OFF: (505) 325-5667

ON SITE

TECHNOLOGIES, LTD.

LAB: (505) 325-1556

Denny G. Foust
DEPUTY OIL & GAS INSPECTOR
OCT 11 9 1996

Approved

PIT REMEDIATION & CLOSURE REPORT

for

G-09-26N-18W

Navajo Tocito # 1

Prepared for

Reading & Bates
901 Threadneedle, Suite 200
Houston, Texas 77079

Prepared by

On Site Technologies, Ltd.
612 East Murray Drive
Farmington, New Mexico 87401

July 23, 1996

RECEIVED
AUG - 7 1996
OIL CON. DIV.
DIST. 3

OFF: (505) 325-5667

ON SITE

LAB: (505) 325-1556

TECHNOLOGIES, LTD.

PIT REMEDIATION FOR READING & BATES

NAVAJO TOCITO # 1

JULY 10, 1996

Robert Crabb of On Site Technologies delivered a letter to Navajo Tribal Utilities Authority requesting NTUA to remove the three transformers on location at the Navajo Tocito # 1. NTUA informed that they will get to it in a week or so and that Reading & Bates will be responsible for the cost of removing them. (See Exhibit C)

Robert Crabb of On Site Technologies, Ltd., arrived at the site at 2:00 PM. Had the backhoe dig down to 10 feet. At this point, contaminated soil was encountered. A BTEX and TPH sample was taken. (See Exhibit A) The horizontal extent of the plume was not defined at this time. Mr. Crabb returned to On Site Technologies Laboratory and signed in the sample for analysis.

Mr. Crabb and Mrs. Gray spoke with Bill Liese with the Farmington Bureau of Land Management. Mr. Liese was briefed on the days events. Mr. Liese stated that since we have not reached ground water, the minimum clean up will suffice. This will consist of digging out the contaminated soil, aerating and mixing it with clean soil (dilution), and placing it back in the hole. Arrangements were made for Mr. Crabb to meet Mr. Liese on the location the following morning at 9:30 AM.

Mr. Crabb and Mrs. Gray spoke via telephone with Mr. Kennedy with Reading and Bates and briefed him on the situation. He was told that we were going to use the backhoe to find the vertical and horizontal extent of the plume the following morning and we would then contact him to update and decide what should be done at that point.

Mr. Crabb and Mrs. Gray then spoke to Mr. James Miles with the Indian Mineral Management Office in Farmington and briefed him on the situation. Mr. Miles was unable to be at the location the following morning, but indicated that since Mr. Liese with the BLM was going to be there, it was all right with him. Mr. Miles stated that he would prefer that all roads be left as is, due to the fact that the local people in the area use the roads for herding their cattle and sheep. Mr. Miles requested that only the pad be re-seeded. Re-seeding will be done during the month of September or October to meet BLM and Indian Mineral Management guidelines.

JULY 11, 1996

Mr. Crabb arrived on location at 9:15 AM. Also present were contractor personnel and Mr. Bill Liese with the BLM. Excavation was begun on the pit to define the vertical and horizontal extent of the plume. Four trenches were dug (one on each side of the pit). The horizontal extent was found to be 12 feet north and south and 14 feet east and west. Excavation was then accomplished in the middle of the pit to a total depth of 15 feet. Of the total of 15 feet in depth, the first ten feet was non contaminated sand. The remaining five feet was contaminated soil. At this point, Mr. Liese made the decision that we should dilute the contaminated soil with clean soil on site and refill the hole. It was decided by all parties that the most feasible manner to complete the project, would be to obtain a trackhoe, since the backhoe had reached the limit as far as depth and the vertical extent of the plume has yet to be defined. Mr. Crabb made arrangements to schedule the trackhoe and estimated the cost to complete the job to meet BLM requirements.

Four PID readings were taken during the day. Samples # 1 & 2 had readings >2500 PPM, sample # 3 was 1200 PPM and # 4 was 943 PPM. All four PID samples were taken at a depth of 15 feet. A sample for TPH was also taken at the 15 foot depth (See Exhibit A)

The estimate for the remaining work to be done was telephoned to Reading & Bate's office in Houston and Ms. Joan Cobb gave approval to proceed with the remediation.

July 15, 1996

Mr. Crabb arrived at the site at 9:15 AM. The backhoe continued to mix and fluff the material that had been removed thus far. PID reading of the mix was 246 PPM. The backhoe could reach only to 16 feet. We encountered a light gray shale at this point. The PID reading for this shale was 417 PPM. Mr. Crabb related these PID readings to Mr. Bill Liese with the BLM, via mobile phone at 9:55 AM and Mr. Liese instructed Mr. Crabb to continue as planned and take TPH/BTEX samples when we reach the extent of the vertical contamination or bedrock (which ever comes first) and to take a TPH/BTEX sample of the mix that is going back into the hole.

The low PID readings indicate that the contaminated soil is high in volatiles and low in heavy hydrocarbons. The contaminated soil showed rapid decrease in PID readings as soon as it was exposed and aerated. A contaminated sample was run on the PID and measured > 2500 PPM. After

exposing this same sample to air and sunlight for one hour, the PID reading was 517, placing it well within the 5,000 TPH limit.

