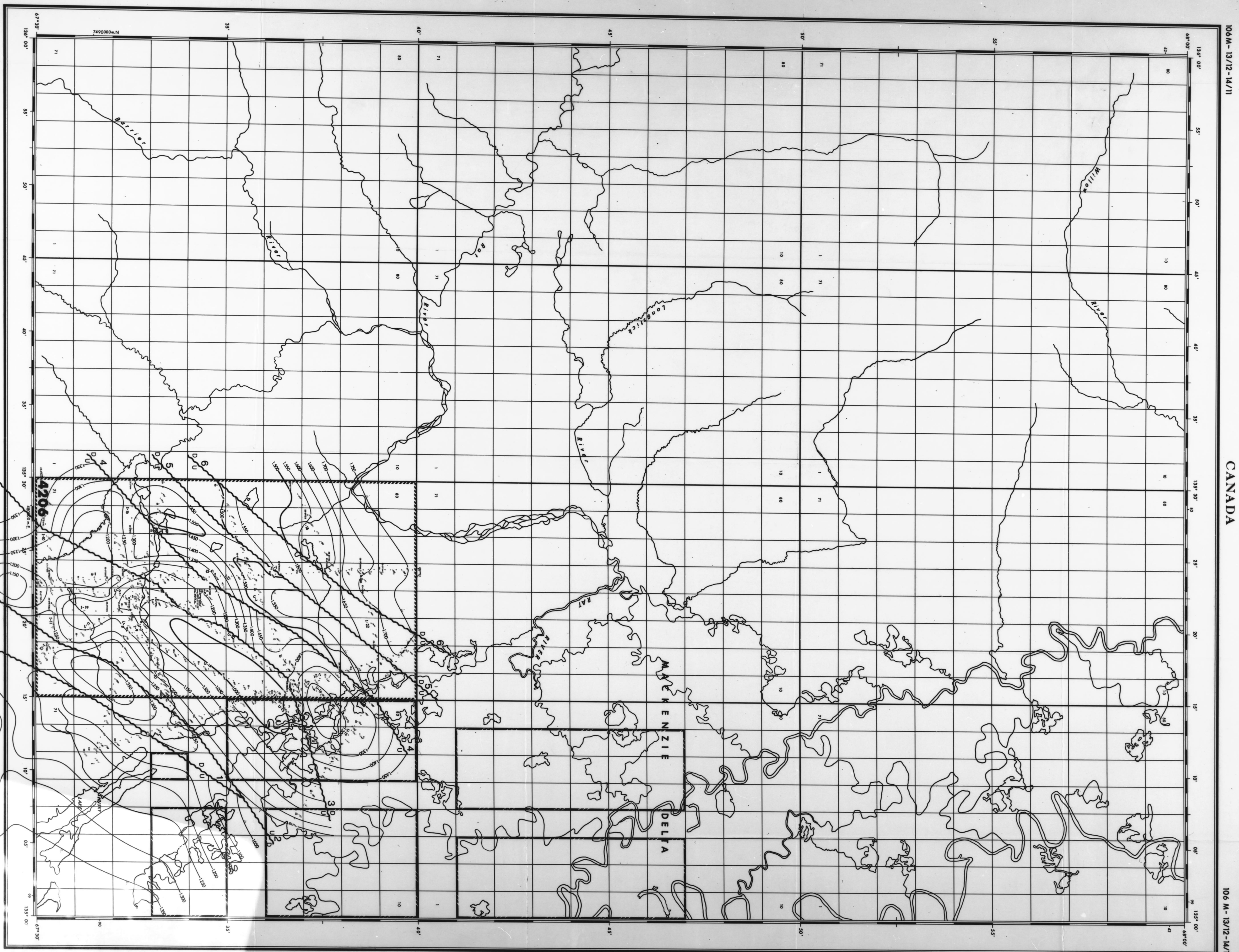




HUSKY LAKE
DISTRICT OF MACKENZIE
NORTHWEST TERRITORIES

SCALE 1 : 50,000

1.25 inches to 1 mile approximately

North American Datum 1927
Universal

Transverse Mercator Projection
(Gauss-Kruger)

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 **DOMÉ PETROLEUM LIMITED**
Calgary Edmonton Grande Prairie

STONY

FLUID STRUCTURE

1

AY, 1972

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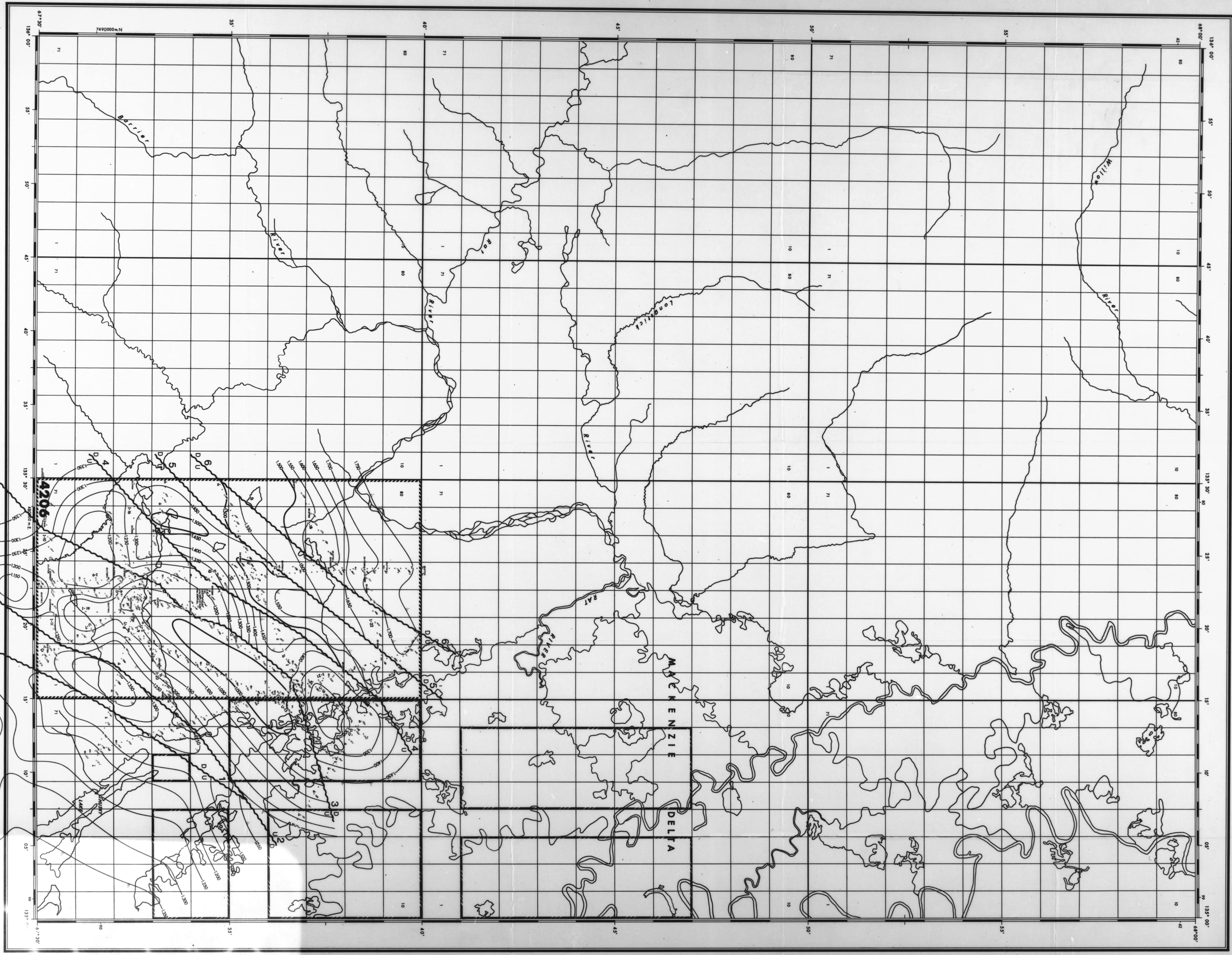
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106 M-13/12-14/11

CANADA

106 M-13/12-14/11



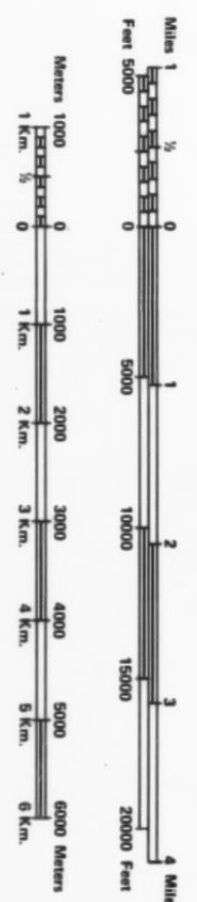
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INFORMATION
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HUSKY LAKE
DISTRICT OF MACKENZIE
NORTHWEST TERRITORIES

