



31 January 2011

The Manager Companies
ASX Limited
20 Bridge Street
Sydney NSW 2000

Dear Sir/Madam,

(8 pages by email)

**REPORT ON ACTIVITIES FOR THE QUARTER ENDED
31 DECEMBER 2010**

HIGHLIGHTS

- **Successful due diligence completed over NSW CBM/Gas projects triggering the farm-in and the entering of Stage 2.**
- **The Company has the right to earn up to a 50% interest in three highly prospective projects covering 5,579 km².**
- **Subject to final approvals, four exploration core hole program to commence in the March 2011 quarter.**
- **Seismic contracts awarded.**
- **Ian Halstead appointed as new CEO.**

AUSTRALIAN OPERATIONS

NSW CBM/Gas Projects

Bylong PEL 468, Shoalhaven PEL 469 and Mooki PEL 470

During the quarter, Planet Gas Limited ('the Company') entered into Stage 2 of the Leichhardt Resources Pty Ltd ('Leichhardt') farm-in agreement.

The farm-in relates to three New South Wales petroleum exploration licences – Bylong (PEL 468) and Shoalhaven (PEL 469) in the Sydney Basin and Mooki (PEL 470) in the Gunnedah Basin.

Planet Gas Limited ABN 46 098 952 035

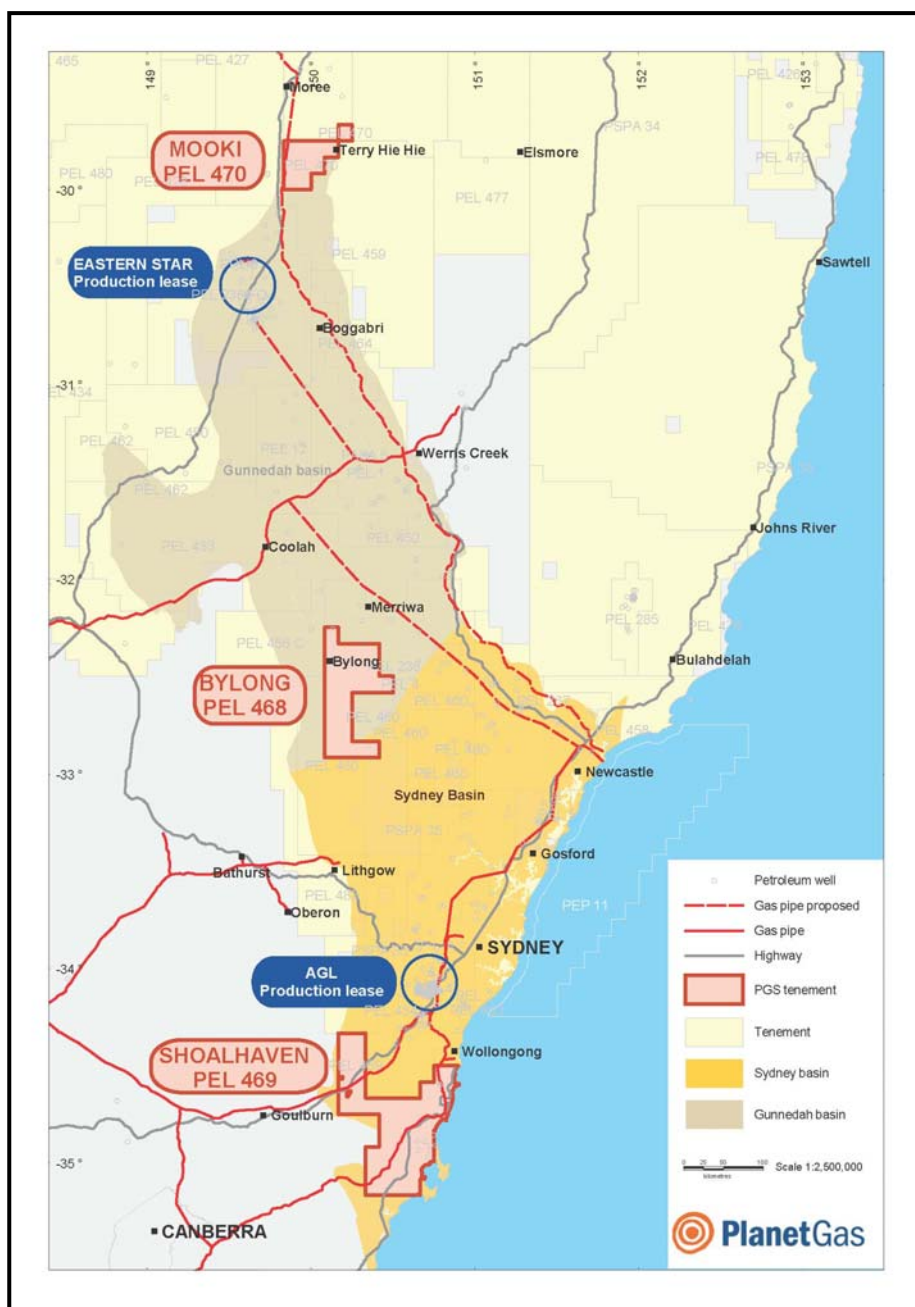
Level 2, 66 Hunter Street Sydney NSW 2000 Australia T +61 2 9300 3322 F +61 2 9221 6333

