

215001

Bass Basin

Tasmania

Australia

Quarterly Report

Permit T-16-P

First Quarterly Report

July 21 to October 21, 1984

Submitted by:

Weaver Oil and Gas Corporation,
Australia
14141 Southwest Freeway
Houston, Texas 77478 USA

OR - 201

Summary

The Tasmanian Devil #1 exploratory well was drilled during this quarter period by a partnership of Australian and American companies. No new geophysical data was acquired during this quarter. A prospect definition seismic acquisition program is planned for the second quarter period of 1985.

The prospect area tested by the drilling of an exploratory well is reviewed.

The drilling of the Tasmanian Devil #1 well is summarized.

The well results in terms of lithostratigraphic units are listed. Results of palynological zonation, source rock evaluation, petrographic studies are described.

A geoseismic profile is enclosed in order to illustrate the stratigraphic and structural conditions at the Tasmanian Devil #1 well location as well as the relationship of this well to the basinward section found to the northwest in the Pelican #1 well.

The gravity and magnetic expression of the volcanics found in this well are reviewed at the local and regional level.

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Enclosures

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Introduction

The Tasmanian Devil #1 exploratory well was drilled during this quarter period by a partnership of Australian and American companies.

The results of a palynological zonation, source rock evaluation, petrographic description, seismic-stratigraphy study as well as magnetic and gravity profile modeling of the well data are reviewed and reconciled with the anticipated section as predicted by the seismic investigation of this prospect area.

The Tasmanian Devil prospect was originally recognized on the old seismic line B-69A-1 and B-71A-65 as a major tilted fault block bounded to the southwest by a down-to-the-coast normal fault.

The nearest well is the Pelican #4 located some 31 miles to the northwest. Further to the northwest is the Pelican #1 well located some 33 miles away from the prospect and to which it is tied by Weaver's seismic line WB-81-11 (See Figure 1). A synthetic seismogram was constructed for the Pelican #1 well (See Figure 2). Other wells to the northwest do not add significantly to the basic data base of the prospect area.

A seismic time structure map was constructed at the Oligocene seismic marker horizon. At this level the prospect is an unfaulted domal feature.

A seismic time structure map was also constructed at the top Eastern View Coal Measures seismic reflector level. This reflector was identified in the Pelican #1 well and correlated as a relatively high amplitude event all the way to the prospect area. At this map level, the prospect is a northeastward tilted fault block controlled by a northwest trending normal fault.

A third seismic time structure map was constructed at the Lower M. diversus seismic marker horizon recognized in the Pelican #1 well. This discontinuous and rather weak reflector was carried all the way to the prospect area, where it seemed to be absent from the prospect crestal area.

At this map level the prospect is a major northeastward tilted fault block bounded to the southwest by a normal fault and a large graben area.

The Tasmanian Devil #1 exploratory well was located in such a way as to evaluate the hydrocarbon potential of the Oligocene, Eocene, and possibly older objective section of the prospect (See Figure 3).

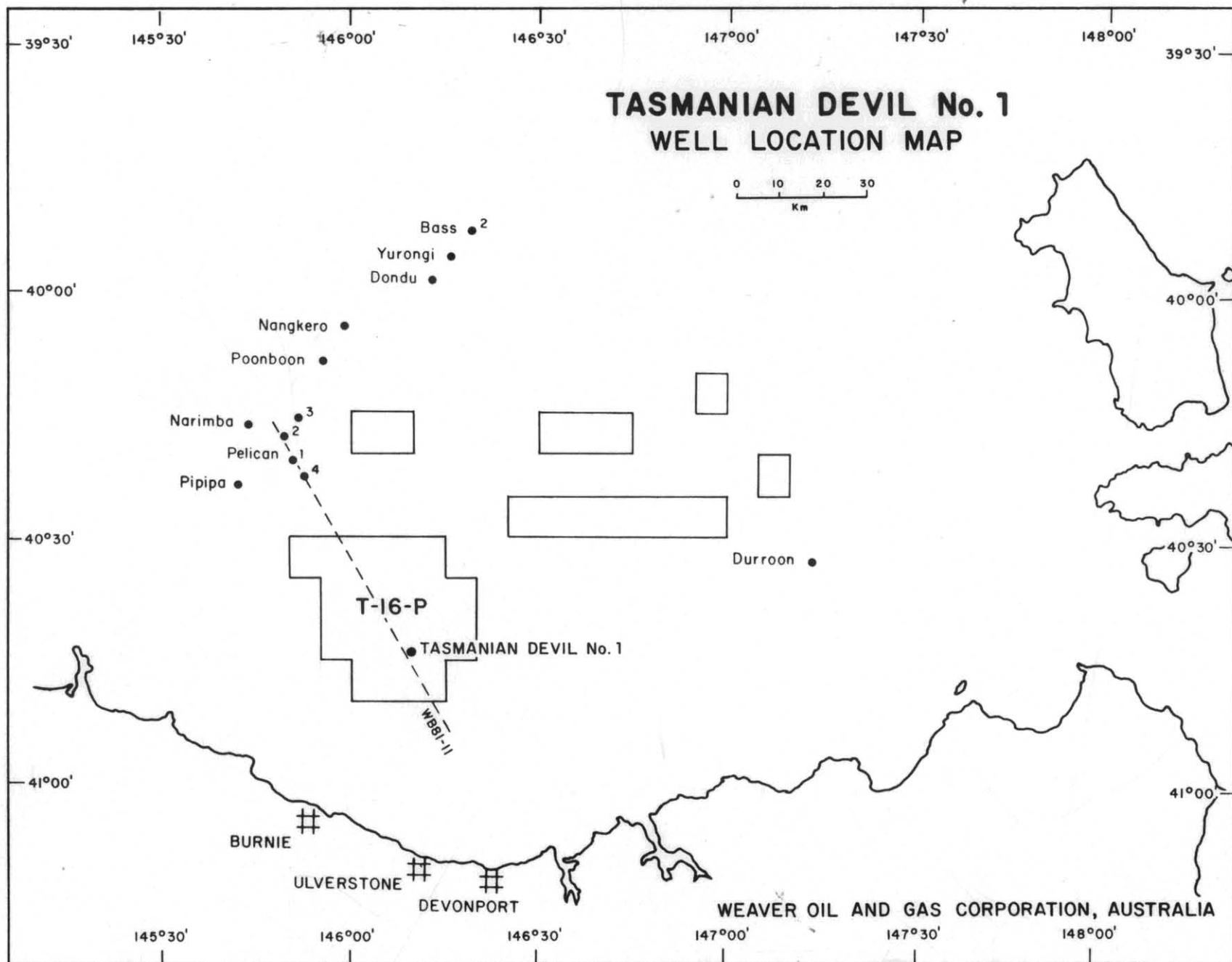
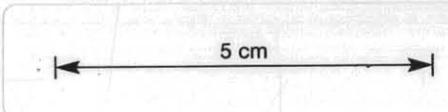


Figure 1

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215010

SYNTHETIC SEISMOGRAM

GTS CORP.

—CUSTOM OFFICE 3724 DACOMA 77C18

ESSO EXPL & PROD AUSTRALIA INC PELICAN #1 WILDCAT AUSTRALIA TASMANIA

M

LOG DATUM = 100

SEISMIC DATUM = 0

COMMENTS _____

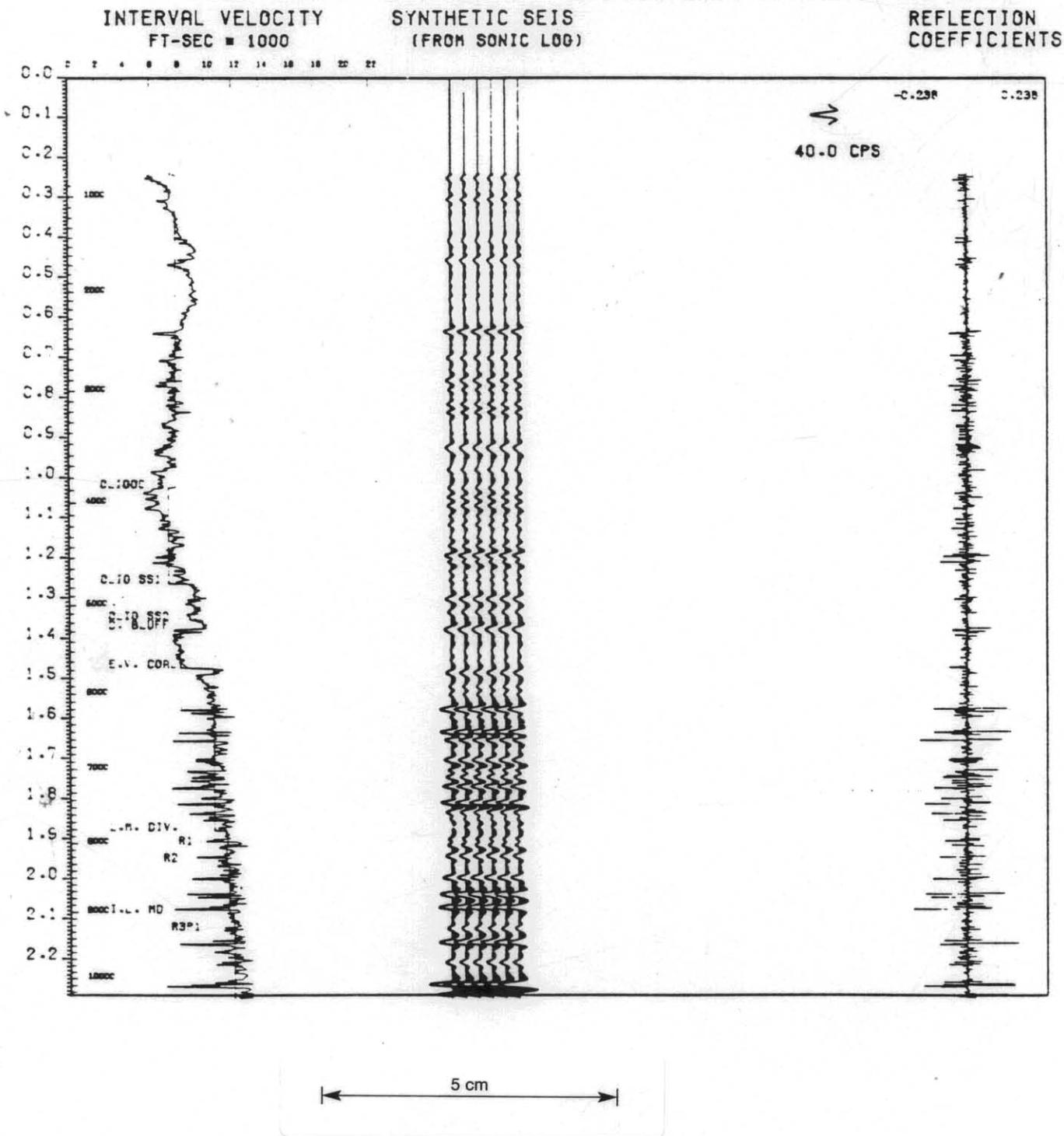


Figure 2

TASMANIAN DEVIL No.1

ANTICIPATED STRATIGRAPHIC SECTION

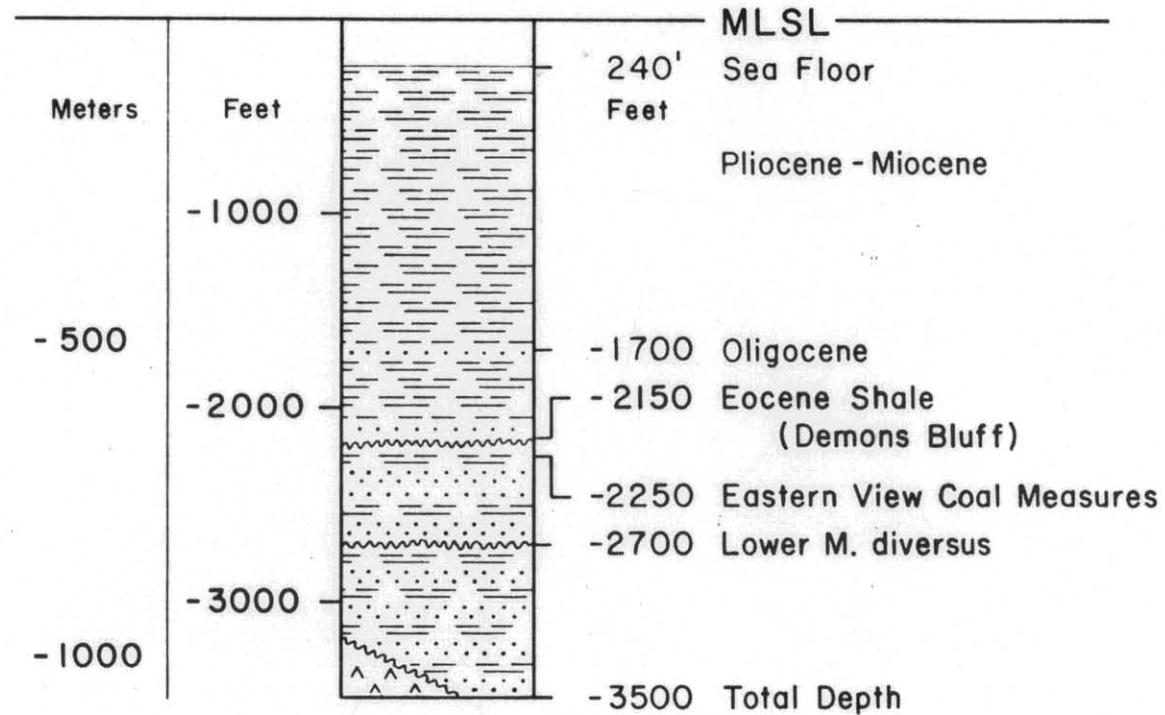
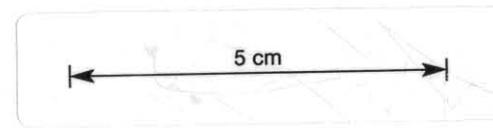


