



U.S. Army Corps of Engineers

Huntsville Division

A/E ENMRONMENTAL RESTORATION SERVICES UNDER DERP at SENECA ARMY DEPOT ACTIVITY

Contract No. DACA87-95-D-0031

COST PROPOSAL FOR
ANNEX E
REMEDIAL INVESTIGATIONS / FEASIBILITY STUDIES
AT THE RADIOLOGICAL WASTE BURIAL SITES,
(SEAD-12),
SENECA ARMY DEPOT ACTIVITY, ROMULUS, NEW YORK

Prepared For:

U.S. ARMY CORPS OF ENGINEERS HUNTSVILLE DIVISION

Prepared By:

PARSONS ENGINEERING SCIENCE, INC.

MARCH 25, 1996

PARSONS ENGINEERING SCIENCE, INC.

Prudential Center • Boston, Massachusetts 02199-7697 • (617) 859-2000 • Fax: (617) 859-2043

March 25, 1996

Ms. Susan Wilson
AE Contracts Division
ATTN: CEHNC-PM-AE
Department of the Army
U. S. Army Engineering and Support Center, Huntsville
4820 University Square
Huntsville, AL 35816-1822

SUBJECT: Contract DACA87-95-D-0031 Revised Cost Proposal for Annex E, Performance of an RI/FS at SEAD-12, The Radiological Waste Burial Sites, Located at the Seneca Army Depot Activity (SEDA), Romulus, NY

Dear Ms. Wilson:

Parsons Engineering Science, Inc. (Parsons ES) is pleased to submit two copies of our revised cost proposal for performing the RI/FS at SEAD-12, the Radiological Waste Burial Sites located at Seneca Army Depot Activity (SEDA) in Romulus, NY. The work to be performed under this delivery order is described in Annex E of the above referenced contract. This cost proposal reflects the negotiated revisions to our original February 21, 1996 cost estimate for labor, ODCs and subcontractor costs that will be required to perform the tasks identified in the Statement of Work (SOW).

We have included our signed SF1411, the summary cost sheets for our cost estimate and the certificate of current cost or pricing data. Parsons ES appreciates this opportunity to provide you with this revised cost proposal. Please contact Mr. Michael Duchesneau at (617) 859-2492 should you have any questions.

Sincerely,

PARSONS ENGINEERING SCIENCE, INC.

Mr. Wilson H. Rownd, P.E. Vice President

MND/:cf Enclosure Mr. Michael N. Duchesneau, P.E.

Program Manager



CONTRACT PRICING PROPOSAL COVER SHEET (Cost or Pricing Data Required)

1.SOLICITATION/CONTRACT/MODIFICATION NUMBER

DACA87-95-D-0031

OMB NO.: 9000-0013

Expires: 09/30/98

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Mr. Wilson Rownd Vice President Parsons Engineering Science, Inc. 17 SIGNATURE 18. DATE OF SUBMISSION				1	М	
17 SIGNATURE 18. DATE OF SUBMISSION			(1300)			cience. Inc.
	m. Trace. Home					
	17 SIGNATURE					SUBMISSION

CERTIFICATE OF CURRENT COST OR PRICING DATA

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section 15.801 of the Federal Acquisition Regulation (FAR) and required under FAR subsection 15.804-2) submitted, either actually or by specific identification in writing, to the Contracting Officer or the Contracting Officer's Representative in support of Contract DACA87-95-D-0031, Annex E, are accurate, complete, and current as of March 25, 1996. This certification includes the cost or pricing data supporting any advance agreements between the offeror and the Government that are part of the proposal.

	Firm: Parsons Engineering Science, Inc.
	Name:
	Title:
Date of Execution:	

COST AND PRICING DATA FOR COST PROPOSAL FOR ANNEX E TO CONTRACT NO. DACA87-95-D-0031

- 1.0 LABOR AND OVERHEAD RATES. Direct labor rates used in preparing the cost proposal for the base Scope of Work tasks are the base year rates contained in the subject contract. Direct labor rates for the optional Scope of Work tasks are the Base Year 1 rates contained in the subject contract. Overhead rates used in preparing the cost proposal are the rates contained in the subject contract. The rates are applied in accordance with our disclosure statement.
- 2.0 JUDGMENTAL FACTORS. The number of labor hours and quantities of other items required to perform each task are estimated using engineering judgment and analysis of the work to be performed. The analysis considered the difficulty and complexity of each work element and assumed efficient use of resources to accomplish the tasks. Where possible, the records of efforts required to perform similar types of work were used to estimate the labor hour requirements. The mix of labor categories to accomplish tasks was designed to minimize the overall cost.

The estimated labor hours for each labor category required to perform each task described in Annex E are identified in the cost proposal.

3.0 TRAVEL AND LIVING EXPENSES

- 3.1 <u>Air Travel</u>. Air fares used are standard coach fares obtained by contacting Thomas Cook Travel, Boston Massachusetts.
- <u>3.2</u> Personal Automobile. A rate of \$0.31/mile was used for personal automobile use.
- 3.3 Rental Cars. Automobile rental rates are based on \$55/day. The daily rental rate was formulated on the following methodology:

Daily rental mid-size car	\$38.00/day
Excess mileage @ \$0.23/mile	
(estimated @ 100 miles per 3-day trip)	\$7.66/day
Sales tax (@ 7%)	\$2.74/day
Gasoline costs (estimated 18 gallons @ \$1.10/gal	
per 3-day trip)	\$6.60/day
TOTAL	\$55.00/day

Please note that in addition to the rental rate shown above, tolls and parking costs may be incurred. These were estimated at cost.

<u>9.4</u> Per Diem. Per diem rates are based upon the current FTR rate of \$96/day for the Romulus, New York area.

4.0 OTHER DIRECT COSTS

- 4.1 Reproduction Costs. Costs for photocopies are based on the current estimated cost of \$0.05/copy, and bluelines on the current estimated cost of \$1.00/Sheet. These costs have been reviewed by DCAA and accepted by our ACO.
- <u>4.2</u> <u>Equipment.</u> Equipment costs are based on the Parsons ES standard schedule included in Section 2 of our cost proposal for the basic contract.
- 4.3 <u>Telephone/Telex.</u> Rates for telephone calls were determined using a \$4.00/call tariff. Fax costs were estimated at \$1.00 per page.
- 4.4 Postage.
 - 4.4.1 U.S. Mail Letters, The rates are current postal rates of \$0.54 per letter.
 - 4.4.2 Express Mail, The rates proposed are based on \$14.50 each for standard overnight letter, and \$96.25 for 50 lb package.
- 4.5 Computer Usage. Costs for computer usage are based on current estimated costs of \$5.00/hour for CADD and \$3.70/hour for word processing and technical calculations on personal computers. These costs have been reviewed by DCAA and accepted by our ACO.

5.0 SUBCONTRACTORS

Analytical Costs. Analytical costs are based upon the unit prices from our team subcontractor Inchcape Testing Services, Aquatec Laboratories, of Colchester, VT that are contained in the subject contract. Unit prices used in preparing the cost proposal for the base Scope of Work tasks are the base year rates.

Analytical costs for the radiological samples were solicited from four (4) subcontractors: Core Laboratories Inc., Accu-Labs Research, Inc., Babcock & Wilcox (Nuclear Environmental Services, Inc.) and Davi Laboratories, Environmental Associates. Davi Laboratories, Environmental Associates is a small-woman owned business and Accu-Labs Research is a small business. The lowest bid was received from a cost quotation from Core Laboratories of Casper WY and we have included these costs as part of our cost proposal and attached the cost quotation as back-up. Parsons ES will provide Huntsville with the request to subcontract following our cost negotiations.

- <u>Surveying.</u> Surveying costs are based upon a quotation received from our team subcontractor Modi Engineers and Land Surveyors using the labor and overhead rates included in the subject contract. Modi Engineers and Land Surveyors is a small minority business enterprise. The cost quotation from Modi has been attached as part of our cost proposal. Parsons ES will provide Huntsville with the request to subcontract following our cost negotiations.
- <u>Photogrammetry.</u> Photogrammetry costs are based upon a quotation received from our team subcontractor Lockwood Mapping, Inc. using the labor and overhead rates included in the subject contract. Lockwood Mapping is a small business enterprise. The cost

quotation from Lockwood has been attached as part of our cost proposal. Parsons ES will provide Huntsville with the request to subcontract following our cost negotiations.

- <u>5.4</u> <u>Drilling.</u> Unit price drilling cost quotations were solicited from three subcontractors: Huntingdon, North Star Drilling, and American Auger. North Star Drilling and American Auger are Small Businesses. The lowest evaluated bid was received from North Star Drilling and their costs are included in this proposal and attached as back-up.
- <u>Waste Disposal</u> Unit price quotations for waste disposal were solicited from two subcontractors: Environmental Waste Resources, Inc. of Waterbury, CT, and Clean Harbors, Inc. of Rochester, NY. Only Environmental Waste Resources responded and their costs are included in this proposal and attached as back-up.
- <u>5.6</u> <u>Mark-up on Subcontractors</u> A 3% material handling reimbursable cost was applied on all Subcontractor charges in accordance with our basic contract negotiation agreement.

Huntsville Division

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

SUMMARY

7 Item Breakdown Tasks 1 thru 13

(' /					
		TASK	HOURS		AMOUNT
		Task # 1 Task # 2 Task # 3 Task # 4 Task # 5 Task # 6 Task # 7 Task # 8 Task # 9 Task # 10 Task # 11 Task # 12 Task # 13	1,348 9,284 150 200 152 256 800 1,000 140 700 700 600 580		\$27,851 \$205,862 \$4,993 \$6,658 \$3,744 \$6,382 \$22,436 \$24,932 \$4,186 \$17,449 \$17,168 \$18,672 \$23,912
(2)	DIRECT LABOR		15,910		\$384,245
(3)	OVERHEAD ON DIREC	T LABOR		1.43	\$549,470
(4)	GEN and ADMIN OVER	HEAD (inc. ir	a 3 above)		\$0
(5)	MATERIALS and SUPPI	LIES			\$27,204
(6)	TRAVEL				\$164,758
(7)	OTHERS				\$213,413
			SUBTOTAL	ITEMS 1-7	\$1,339,089
(8)	SUBCONTRACTOR				\$913,792
			PROJECT T	OTAL	\$2,252,882
(9)	PROFIT or FEE 4.78%	6 Percent	t of project tot	al.	\$107,759
			TOTAL EST	IMATE	\$2,360,641

Client:

.. Army Corps of Engineers

Printed:

∠-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Huffisville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

FEE

DISTRIBUTION

Tasks 1 thru 13

TASK	AMOUNT	SUBCONTRACTOR	AMT W/O	<u>FEE</u>	TOTAL
			SUBCONTRACTOR		
3					
Task # 1	\$94,849	\$0	\$94,849	\$5,691	\$100,540
Task # 2	\$1,706,222	\$913,792	\$792,430	\$74,960	\$1,781,182
Task #3	\$12,818	\$0	\$12,818	\$769	\$13,588
Task#4	\$17,219	\$0	\$17,219	\$1,033	\$18,252
Task # 5	\$10,330	\$0	\$10,330	\$620	\$10,949
Task # 6	\$15,658	\$0	\$15,658	\$939	\$16,598
Task#7	\$55,575	\$0	\$55,575	\$3,334	\$58,909
Task#8	\$89,320	\$0	\$89,320	\$5,359	\$94,679
Task # 9	\$10,597	\$0	\$10,597	\$636	\$11,232
Task # 10	\$43,874	\$0	\$43,874	\$2,632	\$46,506
Task # 11	\$72,799	\$0	\$72,799	\$4,368	\$77,166
Task # 12	\$59,319	\$0	\$59,319	\$3,559	\$62,878
Task # 13	\$64,303	\$0	\$64,303	\$3,858	\$68,161
	=======	=======	=======	=======================================	
TOTAL	\$2,252,882	\$913,792	\$1,339,089	\$107,759	
					======
PROJECT TOTA	AL				\$2,360,641

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate:

143%

SEAD-12 Annex E

Prop No: 979002-00001

SUMMARY

Base Tasks 1 thru 13

Prop No: 9/9002-00001					Mark
	Unit	Linito	Quantity	Cost	Notos
LABOR COSTS	Cost	Units	Quantity	Cost	<u>Notes</u>
EABOR COOTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	100	\$5,874	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Destructional Level E Chan 4 (DES)	CAA 44	/h	1160	¢ E1 2E6	
Professional Level 5, Step 4 (P58)	\$44.11		1162	\$51,256 \$7,508	
Professional Level 5, Step 3 (P56)	\$37.99		200	\$7,598	
Professional Level 5, Step 2 (P54)	\$32.91		1205	\$39,657	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	240	\$7,054	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	2020	\$58,843	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	2134	\$53,777	
D 5	004.04		0	# 0	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	110	\$2,540	
Professional Level 2, Step 1 (P22)	\$19.89	/hour	1931	\$38,408	
Drafaccional Level 1 Stop 2 (D19)	\$18.57	/bour	3399	\$63,119	
Professional Level 1, Step 2 (P18) Professional Level 1, Step 1 (P12)	\$14.84		416	\$6,173	
Professional Level 1, Otep 1 (1 12)	Ψ14.04	Modi	110	ψο, τ τ σ	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	680	\$14,348	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	1655	\$27,440	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
			_		
Technician Level 3, Step 2 (T38)	\$13.99		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
redifficial Level 1 (113)	Ψ0.03	mour	Ŭ	ΨΟ	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	658	\$8,159	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST			15910	\$384,245	
Contract Year: 1				• •	
Base Yr					

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$549,470

\$933,715

U.S. Army Corps of Engineers Huntsville Division Client:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

SUMMARY

Base Tasks 1 thru 13

	Unit				
	Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES			,		
W/ (12) (1/20 / 1/12 00) (1/20					
Bottle labels	\$20.00	/roll	6	\$120	
40 mL VOA Vials	\$122.74	/case	8	\$982	
1 Liter Amber Bottles	\$37.95	/case	23	\$873	
32 oz. HDPE Bottles	\$30.75	/case	11	\$338	
Braided Nylon Rope	\$0.15	/foot	500	\$75	
Bubble Pack	\$84.00	/roll	12	\$1,008	
Decon Eqt	\$18.00	/kit	12	\$216	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	27	\$378	
Ice	\$1.00	/bag	100	\$100	
Latex Gloves	\$10.00	/box	40	\$400	
Methanol (Optima)	\$25.00	/bottle	7	\$175	
Hexane (Optima)	\$25.00	/bottle	2	\$50	
Acetone (Optima)	\$50.00	/b o ttle	2	\$100	
HCI (Optima)	\$285.00	/bottle	5	\$1,425	
HNO3 (Optima)	\$175.00	/bottle	5	\$875	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	883	\$3,532	
Respirator Cartridges	\$15.00	/pair	218	\$3,270	
Packing Tape (doz)	\$72.00	/case	7	\$504	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	13	\$520	
Radiological Badges	\$20.00	each	34	\$680	
Aluminum Foil	\$1.00		10	\$10	
Stain Stl bwl/spn	\$30.00	/set	16	\$480	
Survey Stake/Flag	\$20.00	/bundle	46	\$920	
Teflon tape	\$8.00		0	\$0	
Tyveks	\$6.30		889	\$5,601	
Water (HPLC Grade)	\$97.00	/case	31	\$3,007	
Ziplock bags	\$3.00		13	\$39	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00		10	\$150	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	86	\$1,376	

SUBTOTAL MATLS & SUPPLIES:

\$27,204

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E Prop No: 979002-00001

SUMMARY

Base Tasks 1 thru 13

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	49	\$24,500	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	•	892	\$85,632	
Subsistence-Huntsville	\$89.00	•	0	\$0	
Parking, Airport	\$13.00	•	728	\$9,464	
Auto Rental	\$55.00	•	374	\$20,570	
Suburban\Van rental	\$585.00		40.5	\$23,693	
Mileage	\$0.31	/mile	2900	\$899	
		SUBTOTA	AL TRAVEL:	\$164,758	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		1470	\$5,880	
Word Proc/PC	\$3.70		628	\$2,324	
CADD	\$5.00		260	\$1,300	
Facsimile	\$1.00	/page	2930	\$2,930	
Overnight Express					
Letter/2 lb pack	\$14.50		197	\$2,857	
Package (50 lbs)	\$96.25		316	\$30,415	
Mail 4-lb pack		/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	tal Services		_	\$45,705	
REPRODUCTION					
Photocopier		/page	501400	\$25,070	
Aerial Photo repro	\$10.00	•	10	\$100	
Blueline repro	•	/Sheet	5670	\$5,670	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		957	\$14,355	
Color Copies	\$2.00	/page	2585	\$5,170	
Subto	tal Reproduction	n		\$50,365	

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

SUMMARY

RI/FS at the Radiological Disposal Areas

Base Tasks 1 thru 13

SEAD-12 Annex E Prop No: 979002-00001

	Unit	1 (-14-	Quantity	Cost	Natas
EQUIPMENT RENTAL	<u>Cost</u>	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
EQUI MENT KENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	16	\$880	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00		5	\$250	
Flow thru pH/Cond meter	\$257.00	/week	4	\$1,028	
DO meter	\$55.00	/week	5	\$275	
Soil Gas Supplies	\$50.00	/day	8	\$400	
Slug test eqt	\$50.00	/week	2	\$100	
Water level ind	\$40.00	/week	8	\$320	
Turbidimeter	\$30.00	/week	4	\$120	
Data Logger, Trnsdcr	\$135.00	/day	2	\$270	
Flow Meter	\$30.00	/week	2	\$60	
Water coolers	\$40.00	/month	11.5	\$460	
Equipment Trailer	\$1,000.00	/month	11.5	\$11,500	
Grundfus Redi Flow Pump	\$64.00	/day	37	\$2,368	
PUF Sampler	\$150.00	•	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	-	6	\$450	
Hi- Vol Sampler Calibration Kit	\$25.00		14	\$350	
Ponar Sediment Sampler	\$27.00	-	11	\$297	
3.2 kw Generator	\$50.00	•	37	\$1,850	
Seismograph	\$200.00		5	\$1,000	
EM-31	\$85.00	-	150	\$12,750	
GPR	\$500.00	•	15	\$7,500	
0.14	4-1-04-1			¢42.228	
Subto	otal Rental			\$42,228	
EALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	419	\$20,950	
Alpha Survey Meter	\$80.00	/week	300	\$24,000	
Alpha Scintillation Counter	\$100.00	/week	9	\$900	
Beta Sample Counter	\$100.00	/week	9	\$900	
Gas Proportional Detector	\$100.00	/week	9	\$900	
Gas Prop. Detector-Floor	\$100.00	/week	8	\$800	
Radon Monitor	\$300.00	/week	2	\$600	
Gamma Radiation Meter	\$50.00	/day	372	\$18,600	
Calib Gas	\$10.00	/day	392	\$3,920	
2-way radios		/ea/wk	74	\$1,110	
Air Purif Resp	\$20.00		36	\$720	
10-Gal Eye Wash	\$35.00		49	\$1,715	
Combination SCBA/SAR	\$150.00		0	\$0	
				Φ75.445	
Subto	otal H & S			\$75,115	

SUBTOTAL OTHERS: \$213,413

SUBTOTAL LABOR & ODC'S: \$1,339,089

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

SUMMARY

Base Tasks 1 thru 13

F100 NO. 979002-00001	Unit			_	
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAB	BORATORY	'ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		160	\$64,000	
Pest./PCBs (TCL)	\$180.00		160	\$28,800	
Total Metals & CN(TAL)	\$170.00		160	\$27,200	
Iron(Ferrous)	\$30.00		74	\$2,220	
Sulfide	\$30.00		74	\$2,220	
Spec Cond(EPA 9050)		each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		117	\$2,925	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	74	\$4,440	
Sulfate(EPA 300)	\$25.00	each	74	\$1,850	
COD	\$50.00	each	74	\$3,700	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	226	\$44,070	
Hardness(EPA 130.2)	\$15.00	each	117	\$1,755	
Alkalinity(EPA 310)	\$12.00	each	117	\$1,404	
Nitrate (EPA 353.2)	\$20.00	each	117	\$2,340	
SOILS - SURFACE or SUBSURFACE LABOR	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00		306	\$55,080	
B/N/A (TCL)	\$400.00		306	\$122,400	
Pest./PCBs (TCL)	\$180.00		306	\$55,080	
Total Metals & CN(TAL)	\$170.00		306	\$52,020	
Spec Cond(EPA 9050)		each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	55	\$3,300	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	55	\$440	
Nitrate (EPA 353.2)	\$20.00	each	306	\$6,120	
Subtotal	Team Labor	ratory	<u></u>	\$481,364	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	55	\$6,600	
TCLP	\$1,500.00		12	\$18,000	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00	each	15	\$525	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	43	\$860	
Total Dissolved Solids	\$20.00	each	117	\$2,340	
Ammonia	\$25.00	each	43	\$1,075	
Phosphate	\$25.00	each	43	\$1,075	
Cation Exchange Capacity	\$100.00	each	55	\$5,500	

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001

Project:

22-Mar-96 Printed:

Parsons Engineering Science, Inc.

SUMMARY

Base Tasks 1 thru 13

Prop No: 979002-00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY A		<u></u>	Man init	<u> </u>	1,10100
Vater Samples For:					
Thorium 232, 230, 227	\$60.00	each	157	\$9,420	
Uranium 238, 235, 233+23			157	\$9,420	
Radium 226,223	\$40.00		157	\$6,280	
Pb214&211,Bi214,Ce137,			157	\$12,560	
Plutonium 239 + 240	\$65.00		157	\$10,205	
Americium 241	\$65.00		157	\$10,205	
Gross AlphaΒ	\$45.00		157	\$7,065	
oil Samples For:	* . = . = .			4.,555	
Thorium 232, 230, 227	\$60.00	each	399	\$23,940	
Uranium 238, 235, 233+23			399	\$23,940	
Radium 226,223	\$40.00		399	\$15,960	
Pb214&211,Bi214,Ce137,			399	\$0	
Plutonium 239 + 240	\$65.00		399	\$25,935	
Americium 241	\$65.00		399	\$25,935	
Gamma Spectrometry	\$0.00	040		420,000	
Dist. Coef.(ASTM D:4319-		each	8	\$6,000	
Sample Prep/Return	\$0.00		399	\$0	
Vipe Samples For:	Ψ0.00	04011		4.5	
Thorium 232, 230, 227	\$60.00	each	134	\$8,040	
Uranium 238, 235, 233+23			134	\$8,040	
Radium 226,223	\$40.00		134	\$5,360	
Pb214&211,Bi214,Ce137,			134	\$10,720	
Plutonium 239 + 240	\$65.00		134	\$8,710	
Americium 241	\$65.00		134	\$8,710	
Gross AlphaΒ	\$45.00		134	\$6,030	
Cross / Aprila abeta	Ψ10.00	Cuon	101	Ψ0,000	
IR SAMPLES LABORATORY ANA	LYSIS				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		100	\$2,500	
, tagen (rapida ram)	+ =			4 =,000	
	Subtotal Misc. Labora	itory		\$280,950	
IVESTIGATION SUBCONTRACTO	ORS				
Driller	Lump Sum	each	50515	\$50,515	
Photogrammetry	Lump Sum		31600	\$31,600	
IDW Disposal	Lump Sum		9990	\$9,990	
Surveyor	Lump Sum		32758	\$32,758	
	Subtotal Investigation			\$124,863	

3% Mark-up: SUBTOTAL SUBCONTRACTORS:

Subtotal Laboratory & Investigation Subcontractors:

\$887,177

\$913,792

\$26,615

TASK TOTAL: \$2,252,882

Project:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task#1

Preliminary Investigations

\$67,678

Prop No: 979002-00001					
	Unit	Unito	Quantity	Cost	Notos
_ABOR COSTS	Cost	Units	Quantity	Cost	Notes
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	20	\$882	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		44	\$1, 44 8	
Professional Level 5, Step 2 (754)	\$29.39		0	\$0	
Professional Level 3, Step 1 (F32)	φ29.39	moui	O	φυ	
Professional Level 4, Step 2 (P48)	\$29.13		280	\$8,156	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	20	\$462	
Professional Level 2, Step 1 (P22)	\$19.89		228	\$4,535	
Drafaggianal Layel 1 Ston 2 (D19)	\$18.57	/bour	280	¢5 200	
Professional Level 1, Step 2 (P18) Professional Level 1, Step 1 (P12)	\$16.57 \$14.84		416	\$5,200 \$6,173	
ECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Tarketian Lauri A. Ohn O. (TAO)	¢46.50	// ₂ - 2 - 2 - 2	60	\$205	
Technician Level 4, Step 2 (T48)	\$16.58		60	\$995	
Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
OTAL HOURS/LABOR COST Contract Year: 1			1348	\$27,851	
Base Yr			Labora Doort	400.007	
Overhead Rate: 143%			Labor Burden:	\$39,827	

SUBTOTAL BURDENED LABOR:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Task#1

Preliminary Investigations

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00		0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	5	\$70	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	5	\$50	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	100	\$400	
Respirator Cartridges	\$15.00	/pair	50	\$750	
Packing Tape (doz)	\$72.00	/case	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	2	\$80	
Radiological Badges	\$20.00	each	5	\$100	
Aluminum Foil	\$1.00	/roll	10	\$10	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	5	\$100	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	100	\$630	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	10	\$30	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$2,292

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Task#1

Preliminary Investigations

	Unit		•	• .	
TRAVEL	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
IIAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	4	\$2,000	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	135	\$12,960	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking,Airport	\$13.00	/day	60	\$780	
Auto Rental	\$55.00	/day	30	\$1,650	
Suburban\Van rental	\$585.00	/week	4	\$2,340	
Mileage	\$0.31	/mile	100	\$31	
		SUBTOTA	AL TRAVEL:	\$19,761	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	60	\$240	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	60	\$60	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	10	\$963	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	otal Services			\$1,263	
REPRODUCTION					
Photocopier	\$0.05		5500	\$275	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00	each	0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subto	tal Reproduction	n		\$275	

Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task#1

Preliminary Investigations

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
EQUIPMENT RENTAL					
FARTH SCIENCES FOLIDMENT					
EARTH SCIENCES EQUIPMENT	¢55.00	huook	0	0.9	
Bailer	\$55.00		0	\$0 \$0	
Magnetometer	\$42.00	•	0	\$0 ***	
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00	•	0	\$0	
Slug test eqt	\$50.00		0	\$0	
Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0	
Data Logger,Trnsdcr	\$135.00	-	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	1	\$40	
Equipment Trailer	\$1,000.00	/month	1	\$1,000	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	4	\$300	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	4	\$100	
Ponar Sediment Sampler	\$27.00	-	0	\$0	
3.2 kw Generator	\$50.00	-	0	\$0	
Seismograph	\$200.00	-	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	-	0	\$0	
	,	,		·	
Subtota	al Rental			\$1,440	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/dav	20	\$1,000	
Alpha Survey Meter	\$80.00	•	4	\$320	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		4	\$200	
Calib Gas	\$10.00	•	20	\$200	
2-way radios		/day /ea/wk	8	\$120	
	\$20.00		8	\$120 \$160	
Air Purif Resp	\$20.00 \$35.00		4	\$140	
10-Gal Eye Wash			0	•	
Combination SCBA/SAR	\$150.00	ruay	U	\$0	
Subtota	al H & S			\$2,140	

SUBTOTAL OTHERS:

\$5,118

SUBTOTAL LABOR & ODC'S:

\$94,849

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

Task # 1

RI/FS at the Radiological Disposal Areas SEAD-12

Preliminary Investigations

Annex E Prop No: 979002-00001

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABO	RATORY	ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
	\$180.00		Ö	\$0	
Pest./PCBs (TCL)	\$170.00		0	\$0 \$0	
Total Metals & CN(TAL)			0	\$0 \$0	
Iron(Ferrous)	\$30.00				
Sulfide	\$30.00		0	\$0 \$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$ 0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
Miliate (LFA 333.2)	Ψ20.00	Caon	v	ΨΟ	
SOILS - SURFACE or SUBSURFACE LABORA	TORY AN	IALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
,	\$25.00		0	\$0	
Chloride(EPA 9250)	\$8.00		0	\$0	
pH (EPA 9045)			0	\$ 0	
Nitrate (EPA 353.2)	\$20.00	eacn	U	Φ0	
Subtotal Tea	am Labor	atory		<u>\$0</u>	
		,			
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP \$	1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$ 0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
Callon Exchange Capacity	φ100.00	cacii	U	ΨΟ	

Client:

U.S. Army Corps of Engineers

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task #1

Preliminary Investigations

	Unit			. .	
	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS	5				
Water Samples For:	# 00.00		0	40	
Thorium 232, 230, 227	\$60.00		0	\$0 #0	
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:	***				
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Subtotal	Investigation	Subcontrac	etors	\$0	
Subtotal La	iboratory & In	vestigation S	Subcontractors:	\$0	
Sastotal Ed	2	. 50	3% Mark-up:	\$0	
	IDTOTAL	21.100021	•	40	

TASK TOTAL:

\$94,849

\$0

SUBTOTAL SUBCONTRACTORS:

U.S. Army Corps of Engineers Huntsville Division Client:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Task # 1a Site Visit and Records Review

Seneca Army Depot Activity, Romulus New York Project: RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Pron No: 979002-00001

Prop No	: 979002-00001					
		Unit	l locito	O + i+ .	0.554	Alakaa
LAROE	R COSTS	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
LADOI	(00010					
ENGINE	EERS AND SCIENTISTS					
	Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
	Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
	Professional Level 5, Step 4 (P58)	\$44.11	/hour	4	\$176	
	Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
	Professional Level 5, Step 2 (P54)	\$32.91	/hour	4	\$132	
	Professional Level 5, Step 1 (P52)	\$29.39		0	\$0	
	D () 11 14 04 04 D40	000.40	4	0.0	4500	
	Professional Level 4, Step 2 (P48)	\$29.13		20	\$583	
	Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
	Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
	Professional Level 2, Step 2 (P28)	\$23.09	/hour	20	\$462	
	Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
	· · · · · · · · · · · · · · · · · · ·	******			**	
	Professional Level 1, Step 2 (P18)	\$18.57	/hour	0	\$0	
	Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNI	CAL AND SUPPORT SPECIALISTS					
	Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
	redifficial Level o (100)	Ψ21.10	modi	· ·	Ψ	
	Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
	Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
	Tachnician Loyal 2 Stan 2 (T29)	\$13.99	/hour	0	0.2	
	Technician Level 3, Step 2 (T38)			0	\$0 \$0	
	Technician Level 3, Step 1 (T32)	\$11.61	mour	0	\$0	
	Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
	Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
	Support Level 3 (S35)	\$20.61	/hour	0	\$0	
	Support Level 2 (S25)	\$12.40	/hour	0	\$0	
	Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL Ł	HOURS/LABOR COST			48	\$1,352	
	Contract Year: 1			, -	+ · ,- · =	
	Base Yr					
	Overhead Rate: 143%			Labor Burden:	\$1,934	
	SU	IBTOTAL	BURDE	NED LABOR:	\$3,287	

Huntsville Division

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Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Teflon Sheeting

Glassware

Quartz Filters Vermiculite Packing

Folding Live Traps

Task # 1a Site Visit and Records Review

Prop No: 979002-00001					
	Unit				, , , , , , , , , , , , , , , , , , , ,
	Cost	<u>Units</u>	<u>Quantity</u>	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00		0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
	# 500.00		0	Φ.Ο.	

SUBTOTAL MATLS & SUPPLIES:

\$500.00 /roll

\$15.00 each

\$25.00 each

\$10.00 each

\$16.00 /bag

\$0

\$0

\$0

\$0

\$0

\$0

0

0

0

0

0

Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

\$25

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 1a Site Visit and Records Review

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/da y	0	\$0	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking, Airport	\$13.00	/da y	0	\$0	
Auto Rental	\$55.00	/day	0	\$0	
Suburban\Van rental	\$585.00	/week	0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SURTOT	AL TRAVEL:	\$0	
		3061017	AL IIIAVLL.	ΨΟ	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		10	\$40	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	10	\$10	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	0	\$0	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Sub	ototal Services			\$50	
REPRODUCTION					
Photocopier	\$0.05	/page	500	\$25	
Aerial Photo repro		/photo	0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod	•	/Sq Ft	0	\$0	
3-ring binders	\$15.00	•	0	\$0	
Color Copies		/page	0	\$0	
	+=	1 3 -	-	• -	

Subtotal Reproduction

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Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 1a Site Visit and Records Review

Prop No: 979002-00001					
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/day	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00		0	\$0	
Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0	
Data Logger,Trnsdcr	\$135.00		0	\$0	
Flow Meter	\$30.00	-	0	\$0	
Water coolers		/month	0	\$0	
Equipment Trailer	\$1,000.00		0	\$0	
Grundfus Redi Flow Pump	\$64.00		0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00		0	\$0	
Hi- Vol Sampler	\$75.00	•	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00		0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	-	0	\$0	
	\$200.00	•	0	\$0 \$0	
Seismograph	\$85.00	•	0	\$0 \$0	
EM-31	\$500.00	•	0	\$0 \$0	
GPR	φ500.00	luay	U	ΨΟ	
College	Dantal		-	\$0	
Subtotal	Rentai			φυ	
LIENT THE CASESTY FOLUDATINE					
HEALTH & SAFETY EQUIPMENT	¢50.00	/ d	0	\$ 0	
HNu Meter	\$50.00	•	0	\$0 \$0	
Alpha Survey Meter	\$80.00		0	\$0 #0	
Alpha Scintillation Counter	\$100.00		0	\$0 #0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00	•	0	\$0	
Calib Gas	\$10.00	-	0	\$0	
2-way radios	\$15.00		0	\$0	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		0	\$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	

SUBTOTAL OTHERS:

\$0

\$75

SUBTOTAL LABOR & ODC'S: \$3,362

Subtotal H & S

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 1a Site Visit and Records Review

Prop No: 979002-00001 Unit Units Quantity Cost **Notes** Cost SUBCONTRACTORS GROUNDWATER or SURFACE WATER LABORATORY ANALYSIS \$180.00 each 0 \$0 Volatiles (TCL) 0 \$0 \$400.00 each B/N/A (TCL) \$180.00 each 0 \$0 Pest./PCBs (TCL) 0 \$0 Total Metals & CN(TAL) \$170.00 each 0 Iron(Ferrous) \$30.00 each \$0 \$30.00 each 0 \$0 Sulfide 0 \$0 Spec Cond(EPA 9050) \$8.00 each 0 \$0 Total Organic Carbon (EPA 9060) \$25.00 each \$50.00 each 0 \$0 TOX (EPA 9056) 0 \$0 \$25.00 each Chloride(EPA 9250) 0 \$0 \$60.00 each BOD \$25.00 each 0 \$0 Sulfate(EPA 300) 0 \$0 \$50.00 each COD \$8.00 each 0 \$0 pH (EPA 9045) \$195.00 each 0 \$0 Volatiles (EPA 524) 0 \$15.00 each \$0 Hardness(EPA 130.2) \$12.00 each 0 \$0 Alkalinity(EPA 310) 0 \$0 \$20.00 each Nitrate (EPA 353.2) SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS 0 \$0 Volatiles (TCL) \$180.00 each 0 \$0 \$400.00 each B/N/A (TCL) 0 \$0 Pest./PCBs (TCL) \$180.00 each 0 \$0 Total Metals & CN(TAL) \$170.00 each 0 \$0 Spec Cond(EPA 9050) \$8.00 each 0 \$0 Total Organic Carbon (L. Kahn) \$60.00 each 0 \$0 \$70.00 each TOX (EPA 9056) 0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 \$8.00 each pH (EPA 9045) 0 \$0 Nitrate (EPA 353.2) \$20.00 each Subtotal Team Laboratory \$0 MISC. LABORATORY ANALYSIS 0 \$0 \$120.00 each Grain Size Dist 0 \$0 **TCLP** \$1,500.00 each 0 \$0 \$15.00 each Moisture Content 0 \$0 \$35.00 each **Bulk Density** \$30.00 each 0 \$0 Chromium (Level II) 0 \$0 \$20.00 each Total Suspended Solids 0 \$0 \$20.00 each Total Dissolved Solids 0 \$0 \$25.00 each Ammonia \$0 \$25.00 each 0 Phosphate

0

\$0

\$100.00 each

Cation Exchange Capacity

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Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 1a Site Visit and Records Review

Prop No: 979002-00001

Prop No: 979002-00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSI					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Soil Samples For:	V .5.00			**	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60		each	0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$ 0	
Gamma Spectrometry	•	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00		0	\$0	
Nipe Samples For:	Ψ0.00	Cuon	v	ΨΟ	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0 \$0	
Gross AlphaΒ	\$45.00		0	\$0	
Gross Alphaddela	φ45.00	Cacii	O	ΨΟ	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00		0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtot	al Misc. Labora	atory		\$0	
NVESTIGATION SUBCONTRACTORS					
	Lumn Cum	each	0	\$0	
Driller Photogrammetry	Lump Sum Lump Sum		0	\$0 \$0	
Photogrammetry	•		_		
IDW Disposal	Lump Sum		0	\$0 \$0	
Surveyor	Lump Sum	eacn	U	\$0	
Subtot	al Investigation	Subcontrac	etors	\$0	
Subtotal L	aboratory & In	vestigation	Subcontractors:	\$0	
	,	0	3% Mark-up:	\$0	
	SUBTOTAL	SUBCON	TRACTORS:	\$0	

TASK TOTAL:

\$3,362

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Overhead Rate: 143%

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 1b

Archaeological Investigations

Prop No: 9/9002-00001						
		Unit	1.1-4-	O	04	Notos
LABOR COSTS		Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
LABOR COSTS						
ENGINEERS AND SCIEN	TISTS					
Professional Lev	el 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
	el 6, Step 1 (P62)	\$46.47		0	\$0	
5 () 11	15.01 4 (75.50)	04444		40	#700	
	el 5, Step 4 (P58)	\$44.11		16	\$706	
	el 5, Step 3 (P56)	\$37.99		0	\$0	
	el 5, Step 2 (P54)	\$32.91		40	\$1,316	
Professional Lev	el 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Lev	el 4, Step 2 (P48)	\$29.13	/hour	260	\$7,574	
	el 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
Professional Lev	el 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Lev	el 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
	el 2, Step 1 (P22)	\$19.89		228	\$4,535	
					45.000	
	el 1, Step 2 (P18)	\$18.57		280	\$5,200	
Professional Lev	el 1, Step 1 (P12)	\$14.84	/hour	416	\$6,173	
TECHNICAL AND SUPPO	RT SPECIALISTS					
Technician Level	5 (T55)	\$21.10	/hour	0	\$0	
Technician Lavel	4 Stop 2 (T48)	\$16.58	/hour	60	\$995	
Technician Level Technician Level		\$14.08		0	\$0	
recilitician Level	4, Step 1 (142)	φ14.00	Modi	Ü	ΨΟ	
Technician Level	3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level	3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level	2 (T25)	\$10.13	/hour	0	\$0	
recillician Level	2 (123)	ψ10.13	Modi	Ŭ	ΨΟ	
Technician Level	1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 ((\$35)	\$20.61	/hour	0	\$0	
Support Level 2 ((\$25)	\$12.40	/hour	0	\$0	
Support Level 1 ((S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR C	OST.			1300	\$26,499	
	ract Year: 1			1300	Ψ20,433	
Cont	Base Yr					
	•					

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$37,893

\$64,392

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 1b

Archaeological Investigations

	Unit				
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	5	\$70	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	5	\$50	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	100	\$400	
Respirator Cartridges	\$15.00	/pair	50	\$750	
Packing Tape (doz)	\$72.00	/case	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	2	\$80	
Radiological Badges	\$20.00	each	5	\$100	
Aluminum Foil	\$1.00	/roll	10	\$10	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	5	\$100	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	100	\$630	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Zipłock bags	\$3.00	/box	10	\$30	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$2,292

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Task # 1b

Archaeological Investigations

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	4	\$2,000	
Airfare Boston\Huntsville	\$900.00		0	\$0	
Subsistence-Seneca	\$96.00	/day	135	\$12,960 4.5	man-months
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking, Airport	\$13.00	/day	60	\$780	
Auto Rental	\$55.00	/day	30	\$1,650	
Suburban\Van rental	\$585.00	/week	4	\$2,340	
Mileage	\$0.31	/mile	100	\$31	
		SUBTOTA	L TRAVEL:	\$19,761	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		50	\$200	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	50	\$50	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$96.25		10	\$963	
Mail 4-lb pack	\$4.10	•	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subtot	tal Services			\$1,213	
REPRODUCTION					
Photocopier	\$0.05		5000	\$250	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subtot	al Reproduction	ı		\$250	

Huntsville Division

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22-Mar-96

Parsons Engineering Science, Inc.

