

Santos (BOL) Ltd
(A.C.N. 000 670 575)

EXPLORATION & DEVELOPMENT - SA

McINTEE 1
WELL PROPOSAL

G Parsons / M Majedi
September 2000

Santos (BOL) Ltd
(A.C.N. 000 670 575)

EXPLORATION & DEVELOPMENT - SA

McINTEE 1
WELL PROPOSAL

G Parsons / M Majedi
September 2000

CONTENTS

909139 003

1. WELL DATA SUMMARY

2. EXECUTIVE SUMMARY

3. GEOLOGICAL RISK ASSESSMENT

- 3.1 Play Analysis
- 3.2 Trap
- 3.3 Reservoir
- 3.4 Seal
- 3.5 Charge
- 3.6 CO₂ Issues

4. RESOURCE DISTRIBUTION AND ECONOMIC EVALUATION

- 4.1 Resource Distribution
 - 4.1.1 Area
 - 4.1.2 Porosity
 - 4.1.3 Hydrocarbon Saturation
 - 4.1.4 Net Pay
 - 4.1.5 Recovery Factor
 - 4.1.6 Gas Composition
 - 4.1.7 Flow Rate
- 4.2 Location

FIGURES, ENCLOSURES AND ATTACHMENTS**FIGURES**

1. Well Location
2. Otway Basin - Stratigraphic Column
3. Proposed McIntee 1 - Stratigraphic Column
4. Proposed McIntee 1 - Diagrammatic Structural Cross-Section
5. McIntee Prospect - Near top Waarre Sand Time Map
6. Seismic Line – Curdievale 3D – Proposed McIntee – Callista 1
7. McIntee Prospect - Belfast to Waarre Time Interval
8. Dip Line - McIntee Prospect
9. Strike Line - McIntee Prospect
10. Far offset v's Near offset display
11. Curdievale 3D - Average Amplitude – Near offset
12. Curdievale 3D - Average Amplitude –Far offset
13. Curdievale 3D - Average Amplitude – Far-Near offset
14. Port Campbell Embayment – Waarre Depositional model
15. Log Display - Callista 1
16. Log Display – Boggy Creek 1

ENCLOSURES

1. Curdievale 3D - Near top Waarre Sand Time Map
2. Stratigraphic Cross Section - Curdie 1 - Boggy Creek 1 - Proposed McIntee 1 – Callista 1

ATTACHMENTS

1. Geophysical Prognosis

2. EXECUTIVE SUMMARY

McIntee 1 is proposed as an Otway Basin gas exploration well to be located in the PEP 154 licence (90% Santos (operator) and 10% Beach Petroleum N.L), It lies approximately 13 km north of the town of Peterborough, 4 km north of the Boggy Creek CO₂ field and 10 km west of the producing Mylor and Fenton Creek Gas Fields (Santos 100%). The McIntee Structure is situated within the Port Campbell Embayment and the productive Waarre Sandstone play fairway. (Figure 1).

The McIntee Prospect is a relatively flat-lying horst structural closure defined by 3D seismic. The well is expected to intersect a Waarre Sandstone reservoir with mean average net pay of 21 m. The prospect exhibits a strong amplitude anomaly which where present in other wells in the area has proven to indicate the presence of gas.

The risk of major CO₂ is considered to be low as structurally McIntee is quite different to Boggy Creek structure (90% CO₂), which lies within a "shattered" zone, believed to provide the conduit for the migration of CO₂. Spill from Boggy Creek is to the northeast, away from McIntee 1.

The prognosed stratigraphic succession is summarised by Figures 2 & 3.

3. GEOLOGICAL RISK ASSESSMENT

3.1 Play Analysis

The McIntee Prospect is mapped as a horst block closure with the primary reservoir the Waarre Sandstone. Vertical seal is provided by the Belfast Mudstone (Figure 4) with the critical cross-fault seal possibly relying on Belfast shale smear due to large fault throws and the potential for juxtaposition of Waarre reservoir against the Nullawarre Sandstone. Structures are charged from mature source beds located within the underlying Eumeralla and / or Crayfish Group with migration directly into the reservoir or via fault conduits. The play has proven successful to the east in the nearby Mylor, Fenton Creek, Penryn, North Paaratte, Wallaby Creek and Iona Fields as well as at the Boggy Creek CO₂ field to the south. McIntee, as with each of these fields, exhibits a strong amplitude anomaly at the Waarre Sandstone horizon, interpreted as being well-developed gas-saturated reservoir.

3.2 Trap

Interpretation and mapping of the McIntee prospect was based on the Curdievale 3D survey, which was recorded in early 2000. The Curdievale 3D data quality is good in the McIntee area.

Several migrated volumes including migrated stacks with and without spectral whitening, near and far offset migrated stacks were generated and used for interpretation. Due to better horizon continuity and amplitude preservation the migrated stack volume without spectral whitening was used for horizon interpretation. Far and near offset volumes were used for amplitude extraction and AVO analysis.

A coherency cube (similarity volume) was also generated and used in conjunction with other volumes for fault interpretation.

Main mapping was carried out at near top Waarre Sandstone, which is the primary target reservoir (Figure 5 & Enclosure 1). The Waarre sand package has a distinctive seismic characteristic and therefore a high degree of consistency was maintained with mapping of this unit. It should be noted however, due to uncertainty in phase and polarity of the Curdievale volume and lateral variations within the Waarre, alternative options for the top Waarre event, were investigated across different parts of the surveyed area.

Well ties were performed for Boggy Creek 1, Callista 1 (Figure 6) and Curdie 1. The Curdie 1 tie however may not be a valid tie for the Waarre Sandstone as the well appears to have penetrated a fault plane at this level.

A phase analysis trial was conducted using Boggy Creek 1 and Callista 1 but the results obtained are considered to be inconclusive. Boggy Creek 1 showed data to be between -75 and 60 degrees from zero phase whilst Callista 1 showed between 30 and 135 degrees.

As a consequence of the uncertainties associated with the seismic pick for the top Waarre sand, a few alternative options were considered as possibly representing the near top Waarre sand over the McIntee structure. The integrity of the closure area was also examined using alternative picks and the structure proved robust. The final mapping was carried out using the preferred pick which ties with Callista 1 and forms a consistent pick throughout the Curdievale data volume but is one leg high at the Boggy Creek 1 welltie.

The McIntee prospect is a horst block structure within a much broader McIntee Structural Complex situated south of Callista 1 (Enclosure 1). Three independent structural closures are present within the greater McIntee Structural Complex which are separated by shallow troughs and faulting. The McIntee Structural Complex forms a major NW-SE trending horst block. The southern margin fault dies out just south of McIntee prospect but extends northwesterly beyond the Curdievale surveyed area. The throw of this fault increases towards the northwest and as a result the Waarre sand reservoir in the footwall is in juxtaposition with the Belfast Mudstone in the hanging wall to the southeast, and with the Skull Creek Formation to the northwest.

Such a situation could provide a critical side-seal problem along the fault plane where Waarre sand is juxtaposed against the Nullawarre Sandstone somewhere between McIntee and McIntee C prospects. In addition there is some risk of Nullawarre / Waarre sand juxtaposition within the McIntee structure. This has been considered in assessing the P90 area which relies on closure only along the NE fault. The spill from the McIntee prospect, however is expected to be towards the McIntee C prospect through the saddle between the two features, probably at the northwest corner of the McIntee closure area.

The top Belfast Mudstone was interpreted on a selected grid in order to adequately evaluate the seal efficiency over the McIntee structure. A time-interval map Belfast to Waarre was generated to investigate the seal thickness (Figure 7 & Enclosure 2).

A strong amplitude event is present within the Waarre sand unit over the McIntee prospect (Figures 8 and 9). Similar events over all gas fields within the Port Campbell region suggest that the amplitude anomaly is likely related to the presence of gas in these structures. Furthermore, near and far offset volumes were also used to evaluate the amplitude anomaly over McIntee. Figures 10 to 13 are displays of amplitudes extracted within the Waarre sand unit. Figure 13 is particularly encouraging as the display of far offset amplitude minus near offset amplitude clearly indicates an AVO anomaly over the McIntee structure.

The location for the proposed McIntee 1 was selected on inline 2447 CDP 10254. This location is at a near-crestal position and is within the highest expression of amplitude.

Depth conversion for the prognosis was performed using Callista 1 velocities. The result of this conversion is presented in Attachment 1.

3.3 Reservoir

The Waarre Sandstone reservoir was deposited as the initial post-rift sequence at the commencement of the Turonian time under non-marine to marginal marine conditions. The section is divided into three sub-units – Waarre “A”, “B” & “C”. The lower A unit represents a basal transgressive systems tract (TST) characterised by the flooding of an incised valley with sediments deposited under marginal marine / estuarine conditions. The basal portion of Unit A is represented by either shale (as in Callista 1 or Boggy Creek 1 - interfluvial?) or sand (Curdie 1). This section was overlain by the widespread predominantly argillaceous Unit B, deposited under estuarine conditions. Unit C followed and is characterised by initial estuarine/deltaic conditions succeeded by high energy sands as the transgression pushed sediments up the valley system. Figure 14 illustrates this model.

The Waarre Sandstone thins to the north and in the Callista 1 (Figure 15) well located 2.8 km north, the section appears to be relatively shaley (based on the gamma ray log) with only a thin well developed section at the top of unit C. To the south at Boggy Creek 1 (Figure 16), a thick well-developed Waarre sand was penetrated. Between Callista 1 and McIntee there is significant change in the seismic character at the top Waarre level. This possibly is indicative of better sand development at the McIntee location.

- 5 -

The well intersected a total of 48 metres of gross pay encompassing both units C & A with a Net : Gross ratio of 68. At the McIntee location, the amount of vertical closure (25 ms) will likely allow Unit A to be hydrocarbon filled.

There are no secondary targets in this well although the Heathfield Sandstone Member of the Eumeralla is considered to have some (albeit minor) potential. It is not proposed to investigate this unit in McIntee 1, as it lies some 200m into the Eumeralla and when tested at other locations has proved to be tight.

3.4 Seal

All Otway Basin successes in the Port Campbell Embayment area have been in high-side, tilted fault blocks or tilted horst blocks. The ultimate top seal to Waarre reservoirs is the marine Belfast Mudstone. While a potential waste or "thief" zone exists between the Waarre sands and the Belfast seal, the Flaxmans Formation, deposited under transitional marginal marine conditions is most likely to act as a seal.