Figure 3

WEAVER OIL AND GAS CORPORATION, AUSTRALIA



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Partnership

The Tasmanian Devil #1 exploratory well was drilled by a partnership of Australian and American companies. The well was operated by Weaver Oil and Gas Corporation, Australia

Australia Hydrocarbons, NL
BELCO Petroleum Australia Inc.
Bridge Oil Limited
Cluff Oil Pacific Ltd.
Kimberly Oil and Gas, NL
Oakwood International Petroleum, NL
Sunland Petroleum Corporation, NL
Weaver Oil and Gas Corporation, Australia
Weeks Australia Ltd.

Drilling

The Tasmanian Devil #1 exploratory well was spudded on August 27, 1984 and reached total depth of 864 meters on September 1, 1984. The well was logged, plugged and abandoned, and the drilling rig was released September 3, 1984. No significant indications of hydrocarbon were detected during the drilling of this well.

Well Results

The Tasmanian Devil #1 exploratory well penetrated a sedimentary and igneous sequence ranging in age from Recent to Oligocene. The anticipated stratigraphic section, Figure 3, was submitted with the proposed well prognosis. The Stratigraphic Table, Figure 4, and Comparison Predicted and Actual Section, Figure 5, were submitted with the Well Completion Report.

Since those filings, the seismic, magnetic, gravity, palynological and stratigraphic data in the general Tasmanian Devil #1 exploratory well location area have been reviewed. A slightly different set of lithostratigraphic units and formation boundaries is proposed as follows (See Figure 8).

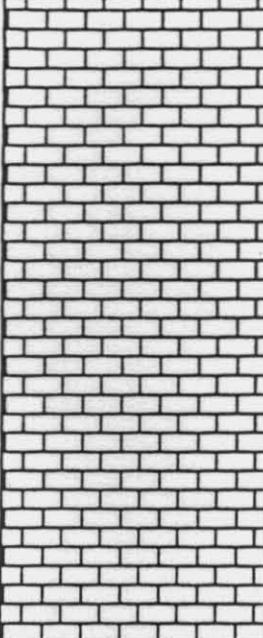
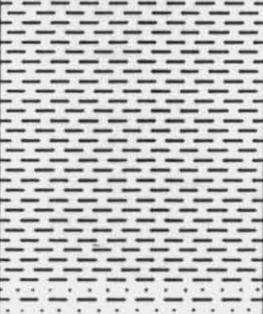
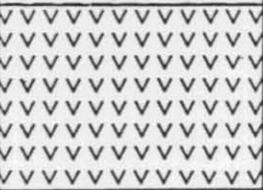
First it should be noted that the average interval velocities as determined from sonic log and synthetic seismogram in the Tasmanian Devil #1 exploratory well are somewhat slower than those determined in the Pelican #1 well which was used for the initial depth conversion (See Figures 6 and 7).

Recent - sea floor to 591.3 meters, 569.4 meters below sea level or 1940 feet, 1868.2 feet below sea level. This interval consist of limestone, claystone, and bioclastic limestone.

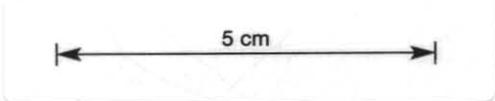
Torquay Group - Miocene, Pliocene, Oligocene, 591.3 meters to 723.5 meters (701.6 meters below sea level). This interval consists of claystone with a basal sandstone body between 702.5 meters and 724 meters.

Demons Bluff Formation - 723.5 meters to 742.5 meters (720.6 meters below sea level). This interval consists of claystone.

Eastern View Coal Measures - 742.5 meters to total depth of 863.7 meters (841.8 meters below sea level). This interval consists of sandstone from 742.5 meters to 751.3 meters (729.4 meters below sea level) and then of alkali olivine basalt down to total depth. It is expected that the facies would be

AGE		FORMATION	LITHOLOGY	DEPTH RT	DEPTH MSL	THICKNESS
		Sea Level			0m	
		Sea Floor		96	-74	74
RECENT		BIOCLASTIC LIMESTONE		524	-502	429
	TERTIARY	TORQUAY GROUP		742	-720	218
	OLIGOCENE	TERTIARY BASALT		864	-842	122

Vertical Scale : 1:5 000



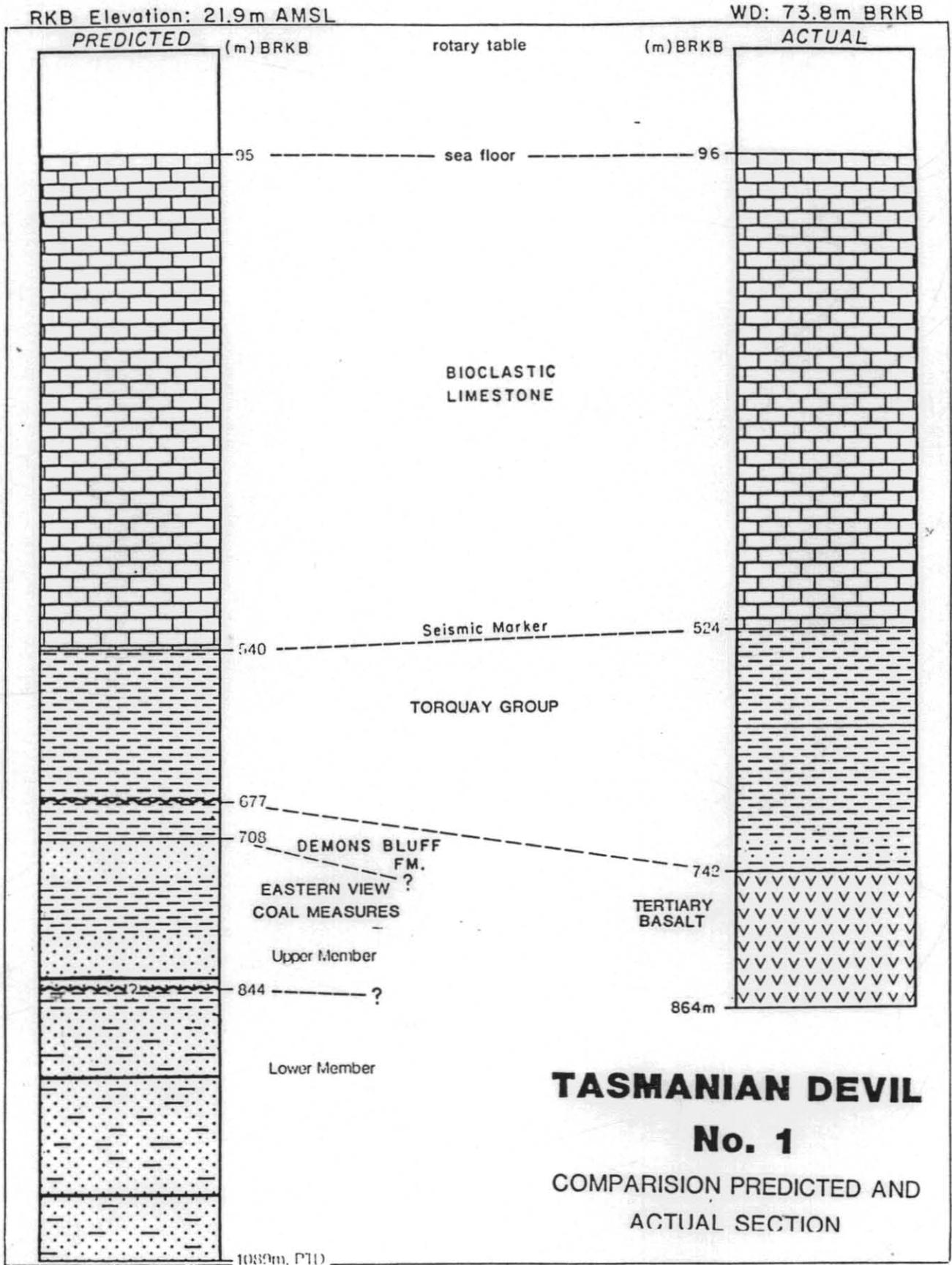
TASMANIAN DEVIL

No.1

STRATIGRAPHIC TABLE

WEAVER OIL & GAS CORP. AUSTRALIA

Figure 4



WEAVER OIL & GAS CORP. AUSTRALIA

Vertical Scale : 1:5000

5 cm

Figure 5

strongly diachronous on the flank of the basin, especially in a structurally active area as is shown by seismic data in the general Tasmanian Devil area.

No significant indication of hydrocarbons were noted during the drilling of this well and this was confirmed by wireline electric logs interpretations.

SEISMIC TIME CONVERSION

WELL ID: WEAVER, O&G, #1 T. DEVIL
 LOCATION: TASMANIA, AUSTRALIA
 LOG TYPE: SONIC
 VELOCITY: 1650 M/S INTG SONIC
 DATUM: SEA LEVEL
 LOG REF (KB): +22