Task # 1b

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Archaeological Investigations

Prop No: 979002-00001

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/day	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	1	\$40	
Equipment Trailer	\$1,000.00	/month	1	\$1,000	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	4	\$300	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	4	\$100	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtota	al Rental			\$1,440	
LUTAL TILLA CAFETY FOLUDATAT					
HEALTH & SAFETY EQUIPMENT	# E0.00	(day)	20	¢1 000	
HNu Meter	\$50.00	•	20	\$1,000	
Alpha Survey Meter	\$80.00		4	\$320	
Alpha Scintillation Counter	\$100.00		0	\$0 \$0	
Beta Sample Counter	\$100.00		0		
Gas Proportional Detector	\$100.00		0	\$0 \$0	
Gas Prop. Detector-Floor	\$100.00		_	•	
Radon Monitor	\$300.00		0	\$0 \$300	
Gamma Radiation Meter	\$50.00	•	4	\$200	
Calib Gas	\$10.00		20	\$200 \$130	
2-way radios	•	/ea/wk	8	\$120 \$160	
Air Purif Resp	\$20.00		8	\$160 \$140	
10-Gal Eye Wash	\$35.00		4	\$140 \$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subtota	al H & S			\$2,140	

SUBTOTAL OTHERS:

\$5,043

SUBTOTAL LABOR & ODC'S:

\$91,487

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 1b

Archaeological Investigations

Prop No: 979002-00001					
	Unit <u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
SOBCONTINOTORO					
GROUNDWATER or SURFACE WATER LAN	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$ 0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0 \$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	RATORY AN	JAI YSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
Subtotal	Team Labor	aton		\$0	
Subtotal	Team Labor	atory		ΨΟ	
MISC. LABORATORY ANALYSIS			_		
Grain Size Dist	\$120.00		0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0 *°	
Total Suspended Solids	\$20.00		0	\$0 \$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0 #0	
Cation Exchange Capacity	\$100.00	eacn	0	\$0	

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Parsons Engineering Science, Inc.

Huntsville Division

Project:

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 1b

Archaeological Investigations

Prop No: 979002-00001					
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Nipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
NIVESTICATION CURSONITRACTORS					
INVESTIGATION SUBCONTRACTORS	Lumn Cum	ooob	0	\$0	
Driller	Lump Sum		0	\$0 \$0	
Photogrammetry	Lump Sum		0	\$0 \$0	
IDW Disposal	Lump Sum Lump Sum		0	\$0 \$0	
Surveyor	Lump Sum	eacri		φ υ	
Subtotal	Investigation	Subcontra	ctors	\$0	
Subtotal Lal	ooratory & Ir	vestigation	Subcontractors:	\$0	

TASK TOTAL:

3% Mark-up:

\$91,487

\$0

\$0

SUBTOTAL SUBCONTRACTORS:

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22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task#2

Radiological Waste Disposal Area

Field Investigations Summary

SEAD-12

Prop	No:	979002-	00001

1100110. 010002 00001	Unit				
	Cost	Units	Quantity	Cost	Notes
LABOR COSTS			-		
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	232	\$10,234	
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		216	\$7,109	
Professional Level 5, Step 1 (P52)	\$29.39		40	\$1,176	
D (' 11 14 04 ' 2 (D40)	¢00.40	(l	1000	¢20.120	
Professional Level 4, Step 2 (P48)	\$29.13		1000	\$29,130	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	2009	\$50,627	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	90	\$2,078	
Professional Level 2, Step 1 (P22)	\$19.89		1423	\$28,303	
5 () 11 14 01 0 (548)	040.57		2070	¢40.204	
Professional Level 1, Step 2 (P18)	\$18.57		2279	\$42,321	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	400	\$8,440	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	1595	\$26,445	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
	410.00		•		
Technician Level 3, Step 2 (T38)	\$13.99		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST			9284	\$205,862	
Contract Year: 1			0201	¥200,002	
Base Yr					
Overhead Rate: 143%			Labor Burden:	\$294,383	

SUBTOTAL BURDENED LABOR:

\$500,245

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Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task#2

Radiological Waste Disposal Area Field Investigations Summary

SEAD-12

Prop No: 979002-00001

	Unit Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES	<u></u>	<u>OTINO</u>	<u> </u>	<u> </u>	140100
Bottle labels	\$20.00	/roll	6	\$120	
40 mL VOA Vials	\$122.74		8	\$982	
1 Liter Amber Bottles	\$37.95		23	\$873	
32 oz. HDPE Bottles	\$30.75		11	\$338	
Braided Nylon Rope	\$0.15		500	\$75	
Bubble Pack	\$84.00		12	\$1,008	
Decon Eqt	\$18.00		12	\$216	
55g drums fill/mov	\$100.00		0	\$0	
Field Notebook	\$14.00		22	\$308	
Ice	\$1.00		100	\$100	
Latex Gloves	\$10.00	-	35	\$350	
Methanol (Optima)	\$25.00		7	\$175	
Hexane (Optima)	\$25.00		2	\$50	
Acetone (Optima)	\$50.00		2	\$100	
HCI (Optima)	\$285.00		5	\$1,425	
HNO3 (Optima)	\$175.00		5	\$875	
Ascorbic Acid	\$10.00		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00		0	\$0	
Overboots	\$4.00		783	\$3,132	
Respirator Cartridges	\$15.00		168	\$2,520	
Packing Tape (doz)	\$72.00		6	\$432	
Padlocks	\$12.00		0	\$0	
Sampling Tables	\$40.00		11	\$440	
Radiological Badges	\$20.00		29	\$580	
Aluminum Foil	\$1.00		0	\$0	
Stain Stl bwl/spn	\$30.00		16	\$480	
Survey Stake/Flag	•	/bundle	41	\$820	
Teflon tape	\$8.00		0	\$0	
Tyveks	\$6.30	each	78 9	\$4,971	
Water (HPLC Grade)	\$97.00		31	\$3,007	
Ziplock bags	\$3.00		3	\$9	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	10	\$150	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	86	\$1,376	

SUBTOTAL MATLS & SUPPLIES:

\$24,912

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task#2

Radiological Waste Disposal Area

Field Investigations Summary

\$475

SEAD-12

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
TRAVEL					

Airfare Boston\Syracuse	\$500.00	•	33	\$16,500	
Airfare Boston\Huntsville	\$900.00	•	0	\$0	
Subsistence-Seneca	\$96.00	•	745	\$71,520	
Subsistence-Huntsville	\$89.00	•	0	\$0	
Parking, Airport	\$13.00	•	658	\$8,554	
Auto Rental	\$55.00		338	\$18,590	
Suburban\Van rental	\$585.00		36.5	\$21,353	
Mileage	\$0.31	/mile	2600	\$806	
		SUBTOTA	AL TRAVEL:	\$137,323	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	450	\$1,800	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	750	\$750	
Overnight Express					
Letter/2 lb pack	\$14.50	each	5	\$73	
Package (50 lbs)	\$96.25	each	136	\$13,090	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	otal Services			\$15,713	
REPRODUCTION					
Photocopier	\$0.05	/page	7500	\$375	
Aerial Photo repro	\$10.00		10	\$100	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0	
3-ring binders	\$15.00	•	0	\$0	
Color Copies	\$2.00	/page	0	\$0	

Subtotal Reproduction

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Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task#2

Radiological Waste Disposal Area Field Investigations Summary

SEAD-12

Annex E				SEAD-12	
Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	16	\$880	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	5	\$250	
Flow thru pH/Cond meter	\$257.00		4	\$1,028	
DO meter	\$55.00		5	\$275	
Soil Gas Supplies	\$50.00		8	\$400	
Slug test eqt		/week	2	\$100	
Water level ind	\$40.00		8	\$320	
Turbidimeter	\$30.00		4	\$120	
	\$135.00		2	\$270	
Data Logger,Trnsdcr		•	2	\$60	
Flow Meter	•	/week			
Water coolers		/month	10.5	\$420	
Equipment Trailer	\$1,000.00		10.5	\$10,500	
Grundfus Redi Flow Pump	\$64.00		37	\$2,368	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	•	0	\$0	
Hi- Vol Sampler	\$75.00		2	\$150	
Hi- Vol Sampler Calibration Kit	\$25.00	•	10	\$250	
Ponar Sediment Sampler	\$27.00	/day	11	\$297	
3.2 kw Generator	\$50.00	/day	37	\$1,850	
Seismograph	\$200.00	/day	5	\$1,000	
EM-31	\$85.00	/day	150	\$12,750	
GPR	\$500.00	/day	15	\$7,500	
Subtotal	Rental			\$40,788	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/dav	399	\$19,950	
Alpha Survey Meter	\$80.00	•	296	\$23,680	
Alpha Scintillation Counter	\$100.00		9	\$900	
Beta Sample Counter	\$100.00		9	\$900	
Gas Proportional Detector	\$100.00		9	\$900	
Gas Proportional Detector Gas Prop. Detector-Floor	\$100.00		8	\$800	
Radon Monitor	\$300.00		2	\$600	
			368	\$18,400	
Gamma Radiation Meter	\$50.00				
Calib Gas	\$10.00	•	372	\$3,720	
2-way radios	•	/ea/wk	66	\$990	
Air Purif Resp		/week	28	\$560	
10-Gal Eye Wash	\$35.00		45	\$1,575	
Combination SCBA/SAR	\$150.00	/day	0	\$0	

SUBTOTAL OTHERS: \$129,951

\$72,975

SUBTOTAL LABOR & ODC'S: \$792,430

Subtotal H & S

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

SEAD-12 Annex E

RI/FS at the Radiological Disposal Areas

Radiological Waste Disposal Area Field Investigations Summary

SEAD-12

Task#2

Prop No: 979002-00001

SUBCONTRACTORS		Unit Cost	<u>Units</u>	Quantity	Cost	Notes
CROUNDWATER or SURFACE WATER LABORATORY ANALYSIS Volatiles (TCL) \$180.00 each 160 \$64,000 \$64,		Cost	Onits	Quantity	Cost	Notes
Volatiles (TCL)	SUBCONTRACTORS					
BRIVA (TCL)	GROUNDWATER or SURFACE WATER LA	BORATORY	ANALYSIS			
Pest./PCBs (TCL)	Volatiles (TCL)	\$180.00	ea c h	0	\$0	
Total Metals & CN(TAL) \$170.00 each 150 \$27,200 Iron(Ferrous) \$30.00 each 74 \$2,220 Sulfide \$30.00 each 74 \$2,220 Spec Cond(EPA 9050) \$8.00 each 74 \$2,220 Spec Cond(EPA 9050) \$8.00 each 17 \$2,925 Total Organic Carbon (EPA 9060) \$25.00 each 117 \$2,925 TOX (EPA 9056) \$50.00 each 0 \$0 \$0 Chloride(EPA 9250) \$25.00 each 74 \$2,444 Sulfate(EPA 300) \$25.00 each 74 \$3,700 PH (EPA 9045) \$8.00 each 74 \$3,700 PH (EPA 9045) \$8.00 each 74 \$3,700 PH (EPA 9045) \$8.00 each 74 \$3,700 PH (EPA 9045) \$195.00 each 74 \$3,700 PH (EPA 353.2) \$15.00 each 117 \$1,755 Alkalinity(EPA 310) \$12.00 each 117 \$1,404 Nitrate (EPA 535.2) \$20.00 each 117 \$2,340 SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS Volatiles (TCL) \$400.00 each 306 \$55,080 B/N/A (TCL) \$400.00 each 306 \$55,080 Total Metals & CN(TAL) \$17.00 each 306 \$55,080 Total Metals & CN(TAL) \$17.00 each 306 \$55,080 Total Organic Carbon (L. Kahn) \$60.00 each 306 \$55,080 TOtal Organic Carbon (L. Kahn) \$60.00 each 306 \$55,080 TOTAL (EPA 9056) \$7.000 each 55 \$3,300 TOX (EPA 9045) \$8.00 each 55 \$3,300 TOX (EPA 9045) \$8.00 each 55 \$3,300 TOX (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 12 \$18,000 PH (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 12 \$18,000 DI Total Organic Carbon (L. Kahn) \$60.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 55 \$3,300 TOX (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 12 \$18,000 Bulk Density \$35.00 each 55 \$46,000 Total Organic Carbon (L. Kahn) \$30.00 each 12 \$18,000 Subtotal Team Laboratory \$481,364 MISC. LABORATORY ANALYSIS \$20.00 each 15 \$2,240 Postport Postport \$1,500.00 each 12 \$18,000 Total Organic Carbon (L. Kahn) \$30.00 each 12 \$18,000 Total Organic Carbon (L. Kahn) \$30.00 each 12 \$18,000 Total Organic Carbon (L. Kahn) \$30.00 each 12 \$18,000 Total Organic Carbon (L. Kahn) \$30.00 each 12 \$18,000 Total Organic Carbon (L. Kahn) \$30.00 each	B/N/A (TCL)	\$400.00	each		\$64,000	
Iron(Ferrous) \$30.00 each 74 \$2,220 Sulfide \$30.00 each 74 \$2,220 Sulfide \$30.00 each 74 \$2,220 Spec Cond(EPA 9050) \$8.00 each 0 \$0 Total Organic Carbon (EPA 9060) \$25.00 each 117 \$2,925 TOX (EPA 9056) \$50.00 each 0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 BOD \$60.00 each 74 \$4,440 Sulfate(EPA 300) \$25.00 each 74 \$1,850 COD \$50.00 each 74 \$3,700 pH (EPA 9045) \$8.00 each 0 \$0 O	Pest./PCBs (TCL)					
Sulfide	Total Metals & CN(TAL)					
Spec Cond(EPA 9050)	,					
Total Organic Carbon (EPA 9060) \$25.00 each 117 \$2,925 TOX (EPA 9056) \$50.00 each 0 \$0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 \$0 BOD \$60.00 each 74 \$4,440 \$0.00 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$						
TOX (EPA 9056) \$50.00 each 0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 BOD \$60.00 each 74 \$4,440 Sulfate(EPA 300) \$25.00 each 74 \$1,850 COD \$50.00 each 74 \$1,850 COD \$50.00 each 74 \$3,700 pH (EPA 9045) \$8.00 each 74 \$3,700 pH (EPA 524) \$195.00 each 117 \$1,755 Alkalinity(EPA 310) \$12.00 each 117 \$1,755 Alkalinity(EPA 310) \$12.00 each 117 \$1,404 Nitrate (EPA 353.2) \$20.00 each 117 \$2,340 SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS Volatiles (TCL) \$180.00 each 306 \$55,080 B/N/A (TCL) \$400.00 each 306 \$55,080 D/N/A (TCL) \$180.00 each 306 \$55,080 Total Metals & CN(TAL) \$170.00 each 306 \$55,080 Total Metals & CN(TAL) \$170.00 each 306 \$52,020 Spec Cond(EPA 9050) \$8.00 each 0 \$0 Total Organic Carbon (L. Kahn) \$60.00 each 55 \$3,300 TOX (EPA 9056) \$70.00 each 0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 pH (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 55 \$440 Nitrate (EPA 9056) \$70.00 each 55 \$440 Nitrate (EPA 9056) \$20.00 each 55 \$440 Nitrate (EPA 9056) \$20.00 each 55 \$440 Nitrate (EPA 9056) \$20.00 each 12 \$18,000 Moisture Content \$15,00 each 0 \$0 Dissurpended Solids \$10.00 each 15 \$525 Chromium (Level II) \$30.00 each 15 \$525 Chromium (Level II) \$30.00 each 15 \$525 Chromium (Level II) \$30.00 each 17 \$2,340 Ammonia \$25.00 each 43 \$860 Total Dissolved Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 43 \$1,075	, , , , , , , , , , , , , , , , , , , ,					
Chloride(EPA 9250) \$25.00 each 0 \$0 BOD \$60.00 each 74 \$4,440 Sulfrate(EPA 300) \$25.00 each 74 \$1,850 COD \$50.00 each 74 \$3,700 pH (EPA 9045) \$50.00 each 74 \$3,700 pH (EPA 9045) \$8.00 each 0 \$0 Volatiles (EPA 524) \$195.00 each 117 \$1,755 Alkalinity(EPA 310) \$12.00 each 117 \$1,404 Nitrate (EPA 353.2) \$20.00 each 117 \$2,340 SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS Volatiles (TCL) \$180.00 each 306 \$55,080 BN/IA (TCL) \$180.00 each 306 \$122,400 Pest./PCBs (TCL) \$180.00 each 306 \$55,080 Total Metals & CN(TAL) \$170.00 each 306 \$55,080 Total Organic Carbon (L. Kahn) \$60.00 each 306 \$52,020 Spec Cond(EPA 9050) \$8.00 each 0 \$0 Total Organic Carbon (L. Kahn) \$60.00 each 55 \$3,300 TOX (EPA 9056) \$70.00 each 0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 PH (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 55 \$440 Nitrate (EPA 353.00 each 12 \$18,000 Moisture Content \$15.00 each 15 \$525 Chromium (Level II) \$30.00 each 17 \$2,340 Ammonia \$25.00 each 43 \$860 Total Dissolved Solids \$20.00 each 17 \$2,340 Ammonia \$25.00 each 43 \$1,075					•	
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COD					. ,	
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Hardness(EPA 130.2)	, ,					
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Nitrate (EPA 353.2) \$20.00 each 117 \$2,340	· · · · · · · · · · · · · · · · · · ·					
SOILS - SURFACE or SUBSURFACE LABORATORY ANALYSIS						
Volatiles (TCL)	Wildle (El 71 000.2)	Ψ20.00	caon		42,0.0	
B/N/A (TCL) \$400.00 each 306 \$122,400 Pest./PCBs (TCL) \$180.00 each 306 \$55,080 Total Metals & CN(TAL) \$170.00 each 306 \$55,080 Total Metals & CN(TAL) \$170.00 each 306 \$52,020 Spec Cond(EPA 9050) \$8.00 each 0 \$0 Total Organic Carbon (L. Kahn) \$60.00 each 55 \$3,300 TOX (EPA 9056) \$70.00 each 0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 pH (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 306 \$6,120 Subtotal Team Laboratory \$481,364 MISC. LABORATORY ANALYSIS Grain Size Dist \$120.00 each 55 \$6,600 TCLP \$1,500.00 each 12 \$18,000 Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 15 \$525 Chromium (Level III) \$30.00 each 43 \$860 Total Dissolved Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	SOILS - SURFACE or SUBSURFACE LABO	RATORY A	NALYSIS			
Pest./PCBs (TCL)	Volatiles (TCL)	\$180.00	each	306	\$55,080	
Total Metals & CN(TAL) \$170.00 each 306 \$52,020 Spec Cond(EPA 9050) \$8.00 each 0 \$0 Total Organic Carbon (L. Kahn) \$60.00 each 55 \$3,300 TOX (EPA 9056) \$70.00 each 0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 PH (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 306 \$6,120 Subtotal Team Laboratory \$481,364 \$\$\$ MISC. LABORATORY ANALYSIS Grain Size Dist \$120.00 each 55 \$6,600 TCLP \$1,500.00 each 12 \$18,000 Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 15 \$525 Chromium (Level II) \$30.00 each 43 \$860 Total Dissolved Solids \$20.00 each 17 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	B/N/A (TCL)	\$400.00	each		\$122,400	
Spec Cond(EPA 9050)	Pest./PCBs (TCL)				*	
Total Organic Carbon (L. Kahn) \$60.00 each 55 \$3,300 TOX (EPA 9056) \$70.00 each 0 \$0 \$0 Chloride(EPA 9250) \$25.00 each 0 \$0 \$0 pH (EPA 9045) \$8.00 each 55 \$440 Nitrate (EPA 353.2) \$20.00 each 306 \$6,120	· · ·					
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Subtotal Team Laboratory \$481,364 MISC. LABORATORY ANALYSIS Grain Size Dist \$120.00 each 55 \$6,600 TCLP \$1,500.00 each 12 \$18,000 Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 0 \$0 Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	, ,					
MISC. LABORATORY ANALYSIS Grain Size Dist \$120.00 each 55 \$6,600 TCLP \$1,500.00 each 12 \$18,000 Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 0 \$0 Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	Nitrate (EPA 353.2)	\$20.00	eacn	306	\$6,120	
Grain Size Dist \$120.00 each 55 \$6,600 TCLP \$1,500.00 each 12 \$18,000 Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 0 \$0 Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	Subtotal	Team Labor	atory		\$481,364	
Grain Size Dist \$120.00 each 55 \$6,600 TCLP \$1,500.00 each 12 \$18,000 Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 0 \$0 Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	MISC I ABORATORY ANALYSIS					
TCLP \$1,500.00 each 12 \$18,000 Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 0 \$0 Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075		\$120.00	each	55	\$6,600	
Moisture Content \$15.00 each 0 \$0 Bulk Density \$35.00 each 15 \$525 Chromium (Level II) \$30.00 each 0 \$0 Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075		\$1,500.00	each	12	•	
Chromium (Level II) \$30.00 each 0 \$0 Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	Moisture Content	•		0	\$0	
Total Suspended Solids \$20.00 each 43 \$860 Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	Bulk Density	\$35.00	each	15	\$525	
Total Dissolved Solids \$20.00 each 117 \$2,340 Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075	Chromium (Level II)	\$30.00	each	0	\$0	
Ammonia \$25.00 each 43 \$1,075 Phosphate \$25.00 each 43 \$1,075		\$20.00	each	43	\$860	
Phosphate \$25.00 each 43 \$1,075	Total Dissolved Solids			117	\$2,340	
·	Ammonia	\$25.00	each	43		
Cation Exchange Capacity \$100.00 each 55 \$5,500					•	
	Cation Exchange Capacity	\$100.00	each	55	\$5,500	

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

SEAD-12 Annex E

RI/FS at the Radiological Disposal Areas

Radiological Waste Disposal Area Field Investigations Summary

SEAD-12

Task#2

Prop No: 979002-00001

F10p 140. 3/3002-00001					
	Unit	1.1.11	0	04	NI 4
DADIOLOGICAL LABORATORY ANALYSI	<u>Cost</u>	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSI	5				
Water Samples For:	\$60.00	oooh	157	\$9,420	
Thorium 232, 230, 227			157	\$9,420 \$9,420	
Uranium 238, 235, 233+234	\$60.00				
Radium 226,223	\$40.00		157	\$6,280 \$12,560	
Pb214&211,Bi214,Ce137,Co60	\$80.00		157	\$12,560 \$10,305	
Plutonium 239 + 240	\$65.00		157	\$10,205	
Americium 241	\$65.00		157	\$10,205	
Gross AlphaΒ	\$45.00	eacn	157	\$7,065	
Soil Samples For:	400.00		200	¢00.040	
Thorium 232, 230, 227	\$60.00		399	\$23,940	
Uranium 238, 235, 233+234	\$60.00		399	\$23,940	
Radium 226,223	\$40.00		399	\$15,960	
Pb214&211,Bi214,Ce137,Co60		each	399	\$0	
Plutonium 239 + 240	\$65.00		399	\$25,935	
Americium 241	\$65.00	each	399	\$25,935	
Gamma Spectrometry		each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	8	\$6,000	
Sample Prep/Return	\$0.00	each	399	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	134	\$8,040	
Uranium 238, 235, 233+234	\$60.00	each	134	\$8,040	
Radium 226,223	\$40.00	each	134	\$5,360	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	134	\$10,720	
Plutonium 239 + 240	\$65.00	each	134	\$8,710	
Americium 241	\$65.00	each	134	\$8,710	
Gross AlphaΒ	\$45.00	each	134	\$6,030	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		100	\$2,500	
Subtota	al Misc. Labora	atory		\$280,950	
		,			
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum		50515	\$50,515	
Photogrammetry	Lump Sum		31600	\$31,600	
IDW Disposal	Lump Sum		9990	\$9,990	
Surveyor	Lump Sum	each	32758	\$32,758	
Subtota	al Investigation	Subcontrac	etors	\$124,863	

Subtotal Laboratory & Investigation Subcontractors:

3% Mark-up: \$26,615

SUBTOTAL SUBCONTRACTORS:

\$887,177 \$913,792

TASK TOTAL: \$1,706,222

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.1

Geophysical Investigations

\$117,920

714,000ft EM-31@6000ft/dy-1 man 71,000 ft GPR @ 2000 ft/dy-2 men

pp No: 979002-00001			8 Seismic Lines				
	Unit						
ABOR COSTS	Cost	<u>Units</u>	Quantity	Cost	Notes		
ABOR COSTS							
NGINEERS AND SCIENTISTS							
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0			
Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0			
Professional Level 5, Step 4 (P58)	\$44.11	/hour	80	\$3,529			
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0			
Professional Level 5, Step 2 (P54)	\$32.91		0	\$0			
Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0			
Professional Level 4, Step 2 (P48)	\$29.13	/hour	1000	\$29,130			
Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0			
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0			
Professional Level 2, Step 2 (P28)	\$23.09	/bour	0	\$0			
Professional Level 2, Step 2 (P20)	\$19.89		0	\$0 \$0			
	440.55		400	47.400			
Professional Level 1, Step 2 (P18) Professional Level 1, Step 1 (P12)	\$18.57 \$14.84		400 0	\$7,428 \$0			
ECHNICAL AND SUPPORT SPECIALISTS							
Technician Level 5 (T55)	\$21.10	/hour	400	\$8,440			
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0			
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0			
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0			
Technician Level 3, Step 2 (136)	\$11.61		0	\$0 \$0			
redifficial Level 3, Step 1 (132)	Ψ11.01	modi	Ü	ΨΟ			
Technician Level 2 (T25)	\$10.13	/hour	0	\$0			
Technician Level 1 (T15)	\$8.89	/hour	0	\$0			
Support Level 3 (S35)	\$20.61	/hour	0	\$0			
Support Level 2 (S25)	\$12.40	/hour	0	\$0			
Support Level 1 (S15)	\$8.72	/hour	0	\$0			
OTAL HOURS/LABOR COST Contract Year: 1			1880	\$48,527			
Base Yr Overhead Rate: 143%			Labor Burdon	¢60 202			
Overneau Rate, 143%	DTOTAL	DUDDEN	Labor Burden:	\$69,393			

SUBTOTAL BURDENED LABOR:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.1

Geophysical Investigations

714,000ft EM-31@6000ft/dy-1 man 71,000 ft GPR @ 2000 ft/dy-2 men

Prop No: 979002-00001	8 Seismic Lines				Truy Emon
P10p No. 979002-00001	Unit		0 0010	1110 21100	
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES	<u> </u>	<u>OTIMO</u>		<u> </u>	
WATERIALS AND SUFFLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75		0 .	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00		0	\$0	
Decon Eqt	\$18.00		0	\$0	
55g drums fill/mov	\$100.00		0	\$0	
Field Notebook	\$14.00		6	\$84	
Ice	\$1.00		0	\$0	
Latex Gloves	\$10.00	-	12	\$120	
	\$25.00		0	\$0	
Methanol (Optima)	\$25.00		0	\$0	
Hexane (Optima)	\$50.00		0	\$0	
Acetone (Optima)	\$285.00		0	\$0	
HCI (Optima)	\$175.00		Ö	\$0	
HNO3 (Optima)		/bottle	Ö	\$0	
Ascorbic Acid	\$50.00		Ö	\$0	
Filters (0.45uM & 0.5uM)	\$4.00		150	\$600	
Overboots	\$15.00	•	15	\$225	
Respirator Cartridges	\$72.00	•	0	\$0	
Packing Tape (doz)	\$12.00		0	\$0	
Padlocks	\$40.00		0	\$0	
Sampling Tables	\$20.00		5	\$100	
Radiological Badges	\$20.00		0	\$0	
Aluminum Foil	\$30.00		0	\$ 0	
Stain Stl bwl/spn		/bundle	12	\$240	
Survey Stake/Flag	\$8.00		0	\$0	
Teflon tape		each	150	\$9 4 5	
Tyveks			0	\$0	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00 \$450.00		0	\$ 0	
Calibration Gas	\$450.00		0	\$0 \$0	
Ultra Pure Air	\$120.00		0	\$ 0	
Teflon Tubing	•		0	\$ 0	
Teflon Sheeting	\$500.00		0	\$0 \$0	
Folding Live Traps	\$15.00		0	\$0 \$0	
Glassware	\$25.00			\$0 \$0	
Quartz Filters	\$10.00		0	\$0 \$0	
Vermiculite Packing	\$16.00	gsar	0	Φυ	

SUBTOTAL MATLS & SUPPLIES:

\$2,314

Parsons Engineering Science, Inc. 22-Mar-96 U.S. Army Corps of Engineers Printed: Client: Huntsville Division Seneca Army Depot Activity, Romulus New York Task # 2.1 Project: RI/FS at the Radiological Disposal Areas Geophysical Investigations 714,000ft EM-31@6000ft/dy-1 man SEAD-12 71,000 ft GPR @ 2000 ft/dy-2 men Annex E Prop No: 979002-00001 8 Seismic Lines Unit Quantity Notes Cost Units Cost **TRAVEL** \$500.00 /trip 6 \$3,000 6@1Flt Airfare Boston\Syracuse Airfare Boston\Huntsville \$900.00 /trip 0 \$0 190 \$18,240 190 days total \$96.00 /day Subsistence-Seneca Subsistence-Huntsville \$89.00 /day 0 \$0 \$4.680 \$13.00 /day 360 Parking, Airport \$10,450 190 days total \$55.00 /day 190 Auto Rental \$585.00 /week Suburban\Van rental 6 \$3,510 6 weeks 1000 \$310 Mileage \$0.31 /mile SUBTOTAL TRAVEL: \$40,190 **OTHERS** IN-HOUSE SERVICES \$800 \$4.00 /call 200 Telephone \$0 Word Proc/PC \$3.70 /hour 0 0 \$0 CADD \$5.00 /hour 200 \$200 Facsimile \$1.00 /page Overnight Express 5 \$73 \$14.50 each Letter/2 lb pack \$96.25 each 0 \$0 Package (50 lbs) 0 \$0 \$4.10 /pack Mail 4-lb pack 0 \$0 Mail letters \$0.54 /letter \$1,073 Subtotal Services REPRODUCTION \$0.05 /page 1000 \$50 Photocopier \$10.00 /photo 0 \$0 Aerial Photo repro

\$1.00 /Sheet

\$5.50 /Sq Ft

\$15.00 each

Subtotal Reproduction

\$2.00 /page

Blueline repro

3-ring binders

Color Copies

Cronoflex Prod

0

0

0

0

\$0

\$0

\$0

\$0

\$50

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.1

Geophysical Investigations

714,000ft EM-31@6000ft/dy-1 man 71,000 ft GPR @ 2000 ft/dy-2 men

Annex E Prop No: 979002-00001	71,000 ft GPR @ 2000 ft/dy-2 8 Seismic Lines				2000 11/dy-2 IIIeII
100 110. 373002 00001	Unit			iornio Enico	
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
EQUIPMENT RENTAL			-		
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	3	\$120	
Equipment Trailer	\$1,000.00	/month	3	\$3,000	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	5	\$1,000	
EM-31	\$85.00	/day	150	\$12,750	5 units x 3 crews
GPR	\$500.00	/day	15	\$7,500	15 days field
Subto	otal Rental			\$24,370	
EALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	190	\$9,500	
Alpha Survey Meter	\$80.00	/week	190	\$15,200	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00	/day	190	\$9,500	
Calib Gas	\$10.00	/day	190	\$1,900	
2-way radios	\$15.00	/ea/wk	6	\$90	
Air Purif Resp	\$20.00	/week	12	\$240	
10-Gal Eye Wash	\$35.00	/week	12	\$420	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subte	otal H & S			\$36,850	

SUBTOTAL OTHERS:

\$62,343

SUBTOTAL LABOR & ODC'S:

\$222,767

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Prop No: 979002-00001

Annex E

Task # 2.1

Geophysical Investigations

714,000ft EM-31@6000ft/dy-1 man 71,000 ft GPR @ 2000 ft/dy-2 men

8 Seismic Lines

Trop Ito. or cool cool.	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
	<u> </u>	<u> </u>	<u> </u>	<u></u>	
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
0.000		1417/010			
SOILS - SURFACE or SUBSURFACE LABO			0	Φ.Λ	
Volatiles (TCL)	\$180.00		0	\$0 \$0	
B/N/A (TCL)	\$400.00		0	\$0 \$0	
Pest./PCBs (TCL)	\$180.00		0	\$0 \$0	
Total Metals & CN(TAL)	\$170.00		0	\$0 \$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0 \$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0 \$0	
TOX (EPA 9056)	\$70.00		0	\$0 \$0	
Chloride(EPA 9250)	\$25.00		0	\$0 \$0	
pH (EPA 9045)	\$8.00		0	\$0 \$0	
Nitrate (EPA 353.2)	\$20.00	eacn	0	\$0	
Subtotal	Team Labor	atory		\$0	
Cubtotal	Tourn Eason	atory		4.5	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	
• • •					

Client: U.S. Army Corps of Engineers Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas Geophysical Investigations

Task # 2.1

714,000ft EM-31@6000ft/dy-1 man

SEAD-12

Annex E 71,000 ft GPR @ 2000 ft/dy-2 men

Prop No: 979002-00001 8 Seismic Lines

Prop No: 979002-00001			8 Seisr	nic Lines	
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:	400.00		2	40	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$ 0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	-	each	0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry		each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:			_		
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal N	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
	Lump Sum		0	\$0 \$0	
IDW Disposal	Lump Sum		0	\$0 \$0	
Surveyor	Lump Sum	Eduli		φ υ	
Subtotal I	nvestigation	Subcontra	ctors	\$0	
Subtotal Lah	oratory & In	vectigation	Subcontractors:	\$0	

Subtotal Laboratory & Investigation Subcontractors: \$0 3% Mark-up: \$0

SUBTOTAL SUBCONTRACTORS: \$0

=========

TASK TOTAL: \$222,767

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.2

Soil Gas Investigation 120 @15/dy=8dy

\$12,576

Prop No: 979002-00001

Prop No	o: 979002-00001					
		Unit Cost	Units	Quantity	Cost	Notes
LABO	R COSTS	<u> </u>	OTILO	gantey	<u> </u>	Notes
ENGINE	EERS AND SCIENTISTS					
	Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
	Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
	Professional Level 5, Step 4 (P58)	\$44.11	/hour	8	\$353	
	Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
	Professional Level 5, Step 2 (P54)	\$32.91	/hour	0	\$0	
	Professional Level 5, Step 1 (P52)	\$29.39	/hour	40	\$1,176	
	Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
	Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
	Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
	Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
	Professional Level 2, Step 1 (P22)	\$19.89	/hour	100	\$1,989	
	Professional Level 1, Step 2 (P18)	\$18.57		0	\$0	
	Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHN	ICAL AND SUPPORT SPECIALISTS					
	Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
	Technician Level 4, Step 2 (T48)	\$16.58	/hour	100	\$1,658	
	Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
	Technician Level 3, Step 2 (T38)	\$13.99		0	\$0	
	Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
	Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
	Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
	Support Level 3 (S35)	\$20.61	/hour	0	\$0	
	Support Level 2 (S25)	\$12.40	/hour	0	\$0	
	Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL	HOURS/LABOR COST Contract Year: 1 Base Yr			248	\$5,175	
	Overhead Rate: 143%			Labor Burden:	\$7,401	
	OLIF		D	115014505	040 570	

SUBTOTAL BURDENED LABOR:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Prop No: 979002-00001

Task # 2.2

Soil Gas Investigation

120 @15/dy=8dy

Prop No: 9/9002-00001					
	Unit		2 "		
MATERIAL O AND OURDUISO	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roli	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	1	\$10	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	16	\$64	
Respirator Cartridges	\$15.00	/pair	16	\$240	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00	each	2	\$40	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	4	\$80	
Teflon tape	\$8.00	/roli	0	\$0	
Tyveks	\$6.30	each	16	\$101	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$575

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.2

Soil Gas Investigation 120 @15/dy=8dy

Prop No: 979002-00001

	Unit Cost	Units	Quantity	Cost	Notes
TRAVEL	<u> </u>	OTILO	Quartity	<u> </u>	110100
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00		0	\$0	
Subsistence-Seneca	\$96.00	•	16	\$1,536	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking,Airport	\$13.00	/day	0	\$0	
Auto Rental	\$55.00	/day	0	\$0	
Suburban\Van rental	\$585.00	/week	2	\$1,170	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOTA	AL TRAVEL:	\$2,706	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	10	\$40	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	10	\$10	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$96.25		0	\$0	
Mail 4-lb pack	\$4.10		0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	otal Services			\$50	
REPRODUCTION					
Photocopier	\$0.05		500	\$25	
Aerial Photo repro	\$10.00	/photo	0	\$0	
Blueline repro	,	/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subto	otal Reproduction	n		\$25	

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Soil Gas Investigation 120 @15/dy=8dy

Task # 2.2

Prop No: 979002-00001

Prop No: 979002-00001			,		
	Unit			-	
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00		8	\$400	
Slug test eqt	\$50.00	•	0	\$0	
Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0	
Data Logger,Trnsdcr	\$135.00		0	\$0	
Flow Meter	\$30.00	•	0	\$0	
Water coolers		/month	0.5	\$20	
Equipment Trailer	\$1,000.00		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00		0.0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00		0	\$0	
Hi- Vol Sampler	\$75.00	•	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00		0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	•	0	\$0	
GFIX	Ψ500.00	ruay	Ü	ΨΟ	
Subto	otal Rental			\$920	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	16	\$800	
Alpha Survey Meter	\$80.00	/week	16	\$1,280	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00		2	\$600	
Gamma Radiation Meter	\$50.00	/day	16	\$800	
Calib Gas	\$10.00	,	16	\$160	
2-way radios	\$15.00		2	\$30	
Air Purif Resp	\$20.00		4	\$80	
10-Gal Eye Wash	\$35.00		2	\$70	
Combination SCBA/SAR	\$150.00		0	\$0	
				\$2,000	
Subto	otal H & S			\$3,820	

SUBTOTAL OTHERS:

\$4,815

SUBTOTAL LABOR & ODC'S:

\$20,672

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.2 Soil Gas Investigation 120 @15/dy=8dy

Prop No: 979002-00001

F10p No. 979002-00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
	<u>0031</u>	OTIILO	<u>Quantity</u>	0051	INOLES
SUBCONTRACTORS					
000001111/1010110					
GROUNDWATER or SURFACE WATER LAI	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
00110 01105405 011001105405 1 4001	34TOD\(**	IALVOIC			
SOILS - SURFACE or SUBSURFACE LABOR			0	40	
Volatiles (TCL)	\$180.00		0	\$0 \$0	
B/N/A (TCL)	\$400.00		0	\$0 \$0	
Pest./PCBs (TCL)	\$180.00		0	\$0 \$0	
Total Metals & CN(TAL)	\$170.00		0	\$0 \$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0 \$0	
Total Organic Carbon (L. Kahn)	\$60.00		0 0	\$0 \$0	
TOX (EPA 9056)	\$70.00 \$25.00		0	\$0 \$0	
Chloride(EPA 9250)	\$25.00		-		
pH (EPA 9045)	\$8.00		0 0	\$0 \$0	
Nitrate (EPA 353.2)	φ20.00	eacii	U	φU	
Subtotal	Team Labor	atory		\$0	
Gubtotal	TOUTH LUDON	ator y		ΨΟ	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
. ,					

Huntsville Division

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22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E Prop No: 979002-00001 Task # 2.2

Soil Gas Investigation 120 @15/dy=8dy

Prop No: 979002-00001					
	Unit	Lleite	Overtite.	04	Mata
RADIOLOGICAL LABORATORY A	Cost	<u>Units</u>	Quantity	Cost	Notes
	IVALIOIO				
Water Samples For: Thorium 232, 230, 227	\$60.00	aaab	0	40	
Uranium 238, 235, 233+2			0	\$0 \$0	
	\$40.00		0	\$0 \$0	
Radium 226,223				\$0 \$0	
Pb214&211,Bi214,Ce137			0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	eacn	0	\$0	
oil Samples For:	200.00		•	•	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+2			0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137			0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319			0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Vipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+23	34 \$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,	,Co60 \$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
IR SAMPLES LABORATORY ANA	ALYSIS				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		0	\$0	
	Subtotal Misc. Labora	tory		\$0	
		,		¥ -	
NVESTIGATION SUBCONTRACTO			_		
Driller	Lump Sum		6776	\$6,776	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum	each	0	\$0	