SCALE 1:50,000

1:50,000 scale in 1 inch approximately



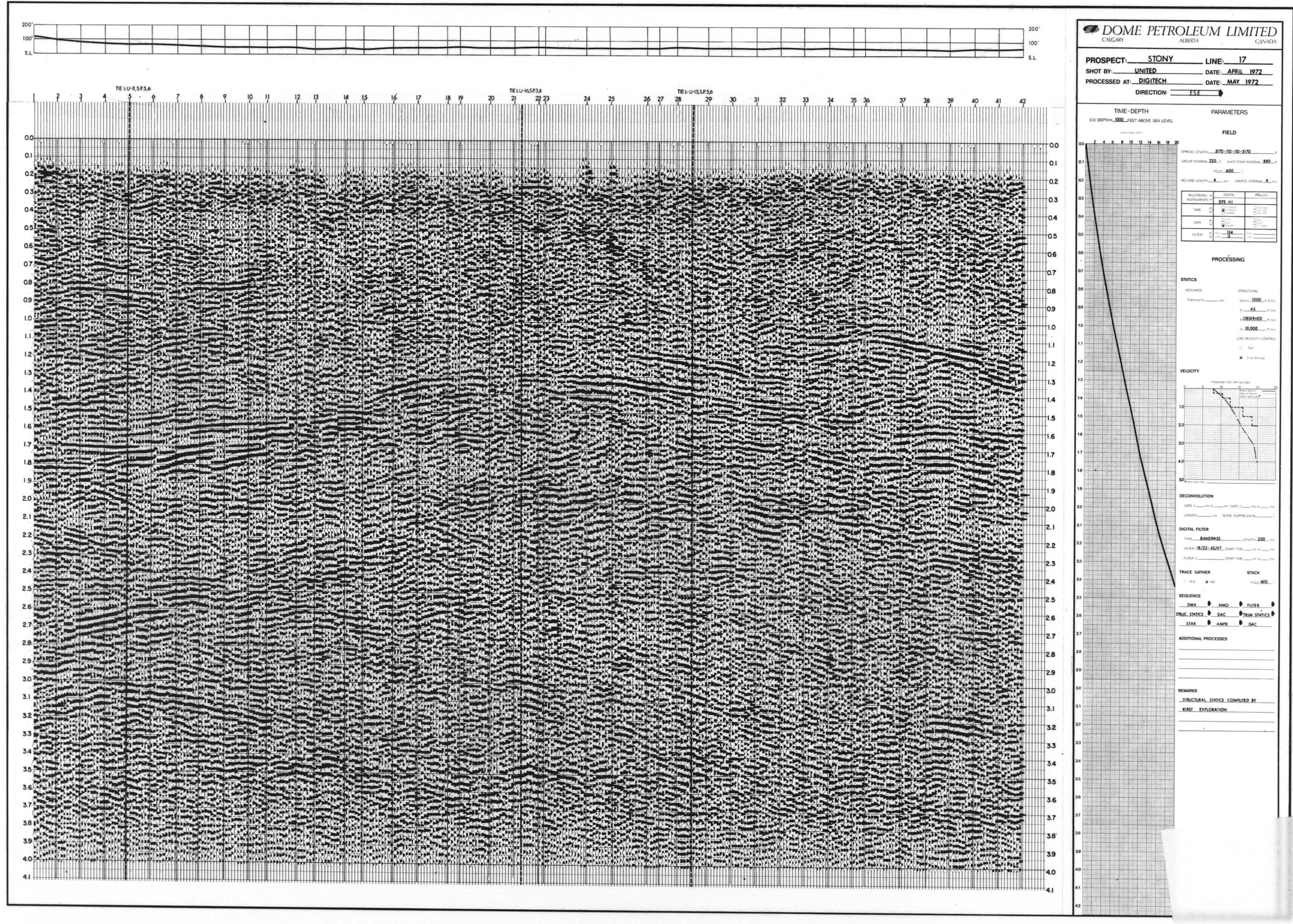
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HUSKY LAKE

DOMO PETROLEUM LIMITED

STONY
DISTRICT

DATE: 1974.6.11
DRAWN BY: J. L. B. / J. L. B.
CHECKED BY: J. L. B. / J. L. B.
DATE: 1974.6.11

NO.	DESCRIPTION	DATE	BY	REVISION
1	CONSTRUCTION	1974.6.11	J. L. B.	1
2	REVISION	1974.6.11	J. L. B.	2
3	REVISION	1974.6.11	J. L. B.	3
4	REVISION	1974.6.11	J. L. B.	4
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6	REVISION	1974.6.11	J. L. B.	6
7	REVISION	1974.6.11	J. L. B.	7
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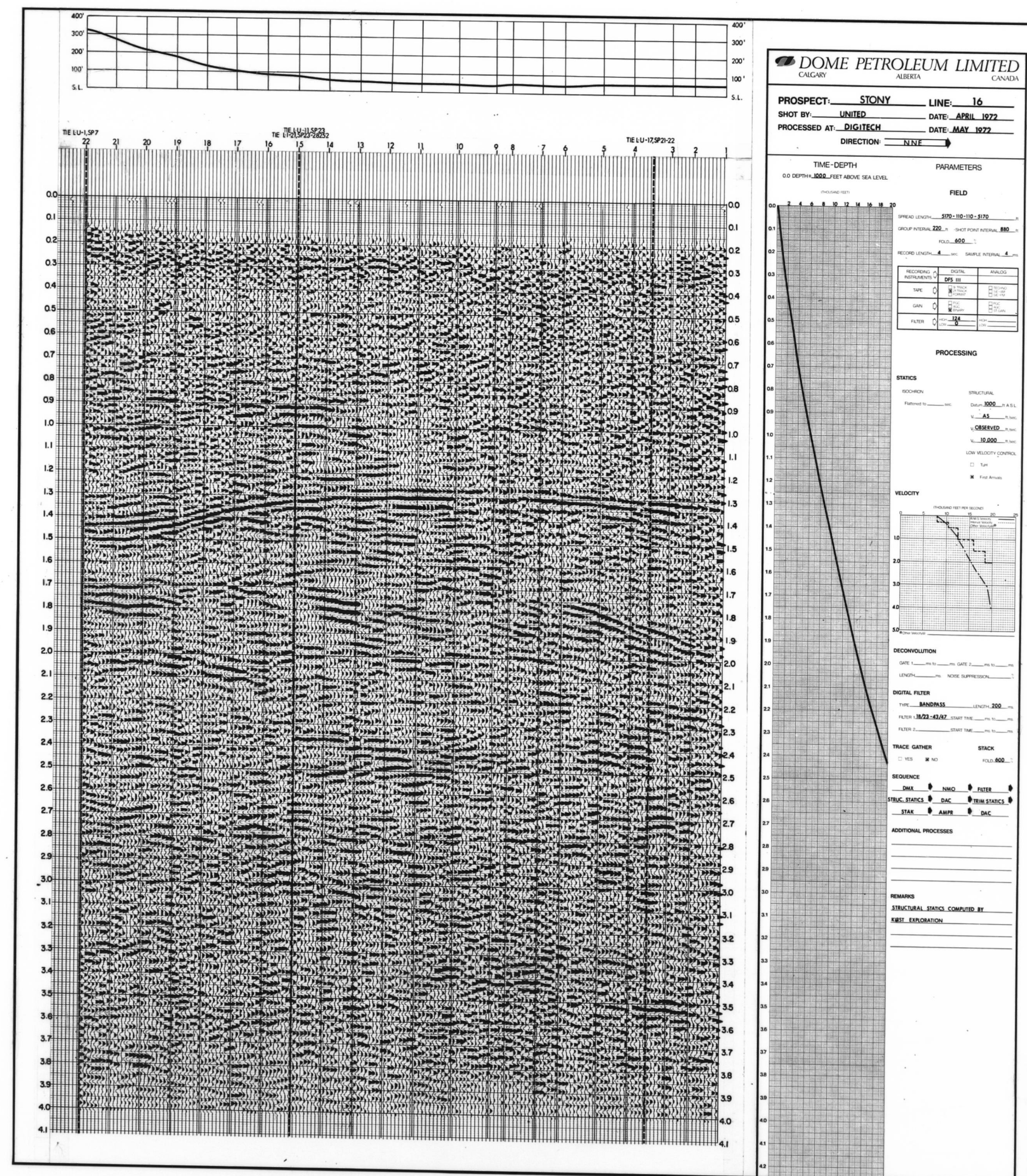
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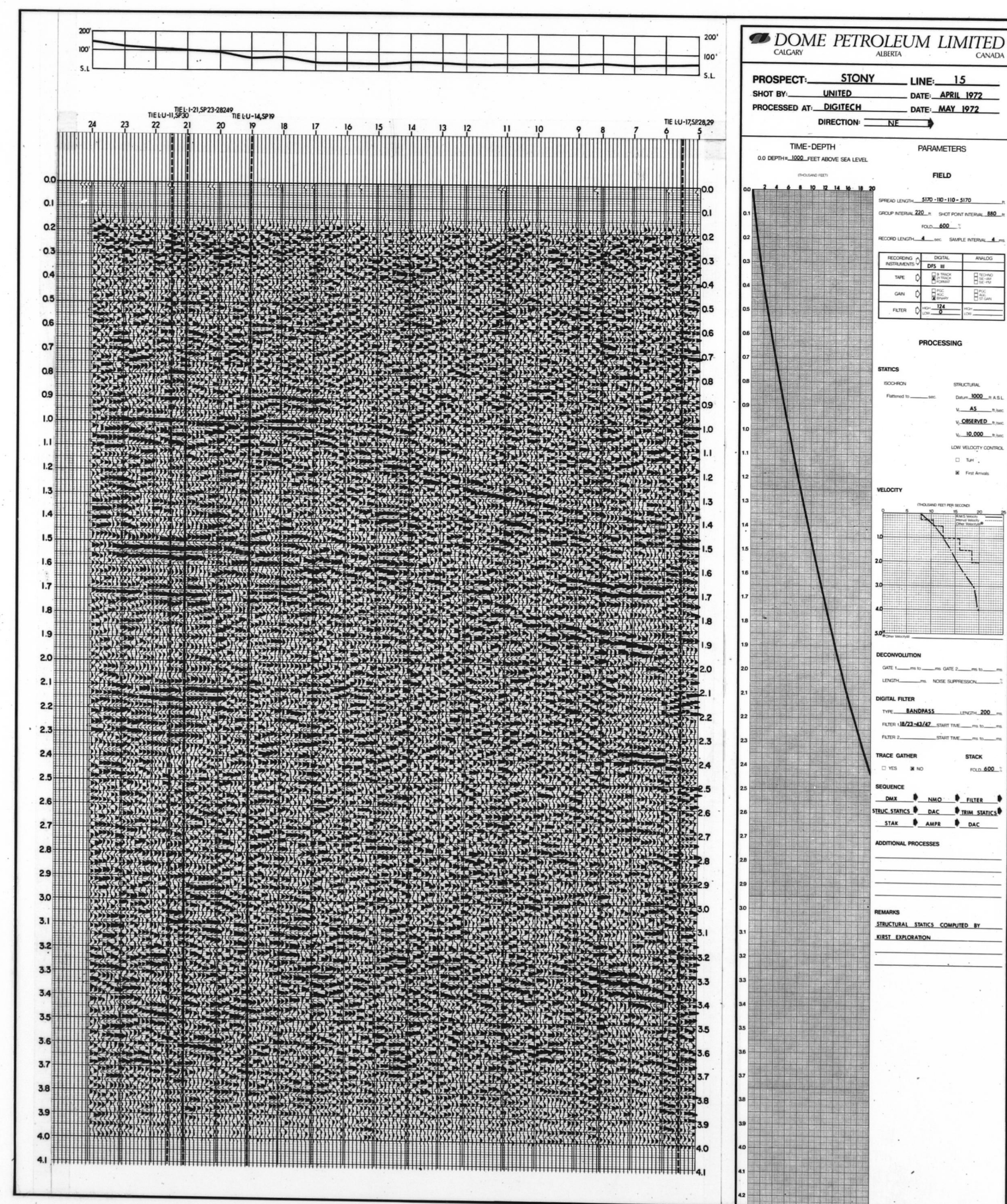
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April 1974



