6619

U-007-202 .12

REMOVAL SITE EVALUATION - OFF-SITE WATER FLOW METER

01/05/95

FERMCO DOE-FN
12
RSE

REMOVAL SITE EVALUATION

OFF-SITE WATER FLOW METER

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

U. S. DEPARTMENT OF ENERGY

1/5/95

REMOVAL SITE EVALUATION
OFF-SITE WATER FLOW METER

INTRODUCTION

An Engineering Evaluation/Cost Analysis (EE/CA) was approved by the U.S. Environmental Protection Agency in January 1992 and provided for the implementation of the South Plume Removal Action No. 3 in five (5) parts. Part 1 of the removal action provided for an alternative water source to an industry affected by the contamination plume from the Fernald site. The industry affected is Albright & Wilson Americas (A&W), located south of the Fernald site. Part 1 of the South Groundwater Contamination Plume project involved the installation of production wells outside the plume area and a water supply system to service the affected industry. These construction wells are constructed on private property in a perpetual easement. Construction was completed in December 1992 and Ohio Environmental Protection Agency approval to begin operation was received in March 1993.

The "Off-site Water Flow Meter" project will modify production well AWA-1 to include an indicating flow meter. The flow meter has to be installed as part of the negotiated settlement agreement between the United States and the owners of the property where the production wells are located. The meter will be visible from a portion of the area easement and will be accessible to the owners of the property. In the language of the agreement, the United States has an obligation to provide a metering device by which the rate of well operation may be monitored by the land owners.

The elements of this project include the design and construction of the indicating flow meter. Included is the removal of approximately five (5) cubic yards of soil to provide for the installation of the flow meter pit (reference sketch #75X-5500-G-00409). Soil sampling data (attached) supports the reuse of this soil as backfill and grading of the construction area. The pre-cast concrete manhole (flow meter pit) will be installed to house the flow element and transmitter. The flow indicator will be installed within the existing fenced area of the production well field. Attachment 2 shows the configuration of wells AWA-1 and AWA-2. The area will be excavated and graded to the existing contour.

This Removal Site Evaluation (RSE) has been completed by the Department of Energy (DOE) under authorities delegated by Executive Order 12580 under section 104 of CERCLA and is consistent with Section 300.410 of the National Oil and Hazardous Substance Pollution Control Contingency Plan (NCP). This RSE addresses the existing conditions where the Off-Site Water Flow Meter is to be located. This RSE has been completed to support the decision as to whether these conditions warrant a removal action. Controls implemented to support this construction activity are also presented in this RSE to demonstrate that the proposed construction will not cause deterioration of the existing site conditions.

SOURCE TERM

Consistent with 40 CFR 300.410 (a), the RSE includes a preliminary assessment is based upon readily available information as described in 40 CFR 300.410 (c).

Previous samples from the construction area have indicated that no uranium or other constituents exist.

A RCRA determination concludes that no materials have been identified that would cause the waste to meet any of the hazardous waste listings under OAC 3745-51-31 to 33, (in lieu of 40 CFR 261, Sub-part D) or exhibit any of the hazardous waste characteristics under OAC 3745-51-21 to 24, (in lieu of 40 CFR 261.21 to 24).

EVALUATION OF THE MAGNITUDE OF THE POTENTIAL THREAT

The management of the waste from this project will be controlled by Site Standard Operating Procedure SSOP-0044 ***Management of Soil, Debris, and Waste From a Project*** and the approved work plan for Removal Action 17 ***Improved Storage of Soil and Debris*** as they apply. The following controls, among others, will be implemented during the construction of the Off-site Water Flow Meter project:

- Excess soil from this project will be used as backfill and grading.
- Physical barriers will be positioned around the work area to prevent unauthorized access.
- Protective clothing and respiratory protection will be provided for workers, as required.

ASSESSMENT OF THE NEED FOR REMOVAL ACTION

Consistent with Section 40 CFR 300.410 of the NCP, the Department of Energy shall determine the appropriateness of a removal action. Eight factors to be considered in this determination are listed in 40 CFR 300.415 (b)(2).

Since there are no sources of radiological or hazardous constituents in the construction area as proven by previous sampling efforts and the attached data, none of the eight factors apply to this project.