Subtotal Laboratory & Investigation Subcontractors: \$6,776

> 3% Mark-up: \$203

SUBTOTAL SUBCONTRACTORS: \$6,979

TASK TOTAL: \$27,651

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate: 143%

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.3

Radiological Investigations Summary

Prop No: 979002-00001					
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
D 6 1 11 10 01 0 (D00)	05074	4		•	
Professional Level 6, Step 2 (P68)	\$58.74		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	60	\$2,647	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		120	\$3,949	
Professional Level 5, Step 1 (P52)	\$29.39	/nour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
				•	
Professional Level 4, Step 1 (P42)	\$25.20	/nour	684	\$17,237	
Professional Level 3, Step 1 (P35)	\$24.04	/bour	0	\$0	
r Totessional Level 3, Otep 1 (1 33)	Ψ24.04	nioui	O	ΨΟ	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		Ö	\$0	
r rolessional Level 2, otep 1 (1 22)	φ15.05	modi	v	ΨΟ	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	684	\$12,702	
Professional Level 1, Step 1 (P12)	\$14.84		0	\$0	
	•			, -	
TECHNICAL AND SUPPORT SPECIALISTS					
_ , , , , , , , , , , , , , , , , , , ,	004.40	,			
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	300	\$4,974	
Technician Level 4, Step 2 (140)	\$14.08		0	\$4,974 \$0	
reclinician Level 4, Step 1 (142)	φ14.00	moui	O	φ0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61		0	\$0	
	4		·	4.	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
,				•	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
0	¢0.70	<i>II</i>	0		
Support Level 1 (S15)	\$8.72	/nour	0	\$0	
TOTAL HOURS/LABOR COST			1848	\$41,508	
Contract Year: 1			1070	Ψ+1,500	
Base Yr					
Dase II					

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$59,357

\$100,866

Huntsville Division

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.3

Radiological Investigations Summary

		Unit				
		Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATER	RIALS AND SUPPLIES					
	Bottle labels	\$20.00	/roll	1	\$20	
	40 mL VOA Viais	\$122.74	/case	0	\$0	
	1 Liter Amber Bottles	\$37.95	/case	6	\$228	
	32 oz. HDPE Bottles	\$30.75	/case	6	\$185	
	Braided Nylon Rope	\$0.15	/foot	500	\$75	
	Bubble Pack	\$84.00	/roll	6	\$504	
	Decon Eqt	\$18.00	/kit	6	\$108	
	55g drums fill/mov	\$100.00	each	0	\$0	
	Field Notebook	\$14.00	each	9	\$126	
	Ice	\$1.00	/bag	20	\$20	
	Latex Gloves	\$10.00	/box	14	\$140	
	Methanol (Optima)	\$25.00	/bottle	1	\$25	
	Hexane (Optima)	\$25.00	/bottle	1	\$25	
	Acetone (Optima)	\$50.00	/bottle	1	\$50	
	HCI (Optima)	\$285.00	/bottle	1	\$285	
	HNO3 (Optima)	\$175.00	/bottle	1	\$175	
	Ascorbic Acid	\$10.00	/bottle	0	\$0	
	Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
	Overboots	\$4.00	/pair	236	\$944	
	Respirator Cartridges	\$15.00	/pair	5	\$75	
	Packing Tape (doz)	\$72.00	/case	3	\$216	
	Padlocks	\$12.00	each	0	\$0	
	Sampling Tables	\$40.00	each	7	\$280	
	Radiological Badges	\$20.00	each	16	\$320	
	Aluminum Foil	\$1.00	/roll	0	\$0	
	Stain Stl bwl/spn	\$30.00	/set	12	\$360	
	Survey Stake/Flag	\$20.00	/bundle	17	\$340	
	Teflon tape	\$8.00	/roll	0	\$0	
	Tyveks	\$6.30	each	242	\$1,525	
	Water (HPLC Grade)	\$97.00	/case	2	\$194	
	Ziplock bags	\$3.00	/box	0	\$0	
	Calibration Gas	\$450.00	/tank	0	\$0	
	Ultra Pure Air	\$310.00	/ton	0	\$0	
	Teflon Tubing	\$120.00	/roll	0	\$0	
	Teflon Sheeting	\$500.00	/roll	0	\$0	
	Folding Live Traps	\$15.00	each	0	\$0	
	Glassware	\$25.00	each	0	\$0	
	Quartz Filters	\$10.00	each	0	\$0	
	Vermiculite Packing	\$16.00	/bag	8	\$128	

SUBTOTAL MATLS & SUPPLIES:

\$6,347

Client:

U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

\$150

Task # 2.3

Radiological Investigations Summary

Prop No. 9/9002-00001					
	Unit	Linita	Ouantit :	0.5-4	Mak
TD AVEL	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	15	\$7,500	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	176	\$16,896	
Subsistence-Huntsville	\$89.00	•	0	\$0	
Parking,Airport	\$13.00	/day	116	\$1,508	
Auto Rental	\$55.00	•	24	\$1,320	
Suburban\Van rental	\$585.00		12	\$7,020	
Mileage	\$0.31	/mile	900	\$279	
		SUBTOTA	AL TRAVEL:	\$34,523	
THERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	120	\$480	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	300	\$300	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$96.25		48	\$4,620	
Mail 4-lb pack	\$4.10		0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Sub	ototal Services			\$5,400	
REPRODUCTION					
Photocopier	\$0.05		3000	\$150	
Aerial Photo repro	\$10.00	•	0	\$0	
Blueline repro	\$1.00	/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	Inage	0	\$0	

Subtotal Reproduction

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3

Radiological Investigations Summary

Prop No: 979002-00001

Prop No: 979002-00001					
	Unit	Limite	Overntite	Cont	Netes
EQUIDMENT DENTAL	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00		0	\$0	
• • •	\$50.00	•	0	\$0	
Slug test eqt Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0 \$0	
	\$135.00		0	\$ 0	
Data Logger, Trnsdcr		•	0	\$0 \$0	
Flow Meter	\$30.00		_		
Water coolers		/month	3	\$120	
Equipment Trailer	\$1,000.00		3	\$3,000	
Grundfus Redi Flow Pump	\$64.00	•	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	•	0	\$0	
Hi- Vol Sampler	\$75.00		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	-	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtota	al Rental			\$3,120	
A STALL THE A CASETY SOLUBATALT					
HEALTH & SAFETY EQUIPMENT HNu Meter	\$50.00	lday	65	\$3,250	
	\$80.00	•	9	\$720	
Alpha Survey Meter Alpha Scintillation Counter	\$100.00		9	\$900	
Beta Sample Counter	\$100.00		9	\$900	
Gas Proportional Detector	\$100.00		9	\$900	
•			8	\$800	
Gas Prop. Detector-Floor	\$100.00		_	\$000 \$0	
Radon Monitor	\$300.00		0		
Gamma Radiation Meter	\$50.00	•	43	\$2,150	
Calib Gas	\$10.00	-	38	\$380	
2-way radios		/ea/wk	28	\$420	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		14	\$490	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subtota	al H & S			\$10,910	

SUBTOTAL OTHERS:

\$19,580

SUBTOTAL LABOR & ODC'S:

\$161,315

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3

Radiological Investigations Summary

Annex					
Prop No: 979002-00001					
	Unit	1.1	0	04	Note-
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATOR	Y ANAL YSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)		each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)		each	0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
SOILS - SURFACE or SUBSURFACE LABO	RATORY A	NAI YSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		Ō	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)		each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)		each	0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
Subtotal	Team Labo	roton.			
Subtotal	ream Labo	ratory		Φ0	
MISC. LABORATORY ANALYSIS	A		•	**	
Grain Size Dist	\$120.00		0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$ 0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York Project:

Task # 2.3

RI/FS at the Radiological Disposal Areas

Radiological Investigations Summary

SEAD-12 Annex E

	, union =
Prop No:	979002-00001

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS	3				
Water Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60		each	0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry		each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtota	l Misc. Labora	atory	-	\$0	
NVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0 \$0	
	Lump Sum		0	\$ 0	
IDW Disposal Surveyor	Lump Sum		0	\$0 \$0	
Surveyor	Lump Sum	Caon			
Subtota	I Investigation	Subcontrac	tors	\$0	
Subtotal La	aboratory & Ir	vestigation S	Subcontractors:	\$0	
	•	-	3% Mark-up:	\$0	
S	UBTOTAL	SUBCON	TRACTORS:	\$0	

TASK TOTAL: \$161,315

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.3.1

Alpha, Beta, Gamma Screening

Alpha Fl76m/h W18m/h Beta/Gamma Fl&W 162m/h Ext. Beta/Gamma 260m/h

\$52,537

Dran Na: 0/0002 00001	Beta/Gamma Fl&VV 162m/h				lm/h
Prop No: 979002-00001	Ext. Beta/Gamma 260m/h Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS	<u> </u>	<u>OTINO</u>	<u>additity</u>	<u> </u>	110103
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	20	\$882	
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		80	\$2,633	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	300	\$7,560	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	300	\$5,571	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	300	\$4,974	
Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1 Base Yr			1000	\$21,620	
Overhead Rate: 143%			Labor Burden:	\$30,917	

SUBTOTAL BURDENED LABOR:

Client:

U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas SEAD-12

Annex E

Prop No: 979002-00001

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.3.1

Alpha, Beta, Gamma Screening

Alpha Fl76m/h W18m/h Beta/Gamma Fl&W 162m/h Ext. Beta/Gamma 260m/h

Prop No: 9/9002-00001	Ext. Beta/Gaiiiiia 20011/11			118/[1	
	Unit			_	
	<u>Cost</u> <u>U</u>	<u> Inits</u>	Quantity	<u>Cost</u>	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00 /r	roll	0	\$0	
40 mL VOA Vials	\$122.74 /c		0	\$0	
1 Liter Amber Bottles	\$37.95 /c		0	\$0	
32 oz. HDPE Bottles	\$30.75 /c		0	\$0	
Braided Nylon Rope	\$0.15 /f		500	\$75	
Bubble Pack	\$84.00 /r	oll	1	\$84	
Decon Eqt	\$18.00 /k	kit	1	\$18	
55g drums fill/mov	\$100.00 e	ach	0	\$0	
Field Notebook	\$14.00 e	ach	4	\$56	
Ice	\$1.00 /b	oag	0	\$0	
Latex Gloves	\$10.00 /b	oox	4	\$40	
Methanol (Optima)	\$25.00 /b	oottle	0	\$0	
Hexane (Optima)	\$25.00 /b	oottle	0	\$0	
Acetone (Optima)	\$50.00 /b	oottle	0	\$0	
HCI (Optima)	\$285.00 /b	oottle	0	\$0	
HNO3 (Optima)	\$175.00 /b		0	\$0	
Ascorbic Acid	\$10.00 /b	oottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00 /b	oox	0	\$0	
Overboots	\$4.00 /p	oair	160	\$640	
Respirator Cartridges	\$15.00 /p	oair	1	\$15	
Packing Tape (doz)	\$72.00 /c		1	\$72	
Padlocks	\$12.00 e	ach	0	\$0	
Sampling Tables	\$40.00 ea	ach	2	\$80	
Radiological Badges	\$20.00 e	ach	4	\$80	
Aluminum Foil	\$1.00 /r	oll	0	\$0	
Stain Stl bwl/spn	\$30.00 /s	set	0	\$0	
Survey Stake/Flag	\$20.00 /b	oundle	10	\$200	
Teflon tape	\$8.00 /r	oll	0	\$0	
Tyveks	\$6.30 e	ach	160	\$1,008	
Water (HPLC Grade)	\$97.00 /c	case	0	\$0	
Ziplock bags	\$3.00 /b	oox	0	\$0	
Calibration Gas	\$450.00 /ta	ank	0	\$0	
Ultra Pure Air	\$310.00 /t	on	0	\$0	
Teflon Tubing	\$120.00 /r	oll	0	\$0	
Teflon Sheeting	\$500.00 /r	·oll	0	\$0	
Folding Live Traps	\$15.00 e	ach	0	\$0	
Glassware	\$25.00 e	ach	0	\$0	
Quartz Filters	\$10.00 e	ach	0	\$0	
Vermiculite Packing	\$16.00 /b	pag	0	\$0	
-					

SUBTOTAL MATLS & SUPPLIES:

\$2,368

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.1

Alpha, Beta, Gamma Screening

Alpha Fl76m/h W18m/h Beta/Gamma FI&W 162m/h Ext. Beta/Gamma 260m/h

Prop No: 979002-00001 Ext. Beta/Gamma 2 Unit Cost Units Quantity Cost TRAVEL Airfare Boston\Syracuse \$500.00 /trip 3 \$1,500 Airfare Boston\Huntsville \$900.00 /trip 0 \$0 Subsistence-Seneca \$96.00 /day 90 \$8,640 3 Subsistence-Huntsville \$89.00 /day 0 \$0	Notes
TRAVEL Airfare Boston\Syracuse \$500.00 /trip 3 \$1,500 Airfare Boston\Huntsville \$900.00 /trip 0 \$0 Subsistence-Seneca \$96.00 /day 90 \$8,640 3 Subsistence-Huntsville \$89.00 /day 0 \$0	<u>Notes</u>
Airfare Boston\Syracuse \$500.00 /trip 3 \$1,500 Airfare Boston\Huntsville \$900.00 /trip 0 \$0 Subsistence-Seneca \$96.00 /day 90 \$8,640 30 Subsistence-Huntsville \$89.00 /day 0 \$0	
Airfare Boston\Huntsville \$900.00 /trip 0 \$0 Subsistence-Seneca \$96.00 /day 90 \$8,640 3 Subsistence-Huntsville \$89.00 /day 0 \$0	
Airfare Boston\Huntsville \$900.00 /trip 0 \$0 Subsistence-Seneca \$96.00 /day 90 \$8,640 30 Subsistence-Huntsville \$89.00 /day 0 \$0	
Subsistence-Seneca \$96.00 /day 90 \$8,640 30 Subsistence-Huntsville \$89.00 /day 0 \$0	
Subsistence-Huntsville \$89.00 /day 0 \$0	@30davs
	O *****, **
Parking,Airport \$13.00 /day 30 \$390	
Auto Rental \$55.00 /day 0 \$0	
Suburban\Van rental \$585.00 /week 6 \$3,510	
Mileage \$0.31 /mile 150 \$47	
SUBTOTAL TRAVEL: \$14,087	
OTHERS	
IN-HOUSE SERVICES	
Telephone \$4.00 /call 20 \$80	
Word Proc/PC \$3.70 /hour 0 \$0	
CADD \$5.00 /hour 0 \$0	
Facsimile \$1.00 /page 50 \$50	
Overnight Express	
Letter/2 lb pack \$14.50 each 0 \$0	
Package (50 lbs) \$96.25 each 8 \$770	
Mail 4-lb pack \$4.10 /pack 0 \$0	
Mail letters \$0.54 /letter 0 \$0	
Subtotal Services \$900	
REPRODUCTION	
Photocopier \$0.05 /page 500 \$25	
Aerial Photo repro \$10.00 /photo 0 \$0	
Blueline repro \$1.00 /Sheet 0 \$0	
Cronoflex Prod \$5.50 /Sq Ft 0 \$0	
3-ring binders \$15.00 each 0 \$0	
Color Copies \$2.00 /page 0 \$0	
Subtotal Reproduction \$25	

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.1

Alpha, Beta, Gamma Screening

Alpha FI76m/h W18m/h Beta/Gamma FI&W 162m/h Ext. Reta/Gamma 260m/h

Prop No: 979002-00001	Ext. Beta/Gamma 260m/h				
P10p No. 979002-00001	Linit	Unit Ext. Beta			20011/11
	Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL	<u> </u>	<u>Omio</u>	Scauling	3000	140100
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	•	0	\$0	
Flow Meter	\$30.00		0	\$0	
Water coolers		/month	0.5	\$20	
Equipment Trailer	\$1,000.00		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00		0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	,	0	\$0	
Hi- Vol Sampler	\$75.00		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	•	0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	•	0	\$0 \$0	
EM-31 GPR	\$85.00	•	0	\$0 \$0	
GFK	\$500.00	luay	0	40	
Subtot	al Rental			\$520	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	30	\$1,500	
Alpha Survey Meter	\$80.00	/week	6	\$480	
Alpha Scintillation Counter	\$100.00		6	\$600	
Beta Sample Counter	\$100.00		6	\$600	
Gas Proportional Detector	\$100.00		6	\$600	
Gas Prop. Detector-Floor	\$100.00		6	\$600	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00	•	30	\$1,500	
Calib Gas	\$10.00	•	30	\$300	
2-way radios	\$15.00		12	\$180	
Air Purif Resp	\$20.00		0	\$0 \$240	
10-Gal Eye Wash	\$35.00		6	\$210	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
0.14.4	11100			¢c 570	

SUBTOTAL OTHERS:

\$8,015

\$6,570

SUBTOTAL LABOR & ODC'S:

\$77,006

Subtotal H & S

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.3.1

Alpha, Beta, Gamma Screening

Alpha FI76m/h W18m/h Beta/Gamma FI&W 162m/h Ext. Beta/Gamma 260m/h

Prop No. 979002-00001			Ext. Beta/G	amma 200m/r	<u> </u>
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABO					
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABORA	ATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal Te	eam Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
. ,					

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.3.1

Alpha, Beta, Gamma Screening

Alpha Fi76m/h W18m/h Beta/Gamma FI&W 162m/h Ext. Beta/Gamma 260m/h

	Unit	11.20	0		
DADIOLOGICAL LABORATORY ANALYSIS	<u>Cost</u>	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For: Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0 \$0	
Gross AlphaΒ	\$45.00		0	\$0 \$0	
Soil Samples For:	φ+5.00	Caon	O	ΨΟ	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00		0	\$0	
Wipe Samples For:	*****			4.5	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal N	lisc. Labora	itory		\$0	
INVESTIGATION SUBCONTRACTORS					
	Lump Sum	each	0	\$0	
	Lump Sum		0	\$0	
	Lump Sum	each	0	\$0	
	Lump Sum	each	0	\$0	
Subtotal Ir	nvestigation	Subcontrac	tors	\$0	
Subtotal Labo	oratory & In	vestigation S	Subcontractors:	\$0	
	•	-	20/ Mark up:	¢Λ	

TASK TOTAL: \$77,006

\$0

\$0

3% Mark-up:

SUBTOTAL SUBCONTRACTORS:

U.S. Army Corps of Engineers Printed: 22-Mar-96 Client: Parsons Engineering Science, Inc. Huntsville Division Project: Seneca Army Depot Activity, Romulus New York Task # 2.3.2 RI/FS at the Radiological Disposal Areas Alpha, Beta, Gamma SEAD-12 **Direct Measurements** Annex E Affected 120/dy Unaffected 100/dy Prop No: 979002-00001 Unit Cost <u>Units</u> Quantity Cost

LABOR COSTS	<u> </u>	Onits	Quantity	<u>0031</u>	Notes
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68) Professional Level 6, Step 1 (P62)	\$58.74 \$46.47		0	\$0 \$0	
Professional Level 5, Step 4 (P58) Professional Level 5, Step 3 (P56) Professional Level 5, Step 2 (P54)	\$44.11 \$37.99 \$32.91	/hour	8 0 8	\$353 \$0 \$263	
Professional Level 5, Step 1 (P52) Professional Level 4, Step 2 (P48)	\$29.39 \$29.13	/hour	0	\$0 \$0	
Professional Level 4, Step 1 (P42) Professional Level 3, Step 1 (P35)	\$25.20 \$24.04		90	\$2,268 \$0	
Professional Level 2, Step 2 (P28) Professional Level 2, Step 1 (P22)	\$23.09 \$19.89		0	\$0 \$0	
Professional Level 1, Step 2 (P18) Professional Level 1, Step 1 (P12)	\$18.57 \$14.84		90 0	\$1,671 \$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48) Technician Level 4, Step 1 (T42)	\$16.58 \$14.08		0 0	\$0 \$0	
Technician Level 3, Step 2 (T38) Technician Level 3, Step 1 (T32)	\$13.99 \$11.61		0 0	\$0 \$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1 Base Yr			196	\$4,555	
base Yr				40.54	

Notes

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$6,514

\$11,070

Overhead Rate:

143%

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.3.2

Alpha, Beta, Gamma **Direct Measurements** Affected 120/dy Unaffected 100/dy

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00		0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	2	\$20	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	18	\$72	
Respirator Cartridges	\$15.00	•	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00	each	2	\$40	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	2	\$40	
Teflon tape	\$8.00		0	\$0	
Tyveks	\$6.30		24	\$151	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00		0	\$0	
Vermiculte Facking	Ψ10.00	, sug	•	Ψ.	

SUBTOTAL MATLS & SUPPLIES:

\$479

Client: U.S. Army Corps of Engineers Printed:
Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York
RI/FS at the Radiological Disposal Areas
SEAD-12
Annex E

Prop No: 979002-00001

Unit
Cost
TRAVEL

Airfare Boston\Syracuse \$500.00 /

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

\$25

Task # 2.3.2

Alpha, Beta, Gamma Direct Measurements Affected 120/dy

Prop No: 979002-00001		Unaffected 100/dy					
	Unit						
	Cost	<u>Units</u>	Quantity	Cost	Notes		
TRAVEL							
Airfare Boston\Syracuse	\$500.00	/trip	2	\$1,000			
Airfare Boston\Huntsville	\$900.00	•	0	\$0			
Subsistence-Seneca	\$96.00		24	\$2,304			
Subsistence-Huntsville	\$89.00		0	\$0			
Parking, Airport	\$13.00		24	\$312			
Auto Rental	\$55.00		8	\$440			
Suburban\Van rental	\$585.00		2	\$1,170			
Mileage	\$0.31	/mile	150	\$47			
		SUBTOTA	AL TRAVEL:	\$5,273			
OTHERS							
IN-HOUSE SERVICES							
Telephone	\$4.00	/call	20	\$80			
Word Proc/PC	\$3.70		0	\$0			
CADD	\$5.00		0	\$0			
Facsimile		/page	50	\$50			
Overnight Express	ψσσ	.6~90		400			
Letter/2 lb pack	\$14.50	each	0	\$0			
Package (50 lbs)	\$96.25		8	\$770			
Mail 4-lb pack		/pack	0	\$0			
Mail letters		/letter	0	\$0			
Subto	otal Services			\$900			
REPRODUCTION							
Photocopier	\$0.05	/page	500	\$25			
Aerial Photo repro	\$10.00		0	\$0			
Blueline repro		/Sheet	0	\$0			
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0			
3-ring binders	\$15.00	each	0	\$0			
Color Copies	\$2.00	/page	0	\$0			

Subtotal Reproduction

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Alpha, Beta, Gamma **Direct Measurements** Affected 120/dy Unaffected 100/dy

Task # 2.3.2

Prop No: 979002-00001

1 10p 140. 37 3002-00001			Onanc	oted roordy	
	Ünit				N
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	week	0	\$0	
	\$42.00		0	\$0 \$0	
Magnetometer			0	\$0 \$0	
pH/Cond meter	\$50.00			•	
Flow thru pH/Cond meter	\$257.00		0	\$0 \$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00	•	0	\$0	
Slug test eqt	\$50.00		0	\$0	
Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0.5	\$20	
Equipment Trailer	\$1,000.00	/month	0.5	\$500	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00		0	\$0	
Hi- Vol Sampler	\$75.00	•	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00		0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00		0	\$0	
	\$500.00	•	0	\$0 \$0	
GPR	φ300.00	luay	O	φυ	
Subtota	al Rental		-	\$520	
Cubicit	a remai			ΨΟΣΟ	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	5	\$250	
Alpha Survey Meter	\$80.00	•	2	\$160	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		2	\$200	
Gas Prop. Detector-Floor	\$100.00		2	\$200	
Radon Monitor	\$300.00		0	\$0	
	\$50.00		0	\$0	
Gamma Radiation Meter		•	-	\$80	
Calib Gas	\$10.00	,	8		
2-way radios	· ·	/ea/wk	4	\$60	
Air Purif Resp	\$20.00		0	\$0 \$70	
10-Gai Eye Wash	\$35.00		2	\$70	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Culitata	al H & S			\$1,020	
Subtota	ππασ			φ1,020	

SUBTOTAL OTHERS:

\$2,465

SUBTOTAL LABOR & ODC'S:

\$19,286

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001 Task # 2.3.2

Alpha, Beta, Gamma **Direct Measurements** Affected 120/dy Unaffected 100/dy

Tiop No. 070002 00001	Unit		0 (1)	0 4	Net
	Cost	<u>Units</u>	<u>Quantity</u>	Cost	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAB	ORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0 \$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0 \$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0 \$0	
TOX (EPA 9056)	\$50.00		0 0	\$0 \$0	
Chloride(EPA 9250)	\$25.00 \$60.00		0	\$0 \$0	
BOD	\$25.00		0	\$0 \$0	
Sulfate(EPA 300) COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	ΔΤΟΡΎ ΔΙ	2127 141			
	\$180.00		0	\$0	
Volatiles (TCL) B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal T	eam Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001 Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.3.2

Alpha, Beta, Gamma Direct Measurements Affected 120/dy Unaffected 100/dv

Prop No: 979002-00001			Un	affected 100/dy	
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANAI	LYSIS				
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co	60 \$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co	60 \$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co	60 \$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALY	'SIS				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		0	\$0	
Q ₁	ıbtotal Misc. Labora	eton/	_	\$0	
	ibtotal Wilde. Labore	atory		40	
INVESTIGATION SUBCONTRACTOR					
Driller	Lump Sum		0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum	each	n	\$0	
Su	ıbtotal Investigatior	Subcontra	actors	\$0	
Subto	otal Laboratory & Ir	vestigation		\$0	
	CLIDTOTAL	CLIDOON	3% Mark-up:	\$0 \$0	
	SUBTUTAL	SUBCOL	ITRACTORS:	ΦU	

TASK TOTAL: \$19,286

Client:

U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.3.3

Project:

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Prop No: 979002-00001

Performance of Exposure

\$14,686

Rate Surveys

 $70/dy \times 12.4dy = 870$ measurements

Prop No: 979002-00001					
	Unit	l lmita	Overtite	Cont	Materia
LABOR COSTS	Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
·					
Professional Level 5, Step 4 (P58)	\$44.11		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20		124	\$3,125	
1 101035101141 20101 1, 010p 1 (1 12)	Ψ20.20	777041		45,125	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
Troicosional Level 2, otop 1 (1 22)	Ψ10.00	modi	·	**	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	124	\$2,303	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
redifficial Level 4, etcp 1 (112)	Ψ.1.00	711041	•	**	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
	\$00.04	0	0	¢o.	
Support Level 3 (S35)	\$20.61	/nour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS!! ABOR COST			264	\$6,044	
TOTAL HOURS/LABOR COST Contract Year: 1			204	φυ,υ44	
Base Yr					
Overhead Rate: 143%			Labor Burden:	\$8,642	
2.0000000000000000000000000000000000000	DTOT::		NED LABOR	0.4.4.000	

SUBTOTAL BURDENED LABOR:

Client:

U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.3.3

Performance of Exposure

Rate Surveys

 $70/dy \times 12.4dy = 870$ measurements

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roli	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	2	\$20	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	24	\$96	
Respirator Cartridges	\$15.00	/pair	1	\$15	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00	each	2	\$40	
Aluminum Foil	\$1.00	/roll	, 0	\$0	
Stain Stl bwl/spn	\$30.00		0	\$0	
Survey Stake/Flag	\$20.00	/bundle	2	\$40	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	24	\$151	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00		0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$518

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.3.3

Performance of Exposure

Rate Surveys

70/dy x 12.4dy = 870measurements

Prop No: 979002-00001			70/0	ıy x 12.4uy – 67011	neasurements
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	2	\$1,000	
Airfare Boston\Huntsville	\$900.00		0	\$0	
Subsistence-Seneca	\$96.00	/day	28	\$2,688	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking,Airport	\$13.00	/day	28	\$364	
Auto Rental	\$55.00	/day	0	\$0	
Suburban\Van rental	\$585.00		3	\$1,755	
Mileage	\$0.31	/mile	150	\$47	
		SUBTOTA	AL TRAVEL:	\$5,854	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	20	\$80	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	50	\$50	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$9 6.25		8	\$770	
Mail 4-lb pack		/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subte	otal Services			\$900	
REPRODUCTION					
Photocopier		/page	500	\$25	
Aerial Photo repro	\$10.00	•	0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subto	otal Reproductio	n		\$25	

Client: U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E Prop No: 979002-00001 Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.3.3

Performance of Exposure

Rate Surveys

 $70/dy \times 12.4dy = 870$ measurements

Trop No. 070002 00001	Unit				
EQUIPMENT BENTAL	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	•	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers		/month	0.5	\$20	
Equipment Trailer	\$1,000.00		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00	•	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	•	0	\$0	
Hi- Vol Sampler	\$75.00		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	•	0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	-	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	•	0	\$0 \$0	
GPR	\$500.00	/day	0	\$0	
Subtot	al Rental			\$520	
Gubtot	ai i teritai			4020	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	13	\$650	
Alpha Survey Meter	\$80.00	-	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00	/day	13	\$650	
Calib Gas	\$10.00	/day	0	\$0	
2-way radios	\$15.00	/ea/wk	6	\$90	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		2	\$70	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subtot	al H & S			\$1,460	

SUBTOTAL OTHERS:

\$2,905

SUBTOTAL LABOR & ODC'S:

\$23,963

Client: U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E Prop No: 979002-00001 Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.3.3

Performance of Exposure

Rate Surveys

 $70/dy \times 12.4dy = 870$ measurements

P10p 140. 979002-00001	I Imia				
	Unit <u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
	<u>0031</u>	Office	Quantity	<u>0031</u>	Hotes
SUBCONTRACTORS					
GOBGONTIVIOTORIO					
GROUNDWATER or SURFACE WATER LA	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00	each	0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABO			_		
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Outhor	T 1	-4		<u> </u>	
Subtotal	Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		Ö	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0 \$0	
Cation Exchange Capacity	Ψ100.00	Caon	U	ΨΟ	

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Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.3

Performance of Exposure

Rate Surveys

 $70/dy \times 12.4dy = 870$ measurements

Alliex E			Toray	x 12.4uy - 01011	reasurement
Prop No: 979002-00001	Llmit				
	Unit Cost	Llaita	Quantity	Cost	Motoo
RADIOLOGICAL LABORATORY ANALYSIS		<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS	•				
Vater Samples For:	\$60.00	oach	0	\$0	
Thorium 232, 230, 227	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234	\$40.00		0	\$0 \$0	
Radium 226,223	\$80.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60 Plutonium 239 + 240	\$65.00		0	\$0 \$0	
	\$65.00 \$65.00		0	\$0 \$0	
Americium 241	\$45.00		0	\$0 \$0	
Gross AlphaΒ	Ф45.00	eacn	U	φU	
oil Samples For:	960.00	ooob	0	\$0	
Thorium 232, 230, 227	\$60.00				
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60		each	0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0 \$0	
Gamma Spectrometry	\$0.00		0	\$0 \$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0 \$0	
Sample Prep/Return	\$0.00	eacn	U	\$0	
Vipe Samples For:	¢60.00	aaah	0	0.2	
Thorium 232, 230, 227	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
Radium 226,223	\$40.00		0 0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0 \$0	
Gross AlphaΒ	\$45.00	each	O	40	
IR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00		0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtota	l Misc. Labora	atory		\$0	
NVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Subtota	l Investigation	Subcontrac	tors	\$0	
Subtotal I	ahoratory & In	vestigation S	Subcontractors:	\$0	
Gastotal Et	abolatory a III	Jougunon C	3% Mark-up:	\$0	
				φ0	

TASK TOTAL:

\$23,963

\$0

SUBTOTAL SUBCONTRACTORS:

Client: U.S. Army Corps of Engineers

Huntsville Division

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Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.3.4

Performance of Wipe Sampling 100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001

1100110. 070002 00001	Unit			•	
LABOR COSTS	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91	/hour	8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39		0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13	/bour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20		100	\$2,520	
1 Totossional Level 4, Otop 1 (1 42)	Ψ20.20	modi	100	Ψ2,020	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89	/hour	0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	100	\$1,857	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/bour	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/bour	0	\$0	
Technician Level 3, Step 2 (133)	\$11.61		Ö	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
, ,					
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST			216	\$4,993	
Contract Year: 1					
Base Yr					

Labor Burden: Overhead Rate: 143%

\$7,140

SUBTOTAL BURDENED LABOR:

\$12,133

Client:

U.S. Army Corps of Engineers

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.3.4

Performance of Wipe Sampling 100 Wipes/dy x 10dy=1000Wipes

Prop No: 9/9002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		Ö	\$0	
32 oz. HDPE Bottles	\$30.75		0	\$0	
	\$0.15		0	\$0	
Braided Nylon Rope	\$84.00		1	\$84	
Bubble Pack	\$18.00		1	\$18	
Decon Eqt	\$100.00		0	\$0	
55g drums fill/mov Field Notebook	\$14.00		1	\$14	
	\$1.00		Ó	\$0	
Ice	\$10.00		2	\$20	
Latex Gloves	\$25.00		0	\$0	
Methanol (Optima)	\$25.00 \$25.00		0	\$0	
Hexane (Optima)	\$50.00		0	\$0 \$0	
Acetone (Optima)	\$285.00		0	\$0	
HCI (Optima)			0	\$0 \$0	
HNO3 (Optima)	\$175.00 \$10.00		0	\$0 \$0	
Ascorbic Acid	4		0	\$ 0	
Filters (0.45uM & 0.5uM)	\$50.00		20	\$80	
Overboots	\$4.00	•	1	\$15	
Respirator Cartridges	\$15.00	-	0	\$13 \$0	
Packing Tape (doz)	\$72.00		0	\$0 \$0	
Padiocks	\$12.00		-	\$40	
Sampling Tables	\$40.00		1		
Radiological Badges	\$20.00		4	\$80	
Aluminum Foil	\$1.00		0	\$0 \$0	
Stain Stl bwl/spn	\$30.00		0		
Survey Stake/Flag		/bundle	0	\$0	
Teflon tape	\$8.00		0	\$0 \$126	
Tyveks	\$6.30		20	\$126	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00		0	\$0	
Calibration Gas	\$450.00		0	\$0 \$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0 \$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$477

Client:

U.S. Army Corps of Engineers

Printed:

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Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.3.4

Performance of Wipe Sampling 100 Wipes/dy x 10dy=1000Wipes

\$25

Prop No: 9/9002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	2	\$1,000	
Airfare Boston\Huntsville	\$900.00		0	\$0	
Subsistence-Seneca	\$96.00	•	20	\$1,920	
Subsistence-Huntsville	\$89.00	-	0	\$0	
Parking, Airport	\$13.00	-	20	\$260	
Auto Rental	\$55.00		10	\$550	
Suburban\Van rental	\$585.00	/week	0	\$0	
Mileage	\$0.31	/mile	150	\$47	
		SUBTOT	AL TRAVEL:	\$3,777	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	20	\$80	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00		0	\$0	
Facsimile		/page	50	\$50	
Overnight Express	*****	19-		***	
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	8	\$770	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Si	ubtotal Services			\$900	
REPRODUCTION					
Photocopier	\$0.05	/page	500	\$25	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod	•	/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	

Subtotal Reproduction

Huntsville Division

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Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.3.4

Performance of Wipe Sampling 100 Wipes/dy x 10dy=1000Wipes

Prop No: 9/9002-00001					
	Unit		0	•	
EQUIPMENT RENTAL	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0.5	\$20	
Equipment Trailer	\$1,000.00	/month	0.5	\$500	
Grundfus Redi Flow Pump	\$64.00		0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00		0	\$0	
Hi- Vol Sampler	\$75.00		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	•	0	\$0	
Ponar Sediment Sampler	\$27.00	*	0	\$0	
3.2 kw Generator	\$50.00		0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtotal	Rental			\$520	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	lday	10	\$500	
Alpha Survey Meter	\$80.00	•	0	\$0	
Alpha Scintillation Counter	\$100.00		2	\$200	
Beta Sample Counter	\$100.00		2	\$200	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
Calib Gas	\$10.00	•	0	\$0	
2-way radios	\$15.00	•	4	\$60	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		2	\$70	
Combination SCBA/SAR	\$150.00		0	\$0	
	Ţ.00.00	,	·	4.5	

SUBTOTAL OTHERS:

\$2,475

\$1,030

SUBTOTAL LABOR & ODC'S:

\$18,862

Subtotal H & S

Client:

U.S. Army Corps of Engineers

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22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.4

Performance of Wipe Sampling 100 Wipes/dy x 10dy=1000Wipes

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)		each	0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABO	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	ratory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
Cauch Exchange Capacity	Ţ.00.00		•	¥ -	

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Project: Seneca Army Depot Activity, Romulus New York

SEAD-12 Annex E

RI/FS at the Radiological Disposal Areas

Performance of Wipe Sampling 100 Wipes/dy x 10dy=1000Wipes

Task # 2.3.4

Prop No: 979002-00001

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYS	SIS				
Water Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS	}				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subto	tal Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Subto	tal Investigation	Subcontra	ctors	\$0	
Subtotal	Laboratory & In	vestigation	Subcontractors:	\$0	
			3% Mark-up:	\$0	

TASK TOTAL: \$18,862

\$0

SUBTOTAL SUBCONTRACTORS:

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York Project:

Overhead Rate:

143%

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.5

Performance of Radon Investigations Placement of Cannisters = 50/dy Collection of Cannisters = 50/dy

Annex E			Colle	ection of Cannister	s = 50/dy
Prop No: 979002-00001	11.2				
	Unit	Inita	Ouantitu	04	N1-4
LABOR COCTO	Cost L	<u> Inits</u>	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 /h	nour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /h	nour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /h		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /h		8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39 /h	nour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /h	nour.	0	\$0	
Professional Level 4, Step 2 (P46) Professional Level 4, Step 1 (P42)	\$25.20 /h		40		
Professional Level 4, Step 1 (F42)	\$25.20 A	ioui	40	\$1,008	
Professional Level 3, Step 1 (P35)	\$24.04 /h	nour	0	\$0	
	+			4.0	
Professional Level 2, Step 2 (P28)	\$23.09 /h	nour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /h	nour	0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /h		40	\$743	
Professional Level 1, Step 1 (P12)	\$14.84 /h	our	0	\$0	
ECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10 /h	nour	0	\$0	
, ,					
Technician Level 4, Step 2 (T48)	\$16.58 /h	our	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /h	our	0	\$0	
T	A (A A A A)		•	•	
Technician Level 3, Step 2 (T38)	\$13.99 /h		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /h	iour	0	\$0	
Technician Level 2 (T25)	\$10.13 /h	our	0	\$0	
redifficial Ecycl 2 (123)	Ψ10.10 ///	ioui	· ·	ΨΟ	
Technician Level 1 (T15)	\$8.89 /h	our	0	\$0	
, ,					
Support Level 3 (S35)	\$20.61 /h	our	0	\$0	
Support Level 2 (S25)	\$12.40 /h	our	0	\$0	
Support Level 1 (S15)	\$8.72 /h	our	0	\$0	
OTAL HOURS/LABOR COST				¢2 267	
			96	\$2,367	
Contract Year: 1 Base Yr					
Dase fr				40.005	

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$3,385

\$5,752

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

:: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Task # 2.3.5

Performance of Radon Investigations Placement of Cannisters = 50/dy

Collection of Cannisters = 50/dy

Prop No: 979002-00001

1100 140. 073002 00001	Unit				
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	2	\$20	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCl (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	8	\$32	
Respirator Cartridges	\$15.00	/pair	1	\$15	
Packing Tape (doz)	\$72.00	/case	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00	each	2	\$40	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	2	\$40	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	8	\$50	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$425

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

Unit

22-Mar-96

Parsons Engineering Science, Inc.

