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NAS CECIL FIELD  
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FINAL WORK PLAN FOR CONTAMINATION ASSESSMENT AT FIVE SITES NAS CECIL  
FIELD FL  
5/1/1991  
ABB ENVIRONMENTAL SERVICES, INC.

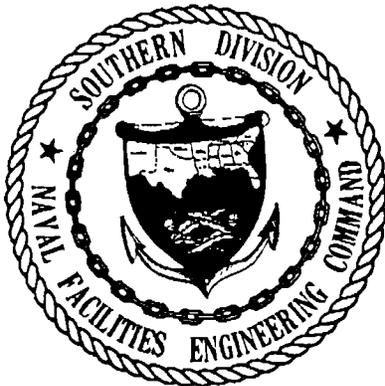


**FINAL**

**WORK PLAN  
CONTAMINATION ASSESSMENT  
AT FIVE SITES  
NAS CECIL FIELD  
JACKSONVILLE, FLORIDA**

**STATEMENT OF WORK NO. 0002  
NAVY CLEAN - DISTRICT I  
CONTRACT NO. N62467-89-D-0317**

**MAY 1991**



**FILE**

**ABB Environmental Services, Inc.**



ASEA BROWN BOVERI

WORK PLAN

CONTRACT NO. N62467-89-D-0317  
CTO NO. 0023

CONTAMINATION ASSESSMENT AT FIVE SITES  
NAVAL AIR STATION CECIL FIELD  
JACKSONVILLE, FLORIDA

MAY, 1991

Submitted By:

ABB ENVIRONMENTAL SERVICES, INC.  
2571 EXECUTIVE CENTER CIRCLE EAST  
TALLAHASSEE, FLORIDA 32301

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- Attachment A - Schedule
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## I. INTRODUCTION

On September 6, 1990, Southern Division (SOUTHDIV) Naval Facilities Engineering Command (NAVFACENGCOM) contracted ABB Environmental Services, Inc. (ABB-ES) (Contract No. N62467-89-D-0317) to assist the Navy's Environmental Engineering Program by providing environmental and engineering support services for the Underground Storage Tank (UST) Program. The first step in the process of executing a Contract Task Order (CTO) is for ABB-ES to respond to a Statement of Work (SOW) by participating in a site visit to define the SOW and to develop a Work Plan. The Work Plan presents a description of the scope of services, a schedule showing the duration of the tasks, and estimated costs associated with the defined tasks.

Field work performed at NAS Cecil Field during December 1990 under contract N62467-87-D-0263, resulted in establishing data indicating that the petroleum contamination beneath the North Fuel Farm, Day Tank 293-DT, and the South Fuel Farm was more pervasive than initially anticipated. The field investigation of the Preliminary Contamination Assessment at the Jet Engine Test Cell (Facility 339) also indicated extensive petroleum contamination beneath the site. In addition, soil borings revealed that petroleum contamination as a result of a pipeline leak or spillage had occurred beneath the truck loading stand immediately southeast of the North Fuel Farm.

This Work Plan describes the scope of services, presents milestone and Gantt schedules, and provides cost estimates for the additional Scope of Work for Contamination Assessments at 5 sites at NAS Cecil Field, Jacksonville, Florida as described in the SOW No. 2, dated January 14, 1991. This Work Plan includes the following tasks:

- Management Activities

Management responsibilities include: cost tracking, internal and external cost reporting, communication, and deliverable processing and review. Monthly progress reporting is considered separately under Task 1 below.

Task 1 - Monthly Progress Reports

- Technical Activities

Task 2 - Field Activities

Task 3 - Incorporation of Additional Data into Reports

The following sections present the scope of services (Section II), key personnel (Section III), schedule (Section IV), and cost estimates for each task (Section V).

II. SCOPE OF SERVICES

Task 1 - Monthly Progress Reports

ABB-ES will prepare Technical/Financial Monthly Reports (TFMR) for the duration of the project in accordance with the provisions of Part V, Section 3 of the contract. Each report will be in the format required in the contract (Part IX, Attachment A) and will summarize activities performed, any problems encountered, and proposed problem resolutions. It will also include a schedule update in the form of a Gantt chart. ABB-ES will notify SOUTHDIV immediately upon discovery of any significant new site conditions, including imminent hazard or substantial endangerment, and any deviation from the project schedule, plan, or budget.