Cross-fault seal is considered the key risk for prospects within the Port Campbell Embayment area. For structures where the fault throw is greater than the thickness of the overlying Belfast Mudstone there is considerable risk that cross-fault seal will leak due to Waarre sands being juxtaposed against sands of the Nullawarre Greensand. If the throw is great enough, the reservoir could however be juxtaposed against the Skull Creek Mudstone.

The McIntee structure is controlled primarily by two faults lying to the northeast and southwest of the prospect. The fault to the northwest demonstrates relatively minor offset at Belfast level and is regarded as unlikely to leak. The seal across the southwest bounding fault appears to be more problematic as the fault demonstrates both growth during the time of Belfast deposition and potential Waarre/Nullawarre sand juxtaposition in the northwestern portion of the structure where fault displacement increases.

The appearance within the proximal hanging wall zone of high angle reflectors may indicate the presence of shale smear along the fault zone that would provide additional confidence in fault seal. The presence of the higher amplitudes and AVO anomaly over the prospect (if reflecting the presence of gas as seems likely) provide corroboration of seal validity.

3.5 Charge

Hydrocarbons are produced in the Port Campbell Embayment, with the Eumeralla Formation and/or the Crayfish Group being the source beds. Analysis of the condensates and oils from the area suggest a non-marine origin with both algal and higher land plant components (Type III kerogen). Maturation studies indicate that the top of the hydrocarbon window lies at about 2500m. Thus mature Eumeralla source units underlie the local gas fields are most likely to charge directly into the overlying structures through source-reservoir juxtaposition or via fault conduits. This model is proposed for McIntee 1.

The formation of the McIntee structure commenced at the time of Belfast Mudstone deposition in the Late Cretaceous although its current configuration was not completed until the end of the Eocene. Generation and migration commenced in the Late Cretaceous and has continued through until the present day.

3.6 CO₂ Issues

The distribution of CO₂ within the Port Campbell area appears to be related to the introduction of a restricted CO₂ volume at a number of locations and its subsequent migration. The CO₂ is considered to be from a mantle source and is likely to have occurred in conjunction with the emplacement of an igneous body during the Miocene.

A review of high-resolution aeromagnetic data has been undertaken in an effort to understand the distribution of deep-seated faulting, believed to be the conduit for CO₂ migration and the location of igneous bodies. The preliminary results of the study indicate the presence of an intrusive marginal to the coast and proximal to a major NNE-SSW lineament. This lineament appears to be co-incident with major faulting identified on the seismic and is seen as a likely conduit for the Langley and Grumby CO₂. While an intrusive is not identified at nearby Boggy Creek, a similar trending lineament is mapped through the Boggy Creek well location. Further details are available in the report from the aeromagnetic interpretation.

4. RESOURCE DISTRIBUTION AND ECONOMIC EVALUATION

4.1 Resource Distribution

Distributions for local gas field parameters are estimated primarily from those at Boggy Creek 1 and Callista 1 with data from other nearby wells reviewed to provide details of the upper and lower limits. These results are set forth in Table 1 and are used in the resource calculation sheets.

4.1.1 Area

The seismic mapping shows an independent closure of 405 acres (Enclosure 1) and this is used as the P10 area. A low side 150 acre area forms the basis of the P90 estimation - closure at 1235ms is about 180 acres.

4.1.2 Porosity

In the adjacent Boggy Creek 1 and Callista 1 wells, average porosity of about 15-17% is calculated from the logs. Spot core porosities of over 25% were measured in Boggy Creek 1. A range of 15% to 24% average porosity for min & max calculates a mean porosity around 19% for the proposed McIntee 1. Carrying a higher mean porosity for McIntee 1 is

considered justified based on the shallower depth of burial and better predicted sand quality at the proposed location.

4.1.3 Hydrocarbon Saturation

A hydrocarbon saturation distribution of 60-90% (min/max) captures all of the discoveries in the Port Campbell Embayment. Based on a log-normal distribution this calculates a mean of 73.8% which is close to the Boggy Creek 1 S_{gas} average of 71.5%.

4.1.4 Net Pay

Boggy Creek 1 has a total net sand (in Waarre A, B & C) of 30.5m (100 ft), Callista 1 has a net sand of 28.2m (93 ft). The mean average net pay estimated for McIntee is 21m (69 ft). Net / Gross ratios of 87% & 68% are recorded for the Waarre section in Callista 1 and Boggy Creek respectively with a range from 60% (P99) and 85% (P1) providing a mean 72% N/G for the proposed McIntee 1. This would allow for a column potentially extending into the Waarre Unit A sand which has a lower net / gross. Structural relief is in the order of 30m (100').

4.1.5 Recovery Factor

The recovery factor for Santos' Mylor and Fenton Creek gas fields is estimated to be 50%, the mean recovery factor of 49.6% is calculated for McIntee based on 40% and 60% P90 and P10 respectively. Santos has no experience with these reservoirs in the Port Campbell area and the mean assigned RF from the existing fields reflects the best estimate from reservoir engineering. The low recovery factor reflects a postulated strong aquifer support.

4.1.6 Gas Composition

The ranges of gas compositions utilised for McIntee were provided by the analysis of the Mylor 1 and Fenton Creek 1 gas compositions. No detailed information from other nearby fields is available although there is potential for the gas to be drier. The main risk in McIntee regarding this issue is the percentage of CO₂ and this is incorporated in the shrinkage factor low-side of 80%.

4.1.7 Flow Rate

Flow rates used range between 3 MMCFD and 30 MMCFD. These estimates are based on the results of the Mylor and Fenton Creek extended production tests and the Boggy Creek DST. Mylor flowed at 25mmcf on a 3/4" choke, Fenton Creek flowed 17mmcf on a 1/2" choke and Boggy Creek flowed at 4.5mmcf on DST (1/2" choke).

4.2 Location

The site for the proposed McIntee well is located within an intensive dairy area and utmost attention needs to be given to environmental and landholder issues.

WELL NAME:

McIntee 1

LOCATION:

4.4 km N of Curdievale township

Latitude: 38° 29' 21.10" S

Longitude: 142° 49' 21.18" E

Seismic Reference: Line 2447 Curdievale 3D CDP 10254

Easting: 658953 m E

Northing: 5738317 m N

LICENCE:

PEP 154

COST ESTIMATE:

P&A \$1.083 mm

C&S \$1.352 mm

ATTACHMENT 1

GEOPHYSICAL PROGNOSIS

ATTACHMENT 1

GEOPHYSICAL PROGNOSIS

	CALLISTA 1						PROP.MCINTEE 1					
	TWT (ms)	DEPTH (m-ss)	Isopach (m)	VAV (m/s)	VINT* (m/s)	TWT (ms)	DEPTH (m-ss)	Isopach (m)	ERROR (+/-m)	VAV (m/s)	VINT* (m/s)	
CLIFF	416	408		1962		420	412			1962		
			420		2593			421			2593	
PEB.P	740	828		2238		745	833			2237		
			50		2857			39			2857	
PAAR	775	878		2266		772	872			2259		
			308		2690			308			2690	
SKUL	1004	1186		2363		1001	1180			2358		
			101		2928			101			2928	
Null	1073	1287		2399		1070	1281			2394		
			312		3029			253			3029	
BELF	1210	1498		2476		1168	1433			2454		
			108		3600			104			3600	
WAAR	1270	1606		2529		1226	1537		+/- 20m	2508		
			47		2686			43			2686	
EUME	1305	1653		2533		1258	1580			2512		
			37					35				
(TD)		1690					1615					

Prospect : MCINTEE A
Drilling Opp. : MCINTEE 1
Formation : WAAR
Reservoir target : WAARRE
Primary target : Y
Target type : GAS
Joint venture(s) : 100% PEP154

MEPS = 1.060 bcf
@ flow 3.000 mmcf/d

Independent risk (single horizon);
Pg = Pcl * Prs * Psl * Pch
= 0.85 * 0.85 * 0.75 * 0.90
= 0.49
Pc = Ppl * Pg * Pmeps
= 1.00 * 0.49 * 0.99
= 0.48