Project:

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.5

Performance of Radon Investigations Placement of Cannisters = 50/dy Collection of Cannisters = 50/dy

Notes

	1
TRAVEL	

	Cost	<u>Units</u>	Quantity	Cost
EL				
Airfare Boston\Syracuse	\$500.00	/trip	4	\$2,000
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0
Subsistence-Seneca	\$96.00	/day	8	\$768
Subsistence-Huntsville	\$89.00	/day	0	\$0
Parking,Airport	\$13.00	/day	8	\$104
Auto Rental	\$55.00	/day	6	\$330
Suburban\Van rental	\$585.00	/week	0	\$0
Mileage	\$0.31	/mile	150	\$47

SUBTOTAL TRAVEL:

\$3,249

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3-ring binders

Color Copies

OTHERS			
IN-HOUSE SERVICES			
Telephone	\$4.00 /call	20	\$80
Word Proc/PC	\$3.70 /hour	0	\$0
CADD	\$5.00 /hour	0	\$0
Facsimile	\$1.00 /page	50	\$50
Overnight Express			
Letter/2 lb pack	\$14.50 each	0	\$0
Package (50 lbs)	\$96.25 each	8	\$770
Mail 4-lb pack	\$4.10 /pack	0	\$0
Mail letters	\$0.54 /letter	0	\$0
Si	ubtotal Services		\$900
REPRODUCTION			
Photocopier	\$0.05 /page	500	\$25
Aerial Photo repro	\$10.00 /photo	0	\$0
Blueline repro	\$1.00 /Sheet	0	\$0
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0

Subtotal Reproduction

\$15.00 each

\$2.00 /page

\$25

\$0

\$0

0

0

Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.3.5

Performance of Radon Investigations

Placement of Cannisters = 50/dy Collection of Cannisters = 50/dy

Prop No: 979002-00001					
	Unit				
	Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0.5	\$20	
Equipment Trailer	\$1,000.00	/month	0.5	\$500	
Grundfus Redi Flow Pump	\$64.00		0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	•	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	-	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	•	0	\$0	
	,	,		· · · · · · · · · · · · · · · · · · ·	
Subtotal	Rental			\$520	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	4	\$200	
Alpha Survey Meter	\$80.00	•	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
Calib Gas	\$10.00	•	0	\$0	
2-way radios	\$15.00	•	0	\$0	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		0	\$0	
Combination SCBA/SAR	\$150.00		0	\$0	
GOILING MAINTENANT AND	Ţ. 20.3 0	,	-	Ŧ-	

SUBTOTAL OTHERS:

\$1,645

\$200

SUBTOTAL LABOR & ODC'S:

\$11,071

Subtotal H & S

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.5

Performance of Radon Investigations Placement of Cannisters = 50/dy Collection of Cannisters = 50/dy

Prop No:	979002-00001

1100 110.	Unit	1.1-:4-	04/4	04	NI-4
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0 #0	
Sulfate(EPA 300)	\$25.00		0	\$0 #0	
COD	\$50.00		0	\$0 \$0	
pH (EPA 9045)	\$8.00		0	\$0 \$0	
Volatiles (EPA 524)	\$195.00 \$15.00		0 0	\$0 \$0	
Hardness(EPA 130.2)	•		0	\$0 \$0	
Alkalinity(EPA 310)	\$12.00 \$20.00		0	\$0 \$0	
Nitrate (EPA 353.2)	\$20.00	each	U	Φ0	
SOILS - SURFACE or SUBSURFACE LABO	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtota	l Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
5 , ,	•				

Client: U.S. Army Corps of Engineers

Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.3.5

Performance of Radon Investigations Placement of Cannisters = 50/dy Collection of Cannisters = 50/dy

Prop No: 979002-00001

•	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					,
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Subtotal	Investigation	Subcontrac	tors	\$0	
Subtotal La	horatory & In	vestigation !	Subcontractors:	\$0	
Gubiotai Lai	coratory & III	+ Joungalion (20/ Mark up:	Φ0	

TASK TOTAL:

3% Mark-up:

\$11,071

\$0

\$0

SUBTOTAL SUBCONTRACTORS:

Huntsville Division

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22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.3.6

Performance of Special

Sampling

4Samples/dy x 3dy=12Samples

Annex E	, , ,				
Prop No: 979002-00001	11.11				
	Unit	1.1.24	0	0 1	
	Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
, , ,				,	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		8	\$263	
			0		
Professional Level 5, Step 1 (P52)	\$29.39	mour	U	\$0	
- () () () () () () () () () (000.40		•	20	
Professional Level 4, Step 2 (P48)	\$29.13		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	30	\$756	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89	/hour	0	\$0	
, , ,				,	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	30	\$557	
Professional Level 1, Step 1 (P12)	\$14.84		0	\$0	
1 Tolessional Level 1, Otep 1 (1 12)	Ψ14.04	modi	v	ΨΟ	
TECHNICAL AND SUPPORT SPECIALISTS					
TECHNICAL AND SOFFORT SPECIALISTS					
Tachnician Lavel E (TEE)	¢21 10	/hour	0	\$0	
Technician Level 5 (T55)	\$21.10	mour	U	Φ0	
T (T40)	040.50	4	•	20	
Technician Level 4, Step 2 (T48)	\$16.58		0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
,					
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
1001111010111 201011 (1110)	45.00		-	4-5	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 3 (333)	Ψ20.01	mour	O	ΨΟ	
Current Lavel 2 (COF)	¢12.40	/bour	0	40	
Support Level 2 (S25)	\$12.40	mour	0	\$0	
	A = ==	4	•	44	
Support Level 1 (S15)	\$8.72	/nour	0	\$0	
				A 1 5 5 5	
TOTAL HOURS/LABOR COST			76	\$1,929	
Contract Year: 1					
- 1/					

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$2,759

\$4,688

Base Yr 143%

Overhead Rate:

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Project:

Annex E Prop No: 979002-00001 Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.3.6

Performance of Special

Sampling

4Samples/dy x 3dy=12Samples

Prop No: 979002-00001					
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	1	\$20	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	6	\$228	
32 oz. HDPE Bottles	\$30.75	/case	6	\$185	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	20	\$20	
Latex Gloves	\$10.00	/box	2	\$20	
Methanol (Optima)	\$25.00	/bottle	1	\$25	
Hexane (Optima)	\$25.00	/bottle	1	\$25	
Acetone (Optima)	\$50.00	/bottle	1	\$50	
HCI (Optima)	\$285.00	/bottle	1	\$285	
HNO3 (Optima)	\$175.00	/bottle	1	\$175	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	6	\$24	
Respirator Cartridges	\$15.00	/pair	1	\$15	
Packing Tape (doz)	\$72.00	•	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00	each	2	\$40	
Aluminum Foil	\$1.00	/roli	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	12	\$360	
Survey Stake/Flag	\$20.00	/bundle	1	\$20	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	6	\$38	
Water (HPLC Grade)	\$97.00	/case	2	\$194	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00		8	\$128	
	+	~		-	

SUBTOTAL MATLS & SUPPLIES:

\$2,079

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.3.6

Performance of Special

Sampling

4Samples/dy x 3dy=12Samples

\$25

Annex E Prop No: 979002-00001				4Samples/dy x 3dy=12Samples		
10p 140. 373002 00007	Unit	- PV-14				
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>	
TRAVEL						
Airfare Boston\Syracuse	\$500.00	/trip	2	\$1,000		
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0		
Subsistence-Seneca	\$96.00	/day	6	\$576		
Subsistence-Huntsville	\$89.00	/day	0	\$0		
Parking,Airport	\$13.00	/day	6	\$78		
Auto Rental	\$55.00	/day	0	\$0		
Suburban\Van rental	\$585.00	/week	1	\$585		
Mileage	\$0.31	/mile	150	\$47		
		SUBTOTA	AL TRAVEL:	\$2,286		
OTHERS						
IN-HOUSE SERVICES						
Telephone	\$4.00	/call	20	\$80		
Word Proc/PC	\$3.70	/hour	0	\$0		
CADD	\$5.00	/hour	0	\$0		
Facsimile	\$1.00	/page	50	\$50		
Overnight Express						
Letter/2 lb pack	\$14.50	each	0	\$0		
Package (50 lbs)	\$96.25	each	8	\$770		
Mail 4-lb pack	\$4.10	/pack	0	\$0		
Mail letters	\$0.54	/letter	0	\$0		
Subto	otal Services			\$900		
REPRODUCTION						
Photocopier	\$0.05	/page	500	\$25		
Aerial Photo repro	\$10.00		0	\$0		
Blueline repro		/Sheet	0	\$0		
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0		
3-ring binders	\$15.00	each	0	\$0		
Color Copies		/page	0	\$0		

Subtotal Reproduction

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.3.6

Performance of Special

Sampling

4Samples/dy x 3dy=12Samples

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL			•		
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger, Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0.5	\$20	
Equipment Trailer	\$1,000.00	/month	0.5	\$500	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	•	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	-	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	•	0	\$0	
	•	,			
Subtota	al Rental			\$520	
HEALTH & SAFETY EQUIPMENT				0.450	
HNu Meter	\$50.00	•	3	\$150	
Alpha Survey Meter	\$80.00		1	\$80	
Alpha Scintillation Counter	\$100.00		1	\$100	
Beta Sample Counter	\$100.00		1	\$100	
Gas Proportional Detector	\$100.00		1	\$100	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00	,	0	\$0	
Calib Gas	\$10.00	•	0	\$0	
2-way radios		/ea/wk	2	\$30	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		2	\$70	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
			-	\$630	
Subtota	al H & S			φου	

SUBTOTAL OTHERS:

\$2,075

SUBTOTAL LABOR & ODC'S:

\$11,128

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.3.6

Performance of Special

Sampling

4Samples/dy x 3dy=12Samples

Annex E				45amples/dy x 3dy=125amples			
Prop No: 979002-00001							
	Unit						
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes		
SUBCONTRACTORS							
GROUNDWATER or SURFACE WATER LA			0	40			
Volatiles (TCL)	\$180.00		0	\$0			
B/N/A (TCL)	\$400.00		0	\$0 ***			
Pest./PCBs (TCL)	\$180.00		0	\$ 0			
Total Metals & CN(TAL)	\$170.00		0	\$ 0			
Iron(Ferrous)	\$30.00		0	\$0			
Sulfide	\$30.00		0	\$0			
Spec Cond(EPA 9050)	\$8.00		0	\$0			
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0			
TOX (EPA 9056)	\$50.00		0	\$0			
Chloride(EPA 9250)	\$25.00		0	\$0			
BOD	\$60.00		0	\$0			
Sulfate(EPA 300)	\$25.00		0	\$0			
COD	\$50.00	each	0	\$0			
pH (EPA 9045)	\$8.00		0	\$0			
Volatiles (EPA 524)	\$195.00		0	\$0			
Hardness(EPA 130.2)	\$15.00		0	\$0			
Alkalinity(EPA 310)	\$12.00		0	\$0			
Nitrate (EPA 353.2)	\$20.00	each	0	\$0			
SOILS - SURFACE or SUBSURFACE LABOR	RATORY AN	NALYSIS					
Volatiles (TCL)	\$180.00		0	\$0			
B/N/A (TCL)	\$400.00		0	\$0			
Pest./PCBs (TCL)	\$180.00		0	\$0			
Total Metals & CN(TAL)	\$170.00		0	\$0			
Spec Cond(EPA 9050)	\$8.00		0	\$0			
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0			
TOX (EPA 9056)	\$70.00		0	\$0			
Chloride(EPA 9250)	\$25.00		0	\$0			
pH (EPA 9045)	\$8.00		0	\$0			
Nitrate (EPA 353.2)	\$20.00		0	\$0			
. Hadio (El 71 000.2)	420.00	0		*-			
Subtotal	Team Labor	atory	-	\$0			
MISC. LABORATORY ANALYSIS							
Grain Size Dist	\$120.00	each	0	\$0			
TCLP	\$1,500.00		0	\$0			
Moisture Content	\$15.00		0	\$0			
Bulk Density	\$35.00		0	\$0			
Chromium (Level II)	\$30.00		0	\$0			
Total Suspended Solids	\$20.00		0	\$0			
Total Suspended Solids Total Dissolved Solids	\$20.00		0	\$0			
Ammonia	\$25.00		0	\$0			
Phosphate	\$25.00		0	\$0			
Cation Exchange Capacity	\$100.00		0	\$0 \$0			
Cation Exchange Capacity	φ100.00	cauli	U	φυ			

Client: U.S. Army Corps of Engineers

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.3.6

Performance of Special

Sampling

4Samples/dy x 3dy=12Samples

1100 110. 01002 00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS	3				
Water Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtota	ıl Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Subtota	l Investigation	Subcontrac	etors	\$0	
Subtotal La	aboratory & In	vestigation	Subcontractors:	\$0	
	•	•	3% Mark-up:	\$0	
•	LIDTOTAL	21.10001	TD A OTODO	0.0	

TASK TOTAL:

\$11,128

\$0

SUBTOTAL SUBCONTRACTORS:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.4

Soil Investigations Summary Surface Soil Sampling Sub-Surface Soil Sampling

Annex E	Test Pit Sampling				
Prop No: 979002-00001	Unit		rest	Pit Sampling	
		Units	Quantity	Cost	Notes
LABOR COCTO	<u>Cost</u>	Offics	Quality	<u>C051</u>	INOLES
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 2 (1 00)	\$46.47		0	\$0	
Professional Level o, Step 1 (1-02)	Ψ+0.+1	Modi	V	ΨΟ	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	24	\$1,059	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		48	\$1,580	
	\$29.39		0	\$0	
Professional Level 5, Step 1 (P52)	φ29.39	Moul	U	Φ0	
Professional Level 4 Ston 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 2 (P48)					
Professional Level 4, Step 1 (P42)	\$25.20	mour	445	\$11,214	
Destancianal Level 2 Stan 1 (D25)	\$24.04	/hour	0	\$0	
Professional Level 3, Step 1 (P35)	Φ 24.04	mour	U	φυ	
Drefessional Level 2 Stan 2 (D29)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 2 (P28)			0		
Professional Level 2, Step 1 (P22)	\$19.89	mour	U	\$0	
Drefessional Level 1 Stan 2 (D19)	\$18.57	/hour	445	\$8,264	
Professional Level 1, Step 2 (P18)					
Professional Level 1, Step 1 (P12)	\$14.84	mour	0	\$0	
TECHNICAL AND CURRORS CRECIALISTS					
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Loyal 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 5 (T55)	Φ21.10	/Houi	O	ΨΟ	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	445	\$7,378	
	\$14.08		0	\$0	
Technician Level 4, Step 1 (T42)	φ14.00	moui	U	ΨΟ	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 2 (136)	\$11.61		0	\$0	
recifician Level 3, Step 1 (132)	φ11.01	Modi	O	ΨΟ	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
reclinician Level 2 (125)	φ10.13	moul	O	ΨΟ	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
recifician Level 1 (113)	Ψ0.03	modi	· ·	ΨΟ	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 3 (000)	Ψ20.01	modi	· ·	Ψ0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 2 (323,	Ψ12.40	modi	V	ΨΟ	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
Support Level 1 (S13)	φυ.12	Aloui	· ·	ΨΟ	
TOTAL HOURS/LABOR COST			1407	\$29,494	
Contract Year: 1			,	····	
Joint doc 1 dail					

Contract Year:

Base Yr

143% Overhead Rate:

Labor Burden:

\$42,177

SUBTOTAL BURDENED LABOR:

\$71,671

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Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.4

Soil Investigations Summary Surface Soil Sampling

Sub-Surface Soil Sampling

Test Pit Sampling

	Unit			7,74	
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	3	\$60	
40 mL VOA Vials	\$122.74	/case	4	\$4 91	
1 Liter Amber Bottles	\$37.95	/case	8	\$304	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	3	\$252	
Decon Eqt	\$18.00	/kit	3	\$54	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	3	\$42	
Ice	\$1.00	/bag	40	\$40	
Latex Gloves	\$10.00	/box	6	\$60	
Methanol (Optima)	\$25.00	/bottle	1	\$25	
Hexane (Optima)	\$25.00	/bottle	1	\$25	
Acetone (Optima)	\$50.00	/bottle	1	\$50	
HCI (Optima)	\$285.00	/bottle	1	\$285	
HNO3 (Optima)	\$175.00	/bottle	1	\$175	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	132	\$528	
Respirator Cartridges	\$15.00	/pair	132	\$1,980	
Packing Tape (doz)	\$72.00	/case	3	\$216	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	2	\$80	
Radiological Badges	\$20.00	each	6	\$120	
Aluminum Foil	\$1.00		0	\$0	
Stain Stl bwl/spn	\$30.00	/set	3	\$90	
Survey Stake/Flag	\$20.00	/bundle	5	\$100	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	132	\$832	
Water (HPLC Grade)	\$97.00	/case	6	\$582	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roli	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	40	\$640	

SUBTOTAL MATLS & SUPPLIES:

\$7,030

Client: U.S. Army Corps of Engineers

Huntsville Division

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.4

Soil Investigations Summary Surface Soil Sampling Sub-Surface Soil Sampling

Test Pit Sampling

Prop No: 979002-00001

1 10p 110. 070002 00001	7.478		· · · · · · · · · · · · · · · · · · ·	cot i it ouriping	
	Unit	1.124	0	0 1	
TD AVEL	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	1	\$500	
Airfare Boston\Huntsville	\$900.00	•	0	\$0	
Subsistence-Seneca	\$96.00	/day	132	\$12,672	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking, Airport	\$13.00	/day	16	\$208	
Auto Rental	\$55.00	/day	44	\$2,420	
Suburban\Van rental	\$585.00	/week	5.5	\$3,218	
Mileage	\$0.31	/mile	300	\$93	
		SUBTO	TAL TRAVEL:	\$19,111	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	60	\$240	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	120	\$120	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	28	\$2,695	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
	Subtotal Services		_	\$3,055	
REPRODUCTION					
Photocopier		/page	1500	\$75	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro	•	/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	
	Subtotal Reproduction	n	_	\$75	

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Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.4

Soil Investigations Summary Surface Soil Sampling Sub-Surface Soil Sampling

Test Pit Sampling

P10p No. 373002-00001			16	at it camping	
	Unit	1.1-24-	O	04	N 1.4
EQUIPMENT RENTAL	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00	-	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0	
Data Logger,Trnsdcr	\$135.00	-	0	\$0	
Flow Meter	\$30.00		0	\$0	
Water coolers		/month	1.25	\$50	
Equipment Trailer	\$1,000.00		1.25	\$1,250	
Grundfus Redi Flow Pump	\$64.00	•	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00		0	\$0	
Hi- Vol Sampler	\$75.00		2	\$150	
Hi- Vol Sampler Calibration Kit	\$25.00	-	10	\$250	
Ponar Sediment Sampler	\$27.00	-	0	\$0	
3.2 kw Generator	\$50.00	-	0	\$0	
Seismograph	\$200.00	-	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtotal	Rental		**************************************	\$1,700	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	44	\$2,200	
Alpha Survey Meter	\$80.00	-	6	\$480	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		44	\$2,200	
Calib Gas	\$10.00	•	44	\$440	
2-way radios	\$15.00	-	8	\$120	
Air Purif Resp	\$20.00		12	\$240	
10-Gal Eye Wash	\$35.00		6	\$210	
Combination SCBA/SAR	\$150.00		0	\$0	
				ΦΕ 000	

SUBTOTAL OTHERS: \$10,720

\$5,890

\$108,531 SUBTOTAL LABOR & ODC'S:

Subtotal H & S

Huntsville Division Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.4

Soil Investigations Summary Surface Soil Sampling Sub-Surface Soil Sampling

Test Pit Sampling

1 100 110. 070002 00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	ROBATORY	ΖΙΖΥ ΙΔΙΑΔ			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00	each	0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
,					
SOILS - SURFACE or SUBSURFACE LABO	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	·	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtoto	I Toom Lobor	oton.		\$0	
Subtotal	l Team Labor	atory		ΨΟ	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	
-					

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001

Project:

Task # 2.4

Soil Investigations Summary Surface Soil Sampling Sub-Surface Soil Sampling

Test Pit Sampling

				1 3	
	Unit				
DADIOLOGICAL LABORATORY ANALYSIS	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:	¢60.00		0	¢0	
Thorium 232, 230, 227	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:	\$00.00		•	40	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	13940	\$13,940	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		4995	\$4,995	
Surveyor	Lump Sum		0	\$0	
Subtotal	Investigation	Subcontrac	ctors	\$18,935	

Subtotal Laboratory & Investigation Subcontractors: \$18,935

3% Mark-up:

\$568

SUBTOTAL SUBCONTRACTORS:

\$19,503

TASK TOTAL:

\$128,034

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.4.1 Surface Soil Sampling

131 SS @ 8 per day (16 days)

Prop No: 979002-00001

Prop No: 979002-00001	Unit			
	Cost Units	Quantity	Cost	Notes
LABOR COSTS				
ENGINEERS AND SCIENTISTS				
Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour	8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour	16	\$527	
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour	160	\$4,032	
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour	160	\$2,971	
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS				
Technician Level 5 (T55)	\$21.10 /hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour	160	\$2,653	
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0	
Technician Level 2 (T25)	\$10.13 /hour	0	\$0	
Technician Level 1 (T15)	\$8.89 /hour	0	\$0	
Support Level 3 (S35)	\$20.61 /hour	0	\$0	
Support Level 2 (S25)	\$12.40 /hour	0	\$0	
Support Level 1 (S15)	\$8.72 /hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1		504	\$10,535	
Base Yr Overhead Rate: 143%		Labor Burden:	\$15,066	
Overmodu Nate. 14070			4.5,000	

SUBTOTAL BURDENED LABOR:

\$25,601

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.4.1

Surface Soil Sampling 131 SS @ 8 per day

(16 days)

Prop No: 979002-00001

Prop No: 9/9002-00001					
	Unit		• "		
MATERIAL O AND OURDUISO	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	1	\$20	
40 mL VOA Vials	\$122.74	/case	2	\$245	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00	/roll	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	20	\$20	
Latex Gloves	\$10.00	/box	2	\$20	
Methanol (Optima)	\$25.00	/bottle	1	\$25	
Hexane (Optima)	\$25.00	/bottle	1	\$25	
Acetone (Optima)	\$50.00	/bottle	1	\$50	
HCl (Optima)	\$285.00	/bottle	1	\$285	
HNO3 (Optima)	\$175.00	/bottle	1	\$175	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	48	\$192	
Respirator Cartridges	\$15.00	•	48	\$720	
Packing Tape (doz)	\$72.00	•	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00	each	3	\$60	
Aluminum Foil	\$1.00		. 0	\$0	
Stain Stl bwl/spn	\$30.00	/set	1	\$30	
Survey Stake/Flag	\$20.00	/bundle	2	\$40	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	48	\$302	
Water (HPLC Grade)	\$97.00	/case	2	\$194	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	16	\$256	

SUBTOTAL MATLS & SUPPLIES:

\$2,888

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.4.1

Surface Soil Sampling 131 SS @ 8 per day

(16 days)

Prop No: 979002-00001

Project:

	Unit Cost	Units	Quantity	Cost	Notes
TRAVEL	Cost	Offics	Quantity	<u>00st</u>	Notes
A16 B (10 mm)	#500.00	4	4	# 500	
Airfare Boston\Syracuse	\$500.00	•	1 0	\$500 \$0	
Airfare Boston\Huntsville	\$900.00 \$96.00		48	\$4,608	
Subsistence-Seneca	\$89.00		0	\$4,606 \$0	
Subsistence-Huntsville	\$13.00		16	\$208	
Parking,Airport Auto Rental	\$55.00 \$55.00		16	\$880	
Suburban\Van rental	\$585.00 \$585.00		2	\$1,170	
Mileage	\$0.31		150	\$47	
		SUBTOT	AL TRAVEL:	\$7,413	
07/1500		005101	, , , , , , , , , , , , , , , , , , , ,	ψ1,110	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		20	\$80	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00		0	\$0	
Facsimile	\$1.00	/page	50	\$50	
Overnight Express Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25		8	\$770	
Mail 4-lb pack	\$4.10		0	\$0	
Mail letters		/letter	0	\$0	
S	Subtotal Services		<u></u>	\$900	
REPRODUCTION					
Photocopier	\$0.05	/page	500	\$25	
Aerial Photo repro	\$10.00	/photo	0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00	each	0	\$0	
Color Copies	\$2.00	/page	0	\$0	
S	Subtotal Reproduction	n		\$25	

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Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.4.1

Surface Soil Sampling 131 SS @ 8 per day

(16 days)

Prop No: 979002-00001

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0.5	\$20	
Equipment Trailer	\$1,000.00	/month	0.5	\$500	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtota	al Rental			\$520	
LIEALTH A CAFETY FOLUDATAT					
HEALTH & SAFETY EQUIPMENT	\$50.00	/dov	16	\$800	
HNu Meter	\$80.00		2	\$160	
Alpha Survey Meter	\$100.00		0	\$0	
Alpha Scintillation Counter	\$100.00		0	\$ 0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$300.00		0	\$0	
Radon Monitor	\$50.00		16	\$800	
Gamma Radiation Meter	\$10.00	•	16	\$160	
Calib Gas		/uay /ea/wk	2	\$30	
2-way radios	\$20.00		6	\$120	
Air Purif Resp	\$20.00 \$35.00		2	\$70	
10-Gal Eye Wash	\$35.00 \$150.00		0	\$0	
Combination SCBA/SAR	Φ150.00	ruay	U	ΨΟ	
Subtota	al H & S			\$2,140	
				•	

SUBTOTAL OTHERS:

\$3,585

SUBTOTAL LABOR & ODC'S:

\$39,486

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.4.1

Surface Soil Sampling 131 SS @ 8 per day

(16 days)

	Unit	-			
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	PODATORY	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2		
	\$180.00		0	\$0	
Volatiles (TCL)	\$400.00		0	\$0 \$0	
B/N/A (TCL) Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
14th ate (E1 7 (000.2)	420.00	0.000		•	
SOILS - SURFACE or SUBSURFACE LABO	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	

Subtota	l Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
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Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.4.1

Surface Soil Sampling 131 SS @ 8 per day

(16 days)

Prop No: 9/9002-00001					
	Unit	[]!4	04:4.	01	N 1.4
DADIOLOGICAL LABORATORY ANALYSIS	<u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS	5				
Water Samples For:	\$60.00	oooh	0	٠.٥	
Thorium 232, 230, 227	\$60.00 \$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234			0	\$0 \$0	
Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$ 0	
Americium 241	\$65.00		0	\$0 \$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:	400.00		•	4.0	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Nipe Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtota	l Misc. Labora	atory		\$0	
NVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0 \$0	
IDW Disposal	Lump Sum		0	\$0 \$0	
·	Lump Sum		0	\$0 \$0	
Surveyor	Lump Sum	cacii	U	φυ	
Subtota	I Investigation	Subcontrac	etors	\$0	
0.17441			2 1 1 1	A O	

TASK TOTAL:

3% Mark-up:

\$39,486

\$0

\$0

\$0

SUBTOTAL SUBCONTRACTORS:

Subtotal Laboratory & Investigation Subcontractors:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E Prop No: 979002-00001

TOTAL HOURS/LABOR COST

Contract Year:

Overhead Rate:

Base Yr

143%

Task # 2.4.2

Sub-Surface Soil Sampling 37 Borings @ 2 per day

(18.5 days)

1 10p 140. 37 3002-00001					
	Unit Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74 \$46.47		0	\$0 \$0	
Professional Level 6, Step 1 (P62)	\$46.47	mour	U	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91	/hour	16	\$527	
Professional Level 5, Step 1 (P52)	\$29.39		0	\$0	
			0		
Professional Level 4, Step 2 (P48)	\$29.13		0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	185	\$4,662	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
	Ψ15.05	moul	Ü	ΨΟ	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	185	\$3,435	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	185	\$3,067	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
			O .	ΨΟ	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	

A - 91

SUBTOTAL BURDENED LABOR:

579

Labor Burden:

\$12,044

\$17,223

\$29,267

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Prop No: 979002-00001

Task # 2.4.2

Sub-Surface Soil Sampling

37 Borings @ 2 per day

(18.5 days)

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					•
Bottle labels	\$20.00	/roll	1	\$20	
40 mL VOA Vials	\$122.74	/case	1	\$123	
1 Liter Amber Bottles	\$37.95	/case	4	\$152	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	10	\$10	
Latex Gloves	\$10.00	/box	2	\$20	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	54	\$216	
Respirator Cartridges	\$15.00	/pair	54	\$810	
Packing Tape (doz)	\$72.00	/case	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	1	\$30	
Survey Stake/Flag	\$20.00	/bundle	2	\$40	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	54	\$340	
Water (HPLC Grade)	\$97.00	/case	2	\$194	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	16	\$256	

SUBTOTAL MATLS & SUPPLIES:

\$2,399

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.4.2

Sub-Surface Soil Sampling

37 Borings @ 2 per day

(18.5 days)

Prop	No:	979002-00001	
1 100	110.	313002 00001	

	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAVEL					
Airford Booton\Syraguna	\$500.00	/trip	0	\$0	
Airfare Boston\Syracuse Airfare Boston\Huntsville	\$900.00	•	0	\$0 \$0	
Subsistence-Seneca	\$96.00	•	54	\$5,184	
Subsistence-General Subsistence-Huntsville	\$89.00	•	0	\$0	
Parking, Airport	\$13.00		0	\$0	
Auto Rental	\$55.00		18	\$990	
Suburban\Van rental	\$585.00	•	2.5	\$1,4 6 3	
Mileage	\$0.31		150	\$47	
		SUBTOT	AL TRAVEL:	\$7,683	
OTHERS				. ,	
OTTENS					
IN-HOUSE SERVICES					
Telephone	\$4.00		20	\$80	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00		0	\$0	
Facsimile	\$1.00	/page	50	\$50	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$96.25		10	\$963	
Mail 4-lb pack	\$4.10		0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	tal Services			\$1,093	
REPRODUCTION					
Photocopier	\$0.05	/page	500	\$25	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00		0	\$0	
Subto	tal Reproduction	n		\$25	

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.4.2

Sub-Surface Soil Sampling 37 Borings @ 2 per day

(18.5 days)

Prop No: 979002-00001

	Unit				
EQUIDMENT BENTAL	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0.5	\$20	
Equipment Trailer	\$1,000.00	/month	0.5	\$500	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtota	al Rental			\$520	
Cubioti	ai rentai			4020	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	18	\$900	
Alpha Survey Meter	\$80.00	/week	2	\$160	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00	/day	18	\$900	
Calib Gas	\$10.00	/day	18	\$180	
2-way radios	\$15.00	/ea/wk	2	\$30	
Air Purif Resp	\$20.00	/week	0	\$0	
10-Gal Eye Wash	\$35.00	/week	2	\$70	
Combination SCBA/SAR	\$150.00	/day	0	\$0	•
O. b. A.	J LL 0 C			\$2,240	
Subtota	al H & S			Φ 2,240	

SUBTOTAL OTHERS:

\$3,878

SUBTOTAL LABOR & ODC'S:

\$43,227

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.4.2

Sub-Surface Soil Sampling 37 Borings @ 2 per day

(18.5 days)

Prop No: 979002-00001

	Unit <u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATORY	'ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0 \$0	
Volatiles (EPA 524)	\$195.00		0	\$0 \$0	
Hardness(EPA 130.2)	\$15.00		0	\$0 \$0	
Alkalinity(EPA 310)	\$12.00 \$20.00		0 0	\$0 \$0	
Nitrate (EPA 353.2)	\$20.00	eacn	U	\$0	
SOILS - SURFACE or SUBSURFACE LABO	RATORY A	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtota	l Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Printed:

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Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.4.2

Sub-Surface Soil Sampling 37 Borings @ 2 per day

(18.5 days)

Annex E			(18.	o days)	
Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Note
RADIOLOGICAL LABORATORY ANAI	LYSIS				
Vater Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co	60 \$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
oil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co	60 \$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
/ipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co	60 \$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
·				*-	
R SAMPLES LABORATORY ANALY			_		
SVOC's	\$490.00		0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Su	btotal Misc. Labora	atory		\$0	
IVESTIGATION SUBCONTRACTORS	5				
Driller	Lump Sum	each	8220	\$8,220	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		4995	\$4,995	
Surveyor	Lump Sum		0	\$0	

Subtotal Laboratory & Investigation Subcontractors: 3% Mark-up:

\$396 \$13,611

SUBTOTAL SUBCONTRACTORS:

\$13,215

TASK TOTAL:

\$56,838

Client:

U.S. Army Corps of Engineers

Huntsville Division

Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Seneca Army Depot Activity, Romulus New York

Printed:

22-Mar-96

Task # 2.4.3

Test Pit Investigations 20 TPs@2/dy=10dys

Parsons Engineering Science, Inc.

Prop No: 979002-00001

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91	/hour	16	\$527	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	100	\$2,520	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	100	\$1,857	
Professional Level 1, Step 1 (P12)	\$14.84		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	100	\$1,658	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61		0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
redifficial Level 2 (129)			· ·		
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	C	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1			324	\$6,914	
Base Yr Overhead Rate: 143% SUE	BTOTAL	BURD	Labor Burden: ENED LABOR:	\$9,888 \$16,802	

U.S. Army Corps of Engineers Huntsville Division Client:

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.4.3

Test Pit Investigations 20 TPs@2/dy=10dys

Prop No: 9/9002-00001					
•	Unit		0	0 4	Nistas
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	1	\$20	
40 mL VOA Vials	\$122.74	/case	1	\$123	
1 Liter Amber Bottles	\$37.95	/case	4	\$152	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	10	\$10	
Latex Gloves	\$10.00	/box	2	\$20	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00		30	\$120	
Respirator Cartridges	\$15.00	/pair	30	\$450	
Packing Tape (doz)	\$72.00	/case	1	\$72	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00		3	\$60	
Aluminum Foil	\$1.00		0	\$0	
Stain Stl bwl/spn	\$30.00	/set	1	\$30	
Survey Stake/Flag	\$20.00	/bundle	1	\$20	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	30	\$189	
Water (HPLC Grade)	\$97.00	/case	2	\$194	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	8	\$128	

SUBTOTAL MATLS & SUPPLIES:

\$1,744

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.4.3

Test Pit Investigations 20 TPs@2/dy=10dys

TD AVICI	<u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00		30	\$2,880	
Subsistence-Huntsville	\$89.00		0	\$0	
Parking,Airport	\$13.00	/day	0	\$0	
Auto Rental	\$55.00		10	\$550	
Suburban\Van rental	\$585.00	/week	1	\$585	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOTA	AL TRAVEL:	\$4,015	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	20	\$80	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	20	\$20	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	10	\$963	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	tal Services			\$1,063	
REPRODUCTION					
Photocopier		/page	500	\$25	
Aerial Photo repro	\$10.00	•	0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Task # 2.4.3

Test Pit Investigations 20 TPs@2/dy=10dys

Prop No: 979002-00001

1-10p No. 373002-00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0.25	\$10	
Equipment Trailer	\$1,000.00	/month	0.25	\$250	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	•	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	2	\$150	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	10	\$250	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	*	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	*	0	\$0	
GPR	\$500.00	•	0	\$0	
Subtota	ıl Rental			\$660	
LIE AL TILLA CA FETY FOLUDMENT					
HEALTH & SAFETY EQUIPMENT	¢ E0.00	/day	10	\$500	
HNu Meter	\$50.00	-	2	\$160	
Alpha Survey Meter	\$80.00		0	\$0	
Alpha Scintillation Counter	\$100.00		0	\$0 \$0	
Beta Sample Counter	\$100.00				
Gas Proportional Detector	\$100.00		0	\$0 \$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0 #0	
Radon Monitor	\$300.00		0	\$0 #500	
Gamma Radiation Meter	\$50.00	•	10	\$500	
Calib Gas	\$10.00	*	10	\$100	
2-way radios		/ea/wk	4	\$60	
Air Purif Resp	\$20.00		6	\$120	
10-Gal Eye Wash	\$35.00		2	\$70	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subtota	IH&S			\$1,510	

SUBTOTAL OTHERS:

\$3,258

SUBTOTAL LABOR & ODC'S:

\$25,818

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Task # 2.4.3

Test Pit Investigations 20 TPs@2/dy=10dys

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
With ate (EFA 333.2)	Ψ20.00	Caon	· ·	40	
SOILS - SURFACE or SUBSURFACE LABO	RATORY AN	IALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
Subtotal	Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0 \$0	
Callott Exchange Capacity	Ψ100.00	Caon	U	ΨΟ	

Huntsville Division

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Parsons Engineering Science, Inc.