The trackhoe arrived at 12:30 PM. We began excavation to find the vertical extent of the plume. Sandstone bedrock was encountered at 22 feet at 1:00 PM. A PID reading was taken from a bedrock sample. This sample showed to be 51 PPM. A laboratory sample for TPH/BTEX was taken from the bedrock. The trackhoe then began digging outward to define the horizontal extent of the plume. The backhoe continued to mix and fluff the backfill. When the horizontal extent was reached, PID readings were taken on each of the four walls at a depth of 22 feet. The north wall was 64.7 PPM, west wall was 74.1 PPM, south wall 77.7 PPM and the east wall was 97.6 PPM. A composite of all four walls was taken for a TPH/BTEX sample for laboratory analysis at the 22 foot level. The PID reading for a like composite was 77 PPM. In addition, a five point composite was then taken from the treated soil for TPH/BTEX laboratory analysis also. A like sample for a PID reading indicated 82.1 PPM. A total of 509 cubic yards of soil was removed from the pit. (See Exhibit B)

The pit was secured with proper temporary fencing and work was halted for the day. Personnel left the area at 4:30 PM.

July 16, 1996

The trackhoe and backhoe continued to treat the removed soil. When this was completed, we began to backfill the hole. The site was contoured and cleaned. The project was completed at 12:30 PM.

SIGNATURES:

I do hereby acknowledge that the above information is true and accurate to the best of my knowledge and that the project was completed on July 16, 1996.

Robert L. Crabb
On Site Technologies, Ltd.
Agent for Reading & Bates

Date 7/23/96

I do hereby acknowledge that Reading & Bates authorized On Site Technologies, Ltd. to perform the work described in this report and that Reading & Bates has reviewed this report and agrees with the data included and that Reading & Bates is responsible for further costs of re-seeding and removal of the transformers by Navajo Tribal Utilities Authority.

John Kennedy, Vice President
Materials Management
Reading & Bates

Date 7-25-96

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: Reading & Bates (R & B) Telephone: 713-496-9994

Address: 901 Threadneedle, Suite 200, Houston, TX 77079

Facility Or: Navajo-Tocito # 1
Well Name

Location: Unit or Qtr/Qtr: SW/4NE/4 Sec: 9 T-26-N R-18-W County: San Juan

Pit Type: Separator____ Dehydrator____ Other Tank Drain

Land Type: BLM____, State____, Fee____, Other: **Navajo Tribal**

Pit Location: (Attach diagram)
Pit dimensions: length **25 feet**, width **25 feet**, depth **22 feet**

Reference: wellhead_____, other: **Dry Hole Marker**

Footage from reference: **132**

Direction from reference: **6** Degrees **X** East North **X** West South _____ of

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet	(20 points)
	50 feet to 99 feet	(10 points)
	Greater than 100 feet	(0 points) ___0__
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes	(20 points)
	No	(0 points) ___0__
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet	(20 points)
	200 feet to 1000 feet	(10 points)
	Greater than 1000 feet	(0 points) __0___
	RANKING SCORE (TOTAL POINTS):	__0__

Date Remediation Started: July 11, 1996 Date Completed: July 16, 1996

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 509

Landfarmed _____ Insitu Bioremediation _____

Other: Dilution & Aeration

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite X Offsite ___

General Description Of Remedial Action: Contaminated soil was present in a 25 foot by 25 foot area horizontally with a vertical extent of 22 feet. The PID readings were such that TPH levels for this 5,000 area were easily met (see attached report). The excavated soil was mixed and treated with clean soil and replaced into the pit. Laboratory analyses are also attached to this form for review.

Ground Water Encountered: No X Yes ____ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location: SEE ATACHMENT (Exhibits A, B & D)

Sample depth _____

Sample date _____ Sample time _____

Sample Results

Benzene (ppm) _____

Total BTEX (ppm) _____

Field headspace (ppm) _____

TPH _____

Ground Water Sample: Yes ____ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

