



IIT Research Institute
10 West 35th Street
Chicago, Illinois 60616-3799

DOE/OR/22160--T20

312/567-4000

October 26, 1995

U. S. Department of Energy
Oak Ridge Operations Office
P. O. Box 2001
Oak Ridge, Tennessee 37831

Subject: US DOE Contract No. DE-AC05-93OR22160
IITRI Project No. C06787
Reports for September 1995 -- Status, Summary,
Milestone, and Cost Management
Financial Reports for Period ending September 30,
1995

Attention: Mr. Johnny Moore

Dear Mr. Moore:

The purpose of this letter is to provide you with a summary of progress on the subject US DOE contract. The contract was signed on September 30, 1993. IITRI began work in October 1993. This report describes the work done during September 1995 along with a discussion of the project schedule and expenditure.

Financial data is provided for the accounting period ending September 30, 1995. IITRI's cost accounting system provides financial data about project expenditures on a four-week period. There are 13 cost accounting periods in the fiscal year starting from October 1.

1. STATUS REPORT

The overall project is divided into 12 tasks. In addition there are four major milestones. These 12 tasks are:

- Task 1: Develop Modify Plans
- Task 2: Permitting
- Task 3: Sub-contract and Supplies
- Task 4: Equipment Testing and Shakedown
- Task 5: Site Preparation and Equipment Mobilization
- Task 6: Pre-Demonstration Soil Sampling and Analysis
- Task 7: Install Treatment System
- Task 8: Conduct Demonstration
- Task 9: Equipment Removal, Decontamination & Demobilization

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October 26, 1995

Task 10: Post Demonstration Soil Sampling and Analysis
Task 11: Data Review and Economic Analysis
Task 12: Final Report Preparation and Draft Review

The four major milestones are:

- Submission of all Documents 75 days after contract award
- All Permits Received within 24 weeks of contract award
- Shakedown of the demonstration system completed by 36 weeks after contract award
- Final Technical report completed after 52 weeks.

1.1 Contract Objective:

No change.

1.2 Technical Approach Changes:

No change to technical approach.

1.3 Progress by Task for September 1995:

Task 1: Develop Modify/Plans

There was no activity on this task in September, 1995.

Task 2. Permitting

There was no activity on this task.

Task 3. Subcontract and Supplies

There was no activity on this task.

Task 4 Equipment Testing and Shakedown

In September there was no activity on this task.

Task 5: Site Preparation and Equipment Mobilization

In September there was no activity on this task.

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Attn: Mr Johnny Moore
October 26, 1995

Task 6: Pre-Demonstration Soil Sampling and Analysis

In September there was no activity on this task.

Task 7: Install Treatment System

There was no activity on this task in September.

Task 8: Conduct Demonstration

There was no activity on this task in September.

Task 9: Post Demonstration Soil Sampling and Analysis.

The final site demobilization and post-test soil sampling activities were begun and completed in September. Twelve new bore holes were made in September to obtain approximately 36 new core samples of soil. These were sent for analysis.

Task 10: Equipment Removal, Decontamination, and Demobilization

All remaining equipment at the site was taken apart. All materials designated as scrap were piled for possible salvage or ultimate disposal by the Site Support personnel. All other equipment was stored in a shipping trailer. The 200 kW power supply trailer was shipped back to Chicago.

All the electrodes, the gas collection wells and the thermowells inserted in the soil were removed. All electrode holes and the 4 wells were redrilled and filled with grout. The hill side next to which the test was done was re-graded and seeded with grass seeds.

Task 11: Data Review and Economic Analysis

Gas sample data was reduced in September. Tables and graphs of the gas phase concentration of selected target contaminants were made.

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October 26, 1995

Task 12: Reports

There was no new activity on this task.

1.4 OTHER ACTIVITIES

There was no other activity to report

1.5 PLAN FOR OCTOBER

- Transport Equipment Trailer to Chicago
- Continue with Data review
- Tabulate and present summaries of results of soil and gas sample analysis
- Present temperature data graphics

2. SUMMARY REPORT

A summary report of the cost status is given in Table 1 for the cost accounting period ending 9/30/95. A summary Labor Report has not been submitted because a labor plan is not required.