Project:

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001 Task # 2.4.3

Test Pit Investigations 20 TPs@2/dy=10dys

Prop No: 9/9002-00001					
	Unit	1.1	0	0 4	N. 4
RADIOLOGICAL LABORATORY ANALY	<u>Cost</u>	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
	1313				
Water Samples For: Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co6			0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0 \$0	
	\$45.00		0	\$0 \$0	
Gross AlphaΒ Soil Samples For:	φ43.00	each	U	φυ	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
	\$40.00		0	\$0 \$0	
Radium 226,223		each	0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co6 Plutonium 239 + 240	\$65.00 \$65.00		0	\$0 \$0	
			0		
Americium 241	\$65.00		_	\$0 \$0	
Gamma Spectrometry		each	0	\$0 \$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0 \$0	
Sample Prep/Return	\$0.00	eacn	U	\$0	
Wipe Samples For:	¢c0.00		0	40	
Thorium 232, 230, 227	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co6			0	\$0	
Plutonium 239 + 240	\$65.00		0	\$ 0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYS	SIS				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		0	\$0	
Sub	total Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	5720	\$5,720	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Sub	total Investigation	Subcontrac	ctors	\$5,720	
Cub			-	7-11-0	

TASK TOTAL:

3% Mark-up:

\$31,710

\$5,720

\$5,892

\$172

SUBTOTAL SUBCONTRACTORS:

Subtotal Laboratory & Investigation Subcontractors:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Surface Water and

Sediment Sampling 43 Samples @ 4 per day

Task # 2.5

Prop No: 979002-00001	(10 Days)				•
	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS	9.00.	<u> </u>	<u> </u>	,333.	110100
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		8	\$263	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	100	\$2,520	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	100	\$1,857	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	100	\$1,658	
Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1			316	\$6,651	
Base Yr					

Overhead Rate: 143% Labor Burden:

\$9,511

SUBTOTAL BURDENED LABOR:

\$16,162

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Prop No: 979002-00001

Annex E

Task # 2.5

Surface Water and Sediment Sampling 43 Samples @ 4 per day

(10 Days)

F10p 140. 31 3002-00001			(10 D	ays)	
	Unit	1.1-2	0	0 - 1	
MATERIAL C AND CURRULES	Cost	<u>Units</u>	<u>Quantity</u>	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	1	\$20	
40 mL VOA Vials	\$122.74		2	\$245	
1 Liter Amber Bottles	\$37.95		4	\$152	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00	/roll	1	\$84	
Decon Eqt	\$18.00	/kit	1	\$18	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	1	\$14	
Ice	\$1.00	/bag	10	\$10	
Latex Gloves	\$10.00	/box	1	\$10	
Methanol (Optima)	\$25.00	/bottle	1	\$25	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	1	\$285	
HNO3 (Optima)	\$175.00	/bottle	1	\$175	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	18	\$72	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	1	\$40	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	1	\$30	
Survey Stake/Flag	\$20.00	/bundle	1	\$20	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	18	\$113	
Water (HPLC Grade)	\$97.00	/case	2	\$194	
Zipłock bags	\$3.00	/box	1	\$3	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roli	0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	8	\$128	

SUBTOTAL MATLS & SUPPLIES:

\$1,639

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.5

Surface Water and Sediment Sampling 43 Samples @ 4 per day

(10 Days)

Prop No: 979002-00001

-	Unit				
TDAY/CI	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	•	0	\$0	
Subsistence-Seneca	\$96.00		18	\$1,728	
Subsistence-Huntsville	\$89.00		0	\$0	
Parking, Airport	\$13.00	•	18	\$234	
Auto Rental	\$55.00		6	\$330	
Suburban\Van rental	\$585.00		1	\$585	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOTA	AL TRAVEL:	\$2,877	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	10	\$40	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00		0	\$0	
Facsimile	·	/page	10	\$10	
Overnight Express	*****			***	
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25		10	\$963	
Mail 4-lb pack	•	/pack	0	\$0	
Mail letters		/letter	0	\$0	
Subto	tal Services			\$1,013	
REPRODUCTION					
Photocopier	\$0.05	/page	500	\$25	
Aerial Photo repro	\$10.00	/photo	0	\$0	
Blueline repro	\$1.00	/Sheet	0	\$0	
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0	
3-ring binders	\$15.00	each	0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subto	tal Reproductio	n		\$25	

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.5

Surface Water and **Sediment Sampling** 43 Samples @ 4 per day

(10 Days)

Prop No: 979002-00001

1 10p 140. 07 3002-00001			(10 D	.,,,,	
	Unit			_	
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00		1	\$50	
•				\$0 \$0	
Flow thru pH/Cond meter	\$257.00		0		
DO meter	\$55.00		1	\$55	
Soil Gas Supplies	\$50.00	•	0	\$0	
Slug test eqt	\$50.00		0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/dav	0	\$0	
Flow Meter	\$30.00	•	1	\$30	
Water coolers		/month	0.25	\$10	
			0.25	\$250	
Equipment Trailer	\$1,000.00			•	
Grundfus Redi Flow Pump	\$64.00	,	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	•	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	6	\$162	
3.2 kw Generator	\$50.00		0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00		0	\$0	
		•	0	\$0 \$0	
GPR	\$500.00	/day	U	φυ	
Subtot	al Rental			\$557	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/dav	10	\$500	
Alpha Survey Meter	\$80.00	•	10	\$800	
Alpha Scintillation Counter	\$100.00		0	\$0	
· · · · · · · · · · · · · · · · · · ·	\$100.00		Ö	\$0	
Beta Sample Counter					
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00	/day	10	\$500	
Calib Gas	\$10.00	/day	10	\$100	
2-way radios		/ea/wk	2	\$30	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		1	\$35	
Combination SCBA/SAR	\$150.00		0	\$0	
COMBINATION SCENISARY	φ150.00	ruay	U	ΦΟ	
0.1.1	-11100			64.005	
Subtot	al H & S			\$1,965	

SUBTOTAL OTHERS:

\$3,560

SUBTOTAL LABOR & ODC'S:

\$24,237

Huntsville Division

Printed:

Unit

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.5

Surface Water and Sediment Sampling 43 Samples @ 4 per day

(10 Days)

Prop	No:	979002-00001

Project:

		Cost	<u>Units</u>	Quantity	Cost	Notes
		<u>0031</u>	Othio	Quantity	0031	140103
SUBCONTRAC	TORS					
SOBCONTRAC	71010					
GROUNDWATER	or SURFACE WATER LABO	RATORY	ANALYSIS			
Volatiles		\$180.00		0	\$0	
B/N/A (T		\$400.00		0	\$0	
	Bs (TCL)	\$180.00		0	\$0	
	tals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferr		\$30.00		0	\$0	
Sulfide	ousy	\$30.00		0	\$0	
	nd(EPA 9050)	\$8.00		0	\$0	
•	ganic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EF		\$50.00		0	\$0	
•	*	\$25.00		0	\$0	
	(EPA 9250)	\$60.00		0	\$0	
BOD	-DA 200\	\$25.00		0	\$0 \$0	
	EPA 300)					
COD	0045)	\$50.00		0	\$0 \$0	
pH (EPA		\$8.00		0	\$0 * 0	
	(EPA 524)	\$195.00		0	\$0	
	s(EPA 130.2)	\$15.00		0	\$0	
-	(EPA 310)	\$12.00		0	\$0	
Nitrate (E	EPA 353.2)	\$20.00	each	0	\$0	
			14137010			
	or SUBSURFACE LABORA					
Volatiles	•	\$180.00		0	\$0	
B/N/A (T	•	\$400.00		0	\$0	
	Bs (TCL)	\$180.00		0	\$0	
	tals & CN(TAL)	\$170.00		0	\$0	
Spec Co	nd(EPA 9050)	\$8.00		0	\$0	
Total Org	ganic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EP	PA 9056)	\$70.00	each	0	\$0	
Chloride((EPA 9250)	\$25.00	each	0	\$0	
pH (EPA	9045)	\$8.00	each	0	\$0	
Nitrate (E	EPA 353.2)	\$20.00	each	0	\$0	
	Subtotal Te	am Labor	atory		\$0	
MISC. LABORATO						
Grain Siz		\$120.00		0	\$0	
TCLP		\$1,500.00		0	\$0	
Moisture	Content	\$15.00	each	0	\$0	
Bulk Der	nsity	\$35.00	each	0	\$0	
Chromiu	m (Level II)	\$30.00	each	0	\$0	
Total Sus	spended Solids	\$20.00	each	0	\$0	
	solved Solids	\$20.00	each	0	\$0	
Ammonia	a	\$25.00	each	0	\$0	
Phospha	te	\$25.00	each	0	\$0	
	xchange Capacity	\$100.00		0	\$0	
	. ,					

Huntsville Division

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001 Task # 2.5

Surface Water and Sediment Sampling 43 Samples @ 4 per day

(10 Days)

Prop No: 9/9002-00001			(10 Day	/S)	
	Unit	11.4	0	0 1	N 1.4
DADIOLOGICAL LADODATODY ANALYSIS	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:	\$60.00	oach	0	\$0	
Thorium 232, 230, 227	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234	\$40.00		0	\$0 \$0	
Radium 226,223 Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0 \$0	
	\$45.00		0	\$0 \$0	
Gross AlphaΒ	φ45.00	eacii	0	φυ	
Soil Samples For: Thorium 232, 230, 227	\$60.00	each	0	\$0	
	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234 Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$ 0	
Plutonium 239 + 240	\$65.00		0	\$ 0	
Americium 241	\$65.00		0	\$ 0	
Gamma Spectrometry	\$0.00		0	\$ 0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$ 0	
Sample Prep/Return	\$0.00		0	\$0	
Wipe Samples For:	Ψ0.00	Cacri	v	ΨΟ	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0 \$0	
Radon (Alpha Film)	\$25.00		0	\$ 0	
radon (Alpha Film)	Ψ20.00	cuon	· ·	Ψ.	
Subtotal M	lisc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal In	vestigation	Subcontrac	ctors	\$0	
Subtotal Labo	ratorv & in	vestigation	Subcontractors:	\$0	
	,	3	3% Mark-un	\$0	

TASK TOTAL:

3% Mark-up:

\$24,237

\$0

\$0

SUBTOTAL SUBCONTRACTORS:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate:

143%

SEAD-12 Annex E

Task # 2.6

Groundwater Sampling Install 28 MW @ 1 per day

Samp 37 Wells @ 2 per Day (2 Rnds)

Prop No: 979002-00001		(65 Days)					
	Unit Cost	Units	Quantity	Cost	Notes		
LABOR COSTS	0031	Office	Quartity	0031	INOTES		
ENGINEERS AND SCIENTISTS							
Professional Level 6, Step 2 (P68)	\$58.74	l /hour	0	\$0			
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0			
Professional Level 5, Step 4 (P58)	\$44.11	/hour	24	\$1,059			
Professional Level 5, Step 3 (P56)	\$37.99	hour /	0	\$0			
Professional Level 5, Step 2 (P54)	\$32.91	/hour	40	\$1,316			
Professional Level 5, Step 1 (P52)	\$29.39		0	\$0			
Professional Level 4, Step 2 (P48)	\$29.13	hour	0	\$0			
Professional Level 4, Step 1 (P42)	\$25.20	/hour	650	\$16,380			
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0			
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0			
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0			
Professional Level 1, Step 2 (P18)	\$18.57	/hour	650	\$12,071			
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0			
TECHNICAL AND SUPPORT SPECIALISTS							
Technician Level 5 (T55)	\$21.10	/hour	0	\$0			
Technician Level 4, Step 2 (T48)	\$16.58	/hour	650	\$10,777			
Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0			
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0			
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0			
Technician Level 2 (T25)	\$10.13	/hour	0	\$0			
Technician Level 1 (T15)	\$8.89	/hour	0	\$0			
Support Level 3 (S35)	\$20.61	/hour	0	\$0			
Support Level 2 (S25)	\$12.40	/hour	0	\$0			
Support Level 1 (S15)	\$8.72	/hour	0	\$0			
TOTAL HOURS/LABOR COST Contract Year: 1			2014	\$41,603			
Base Yr				450 400			

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SUBTOTAL BURDENED LABOR:

Labor Burden:

\$59,492

\$101,094

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.6

Groundwater Sampling Install 28 MW @ 1 per day

Samp 37 Wells @ 2 per Day (2 Rnds)

Prop No: 979002-00001	(65 Days)				
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Dawla labala	\$20.00	/roll	1	\$20	
Bottle labels	\$20.00 \$122.74		2	\$245	
40 mL VOA Vials	\$37.95		5	\$190	
1 Liter Amber Bottles	\$30.75		5	\$154	
32 oz. HDPE Bottles	•		0	\$0	
Braided Nylon Rope	\$0.15		2	\$168	
Bubble Pack	\$84.00		2	\$36	
Decon Eqt	\$18.00			\$0	
55g drums fill/mov	\$100.00		0		
Field Notebook	\$14.00		1	\$14 \$20	
Ice	\$1.00	-	30	\$30	
Latex Gloves	\$10.00		1	\$10 \$100	
Methanol (Optima)	\$25.00		4	\$100	
Hexane (Optima)	\$25.00		0	\$0	
Acetone (Optima)	\$50.00		0	\$0	
HCI (Optima)	\$285.00		2	\$570	
HNO3 (Optima)	\$175.00		2	\$350	
Ascorbic Acid	\$10.00		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00		0	\$0	
Overboots	\$4.00	/pair	195	\$780	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	195	\$1,229	
Water (HPLC Grade)	\$97.00	/case	20	\$1,940	
Ziplock bags	\$3.00	/box	2	\$6	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00		30	\$480	
Vermiculte Facking	Ψ10.00	.sug	-	7.00	

SUBTOTAL MATLS & SUPPLIES:

\$6,321

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.6

Groundwater Sampling Install 28 MW @ 1 per day

Samp 37 Wells @ 2 per Day (2 Rnds)

(65 Days)

Prop No: 9/9002-00001			(65	Days)	
	Unit	11.2	0	0	.
TDAVEL	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	9	\$4,500 3	Inst.+ 3/Rnd.X2
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	195	\$18,720	
Subsistence-Huntsville	\$89.00	•	0	\$0	
Parking,Airport	\$13.00	•	130	\$1,690	
Auto Rental	\$55.00		65	\$3,575	
Suburban\Van rental	\$585.00		8	\$4,680	
Mileage	\$0.31	/mile	300	\$93	
		SUBTOTA	AL TRAVEL:	\$33,258	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		20	\$80	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00		0	\$0	
Facsimile	\$1.00	/page	50	\$50	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$96.25		50	\$4,813	
Mail 4-lb pack		/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	tal Services			\$4,943	
REPRODUCTION					
Photocopier	\$0.05		500	\$25	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subtot	tal Reproduction	n	_	\$25	

Client: U.S. Army Corps of Engineers Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York Task # 2.6

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Groundwater Sampling Install 28 MW @ 1 per day

Samp 37 Wells @ 2 per Day (2 Rnds)

Annex E Prop No: 979002-00001					
	Unit	4-977-		- //	
	<u>Cost</u>	<u>Units</u>	Quantity	<u>Cost</u>	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00) /week	16	\$880	
Magnetometer	\$42.00) /week	0	\$0	
pH/Cond meter	\$50.00) /week	4	\$200	
Flow thru pH/Cond meter	\$257.00		4	\$1,028	
DO meter	•) /week	4	\$220	
Soil Gas Supplies	\$50.00	•	0	\$0	
Slug test eqt) /week	2	\$100	
Water level ind) /week	8	\$320	
Turbidimeter) /week	4	\$120	
Data Logger,Trnsdcr	\$135.00	•	2	\$270	
Flow Meter	,) /week	0	\$0	
Water coolers) /month	2	\$80	
Equipment Trailer	\$1,000.00		2 37	\$2,000	
Grundfus Redi Flow Pump	\$64.00 \$150.00	•	0	\$2,368 \$0	
PUF Sampler PUF Sampler Calibration Kit	\$25.00		0	\$0 \$0	
Hi- Vol Sampler		/week	0	\$0 \$0	
Hi- Vol Sampler Calibration Kit	\$25.00		0	\$0	
Ponar Sediment Sampler	\$27.00	-	0	\$0	
3.2 kw Generator	\$50.00	-	37	\$1,850	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	•	0	\$0	
Subto	tal Rental			\$9,436	
Gubto	tai i toritai			ψο, 100	
HEALTH & SAFETY EQUIPMENT	.			44	
HNu Meter	\$50.00	-	65	\$3,250	
Alpha Survey Meter		/week	65	\$5,200	
Alpha Scintillation Counter	\$100.00		0	\$0 \$0	
Beta Sample Counter	\$100.00		0	\$0 \$0	
Gas Proportional Detector	\$100.00		0	\$0 \$0	
Gas Prop. Detector-Floor Radon Monitor	\$100.00 \$300.00		0	\$0 \$0	
Gamma Radiation Meter			65	\$3,250	
Calib Gas	\$50.00 \$10.00	-	65	\$650	
2-way radios		/ /uay) /ea/wk	16	\$240	
Air Purif Resp) /week	0	\$0	
10-Gal Eye Wash		/ /week	8	\$280	
Combination SCBA/SAR	\$150.00		0	\$0	
		-		0.10 0.00	

SUBTOTAL OTHERS: \$27,274

\$12,870

SUBTOTAL LABOR & ODC'S: \$167,947

Subtotal H & S

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project:

Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

Groundwater Sampling

SEAD-12

Install 28 MW @ 1 per day

Annex E Prop No: 979002-00001 Samp 37 Wells @ 2 per Day (2 Rnds)

(65 Days)

Task # 2.6

	Unit		0	0 - 4	NI-4
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER L	ABORATORY	ANALYS	SIS		
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0 ©0	
Spec Cond(EPA 9050)	\$8.00		0	\$ 0	
Total Organic Carbon (EPA 9060)			0 0	\$0 \$0	
TOX (EPA 9056)	\$50.00 \$25.00		0	\$0 \$0	
Chloride(EPA 9250) BOD	\$60.00		0	\$0 \$0	
Sulfate(EPA 300)	\$25.00		0	\$ 0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LAB					
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0 \$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0 ©0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0 \$0	
TOX (EPA 9056)	\$70.00		0 0	\$0 \$0	
Chloride(EPA 9250)	\$25.00 \$8.00		0	\$0 \$0	
pH (EPA 9045)	\$20.00		0	\$0 \$0	
Nitrate (EPA 353.2)	φ20.00	eacii	O	ΨΟ	
Subtot	al Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0 #0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.6

Groundwater Sampling Install 28 MW @ 1 per day

Samp 37 Wells @ 2 per Day (2 Rnds)

(65 Days)

				, ,	
	Unit				
DADIOLOGICAL LABORATORY ANALYSIS	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:	\$60.00	aaab	0	\$0	
Thorium 232, 230, 227	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234	\$60.00		0		
Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:			•	•	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	29799	\$29,799	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	4995	\$4,995	
Surveyor	Lump Sum	each	0	\$0	
Subtotal	Investigation	Subcontr	actors	\$34,794	

Subtotal Laboratory & Investigation Subcontractors:

3% Mark-up:

\$34,794 \$1,044

SUBTOTAL SUBCONTRACTORS:

\$35,838

TASK TOTAL:

\$203,785

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Printed:

22-Mar-96

RI/FS at the Radiological Disposal Areas

Overhead Rate:

SEAD-12 Annex E

Task # 2.7

Ecological Investigation Terrestrial Invest. (3 days) Aquatic Invest. (3 days) Wildlife Invest. (3days)

Parsons Engineering Science, Inc.

Prop No: 979002-00001

1 10p 140. 373002 00001			VVIIG	ine invest. (edays	<u>/</u>
	Unit <u>Cost</u>	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11		8	\$353	
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91	/hour	0	\$0	
Professional Level 5, Step 1 (P52)	\$29.39		0	\$0	
Professional Level 3, Step 1 (F32)	Ψ29.55	Mour	O	40	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20		90	\$2,268	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	90	\$2,078	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
Professional Level 2, Step 1 (P22)	φ19.09	mour	U	Φ0	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84		0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/bour	0	\$0	
redifficial Level 3 (199)	Ψ21.10	modi	· ·	ΨΟ	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Tachnisian Laval 1 (T15)	\$8.89	/hour	0	\$0	
Technician Level 1 (T15)	ф0.09	mour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	0	\$0	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS!! ABOD COST			100	\$4.600	
TOTAL HOURS/LABOR COST Contract Year: 1			188	\$4,699	
Base Yr				¢6 720	
(Number of Date: 4490/			Lobor Lindon	W. G. 77371	

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$6,720

\$11,419

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Task # 2.7

Ecological Investigation Terrestrial Invest. (3 days) Aquatic Invest. (3 days) Wildlife Invest. (3days)

Prop No: 9/9002-00001			vviidille ilivest. (Suays)			
	Unit					
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>	
MATERIALS AND SUPPLIES						
Bottle labels	\$20.00	/roll	0	\$0		
40 mL VOA Vials	\$122.74	/case	0	\$0		
1 Liter Amber Bottles	\$37.95	/case	0	\$0		
32 oz. HDPE Bottles	\$30.75	/case	0	\$0		
Braided Nylon Rope	\$0.15	/foot	0	\$0		
Bubble Pack	\$84.00	/roll	0	\$0		
Decon Eqt	\$18.00	/kit	0	\$0		
55g drums fill/mov	\$100.00	each	0	\$0		
Field Notebook	\$14.00	each	2	\$28		
Ice	\$1.00	/bag	0	\$0		
Latex Gloves	\$10.00	/box	0	\$0		
Methanol (Optima)	\$25.00	/bottle	0	\$0		
Hexane (Optima)	\$25.00	/bottle	0	\$0		
Acetone (Optima)	\$50.00	/bottle	0	\$0		
HCI (Optima)	\$285.00	/bottle	0	\$0		
HNO3 (Optima)	\$175.00	/bottle	0	\$0		
Ascorbic Acid	\$10.00	/bottle	0	\$0		
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0		
Overboots	\$4.00	/pair	36	\$144		
Respirator Cartridges	\$15.00	/pair	0	\$0		
Packing Tape (doz)	\$72.00		0	\$0		
Padlocks	\$12.00	each	0	\$0		
Sampling Tables	\$40.00		0	\$0		
Radiological Badges	\$20.00	each	0	\$0		
Aluminum Foil	\$1.00	/roll	0	\$0		
Stain Stl bwl/spn	\$30.00		0	\$0		
Survey Stake/Flag		/bundle	2	\$40		
Teflon tape	\$8.00	/roll	0	\$0		
Tyveks	\$6.30	each	36	\$227		
Water (HPLC Grade)	\$97.00	/case	1	\$97		
Ziplock bags	\$3.00	/box	0	\$0		
Calibration Gas	\$450.00		0	\$0		
Ultra Pure Air	\$310.00		0	\$0		
Teflon Tubing	\$120.00	/roll	0	\$0		
Teflon Sheeting	\$500.00		0	\$0		
Folding Live Traps	\$15.00	each	10	\$150		
Glassware	\$25.00		0	\$0		
Quartz Filters	\$10.00		0	\$0		
Vermiculite Packing	\$16.00	/bag	0	\$0		

SUBTOTAL MATLS & SUPPLIES:

\$686

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 2.7

Ecological Investigation Terrestrial Invest. (3 days)

Aquatic Invest. (3 days)

Prop No: 979002-00001 Wildlife Invest. (3days)

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	2	\$1,000	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	18	\$1,728	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking,Airport	\$13.00	/day	18	\$234	
Auto Rental	\$55.00	/day	9	\$495	
Suburban\Van rental	\$585.00	/week	2	\$1,170	
Mileage	\$0.31	/mile	100	\$31	
		SUBTO	TAL TRAVEL:	\$4,658	
		00010	1712 111714 22.	Ψ4,000	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	20	\$80	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	50	\$50	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	0	\$0	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
	Subtotal Services			\$130	
REPRODUCTION					
Photocopier	\$0.05	/page	500	\$25	
Aerial Photo repro	\$10.00		10	\$100	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00		0	\$0	
	Subtotal Reproduction	n		\$125	
	- and the state of	•		Ψ.=-	

Client: U.S. Army Corps of Engineers Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Task # 2.7 Ecological Investigation Terrestrial Invest. (3 days) Aquatic Invest. (3 days)

Prop No: 979002-00001

Aquatic Invest. (3 days)
Wildlife Invest. (3days)

	Unit				
	Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL			•		
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	-	1	\$30	
Water coolers		/month	0.5	\$20	
Equipment Trailer	\$1,000.00		0.5	\$500	
Grundfus Redi Flow Pump	\$64.00		0	\$0	
PUF Sampler	\$150.00	•	0	\$0	
PUF Sampler Calibration Kit	\$25.00		0	\$0	
Hi- Vol Sampler	\$75.00	•	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00		0	\$0	
Ponar Sediment Sampler	\$27.00	•	5	\$135	
3.2 kw Generator	\$50.00	•	0	\$0	
	\$200.00	•	0	\$0	
Seismograph	\$85.00	-	0	\$0	
EM-31	\$500.00	•	0	\$0 \$0	
GPR	\$500.00	/uay	· ·	ΨΟ	
Subtot	al Rental			\$685	
Gubiot	arremai			4 555	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/dav	9	\$450	
Alpha Survey Meter	\$80.00	-	0	\$0	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
Calib Gas	\$10.00	-	9	\$90	
2-way radios		/ea/wk	4	\$60	
•		/week	0	\$0	
Air Purif Resp		/week	2	\$70	
10-Gal Eye Wash			0	\$70 \$0	
Combination SCBA/SAR	\$150.00	ruay	U	φυ	
Chtai	tal H & S			\$670	
Subioi	ailias			ΨΟΙΟ	

SUBTOTAL OTHERS: \$1,610

SUBTOTAL LABOR & ODC'S: \$18,372

U.S. Army Corps of Engineers Huntsville Division Client:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.7

Ecological Investigation Terrestrial Invest. (3 days) Aquatic Invest. (3 days) Wildlife Invest. (3days)

Prop No: 979002-00001 Unit

		Unit		• ***		
		Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
0						
SUBCO	NTRACTORS					
00011110	WATER A CUREAGE WATER LAR		(ANAL VOIC			
	WATER or SURFACE WATER LABO	\$180.00		0	\$0	
	Volatiles (TCL)	•		0	\$0 \$0	
	B/N/A (TCL)	\$400.00		0	\$0 \$0	
	Pest./PCBs (TCL)	\$180.00 \$170.00		0	\$0 \$0	
	Total Metals & CN(TAL)			0	\$0 \$0	
	Iron(Ferrous)	\$30.00		0	\$0 \$0	
	Sulfide	\$30.00		0	\$0 \$0	
	Spec Cond(EPA 9050)	\$8.00		0	\$0 \$0	
	Total Organic Carbon (EPA 9060)	\$25.00		0	\$0 \$0	
	TOX (EPA 9056)	\$50.00			\$0 \$0	
	Chloride(EPA 9250)	\$25.00		0		
	BOD	\$60.00		0	\$0 \$0	
	Sulfate(EPA 300)	\$25.00		0	\$0 #0	
	COD	\$50.00		0	\$ 0	
	pH (EPA 9045)	\$8.00		0	\$0 \$0	
	Volatiles (EPA 524)	\$195.00		0	\$0 \$0	
	Hardness(EPA 130.2)	\$15.00		0	\$0 #0	
	Alkalinity(EPA 310)	\$12.00		0	\$0 #0	
	Nitrate (EPA 353.2)	\$20.00	eacn	0	\$0	
	UDEA OF THE OLIDEA OF LADOR	^T^D\/ ^A	IALVOIC			
	SURFACE or SUBSURFACE LABORA			0	\$0	
	Volatiles (TCL)	\$180.00		0	\$0 \$0	
	B/N/A (TCL)	\$400.00		0 0	\$0 \$0	
	Pest./PCBs (TCL)	\$180.00		0	\$0 \$0	
	Total Metals & CN(TAL)	\$170.00		0	\$0 \$0	
	Spec Cond(EPA 9050)	\$8.00		0	\$0 \$0	
	Total Organic Carbon (L. Kahn)	\$60.00		_	\$0 \$0	
	TOX (EPA 9056)	\$70.00		0		
	Chloride(EPA 9250)	\$25.00		0	\$0 \$0	
	pH (EPA 9045)	\$8.00		0	\$0 \$0	
	Nitrate (EPA 353.2)	\$20.00	eacn	0	\$0	
	Outstal T		4		\$0	
	Subtotal To	eam Labor	atory		Φ0	
MICC I A	DODATORY ANALYSIS					
	BORATORY ANALYSIS Grain Size Dist	\$120.00	oach	0	\$0	
		\$1,500.00		0	\$0 \$0	
		\$1,500.00		0	\$0 \$0	
	Moisture Content			0	\$0 \$0	
	Bulk Density	\$35.00 \$30.00		0	\$0 \$0	
	Chromium (Level II)	\$30.00		0	\$0 \$0	
	Total Suspended Solids			0	\$0 \$0	
	Total Dissolved Solids	\$20.00		•	•	
	Ammonia	\$25.00		0	\$0 \$0	
	Phosphate	\$25.00		0 0	\$0 \$0	
	Cation Exchange Capacity	\$100.00	eacn	U	Φυ	

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Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 2.7

Ecological Investigation Terrestrial Invest. (3 days) Aquatic Invest. (3 days) Wildlife Invest. (3days)

	Unit				
	Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS				230,	110100
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal I	Misc. Labora	atory		\$0	
N.N. (COTION TION OF IDOON TO A OTO DO					
INVESTIGATION SUBCONTRACTORS	Luman Occ		^	60	
Driller D'	Lump Sum		0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum	eacn	0	\$0	
Subtotal I	nvestigation	Subcontrac	tors	\$0	

TASK TOTAL: \$18,372

3% Mark-up:

\$0

\$0

\$0

SUBTOTAL SUBCONTRACTORS:

Subtotal Laboratory & Investigation Subcontractors:

Printed:

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Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate: 143%

SEAD-12 Annex E

Task # 2.8 Chemical Analysis

218 Soil, 74 GW, 43 SW&Sed, 378 Data points@3.5hrs/point

\$38,639

\$65,659

Prop No: 979002-00001

Prop No: 979002-000	001					
		Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS				-		·
ENGINEERS AND S	CIENTISTS					
	al Level 6, Step 2 (P68) al Level 6, Step 1 (P62)	\$58.74 \$46.47		0	\$0 \$0	
	ıl Level 5, Step 4 (P58)	\$44.11		16	\$706	
	ıl Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professiona	ll Level 5, Step 2 (P54)	\$32.91	/hour	0	\$0	
Professiona	ll Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professiona	l Level 4, Step 2 (P48)	\$29.13		0	\$0	
Professiona	l Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
Professiona	l Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professiona	l Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
	I Level 2, Step 1 (P22)	\$19.89	/hour	1323	\$26,314	
Professiona	l Level 1, Step 2 (P18)	\$18.57	/hour	0	\$0	
Professiona	l Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SU	JPPORT SPECIALISTS					
Technician	Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician	Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician I	Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technician I	Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician	Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician	Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician	Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Lev	/el 3 (S35)	\$20.61	/hour	0	\$0	
Support Lev	vel 2 (S25)	\$12.40	/hour	0	\$0	
Support Lev	/el 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LAB	OR COST Contract Year: 1 Base Yr			1339	\$27,020	

SUBTOTAL BURDENED LABOR:

Labor Burden:

Huntsville Division

Printed:

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Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.8

Chemical Analysis

218 Soil, 74 GW, 43 SW&Sed, 378 Data points@3.5hrs/point

Prop No: 979002-00001

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75		0	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00		0	\$0	
Decon Eqt	\$18.00		0	\$0	
55g drums fill/mov	\$100.00		0	\$0	
Field Notebook	\$14.00		0	\$0	
Ice	\$1.00		0	\$0	
Latex Gloves	\$10.00		0	\$0	
Methanol (Optima)	\$25.00		0	\$0	
Hexane (Optima)	\$25.00		0	\$0	
Acetone (Optima)	\$50.00		Ö	\$0	
HCI (Optima)	\$285.00		Ö	\$0	
HNO3 (Optima)	\$175.00		0	\$0	
Ascorbic Acid	\$10.00		Ö	\$0	
Filters (0.45uM & 0.5uM)	\$50.00		Ő	\$0	
Overboots	\$4.00		Ö	\$0	
Respirator Cartridges	\$15.00	•	ő	\$0	
,	\$72.00	•	0	\$0	
Packing Tape (doz) Padlocks	\$12.00		0	\$0	
	\$40.00		0	\$0 \$0	
Sampling Tables	\$20.00		0	\$0 \$0	
Radiological Badges Aluminum Foil	\$1.00		0	\$0 \$0	
	\$30.00		0	\$0	
Stain Stl bwl/spn			0	\$0 \$0	
Survey Stake/Flag		/bundle	0	\$0 \$0	
Teflon tape	\$8.00		0	\$0 \$0	
Tyveks	\$6.30		•		
Water (HPLC Grade)	\$97.00		0	\$0 \$0	
Ziplock bags	\$3.00		0	\$0 \$0	
Calibration Gas	\$450.00		0	\$0 #0	
Ultra Pure Air	\$310.00		0	\$0 \$0	
Teflon Tubing	\$120.00		0	\$0 \$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0 \$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$0

Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.8

Chemical Analysis

218 Soil, 74 GW, 43 SW&Sed, 378 Data points@3.5hrs/point

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	0	\$0	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking, Airport	\$13.00	/day	0	\$0	
Auto Rental	\$55.00	/day	0	\$0	
Suburban\Van rental	\$585.00	/week	0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOT	AL TRAVEL:	\$0	
		306101	AL INAVLL.	\$ O	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	0	\$0	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00		0	\$0	
Facsimile		/page	0	\$0	
Overnight Express	,	1 0		•	
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	0	\$0	
Mail 4-lb pack	\$4.10		0	\$0	
Mail letters	\$0.54		0	\$0	
Si	ubtotal Services			\$0	
				*-	
REPRODUCTION					
Photocopier	\$0.05		0	\$0	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Si	ubtotal Reproduction	n		\$0	
	1			• -	

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Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.8

Chemical Analysis

218 Soil, 74 GW, 43 SW&Sed, 378 Data points@3.5hrs/point

Prop No: 979002-00001

Project:

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL			•		
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00		0	\$0	
Slug test eqt	\$50.00	•	0	\$0	
Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0 \$0	
	\$135.00		0	\$0 \$0	
Data Logger,Trnsdcr		•	0	\$0 \$0	
Flow Meter	\$30.00				
Water coolers	•	/month	0	\$0 \$0	
Equipment Trailer	\$1,000.00		0	\$0 * 0	
Grundfus Redi Flow Pump	\$64.00	•	0	\$0 \$0	
PUF Sampler	\$150.00		0	\$0 #0	
PUF Sampler Calibration Kit	\$25.00	•	0	\$0	
Hi- Vol Sampler	\$75.00		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	-	0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	-	0	\$0	
EM-31	\$85.00		0	\$0	
GPR	\$500.00	/day	0	\$0	
Subto	tal Rental			\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	0	\$0	
Alpha Survey Meter	\$80.00	•	0	\$ 0	
, ,	\$100.00		0	\$0 \$0	
Alpha Scintillation Counter	\$100.00		0	\$ 0	
Beta Sample Counter			0	\$0 \$0	
Gas Proportional Detector	\$100.00			\$0 \$0	
Gas Prop. Detector-Floor	\$100.00		0		
Radon Monitor	\$300.00		0	\$0 \$0	
Gamma Radiation Meter	\$50.00	•	0	\$0 ***	
Calib Gas	\$10.00	-	0	\$ 0	
2-way radios		/ea/wk	0	\$0	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		0	\$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subto	tal H & S			\$0	

SUBTOTAL OTHERS:

\$0

SUBTOTAL LABOR & ODC'S:

\$65,659

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.8

Chemical Analysis

218 Soil, 74 GW, 43 SW&Sed, 378 Data points@3.5hrs/point

Annex E			3/8	Data points@	3.5hrs/point
Prop No: 979002-00001					
	Unit			_	
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATOR'	Y ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		160		117+14M+22R+7D
Pest./PCBs (TCL)	\$180.00		160	. ,	117+14M+22R+7D
Total Metals & CN(TAL)	\$170.00		160		117+14M+22R+7D
Iron(Ferrous)) each	74		74GW(37x2Rnds.)
Sulfide) each	74		74GW(37x2Rnds.)
Spec Cond(EPA 9050)) each	0	\$0	
Total Organic Carbon (EPA 9060)) each	117		74GW+43SW
TOX (EPA 9056)) each	0	\$0	
Chloride(EPA 9250)) each	0	\$0	
BOD) each	74		74GW(37x2Rnds.)
Sulfate(EPA 300)) each	74		74GW(37x2Rnds.)
COD		each	74		74GW(37x2Rnds.)
pH (EPA 9045)) each	0	\$0	7.1011(07.21.11.00.)
Volatiles(EPA524or8260)	\$195.00		226		117+14M+66B+22R+7
Hardness(EPA 130.2)		each	117		74GW+43SW
Alkalinity(EPA 310)		each	117	. ,	74GW+43SW
Nitrate (EPA 353.2)		each	117	. ,	74GW+43SW
SOILS - SURFACE or SUBSURFACE LABO					
Volatiles (TCL)	\$180.00		306	,	158+43+60T+30M+15
B/N/A (TCL)	\$400.00		306		158+43+60T+30M+15
Pest./PCBs (TCL)	\$180.00		306		158+43+60T+30M+15
Total Metals & CN(TAL)	\$170.00		306		158+43+60T+30M+15
Spec Cond(EPA 9050)		each each	0	\$0	
Total Organic Carbon (L. Kahn)) each	55	•	6SB+6TP+43SD
TOX (EPA 9056)) each	0	\$0	
Chloride(EPA 9250)) each	0	\$0	
pH (EPA 9045)) each	55		6SB+6TP+43SD
Nitrate (EPA 353.2)	\$20.00) each	306	\$6,120	158+43+60T+30M+15
Subtotal	Team Labo	ratory		\$481,364	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00) each	55	\$6,600	6SB+6TP+43SD
TCLP	\$1,500.00		12		6SB+6TP
Moisture Content) each	0	\$10,000	000.011
Bulk Density		each	15		6SB+6TP+3SD
Chromium (Level II)) each	0	\$0	008.011 .008
Total Suspended Solids	-	each each	43		43SW
Total Dissolved Solids		each each	117		74GW+43SW
	-	each Deach			
Ammonia			43	\$1,075 \$1,075	
Phosphate		each	43	\$1,075 \$5,500	
Cation Exchange Capacity	\$100.00	реасп	55	\$5,500	6SB+6TP+43SD

Printed:

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Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.8 Chemical Analysis

218 Soil, 74 GW, 43 SW&Sed, 378 Data points@3.5hrs/point

Prop No: 979002-00001

Project:

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:	\$60.00	oooh	157	\$0.420	74+43+12M+22R+6D
Thorium 232, 230, 227 Uranium 238, 235, 233+234	\$60.00		157		74+43+12M+22R+6D
Radium 226,223	\$40.00		157		74+43+12M+22R+6D
Pb214&211,Bi214,Ce137,Co60	\$80.00		157		74+43+12M+22R+6D
Plutonium 239 + 240	\$65.00		157		74+43+12M+22R+6D
Americium 241	\$65.00		157		74+43+12M+22R+6D
Gross AlphaΒ	\$45.00		157		74+43+12M+22R+6D
Soil Samples For:	φ+σ.σσ	Cuon	107	Ψ1,000	74.40.1211.2211.00
Thorium 232, 230, 227	\$60.00	each	399	\$23,940	302S+43SD+38M+16
Uranium 238, 235, 233+234	\$60.00		399		302S+43SD+38M+16
Radium 226,223	\$40.00		399		302S+43SD+38M+16
Pb214&211,Bi214,Ce137,Co60	\$0.00		399	\$0	
Plutonium 239 + 240	\$65.00		399		302S+43SD+38M+16
Americium 241	\$65.00		399		302S+43SD+38M+16
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		8	\$6,000	
Sample Prep/Return	\$0.00		399	\$0	
Wipe Samples For:	•				
Thorium 232, 230, 227	\$60.00	each	134	\$8,040	98W+12S+12M+6B+6
Uranium 238, 235, 233+234	\$60.00	each	134	\$8,040	98W+12S+12M+6B+6
Radium 226,223	\$40.00	each	134	\$5,360	98W+12S+12M+6B+6
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	134	\$10,720	98W+12S+12M+6B+6
Plutonium 239 + 240	\$65.00	each	134	\$8,710	98W+12S+12M+6B+6
Americium 241	\$65.00	each	134	\$8,710	98W+12S+12M+6B+6
Gross AlphaΒ	\$45.00	each	134	\$6,030	98W+12S+12M+6B+6
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	100	\$2,500	
Subtotal	Misc. Labora	atory		\$280,950	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum		0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal	Investigation	Subcontra	ctors	\$0	

Subtotal Laboratory & Investigation Subcontractors:

3% Mark-up:

\$762,314 \$22,869

SUBTOTAL SUBCONTRACTORS:

\$785,183

TASK TOTAL: \$850,843 Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.9 Surveying

(318 Sampling Points) (600 Archeological Points)

\$2,878

Prop No: 979002-00001

Prop No: 9/9002-00001						
		Unit	I Imita	Overtit.	Coot	Mater
LABOR COSTS		Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS						
ENGINEERS AND SCIENTI	STS					
Professional Level	6. Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level		\$46.47		0	\$0	
Professional Level		\$44.11		4	\$176	
Professional Level		\$37.99		0	\$0	
Professional Level		\$32.91		0	\$0	
Professional Level	5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Level	4 Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level		\$25.20		40	\$1,008	
1 Totessional Level	4, Otep 1 (1 42)	Ψ20.20	modi	10	Ψ1,000	
Professional Level	3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level	2, Step 2 (P28)	\$23.09		0	\$0	
Professional Level	2, Step 1 (P22)	\$19.89	/hour	0	\$0	
Donforcion di Lovel	4. Ot- = 2 (D49)	¢10 E7	/h a	0	\$ 0	
Professional Level		\$18.57		0	\$0 \$ 0	
Professional Level	1, Step 1 (P12)	\$14.84	mour	U	ΦΟ	
TECHNICAL AND SUPPOR	T SPECIALISTS					
Technician Level 5	(T55)	\$21.10	/hour	0	\$0	
To all obstant avail 4	Ota = 2 (T40)	¢40 E0	/h a	0	\$0	
Technician Level 4,		\$16.58		0 0	\$0 \$0	
Technician Level 4,	, Step 1 (142)	\$14.08	mour	U	Φ0	
Technician Level 3,	Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3,	, , ,	\$11.61		0	\$0	
	,,	*				
Technician Level 2	(T25)	\$10.13	/hour	0	\$0	
Technician Level 1	(T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S	35)	\$20.61	/hour	0	\$0	
- Cappent 2010. c (0)	,	•				
Support Level 2 (S	25)	\$12.40	/hour	0	\$0	
				_	4.5	
Support Level 1 (S	15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR CO	ST			44	\$1,184	
	ct Year: 1				-	
	Base Yr					
Overhea	d Rate: 143%			Labor Burden:	\$1,694	

SUBTOTAL BURDENED LABOR:

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.9 Surveying

(318 Sampling Points) (600 Archeological Points)

F10p No. 373002-00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00		0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00		0	\$0	
Radiological Badges	\$20.00		0	\$0	
Aluminum Foil	\$1.00		0	\$0	
Stain Stl bwl/spn	\$30.00		0	\$0	
Survey Stake/Flag	•	/bundle	0	\$0	
Teflon tape	\$8.00		0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00		0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 2.9 Surveying

(318 Sampling Points) (600 Archeological Points)

Prop No: 979002-00001

1100110. 0.0002 00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	0	\$0	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking, Airport	\$13.00	/day	0	\$0	
Auto Rental	\$55.00		0	\$0	
Suburban\Van rental	\$585.00		0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOTA	AL TRAVEL:	\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	10	\$40	
Word Proc/PC	\$3.70	/hour	0	\$0	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	10	\$10	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	0	\$0	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subtotal Services				\$50	
REPRODUCTION					
Photocopier	\$0.05	/page	0	\$0	
Aerial Photo repro	\$10.00	/photo	0	\$0	
Blueline repro	\$1.00	/Sheet	0	\$0	
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0	
3-ring binders	\$15.00	each	0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subtotal Reproduction				\$0	

Huntsville Division

Seneca Army Depot Activity, Romulus New York

Printed:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Task # 2.9

22-Mar-96

Surveying
(318 Sampling Poin

(318 Sampling Points) (600 Archeological Points)

Parsons Engineering Science, Inc.