APPROPRIATENESS OF A RESPONSE

Based on the evaluation of the above factors, it has been determined that a removal action will not be necessary and this project should be continued as a best management practice in support of the CERCLA remediation process at the FEMP. Furthermore, the controls planned in conjunction with this activity are adequate to mitigate any hazards created by contamination at the site and to prevent deterioration of existing site conditions.

SAMPLING DATA

SOUTH GROUNDWATER CONTAMINATION PLUME

PART 1-ALTERNATE WATER SYSTEM

AWA-2 SAMPLING GRID (WEST)

OFF-SITE WATER FLOW METER

10/10/94

4

SUBMISSION ID : 1000007609

SAMPLE ID	USER SAMPLE ID	COMPONENT	LQ	RESULT	UNITS	DATE TASK PERFORMED	RELEASE NUMBER
200044569	94-592-0993	TOXAPHENE	U	200	ug/kg	08-APR-94	1000002203
200044570	94-592-0993	ALUMINUM		5840	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	ANTIMONY	B	8.0	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	ARSENIC		5.8	mg/kg	07-APR-94	1000002203
200044570	94-592-0993	BARIUM		69.0	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	BERYLLIUM	B	0.54	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	CADMIUM	U	0.95	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	CALCIUM		20100	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	CHROMIUM		11.4	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	COBALT	B	7.9	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	COPPER		9.7	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	IRON		16800	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	LEAD		15.6	mg/kg	07-APR-94	1000002203
200044570	94-592-0993	MAGNESIUM		7150	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	MANGANESE		685	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	MERCURY	U	0.06	mg/kg	08-APR-94	1000002203
200044570	94-592-0993	NICKEL		9.8	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	POTASSIUM	B	621	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	SELENIUM	U	0.47	mg/kg	05-APR-94	1000002203
200044570	94-592-0993	SILVER	U	1.2	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	SODIUM	B	68.1	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	THALLIUM	U	0.47	mg/kg	05-APR-94	1000002203
200044570	94-592-0993	VANADIUM		20.9	mg/kg	06-APR-94	1000002203
200044570	94-592-0993	ZINC		30.3	mg/kg	06-APR-94	1000002203
200044572	94-592-0995	THORIUM SP-5 (0-6")	U	18	ug/g dry	29-MAR-94	1000002203
200044572	94-592-0995	URANIUM	U	11	ug/g dry	29-MAR-94	1000002203
200044575	94-592-0995	4,4-DDD	U	4.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	4,4-DDE	U	4.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	4,4-DDT	U	4.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	A-BHC	U	2.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	A-CHLORDANE	U	2.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	ALDRIN	U	2.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	AROCLOR 1016	U	40	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	AROCLOR 1221	U	80	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	AROCLOR 1232	U	40	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	AROCLOR 1242	U	40	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	AROCLOR 1248	U	40	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	AROCLOR 1254	U	40	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	AROCLOR 1260	U	40	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	B-BHC	U	2.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	D-BHC	U	2.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	DIELDRIN		4.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	ENDOSULFAN I	U	2.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	ENDOSULFAN II	U	4.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	ENDOSULFAN SULFATE	U	4.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	ENDRIN	U	4.0	ug/kg	09-APR-94	1000002203
200044575	94-592-0995	ENDRIN ALDEHYDE	U	4.0	ug/kg	09-APR-94	1000002203