As has been mentioned earlier, IITRI's accounting system produces cost sheet every four weeks. These reports follow a periodic cycle which does not coincide with the calendar months. In many cases the cost accounting cycle straddles two months. The actual cost incurred per cycle is summarized in Table 2, which also gives a pro-rated estimate of the cost incurred per calendar month. It is this pro-rated estimate of the monthly cost which is plotted in the actual cost graph shown in Table 1.

The planned expenditure shown in these tables is based on the revised Cost Plan dated March 6, 1995.

3. MILESTONE SCHEDULE AND STATUS REPORT

Figure 1 illustrates the schedule and the percent completion of the active tasks through September, 1995. This figure also presents projected schedule for the successor tasks which is based on the Milestone Plan prepared in March 1995. Table 3 gives a Milestone log showing the planned completion dates versus an estimate of percent completion.

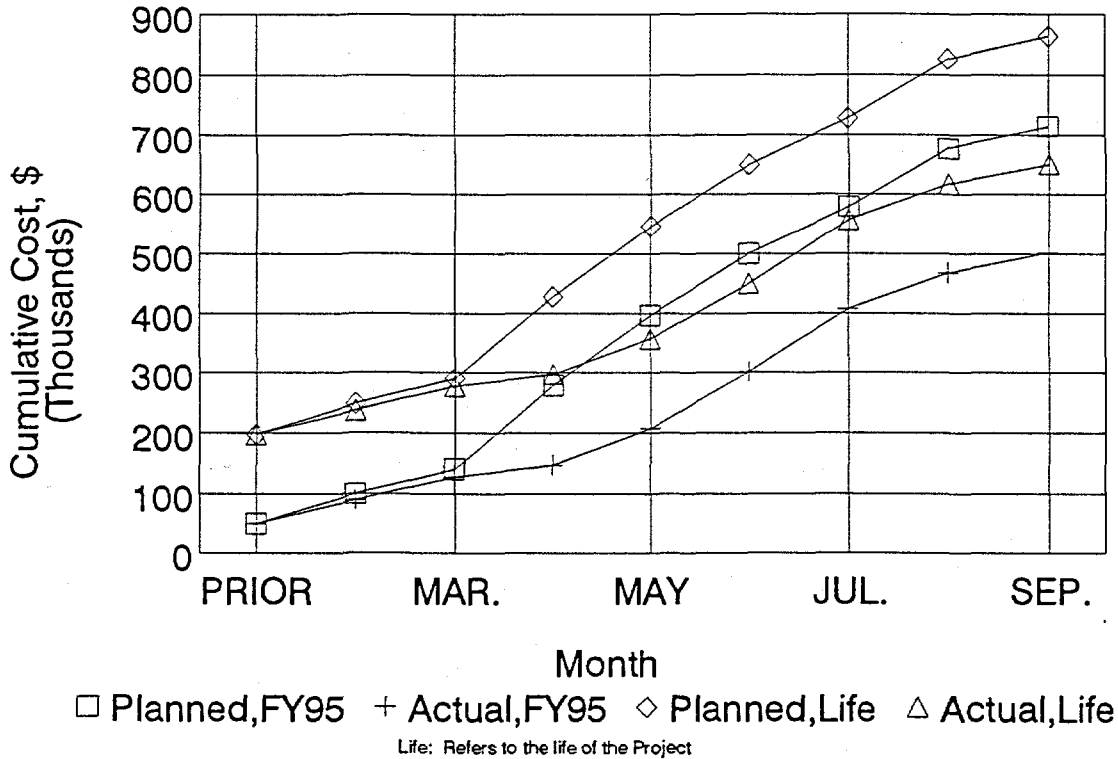
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 October 26, 1995

