



480

VELOCITY SURVEY  
OF  
**FERGUSONS HILL**  
No. 1

FOR  
FROME-BROKEN HILL CO. PTY. LTD.  
VICTORIA, AUSTRALIA

ATTACHMENT TO WCR  
VELOCITY SURVEY  
FERGUSONS HILL-1  
W480

BY  
UNITED GEOPHYSICAL CORP.  
PARTY 149

4th MAY, 1964

W480

Page 1 of 14  
Plus 1 SHEET

VELOCITY SURVEY  
of  
FERGUSON HILL NO. 1

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4 May, 1964

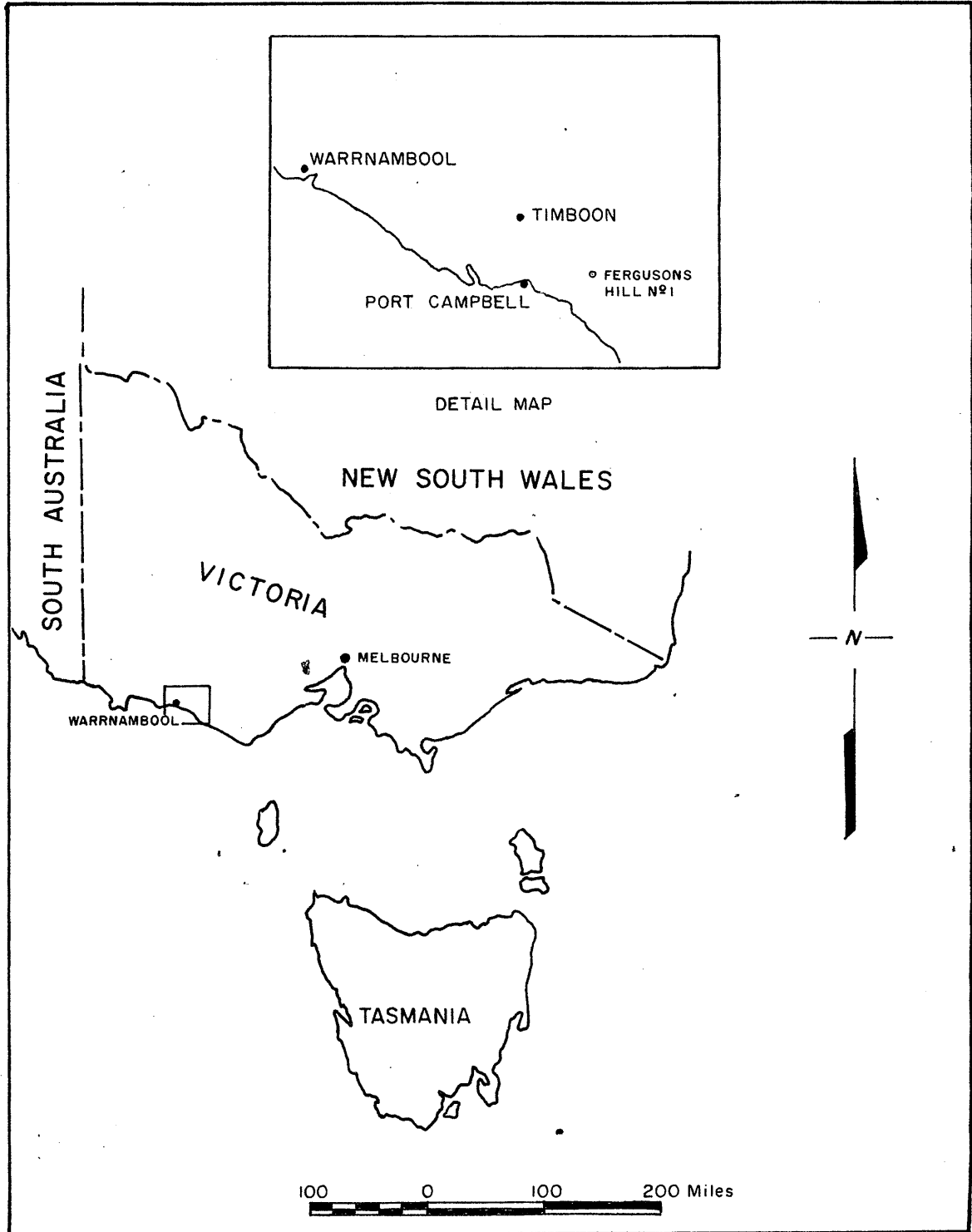
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VELOCITY SURVEY, FERGUSON HILL NO.1

A velocity survey was conducted at Ferguson Hill No. 1 on 4 May, 1964. No operational difficulties were encountered during the survey which was completed in seven hours.

