Schlumberger

Company: **Essential Petroleum Resources Limited**

Well: **Killarney EPRL 1**

Field: **PEP 152**

Rig: **Hunt Rig #2** Country: **Australia**

CSI Seismic

Final Print

Rig: Hunt Rig #2 | Field: PEP 152 | Location: Datum GDA94 MGA94 Zone 54 | Well: Killarney EPRL 1 | Company: Essential Petroleum Resources L

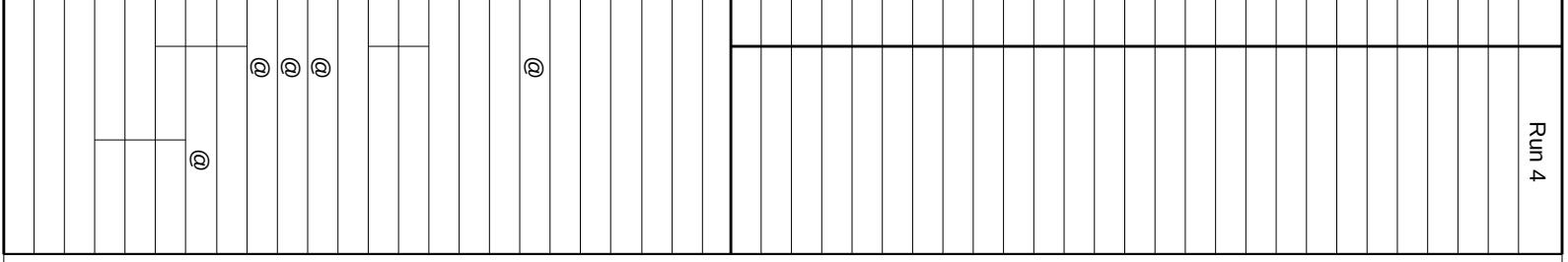
LOCATION

Datum GDA94 MGA94 Zone 54	Elev.: K.B.	5.49 m
Easting 609803.3	G.L.	1.6 m
Northing 5753917.2	D.F.	5.49 m
Permanent Datum: AHD	Elev.:	0 m
Log Measured From: ROTARY TABLE	5.5 m	above Perm. Datum
Drilling Measured From: ROTARY TABLE		

State:	Max. Well Deviation	Longitude	Latitude
Victoria	2 deg	142* 15' 24.22" E	38* 21' 22.24" S

	Run 1	Run 2	Run 3
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth	@	@	
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
MUD Density / Viscosity			
MUD Fluid Loss / PH			
MUD Source Of Sample			
RM @ Measured Temperature	@	@	
RMF @ Measured Temperature	@	@	
RMC @ Measured Temperature	@	@	
Source RMF / RMC			
RM @ MRT / RMF @ MRT	@ / @	@ / @	@ / @
Maximum Recorded Temperatures			
Circulation Stopped / Time			
Logger On Bottom / Time			
Unit Number / Location			
Recorded By			
Witnessed By			

Logging Date		18−Jun−2004			
Run Number		1			
Depth Driller		1640 m			
Schlumberger Depth		1634.8 m			
Bottom Log Interval		1632.4 m			
Top Log Interval		255.5 m			
Casing Driller Size @ Depth		9.625 in @ 255.8 m		@	
Casing Schlumberger		255.5 m			
Bit Size		8.500 in			
Type Fluid In Hole		4% KCl−PHPA			
MUD Density	Viscosity	1.128 g/cm3	43 s		
MUD Fluid Loss	PH	6 cm3	8.5		
MUD Source Of Sample		PIT			
RM @ Measured Temperature		0.231 ohm.m @ 13 degC		@	
RMF @ Measured Temperature		0.201 ohm.m @ 12 degC		@	
RMC @ Measured Temperature		0.243 ohm.m @ 13 degC		@	
Source RMF	RMC	PRESS	PRESS		
RM @ MRT	RMF @ MRT	0.093 @ 63	0.080 @ 63	@	@
Maximum Recorded Temperatures		63 degC	61		
Circulation Stopped	Time	18−Jun−2004	0:00		
Logger On Bottom	Time	18−Jun−2004	16:30		
Unit Number	Location	3170	QEA		
Recorded By		G. Jonsson			
Witnessed By		G. Wakelin−King			



DEPTH SUMMARY LISTING

Date Created: 22−JUN−2004 12:26:46

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW−B	Type:	CMTD−B/A	Type:	7−42V
Serial Number:	−999	Serial Number:	2268	Serial Number:	78197
Calibration Date:	dd−Mmm−yyyy	Calibration Date:	13−Feb−2004	Length:	3699.97 M
Calibrator Serial Number:	−999	Calibrator Serial Number:	1050	Conveyance Method:	Wireline
Calibration Cable Type:	7−42V	Calibration Gain:	0.89	Rig Type:	LAND
Wheel Correction 1:	−2	Calibration Offset:	56.00		
Wheel Correction 2:	−2				

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	0.00 M
Rig Up Length At Bottom:	0.00 M
Rig Up Length Correction:	0.00 M
Stretch Correction:	0.80 M
Tool Zero Check At Surface:	0.35 M

Depth Control Remarks

1. Depth correlated to downlog.
2. Cable stretch and rig up changes accounted for.
3. IDW wheel corrections set to −2
4.
5.
6.

OTHER SERVICES1	OTHER SERVICES2
OS1: HALS−BHC−PEX−HNGS	OS1:
OS2: MDT	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
This is the first run in hole. Full SLB depth control used.	
Some noise on log possibly due to wind moving pipe in derrick	
Source positioned 20m 270 degrees from well head	
Source and geophone 4.9 meters below drill floor.	
Depth correlated to casing shoe.	
CSAT−B (GAC) detector used.	
SPARK shooting system used. 4.6 ms radio delay used.	
1 shot per level used to reduce exposure to explosives where possible	

Assumed surface velocity of 1524 m/s due to lack of signal at SRD	
Additional Mud information:	
Chloride: 21500 mg/L, Calcium: 320 mg/L, Sulphite: 80mg/L, KCl: 4.1%	
Barite present in mud	
Elevation Rotary Table= 3.89m above Ground Level (GL= 1.6m AHD)	

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:		10C0−306	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT

WSAM
WITM (CTS)−A

DOWNHOLE EQUIPMENT

LEH−QT 7.40
LEH−QT

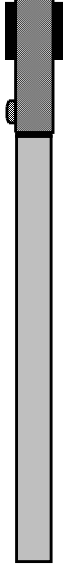
TCC−BF 6.51
ECH−KC
TCC−BF

TelStatus 5.59

CSAT−B1 5.59
CSSH
CSSC−A
CSAS−A
Shaker
CSAH−A
CSAC−A
STAND−LO
STAND−HI
CSAD−B

CSAT−1 Ar 4.03

CSAT−1 Su 3.04



BNS−CCS
BNS−CCS

DF
Tension HV 0.00
TOOL ZERO

0.14

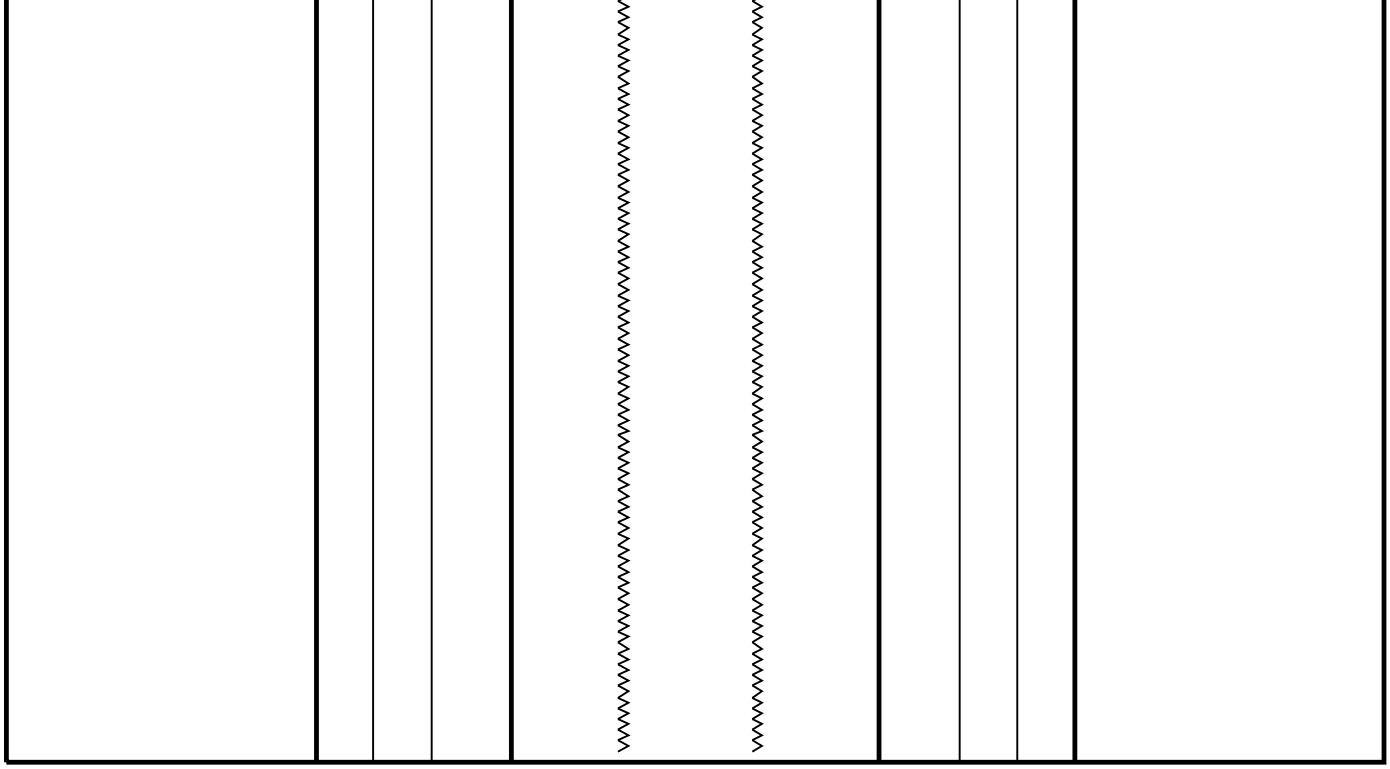
MAXIMUM STRING DIAMETER 4.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Client: Essential
Well: Kilarney−1
Field: Wildcat
State: Victoria
Country: Australia

Drawing Date: 6/18/2004
API #:

Rig Name: Hunt Rig 2
Reference Datum: KB
Elevation: 6.9 m

Production String	(in) OD	(in) ID	(m) MD	Well Schematic	(m) MD	(in) OD	(in) ID	Casing String
					0.0	17.500		Borehole Segment
					0.0	13.375		Casing String
					45.6	13.375		Casing Shoe
					45.9	12.250		Borehole Segment
					0.0	9.625		Casing String
					255.8	9.625		Casing Shoe
					258.0	8.500		Borehole Segment



Schlumberger

Main Log

MAXIS Field Log

Output DLIS Files

DEFAULT	SEIS_CSI_019PNP	FN:81	PRODUCER	28−Jun−2004 17:43	0.0 M	0.0 M

OP System Version: 10C0−306

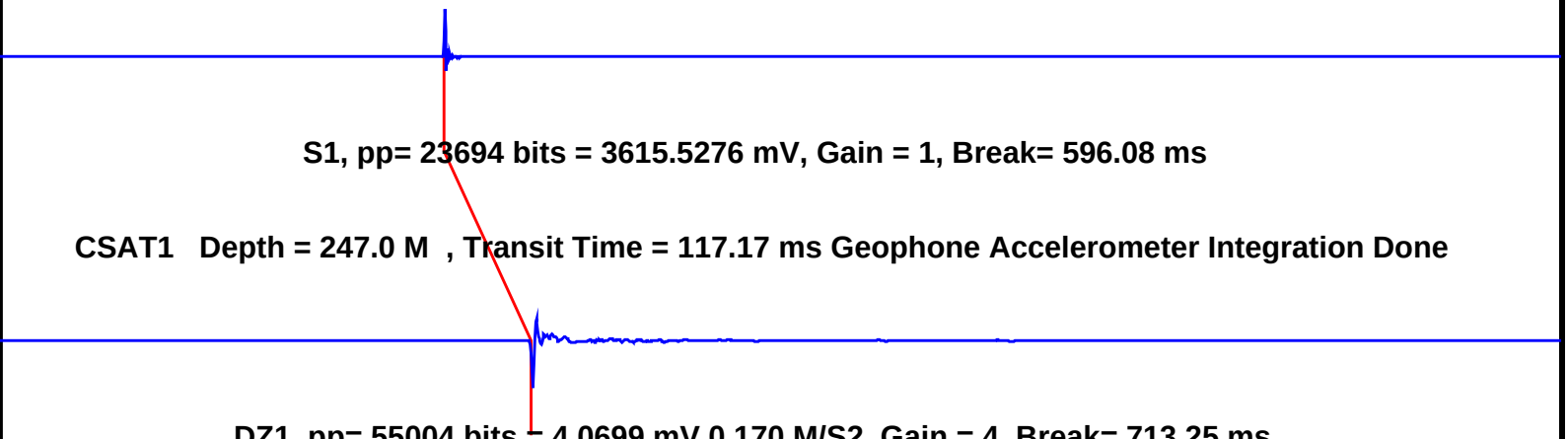
MCM

CSAT−B1	10C0−306	TCC−BF	10C0−306

STACK # 18 19−Jun−2004−01:12 Shots: 63

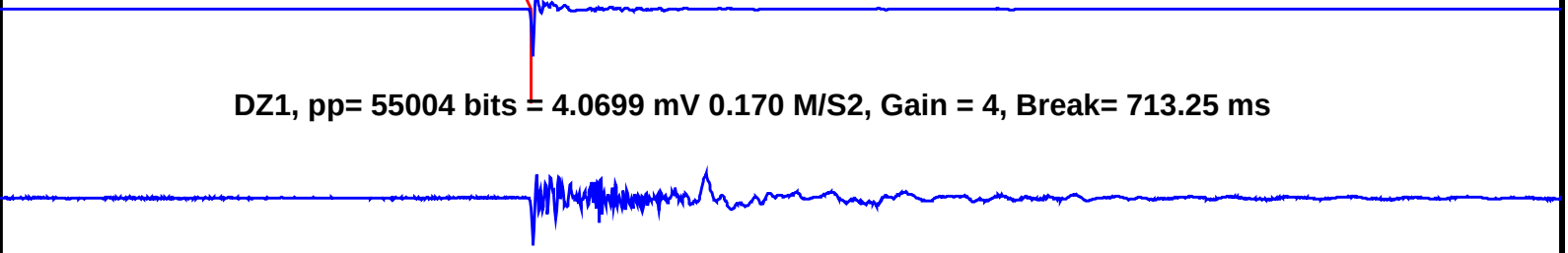
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 0 ms