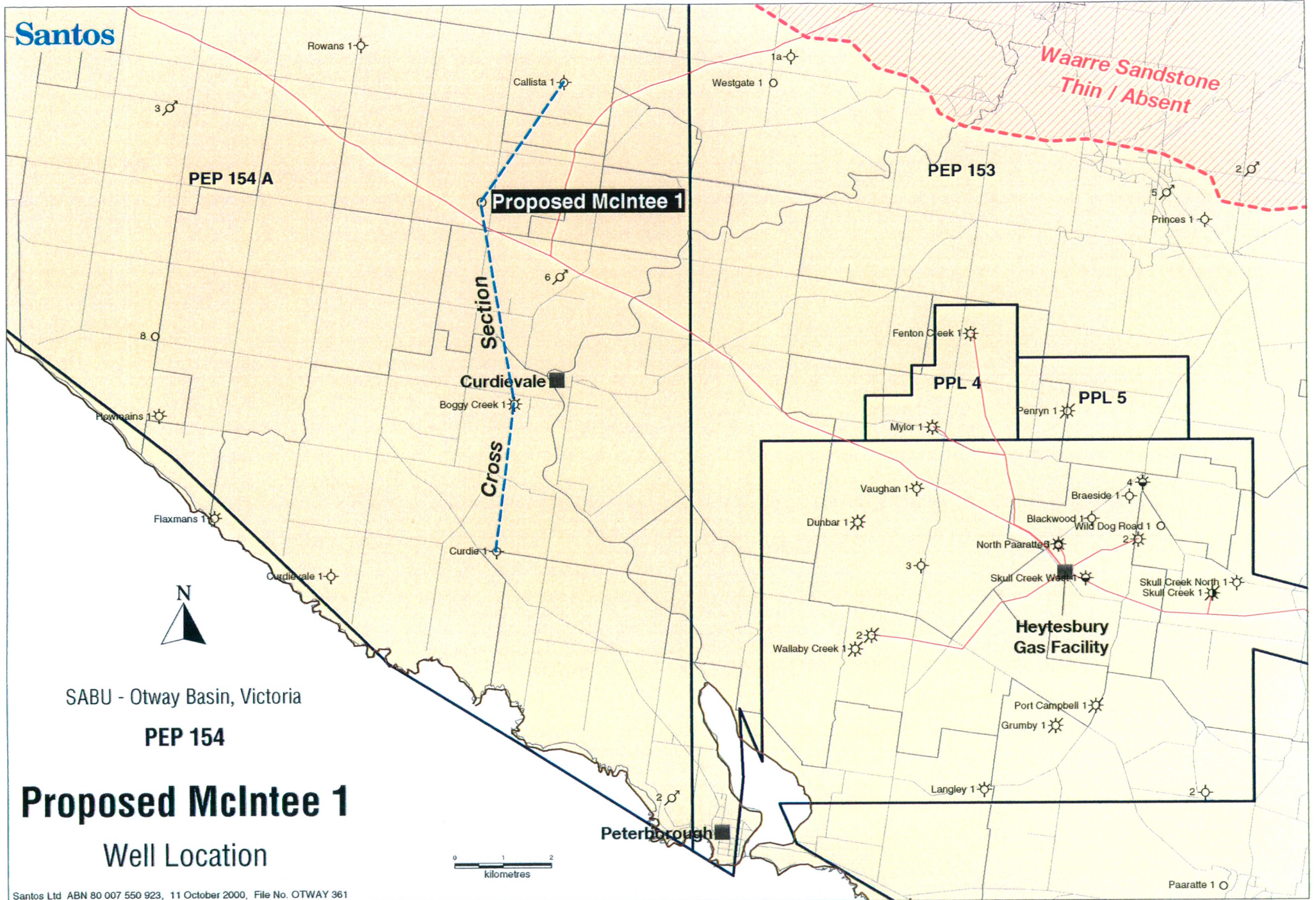
Group Share : 100 %

	Min	P90 Low	P50 Mid	Mean	P10 High	Max	
Trap Geometry Correction Factor : 0.90							
Pool area	150.000 *	199.990	284.598	295.589	405.000 *	539.972	acres
Gross interval	60.000 *	73.707	94.868	96.726	122.104	150.000 *	ft
Net/Gross	0.600 *	0.649	0.714	0.716	0.786	0.850 *	%100
Ave net pay	37.350	46.546 *	60.975	62.343	79.875 *	99.543	ft
100% NRV	7747.032	11128.458 *	17353.225	18427.936	27059.852 *	38870.940	ac.ft

--SALES GAS--							
100% NRV	7747.032	11128.458 *	17353.225	18427.936	27059.852 *	38870.940	ac.ft
Porosity	0.150 *	0.167	0.190	0.191	0.216	0.240 *	%100
Sh	0.600 *	0.657	0.735	0.738	0.822	0.900 *	%100
1/Bg	151.100	155.000 *	159.922	159.969	165.000 *	169.259	
OGIP yield	708.467	816.317 *	971.279	980.253	1155.656 *	1331.582	mcf/ac.ft
OGIP	7.090	10.460 *	16.855	18.064	27.159 *	40.070	bcf
.RF	0.339	0.400 *	0.490	0.496	0.600 *	0.708	%100
Shrinkage	0.800 *	0.831	0.872	0.872	0.914	0.950 *	%100
Sales gas yld	253.543	316.282 *	414.817	424.210	544.049 *	678.673	mcf/ac.ft
Untruncated	2.798	4.355 *	7.198	7.733	11.898 *	18.517	bcf
Truncated	2.798	4.355 *	7.198	7.733	11.898 *	18.517	bcf
Expected	1.351	2.103	3.475	3.734	5.744	8.940	bcf
Flow rate	3.000 *	5.031	9.487	10.723	17.888	30.000 *	mmcf/d

--GAS LIQUIDS--							
OGIP	7.090	10.460 *	16.855	18.064	27.159 *	40.070	bcf
C2 Rec	0.339	0.400 *	0.490	0.496	0.600 *	0.708	%100
C3C4 Rec	0.339	0.400 *	0.490	0.496	0.600 *	0.708	%100
C5+ Rec	0.339	0.400 *	0.490	0.496	0.600 *	0.708	%100
C2 yield	0.001 *	0.001	0.001	0.001	0.001	0.001 *	bbls/mmcf
C3C4 yield	0.001 *	0.001	0.001	0.001	0.001	0.001 *	bbls/mmcf
C5+ yield	10.000 *	10.953	12.247	12.294	13.695	15.000 *	bbls/mmcf
(Untruncated)							
Ethane	0.000	0.000	0.000	0.000	0.000	0.000	bcf
LPG	0.000	0.000	0.000	0.000	0.000	0.000	mmbbls
Condensate	0.039	0.061	0.101	0.109	0.169	0.265	mmbbls
(Truncated)							
Ethane	0.000	0.000	0.000	0.000	0.000	0.000	bcf
LPG	0.000	0.000	0.000	0.000	0.000	0.000	mmbbls
Condensate	0.039	0.061	0.101	0.109	0.169	0.265	mmbbls
(Expected)							
Ethane	0.000	0.000	0.000	0.000	0.000	0.000	bcf
LPG	0.000	0.000	0.000	0.000	0.000	0.000	mmbbls
Condensate	0.019	0.029	0.049	0.053	0.081	0.128	mmbbls

Santos

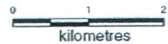


SABU - Otway Basin, Victoria

PEP 154

Proposed McIntee 1

Well Location



909139 016

PE909139-color 001

Figure 1

OTWAY BASIN STRATIGRAPHIC COLUMN

Santos

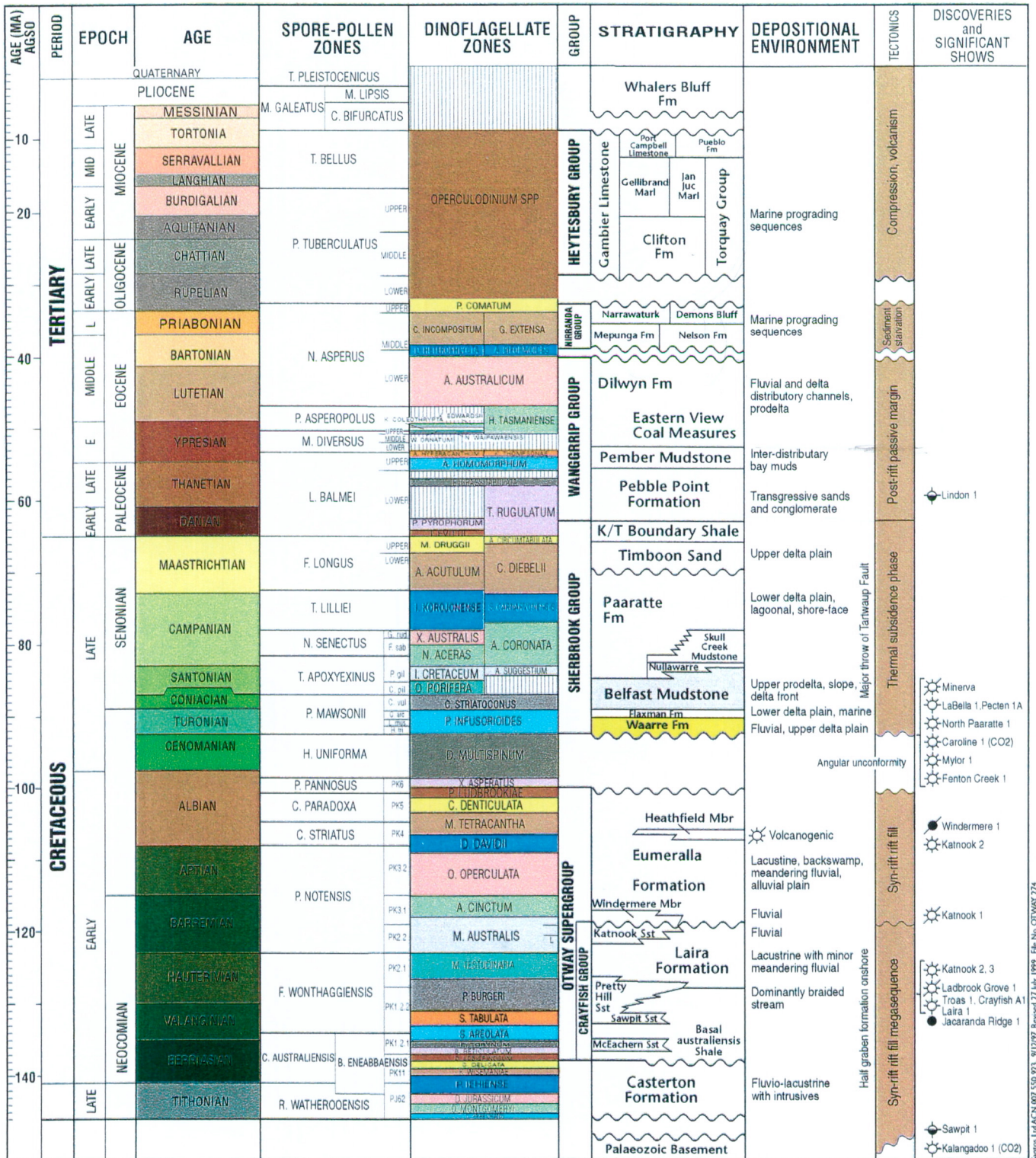


Figure 2

Santos Ltd/ACN 007 550 973, 9/12/97, Revised 27 July 1999, File No. OTWAY 274

McINTEE 1 STRATIGRAPHIC COLUMN

Santos

Lat.: 38° 29' 21.10"S (ANS) Long.: 142° 49' 21.18"E (ANS)