The Survey Plat ( page 5 ) included with this report indicates the relationship between the shot holes and the well. Locations 'B' and 'C' were shot for geophone depth positions of 4000 ft. and shallower. All deeper positions were shot from the far holes. All depths were shot from both sides of the well. Average corrected times were used in computing interval and average velocities.

Good breaks were obtained at all depths with the exception of the deepest position, 11,500 ft. It was found that Shot Location 'D' required heavier explosive charges than 'A' Location. Uphole times and the times obtained from the reference geophone indicate a much thicker weathering layer at Location 'D'. Most charges at 'D' were apparently in weathering which would account for the energy loss.

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Curves plotted and submitted ( page 6 ) with this report indicate a gradual increase in both average and interval velocity with depth down to 10,000 ft. A decrease is noted in interval velocity between the 10,000 ft. level and the deepest shot at 11,500 ft.

A deep well geophone supplied by United Geophysical Corp. was used for this survey. This geophone is a pressure sensitive type.

Respectfully submitted,



Teddy J. Greer  
Party Chief

Warrnambool, Victoria

11 May, 1964

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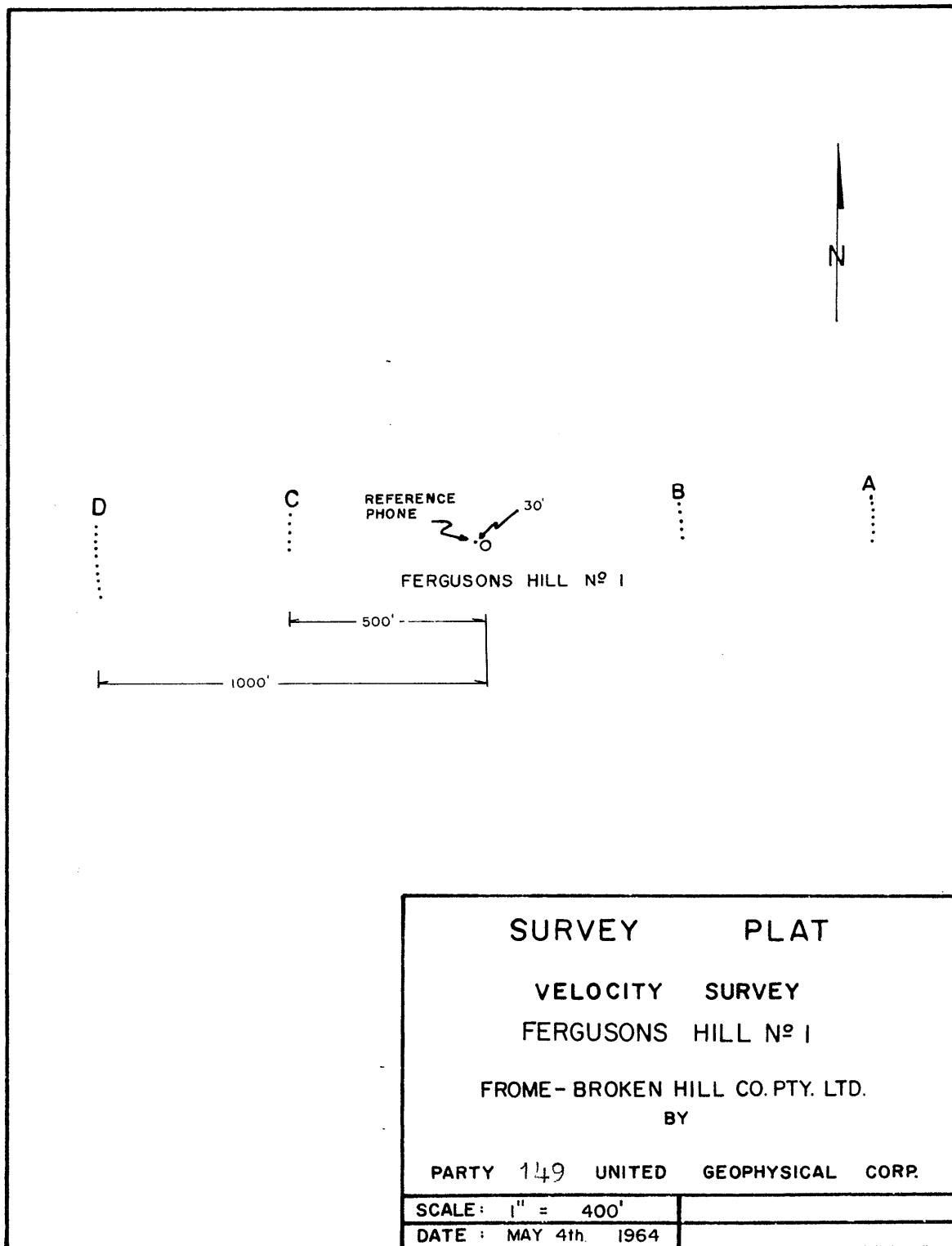
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- CONTAINER\_BARCODE = PE905761
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Fergusons Hill-1
  - BASIN = OTWAY BASIN
  - PERMIT = PEP/6
  - TYPE = WELL
  - SUBTYPE = VELOCITY\_CHART
  - DESCRIPTION = Shot Hole Information Sheet (from  
Velocity Report--attachment to WCR) for  
Fergusons Hill-1
- REMARKS =
- DATE\_CREATED = 4/03/64
- DATE\_RECEIVED =
  - W\_NO = W480
  - WELL\_NAME = FERGUSONS HILL-1
- CONTRACTOR =
- CLIENT\_OP\_CO = FROME-BROKEN HILL CO. PTY. LTD.

