# UNITED STATES SECURITIES AND EXCHANGE COMMISSION 

Washington, D.C. 20549

## FORM 6-K

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

For the month of October, 2012

Commission File Number: 001-32929

## POLYMET MINING CORP.

(Translation of registrant's name into English)
390-3600 Lysander Lane
Richmond, B.C. Canada V7B 1C3
(Address of principal executive offices)
Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.
[ X ] Form 20-F [ ] 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): [ ]

## EXPLANATORY NOTE

This report on Form 6-K and attached exhibit are incorporated by reference into Registration Statement No. 333-161564 and this report on Form 6-K shall be deemed a part of such registration statement from the date on which this report on Form 6-K is filed, to the extent not superseded by documents or reports subsequently filed or furnished by PolyMet Mining Corp. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

## SUBMITTED HEREWITH

Exhibits
99.1 News Release dated October 10, 2012

## SIGNATURES

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

Date: October 10, 2012

## PolyMet Mining Corp.

(Registrant)
By: /s/ Jonathan Cherry
Jonathan Cherry
Title: President and CEO

