



ASX/MEDIA RELEASE

23 September 2015

PEP11, Offshore Sydney Basin

Bounty Oil & Gas NL (ASX: BUY) ("Bounty") is pleased to announce a geological and geophysical prospectivity update on Petroleum Exploration Permit 11 (PEP 11) offshore Sydney Basin as result of studies undertaken by MEC Resources Ltd (ASX: MMR) on behalf of the operator Asset Energy Pty Limited.

The report identifies a revised drill target at Location DM1 (see presentation) on the Baleen Prospect on seismic data line B4-18 with total depth of 2150 metres.

The attached presentation prepared by the operator summarises the geological and geophysical basis for a potential new exploration well at that Location within PEP11.

Background and commentary arising from the presentation are provided below:

1. PEP11 has been pursued since 1981 with the first offshore 2D seismic survey. The nearest equivalent depth/age/commercial gas-condensate fields are west of Brisbane in the Bowen Basin. 2D seismic data (2D) shows that the Permian aged section of the Bowen Basin has conventional gas fields at similar seismic time and depth to that interpreted for PEP11. Seismic amplitude strength on regional 2D seismic data in PEP11 at the Triassic/Permian age boundary appears similar to regional data for the Bowen Basin..
2. The Bowen Basin fields have interbedded coal and gas sands in the Late Permian age sequence that are probably correlative to the Late Permian age target in PEP11.
3. A 40 BCF gas field named Churchie/Myall Creek south of Roma, Queensland, produces from gas sands between the Late Permian coal seams. The coals appear to be the local source for conventional gas with flow rates up to 10 mmcf/d & 115 bcpd. Presentation Slide 6 shows the lateral continuity of the local facies at Myall Creek. Since these facies appear to be similar in depth and age to the PEP11 anticline target, seismic data files (log ascii) were downloaded to create a forward AVO model for comparison to the AVO data from PEP 11. The forward AVO model presents strong coal impedance and weak, minor amplitude change with offset.
4. A similar AVO anomaly was found on 2D arbitrary line B4-18 to B4-03 over the PEP 11 anticline. The position of this anomaly on the south south west side of the Newcastle syncline sedimentary sink / source kitchen may be favourable for permeable sands locally sourced by coals similar to those at the Churchie/Myall Creek fields. Further, the PEP 11 anticline appears

to be structured by an eastward dipping thrust fault. Intersecting 2D lines suggest an extrapolated amplitude anomaly over an area of 24.3 km² (6000 acres) could be associated with a Late Permian interbedded coal and gas facies. AVO angle gathers at the "DM1" location on line B4-18 suggest that the amplitudes could be related to coal and gas interbeds with a similarity in seismic response to the Myall Creek forward AVO model.

5. Correlation risk that the anomaly location is at the Triassic/Permian boundary is reduced by jump correlating the 2D PEP11 seismic data to nearby onshore Late Permian well log control using RMS velocities and conversions adapted after a Fugro Geophysical report. That report integrated a 1991 Santos Limited /Ampol Exploration offshore 2D seismic data report, onshore well result summaries and a cross-section obtained from <http://digsopen.minerals.nsw.gov.au> and suggests that the probable 2D amplitude target is the onshore equivalent of the Permian aged Mulbring Siltstones and/or Muree Sandstones.
6. Interbedded coal beds may be the basis for the dominant seismic amplitudes which are roughly equivalent to the overlying Late Permian coal measures. The extrapolated 24.3 km² (6000 acre) 2D amplitude anomaly has a finite extent at or about 1342m measured depth (4400 feet). It should be noted that few other amplitude anomalies like this event are present across PEP11 making this location more equivalent to the Bowen basin sequences referred to above.
7. It is postulated that a wellbore at the "DM 1" location would probably encounter thin, anticlinal Triassic age Narrabeen Group sands below the seabed, followed by a normal section of Permian age coal measures, and then enter the Permian aged Mulbring/Muree section with interbedded gas sands and coal measures.
8. The strong petroleum potential of the northern Sydney Basin is indicated by the result of the Strevens Terrigal 1 well drilled in 1961 just onshore from PEP 11. The online records from <http://digsopen.minerals.nsw.gov.au> state that oil entered the wellbore at 103m (338') (Narrabeen Group) and 5 – 7.6 cm (2-3 inch) oil fractures were noted at 1525m (5000 feet) (~Mulbring Siltstone). This oil stayed in the mud throughout the drilling. The wellbore had to be abandoned as the operator left "drilling rods downhole" in the wellbore at 1887m (6186 feet) TD. Their chief geologist suggested that another 3050 to 4600 metres (10-15000 feet) of Permian facies lay below the TD of this wellbore. More integration of this available drill log and seismic data will be used to refine an offshore drill location.
9. As Santos Ltd stated in 1991, "there is presently no commercial production or known commercial size accumulations of oil or gas in the Sydney Basin. However,the abundant shows indicate that the Basin is indeed capable of yielding oil and gas."
10. Although there are a number of risks associated with the new PEP 11 target at DM1 there are several encouraging factors:
 - a. the Terrigal 1 well is only 47 km from the proposed location and that well reported oil above and in the target PEP11 equivalent section.
 - b. the thrust anticline has overlying surface oil and gas seeps above a finite target amplitude event, and
 - c. most historical reports put the hydrocarbon source kitchen in the Newcastle Syncline adjacent to and downdip from the DM1 proposed drilling location.
11. Correlation from the Baleen 2D seismic section west to the onshore Sydney Basin with the very sparse well control available suggests a Late Permian target below the Tomago Coal Measures. Additionally, Advent drilled and found "Permian" aged-sands in the New Seaclem 1 well at TD which also provides a relative fit for the formation target versus 2D seismic. The Late Permian section drilled onshore in Terrigal 1 is dominantly sand of the Upper and Middle Permian so the thrust fault model appears to suggest that the target at the proposed DM1 drilling location may be at the Triassic/Permian boundary.

The participants in the PEP 11 Joint Venture are:

Asset Energy Pty Limited:	85% and operator (1)
Bounty Oil & Gas NL:	15%

(1) Asset Energy Pty Ltd is a wholly owned subsidiary of Advent Energy Ltd (Advent), an investee entity of MEC Resources Ltd (MMR).

ABBREVIATIONS

AVO	Specialised analysis of seismic data comparing amplitude of sound waves versus collection point offsets
Basin	A segment of the earth's crust which has down warped and in which sediments have accumulated, such areas may contain hydrocarbons.
Barrel	159 litres – a volumetric measure used in the petroleum industry
BCF/Bcf	Billion cubic feet, i.e. 1,000 million cubic feet (equivalent to approximately 28.3 million cubic metres) of gas.
BCPD/bcpd	Barrels of condensate per day
MDRT	Measured depth below Rotary Table
MMB/mmb, MMBO/mmbo	Million barrels, million barrels of oil.
MMCF/mmcf, MMCFG/mmcfg, MMCFGD/mmcfgd	Million cubic feet, million cubic feet of gas, million cubic feet of gas per day
Permeability	The degree to which fluids such as oil, gas and water can move through the pore spaces of a reservoir rock.
Permit	A petroleum tenement, lease, licence or block.
Porosity	The void space in a rock created by cavities between the constituent mineral grains. Liquids are contained in the void space.
Prospect (petroleum)	A geological or geophysical anomaly that has been surveyed and defined, usually by seismic data, to the degree that its configuration is fairly well established and on which further exploration such as drilling can be recommended.
Reservoir	A subsurface volume of rock of sufficient porosity and permeability to permit the accumulation of crude oil and natural gas under adequate trap conditions.
RMS	Root mean square – a method of calculation with seismic data
Seismic Survey	A type of geophysical survey where the travel times of artificially created seismic waves are measured as they are reflected in a near vertical sense back to the surface from subsurface boundaries. This data is typically used to determine the depths to the tops of stratigraphic units and in making subsurface structural contour maps and ultimately in delineating prospective structures.
Structure	A discrete area of deformed sedimentary rocks, in which the resultant bed configuration is such as to form a potential trap for migrating hydrocarbons.
Anticline/Syncline	A localised fold or depression within a Basin.
TD	Total drilled depth for a petroleum well

INFORMATION REQUIRED UNDER CHAPTER 5 OF ASX LISTING RULES

Estimates of oil and gas volumes presented in this announcement are:

- Reported at the date of this release
- Determined as an estimate of recoverable resources in place unadjusted for risk
- Best Estimate Prospective Resources unless specified as 2C in which case they are Proved and Probable Contingent Resources
- Estimated using probabilistic methods unless indicated with an "*" in which case they are deterministic
- If specified as" boe" then they are converted from gas to oil equivalent at the rate of 182 bbls ≡ 1 million standard cu ft of gas
- Reported at 100% project equity unless specifically stated as net to Bounty

The estimated quantities of petroleum that may potentially be recovered by the application of a future development project relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration, appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