The Phase I cost estimates reflect the preparation of 5 monthly reports for this purpose.

The key personnel and level of effort (LOE) estimated for this task include: Task Order Manager (5 days) and Program Assistant (2.5 days).

Task 2 - Field Investigation Activities

The additional field work is necessary to define the nature and extent of the petroleum contamination beneath the North Fuel Farm, the South Fuel Farm, the Day Tank, the Jet Engine Test Cell, and the Truck Loading Stand at the North Fuel Farm. The increased scope will include the installation and sampling of additional shallow and deep monitoring wells at all of the above sites. The number and type of monitoring wells to be installed is listed below.

<u>FACILITY</u>	<u>NO. OF SHALLOW WELLS</u>	<u>NO. OF DEEP WELLS</u>
North Fuel Farm	15	3
Truck Loading Stand	11	1
Day Tank 293-DT	12	2
Jet Engine Test Cell	12	3
South Fuel Farm	<u>12</u>	<u>2</u>
TOTAL	62	11

Groundwater samples will be collected and analyzed for the proposed additional monitoring wells at each of the sites for kerosene constituents as discussed in FDER Chapter 17-770, FAC. Proper Quality Assurance and Quality Control (QA/QC) samples (i.e., trip blanks, field blanks, equipment blanks, and duplicates) will be collected and analyzed. No tank testing will be performed in this project. Slug tests will be performed on monitoring wells at the Jet Engine Test Cell and the Truck Loading Stand at the North Fuel Farm to calculate an estimated hydraulic conductivity of the surficial aquifer at the sites. All of the additional monitoring wells at the five sites will be surveyed by a Florida Professional Surveyor to determine elevation (Z) and location (X and Y) on the base coordinate system.

The key personnel and LOE estimated for this task include: Program Manager (six 1/hr days), Task Order Manager (fourteen 4/hr days), Senior Scientist (forty-two 10/hr days), Engineer (forty-two 10/hr days), Technician (twenty-three and a half 4/hr days), and Clerical Support (one 2/hr day).

Other direct costs (ODCs) include: Field GC rental, Oil/water interface probe, data logger w/transducers, hand auger, tool kit, sampling kit, pumps, health and safety equipment, expendables, travel costs and per diem, shipping, phone charges, car rental, drilling subcontractor, professional survey subcontractor, and analytical laboratory subcontractor costs.

### Task 3 -Report Preparation

Draft and final Contamination Assessment Reports (CARs) shall be prepared and submitted for the Jet Engine Test Cell and the Truck Loading Stand to SOUTH DIV and NAS Cecil Field. The CARs shall contain the findings and recommendations from the investigations in accordance with FDER Chapter 17-770, FAC, guidelines. Recommendations shall be made as to the need for remedial action, no further action, or monitoring only.

If remedial action is warranted at either of the two new sites, draft Preliminary Remedial Action Plans (PRAPs) will be developed as outlined in the original fee proposal for Amendment #20

If remedial action is not warranted, recommendations for either no further action, or monitoring only will be justified. Either plan will be submitted in both a draft and a final form. The plans will be in accordance with Chapter 17.770.660 FAC and will be submitted to SOUTH DIV and NAS Cecil Field.

The key personnel and LOE estimated for this task include: Program Manager (five 4/hr days), Task Order Manager (eleven 2/hr days), Senior Engineer (five 4/hr days), Senior Scientist (sixteen and a half 8/hr days), Engineer (twenty 10/hr days), Draftsman (nine and a half 8/hr days), Technician (seven 6/hr days), and Clerical Support (seven 2/hr days).

### III. KEY PERSONNEL

The designated roles for the Contamination Assessment Program work at NAS Cecil Field are as follows:

- Program Manager. The Program Manager, Tony Allen, is responsible for oversight and management of the overall multi-installation Navy CLEAN contract for District I. In this position, Mr. Allen is able to identify overall program needs, promote technology and other information transfer between various Navy CLEAN projects, and direct resources as appropriate, for effective and timely completion of program activities.

