

Schlumberger  
MELBOURNE LOG INTERPRETATION CENTRE  
DEPT. NAT. RES. & ENV.  
PE605579

# GEOGRAM\*

(Synthetic Seismogram)

Stacked X,Y,Z components PLOT 1

Company: WESTERN UNDERGROUND GAS STORAGE  
Well: IONA OBS-1  
Field: IONA  
Country: AUSTRALIA  
Reference No: Interval: 1540.46 to 698.00  
Date Logged: 24-FEB-1999 Date Processed: N.A.  
Location: Latitude: Longitude:  
Elevations: KB: 137.50 DF: 137.20 GL: 132.50  
Permanent Datum: MSL Depth Units: METRES

**LOG INFORMATION**  
FIELD RECORDING: Engineer: R. GERHART Location: Program Version: 700-427  
COMPUTATION: Analyst: Y. SOLOVYOV Centre: SYJ Baseline: 20.5  
**ELEVATION ABOVE MEAN SEA LEVEL**  
Logging Datum: 137.50  
Seismic Reference Datum: 0.00  
Sonic Calibration By Check Shots: YES Sonic Edited By Analyst: YES  
Two-Way Time Sample Interval: 1 ms Environment: YES

True Vertical Depth Corrections Applied: YES  
Source of True Vertical Depth Data:  
Maximum Hole Deviation: 40

Run	Date	Tool Type	Bit Size/Depth	Casing Size/Depth	Top Depth	Bottom Depth
1	25-08-95	DLL-LDL-GR	17.8 IN	13.3 IN	108 M	698 M
2	12-06-95	DLL-LDL-GR	12.2 IN	13.3 IN	655 M	2755 M

VSP Run	Date	Gun Offset	Hydro Offset	Gun Elevation	Hydro Elevation	Gun Azimuth	Hydro Azimuth
1	15-06-95	590 M	590 M	-101.9 M BELOW MSL	-102.4 M BELOW MSL	127 DEG	127 DEG

**GEOGRAM MODEL ASSUMPTIONS**  
Equal time slice model of horizontal plane layers.  
Plane acoustic waves at normal incidence.  
No intrinsic attenuation.

**POLARITY**  
An upgoing wave, reflected by an increase in acoustic impedance with depth, is displayed as a white trough under normal polarity.

**SIGNATURES**  
All signatures displayed in the Geogram results correspond to a wavelet convolved with a reflection coefficient of -0.5 (A decrease in acoustic impedance with depth).

REMARKS

The well name, location and feedback addresses which were furnished by the customer. All interpretations are opinions based on information from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation. We are not responsible for any loss or damage, or any liability, arising from or in connection with the use of any information or interpretation provided or made available by service resulting from any interpretation made by Schlumberger. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

TEXAS UNLIMITED  
IONA  
IONA OBS-1  
AUSTRALIA

PLOT REFERENCE : STACKED DATA

DATA PROCESSED: 4 MARCH 1999

**\*\* MEDIAN STACK \*\***  
(DOWNHOLE DATA)  
MEDIAN COHERENCY STACK OF THE DOWNHOLE VERTICAL COMPONENT.  
PROCESSING SEQUENCE:  
MEDIAN STACK APPLIED  
BANDPASS FILTER : 5 - 120 HZ  
VERTICAL SCALE : 25 CM/SEC  
POLARITY (S.E.G.) : REVERSE  
TIMES REFERENCED TO HYDROPHONE