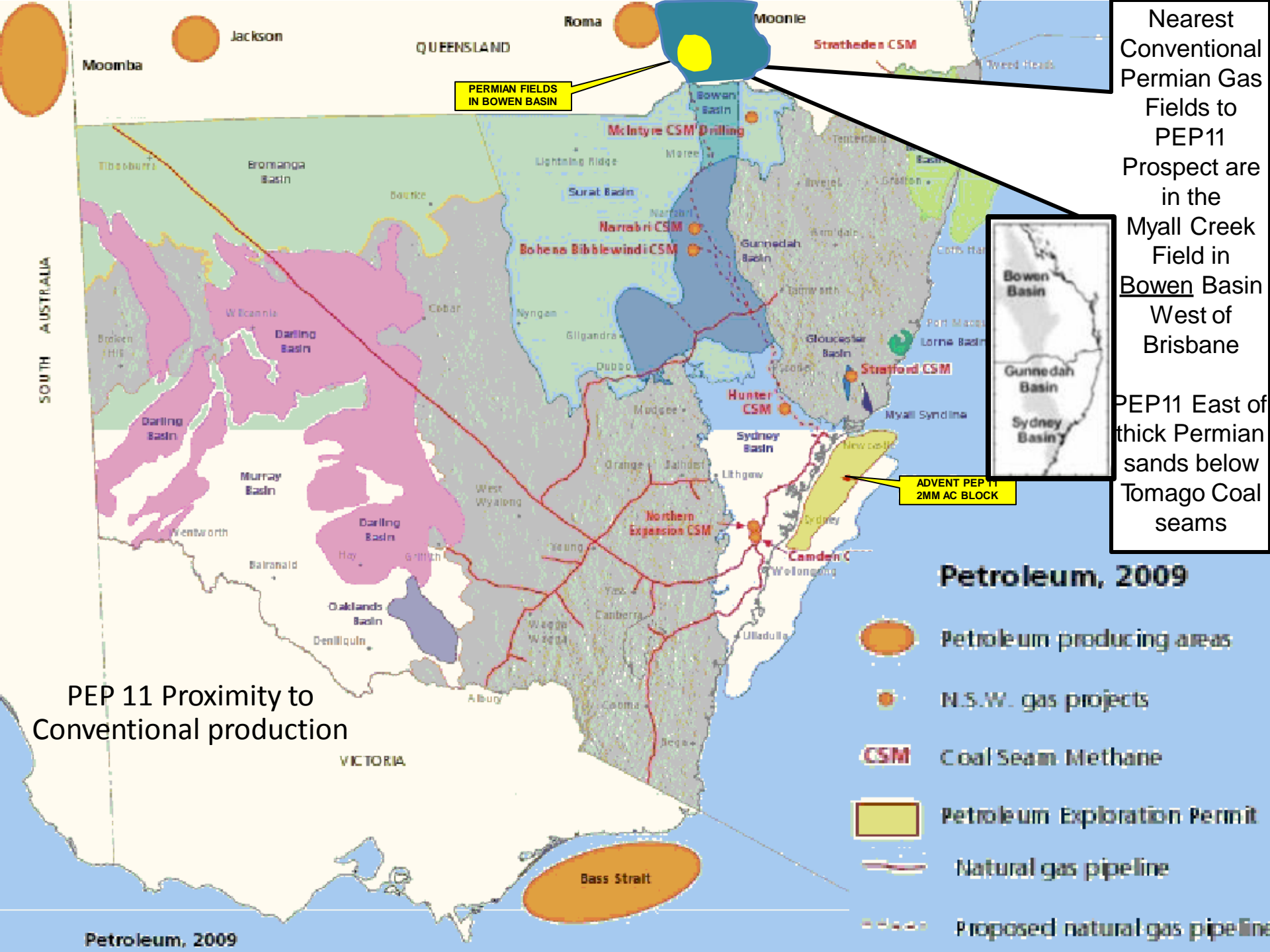
QUALIFIED PERSON'S STATEMENT

1. The petroleum Reserve and Resources estimates used in this report and;
2. The information in this report that relates to or refers to petroleum or hydrocarbon production, development and exploration;
3. Is based on information and reports prepared by, reviewed and/or compiled by the CEO of Bounty, Mr Philip F Kelso. Mr Kelso is a Bachelor of Science (Geology) and has practised geology and petroleum geology for in excess of 25 years. He is a member of the Petroleum Exploration Society of Australia and a Member of the Australasian Institute of Mining and Metallurgy.
4. Mr Kelso is a qualified person as defined in the ASX Listing Rules: Chapter 19 and consents to the reporting of that information in the form and context in which it appears.

Website: www.bountyoil.com

For further information contact:

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PERMIAN FIELDS IN BOWEN BASIN

ADVENT PEP 11 2MM AC BLOCK

Nearest Conventional Permian Gas Fields to PEP11 Prospect are in the Myall Creek Field in Bowen Basin West of Brisbane

PEP11 East of thick Permian sands below Tomago Coal seams



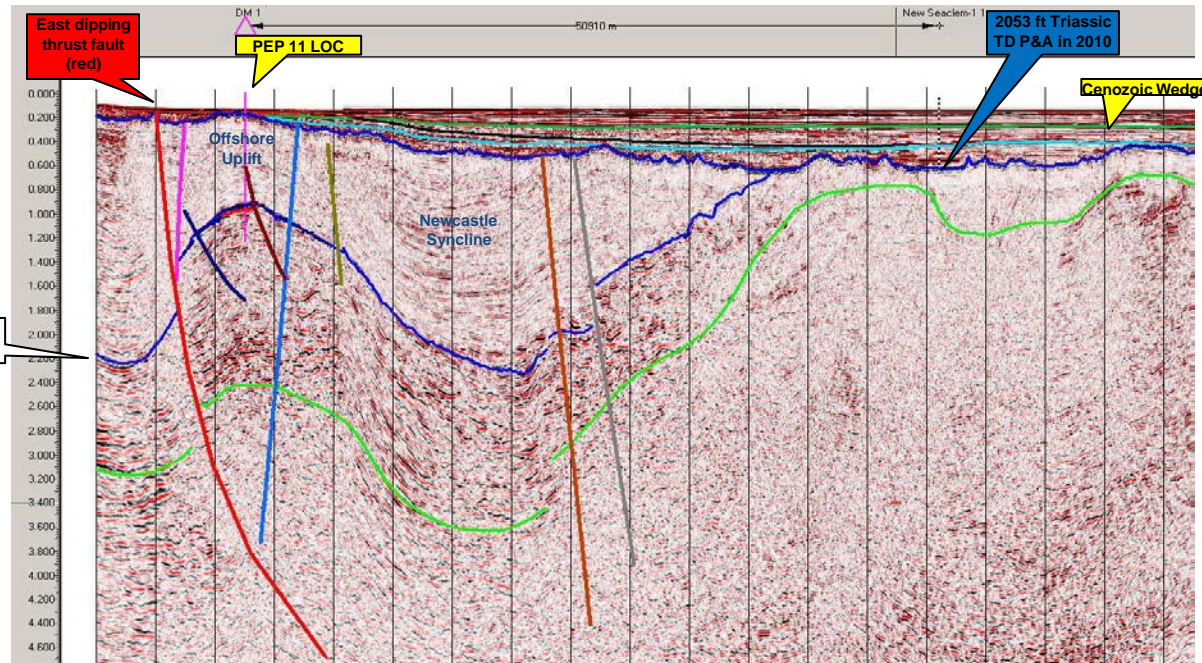
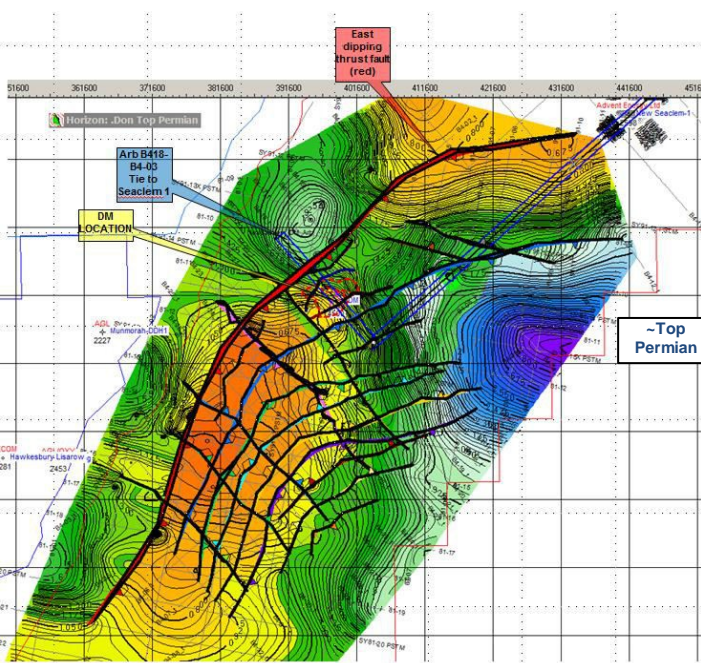
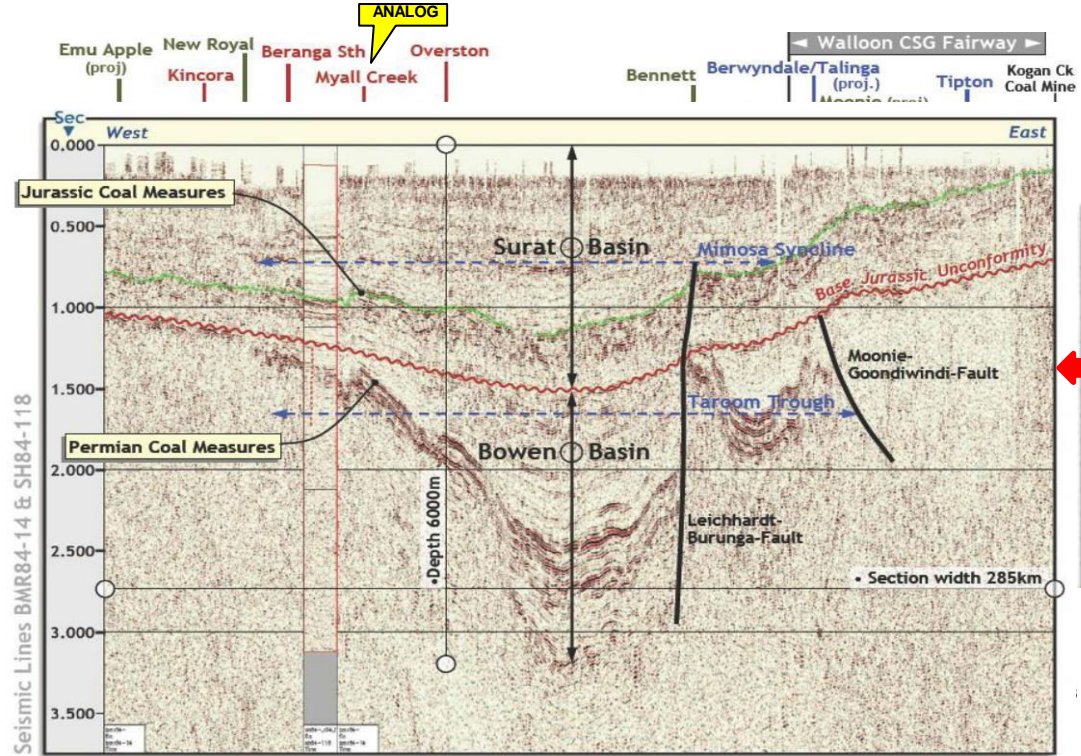
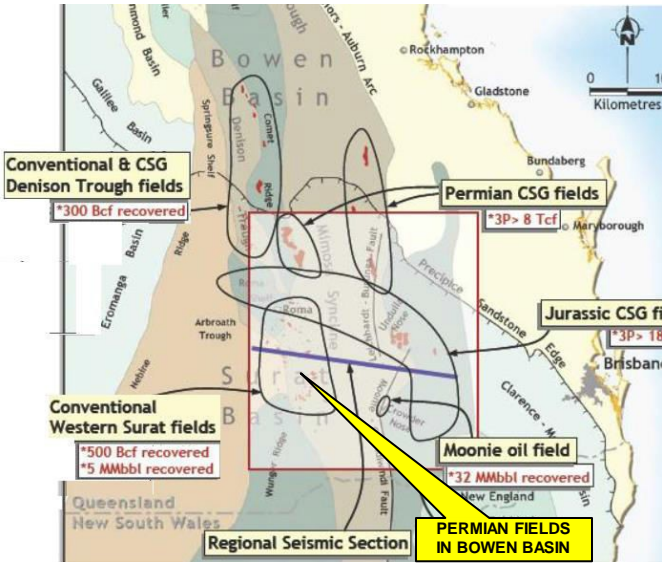
SOUTH AUSTRALIA