TABLE 1. SUMMARY REPORT

Contract No.	DE-AC05-93OR22160	PROGRAM/PROJECT TITLE	REPORTING PERIOD (Technical)	September 1995
		Demonstration Testing and	REPORTING PERIOD (Cost)	thru 9/30/95
PARTICIPANT NAME & ADDRESS		Evaluation of In Situ Heating of Soil	START DATE:	09/30/93
IIT Research Institute			COMPLETION DATES:	01/30/96 extension requested
10 W., 35th Street				
Chicago, IL 60616				

FISCAL YEAR	1995 COST STATUS	\$ EXPRESSED IN:	THOUSANDS
Budget & Reporting No.			
Cost plan date	03/06/95	Actual Costs Prior Years	149.27 for FY'94
Total Estimated Cost for Contract	863	Planned Costs Prior Years	for FY'94
Total Contract Value	863		
Estimated Subsequent Reporting Period	for SEP. '95 Subsequent Cost Reporting Period:		10/1/95 to 10/29/95
Estimated Cost Commitments	108.9 not included in figure below		

PROJECT COST, PLANNED VERSUS ACTUAL
 (Cumulative Costs)



MILESTONE STATUS THROUGH AUGUST '95

MILESTONE	Dates			Percent Completed End of Reporting Period
	Planned Completion	Planned Completion Original	Actual Completion Rev. 1	
1 Submit All Documents		12/17/93	02/01/95	01/31/95 100%
2 All Permits Received		03/23/94	02/01/95	01/31/95 100%
3 Shakedown Completed		06/08/94	05/15/95	06/13/95 100%
4 Final Report Submitted		09/30/94	Sep-95	0%

TABLE 2. ESTIMATE OF COST BY CALENDAR MONTH

Cost Accounting				DATA THROUGH END OF COST ACCOUNTING PERIOD 13, FY'95												
Period No.	Period Dates		Actual Cost \$	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	
	Start	End														
FY 94	1	10/01/93	10/29/93													
	2	10/30/93	11/26/93													
	3	11/27/93	12/23/93													
	4	12/24/93	01/21/94													
	5	01/22/94	02/18/94													
	6	02/19/94	03/18/94													
	7	03/19/94	04/15/94													
	8	04/16/94	05/13/94													
	9	05/14/94	06/10/94													
	10	06/11/94	07/08/94													
	11	07/09/94	08/05/94													
	12	08/06/94	09/02/94													
	13	09/03/94	09/30/94													
FY 95	1	10/01/94	10/30/94	11201												
	2	10/31/94	11/27/94	5089												
	3	11/28/94	12/25/94	12007												
	4	12/26/94	01/22/95	15587.03			13507									
	5	01/23/95	02/19/95	34452.56			5170	29283								
	6	02/20/95	03/19/95	27908.61				10880	17029							
	7	03/20/95	04/16/95	26401.25					21892	4509						
	8	04/17/95	05/14/95	42186.84						15618	26569					
	9	05/15/95	06/11/95	72815.69							33410	39406				
	10	06/12/95	07/09/95	98992.25								53461	45531			
	11	07/10/95	08/06/95	66048.7									61510.46	4538.24		
	12	08/07/95	09/03/95	55624.54										55624.54		
	13	09/04/95	09/30/95	33707.16											33707.16	
FY 96	1	10/01/95	10/28/95													
	2	10/29/95	11/25/95													
	3	11/26/95	12/23/95													
	4	12/24/95	01/20/96													
	5	01/21/96	02/17/96													
	6	02/18/96	03/16/96													
	7	03/17/96	04/13/96													
		04/14/96	05/11/96													
Total Cost				651295.52	11200.75	5089.40	14087.42	18677.03	40162.56	38920.61	20126.82	59978.82	92867.07	107041.78	60162.78	33707.16
Cumulative Cost by Month					160474	165563	179651	198328	238490	277411	297538	357517	450384	557426	617588	651296
Cumulative Cost, thousands					160.47	165.56	179.65	198.33	238.49	277.41	297.54	357.52	450.38	557.43	617.59	651.30
FY'94 Cost				149273.32												
FY'95 Cost				502022.20												
FY'96 Cost				0												