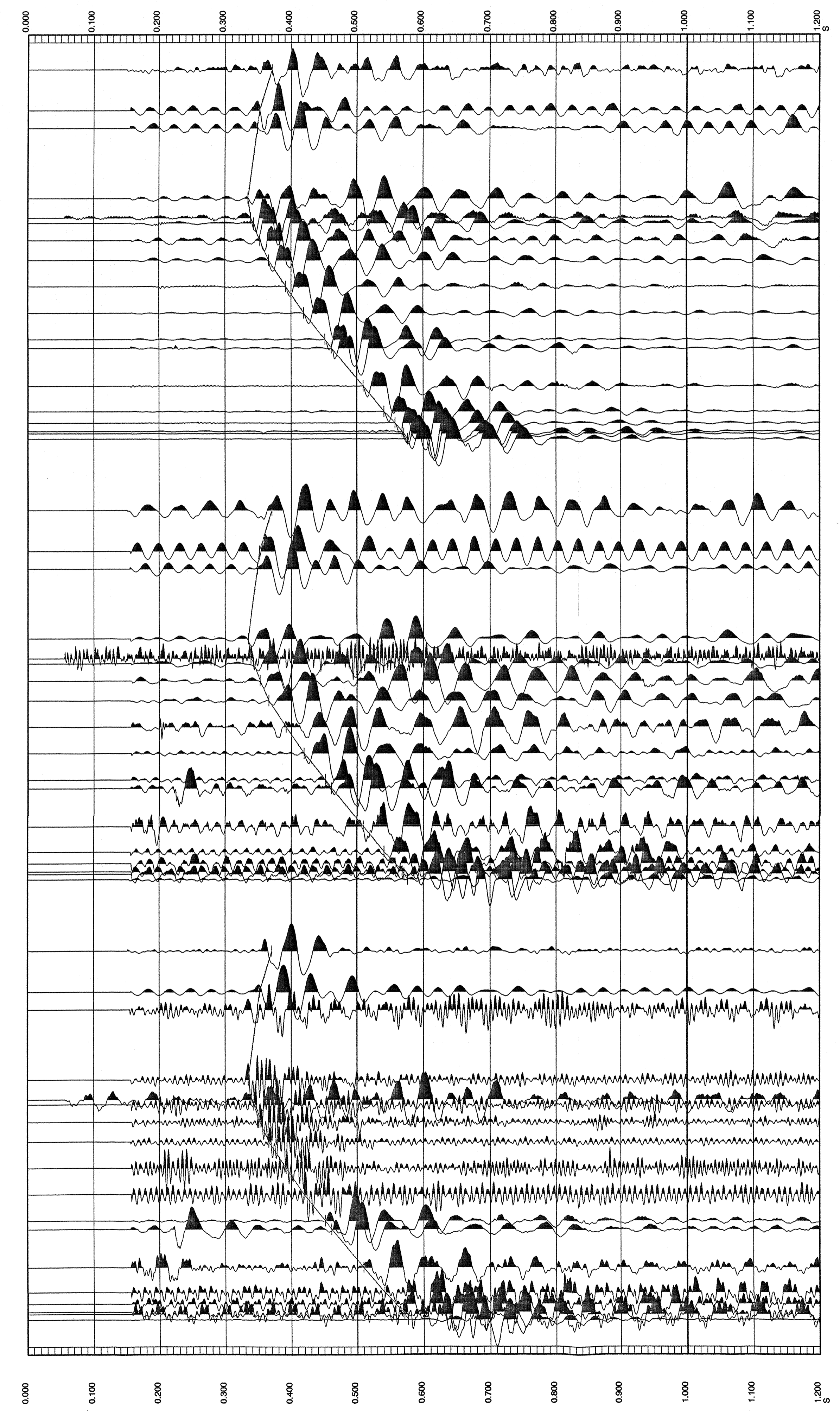
RAW DEPTH M	TRANSIT TIME S	LEVEL NO	MAX AMPLITUDE	MIN AMPLITUDE
137.4	0.370	18	0.2744	-0.2604
282.8	0.351	17	0.4065	-0.3598
365.2	0.349	16	0.3907	-0.3440
453.5	0.336	15	0.2303	-0.2792
702.2	0.330	14	0.1791	-0.2453
713.3	0.340	13	0.1962	-0.2397
785.5	0.330	12	0.1190	-0.2292
903.0	0.336	11	0.3328	-0.4128
965.0	0.382	10	0.3000	-0.4608
1060.0	0.419	9	0.3878	-0.4600
1180.0	0.461	8	0.3487	-0.4400
1193.0	0.461	7	0.2890	-0.4601
1327.5	0.510	6	0.3023	-0.3640
1433.5	0.541	5	0.2303	-0.3740
1477.3	0.538	4	0.2405	-0.3130
1517.0	0.571	3	0.2814	-0.3208
1527.9	0.577	2	0.2561	-0.3388

**\*\* MEDIAN STACK \*\***  
(DOWNHOLE DATA)  
MEDIAN COHERENCY STACK OF THE DOWNHOLE 2. HORIZONTAL COMPONENT  
PROCESSING SEQUENCE:  
MEDIAN STACK APPLIED  
BANDPASS FILTER : 5 - 120 HZ  
VERTICAL SCALE : 25 CM/SEC  
POLARITY (S.E.G.) : REVERSE  
TIMES REFERENCED TO HYDROPHONE

RAW DEPTH M	TRANSIT TIME S	LEVEL NO	MAX AMPLITUDE	MIN AMPLITUDE
137.4	0.370	18	0.2818	-0.2923
282.8	0.351	17	0.4543	-0.4617
365.2	0.349	16	0.3953	-0.3775
453.5	0.336	15	0.2592	-0.3067
702.2	0.330	14	0.2020	-0.2086
713.3	0.340	13	0.1895	-0.1800
785.5	0.330	12	0.1101	-0.0959
903.0	0.336	11	0.1165	-0.1008
965.0	0.382	10	0.0963	-0.0878
1060.0	0.419	9	0.1105	-0.1071
1180.0	0.461	8	0.0789	-0.0951
1193.0	0.461	7	0.0963	-0.0554
1327.5	0.510	6	0.0340	-0.0384
1433.5	0.541	5	0.0328	-0.0421
1477.3	0.538	4	0.0409	-0.0489
1517.0	0.571	3	0.0281	-0.0312
1527.9	0.577	2	0.0298	-0.0316

**\*\* MEDIAN STACK \*\***  
(DOWNHOLE DATA)  
MEDIAN COHERENCY STACK OF THE DOWNHOLE 1. HORIZONTAL COMPONENT  
PROCESSING SEQUENCE:  
MEDIAN STACK APPLIED  
BANDPASS FILTER : 5 - 120 HZ  
VERTICAL SCALE : 25 CM/SEC  
POLARITY (S.E.G.) : REVERSE  
TIMES REFERENCED TO HYDROPHONE

RAW DEPTH M	TRANSIT TIME S	LEVEL NO	MAX AMPLITUDE	MIN AMPLITUDE
137.4	0.370	18	1.3203	-1.1585
282.8	0.351	17	0.8703	-0.8795
365.2	0.349	16	0.9128	-0.9195
453.5	0.336	15	0.0209	-0.0233
702.2	0.330	14	0.0338	-0.2023
713.3	0.340	13	0.0297	-0.0710
785.5	0.330	12	0.0276	-0.0229
903.0	0.336	11	0.0290	-0.0353
965.0	0.382	10	0.0214	-0.0330
1060.0	0.419	9	0.0118	-0.0128
1180.0	0.461	8	0.0250	-0.1800
1193.0	0.461	7	0.0370	-0.1048
1327.5	0.510	6	0.0074	-0.0064
1433.5	0.541	5	0.0235	-0.0273
1477.3	0.538	4	0.0207	-0.0438
1517.0	0.571	3	0.0482	-0.0368
1527.9	0.577	2	0.4600	-0.2544



COMPANY W.U.G.S.  
FIELD IONA  
WELL IONA OBS-1  
COUNTRY AUSTRALIA