PEP 11 Proximity to Conventional production

Petroleum, 2009

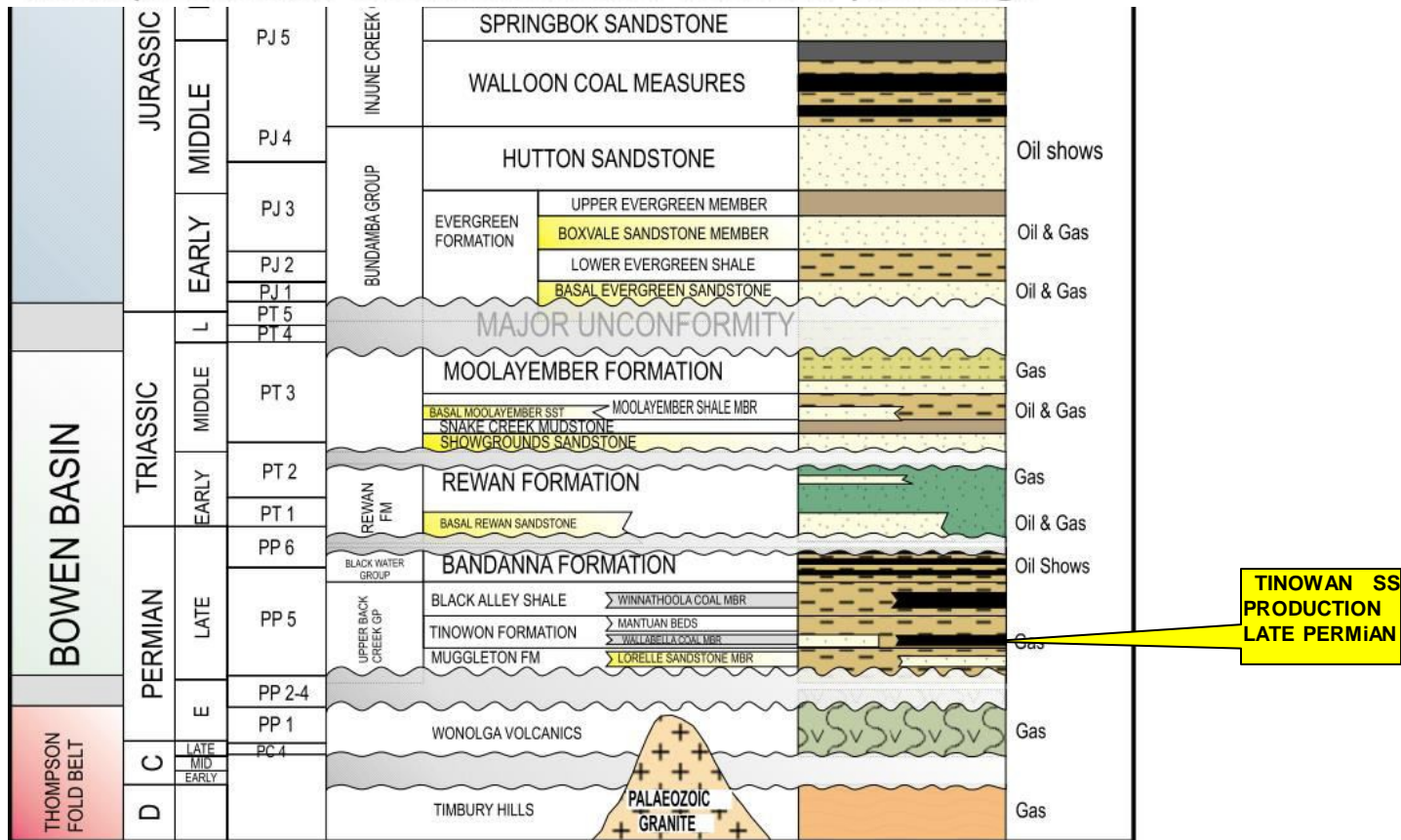
-  Petroleum producing areas
-  N.S.W. gas projects
-  Coal Seam Methane
-  Petroleum Exploration Permit
-  Natural gas pipeline
-  Proposed natural gas pipeline

Bowen Basin West Surat Production Interpreted 2D Line Showing Permian Amps Versus Offshore Sydney PEP11 2D Line West of Brisbane, AU (Queensland)



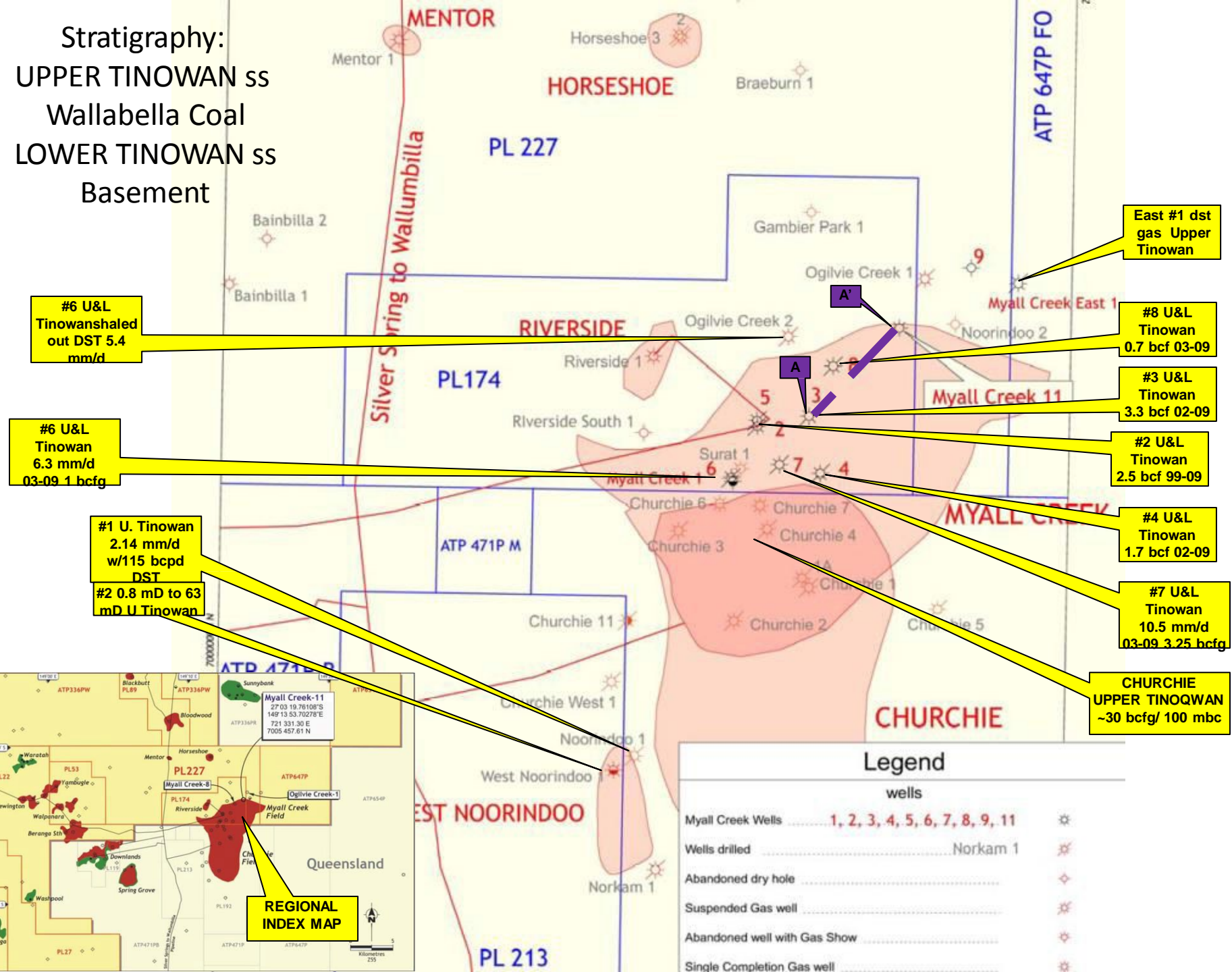
PEP 11 SAND Analog: 1999 Myall Creek Late Permian gas/condensate Queensland

The Myall Creek field was discovered in 1999 with the drilling of Myall Creek 2 which flowed gas on DST from the Tinowon Formation. First production started in early 2001. Subsequent appraisal and development wells were drilled with 6 wells now producing.