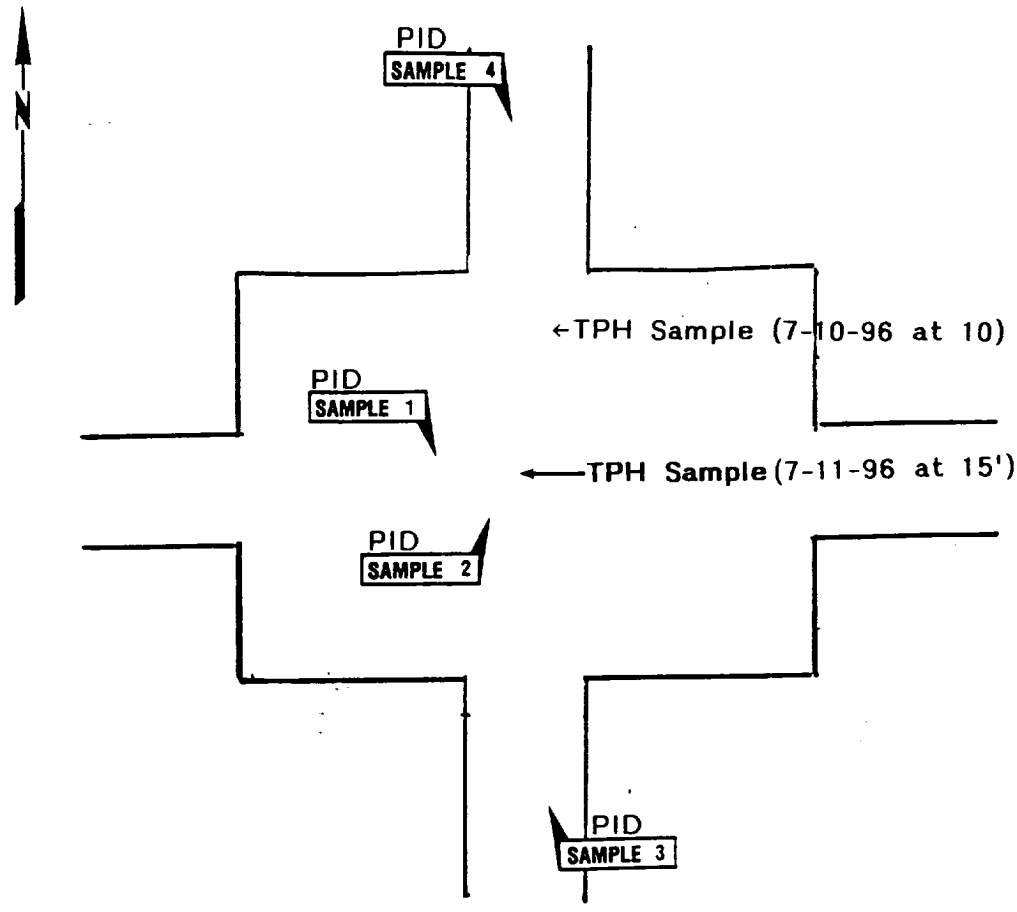
DATE July 23, 1996

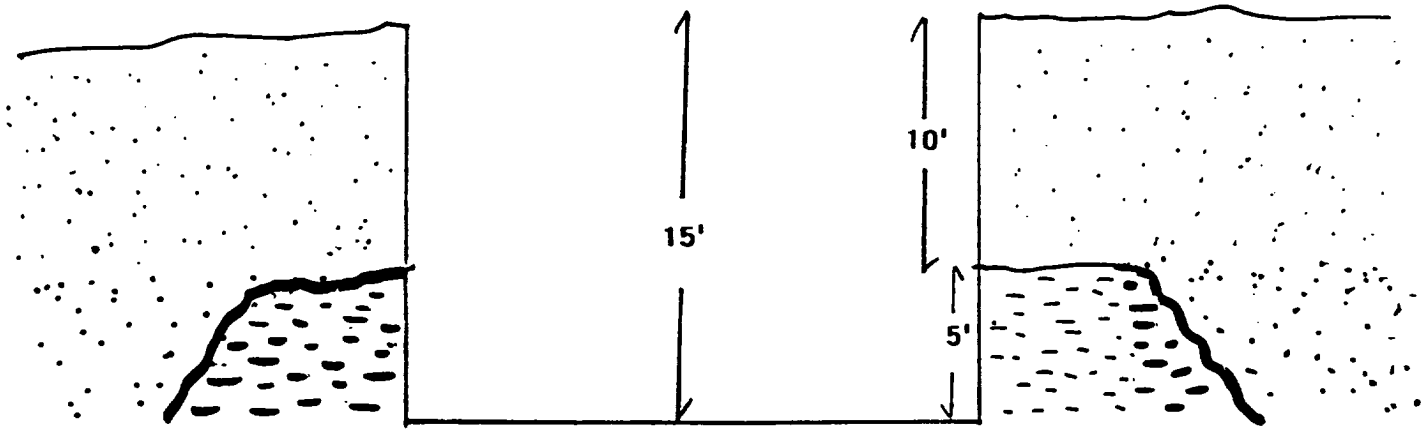
SIGNATURE [signature] PRINTED NAME Robert L. Crabb, Agent for R & B AND TITLE Field Tech. On Site Technologies, Ltd

APPENDICES

Exhibit A	Diagram of Excavation 7-11-96
Exhibit B	Diagram of Samples Taken 7-15-96
Exhibit C	Copy of Letter to NTUA
Exhibit D	Laboratory Analyses
Exhibit E	Photographs