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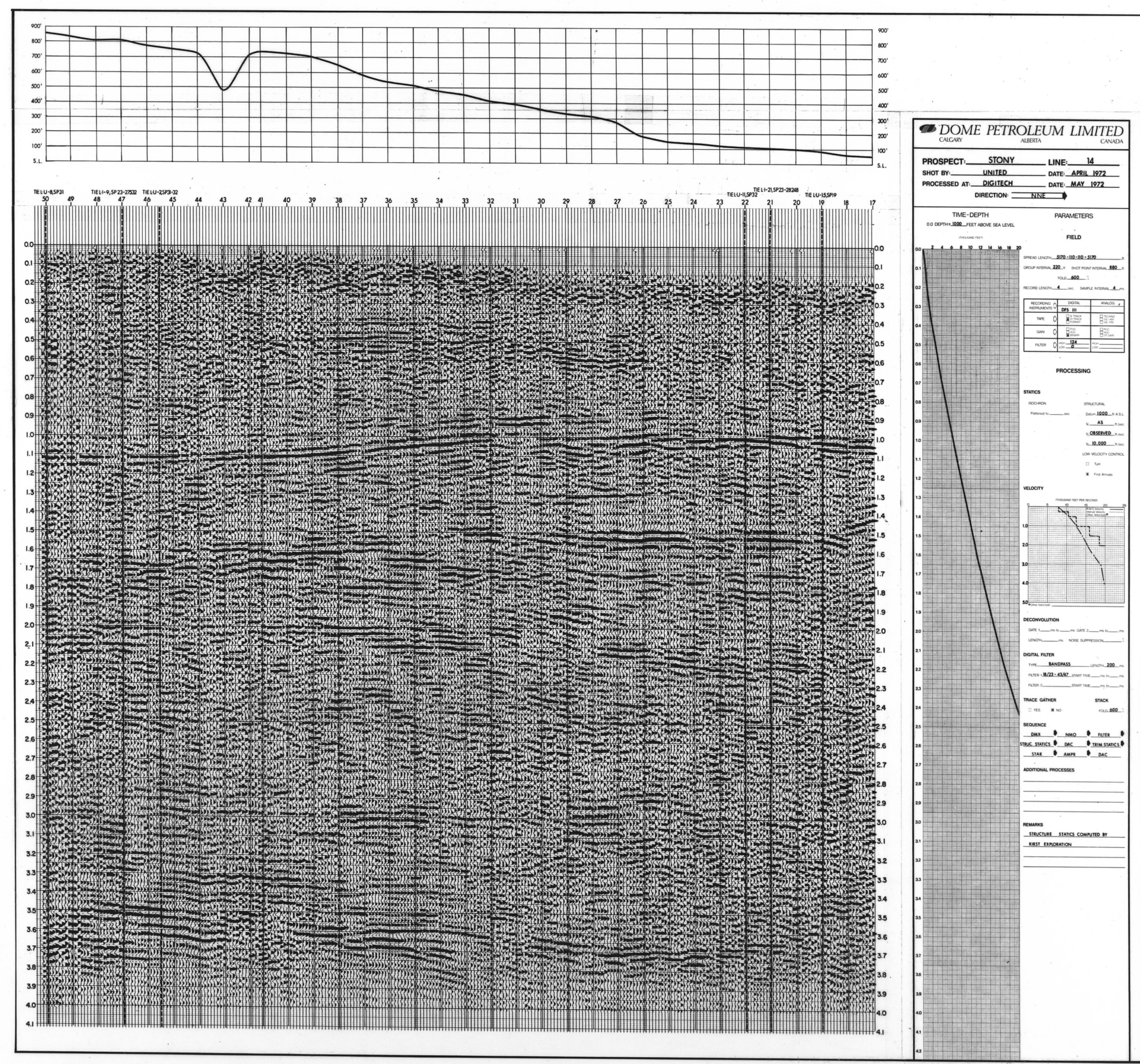
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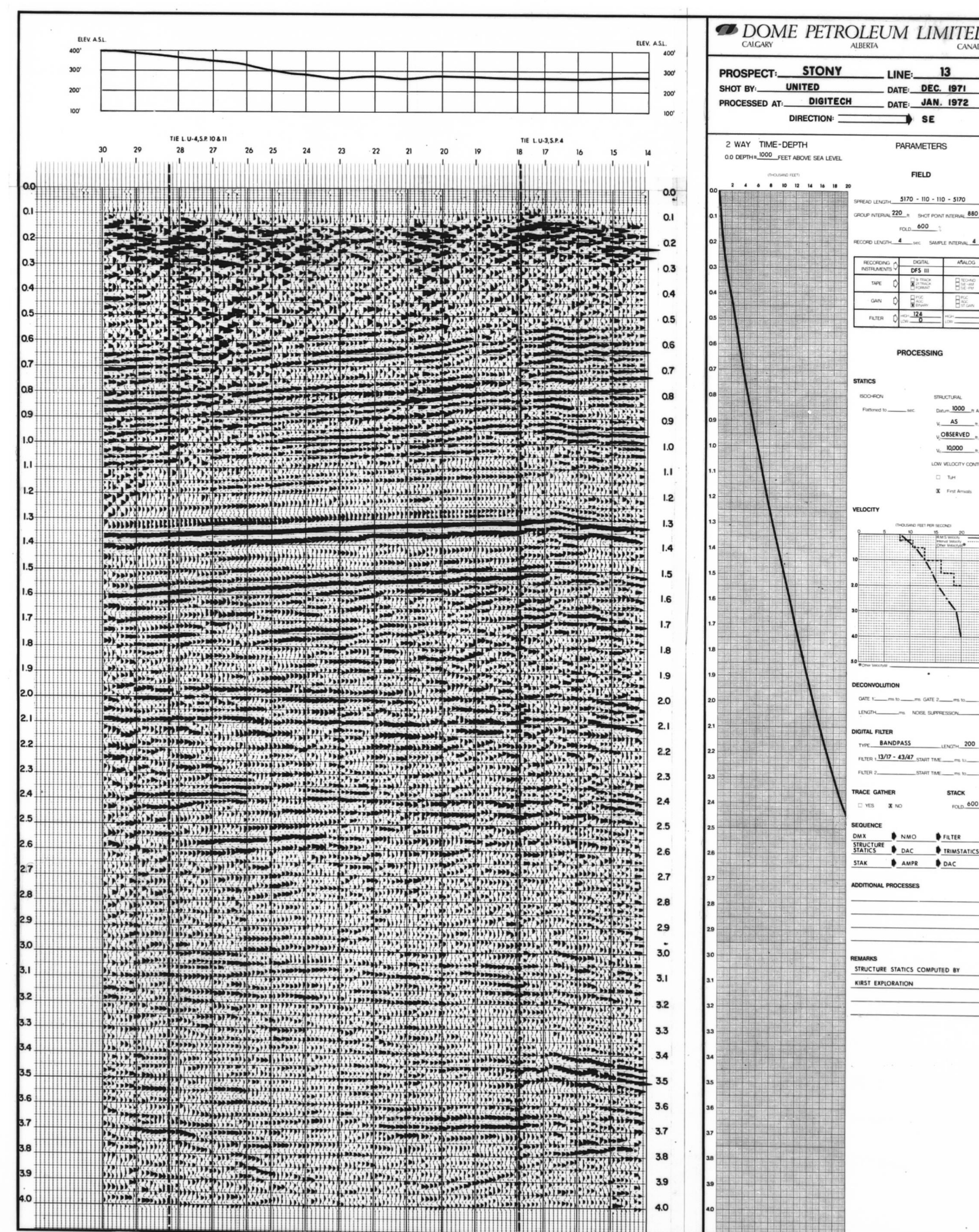


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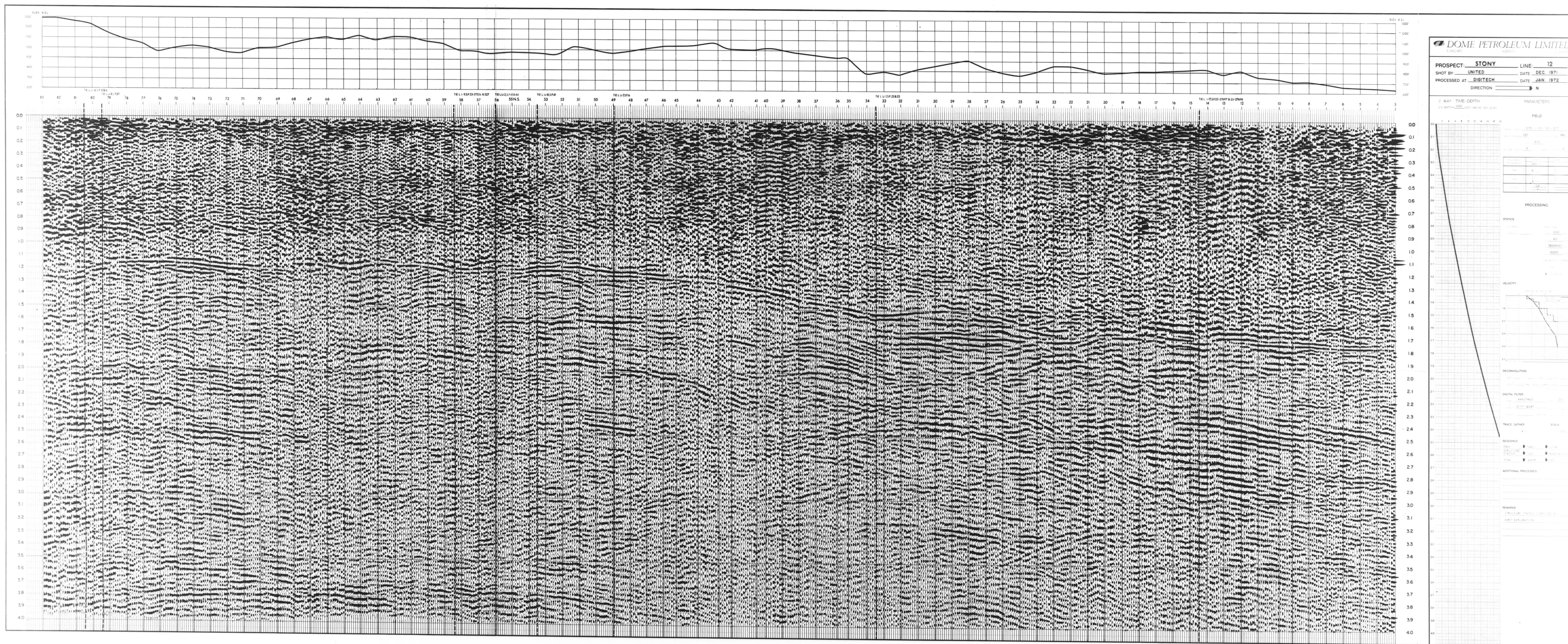