SUBMISSION ID : 1000007609

SAMPLE ID	USER SAMPLE ID	COMPONENT	LQ	RESULT	UNITS	DATE TASK PERFORMED	RELEASE NUMBER
200044581	94-592-0997	DIELDRIN		4.4	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	ENDOSULFAN I	U	2.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	ENDOSULFAN II	U	4.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	ENDOSULFAN SULFATE	U	4.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	ENDRIN	U	4.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	ENDRIN ALDEHYDE	U	4.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	ENDRIN KETONE	U	4.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	G-BHC/LINDANE	U	2.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	G-CHLORDANE	U	2.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	HEPTACHLOR	U	2.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	HEPTACHLOR EPOXIDE	U	2.0	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	METHOXYCHLOR	U	20	ug/kg	09-APR-94	1000002203
200044581	94-592-0997	TOXAPHENE	U	200	ug/kg	09-APR-94	1000002203
200044582	94-592-0997	ALUMINUM		7680	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	ANTIMONY	U	6.5	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	ARSENIC		5.5	mg/kg	07-APR-94	1000002203
200044582	94-592-0997	BARIUM		107	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	BERYLLIUM	B	0.68	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	CADMIUM	U	0.97	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	CALCIUM		4930	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	CHROMIUM		13.0	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	COBALT		15.8	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	COPPER		20.0	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	IRON		20900	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	LEAD		11.9	mg/kg	07-APR-94	1000002203
200044582	94-592-0997	MAGNESIUM		2830	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	MANGANESE		1320	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	MERCURY	U	0.06	mg/kg	08-APR-94	1000002203
200044582	94-592-0997	NICKEL		12.7	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	POTASSIUM	B	728	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	SELENIUM	U	0.48	mg/kg	05-APR-94	1000002203
200044582	94-592-0997	SILVER	U	1.2	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	SODIUM	B	261	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	THALLIUM	U	0.48	mg/kg	05-APR-94	1000002203
200044582	94-592-0997	VANADIUM		24.8	mg/kg	06-APR-94	1000002203
200044582	94-592-0997	ZINC		37.5	mg/kg	06-APR-94	1000002203
200044584	94-592-0999	THORIUM SP-7 (0"-6")	U	18	ug/g dry	29-MAR-94	1000002203
200044584	94-592-0999	URANIUM	U	11	ug/g dry	29-MAR-94	1000002203
200044587	94-592-0999	4,4-DDD	U	4.1	ug/kg	09-APR-94	1000002203
200044587	94-592-0999	4,4-DDE	U	4.1	ug/kg	09-APR-94	1000002203
200044587	94-592-0999	4,4-DDT	U	4.1	ug/kg	09-APR-94	1000002203
200044587	94-592-0999	A-BHC	U	2.1	ug/kg	09-APR-94	1000002203
200044587	94-592-0999	A-CHLORDANE	U	2.1	ug/kg	09-APR-94	1000002203
200044587	94-592-0999	ALDRIN	U	2.1	ug/kg	09-APR-94	1000002203
200044587	94-592-0999	AROCLOR 1016	U	41	ug/kg	09-APR-94	1000002203
200044587	94-592-8999	AROCLOR 1221	U	82	ug/kg	09-APR-94	1000002203
200044587	94-592-0999	AROCLOR 1232	U	41	ug/kg	09-APR-94	1000002203

6

SUBMISSION ID : 1000007609

SAMPLE ID	USER SAMPLE ID	COMPONENT	LQ	RESULT	UNITS	DATE TASK PERFORMED	RELEASE NUMBER
200044618	94-592-0988	METHOXYCHLOR	U	20	ug/kg	09-APR-94	1000002203
200044618	94-592-0988	TOXAPHENE	U	200	ug/kg	09-APR-94	1000002203
200044619	94-592-0988	ALUMINUM		8800	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	ANTIMONY	U	6.6	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	ARSENIC		5.0	mg/kg	07-APR-94	1000002203
200044619	94-592-0988	BARIUM		78.0	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	BERYLLIUM	B	0.51	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	CADMIUM	U	0.98	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	CALCIUM		54000	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	CHROMIUM		14.1	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	COBALT	B	8.5	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	COPPER		15.9	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	IRON		19900	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	LEAD		8.5	mg/kg	07-APR-94	1000002203
200044619	94-592-0988	MAGNESIUM		15900	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	MANGANESE		386	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	MERCURY	U	0.06	mg/kg	08-APR-94	1000002203
200044619	94-592-0988	NICKEL		19.0	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	POTASSIUM	B	862	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	SELENIUM	U	0.49	mg/kg	05-APR-94	1000002203
200044619	94-592-0988	SILVER	U	1.2	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	SODIUM	B	133	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	THALLIUM	U	0.49	mg/kg	05-APR-94	1000002203
200044619	94-592-0988	VANADIUM		18.8	mg/kg	06-APR-94	1000002203
200044619	94-592-0988	ZINC		44.5	mg/kg	06-APR-94	1000002203
200044621	94-592-0996	THORIUM SP-5 (1')	U	18	ug/g dry	29-MAR-94	1000002203
200044621	94-592-0996	URANIUM	U	11	ug/g dry	29-MAR-94	1000002203
200044624	94-592-0996	4,4-DDD	U	4.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	4,4-DDE	U	4.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	4,4-DDT	U	4.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	A-BHC	U	2.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	A-CHLORDANE	U	2.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	ALDRIN	U	2.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	AROCLOR 1016	U	41	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	AROCLOR 1221	U	83	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	AROCLOR 1232	U	41	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	AROCLOR 1242	U	41	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	AROCLOR 1248	U	41	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	AROCLOR 1254	U	41	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	AROCLOR 1260	U	41	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	B-BHC	U	2.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	D-BHC	U	2.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	DIELDRIN	U	4.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	ENDOSULFAN I	U	2.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	ENDOSULFAN II	U	4.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	ENDOSULFAN SULFATE	U	4.1	ug/kg	08-APR-94	1000002203
200044624	94-592-0996	ENDRIN	U	4.1	ug/kg	08-APR-94	1000002203