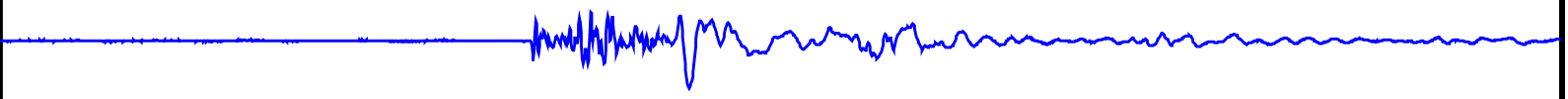
S1, pp= 23694 bits = 3615.5276 mV, Gain = 1, Break= 596.08 ms

CSAT1 Depth = 247.0 M , Transit Time = 117.17 ms Geophone Accelerometer Integration Done

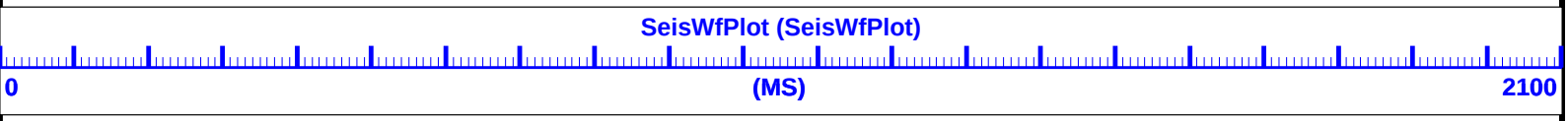


DZ1, pp= 55004 bits = 4.0699 mV 0.170 M/S2, Gain = 4, Break= 713.25 ms

DY1, pp= 40520 bits = 0.7495 mV 0.031 M/S2, Gain = 16



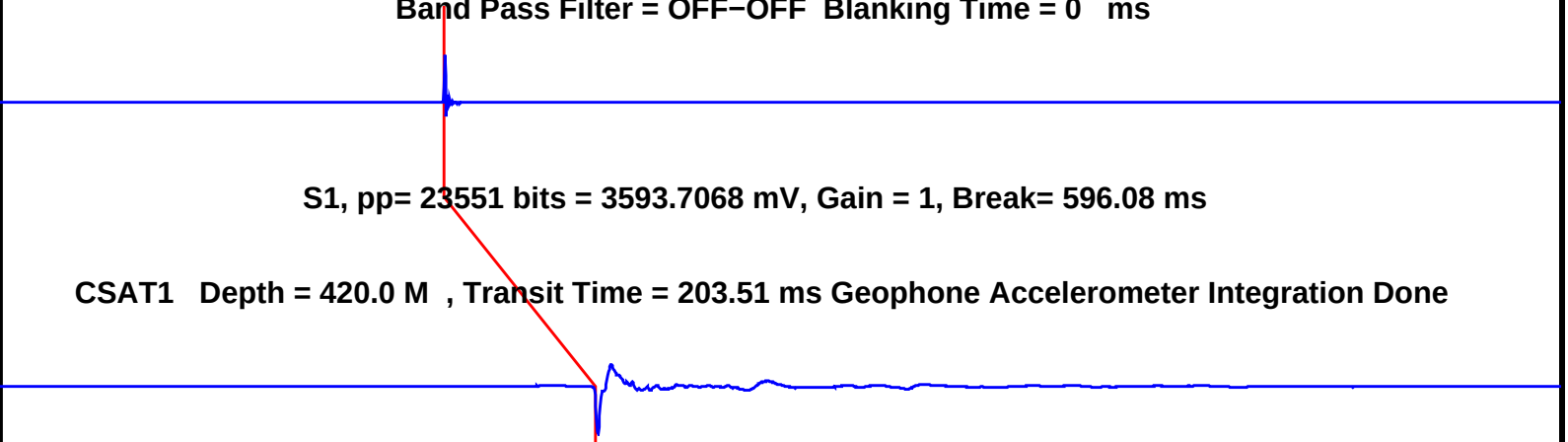
DX1, pp= 31159 bits = 0.2882 mV 0.012 M/S2, Gain = 32



STACK # 17 19−Jun−2004−00:52 Shots: 59

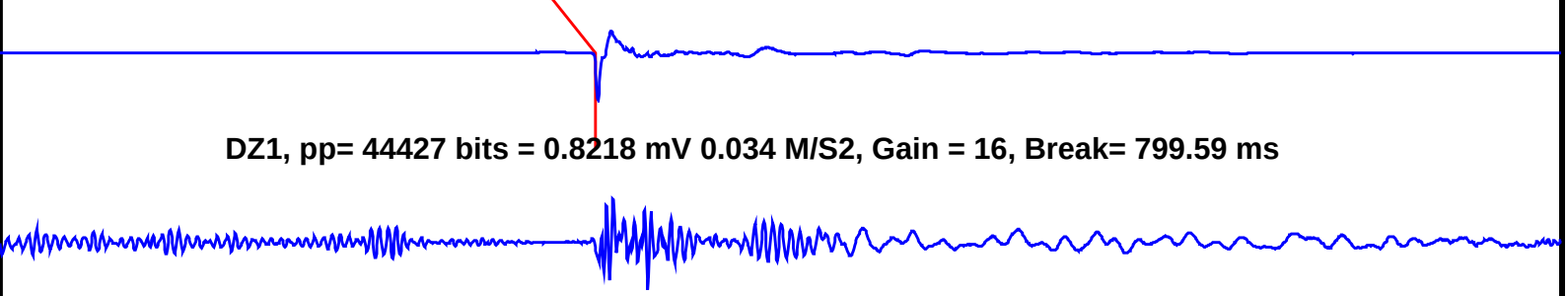
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 0 ms



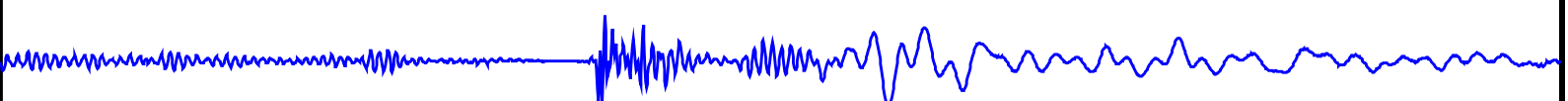
S1, pp= 23551 bits = 3593.7068 mV, Gain = 1, Break= 596.08 ms

CSAT1 Depth = 420.0 M , Transit Time = 203.51 ms Geophone Accelerometer Integration Done



DZ1, pp= 44427 bits = 0.8218 mV 0.034 M/S2, Gain = 16, Break= 799.59 ms

DY1, pp= 14364 bits = 0.2657 mV 0.011 M/S2, Gain = 16



DX1, pp= 10194 bits = 0.1886 mV 0.007883 M/S2, Gain = 16

SeisWfPlot (SeisWfPlot)

0 (MS) 2100

STACK # 16 19−Jun−2004−00:42 Shots: 55

Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 100 ms

S1, pp= 23724 bits = 3620.1055 mV, Gain = 1, Break= 596.08 ms

CSAT1 Depth = 537.0 M , Transit Time = 256.22 ms Geophone Accelerometer Integration Done

DZ1, pp= 14845 bits = 0.2746 mV 0.011 M/S2, Gain = 16, Break= 852.30 ms

DY1, pp= 1117 bits = 0.0207 mV 0.000864 M/S2, Gain = 16

DX1, pp= 1804 bits = 0.0334 mV 0.001395 M/S2, Gain = 16

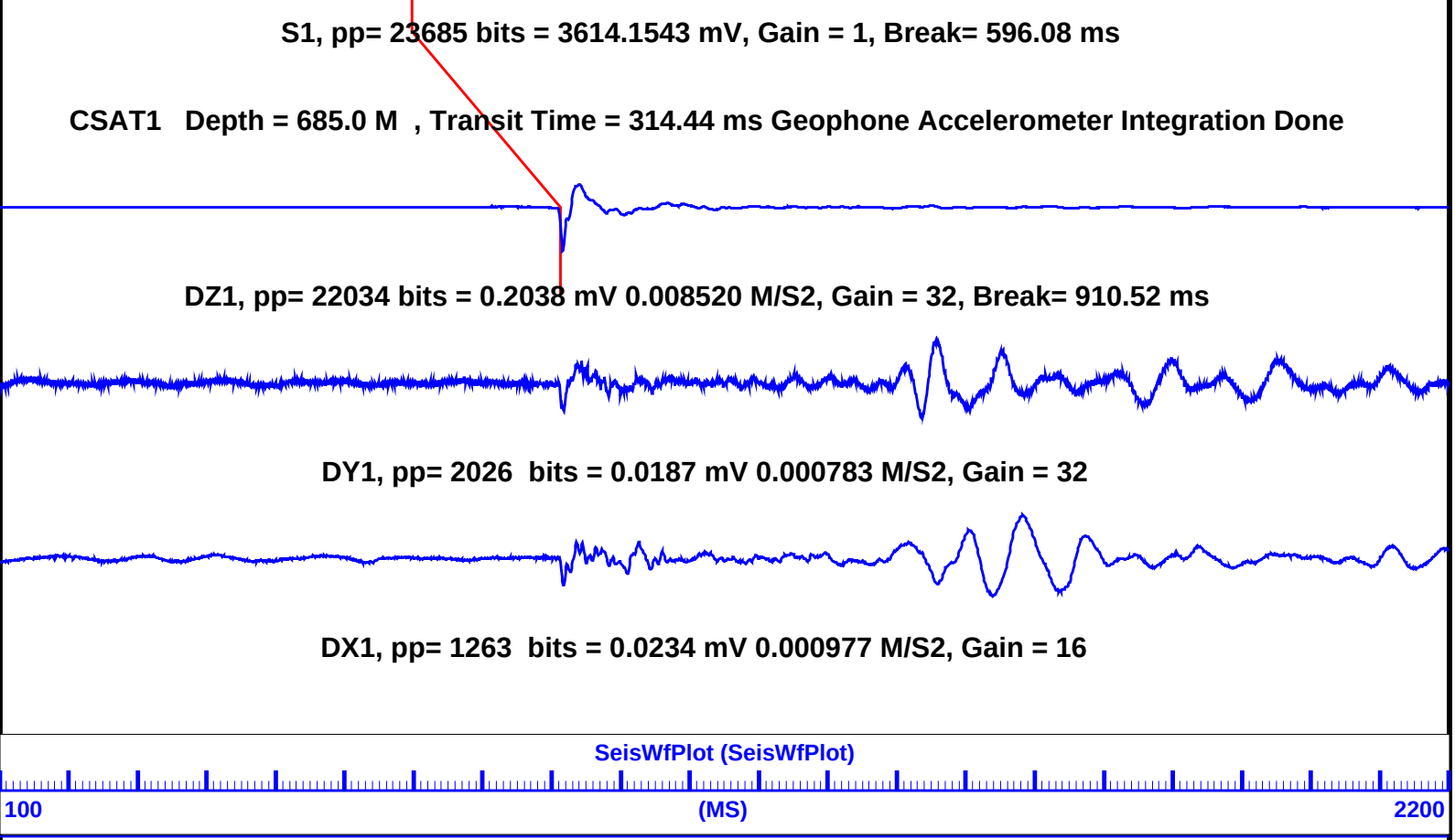
SeisWfPlot (SeisWfPlot)

100 (MS) 2200

STACK # 15 19−Jun−2004−00:23 Shots: 45

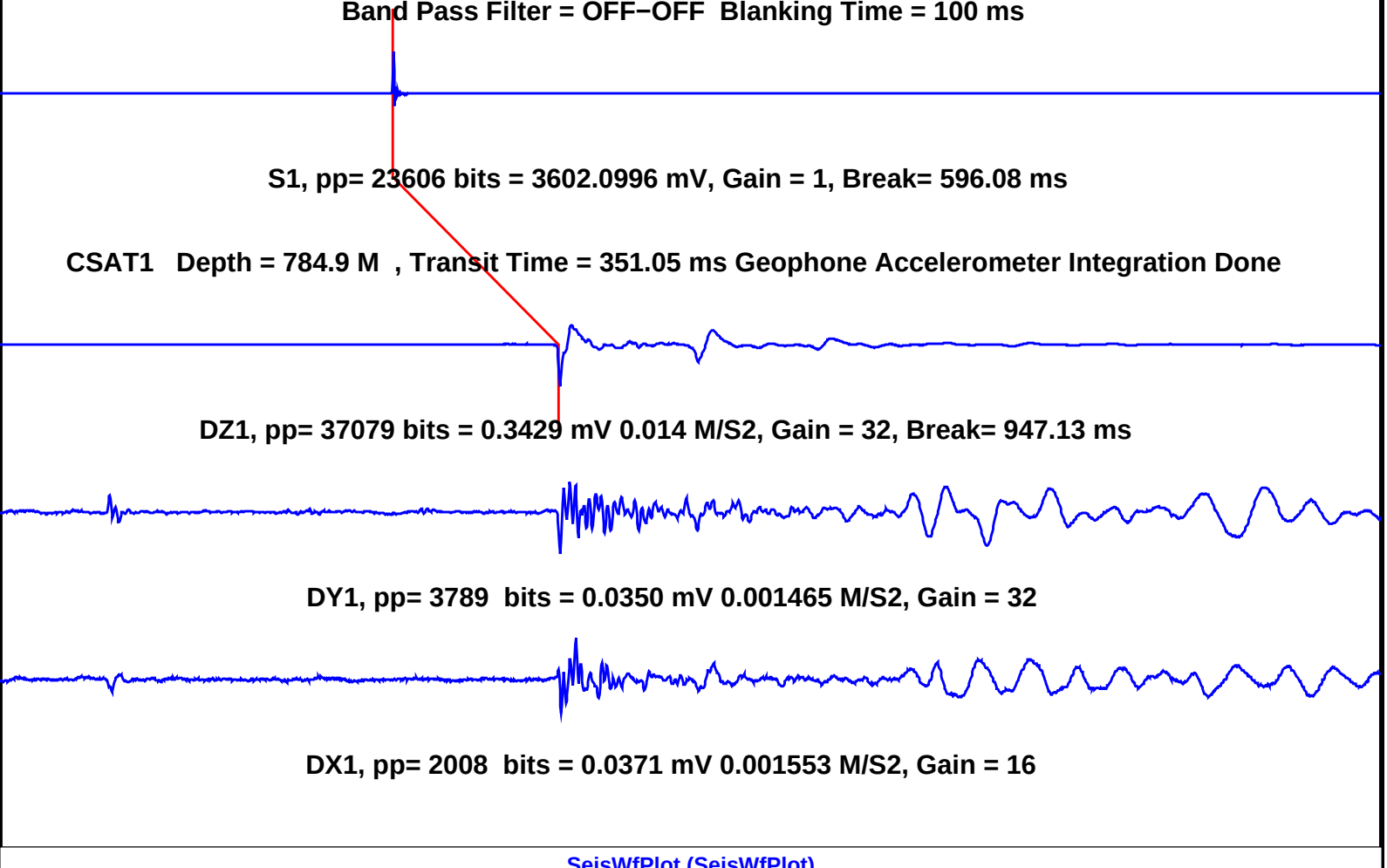
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 100 ms

