



25 FEB 1983

Seismograph Service Limited

Inc. in England registered in W.A.

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CABLES
"SEISLIM LONDON"
INLAND TELEGRAMS
"SEISLIM BROMLEY TELEX"
HOLWOOD,
WESTERHAM ROAD,
KESTON, KENT
ENGLAND
BR2 6HD
REGISTERED IN ENGLAND No. 409888

COMPANY: PHILLIPS AUSTRALIAN OIL CO.

WELL: SELENE NO. 1

VSP PROCESSING COMMENT.

A V.S.P. checkshot survey was recorded in the above well on the 6th February, 1983. A total of 62 levels between 3535 and 360m below KB were recorded of which 48 between 3535 and 2335m below KB were V.S.P. processed. Above 2335m below KB the data was too widely spaced for use in the VSP. No data could be recorded at 2885m below KB due to washout. A dead trace has been inserted for this well to maintain an even trace spacing of approximately 25m

A single Bolt airgun (120cu in capacity) was used throughout the survey. This has produced a consistent waveform.

The VSP displays were produced using the processing sequence indicated on the side labels. A source signature deconvolution has been applied to the data using operators designed from 310ms of the near-field hydrophone signal. This has successfully removed the bubble train evident on the geophone signal.

Downgoing wave subtraction and Special VSP deconvolution were applied as appropriate during processing. The latter was designed from 1050ms of the downgoing wave. It was considered that this was the maximum length of data over which the downgoing energy was sufficiently coherent (Panel D2).

In order to better enhance any events with moveout in the data, a tracking filter designed to enhance dips to the left of 0-4ms/trace was applied to the deconvolved data (Panels S4 and S5).

The match with the seismic section is considered very good with a time tie of zero on the seismic section (Line GP81-91 migrated SP180) against zero on the VSP (Panels S3, S5 and V2 Polarity 1). There is also a good match between the VSP, particularly after special VSP Deconvolution and the changes in the velocity shown by the two-way travel time velocity log.

PROCESSED BY:

DAVID MEAD.
Snr. Seismologist.
24th February, 1983.



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VSP STACKED GEOPHONE DATA.

<u>LEVEL No.</u>	<u>DEPTH (m below KB).</u>	<u>STACK.</u>
1	3535	1
2	3510	2
3	3485	3
4	3460	3
5	3435	3
6	3410	3
7	3385	3
8	3360	3
9	3335	3
10	3310	2
11	3285	4
12	3260	3
13	3235	3
14	3210	4
15	3185	4
16	3160	4
17	3135	2
18	3110	2
19	3085	3
20	3060	4

<u>LEVEL No.</u>	<u>DEPTH (m below KB).</u>	<u>STACK.</u>
21	3035	3
22	3007	4
23	2985	4
24	2960	4
25	2935	3
26	2910	10
27	2885	BLANK
28	2860	3
29	2835	3
30	2810	4
31	2785	4
32	2760	4
33	2735	7
34	2710	5
35	2685	7
36	2660	3
37	2635	5
38	2610	9
39	2585	4
40	2560	4
41	2535	4
42	2510	4
43	2485	5
44	2460	4
45	2435	5
46	2410	5
47	2385	10
48	2360	11
49	2335	5