7

SUBMISSION ID : 1000007609

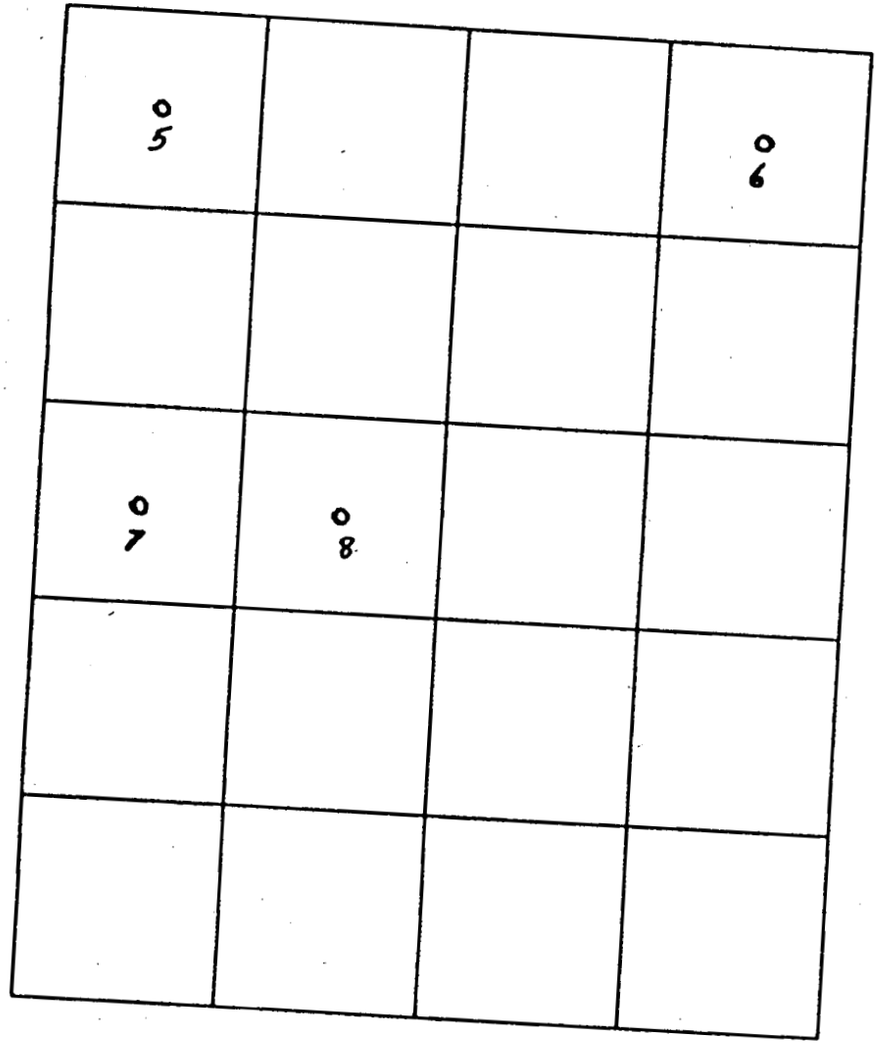
SP-6 (4')