Prop No: 979002-00001

Project:

1 10p 140. 373002 00001					
	Unit	1.1-54-	O andib.	04	N1-4
EQUIDATE IT DENTAL	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
•	\$50.00		0	\$ 0	
pH/Cond meter Flow thru pH/Cond meter	\$257.00		0	\$0 \$0	
·	\$55.00		0	\$0 \$0	
DO meter	\$50.00		0	\$0 \$0	
Soil Gas Supplies	\$50.00		0	\$0 \$0	
Slug test eqt	•		_	\$0 \$0	
Water level ind	\$40.00		0		
Turbidimeter	\$30.00		0	\$0 #0	
Data Logger,Trnsdcr	\$135.00	•	0	\$0	
Flow Meter	\$30.00		0	\$0	
Water coolers		/month	0	\$0	
Equipment Trailer	\$1,000.00		0	\$0	
Grundfus Redi Flow Pump	\$64.00	,	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	-	0	\$0	
GPR	\$500.00	-	0	\$0	
31 TC	***************************************	,,		•	
Subtota	al Rental			\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	0	\$0	
Alpha Survey Meter	\$80.00	/week	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
Calib Gas	\$10.00	•	0	\$0	
		/ea/wk	0	\$0	
2-way radios	\$20.00		0	\$0 \$0	
Air Purif Resp	\$20.00 \$35.00		0	\$0 \$0	
10-Gal Eye Wash			0		
Combination SCBA/SAR	\$150.00	/ua y	U	\$0	
Cultura	al H & S			\$0	
Subtota	III A S			φυ	

SUBTOTAL OTHERS:

\$50

SUBTOTAL LABOR & ODC'S:

\$2,928

U.S. Army Corps of Engineers Huntsville Division Client:

Project: Seneca Army Depot Activity, Romulus New York

SEAD-12 Annex E Prop No: 979002-00001

RI/FS at the Radiological Disposal Areas

Printed:

22-Mar-96

Task # 2.9 Surveying

(318 Sampling Points) (600 Archeological Points)

Parsons Engineering Science, Inc.

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATORY	'ANALYS	SIS		
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	-	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	•	each	0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABO				••	
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)		each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0 #0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)		each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
0.14.4	-	1		40	
Subtotal	Team Labor	ratory		\$0	
AND ADDRATORY ANALYOIG					
MISC. LABORATORY ANALYSIS	¢420.00	aaah	0	\$0	
Grain Size Dist	\$120.00		0 0	\$0 \$0	
TCLP	\$1,500.00		=	\$0 \$0	
Moisture Content	\$15.00		0		
Bulk Density	\$35.00		0	\$0 \$0	
Chromium (Level II)	\$30.00		0	•	
Total Suspended Solids	\$20.00		0	\$0 \$0	
Total Dissolved Solids	\$20.00		0	\$0 \$0	
Ammonia	\$25.00		0	\$0 \$0	
Phosphate	\$25.00		0	\$0 \$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 2.9 Surveying

(318 Sampling Points) (600 Archeological Points)

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS	3		•		
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		0	\$0	
, ,					
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	31600	\$31,600	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	32758	\$32,758	
Subtotal	Investigation	Subcontra	ectors	\$64,358	

Subtotal Laboratory & Investigation Subcontractors:

3% Mark-up:

\$64,358 \$1,931

SUBTOTAL SUBCONTRACTORS:

A - 132

\$66,289

TASK TOTAL:

Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Overhead Rate: 143%

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task #3

Monthly Field Activity Reports

6 Reports

Prop No: 979002-	00001					
		Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS	S	<u> </u>	<u>91110</u>	scarinty	0.000	140105
ENGINEERS AND	SCIENTISTS					
	onal Level 6, Step 2 (P68)	\$58.74		0	\$0	
Profession	onal Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
Profession	onal Level 5, Step 4 (P58)	\$44.11	/hour	60	\$2,647	
	onal Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Profession	onal Level 5, Step 2 (P54)	\$32.91		60	\$1,975	
	onal Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Profession	onal Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
	onal Level 4, Step 1 (P42)	\$25.20		0	\$0	
		420.20	7110 4.	·	•	
Profession	onal Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Profession	onal Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
	onal Level 2, Step 1 (P22)	\$19.89		0	\$0	
1 10100010	7. 101 Love 2, Otop 1 (1 22)	Ψ10.00	711041	v	Ψ	
Profession	onal Level 1, Step 2 (P18)	\$18.57	/hour	0	\$0	
Profession	onal Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND	SUPPORT SPECIALISTS					
Technicia	an Level 5 (T55)	\$21.10	/hour	0	\$0	
	(•	
Technicia	an Level 4, Step 2 (T48)	\$16.58		0	\$0	
Technicia	n Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technicia	an Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
	an Level 3, Step 1 (T32)	\$11.61		0	\$0	
	. , , .					
Technicia	nn Level 2 (T25)	\$10.13	/hour	0	\$0	
Technicia	n Level 1 (T15)	\$8.89	/hour	0	\$0	
Support I	_evel 3 (S35)	\$20.61	/hour	0	\$0	
• •	, ,					
Support I	_evel 2 (S25)	\$12.40	/hour	30	\$372	
Support l	_evel 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LA	BOR COST			150	\$4,993	
. 5	Contract Year: 1				+ .,===	
	Base Yr					

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$7,140

\$12,133

U.S. Army Corps of Engineers Huntsville Division Client:

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

22-Mar-96 Printed:

Parsons Engineering Science, Inc.

Task #3

Monthly Field Activity Reports

6 Reports

Unit				
	<u>Units</u>	Quantity	Cost	<u>Notes</u>
<u>-</u> S				
\$20.00	/roll	0	\$0	
		0		
· · · · · · · · · · · · · · · · · · ·			•	
		0	\$0	
· ·		0	\$0	
\$1.00	/bag	0	\$0	
\$10.00	/box	0	\$0	
\$25.00	/bottle	0	\$0	
\$25.00	/bottle	0	\$0	
\$50.00	/bottle	0	\$0	
\$285.00	/bottle	0	\$0	
\$175.00	/bottle	0	\$0	
\$10.00	/bottle	0	\$0	
1) \$50.00	/box	0	\$0	
\$4.00	/pair	0	\$0	
\$15.00	/pair	0	\$0	
\$72.00	/case	0	\$0	
\$12.00	each	0	\$0	
\$40.00	each	0	\$0	
\$20.00	each	0	\$0	
\$1.00	/roll	0	\$0	
\$30.00	/set	0		
\$20.00	/bundle	0		
\$8.00	/roll	0	\$0	
		0	\$0	
\$97.00	/case	0	\$0	
\$3.00	/box	0		
,				
			T -	
-			•	
		-	* -	
			\$0	
'				
\$16.00	/bag	0	\$0	
	\$20.00 \$122.74 \$37.95 \$30.75 \$0.15 \$84.00 \$18.00 \$100.00 \$14.00 \$1.00 \$25.00 \$25.00 \$25.00 \$175.00 \$10.00 \$	\$20.00 /roll \$122.74 /case \$37.95 /case \$30.75 /case \$30.75 /case \$0.15 /foot \$84.00 /roll \$18.00 /kit \$100.00 each \$14.00 each \$1.00 /bag \$10.00 /box \$25.00 /bottle \$25.00 /bottle \$25.00 /bottle \$175.00 /bottle \$175.00 /bottle \$175.00 /bottle	\$20.00 /roll	\$20.00 /roll

SUBTOTAL MATLS & SUPPLIES:

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task#3

Monthly Field Activity Reports

6 Reports

Prop No: 979002-00001					
	Unit				
	Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74		0	\$ 0	
	\$37.95		0	\$0 \$0	
1 Liter Amber Bottles	\$30.75		0	\$ 0	
32 oz. HDPE Bottles	\$0.15		0	\$0 \$0	
Braided Nylon Rope	•		0	\$0 \$0	
Bubble Pack	\$84.00		0		
Decon Eqt	\$18.00		0	\$0 \$0	
55g drums fill/mov	\$100.00		0	\$0 \$0	
Field Notebook	\$14.00				
Ice	\$1.00		0	\$0 \$0	
Latex Gloves	\$10.00		0	\$ 0	
Methanol (Optima)		/bottle	0	\$0	
Hexane (Optima)	·	/bottle	0	\$0	
Acetone (Optima)	\$50.00		0	\$ 0	
HCI (Optima)	\$285.00		0	\$0	
HNO3 (Optima)	\$175.00		0	\$0	
Ascorbic Acid		/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00		0	\$0	
Overboots	\$4.00	•	0	\$0	
Respirator Cartridges	\$15.00		0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00		0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	
	*	•			

SUBTOTAL MATLS & SUPPLIES:

\$0

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task#3

Monthly Field Activity Reports

\$75

6 Reports

1 10p 140. 07 0002 00001					
	Unit		0 "		
TD A VEL	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	0	\$0	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking,Airport	\$13.00	/day	0	\$0	
Auto Rental	\$55.00	/day	0	\$0	
Suburban\Van rental	\$585.00	/week	0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOT	AL TRAVEL:	\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	20	\$80	
Word Proc/PC	\$3.70		20	\$7 4	
CADD	\$5.00		0	\$0	
Facsimile	· · · · · · · · · · · · · · · · · · ·	/page	50	\$50	
Overnight Express	Ψ1.00	page		400	
Letter/2 lb pack	\$14.50	each	28	\$406	
Package (50 lbs)	\$96.25		0	\$0	
Mail 4-lb pack		/pack	0	\$0	
Mail letters		/letter	0	\$0	
S	Subtotal Services			\$610	
REPRODUCTION					
Photocopier	\$0.05	/page	1500	\$75	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	·	/page	Ö	\$0	

Subtotal Reproduction

Huntsville Division

ntavilla Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 3

Monthly Field Activity Reports

6 Reports

Prop No	: 979002-00001					
		Unit				
		Cost	Units	Quantity	Cost	<u>Notes</u>
EQUIPM	IENT RENTAL					
FARTH	SCIENCES EQUIPMENT					
LAKITI	Bailer	\$55.00	/week	0	\$0	
	Magnetometer	\$42.00		0	\$0	
	pH/Cond meter	\$50.00		0	\$0	
	Flow thru pH/Cond meter	\$257.00		0	\$0	
	DO meter	\$55.00		0	\$0	
	Soil Gas Supplies	\$50.00		0	\$0	
	Slug test eqt	\$50.00		0	\$0	
	Water level ind	\$40.00		0	\$0	
	Turbidimeter	\$30.00		0	\$0	
	Data Logger,Trnsdcr	\$135.00		0	\$0	
	Flow Meter	\$30.00	-	0	\$0	
	Water coolers	•	/month	0	\$0	
	Equipment Trailer	\$1,000.00		0	\$0	
	Grundfus Redi Flow Pump	\$64.00		0	\$0	
	PUF Sampler	\$150.00		0	\$0	
	PUF Sampler Calibration Kit	\$25.00		0	\$0	
	Hi- Vol Sampler	\$75.00	•	0	\$0	
	Hi- Vol Sampler Calibration Kit	\$25.00		0	\$0	
	Ponar Sediment Sampler	\$27.00		0	\$0	
	3.2 kw Generator	\$50.00	-	0	\$0	
	Seismograph	\$200.00		0	\$0	
	EM-31	\$85.00	-	0	\$0	
	GPR	\$500.00	-	0	\$0	
				, 		
	Subtota	l Rental			\$0	
HEALTH	1 & SAFETY EQUIPMENT					
,	HNu Meter	\$50.00	/day	0	\$0	
	Alpha Survey Meter	\$80.00	•	0	\$0	
	Alpha Scintillation Counter	\$100.00		0	\$0	
	Beta Sample Counter	\$100.00		0	\$0	
	Gas Proportional Detector	\$100.00		0	\$0	
	Gas Prop. Detector-Floor	\$100.00		0	\$0	
	Radon Monitor	\$300.00		0	\$0	
	Gamma Radiation Meter	\$50.00		0	\$0	
	Calib Gas	\$10.00	•	0	\$0	
	2-way radios		/ea/wk	0	\$0	
	Air Purif Resp		/week	0	\$0	
	10-Gal Eye Wash	\$35.00		0	\$0	
	Combination SCBA/SAR	\$150.00		0	\$0	
	Subtota	IH&S			\$0	

SUBTOTAL OTHERS:

\$685

SUBTOTAL LABOR & ODC'S:

\$12,818

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Prop No: 979002-00001

Task#3

Monthly Field Activity Reports

6 Reports

	Unit Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAI	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0 \$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	RATORY A	NALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001

Project:

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 3

Monthly Field Activity Reports

6 Reports

Ε10μ Νο. 373002-00001	Unit	Linito	Quantity	Cost	Notos
RADIOLOGICAL LABORATORY ANALYSIS	Cost	<u>Units</u>	Quantity	Cost	Notes
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Soil Samples For:	4.0.00	0		**	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Vipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
IR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00		0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
NVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum		0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surve y or	Lump Sum	each	0	\$0	
Subtotal	Investigation	Subcontrac	etors	\$0	
Subtotal Lal	ooratory & In	vestigation	Subcontractors:	\$0	
			20/ Mark up:	0.9	

TASK TOTAL:

3% Mark-up:

\$0

\$0

\$12,818

SUBTOTAL SUBCONTRACTORS:

Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate:

143%

SEAD-12 Annex E

Prop No: 979002-00001

Task#4

Quarterly Reports

8 Reports

Prop No: 9/9002-00001					
	Unit		0	0 1	
LABOR COCTO	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11		80	\$3,529	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		80	\$2,633	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20		0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57		0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician Level 4, Step 2 (140)	\$14.08		0	\$0 \$0	
recommodan zever 4, otop 1 (142)	Ψ14.00	moui	v	Ψ	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
recillician Level 2 (123)	Φ10.13	moui	O	Ψ0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	40	\$496	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOLIDOW ADOD COST				CC CC	
TOTAL HOURS/LABOR COST Contract Year: 1			200	\$6,658	
Base Yr					
				40.500	

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$9,520

\$16,178

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task#4

Quarterly Reports

8 Reports

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75		0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/ba g	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00		0	\$0	
Overboots	\$4.00	•	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00		0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00		0	\$0	
Radiological Badges	\$20.00		0	\$0	
Aluminum Foil	\$1.00		0	\$0	
Stain Stl bwl/spn	\$30.00		0	\$0	
Surve y Stake/Flag	+	/bundle	0	\$0	
Teflon tape	\$8.00		0	\$0	
Tyveks	\$6.30		0	\$0	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00		0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0 ***	
Folding Live Traps	\$15.00		0	\$0 \$0	
Glassware	\$25.00		0	\$0 \$0	
Quartz Filters	\$10.00		0	\$0 \$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$0

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

\$25

Task#4

Quarterly Reports

8 Reports

1100140. 373002-00001	Unit				
	Cost	Units	Quantity	Cost	Notes
TRAVEL	3000	CTITO	scaaring	<u> </u>	140tes
717/					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	•	0	\$0	
Subsistence-Huntsville	\$89.00		0	\$0	
Parking,Airport	\$13.00		0	\$0	
Auto Rental	\$55.00		0	\$0	
Suburban\Van rental	\$585.00		0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOT	AL TRAVEL:	\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	20	\$80	
Word Proc/PC	\$3.70		20	\$74	
CADD	\$5.00		0	\$0	
Facsimile	•	/page	50	\$50	
Overnight Express		. 0			
Letter/2 lb pack	\$14.50	each	56	\$812	
Package (50 lbs)	\$96.25	each	0	\$0	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	tal Services			\$1,016	
REPRODUCTION					
Photocopier	\$0.05	/page	500	\$25	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro	•	/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	

Subtotal Reproduction

Huntsville Division

Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Project:

Prop No: 979002-00001

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Task # 4

Quarterly Reports

8 Reports

Prop No: 979002-00001					
	Unit				
	Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
	\$55.00	Meek	0	\$0	
Bailer	\$42.00		0	\$0	
Magnetometer	\$50.00		0	\$0 \$0	
pH/Cond meter	\$257.00		0	\$0 \$0	
Flow thru pH/Cond meter	\$55.00		0	\$0 \$0	
DO meter	,		0	\$0 \$0	
Soil Gas Supplies	\$50.00 \$50.00		_	\$0 \$0	
Slug test eqt	,		0		
Water level ind	\$40.00		0	\$0 \$0	
Turbidimeter	\$30.00		0	\$0	
Data Logger, Trnsdcr	\$135.00	-	0	\$0 \$0	
Flow Meter	\$30.00		0	\$0	
Water coolers		/month	0	\$0	
Equipment Trailer	\$1,000.00		0	\$0	
Grundfus Redi Flow Pump	\$64.00		0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	•	0	\$0	
Hi- Vol Sampler	\$75.00		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	-	0	\$0	
Ponar Sediment Sampler	\$27.00	-	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtotal	Rental			\$0	
Cubicial	rtonar			4.	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	0	\$0	
Alpha Survey Meter	\$80.00	/week	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00	/day	0	\$0	
Calib Gas	\$10.00	/day	0	\$0	
2-way radios		/ea/wk	0	\$0	
Air Purif Resp		/week	0	\$0	
10-Gal Eye Wash		/week	0	\$0	
Combination SCBA/SAR	\$150.00		0	\$0	

SUBTOTAL OTHERS:

\$1,041

\$0

SUBTOTAL LABOR & ODC'S:

\$17,219

Subtotal H & S

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

SEAD-12

RI/FS at the Radiological Disposal Areas

Annex E

Task#4

Quarterly Reports

8 Reports

Prop No: 979002-00001					
P10p No. 979002-00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAI	RORATORY	ΖΙΖΥ ΙΔΙΑΔ			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
(2.7000)	•				
SOILS - SURFACE or SUBSURFACE LABOR	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		Ö	\$0	
Chromium (Level II)	\$30.00		Ö	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		Ö	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		Ö	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
Cation Exchange Capacity	Ψ100.00	Juon	V	ΨΟ	

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task#4

Quarterly Reports

8 Reports

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALY	SIS				
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60			0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSI	S				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subt	otal Misc. Labora	atory		\$0	
INDUSCRICATION OF BOOMED VOTORS					
INVESTIGATION SUBCONTRACTORS	L.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0	40	
Driller	Lump Sum		0	\$0 #0	
Photogrammetry	Lump Sum		0	\$0 \$0	
IDW Disposal	Lump Sum		0		
Surveyor	Lump Sum	eacn	0	\$0	
Subt	otal Investigation	Subconti	actors	\$0	
Subtota	! Laboratory & In	vestigatio	n Subcontractors:	\$0	

TASK TOTAL:

3% Mark-up:

\$17,219

\$0

\$0

SUBTOTAL SUBCONTRACTORS:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Task # 5

Field Sampling Letter Reports

1 Report

Prop No: 979002-00001				
	Unit <u>Cost</u> <u>Units</u>	Quantity	Cost	Notes
LABOR COSTS				
ENGINEERS AND SCIENTISTS				
Professional Level 6, Step 2 (P68)	\$58.74 /hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47 /hour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11 /hour	16	\$706	
Professional Level 5, Step 3 (P56)	\$37.99 /hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91 /hour	16	\$527	
Professional Level 5, Step 1 (P52)	\$29.39 /hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13 /hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20 /hour	80	\$2,016	
Professional Level 3, Step 1 (P35)	\$24.04 /hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09 /hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89 /hour	0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57 /hour	0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84 /hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS				
Technician Level 5 (T55)	\$21.10 /hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58 /hour	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08 /hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99 /hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61 /hour	0	\$0	
Technician Level 2 (T25)	\$10.13 /hour	0	\$0	
Technician Level 1 (T15)	\$8.89 /hour	0	\$0	
Support Level 3 (S35)	\$20.61 /hour	0	\$0	
Support Level 2 (S25)	\$12.40 /hour	40	\$496	
Support Level 1 (S15)	\$8.72 /hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1		152	\$3,744	

Base Yr 143%

Overhead Rate:

Labor Burden:

\$5,354

SUBTOTAL BURDENED LABOR:

\$9,099

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task #5

Field Sampling Letter Reports

1 Report

	Unit	1.1-4-	Overatit.	04	Makaa
MATERIAL O AND OLIDBUIES	Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$0

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

Prop No: 979002-00001

Task #5

Field Sampling Letter Reports

1 Report

Prop No:	979002-00001					
		Unit				
		Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAV	EL					
	Airfare Boston\Syracuse	\$500.00	•	0	\$0	,
	Airfare Boston\Huntsville	\$900.00		0	\$0	
	Subsistence-Seneca	\$96.00		0	\$0	
	Subsistence-Huntsville	\$89.00	,	0	\$0	
	Parking,Airport	\$13.00		0	\$0	
	Auto Rental	\$55.00		0	\$0	
	Suburban\Van rental	\$585.00		0	\$0	
	Mileage	\$0.31	/mile	0	\$0	
			SUBTO	TAL TRAVEL:	\$0	
OTHER	2S					
0	.0					
IN-HOU	ISE SERVICES					
	Telephone	\$4.00	/call	20	\$80	
	Word Proc/PC	\$3.70	/hour	40	\$148	
	CADD	\$5.00	/hour	0	\$0	
	Facsimile	\$1.00	/page	50	\$50	
	Overnight Express				·	
	Letter/2 lb pack	\$14.50	each	14	\$203	
	Package (50 lbs)	\$96.25	each	0	\$0	
	Mail 4-lb pack		/pack	0	\$0	
	Mail letters		/letter	0	\$0	
		Subtotal Services		_	\$481	
REPRO	DUCTION					
	Photocopier	\$0.05	/page	15000	\$750	
	Aerial Photo repro	\$10.00	/photo	0	\$0	
	Blueline repro		/Sheet	0	\$0	
	Cronoflex Prod		/Sq Ft	0	\$0	
	3-ring binders	\$15.00		0	\$0	
	Color Copies	\$2.00		0	\$0	
		Subtotal Reproduction	n		\$750	

Huntsville Division

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Project: Seneca Army Depot Activity, Romulus New York

Printed:

22-Mar-96

Task #5

Field Sampling Letter Reports

Parsons Engineering Science, Inc.

1 Report

Prop No: 979002-00001

	Unit	Unito	Quantity	Cost	Notos
EQUIPMENT RENTAL	Cost	<u>Units</u>	Quantity	Cost	Notes
E GOII WEITH NEITH					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00		0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00		0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0	\$0	
Equipment Trailer	\$1,000.00	/month	0	\$0	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	-	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	-	0	\$0	
GPR	\$500.00	-	0	\$0	
Subto	otal Rental			\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	0	\$0	
Alpha Survey Meter	\$80.00	/week	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
Calib Gas	\$10.00	•	0	\$0	
2-way radios		/ea/wk	0	\$0	
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		0	\$0	
Combination SCBA/SAR	\$150.00		0	\$0	
		-			
Subto	otal H & S			\$0	

SUBTOTAL OTHERS:

\$1,231

SUBTOTAL LABOR & ODC'S:

\$10,330

U.S. Army Corps of Engineers Huntsville Division Client:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 5

Field Sampling Letter Reports

1 Report

Prop No: 979002-00001					
	Unit				
	Cost	Units	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABO			•	0.0	
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
(L. 71000.2)	4			•	
SOILS - SURFACE or SUBSURFACE LABORA	ATORY AN	VALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		Ö	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
Mitale (EPA 355.2)	φ20.00	Cacii	V	ΨΟ	
Subtotal Te	am Labor	atory		\$0	
Subtotal 16	tain Labor	atory		ΨΟ	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
	\$1,500.00		0	\$0	
Moisture Content	\$1,500.00 \$15.00		0	\$0	
	\$35.00		0	\$0	
Bulk Density	\$30.00		0	\$0 \$0	
Chromium (Level II)			_		
Total Suspended Solids	\$20.00		0	\$0 \$0	
Total Dissolved Solids	\$20.00		0	\$0 \$0	
Ammonia	\$25.00		0	\$0 *0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task#5

Field Sampling Letter Reports

1 Report

1 10p 110. 373002 00001					
	Unit				
	Cost	<u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYS	IS				
Water Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00		0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
5,000 / mp.::dai	V		·	40	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtot	al Misc. Labora	itory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
•					
Subtot	al Investigation	Subcontrac	tors	\$0	
Subtotal L	aboratory & In	vestigation S	Subcontractors:	\$0	
	•	-	3% Mark-up:	\$0	
	UDTOTAL			•	

TASK TOTAL:

\$10,330

\$0

SUBTOTAL SUBCONTRACTORS:

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate:

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task #6

Contaminant Fate and Transport

Prop No: 979002-00001					
	Unit	1.1.14	0	04	NI-4-
LABOR COSTS	Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step	2 (P68) \$58.74	/hour	0	\$0	
Professional Level 6, Step	1 (P62) \$46.47	/hour	0	\$0	
Professional Level 5, Step	4 (P58) \$44.11	/hour	16	\$706	
Professional Level 5, Step			0	\$0	
Professional Level 5, Step			20	\$658	
Professional Level 5, Step			0	\$0	
1 Totassional Ecvel 6, Grap	(1 02)	711041	·	4.5	
Professional Level 4, Step	2 (P48) \$29.13	/hour	100	\$2,913	
Professional Level 4, Step		/hour	0	\$0	
Professional Level 3, Step	1 (P35) \$24.04	/hour	0	\$0	
Drafassianal Laval 2 Stan	2 (P28) \$23.09	/hour	0	\$0	
Professional Level 2, Step 2 Professional Level 2, Step	,		0	\$0 \$0	
Professional Level 2, Step	1 (P22) \$15.05	moul	O	φυ	
Professional Level 1, Step	2 (P18) \$18.57	/hour	100	\$1,857	
Professional Level 1, Step		/hour	0	\$0	
TECHNICAL AND SUPPORT SPEC	IALISTS				
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2	-		0	\$0	
Technician Level 4, Step 1	(T42) \$14.08	/hour	0	\$0	
Technician Level 3, Step 2	(T38) \$13.99	/hour	0	\$0	
Technician Level 3, Step 1	` '		0	\$0	
, , ,					
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	20	\$248	
	00.70	0	•	*	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST			256	\$6,382	
Contract Year:	1				
	Base Yr				

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$9,126

\$15,508

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 6

Contaminant Fate and Transport

\$0

Prop No. 979002-00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	
_					

SUBTOTAL MATLS & SUPPLIES:

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 6

Contaminant Fate and Transport

\$50

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00		0	\$0	
Subsistence-Seneca	\$96.00	•	0	\$0	
Subsistence-Huntsville	\$89.00	,	0	\$0	
Parking, Airport	\$13.00		0	\$0	
Auto Rental	\$55.00		0	\$0	
Suburban\Van rental	\$585.00		0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOTA	AL TRAVEL:	\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		20	\$80	
Word Proc/PC	\$3.70		0	\$0	
CADD	\$5.00		0	\$0	
Facsimile	\$1.00	/page	20	\$20	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$96.25		0	\$0	
Mail 4-lb pack		/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subt	otal Services			\$100	
REPRODUCTION					
Photocopier	\$0.05	/page	1000	\$50	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro	\$1.00	/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00	each	0	\$0	
Color Copies	\$2.00	/page	0	\$0	

Subtotal Reproduction

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Task#6

Contaminant Fate and Transport

Prop No: 979002-00001					
	Unit				
	Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0	\$0	
Equipment Trailer	\$1,000.00	/month	0	\$0	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	•	0	\$0	
EM-31	\$85.00	•	0	\$0	
GPR	\$500.00	•	0	\$0	
Sub	total Rental			\$0	
Sub	itotai iventai			ΨΟ	
HEALTH & SAFETY EQUIPMENT	\$50.00	/day	0	\$0	
HNu Meter	\$50.00	•	0	\$0 \$0	
Alpha Survey Meter	,	/week	0		
Alpha Scintillation Counter	\$100.00		0	\$0 \$0	
Beta Sample Counter	\$100.00		0	\$0 \$0	
Gas Proportional Detector	\$100.00		0	\$0 \$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0 \$0	
Radon Monitor	\$300.00		0	\$0 #0	
Gamma Radiation Meter	\$50.00	•	0	\$0	
Calib Gas	\$10.00		0	\$0	
2-way radios		/ea/wk	0	\$0	
Air Purif Resp		/week	0	\$0	
10-Gal Eye Wash		/week	0	\$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Sub	ototal H & S			\$0	

SUBTOTAL OTHERS: \$150

\$15,658 SUBTOTAL LABOR & ODC'S:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Project:

Task#6

Contaminant Fate and Transport

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAB	ORATORY	'ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00	each	0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	ATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal T	eam Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
<u> </u>					

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

Task#6

SEAD-12 Annex E

Prop No: 979002-00001

Contaminant Fate and Transport

	Unit	11. 7	0 "		
DADIOLOGICAL LABORATORY ANALYSIS	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS Water Samples For:	5				
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Soil Samples For:	Ψ10.00	Cuon	· ·	Ψ	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	,		0	\$0	
Sample Prep/Return	\$0.00		0	\$0	
Wipe Samples For:	Ψ0.00	Caon	V	ΨΟ	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0 \$0	
	\$45.00		0	\$0 \$0	
Gross AlphaΒ	φ45.00	eacii	U	Φ0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		0	\$0	
, ,				· · · · · · · · · · · · · · · · · · ·	
Subtota	l Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0 \$0	
IDW Disposal	Lump Sum		0	\$0 \$0	
Surveyor	Lump Sum		0	\$0 \$0	
Surveyor	Lump Sum	eacii	O	Φ0	
Subtota	l Investigation	Subcontrac	tors	\$0	
Subtotal La	aboratory & in	vestigation S	Subcontractors:	\$0	
		-	3% Mark-up:	\$0	
S	UBTOTAL S	SUBCONT	TRACTORS:	\$0	
•					

TASK TOTAL:

\$15,658

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task#7

Baseline Risk Assessment

\$54,519

Prop No: 9/9002-00001					
	Unit Cost	Units	Quantity	Cost	Notes
LABOR COSTS	<u>0031</u>	Onits	Quartity	<u> </u>	ivotes
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74		0	\$0 \$0	
Professional Level 6, Step 1 (P62)	\$46.47	mour	U	\$0	
Professional Level 5, Step 4 (P58)	\$44.11		60	\$2,647	
Professional Level 5, Step 3 (P56)	\$37.99		200	\$7,598	
Professional Level 5, Step 2 (P54)	\$32.91		0	\$0	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	200	\$5,878	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		280	\$5,569	
· · · · · · · · · · · · · · · · · ·	040.57	,,	•		
Professional Level 1, Step 2 (P18)	\$18.57		0	\$ 0	
Professional Level 1, Step 1 (P12)	\$14.84	/nour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 2 (133)	\$11.61		0	\$0	
				4.0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	60	\$744	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1 Base Yr			800	\$22,436	
Overhead Rate: 143%			Labor Burden:	\$32,083	

SUBTOTAL BURDENED LABOR:

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

\$0

Task # 7

Baseline Risk Assessment

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
	***	, ,,	•	¢0	
Bottle labels	\$20.00		0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75		0	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00		0	\$0	
Decon Eqt	\$18.00		0	\$0	
55g drums fill/mov	\$100.00		0	\$0	
Field Notebook	\$14.00		0	\$0	
Ice	\$1.00	-	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roli	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00		0	\$0	
tollinganio . atimig	.	0			

SUBTOTAL MATLS & SUPPLIES:

Huntsville Division

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22-Mar-96

Parsons Engineering Science, Inc.

Seneca Army Depot Activity, Romulus New York Project:

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task #7

Baseline Risk Assessment

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00	/trip	0	\$0	
Subsistence-Seneca	\$96.00	/day	0	\$0	
Subsistence-Huntsville	\$89.00		0	\$0	
Parking,Airport	\$13.00		0	\$0	
Auto Rental	\$55.00		0	\$0	
Suburban\Van rental	\$585.00		0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOT	AL TRAVEL:	\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		30	\$120	
Word Proc/PC	\$3.70	/hour	80	\$296	
CADD	\$5.00		0	\$0	
Facsimile	\$1.00	/page	100	\$100	
Overnight Express					
Letter/2 lb pack	\$14.50		20	\$290	
Package (50 lbs)	\$96.25		0	\$0	
Mail 4-lb pack	\$4.10		0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subt	otal Services			\$806	
REPRODUCTION					
Photocopier	\$0.05		5000	\$250	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod		/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	
Subt	otal Reproduction	n		\$250	

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task#7

Baseline Risk Assessment

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00		0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00	•	0	\$0	
Slug test eqt	\$50.00		0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00		0	\$0	
Water coolers	\$40.00	/month	0	\$0	
Equipment Trailer	\$1,000.00	/month	0	\$0	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtota	al Rental			\$0	
HEALTH & SAFETY EQUIPMENT	250.00		0	60	
HNu Meter	\$50.00	-	0	\$0 #0	
Alpha Survey Meter	\$80.00		0	\$ 0	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter	\$100.00		0	\$0 ***	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00	•	0	\$0	
Calib Gas	\$10.00	-	0	\$0	
2-way radios		/ea/wk	0	\$0	
Air Purif Resp		/week	0	\$0	
10-Gal Eye Wash		/week	0	\$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	
Subtota	al H & S			\$0	

SUBTOTAL OTHERS:

\$1,056

SUBTOTAL LABOR & ODC'S:

\$55,575

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task #7

Baseline Risk Assessment

Prop No: 979002-00001					
•	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAN	BORATORY	'ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)		each	0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	RATORY A	NAI YSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)		each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)		each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	ratory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00	each each	0	\$0	

Huntsville Division

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task #7

Baseline Risk Assessment

Prop No: 979002-00001

. 100 110. 0. 0002	Unit	Linita	Occantity	Cont	NI-4
RADIOLOGICAL LABORATORY ANALYSIS	Cost	<u>Units</u>	Quantity	Cost	Notes
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00		0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal	Investigation	Subcontrac	etors	\$0	
Subtotal Lab	ooratory & In	vestigation	Subcontractors:	\$0	

TASK TOTAL:

3% Mark-up:

\$55,575

\$0

\$0

SUBTOTAL SUBCONTRACTORS:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task #8 RI Report Pre-Draft, Draft, Draft-Final, Final

Prop No: 979002-00001

Prop No	o: 979002-00001					
		Unit			•	
	2.00070	Cost	<u>Units</u>	<u>Quantity</u>	Cost	Notes
LABOR	RCOSTS					
ENGINE	EERS AND SCIENTISTS					
	Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
	Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
	Drafassianal Lavel E. Ston 4 (D59)	\$44.11	/hour	80	\$3,529	
	Professional Level 5, Step 4 (P58)			0	•	
	Professional Level 5, Step 3 (P56)	\$37.99		_	\$0 \$0.583	
	Professional Level 5, Step 2 (P54)	\$32.91		200	\$6,582	
	Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
	Professional Level 4, Step 2 (P48)	\$29.13	/hour	200	\$5,826	
	Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
	, , , , , , , , , , , , , , , , , , , ,					
	Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
	Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
	Professional Level 2, Step 1 (P22)	\$19.89	/hour	0	\$0	
	Professional Loyal 1 Ston 2 (P19)	\$18.57	/hour	300	\$5,571	
	Professional Level 1, Step 2 (P18)					
	Professional Level 1, Step 1 (P12)	\$14.84	nour	0	\$0	
TECHNI	CAL AND SUPPORT SPECIALISTS					
	Technician Level 5 (T55)	\$21.10	/hour	80	\$1,688	
	Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
	Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
	, commonant 20101 1, 110p 1 (1 12)	*		_	, -	
	Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
	Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
	Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
		40.00			4.0	
	Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
	Support Level 3 (S35)	\$20.61	/hour	0	\$0	
	Support Level 2 (S25)	\$12.40	/hour	140	\$1,736	
	Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL	HOURS/LABOR COST			1000	\$24,932	
IOIALI	Contract Year: 1			1000	Ψ2 F,002	
	Base Yr					
	Overhead Rate: 143%			Labor Burden:	\$35,652	
	01.15	TOT 4 1	DUDD	ENED LABOR:	CCO FO4	

SUBTOTAL BURDENED LABOR:

\$60,584

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

RI Report Pre-Draft, Draft, Draft-Final,Final

Task #8

Prop No: 979002-00001

Prop No: 9/9002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
	200.00		•	20	
Bottle labels	\$20.00		0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75		0	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00		0	\$0	
Decon Eqt	\$18.00		0	\$0	
55g drums fill/mov	\$100.00		0	\$0	
Field Notebook	\$14.00		0	\$0	
Ice	\$1.00		0	\$0	
Latex Gloves	\$10.00		0	\$0	
Methanol (Optima)	\$25.00		0	\$0	
Hexane (Optima)	\$25.00		0	\$0	
Acetone (Optima)	\$50.00		0	\$0	
HCI (Optima)	\$285.00		0	\$0	
HNO3 (Optima)	\$175.00		0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00		0	\$0	
Overboots	\$4.00	•	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00		0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$0

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task#8 RI Report Pre-Draft, Draft, Draft-Final,Final

Prop No: 979002-00001

1100110. 070002 00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	0	\$0	
Airfare Boston\Huntsville	\$900.00		0	\$0	
Subsistence-Seneca	\$96.00		0	\$0	
Subsistence-Huntsville	\$89.00		0	\$0	
Parking,Airport	\$13.00	/day	0	\$0	
Auto Rental	\$55.00		0	\$0	
Suburban\Van rental	\$585.00		0	\$0	
Mileage	\$0.31	/mile	0	\$0	
		SUBTOTA	L TRAVEL:	\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	100	\$400	
Word Proc/PC	\$3.70	/hour	120	\$444	
CADD	\$5.00	/hour	100	\$500	
Facsimile	\$1.00	/page	500	\$500	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	85	\$8,181	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	otal Services			\$10,025	
REPRODUCTION					
Photocopier	\$0.05		203000	\$10,150	
Aerial Photo repro	\$10.00	•	0	\$0	
Blueline repro	\$1.00		2030	\$2,030	
Cronoflex Prod	\$5.50		0	\$0	
3-ring binders	\$15.00	each	300	\$4,500	
Color Copies	\$2.00	/page	1015	\$2,030	
Subto	otal Reproduction	1		\$18,710	

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

22-Mar-96 Printed:

Parsons Engineering Science, Inc.

Task #8 RI Report Pre-Draft, Draft, Draft-Final, Final

Prop No: 979002-00001

7 100 110. 070002 00001	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL		<u> </u>			
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00	/week	0	\$0	
Water coolers	\$40.00	/month	0	\$0	
Equipment Trailer	\$1,000.00	/month	0	\$0	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtota	al Rental			\$0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	/day	0	\$0	
		/week	0	\$0	
Alpha Scientillation Counter	\$100.00		0	\$0	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter Gas Proportional Detector	\$100.00		0	\$0	
•	\$100.00		0	\$0	
Gas Prop. Detector-Floor Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
Calib Gas	\$10.00	•	0	\$0 \$0	
		/uay /ea/wk	0	\$0 \$0	
2-way radios		/week	0	\$0	
Air Purif Resp		/week /week	0	\$0 \$0	
10-Gal Eye Wash Combination SCBA/SAR	\$150.00		0	\$0 \$0	
Combination SCBA/SAR	φ150.00	luay	U	ΨΟ	
Subtota	aí H & S			\$0	

SUBTOTAL OTHERS:

\$28,735

SUBTOTAL LABOR & ODC'S:

\$89,320

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task #8 RI Report Pre-Draft, Draft, Draft-Final,Final

Prop No: 979002-00001

1 10p No. 373002 00001	Unit <u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
SUBCONTRACTORS					
ODOLINDWATER CUREACE WATER LA	POBATORY	ANIAI VOIO			
GROUNDWATER or SURFACE WATER LAB	\$180.00		0	\$0	
Volatiles (TCL) B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12

Annex E

RI Report Pre-Draft, Draft,

Task #8

Draft-Final,Final

Prop No: 979002-00001

Prop No: 9/9002-00001					
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS	i				
Water Samples For:	¢60.00	aaah	0	¢ 0	
Thorium 232, 230, 227	\$60.00 \$60.00		0 0	\$0 \$0	
Uranium 238, 235, 233+234				\$0 \$0	
Radium 226,223	\$40.00		0		
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00			\$0 \$0	
Gross AlphaΒ	\$45.00	eacn	0	\$0	
Soil Samples For:	¢60.00	0000	0	60	
Thorium 232, 230, 227	\$60.00		0	\$0 \$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0 \$0	
Radium 226,223	\$40.00		0	\$0 \$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0 \$0	
Plutonium 239 + 240	\$65.00		0	\$0 \$0	
Americium 241	\$65.00		0	\$0 \$0	
Gamma Spectrometry	\$0.00		0	\$0 \$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:	400.00		•	0.0	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Cultotal	Miss Labor	-4		***	
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum	each	0	\$0	
IDW Disposal	Lump Sum	each	0	\$0	
Surveyor	Lump Sum	each	0	\$0	
Subtotal	Investigation	Subcontrac	etors	\$0	
Quitotal La	ihoratory & In	vestigation (Subcontractors:	\$0	
Subtotal La	Donatory of III	ivestigation	3% Mark-up:	\$0 \$0	
			570 Mark-up.	φ0	

TASK TOTAL:

\$89,320

\$0

SUBTOTAL SUBCONTRACTORS:

Client:

U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate:

143%

SEAD-12 Annex E Prop No: 979002-00001

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task#9

Treatability Study

Requirements Assessment

\$5,986

\$10,173

110p110. 070002 00001					
	Unit <u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS					<u> </u>
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47		0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	30	\$1,323	
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		45	\$1,481	
Professional Level 5, Step 2 (P52)	\$29.39		0	\$0	
Professional Level 3, Step 1 (F 32)	Ψ23.33	moui	Ü	ΨΟ	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	45	\$1,134	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
1 101000101141 20101 2, 0.00 1 (1 22)	Ψ.σ.σσ	71,001	·		
Professional Level 1, Step 2 (P18)	\$18.57	/hour	0	\$0	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
		_			
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
redifficient Level 4, otop 1 (112)	ψ11.00	711041	· ·	4.0	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
redifficial Level 2 (125)	ψισιισ	modi	·		
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
0.0000000000000000000000000000000000000	,				
Support Level 2 (S25)	\$12.40	/hour	20	\$248	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST			140	\$4,186	
Contract Year: 1 Base Yr					
Dase 11				AF 000	

SUBTOTAL BURDENED LABOR:

Labor Burden:

U.S. Army Corps of Engineers Huntsville Division Client:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task#9

Treatability Study

Requirements Assessment

1100110. 070002 00001	Unit				
	Cost	Units	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00		0	\$0	
Aluminum Foil	\$1.00		0	\$0	
Stain Stl bwl/spn	\$30.00		0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30		0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00		0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$0

Huntsville Division

Printed:

22-Mar-96

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Project: Seneca Army Depot Activity, Romulus New York

Task#9

Treatability Study

Requirements Assessment

Parsons Engineering Science, Inc.