- Task Order Manager. The Task Order Manager for the Contamination Assessments at NAS Cecil Field will be Peter Redfern, C.P.E. Mr. Redfern is responsible for maintaining the project schedule and budget and for evaluating the appropriateness of the technical or engineering services provided for the CTO. Mr. Redfern is also responsible for the day-to-day conduct of the work, including the integration of the input of supporting disciplines and subcontractors. He will review the on-going quality control during the performance of the work and the clarity and usefulness of all project work products.

Specific responsibilities of this role include:

- initiating project activities;
- participating in the work plan preparation and staff assignments;
- identifying and fulfilling equipment and other resource requirements;
- monitoring task activities to ensure compliance with established budgets, schedules, and scope of work; and
- regularly interacting with the EIC, the Program Manager, the Technical Director, and others as appropriate, on the status of the project.

Technical Director. Mr. Kenneth L. Busen, P.G. will be the Technical Director of the Contamination Assessments at NAS Cecil Field. Mr. Busen will be responsible for the evaluating the appropriateness and adequacy of the technical or engineering services provided for the CTO and for developing the technical approach and LOE required to address each of the Work Plan tasks. Mr. Busen will also be responsible for reviewing the on-going quality control during the performance of the work, and the technical integrity of conclusions and recommendations.

Specific responsibilities of this role include:

- overall technical responsibility for the project;
- initiating project activities;
- participating in the work plan preparation;
- monitoring the technical adequacy of task activities; and
- regularly interacting with the EIC, Program Manager, Task Order Manager, and others as appropriate, on the status of the project.

- Quality Review Board. A Quality Review Board comprised of senior technical staff from the ABB-ES team will assist the Task Order Manager and Technical Director by providing review of the technical aspects of the project to assure they are produced in accordance with corporate policy, and meet the requirements of U.S. Navy Southern Division.

Michael Keirn, Ph.D. and Kathleen O'Neil, P.G. will comprise this project's technical quality review board and will be actively involved in assuring the technical quality and appropriateness of methodologies, conclusions and recommendations of the Contamination Assessments at NAS Cecil Field.

- Contract Manager. The position of contract manager is established because of the importance of day-to-day scope, schedule and budget monitoring for the NAS Cecil Field Program between ABB-ES and SouthDiv contracts. It is expected that program decisions will be occurring frequently. Therefore, it is necessary to anticipate and immediately implement contractual actions (i.e., amend subcontracts, initiate procurement actions, etc.) to carry out the program plans. The Contract Manager will be responsible to the Task Order Manager and will be the principal communication link to the U.S. Navy Southern Division contract officer. Three specific tasks for which this person will be responsible are the following:
  - establish and oversee all subcontract actions to support the project;
  - review technical/financial monthly reports for contractual conformance;
  - ensure that appropriate financial record and reporting requirements are met.

#### IV. SCHEDULE

Attachment A portrays the schedule for completion of the tasks described above and indicates the timeframe requirements to conduct the services as described. The date of initiation and completion of these services is in conformance with the schedule requirements agreed to within the FDER and Navy Consent Order Agreement for investigation of petroleum sites within Florida.

#### V. COST

Attachment B (Table 1 and the fee itemization form) presents the cost estimate to complete the scope of services described herein. A supplement sheet has been added to allow the itemization of field equipment and supplies proposed for Task 2 (Field Work, this supplement refers only to Task 2).

**VI. FEE ITEMIZATION FORM SCOPE LIMITATION**

The purpose of this paragraph is to clearly define the scope and assumptions made for this fee proposal should it be necessary to enact provisions delineated at Part VII, Para. 22 of the subject contract in accordance with FAR 5243-2.

Specific Parameters:

