

OMB APPROVAL  
OMB Number: 3325-0116  
Expires: July 31, 2008  
Estimated average burden  
Hours per response 6.2

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

## FORM 6-K

REPORT OF FOREIGN ISSUER PURSUANT TO RULE 13a-16 AND 15d-16  
UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the Month of \_\_\_\_\_ February 2008

### PEDIMENT EXPLORATION LTD.

(Name of Registrant)

789 West Pender Street, #720, Vancouver, British Columbia, Canada V6C 1H2  
(Address of principal executive offices)

1. Press Release: February 20, 2008  
Material Change Report: February 20, 2008

Indicate by check mark whether the Registrant files annual reports under cover of Form 20-F or Form 40-F. Form 20-F xxx Form 40-F \_\_\_\_

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): \_\_\_\_

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): \_\_\_\_

Indicate by check mark whether the Registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under Securities Exchange Act of 1934.  
Yes \_\_\_\_ No xxx



February 20, 2008

## **Los Planes Perimeter Extended, Including 10.67 metres @ 11.79 g/t Gold; Significant New Zone Intersected**

Pediment Exploration Ltd (PEZ-V, PEZFF-OTCB, and P5E-F) is pleased to report results of on-going drill testing at the company's 100% owned San Antonio gold project in Baja California Sur, Mexico. Expansion of Los Planes gold zone has been confirmed with the assay results released below. Extension of the Planes gold zone with good gold grades occurs in drill holes to the north, the west, and southerly toward the Las Colinas historical resource. Los Planes remains open to further expansion in these directions.

A new zone, the Fandango, that was originally detected as a geophysical anomaly has been confirmed with completion of core drill hole FADD-1 located 1,500 meters west of Los Planes zone. FADD-1 intersected approximately 260 metres of sulphide mineralization including 160 metres of stronger (higher sulphide) material within shear foliated quartz diorite in three zones. Sulphide mineralogy observed in the core is similar to that seen in Los Planes. The core review shows areas of high sulphide content and a strong, near horizontal shear character. The economic significance of this intercept will be indicated by gold assays that are still pending. The core drill is moving farther west to follow-up FADD-1 closer to a projected apex of the sulphide zone.

### **Los Planes Expansion**

Drill hole PLRC-39 testing the northeastern extension of the Los Planes zone has returned 27.4 metres of 1.23 g/t gold beginning 145.4 metres down-hole. PLRC-39 is located 100 north of previously reported PLRC-41 that returned 48.8 of 1.49 g/t gold (see release dated February 4, 2008), indicating that Los Planes remains open to expansion in this direction.

On the southern end of the system PLRC-54 has returned 9.2 metres of 2.54 g/t beginning 42.7 metres down-hole, and PLRC-56 that extends the system a further 50 metres south from previous reporting has returned 12.2 metres of 1.51 g/t beginning 70.1 metres down-hole. These holes indicate a potential to expand the gold resource in good grades to the south, and with PLRC-39 noted above intersections of potentially economic gold resource have now been encountered along 800 metres of north-south trend.

New results have also been received from holes testing the west-central area of Los Planes zone, highlights of which include hole PLRC-59 which intersected 54.6 metres grading 2.88 g/t gold including 10.67 metres grading 11.79 g/t gold and hole PLRC-43 which contained intervals of 36.6 metres and 33.5 metres of 1.02 g/t and 68.6 metres of 1.01 g/t gold in a section totalling 150.9 metres. Angle hole PLRC-51, 100 metres north of hole 59 returned two separate sections of 51.8 metres of 1.43 g/t and 53.3 metres of 1.79 g/t gold in a section totalling 125 meters length beginning 82.9 metres down-hole. Los Planes zones remain open to expansion westerly from this area toward FADD-1. Complete results and an update plan map can be found under the San Antonio project on the Pediment Exploration website.

### **Fandango Testing**

The first core hole testing new targets outside the Planes body, located at Arroyo Fandango, has intersected a thick section of alteration and mineralization similar to that hosting the region's gold deposits. Assay results for this hole are pending, and the company cautions that visual inspection of the core can not assess its gold tenor nor indicate its potential viability. However, the form and scale of this intersection do indicate the considerable untested scope within the San Antonio project for discovery of new mineralized bodies.

Core hole FADD-01 was collared to test the high chargeability response in the central of three broadly-spaced Induced Polarization lines covering 1,000 metres of trend length, near an area where sparse outcrop in the walls of the arroyo (intermittent stream channel) exposes alteration and limonite staining within older granitic rock that includes some sections of late phase, felsic intrusive rock.