Stratigraphy:

- UPPER TINOWAN ss
- Wallabella Coal
- LOWER TINOWAN ss
- Basement



#6 U&L
Tinowanshaled
out DST 5.4
mm/d

#6 U&L
Tinowan
6.3 mm/d
03-09 1 bcfg

#1 U. Tinowan
2.14 mm/d
w/115 bcps
DST
#2 0.8 mD to 63
mD U Tinowan

East #1 dst
gas Upper
Tinowan

#8 U&L
Tinowan
0.7 bcf 03-09

#3 U&L
Tinowan
3.3 bcf 02-09

#2 U&L
Tinowan
2.5 bcf 99-09

#4 U&L
Tinowan
1.7 bcf 02-09

#7 U&L
Tinowan
10.5 mm/d
03-09 3.25 bcfg

CHURCHIE
UPPER TINOWAN
~30 bcfg/ 100 mbc

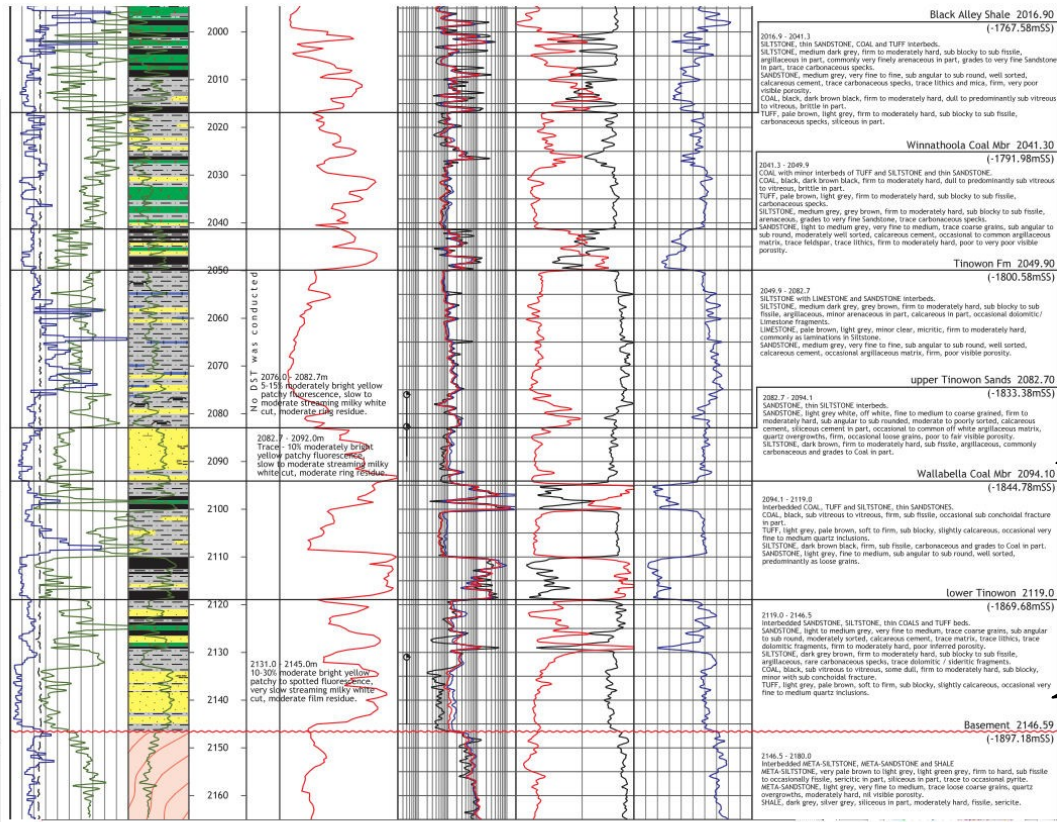
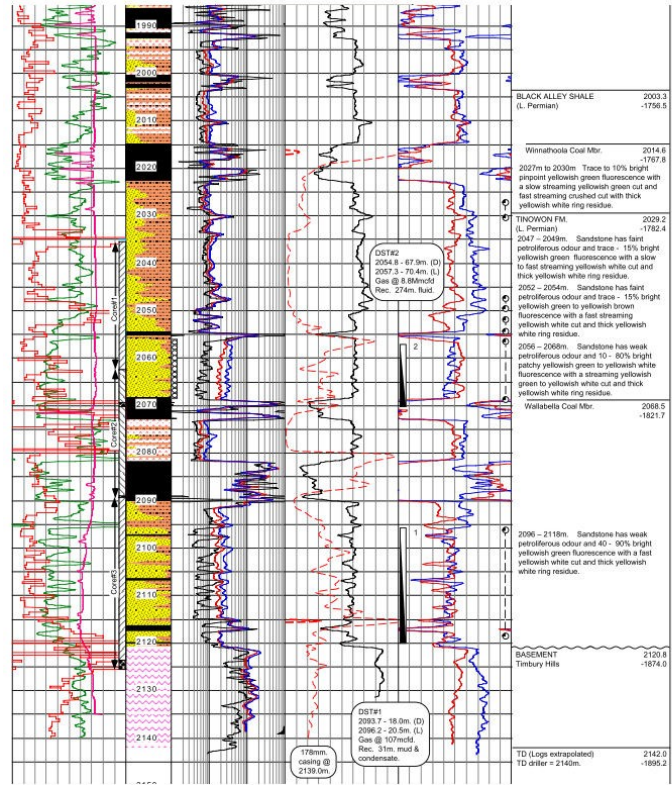
Legend		
wells		
Myall Creek Wells	1, 2, 3, 4, 5, 6, 7, 8, 9, 11	☼
Wells drilled	Norkam 1	☼
Abandoned dry hole		◇
Suspended Gas well		☼
Abandoned well with Gas Show		☼
Single Completion Gas well		☼