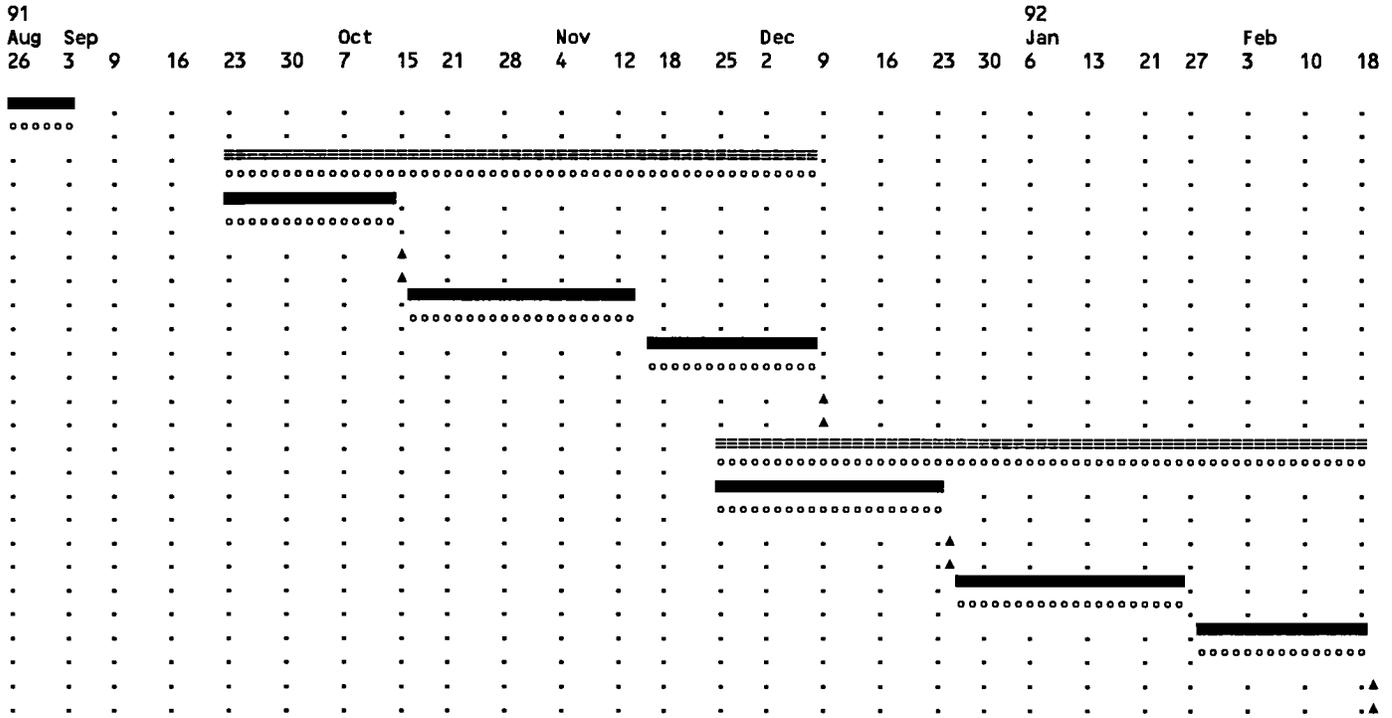
As outlined specifically in Work Elements 1 through 3 of the Statement of Work dated January 14, 1991.

Period of Performance Parameters:

Costs presented are estimated to be incurred through April, 1991 (refer to Milestone Chart).

**ATTACHMENT A**  
**SCHEDULE**





TIME LINE Gantt Chart Report, Strip 2

**ATTACHMENT B**  
**COST ESTIMATE**

**CLEAN FEE ITEMIZATION FORM  
SOUTH DIV ENVIRONMENTAL DIVISION**

DATE OF SCOPE: 24 May 1991      A&E FIRM: ABB Environmental Services, Inc.  
 CTO: 002      DATE OF ESTIMATE: 24 May 1991      CONTRACT NO.: N62467-89-D-0317

PROJECT: NAS Cecil Field CARs

FUNDING: Defense Environmental Restoration Act (DERA)