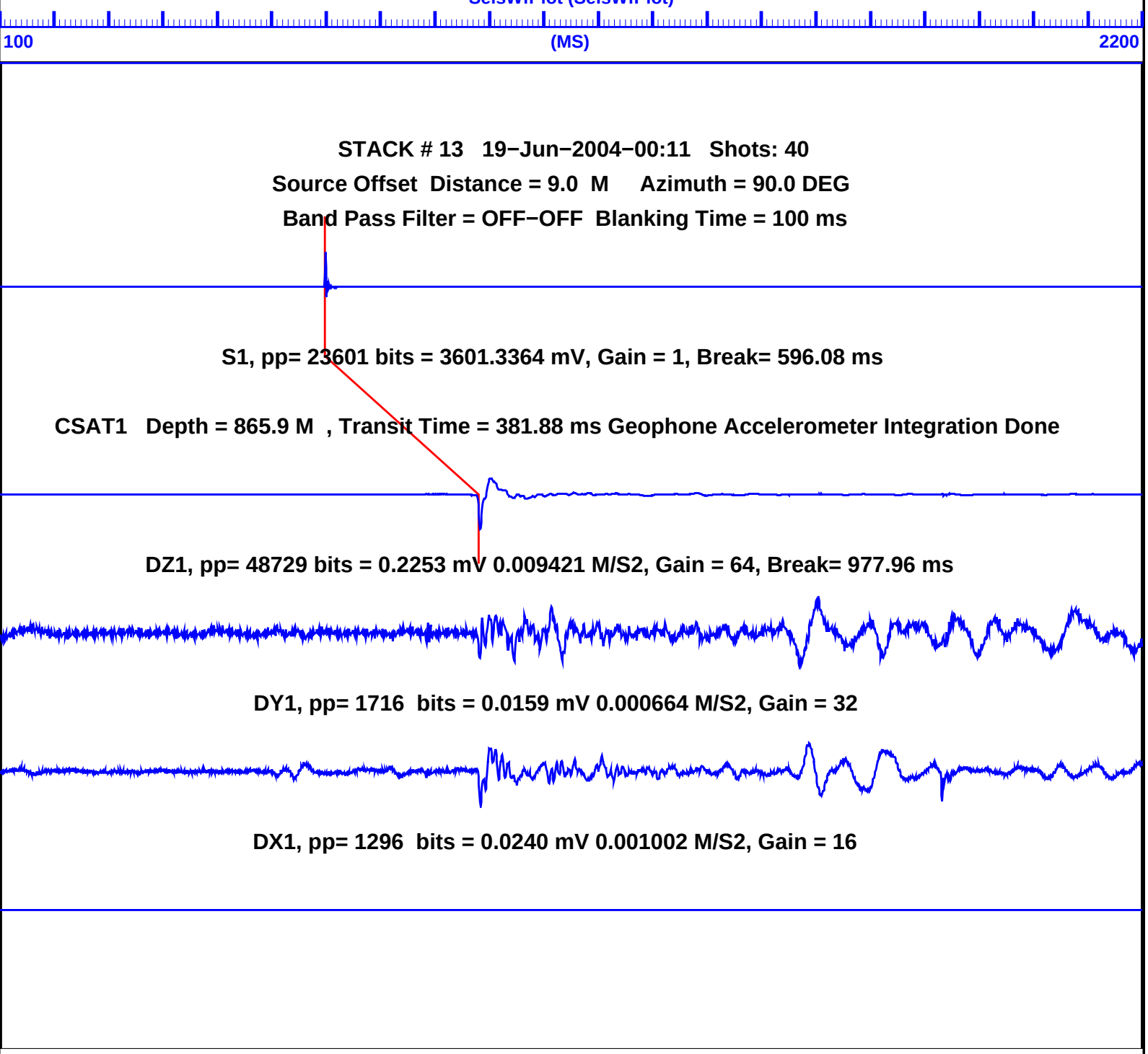


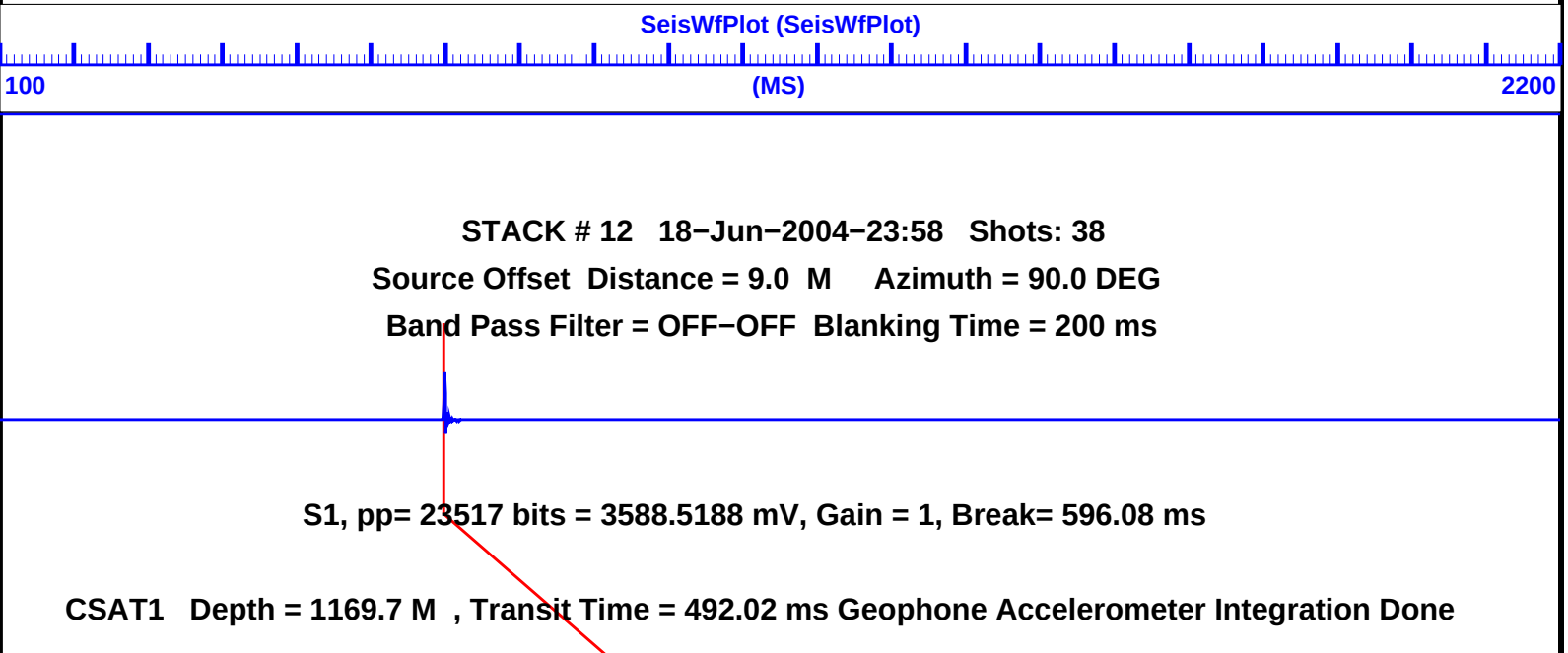
SeisWfPlot (SeisWfPlot)

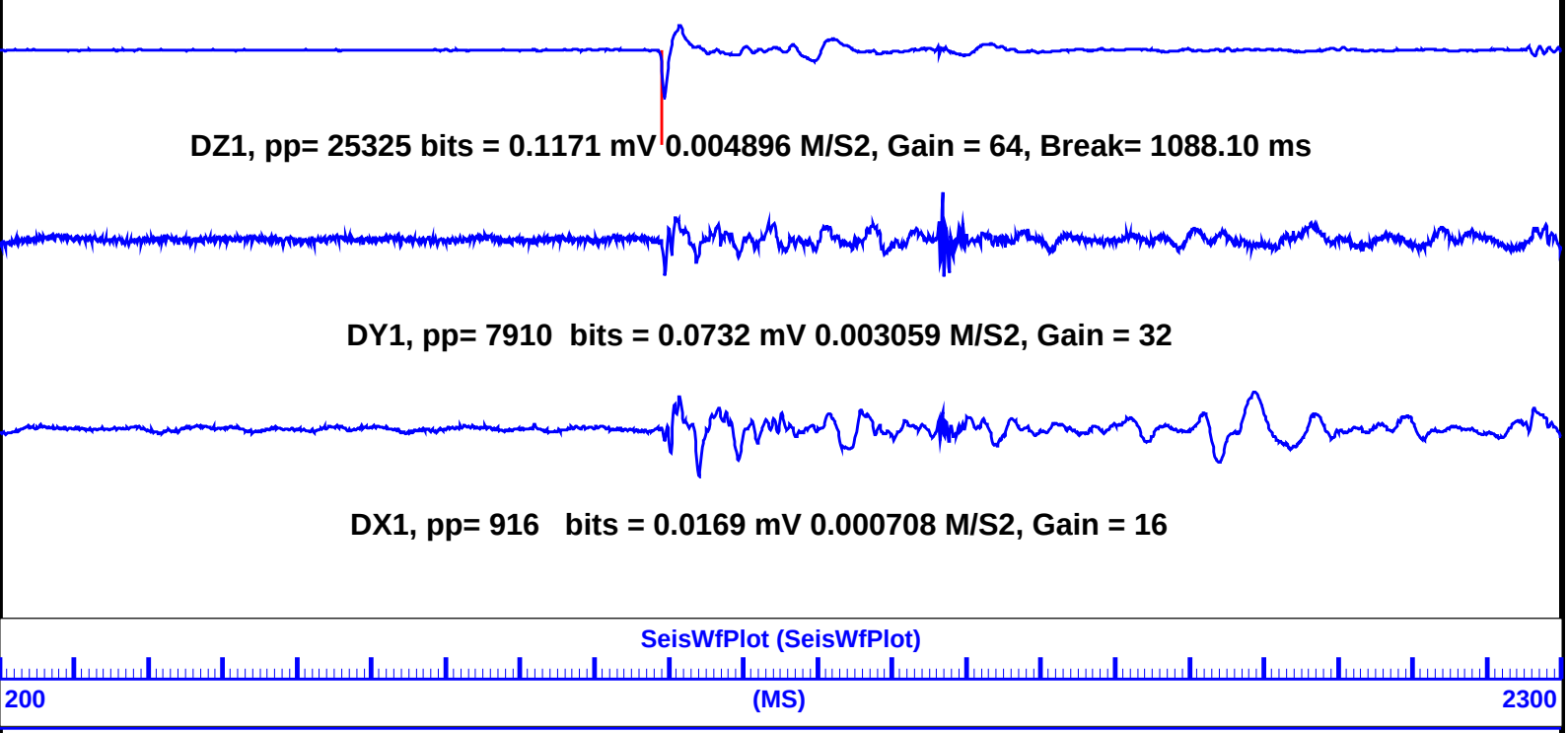
100 (MS) 2200

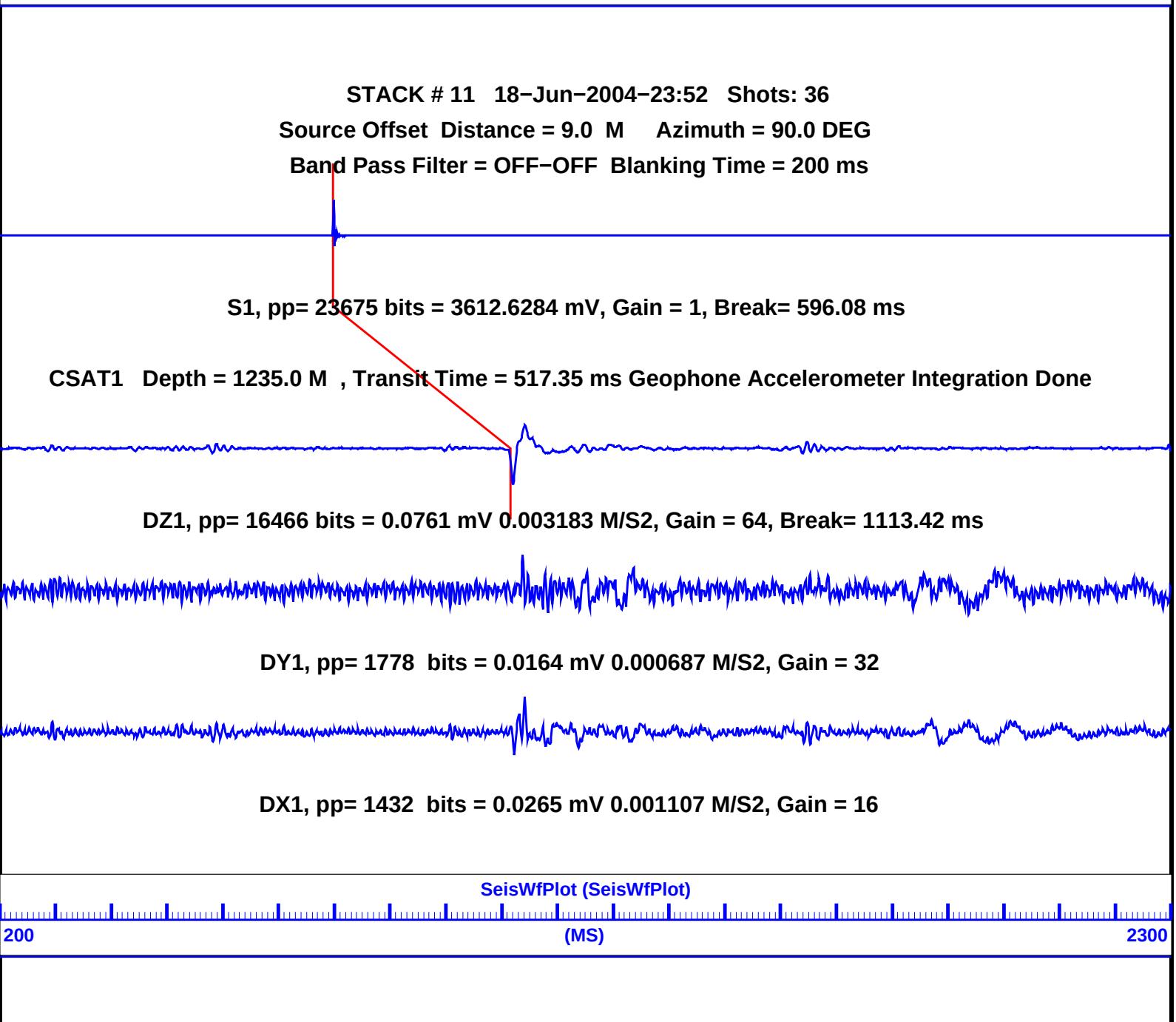


SeisWfPlot (SeisWfPlot)