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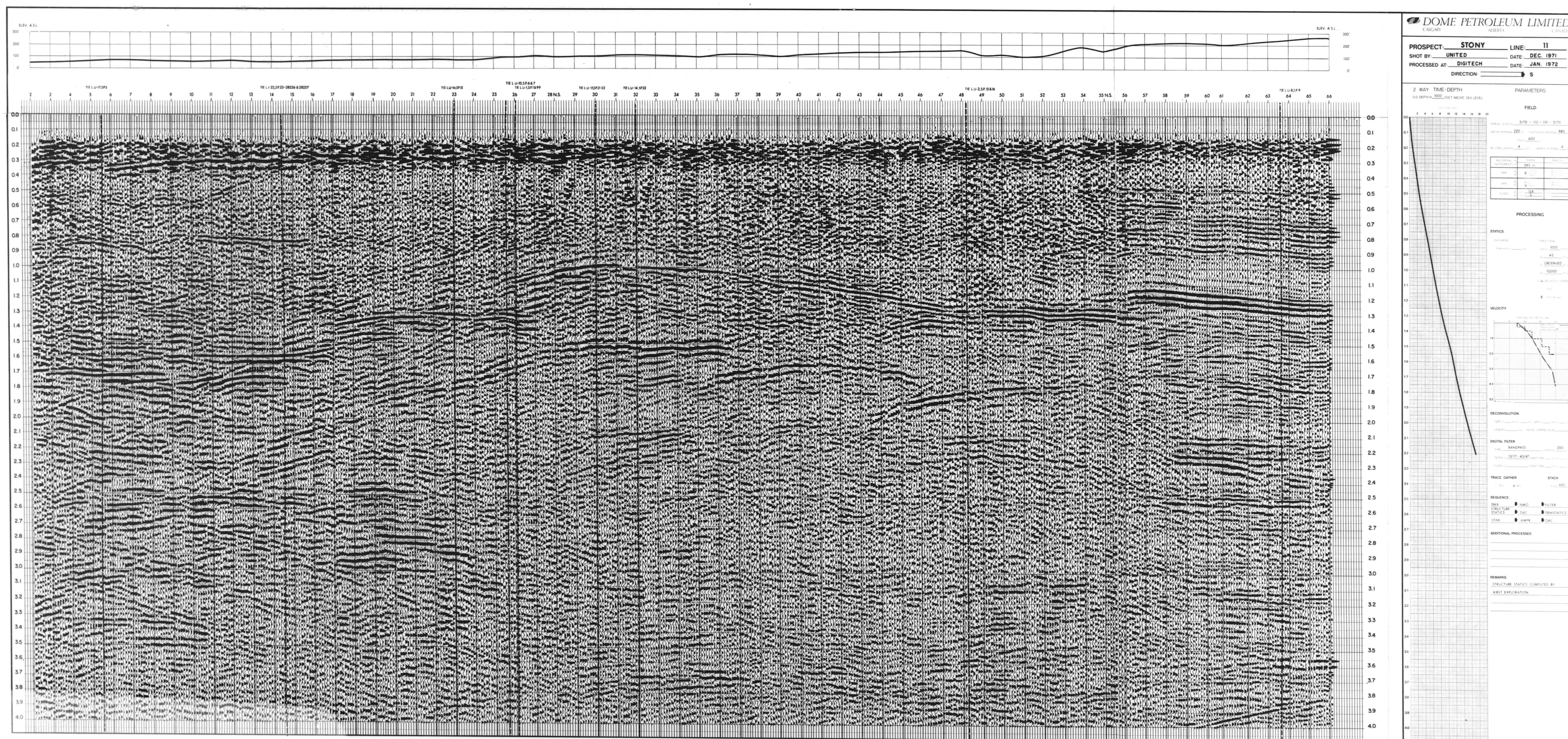
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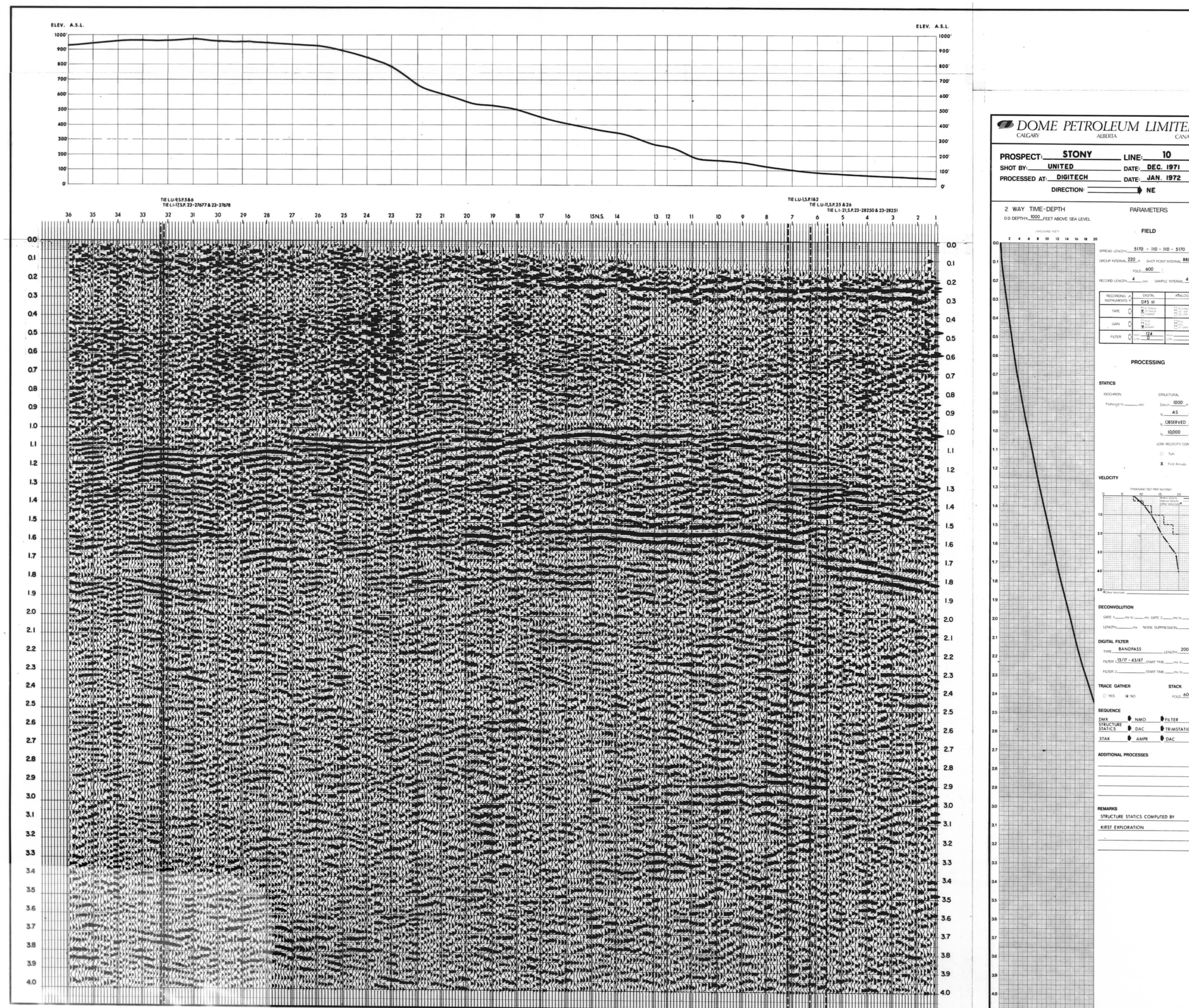


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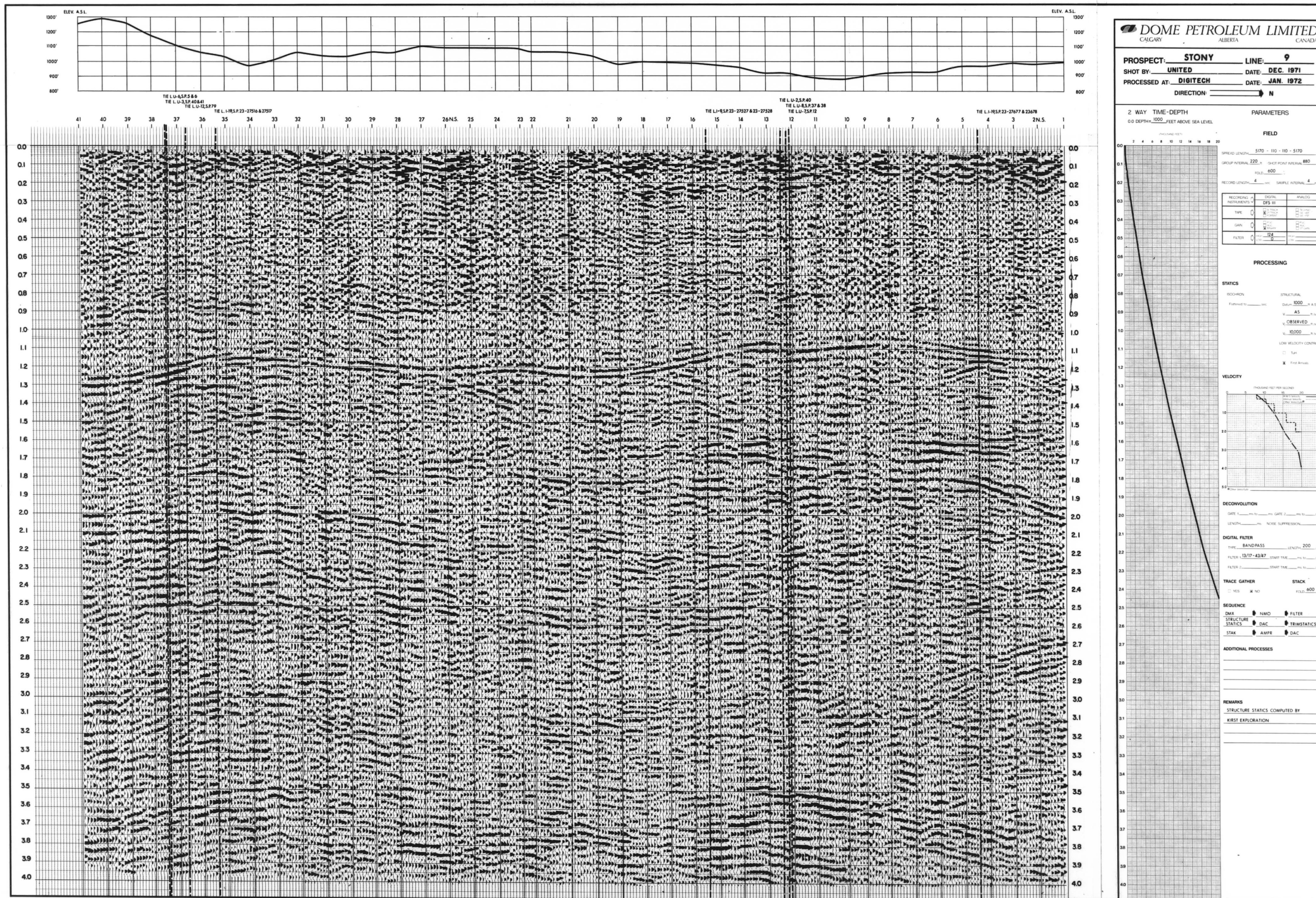


