

PITCHER DRILLING CO.

218 Demeter Street, East Palo Alto, CA 94303 Tel #: (650) 328-8910 Fax #: (650) 328-3621

Mr. Doug Young
Alameda County Water District
43885 Grimmer Blvd
Fremont, CA 94538

June 22, 2012

Tel: (510) 668-4452
Fax: (510) 651-1760
Cell: (775) 690-6373

Dear Mr. Young,

Re: Mud Rotary Test Borings and 2" Sch. 80 PVC Piezometers Installations
Fremont, CA

Further to our telephone conversation of this week, this letter provides you with our **revised** prices for providing investigation and piezometer installation services in Fremont, CA.

SCOPE OF WORK

The current scope of site investigation works is to consist of the following:

- Four (4) 8" mud rotary borings to 800' in depth, estimated 3200' total for installation of 2-2" Sch. 80 piezometers to 350' in depth & 2-2" Sch. 40 piezometers to 250' in depth.
- Two (2) 8" mud rotary borings to 250' in depth, estimated 500' total for installation of 2" Sch. 80 piezometers to 250' in depth.

We understand this work will commence in May & June of 2013. Two of the 800' deep borings and piezometer installations will be installed on Salt Pond Levies while the remaining two 800' deep borings will be installed on streets. Five drive samples (maximum 400' in depth) will be taken in each 800' deep boring. The borings will be primarily logged by drill cuttings. Upon completion of drilling borings will be down hole suspension logged. The 800' deep borings will be tremie pipe grouted with Portland cement grout to 250' or 350' BGS after which 2"Sch. 80 Piezometers will be installed. At each street location a second boring will be straight drilled to 250' BGS and a 2" Sch. 80 PVC piezometer will be installed. The Piezometer installations will include 30 to 40' of 0.02 slot screen, riser, # 3 sand, cement seal and surface

completion. This estimate includes down hole suspension logging of each 800' boring. Drill spoils will be contained at site in 20 yard storage bins after which drill spoils will be transported to county disposal site at Mission Blvd near Niles Canyon Road. This estimate includes a mud conditioning system, fork lift and tilting hoppers rentals to facilitate transport of spoils to 20 yard storage bin.

PROGRAM UNIT RATES

ITEM NO.	DESCRIPTION	UNITS	ESTIMATED QUALITY	UNIT PRICE	EXTENDED BID PRICE
1.0	Mob/demob truck Drill	Each	1	\$5,000.00	\$5,000.00
2.0a	Mud rotary drilling, 4 borings to 800' in depth, grout borings from 250 to 350' BGS, up to 9 hrs/day on site.	Day	20	\$4,500.00	\$90,000.00
2.0b	Mud rotary drilling 2 borings to 250' in depth, up to 9 hrs/day on site.	Day	4	\$4,500.00	\$18,000.00
2.0c	Drill rig during Down hole suspension logging	Day	2	\$4,000.00	\$8,000.00
2.0d	Piezometer Installations 6 piezometers for 250 to 350' in depth	Day	12	\$4,500.00	\$54,000.00
3.0	Drilling additives	Foot	3700	\$2.00/ft	\$7,400.00
4.0	Portland Cement Grout	Foot	2000	\$5.00/ft	\$10,000.00
5.0	Piezometer Materials	Foot	1700	\$14.00/ft	\$23,800.00
6.0	Drill spoils Containment and Disposal	Lump sum		\$20000.00	\$20,000.00
7.0	Down Hole Suspension Logging	Boring	4	\$2,500.00	\$10,000.00
ESTIMATED TOTAL PRICE				\$246,200.00	

Standby Rate is \$4500.00/day; Overtime Hourly Rate is \$400.00/hr (any hrs after 9 or on Saturday)

Assumptions:

- Water on Site
- Level D Safety required
- Drill sites accessible to Truck Mounted Drill Equipment.

Terms and Conditions

The preceding costs represent our best estimate for the tasks, as we understand them. The cost estimate does not reflect additional charges that would be incurred for stand-by time or adverse

weather and/or drilling conditions. The client will be responsible for obtaining necessary permits and for the clearance of underground utilities. The client will provide copies of USA notices to Pitcher Drilling 72 hours in advance of drilling activities. The information contained in these notices will be used to notify USA, as required by law. Pitcher Drilling Co. will not accept any responsibility for damages to underground utilities. Client will be invoiced following completion of work; all bills are due and payable within 30 days of the date of invoice. Invoices not paid within 30 days will be subject to a 1.5% per month finance charge.

ACCEPTANCE of PROPOSAL:

Please sign and return by fax this proposal to indicate acceptance of proposal and conditions.

Accepted by:

Client Name: _____

Signature: _____

Name (printed): _____

Title: _____

Date: _____

Pitcher Drilling Co. would like to thank you for the opportunity of providing our services on this project. If you have any questions or would like to schedule work, please contact our office at (650) 328-8910.

Sincerely,

Terry Shewchuk, Operations Manager
Pitcher Drilling Co.

PITCHER DRILLING CO.