Rock chip sampling of these exposures returned generally low gold values in the 0.1 to 0.2 g/t range over a broad area, but with spot results grading up to 2.3 g/t over 1 metre.

The core hole revealed 60 metres of unaltered granodiorite before encountering a 20 metre section of sparsely silicified material with fine grained sericite and sulphide minerals as fracture filling that became foliation controlled with depth. From 80 to 340 metres is a section with well mineralized gneissic rock containing up to 10% sulphide minerals, primarily pyrite, arsenopyrite, and pyrrhotite with minor chalcopyrite, associated with quartz veinlets and secondary biotite that are also aligned with the host rock's foliation. Late stage breccia bodies and several narrow quartz-feldspar pegmatite dykes were seen to crosscut the foliation. The sulphide mineral assemblage and variability is similar to that in the Los Planes and Las Colinas zones and to occurrences of other gold bearing bodies in the district.

The three sections of high chargeability response being tested occur along profile lengths of 600 to 900 metres each; the high chargeability anomalies in all three of the profiles are open to the west beyond the surveyed area, and appear to plunge slowly downwards to the east (towards the Los Planes zone) before they are lost at depth. A single IP line run 1000 metres to the north of Fandango to cover an area of anomalously high gold in soils results, being dubbed La Virgen target, returned a separate and more subtle high chargeability anomaly. A map of the San Antonio IP sections showing the location of FADD-01 is posted on the Pediment website at the following URL:

Fandango Zone Map Link: [http://www.pedimentexploration.com/i/pdf/2008-02-20\\_NRM.pdf](http://www.pedimentexploration.com/i/pdf/2008-02-20_NRM.pdf)

A third campaign of reconnaissance and lines of induced polarization to test the regional trend extension for a further 10 km to the north of the Los Planes zone has now begun. This will be followed up with soil sampling, prospecting, geological mapping and ultimately, drilling. Plans for additional IP and exploration drilling around the Fandango anomalies are also being developed. These will be finalized and detailed upon receipt of geochemical results for FADD-01. Pediment's VP of Exploration Mel Herdrick is a qualified person as defined by NI 43-101 and has approved the information contained in this release. The project supervisor is geologist Pedro Teran, B.Sc.

For additional information please contact Gary Freeman or Michael Rapsch at 604-682-4418.

Gary Freeman, President and CEO  
PEDIMENT EXPLORATION LTD  
Vancouver, British Columbia

We Seek Safe Harbour.

*The TSX Venture Exchange does not accept responsibility for the adequacy or accuracy of this release.*

This press release contains forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, and Section 27E of the U.S. Securities Exchange Act of 1934, as amended regarding the Los Planes extension and the Fandango drill testing. Such statements include, without limitation, statements regarding the timing of future exploration activities by the Company, future anticipated exploration program results, the discovery and delineation of mineral deposits/resources/reserves, business and financing plans, potential mining scenarios, the success of mineral processing procedures, business trends and future operating costs and revenues. Although the Company believes that such statements are reasonable, it can give no assurance that such expectations will prove to be correct. Forward-looking statements are typically identified by words such as: believe, expect, anticipate, intend, estimate, postulate and similar expressions, or are those, which, by their nature, refer to future events. The Company cautions that any forward-looking statements by the Company are not guarantees of future results or performance, and that actual results may differ materially from those in forward-looking statements as a result of various factors, including, but not limited to, variations in the nature, quality and quantity of any mineral deposits that may be located, the Company's inability to obtain any necessary permits, consents or authorizations required for its activities, the Company's inability to produce minerals from its properties successfully or profitably, to continue its projected growth, to raise the necessary capital or to be fully able to implement its business strategies. The reader is referred to the Company's reports, publicly available through the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval (SEDAR) at [www.sedar.com](http://www.sedar.com), and the U.S. Securities and Exchange Commission's Electronic Data Gathering and Retrieval (EDGAR) System at [www.sec.gov](http://www.sec.gov), for a more complete discussion of such risk factors and their potential effects.

This press release contains information with respect to adjacent or similar mineral properties in respect of which the Company has no interest or rights to explore or mine. The Company advises that the U.S. Securities and Exchange Commission's mining guidelines prohibit information of this type in reports filed with the SEC. Readers are cautioned that the Company has no interest in or right to acquire any interest in any such adjacent or similar properties, and that mineral deposits on adjacent or similar properties are not indicative of mineral deposits on the Company's properties.

All of the Company's public disclosure filings may be accessed via [www.sedar.com](http://www.sedar.com) and [www.sec.gov](http://www.sec.gov), and readers are urged to review these materials, including any technical reports filed with respect to the Company's mineral properties.