Results of Excavation July 11, 1996



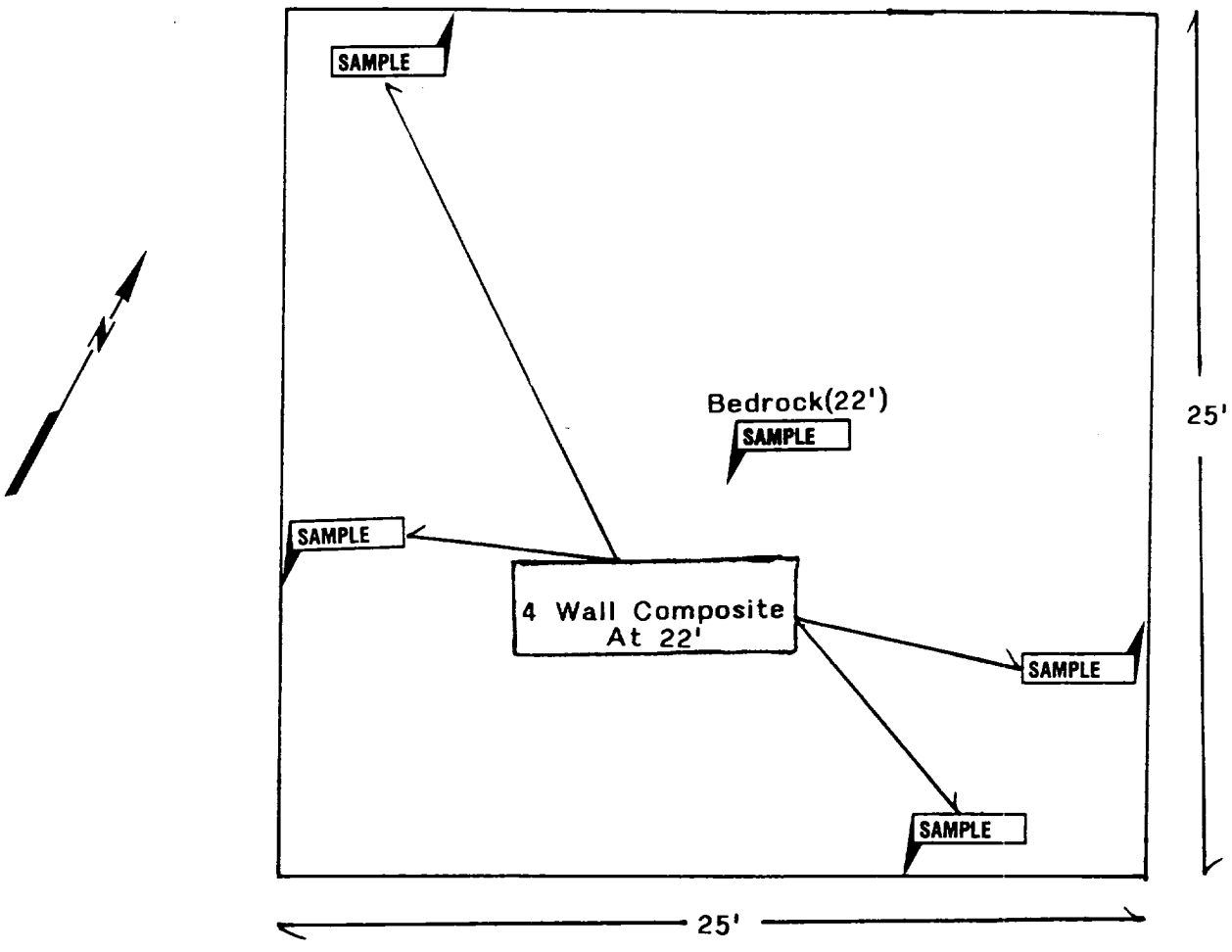


Cross Section Looking North

Clean Soil

Contaminated Soil

EXHIBIT A



Samples Taken on 7-15-96

EXHIBIT B

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

July 10, 1996

Mr. Ralph Atcitty
NTUA
District Office
Shiprock, NM 87420

COPY

Dear Mr. Atcitty:

On Site Technologies, Ltd. has been retained by Reading & Bates to do a clean up and remediation of two abandoned well locations in the Tocito Field area. One of the locations has a power pole with two transformers on it. James Miles with the Indian Minerals Management Office in Farmington, New Mexico has requested that the two transformers be removed. The purpose of this letter is to request NTUA to issue a work order to remove said transformers.

The location of the transformers is on the Navajo Tocito No. 1, located in the SW/4NE/4 of Section 9, Township 26 North, Range 18 West, NMPM, San Juan County, New Mexico. A copy of a photograph of the location is enclosed.

Sincerely,

Robert L. Crabb
On Site Technologies, Ltd.
Agent for Reading & Bates

EXHIBIT D

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

TPH - Gasoline / Diesel Range Organics

Attn: *Cindy Gray*
Company: *On Site Technologies, Ltd.*
Address: *612 E. Murray Drive*
City, State: *Farmington, NM 87401*

Date: 12-Jul-96
COC No.: *4264*
Sample No. *11480*
Job No. *4-1293*

Project Name: ***Reading & Bates***
Project Location: ***Navajo Tocito #1***
Sampled by: RLC Date: 10-Jul-96 Time: 14:15
Analyzed by: DC/HR Date: 12-Jul-96
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	1279.7	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	7406.7	mg/kg	5.0	mg/kg
TOTAL	8686.4	mg/kg		

Quality Assurance Report

GRO QC No.: *0461-STD*
DRO QC No.: *0475-STD*

Calibration Check

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Gasoline Range (C5 - C9)	<50	ppb	1,350	1,353	0.2	15%
Diesel Range (C10 - C28)	<5.0	ppm	2,000	1,832	8.4	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	102	109	(70-130)	5	20%
Diesel Range (C10-C28)	107	106	(70-130)	0	20%

Method *- SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by:
Date: 7/12/96

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

Attn:	*Cindy Gray*	Date:	12-Jul-96
Company:	*On Site Technologies, Ltd.*	*COC No.:*	*4264*
Address:	*612 E. Murray Drive*	*Sample No.*	*11480*
City, State:	*Farmington, NM 87401*	*Job No.*	*4-1293*

Project Name:	***Reading & Bates***				
Project Location:	***Navajo Tocito #1***				
Sampled by:	RLC	Date:	10-Jul-96	Time:	14:15
Analyzed by:	HR	Date:	11-Jul-96		
Sample Matrix:	*Soil*				

Laboratory Analysis

Component	*Result*	*Units of Measure*	*Detection Limit*	*Units of Measure*
Benzene	3656.6	ug/kg	0.2	ug/kg
Toluene	4382.4	ug/kg	0.2	ug/kg
Ethylbenzene	18123.7	ug/kg	0.2	ug/kg
m,p-Xylene	115656.0	ug/kg	0.2	ug/kg
o-Xylene	38437.8	ug/kg	0.2	ug/kg
TOTAL	180256.5	ug/kg		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: DaG
Date: 7/12/96

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 11-Jul-96

Internal QC No.: 0444-STD
Surrogate QC No.: 0445-STD
Reference Standard QC No.: 0355-STD

Method Blank

Analyte	Result	Units of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Analyte	Units of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20.0	19.7	2	15%
Toluene	ppb	20.0	20.0	0	15%
Ethylbenzene	ppb	20.0	20.0	0	15%
m,p-Xylene	ppb	40.0	39.2	2	15%
o-Xylene	ppb	20.0	19.8	1	15%

Matrix Spike

Analyte	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	100	105	(39-150)	3	20%
Toluene	100	103	(46-148)	2	20%
Ethylbenzene	98	102	(32-160)	3	20%
m,p-Xylene	96	100	(35-145)	2	20%
o-Xylene	97	100	(35-145)	2	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovery	(70-130)	
11480-4264	97	

S1: Flourobenzene

ON SITE TECHNOLOGIES, LTD.