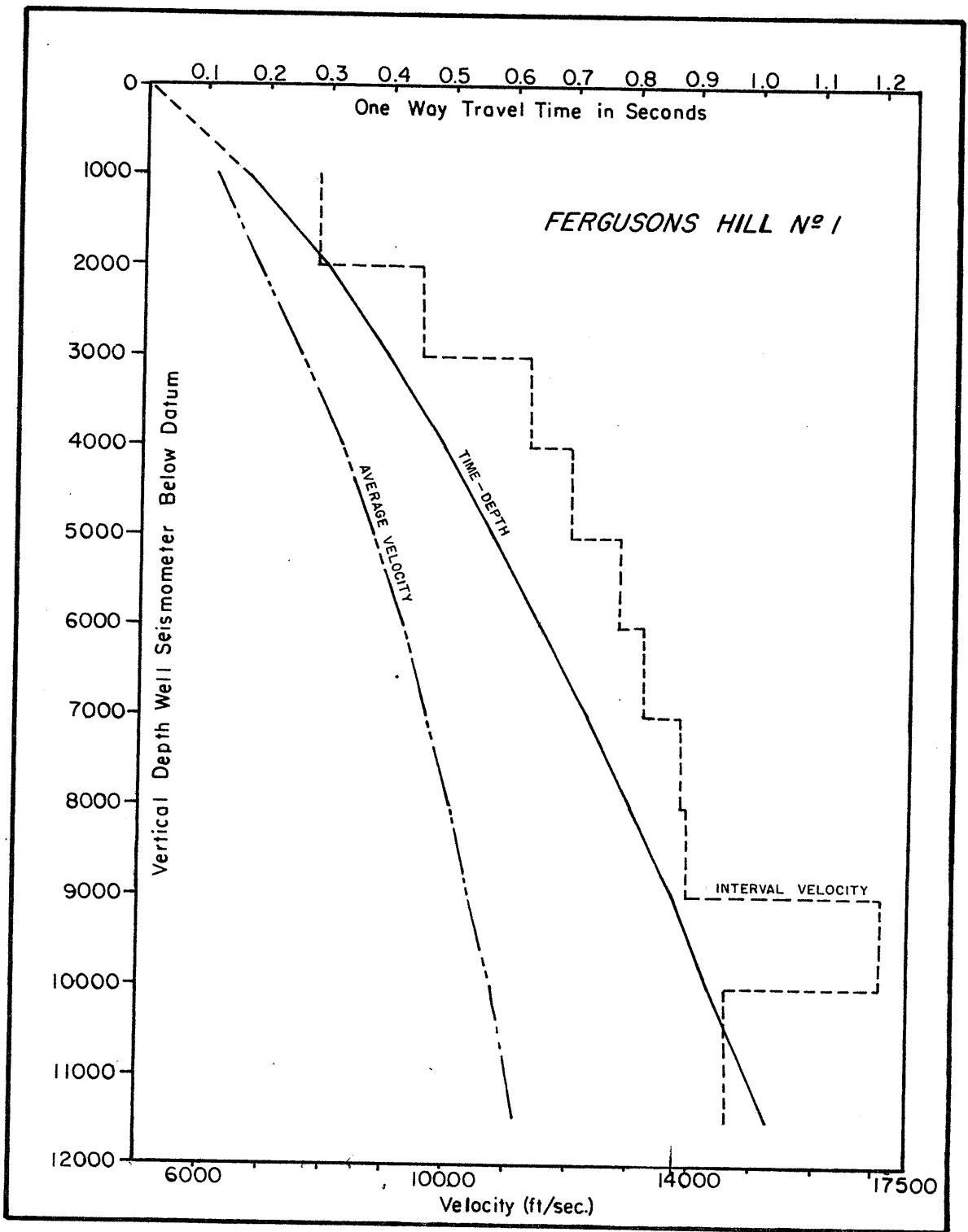
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