

1725

**FERNALD RI/FS DATA TRANSFER**

**02/17/92**

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ENCLOSURE  
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## Fernald RI/FS Data Transfer

## RCRA Monitoring Partition Diskette

This readme file describes the data included in the 12 February 1991 data transmittal from the Fernald Remedial Investigation / Feasibility Study data base to the US-DOE. This transmittal consists of 4 data files. As with previous transmittals, the data files are compressed. The compressed file is RCRA.ARC (286,520 bytes in size).

The data files contain RCRA partition records. Analysis results for RCRA samples were received from several laboratories working under different contracts. The data is in different formats. These results are stored in separate segments on the database. Thus separate files of results are provided.

IT laboratory results, the standard RI/FS laboratory, are in the file RCRACHM.ALL and RCRARAD.ALL. Samples analyzed under a WMCO contract are in the file RCRACHMW.all.

Below is a listing of the data files being sent. Also shown are their estimated sizes and a description of their contents.

	file size in bytes	contents
RCRA-DES.ALL	68,535	RCRA samples, description info.
RCRACHM.ALL	1,002,431	RCRA chemical results, IT laboratory
RCRACHMW.ALL	122,695	RCRA chemical results, WMCO laboratory
RCRARAD.ALL	82,766	RCRA radiological results, IT laboratory

Total of 4 files, 1,276,427 bytes.

The following tables provide the detailed description of the records for every possible data file type. Every type may not be present in this transmittal. The fields are named, numbered, briefly described, and the maximum size is stated. At the end of each chart is the estimated maximum size for the record.

## RCRA data format

Data Base Field name =====	maximum length =====	Field description =====
RCRA-monitor part., description seg.		
1 rcra-id	5	key, sample ID
2 well-number	15	
3 loct-water	50	descript of location
4 date-water-samp	8	
5 time-water-samp	10	
6 gr-samp-type	6	type of water sample
7 gr-other	10	
8 gr-pollute	20	
9 gr-temp	4	
10 gr-units	10	
11 do-value	25	dissolved oxygen
12 gr-conduct	10	conductivity
13 gr-pH	4	pH
14 2-do	25	dissolved oxygen
15 2-conduct	10	conductivity
16 2-pH	4	pH
17 last-do	25	dissolved oxygen
18 last-cond	10	conductivity
19 last-pH	4	pH
20 media-wat	3	sample media
21 other-wat-media	15	
22 wat-rinsate	1	
23 wat-preserve	1	flag
24 preserve-type	7	
25 wat-other-pres	15	
26 sequence-wat	2	seq. number
27 wat-blank	1	flag
28 wat-duplicate	1	flag
29 id-dup-wat	10	
30 1-wat-triplicat	1	
31 1-triplicate-id	30	
32 wat-split	1	flag
33 id-split-wat	10	
34 wat-spike	1	flag
35 id-wat-spike	20	
36 wat-filter	1	flag
37 wat-comments	10	
Totals:	385	maximum width of fields
	110	estimated number of delimiters
	495	estimated maximum record width

## Laboratory Results Data Format

Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,	description seg.,	lab-results seg.,
1 sample-id	5	
2 suffix	25	suffix code
3 param-code	9	CAS number
4 lab-result	20	
5 qualif	10	qualifier
6 units	15	
7 error	20	
8 bland-id	15	
9 ext-date	8	
10 analy-date	8	analysis date
11 prod-code	6	
12 conform-flag	1	
13 lab-code	9	
14 ID-lab	9	
15 MG-value	20	
16 MG-units	20	
17 lab-comments	10	
	-----	
Totals:	210	maximum width of fields
	50	estimated number of delimiters
	260	estimated maximum record width

Results-lab part.,	description seg.,	rad-results seg.
1 sample-id	5	
2 filter	10	filter parameters
3 rad-units	20	
4 Rtest-rad	20	type of test
5 detect-param	1	
6 results-rad	10	
7 sigma-2	10	
8 radlab-id	20	
9 rad-comments	10	
	-----	
Totals:	106	maximum width of fields
	26	estimated number of delimiters
	132	estimated maximum record width

## WMCO Laboratory Results Data Format

Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,		description seg., WMCO-results seg., (Chemical results)
1 sample-id	5	
2 lab-id-num	11	lab id number
3 tst	30	test analysis
4 cas-code	9	parameter (CAS) code
5 det-symb	1	detection symbol
6 test-results	10	lab reading
7 results-units	11	units
8 compdate	8	date analysis completed
9 appdate	8	date analysis approved
10 suff-code	25	suffix code for sample
11 wmco-chem-qual	2	validation qualifier code
	-----	
Totals:	120	maximum width of fields
	32	estimated number of delimiters
	152	estimated maximum record width

Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,		description seg., WMCO-rad-results seg., (Radiological)
1 sample-id	5	
2 lab-sam-num	10	lab sample number
3 analysis	30	analysis performed
4 res-rad-wmco	10	analysis results (includes < )
5 unit-rad-wmco	12	units
6 date-complete	12	date analysis completed
7 wmco-rad-qual	2	validation qualification code
8 wm-rad-detect	1	detection parameter
9 wm-rad-result	10	numeric analysis results
	-----	
Totals:	92	maximum width of fields
	26	estimated number of delimiters
	118	estimated maximum record width

## 1990 Quarters 3 &amp; 4 Resend Diskette

This readme file describes the data included in the 12 February 1991 data transmittal from the Fernald Remedial Investigation / Feasibility Study database to the US-DOE. This transmittal consists of 23 data files. As with previous transmittals, the data files are compressed. The compressed file is RESEND.ARC (819,991 bytes in size). The program PKXARC is also included for restoring the files to their original size.

The data files contain records which are new or were revised during the third and fourth quarters of 1990. Below is a listing of the data files being sent. Also shown are their sizes and a description of their contents.

	file size in bytes	contents
biorad.res	64,097	biological, rad. results
gwr1rad.res	178,172	groundwater round 1, rad. results
gwr2des.res	168	groundwater round 2, description info.
gwr2rad.res	198,389	groundwater round 2, rad. results
gwr2chm.res	113	groundwater round 2, chemical results
gwr3rad.res	217,914	groundwater round 3, rad. results
gwr4rad.res	244,582	groundwater round 4, rad. results
gwr5rad.res	97,258	groundwater round 5, rad. results
gwr6rad.res	24,602	groundwater round 6, rad. results
gwother.res	29,891	groundwater, other, description info.
gwothrd.res	88,248	groundwater, other, rad. results
gwothch.res	253,553	groundwater, other, chemical results
nodelis.res	439,144	node-rad, description info.
sedimen.ren	11,567	sediment, description info.
sedrad.res	18,691	sediment, rad. results
subsoil.res	582,262	subsurface soil, description info.
sbslrad.res	307,493	subsurface soil, rad. results
surfwat.res	14,807	surface water, description info.
sfwtrad.res	126,888	surface water, rad. results
sfwtchm.res	11,864	surface water, chemical results
sfsrad.res	469,163	surface soil, rad. results
wellbas.res	64,506	well monitor, description info.
wellread.res	222,834	well monitor, water elevation info.

Total of 23 files, 3,666,206 bytes.

The following tables provide the detailed description of the records for every possible data file type. Every type may not be present in this transmittal.

The fields are named, numbered, briefly described, and the maximum size is stated. At the end of each chart is the estimated maximum size for the record.

## Well-monitoring Basic Data Format

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Data Base Field name =====	maximum length =====	Field description =====
Well-monitoring part., description seg.		
1 well-id	15	key, boring (or well) id.
2 nu-well-id	15	new well id
3 north	15	north coordinate
4 east	15	east coordinate
5 field-engineer	59	name of field engineer
6 date-field	8	date of field engineer
7 date-installe	8	installation date
8 drill-method	30	drilling method
9 toc	8	top of casing
10 tow	8	top of well
11 msl-conc	8	concrete
12 ground-msl	8	ground elev. above msl
13 rcra-ref	1	is this a rcra well (y/n)
14 ref-toc	1	is depth read toc? (y/n)
15 site-flag	2	site flag
16 well-flag	15	well or boring? (p/m/b)
17 own-name	59	owner's name
18 own-address	59	owner's address
19 own-city	29	city
20 own-state	2	state
21 own-zip	10	zip code
22 own-company	59	owner's corporate name
23 fluid-drill	1	drilling fluid used? (y/n)
24 1-type-fluid	20	type of fluid
25 1-from	6	fluid used from
26 1-to	6	fluid used to
27 1-units-fluid	11	units of depth
28 2-type-fluid	20	type of fluid
29 2-from	6	fluid used from
30 2-to	6	fluid used to
31 2-units-fluid	11	units of depth
32 bit-type	16	type of bit
33 other-bit	59	define other bit
34 out-case	8	outside casing - gl
35 temp-casing	1	is casing temporary? (y/n)
36 1-case-size	3	first casing size
37 1-units-casing	11	units of diameter
38 1-case-from	7	casing used from
39 1-case-to	7	casing used to
40 1-units-case	11	units of depth
41 2-case-size	3	second casing size
42 2-units-casing	11	units of diameter
43 2-case-from	7	casing used from
44 2-case-to	7	casing used to
45 2-units-case	11	units of depth
46 casing-type	15	casing type
47 oth-casing	30	define other casing
48 casing-diameter	5	casing diameter
49 id-od	2	inner/outer diameter
50 units-diameter	11	units of diameter