E pnightingale@planetgas.com W www.planetgas.com

Bylong (PEL 468) and Shoalhaven (PEL 469) will be targeted for coal bed methane (CBM) resources in the Illawarra Coal Measures and the Shoalhaven Group. PEL 468 is adjacent to PEL 456 which contains the Apollo/Santos discovery at Cuan-1. Mooki (PEL 470) is adjacent to the Eastern Star Gas/Santos CBM development project at Narrabri and the Company will be targeting the Maules Creek coals.

Subsequent to the end of the quarter, the Company awarded the drilling of four shallow exploration core holes across PELs 468, 469 and 470 to Tom Browne Drilling Pty Ltd. In addition, the Company awarded seismic acquisition services (totalling 80 kilometres) across three PELs 468, 469 and 470 to Velseis Pty Ltd.

Assuming all approvals have been received, seismic acquisition and exploration core hole drilling are expected to commence towards the end of the current quarter.



Location Map of the NSW CBM Projects

Bylong (PEL 468)

Bylong (PEL 468) covers some 1,736 km² and is located on the boundary of the Gunnedah Basin and Sydney (Hunter Coalfield) Basins and is 300 kilometres northwest of Sydney and approximately equidistance to the regional centres of Dubbo, Tamworth and Newcastle.

To date, some 48 drillholes, mostly NSW Government commissioned for open pit and shallow underground mining studies, have been identified in the public domain within the area, and a number of oil and gas exploration wells have been drilled within close proximity to the margins of this licence. These holes intersected the Late Permian Black Jack Formation/Wittingham Coal Measures (Illawarra equivalent) at depths ranging from subcrop to 800 metres. Drilling of these coal seams in adjacent areas has indicated a coal thickness of these coals of up to 90 metres, with gas contents ranging up to 8 m³/tonne.

Shoalhaven (PEL 469)

Shoalhaven (PEL 469) covers some 3,173 km² in the Southern Coalfield of the Sydney Basin. The project is approximately 80 kilometres south of Sydney and adjacent to the operating AGL (PEL 2) tenement. A major regional pipeline linking Sydney Gas to Canberra and Victoria passes through the prospect and the proposed 40TJ/Day Rosalind Park Gas Plant is less than 40 kilometres from the prospect.

Prospective for CBM gas resources are the Illawarra coals which range up to 15 metres thick for the Clyde Coal Measures and more than 25 metres thick for the Illawarra Coal Measures. The Illawarra Coal Measures contain 11 named coal seams including four main prospective target seams, those being the Bulli, Balgownie, Wongawilli and Tongarra Seams. Coal vitrinite reflectance data for these seams average 1.2 and historical mine gas data indicates gas contents of 10 to 16 m³/tonne. There are a number of existing drill holes and seismic lines within the licence.