218 Demeter Street, East Palo Alto, CA 94303 Tel #: (650) 328-8910 Fax #: (650) 328-3621

Mr. Doug Young
Alameda County Water District
43885 Grimmer Blvd
Fremont, CA 94538

July 2, 2012

Tel: (510) 668-4452
Fax: (510) 651-1760
Cell: (775) 690-6373

Dear Mr. Young,

Re: *Well Development*
Fremont, CA

Further to our telephone conversation of today, this letter provides you with our prices for providing well development services in Fremont, CA.

SCOPE OF WORK

The current scope of site investigation works is to consist of the following:

- Develop six (6) 2" Piezometers from 250 to 350' in depth.

The Piezometers will be developed by surging, bailing and air lift methods at minimum 10 times the well volume. Discharge will be monitored for turbidity with a turbidity meter.

Discharge with high turbidity levels will be contained in disposal bin from which discharge will be transported to Mission Blvd. disposal site. Discharge with low levels of turbidity will be released on site.

PROGRAM UNIT RATES

ITEM NO.	DESCRIPTION	UNITS	ESTIMATED QUALITY	UNIT PRICE	EXTENDED BID PRICE
1.0	Mob/demob development truck	Each	1	\$800.00	\$800.00
2.0	Well Development Services, 6 monitoring wells form 250 to 350' in depth, up to 10 hrs/day on site.	Day	5	\$2,350.00	\$11,750.00
3.0	Turbidity meter and compressor rental	Day	5	\$300.00	\$1,500.00

4.0	Discharge Containment and Transport to Disposal Site	Each	6	\$600.00	\$3,600.00
ESTIMATED TOTAL PRICE					\$17,650.00

Standby Rate is \$2200.00/day; Overtime Hourly Rate is \$400.00/hr (any hrs after 9 or on Saturday)

Assumptions:

-Level D Safety required

Terms and Conditions

The preceding costs represent our best estimate for the tasks, as we understand them. The client will be responsible for obtaining necessary permit. Client will be invoiced following completion of work; all bills are due and payable within 30 days of the date of invoice. Invoices not paid within 30 days will be subject to a 1.5% per month finance charge.

ACCEPTANCE of PROPOSAL:

Please sign and return by fax this proposal to indicate acceptance of proposal and conditions.

Accepted by:

Client Name: _____

Signature: _____

Name (printed): _____

Title: _____

Date: _____

Pitcher Drilling Co. would like to thank you for the opportunity of providing our services on this project. If you have any questions or would like to schedule work, please contact our office at (650) 328-8910.

Sincerely,

Terry Shewchuk, Operations Manager
Pitcher Drilling Co.

Douglas Young

From: Jeannette Kelley
Sent: Tuesday, June 26, 2012 12:43 PM
To: Douglas Young
Subject: RE: cation/anion analysis request for grant proposal - unit prices
Attachments: D Young possible grant study wells 2013 gnuplot.pdf

Hi Doug,

Here are unit prices you can use for your grant. When appropriate, let me know what reporting limits you need to achieve for the project.

Analyte	Method	Unit Price
Alkalinity, Total (Carbonate, Bicarbonate, Hydroxide fractions)	SM* 2320B	\$26
Calcium (Ca)	SM 3111B	\$27
Chloride (Cl)	EPA 300.1	\$31
Magnesium (Mg)	SM 3111B	\$27
Sodium (Na)	SM 3111B	\$27
Potassium (K)	SM 3111B	\$27
Sulfate (SO4)	EPA 300.1	\$31

*SM: *Standard Methods for the Examination of Water and Wastewater*

Jeannette

Jeannette V. Kelley, Ph.D.
Laboratory Services Manager
Alameda County Water District
email: jeannette.kelley@acwd.com
t: 510/668-6520
f: 510/656-3426
c: 510/585-8328

From: Jeannette Kelley
Sent: Tuesday, May 29, 2012 8:12 AM
To: Douglas Young
Subject: RE: cation/anion analysis request for grant proposal

Sorry, I forgot to add that we would need to know what reporting limits you need to meet. If for any reason we cannot meet any reporting limits in house, we will arrange for MWH to analyze those affected constituents.

Jeannette V. Kelley, Ph.D.
Laboratory Services Manager
Alameda County Water District
email: jeannette.kelley@acwd.com
t: 510/668-6520
f: 510/656-3426
c: 510/585-8328

From: Jeannette Kelley
Sent: Tuesday, May 29, 2012 8:10 AM

DATE: June 21, 2012
PAGE NO: 1 of 1

To: Mr. Douglas Young
Alameda County Water District
43885 South Grimmer Blvd.
Fremont, CA 94538

Dear Mr. Young,

In accordance with your request, we are providing the cost quote for the following laboratory test:

20 Flexible Wall Permeability (ASTM D5084) - non-disturbed 2.5" diameter specimen	@ \$ 360 each	\$ 7,200
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Costs for Additional Services (if required):

Cell pressure exceeding 70 psi	\$ 30
Sample Remolding	\$ 100
Sample Pick Up	No Charge

This cost quote is valid for testing assigned prior to June 30, 2013. Please contact us at 510-877-8484 or via email if you have any questions regarding this quote.

Sincerely,



Kin W. Yee
Lab QA Manager
Signet Testing Labs, Inc.