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Data Base Field name =====	maximum length =====	Field description =====
Well-monitoring part., description seg.		
51 perf-type	6	perforation type
52 size-perf	6	avg. perforation size
53 perf-units	11	units of perforation
54 tot-perf	4	total perforated area
55 units-perf	11	units of total perforation
56 riser-type	15	riser type
57 rise-oth-casing	30	define other casing
58 outer-riser	8	riser outer diameter
59 inner-riser	8	riser inner diameter
60 rise-units	11	units of diameter
61 1-length-rise	5	length of first riser
62 2-length-rise	5	length of second riser
63 3-length-rise	5	length of third riser
64 len-units	11	units of length
65 method-join	59	joining method
66 prot-length	8	riser protected pipe length
67 units-prot	11	units of length
68 od-prot	8	protective pipe outer diameter
69 units-od	11	diameter units
70 oth-prot	59	other protection
71 rise-elev	5	top of riser pipe
72 1-rise-units	11	units of elevation
73 bottom-prot	5	bottom of protective pipe
74 units-bottom	11	units of measurement
75 1-fill	12	borehole fill materials
76 1-surf-top	8	top distance
77 1-surf-bot	8	bottom distance
78 1-msl-top	8	top distance above msl
79 1-msl-bot	8	bottom distance above msl
80 2-fill	12	borehole fill materials
81 2-surf-top	8	top distance
82 2-surf-bot	8	bottom distance
83 2-msl-top	8	top distance above msl
84 2-msl-bot	8	bottom distance above msl
85 3-fill	12	borehole fill materials
86 3-surf-top	8	top distance
87 3-surf-bot	8	bottom distance
88 3-msl-top	8	top distance above msl
89 3-msl-bot	8	bottom distance above msl
90 4-fill	12	borehole fill materials
91 4-surf-top	8	top distance
92 4-surf-bot	8	bottom distance
93 4-msl-top	8	top distance above msl
94 4-msl-bot	8	bottom distance above msl
95 5-fill	12	borehole fill materials
96 5-surf-top	8	top distance
97 5-surf-bot	8	bottom distance
98 5-msl-top	8	top distance above msl
99 5-msl-bot	8	bottom distance above msl
100 top-perf	8	perforated top distance

## Well-monitoring Basic Data Format

Data Base Field name =====	maximum length =====	Field description =====
Well-monitoring part., description seg.		
101 bot-perf	8	perforated bottom distance
102 msl-top-perf	8	perf. top msl
103 msl-bot-perf	8	perf. bottom msl
104 tip-piez	5	piezometer tip
105 tip-msl-piez	5	piez. tip above msl
106 bore-bottom	5	bottom of borehole
107 msl-bottom	5	bore bottom - msl
108 gwl-depth	5	gwl after installation
109 msl-gwl	5	gwl elevation - msl
110 flush-piez	1	piez. flushed? (y/n)
111 sens-piez	1	sens. test performed? (y/n)
112 comment-bore	20	comments
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Totals:	1374	maximum width of fields
	335	estimated number of delimiters
	1709	estimated maximum record width

Well-monitoring Elevation Readings Data Format

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Data Base Field name =====	maximum length =====	Field description =====
Well-monitoring part.,		description seg.
		readings seg.
1 well-id	15	key, boring (or well) id.
2 nu-well-id	15	new well id
3 north	15	north coordinate
4 east	15	east coordinate
5 date-read	8	date of reading
6 piez-read	8	depth of water to top
7 repeat	1	repeated reading? ( r or blank)
8 ref-point	3	reference point
9 read-comments	20	comment
** 10 calcul. reading	8	calculated water elevation
	-----	
Totals:	108	maximum width of fields
	29	estimated number of delimiters
	137	estimated maximum record width

\*\* = new field (totals were revised)

Sorted by well-id, date-read.