REGIONAL
INDEX MAP

PEP 11 ANALOG: INTERBEDDED LATE PERMIAN COAL AND GAS SANDS

Myall Creek 3
3.5 bcfg

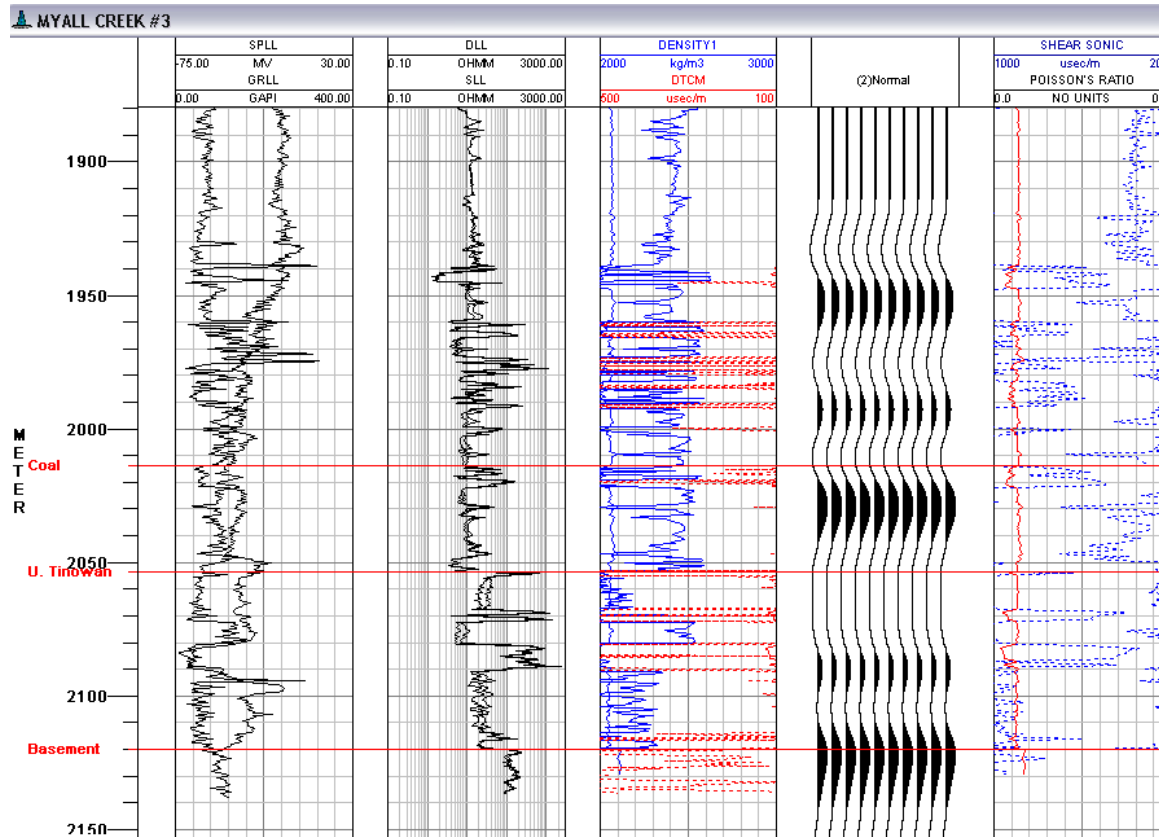
Myall Creek 11
Wet



UPPER TINOWAN SS

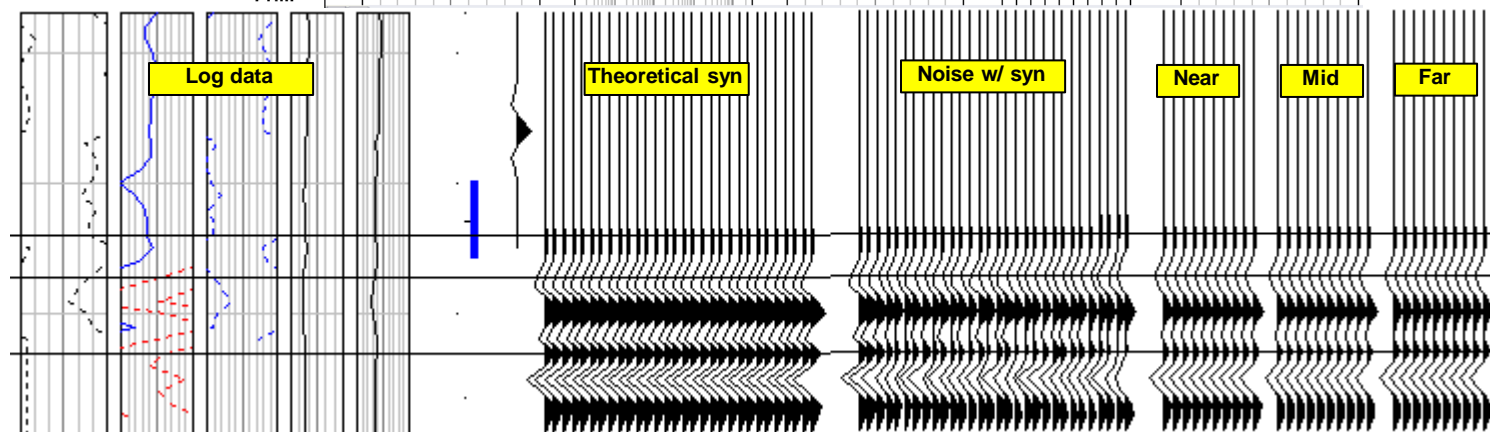
LOWER TINOWAN SS

PEP 11 FORWARD AVO ANALOG: MYALL CREEK INTERBEDDED LATE PERMIAN COAL AND GAS SANDS TBA



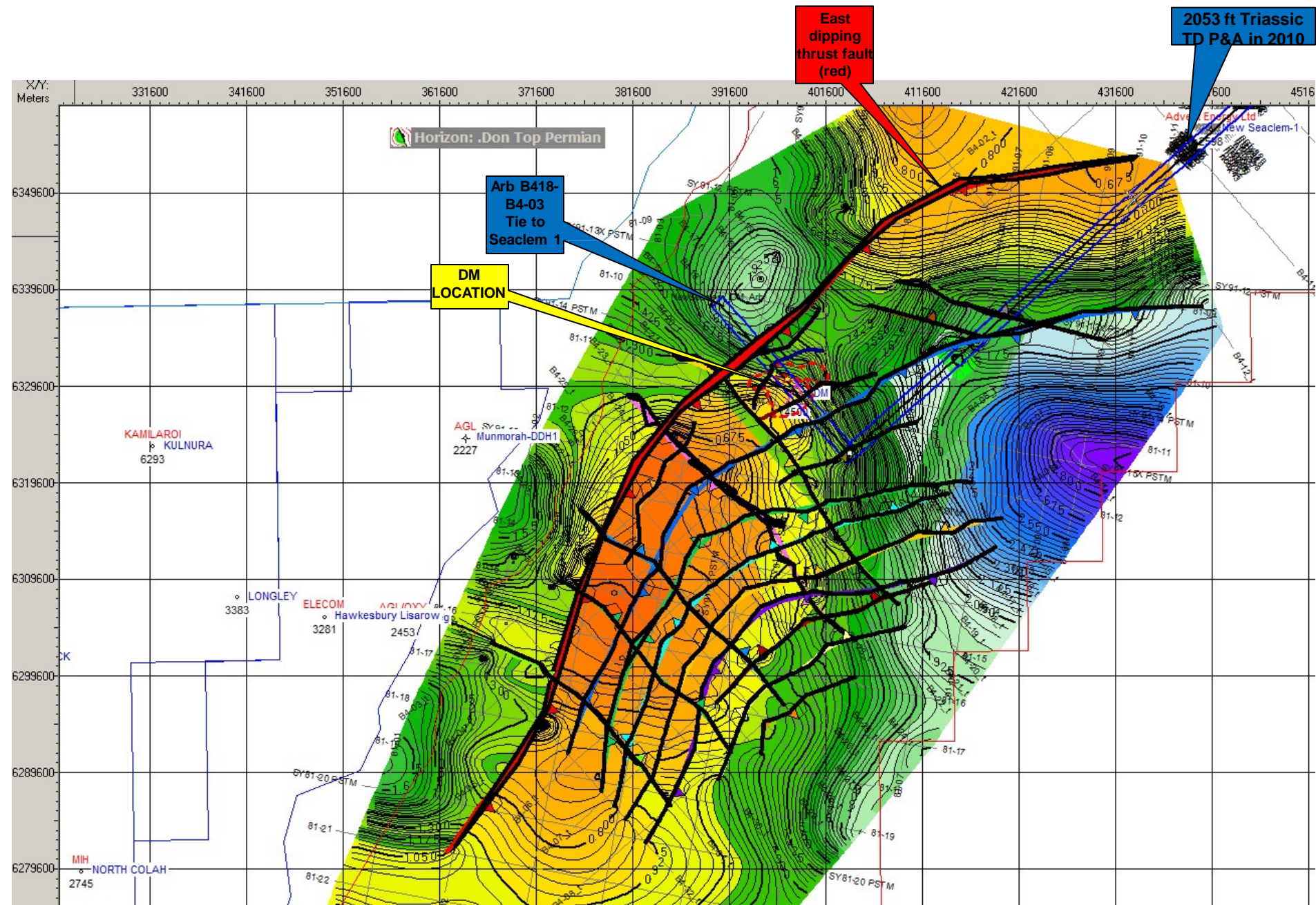
UPPER TINOWAN SS
Myall Creek 3
3.5 bcfg

LOWER TINOWAN SS



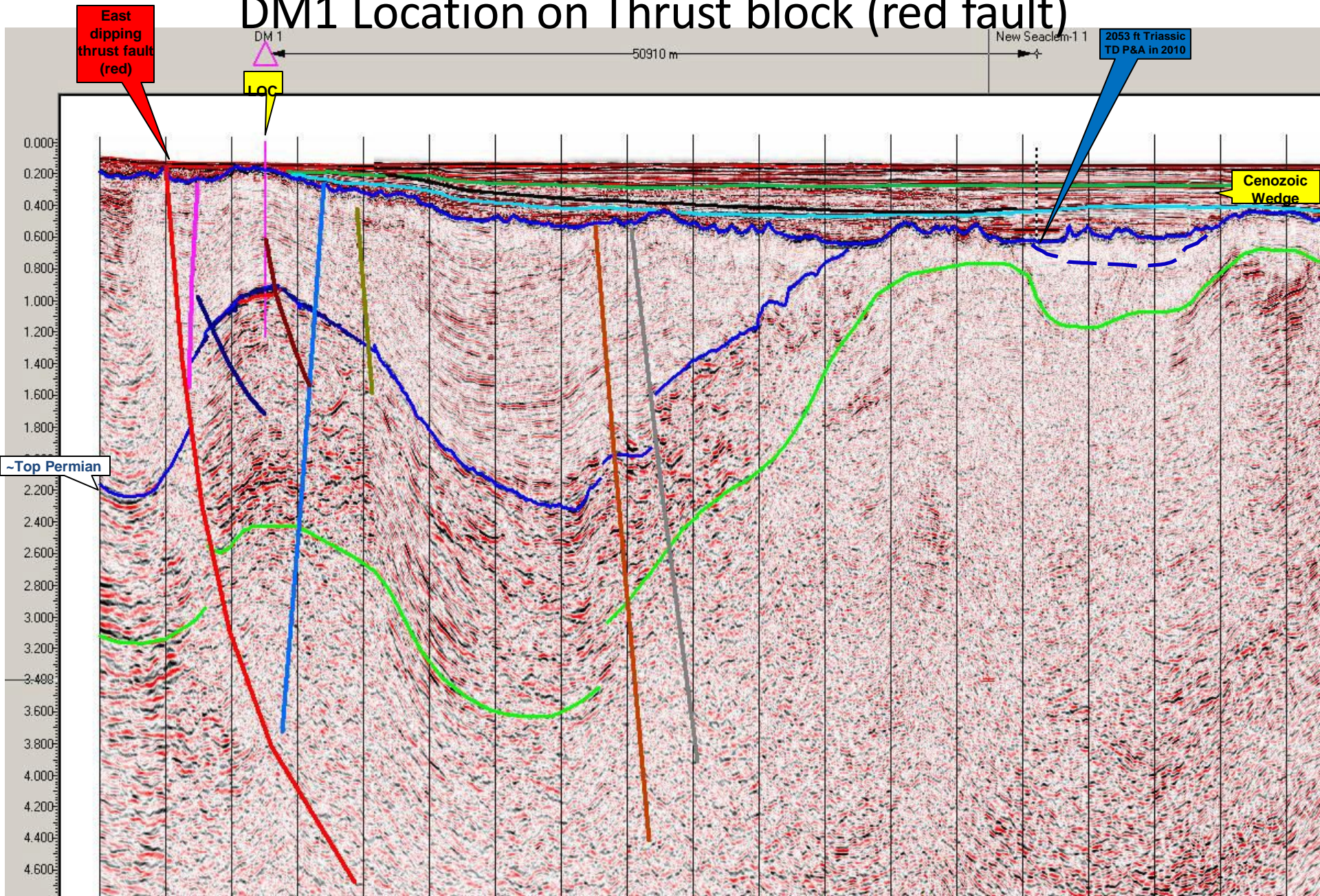
AVO for UPPER TINOWAN SS
weak, minor change with offset because of the strong coal impedance