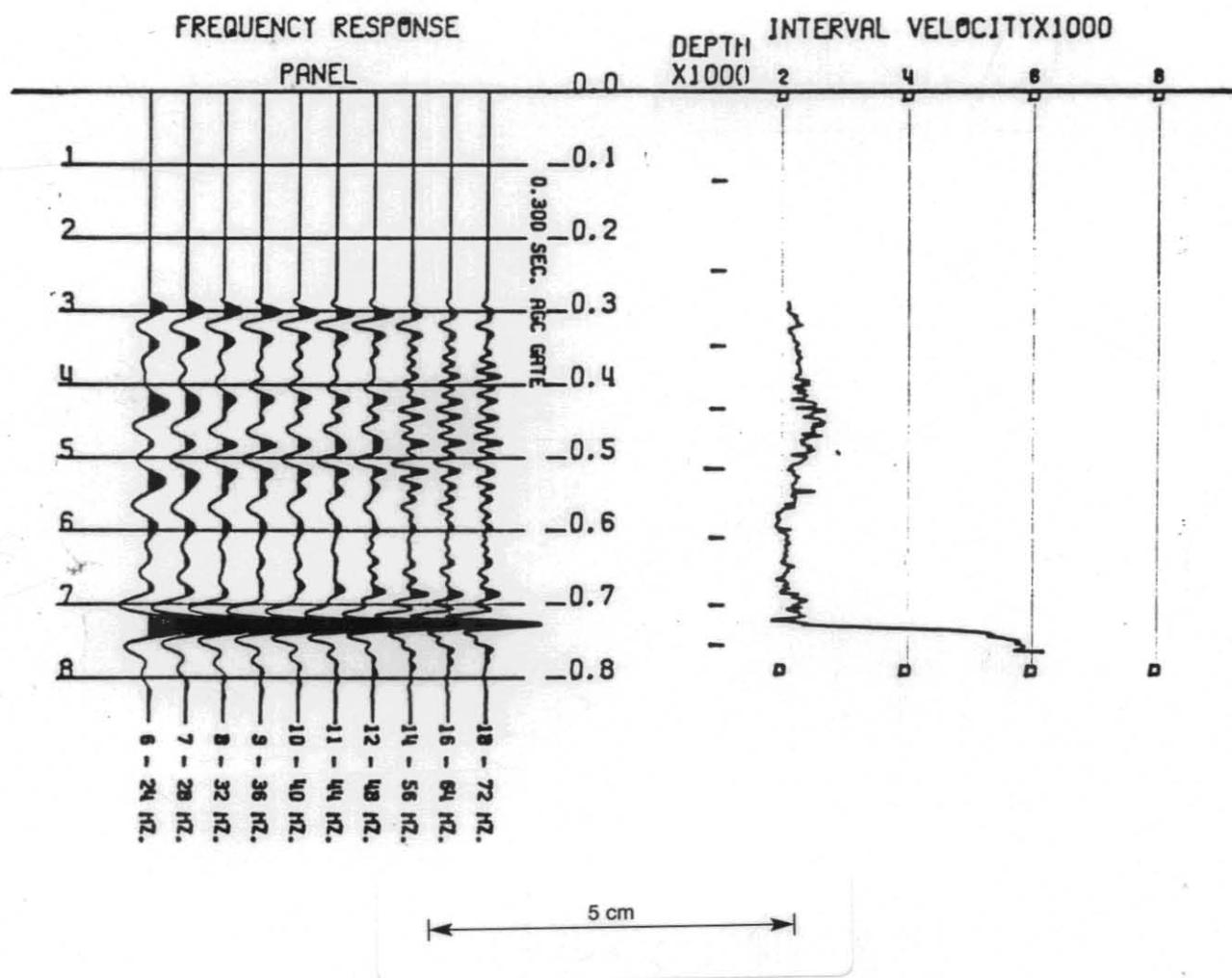


Figure 6

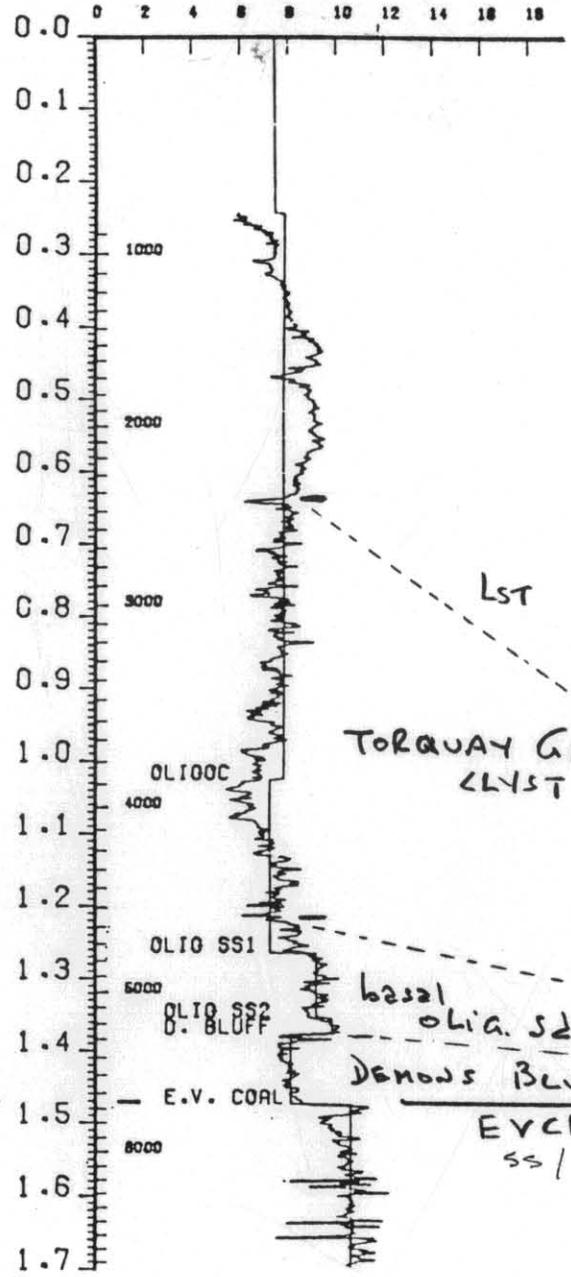
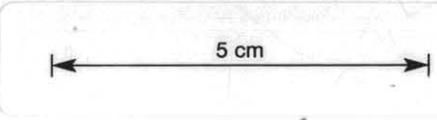
AGE (m.y.)	EPOCH	SERIES	SPORE-POLLEN ASSEMBLAGE ZONES	STRATIGRAPHY	
	MIOCENE- PLIOCENE			TORQUAY GROUP	
24	OLIGOCENE				
37.5			<i>Upper Nothofagidites asperus</i>	DEMONS BLUFF FORMATION	
40	EOCENE	Late	<i>Nothofagidites goniatus</i>	'UPPER' EASTERN	
45		Middle			<i>Middle Nothofagidites asperus</i>
50		Early			<i>Lower Nothofagidites asperus</i>
55		Late			<i>Proteacidites asperopolis</i>
60	PALEOCENE	Middle	<i>Upper Malvacipollis diversus</i>	VIEW	
65		Early			<i>Lower Malvacipollis diversus</i>
70			<i>Upper Lygistepollenites balmei</i>	'LOWER' COAL	
75			<i>Lower Lygistepollenites balmei</i>		
80	LATE CRETACEOUS		<i>Tricolpites longus</i>	MEASURES	
98	EARLY CRETACEOUS			OTWAY GROUP	

Stratigraphy of the Bass Basin

Figure 7

PELICAN #1

INTERVAL VELOCITY
FT-SEC X 1000



SEISMIC TIME CONVERSION

WEAVER, O&G, #1 T. DEVIL

TASMANIA, AUSTRALIA

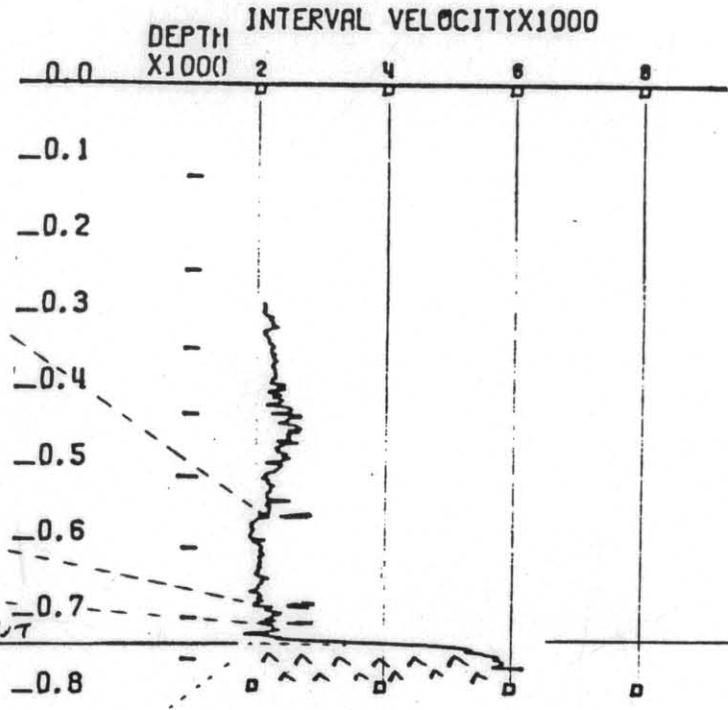


Figure 8

fb

Palynological Zonation

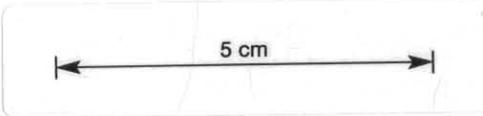
A palynological zonation of the sequence encountered by the Tasmanian Devil #1 exploratory well was performed by Helen A. Martin of the School of Botany, University of New South Wales, Kensington, NSW Australia.

All the assemblages are poorly preserved. The grains are frequently broken or corroded and the finer morphological details may be obliterated. This poor preservation often prevents a reliable specific identification, although the objects may be referable to a genus. All the samples are cuttings so the assemblages must be interpreted with extra care.

The only interval studied is from 600 to 750 meters. The section consists of medium gray-brown to olive-brown claystone, calcareous, carbonaceous, with traces of silt, micromica, skeletal fragments and glauconite. A sandstone unit is recognized towards the base of this interval. It is described as: very fine to coarse, dominantly medium grained, translucent to very light gray, moderately sorted, sub-angular to sub-rounded calcareous, dolomitic, with an argillaceous matrix and traces of pyritic cement, lithic fragments, mica and skeletal fragments. This interval is assigned to the *P. tuberculatus* zone of the Early Oligocene - Early Miocene. None of the diagnostic species which first appear at the base of this palynological zone are present within the interval studied. However, they are not common and are frequently lacking. Dinoflagellate species identified in this interval are consistent with the spore-pollen determinations. All the assemblages contain diverse dinoflagellates and the environment of deposition was marginal marine.

Source Rock Evaluation

The interval 705 meters to 720 meters was analysed for vitrinite reflectance and coal maceral identification (See Figure 9). Results indicate a vitrinite



VITRINITE REFLECTANCE AND COAL MACERAL IDENTIFICATION

WELL NAME : TASMANIAN DEVIL #1

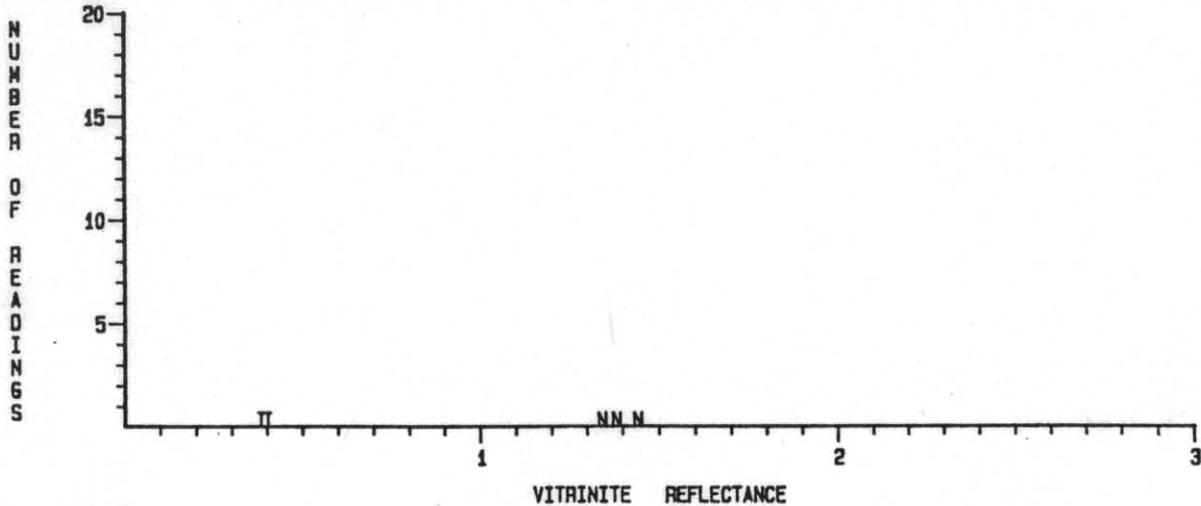
DEPTH OR SAMPLE No : 705-720 Metres

SAMPLE TYPE : CUTTINGS

(Total No. of Readings = 5) 0.38 0.40 1.34 1.38 1.44

VITRINITE REFLECTANCE							MACERAL IDENTIFICATION				
POPULATION		No. of Readings	Mean Ro (%)	Min. Ro (%)	Max. Ro (%)	STD. Dev. (%)	Comments	%	%	%	%
Number	%										
1	40	2	0.39	0.38	0.40	0.01	INDIGENOUS (I)	25.00	25.00	25.00	25.00
2	60	3	1.38	1.34	1.44	0.05	INERTINITE (N)	No data	No data	No data	No data

Figure 9



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reflectance R_o max 0.40% for an indigenous population consisting of equal amounts of algenite, exinite, vitrinite, and inertinite. This interval is immature. A second population which may represent a drilling mud additive contaminant or thermal alteration has a vitrinite reflectance R_o max 1.44% and consist of inertinite. Exinite fluorescence measurements indicate R_r max 0.39 (See Figure 10).

Two samples were submitted for Rock-Eval Pyrolysis. The intervals studied were 645 meters to 660 meters and 705 meters to 720 meters (See Figure 11). The analyses indicate that the samples are from an immature section which contain negligible amounts of free hydrocarbons and residual hydrocarbons, that it is a rather lean source-rock and finally, is definitely gas-prone at this stage of its thermal evolution.