This press release is not, and is not to be construed in any way as, an offer to buy or sell securities.

**Form 51-102F3**  
***Material Change Report***

**Item 1:           Name and Address of Company**

PEDIMENT EXPLORATION LTD.  
Suite 720-789 West Pender Street  
Vancouver, British Columbia V6C 1L6  
(the "Company")

**Item 2   Date of Material Change**

February 20, 2008

**Item 3   News Release**

The news release was disseminated on February 20, 2008 by way of Stockwatch.

**Item 4   Summary of Material Change**

The Company announces that the Los Planes perimeter has been extended; including 10.67 metres at 11.79 g/t gold, and a significant new gold zone has been intersected.

**Item 5   Full Description of Material Change**

**5.1           Full Description of Material Change**

The Company reports results of on-going drill testing at the company's 100% owned San Antonio gold project in Baja California Sur, Mexico. Expansion of Los Planes gold zone has been confirmed with the assay results released below. Extension of the Planes gold zone with good gold grades occurs in drill holes to the north, the west, and southerly toward the Las Colinas historical resource. Los Planes remains open to further expansion in these directions.

A new zone, the Fandango, that was originally detected as a geophysical anomaly has been confirmed with completion of core drill hole FADD-1 located 1,500 meters west of Los Planes zone. FADD-1 intersected approximately 260 metres of sulphide mineralization including 160 metres of stronger (higher sulphide) material within shear foliated quartz diorite in three zones. Sulphide mineralogy observed in the core is similar to that seen in Los Planes. The core review shows areas of high sulphide content and a strong, near horizontal shear character. The economic significance of this intercept will be indicated by gold assays that are still pending. The core drill is moving farther west to follow-up FADD-1 closer to a projected apex of the sulphide zone.

**Los Planes Expansion**

Drill hole PLRC-39 testing the northeastern extension of the Los Planes zone has returned 27.4 metres of 1.23 g/t gold beginning 145.4 metres down-hole. PLRC-39 is located 100 north of previously reported PLRC-41 that returned 48.8 of 1.49 g/t gold (see release dated February 4, 2008), indicating that Los Planes remains open to expansion in this direction.

On the southern end of the system PLRC-54 has returned 9.2 metres of 2.54 g/t beginning 42.7 metres down-hole, and PLRC-56 that extends the system a further 50 metres south from previous reporting has returned 12.2 metres of 1.51 g/t beginning 70.1 metres down-hole. These holes indicate a potential to expand the gold resource in good grades to the south, and with PLRC-39

noted above intersections of potentially economic gold resource have now been encountered along 800 metres of north-south trend.

New results have also been received from holes testing the west-central area of Los Planes zone, highlights of which include hole PLRC-59 which intersected 54.6 metres grading 2.88 g/t gold including 10.67 metres grading 11.79 g/t gold and hole PLRC-43 which contained intervals of 36.6 metres and 33.5 metres of 1.02 g/t and 68.6 metres of 1.01 g/t gold in a section totalling 150.9 metres. Angle hole PLRC-51, 100 metres north of hole 59 returned two separate sections of 51.8 metres of 1.43 g/t and 53.3 metres of 1.79 g/t gold in a section totalling 125 meters length beginning 82.9 metres down-hole. Los Planes zones remain open to expansion westerly from this area toward FADD-1. Complete results and an update plan map can be found under the San Antonio project on the Pediment Exploration website.

### **Fandango Testing**

The first core hole testing new targets outside the Planes body, located at Arroyo Fandango, has intersected a thick section of alteration and mineralization similar to that hosting the region's gold deposits. Assay results for this hole are pending, and the company cautions that visual inspection of the core can not assess its gold tenor nor indicate its potential viability. However, the form and scale of this intersection do indicate the considerable untested scope within the San Antonio project for discovery of new mineralized bodies.

Core hole FADD-01 was collared to test the high chargeability response in the central of three broadly-spaced Induced Polarization lines covering 1,000 metres of trend length, near an area where sparse outcrop in the walls of the arroyo (intermittent stream channel) exposes alteration and limonite staining within older granitic rock that includes some sections of late phase, felsic intrusive rock. Rock chip sampling of these exposures returned generally low gold values in the 0.1 to 0.2 g/t range over a broad area, but with spot results grading up to 2.3 g/t over 1 metre.

