



CONTINENTAL PLACER INC.

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June 5, 2020

Ms. Alix Daguin
D'Artagnan Farms Foundation
800 Green Lane
Union, NJ 07083

via email

**RE: Cost Proposal for Source Water Supply Consulting Services
Goshen, New York**

Dear Ms. Daguin:

Continental Placer Inc. (CPI) is pleased to provide you with this cost proposal to provide source water supply consulting services. CPI will supervise the performance of a 72-hour pumping test on your existing water well to determine the long-term safe yield. The proposed scope of work and estimated project costs are discussed in this proposal.

Proposed Scope of Work

The proposed scope of work will consist of the following tasks:

- Task 1: Perform Site Inspection
- Task 2: Coordination and Meetings with Regulatory Authorities
- Task 3: Perform 72-Hour Pumping Test on Existing Well and Sample for Part V Analysis
- Task 4: Data Analysis and Report Preparation

A description of the scope of work for each task is provided below:

Task 1: Site Inspection

CPI will perform a site inspection to determine site access, access to the water well, and how the well is plumbed. CPI will also measure the depth to water in the existing water well, if the well head is accessible.

Task 2: Coordination and Meetings with Regulatory Authorities

In order to operate a public water supply system, permissions need to be obtained from the Department of Health (DOH) and possibly the Town. Typically, the DOH requires a 72-hour pumping test and a Part V laboratory analysis for a bedrock well. CPI will contact the DOH to negotiate their requirements and attempt to minimize the level of effort the DOH will accept. If there are any Town requirements CPI will also communicate with the Town to determine the minimal requirements needed to get the water system approved.

Task 3: Perform 72-hour Pumping Test on Existing Well and Sample for Part V Analysis

CPI will coordinate with the Pietrak & Pfau Engineering & Surveying, PLLC (Pietrzak & Pfau) to verify that the approach for the pumping test will be adequate for the DOH. The DOH typically requires 72-hour pumping tests be performed for bedrock water wells that are used as public water supplies. Prior to performing the 72-hour pumping test, a step test will be performed to determine the pumping rate for the 72-hour test. The step test will be performed by pumping the well at three or

four half hour increments at progressively higher pumping rates. A pumping rate for the 72-hour test will be determined based on the water level response in the pumping well during the step test. The objective is to select a pumping rate that will maximize the yield of the pumping well yet still allow stabilization of water levels while pumping and minimize dewatering impacts to neighboring wells. CPI assumes only one 72-hour pumping test will be performed.

For the 72-hour pumping tests, CPI will coordinate with your pump installer to determine the target pumping rate and the pumping test schedules. Prior to and during the pumping test, CPI will monitor water levels in the well using either handheld measurements (electronic water level meters) or with data logging pressure transducers pending well construction and depth. For the purpose of this proposal, CPI is assuming monitoring of neighboring residential wells will not be required. CPI will monitor background water level in the existing well prior to the pumping test for 12 to 24 hours, and recovery of water levels for 12 to 24 hours after completion of the pumping test. Just prior to completion of the pumping test, CPI will collect a water sample for a NYSDOH Part V laboratory analysis. After completion of all pump testing and water level recovery measurements, CPI will remove all monitoring equipment from all wells.

Whenever placing equipment into an existing residential well with an existing pump, there is the potential that the monitoring equipment could get caught up on the pump wires when retrieving the monitoring equipment. As a result, the pump contractor will need to be available in the event the monitoring equipment gets ‘stuck’ in the well. In such a case, it may be necessary to temporarily pull the pump from the well to remove the monitoring equipment and re-install the pump. Costs are not included to perform removal and replacement of the well pump.

Task 4: Data Analysis and Report Preparation

CPI will prepare a written report to you discussing the water level drawdown, projected sustainable yields, and expected impacts to nearby water users. The report will include site sketches showing the locations of the production well, neighboring wells, and salient site features. Plots of water drawdowns will also be included for each well monitored. The report will present conclusions and clearly identify a safe sustainable yield for the well. This report will be submitted to you, Pietrzak & Pfau, and the DOH.

ESTIMATED PROJECT COSTS

The estimated CPI costs to provide the services discussed herein are listed below:

Task 1: Site Inspection	
CPI Labor and Expenses	\$ 1,000.00
Task 2: Coordination and Meetings with Regulatory Authorities	
CPI Labor and Expenses	\$ 3,000.00
Task 3: Perform 72-hour Pumping Test and Part V Analysis	
CPI Labor and Expenses	\$ 23,500.00
Task 4: Data Analysis and Report Preparation	
CPI Labor and Expenses	\$ <u>4,500.00</u>

Total Estimated Project Costs: \$ 32,000.00

These costs do not include cost for a plumber or pump installer if the plumbing system needs modification to perform a pumping test. CPI assumes the pump installer/plumber will contract directly with your client.

Any additional work beyond the scope of this proposal and determined necessary as part of the investigation will be incorporated into our recommendations. Any such additional work would be invoiced at our standard rates plus expenses. No additional work, however, will be conducted or invoiced without prior authorization from the Client. Invoices will be provided monthly for charges incurred during the month. All invoices are payable upon receipt and are due within thirty (30) days. CPI reserves the right to cease work if invoices are not paid without just cause within thirty (30) days. Complete final payment is due upon report submittal to the Client.

The intent of the proposal has been to outline the services to be provided, estimate costs and define invoicing procedures for the proposed source water supply consulting services. CPI will commence the fracture trace analysis once we receive your authorization to proceed with that task. **CPI will require a \$7,500.00 retainer fee prior to performing the pumping test.** If you have any questions regarding the Scope of Services or Cost Estimates described within this proposal, please do not hesitate to contact me at (518) 458-9203 Ext. 305.

Sincerely,



William J. Miller, III
Senior Hydrogeologist - Continental Placer, Inc.

AUTHORIZATION TO PROCEED

Signature/Title and Date