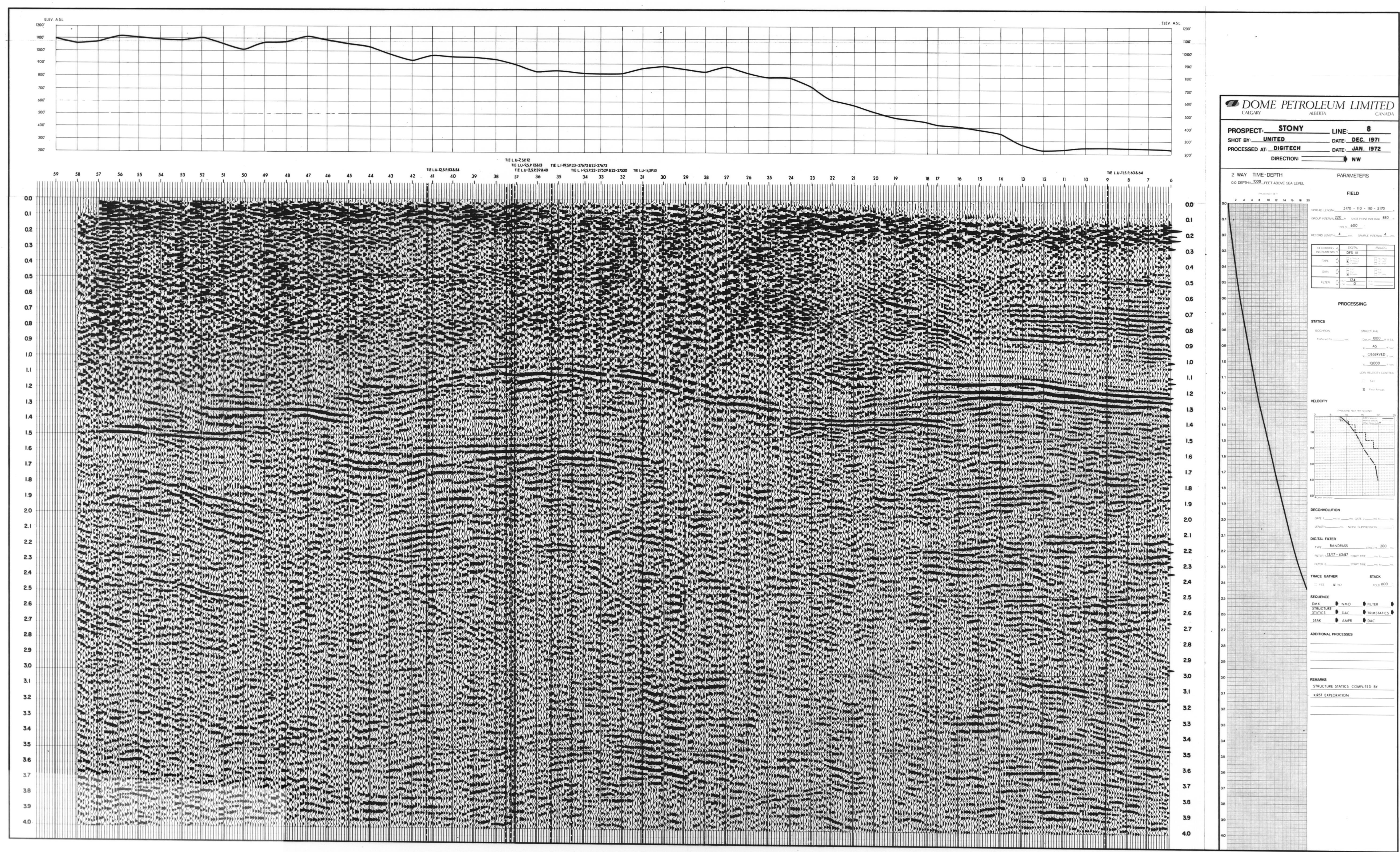
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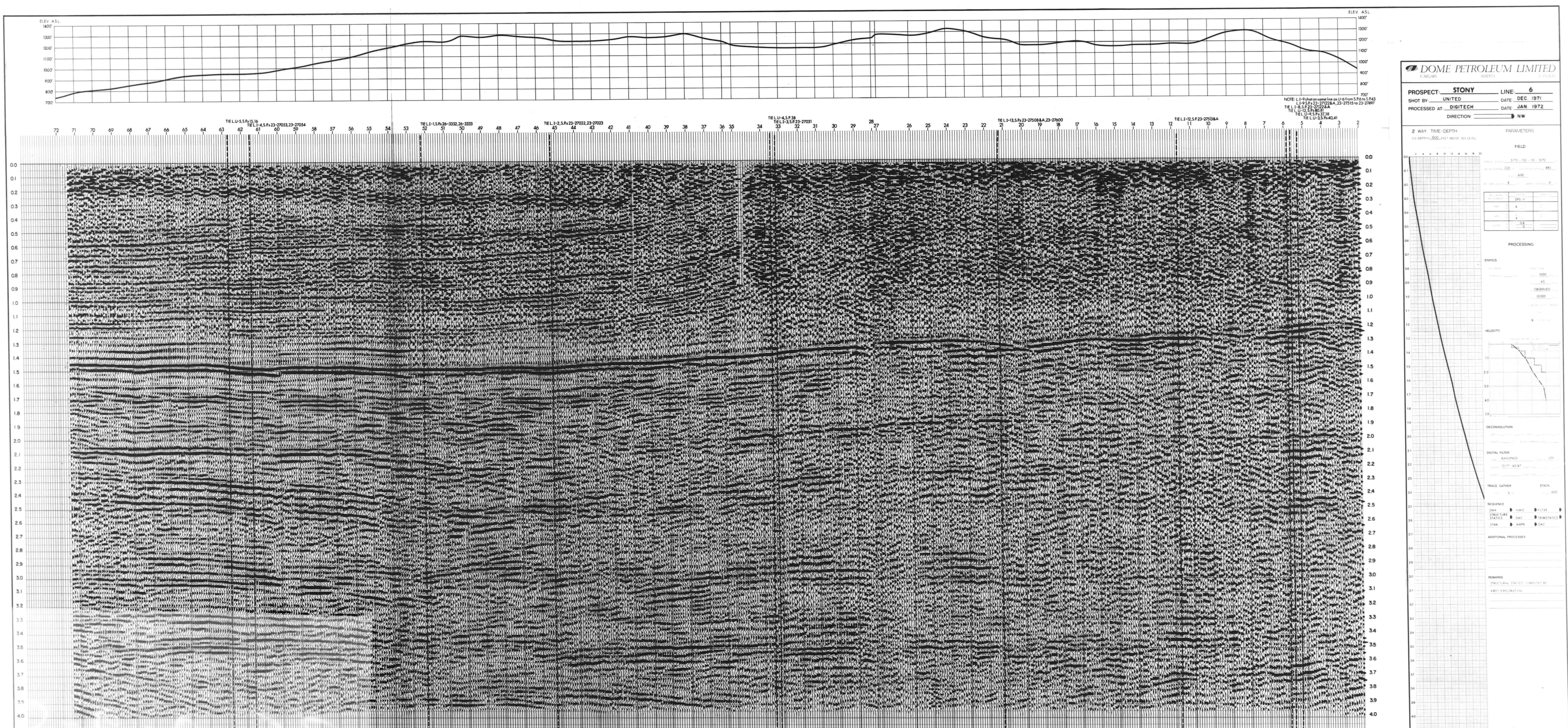
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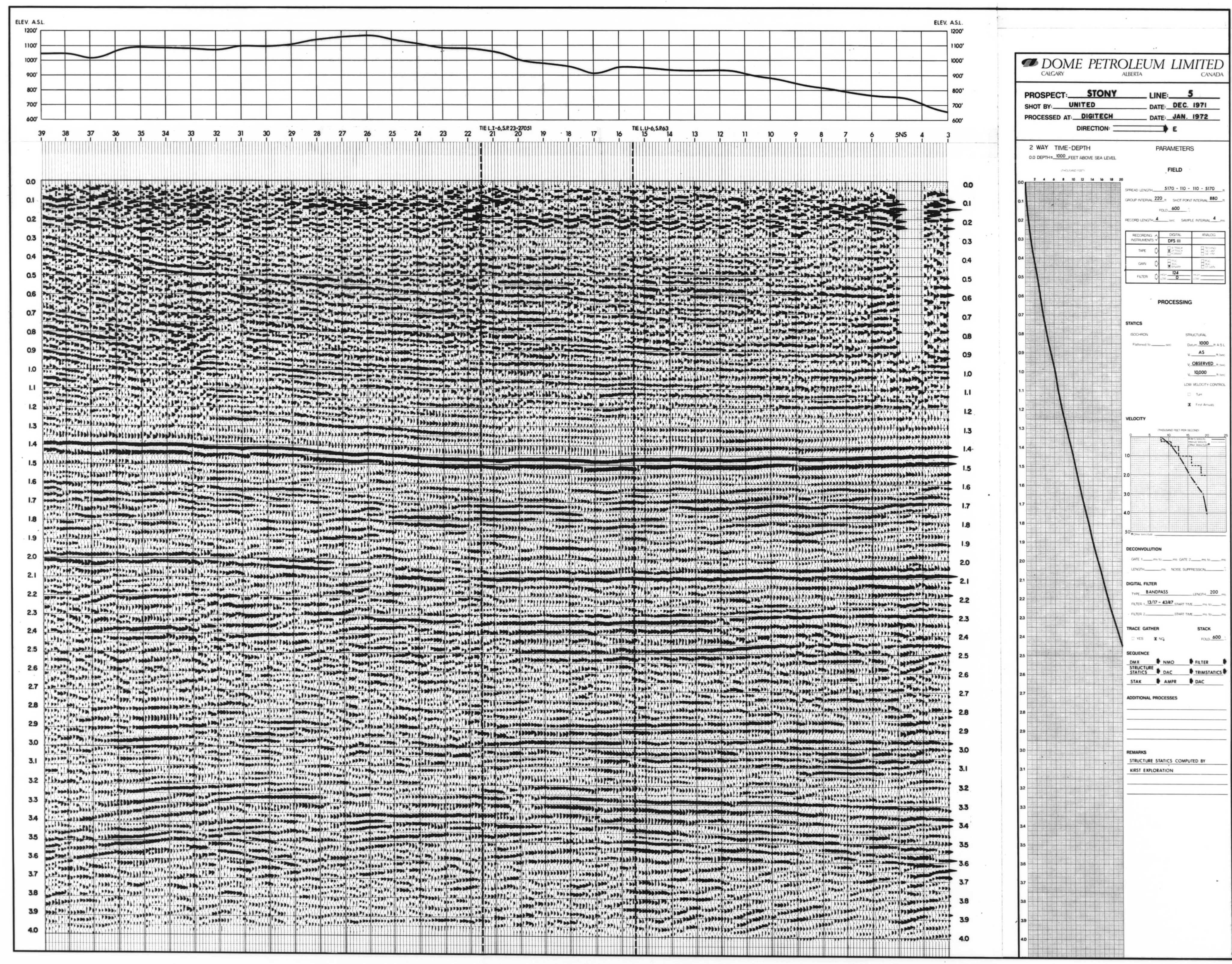
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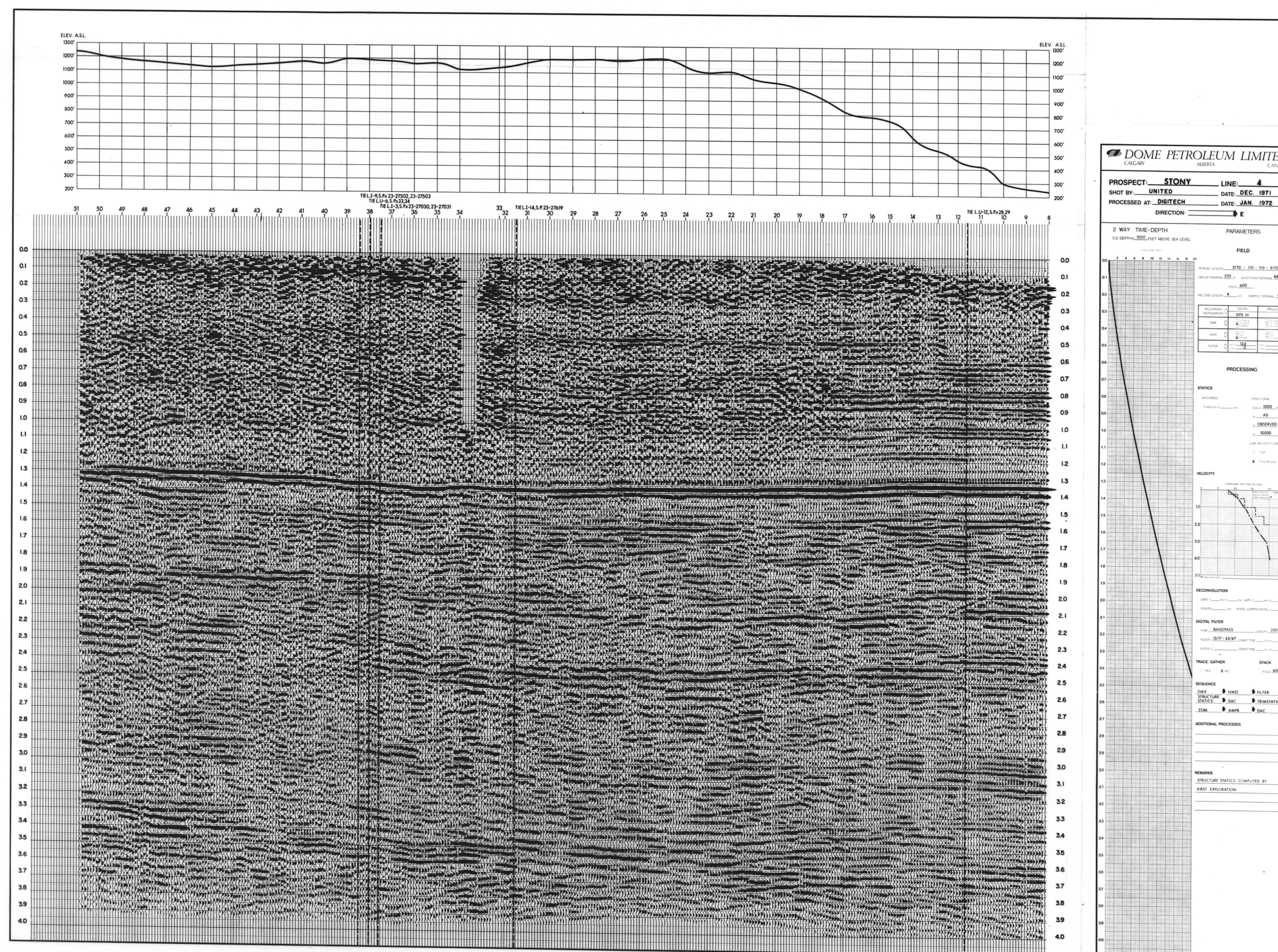