Seismic : Curdievale 3D Inline 2447, CDP 10254

G.L.: 59.5m

R.T.: 64.2m

Santos Ltd ABN 80 007 550 923, Sept 2000, File No. OTWAY 363

AGE	FORMATION	ELEV.(m) SUBSEA PROGN.	LITHOLOGY	COMMENTS	CASING	CORING	TESTING	LOGGING	MONITORING		ANALYSIS	
									GAS	CUTTING		
TERTIARY	MIOCENE				7 5/8" @ -361m SS (425m RT)							
	OLIGOCENE	HEYTESBURY GROUP (INCLUDING CLIFTON FM)										
	EOCENE	NIRRANDA GROUP (INCLUDING MEPUNGA FM)										-426 500mSS
	PALEO.	PEMBER										-796
		PEBBLE PT										-833
CRETACEOUS	LATE	EUMERELLA	-872									
			PAARATTE	1000mSS								
			SKULL CREEK	-1180								
			NULLAWARRE	-1281								
			BELFAST	-1433								
	EARLY	EUMERELLA	1500mSS									
			FLAXMANS	-1522								
			WAARRE	-1537								
				-1580								
				-1636								
		2000mSS										
				PRIMARY OBJECTIVE								
				T.D.	3 1/2" @ T.D. if required	NO CONVENTIONAL CORES 1 GUN (20 SIDEWALL CORES)	20 MDT POINTS	GR-DLL : T.D. TO SURFACE SDT : T.D. TO SURFACE CASING MSFL-CALI : T.D. TO 10m ABOVE TOP PEMBER LDL/LDS-CNL : T.D. TO 100m ABOVE EUMERALLA FORMATION (DEPENDENT ON SHOWS AND RESERVOIR DEVELOPMENT)	GAS DETECTOR AND GAS CHROMATOGRAPH FROM SURFACE TO T.D.	3m INTERVALS 10m INTERVALS to 905m (SS)	PALYNOLOGY : SANTOS, ADELAIDE	

Figure 3

Otway Basin, Victoria - PEP 154
Proposed McIntee I
Diagrammatic Structural Cross Section

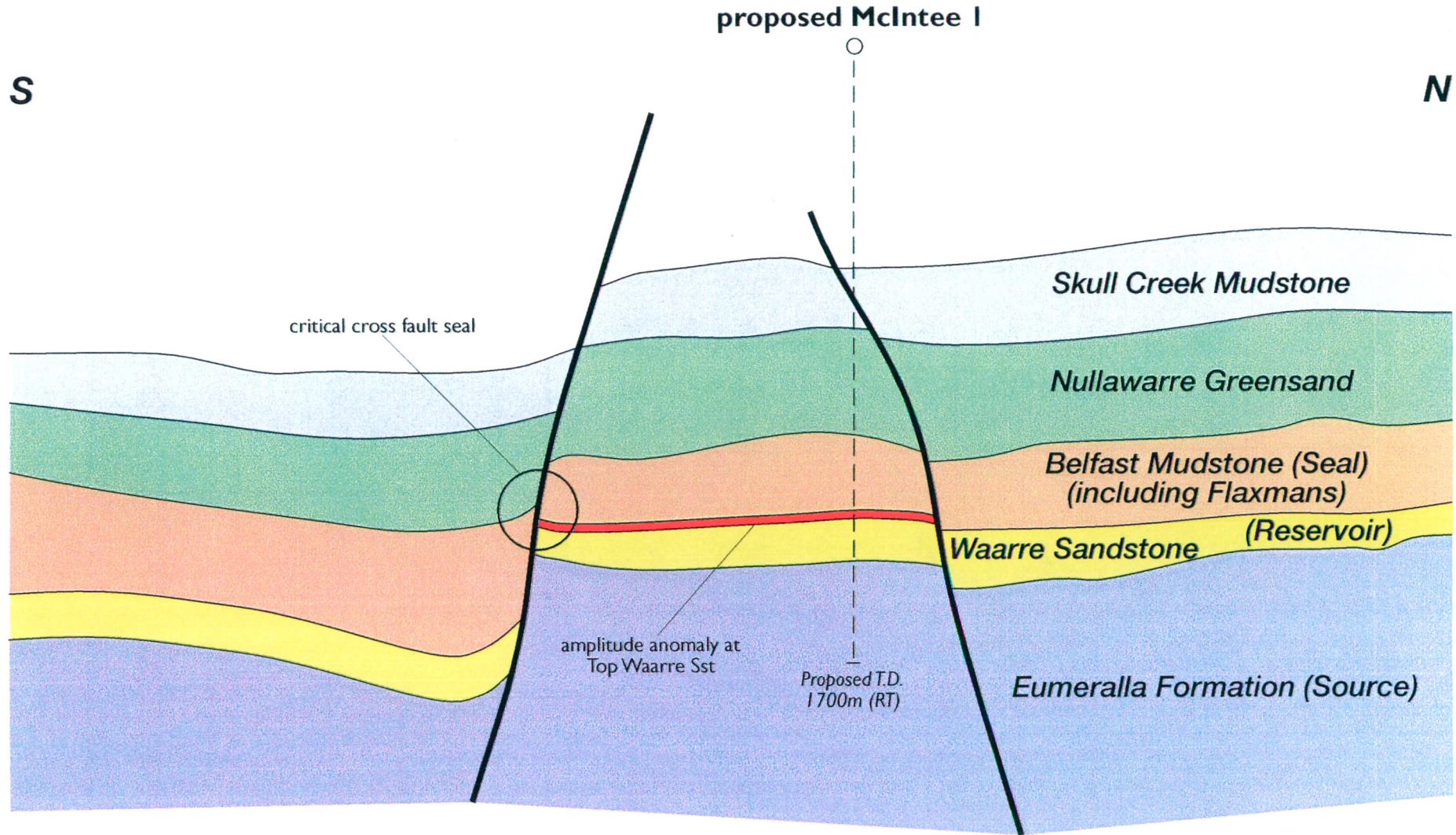
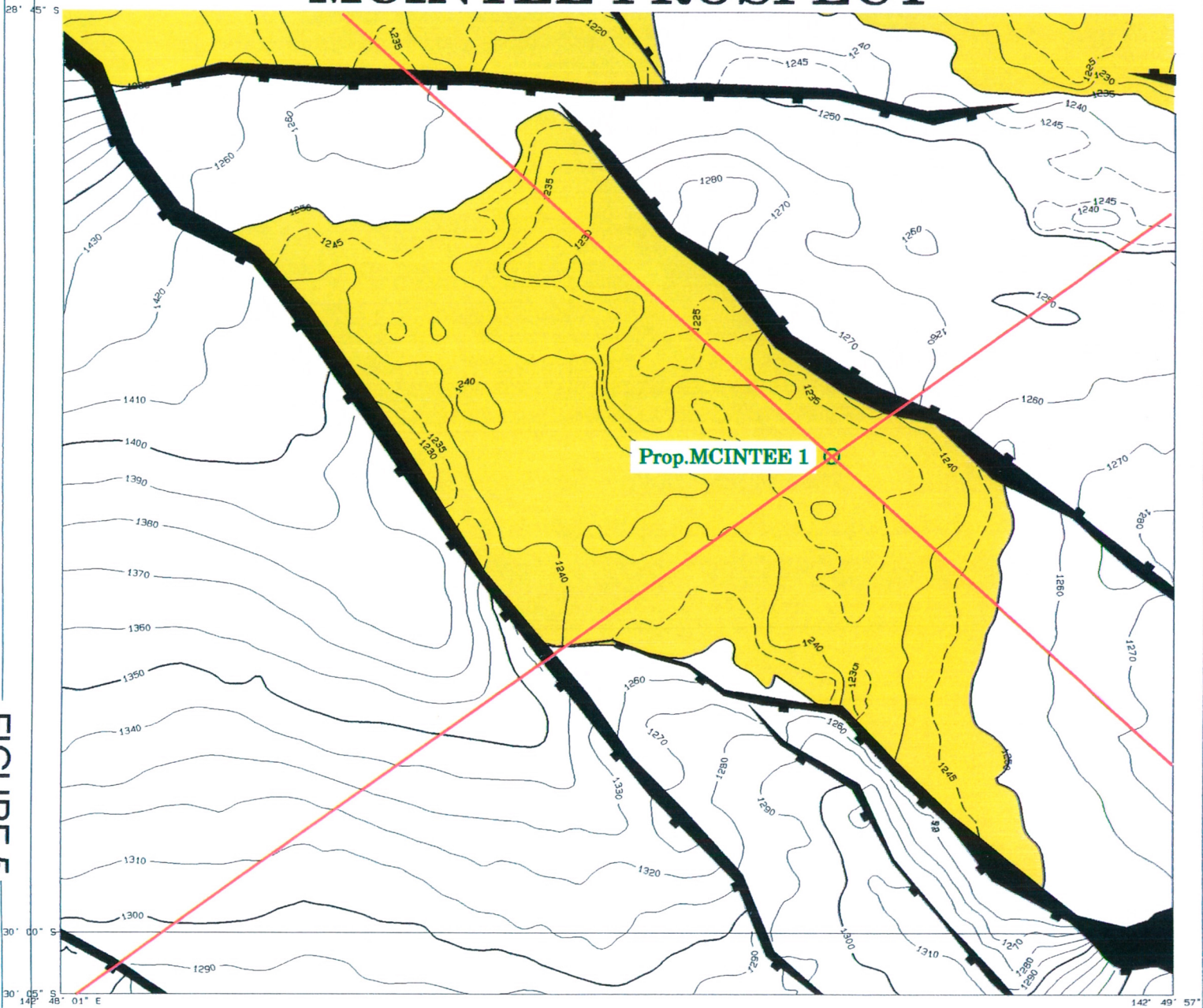
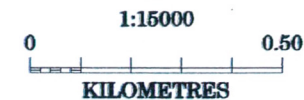


Figure 4

MCINTEE PROSPECT



909139 020



UNIVERSAL TRANSVERSE MERCATOR PROJECTION
 AUSTRALIAN NATIONAL SPHEROID
 CENTRAL MERIDIAN 141° 00' 00" E
 Mapsheet datum: "Unknown"

Santos

Near Top Waarre Sand TWT

September 2000

M.Majedi

Date : September 27, 2000	Author :	REVCL
Contour Interval : 10	Drafted :	
Datum : AUSTRALIAN NATIONAL	File No. :	