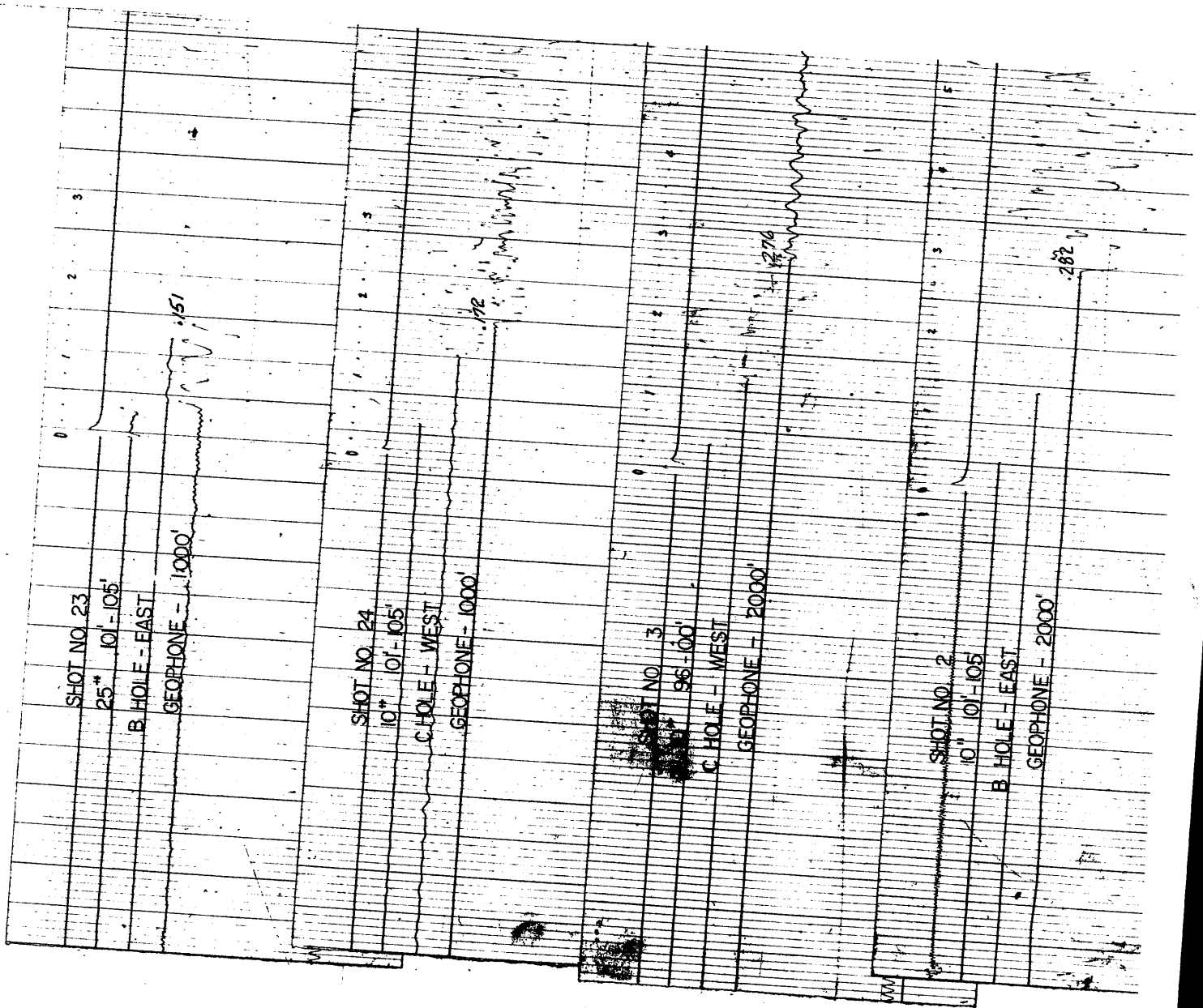


