

MEETING MINUTES

September 11, 2012

Minutes: Santos Community Committee – Narrabri Shire
Tuesday, September 11, 2012
Narrabri Shire Council Chambers, Narrabri

Attendance: David Ross (Chair), Judy Simmonds, Tony Pickard, Brendon Warnock, Ian Duffy, Ken Flower, Gerrit Nehrkorn, Victoria Hamilton, Annie Alexander (Santos), Cate McMahon (Santos) Andrew Abbey (Santos presenter), Wayne Robins (Santos presenter)

Apologies: Michael Guest, Jane Trindall, and Lisa Montgomery

	Discussion	Action/By Whom
1. Welcome and introductions	The chair opened the meeting at: 5.37pm - Chair welcomed committee to meeting and introduced committee member Brendan Warnock who was an apology at the first meeting – Brendan is a local cotton grower, representing Cotton Australia.	
2. Previous Meeting Minutes	<ul style="list-style-type: none"> - Chair went through actions from previous meetings. - Action 1: Santos to send instructions to access minutes on website (<i>see link below</i>) http://www.santos.com/exploration-acreage/nsw-csg/community-committee-on-csg-narrabri.aspx. - Action 3: Santos to provide Committee with information on legislation information at next meeting. – Andrew Abbey and Wayne Robbins from Santos to present at tonight’s meeting. - Committee accepted previous minutes. - Committee member asked Chair if Narrabri Shire Council has sent a representative member of staff to attend tonight’s meeting? Chair responded that Council replied and will not be sending a representative to this meeting. 	<p>Completed</p> <p>Completed</p>
3. Exploration Description Wayne Robbins	<ul style="list-style-type: none"> - Chair introduced presenters Wayne Robbins, CSG Exploration Manager for Santos NSW and Andrew Abbey, Santos Regulatory Policy Coordinator. - Exploration and Appraisal presentation (<i>see appendix 1 for full presentation</i>) - Santos began with a summary of what the processes are and what information 	

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Legislative approvals process (Overview) Andrew Abbey

Santos gets from the process.

- Seismic Acquisition
- Seismic Method
- Geophone receivers - recording / data
- Schematic of a core hole: walked committee through the drilling processes and design of the core hole design.
- Presented on the processes, reports and approvals required to start exploration.
- Pilot testing explanation – Pilot Well Design.
- Environmental approvals.

Questions:

- Chair invited committee to ask questions.
 - Committee member asks what effects the seismic trucks have on the land? Santos responds there can be compaction tracks, but any left should be rehabilitated. Committee member disagrees as has seen tracks that are still visible in areas from seismic surveys four years ago.
 - Committee member questions how close to dams can Santos structures be built? Santos Representative responded that they were not sure on the exact measurements, but could find out. Committee member went onto ask if bad weather interrupts the survey, does the entire process have to restart again? Santos responded that the survey could be resumed from where it was. Committee member asked if Santos takes into account landholders' advice when travelling around their land? Santos responded that they do like to consult with landholders at all times. Committee member asked would Santos travel through a biodiversity area on a property. Santos replied that they would get the CMA (Catchment Management Authority) to assess any areas of this nature before travelling through. Santos's approach to transport is to look for the best route to minimise damage of the environment.
- Committee member to provide Chair with questions that could not be answered during the meeting and get Santos to answer them for him.

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- Committee member asked what does Cadastral mean? Another committee member explained it is a map or record of property ownership in an area, and went onto ask Santos how they obtain such maps, as that committee member had not been able to obtain this kind of map due to privacy laws. Santos responds that these maps are available and used in other industries like real estate and the local council can usually provide them.
- Committee member asks does a core hole ever turn into a pilot well? Santos explains that because most were small diameter well (5 inch) that they could not be used, only the large bore core holes can be pilot wells, if they are used, it is mainly to monitor water and to collect other data.
- Committee member refers to Strategic Regional Land Use Policy and asks what legislation /restrictions are in place allowing Santos to go onto cultivated land? Santos responds that they prefer to put more effort into negotiations and making sure that they are sensitive to the landholders needs. There are comprehensive provisions in place like this policy that state Santos can't go onto cultivated land if they have not negotiated with the landholder to do so before hand. Santos also consults with landholders to negotiate where to drill in a cultivated paddock as the aim is to minimise destruction.
- Committee member asks can you produce water from a core hole? Santos responds that core holes get sample of the earth. Committee member asks what is 'spudded'? Santos explains the meaning to when the drill first touches the soil and they begin to drill (much like when you dig a post hole).
- Committee Member asks about Pilot testing. If they have shut down the Tintfield power station in the Pilliga why is there still activity happening there. Santos responds that the Wilga Park Power Station was shut down and was only

Chair to get a response from Council to see if these maps are available for public access?