SeisWfPlot (SeisWfPlot)
100
(MS)
2200
STACK # 13 19−Jun−2004−00:11 Shots: 40
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG
Band Pass Filter = OFF−OFF Blanking Time = 100 ms
S1, pp= 23601 bits = 3601.3364 mV, Gain = 1, Break= 596.08 ms
CSAT1 Depth = 865.9 M , Transit Time = 381.88 ms Geophone Accelerometer Integration Done
DZ1, pp= 48729 bits = 0.2253 mV 0.009421 M/S2, Gain = 64, Break= 977.96 ms
DY1, pp= 1716 bits = 0.0159 mV 0.000664 M/S2, Gain = 32
DX1, pp= 1296 bits = 0.0240 mV 0.001002 M/S2, Gain = 16


SeisWfPlot (SeisWfPlot)
100
(MS)
2200
STACK # 12 18−Jun−2004−23:58 Shots: 38
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG
Band Pass Filter = OFF−OFF Blanking Time = 200 ms
S1, pp= 23517 bits = 3588.5188 mV, Gain = 1, Break= 596.08 ms
CSAT1 Depth = 1169.7 M , Transit Time = 492.02 ms Geophone Accelerometer Integration Done

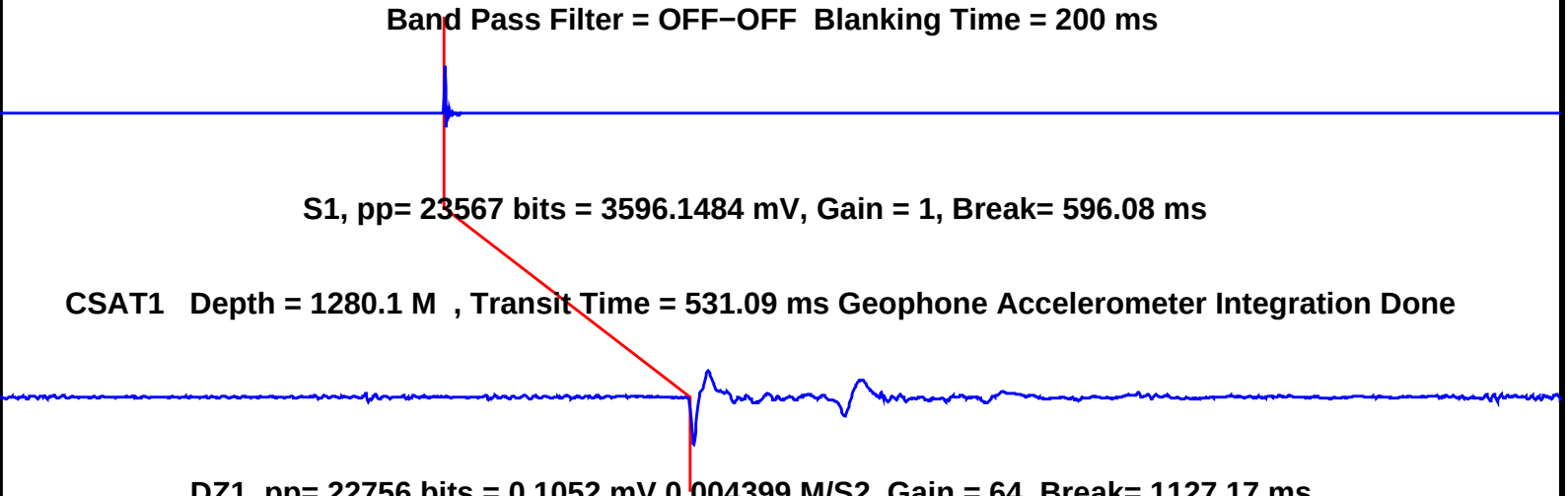

DZ1, pp= 25325 bits = 0.1171 mV 0.004896 M/S2, Gain = 64, Break= 1088.10 ms
DY1, pp= 7910 bits = 0.0732 mV 0.003059 M/S2, Gain = 32
DX1, pp= 916 bits = 0.0169 mV 0.000708 M/S2, Gain = 16
SeisWfPlot (SeisWfPlot)
200
(MS)
2300


STACK # 11 18−Jun−2004−23:52 Shots: 36
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG
Band Pass Filter = OFF−OFF Blanking Time = 200 ms
S1, pp= 23675 bits = 3612.6284 mV, Gain = 1, Break= 596.08 ms
CSAT1 Depth = 1235.0 M , Transit Time = 517.35 ms Geophone Accelerometer Integration Done
DZ1, pp= 16466 bits = 0.0761 mV 0.003183 M/S2, Gain = 64, Break= 1113.42 ms
DY1, pp= 1778 bits = 0.0164 mV 0.000687 M/S2, Gain = 32
DX1, pp= 1432 bits = 0.0265 mV 0.001107 M/S2, Gain = 16
SeisWfPlot (SeisWfPlot)
200
(MS)
2300

STACK # 10 18−Jun−2004−23:47 Shots: 35

Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

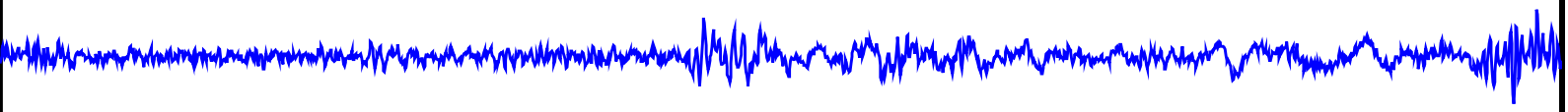
Band Pass Filter = OFF−OFF Blanking Time = 200 ms



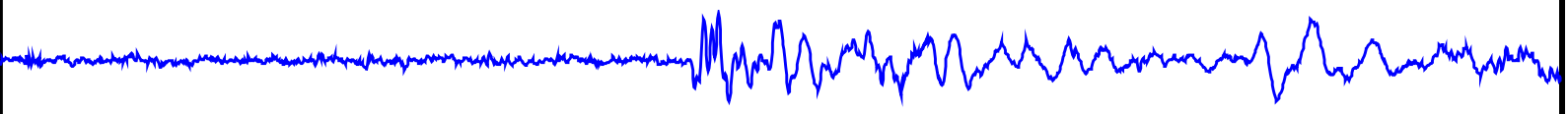
S1, pp= 23567 bits = 3596.1484 mV, Gain = 1, Break= 596.08 ms

CSAT1 Depth = 1280.1 M , Transit Time = 531.09 ms Geophone Accelerometer Integration Done

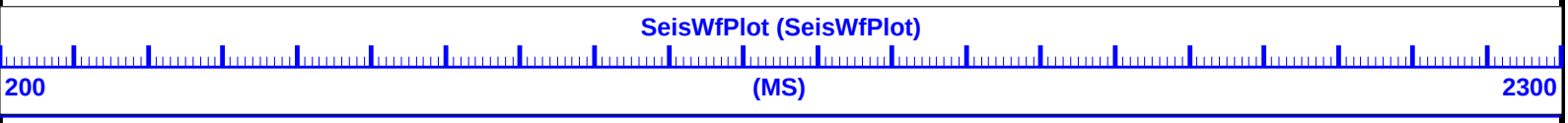
DZ1, pp= 22756 bits = 0.1052 mV 0.004399 M/S2, Gain = 64, Break= 1127.17 ms



DY1, pp= 2994 bits = 0.0277 mV 0.001158 M/S2, Gain = 32



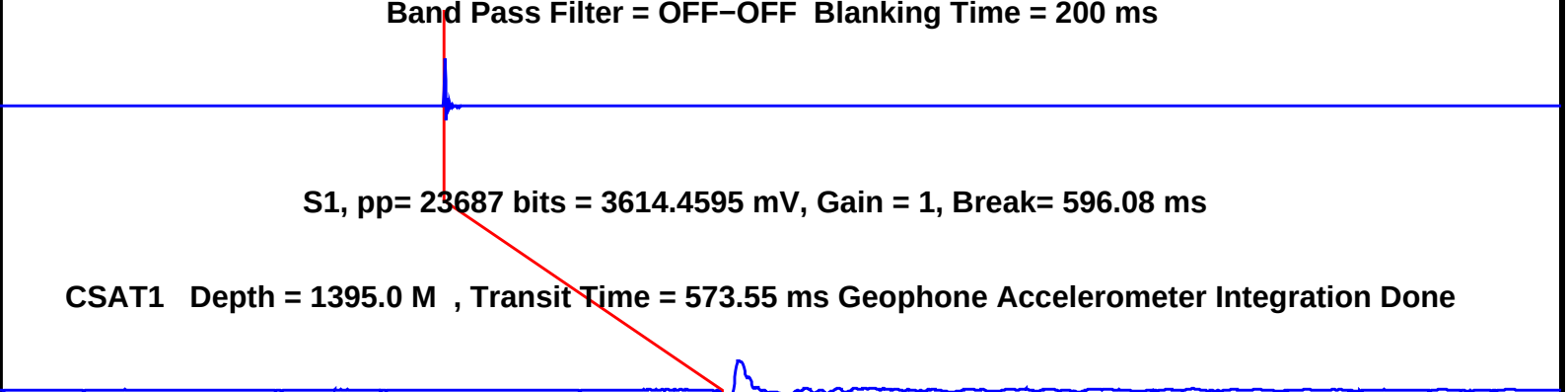
DX1, pp= 673 bits = 0.0124 mV 0.000520 M/S2, Gain = 16



STACK # 9 18−Jun−2004−23:37 Shots: 32

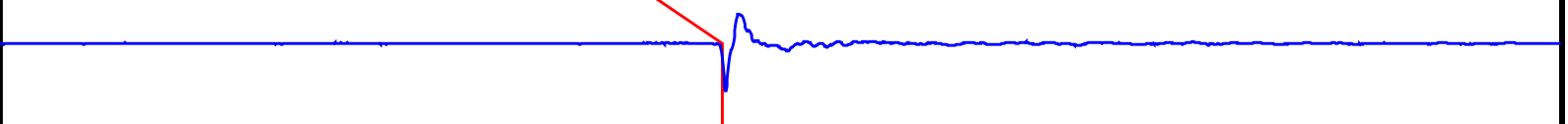
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 200 ms



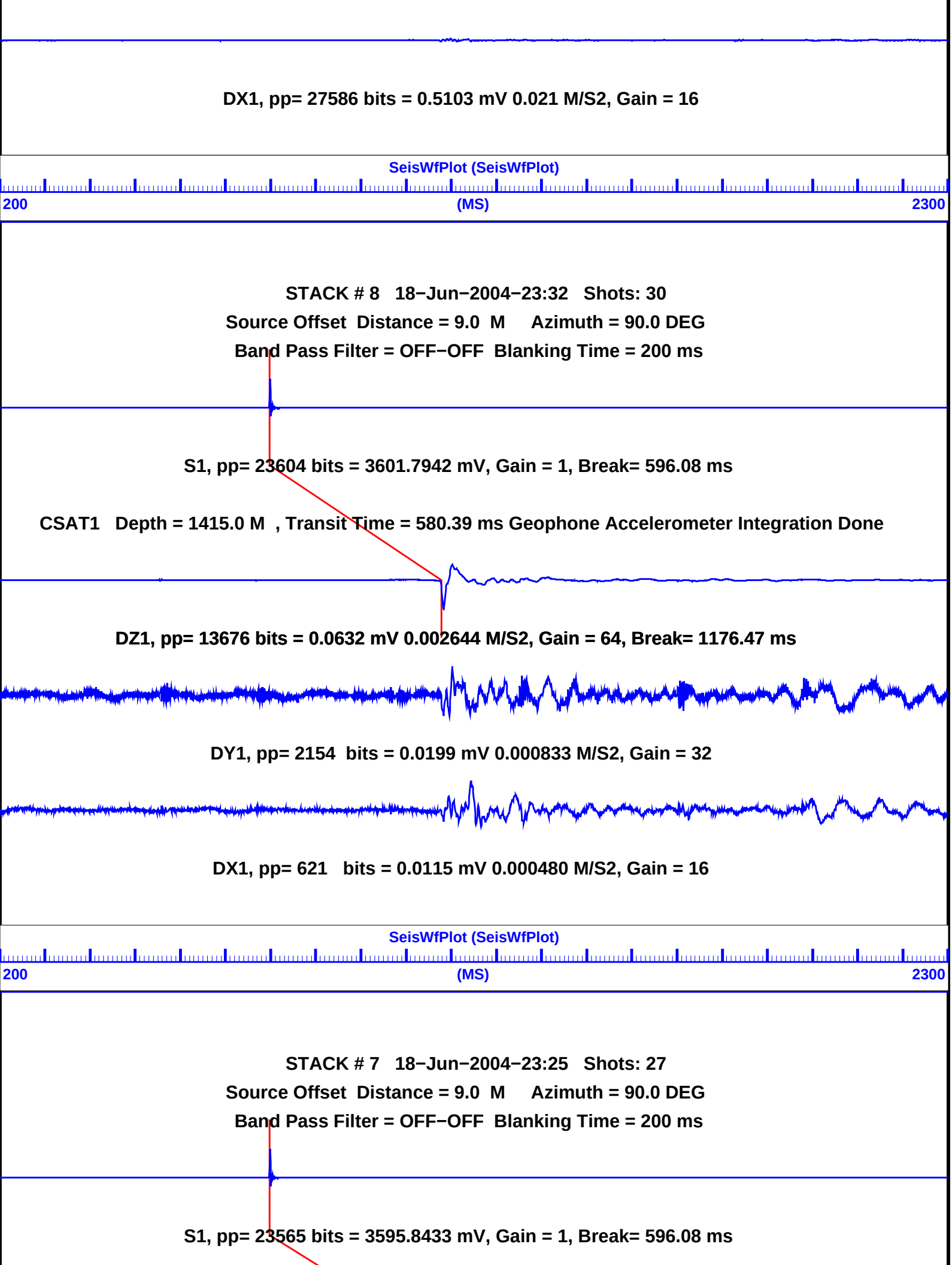
S1, pp= 23687 bits = 3614.4595 mV, Gain = 1, Break= 596.08 ms