Mooki (PEL 470)

Mooki (PEL 470) covers some 670 km² and is located between the regional centres of Moree and Narrabri and less than 100 kilometres from the Wilga Park Gas Fired Power Station. The proposed Wullumbilla-Newcastle pipeline development from Roma Gas Fields to Newcastle runs through the area, providing numerous options for future gas offtake.

The project is located in the Northern Gunnedah Basin. The eastern boundary of the prospect is adjacent to the Hunter-Mooki Fault, a regional structure active throughout deposition of the coal measures and a depo-centre for thick accumulations of coal bearing sediments. Drilling in the area has intersected net coal thicknesses of between 15 to 20 metres from the early-mid Permian Black Jack/Maules Creek Formations, and CBM gas contents of up to 10 m³/tonne, which are highly prospective for CBM gas resources.

The Farm-In Agreement

The farm-in agreement requires no upfront payments by the Company. The estimated minimum expenditure for the technical works, or in ground costs, by the Company over the 3 year life of the farm-ins is \$15,880,000. Each area will be the subject of a three phase farm-in process. The Stage 1 (or due diligence phase) has been completed.

The Stage 2 work programs will earn the Company a 10% equity interest in each of the three PELs, at a total cost of \$3.0 million. The work will be undertaken concurrently and will include seismic acquisition programs and the drilling, logging and testing of one open hole well in each of PELs 469 and 470 and two open-hole wells in PEL 468.

If the Company decides to proceed, Stage 3 of the farm-ins will allow the Company to earn another 40% in each of the PELs.

South Australia – Cooper Basin Oil and Gas Project (PELA 514)

The Company is in the final stages of completing native title process on PELA514 (100%), which was the subject of a successful tender by the Company in late 2009. The PEL is strategically located close to existing producing oil and gas fields, and underutilised infrastructure in the Cooper Basin. PELA514 is prospective for conventional and unconventional hydrocarbon resources. The Company is particularly encouraged by the recent drilling, by Beach Energy Limited, of some 400 metres of potential gas rich shales in a recent well on PEL218, which is located immediately south of PELA514.

Other Projects

No field activities were undertaken during the quarter at the Company's other projects (Clarence/Moreton, Eromanga, Leigh Creek and Innot geothermal projects and Wyoming CBM projects). Preliminary geological and geophysical work has been ongoing.

The Company was advised during the quarter that it was unsuccessful for the tender of PLR2010-1-5 and PLR2010-2-7 in Queensland.

The Company continues to assess new business opportunities and the rationalisation of its geothermal portfolio.

APPOINTMENT OF NEW CHIEF EXECUTIVE OFFICER

As previously advised, during the quarter, the Company announced the appointment of Mr. Ian G. Halstead as the Company's Chief Executive Officer.

Ian Halstead is a geologist with more than 27 years of conventional oil and gas exploration and production experience, including 16 years in senior management roles. Ian has extensive international experience with a focus on the Asia Pacific region. Prior to joining the Company in July 2010 as Chief Operating Officer, Ian was Chief Operating Officer/General Manager for Pan Orient Energy Corp., a TSX listed company, based in Thailand. Ian was instrumental in the Wichian Buri, Na Sanun East, and Bo Rang North field developments, onshore Thailand, where both daily production and reserves were increased significantly over the 2006-2009 period.

Ian's earlier appointments included Director/General Manager for Cairn Energy plc in Bangladesh, where he managed the acquisition of Shell's operating unit and merger with Cairn in 2004. He also managed the Sangu offshore gas Phase 2 development project and has performed other roles including Group Risk and HSE Manager based in Scotland and General Manager Far East - a regional role based in Singapore.

In summary, Ian has been involved with all aspects of management in the oil and gas exploration and production sector, developing organisations from their infancy into fully staffed and functional operational production teams.