PE909139-color004

FIGURE 5

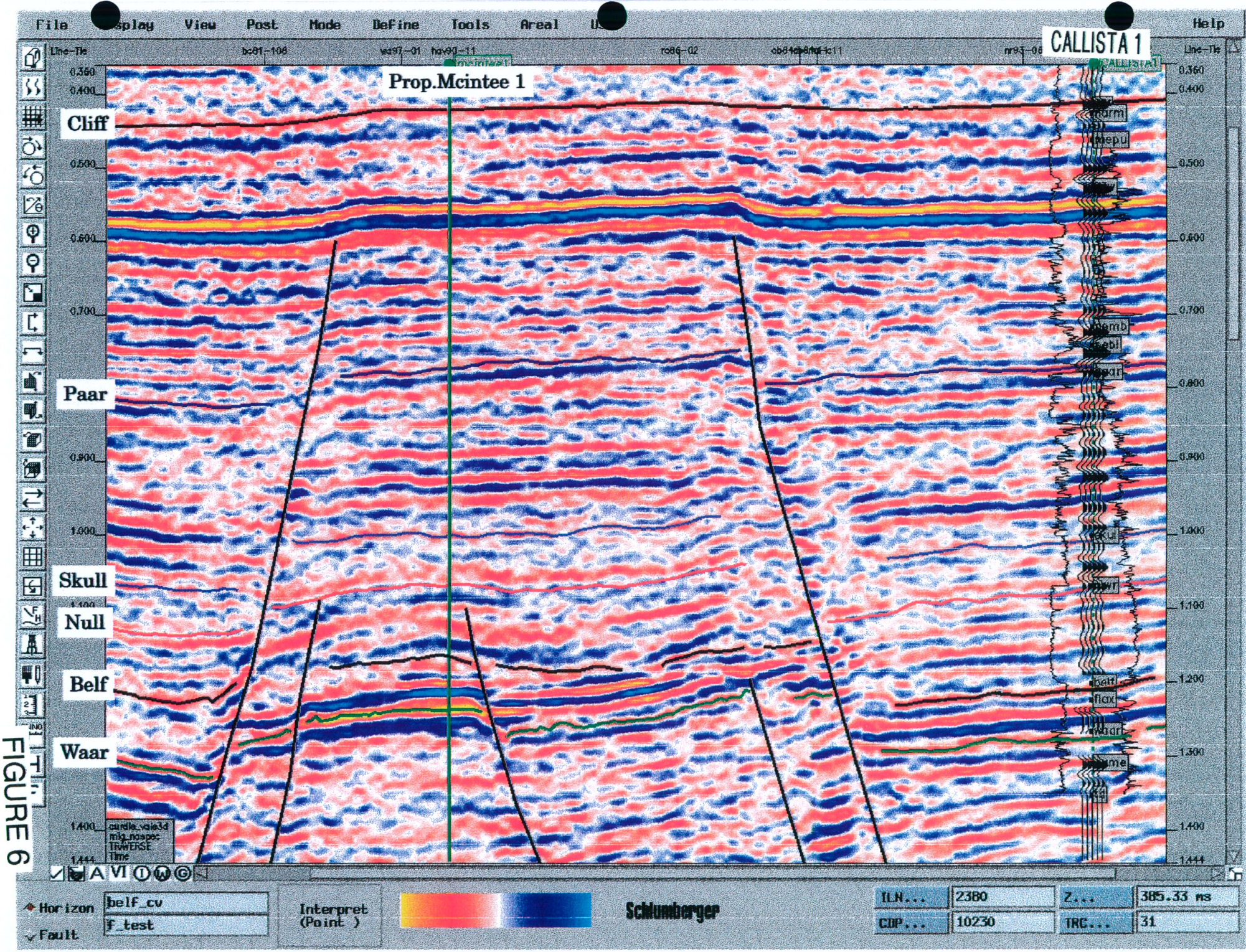
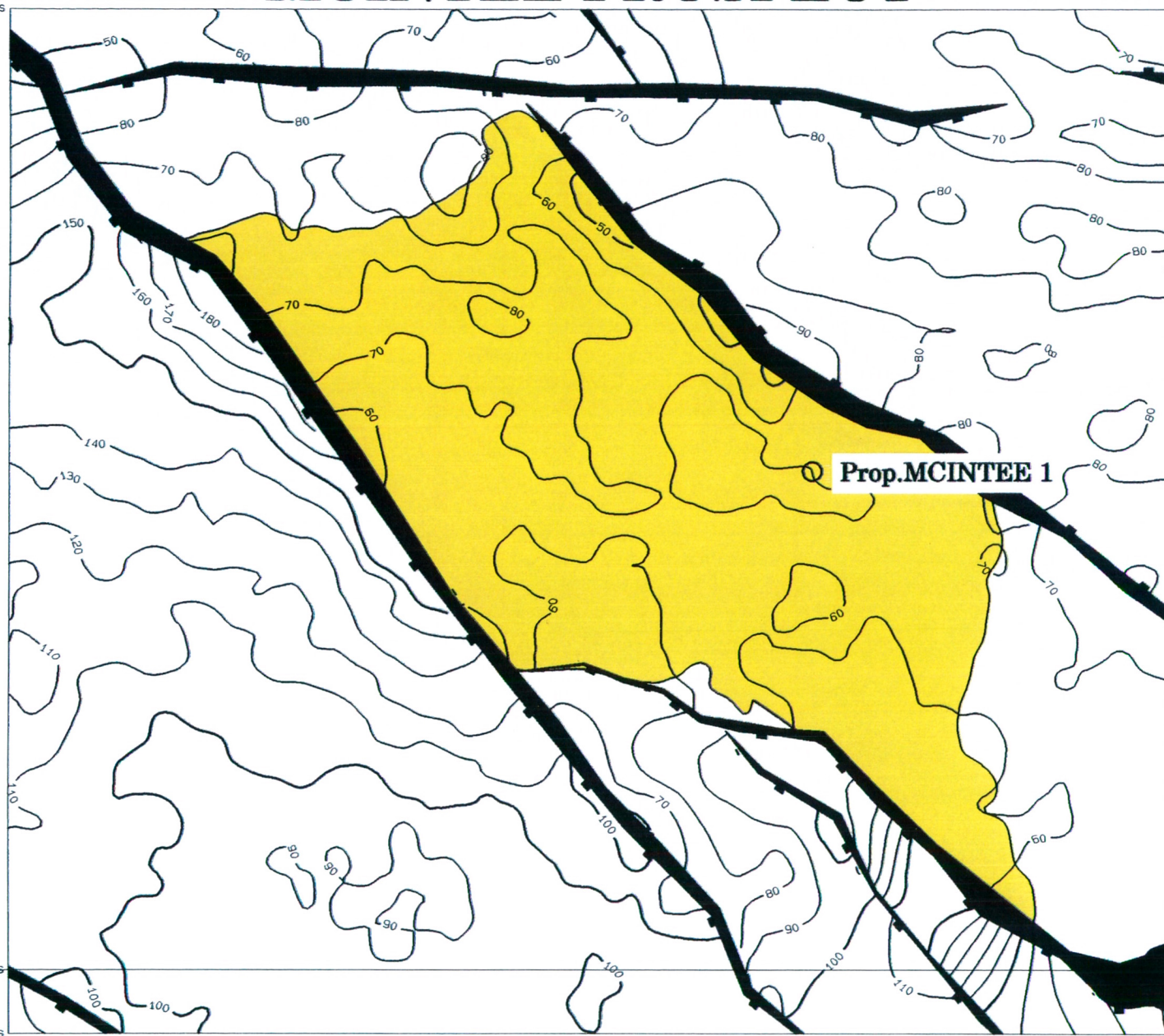


FIGURE 6

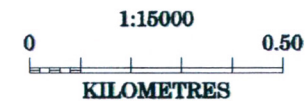
909139 021

PE990139 - color 005

MCINTEE PROSPECT



Prop. MCINTEE 1



UNIVERSAL TRANSVERSE MERCATOR PROJECTION
AUSTRALIAN NATIONAL SPHEROID
CENTRAL MERIDIAN 141° 00' 00" E
Mapsheet datum: "Unknown"

Santos

Belfast - Waarre Time Interval TWT

September 2000

M. Majedi

Date : September 27, 2000	Author :	ENC1
Contour Interval : 10	Drafted :	
Datum : AUSTRALIAN NATIONAL	File No. :	