SAMPLE ID	USER SAMPLE ID	COMPONENT	LQ	RESULT	UNITS	DATE TASK PERFORMED	RELEASE NUMBER
200044643	94-592-0990	VANADIUM		20.3	mg/kg	06-APR-94	1000002203
200044643	94-592-0990	ZINC		27.4	mg/kg	06-APR-94	1000002203
200044645	94-592-0998	THORIUM	U	18	ug/g dry	29-MAR-94	1000002203
200044645	94-592-0998	URANIUM	U	11	ug/g dry	29-MAR-94	1000002203
200044648	94-592-0998	4,4-DDD	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	4,4-DDE	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	4,4-DDT	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	A-BHC	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	A-CHLORDANE	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	ALDRIN	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	AROCLOR 1016	U	41	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	AROCLOR 1221	U	82	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	AROCLOR 1232	U	41	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	AROCLOR 1242	U	41	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	AROCLOR 1248	U	41	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	AROCLOR 1254	U	41	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	AROCLOR 1260	U	41	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	B-BHC	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	D-BHC	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	DIELDRIN	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	ENDOSULFAN I	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	ENDOSULFAN II	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	ENDOSULFAN SULFATE	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	ENDRIN	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	ENDRIN ALDEHYDE	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	ENDRIN KETONE	U	4.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	G-BHC/LINDANE	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	G-CHLORDANE	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	HEPTACHLOR	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	HEPTACHLOR EPOXIDE	U	2.1	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	METHOXYCHLOR	U	21	ug/kg	13-APR-94	1000002203
200044648	94-592-0998	TOXAPHENE	U	210	ug/kg	13-APR-94	1000002203
200044649	94-592-0998	ALUMINUM		9420	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	ANTIMONY	U	6.4	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	ARSENIC		4.6	mg/kg	07-APR-94	1000002203
200044649	94-592-0998	BARIUM		81.7	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	BERYLLIUM	B	0.57	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	CADMIUM	U	0.95	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	CALCIUM		66200	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	CHROMIUM		14.3	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	COBALT	B	11.7	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	COPPER		18.2	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	IRON		21500	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	LEAD		8.7	mg/kg	07-APR-94	1000002203
200044649	94-592-0998	MAGNESIUM		23400	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	MANGANESE		699	mg/kg	06-APR-94	1000002203
200044649	94-592-0998	MERCURY	U	0.05	mg/kg	08-APR-94	1000002203

8

SUBMISSION ID : 1000007609

SAMPLE ID	USER SAMPLE ID	COMPONENT	LQ	RESULT	UNITS	DATE TASK PERFORMED	RELEASE NUMBER
200044656	94-592-1000	COPPER		14.5	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	IRON		20400	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	LEAD		10.0	mg/kg	07-APR-94	1000002203
200044656	94-592-1000	MAGNESIUM		12700	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	MANGANESE		705	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	MERCURY	U	0.06	mg/kg	08-APR-94	1000002203
200044656	94-592-1000	NICKEL		18.3	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	POTASSIUM	B	770	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	SELENIUM	U	0.49	mg/kg	05-APR-94	1000002203
200044656	94-592-1000	SILVER	U	1.2	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	SODIUM	B	97.6	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	THALLIUM	U	0.49	mg/kg	05-APR-94	1000002203
200044656	94-592-1000	VANADIUM		20.7	mg/kg	06-APR-94	1000002203
200044656	94-592-1000	ZINC		42.9	mg/kg	06-APR-94	1000002203
200044658	94-592-1002	THORIUM SP-8 (3')	U	18	ug/g dry	29-MAR-94	1000002203
200044658	94-592-1002	URANIUM	U	11	ug/g dry	29-MAR-94	1000002203
200044661	94-592-1002	4,4-DDD	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	4,4-DDE	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	4,4-DDT	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	A-BHC	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	A-CHLORDANE	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	ALDRIN	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	AROCLOR 1016	U	40	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	AROCLOR 1221	U	81	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	AROCLOR 1232	U	40	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	AROCLOR 1242	U	40	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	AROCLOR 1248	U	40	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	AROCLOR 1254	U	40	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	AROCLOR 1260	U	40	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	B-BHC	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	D-BHC	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	DIELDRIN	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	ENDOSULFAN I	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	ENDOSULFAN II	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	ENDOSULFAN SULFATE	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	ENDRIN	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	ENDRIN ALDEHYDE	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	ENDRIN KETONE	U	4.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	G-BHC/LINDANE	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	G-CHLORDANE	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	HEPTACHLOR	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	HEPTACHLOR EPOXIDE	U	2.0	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	METHOXYCHLOR	U	20	ug/kg	08-APR-94	1000002203
200044661	94-592-1002	TOXAPHENE	U	200	ug/kg	08-APR-94	1000002203
200044662	94-592-1002	ALUMINUM		7350	mg/kg	06-APR-94	1000002203
200044662	94-592-1002	ANTIMONY	U	6.5	mg/kg	06-APR-94	1000002203
200044662	94-592-1002	ARSENIC		4.6	mg/kg	07-APR-94	1000002203