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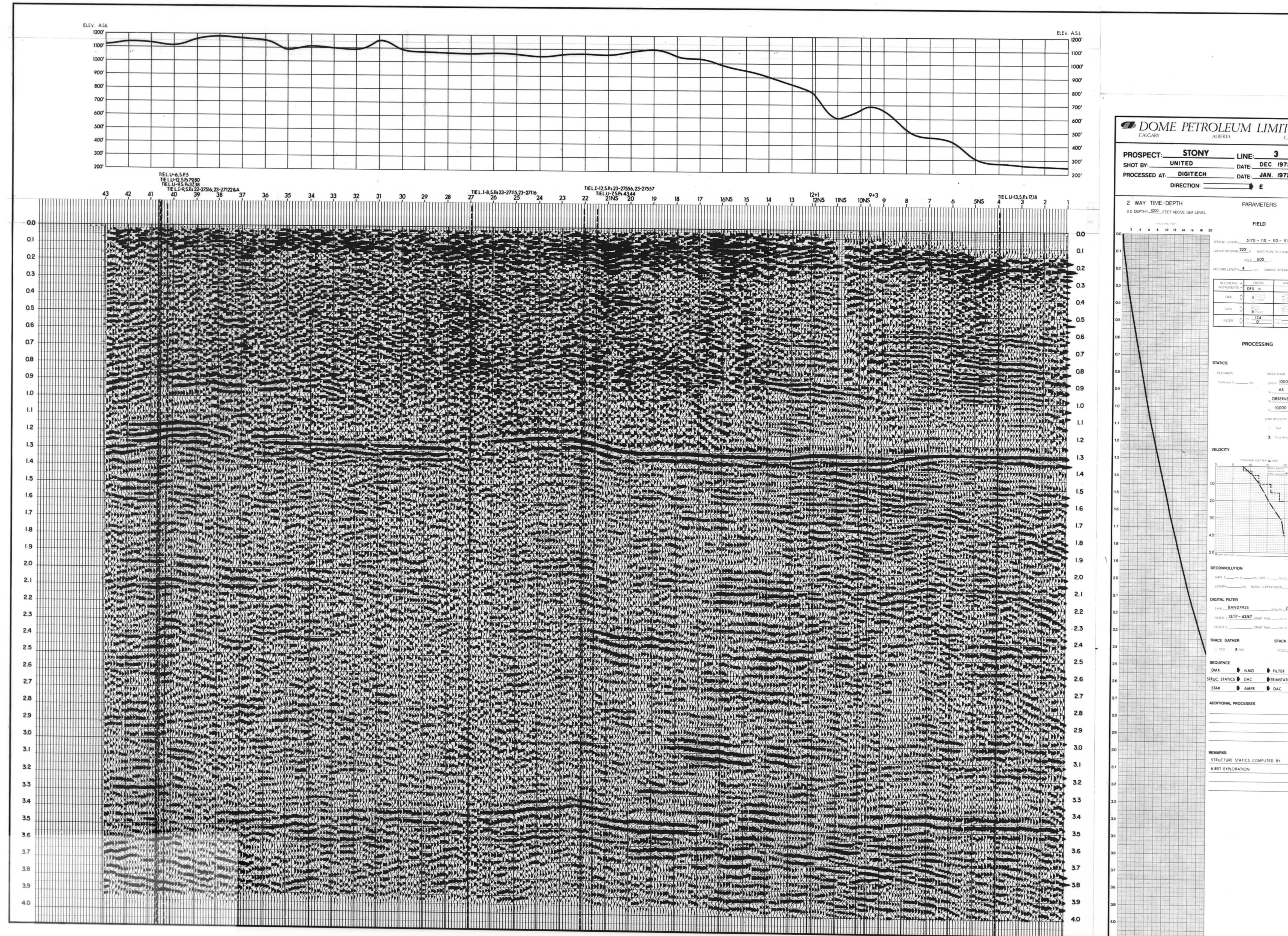
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DOME PETROLEUM LIMITED
CALGARY ALBERTA CANADA

PROSPECT: **STONY** LINE: **3**
SHOT BY: **UNITED** DATE: **DEC 1971**
PROCESSED AT: **DIGITECH** DATE: **JAN 1972**
DIRECTION: **E**

2-WAY TIME-DEPTH
0.0 DEPTH - 0.0 FEET ABOVE SEA LEVEL

FIELD

STATION: **STO-10-10-10**
GROUP: **STO-10-10-10**
FIELD: **STO-10-10-10**
WELL: **STO-10-10-10**
DATE: **STO-10-10-10**
TIME: **STO-10-10-10**
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DATE: **STO-10-10-10**
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PROCESSING

STATION: **STO-10-10-10**
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FIELD: **STO-10-10-10**
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VELOCITY: **STO-10-10-10**
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WELL: **STO-10-10-10**
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DECONVOLUTION

