

PLANET EXPLORATION INC.

FORM 51-102F3

MATERIAL CHANGE REPORT

ITEM 1 Name and Address of Reporting Issuer:

Planet Exploration Inc. (“Planet”)
Suite 400, 750 – 11th Street SW
Calgary, AB T2P 3N7

ITEM 2 Date of Material Change:

April 14, 2009

ITEM 3 News Release:

The attached news release was issued on April 14, 2009, through the facilities of Marketwire.

ITEM 4 Summary of Material Change:

Planet announced the results of the first National Instrument 43-101 compliant independent Technical Report and Mineral Resource estimates on the Sidace Lake Property, a joint venture with Red Lake Gold Mines, an affiliate of Goldcorp Inc. The Sidace Lake JV property comprises 12,224 ha of unpatented mineral claims approximately 30 kilometres north of the town of Red Lake, Ontario.

ITEM 5 Full Description of Material Change:

See the attached news release.

ITEM 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51-102:

Not applicable.

ITEM 7 Omitted Information:

None

ITEM 8 Executive Officer:

Salim Jivraj, Director
Telephone: 403-537-0067
Facsimile: 403-237-5816

ITEM 9 Date of Report:

April 17, 2009



Planet Exploration Inc.

Suite 400, 750 11th Street S.W.

Calgary, Alberta, T2P 3N7

Tel: (403) 537-0067

Fax: (403) 237-5816

CALGARY, CANADA

(TSXV: PXI)

Planet Exploration Announces Initial Mineral Resource Estimates At Sidace Lake

- **141,000 oz Au Indicated Resources**
- **219,000 oz Au Inferred Resources**

April 14, 2009 Planet Exploration Inc. ("Planet") (TSXV:PXI) announces the first National Instrument 43-101 ("NI 43-101") compliant independent Technical Report and Mineral Resource estimates on the Sidace Lake Property, a joint venture with Red Lake Gold Mines, an affiliate of Goldcorp Inc. ("Goldcorp"). The Sidace Lake JV property comprises 12,224 ha of unpatented mineral claims approximately 30 kilometres north of the town of Red Lake, Ontario.

Systematic exploratory diamond drilling within a 1,500 ha central corridor on these claims has identified twelve separate gold occurrences. In October 2008, Planet engaged Watts, Griffis and McOuat Limited ("WGM") to produce an independent NI 43-101 Technical Report on the property. Included in this report are Mineral Resource estimates on the 2 most advanced prospects on the claims, the Main Discovery Zone ("MDZ") and the Upper Duck Zone ("UDZ").

The WGM Technical Report is an exciting step forward for the company because it demonstrates that:

- the Sidace Lake Property is host to several significant gold deposits;
- two of these deposits (the MDZ and UDZ) are in an advanced stage of development and are demonstrated to contain Mineral Resources; and
- drilling on the MDZ and UDZ shows reasonable continuity and predictability.

A summary of the Mineral Resource estimates for the UDZ and MDZ, based on sensitivity to cut-off grades, is shown below. The Indicated Resources are confined to the uppermost 312 metres from surface on the UDZ and the uppermost 410 metres from surface on the MDZ:

Mineral Resource Estimate Summary for Sidace Lake

Upper Duck Zone (UDZ)						
Cut-off	INFERRED			INDICATED (from surface down 312m)		
(g Au/t)	Tonnes	g Au /t	Total oz Au	Tonnes	g Au /t	Total oz Au
0.5	616,700	3.19	63,300	413,000	2.92	38,700
1.0	557,700	3.44	61,700	337,100	3.40	36,900
1.5	425,800	4.11	56,300	247,600	4.19	33,300
2.0	308,600	5.01	49,700	162,800	5.46	28,600
Main Discovery Zone (MDZ)						
Cut-off	INFERRED			INDICATED (from surface down 410m)		
(g Au/t)	Tonnes	g Au /t	Total oz Au	Tonnes	g Au /t	Total oz Au
0.5	3,093,500	2.10	208,600	1,601,400	2.41	124,300
1.0	2,437,000	2.46	192,400	1,401,300	2.65	119,300
1.5	1,677,200	3.01	162,500	1,119,500	3.00	107,900
2.0	1,152,900	3.59	133,000	815,500	3.46	90,800
TOTALS	INFERRED			INDICATED		
	Tonnes	g Au /t	Total oz Au	Tonnes	g Au /t	Total oz Au
1.5	2,103,100	3.24	218,800	1,367,200	3.21	141,300

Note: Tonnage and oz Au figures are rounded to nearest hundred. Totals may not add up due to rounding.