909139 022

909139 - color 006

FIGURE 7

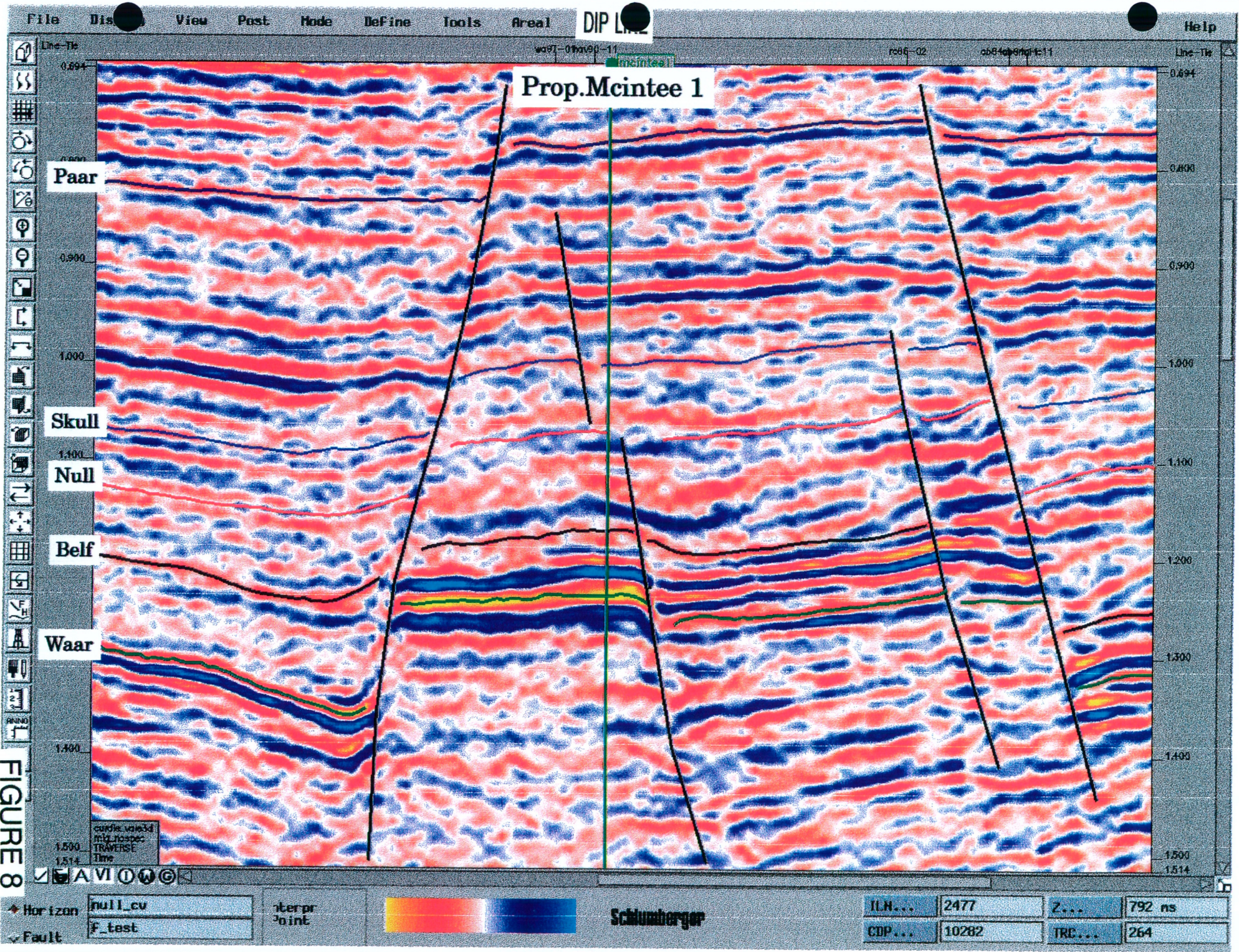
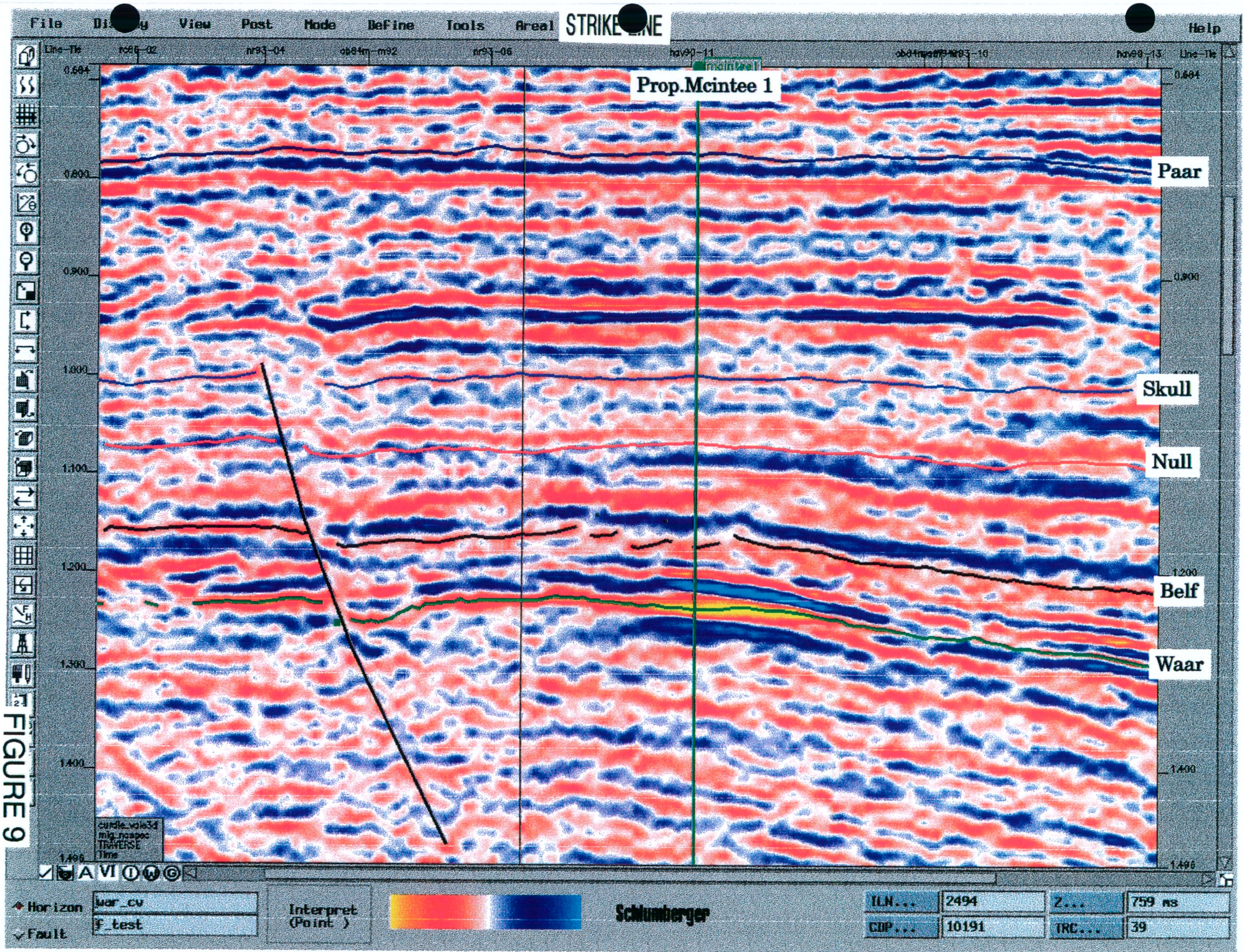


FIGURE 8

909139 023

PE909139-cdr 007



300139 024

PE909139 - color 008

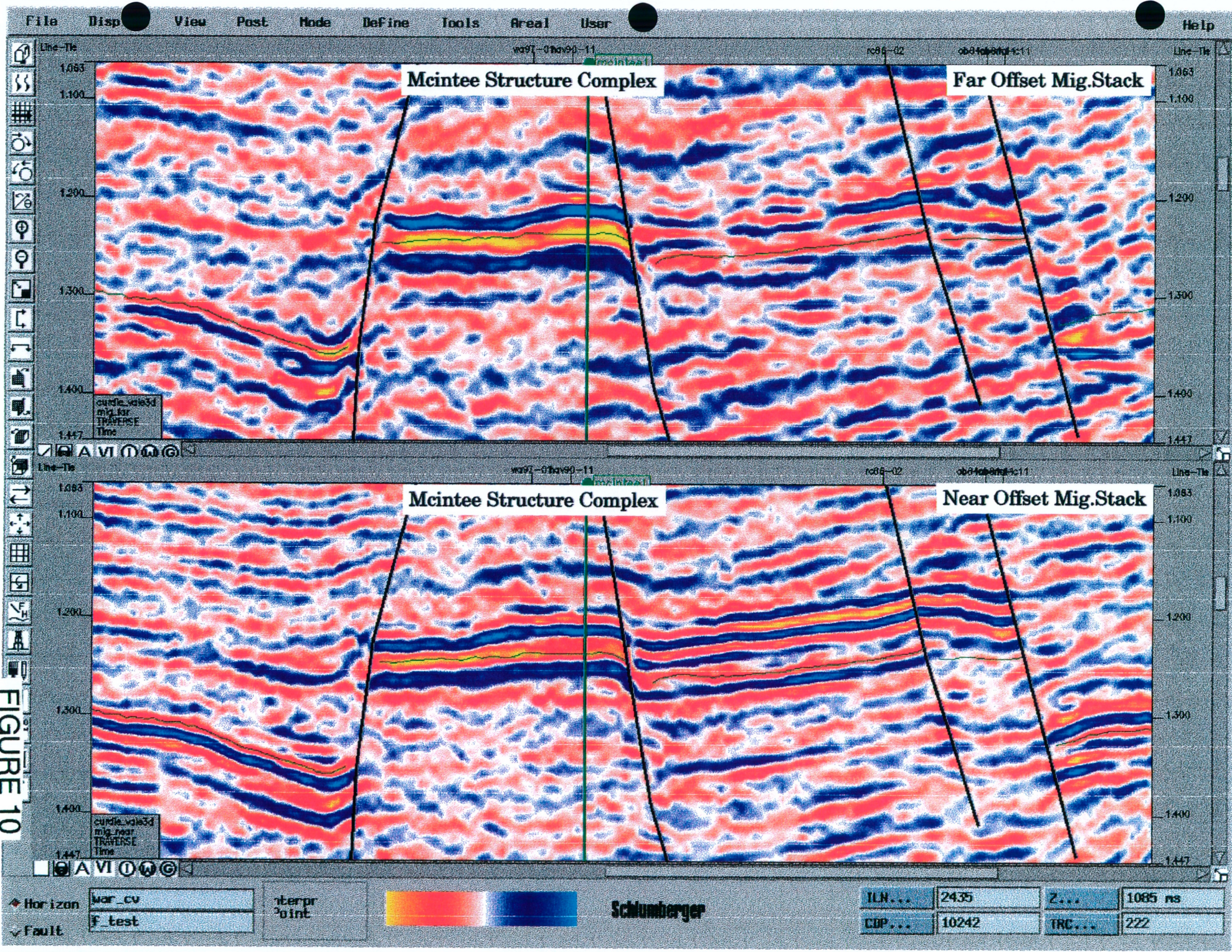


FIGURE 10

900139 025

PE909139_color 009



142 44 00 E

142 46 00 E

142 48 00 E

142 50 00 E

5,740,000

2550

2500

2450

2400

2350

2300

2250

2200

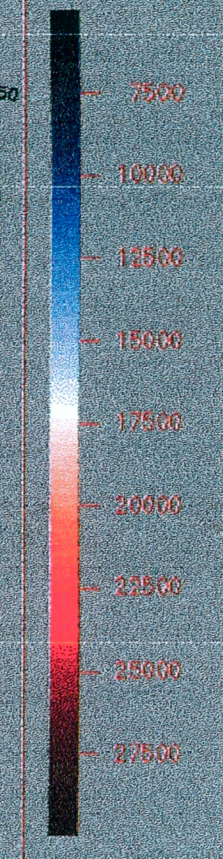
2150

38 28 00 S

38 30 00 S

38 32 00 S

Ave.Ampl.(near offset)
Waar (25ms above,50ms below)



McINTEE

BOGLEY CREEK

CROFT



650,000

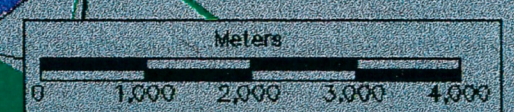


FIGURE 11

909139 026

PE909139 - color 010

Define trav path



XY: 650391.21,5741174.98 m

CDP:

SP:

Ln:

Svy:

H:

HZ:

F:

Ave.Ampl.(far offset)
Waar (25ms above,50ms below)