The core hole revealed 60 metres of unaltered granodiorite before encountering a 20 metre section of sparsely silicified material with fine grained sericite and sulphide minerals as fracture filling that became foliation controlled with depth. From 80 to 340 metres is a section with well mineralized gneissic rock containing up to 10% sulphide minerals, primarily pyrite, arsenopyrite, and pyrrhotite with minor chalcopyrite, associated with quartz veinlets and secondary biotite that are also aligned with the host rock's foliation. Late stage breccia bodies and several narrow quartz-feldspar pegmatite dykes were seen to crosscut the foliation. The sulphide mineral assemblage and variability is similar to that in the Los Planes and Las Colinas zones and to occurrences of other gold bearing bodies in the district.

The three sections of high chargeability response being tested occur along profile lengths of 600 to 900 metres each; the high chargeability anomalies in all three of the profiles are open to the west beyond the surveyed area, and appear to plunge slowly downwards to the east (towards the Los Planes zone) before they are lost at depth. A single IP line run 1000 metres to the north of Fandango to cover an area of anomalously high gold in soils results, being dubbed La Virgen target, returned a separate and more subtle high chargeability anomaly. A map of the San Antonio IP sections showing the location of FADD-01 is posted on the Pediment website at the following URL:

Fandango Zone Map Link: [http://www.pedimentexploration.com/i/pdf/2008-02-20\\_NRM.pdf](http://www.pedimentexploration.com/i/pdf/2008-02-20_NRM.pdf)

A third campaign of reconnaissance and lines of induced polarization to test the regional trend extension for a further 10 km to the north of the Los Planes zone has now begun. This will be

followed up with soil sampling, prospecting, geological mapping and ultimately, drilling. Plans for additional IP and exploration drilling around the Fandango anomalies are also being developed. These will be finalized and detailed upon receipt of geochemical results for FADD-01. Pediment's VP of Exploration Mel Herdrick is a qualified person as defined by NI 43-101 and has approved the information contained in this release. The project supervisor is geologist Pedro Teran, B.Sc.

**Caution regarding forward-looking statements:**

This material change report contains forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, and Section 27E of the U.S. Securities Exchange Act of 1934, as amended regarding the Los Planes extension and the Fandango drill testing. Such statements include, without limitation, statements regarding the timing of future exploration activities by the Company, future anticipated exploration program results, the discovery and delineation of mineral deposits/resources/reserves, business and financing plans, potential mining scenarios, the success of mineral processing procedures, business trends and future operating costs and revenues. Although the Company believes that such statements are reasonable, it can give no assurance that such expectations will prove to be correct. Forward-looking statements are typically identified by words such as: believe, expect, anticipate, intend, estimate, postulate and similar expressions, or are those, which, by their nature, refer to future events. The Company cautions that any forward-looking statements by the Company are not guarantees of future results or performance, and that actual results may differ materially from those in forward-looking statements as a result of various factors, including, but not limited to, variations in the nature, quality and quantity of any mineral deposits that may be located, the Company's inability to obtain any necessary permits, consents or authorizations required for its activities, the Company's inability to produce minerals from its properties successfully or profitably, to continue its projected growth, to raise the necessary capital or to be fully able to implement its business strategies. The reader is referred to the Company's reports, publicly available through the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval (SEDAR) at [www.sedar.com](http://www.sedar.com), and the U.S. Securities and Exchange Commission's Electronic Data Gathering and Retrieval (EDGAR) System at [www.sec.gov](http://www.sec.gov), for a more complete discussion of such risk factors and their potential effects.

This material change report contains information with respect to adjacent or similar mineral properties in respect of which the Company has no interest or rights to explore or mine. The Company advises that the U.S. Securities and Exchange Commission's mining guidelines prohibit information of this type in reports filed with the SEC. Readers are cautioned that the Company has no interest in or right to acquire any interest in any such adjacent or similar properties, and that mineral deposits on adjacent or similar properties are not indicative of mineral deposits on the Company's properties.

All of the Company's public disclosure filings may be accessed via [www.sedar.com](http://www.sedar.com) and [www.sec.gov](http://www.sec.gov), and readers are urged to review these materials, including any technical reports filed with respect to the Company's mineral properties.

This material change report is not, and is not to be construed in any way as, an offer to buy or sell securities.

**5.2 Disclosure for Restructuring Transactions**

Not applicable.

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

Not applicable.

**Item 7 Omitted Information**

Not applicable.

**Item 8 Executive Officer**

Gary Freeman, President & Chief Executive Officer

Business Telephone: (604) 682-4418

Facsimile: (604) 669-0384

**Item 9 Date of Report**

February 20, 2008

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Form 6-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Pediment Exploration Ltd. -- SEC File No. 000-52509  
(Registrant)

Date: February 25, 2008

By /s/ Gary Freeman  
Gary Freeman, President/CEO/Director

SEC 1815 (5-2006) Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.