Synthetic Seismogram

A velocity survey was not run in this well. Instead, a two-way time depth was computed from the sonic log and is included in Table 1. A synthetic seismogram was also prepared and is included as Figure 6.

The synthetic seismogram show good correlation to the seismic data.

Volcanics

The Tasmanian Devil #1 exploratory well intersected volcanics at a drill depth of 751.3 meters and remained in volcanics to total depth of 863.7 meters.

Samples have been submitted to The Australian Mineral Development Laboratories (AMDEL) for petrographic description.

A bottom sample, labeled 865 meters, is described as a fresh dolerite with plagioclase feldspar laths intergrown with clinopyroxene and olivine. Olivine is also recognized as individual grains.

TASMANIAN DEVIL NO. 1

Depth (m)	\bar{R}_V max	Range	N	Exinite Fluorescence (Remarks)
705- 720 ?Ctgs	0.39	0.38-0.40	2	Rare phytoplankton, greenish yellow, rare cutinite, sporinite and alginite A, yellow. (Carbonate>>sandstone> claystone. Dom rare to sparse, E>I>V. All macerals rare. Abundant pyrite. Vitrinite may be a contaminant, such as a mud additive.)

Figure 10

ROCK-EVAL PYROLYSIS DATA (one run)

WELLNAME = TASMANIAN DEVIL #1

DATE OF JOB = OCTOBER 1984

DEPTH(m)	TMAX	S1	S2	S3	S1+S2	S2/S3	PI	PC	TOC	HI	OI
645.0- 660.0	389	0.14	0.38	3.76	0.52	0.10	0.27	0.04	0.59	64	637
705.0- 720.0	399	0.07	0.28	2.39	0.35	0.12	0.20	0.03	0.68	41	351

TMAX = Max. temperature
 S1+S2 = Potential yield
 PC = Pyrolysable carbon
 OI = Oxygen Index

S1 = Volatile hydrocarbons (HC)
 S3 = Organic carbon dioxide
 TOC = Total organic carbon
 nd = no data

S2 = HC generating potential
 PI = Production index
 HI = Hydrogen index

Figure 11

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TIME(2-WAY) - DEPTH BELOW SEA LEVEL

	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.000	0.	1.	2.	2.	3.	4.	5.	6.	7.	7.
0.010	8.	9.	10.	11.	11.	12.	13.	14.	15.	16.
0.020	16.	17.	18.	19.	20.	21.	21.	22.	23.	24.
0.030	25.	25.	26.	27.	28.	29.	30.	30.	31.	32.
0.040	33.	34.	34.	35.	36.	37.	38.	39.	39.	40.
0.050	41.	42.	43.	44.	44.	45.	46.	47.	48.	48.
0.060	49.	50.	51.	52.	53.	53.	54.	55.	56.	57.
0.070	57.	58.	59.	60.	61.	62.	62.	63.	64.	65.
0.080	66.	66.	67.	68.	69.	70.	71.	71.	72.	73.
0.090	74.	75.	76.	76.	77.	78.	79.	80.	80.	81.
0.100	82.	83.	84.	85.	85.	86.	87.	88.	89.	89.
0.110	90.	91.	92.	93.	94.	94.	95.	96.	97.	98.
0.120	98.	99.	100.	101.	102.	103.	103.	104.	105.	106.
0.130	107.	108.	108.	109.	110.	111.	112.	112.	113.	114.
0.140	115.	116.	117.	117.	118.	119.	120.	121.	121.	122.
0.150	123.	124.	125.	126.	126.	127.	129.	129.	130.	131.
0.160	131.	132.	133.	134.	135.	135.	136.	137.	138.	139.
0.170	140.	140.	141.	142.	143.	144.	144.	145.	146.	147.
0.180	148.	149.	149.	150.	151.	152.	153.	153.	154.	155.
0.190	156.	157.	158.	158.	159.	160.	161.	162.	163.	163.
0.200	164.	165.	166.	167.	167.	168.	169.	170.	171.	172.
0.210	172.	173.	174.	175.	176.	176.	177.	178.	179.	180.
0.220	181.	181.	182.	183.	184.	185.	185.	186.	187.	188.
0.230	189.	190.	190.	191.	192.	193.	194.	195.	195.	196.
0.240	197.	198.	199.	199.	200.	201.	202.	203.	204.	204.
0.250	205.	206.	207.	208.	208.	209.	210.	211.	212.	213.
0.260	213.	214.	215.	216.	217.	218.	218.	219.	220.	221.
0.270	222.	222.	223.	224.	225.	226.	227.	227.	228.	229.
0.280	230.	231.	231.	232.	233.	234.	235.	236.	237.	238.
0.290	239.	240.	242.	243.	244.	245.	246.	247.	248.	249.
0.300	250.	251.	252.	253.	254.	256.	257.	258.	259.	260.
0.310	261.	262.	263.	264.	266.	267.	268.	269.	270.	271.
0.320	272.	273.	274.	276.	277.	278.	279.	280.	281.	282.
0.330	283.	283.	285.	286.	287.	289.	290.	291.	292.	293.
0.340	294.	295.	296.	298.	299.	300.	301.	302.	303.	304.
0.350	305.	306.	308.	309.	310.	311.	312.	313.	314.	316.
0.360	317.	318.	319.	320.	321.	322.	324.	325.	326.	327.
0.370	328.	329.	330.	332.	333.	334.	335.	336.	337.	338.
0.380	340.	341.	342.	343.	344.	345.	347.	348.	349.	350.
0.390	351.	352.	353.	355.	356.	357.	358.	359.	361.	362.
0.400	363.	364.	365.	366.	367.	369.	370.	371.	372.	373.
0.410	374.	376.	377.	378.	379.	380.	382.	383.	384.	385.
0.420	386.	387.	389.	390.	391.	392.	394.	395.	396.	397.
0.430	399.	400.	401.	403.	404.	405.	407.	408.	409.	410.
0.440	412.	414.	414.	415.	417.	418.	419.	420.	422.	423.
0.450	425.	426.	427.	428.	430.	431.	432.	434.	435.	436.
0.460	437.	439.	440.	441.	442.	444.	445.	446.	447.	449.
0.470	450.	452.	453.	453.	455.	456.	457.	458.	459.	460.
0.480	462.	463.	464.	465.	467.	468.	469.	470.	472.	473.
0.490	474.	475.	476.	478.	479.	480.	481.	482.	483.	485.
0.500	486.	487.	488.	489.	491.	492.	493.	494.	495.	496.
0.510	497.	498.	500.	501.	502.	503.	504.	505.	506.	507.
0.520	508.	509.	510.	512.	513.	514.	515.	516.	517.	518.
0.530	520.	521.	522.	523.	524.	525.	526.	527.	528.	529.
0.540	531.	532.	533.	534.	535.	536.	538.	539.	540.	541.
0.550	542.	543.	544.	545.	546.	548.	549.	550.	551.	552.
0.560	553.	554.	555.	556.	558.	559.	560.	561.	562.	563.
0.570	564.	565.	566.	567.	568.	569.	570.	571.	572.	573.
0.580	574.	575.	576.	577.	578.	579.	580.	581.	582.	583.
0.590	584.	585.	586.	587.	587.	589.	590.	591.	592.	593.
0.600	594.	595.	596.	597.	598.	599.	600.	601.	602.	603.
0.610	604.	605.	606.	607.	608.	610.	611.	612.	613.	614.
0.620	615.	616.	617.	618.	619.	620.	621.	622.	623.	624.
0.630	625.	626.	627.	628.	629.	630.	632.	633.	634.	635.
0.640	636.	637.	638.	639.	640.	641.	642.	643.	644.	645.
0.650	646.	647.	648.	649.	650.	652.	653.	654.	655.	656.
0.660	657.	658.	659.	660.	661.	662.	663.	664.	665.	666.
0.670	667.	668.	669.	670.	671.	672.	673.	674.	675.	676.
0.680	677.	678.	679.	681.	682.	683.	684.	685.	686.	687.
0.690	688.	690.	691.	692.	693.	694.	696.	697.	698.	699.
0.700	700.	701.	702.	703.	704.	706.	707.	708.	709.	710.
0.710	711.	712.	714.	715.	716.	717.	718.	719.	720.	721.
0.720	722.	723.	724.	726.	727.	728.	729.	731.	732.	734.
0.730	736.	738.	741.	743.	746.	748.	751.	754.	757.	759.
0.740	762.	765.	767.	770.	773.	776.	779.	782.	785.	788.
0.750	790.	793.	796.	799.	802.	805.	809.	811.	814.	817.
0.760	820.	823.	826.							

Table 1

The sample interval, 765 meters to 780 meters, is also described as a fresh dolerite.

The sample interval 865 meters to 880 meters, mislabeled since it is beyond total depth, is also described as a fresh dolerite.

In addition, samples have been collected and studied by the Tasmanian Department of Mines. Thin sections were prepared from cuttings from depths of 815 m, 835 m, 855 m, 860 m, and 865 meters. Each of those has been studied and described individually. The mineral chemistry, petrographic description and comparison with onshore Tertiary basalts indicate that these cuttings are from alkali olivine basalts transitional to olivine bearing tholeites. Further to this study, a composite sample of cuttings from 815 m, 835 m, 850 m, 855 m, and 865 meters was submitted for major and trace elements analysis. This analysis confirms the petrographic description of an alkali olivine basalt.

Geoseismic Profile

A geoseismic profile has been constructed in order to illustrate the results of the Tasmanian Devil #1 exploratory well. Weaver's seismic line WB-81-11 was used. This line joins the Pelican #1 well to the Tasmanian Devil structure and comes within less than two kilometers of the actual Tasmanian Devil #1 well location to which it is tied by seismic line WB-82-51.

The top Oligocene, top Eastern View Coal Measures, top lower *M. diversus* unconformity and basement seismic markers are identified (See Figure 12).

The Eastern View Coal Measures are shown to onlap and pinch-out on the northwest flank of a major basement tilted fault block. It is shown to be present again in a fault bounded trough located behind and to the southwest of this basement block.

The outline of the alkali olivine basalt flows or sill intersected by the Tasmanian Devil #1 exploratory well is shown. On the basis of seismic data and well correlation, it appears that the very uppermost top of the Eastern View Coal Measures, the first sandstone, is present above the volcanics. It also appears that a condensed section of Demons Bluff claystone is present above the volcanics. The reduced thickness of this formation may be due to a combination of regional convergence towards the edge of the basin and non-description on top of a relatively elevated area.

Given the somewhat limited capacity of the seismic reflection method to actually see below a substantial thickness of volcanics with any amount of resolution, it appears that the partially drilled volcanic section found at the Tasmanian Devil #1 exploratory well location is actually lying on top of a basement complex of unknown age and composition. Additional drilling would have shed some light on the relationship between the volcanics and basement

complexes but would probably not have tested any substantial thickness of potential hydrocarbon bearing objective section.