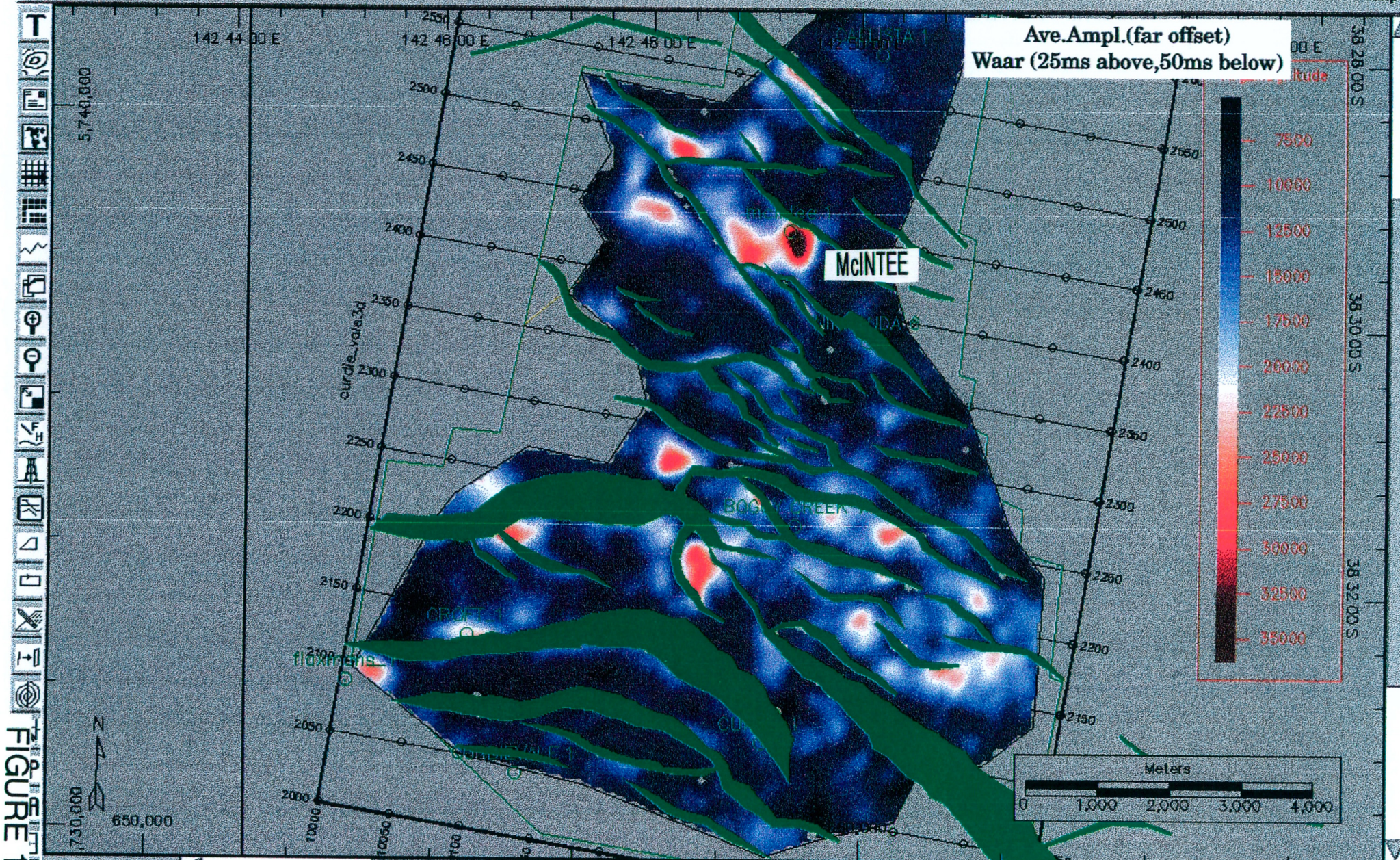
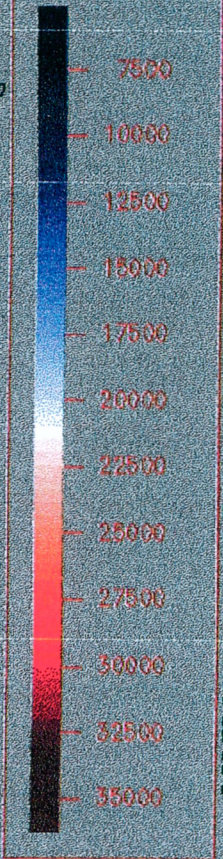


FIGURE 12

Define trav path



XY: 651994.94,5741399.15 m	CDP:	SP:	Ln:
Svy:	H:	HZ:	F:

900139 027

PE909159 - 00100011

Ave.Ampl.(far-near offset)
Waar (25ms above,50ms below)

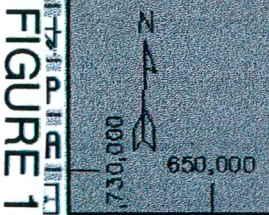
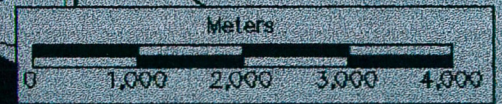
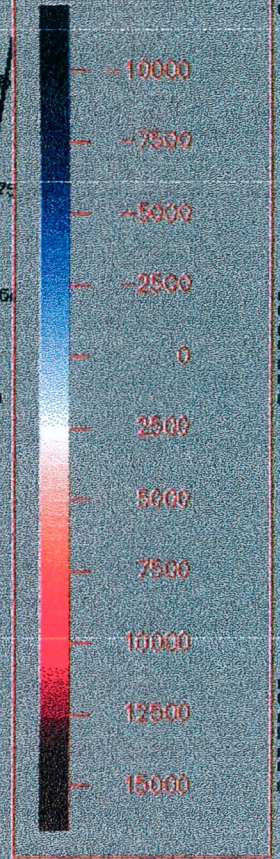


FIGURE 13

1 P C M

Send lines or paths



XY: 649873.89,5741140.49 m	CDP:	SP:	Ln:
Svy:	H:	HZ:	F:

909139 028 PE909139 - color.tif

Waarre Sandstone Depositional Model

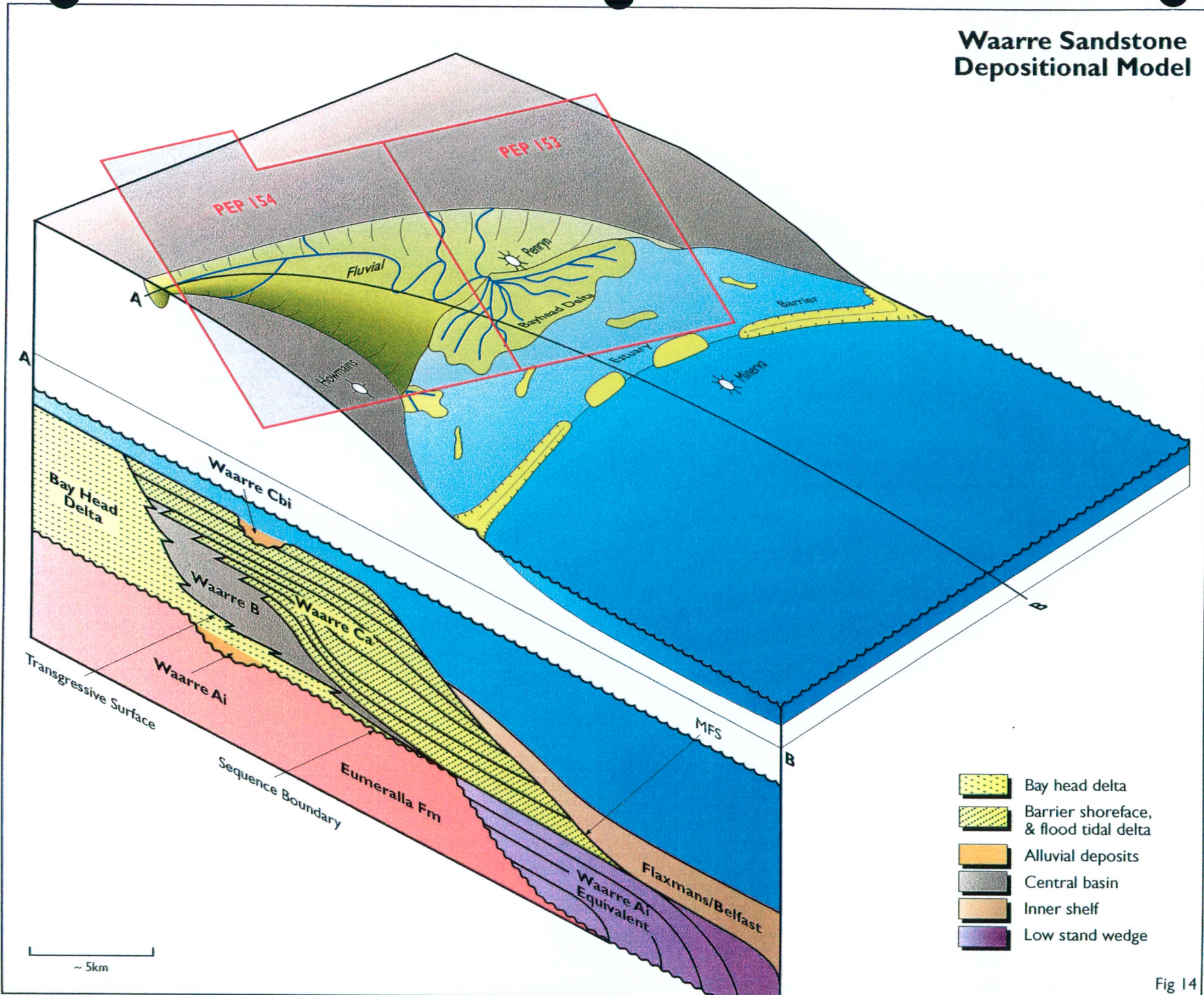


Fig 14

OTWAY 366

900139 029

PE909139_color A13

FIGURE 14

Santos

SANTOS LIMITED

Santos

CALLISTA_1

RIG RELEASED : APR 1988

KB/RT (METRES) : 24.96

TOTAL DRILLED DEPTH (METRES) : 1800.0

Vertical Units METRES

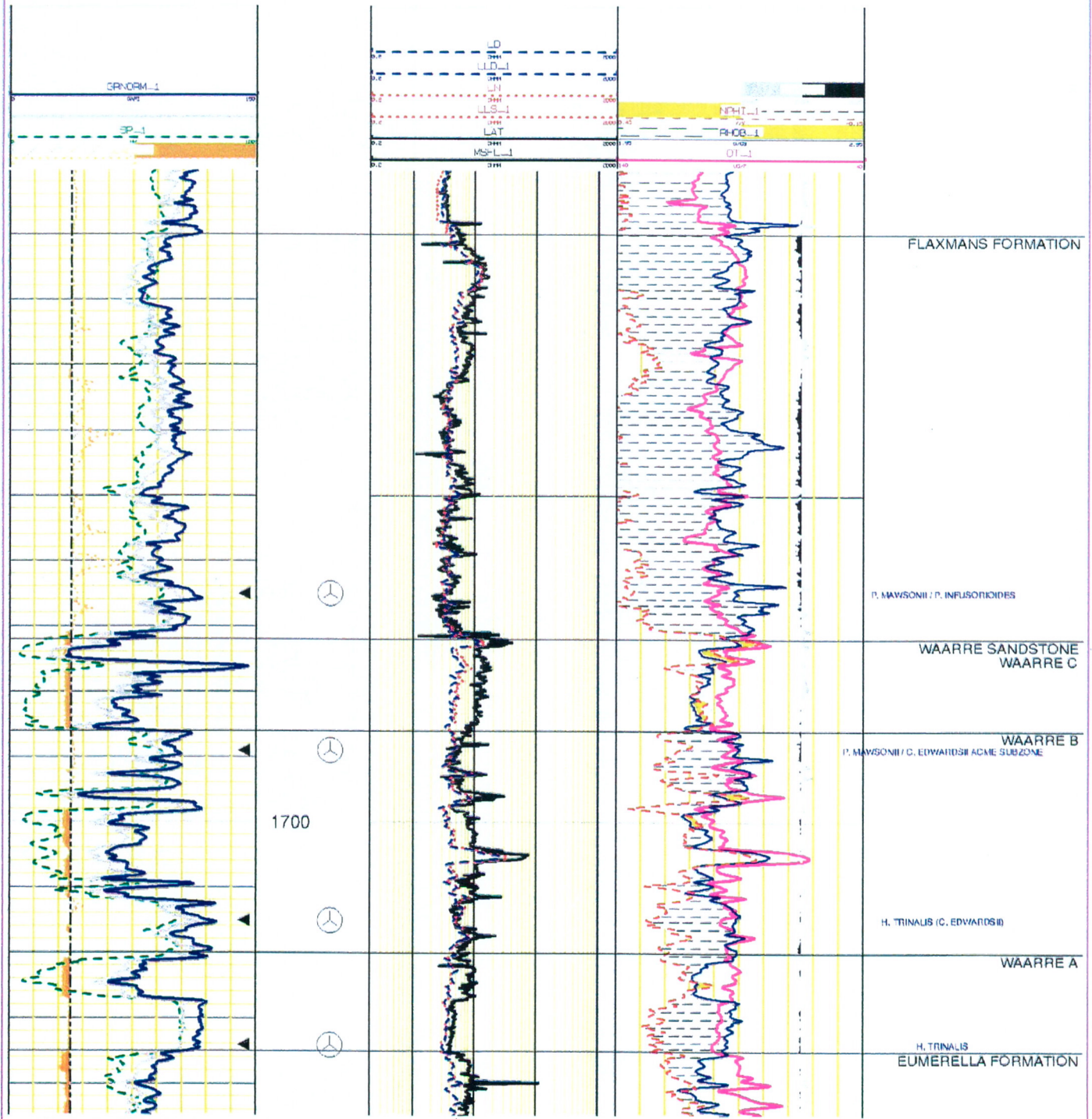


FIGURE 15

Santos

SANTOS LIMITED

Santos

BOGGY_CREEK_1

RIG RELEASED : 12 JAN 1992

KB/RT (METRES) : 35.0

TOTAL DRILLED DEPTH (METRES) : 1900.0

Vertical Units METRES

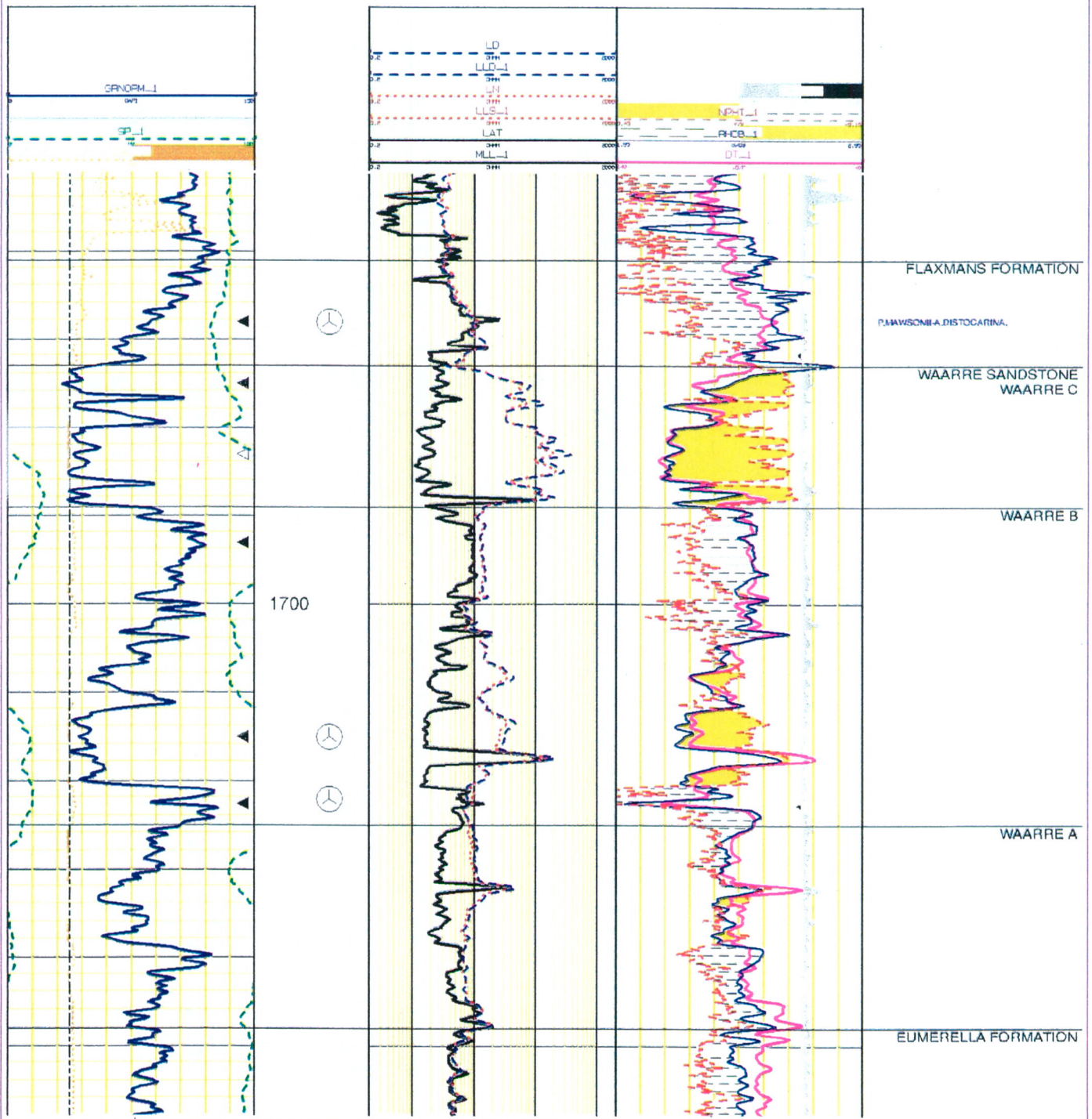


FIGURE 16

PE909140

This is an enclosure indicator page.
The enclosure PE909140 is enclosed within the
container PE909139 at this location in this
document.

The enclosure PE909140 has the following characteristics:

ITEM_BARCODE = PE909140
CONTAINER_BARCODE = PE909139
NAME = Encl.1 Near Top Waarre Sand Time Map
BASIN = OTWAY
ONSHORE? = Y
DATA_TYPE = SEISMIC
DATA_SUB_TYPE = ISOCHRON_MAP
DESCRIPTION = Encl.1 Near Top Waarre Sand Time Map,
Curdievale 3D, Scale 1:25000, C.I. 10m,
by Santos [BOL] Pty Ltd, W1316, PEP154.
Enclosure 1 contained within "McIntee-1
Well Proposal Report" [PE909139].
REMARKS =
DATE_WRITTEN = 30-SEP-2000
DATE_PROCESSED =
DATE_RECEIVED =
RECEIVED_FROM = Santos (BOL) Pty Ltd
WELL_NAME = McIntee-1
CONTRACTOR =
AUTHOR =
ORIGINATOR = Santos (BOL) Pty Ltd
TOP_DEPTH =
BOTTOM_DEPTH =
ROW_CREATED_BY = CD000_SW

(Inserted by DNRE - Vic Govt Mines Dept)

PE909141

This is an enclosure indicator page.
The enclosure PE909141 is enclosed within the
container PE909139 at this location in this
document.

The enclosure PE909141 has the following characteristics:

ITEM_BARCODE = PE909141
CONTAINER_BARCODE = PE909139
NAME = Encl.2 Stratigraphic Cross-Section
BASIN = OTWAY
ONSHORE? = Y
DATA_TYPE = SEISMIC
DATA_SUB_TYPE = ISOCHRON_MAP
DESCRIPTION = Encl.2 Stratigraphic Cross-Section,
Curdie-1, Boggy Creek-1, Proposed
McIntee-1, Callista-1, by Santos [BOL]
Pty Ltd, W1316, PEP154. Enclosure 2
contained within "McIntee-1 Proposal
Report" [PE909139].
REMARKS =
DATE_WRITTEN = 26-SEP-2000
DATE_PROCESSED =
DATE_RECEIVED =
RECEIVED_FROM = Santos (BOL) Pty Ltd
WELL_NAME = McIntee-1
CONTRACTOR =
AUTHOR =
ORIGINATOR = Santos (BOL) Pty Ltd
TOP_DEPTH =
BOTTOM_DEPTH =
ROW_CREATED_BY = CD000_SW

(Inserted by DNRE - Vic Govt Mines Dept)