WGM selected a 1.5 g Au/t cutoff based on a gold price of US\$800 per ounce, an exchange rate of \$US1.00:\$CDN1.20 and on the assumption that both deposits would be mined and milled as satellites to existing mining facilities in the Red Lake area, thus reducing capital and operating costs.

The WGM report takes into account 225 diamond drill holes, totalling 82,604 metres of NQ core that have been drilled since 1998 (including 16 holes abandoned for logistical reasons, 12 sidetrack wedges and 5 extensions to previously drilled holes). This drilling includes:

- MDZ on which 96 holes, totalling 34,014 metres;
- UDZ on which 64 holes totalling 23,935 metres.

Drilling on the MDZ area has concentrated mostly down to 500 metres below surface with probes to 960 metres below surface. Drilling on the UDZ, has been mostly above 400 metres below surface. Due to the complex nature of both deposits, the holes were drilled in an irregular pattern, without specific predetermined spacing. However, strict spacing criteria, outlined below, were used in determining whether or not to include drill defined blocks in the Mineral Resource estimates.

Mineral Resource Estimate Methodology

The Mineral Resource estimates of WGM dated April 14, 2009, are based on a 3-D geologic and mineralization model that integrates all exploration work on the project as of June 30, 2008.

- For each of the two deposits, an inverse distance squared (“ID²”) block model was interpolated using 2 metre composites. Individual blocks measured 5 metres along strike, 5 metres in vertical height, and 2.5 metres across strike. A minimum of three composite samples were required for interpolation, with no more than two originating from a single drill hole. Samples used for the grade interpolation must have been derived from a minimum of two drill holes to establish geological continuity.
- To establish grade and Mineral Resource categories, two interpolation phases were used. Indicated Resources were identified using a search ellipse measuring 40 metres along strike, 40 metres across strike, and between 15 and 20 metres in vertical height. Where capped mean grades exceeded 20 g Au/t, the area of influence of that value was dropped to 20 metres from the 40 metres otherwise used, to mitigate the effects of high grade nuggets. Inferred Resources were identified using a search ellipse measuring 90 metres along strike, 90 metres across strike, and between 15 and 20 metres in vertical height.
- All resources below 410 metres below surface on the MDZ and below 312 metres below surface on the UDZ were classified as Inferred.
- Gold grades were capped at 35 g Au/t over 2 metre mean composites, averaged over the intersect length.
- Interpolation characteristics were defined based on the geology, drill hole spacing and geostatistical analysis of the data. The resources were classified by their proximity to the sample locations and are reported, as required by NI 43-101, according to the CIM standards on Mineral Resources and Reserves.

Except for the initial 4,000 metres of drilling, from which samples were sent for fire assay to TSL laboratories in Saskatoon, Sask., all drill samples were analyzed by fire assay at Acurassay Laboratories in Thunderbay, ON, Canada. A rigorous quality control and quality assurance protocol was used by the project operators (Goldcorp) on the project, including blank and reference samples with each batch of assays. Apart from visiting the drill sites, the core repository at Cocheneur Mine and Acurassay laboratories in Thunder Bay, and running random checks on core logs, field locations and sampling intervals and tagging, WGM ran their own check analyses on 13 independent split NQ-sized core samples collected from six drill holes, chosen to correspond with historic sample intervals and to include a range of "high" and "low" values.

The Mineral Resource estimates were prepared under the direction of Kurt Breede, P.Eng., with the assistance of David Power-Fardy, P.Geo., both employees of WGM, and wholly independent of Planet. Mr. Breede is the independent Qualified Person as defined by NI 43-101, and is responsible for the Mineral Resource estimates.

The Qualified Person (“QP”) for Planet is Dr. Adrian Mann, P.Geo., who is not independent.

