

**ANNUAL REPORT 1981**

**(1<sup>ST</sup> PERMIT YEAR)**

**WEAVER OIL AND GAS CORP.**

**OR – 199**

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213002

## **ANNUAL REPORT**

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APPROX. MID M. DIVERSUS

44/9

WEAVER OIL & GAS CORPORATION, AUSTRALIA

a Kaneb company

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August 17, 1981

*2 copy  
book*

of Mr.	Ad.	CC.	E.O.	D.S.M.
<i>hm</i>	<i>[initials]</i>	<i>[initials]</i>		<i>[initials]</i>
Received	24 AUG 1981			Registrar
Answered				E & IL
DEPT. OF MINES				
REF. No: 7286/81				

Mr. H. Murchie  
Director of Mines  
Department of Mines  
G.P.O. Box 124B  
Hobart, Tasmania 7001

Re: Fourth Quarter Report (covering the period from July 21, 1980 to July 21, 1981) and Annual Report (covering the first year's work program for Weaver's Permit T-16/P)

Dear Mr. Murchie:

The following is a summary of the first year's work program performed on Permit T-16/P, a Bass Basin Exploration Permit awarded to Weaver Oil and Gas Corporation, Australia on July 21, 1980.

During the first quarter Weaver employees and representatives contacted state and federal government agencies and various exploration companies to obtain proper permits and assist in obtaining various geological and geophysical information previously acquired and compiled in the Bass Basin. Portions of these data were transported to Weaver's Houston, Texas office for studies in stratigraphic and structural analysis which has been an ongoing project during the first work year period.

Difficulties arising during the second quarter in the collection of a majority of the geophysical data resulted in Weaver sending their own technicians to BHP to oversee and supervise the gathering, copying, and shipping of the seismic film sections and reports to Houston. Weaver's staff geologists and geophysicists visited Hobart, Canberra and Melbourne in their research of geological and geophysical data on the 32 graticulars making up Permit T-16/P.

Scanning of the seismic data during the second and third quarters, and preliminary interpretation of anomalous features resulted in the formulation of Tasmanian Devil prospect, located

*T/16P Part 9*

in the southwest portion of the Bass Basin. It is a northwest-southeast oriented horst block, tilted down to the northeast, or basinward, where the hydrocarbons are thought to have been generated. Seismic correlations at the Pelican Field where gaseous hydrocarbons were discovered in the Eocene Lower M. Diversus, were carried to the T-Devil prospect and two horizons were interpreted, the Eastern View Coal Measures and the M. Diversus.

Eastern View Coal Measures Time Structure Map (Enclosure 1)

The reflector designated the Eastern View Coal Measures is a high amplitude event generally overlain by the seismically "dead" Eocene shale package. Two seismic lines are enclosed to show the basic style of the structure. They are line B71A-65 (Enclosure 2) which runs northeast-southwest from the basin in the northeast, across the tilted prospective fault block, then across the bounding down to the south fault, through a minor syncline then gradually getting shallower toward the southwest. Line B70A-14 (Enclosure 3) intersects the prospect in a northwest-southeast direction. Starting from the northwest, the reflectors gradually rise to the southeast, crossing the T-Devil horst block, encountering minor faulting then dropping over the down to the south bounding fault into the syncline noted on Line B71A-65. The section then gradually rises to the southeast towards Tasmanian.

The time structure map at the Eastern View Coal Measures encompasses approximately 32,800 acres of closure. The depth to the crest of the structure is 0.760 seconds ( $\pm 2950'$ ). The water depth is approximately 238'.

M. Diversus Time Structure Map (Enclosure 4)

Correlation of the M. Diversus reflector from Pelican Field to the T-Devil prospect was attempted, however, due to the reflection strength of the Eastern View Coal Measures, a series of multiples have been generated which impede and often destroy the seismic character of the M. Diversus. Only when the M. Diversus reflectors are angular to the Eastern View Coal Measures is it possible to carry the reflector with any degree of confidence. On seismic Line B71A-65 (Enclosure 2) the M. Diversus interval thins appreciably on the flanks of the T-Devil horst block, and there is probably a thin ( $\pm 500'$ ) Eastern View section present on the crest. Seismic reflectors within the horst block are absent, except for multiple content. Additional seismic data was obtained in the third quarter and velocities are being studied to determine the potential thickness of the Eastern View section on the crest of the structure. The M. Diversus thickens slightly on the south flank of the horst block in the syncline, then gradually gets shallower to the south and west.

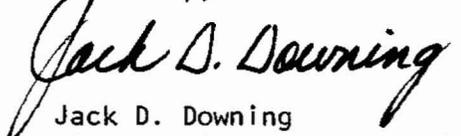
The area of closure at the M. Diversus horizon is approximately 24,000 acres. The depth to the top of the structure is 0.900 seconds ( $\pm 3,000'$ ). Vertical relief is 0.100 seconds ( $\pm 400'$ ). If filled to the spillpoint, the structure could contain approximately 750 MMBO and 640 BCF.