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run as required for maintenance, Tintfield was not supplying the power station.

- Chair requests Santos representative to summarise the legislation process again for the committee explaining acronyms and what levels of approvals are required by different levels of Government. Santos representative gives outline of what approvals are needed for various levels of Government to start exploration and also Pilot wells, explains that PEL is Petroleum Exploration Licence, REF - Review of Environmental Factors, Santos has to identify potential environmental impacts, and if there are impacts, mitigating measures have to be put in place to make sure the impacts are at an acceptable level. Then there are a number of other approvals, like Local Shire approvals for temporary development, Road Traffic management approvals etc. Santos representative explains that under an exploration area Santos have to get an approval to undertake the work. Full analysis of the regional description including social, cultural, heritage, geology, environmental, agricultural, community, social and economic impacts etc. Community consultations are part of this process. Santos will often bundle activities to submit appraisals at one time. There are a number of separate applications at all stages of the process.
- Committee member asks why are works already underway before the REF goes onto the Internet for public view? Santos responds that they now should be posted on the web before they are approved. Santos aims for transparency with their activities, that's why community consultations are run to seek community input. After approvals are in place there will be conditions of approval Santos must comply with and a long list of legal obligations to uphold. Preparations of environmental and safety management plan, hours of operation etc. We also have to pay security deposits. Committee member questions Santos on security deposits and Santos's intent on plugging and then abandoning wells without proper rehabilitation to areas, and questions why conditions of approvals are not available to general public and why there is no mention of security deposits in

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the REF. Santos explains that this may be old systems, that Santos has new transparent systems in place compared to previous systems of ESG (Eastern Star Gas).

- Committee member asks who is monitoring Santos for issues such as noise activity for example? Santos responds the Government has just announced that there will be 40 new compliance officers put in place to monitor these issues. Another Committee member explains that currently there are only 5 compliance officers in the entire state and 1 safety officer who is based in Maitland. Santos responds that they welcome the new officers, as they want to stick by the rules that are in place no matter who is monitoring them.
- Committee member brings up the issues that the EPA (Environment Protection Authority) has nothing to do with exploration attached to mining, it is only able to enforce when pollution leaves the site area. Santos representative states that POEO (Protection of the Environment) Act however is very clear about the penalties attached and explains that there are a number of other approvals and legislation that applies to the industry. The topic of Dewhurst 8 is brought up by a committee member; as an example of exclusion of the EPA from the exploration phase of investigation and penalties – provided the damage was on exploration area only. Another example raised was the Bohena Creek discharge and the small penalty imposed.
- Committee member is interested in the formation of aquifers (Purlewaugh). Santos explains that the area was a lake, thin layers that have compacted, and the thickness is quite consistent and not fractured solid rock throughout.
- Committee member refers to page 155 of Namoi Catchment Water Study, which states that there are no aquifers on the chart.
- Committee member asks why Santos fills in the Core holes and what percentage

Santos to confirm this reference with a water management specialist.

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- of the holes would be used? Santos has had two core holes that have been used to collect data, this data is provided to the Government. Committee member asks at what level of the earth does the hot bore water sit, and is the water that Santos is bringing up, hot like the bore water? Santos explains that the water they bring up to test can be warm but will have to confirm at what level the bore water is at.
- Santos to get a water expert to respond to the question; 'at what level is the artisan water found'.
- Further conversation continues about water and geological data that is collected at PEL 238. Santos presenters confirm that this is not their area of expertise and a Hydrologist would be able to answer underground water questions. A Hydrologist to present on water at a future meeting.
 - Committee members bring up questions on cement setting properly down holes and how the cement is treated to withstand the various pH difference over the length of the cementing column (Acid on top to Alkaline at base of column). Santos Presenters recommend speaking to a Driller to explain this further. A driller to present at future meeting to explain drilling processes in detail.
 - Committee member asks what is a 'sweet spot'? Santos answers that we conduct exploration to find a sweet spot, which is determined by the gas' content, permeability and the thickness of the coal, it is good gas. Committee member asks if you are testing the water to collect data, are you looking for bacteria? Santos responds that they do analysis of the water but would have to get a water expert to describe what they are testing for and what data they are collecting. Water Specialists to confirm what is tested for.
 - Committee member is interested in finding out more about Santos water management and the limitations of 3mL of water per petroleum exploration area, conversation continues about water licences and restrictions on Santos. Santos responds explaining that water management acts have brought CSG into line requiring them to have water licences like other industries.
 - Chair asks if the committee is comfortable with the overview provided from

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Santos.