Prop No: 979002-00001

	Unit				
	Cost	<u>Units</u>	<u>Quantity</u>	Cost	<u>Notes</u>
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trin	0	\$0	
Airfare Boston\Huntsville	\$900.00		0	\$0 \$0	
Subsistence-Seneca	\$96.00	•	0	\$0	
Subsistence-Huntsville	\$89.00	-	0	\$0	
Parking, Airport	\$13.00		0	\$0	
Auto Rental	\$55.00		0	\$0	
Suburban\Van rental	\$585.00		0	\$0	
Mileage	\$0.31		0	\$0	
		SUBTO	 TAL TRAVEL:	\$0	
		00510	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	40	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00		50	\$200	
Word Proc/PC	\$3.70		20	\$74	
CADD	\$5.00		0	\$0	
Facsimile	\$1.00	/page	100	\$100	
Overnight Express					
Letter/2 lb pack	\$14.50		0	\$0	
Package (50 lbs)	\$96.25		0	\$0	
Mail 4-lb pack	\$4.10		0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
	Subtotal Services		_	\$374	
REPRODUCTION					
Photocopier	\$0.05	/page	1000	\$50	
Aerial Photo repro	\$10.00	/photo	0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0	
3-ring binders	\$15.00	each	0	\$0	
Color Copies	\$2.00	/page	0	\$0	
	Subtotal Reproduction	n	_	\$50	

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task#9

Treatability Study

Requirements Assessment

	Annex E					
Prop No:	979002-00001					
		Unit				
		Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
EQUIPM	ENT RENTAL					
EARTH S	SCIENCES EQUIPMENT					
	Bailer	\$55.00	/week	0	\$0	
	Magnetometer	\$42.00	/week	0	\$0	
	pH/Cond meter	\$50.00	/week	0	\$0	
	Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
	DO meter	\$55.00		0	\$0	
	Soil Gas Supplies	\$50.00		0	\$0	
	Slug test eqt	\$50.00	•	0	\$0	
	Water level ind	\$40.00		0	\$0	
	Turbidimeter	\$30.00		0	\$0	
				0	\$0 \$0	
	Data Logger,Trnsdcr	\$135.00	•			
	Flow Meter	\$30.00		0	\$ 0	
	Water coolers		/month	0	\$0	
	Equipment Trailer	\$1,000.00		0	\$0	
	Grundfus Redi Flow Pump	\$64.00	,	0	\$0	
	PUF Sampler	\$150.00		0	\$0	
	PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
	Hi- Vol Sampler	\$75.00	/week	0	\$0	
	Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
	Ponar Sediment Sampler	\$27.00	/day	0	\$0	
	3.2 kw Generator	\$50.00	/day	0	\$0	
	Seismograph	\$200.00	/day	0	\$0	
	EM-31	\$85.00	•	0	\$0	
	GPR	\$500.00	•	0	\$0	
		*******	, ,		* -	
	Subtotal I	Rental			\$0	
	Gustotari	Contai			Ψ0	
	& SAFETY EQUIPMENT					
HEALIH	HNu Meter	\$50.00	lday	0	\$0	
			-	0	\$0 \$0	
	Alpha Survey Meter	\$80.00				
	Alpha Scintillation Counter	\$100.00		0	\$0 \$0	
	Beta Sample Counter	\$100.00		0	\$0 \$0	
	Gas Proportional Detector	\$100.00		0	\$0	
	Gas Prop. Detector-Floor	\$100.00		0	\$0	
	Radon Monitor	\$300.00		0	\$0	
	Gamma Radiation Meter	\$50.00		0	\$0	
	Calib Gas	\$10.00	/day	0	\$0	
	2-way radios	\$15.00	/ea/wk	0	\$0	
	Air Purif Resp	\$20.00	/week	0	\$0	
	10-Gal Eye Wash	\$35.00		0	\$0	
	Combination SCBA/SAR	\$150.00		0	\$0	
		,	,	-		

SUBTOTAL OTHERS:

\$424

\$0

SUBTOTAL LABOR & ODC'S:

\$10,597

Subtotal H & S

Huntsville Division

Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001

Project:

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task#9

Treatability Study

Requirements Assessment

	Unit				
	Cost	Units	Quantity	Cost	Notes
SUBCONTRACTORS					
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAN	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00		0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0 \$0	
Alkalinity(EPA 310)	\$12.00		0	\$0 \$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	RATORY AN	JALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00		0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00	each	0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task#9 Treatability Study

Requirements Assessment

Prop No: 979002-00001

1100110. 0.0002 0000.					
	Unit			_	
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYSIS					
Water Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry		each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00		0	\$0	
Wipe Samples For:	,			,	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Gloss Alphaabeta	φ+3.00	Cacii	· ·	ΨΟ	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal	Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Surveyor	Lump Sum	Cacii	U	ΨΟ	
Subtotal	Investigation	Subcontrac	ctors	\$0	
Subtotal La	horaton & Ir	vestigation :	Subcontractors:	\$0	
Subtotal Ea	isolutory wil	Jouganon	3% Mark-up:	\$0	
	IDTOTAL		570 Wark-up.	Φ0	

\$10,597 TASK TOTAL:

\$0

SUBTOTAL SUBCONTRACTORS:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 10 Feasibility Study

Prop No	979002-00001					
		Unit				
		Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR	R COSTS					
ENGINE	EERS AND SCIENTISTS					
	Professional Level 6, Step 2 (P68)	\$58.74		0	\$0	
	Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
	Professional Level 5, Step 4 (P58)	\$44.11		40	\$1,764	
	Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
	Professional Level 5, Step 2 (P54)	\$32.91		100	\$3,291	
	Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
	Professional Level 4, Step 2 (P48)	\$29.13		200	\$5,826	
	Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
	Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
	Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
	Professional Level 2, Step 1 (P22)	\$19.89	/hour	0	\$0	
	Professional Level 1, Step 2 (P18)	\$18.57	/hour	200	\$3,714	
	Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNI	CAL AND SUPPORT SPECIALISTS					
	Technician Level 5 (T55)	\$21.10	/hour	100	\$2,110	
		4.0.00			•	
	Technician Level 4, Step 2 (T48)	\$16.58		0	\$0	
	Technician Level 4, Step 1 (T42)	\$14.08	/hour	0	\$0	
	Technician Level 3, Step 2 (T38)	\$13.99		0	\$0	
	Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
	Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
	Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
	Support Level 3 (S35)	\$20.61	/hour	0	\$0	
	Support Level 2 (S25)	\$12.40	/hour	60	\$744	
			_			
	Support Level 1 (S15)	\$8.72	/hour	0	\$0	
					A 1	
TOTAL I	HOURS/LABOR COST			700	\$17,449	
	Contract Year: 1					
	Base Yr					
	Overhead Rate: 143%			Labor Burden:	\$24,953	
	01.15	1 T () T () I			m 40 400	

SUBTOTAL BURDENED LABOR:

\$42,402

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 10 Feasibility Study

Prop No: 9/9002-00001					
	Unit			0 /	N 1 (
	Cost	<u>Units</u>	Quantity	Cost	Notes
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74	/case	0	\$0	
1 Liter Amber Bottles	\$37.95	/case	0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fili/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00		0	\$0	
Ice	\$1.00		0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00		0	\$0	
Survey Stake/Flag		/bundle	0	\$0	
Teflon tape	\$8.00		0	\$0	
Tyveks	\$6.30		0	\$0	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00	/roil	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$0

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Prop No: 979002-00001

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 10 Feasibility Study

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAVEL					
Ainfara Booton\Curoquo	\$500.00	/trin	0	\$0	
Airfare Boston\Syracuse Airfare Boston\Huntsville	\$900.00		0	\$0 \$0	
Subsistence-Seneca	\$96.00	•	0	\$0 \$0	
Subsistence-Geneca Subsistence-Huntsville	\$89.00		0	\$0	
Parking, Airport	\$13.00	•	0	\$0	
Auto Rental	\$55.00	•	0	\$0	
Suburban\Van rental	\$585.00		0	\$0	
Mileage	\$0.31		0	\$0	
Willeage	ψ0.51	/////IIC			
		SUBTOTA	AL TRAVEL:	\$0	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	50	\$200	
Word Proc/PC	\$3.70	/hour	60	\$222	
CADD	\$5.00	/hour	80	\$400	
Facsimile	\$1.00	/page	50	\$50	
Overnight Express					
Letter/2 lb pack	\$14.50	each	0	\$0	
Package (50 lbs)	\$96.25	each	0	\$0	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subto	al Services			\$872	
REPRODUCTION					
	\$0.05	/page	2000	\$100	
			0	\$0	
Photocopier	\$10.00	/pnoto	V	ΨΟ	
	\$10.00 \$1.00	/pnoto /Sheet	500	\$500	
Photocopier Aerial Photo repro	\$1.00				
Photocopier Aerial Photo repro Blueline repro Cronoflex Prod	\$1.00	/Sheet /Sq Ft	500	\$500	
Photocopier Aerial Photo repro Blueline repro	\$1.00 \$5.50 \$15.00	/Sheet /Sq Ft	500 0	\$500 \$0	

Client:

U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 10 Feasibility Study

Prop No: 979002-00001					
	Unit				
	Cost	Units	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00		0	\$0	
• •		/week	0	\$0	
Slug test eqt	\$40.00		0	\$0	
Water level ind			0	\$0 \$0	
Turbidimeter	\$30.00			\$0 \$0	
Data Logger,Trnsdcr	\$135.00	•	0		
Flow Meter		/week	0	\$0	
Water coolers	•	/month	0	\$0	
Equipment Trailer	\$1,000.00		0	\$0	
Grundfus Redi Flow Pump	\$64.00		0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/day	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	•	0	\$0	
3.2 kw Generator	\$50.00		0	\$0	
	\$200.00	•	0	\$0	
Seismograph	\$85.00	•	0	\$0	
EM-31	\$500.00	-	0	\$0	
GPR	φ500.00	/uay	U	ΨΟ	
0.11	1.00 4 - 1		-	\$0	
Subtot	al Rental			Φ0	
_					
HEALTH & SAFETY EQUIPMENT				0.0	
HNu Meter	\$50.00	•	0	\$0	
Alpha Survey Meter	·	/week	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
Calib Gas	\$10.00	•	0	\$0	
		/ea/wk	0	\$0	
2-way radios	·	/week	0	\$0	
Air Purif Resp			0	\$0	
10-Gal Eye Wash		/week	0	\$0 \$0	
Combination SCBA/SAR	\$150.00	/day	U	φυ	
Subtot	al H & S			\$0	

SUBTOTAL OTHERS:

\$1,472

SUBTOTAL LABOR & ODC'S:

\$43,874

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 10 Feasibility Study

Prop No: 979002-00001	Unit Cost	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LA	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00		0	\$0	
Sulfate(EPA 300)	\$25.00		0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABO	RATORY A	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	ratory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00	each	0	\$0	
Moisture Content	\$15.00	each	0	\$0	
Bulk Density	\$35.00	each	0	\$0	
Chromium (Level II)	\$30.00	each	0	\$0	
Total Suspended Solids	\$20.00	each	0	\$0	
Total Dissolved Solids	\$20.00	each	0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00	each	0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	
0 ,					

Client: U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001 Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 10 Feasibility Study

	Unit	Linita	Quantity	Cost	Notos
RADIOLOGICAL LABORATORY ANALY	<u>Cost</u> SIS	<u>Units</u>	Quantity	Cost	Notes
Water Samples For:	0.0				
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60			0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gamma Spectrometry	\$0.00	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00	each	0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Vipe Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00	each	0	\$0	
Radium 226,223	\$40.00	each	0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSI	S				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subtotal Misc. Laboratory				\$0	
NVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Subto	otal Investigation	Subcontrac	tors	\$0	
Subtota	I Laboratory & In	vestigation S	Subcontractors:	\$0	

TASK TOTAL: \$43,874

\$0

\$0

3% Mark-up:

SUBTOTAL SUBCONTRACTORS:

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 11 FS Report Pre-Draft, Draft, Draft-Final, Final

Prop No: 979002-00001

Prop No: 979002-00001					
	Unit		0 "		
LABOR COSTS	Cost	Units	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74	/hour	0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	60	\$2,647	
Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91		100	\$3,291	
Professional Level 5, Step 1 (P52)	\$29.39		0	\$0	
Professional Level 3, Step 1 (1 32)	Ψ20.00	modi	· ·	ΨΟ	
Professional Level 4, Step 2 (P48)	\$29.13	/hour	160	\$4,661	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	160	\$2,971	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	100	\$2,110	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician Level 4, Step 2 (140)	\$14.08		0	\$0	
redifficial Level 4, Step 1 (142)	Ψ14.00	moui	O	ΨΟ	
Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	120	\$1,488	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST			700	\$17,168	
Contract Year: 1			700	Ψ,100	
Base Yr					
Overhead Rate: 143%			Labor Burden:	\$24,550	
CLIF		DUDDE	NED LADOD.	C 44 747	

SUBTOTAL BURDENED LABOR:

\$41,717

Client: U.S. Army Corps of Engineers

Vermiculite Packing

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Printed: 22-Mar-96

Parsons Engineering Science, Inc.

Task # 11 FS Report Pre-Draft,Draft, Draft-Final,Final

Prop No: 9/9002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75		0	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00		0	\$0	
Decon Eqt	\$18.00		0	\$0	
55g drums fill/mov	\$100.00		0	\$0	
Field Notebook	\$14.00		0	\$0	
lce	\$1.00		0	\$0	
Latex Gloves	\$10.00	•	0	\$0	
Methanol (Optima)	\$25.00		0	\$0	
Hexane (Optima)	\$25.00		0	\$0	
Acetone (Optima)	\$50.00		0	\$0	
HCI (Optima)	\$285.00		0	\$0	
HNO3 (Optima)	\$175.00		0	\$0	
Ascorbic Acid	\$10.00		0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00		0	\$0	
Overboots	\$4.00		0	\$0	
Respirator Cartridges	\$15.00	•	0	\$0	
Packing Tape (doz)	\$72.00	•	0	\$0	
Padlocks	\$12.00		0	\$0	
Sampling Tables	\$40.00		0	\$0	
Radiological Badges	\$20.00		0	\$0	
Aluminum Foil	\$1.00		0	\$0	
Stain Stl bwl/spn	\$30.00		0	\$0	
Survey Stake/Flag		/bundle	0	\$0	
Teflon tape	\$8.00		0	\$0	
Tyveks	\$6.30		0	\$0	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00		0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0 \$0	
Qualiz Fillers	\$10.00 \$40.00		0	Φ0	

SUBTOTAL MATLS & SUPPLIES:

\$16.00 /bag

\$0

0

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

\$21,630

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 11 FS Report Pre-Draft, Draft, Draft-Final,Final

Prop No: 979002-00001

P10p No. 979002-00001	Unit			
77 A. V. (771)	<u>Cost</u> <u>Units</u>	Quantity	<u>Cost</u>	<u>Notes</u>
TRAVEL				
Airfare Boston\Syracuse	\$500.00 /trip	0	\$0	
Airfare Boston\Huntsville	\$900.00 /trip	0	\$0	
Subsistence-Seneca	\$96.00 /day	0	\$0	
Subsistence-Huntsville	\$89.00 /day	0	\$0	
Parking, Airport	\$13.00 /day	0	\$0	
Auto Rental	\$55.00 /day	0	\$0	
Suburban\Van rental	\$585.00 /week	0	\$0	
Mileage	\$0.31 /mile	0	\$0	
	SUBTOT	AL TRAVEL:	\$0	
OTHERS				
IN-HOUSE SERVICES				
Telephone	\$4.00 /call	100	\$400	
Word Proc/PC	\$3.70 /hour	100	\$370	
CADD	\$5.00 /hour	80	\$400	
Facsimile	\$1.00 /page	100	\$100	
Overnight Express				
Letter/2 lb pack	\$14.50 each	0	\$0	
Package (50 lbs)	\$96.25 each	85	\$8,181	
Mail 4-lb pack	\$4.10 /pack	0	\$0	
Mail letters	\$0.54 /letter	0	\$0	
Subto	otal Services		\$9,451	
REPRODUCTION				
Photocopier	\$0.05 /page	157000	\$7,850	
Aerial Photo repro	\$10.00 /photo	0	\$0	
Blueline repro	\$1.00 /Sheet	3140	\$3,140	
Cronoflex Prod	\$5.50 /Sq Ft	0	\$0	
3-ring binders	\$15.00 each	500	\$7,500	
Color Copies	\$2.00 /page	1570	\$3,140	

Subtotal Reproduction

Client: U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Printed: 22-Mar-96

Unit

Parsons Engineering Science, Inc.

Task # 11 FS Report Pre-Draft,Draft, Draft-Final,Final

Prop	No:	979002-00001

	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	huook	0	\$0	
				\$0	
Magnetometer	\$42.00		0		
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00		0	\$0	
Turbidimeter	\$30.00		0	\$0	
	\$135.00		0	\$0	
Data Logger,Trnsdcr		-	=		
Flow Meter	\$30.00		0	\$0	
Water coolers	•	/month	0	\$0	
Equipment Trailer	\$1,000.00	/month	0	\$0	
Grundfus Redi Flow Pump	\$64.00	/day	0	\$0	
PUF Sampler	\$150.00	/week	0	\$0	
PUF Sampler Calibration Kit	\$25.00	/dav	0	\$0	
Hi- Vol Sampler	\$75.00	•	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00		0	\$0	
		-	0	\$0	
Ponar Sediment Sampler	\$27.00	-			
3.2 kw Generator	\$50.00	-	0	\$0	
Seismograph	\$200.00	-	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtotal	Rental			\$0	
				•	
HEALTH & SAFETY EQUIPMENT					
	¢50.00	lday	0	\$0	
HNu Meter	\$50.00	-			
Alpha Survey Meter	\$80.00		0	\$0	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$ 0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00		0	\$0	
	\$10.00	-	0	\$0	
Calib Gas		•		\$0 \$0	
2-way radios		/ea/wk	0		
Air Purif Resp	\$20.00		0	\$0	
10-Gal Eye Wash	\$35.00		0	\$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	

Subtotal	H&S			\$0	

SUBTOTAL OTHERS: \$31,081

SUBTOTAL LABOR & ODC'S: \$72,799

Client: U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Printed:

22-Mar-96

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 11 FS Report Pre-Draft, Draft, Draft-Final,Final

Parsons Engineering Science, Inc.

Prop No: 979002-00001

P10p No. 979002-00001	1.124				
	Unit <u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
	COSL	Office	Quantity	Cost	ivotes
SUBCONTRACTORS					
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LABO	RATORY	ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00	each	0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
•					
SOILS - SURFACE or SUBSURFACE LABORA					
Volatiles (TCL)	\$180.00	each	0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal Te	eam Labor	atory		\$0	
MISC. LABORATORY ANALYSIS	* 4 * * * * * * * *		•	00	
Grain Size Dist	\$120.00		0	\$0	
	\$1,500.00		0	\$ 0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0 #0	
Total Suspended Solids	\$20.00		0	\$ 0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00	each	0	\$0	

Huntsville Division Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Printed: 22-Mar-96 Parsons Engineering Science, Inc.

Task # 11 FS Report Pre-Draft, Draft, Draft-Final, Final

Prop No: 979002-00001

	Unit				
	Cost	Units	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALYSIS		<u> </u>			1.1.1.1
Water Samples For:					
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Soil Samples For:	V 1.2.2.2			•	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60		each	0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry		each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00		0	\$0	
Wipe Samples For:	40.00			* -	
Thorium 232, 230, 227	\$60.00	each	0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00		0	\$0	
Oroso / Aprila Socia	4 10100			• -	
AIR SAMPLES LABORATORY ANALYSIS					
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00		0	\$0	
Radon (Alpha Film)	\$25.00		0	\$0	
radon (rupha rum)	+			• -	
Subtotal	Misc. Labor	atorv		\$0	
		,			
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
	,				
Subtotal	Investigation	Subcontra	ctors	\$0	
	0				

TASK TOTAL:

3% Mark-up:

\$72,799

\$0 \$0

\$0

SUBTOTAL SUBCONTRACTORS:

Subtotal Laboratory & Investigation Subcontractors:

Client: U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 12 Post FS Support

Prop No: 979002-00001					
	Unit Cost	<u>Units</u>	Quantity	Cost	Notes
LABOR COSTS					
ENGINEERS AND SCIENTISTS					
Professional Level 6, Step 2 (P68)	\$58.74		0	\$0	
Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
Professional Level 5, Step 4 (P58)	\$44.11	/hour	180	\$7,940	
Professional Level 5, Step 3 (P56)	\$37.99	/hour	0	\$0	
Professional Level 5, Step 2 (P54)	\$32.91	/hour	180	\$5,924	
Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
Professional Level 4, Step 2 (P48)	\$29.13		80	\$2,330	
Professional Level 4, Step 1 (P42)	\$25.20	/hour	0	\$0	
Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
Professional Level 2, Step 1 (P22)	\$19.89	/hour	0	\$0	
Professional Level 1, Step 2 (P18)	\$18.57	/hour	80	\$1,486	
Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNICAL AND SUPPORT SPECIALISTS					
Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
Technician Level 3, Step 2 (T38)	\$13.99		0	\$0	
Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
Support Level 3 (S35)	\$20.61	/hour	0	\$0	
Support Level 2 (S25)	\$12.40	/hour	80	\$992	
Support Level 1 (S15)	\$8.72	/hour	0	\$0	
TOTAL HOURS/LABOR COST Contract Year: 1 Base Yr			600	\$18,672	
Overhead Rate: 143%			Labor Burdon	\$26.700	
Overneau Nate. 143%	770741	DUDDEA	Labor Burden:	\$26,700	

SUBTOTAL BURDENED LABOR:

\$45,372

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

Task # 12 Post FS Support

RI/FS at the Radiological Disposal Areas SEAD-12

Annex E

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00	/roll	0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75	/case	0	\$0	
Braided Nylon Rope	\$0.15	/foot	0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCI (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00		0	\$0	
Radiological Badges	\$20.00		0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag		/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30		0	\$0	
Water (HPLC Grade)	\$97.00		0	\$0	
Ziplock bags	\$3.00		0	\$0	
Calibration Gas	\$450.00		0	\$0	
Ultra Pure Air	\$310.00		0	\$0	
Teflon Tubing	\$120.00		0	\$0	
Teflon Sheeting	\$500.00		0	\$0	
Folding Live Traps	\$15.00		0	\$0	
Glassware	\$25.00		0	\$0	
Quartz Filters	\$10.00		0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	

SUBTOTAL MATLS & SUPPLIES:

\$0

Client: U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

\$7,355

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 12 Post FS Support

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	<u>Quantity</u>	Cost	Notes
TRAVEL					
Airfare Boston\Syracuse	\$500.00	/trip	8	\$4,000	
Airfare Boston\Huntsville	\$900.00	•	0	\$0	
Subsistence-Seneca	\$96.00	/day	8	\$768	
Subsistence-Huntsville	\$89.00	/day	0	\$0	
Parking, Airport	\$13.00	/day	8	\$104	
Auto Rental	\$55.00	/day	4	\$220	
Suburban\Van rental	\$585.00	/week	0	\$0	
Mileage	\$0.31	/mile	100	\$31	
		SUBTOTA	AL TRAVEL:	\$5,123	
OTHERS					
IN-HOUSE SERVICES					
Telephone	\$4.00	/call	50	\$200	
Word Proc/PC	\$3.70	/hour	120	\$444	
CADD	\$5.00	/hour	0	\$0	
Facsimile	\$1.00	/page	100	\$100	
Overnight Express					
Letter/2 lb pack	\$14.50		50	\$725	
Package (50 lbs)	\$96.25		0	\$0	
Mail 4-lb pack	\$4.10	/pack	0	\$0	
Mail letters	\$0.54	/letter	0	\$0	
Subte	otal Services			\$1,469	
REPRODUCTION					
Photocopier	\$0.05	/page	100000	\$5,000	
Aerial Photo repro	\$10.00	/photo	0	\$0	
Blueline repro	\$1.00	/Sheet	0	\$0	
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0	
3-ring binders	\$15.00	each	157	\$2,355	
Color Copies	\$2.00	/page	0	\$0	

Subtotal Reproduction

Client:

U.S. Army Corps of Engineers

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Task # 12 Post FS Support

RI/FS at the Radiological Disposal Areas SEAD-12 Annex E

Annex E					
Prop No: 979002-00001					
	Unit	1.124	0	Cont	Noton
	Cost	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00		0	\$0	
pH/Cond meter	\$50.00		0	\$0	
Flow thru pH/Cond meter	\$257.00		0	\$0	
DO meter	\$55.00		0	\$0	
Soil Gas Supplies	\$50.00		0	\$0	
• •	\$50.00	-	Ö	\$0	
Slug test eqt	\$40.00		0	\$0	
Water level ind	\$30.00		0	\$0	
Turbidimeter			0	\$0 \$0	
Data Logger, Trnsdcr	\$135.00	-		\$0 \$0	
Flow Meter	\$30.00		0	·	
Water coolers		/month	0	\$0 \$0	
Equipment Trailer	\$1,000.00		0	\$0 \$0	
Grundfus Redi Flow Pump	\$64.00	•	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	-	0	\$0	
Hi- Vol Sampler	\$75.00	/week	0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	/day	0	\$0	
Ponar Sediment Sampler	\$27.00	/day	0	\$0	
3.2 kw Generator	\$50.00	/day	0	\$0	
Seismograph	\$200.00	/day	0	\$0	
EM-31	\$85.00	/day	0	\$0	
GPR	\$500.00	/day	0	\$0	
Cultatal	Dantal			\$0	
Subtotal	Kentai			Φ0	
HEALTH & SAFETY EQUIPMENT					
HNu Meter	\$50.00	-	0	\$0	
Alpha Survey Meter	\$80.00	/week	0	\$0	
Alpha Scintillation Counter	\$100.00	/week	0	\$0	
Beta Sample Counter	\$100.00	/week	0	\$0	
Gas Proportional Detector	\$100.00	/week	0	\$0	
Gas Prop. Detector-Floor	\$100.00	/week	0	\$0	
Radon Monitor	\$300.00	/week	0	\$0	
Gamma Radiation Meter	\$50.00	/day	0	\$0	
Calib Gas	\$10.00		0	\$0	
2-way radios		/ea/wk	0	\$0	
Air Purif Resp		/week	0	\$0	
10-Gal Eye Wash		/week	0	\$0	
Combination SCBA/SAR	\$150.00		0	\$0	
Combination COD/CAIX	Ψ100.00	,	-	+-	
Subtotal	H&S			\$0	

SUBTOTAL OTHERS:

\$8,824

SUBTOTAL LABOR & ODC'S:

\$59,319

U.S. Army Corps of Engineers Huntsville Division Client:

Printed:

Project: Seneca Army Depot Activity, Romulus New York

SEAD-12 Annex E Prop No: 979002-00001

Task # 12 Post FS Support

Parsons Engineering Science, Inc.

RI/FS at the Radiological Disposal Areas

22-Mar-96

Prop No. 979002-00001					
	Unit <u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
SUBCONTRACTORS					
SUBCONTRACTORS					
GROUNDWATER or SURFACE WATER LAI	BORATORY	ANALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Iron(Ferrous)	\$30.00	each	0	\$0	
Sulfide	\$30.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (EPA 9060)	\$25.00	each	0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00		0	\$0	
pH (EPA 9045)	\$8.00		0	\$0	
Volatiles (EPA 524)	\$195.00		0	\$0	
Hardness(EPA 130.2)	\$15.00		0	\$0	
Alkalinity(EPA 310)	\$12.00		0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
SOILS - SURFACE or SUBSURFACE LABOR	RATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00	each	0	\$0	
Total Organic Carbon (L. Kahn)	\$60.00	each	0	\$0	
TOX (EPA 9056)	\$70.00	each	0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
Subtotal	Team Labor	atory		\$0	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
Total Dissolved Solids	\$20.00		0	\$0	
Ammonia	\$25.00		0	\$0	
Phosphate	\$25.00		0	\$0	
Cation Exchange Capacity	\$100.00		0	\$0	
,					

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Prop No: 979002-00001 Task # 12 Post FS Support

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
RADIOLOGICAL LABORATORY ANALYS	SIS				
Water Samples For:	400.00				
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$0.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	\$0.00		0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00		0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSIS	}				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subto	tal Misc. Labora	atory		\$0	
INVESTIGATION SUBCONTRACTORS					
Driller	Lump Sum	each	0	\$0	
Photogrammetry	Lump Sum		0	\$0	
IDW Disposal	Lump Sum		0	\$0	
Surveyor	Lump Sum		0	\$0	
Subto	tal Investigation	Subcontrac	etors	\$0	
Culhtatal I	l abaratanı ⁰ lm	vootigotis -	Cub contro etero:	40	
Subtotal	Laboratory & In	vesugation	Subcontractors: 3% Mark-up:	\$0 \$0	
			570 Mark-up.	ΦU	

TASK TOTAL: \$59,319

\$0

SUBTOTAL SUBCONTRACTORS:

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

Overhead Rate:

143%

SEAD-12 Annex E

Prop No: 979002-00001

Task # 13

Project Management 24 Monthly Reports

Prop No	: 979002-00001					
		Unit	1.1	0	0-1	NI-4
1 4 B 🔾	R COSTS	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
LABOI	(00010					
ENGINE	EERS AND SCIENTISTS					
	Professional Level 6, Step 2 (P68)	\$58.74	/hour	100	\$5,874	
	Professional Level 6, Step 1 (P62)	\$46.47	/hour	0	\$0	
	Professional Level 5, Step 4 (P58)	\$44.11	/bour	288	\$12,704	
	Professional Level 5, Step 3 (P56)	\$37.99		0	\$0	
	Professional Level 5, Step 2 (P54)	\$32.91		144	\$4,739	
	Professional Level 5, Step 1 (P52)	\$29.39	/hour	0	\$0	
	Professional Level 4, Step 2 (P48)	\$29.13	/hour	0	\$0	
	Professional Level 4, Step 1 (P42)	\$25.20		0	\$0	
	Troicessional Level 4, etcp 1 (1 12)	Ψ20.20	mour	· ·	Ψ.	
	Professional Level 3, Step 1 (P35)	\$24.04	/hour	0	\$0	
	Professional Level 2, Step 2 (P28)	\$23.09	/hour	0	\$0	
	Professional Level 2, Step 1 (P22)	\$19.89		0	\$0	
	1 101000101141 20101 2, 0100 1 (1 22)	Ψ.σ.σσ	711041	·	Ψ.	
	Professional Level 1, Step 2 (P18)	\$18.57	/hour	0	\$0	
	Professional Level 1, Step 1 (P12)	\$14.84	/hour	0	\$0	
TECHNI	CAL AND SUPPORT SPECIALISTS					
	Technician Level 5 (T55)	\$21.10	/hour	0	\$0	
	Technician Level 4, Step 2 (T48)	\$16.58	/hour	0	\$0	
	Technician Level 4, Step 1 (T42)	\$14.08		0	\$0	
	Technician Level 3, Step 2 (T38)	\$13.99	/hour	0	\$0	
	Technician Level 3, Step 1 (T32)	\$11.61	/hour	0	\$0	
	Technician Level 2 (T25)	\$10.13	/hour	0	\$0	
	recimician Level 2 (123)	Ψ10.13	mour	Ü	ΨΟ	
	Technician Level 1 (T15)	\$8.89	/hour	0	\$0	
	Support Level 3 (S35)	\$20.61	/hour	0	\$0	
	0	¢40.40	(la a	40	¢EOE	
	Support Level 2 (S25)	\$12.40	mour	48	\$595	
	Support Level 1 (S15)	\$8.72	/hour	0	\$0	
ΤΩΤΔΙΙ	HOURS/LABOR COST			580	\$23,912	
IOIALI	Contract Year: 1			500	Ψ20,012	
	Base Yr					
	0 1 10 1 1100/			1 1 5 1	004404	

SUBTOTAL BURDENED LABOR:

Labor Burden:

\$34,194

\$58,106

Client:

U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 13

Project Management 24 Monthly Reports

1 100 110. 010002 00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
MATERIALS AND SUPPLIES					
Bottle labels	\$20.00		0	\$0	
40 mL VOA Vials	\$122.74		0	\$0	
1 Liter Amber Bottles	\$37.95		0	\$0	
32 oz. HDPE Bottles	\$30.75		0	\$0	
Braided Nylon Rope	\$0.15		0	\$0	
Bubble Pack	\$84.00	/roll	0	\$0	
Decon Eqt	\$18.00	/kit	0	\$0	
55g drums fill/mov	\$100.00	each	0	\$0	
Field Notebook	\$14.00	each	0	\$0	
Ice	\$1.00	/bag	0	\$0	
Latex Gloves	\$10.00	/box	0	\$0	
Methanol (Optima)	\$25.00	/bottle	0	\$0	
Hexane (Optima)	\$25.00	/bottle	0	\$0	
Acetone (Optima)	\$50.00	/bottle	0	\$0	
HCl (Optima)	\$285.00	/bottle	0	\$0	
HNO3 (Optima)	\$175.00	/bottle	0	\$0	
Ascorbic Acid	\$10.00	/bottle	0	\$0	
Filters (0.45uM & 0.5uM)	\$50.00	/box	0	\$0	
Overboots	\$4.00	/pair	0	\$0	
Respirator Cartridges	\$15.00	/pair	0	\$0	
Packing Tape (doz)	\$72.00	/case	0	\$0	
Padlocks	\$12.00	each	0	\$0	
Sampling Tables	\$40.00	each	0	\$0	
Radiological Badges	\$20.00	each	0	\$0	
Aluminum Foil	\$1.00	/roll	0	\$0	
Stain Stl bwl/spn	\$30.00	/set	0	\$0	
Survey Stake/Flag	\$20.00	/bundle	0	\$0	
Teflon tape	\$8.00	/roll	0	\$0	
Tyveks	\$6.30	each	0	\$0	
Water (HPLC Grade)	\$97.00	/case	0	\$0	
Ziplock bags	\$3.00	/box	0	\$0	
Calibration Gas	\$450.00	/tank	0	\$0	
Ultra Pure Air	\$310.00	/ton	0	\$0	
Teflon Tubing	\$120.00	/roll	0	\$0	
Teflon Sheeting	\$500.00	/roll	0	\$0	
Folding Live Traps	\$15.00	each	0	\$0	
Glassware	\$25.00	each	0	\$0	
Quartz Filters	\$10.00	each	0	\$0	
Vermiculite Packing	\$16.00	/bag	0	\$0	
		•			

SUBTOTAL MATLS & SUPPLIES:

\$0

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

\$120

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Task # 13

Project Management 24 Monthly Reports

Prop No: 979002-00001					
	Unit				
	<u>Cost</u>	<u>Units</u>	Quantity	Cost	<u>Notes</u>
TRAVEL					
Airford Books \Question	¢500.00	/4min	4	000	
Airfare Boston\Syracuse	\$500.00 \$900.00	•	4 0	\$2,000 \$0	
Airfare Boston\Huntsville Subsistence-Seneca	\$96.00	•	4	\$384	
Subsistence-Seneca Subsistence-Huntsville	\$89.00	•	0	\$304	
	\$13.00	•	2	\$26	
Parking,Airport Auto Rental	\$55.00 \$55.00		2	\$110	
Suburban\Van rental	\$585.00 \$585.00		0	\$110	
	•		100	\$31	
Mileage	\$0.31	mue	100	φοι	
		SUBTOTA	AL TRAVEL:	\$2,551	
OTHERS					
IN-HOUSE SERVICES	* 4.00	<i>t</i> = 41	500	#0.000	
Telephone	\$4.00		500	\$2,000	
Word Proc/PC		/hour	48	\$178	
CADD		/hour	0	\$0	
Facsimile	\$1.00	/page	1000	\$1,000	
Overnight Express	¢44.50		24	¢2.40	
Letter/2 lb pack	\$14.50		24	\$348	
Package (50 lbs)	\$96.25		0	\$0 *0	
Mail 4-lb pack		/pack	0	\$0 \$0	
Mail letters	\$0.54	/letter	0	\$0	
Subt	otal Services			\$3,526	
REPRODUCTION					
Photocopier	\$0.05	/page	2400	\$120	
Aerial Photo repro	\$10.00		0	\$0	
Blueline repro		/Sheet	0	\$0	
Cronoflex Prod	\$5.50	/Sq Ft	0	\$0	
3-ring binders	\$15.00		0	\$0	
Color Copies	\$2.00	/page	0	\$0	

Subtotal Reproduction

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 13

Project Management 24 Monthly Reports

Prop No. 3/3002-00001					
	Unit	1.114	. Our matitus	Cont	Nickon
EQUIPMENT RENTAL	<u>Cost</u>	<u>Units</u>	Quantity	Cost	Notes
EQUIPMENT RENTAL					
EARTH SCIENCES EQUIPMENT					
Bailer	\$55.00	/week	0	\$0	
Magnetometer	\$42.00	/week	0	\$0	
pH/Cond meter	\$50.00	/week	0	\$0	
Flow thru pH/Cond meter	\$257.00	/week	0	\$0	
DO meter	\$55.00	/week	0	\$0	
Soil Gas Supplies	\$50.00	/day	0	\$0	
Slug test eqt	\$50.00	/week	0	\$0	
Water level ind	\$40.00	/week	0	\$0	
Turbidimeter	\$30.00	/week	0	\$0	
Data Logger,Trnsdcr	\$135.00	/day	0	\$0	
Flow Meter	\$30.00		0	\$0	
Water coolers	\$40.00	/month	0	\$0	
Equipment Trailer	\$1,000.00		0	\$0	
Grundfus Redi Flow Pump	\$64.00	•	0	\$0	
PUF Sampler	\$150.00		0	\$0	
PUF Sampler Calibration Kit	\$25.00	-	0	\$0	
Hi- Vol Sampler	\$75.00		0	\$0	
Hi- Vol Sampler Calibration Kit	\$25.00	•	0	\$0	
Ponar Sediment Sampler	\$27.00	-	0	\$0	
3.2 kw Generator	\$50.00	•	0	\$0	
Seismograph	\$200.00	-	0	\$0	
EM-31	\$85.00		0	\$0	
GPR	\$500.00	/day	0	\$0	
Subtota	i Rental			\$0	
HEALTH & SAFETY EQUIPMENT				•	
HNu Meter	\$50.00	•	0	\$0	
Alpha Survey Meter	\$80.00		0	\$0	
Alpha Scintillation Counter	\$100.00		0	\$0	
Beta Sample Counter	\$100.00		0	\$0	
Gas Proportional Detector	\$100.00		0	\$0	
Gas Prop. Detector-Floor	\$100.00		0	\$0	
Radon Monitor	\$300.00		0	\$0	
Gamma Radiation Meter	\$50.00	-	0	\$0	
Calib Gas	\$10.00	-	0	\$0	
2-way radios		/ea/wk	0	\$0 ***	
Air Purif Resp	\$20.00		0	\$0 \$0	
10-Gal Eye Wash	\$35.00		0	\$0 \$0	
Combination SCBA/SAR	\$150.00	/day	0	\$0	

SUBTOTAL OTHERS:

\$3,646

\$0

SUBTOTAL LABOR & ODC'S:

\$64,303

Subtotal H & S

Client:

U.S. Army Corps of Engineers

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Huntsville Division Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E

Prop No: 979002-00001

Task # 13

Project Management 24 Monthly Reports

Prop No: 979002-00001	11.				
	Unit	I India	Oventity	Cont	Notes
	Cost	<u>Units</u>	Quantity	Cost	<u>Notes</u>
SUBCONTRACTORS					
			•		
GROUNDWATER or SURFACE WATE				Φ.Ο.	
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00		0	\$0	
Pest./PCBs (TCL)	\$180.00		0	\$0	
Total Metals & CN(TAL)	\$170.00		0	\$0	
Iron(Ferrous)	\$30.00		0	\$0	
Sulfide	\$30.00		0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (EPA 9			0	\$0	
TOX (EPA 9056)	\$50.00		0	\$0	
Chloride(EPA 9250)	\$25.00	each	0	\$0	
BOD	\$60.00	each	0	\$0	
Sulfate(EPA 300)	\$25.00	each	0	\$0	
COD	\$50.00	each	0	\$0	
pH (EPA 9045)	\$8.00	each	0	\$0	
Volatiles (EPA 524)	\$195.00	each	0	\$0	
Hardness(EPA 130.2)	\$15.00	each	0	\$0	
Alkalinity(EPA 310)	\$12.00	each	0	\$0	
Nitrate (EPA 353.2)	\$20.00	each	0	\$0	
,					
SOILS - SURFACE or SUBSURFACE	LABORATORY AN	NALYSIS			
Volatiles (TCL)	\$180.00		0	\$0	
B/N/A (TCL)	\$400.00	each	0	\$0	
Pest./PCBs (TCL)	\$180.00	each	0	\$0	
Total Metals & CN(TAL)	\$170.00	each	0	\$0	
Spec Cond(EPA 9050)	\$8.00		0	\$0	
Total Organic Carbon (L. Kah			0	\$0	
TOX (EPA 9056)	\$70.00		0	\$0	
Chloride(EPA 9250)	\$25.00		0	\$0	
pH (EPA 9045)		each	0	\$0	
Nitrate (EPA 353.2)	\$20.00		0	\$0	
(Li 71 000.2)	420.00	00011		• -	
Su	ıbtotal Team Labor	atorv		\$0	
	2000	,		·	
MISC. LABORATORY ANALYSIS					
Grain Size Dist	\$120.00	each	0	\$0	
TCLP	\$1,500.00		0	\$0	
Moisture Content	\$15.00		0	\$0	
Bulk Density	\$35.00		0	\$0	
Chromium (Level II)	\$30.00		0	\$0	
Total Suspended Solids	\$20.00		0	\$0	
·	\$20.00		0	\$0	
Total Dissolved Solids			0	\$0 \$0	
Ammonia	\$25.00		0	\$0 \$0	
Phosphate	\$25.00		0	\$0 \$0	
Cation Exchange Capacity	\$100.00	eacn	U	Φυ	

Client: U.S. Army Corps of Engineers

Huntsville Division

Printed:

22-Mar-96

Parsons Engineering Science, Inc.