To better delineate the T-Devil prospect and define other prospect leads, a seismic program of 554.75 kms was proposed. Acquisition parameters were stipulated to be 4800 percent coverage utilizing a two millisecond sample rate. Record length was 5 seconds below sea level. Western Geophysical was contracted and began operations on April 2, 1981 and ceased operations on April 4. Only 394.125 kms on nine seismic lines were acquired due to the closing weather window and prior commitments by Western. A complete geophysical report on the seismic operations is presently being prepared. The data was processed by Western Geophysical in their Houston processing center and is presently being interpreted and tied into the T-Devil prospect.

During the first annual work program Weaver has not drilled any test wells.

During the second year work program Weaver staff will continue in their interpretation of the recently acquired seismic data and developing leads.

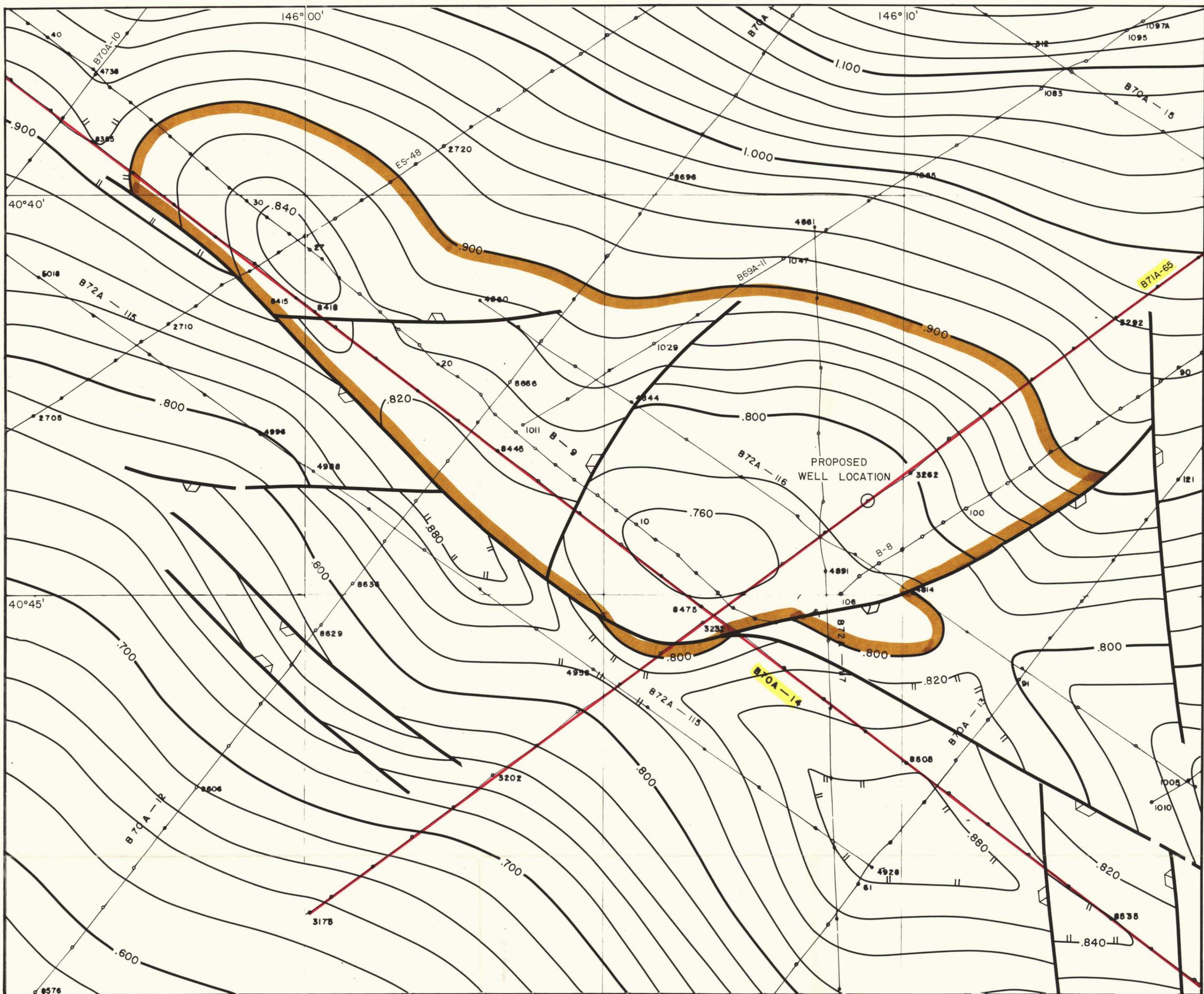
Sincerely,



Jack D. Downing  
Vice President - Geophysics

JDD:lgp

xc: Bureau of Mineral Resources



DEPTH TO MAIN OBJECTIVE SECTION: 0.760 sec. , ± 2950'  
 AREA OF CLOSURE: 32,800 acres  
 RELIEF: .140 msec.