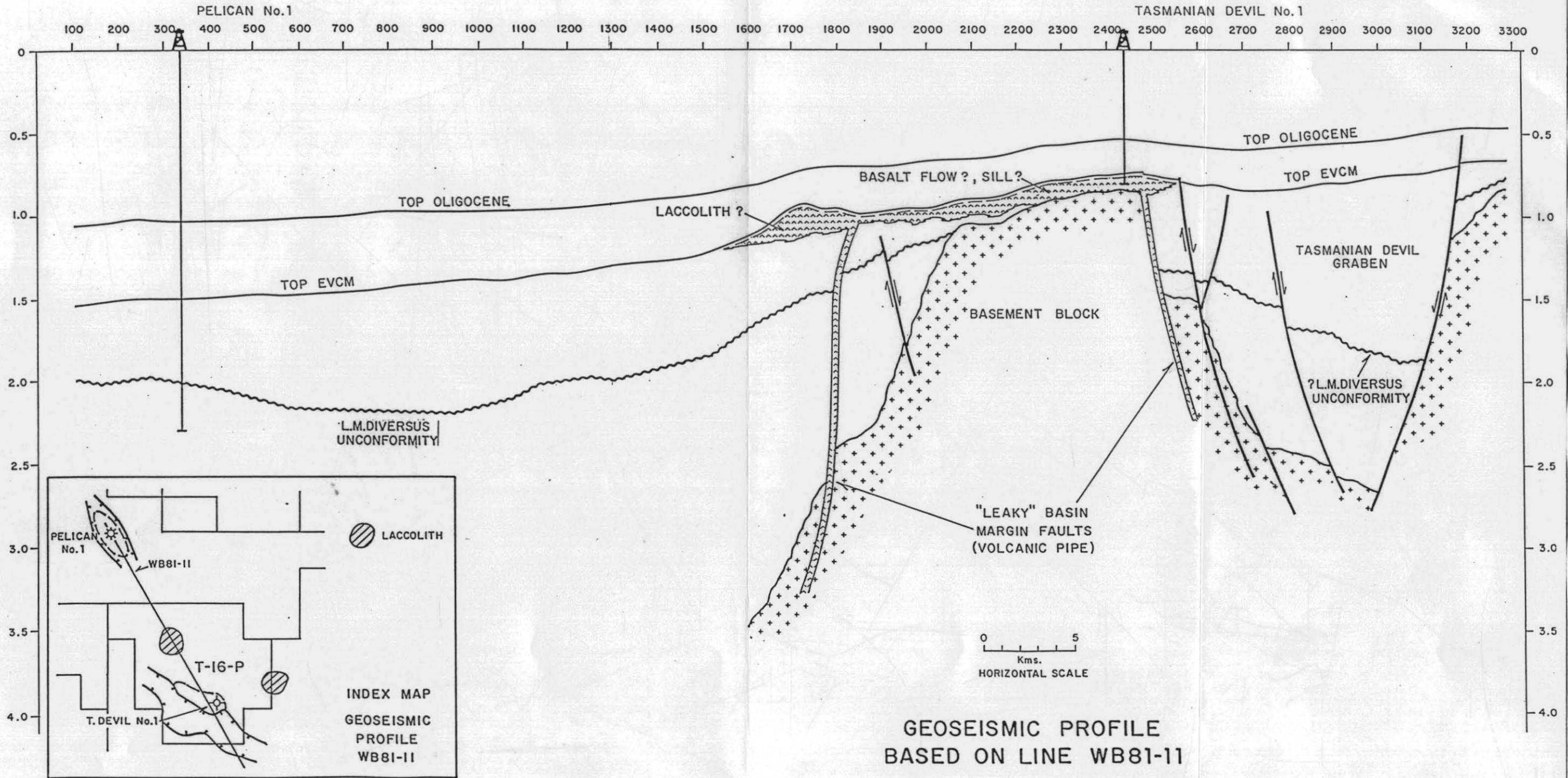


FIGURE 12.-

Aeromagnetic Survey

The results of an aeromagnetic survey conducted in 1960-61 indicate that at the Tasmanian Devil #1 exploratory well location, the calculated depth to magnetic basement is in the order of 1900 feet below sea level (See Figure 13).

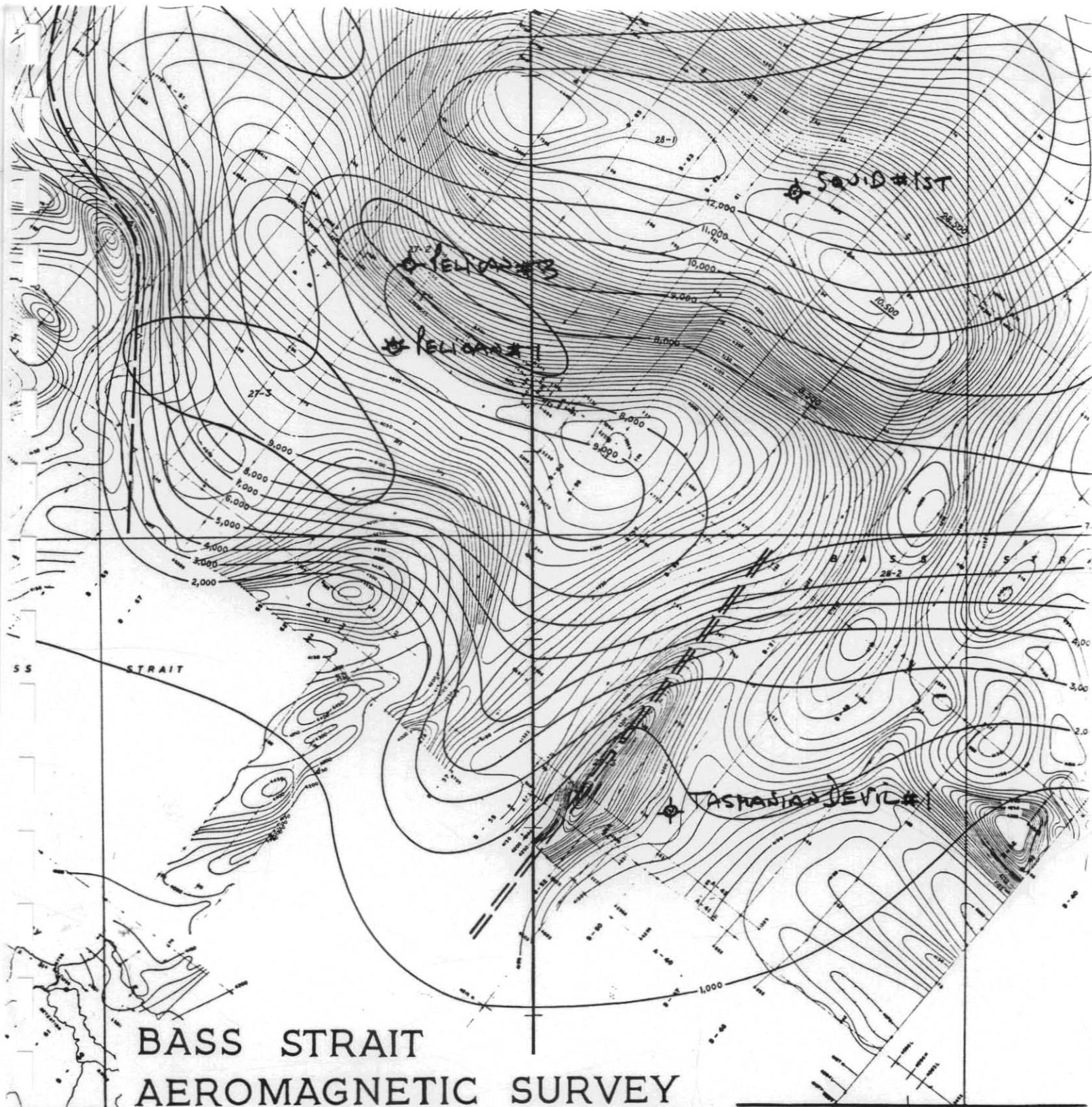
Drilling of the Tasmanian Devil #1 well has been shown the presence of an alkali olivine basalt stratiform at a depth of 2393 feet below sea level. The well did not reach basement as defined seismically. However, this alkali olivine basalt stratiform may actually lie on top of basement and effectively mask it.

A distinct northeast-southwest alignment of the total magnetic intensity contour lines is shown in the area directly to the west and northwest of the Tasmanian Devil #1 well location. The calculated depth to magnetic basement contour lines are bent around this particular anomaly which may be indicative of a mineralized transfer fault zone. If the calculated depth to magnetic basement contour lines are bent back in order to artificially remove this anomaly, of local significance only, the depth to magnetic basement becomes that of the top of the volcanics found in the well.

Magnetic and Gravity Surveys

Magnetic and gravity data was acquired in the course of the 1981 Stoney Head geophysical survey and the 1982 Egg Island geophysical survey. Results of these two surveys have been compiled for the Tasmanian Devil area. The contour interval for the Bouguer gravity map is 5 milligals and for the Total Magnetic Intensity map is 50 gammas. Depth to magnetic basement have been calculated. The map scale is 1:100,000.

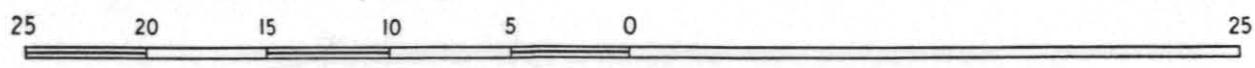
Enclosure map #1 is based on a sub-sea depth structure map near the top of the lower M. diversus unconformity as picked in the Pelican #1 well. The closure



**BASS STRAIT
 AEROMAGNETIC SURVEY
 TOTAL MAGNETIC INTENSITY
 GEOPHYSICAL INTERPRETATION**

BASEMENT DEPTH. (Feet below sea level) ----- 2,000 -----

ANALYTICAL DEPTH ESTIMATES ----- 16,000 -----



215032

MILES

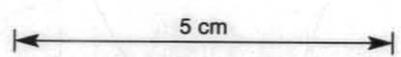


Figure 13

area is indicated and shaded, and so is the area where this seismic marker is absent by erosion or non-deposition. The location of the Tasmanian Devil #1 exploratory well is shown, and so is the location of the Geoseismic Profile seismic line WB-91-11 (See Figure 12).

At the level of this map, the Tasmanian Devil's general area is dominated by this sub-parallel northwest-southeast trending normal faults which together form a major southeast dipping graben area. The Tasmanian Devil closure area is shown to dip towards the northeast and to terminate in its up-dip direction against the northeast main normal fault.

The northwest trend of the two main faults is shown to be offset twice by what are thought to be northeast-southwest trending transfer fault zones. Starting at the southeast end of the map area, the first off set is to the southwest and is characterized by the branching of the main faults as well as by a transfer of displacement between the various fault branches. The Tasmanian Devil #1 exploratory well is located near this transfer zone. The second offset is farther to the northwest. It is located at or near the northeast trending normal fault recognized on seismic. The offset is towards the northeast. Further to the northwest the graben area narrows and terminates.

Enclosure map 2 uses as a base the Enclosure map 1, previously described, to which the Bouguer gravity contour lines are added. The dominant trend of the Bouguer gravity contour lines is essentially east-west. A gravity positive anomaly occupies the general Tasmanian Devil structure area. Gravity negative trend values are towards the north or northwest the Pelican #1 well area and toward the south, the graben area. The gravity positive which occupies the Tasmanian Devil structure area is peanut shaped, or two lobed, with a necking and southwest shift of the contour lines over the area where the northeast transfer fault zone is thought

to be present. To the northwest, the influence of the second transfer fault zone is also observed.

Enclosure map 3 uses as a base the Enclosure map 1, previously described, to which the Total Magnetic Intensity contour lines are added. The dominant trend of the Total Magnetic Intensity contour lines is northeast-southwest. A magnetic positive anomaly is superimposed on the seismically defined northeast-southwest fault associated with a transfer zone of the Tasmanian Devil structure. The intensity of the magnetic positive anomaly decreases towards the northwest and toward the southeast.

The calculated depths to magnetic basement indicate that at the Tasmanian Devil #1 exploratory well location, the interpreted depth to magnetic basement is 700 meters below sea level. The well intersects an alkali olivine basalt at 729.4 meters below sea level, effectively testing magnetic basement. Enclosure Map 4.

The magnetic and gravity response of the Tasmanian Devil structure area has been modeled using a computer interactive, 2 1/2 dimensional forward modeling program which allows the interpreter to build a schematic model with variable physical characteristics such as size, shape, orientation, depth, magnetic susceptibility, remanent magnetisms and density. Once the model is constructed, magnetic or gravity anomaly curves can be calculated over the model and then compared with the actual observed anomaly curves, thereby directing the interpreter in the revisions of the model parameters.

Seismic line WB-82-50 along with the magnetic and gravity data collected has been modeled. Figure 14 displays the model generated from Total Magnetic Intensity data and depth to the seismically determined acoustic basement.