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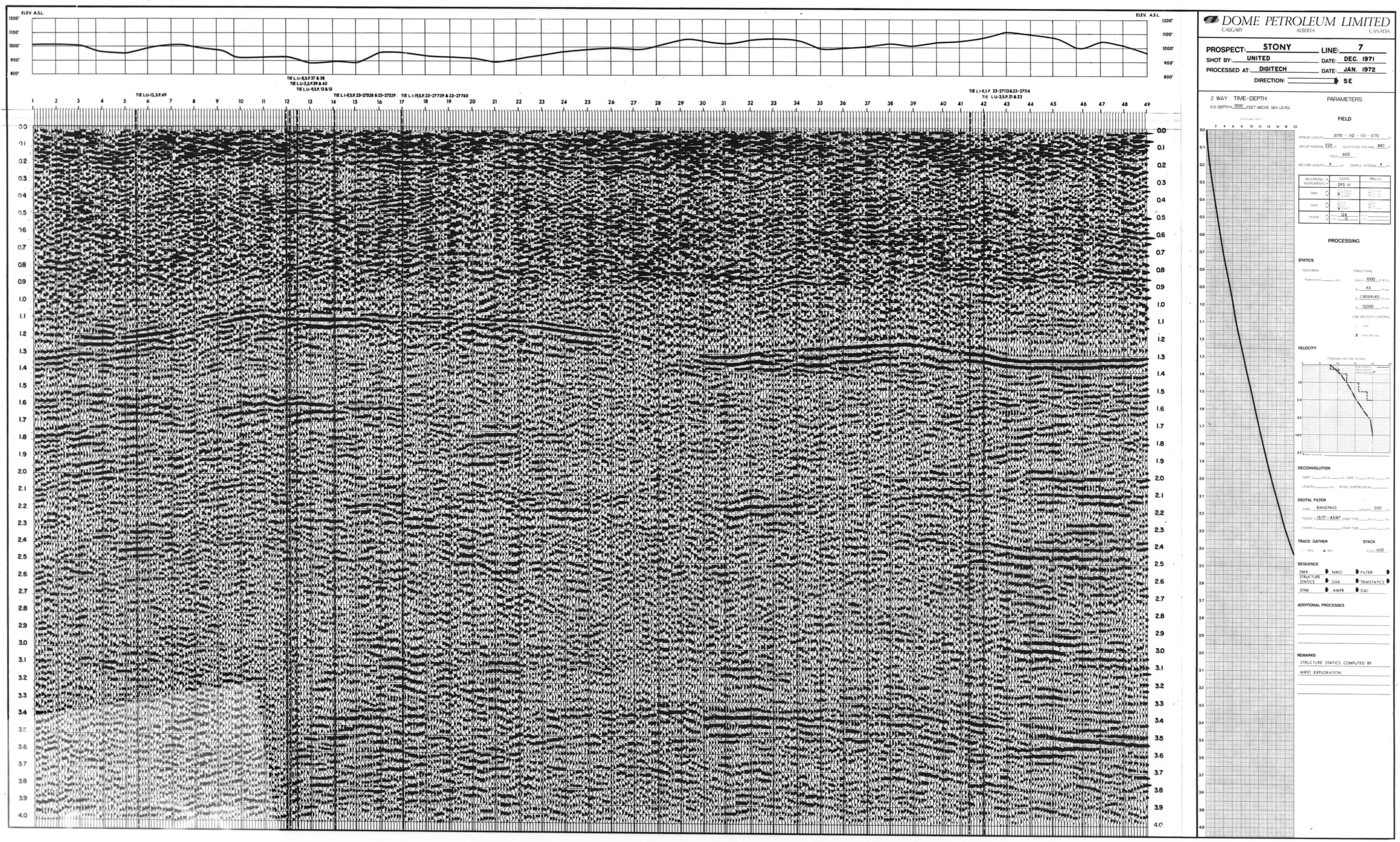
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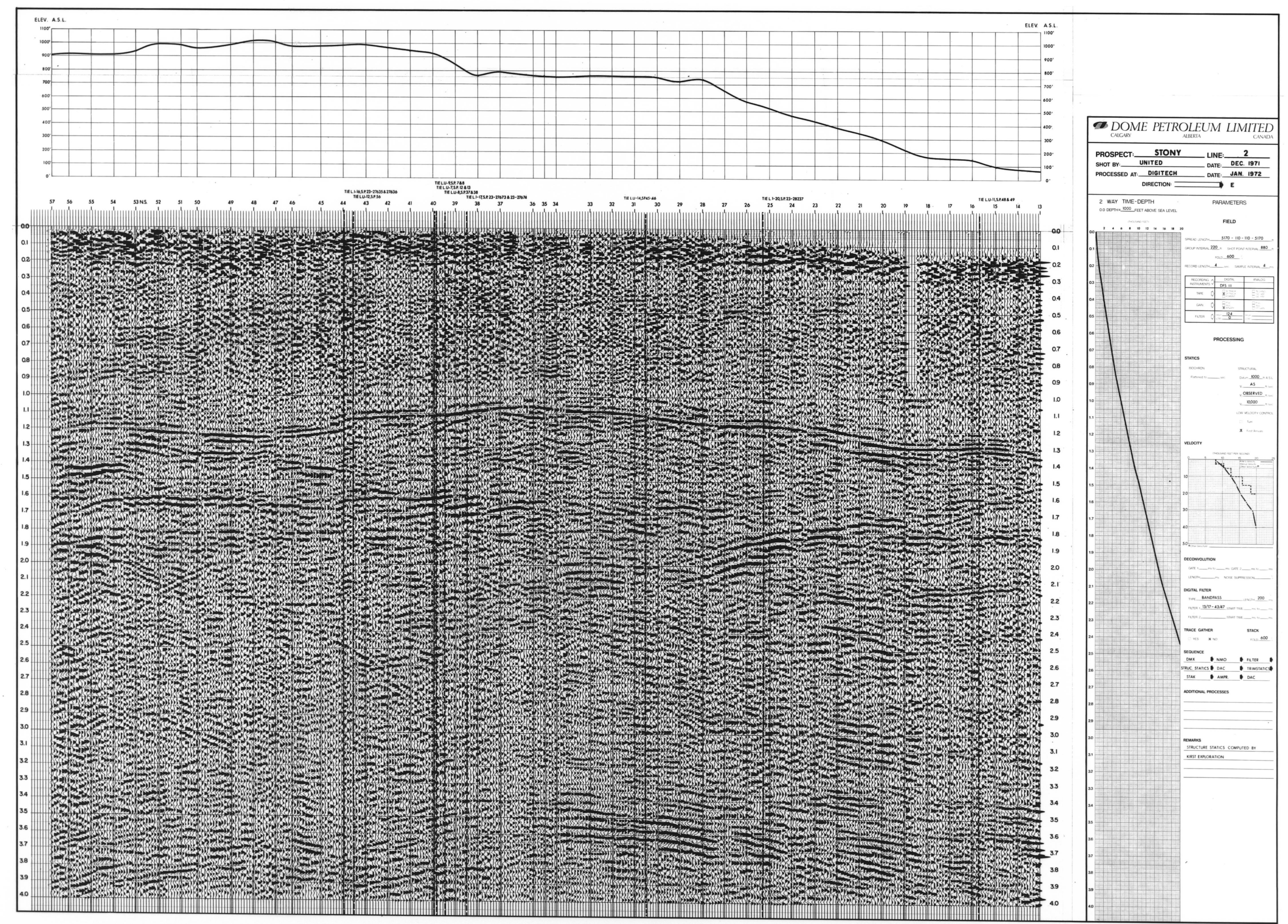
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REMARKS

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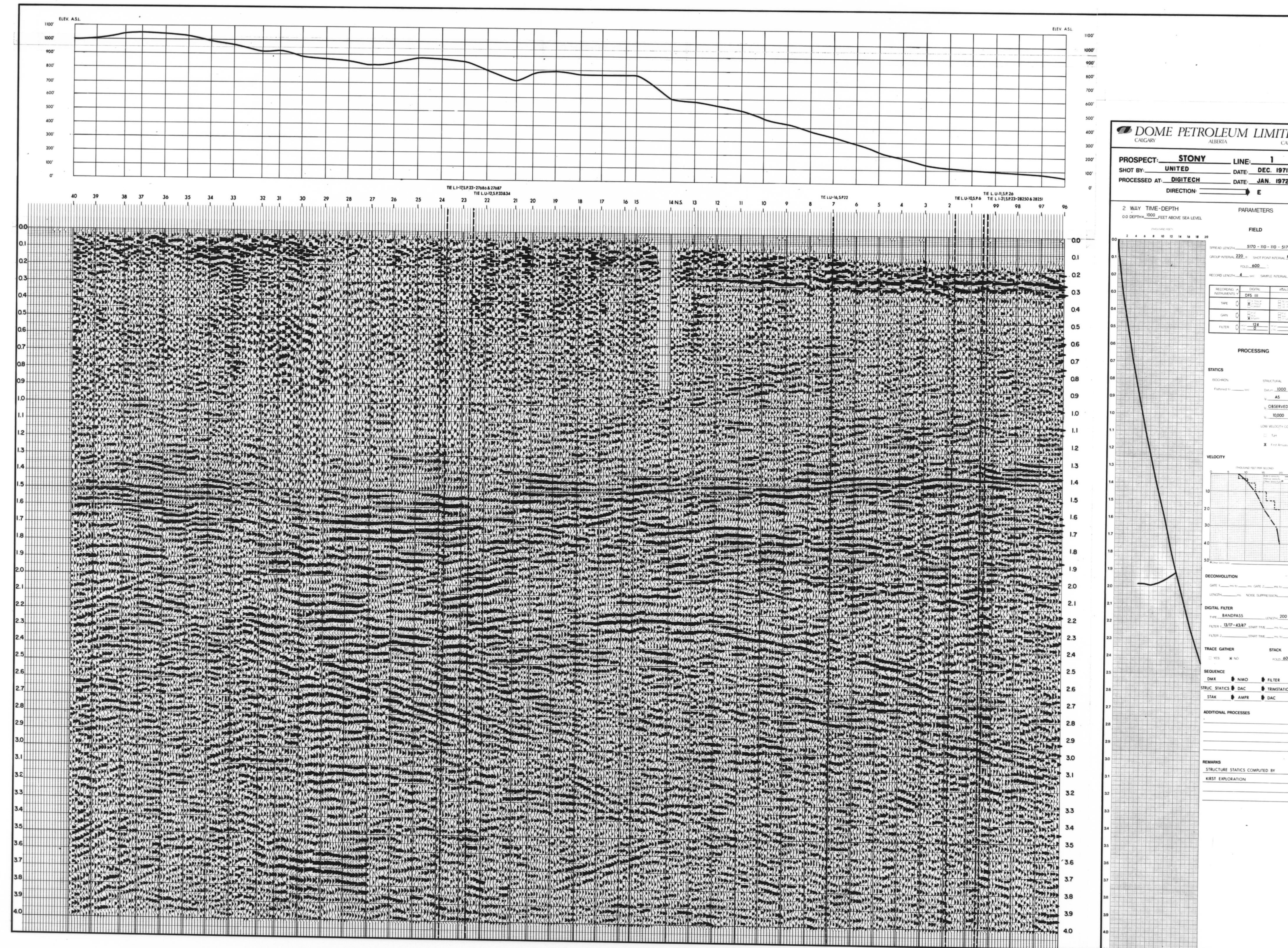


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FINAL REPORT
on the
Reflection Survey
STONY PROSPECT, N.W.T.
1971 - 1972

by
Dome Petroleum Limited

on
Permits 3731, 3732 & 4206

Roy Millice
February 18, 1974

Project Numbers 5-6-6-71-6
5-6-6-72-5

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VII. CONTOUR MAP	Figure 3

ABSTRACT

The following report presents the results of a Land Reflection Survey that was carried out under two separate Federal Project numbers during the winter shooting season of 1971 - 1972. The field work was undertaken by United Geophysical Company of America, Party 542 on behalf of Dome Petroleum Limited. It forms part of a large reconnaissance program covering permits 3731, 3732, and 4206 (see Figure 1) belonging to Dome Petroleum Limited.