Near Top Permian (Base Narabeen Triassic)



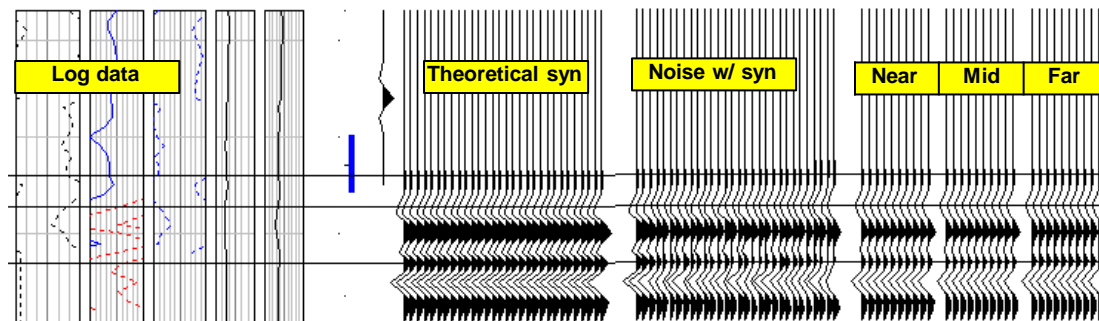
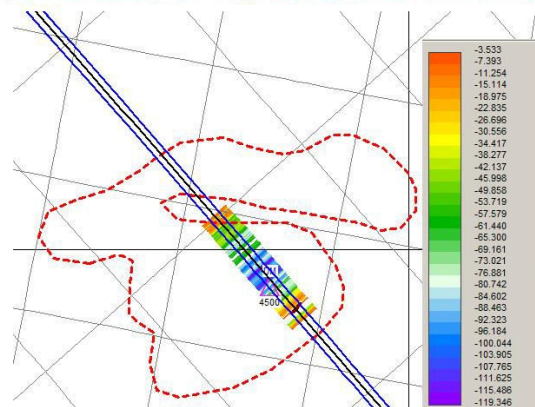
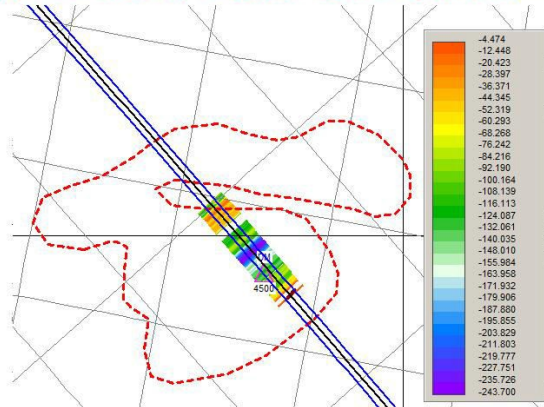
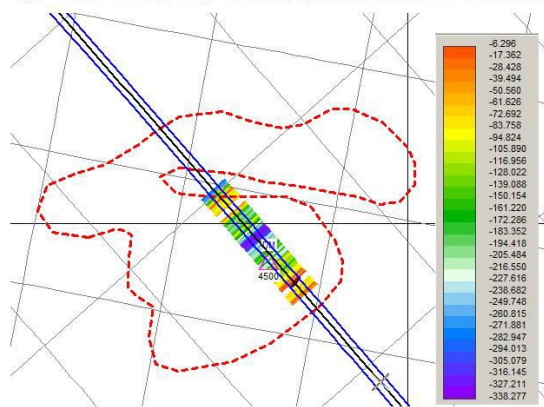
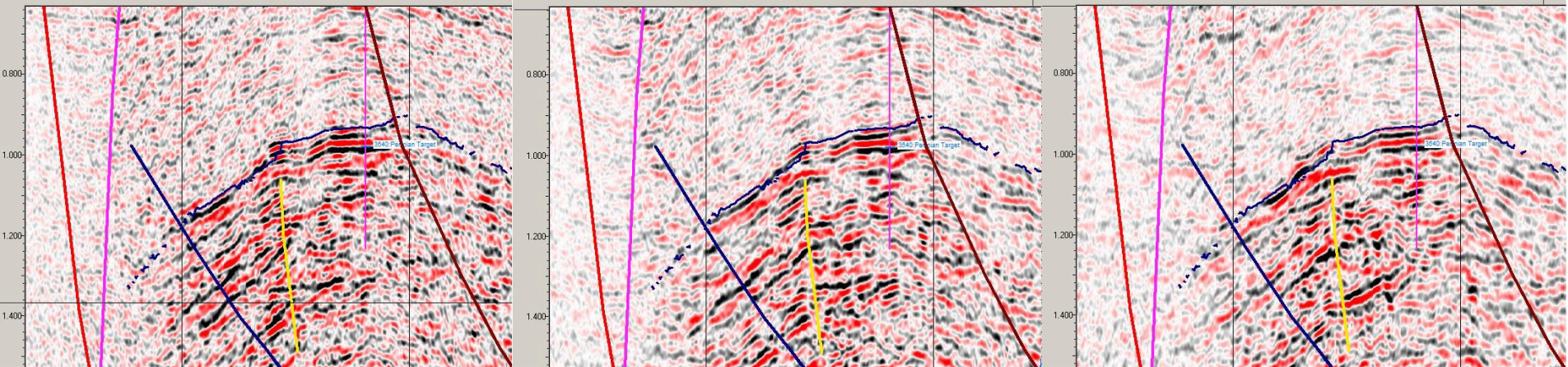
Arb B418 to B403 Arb Line Tie to Advent Seaclem #1 P&A

DM1 Location on Thrust block (red fault)



Near2-12, Mid 12-22, Far 22-32 Angles at Location

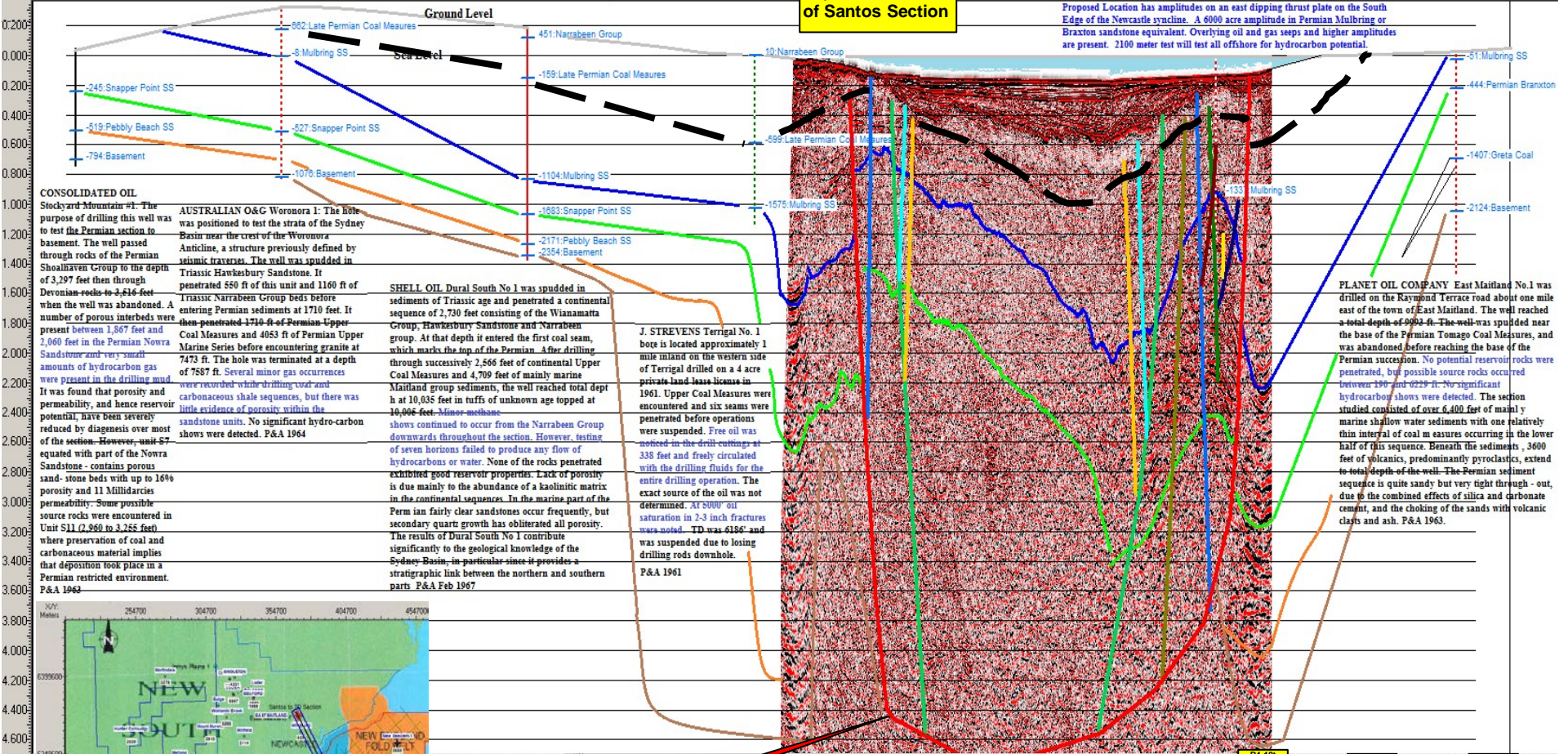
Increasing amplitude “at” location; similar to onshore AVO model



AVO for UPPER TINOWAN SS weak, minor change with offset because of the strong coal impedance. Has similarities to above angle gathers.