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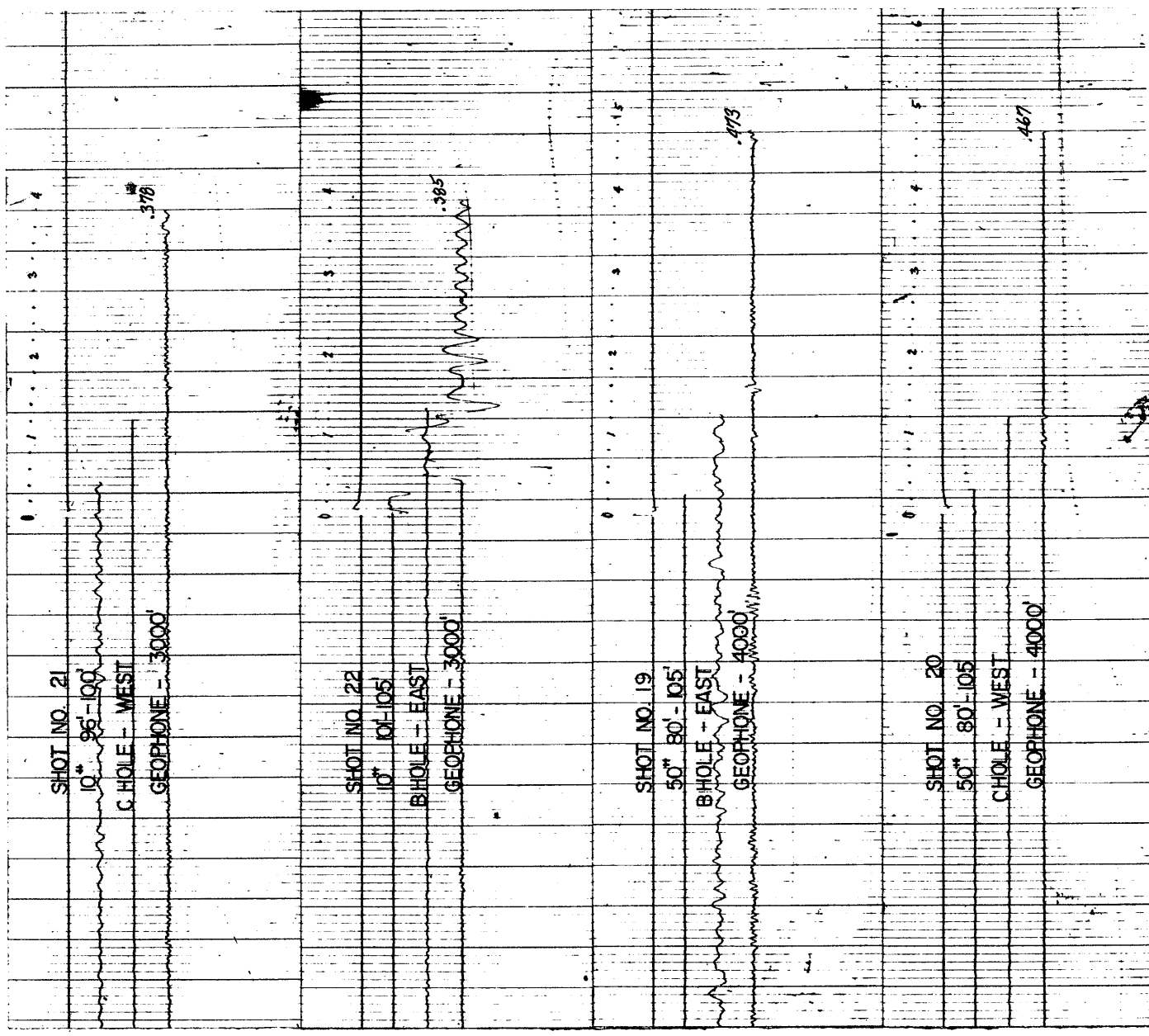