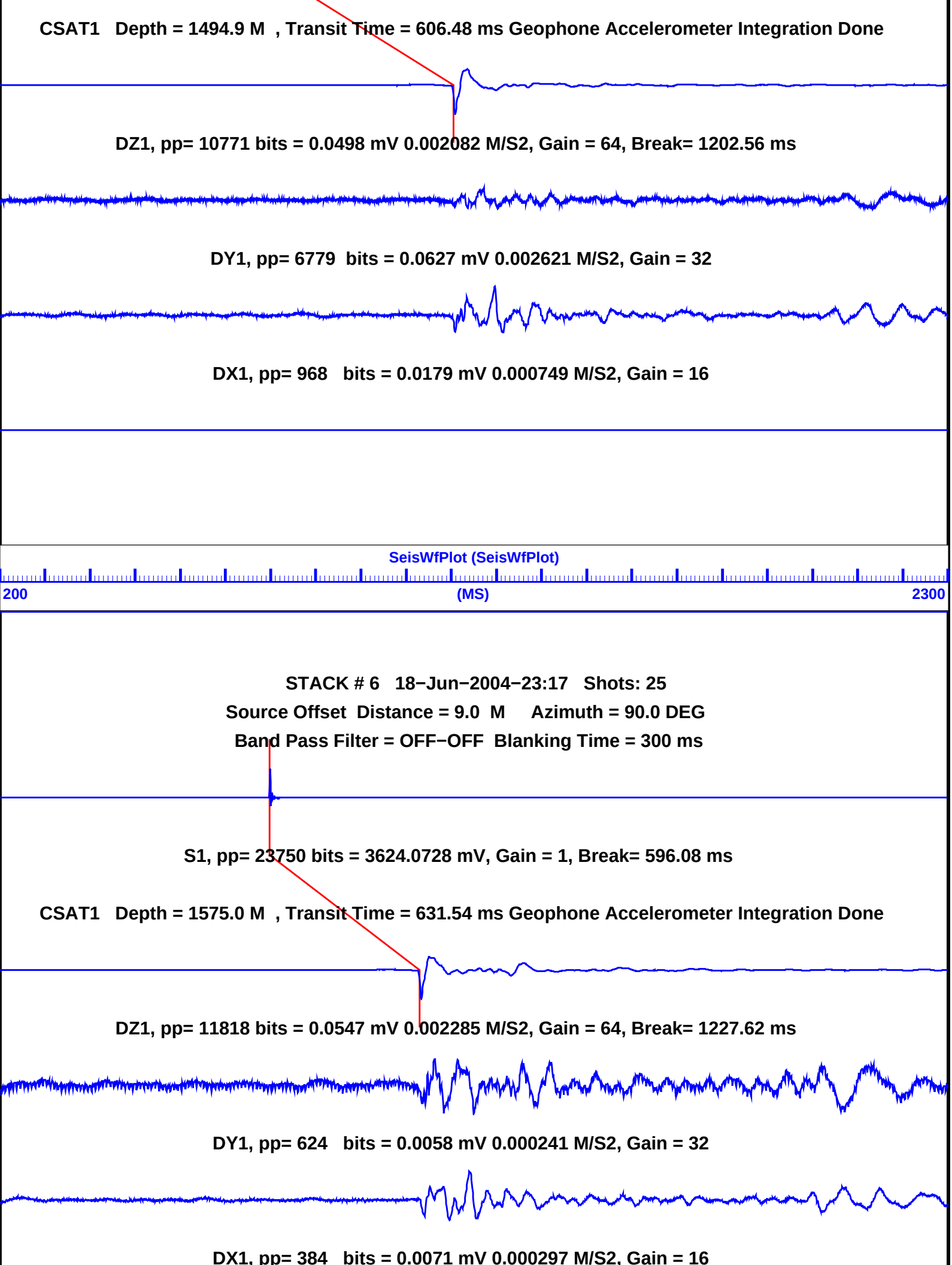
CSAT1 Depth = 1395.0 M , Transit Time = 573.55 ms Geophone Accelerometer Integration Done



DZ1, pp= 26856 bits = 0.1242 mV 0.005192 M/S2, Gain = 64, Break= 1169.63 ms

DY1, pp= 59475 bits = 0.5501 mV 0.023 M/S2, Gain = 32


DX1, pp= 27586 bits = 0.5103 mV 0.021 M/S2, Gain = 16
SeisWfPlot (SeisWfPlot)
200
(MS)
2300
STACK # 8 18−Jun−2004−23:32 Shots: 30
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG
Band Pass Filter = OFF−OFF Blanking Time = 200 ms
S1, pp= 23604 bits = 3601.7942 mV, Gain = 1, Break= 596.08 ms
CSAT1 Depth = 1415.0 M , Transit Time = 580.39 ms Geophone Accelerometer Integration Done
DZ1, pp= 13676 bits = 0.0632 mV 0.002644 M/S2, Gain = 64, Break= 1176.47 ms
DY1, pp= 2154 bits = 0.0199 mV 0.000833 M/S2, Gain = 32
DX1, pp= 621 bits = 0.0115 mV 0.000480 M/S2, Gain = 16
SeisWfPlot (SeisWfPlot)
200
(MS)
2300
STACK # 7 18−Jun−2004−23:25 Shots: 27
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG
Band Pass Filter = OFF−OFF Blanking Time = 200 ms
S1, pp= 23565 bits = 3595.8433 mV, Gain = 1, Break= 596.08 ms


CSAT1 Depth = 1494.9 M , Transit Time = 606.48 ms Geophone Accelerometer Integration Done
DZ1, pp= 10771 bits = 0.0498 mV 0.002082 M/S2, Gain = 64, Break= 1202.56 ms
DY1, pp= 6779 bits = 0.0627 mV 0.002621 M/S2, Gain = 32
DX1, pp= 968 bits = 0.0179 mV 0.000749 M/S2, Gain = 16
SeisWfPlot (SeisWfPlot)
200
(MS)
2300
STACK # 6 18−Jun−2004−23:17 Shots: 25
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG
Band Pass Filter = OFF−OFF Blanking Time = 300 ms
S1, pp= 23750 bits = 3624.0728 mV, Gain = 1, Break= 596.08 ms
CSAT1 Depth = 1575.0 M , Transit Time = 631.54 ms Geophone Accelerometer Integration Done
DZ1, pp= 11818 bits = 0.0547 mV 0.002285 M/S2, Gain = 64, Break= 1227.62 ms
DY1, pp= 624 bits = 0.0058 mV 0.000241 M/S2, Gain = 32
DX1, pp= 384 bits = 0.0071 mV 0.000297 M/S2, Gain = 16

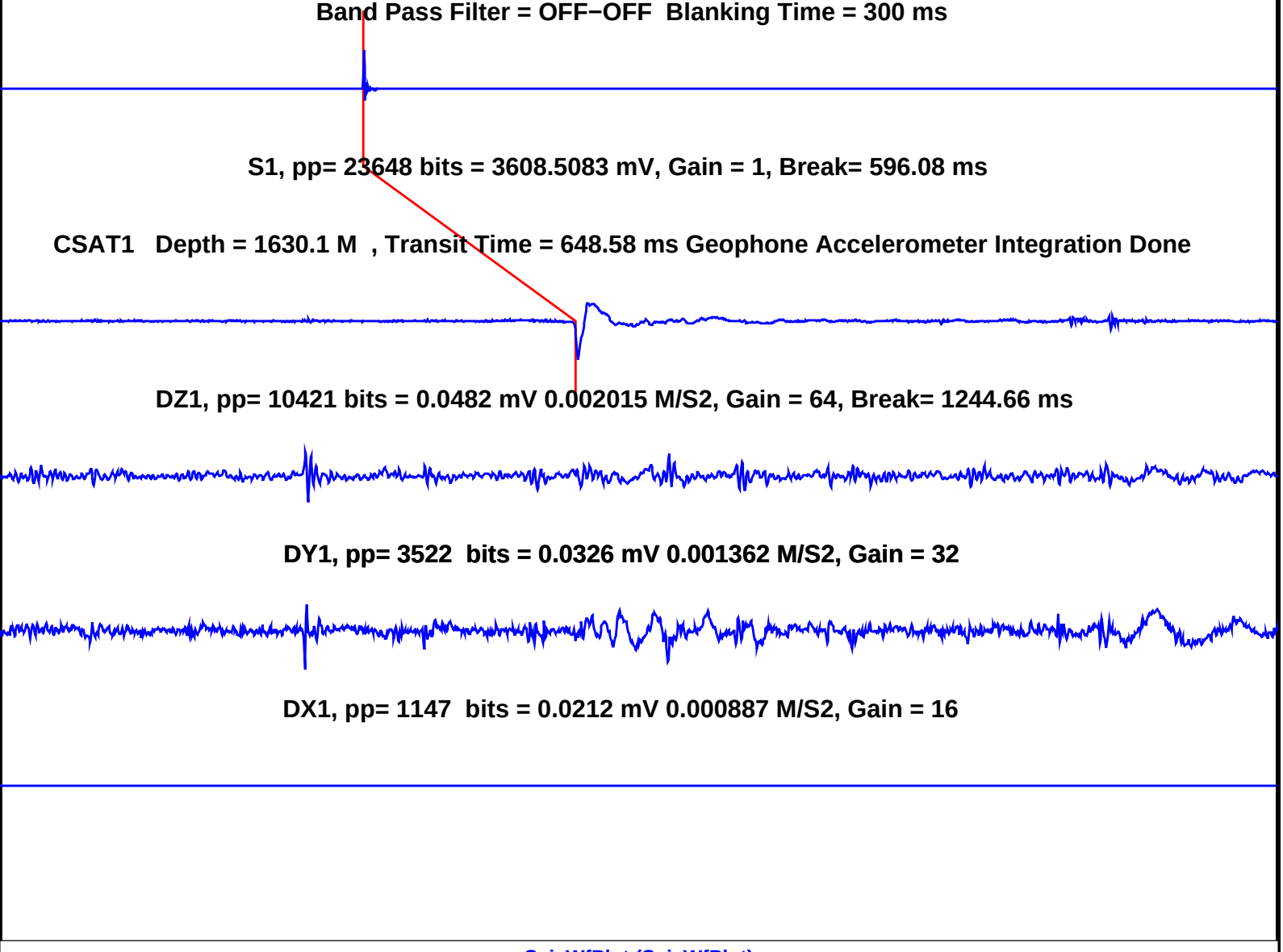
SeisWfPlot (SeisWfPlot)

300 (MS) 2400

STACK # 5 18−Jun−2004−23:12 Shots: 23

Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 300 ms



SeisWfPlot (SeisWfPlot)

300 (MS) 2400

Format: SeisAxisWfPlotCsat Vertical Scale: 0.5" per 1SAMPLES Graphics File Created: 28−Jun−2004 17:43

