



Appendix C- Operating Costs

- C.1a Operating Costs 8,000gpm
- C.1b Operating Costs 4,000gpm



C.1a Operating Costs 8,000gpm



1550 Dover Street
Lakewood, CO 80215
Phone: 303-623-8365

Made By: Daniel Trump
Date: October 20th, 2010
Chckd By: _____
Date: _____
CLIENT: Roca Honda Resources - Strathmore
LOCATION: Grants, New Mexico
Job Number: 10034

Operating Costs; Roca Honda WTP 8000gpm

Electric Power Consumption

	Capacity GPM	Operating Hours/day	Electrical Demand (kWh)	Power Cost/kWh	Cost/day	Cost/Yr (\$)
Water Treatment Plant (all)	8000	24.0	724	\$ 0.060	\$ 1,043	\$ 375,511
*Power Costs based on Lyntek Phase 1 report, April 22nd 2010					\$ 1,043	\$ 375,511

Reagents

	Capacity GPM	Operating Hours/day	Consumption (lb/min)	Cost (\$/lb)	Cost/day	Cost/Yr (\$)
Barium Chloride	8000	24.0	1.00	\$1.25	\$ 1,803	\$ 648,979
Diatomaceous Earth	8000	24.0	0.09	\$0.50	\$ 64	\$ 23,143
Resin	5% per year	24.0	271 ft3/year	\$125.00 /cuft	\$ 93	\$ 33,929
*Diatomaceous Earth estimated using 2 filter press coatings per week.					\$ 1,960	\$ 706,051
*Barium Chloride consumption estimated at 15ppm dosing						

Scheduled Maintenance

	Cost/day	Cost/Yr (\$)
Maintenance Cost	\$ 347	\$ 125,000
*5% of equipment Cost Annually	\$ 347	\$ 125,000

Labor Costs

	# of Personel	Shifts per day	Annual Salary	Cost/day	Cost/Yr (\$)
Plant Operators	2	3	\$ 45,000	\$ 740	\$ 270,000
Laboratory Technician	1	1	\$ 45,000	\$ 123	\$ 45,000
Plant Foreman	1	1	\$ 65,000	\$ 178	\$ 65,000
				\$ 1,041	\$ 380,000

Water Quality Testing

	Tests	Cost	Cost/day	Cost/Yr (\$)	
In House Uranium	7 Tests/Week	0	\$ -	\$ -	
In House Radium	7 Tests/Week	\$200 /test	\$ 199	\$ 72,800	
Outside Uranium	2 Tests/Week	\$28 /test	\$ 8	\$ 2,912	
Outside Radium	2 Tests/Week	\$208 /test	\$ 59	\$ 21,632	
*Radium outside lab test provided by Evergreen Analytical				\$ 267	\$ 97,344
*In House Uranium tests can be performed as frequently as desired at minimal operating costs					

Total Cost **Cost/day** **Cost/Yr (\$)**
\$ 4,658 **\$ 1,683,907**

Notes:

\$0.41 **\$/thousand gallons**

- (1) Operating Days/Yr 360
- (2) Operating GPM 8000
- (3) Operating Gallons/Yr 4,147,200,000
- (4) WTP availability 100%
- (5) Operations are on a 24-hour basis
- (6) Contingency is NOT Included
- (7) BaCl dosed at 15ppm
- (8) Diatomaceous Earth requires precoating only, twice per week, at a density of 16lb/ft³
- (9) Outside Testing Costs provided by Evergreen Analytical - Radium test performed by hazen for radium 226 and 228



C.1b Operating Costs 4,000gpm



1550 Dover Street
Lakewood, CO 80215
Phone: 303-623-8365

Made By: Daniel Trump
Date: October 20th, 2010
Chckd By: _____
Date: _____
CLIENT: Roca Honda Resources - Strathmore
LOCATION: Grants, New Mexico
Job Number: 10034

Operating Costs; Roca Honda WTP 4000gpm

Electric Power Consumption

	Capacity GPM	Operating Hours/day	Electrical Demand (kWh)	Power Cost/kWh	Cost/day	Cost/Yr (\$)
Water Treatment Plant (all)	4000	24.0	362	\$ 0.060	\$ 521	\$ 187,661
*Power Costs based on Lyntek Phase 1 report, April 22nd 2010					\$ 521	\$ 187,661

Reagents

	Capacity GPM	Operating Hours/day	Consumption (lb/min)	Cost (\$/lb)	Cost/day	Cost/Yr (\$)
Barium Chloride	4000	24.0	0.50	\$1.25	\$ 901	\$ 324,490
Diatomaceous Earth	4000	24.0	0.04	\$0.50	\$ 32	\$ 11,571
Resin	5% per year	24.0	271 ft3/year	\$125.00 /cuft	\$ 93	\$ 33,929
*Diatomaceous Earth estimated using 2 filter press coatings per week.					\$ 1,026	\$ 369,990
*Barium Chloride consumption estimated at 15ppm dosing						

Scheduled Maintenance

	Cost/day	Cost/Yr (\$)
Maintenance Cost	\$ 347	\$ 125,000
*5% of equipment Cost Annually	\$ 347	\$ 125,000

Labor Costs

	# of Personnel	Shifts per day	Annual Salary	Cost/day	Cost/Yr (\$)
Plant Operators	2	3	\$ 45,000	\$ 740	\$ 270,000
Laboratory Technician	1	1	\$ 45,000	\$ 123	\$ 45,000
Plant Foreman	1	1	\$ 65,000	\$ 178	\$ 65,000
				\$ 1,041	\$ 380,000

Water Quality Testing

	Tests	Cost	Cost/day	Cost/Yr (\$)
In House Uranium	7 Tests/Week	0	\$ -	\$ -
In House Radium	7 Tests/Week	\$200 /test	\$ 199	\$ 72,800
Outside Uranium	2 Tests/Week	\$28 /test	\$ 8	\$ 2,912
Outside Radium	2 Tests/Week	\$208 /test	\$ 59	\$ 21,632
			\$ 267	\$ 97,344

*Radium outside lab test provided by Evergreen Analytical

*In House Uranium tests can be performed as frequently as desired at minimal operating costs

Total Cost	Cost/day	Cost/Yr (\$)
	\$ 3,203	\$ 1,159,995

Notes:

\$0.28 \$/thousand gallons

- (1) Operating Days/Yr 360
- (2) Operating GPM 8000
- (3) Operating Gallons/Yr 4,147,200,000
- (4) WTP availability 100%

(5) Operations are on a 24-hour basis

(6) Contingency is NOT Included

(7) BaCl dosed at 15ppm

(8) Diatomaceous Earth requires precoating only, twice per week, at a density of 16lb/ft³

(9) Outside Testing Costs provided by Evergreen Analytical - Radium test performed by hazen for radium 226 and 228

\$ 173,999.25
\$ 1,333,994