ACTIVITY: Naval Air Station Cecil Field

UIC CODE: N60200      LOCATION: Jacksonville, Florida

ITEM	RATE/HR.	OFFICE		FIELDWORK		TOTAL	
		LABOR HOURS	COST(S)	LABOR HOURS	COST(S)	LABOR HOURS	COST(S)
Program Manager	36.50		\$0.00		\$0.00	0	\$0.00
Quality Assurance Manager	25.50		\$0.00		\$0.00	0	\$0.00
Task Order Manager	29.00	118	\$3,422.00		\$0.00	118	\$3,422.00
Senior Engineer	29.00	20	\$580.00		\$0.00	20	\$580.00
Senior Scientist	29.10	552	\$16,063.20		\$0.00	552	\$16,063.20
Engineer	18.50	620	\$11,470.00		\$0.00	620	\$11,470.00
Geologist	19.00		\$0.00		\$0.00	0	\$0.00
Hydrologist	20.00		\$0.00		\$0.00	0	\$0.00
Toxicologist	18.00		\$0.00		\$0.00	0	\$0.00
Program Assistant	13.00	20	\$260.00		\$0.00	20	\$260.00
Clerical/Word Processing	10.00	16	\$160.00		\$0.00	16	\$160.00
Accounting	14.00		\$0.00		\$0.00	0	\$0.00
Contract Manager	19.50		\$0.00		\$0.00	0	\$0.00
Technical Editor	13.26		\$0.00		\$0.00	0	\$0.00
Health & Safety Assistant	12.50		\$0.00		\$0.00	0	\$0.00
Health & Safety Manager (CIH)	24.00		\$0.00		\$0.00	0	\$0.00
Quality Assurance Assistant	19.71		\$0.00		\$0.00	0	\$0.00
Cad Operator/Sr. Draftsperson	15.60		\$0.00		\$0.00	0	\$0.00
Draftsperson	10.50	76	\$798.00		\$0.00	76	\$798.00
Air Quality Engineer/Scientist	16.94		\$0.00		\$0.00	0	\$0.00
Senior Hydrologist	33.79		\$0.00		\$0.00	0	\$0.00
Senior Chemist (CLP Qual.)	22.44		\$0.00		\$0.00	0	\$0.00
Public Relations	20.00		\$0.00		\$0.00	0	\$0.00
Technician	13.00	136	\$1,768.00		\$0.00	136	\$1,768.00
Senior Contract Manager	28.50		\$0.00		\$0.00	0	\$0.00
Technical Expert (PhD-Sci/Eng)	35.00		\$0.00		\$0.00	0	\$0.00
<b>TOTAL DIRECT LABOR</b>	<b>XXXXX</b>	<b>1,558</b>	<b>\$34,521.20</b>	<b>0</b>	<b>\$0.00</b>	<b>1,558</b>	<b>\$34,521.20</b>
X Fringe (.3312)	XXXXX	XXXXX	\$11,433.42	XXXXX	\$0.00	XXXXX	\$11,433.42
X Overhead (.5413)	XXXXX	XXXXX	\$24,875.24	XXXXX	\$0.00	XXXXX	\$24,875.24
X G&A (.0733)	XXXXX	XXXXX	\$5,191.83	XXXXX	\$0.00	XXXXX	\$5,191.83
<b>Total Burdened Dir. Labor</b>	<b>XXXXX</b>	<b>XXXXX</b>	<b>\$76,021.69</b>	<b>XXXXX</b>	<b>\$0.00</b>	<b>XXXXX</b>	<b>\$76,021.69</b>

**PART II - OTHER DIRECT COSTS (Itemized on Supplement Sheets)**

ITEM	UNIT COST(S)	QUANTITY	TOTAL
Telephone/Communications	\$5.00/Call	70	\$350
Postage/Freight	See attached sheet		\$2,170
Equipment/Expendables	See attached sheet		\$10,684.55
Miscellaneous Equipment	See attached sheet		\$400
Subtotal			\$13,604.55
X G&A (.0733)			\$997.21
<b>TOTAL</b>	XXXXXXX	XXXXXXXX	\$14,601.76

**PART III - TRAVEL (Itemized on Supplement Sheets)**

Subsistence	\$74.00/Day	77	\$5,698
Car/Van Rental and Fuel	See attached sheet		\$4,900
Subtotal			\$10,598.00
X G&A (.0733)			\$776.83
<b>TOTAL TRAVEL EXPENSES</b>	XXXXX	XXXXX	\$11,374.83

**PART IV - SUBCONTRACTOR SERVICES (Itemized on Supplement Sheets)**

Drilling/Laboratory/Survey	See attached sheet		\$105,650
Subtotal			\$105,650.00
X G&A (.0733)			\$7,744.15
<b>TOTAL SUBCONTRACTOR EXPENSES</b>	XXXXX	XXXXX	\$113,394.15