OP System Version: 10C0−306

MCM

CSAT−B1	10C0−306	TCC−BF	10C0−306

Output DLIS Files

DEFAULT	SEIS_CSI_019PNP	FN:81	PRODUCER	28−Jun−2004 17:43

Schlumberger

Downgoing Correlation

MAXIS Field Log

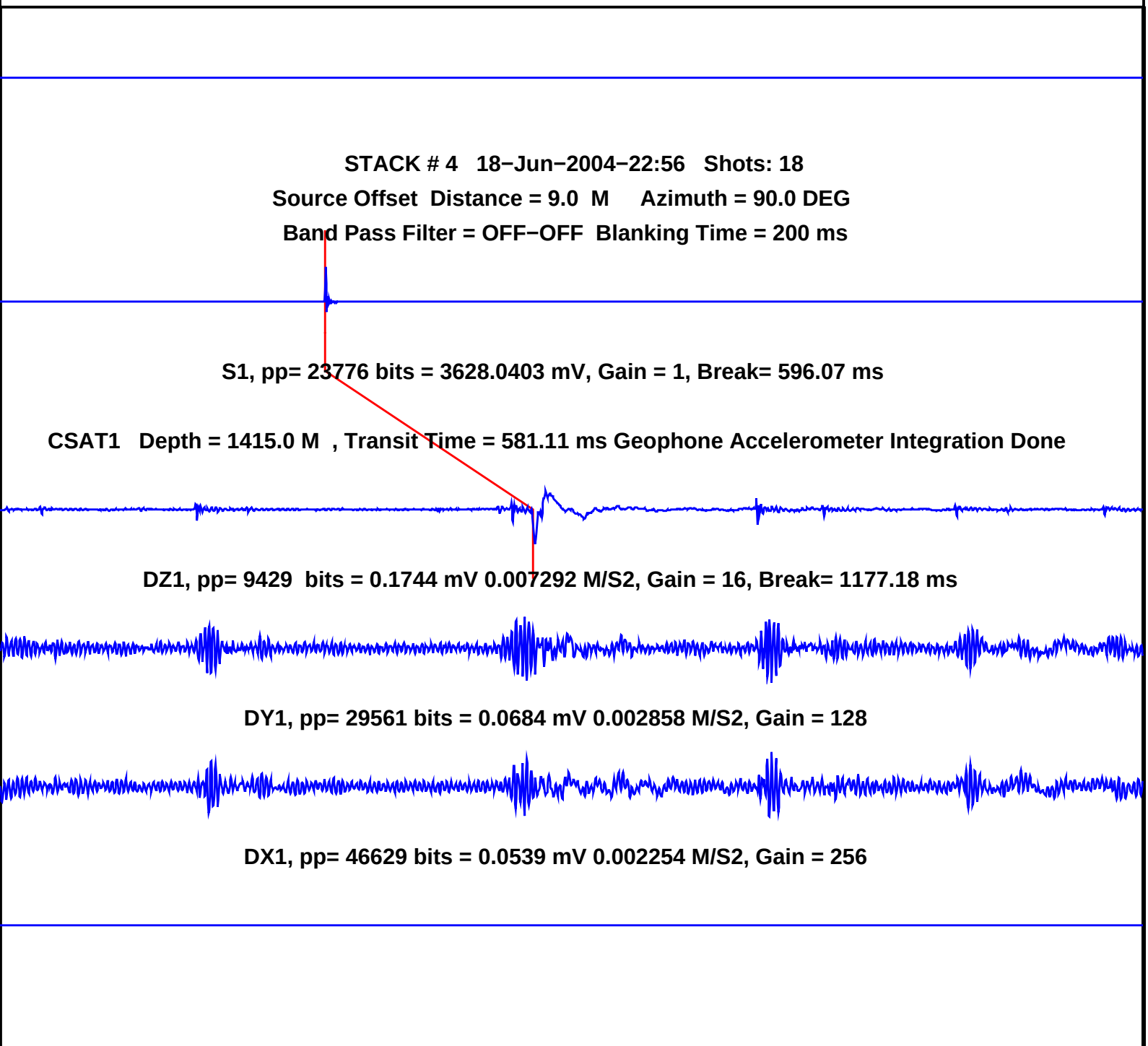
Output DLIS Files

DEFAULT SEIS_CSI_019PNP FN:81 PRODUCER 28−Jun−2004 17:44 0.0 M 0.0 M

OP System Version: 10C0−306

MCM

CSAT−B1 10C0−306 TCC−BF 10C0−306



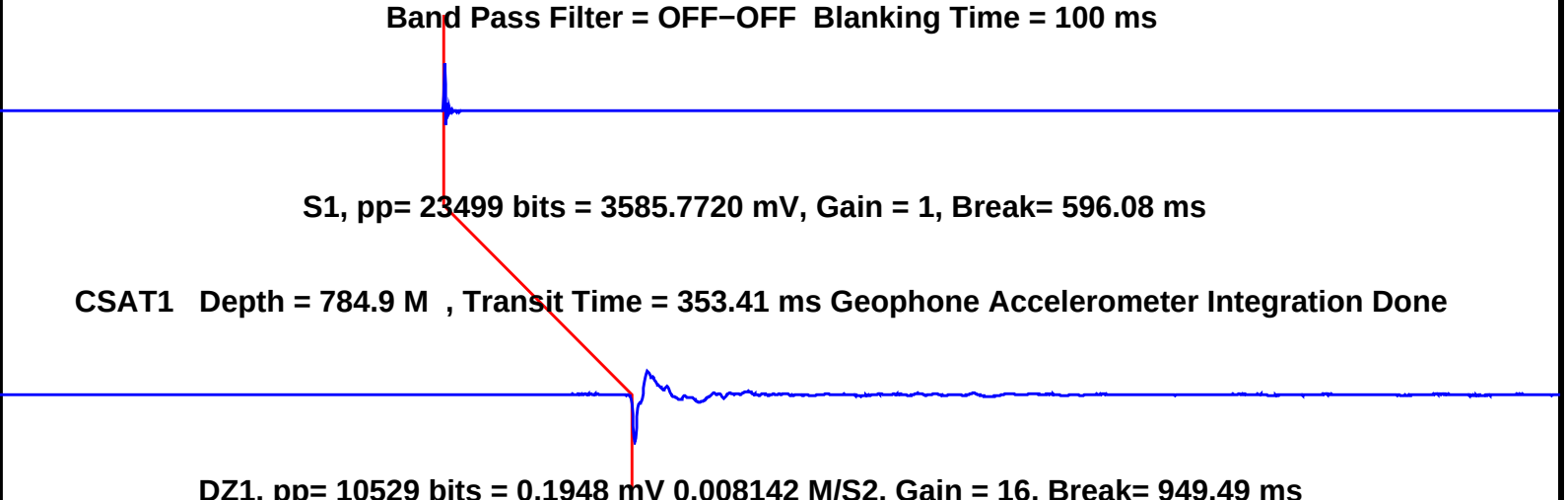
SeisWfPlot (SeisWfPlot)

200 (MS) 2300

STACK # 3 18−Jun−2004−22:26 Shots: 13

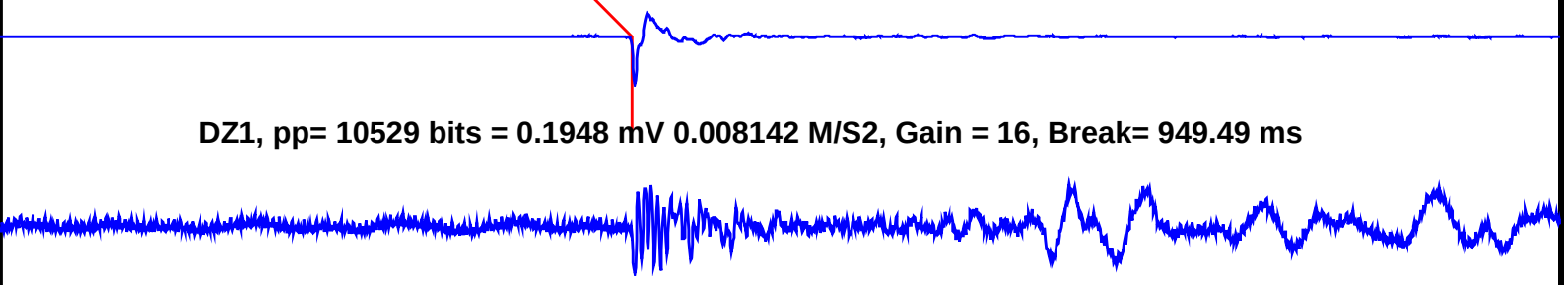
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 100 ms



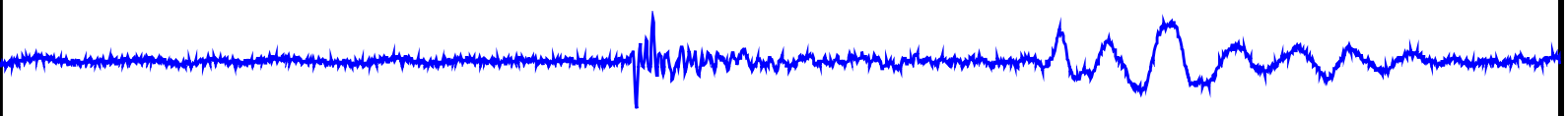
S1, pp= 23499 bits = 3585.7720 mV, Gain = 1, Break= 596.08 ms

CSAT1 Depth = 784.9 M , Transit Time = 353.41 ms Geophone Accelerometer Integration Done



DZ1, pp= 10529 bits = 0.1948 mV 0.008142 M/S2, Gain = 16, Break= 949.49 ms

DY1, pp= 11323 bits = 0.0262 mV 0.001095 M/S2, Gain = 128



DX1, pp= 11336 bits = 0.0262 mV 0.001096 M/S2, Gain = 128

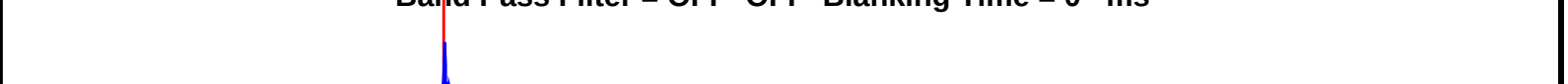
SeisWfPlot (SeisWfPlot)

100 (MS) 2200

STACK # 2 18−Jun−2004−22:05 Shots: 10

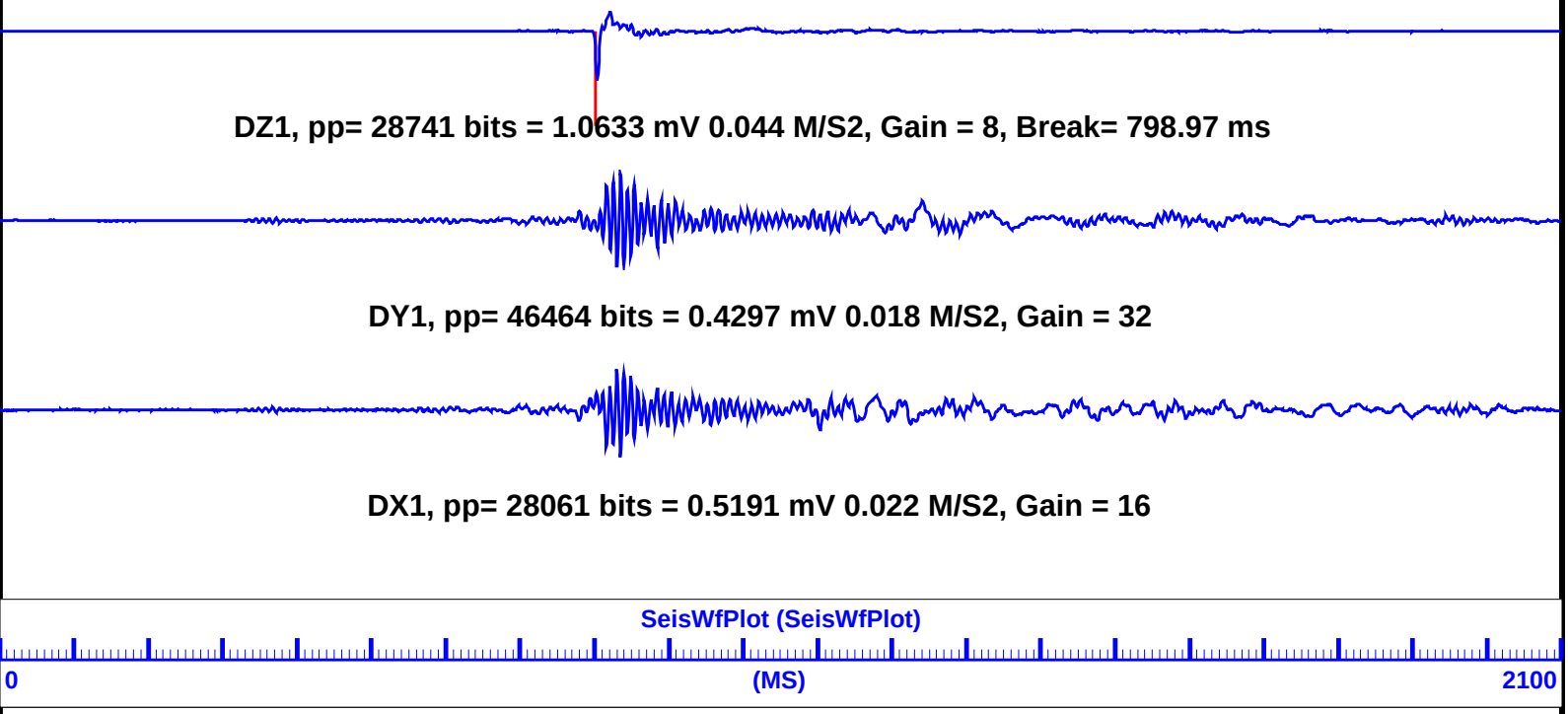
Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 0 ms



S1, pp= 23765 bits = 3626.3618 mV, Gain = 1, Break= 596.07 ms

CSAT1 Depth = 420.0 M , Transit Time = 202.89 ms Geophone Accelerometer Integration Done