CHAIN OF CUSTODY RECORD

4264

Date: 7-10-96

Page 1 of 1

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.: | Job No. 4-1213

SEND INVOICE TO

Name [illegible] BATES

Company | Dept.

Address

City, State, Zip

REPORT RESULTS TO

Name [illegible] | Title

Company

Mailing Address

City, State, Zip

Telephone No. | Telefax No.

Sampling Location: [illegible]

Sampler: RAC

Number of Containers

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	418.1	418.1 M	LAB ID
[illegible] #1	[illegible]	[illegible]	[illegible]	[illegible]	✓	✓	[illegible]

Relinquished by: [signature] | Date/Time 7-10-96 1:45 | Received by: | Date/Time

Relinquished by: | Date/Time | Received by: | Date/Time

Relinquished by: | Date/Time | Received by: | Date/Time

Method of Shipment:

Authorized by: [signature] (Client Signature Must Accompany Request) | Date 7-10-96

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

TPH - Gasoline / Diesel Range Organics

Attn:	*Cindy Gray*	Date:	15-Jul-96
Company:	*On Site Technologies, Ltd.*	*COC No.:*	*4265*
Address:	*612 E. Murray Drive*	*Sample No.*	*11484*
City, State:	*Farmington, NM 87401*	*Job No.*	*4-1293*

Project Name:	***Reading & Bates - Navajo Tocito #1***				
Project Location:	***Navajo Tocito #2***				
Sampled by:	RLC	Date:	11-Jul-96	Time:	11:10
Analyzed by:	DC/HR	Date:	15-Jul-96		
Sample Matrix:	*Soil*				

Laboratory Analysis

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Gasoline Range Organics (C5 - C9)	1537.9	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	6007.2	mg/kg	5.0	mg/kg
TOTAL	7545.1	mg/kg		

Quality Assurance Report

GRO QC No.: *0461-STD*
DRO QC No.: *0475-STD*

Calibration Check

Parameter	*Method Blank*	*Unit of Measure*	*True Value*	*Analyzed Value*	*% Diff*	*Limit*
Gasoline Range (C5 - C9)	<50	ppb	1,350	1,353	0.2	15%
Diesel Range (C10 - C28)	<5.0	ppm	2,000	1,832	8.4	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*%RSD*	*Limit*
Gasoline Range (C5-C9)	102	109	(70-130)	5	20%
Diesel Range (C10-C28)	107	106	(70-130)	0	20%

Method - *SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by:
Date:

CHAIN OF CUSTODY RECORD

4265

ON SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 7-11-96

Page 1 of 1

Purchase Order No.:	Job No. 21-1293		
SEND INVOICE TO: Name	Reading & Bates	REPORT RESULTS TO: Name	Cindy / Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location: Navajo Tucker #1			
Sampler:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	4015	LAB ID
Navajo Tucker #1	7-11	1110	Sand	X	1	✓	

ANALYSIS REQUESTED

Relinquished by:	Date/Time 7-11-96 1:55	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Method of Shipment:			
Authorized by: (Client Signature Must Accompany Request)	Date 7-11-96		

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

TPH - Gasoline / Diesel Range Organics

Attn:	Cindy Gray	Date:	17-Jul-96
Company:	On Site Technologies, Ltd.	COC No.:	4267
Address:	612 E. Murray Drive	Sample No.	11529
City, State:	Farmington, NM 87401	Job No.	4-1293

Project Name:	**Reading & Bates - Navajo Tocito #1**				
Project Location:	**TD-22' Bedrock**				
Sampled by:	RLC	Date:	15-Jul-96	Time:	13:10
Analyzed by:	DC/HR	Date:	16-Jul-96		
Sample Matrix:	Soil				

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	186.5	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	1292.1	mg/kg	5.0	mg/kg
TOTAL	1478.7	mg/kg		

Quality Assurance Report

GRO QC No.: 0467-STD

DRO QC No.: 0479-STD

Calibration Check

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Gasoline Range (C5 - C9)	<50	ppb	1,350	1,173	13.1	15%
Diesel Range (C10 - C28)	<5.0	ppm	2,000	1,861	6.9	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	102	109	(70-130)	5	20%
Diesel Range (C10-C28)	107	106	(70-130)	0	20%

Method - *SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by: DC

Date: 7/18/96

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

Attn:	*Cindy Gray*	Date:	17-Jul-96
Company:	*On Site Technologies, Ltd.*	*COC No.:*	*4267*
Address:	*612 E. Murray Drive*	*Sample No.*	*11529*
City, State:	*Farmington, NM 87401*	*Job No.*	*4-1293*

Project Name:	***Reading & Bates - Navajo Tocito #1***				
Project Location:	***TD-22' Bedrock***				
Sampled by:	RLC	Date:	15-Jul-96	Time:	13:10
Analyzed by:	HR	Date:	16-Jul-96		
Sample Matrix:	*Soil*				

Laboratory Analysis

Component	*Result*	*Units of Measure*	*Detection Limit*	*Units of Measure*
Benzene	134.1	ug/kg	0.2	ug/kg
Toluene	445.0	ug/kg	0.2	ug/kg
Ethylbenzene	2070.6	ug/kg	0.2	ug/kg
m,p-Xylene	11832.4	ug/kg	0.2	ug/kg
o-Xylene	3015.7	ug/kg	0.2	ug/kg
TOTAL	17497.9	ug/kg		

Method *- SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by:
Date: 7/18/96

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

TPH - Gasoline / Diesel Range Organics

Attn:	*Cindy Gray*	Date:	17-Jul-96
Company:	*On Site Technologies, Ltd.*	*COC No.:*	*4267*
Address:	*612 E. Murray Drive*	*Sample No.*	*11530*
City, State:	*Farmington, NM 87401*	*Job No.*	*4-1293*