2015 Time to depth 2D revision of Santos Section

Proposed Location has amplitudes on an east dipping thrust plate on the South Edge of the Newcastle syncline. A 6000 acre amplitude in Permian Mulbring or Braxton sandstone equivalent. Overlying oil and gas seeps and higher amplitudes are present. 2100 meter test will test all offshore for hydrocarbon potential.



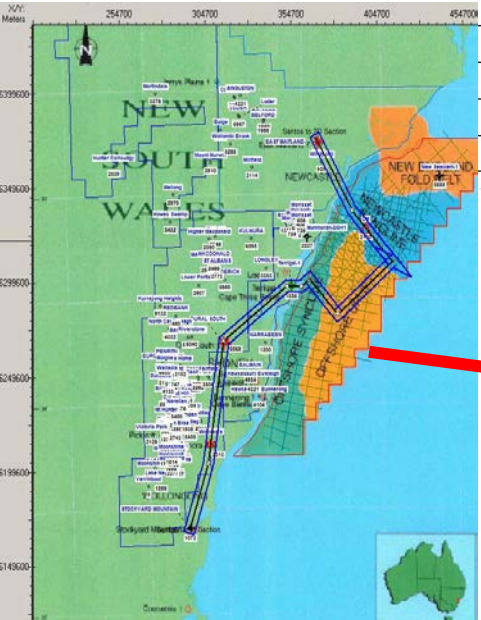
CONSOLIDATED OIL
 Stockyard Mountain #1: The purpose of drilling this well was to test the Permian section to basement. The well passed through rocks of the Permian Shoalhaven Group to the depth of 3,297 feet then through Devonian rocks to 2,616 feet when the well was abandoned. A number of porous interbeds were present between 1,367 feet and 2,669 feet in the Permian Nowra Sandstone and very much amounts of hydrocarbon gas were present in the drilling mud. It was found that porosity and permeability, and hence reservoir potential, have been severely reduced by diagenesis over most of the section. However, unit 57 equated with part of the Nowra Sandstone - contains porous sandstone beds with up to 16% porosity and 11 Millidarcies permeability. Some possible source rocks were encountered in Unit S11 (2,960 to 3,285 feet) where preservation of coal and carbonaceous material implies that deposition took place in a Permian restricted environment. P&A 1963

AUSTRALIAN O&G Woronora 1: The hole was positioned to test the strata of the Sydney Basin near the crest of the Woronora Anticline, a structure previously defined by seismic traverses. The well was spudded in Triassic Hawkesbury Sandstone. It penetrated 550 feet of this unit and 1160 feet of Triassic Narrabeen Group beds before entering Permian sediments at 1710 feet. It then penetrated 1710 ft of Permian Upper Coal Measures and 4053 ft of Permian Upper Marine Series before encountering granite at 7473 ft. The hole was terminated at a depth of 7687 ft. Several minor gas occurrences were recorded while drilling coal and carbonaceous shale sequences, but there was little evidence of porosity within the sandstone units. No significant hydrocarbon shows were detected. P&A 1964

SHELL OIL Dural South No 1 was spudded in sediments of Triassic age and penetrated a continental sequence of 2,730 feet consisting of the Wianamatta Group, Hawkesbury Sandstone and Narrabeen group. At that depth it entered the first coal seam, which marks the top of the Permian. After drilling through successively 2,566 feet of continental Upper Coal Measures and 4,709 feet of mainly marine Maitland group sediments, the well reached total depth at 10,035 feet in tuffs of unknown age topped at 10,006 feet. Minor methane shows continued to occur from the Narrabeen Group downwards throughout the section. However, testing of seven horizons failed to produce any flow of hydrocarbons or water. None of the rocks penetrated exhibited good reservoir properties. Lack of porosity is due mainly to the abundance of a kaolinitic matrix in the continental sequences. In the marine part of the Permian fairly clear sandstones occur frequently, but secondary quartz growth has obliterated all porosity. The results of Dural South No 1 contribute significantly to the geological knowledge of the Sydney Basin, in particular since it provides a stratigraphic link between the northern and southern parts. P&A Feb 1967

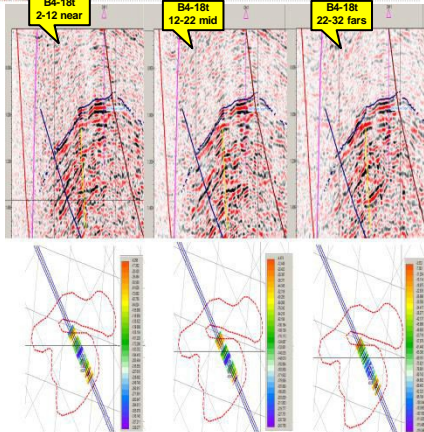
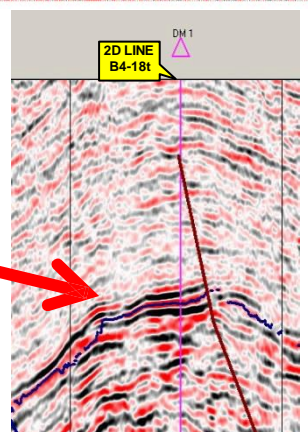
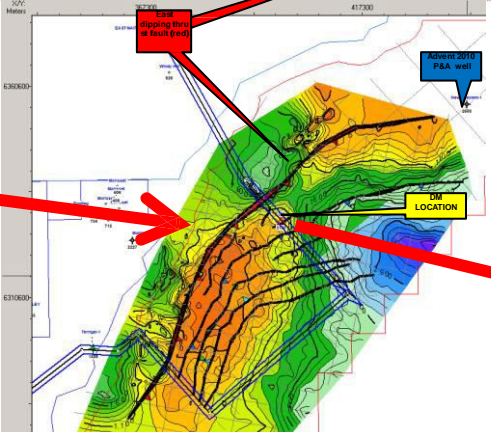
J. STREVENS Terrigal No. 1 bore is located approximately 1 mile inland on the western side of Terrigal drilled on a 4 acre private land lease license in 1961. Upper Coal Measures were encountered and six seams were penetrated before operations were suspended. Free oil was noticed in the drill cuttings at 338 feet and freely circulated with the drilling fluids for the entire drilling operation. The exact source of the oil was not determined. At 5000' oil saturation in 2-3 inch fractures was noted. TD was 6186' and was suspended due to losing drilling rods downhole. P&A 1961

PLANET OIL COMPANY East Maitland No.1 was drilled on the Raymond Terrace road about one mile east of the town of East Maitland. The well reached a total depth of 9900 ft. The well was spudded near the base of the Permian Tomago Coal Measures, and was abandoned before reaching the base of the Permian succession. No potential reservoir rocks were penetrated, but possible source rocks occurred between 190 and 6229 ft. No significant hydrocarbon shows were detected. The section studied consisted of over 6,400 feet of mainly marine shallow water sediments with one relatively thin interval of coal in sequence occurring in the lower half of this sequence. Beneath the sediments, 3600 feet of volcanics, predominantly pyroclastic, extend to total depth of the well. The Permian sediment sequence is quite sandy but very tight through-out, due to the combined effects of silica and carbonate cement, and the choking of the sands with volcanic clays and ash. P&A 1963.



Suggested Target: Test 6000 acre amplitude anomaly on North end of Late Permian anticline formed on the upper plate of easterly dipping thrusts fault (red).

Onshore Sydney basin Permian provides some coal seam gas (CSG) while this offshore anticline has gas seeps encountered above anticline near DM location.



