018	etc		
55/013	088:063352	088:0644048	55/017	NOISE TESTS		
55/014	089:0050	089:1200	55/020	ESP E1 + NT + OT		
55/015	090:030538	092:023358	55/021	WACDP		
55/016	092:024639	093:013203	55/022	WACDP		
55/017	093:103800	093:152800	55/024	ESP 09		
55/018	093:175512	093:235843	55/026	ESP 9A		
55/019	094:054108	094:150900	55/028	ESP 8		
55/020	094:230900	095:101342	55/030	ESP 7		
55/021	095:163400	096:033800	55/032	ESP 6		
55/022	096:173500	097:053500	55/034	CR3 + NT + OT		
55/023	097:103500	097:214945	55/036	CR 2A.		
55/024	098:022700	098:135000	55/038	CR 2		
55/025	098:195000	099:043354	55/040	CR 1		

FAST MONITOR.

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SLOW MONITOR

Sequence No	Start time	Stop time	Line No	Sequence No	Stop
55/001	073:1957	074:2132	55/002		
55/002	074:2132	075:0912	55/003		
55/003	075:091545	076:044933	55/004		
55/004	076:0515	076:1722	55/005		
55/005	076:172644	077:114058	55/006		
55/006	077:1141	078:0120	55/007		
55/007	078:012226	078:171935	55/008		
55/008	078:171935	079:070006	55/009		
55/009	084:192534	085:070742	55/012	ESP 5	
55/010	085:184600	085:062242	55/014	ESP 4	
55/011	086:115500	086:224800	55/016	ESP 3	
55/012	088:054024	088:163142	55/018	ESP E2	
55/013	088:023352	088:004048	55/017	NOISE TEST	
55/014	089:0500	089:1200	55/020	ESP E3 left + N/T	
55/015	090:030538	092:023358	55/021	WACDP	
55/016	092:024639	093:013202	55/022	WACDP	
55/017	093:103800	093:152800	55/024	ESP 09	
55/018	093:175512	093:235843	55/026	ESP 9A	
55/019	094:054108	094:150900	55/028	ESP 8	
55/020	094:230900	095:101342	55/030	ESP 7	
55/021	095:163400	096:033800	55/032	ESP 6	
55/022	096:173500	097:053500	55/034	CR3+ N/T + O/T	
55/023	097:103500	097:214945	55/036	CR 2A.	
55/024	098:022700	098:135000	55/038	CR 2	
55/025	098:195000	099:043354	55/040	CR 1	

CYCLING MONITOR

Sequence No	Start time	Stop time	Line No	Sequence No	S
55/001	073:1957	074:2132	55/002		
55/002	074:2132	075:0912	55/003		
55/003	075:091545	076:044933	55/004		
55/004	076:0515	076:1722	55/005		
55/005	076:172644	077:114058	55/006		
55/006	077:1141	078:0120	55/007		
55/007	078:012226	078:171935	55/008		
55/008	078:171935	079:070006	55/009		
55/009	084:192534	085:070742	55/012	ESP 5	
55/010	085:184600	085:062242	55/014	ESP 4	
55/011	086:115500	086:224800	55/016	ESP 3	
55/012	086:115500 086:054024	086:224800 086:183142	55/018	ESP E2	
55/013	088:023352	088:044048	55/017	NOISE TESTS	
55/014	089:0500	089:1200	55/020	ESP E1	
55/015	090:030538	092:023358	55/021	WACDP	
55/016	092:024639	093:013202	55/022	WACDP	
55/017	093:103800	093:152800	55/024	ESP 9	
55/018	093:175512	093:235843	55/026	ESP 9A	
55/019	094:054108	094:150900	55/028	ESP 8	
55/020	094:230900	095:101342	55/030	ESP 7	
55/021	095:1163400	096:033800	55/032	ESP 6	
55/022	096:173500	097:053500	55/034	CR 3 + NT + OT	
55/023	097:103500	097:214945	55/036	CR 2A.	
55/024	098:022700	098:135000	55/038	CR 2	
55/025	098:195000	099:043354	55/040	CR 1	

CYCLING MONITOR.

[illegible]

Cable Configuration

Line No.	Time	Cable length	No. Chan.	leader length	
55/002	73:1921	2400	48	115m	
55/002	73:1950	2400	48	110m	
55/002	74:0324	"	"	97m	
55/006	74:2238	2400	48	102m	
55/007	77:1600 START OF ESP	"	"	94m	
55/012		2400	48	103m	
55/014	085:165600	2400	48	103m	
55/016	086:144000	2400	48	99m	
	087:12000	2400	48	110m	
	088:121536	2400	48	103m	
55/018 T024	088:09002	2400	48	95m	
55/	093:1038	2400	48	110m	
	093:1049	2400	48	117m	
55/028	094:1225	2400	48	110m	
55/030	095:0148	2400	48	106m	
55/032	095:1627	2400	48	98m	
55/034 367	097:0108	2400	48	93m	
55/040	098:1550	2400	48	~160m	+4 wraps
55/040	099:001920	2400	48	97m	-3 wraps
55/040	099:020403	2400	48	93m	-1 wrap
55/040	099:032230	2400	48	101m	+2 wraps