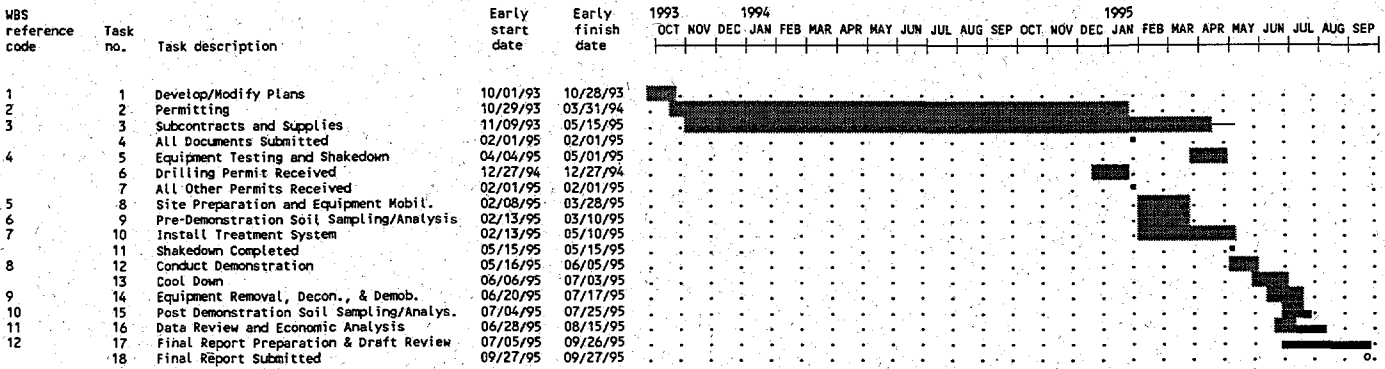
TABLE 2. ESTIMATE OF COST BY CALENDAR MONTH

Cost Accounting				Period Actual Cost \$	DATA FOR FISCAL YEAR '94											
Period No.	Period Dates		Actual Cost \$		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	Start	End														
FY 94	1	10/01/93	10/29/93	5233.68	5234											
	2	10/30/93	11/26/93	19837.48		19837										
	3	11/27/93	12/23/93	12226.65		1223	11004									
	4	12/24/93	01/21/94	5380.66			1614	3766								
	5	01/22/94	02/18/94	16437.88			4931	11507								
	6	02/19/94	03/18/94	12296.99				3357	8940							
	7	03/19/94	04/15/94	19855.18					9928	9928						
	8	04/16/94	05/13/94	8780.20						5356	3424					
	9	05/14/94	06/10/94	1615.07							1486	129				
	10	06/11/94	07/08/94	11311.70								9079	2233			
	11	07/09/94	08/05/94	10775.23									6142	4633		
	12	08/06/94	09/02/94	17617.48										17617		
	13	09/03/94	09/30/94	7905.12												7905
FY 95	1	10/01/94	10/30/94	11200.75												
	2	10/31/94	11/27/94	5089.40												
	3	11/28/94	12/25/94	12007.42												
	4	12/26/94	01/22/95	15587.03												
	5	01/23/95	02/19/95	34452.56												
	6	02/20/95	03/19/95	27908.61												
	7	03/20/95	04/16/95	26401.25												
	8	04/17/95	05/14/95	42186.84												
	9	05/15/95	06/11/95	72815.69												
	10	06/12/95	07/09/95	98992.25												
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	2	10/29/95	11/25/95													
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	4	12/24/95	01/20/96													
	5	01/21/96	02/17/96													
	6	02/18/96	03/16/96													
	7	03/17/96	04/13/96													
		04/14/96	05/11/96													
Total Cost				651295.52	5233.68	21060.15	12618.18	8697.83	14863.59	18867.50	15283.51	4910.14	9207.98	8374.81	22250.83	7905.12
Cumulative Cost by Month					5234	26294	38912	47610	62473	81341	96624	101535	110743	119117	141368	149273
Cumulative Cost, thousands					5.23	26.29	38.91	47.61	62.47	81.34	96.62	101.53	110.74	119.12	141.37	149.27
FY'94 Cost				149273.32												
FY'95 Cost				502022.20												
FY'96 Cost				0												