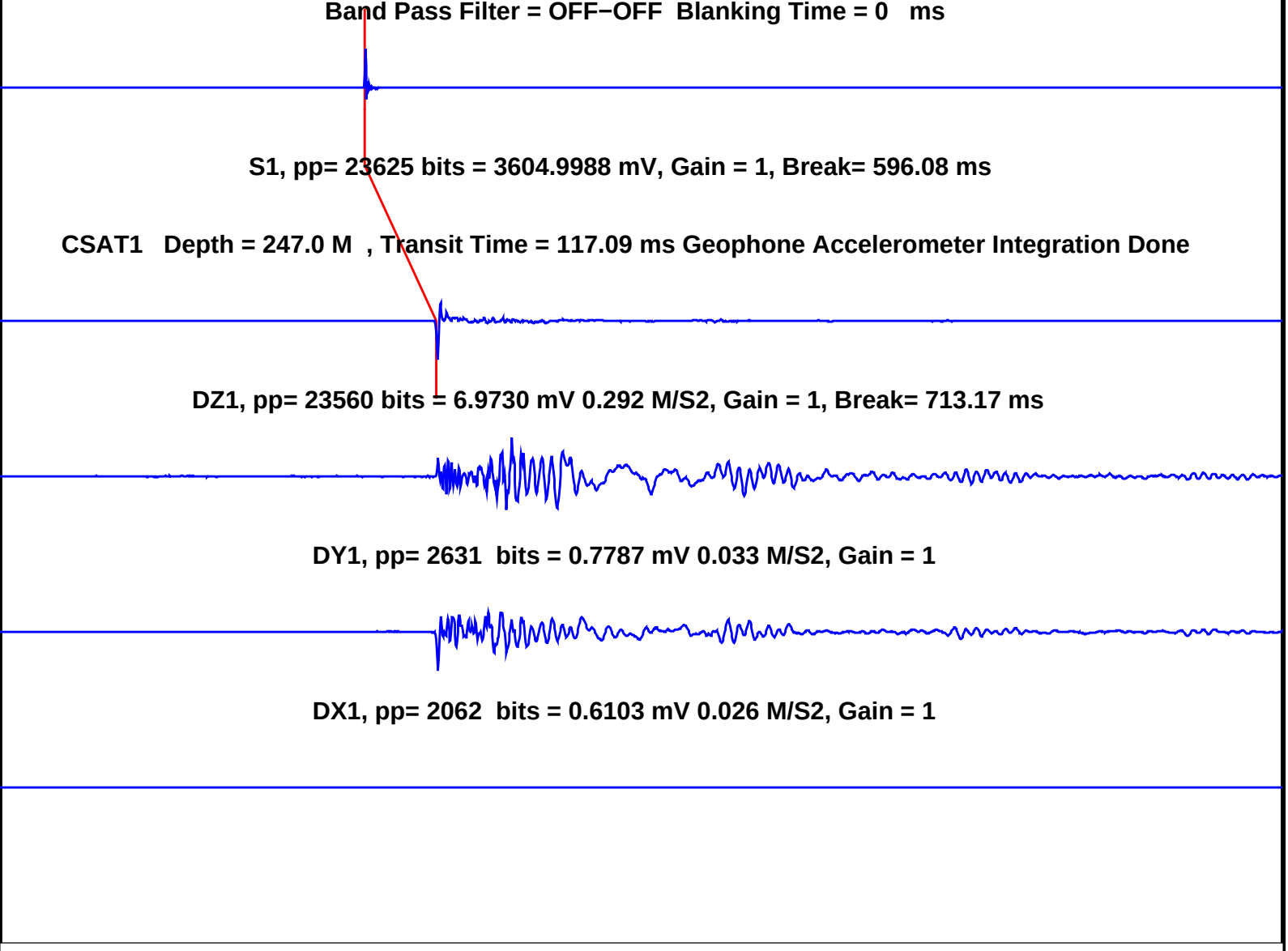
SeisWfPlot (SeisWfPlot)

0 (MS) 2100

STACK # 1 18−Jun−2004−21:47 Shots: 6

Source Offset Distance = 9.0 M Azimuth = 90.0 DEG

Band Pass Filter = OFF−OFF Blanking Time = 0 ms



SeisWfPlot (SeisWfPlot)

0 (MS) 2100

Format: SeisAxisWfPlotCsat Vertical Scale: 0.5" per 1SAMPLES Graphics File Created: 28−Jun−2004 17:43

OP System Version: 10C0−306

MCM

CSAT−B1	10C0−306	TCC−BF	10C0−306

Output DLIS Files

DEFAULT	SEIS_CSI_019PNP	FN:81	PRODUCER	28−Jun−2004 17:44

Schlumberger

VSP HBTA

MAXIS Field Log

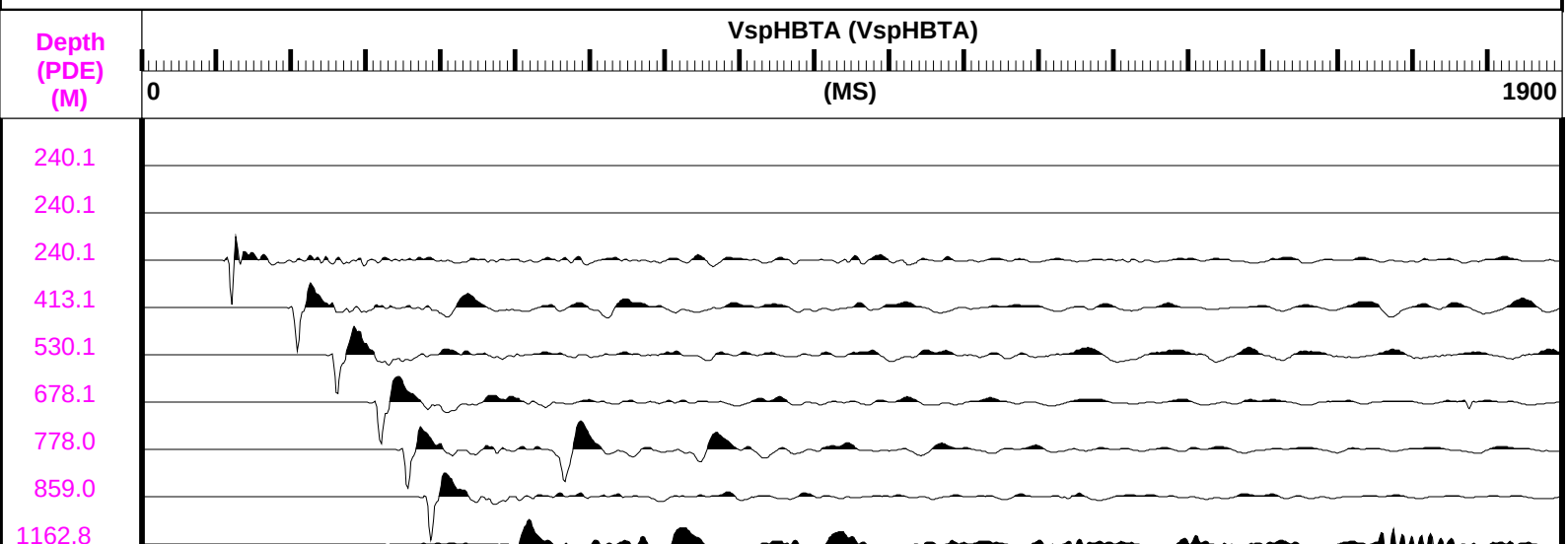
OP System Version: 10C0−306

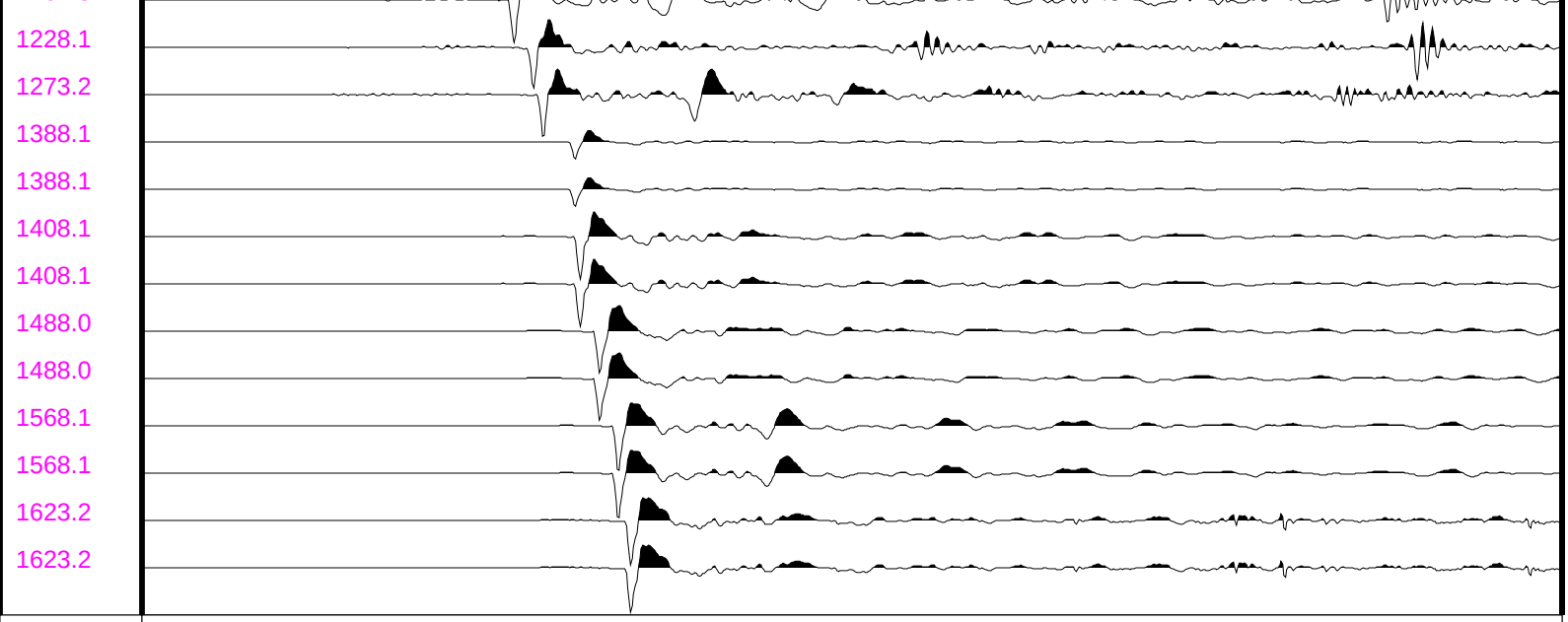
MCM

CSAT−B1	10C0−306	TCC−BF	10C0−306

VSP PROCESSING

Data Corrected to SRD and TVD
Input data filtered from 5 to 120 Hz
One Way Time Scale Plot
SEG Reverse Polarity
TAR = DATA(I)*I**1.200
Z−AXIS Processed





Format: vspHBTA **Vertical Scale: 0.25" per 1SAMPLES** **Graphics File Created: 28−Jun−2004 17:56**

OP System Version: 10C0−306

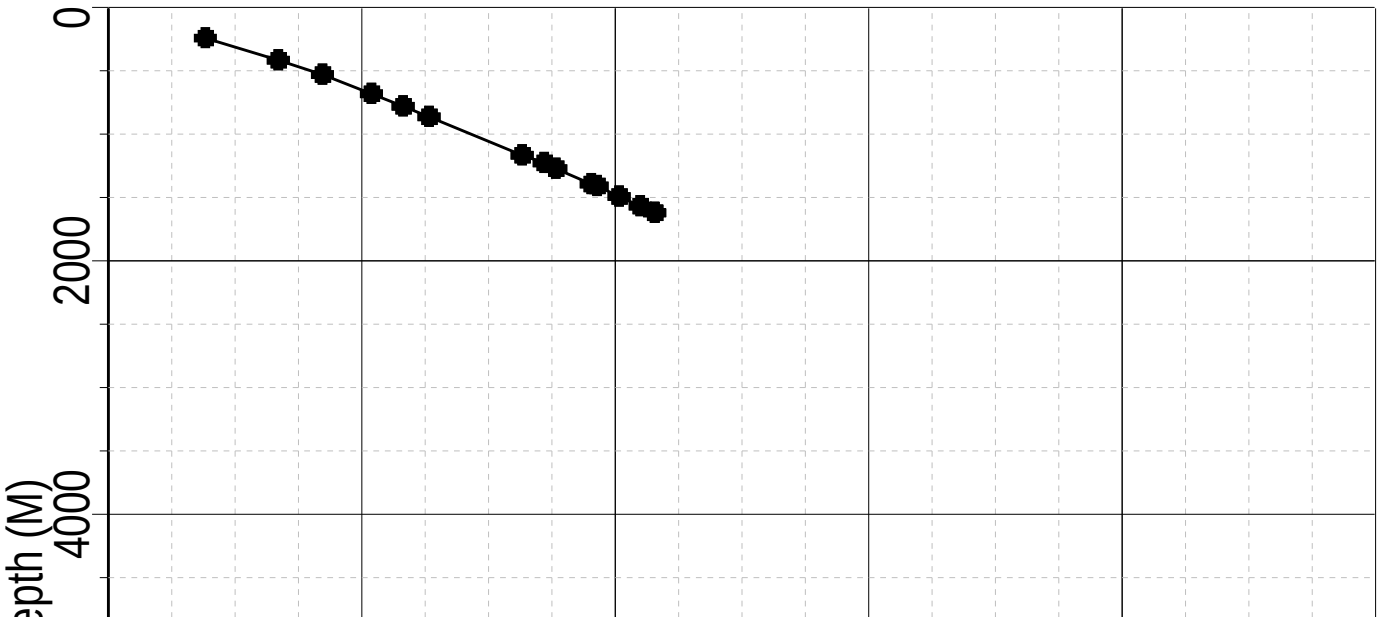
MCM

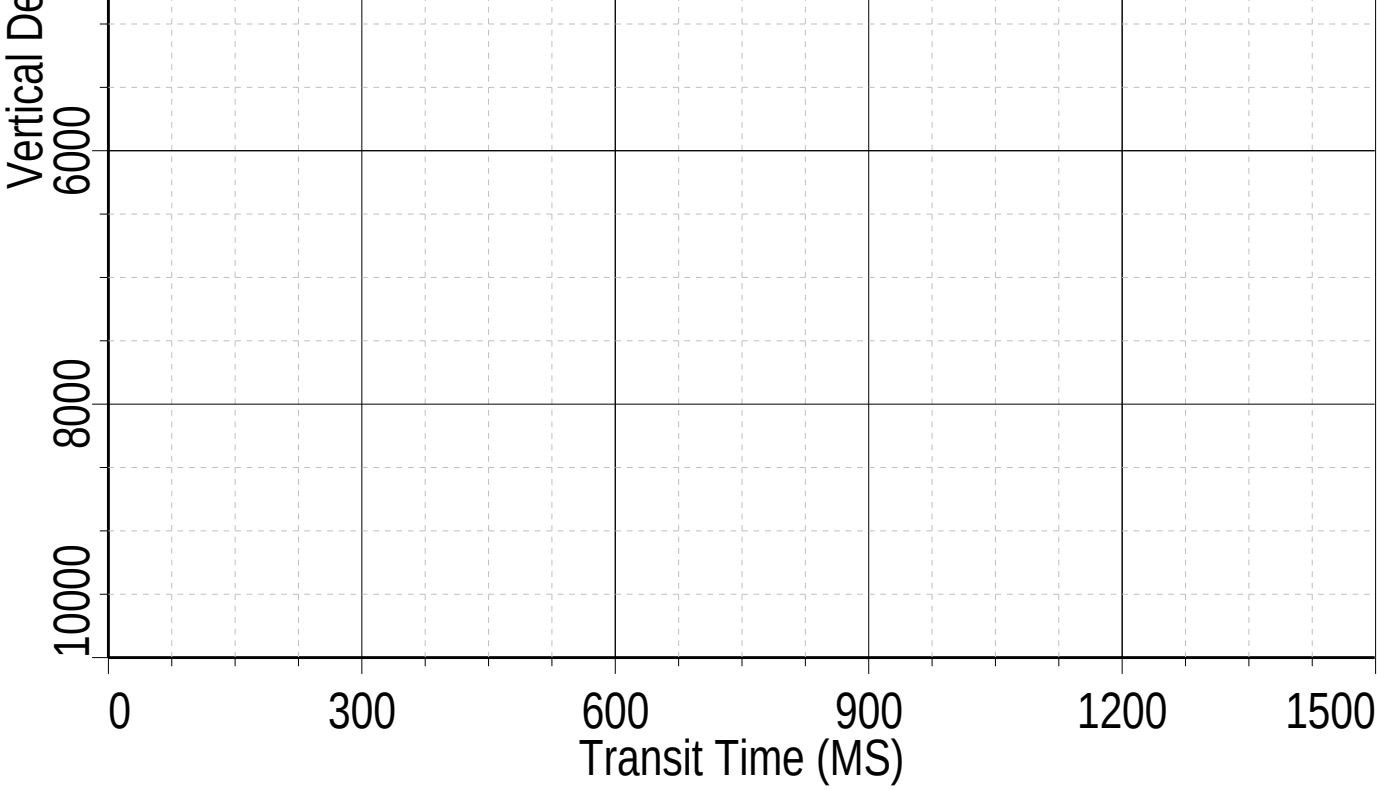
CSAT−B1	**10C0−306**	**TCC−BF**	**10C0−306**