	TOTAL			
	LABOR HOURS	COST(S)		
TOTAL PART I (Direct Labor)	1088	\$76,021.69		
TOTAL PART II (Other Direct Costs)		\$14,601.76		
TOTAL PART III (Travel Expenses)		\$11,374.83		
<b>SUBTOTAL (Parts I, II, &amp; III)</b>		<b>\$101,998.28</b>		
Award Fee Pool @ <u>9%</u> x Parts I, II, & III		\$9,179.85		
Enter Award Fee % here <u>9%</u>				
<b>Parts I, II, &amp; III TOTAL</b>		<b>111,178.13</b>		
TOTAL PART IV (Subcontractor Expenses)		\$113,394.15		
Award Fee Pool @ <u>4.5</u> % x Part IV		\$5,102.74		
Enter Award Fee % here <u>4.5</u> %				
<b>Part IV TOTAL</b>		<b>\$118,496.89</b>		
TOTAL: (Parts I, II, & III)		\$111,178.13		
(Part IV)		\$118,496.89		
<b>GRAND TOTAL</b>		<b>\$229,675.02</b>		
A&E Signature	Date	Telephone		
	May 29, 1991	(904) 656-1293		
EIC Signature	Date	Code	Code 18C Approval	Date

TASK: CUMULATIVE COST MODEL  
 PROJECT NAME: NAS CECIL FIELD CARs  
 RESPONSIBLE: P. REDFERN

DESCRIPTION	BASE	RATE	AMOUNT
TASK ORDER MANAGER	118	\$29.00	\$3,422.00
SENIOR SCIENTIST	552	\$29.10	\$16,063.20
SENIOR ENGINEER	20	\$29.00	\$580.00
QUALITY ASSURANCE MANAGER		\$25.50	
HEALTH & SAFETY MANAGER		\$24.00	
ENGINEER	620	\$18.50	\$11,470.00
HYDROLOGIST		\$20.00	
QUALITY ASSURANCE ASSISTANT		\$19.71	
TECHNICIAN	136	\$13.00	\$1,768.00
TECHNICAL EXPERT		\$35.00	
HEALTH & SAFETY ASSISTANT		\$12.50	
GEOLOGIST		\$19.00	
PROJECT ASSISTANT	20	\$13.00	\$260.00
DRAFTING	78	\$10.50	\$798.00
CLERICAL/WORDPROCESSOR	16	\$10.00	\$160.00
TECHNICAL EDITOR		\$13.26	
TOTAL DIRECT LABOR	1558		\$34,521.20
OVERHEAD	34521.2	0.3312	\$11,433.42
FRINGE	45954.62	0.5413	\$24,875.24
TOTAL LABOR OVERHEAD			\$36,308.66
AIRFARE			
CAR/FUEL	42	\$50.00	\$2,100.00
PER DIEM/LODGING	77	\$74.00	\$5,698.00
FIELD VAN/FUEL	35	\$80.00	\$2,800.00
TOTAL TRAVEL			\$10,598.00
PHONE & TELEX	70	\$5.00	\$350.00
SHIPPING			\$2,170.00
MISCELLANEOUS EQUIPMENT			\$400.00
EQUIPMENT			\$10,284.55
EXPENDABLES	8	\$50.00	\$400.00
SUBTOTAL OTHER DIRECT COSTS			\$24,202.55
G&A - LABOR, O/H, ODC	95032.41	0.0733	\$6,965.88
SUBCONTRACT			
DRILLING			\$65,178.00
LABORATORY			\$35,072.00
SURVEY			\$5,400.00
COPYING & BINDING			\$0.00
SUBTOTAL SUBCONTRACT			\$105,650.00
G&A - SUBCONTRACT	105650	0.0733	\$7,744.15
TOTAL COST			\$215,392.43
AWARD FEE - LABOR, O/H, ODC	101998.28	0.09	\$9,179.85
AWARD FEE - SUBCONTRACT	113394.14	0.045	\$5,102.74
TOTAL PRICE			\$229,675.01