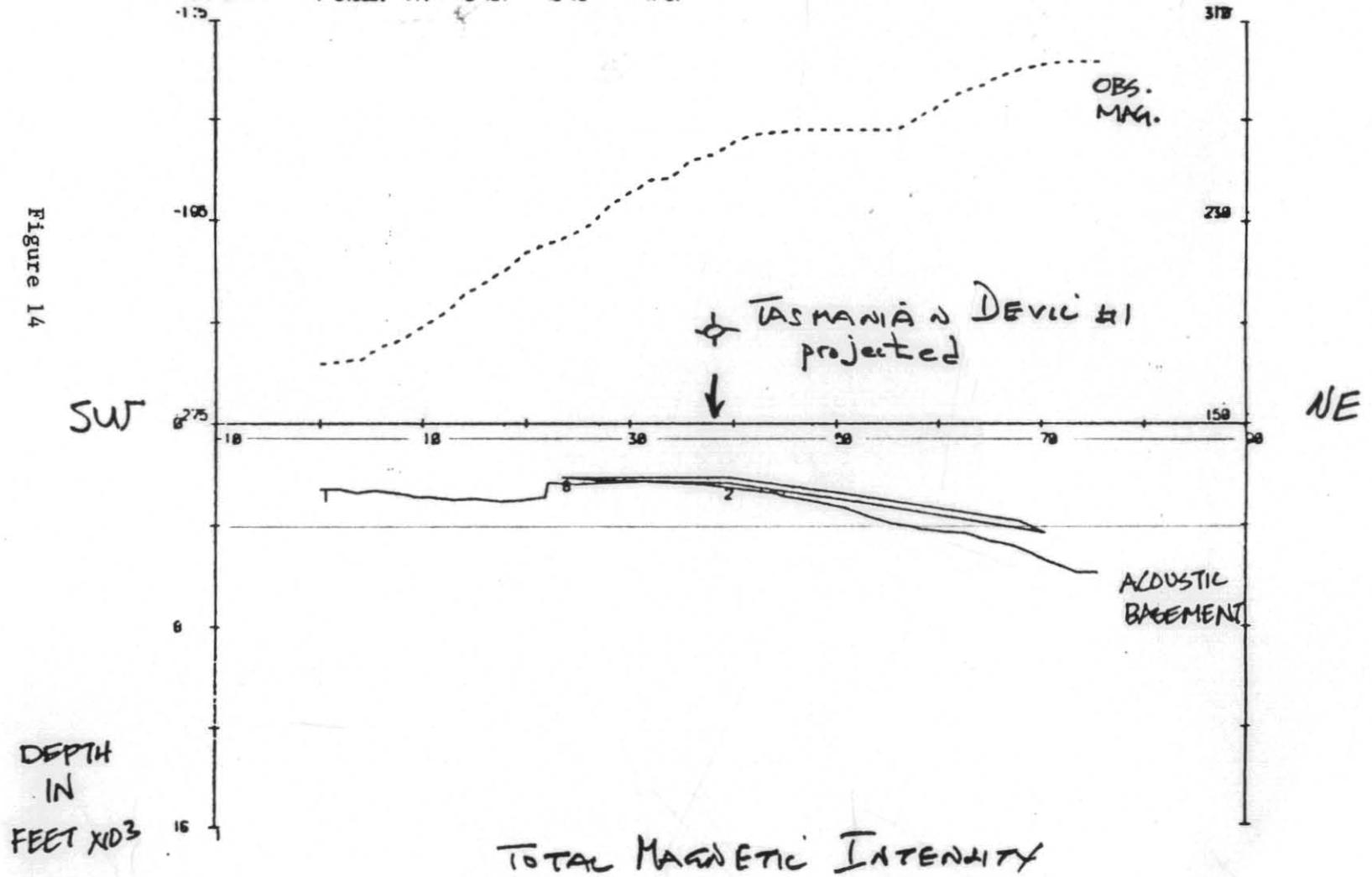
The projected location of the Tasmanian Devil #1 exploratory well is shown. On the basis of this model, it appears that the well tested a sill of alkali olivine basalt near the area of its direct superposition with the acoustic basement. Figure 15 displays the model generated from Bouguer gravity data and

SEISMIC LINE WP-82-50

OBS. GAMMAS

WEAVER OIL COMPANY / BASS BASIN / LINE 50
 DISTANCE IN KILOFEET. ANOMALY IN GAMMAS
 F 616281 -71. D 12. C 12 A 8.

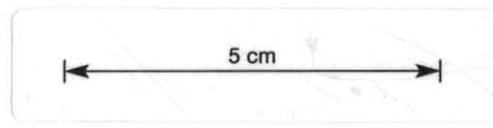
Figure 14



DEPTH
IN
FEET X03

TOTAL MAGNETIC INTENSITY

AERO SERVICE DIVISION
 WESTERN GEOPHYSICAL
 COMPANY OF AMERICA
 HOUSTON, TEXAS

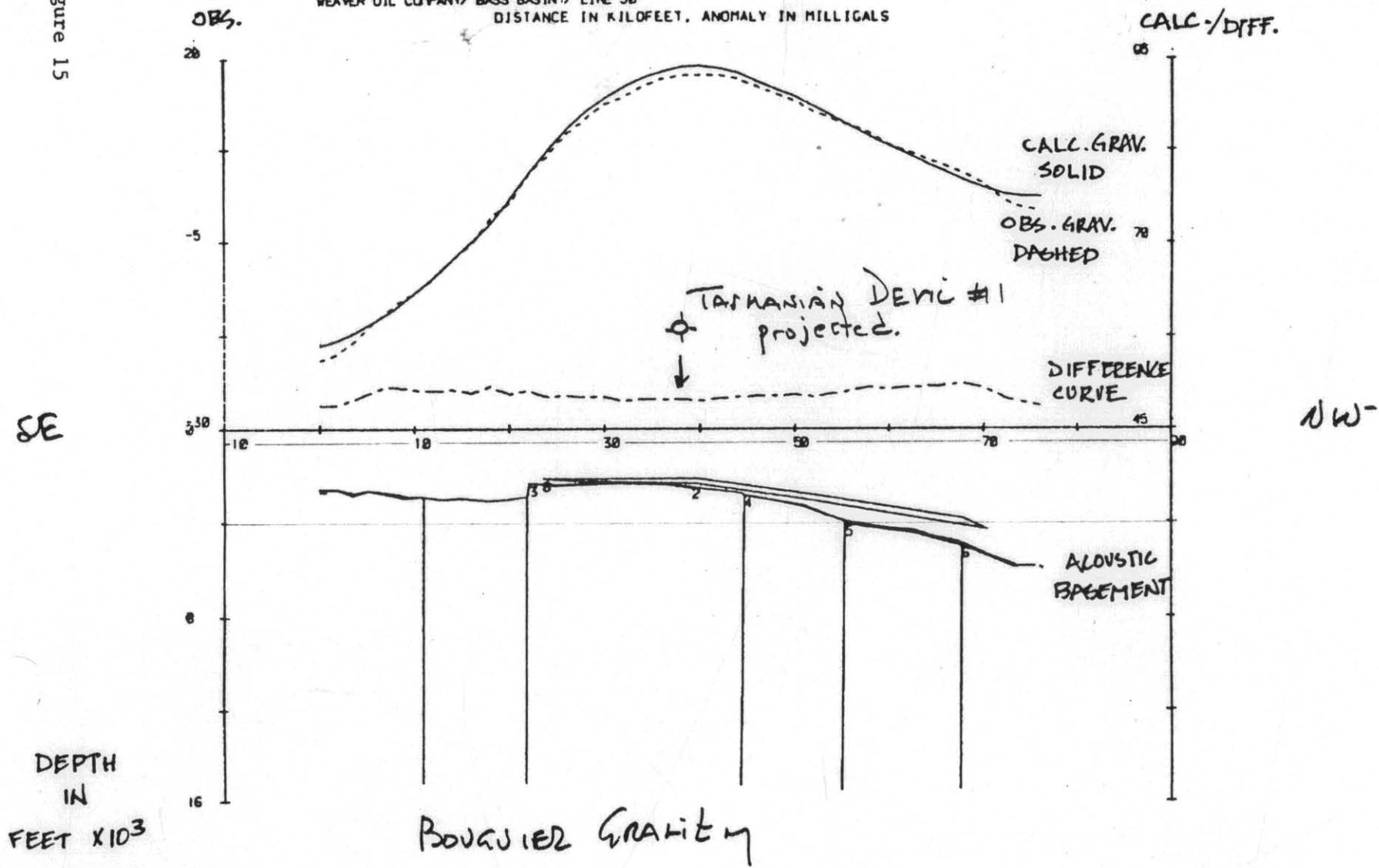


215035

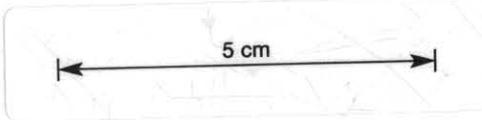
SEISMIC LINE WB-82-50

Figure 15

WEAVER OIL COMPANY / BASS BASIN / LINE 50
 DISTANCE IN KILOFEET, ANOMALY IN MILLIGALS



AERO SERVICE DIVISION
 WESTERN GEOPHYSICAL
 COMPANY OF AMERICA
 HOUSTON, TEXAS



215036

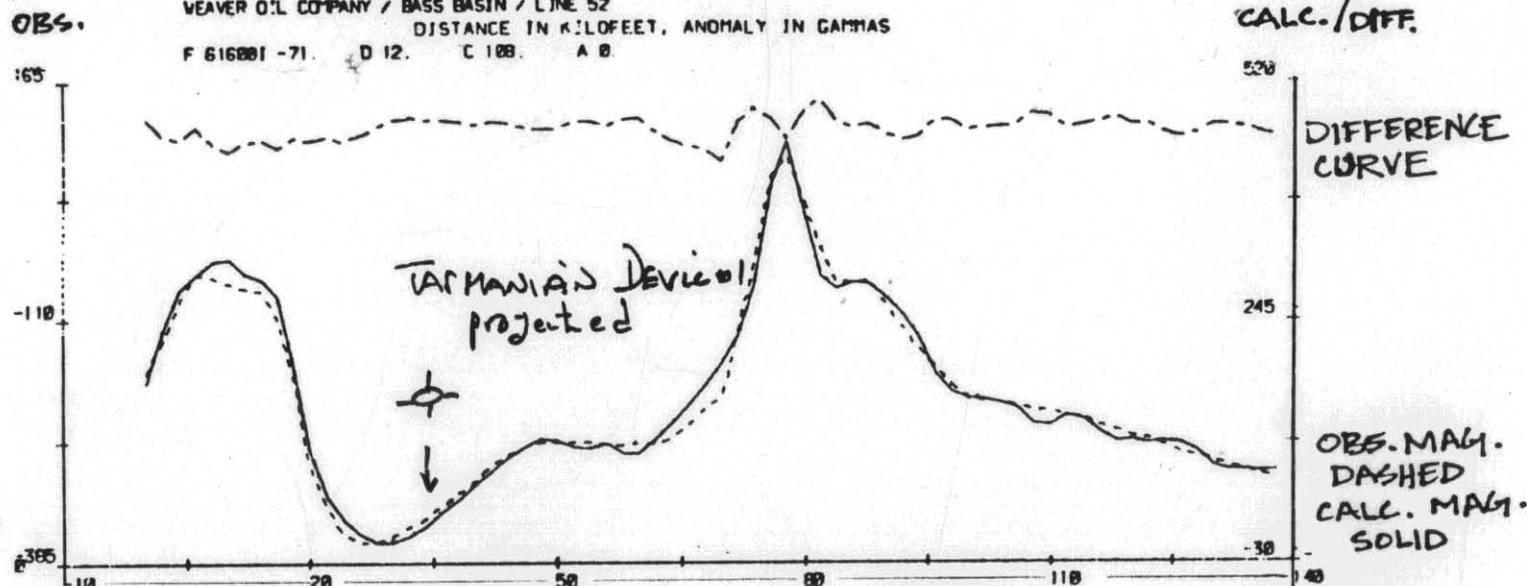
depth to acoustic basement for seismic line WB-82-50. It is essentially the same as the model generated from the magnetic data (See Figure 14).

Seismic line WB-82-52, a strike line, along with the magnetic and gravity data collected has been modeled. Figure 16 displays the model generated from Total Magnetic Intensity data and depth to acoustic basement. The projected location of the Tasmanian Devil #1 exploratory well is indicated. The presence of sills lying on basement is shown.

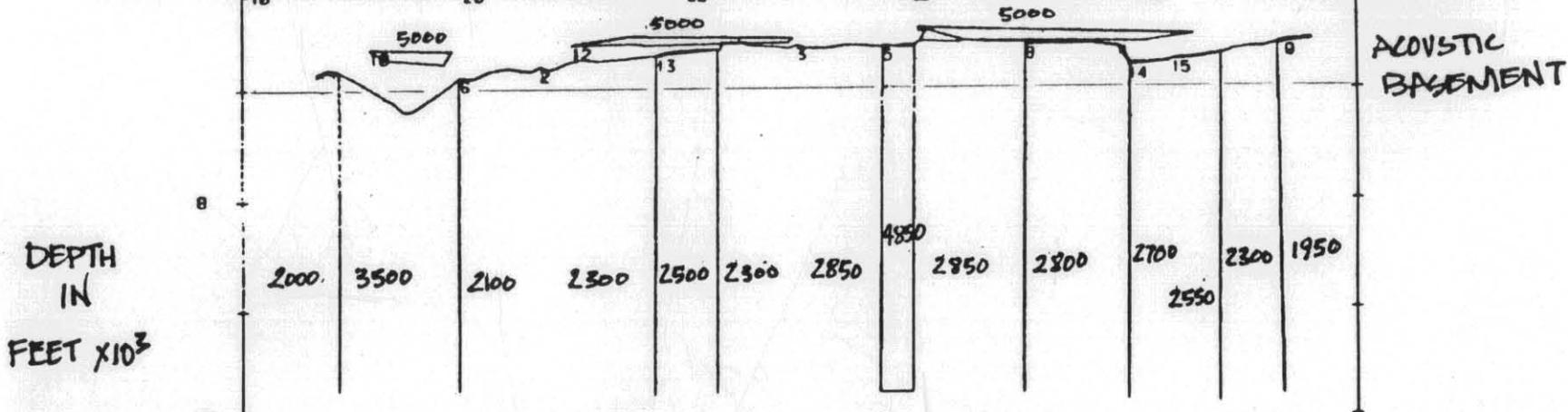
The well is actually located on an upthrown fault block to this strike line where a sill is present, and has been intersected, and where the acoustic basement is somewhat shallower as seen in the model generated for line WB-82-50. Figure 17 displays the model generated from Bouguer gravity data and depth to acoustic basement for seismic line WB-82-52. It is essentially the same as the model generated from the magnetic data (See Figure 16).