The work completed with WGM, including the new 3D model of the deposits, has shown many specific targets which, with positive assay results, can quickly increase the size of the resource. The undertaking of this resource calculation is assisting Planet’s targeting of existing mineralized zones, as well as generating new targets in evident gaps in the drilling pattern.

In addition to the MDZ and UDZ, 4 discoveries have been identified in other drilling:

- Deep Footwall Zone: intersected in 10 holes including 20.59 g Au/t over 1.00 metre in RL04-39, 14.47 g Au/t over 0.80 metres in RL03-37 and 10.24 g Au/t over 1.00 metre in RL08-179, and covers a strike of 550 metres, open west and at depth;
- Skarn Zone: intersected in 7 of 8 holes including 13.03 g Au/t over 1.00 metre in RL05-86, and 10.12 g Au/t over 2.80 metres in RL04-40, and covers a strike of 200 metres open north, south and at depth;
- Anderson Zones: the 16 holes drilled in this area outlined 2 targets of interest:
 - North Anderson 'B' Zone intersected in 7 holes, including 11.27 g Au/t over 2.00 metres in RL05-102 and 9.76 g Au/t over 2.00 metres in RL05-93, and covers a strike of 600 metres, open north, south and at depth;
 - North Anderson 'Massive ' Zone intersected in 4 holes, including a core zone of 1.76 g Au/t over 13.00 metres in RL05-89, open west and at depth
- Duck 77 Zone: intersected in 3 of 9 holes that targeted this feature, including 37.08 g Au/t over 1.30 metres in RL05-77, 17.07 g Au/t over 3.00 metres in RL08-182, and 2.75 g Au/t over 2.78 metres in RL05-105. Of these 9 holes, 3 others also showed interesting values. The occurrence is the probable fault extension of UDZ;

Within the 1,500 ha corridor explored to date, the company has also identified six other targets for follow up:

- Duck 84 target: intersected in one isolated hole, RL-05-84, 3,000 metres south west of MDZ;
- Geophysical target #1: in apparently similar lithology and structure to MDZ, 500 metres north east of MDZ;
- Geophysical target #2: in apparently similar lithology and structure to MDZ, 1,000 metres north east of MDZ;
- Far West target: intersected in one isolated hole, RL04-46, 4,500 metres south west of MDZ in similar stratigraphic and lithological environment;

- Central Anderson ultramafic target: a geophysical feature of what appears to be a refolded fold in the extension to the East Bay Serpentine, 4,000 metres south west of MDZ; and
- South Anderson Zone: scattered gold values in mafic volcanics intersected in 2 of 4 holes drilled, 4,500 metres south of MDZ.

Drilling on the two deposits on which Mineral Resources have been estimated has shown reasonable continuity and predictability. The further potential on the claims, which is evident in the other 4 drilled discoveries and the 6 identified exploration targets, add excitement to our future drill program.

A NI 43-101 Technical Report and Mineral Resource estimates, which is the basis for this press release, will be filed on SEDAR on the date of this press release.

For more information, please contact Salim Jivraj or Dr. Adrian Mann at 403-537-0067. For a complete presentation of the Sidace Lake Property visit Planet's website at www.planetexploration.net.

Planet is a minerals exploration company based in Calgary, Canada, with the Red Lake area being the current focus of our attention. The Planet /Goldcorp joint venture owns 100% of the Sidace Lake property. Goldcorp has a 60% and Planet has a 40% ownership interest in the property.

CAUTIONARY STATEMENT

Neither the TSX Venture Exchange nor its Regulation Services Provider (as such term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release. No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein. This News Release includes certain "forward-looking statements". All statements other than statements of historical fact, included in this release, including, without limitation, statements regarding potential mineralization and reserves, exploration results, and future plans and objectives of Planet, are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Future drilling may fail to confirm economic mineral accumulations on current targets or discoveries. Important factors that could cause actual results to differ materially from Planet's expectations are the inherent exploration risks detailed from time to time in the filings made by Planet with securities regulators.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resource estimates do not account for mineability, selectivity, mining loss and dilution. These Mineral Resource estimates include Inferred Mineral Resources that are normally considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is also no certainty that these Inferred Mineral Resources will be converted to Measured and Indicated Mineral Resource categories through further drilling, or into Mineral Reserves once economic considerations are applied.