Time-Depth Curve for <sup>6</sup> a datum of 651' a.s.l.

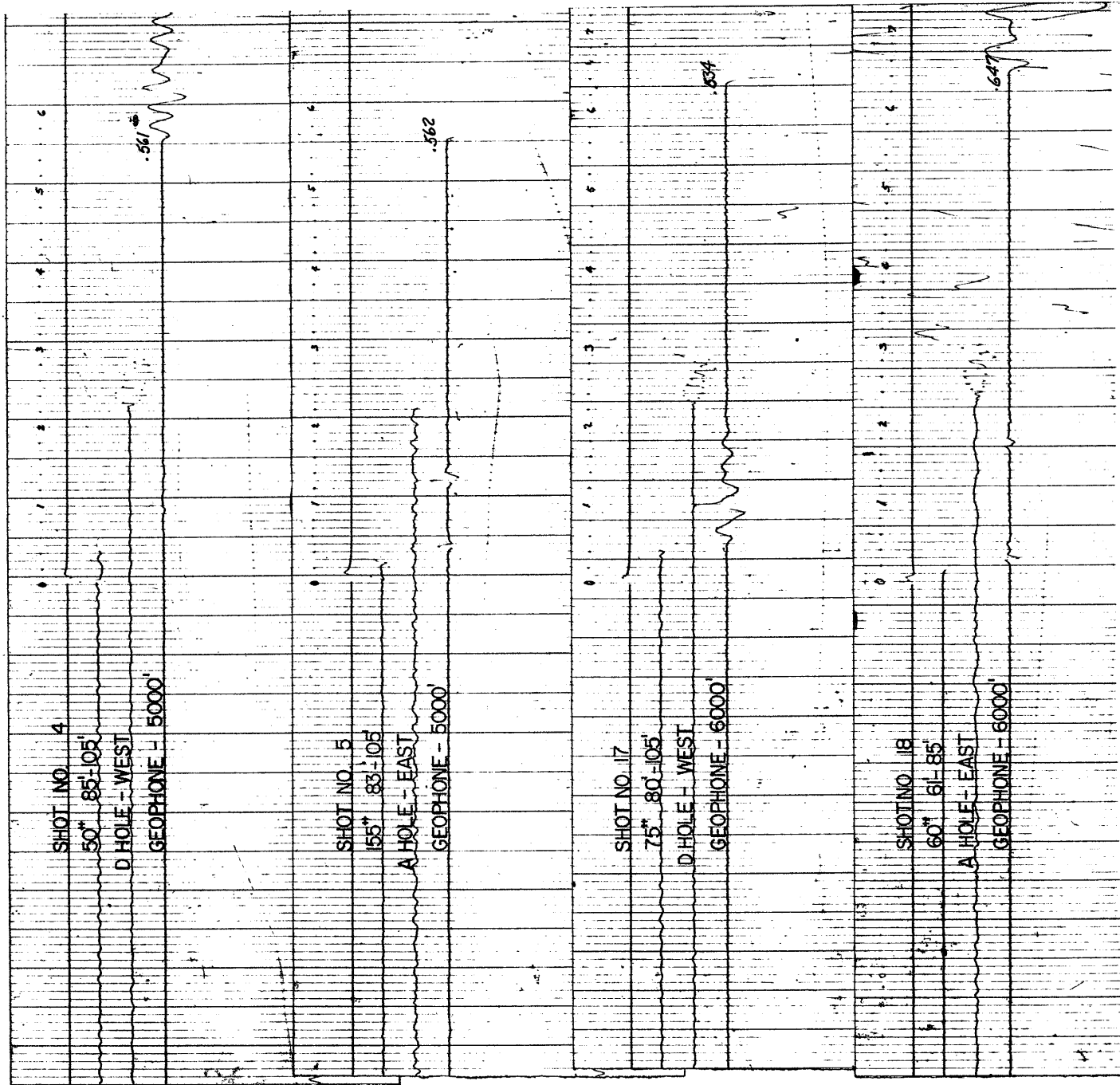
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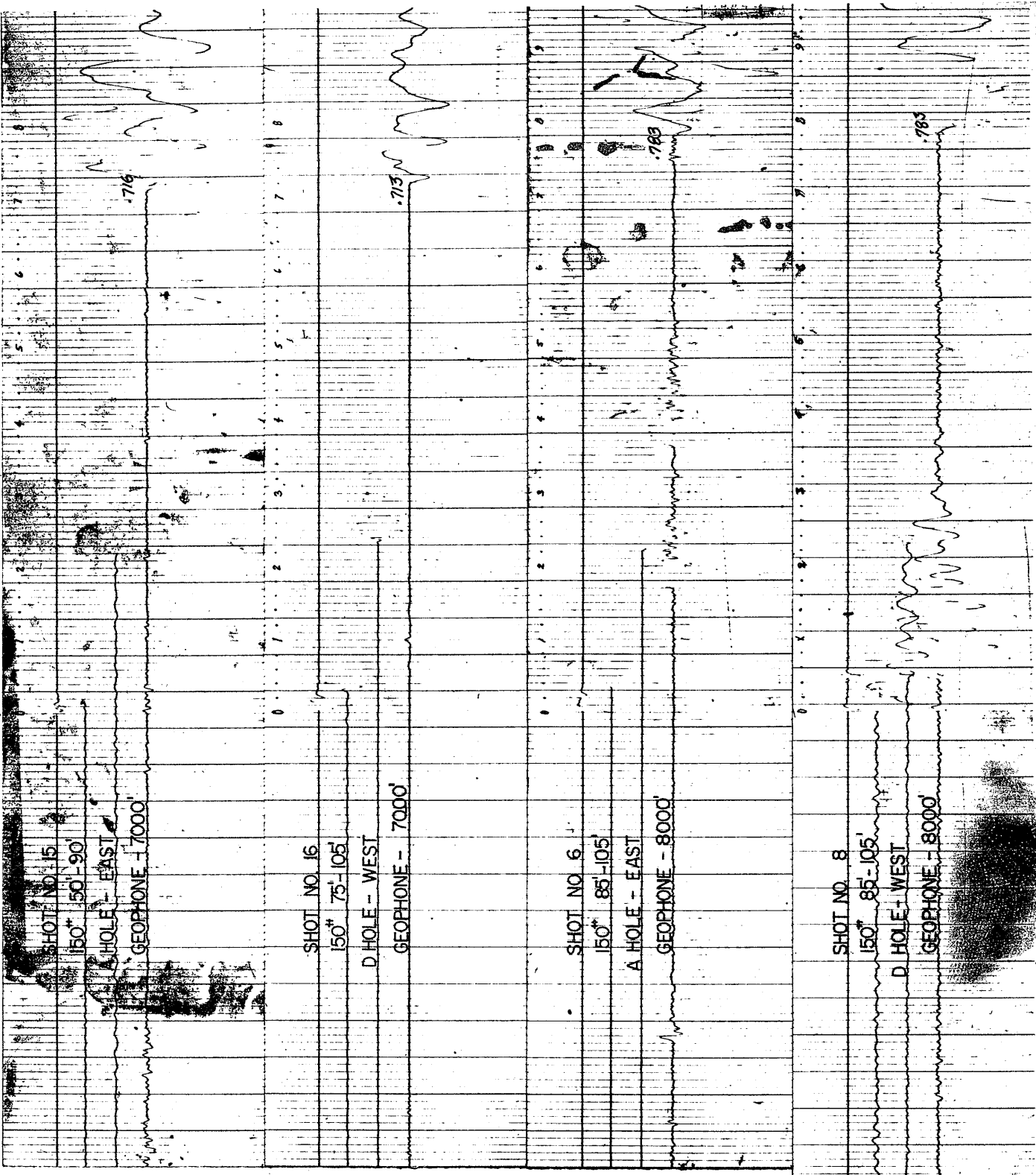
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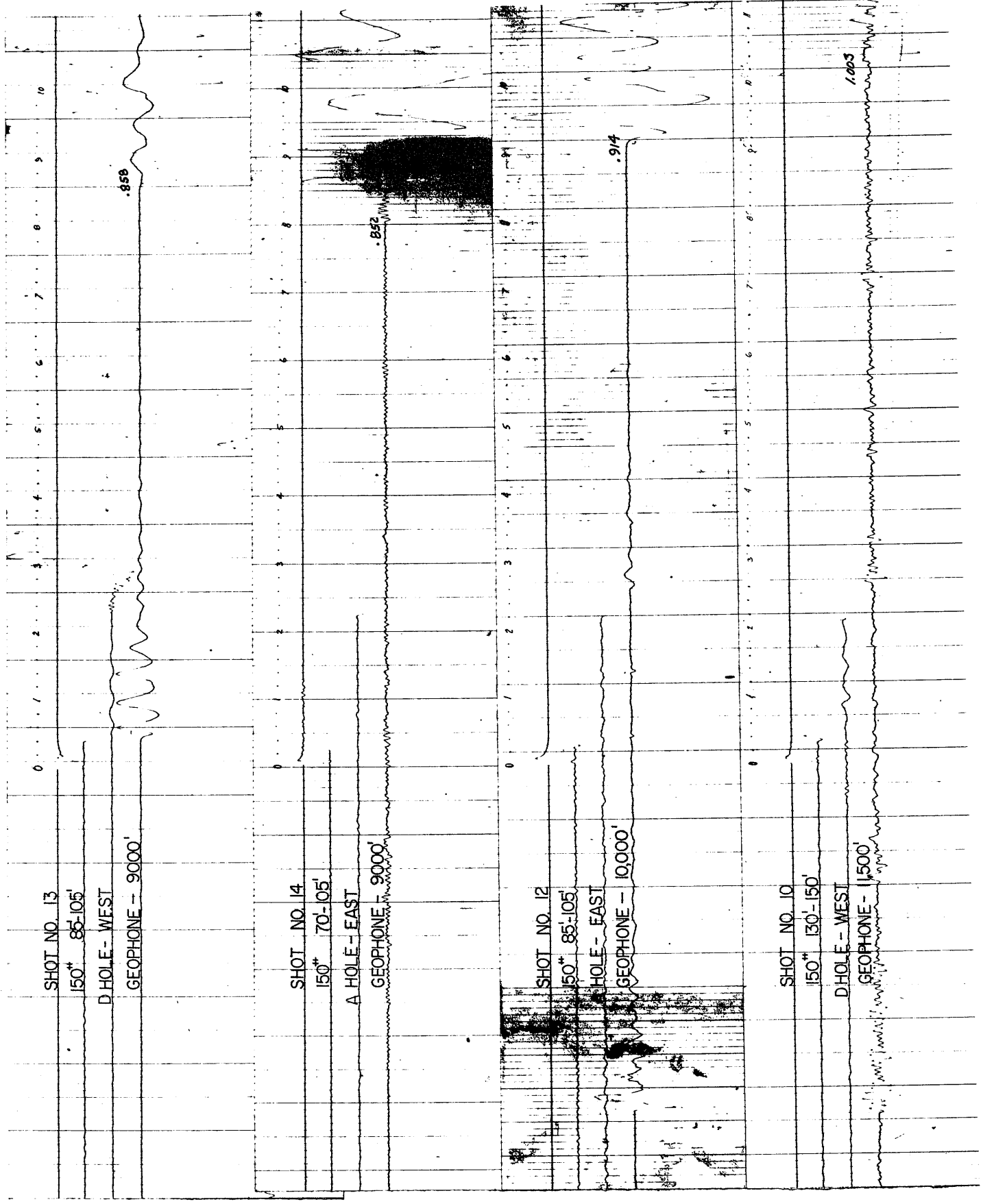