- Committee members ask final question regarding Strategic Regional Land Use Policy, Santos explains that Section 71 of the Petroleum Act, states that Santos must not carry out mining of land, which is under cultivation except with the consent of the landholder. Committee member asks if the Minister can override this and Santos explains that they can, however the preference is to negotiate with the landholder and aim for their consent rather than go to the Minister. Committee member asks if a pilot production falls under exploration license does that mean that Santos wouldn't put a pilot production facility on cultivated country. Santos explains that alternatives would be looked into.
- Chair thanks Santos for the presentation.

5. General Business

- Decision making process
- Future meeting dates 2012
- Media
- Next meeting

- Chair raises point that Narrabri Shire Council had passed a motion to seek assurances from Santos that any member of the community committee declares shareholdings and any other financial interest in Santos. The chair suggests holding off on this, as no Council representative could be present at tonight's meeting.
- Chair makes note that Committee member, Ian Duffy had to leave early and place his apologies for the rest of the meeting.
- Chair presents committee with copy of proposed decision-making flow chart.
- Committee decided that they would like a balance between real information and steer clear of petty debate, despite diverse viewpoints of committee members. Committee was comfortable with this as a reference document to use as a starting point for tricky questions.
- Committee member would like to bring up an issue from the first meeting of a map that was provided to committee by Santos representative. Committee member believes there are a number of incorrect drill sites marked on the map and would like to request for a correct map.
- Chair informs committee that he was interview by ABC radio based in Tamworth after the first meeting, he was asked general questions of the committee make

Action to carry over to next meeting.

Santos to check the map and update and provide chair with new map if necessary to distribute.

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- up and stated that the committee will be driving the content of these meetings.
- Chair proposes date for future meetings as the second Tuesday of each month. *(See appendix 2)*
 - Santos representative explains logistics and requirements for committee members to go on site operations tour. *(See appendix 2 for proposed dates)* Committee member would suggest Bohena 7 site to be included in tour, as example of ESG mismanagement.
 - Chair suggests that tour attendants make presentation after tour at meeting to those committee members who could not attend.
 - Agenda for next meeting- Committee decides that they would be interested in a presentation from a Water Management Specialist, to speak on treatment and analysis of surface water. Committee member suggests that a Hydrologist might be a good follow on for a presentation at the November meeting.
 - Next meeting: 9th October 5.30pm

Action Santos operations to developed proposed itinerary for the trip to present to committee for comment.

Chair to contact each committee member to see who would be available to attend site tour and what date and time would work best.

Meeting Closed: 7:37pm

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Attachment 1.

Attachment 2. Actions

Action Raised	Date Raised	Progress Made
Santos to send info on how to access minutes and media releases.	15 th August.	Completed
Santos and chair to provide proposed meeting dates for next six months, at next meeting	15 th August.	Completed
Santos to provide Committee with information on legislation information at next meeting.	15 th August.	Completed
Santos to investigate into logistics of transporting Committee members on a tour of the CSG sites.	15 th August.	In progress
Santos to provide Chair with a copy of the presentation and other documents to go out with minutes.	15 th August.	Completed
Chair to draft a discrepancies flow chart for future discussion	15 th August	Completed.
Chair to obtain list of the committee members questions that could not be answered by Santos representative and get Santos to respond to them.	11 th September	
Chair to get a response from Council to see if Cadastral maps are available for public access	11 th September	
Santos to get a water expert to find out at what level artisan water found	11 th September	
Santos to organise a Hydrologist to present on water at a future meeting.	11 th September	
Santos to organise a driller to present at future meeting	11 th September	
Santos to organise a Water Specialists to present at next meeting.	11 th September	
Santos to check map distributed at first meeting and update and provide chair with new map for distribution, if necessary.	11 th September	
Santos operations to developed proposed itinerary for the site tour, to present to committee for comment.	11 th September	
Chair to contact each committee member to see who would be available to attend site tour and what date and time would work best.	11 th September	