Statement of Competent Person

The information in this report that relates to Petroleum Exploration Results is based on information compiled by Mr Ian Halstead, geologist, who is a Member of the American Association of Petroleum Geologists. Ian Halstead is a full-time employee of the Company who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Ian Halstead has consented to the inclusion in this report of the matters based on his information in the form and context in which they appear.

For further information, please contact Ian Halstead, Norman Seckold or Peter Nightingale on (61-2) 9300 3322.

Yours sincerely

A handwritten signature in black ink, appearing to read 'PJN', written in a cursive style.

Peter J. Nightingale
Director

pjn5830

1 PLANET GAS PROJECT LIST

AUSTRALIA

| State | Tenement | Resource | Project | Status | Granted | Expiry | Company | Area (km ²) |
|-------|--------------------------|------------|-------------------|--|-----------|-----------|-----------------------------|-------------------------|
| NSW | EL7146 | Geothermal | Clarence Moreton | Granted | 28-May-08 | 28-May-12 | Gradient Energy Ltd | 1,942 km ² |
| NSW | EL7350 | Geothermal | Gloucester | Granted | 10-Jun-09 | 10-Jun-11 | Gradient Energy Ltd | 1,230 km ² |
| NSW | EL7510 | Geothermal | Sydney - Ourimbah | Granted | 7-Apr-10 | 7-Apr-13 | Gradient Energy Ltd | 1,377 km ² |
| NSW | EL7512 | Geothermal | Sydney – Richmond | Granted | 7-Apr-10 | 7-Apr-13 | Gradient Energy Ltd | 1,800 km ² |
| NSW | EL7513 | Geothermal | Sydney | Granted | 7-Apr-10 | 7-Apr-13 | Gradient Energy Ltd | 1,900 km ² |
| QLD | EPG29 | Geothermal | Innot | Granted | 13-Apr-10 | 30-Apr-15 | Gradient Energy Ltd | 596 km ² |
| SA | GEL354-GEL365 and GEL377 | Geothermal | Eromanga | Granted | 26-May-08 | 25-May-13 | Gradient Energy Ltd | 6,101 km ² |
| SA | GEL448-GEL461 | Geothermal | Leigh Creek | Granted | 17-Nov-09 | 16-Nov-14 | Gradient Energy Ltd | 6,590 km ² |
| SA | PELA514 | Petroleum | Cooper Basin | App Lodged 9-Dec-09 (awaiting Native Title clearance) | | | Planet Cooper Basin Pty Ltd | 1,917 km ² |

FARM-IN AGREEMENTS

| State | Tenement | Resource | Project | Status | Granted | Expiry | Company | Area (km ²) |
|-------|----------|----------|------------|-----------------|---------|--------|--------------------------|-------------------------|
| NSW | PEL 468 | CBM/Gas | Bylong | Farm-in stage 2 | NA | NA | Planet Gas & CBM Pty Ltd | 1,736 km ² |
| NSW | PEL 469 | CBM/Gas | Shoalhaven | Farm-in stage 2 | NA | NA | Planet Gas & CBM Pty Ltd | 3,173 km ² |
| NSW | PEL 470 | CBM/Gas | Mooki | Farm-in stage 2 | NA | NA | Planet Gas & CBM Pty Ltd | 745 km ² |



Location Map of the Australian Projects

USA

| State | Basin | Holder | Resource | Project | Area |
|---------|--------------|-----------------------|-----------|---------------|-----------|
| Wyoming | Powder River | Paupers Dream Company | Oil & Gas | Esponda East | 469 Ha |
| Wyoming | Powder River | Paupers Dream Company | Oil & Gas | Esponda West | 11,586 Ha |
| Wyoming | Powder River | Paupers Dream Company | Oil & Gas | Oriva Throne | 146 Ha |
| Wyoming | Powder River | Paupers Dream Company | Oil & Gas | Oriva Federal | 359 Ha |