Project Name:	***Reading & Bates - Navajo Tocito #1***				
Project Location:	***5pt. Composite - Mixed Soil***				
Sampled by:	RLC	Date:	15-Jul-96	Time:	16:15
Analyzed by:	DC/HR	Date:	16-Jul-96		
Sample Matrix:	*Soil*				

Laboratory Analysis

Parameter	*Result*	*Unit of Measure*	*Detection Limit*	*Unit of Measure*
Gasoline Range Organics (C5 - C9)	109.3	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	1519.3	mg/kg	5.0	mg/kg
TOTAL	1628.5	mg/kg		

Quality Assurance Report

GRO QC No.: *0467-STD*
DRO QC No.: *0479-STD*

Calibration Check

Parameter	*Method Blank*	*Unit of Measure*	*True Value*	*Analyzed Value*	*% Diff*	*Limit*
Gasoline Range (C5 - C9)	<50	ppb	1,350	1,173	13.1	15%
Diesel Range (C10 - C28)	<5.0	ppm	2,000	1,861	6.9	15%

Matrix Spike

Parameter	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*%RSD*	*Limit*
Gasoline Range (C5-C9)	102	109	(70-130)	5	20%
Diesel Range (C10-C28)	107	106	(70-130)	0	20%

Method *- SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by:
Date: 7/19/96

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

Attn: *Cindy Gray*
Company: *On Site Technologies, Ltd.*
Address: *612 E. Murray Drive*
City, State: *Farmington, NM 87401*

Date: 17-Jul-96
COC No.: *4267*
Sample No. *11530*
Job No. *4-1293*

Project Name: ***Reading & Bates - Navajo Tocito #1***
Project Location: ***5pt. Composite - Mixed Soil***
Sampled by: RLC Date: 15-Jul-96 Time: 16:15
Analyzed by: HR Date: 16-Jul-96
Sample Matrix: *Soil*

Laboratory Analysis

Component	*Result*	*Units of Measure*	*Detection Limit*	*Units of Measure*
Benzene	129.4	ug/kg	0.2	ug/kg
Toluene	103.2	ug/kg	0.2	ug/kg
Ethylbenzene	1270.4	ug/kg	0.2	ug/kg
m,p-Xylene	7562.7	ug/kg	0.2	ug/kg
o-Xylene	1711.6	ug/kg	0.2	ug/kg
TOTAL	10777.2	ug/kg		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by:
Date: 7/19/96

OFF: (505) 325-5667

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TPH - Gasoline / Diesel Range Organics

Attn: Cindy Gray
Company: On Site Technologies, Ltd.
Address: 612 E. Murray Drive
City, State: Farmington, NM 87401

Date: 17-Jul-96
COC No.: 4267
Sample No. 11531
Job No. 4-1293

Project Name: **Reading & Bates - Navajo Tocito #1**
Project Location: **4 Wall Composite**
Sampled by: RLC Date: 15-Jul-96 Time: 16:00
Analyzed by: DC/HR Date: 17-Jul-96
Sample Matrix: Soil

Laboratory Analysis

Parameter	Result	Unit of Measure	Detection Limit	Unit of Measure
Gasoline Range Organics (C5 - C9)	103.2	mg/kg	5.0	mg/kg
Diesel Range Organics (C10 - C28)	771.3	mg/kg	5.0	mg/kg
TOTAL	874.5	mg/kg		

Quality Assurance Report

GRO QC No.: 0467-STD
DRO QC No.: 0479-STD

Calibration Check

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	% Diff	Limit
Gasoline Range (C5 - C9)	<50	ppb	1,350	1,173	13.1	15%
Diesel Range (C10 - C28)	<5.0	ppm	2,000	1,912	4.4	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Gasoline Range (C5-C9)	102	109	(70-130)	5	20%
Diesel Range (C10-C28)	107	106	(70-130)	0	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by:
Date: 7/18/96

OFF: (505) 325-5667

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-1556

AROMATIC VOLATILE ORGANICS

Attn:	*Cindy Gray*	Date:	17-Jul-96
Company:	*On Site Technologies, Ltd.*	*COC No.:*	*4267*
Address:	*612 E. Murray Drive*	*Sample No.*	*11531*
City, State:	*Farmington, NM 87401*	*Job No.*	*4-1293*

Project Name:	***Reading & Bates - Navajo Tocito #1***				
Project Location:	***4 Wall Composite***				
Sampled by:	RLC	Date:	15-Jul-96	Time:	16:00
Analyzed by:	HR	Date:	16-Jul-96		
Sample Matrix:	*Soil*				

Laboratory Analysis

Parameter	*Result*	*Units of Measure*	*Detection Limit*	*Units of Measure*
Benzene	15.0	ug/kg	0.2	ug/kg
Toluene	95.9	ug/kg	0.2	ug/kg
Ethylbenzene	962.8	ug/kg	0.2	ug/kg
m,p-Xylene	5438.9	ug/kg	0.2	ug/kg
o-Xylene	201.7	ug/kg	0.2	ug/kg
TOTAL	6714.3	ug/kg		

Method *- SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: DaG
Date: 7/18/96

OFF: (505) 325-5667

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 16-Jul-96

Internal QC No.: 0444-STD
Surrogate QC No.: 0445-STD
Reference Standard QC No.: 0417-QC

Method Blank

Analyte	*Result*	*Units of Measure*
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Analyte	*Units of Measure*	*True Value*	*Analyzed Value*	*% Diff*	*Limit*
Benzene	ppb	20.0	19.0	5	15%
Toluene	ppb	20.0	21.7	9	15%
Ethylbenzene	ppb	20.0	21.9	9	15%
m,p-Xylene	ppb	40.0	40.9	2	15%
o-Xylene	ppb	20.0	20.0	0	15%