Project: Seneca Army Depot Activity, Romulus New York

RI/FS at the Radiological Disposal Areas

SEAD-12 Annex E Task # 13 Project Management 24 Monthly Reports

Annex E Prop No: 979002-00001

Prop No: 979002-00001					
	Unit				
	Cost	<u>Units</u>	Quantity	Cost	Notes
RADIOLOGICAL LABORATORY ANALY	SIS				
Water Samples For:	***			0.0	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60			0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
Soil Samples For:	444		•	4.0	
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60			0	\$0	
Plutonium 239 + 240	\$65.00		0	\$0	
Americium 241	\$65.00		0	\$0	
Gamma Spectrometry	,	each	0	\$0	
Dist. Coef.(ASTM D:4319-83)	\$750.00		0	\$0	
Sample Prep/Return	\$0.00	each	0	\$0	
Wipe Samples For:					
Thorium 232, 230, 227	\$60.00		0	\$0	
Uranium 238, 235, 233+234	\$60.00		0	\$0	
Radium 226,223	\$40.00		0	\$0	
Pb214&211,Bi214,Ce137,Co60	\$80.00	each	0	\$0	
Plutonium 239 + 240	\$65.00	each	0	\$0	
Americium 241	\$65.00	each	0	\$0	
Gross AlphaΒ	\$45.00	each	0	\$0	
AIR SAMPLES LABORATORY ANALYSI	S				
SVOC's	\$490.00	each	0	\$0	
Metals	\$150.00	each	0	\$0	
Radon (Alpha Film)	\$25.00	each	0	\$0	
Subt	otal Misc. Labora	atory	_	\$0	
INIVESTICATION SUBCONTRACTORS					
INVESTIGATION SUBCONTRACTORS Driller	Lump Sum	ooob	0	\$0	
	Lump Sum		0	\$0 \$0	
Photogrammetry			_	\$0 \$0	
IDW Disposal	Lump Sum		0		
Surveyor	Lump Sum	eacn	0	\$0	
Subt	otal Investigation	Subcontrac	ctors	\$0	
Subtota	l Laboratory & In	vestigation		\$0	
			3% Mark-up:	\$0	
	SUBTOTAL	SUBCON	TRACTORS:	\$0	

TASK TOTAL:

\$64,303

SUBCONTRACTOR COSTS
BACKUP DATA

LABORATORY SUBCONTRACTOR COSTS BACKUP DATA

	Services at the Seneca Army Depot	Unit				
Item	Del. Order E - Investigation of SEAD-12			Estimated		
	Description of Servies*	Cost			Total (
1.	Perform an analysis of soil or water using	Soil \$	180	306	\$	55080
NYSDEC CLP	the protocols specified in the 12/91 revisions to					
TCL VOC's	the NYSDEC Analytical Services Protocol (ASP)	Water \$	180	0	\$	(
2.	Perform an analysis of soil or water using	Soil \$	400	306	\$	122400
NYSDEC CLP	the protocols specified in the 12/91 revisions to					
TCL Semi-VOC's	the NYSDEC ASP Category B data package	Water \$	400	160	\$	64000
3.	Perform an analysis of soil or water using	Soil \$	180	306	\$	55080
NYSDEC CLP	the protocols specified in the 12/91 revisions to					
TCL Pest./PCB's	the NYSDEC ASP Category B data package	Water \$	180	160	\$	28800
4.	Perform an analysis of soil or water using	Soil \$	170	306	\$	52020
NYSDEC CLP	the protocols specified in the 12/91 revisions to					
TAL Inorganics	the NYSDEC ASP Category B data package	Water \$	_170	160	\$	27200
5.	Perform an analysis of soil or water using	Soil \$	180	0	\$	(
EPA Method 8330	the protocols specified in SW-846, with an					
Explosives	ASP Category B validatable data package	Water \$	180	0	\$	(
6.	Perform an analysis of soil or water using					
EPA Method 524.2	the protocols specified in SW-846, with an					
VOC's	ASP Category B validatable data package	Water \$	195	226	\$	44070
7.	Perform an analysis of soil or water using					
EPA Method 418.1	the protocols specified in SW-846, with an					
TRPH	ASP Category B validatable data package	Water \$	50	0	\$	(
8.	Perform an analysis of soil or water using the	Soil \$	120	55	\$	6600
ASTM D422-63	protocols specified in ASTM Method D422-63.					
Grain Size Analysis						
9.	Perform an analysis of soil or water using	Soil \$	60	55	\$	3300
EPA Method 415.1	the protocols specified in SW-846, with an					
Total Organic Carbon	ASP Category B validatable data package	Water \$	25	117	\$	2925
10.	Perform an analysis of water using					
EPA Method 130.2	the protocols specified in SW-846, with an					
Hardness	ASP Category B validatable data package	Water \$	15	117	\$	175:
11.	Perform an analysis of soild materials using	1 1 1 1 1				
Asbestos	Polarized Light Microscopy, with dispersion	Solids N	Jo Bid	0	\$	
EPA600/M4-82-020	staining. Level 3 delivery package.	Bonds	10 Dia		Ψ	
12.	Perform an analysis of water using	Soil \$	8	55	\$	440
EPA Method 9045	the protocols specified in SW-846, with an	3011 \$	0	33	- U	
	ASP Category B validatable data package					
pH	Perform an analysis of soil or water using	Soil \$	20	306	\$	6120
EPA Method 353.2	the protocols specified in SW-846, with a	3011 \$	20	300	Φ	012
		Water C	20	117	e e	234
NO3	Level 4 delivery package.	Water \$	20	117	\$	234
14.	Perform an analysis of soil or water					
Iron(Ferrous)	for Iron(Ferrous)	W-1-0	20	7.4	0	222
		Water \$	30	74	\$	2220

Notes: * - All analyses should include the costs for sample preparation, including extraction.

All analyses should include the costs for sample disposal.

All analyses should include the costs for pre-preserved bottles.

	Laboratory Subcontractor Quote for					
	Services at the Seneca Army Depot					
Item	Del. Order E - Investigation of SEAD-12	Unit		Estimated		
	Description of Servies*	Cost		Quantity	Total Co	st
15.	Perform an analysis of soil or water for					
Sulfide	sulfide.	***				2222
		Water \$	30	74	\$	2220
16.	Perform an analysis of soil or water for					
BOD	BOD	777 . D		7.4	Φ.	4440
177		Water \$	60	74	\$	4440
17.	Perform an analysis of soil or water using					
EPA 300	the protocols specified in SW-846.	XX7	25	74	Φ.	1050
Sulfate		Water \$	25	74	\$	1850
18. COD	Perform an analysis of soil or water for COD					
COD	COD	777 d	50	74	Φ	2700
10		Water \$	50	74	\$	3700
19. EPA 310	Perform an analysis of soil or water using					
	the protocols specified in SW-846.	Water \$	12	117	\$	1404
Alkalinity	Perform an analysis of soil by Toxicity	Soil \$	1500	117		1404 18000
20. TCLP	Charactristic Leaching Procedures.	2011 2	1300	12	2	18000
ICLP	Charactristic Leaching Procedures.					
21.	Perform an analysis of soil for Bulk	Soil \$	35	15	\$	525
Bulk Density	density.					
1						
22.	Perform an analysis of water for total suspended					
Total Suspended Solids	solids.					
		Water \$	20	43	\$	860
23.	Perform an analysis of water for total disolved					
Total Disolved Solids	solids.					
		Water \$	20	117	\$	2340
24.	Perform an analysis of soil for Ammonia	Soil \$	25	43	\$	1075
Ammonia						
25.	Description of a life phase between	Cail C	25	43	\$	1075
	Perform an analysis of soil for Phosphate	Soil \$		4.5	D	10/3
Phosphate						
26.	Perform an analysis of soil for cation exchange	Soil \$	100	55	\$	5500
CEC	capacity.					
1						

Notes: * - All analyses should include the costs for sample preparation, including extraction.

Tot \$517,339.00

All analyses should include the costs for sample disposal.

All analyses should include the costs for pre-preserved bottles.

Name of Laboratory:	Core Labs, Inc.
Address:	420 W. 1ST Street
	Casper, WY
	82601
Name and phone number of contac person	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7

U.S.A.C.O.E. Missourl River Division certification: X none __current __expired **Business Classifications:** __smail __disadvantaged __woman owned

- Sample Medium:

WATER

item #	Radionuciida (and req		Anticipated Number of Samples	Proposed Analysis Method	Proposed Method MDA for Water Analyses	AnalysisTurn	Proposed Method Cost per Analysis (122)	Additional Nuclides Detected by Proposed Analysis
		(1 to 6 pCVL)		HASL 300	1 pCi/t	4 week	60.00	\$13,860.00
		(1 to 5 pCi/L)		HA5L 300	1 pCi/t	4 week	(1)	(1)
1	Thorium 227	(1 to 5 pCVL)		HASL 300	1 pCi/l	4 week	(1)	(1)
	Uranium 238	(1 to 5 pCVL)	231	HASL 300	1 pCi/l	4 week	60.00	13,860.00
1	Uranium 235	(1 to 5 pCi/L)	224	HASL 300	1 pCi/l	4 week	(4)	(4)
8	Uranlum 233+234	(1 to 5 pCI/L)	231	HASL 300	1 pCi/l	4 week	(4)	(4)
	Radium 226	(1 to 6 pCVL)	231	EPA 903.1	1 pCi/l	3 week	40.00	9,240.00
8	Radium 223	(1 to 5 pCVL)	117	EPA 903.1	1 pCi/l	3 week	(7)	(7)
9	Plutonium 239+240	(1 to 6 pCVL		HASL 300	1 pCi/l	4 week	65.00	7,605.00
10	Americium 241	(1 to 5 pCVL	117	HASL 300	1 pCi/l	4 week	65.00	7,605.00
11	Lead 214	(1 to 5 pCVL		EPA 901.1	1 pCi/1	3 week	80.00	18,480.00
12	Lead 211	(1 to 5 pCVL	117	EPA 901.1	1 pCi/l	3 week	(11) .	(11)
13	Bismulh 214	(1 to 5 pCVL	231	EPA 901.1 .	1 pci/l	3 week	(Ì1)	(11)
14	Gross Alpha	(10 pCVL)	231	EPA 900	10 pCi/l	3 week	45.00	10,395.00
15	Gross Beta	(25 pCVL)		EPA 900	25 pCi/l	3 week	(14)	(14)
16	Cesium 137	(1 to 6 pCVL	231	EPA 901.1	1 pCi/l	3 week	(11)	(11)
17	Cobalt 60	(1 to 5 pCl/L	231	EPA 901.1	1 pCi/l	3 week	(11)	(11)
18	Alpha Spectroscopy	(See IADAs of the sipha emitting isotopes lieted above.)	o	HASL 300	1 pCi/l	3-4 week	60.00	0.00

⁽¹⁾ The analysis cost should be based upon providing a Level IV or equivalent data package and should include all preparation costs
(2) Please Indicate if multiple isotopes are included in a single analysis cost by referencing the item number of the priced analysis in the cost column of the other isotope(s).

Ilological Analysis Information Request Sheet

Name of Laboratory	Core Labs, Inc.	U.S.A.C.O.E. Missouri River Division certific X nonecurrentexpired	:atlon:
Address	: 420 W. 18T Street		
	Casper, WY	Business Classifications:	
	82601	smalldisadvantagedwoman own	ea
Name and phor number of conta perso	ct ct		
,			

Sample Medium:

100 cm^2 WIPE SAMPLE

ltem#	Radionuclide (and required MDA	Anticipated Number of Samples	Proposed Analysis Method	Proposed Method MDA for Wipe Analyses	AnalysisTurn Around Time	Proposed Method Cost per Analysis (1)(2)	Additional Nuclides Detected by Proposed Analysis
	Thorium 232 -(1 to 5 pG		HASL 300	*1.*pCi/l .	4 week	60.00	\$11,280.00
2	Thorium 230 (1 to 5 pC)		HASL 300	*1 pCi/l	4 week	(1)	(1)
3	Thorium 227 -(1 to 5 pG	L) 188	HASE 300	*1 pCi/l	4 week	(1)	(1)
4	Uranium 238 -(1 to 5 pG	L.) 188	HASL 300	*1 pCi/l	4 week	60.00	11,280.00
6	Uranium 235 -(1 to 5 pC)	188	HASL 300	*1 pCi/l	4 week.	(4)	(4)
В	Uranium 233+234 -(1-to-5-pG	L-) 188	HASL 300	*1 pCi/l	4 week	(4)	(4)
7	Radium 226 -{1-to-5-pC	188	EPA 903.1	*1 pCi/l	3 week	40.00	7,520.00
8	Radium 223{1-to-5-pC	A.) 49	EPA 903.1	*1 pCi/l	3 week	(7)	(7)
9	Plutonium 239+240 -{1-to-6-p0	/L) 49	HASL 300	*1 pCi/l	4 week	65.00	3,185.00
10	Americium 241 - († to 5-p0	(L) 49	HASL 300	*1 pCi/l	4 week	65.00	3,185.00
11	Lead 214 - (1 to 5 p8	/L) 188	EPA 901.1	*1 pCi/l	3 week	80.00	15,040.00
12	Lead 211{110.5.pC	Д.) 49	EPA 901.1	*1~p'Ci71	3 week	(11)	(11)
13	Bismuth 214 - (+ to 5 pC	/L-) 188	EPA 901.1	*1 pci/l	3 week	(11)	(11)
14	Gross Alpha - (10-pCI/L)	188	EPA 900.0	*10pCi/l	3 week	45.00	8,460.00
	Gross Beta - (25-pCI/L)	188	EPA 900.0	*25pCi/l	3 week	(14)	(14)
16	Cesium 137 - + + + + + + + + + + + + + + + + + +		EPA 90.1.1	*1 pCi/l	3 week	(11)	(11)
	Cobalt 60 -{1 to 5 pC		EPA 901.1	*1 pCi/l	3 week	(11)	(11)
	Alpha Spectroscopy See MDAs of sha son ting solops Listed shore.)	0	HASL 300	*1 pCi/l	3-4 week	60.00	0.00

- (1) The analysis cost should be based upon providing a Level IV or equivalent data package and should include all preparation costs.

 (2) Please Indicate if multiple isotopes are included in a single analysis cost by referencing the item number of the priced analysis in the cost column of the other isotope(s).

^{*} Assuming a single swipe/analyte, water MDAs are achievable.

Radio.ogical Analysis Information Request Sheet

Name of Laboratory: Core Labs, Inc.	U.S.A.C.O.E. Missouri River Division certification:
Address: 420 W. 1ST Street	<u>X</u> none <u>current</u> expired
Casper, WY	Business Classifications:
82601	smalldisadvantagedwoman owned
Name and phone	
number of contact person: Peter Brixius (307) 235-5741	

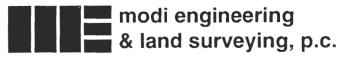
Sample Medium: SOILS

Item #	Radionuclide (and red		Anticipated Number of Samples	Proposed Analysis Method	Proposed Method MDA for Soil Analyses			Additional Nuclides Detected by Proposed Analysis
	Thorium 232	(0.5 pCi/g)		HASL 300	0.5 pCi/a	4 week	60.00	\$35,520.00
	Thorium 230	(0.5 pCi/g)		HASL 300	0.5 pCi/g	4 week	(1)	(1)
	Thorium 227	(0.5 pCi/g)		HASL 300	0.5 pCi/g	4 week	(1)	(1)
	Uranium 238	(0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	60.00	35,520.00
	Uranium 235	(0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	(4)	(4)
	Uranium 233+234	(0.5 pCi/g)	592	HASL 300	0.5 pCi/g	4 week	(4)	(4)
	Radium 226	(0.5 pCi/g)		EPA 901.1	0.5 pCi/g	3 week	40.00	23,680.00
	Radium 223	(0.5 pCi/g)	303	EPA 901.1	0.5 pCi/q	3 week	(7)	(7)
9	Plutonium 239+240	(0.5 pCi/g)	303	HASL 300	0.5 pCi/g	4 week	65.00	19,695.00
10	Americium 241	(0.5 pCi/g)	303	HASL 300	0.5 pCi/g	4 week	65.00	19,695.00
11	Lead 214	(0.5 pCi/g)	592	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
12	Lead 211	(0.5 pCi/g)	303	EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
13	Bismuth 214	(0.5 pCi/g)	592	EPA 901.1	0.5 pCi/g	3 week	(7)-	(7)
14	Gross Alpha	(NA)	0	EPA 900.0	10 pCi/g	3 week	45.00	0.00
15	Gross Beta	(NA)	0	EPA 900.0	20 pCi/g	3 week	(14)	(1 <u>4</u>)
16	Cesium 137	(0.5 pCi/g)	303	EPA 901.1	0.5 pci/a	3 week	(7)	(7)
17	Cobalt 60	(0.5 pCi/g)		EPA 901.1	0.5 pCi/g	3 week	(7)	(7)
18	Alpha Spectroscopy	(See MDAs of the alpha emitting isotopes listed above.)	0	HASL 300	0.5 pCi/g	3-4 week	60.00	0.00

The analysis cost should be based upon providing a Level IV or equivalent data package and should include all preparation costs
 Please indicate if multiple isotopes are included in a single analysis cost by referencing the item number of the priced analysis in the cost column of the other isotope(s).

SURVEYING SUBCONTRACTOR COSTS BACKUP DATA

RAMESH MODI, P.E. 'RESIDENT



DONALD H. FRY, L.S. LINA R. MODI

Minority Business Enterprise 1981 - 1996

February 16, 1996

Parsons Engineering Science, Inc.

Prudential Center Boston, MA 02199--7697

RECEIVED

Re: Estimate for Surveying Services

SEAD-12

Seneca Army Depot Romulus, New York FEB 2 2 1996

E.S.-BOSTON

Attn: Mr. Michael Ducheneau

Project Manager

Modi Engineering & Land Surveying, P.C. is pleased to provide a detailed breakdown of our estimate for the above referenced project in accordance with your request on February 16, 1996 to provide surveying services. All rates utilized to prepare this estimate were approved by the Huntsville Corps of Engineers and include direct labor, overhead and fixed fee costs.

Scope of work is as follows:

1) Locations of Samples

Description of Services	Number of Points
Provide Horizontal Survey Control for:	
Seismic Line Nodes	16
EM-31 Geophysical Survey Nodes	50
GPR Geophysical Survey Nodes	20
Soil Gas Locations	25
Surface Water/Sediment Locations	25
Surface Soil Locations	65
Additional Surface Scanning Locations	60
Provide Horizontal and Vertical Survey Control for:	
Monitoring Well Locations	28
Soil Borings	9
Test Pit Locations	20

Two-Man Field Crew: 120 hrs x 14.82/hr = \$ 13,778.40

2) Monuments

Check horizontal distances and elevations on 3 existing monuments at each site. After commencing the survey, Parsons Engineering Science will provide us with the state plane coordinates and elevations of these monuments.

Two-Man Field Crew: $8 \text{ hrs } \times \$114.82/\text{hr} = \$ 918.56$

consulting engineers & land surveyors —



Page 2

3) Tabulated List

Provide a tabulated list of item #1, including there coordinates and elevations as required.

Survey Manager:

24 hrs x \$53.00

= \$ 1,272.00

4) Description Card

Description card shall show a sketch of each monument and its location relative to reference marks, building, road, poles, etc.

Survey Manager

8 hrs x \$53.00/hr

= \$ 424.00

Office Work Provided 5)

All field notes on vertical and horizontal control with computations and adjustments will be submitted on the final control report.

Survey Manager

16 hrs x \$53.00

848.00

Licensed Land Surveyor 4 hrs x \$65.00

260.00 = \$

AutoCADD 6)

An AutoCADD disk detailing all sample locations, monuments, X- and Ycoordinates and all required elevations will be submitted to your office.

CADD Manager

40 hrs x \$60.00

= \$ 2,400.00

Total

= \$ 19,900.60

Should you require additional information, or have any questions regarding this estimate, please contact Mr. Douglas Keib of this office at (315) 699-9006.

Sincerely,

MODI ENGINEERING & LAND SURVEYING, P.C.

Lina Modi

Managing Engineer

LM:sp

RAMESH MODI, P.E. PRESIDENT



DONALD H. FRY, L.S. LINA R. MODI

Minority Business Enterprise 1981 - 1996

February 20, 1996

Parsons Engineering Science, Inc. Prudential Center Boston, MA 02199-7697

Re: Estimate for Surveying Services

SEAD-12

Seneca Army Depot Romulus, New York Revised estimate in accordance with your letter dated 02/19/96: Archaeological Sample Locations

Attn: Mr. Michael Ducheneau

Project Manager

Modi Engineering & Land Surveying, P.C. is pleased to provide a detailed breakdown of our estimate for the above referenced project in accordance with your request on February 16, 1996 to provide surveying services. All rates utilized to prepare this estimate were approved by the Huntsville Corps of Engineers and include direct labor, overhead and fixed fee costs.

Scope of work is as follows:

1) Locations of Samples

Description of Services	Number of Points
Provide Horizontal Survey Control for:	
Seismic Line Nodes	16
EM-31 Geophysical Survey Nodes	50
GPR Geophysical Survey Nodes	20
Soil Gas Locations	25
Surface Water/Sediment Locations	25
Surface Soil Locations	65
Additional Surface Scanning Locations	60
Provide Horizontal and Vertical Survey Control for:	
Monitoring Well Locations	28
Soil Borings	9
Test Pit Locations	20
Archaeological Sample Locations	600

2) Monuments

Check horizontal distances and elevations on 3 existing monuments at each site. After commencing the survey, Parsons Engineering Science will provide us with the state plane coordinates and elevations of these monuments.

= \$ 22,964.00

Two-Man Field Crew: 8 hrs x 114.82/hr = \$ 918.56

Two-Man Field Crew: 200 hrs x \$114.82/hr



Page 2

3) Tabulated List

Provide a tabulated list of item #1, including there coordinates and elevations as required.

Survey Manager:

48 hrs x \$53.00

= \$ 2,544.00

4) Description Card

Description card shall show a sketch of each monument and its location relative to reference marks, building, road, poles, etc.

Survey Manager

8 hrs x \$53.00/hr

= \$ 424.00

5) Office Work Provided

All field notes on vertical and horizontal control with computations and adjustments will be submitted on the final control report.

Survey Manager 16 hrs x \$53.00

848.00 = \$

Licensed Land Surveyor 4 hrs x \$65.00

= \$ 260.00

6) AutoCADD

An AutoCADD disk detailing all sample locations, monuments, X- and Ycoordinates and all required elevations will be submitted to your office.

CADD Manager

80 hrs x \$60.00

= \$ 4,800.00

Total

= \$ 32,758.56

Should you require additional information, or have any questions regarding this estimate, please contact Mr. Douglas Keib of this office at (315) 699-9006.

Sincerely,

MODI ENGINEERING & LAND SURVEYING, P.C.

Lina-Modi

Managing Engineer

LM:sp



36 KARLAN DRIVE • ROCHESTER, NEW YORK 14617 716-342-5810 FAX: 716-342-6847

February 16, 1996

Mr. Mark E. Baker Remediation Manager Parsons Engineering Science, Inc. Prudential Center Boston, MA 02199-7697

Re: L.M.I. Project 6366/94

Remedial Investigation at SEAD-12

Seneca Army Depot

Dear Mark:

In response to our telephone conversation and your follow-up FAX note, Lockwood Mapping would produce mapping for the area requested for \$35.00 per acre, the same price as the previous mapping area. Since we are now considering a fairly large area, we should incorporate the existing ground control with some new survey points and an analytical aerial triangulation for control densification and extension.

Such triangulation would cost an additional \$975.00.

Mapping would be produced at 1"/50' with 2' contours as before, and presented as both ink on mylar plots and AutoCAD disks.

Should you have any questions, please call.

Sincerely,

Lockwood Mapping, Inc.

\

Keith P. Adams

KPA:bss

Seneca Army Depot SEAD-12 Aerial Mapping Services

ITEM	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Aerial Mapping	\$35.00/acre	875	\$30,625.00
Aerial Triangulation	\$975.00	1	\$975.00
TOTAL			\$31,600.00

DRILLING SUBCONTRACTOR COSTS BACKUP DATA

Drilling Subcontractor Quote for Services at the Seneca Army Depot

	Services at the Seneca Army Depot		,					
	Remedial Investigation of SEAD-12	Estimated	Maxim Tech.	Maxim Tech.	N. Star		A. Auger	A. Auger
Item	Description of Services	Quantity	Unit Cost	Total Cost	Unit Cost	Total Cost		Total Cost
1.	Mob./Demob. a truck mounted drilling rig	2	\$325	\$650	\$250	\$500	\$800	\$1,600
Mobilization/	to the site in Romulus, NY. Include security		per event		per event		per event	
Demobilization	requirements to enter the base.			Ĺ	L			
2.	Provide meals and living costs for one drilling	33	\$0	\$0	\$0	\$0	\$90	\$2,970
Per Diem	crew during the conduct of drilling services.		per day		per day		per day	
3	Provide a cost to drive an AW Drilling Rod	120	\$60	\$7,200	\$25	\$3,000	\$50	\$6,000
Install Soil Gas	into the subsurface soil approximately 5 feet.		per probe	1	per probe		per probe	
Probes	Cost will include rod removal.							
4.	Construct a temporary decon. pad, on-site, to	1	\$200	\$200	\$100	\$100	\$500	\$500
Construct a	perform all decon. of drilling equipment.		per pad		per pad		per pad	İ
Decon. Pad	Pad will collect all decon. water.							
5.	Provide an hourly rate to steam decon. drilling	66	\$140	\$9,240	\$125	\$8,250	\$105	\$6,930
Decon. Time	equipment; include decon. equipment rental.		per hour		per hour		per hour	
6.	Provide a cost to supply a DOT approved	46	\$55	\$2,530	\$50	\$2,300	\$35	\$1,610
Provide Empty	steel drum, with covers, to contain all drilling		per drum		per drum		per drum	
Drums	wastes, including decon. water.		1				1	
7.	Provide a cost to move a drum, 3/4 full, a	46	\$25	\$1,150	\$25	\$1,150	\$35	\$1,610
Move Drums	distance of 100 ft to a central storage location	1	per drum		per drum		per drum	
8.	Provide cost to perform Hollow Stem	370	\$16	\$5,920	\$15	\$5,550	\$17	\$6,290
Hollow Stem	Augering using a 6.25" auger with a plug.		per foot	i l	per foot		per foot	
Augering			-	1				
9.	Provide cost to perform Hollow Stem	0	\$0	\$0	\$50	\$0	\$19	\$0
Hollow Stem	Augering using a 10" auger with a plug.		per foot	į l	per foot		per foot	
Augering			1				-	
10.	Provide a cost to collect a 3" split-spoon	185	\$16	\$2,960	\$15	\$2,775	\$18	\$3,330
Split-Spoon	sample, following the completion of		per split-	1	per split-		per split-	
Sampling	Hollow Stem Augering.		spoon		spoon		spoon	
11.	Provide a cost for the drilling crew to standby	66	\$140	\$9,240	\$125	\$8,250	\$100	\$6,600
Standby Time	during completion of an activity.		per hour		per hour		per hour	
12.	Provide a cost to grout a borehole upon	90		\$720	\$4	\$360	\$8	\$720
Grout Boreholes	completion of soil sampling activities.		per foot		per foot		per foot	
13.	Provide a cost, including materials, to install	28	\$225	\$6,300	\$225	\$6,300	\$200	\$5,600
Installation of	a 15' overburden monitoring well as specified		per well		per well		per well	
Monitoring Wells	in the attached text.			í /	1			
14.	Provide a cost, including materials, to install	28	\$75	\$2,100	\$150	\$4,200	\$225	\$6,300
Ballards	three ballards around each monitoring well.	İ	per well		per well		per well	
15	Provide a cost, including materials, to install	28	\$100	\$2,800	\$25	\$700	\$75	\$2,100
Concrete Collar	a concrete collar around each monitoring well		per well		per well		per well	
16.	Provide a cost, including materials, to install a	28	\$100	\$2,800	\$100	\$2,800	\$100	\$2,800
Steel Casing	4" steel casing, with a cap & a weep hole.	İ	per well		per well		per well	
17.	Provide a cost to supply a brass, weather	28		\$700	\$10	\$280	\$20	\$560
Brass Locks	resistant, lock for each well.		per well	<u> </u>	per well		per well	
18.	Provide a cost to supply a bulldozer to tow the	1	\$500	\$500	\$1,000	\$1,000	\$800	\$800
Bulldozer	drill rig, include standby, mob. & operator.	[per week		per week		per week	1
19.	Provide a cost for the drill crew to upgrade	30		\$900	\$50	\$1,500	\$20	\$600
Level C Surcharge	to Level C, including support equipment.		per hour		per hour		per hour	ĺ
20.	Provide a cost for the drill crew to upgrade	10		\$1,500	\$150	\$1,500		\$800
Level B Surcharge	to Level B, including support equipment.		per hour	'	per hour		per hour	
	3 - 7							

P.O. Box 67, Cortland, NY 13045

Phone: 607-756-8820

Fax: 607-753-9911

Transmittal

Date: February 16, 1996

To: Parsons Engineering Science, Inc.

Prudential Center Boston, MA 02199

Attn: Michael Duchesneau, P.E.

Re: Seneca Army Depot

Romulus, New York

From: Jeff Thew

We are sending you by fax, with original by mail, the attached Drilling Subcontractor Quote for technical drilling services in connection with the referenced project as per your letter request of February 15, 1996.

The Contractor Safety Data Questionnaire will be forwarded by mail, along with the original quote.

If you should have any questions or require additional information, please do not hesitate to call. We thank you for the invitation to quote on this work and look forward to the possibility of being of service on the project.

JJT:pb

Encs.

	Drilling Subcontractor Quote for				
	Services at the Seneca Army Depot				
	Remedial Investigation of SEAD-12		Estimated	Estimated	
Item	Description of Services	Unit Cost	Quantity	Total Cost	
1	Mob./Demob. a truck mounted drilling rig	\$ 250.00	Quality	Total Cost	
Mobilization/	to the site in Romulus, NY. Include security	per event	2	\$ 500.00	
Demobilization	requirements to enter the base.	per event		Ψ	
2.	Provide meals and living costs for one drilling	\$ 0.00	. 33		
Per Diem	•	0.00	33	¢ 0.00	
Per Dieni	crew during the conduct of drilling services. Provide a cost to drive an AW Drilling Rod	per day	100	\$ 0.00	
- 1				\$3,000.00	
Install Soil Gas	into the subsurface soil approximately 5 feet.	per probe		\$3,000.00	
Probes	Cost will include rod removal.	£ 100 00	7		
4.	Construct a temporary decon. pad, on-site, to	\$ 100.00	1	£ 100 00	
Construct a	perform all decon. of drilling equipment.	per pad		\$ 100.00	
Decon, Pad	Pad will collect all decon. water.	2 105 00			
5.	Provide an hourly rate to steam decon. drilling	\$ 125.00	66	¢0 050 00	
Decon. Time .	equipment, include decon. equipment rental.	per hour		\$8,250.00	
6.	Provide a cost to supply a DOT approved	\$ 50.00	46		
Provide Empty	steel drum, with covers, to contain all drilling	per drum		\$2,300.00	
Drums	wastes, including decon. water.				
7.	Provide a cost to move a drum, 3/4 full, a	\$ 25.00	46		
Move Drums	distance of 100 ft to a central storage location	per drum		\$1,150.00	
8.	Provide cost to perform Hollow Stem	\$ 15.00	370		
Hollow Stem	Augering using a 6.25" auger with a plug.	per foot		\$5,550.00	
Augering	11264	1		+5,55000	
9.	Provide cost to perform Hollow Stem	\$ 50.00	0		
Hollow Stem	Augering using a 10" auger with a plug.	per foot		\$ 0.00	
Augering	informed manification and a super strain.	P 2000		Ψ 0.00	
10.	Provide a cost to collect a 3" split-spoon	\$ 15.00	185		
Split-Spoon	sample, following the completion of	per split-	103	\$2,775.00	
Sampling	Hollow Stem Augering.	spoon		+=,///	
ll.	Provide a cost for the drilling crew to standby	\$ 125.00	66		
Standby Time	during completion of an activity.	per hour	00	\$8,250.00	
		\$ 4.00	90	\$0,250.00	
12.	Provide a cost to grout a borehole upon	1 '	90	\$ 360.00	
Grout Boreholes	completion of soil sampling activities.	per foot	20	7 700.00	
13.	Provide a cost, including materials, to install	\$ 225.00	28		
Installation of	a 15' overburden monitoring well as specified	per well		\$6,300.00	
Monitoring Wells	in the attached text.				
14.	Provide a cost, including materials, to install	\$ 150.00	28		
Ballards	three ballards around each monitoring well.	per well		\$4,200.00	
15	Provide a cost, including materials, to install	\$ 25.00	28		
Concrete Collar	a concrete collar around each monitoring well	per well		\$ 700.00	
16.	Provide a cost, including materials, to install a	\$ 100.00	28		
Steel Casing	4" steel casing, with a cap & a weep hole.	per well		\$2,800.00	
17.	Provide a cost to supply a brass, weather	\$ 10.00	28		
Brass Locks	resistant, lock for each well.	per well		\$ 280.00	
18.	Provide a cost to supply a bulldozer to tow the	\$1000.00	I		
Bulldozer	drill rig, include standby, mob. & operator.	per week		\$1,000.00	
19.	Provide a cost for the drill crew to upgrade	\$ 50.00	30		
Level C Surcharge	to Level C, including support equipment.	per hour		\$1,500.00	
20.	Provide a cost for the drill crew to upgrade	\$ 150.00	10		
Level B Surcharge	to Level B, including support equipment	per hour	1	\$1,500.00	
- Duranise	TO TO LOT TE WIND AND AND AND THE PARTITIONS	1 P == 2000		7.,,,,,,,,,,,,	

WASTE DISPOSAL SUBCONTRACTOR COSTS BACKUP DATA

Seneca Army Depot RI/FS at SEAD-12 Waste Disposal Costs

ITEM	UNIT COST	UNIT	ESTIMATED QUANTITY	TOTAL COST
Transportation/Round Trip	\$850	Trip	2	\$1,700
Transp. /Round Trip Vac. Truck	\$850	Trip	1	\$850
Disposal of Soil Drums	\$202	Drum	9	\$1,814
Disposal of Empty Drums	\$25	Drum	47	\$1,175
Inspection Fee	\$0	Each	1	\$0
Demurrage Time (Loading)	\$75	Hour	10	\$750
Bulk Rate for Liquid Disposal	\$0.60	Gallon	560	\$333
Additional Labor	\$35	Hour	14	\$490
Disposal of Liquid Drum	\$106	Drum	14	\$1,477
Overpacks of Liquid Drums	\$100	Drum	14	\$1,400

TOTALS

\$9,989

Seneca Army Depot RI/FS at SEAD-12 Waste Disposal Costs

	UNIT		ESTIMATED	TOTAL
ITEM	COST	UNIT	QUANTITY	COST
Transportation/Round Trip	\$850	Trip	2	\$1,700
Transp. /Round Trip Vac. Truck	\$850	Trip	1	\$850
Disposal of Soil Drums	\$202	Drum	9	\$1,814
Disposal of Empty Drums	\$25	Drum	47	\$1,175
Inspection Fee	\$0	Each	1	\$0
Demurrage Time (Loading)	\$75	Hour	10	\$750
Bulk Rate for Liquid Disposal	\$0.60	Gallon	560	\$333
Additional Labor	\$35	Hour	14	\$490
Disposal of Liquid Drum	\$106	Drum	14	\$1,477
Overpacks of Liquid Drums	\$100	Drum	14	\$1,400
			TOTALS	\$9,989

Note: The unit cost column of this table includes any applicable insurance surcharges. Insurance surcharges are \$5.50 / drum and \$0.035 / gallon of liquid waste.

Feb. 19 1996 01:04PM P2

ID:203-755-5748

FROM : EWR GREG DORN

III.

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EWR, INC.

FEB 15'96 _ 17:39 No.011 F.02

EA

Seneca Army Depot RVFS at 8EAD-12 **Waste Disposal Costs**

	TIEM	UNIT COST	UNIT	ESTIMATED QUANTITY	TOTAL	
	Transportation/Round Trip	\$ 850.00	Trip	2	\$1700.00	
	Disposal of Soil Drum	\$ 196.00	Drum	9	\$1764.00	
	Inspection Fee	\$	Each	1		
	Bulk Rate for Liquid Disposal	\$ 0.56	Gallon	\$60 *	\$313.00	
	Disposal of Liquid Drum	\$ 100.00	Drute	14	\$1400.00	
I.	Transportation of Bulk Liquid(Vac Trk)	\$850.00	Trip	2	\$1700.00	
II.	Additional Labor (if necessary)	\$ 35.00	Hour	14	\$490.00	
II.	85 Gallon Overpacks (if necessary)	\$100.00	Drum	E A		
IV.	Demurrage Time	\$ 75.00	Hour	HR		

\$ 25.00

Drum

VI. Insurance Surcharges: Drums@ \$5.50/drum Gallons@ \$0.035/gallon

(Loading on Site)

Empty Drums