COONEMIA-1
 T.D. = 2614' KB = 62'
 1960
 SOUTHERN SYDNEY BASIN

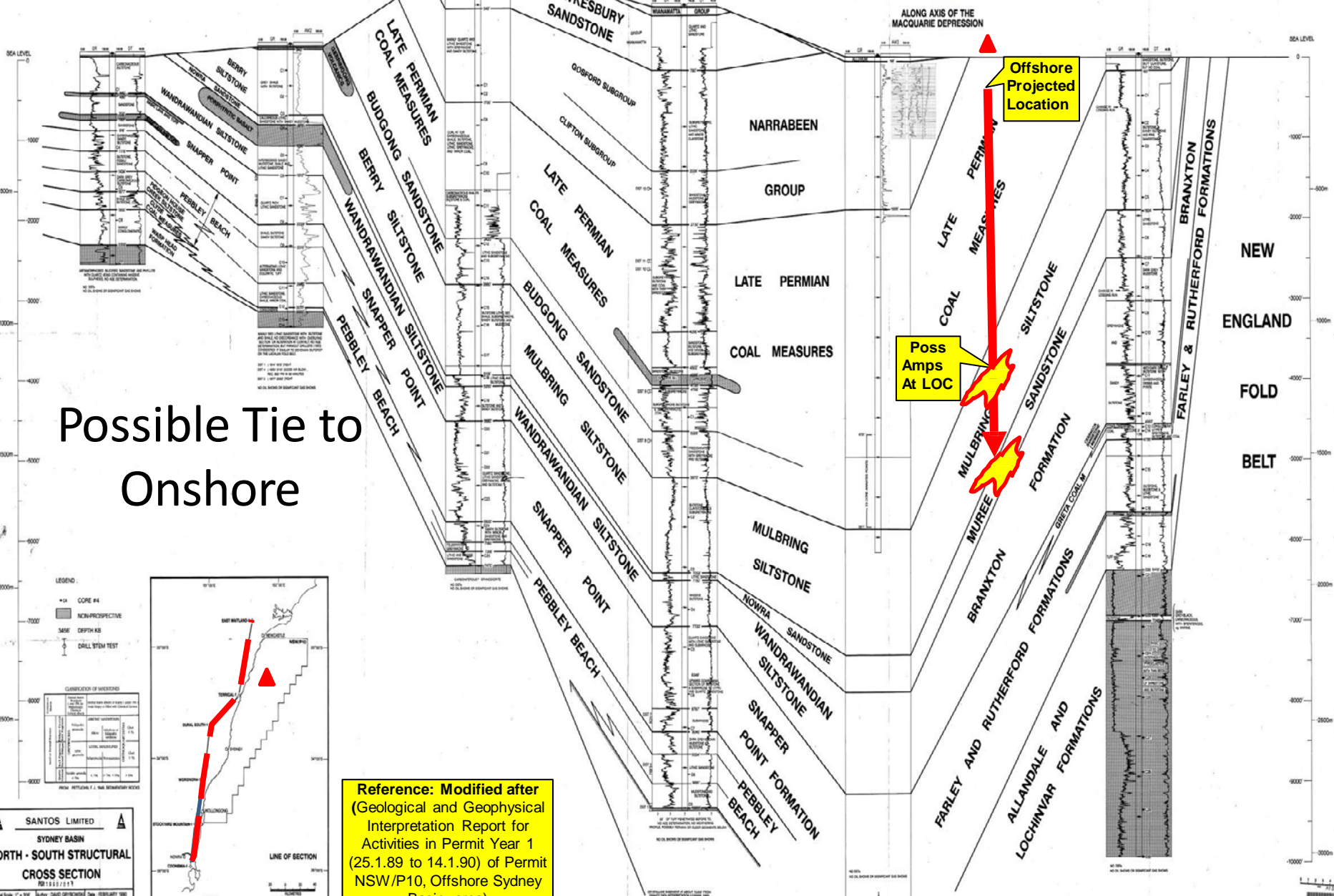
STOCKYARD MOUNTAIN - 1
 T.D. = 3516' KB = 174'
 1962
 EAST FLANK OF SOUTH PLUNGE OF ONSHORE DEPOCENTRE

WORONORA-1
 T.D. = 7567' KB = 1172'
 1964

DURAL SOUTH-1
 T.D. = 10035' KB = 649'
 1966
 NEAR CRESTAL POSITION OF THE LOCHINVAR-KULNURA DURAL DOME ARCH

TERRIGAL-1
 T.D. = 6186' KB = 18'
 1960
 SOUTH AXIAL PLUNGE OF THE MACQUARIE DEPRESSION
 NEWCASTLE SYNCLINE

EAST MAITLAND-1
 T.D. = 9993' KB = 31'
 1963
 NORTH FLANK NEWCASTLE SYNCLINE



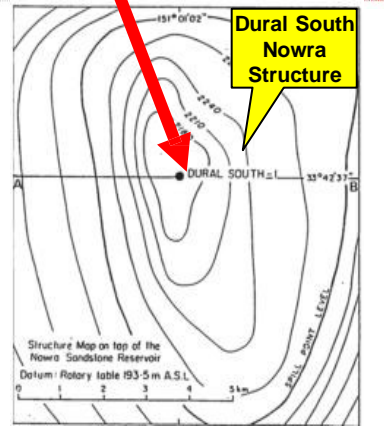
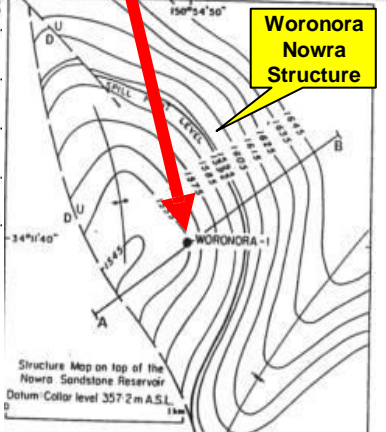
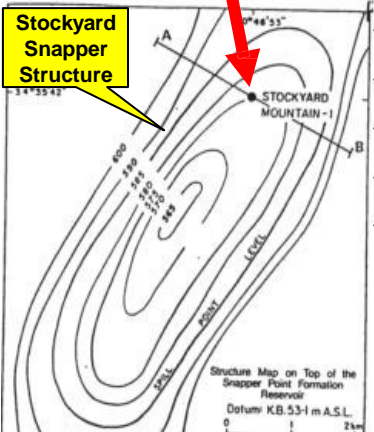
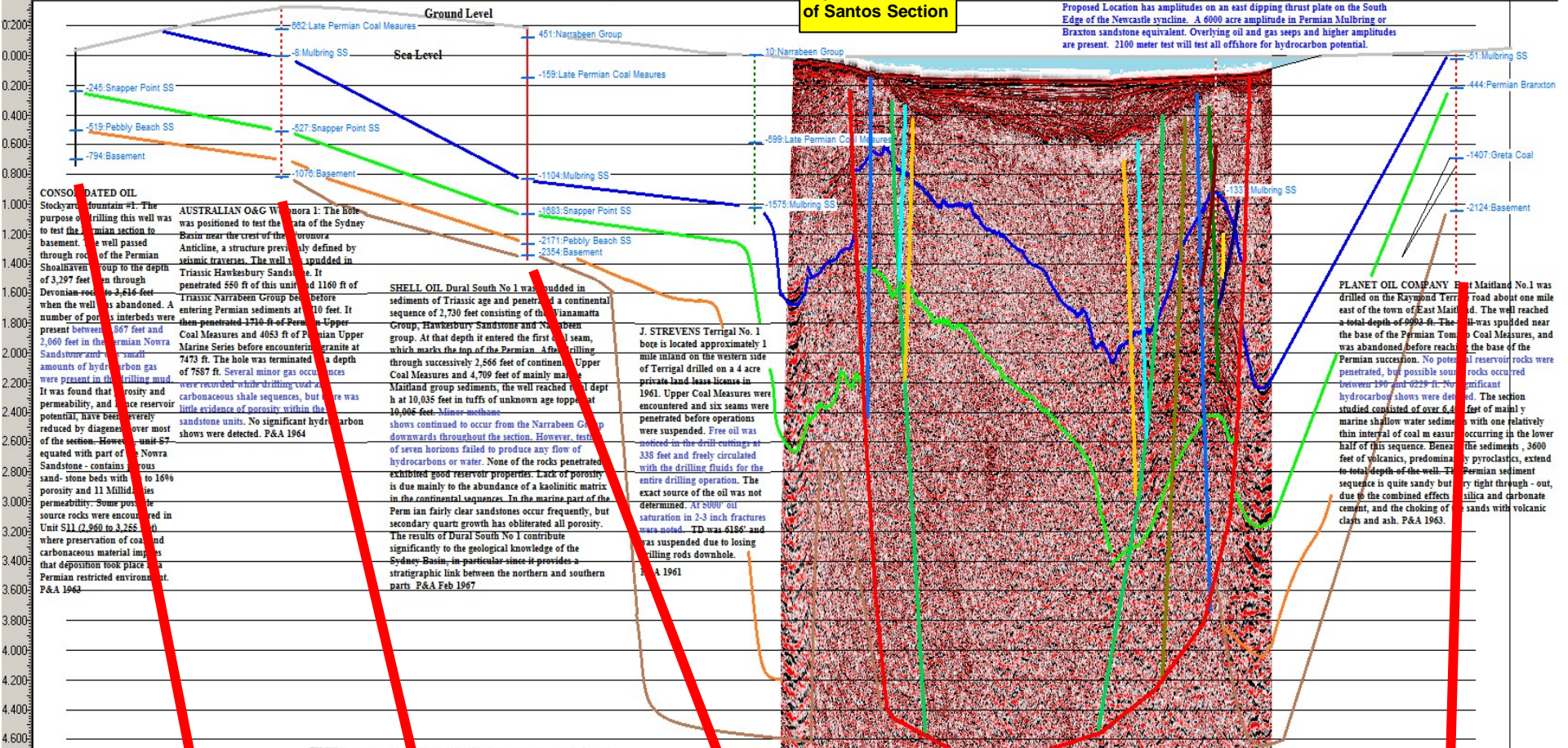
Possible Tie to Onshore

Reference: Modified after
 (Geological and Geophysical
 Interpretation Report for
 Activities in Permit Year 1
 (25.1.89 to 14.1.90) of Permit
 NSW/P10, Offshore Sydney
 Basin, area)

SANTOS LIMITED
 SYDNEY BASIN
 NORTH - SOUTH STRUCTURAL
 CROSS SECTION
 01/11/11

2015 Time to depth 2D revision of Santos Section

Proposed Location has amplitudes on an east dipping thrust plate on the South Edge of the Newcastle syncline. A 6000 acre amplitude in Permian Mulbring or Braxton sandstone equivalent. Overlying oil and gas seeps and higher amplitudes are present. 2100 meter test well will test all offshore for hydrocarbon potential.



No map available on Terrigal 1 4 acre lease Assumed structural closure