SEISMIC LINE WB-82-52

WEAVER OIL COMPANY / BASS BASIN / LINE 52
 DISTANCE IN KILOFEET, ANOMALY IN GAMMAS
 F 616881 -71. D 12. C 108. A B



NW



TOTAL MAGNETIC INTENSITY

AERO SERVICE DIVISION
 WESTERN GEOPHYSICAL
 COMPANY OF AMERICA
 HOUSTON, TEXAS

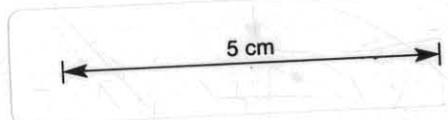


Figure 16

215038

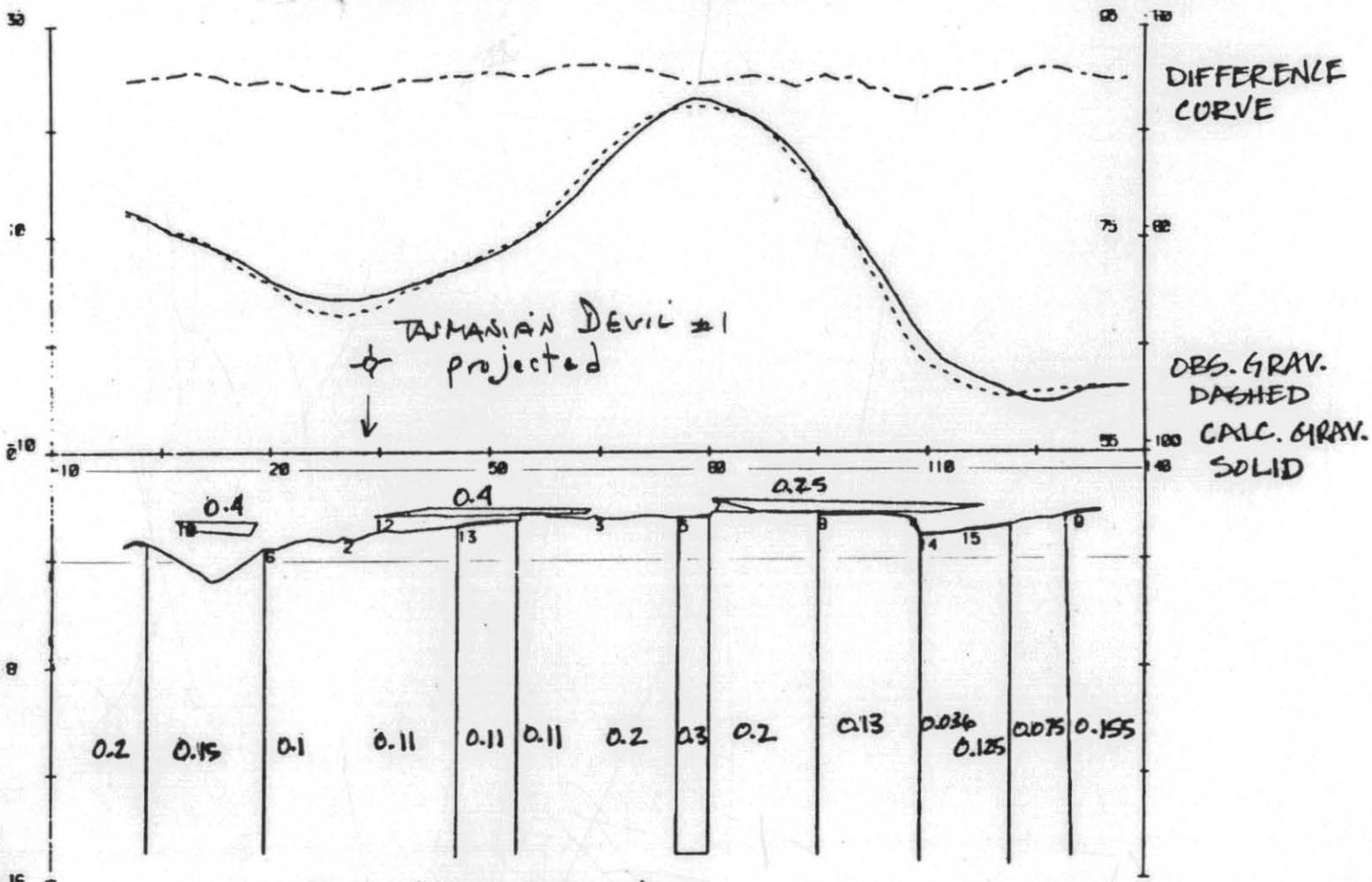
SEISMIC LINE WB-82-52

WEAVER OIL COMPANY / BASS BASIN / LINE 52
 DISTANCE IN KILOFEET. ANOMALY IN MILLIGALS

CALC./DIFF.

Figure 17

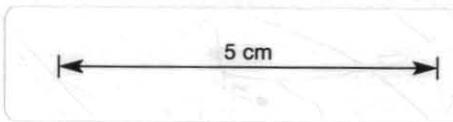
SE



DEPTH IN FEET $\times 10^3$

BOUGUER GRAVITY.

AERO SERVICE DIVISION
 WESTERN GEOPHYSICAL
 COMPANY OF AMERICA
 HOUSTON, TEXAS



215039

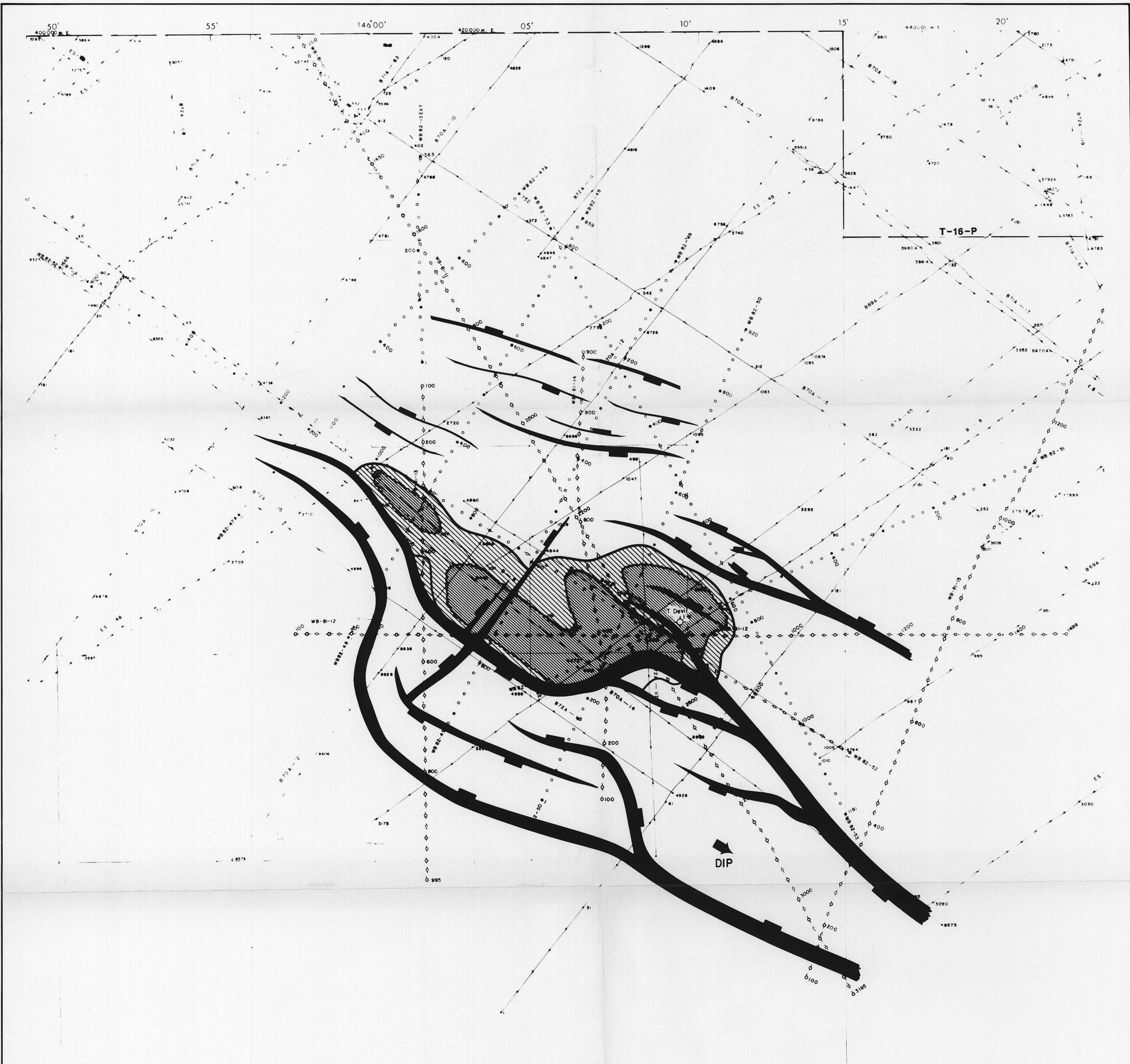
Conclusion

The Tasmanian Devil #1 exploratory well was drilled during this quarter. The well was designed to evaluate the hydrocarbon potential of a major tilted fault block located on the southwest flank of the Bass Basin.

The exploration concept was based on seismic evidence that the Tasmanian Devil structure formed very early in the evolution of the basin, that it would contain a reworked sandstone section of the uppermost Eastern View Coal Measures equivalent, that it would be sealed by the Eocene shale or Demons Bluff Formation, and that long range migration of hydrocarbon took place from the northwest or deeper and mature portion of the basin.

The Tasmanian Devil #1 exploratory well did find a basal Oligiocene sandstone, the Eocene shale and a very condensed Eastern View Coal Measures sandstone section, almost all of the objective section being replaced by alkali olivine basalt.

Other prospective structures remain to be tested in Permit T-16 P area.