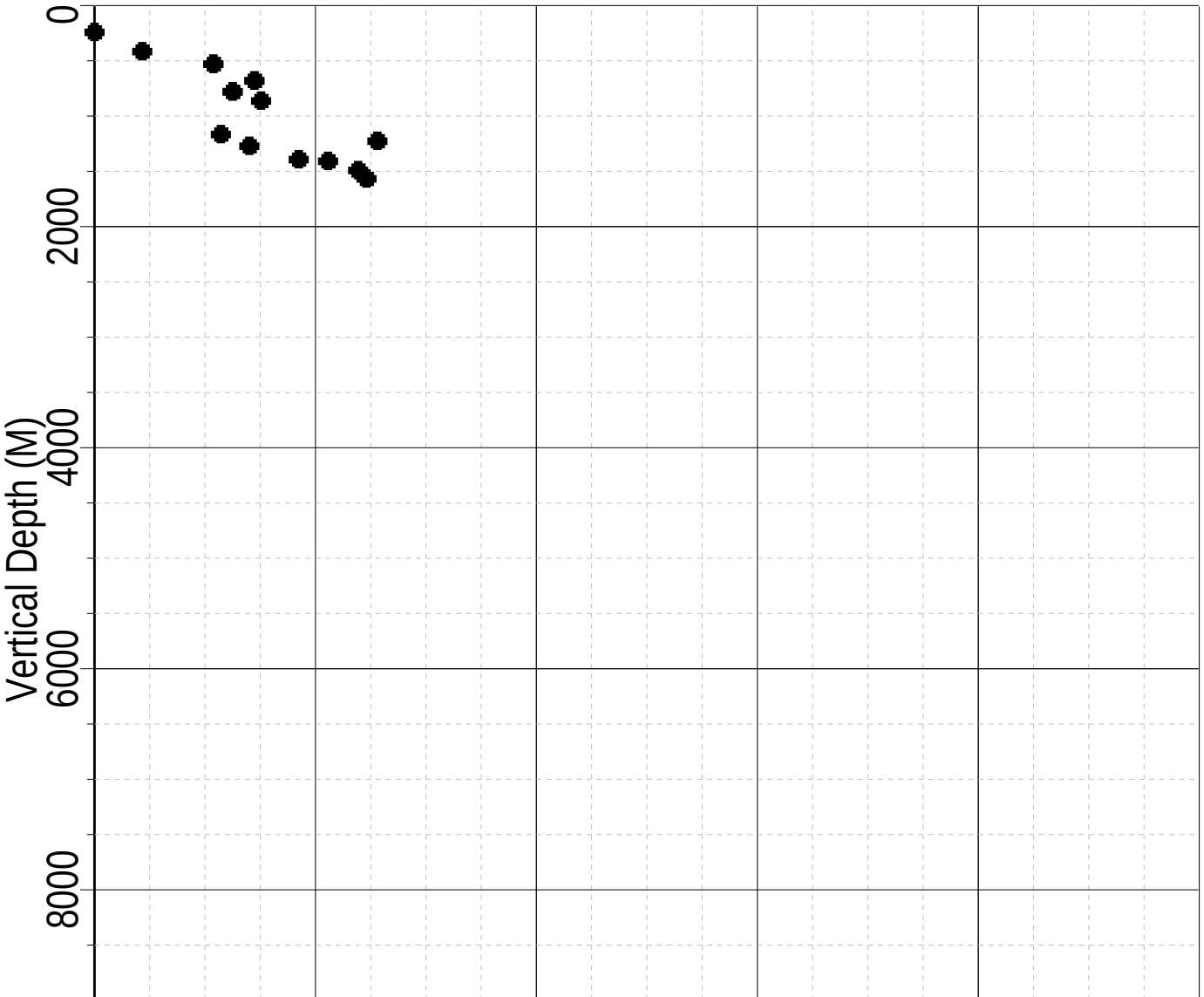
Schlumberger

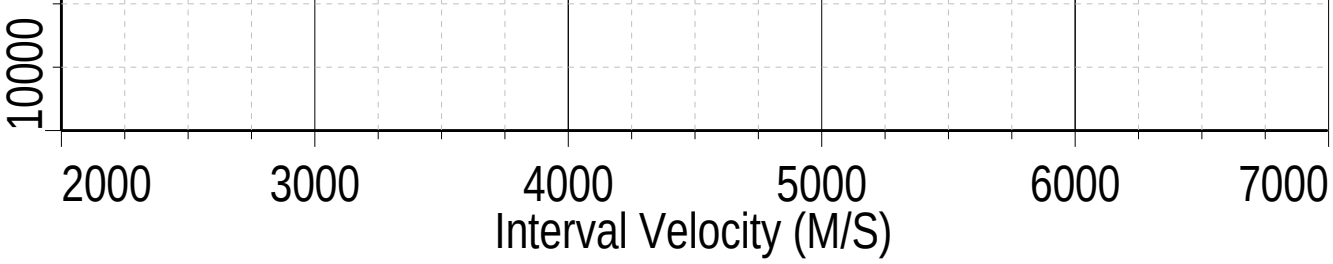
VSP Crossplots

MAXIS Field Log




Vertical De
6000
8000
10000
0
300
600
900
1200
1500
Transit Time (MS)


0
2000
4000
6000
8000
Vertical Depth (M)



Schlumberger

VSP Times

MAXIS Field Log

VSP STACK SUMMARY LISTING

Gun and Hydrophone Coordinates:

Gun Azimuth	270.0 DEG
Gun Offset	20.0 M
Gun Depth From Schlumberger Zero	4.9 M
Hydrophone Depth From Schlumberger Zero	4.9 M
SRD Depth From Schlumberger Zero	6.9 M

Other VSP constants:

True Vertical Time Correction	YES
Surface Velocity	1524.00 M/S

Stack number	Measured Depth (1) (M)	Measured Trans Time (MS)	True Vert. Depth from SRD (2) (M)	Corrected Trans Time (3) (MS)	Interval Velocity (4) (M/S)
18	247.0	117.17	240.1	115.46	2000.01
17	420.0	203.51	413.1	201.96	2217.37
16	537.0	256.22	530.1	254.73	2540.17
15	685.0	314.44	678.1	312.99	2727.30
14	784.9	351.05	778.0	349.62	2626.33
13	865.9	381.88	859.0	380.46	2757.55
12	1169.7	492.02	1162.8	490.63	2577.43
11	1235.0	517.35	1228.1	515.97	3281.53
10	1280.1	531.09	1273.2	529.71	2705.35
9	1395.0	573.55	1388.1	572.18	2926.05
8	1415.0	580.39	1408.1	579.02	3061.81
7	1494.9	606.48	1488.0	605.11	3195.75
6	1575.0	631.54	1568.1	630.18	3233.44
5	1630.1	648.58	1623.2	647.22	0.00

(1)Measured Depth is Cable Depth Referenced to Schlumberger Zero

|(1)Measured Depth is Cable Depth Referenced to Schlumberger Zero.|
|(2)TVD is referenced to SRD (5)|
|(3)Transit time with respect to SRD(5) corrected for Deviation.|
|(4)Interval Velocity corrected for Deviation.|
|(5)SRD is Seismic Reference Depth.|

VSP STACK SUMMARY LISTING (TWO WAY CORRECTED TIMES)

Gun and Hydrophone Coordinates:

Gun Azimuth	270.0 DEG
Gun Offset	20.0 M
Gun Depth From Schlumberger Zero	4.9 M
Hydrophone Depth From Schlumberger Zero	4.9 M
SRD Depth From Schlumberger Zero	6.9 M

Other VSP constants:

True Vertical Time Correction	YES
Surface Velocity	1524.00 M/S

Stack number	Measured Depth (1) (M)	Measured Trans Time (MS)	True Vert. Depth from SRD (2) (M)	Corrected Trans Time (3) (MS)	Interval Velocity (4) (M/S)
18	247.0	117.17	240.1	230.93	2000.01
17	420.0	203.51	413.1	403.92	2217.37
16	537.0	256.22	530.1	509.46	2540.17
15	685.0	314.44	678.1	625.99	2727.30
14	784.9	351.05	778.0	699.24	2626.33
13	865.9	381.88	859.0	760.93	2757.55
12	1169.7	492.02	1162.8	981.26	2577.43
11	1235.0	517.35	1228.1	1031.93	3281.53
10	1280.1	531.09	1273.2	1059.42	2705.35
9	1395.0	573.55	1388.1	1144.36	2926.05
8	1415.0	580.39	1408.1	1158.04	3061.81
7	1494.9	606.48	1488.0	1210.23	3195.75
6	1575.0	631.54	1568.1	1260.36	3233.44
5	1630.1	648.58	1623.2	1294.44	0.00

|(1)Measured Depth is Cable Depth Referenced to Schlumberger Zero.|
|(2)TVD is referenced to SRD (5)|
|(3)TW Transit time with respect to SRD(5) corrected for Deviation|
|(4)Interval Velocity corrected for Deviation.|
|(5)SRD is Seismic Reference Depth.|

VSP STACK SUMMARY LISTING

Gun and Hydrophone Coordinates:

Gun Azimuth 270.0 DEG
Gun Offset 20.0 M
Gun Depth From Schlumberger Zero 4.9 M
Hydrophone Depth From Schlumberger Zero 4.9 M

SRD Depth From Schlumberger Zero 6.9 M

Other VSP constants:

True Vertical Time Correction YES
Surface Velocity 1524.00 M/S

Stack number	Measured Depth (1) (M)	Measured Trans Time SRD (2) (MS)	True Vert. Depth from SRD (3) (M)	Corrected Trans Time (4) (MS)	Average Velocity (M/S)
18	247.0	117.17	240.1	115.46	2073.19
17	420.0	203.51	413.1	201.96	2042.05
16	537.0	256.22	530.1	254.73	2078.18
15	685.0	314.44	678.1	312.99	2163.82
14	784.9	351.05	778.0	349.62	2222.64
13	865.9	381.88	859.0	380.46	2255.25
12	1169.7	492.02	1162.8	490.63	2367.74
11	1235.0	517.35	1228.1	515.97	2378.01
10	1280.1	531.09	1273.2	529.71	2401.39
9	1395.0	573.55	1388.1	572.18	2423.90
8	1415.0	580.39	1408.1	579.02	2429.82
7	1494.9	606.48	1488.0	605.11	2457.01
6	1575.0	631.54	1568.1	630.18	2486.33
5	1630.1	648.58	1623.2	647.22	2505.97

(1)Measured Depth is Cable Depth Referenced to Schlumberger Zero.
(2)TVD is referenced to SRD (5)
(3)Transit time with respect to SRD(5) corrected for Deviation.
(4) Average Velocity from close to source sensor to geophone.
(5)SRD is Seismic Reference Depth.

VSP STACK SUMMARY LISTING (TWO WAY CORRECTED TIMES)

Gun and Hydrophone Coordinates:

Gun Azimuth 270.0 DEG
Gun Offset 20.0 M
Gun Depth From Schlumberger Zero 4.9 M
Hydrophone Depth From Schlumberger Zero 4.9 M

SRD Depth From Schlumberger Zero 6.9 M

| SRD Depth From Schlumberger Zero 0.0 M |

Other VSP constants:

True Vertical Time Correction YES
Surface Velocity 1524.00 M/S

Stack number	Measured Depth (1) (M)	Measured Trans Time SRD (2) (MS)	True Vert. Depth from SRD (3) (M)	Corrected Trans Time (MS)	Average Velocity (4) (M/S)
18	247.0	117.17	240.1	230.93	2073.19
17	420.0	203.51	413.1	403.92	2042.05
16	537.0	256.22	530.1	509.46	2078.18
15	685.0	314.44	678.1	625.99	2163.82
14	784.9	351.05	778.0	699.24	2222.64
13	865.9	381.88	859.0	760.93	2255.25
12	1169.7	492.02	1162.8	981.26	2367.74
11	1235.0	517.35	1228.1	1031.93	2378.01
10	1280.1	531.09	1273.2	1059.42	2401.39
9	1395.0	573.55	1388.1	1144.36	2423.90
8	1415.0	580.39	1408.1	1158.04	2429.82
7	1494.9	606.48	1488.0	1210.23	2457.01
6	1575.0	631.54	1568.1	1260.36	2486.33
5	1630.1	648.58	1623.2	1294.44	2505.97

(1)Measured Depth is Cable Depth Referenced to Schlumberger Zero.
(2)TVD is referenced to SRD (5)
(3)TW Transit time with respect to SRD(5) corrected for Deviation
(4) Average Velocity from close to source sensor to geophone.
(5)SRD is Seismic Reference Depth.

Company: **Essential Petroleum Resources Limited**

Schlumberger

Well: **Killarney EPRL 1**
Field: **PEP 152**
Rig: **Hunt Rig #2**
Country: **Australia**

CSI Seismic
Final Print