This new shooting program was laid out after a review had been made of approximately one hundred (100) miles of existing 100% Imperial Oil data. Two leads had been mapped and it was felt that new seismic would further delineate a drillable location. A well was subsequently located on this new seismic.

All interpretation and processing was done under the direction of Dome Petroleum Limited.

GENERAL INFORMATION

FIELD PROCEDURES

Recording equipment employed during the survey consisted of a 21-track Binary Gain DFS III with 48-channel input.

Six hundred percent coverage was obtained, using a 5170-110-5170 split spread. 220 foot station intervals were used, with shot point spacing of 880 feet. Shot points were located midpoint between geophone stations.

Recording was done on a wide open filter with a fixed gain (12db).

Access into the area was gained by ^{use} was of an overland route from Fort McPherson west to the old Imperial Stony I-50 well location where camp was established.

Records were of generally good quality except in areas of thick drift or soft muskeg.

Drilling was done by 5 tracked mounted air drills. Drilling in general was not difficult. All shot points were drilled with a single hole as field testing indicated that no pattern holes were necessary.

Strata encountered included were clay, rock, some ice, and occasional sandstone and shale.

Dozing was done with 4 - D6C and 2 - D7E caterpillar tractors. The D6C's were provided by Caribou Construction while the D7E's were provided by Beattie Construction.

The dozers were basically used for fuel hauling, camp moving, snow plowing and equipment moving.

Field surveying was done with a T - 16 Theodolite to carry both horizontal and vertical control. Shot point and spread distances were measured chainage and horizontal distances were checked with stadia. Vertical control was established from the I.O.E. Stony I-50 well and two triangulation stations identified as CREE and DEL. Horizontal control was also carried from these three points and plotted on a 1:50,000 topographic map.

DATA PROCESSING

The processing of the field data was performed by Digitech of Canada, under the direction of one of Dome's geophysicists assigned to the prospect.

All of the 1st arrivals or 1st breaks were timed and plotted for drift control and structural statics derived from this data. Plotting of this data indicated that the area of the survey has extremely thick pockets of low velocity drift material and that a modified uphole correction would possibly lead to the interpretation of pseudo - velocity anomalies.

A structural datum of +1000 feet was utilized in applying structural statics.

The following processing sequence was followed. The field reels were reformatted and demultiplexed, N.M.O., filter, structural statics applied, display, trim static, stak, amplitude gain, display.

A band pass filter with a 200 ms length was applied the filter cuts were 13/17 and 43/47.

INTERPRETATION and RESULTS

The permit area (See Figure 1) is situated at the south end of the MacKenzie Delta and lies east of the Richardson Mountains. The subject area exhibits down to the basin faulting with the faults trending in a NE-SW direction.

A total of 121.50 miles of reflection seismic data were shot during the winter season of 1971 and 1972. This total mileage represents seventeen (17) separate lines, of these seventeen, only a small portion were shot off of the permits.

Initially, a review was undertaken of approximately 100 miles of 100% data that had been shot by Imperial Oil. The quality of this data it was felt was adequate enough to warrant reprocessing. Upon completion of the reprocessing an interpretation was undertaken. Reflection identifications were made utilizing a synthetic sonigram at the Imperial Oil Ltd. I-50 well. The only event that could be carried with any marked continuity was the Top of the Hume. This reflection represents the interface between the overlying Imperial shale and underlying carbonate section. The sections also exhibit a deep event but due to lack of identification and sporadic continuity this event was not mapped. This event may represent the Cambro-Ordovician?

The original 100% data indicated that a questionable high could be mapped on the east side of permit number 4206. This high, although of a questionable nature had approximately 150 ms higher structural buildup than the old I.O.E. Stony well location. Thus, it was felt that a seismic program should be instigated. Subsequently, this program was carried out and the structural picture became much clearer.

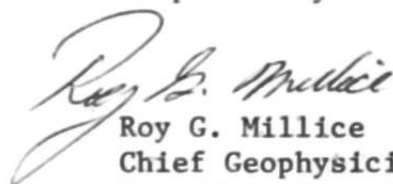
The new data indicates a series of NE-SW trending faults as interpreted by Dome's geophysical department. However, the data might be interpreted as a Carbonate Reef edge with the forefront of the reef being very steep and thus breaking the continuity of the reflecting event. This would lead to the interpretation as presented on the structural maps (See Figure 3).

Dome's interpretation indicates that the old I.O.E. Stony well and the Dome location G-6 are located on an upthrown horst. The new data also supported the old interpretation that a higher buildup did in fact exist. However, closure in a northeast direction was still questionable. This necessitated making a farmin from Texaco and shooting some additional seismic. With this additional seismic closure was mapped and a location was picked.

The Dome Fort McPherson G-6 was drilled and did encounter a high buildup of dolomite carbonate with good porosity and permeability indicating a reefal edge. However, water was tested and the hole abandoned.

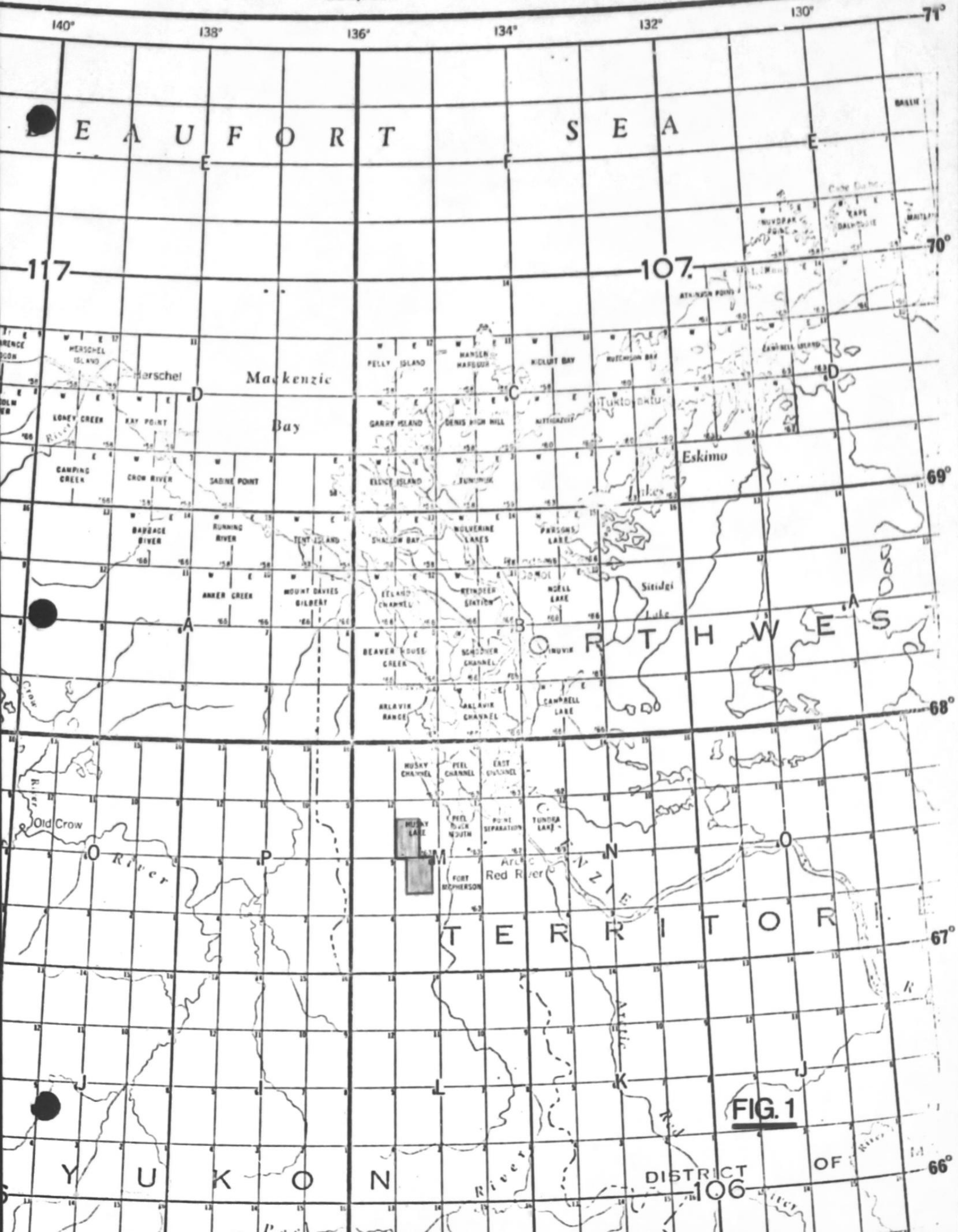
As no other leads existed it was decided to do no further work on these permits.

Respectfully submitted,



Roy G. Millice
Chief Geophysicist,
Dome Petroleum Limited,
AAEGG of A #22600

1:50,000



STATISTICS

1. Commencement date, first shot	<u>Nov. 18, 1971, Mar. 17, 1972</u>
2. Completion date, last shot	<u>Dec. 15, 1971, Mar. 20, 1972</u>
3. Total miles shot	<u>121.50</u>
4. Number of profiles shot	<u>731</u>
5. Total number of shots	<u>743</u>
6. Total recording hours, field	<u>307.50</u>
7. Total recording hours, driving	<u>70.00</u>
8. Total recording hours	<u>377.50</u>
9. Total Dynamite used	<u>19, 490</u>
10. Total caps used	<u>1513</u>
11. Caps used per profile	<u>2.07</u>
12. Caps used per shot	<u>2.04</u>
13. Total number holes drilled	<u>757</u>
14. Total footage drilled	<u>62, 233</u>
15. Total drill hours, field	<u>1336.50</u>
16. Total drill hours, driving	<u>430.50</u>
17. Total drill hours	<u>1767.00</u>
18. Average holes per 12 hour shift	<u>5.14</u>
19. Average feet drilled per hour	<u>3.52</u>
20. Extra water truck hours	<u>53.50</u>
21. Dozing hours	<u>3094</u>

FIG. 2