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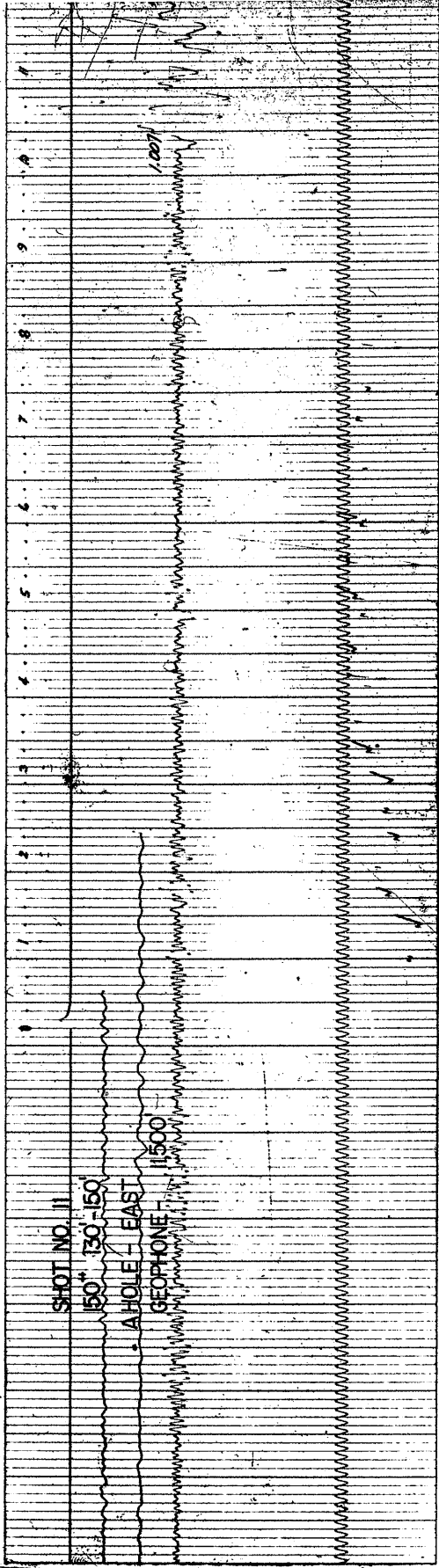
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PERMIT = PEP/6  
TYPE = WELL  
SUBTYPE = VELOCITY\_CHART  
DESCRIPTION = Time Depth Curve (from Velocity  
Survey--attachment to WCR) for  
Fergusons Hill-1  
REMARKS =  
DATE\_CREATED = 4/05/64  
DATE\_RECEIVED =  
W\_NO = W480  
WELL\_NAME = FERGUSONS HILL-1  
CONTRACTOR =  
CLIENT\_OP\_CO = FROME-BROKEN HILL CO. PTY. LTD.

(Inserted by DNRE - Vic Govt Mines Dept)