Matrix Spike

Analyte	*1- Percent Recovered*	*2 - Percent Recovered*	*Limit*	*%RSD*	*Limit*
Benzene	107	101	(39-150)	4	20%
Toluene	93	85	(46-148)	6	20%
Ethylbenzene	99	91	(32-160)	6	20%
m,p-Xylene	97	90	(35-145)	6	20%
o-Xylene	101	96	(35-145)	4	20%

Surrogate Recoveries

Laboratory Identification	*S1 Percent Recovered*	*S2 Percent Recovered*
Limit Percent Recovery	(70-130)	
11529-4267	96	
11530-4267	98	
11531-4267	100	

S1: Flourobenzene

ÒN SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

4267

Date: 7·15·96

Page 1 of 1

Purchase Order No.: | Job No.:

SEND INVOICE TO
Name:
Company: Riddle's Baites | Dept.:
Address:
City, State, Zip:

REPORT RESULTS TO
Name: Cindy Gray | Title:
Company:
Mailing Address:
City, State, Zip:
Telephone No.: | Telefax No.:

Sampling Location: Navajo Tocito #1

Sampler: RLC

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	BTEX	TPH							LAB ID
TD-22' Bed Rock	7-15-96	1310	Soil			✓	✓							[illegible]
5 Point Composite - mixed Soil	"	1615	"			✓	✓							[illegible]
4 Wall Composite	"	1100	"			✓	✓							[illegible]

Relinquished by: [signature] | Date/Time 7-15-96/17[illegible] | Received by: | Date/Time
Relinquished by: | Date/Time | Received by: | Date/Time
Relinquished by: | Date/Time | Received by: | Date/Time

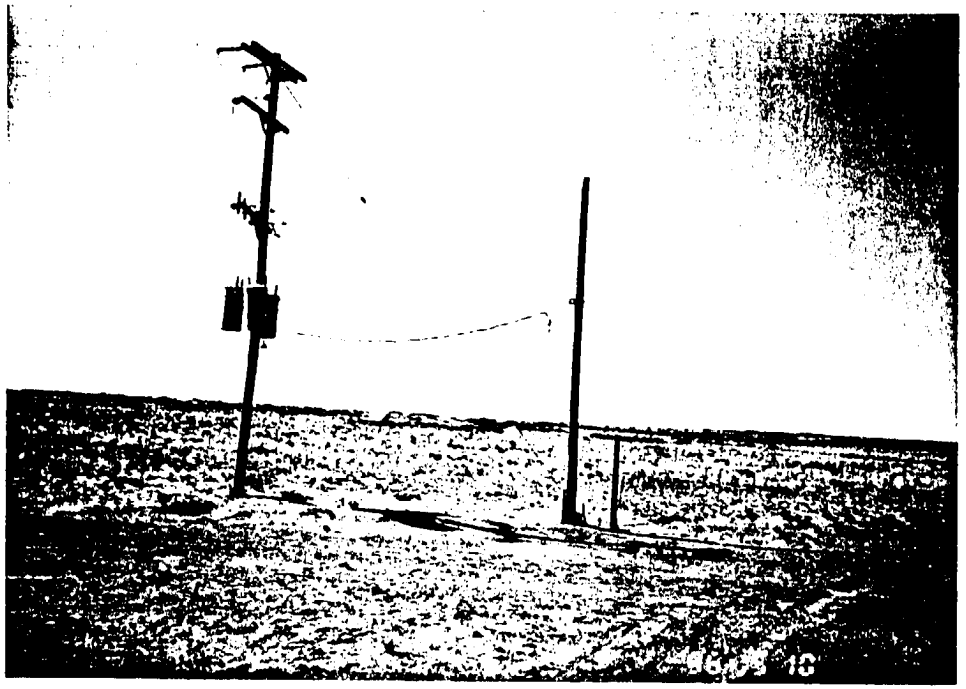
Method of Shipment:

Rush | 24-48 Hours | 10 Working Days | Special Instructions:

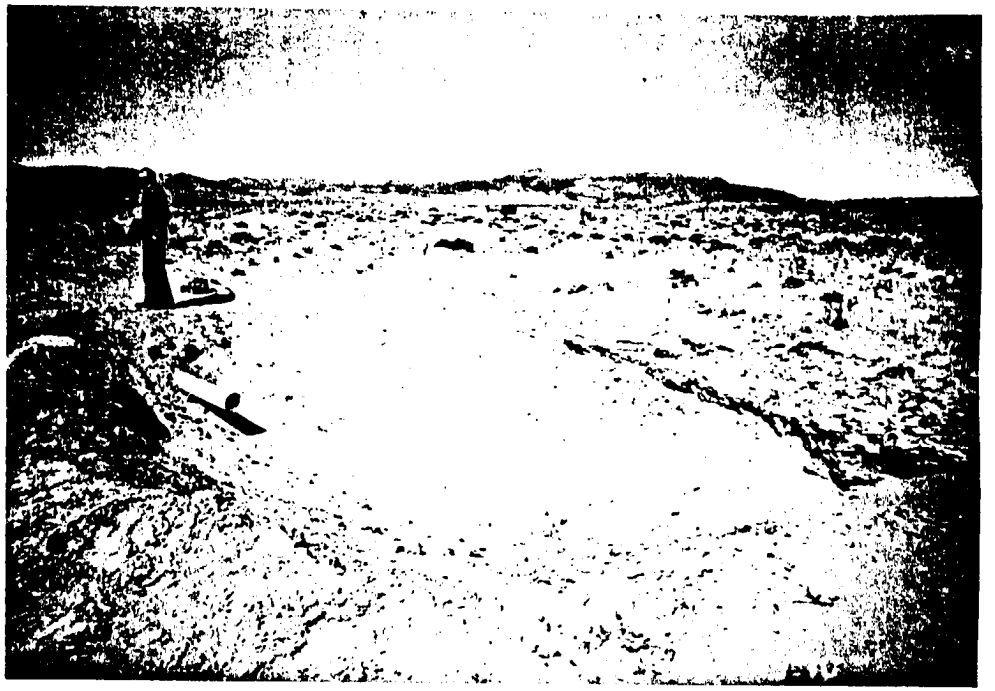
Authorized by: [signature] Date 7·15·96
(Client Signature Must Accompany Request)