10/26/95
13:00:17

IIT Research Institute
Project Gantt Chart Report
DT&E OF IN SITU SOIL HEATING

Frame: 1
Page: 1



<p>Symbol Legend</p> <ul style="list-style-type: none"> █ CRITICAL TASK ▬ Non-critical task --- Float time █ Completed task ○ Non-completed milestone ■ Completed milestone T Today's date 	<p>Project: DT&E OF IN SITU SOIL HEATING</p> <p>Leader: G. Sresty</p> <p>Date: 10/26/95 13:00:17</p> <p>Notes:</p>
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Figure 1. Project Schedule and Progress Through September 1995.

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 October 26, 1995

IIT Research Institute Project No. 006787
 IIT RIF Contract No. DE-AC05-90OR2160

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TABLE 3. MILESTONE LOG

No.	Milestone	Completion Date			Completed Through August 1995 %
		Original Plan	Plan Revision 2	Actual	
2.8	Submit All Documents	12/17/93	2/1/95	Jan 1995	100%
	All Permits Received	3/23/94	2/1/95	Jan 1995	100%
7.4	Shakedown Completed	6/8/94	5/15/95	June 1995	100%
12.6	Final Report Submitted	9/30/94	9/27/95		

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October 26, 1995

4. COST MANAGEMENT REPORT

Table 4 gives the cost management report for accounting period ending on 9/30/1995.

If you should have any questions please call Mr Guggilam Sresty at 312/567 4232 or me at 312/567 4257.

Very truly yours,



Harsh Dev
Science Advisor
Energy and Environmental Sciences

Approved:



Guggilam C. Sresty
Manager
Energy and Environmental Sciences

TABLE 4. COST MANAGEMENT REPORT FOR ACCOUNTING PERIOD ENDING SEPTEMBER 30, 1995

TITLE Demonstration, Testing and Evaluation of Insitu Healing of Soil
 PARTICIPANT NAME & ADDRESS
 IIT Research Institute
 10 W. 35th Street,
 Chicago, IL 60616

THIS REPORTING PERIOD:(technical)
 ACTUAL COST DATA
 COST PLAN DATE:
 SUBSEQUENT REPORTING PERIOD

September '95
 9/4/95 to 9/30/95
 03/06/95
 cost data through 10/29/95
 Technical through October '95

IDENTIFICATION NO.
 START DATE:
 COMPLETION DATES:

DE-AC05-93OR22160
 09/30/93
 09/30/95
 per contract
 projected
 Jan-96

Cost Commitments of \$108,861 not included in accrued cost below

ELEMENT CODE	REPORTING ELEMENT	REPORTING PERIOD		ACCUMULATIVE		Subsequent Reporting Period	Balance of Fiscal Year	ESTIMATED ACCRUED COST			Total Contract Value	Variance	
		Actual thru 9/30/95	Plan Sept. '95	Actual thru 9/30/95	Plan thru Sept. '95			(1)	(2)	(3)			Fiscal Years to Completion
1	DT&E of Insitu Healing of Soil	\$33,707	\$98,000	\$651,296	\$863,765	\$15,000 *	\$197,468	\$0	\$0	\$0	\$863,764	\$863,764	\$0
Total		\$33,707	\$98,000	\$651,296	\$863,765	\$15,000	\$197,468	\$0	\$0	\$0	\$863,764	\$863,764	\$0
DOLLARS EXPRESSED IN: Actual to nearest dollar Plan rounded to nearest ten dollars		SIGNATURE OF PARTICIPANTS PROJECT MANAGER AND DATE <i>[Signature]</i> 10/27/95		SIGNATURE OF PARTICIPANTS AUTHORIZED FINANCIAL REPRESENTATIVE & DATE <i>[Signature]</i> 10/26/95									

* Estimated Amount. Cost Plan Revision 2 Covers period only through September 30, 1995

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