5 cm

**WEAVER OIL AND GAS CORPORATION,  
 AUSTRALIA**

**TASMANIAN DEVIL**

PERMIT T-16-P

**APPROX. TOP EASTERN VIEW COAL  
 MEASURES**

213006

GEOPHYSICIST: J. D. DOWNING

*T/16P  
 Part 4*



C.I. 0.020 sec. SCALE 1:50,000 APRIL 1981

ENCLOSURE 1

OR-199

SW

213007

ENCLOSURE 2

OR-199

# TASMANIAN DEVIL PROSPECT

T-16-P

PROPOSED LOCATION

DCN BEFORE STACK  
24 FOLD STACK/TVD  
TVF 15 - 60Hz: 200ms.  
10 - 40Hz: 1500ms.  
8 - 32Hz: 3000ms.

NE

LINE B71A - 65 HORIZONTAL SCALE : 1 TRACE = 50 METRES  
SCALE RATIO = 2.8:1 AT 1.5 SEC.

LINE B71A - 65 HORIZONTAL SCALE : 1 TRACE = 50 METRES  
SCALE RATIO = 2.8:1 AT 1.5 SEC.

T/16P R. 4

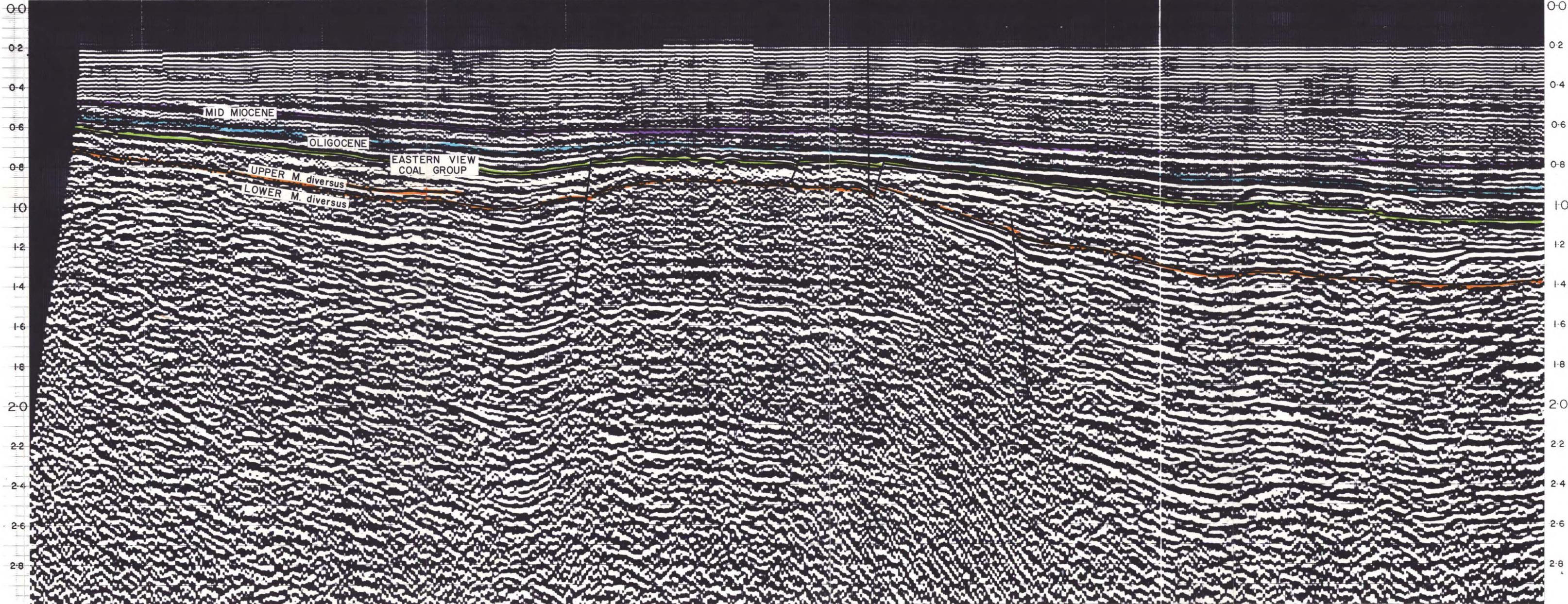
B70A-14 B63-9

5 cm

3172 3178 3184 3190 3196 3202 3208 3214 3220 3226 3232 3238 3244 3250 3256 3262 3268 3274 3280 3286 292 3298 3304 3310 3316 3322 3328 3317

WATER DEPTHS

VELOCITIES



OR-199

ENCLOSURE 3

T/16P Part 4

5 cm

213005

# TASMANIAN DEVIL PROSPECT

T-16-P

PROJECTED LOCATION

NW

LINE B70A-14

LINE B70A-14

SE

24 FOLD STACK  
 TVD 20 - 60 Hz 400 ms.  
 TVF 15 - 55 Hz 600 ms.  
 10 - 50 Hz 800 ms.  
 10 - 40 Hz 1200 ms.  
 ES-48

24 FOLD STACK  
 TVD 20 - 60 Hz 400 ms.  
 TVF 15 - 55 Hz 600 ms.  
 10 - 50 Hz 800 ms.  
 10 - 40 Hz 1200 ms.  
 ES-49