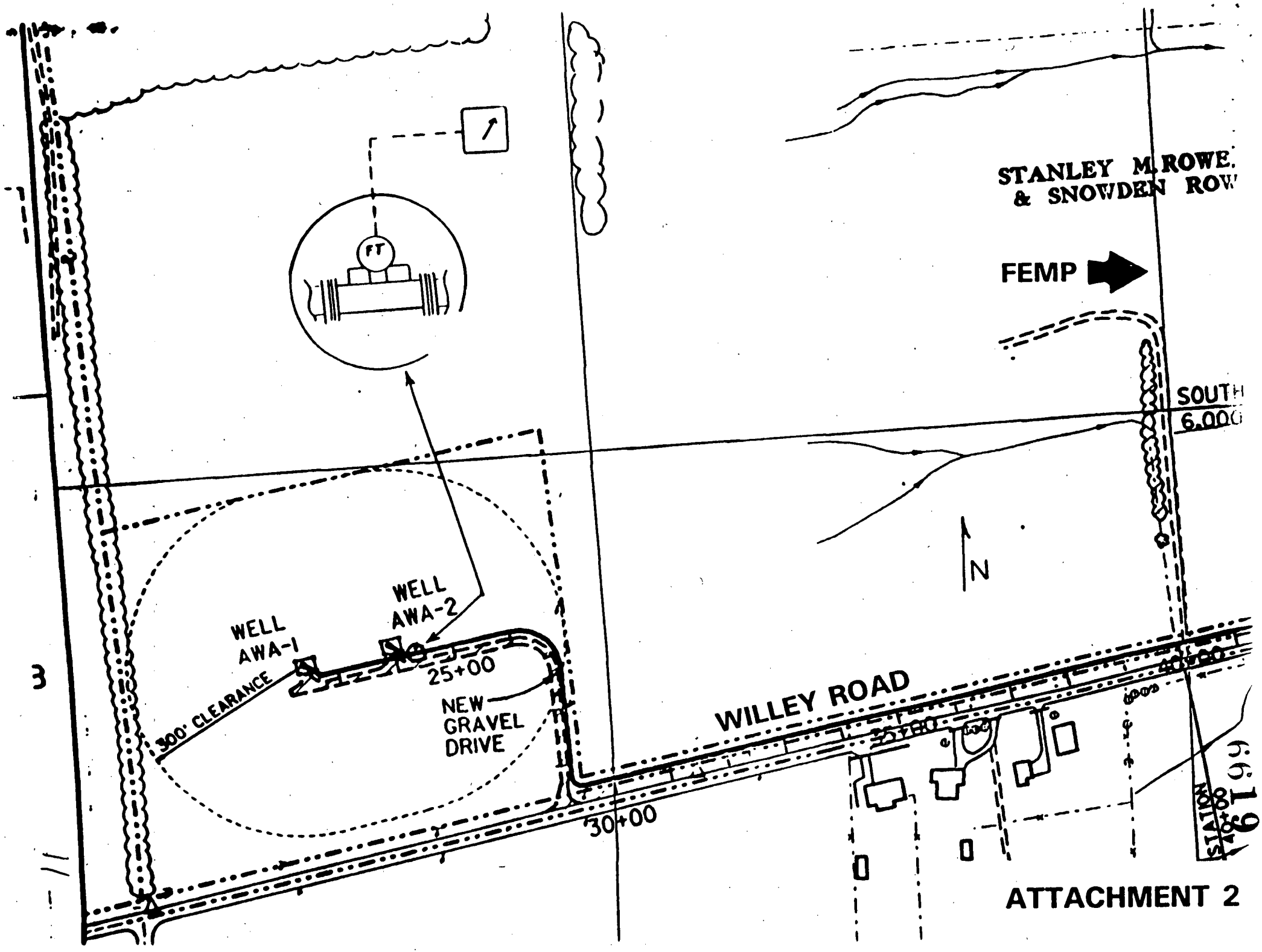
SAMPLING GRID FOR WELL AWA-2

Sampling Points 5-8

Sampling Plan # 93-592-EAST

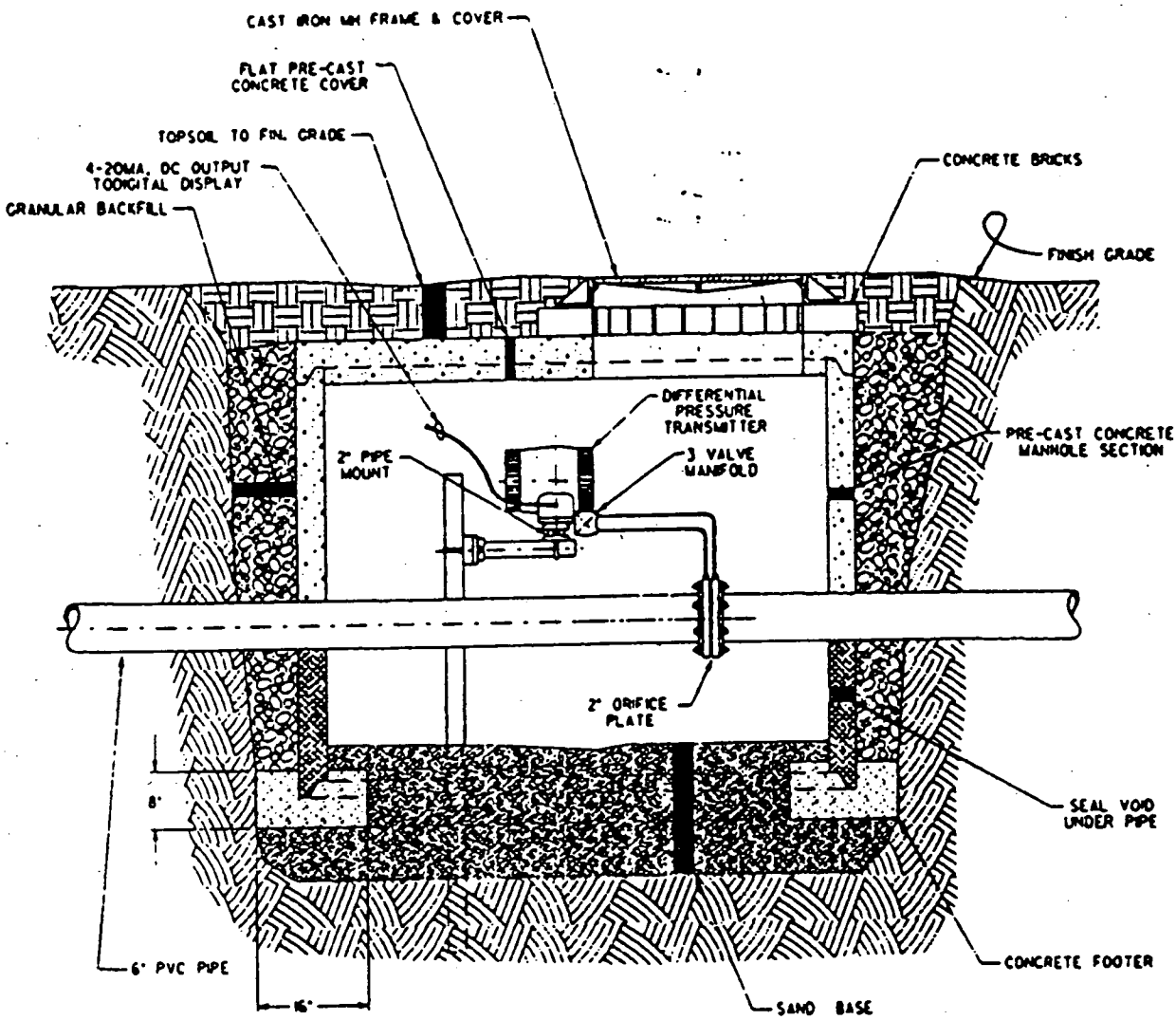
6619

10



ATTACHMENT 2

6619



NO.	REVISIONS	DATE	DWN. BY	APPD.

FERNALD ENVIRONMENTAL RESTORATION MANAGEMENT CORPORATION

FERMCO

Fernald Environmental Management Project

U.S. DEPARTMENT OF ENERGY

ALT. WATER SUPPLY METER PIT DETAIL ALT. #1

75X-5500-G-00409 | 0

FILE NAME:

12