**WEAVER OIL AND GAS CORPORATION,
AUSTRALIA**

BASS BASIN T-16-P

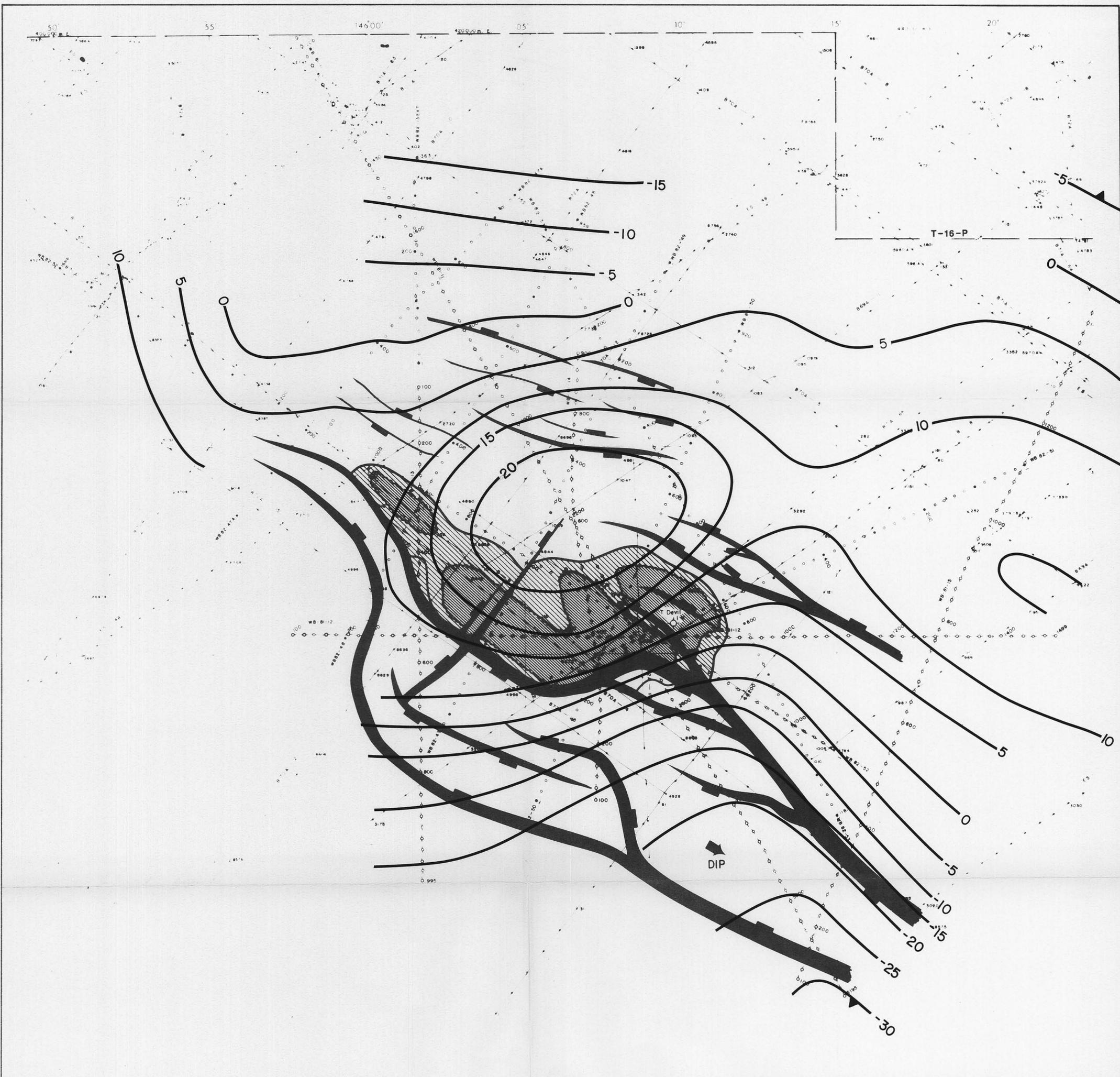
**FAULT TRENDS AND CLOSURE AREA AT
NEAR TOP LOWER M. DIVERSUS UNCONFORMITY
TASMANIAN DEVIL NO. 1 WELL AREA**

5 cm

215041

f/16P Part 7

OR-201



WEAVER OIL AND GAS CORPORATION,
AUSTRALIA

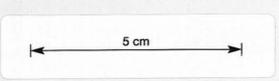
BASS BASIN T-16-P

FAULT TRENDS AND CLOSURE AREA AT
NEAR TOP LOWER M. DIVERSUS UNCONFORMITY
SEISMIC MARKER LEVEL SHOWING BOUGUER
GRAVITY CONTOUR LINES

T/16-P Part 2

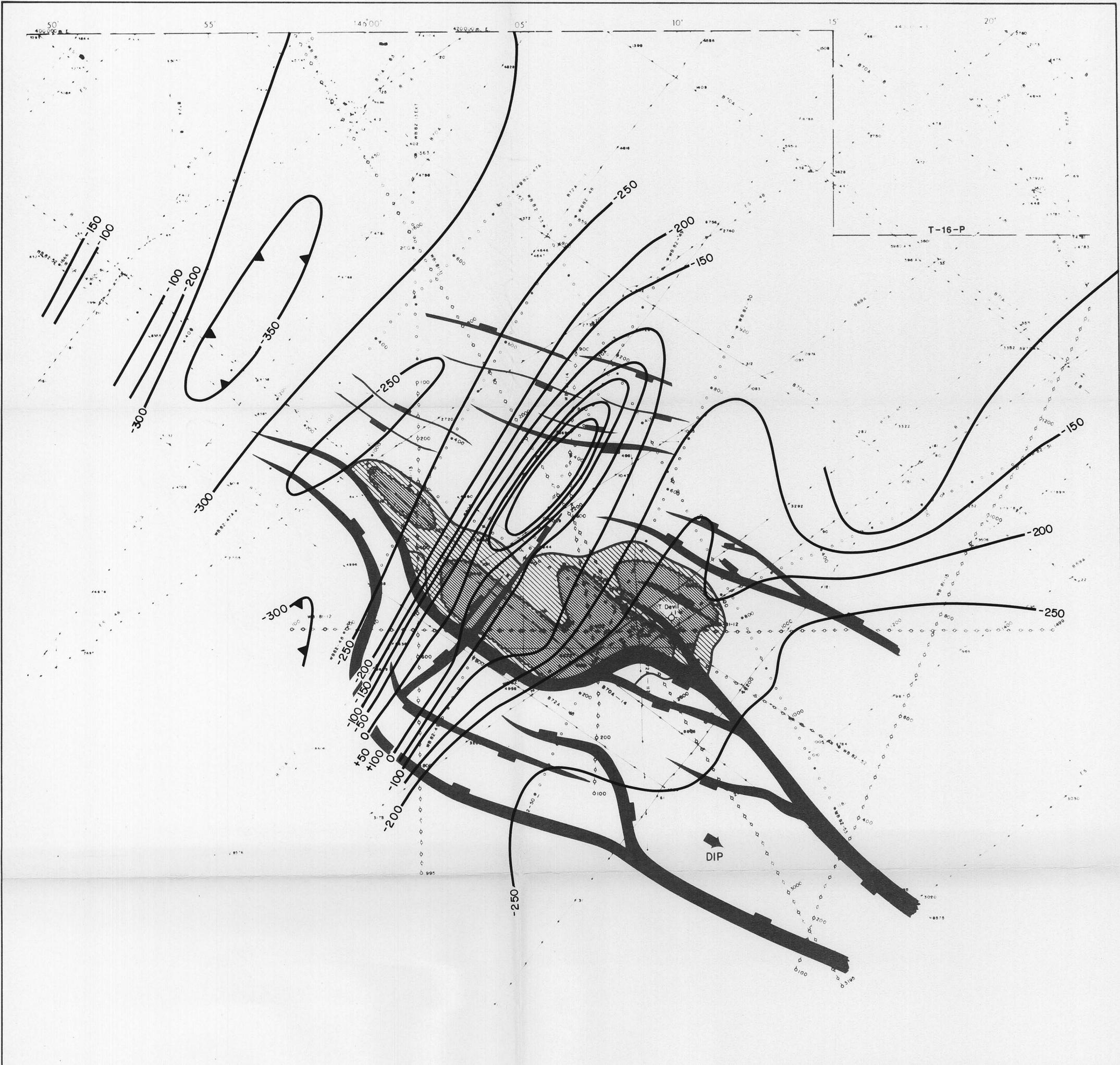
215042

OR-201



Enclosure Map 2

SCALE 1:100,000
CONTOUR INTERVAL 5 MILLIGALS



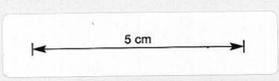
WEAVER OIL AND GAS CORPORATION,
AUSTRALIA

BASS BASIN T-16-P

**FAULT TRENDS AND CLOSURE AREA AT
NEAR TOP LOWER M. DIVERSUS UNCONFORMITY
SEISMIC MARKER LEVEL SHOWING TOTAL
MAGNETIC INTENSITY CONTOUR LINES**

T/16P Part 7

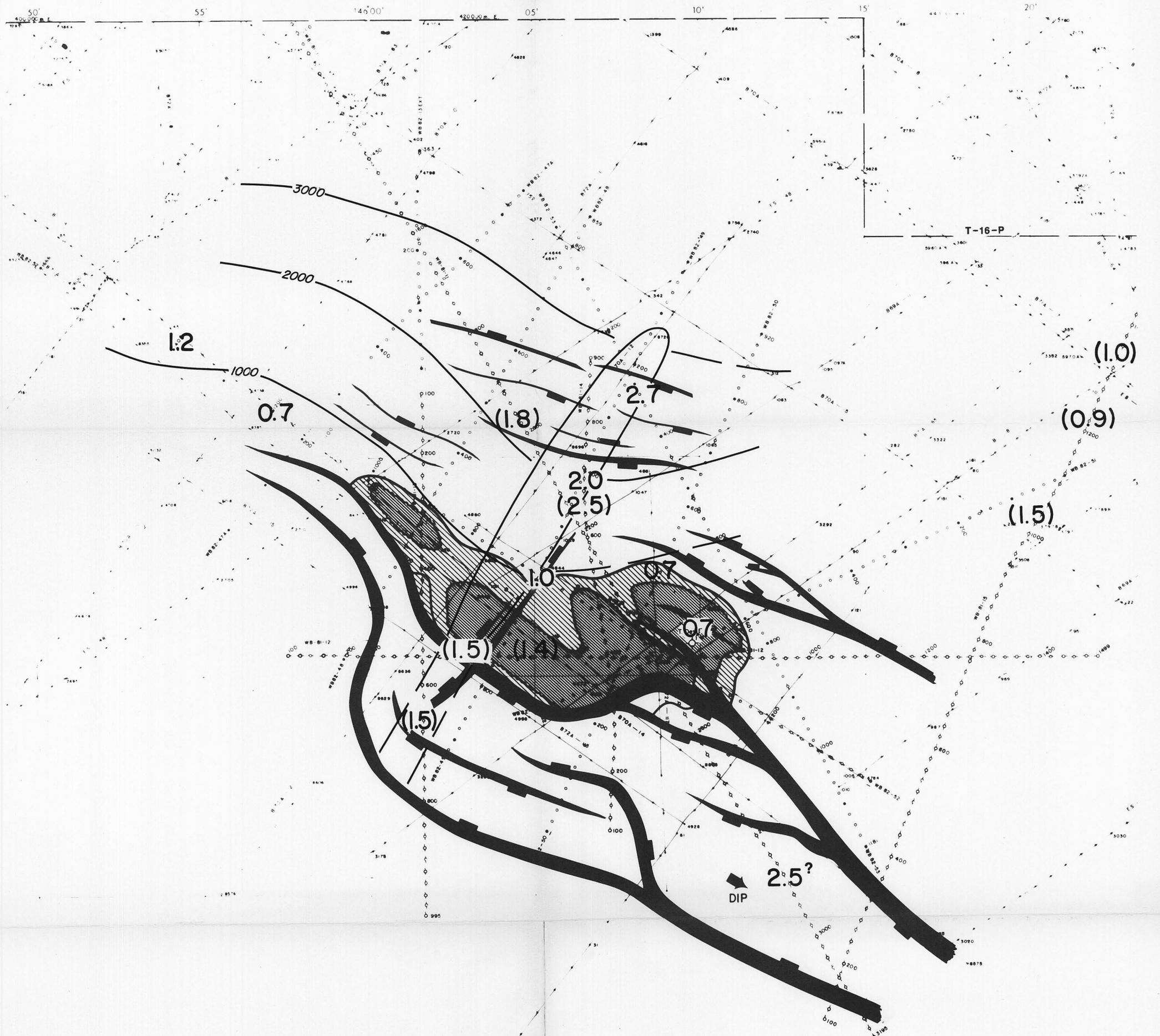
215043



Enclosure Map 3

SCALE 1:100,000
CONTOUR INTERVAL 50 GAMMAS

OR-201



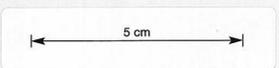
GRADED DEPTH VALUES IN THOUSANDS OF METERS TO INTERPRETED MAGNETIC BASEMENT
 DEPTH VALUES IN PARENTHESIS ARE SOURCES OCCURING ABOVE INTERPRETED BASEMENT

**WEAVER OIL AND GAS CORPORATION,
 AUSTRALIA**

BASS BASIN T-16-P

215044

**FAULT TRENDS AND CLOSURE AREA AT
 NEAR TOP LOWER M. DIVERSUS UNCONFORMITY
 SEISMIC MARKER LEVEL SHOWING CALCULATED
 DEPTH TO MAGNETIC BASEMENT AND POSSIBLE
 EXTENT OF VOLCANICS ALONG FAULT PLANE**



Enclosure Map 4

SCALE 1:100,000
 CONTOUR INTERVAL 50 GAMMAS

T/16P Part 7

OR-201