**TASK: TASK 1 - MONTHLY PROGRESS REPORTS**

**PROJECT NAME: NAS CECIL FIELD CARs**

**RESPONSIBLE: P. REDFERN**

**TASK DESCRIPTION: PREPARE MONTHLY PROGRESS REPORTS**

DESCRIPTION	BASE	RATE	AMOUNT
TASK ORDER MANAGER	40	\$29.00	\$1,160.00
SENIOR SCIENTIST		\$29.10	
SENIOR ENGINEER		\$29.00	
QUALITY ASSURANCE MANAGER		\$25.50	
HEALTH & SAFETY MANAGER		\$24.00	
ENGINEER		\$18.50	
HYDROLOGIST		\$20.00	
QUALITY ASSURANCE ASSISTANT		\$19.71	
TECHNICIAN		\$13.00	
TECHNICAL EXPERT		\$35.00	
HEALTH & SAFETY ASSISTANT		\$12.50	
GEOLOGIST		\$19.00	
PROJECT ASSISTANT	20	\$13.00	\$260.00
DRAFTING		\$10.50	
CLERICAL/WORDPROCESSOR		\$10.00	
TECHNICAL EDITOR		\$13.26	
<b>TOTAL DIRECT LABOR</b>	<b>60</b>		<b>\$1,420.00</b>
OVERHEAD	1420	0.3312	\$470.30
FRINGE	1890.30	0.5413	\$1,023.22
<b>TOTAL LABOR OVERHEAD</b>			<b>\$1,493.53</b>
AIRFARE			
CAR/FUEL			
PER DIEM			
LODGING			
TOTAL TRAVEL			\$0.00
PHONE & TELEX		\$5.00	\$0.00
SHIPPING			
COMPUTER TIME			
EQUIPMENT			
EXPENDABLES			
<b>SUBTOTAL OTHER DIRECT COSTS</b>			<b>\$0.00</b>
G&A - LABOR, O/H, ODC	2913.53	0.0733	\$213.56
SUBCONTRACT			
DRILLING			
LABORATORY			
SURVEY			
COPYING & BINDING			
<b>SUBTOTAL SUBCONTRACT</b>			<b>\$0.00</b>
G&A - SUBCONTRACT	0	0.0733	\$0.00
<b>TOTAL COST</b>			<b>\$3,127.09</b>
AWARD FEE - LABOR, O/H, ODC	3127.09	0.09	\$281.44
AWARD FEE - SUBCONTRACT	0	0.045	\$0.00
<b>TOTAL PRICE</b>			<b>\$3,408.52</b>

TASK: TASK 2 - FIELD INVESTIGATION  
 PROJECT NAME: NAS CECIL FIELD CARs  
 RESPONSIBLE: P. REDFERN

TASK DESCRIPTION: INSTALLATION OF MONITORING WELLS,  
 SAMPLING, ETC.

DESCRIPTION	BASE	RATE	AMOUNT
TASK ORDER MANAGER	56	\$29.00	\$1,624.00
SENIOR SCIENTIST	420	\$29.10	\$12,222.00
SENIOR ENGINEER		\$29.00	
QUALITY ASSURANCE MANAGER		\$25.50	
HEALTH & SAFETY MANAGER		\$24.00	
ENGINEER	420	\$18.50	\$7,770.00
HYDROLOGIST		\$20.00	
QUALITY ASSURANCE ASSISTANT		\$19.71	
TECHNICIAN	94	\$13.00	\$1,222.00
TECHNICAL EXPERT		\$35.00	
HEALTH & SAFETY ASSISTANT		\$12.50	
GEOLOGIST		\$19.00	
PROJECT ASSISTANT		\$13.00	
DRAFTING		\$10.50	
CLERICAL/WORDPROCESSOR	2	\$10.00	\$20.00
TECHNICAL EDITOR		\$13.26	
TOTAL DIRECT LABOR	992		\$22,858.00
OVERHEAD	22858	0.3312	\$7,570.57
FRINGE	30428.57	0.5413	\$16,470.98
TOTAL LABOR OVERHEAD			\$24,041.55
AIRFARE			
CAR/FUEL	42	\$50.00	\$2,100.00
PER DIEM	77	\$74.00	\$5,698.00
FIELD VAN/FUEL	35	\$80.00	\$2,800.00
TOTAL TRAVEL			\$10,598.00
PHONE & TELEX	70	\$5.00	\$350.00
SHIPPING	32	\$65.00	\$2,080.00
MISCELLANEOUS EQUIPMENT			\$400.00
EQUIPMENT			\$10,284.55
EXPENDABLES	8	\$50.00	\$400.00
SUBTOTAL OTHER DIRECT COSTS			\$24,112.55
G&A - LABOR, O/H, ODC	71012.10	0.0733	\$5,205.19
SUBCONTRACT			
DRILLING			\$65,178.00
LABORATORY			\$35,072.00
SURVEY			\$5,400.00
COPYING & BINDING			
SUBTOTAL SUBCONTRACT			\$105,650.00
G&A - SUBCONTRACT	105650	0.0733	\$7,744.15
TOTAL COST			\$189,611.44
AWARD FEE - LABOR, O/H, ODC	76217.29	0.09	\$6,859.56
AWARD FEE - SUBCONTRACT	113394.1	0.045	\$5,102.74
TOTAL PRICE			\$201,573.73