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

EXHIBIT E



Transformers (to be removed)



Pit Before Excavation

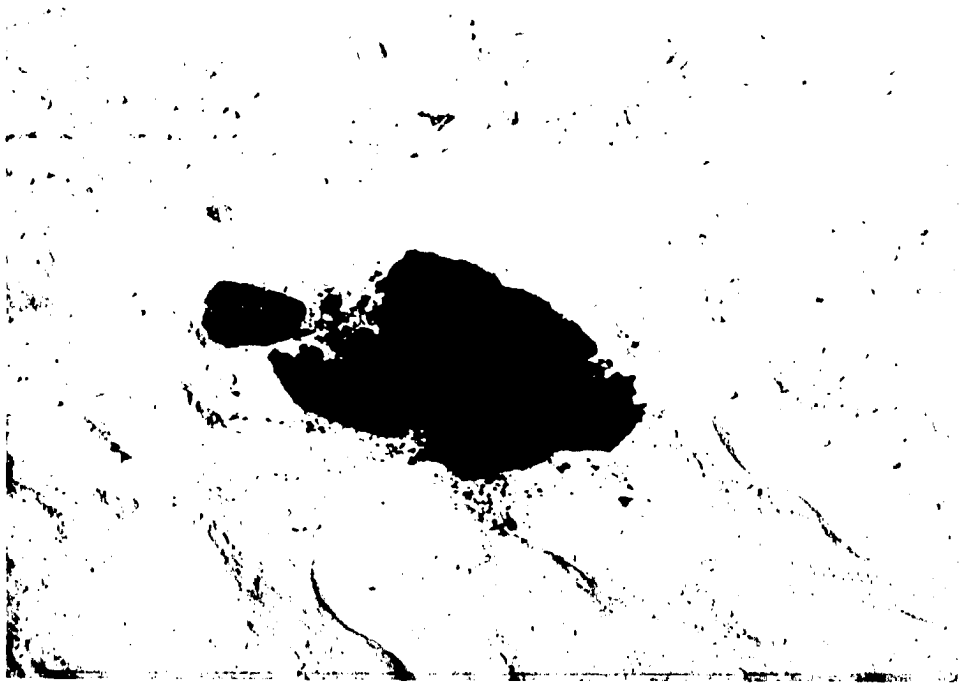
First Day of Excavation

Contaminated Soil (10 to 12 Foot level)

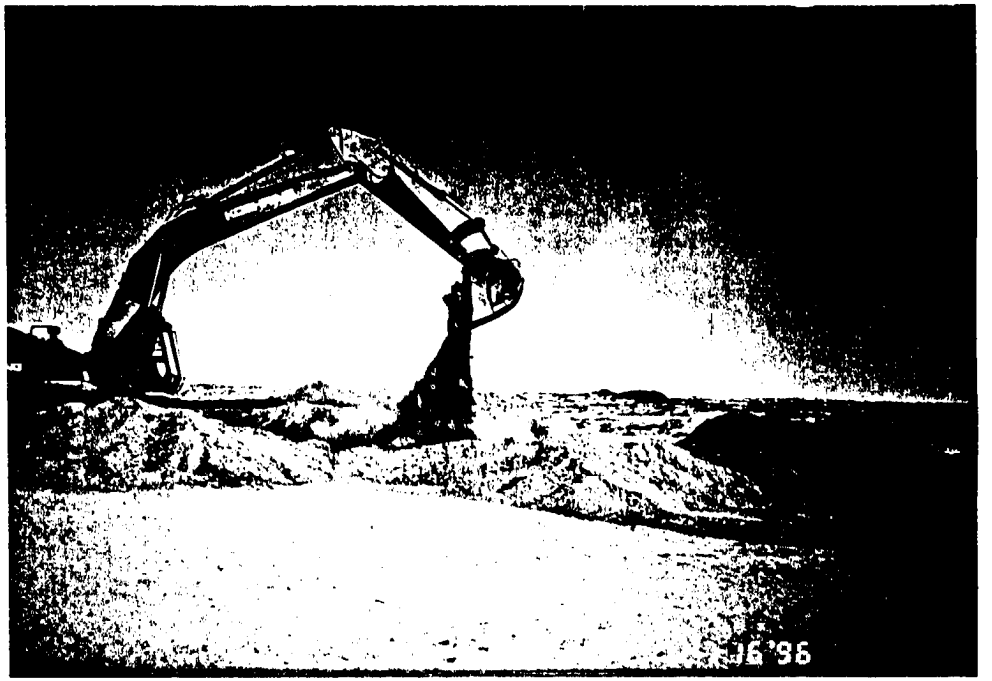
Soil Treating & Mixing

Treated Soil

Contaminated Soil Before Excavation



Contaminated Soil From The 20' Level



Final Soil Treatment

Filling Pit With Treated Soil

Finished Job