

South Platte Decision Support System, Phase 2
Bedrock Monitoring Well Price List
Engineering Estimate

Item	Estimated Quantity	Unit	Unit Price	Amount
1. Mob/Demob and Clean up	1	Each	\$15,200.00	\$15,200.00
2. Drill 18-inch diameter borehole	100	Feet	\$19.00	\$1,900.00
3. Furnish and install 10-inch diameter steel construction casing and grout casing in place	100	Feet	\$36.00	\$3,600.00
4. Drill 10-inch diameter borehole by mud rotary techniques.	640	Feet	\$19.00	\$12,160.00
5. Coring at 5-foot Intervals	35	Feet	\$430.00	\$15,050.00
6. Perform Geophysical logging	1	Lump Sum	\$3,100.00	\$3,100.00
7. Furnish and install 5-inch diameter, schedule 80 PVC 40-slot well screen with flush threaded joints	200	Feet	\$17.00	\$3,400.00
8. Furnish and install 5-inch, schedule 80 PVC casing with flush threaded joints	540	Feet	\$12.00	\$6,480.00
9. Furnish and install size 8-12 silica sand filter pack and infiltration barrier	240	Feet	\$13.00	\$3,120.00
10. Furnish and install bentonite slurry	2	Feet	\$13.00	\$26.00
11. Furnish and install Cement/ bentonite grout	40	Feet	\$13.00	\$520.00
12. Furnish and install high-solids bentonite grout	458	Feet	\$13.00	\$5,954.00
13. Furnish and install protective steel cover and pad	1	Each	\$600.00	\$600.00
14. Furnish and install three protective bollards	1	Lump Sum	\$1,000.00	\$1,000.00
15. Develop well	22	Hours	\$375.00	\$8,250.00
16. Test Pumping (8 hours)	1	Lump Sum	\$7,500.00	\$7,500.00
17. Containerize, haul and dispose of cuttings and drilling fluids.	1	Lump Sum	\$4,000.00	\$4,000.00
18. Standby time	0	Hours	\$250.00	\$0.00
TOTAL BID PRICE				\$91,860.00

Table A2.
South Platte Decision Support System, Phase 2
Direct-Push Technology Monitoring Well Price List
Engineering Estimate

ESTIMATED COST SCHEDULE, ONE LOCATION

COST ASSUMING PROTECTIVE BOLLARDS ARE REQUIRED

Item*	Estimated Quantity	Unit	Unit Price	Amount
1. Mobilization and Set Up**	1	Each	\$150.00	\$150.00
2. Advance EC probe to 60 ft, Install 60 ft piezometer, Collect two Discrete Samples**	0.5	Day	\$2,000.00	\$1,000.00
3. Furnish and install 1-inch diameter piezometer with Surface Completion***	1	Each	\$250.00	\$250.00
4. Steam Cleaner and Group Pump**	0.5	Day	\$150.00	\$75.00
5. Per Diem for 2-Person Crew**	0.5	Day	\$150.00	\$75.00
6. EC Borehole Abandonment	1	Each	\$5.00	\$5.00
7. Furnish and Install Three Protective Steel Bollards	1	Location	\$200.00	\$200.00
8. Standby time (included in daily rate)	0	Hours		\$0.00
TOTAL PRICE PER WELL, WITH PROTECTIVE BOLLARDS				\$1,755.00

COST ASSUMING PROTECTIVE BOLLARDS ARE NOT REQUIRED

Item*	Estimated Quantity	Unit	Unit Price	Amount
1. Mobilization and Set Up**	1	Each	\$150.00	\$150.00
2. Advance EC probe to 60 ft, Install 60 ft piezometer, Collect two Discrete Samples**	0.5	Day	\$2,000.00	\$1,000.00
3. Furnish and install 1-inch diameter piezometer with Surface Completion***	1	Each	\$250.00	\$250.00
4. Steam Cleaner and Group Pump**	0.5	Day	\$150.00	\$75.00
5. Per Diem for 2-Person Crew**	0.5	Day	\$150.00	\$75.00
6. EC Borehole Abandonment	1	Each	\$5.00	\$5.00
7. Furnish and Install Three Protective Steel Bollards	0	Location	\$200.00	\$0.00
8. Standby time (included in daily rate)	0	Hours		\$0.00
TOTAL PRICE PER WELL, WITHOUT PROTECTIVE BOLLARDS				\$1,555.00

*Detailed descriptions of each line item are provided in the technical specifications.

** Assumes a 10-day field program and completion of two to three locations per day.

*** Assumes prepack screens will not be required

Table A3.
South Platte Decision Support System, Phase 2
Hollow-Stem Auger Monitoring Well Price List
Engineering Estimate

ESTIMATED COST SCHEDULE, ONE LOCATION

Item	Estimated Quantity	Unit	Unit Price	Amount
1. Mobilization and Set Up*	1	Each	\$250.00	\$250.00
2. Drill and continuously sample 8" borehole to 120 ft.	120	Feet	\$18.00	\$2,160.00
3. Furnish and install 2" diameter, schedule 40 PVC millslopped well screen with flush threaded joints with filter pack	20	Feet	\$17.00	\$340.00
4. Furnish and install 2", schedule 40 PVC casing with flush threaded joints with annular bentonite and grout	100	Feet	\$17.00	\$1,700.00
5. Furnish and install protective steel cover and pad and three protective bollards; restore site	1	Each	\$325.00	\$325.00
6. Develop well	2	Hours	\$110.00	\$220.00
7. Per Diem for 2-Person Crew	3	Day	\$150.00	\$450.00
8. Standby time	0	Hours	\$150.00	\$0.00
TOTAL PRICE PER WELL				\$5,445.00

Assumes that two wells will be installed in one mobilization

Table A4.
South Platte Decision Support System, Phase 2
Monitoring Well Price Summary
Engineering Estimate

Type of Wells	Expected Number of Installations	Cost per Well	Total by Type
Direct Push Wells, Without Protective Steel Bollards	10	\$1,555	\$15,550
Direct Push Wells, With Protective Steel Bollards	15	\$1,755	\$26,325
Hollow-Stem Auger Wells, With Protective Steel Bollards	2	\$5,445	\$10,890
Bedrock Monitoring Well	1	\$91,860	\$91,860
Total Estimated CDM Drilling Subcontractor Costs	28		\$144,625