TASK: TASK 3 - PREPARATION OF REPORTS  
 PROJECT NAME: NAS CECIL FIELD CARs  
 RESPONSIBLE: P. REDFERN

DESCRIPTION	BASE	RATE	AMOUNT
TASK ORDER MANAGER	22	\$29.00	\$638.00
SENIOR SCIENTIST	132	\$29.10	\$3,841.20
SENIOR ENGINEER	20	\$29.00	\$580.00
QUALITY ASSURANCE MANAGER		\$25.50	
HEALTH & SAFETY MANAGER		\$24.00	
ENGINEER	200	\$18.50	\$3,700.00
HYDROLOGIST		\$20.00	
QUALITY ASSURANCE ASSISTANT		\$19.71	
TECHNICIAN	42	\$13.00	\$546.00
TECHNICAL EXPERT		\$35.00	
HEALTH & SAFETY ASSISTANT		\$12.50	
GEOLOGIST		\$19.00	
PROJECT ASSISTANT		\$13.00	
DRAFTING	76	\$10.50	\$798.00
CLERICAL/WORDPROCESSOR	14	\$10.00	\$140.00
TECHNICAL EDITOR		\$13.26	
TOTAL DIRECT LABOR	506		\$10,243.20
OVERHEAD	10243.2	0.3312	\$3,392.55
FRINGE	13635.75	0.5413	\$7,381.03
TOTAL LABOR OVERHEAD			\$10,773.58
AIRFARE			
CAR/FUEL			
PER DIEM			
FIELD VAN/FUEL			
TOTAL TRAVEL			\$0.00
PHONE & TELEX		\$5.00	\$0.00
SHIPPING	6	\$15.00	\$90.00
MISCELLANEOUS EQUIPMENT			
EQUIPMENT			
EXPENDABLES			
SUBTOTAL OTHER DIRECT COSTS			\$90.00
G&A - LABOR, O/H, ODC	21106.78	0.0733	\$1,547.13
SUBCONTRACT			
DRILLING			
LABORATORY			
SURVEY			
COPYING & BINDING			
SUBTOTAL SUBCONTRACT			\$0.00
G&A - SUBCONTRACT	0	0.0733	\$0.00
TOTAL COST			\$22,653.90
AWARD FEE - LABOR, O/H, ODC	22653.90	0.09	\$2,038.85
AWARD FEE - SUBCONTRACT	0	0.045	\$0.00
TOTAL PRICE			\$24,692.76

FIELD EQUIPMENT – NAS CECIL FIELD			
ITEM	# WEEKS	DAILY LEASE RATE	TOTAL COST
HNU GC	7	\$134.83	\$4,719.05
OIL/WATER PROBE	8	\$17.02	\$680.80
DATA LOGGER	2	\$65.54	\$655.40
HAND AUGERS (2)	7	\$7.79	\$545.30
DECON KIT	8	\$44.53	\$1,781.20
BAILERS	2	\$9.93	\$99.30
2" SUB PUMP	2	\$42.30	\$423.00
SURVEY EQUIPMENT	2	\$19.33	\$193.30
LAMOTTE METER	2	\$20.89	\$208.90
MAGNETOMETER	7	\$14.10	\$493.50
WATER LEVEL INDICATOR	8	\$5.79	\$231.60
YSI SCT METER	2	\$25.32	\$253.20
<b>TOTAL FIELD EQUIPMENT</b>			<b>\$10,284.55</b>
MISCELLANEOUS EQUIPMENT	8	\$10.00	\$400.00
EXPENDABLES	8	\$10.00	\$400.00
<b>TOTAL EQUIPMENT/EXPENDABLES</b>			<b>\$11,084.55</b>