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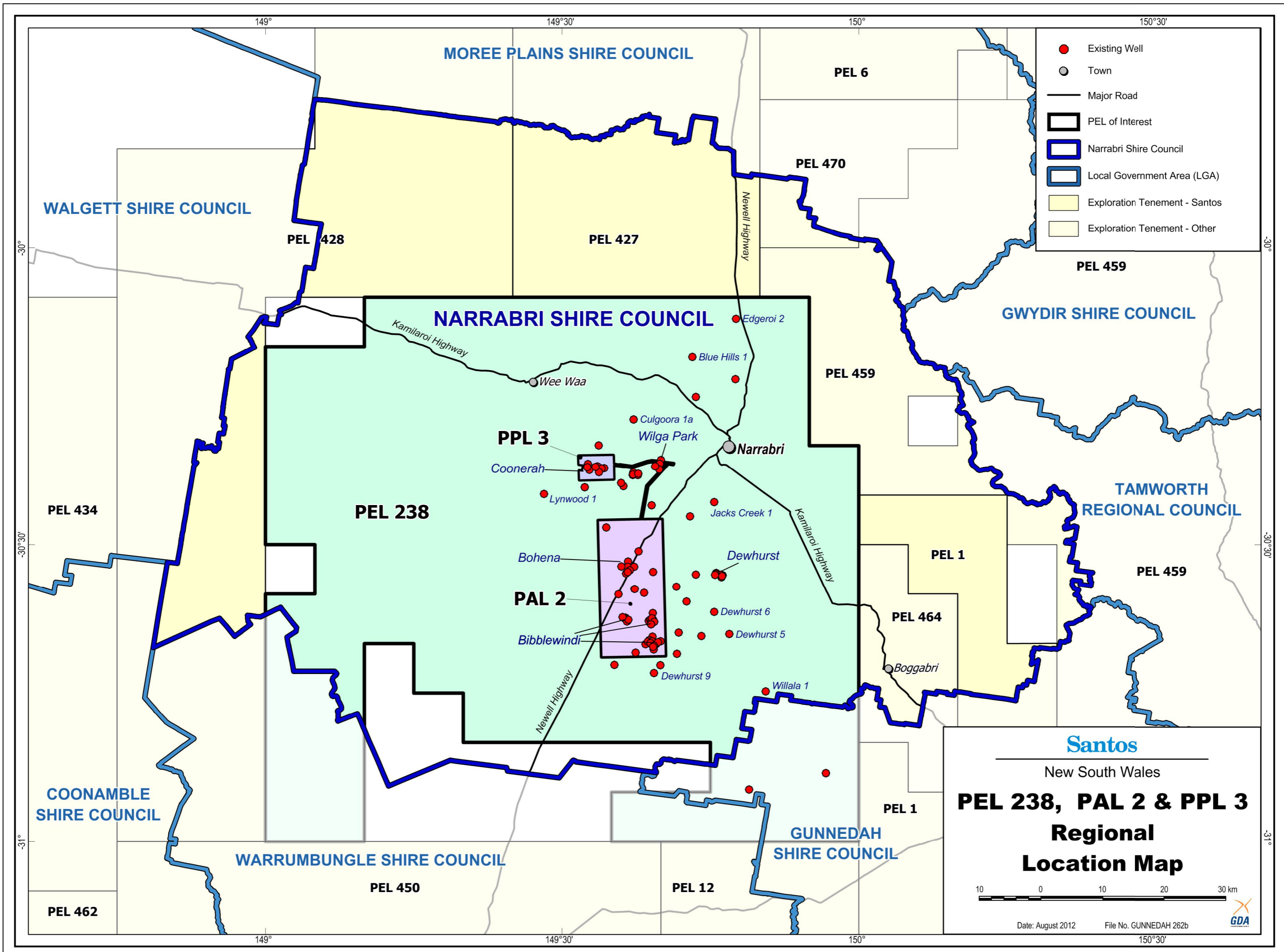
Appendix 1: Exploration & Appraisal Presentation.

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Appendix 2: Proposed Dates for Narrabri Shire CCC Meetings and Site Tour.

	Meeting Dates (Proposed)	Site Tour Dates (Proposed)
August	15 th August	
September	11 th September	
October	9 th October	19 th (Friday)
November	13 th November	16 th , 23 rd , 30 th (Thursday) 9 th , 16 th , 23 rd (Friday)
December	11 th December	6 th (Thursday) 7 th (Friday)



Santos

New South Wales

PEL 238, PAL 2 & PPL 3

Regional

Location Map

Date: August 2012 File No. GUNNEDAH 262b

PEL 238 UPDATE

Information for the Santos Community Committee – Narrabri Shire, September 2012.

- > Contractors have been engaged to undertake rehabilitation projects around sites in the Pilliga in accordance with regulatory approval.
- > Routine maintenance of wells continues. This involves some minimal flaring of gas, as each well is briefly re-started to maintain the condition of the down hole rotating equipment.
- > Pilot scale remediation trials have been conducted at the Bohena and Bibblewindi dieback sites to assist in formulating the rehabilitation implementation program. The program is undergoing regulatory review.
- > Management plans for weeds and waste are currently under review.
- > Santos have purchased the property at Leewood which may be used for operational activities in the future.