Data Base Field name	maximum length	Field description
Biological part.	sample	description
1 bio-id	5	key, sample id number
2 loct-bio	50	location description
3 bio-n.coord	15	north coordinate
4 bio-e.coord	15	east coordinate
5 date-bio	8	date of sample
6 time-bio	10	time of sample (military)
7 biodefine	20	define biological sample
8 bio-type	9	sample type
9 media-bio	13	sample media
10 other-media	59	other media
11 bio-preservativ	1	preservative (y/n)
12 bio-blank	1	blank? (y/n)
13 bio-spike	1	spike? (y/n)
14 id-spike-bio	20	spike identification
15 bio-duplicate	1	duplicate of sample? (y/n)
16 id-bio-duplicat	10	id no of duplicate
17 bio-triplicate	1	sample triplicate? (y/n)
18 triplicate-id	30	id no.s of triplicates
19 bio-split	1	split of sample? (y/n)
20 id-split-bio	10	id no. of split
21 bio-weather	20	weather at time of sample
22 bio-comments	20	comments
Totals:	320	maximum width of fields
	65	estimated number of delimiters
	385	estimated maximum record width

Data Base Field name =====	maximum length =====	Field description =====
Surface-water part., sample-description seg.		
1 sample-id	5	key, water sample id number
2 loct-water	50	sample location
3 date-water-samp	8	collection date
4 time-wat-sample	10	collection time (military)
5 surf-n-coord	15	north coordinate
6 surf-e-coord	15	east coordinate
7 log-location	30	location description
8 start-depth	12	sample depth interval
9 depth-units	3	units of depth (i,c,f,m,)
10 log-depth	6	depth of sample
11 units-depth	10	units of depth
12 sur-flow-rate	10	flow rate of water
13 sur-rate-units	18	units for flow rate
14 gr-samp-type	9	type of water sample
15 gr-other	20	define other sample
16 media-wat	13	sample media
17 other-wat-media	59	other media
18 wat-preserve	3	preservative used ?
19 preserve-type	7	type of preservative
20 wat-otter-pre	59	define other preservative
21 wat-rinsate	1	rinsate sample (y/n)
22 wat-blank	1	blank? (y/n)
23 wat-spike	1	spike (y/n)
24 id-wat-spike	30	spike identification
25 wat-duplicate	1	duplicate of sample? (y/n)
26 id-dup-wat	10	id no. of duplicate
27 1-wat-triplicat	1	triplicate of sample (y/n)
28 1-triplicate-id	30	id no.'s of trip.
29 wat-split	1	split of sample? (y/n)
30 id-split-wat	10	id. no. of split
31 log-ph	4	pH of water sample
32 log-mhos	6	uMHOS/cm
33 do-value	6	dissolved oxygen - mg/l
34 pH-temp	6	pH temperature
35 1-pH-standard	6	1st pH standard
36 1-ok	1	is standard ok? (y/n)
37 2-pH-standard	6	2nd pH standard
38 2-ok	1	is standard ok? (y/n)
39 do-temperature	6	dissolved oxygen temperature
40 0-do	6	dissolved oxygen at 0
41 1-do-ok	1	is d.o. standard ok? (y/n)
42 std-do	6	dissolved oxygen at standard
43 2-do-ok	1	is d.o. standard ok? (y/n)
44 log-redox-samp	10	redox sample (in mv)
45 redox-temp	4	redox temperature
46 log-zobel	10	zobel (in mv)
47 zobel-temp	4	zobel temperature (celsius)
48 test-param	59	test parameters
49 1-num-equip	59	first equipment number
50 1-nam-equip	59	first equipment name

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## Surface Water and Sediment Data Format

Data Base Field name	maximum length	Field description
Surface-water part., sample-description seg.		
51 2-num-equip	59	second equipment number
52 2-nam-equip	59	second equipment name
53 3-num-equip	59	third equipment number
54 3-nam-equip	59	third equipment name
55 4-num-equip	59	fourth equipment number
56 4-nam-equip	59	fourth equipment name
57 log-weather	30	weather conditions
58 log-pollute	30	sources of pollution
59 wat-comments	30	comments, additional remarks
-----		
Totals:	1153	maximum width of fields
	176	estimated number of delimiters
	1329	estimated maximum record width

Subsoil-monitor Data Format

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Data Base Field name =====	maximum length =====	Field description =====
Subsoil-monitor part., description seg.		
1 sample-id	5	key, assigned sample id
2 well-number	15	well number (well id.)
3 date-monitor	8	date of sample
4 time-monitor	12	sample time
5 top-soi-dep	4	top depth of sample
6 bot-soi-dep	4	bottom depth of sample
7 unit-soi-dep	6	units of depth
8 1-blows	8	first blow reading
9 2-blows	8	second blow reading
10 3-blows	8	third blow reading
11 blow-units	11	units of measurement
12 recovery	4	recovery
13 units-recovery	11	recovery units
14 strata	20	sample description
15 1-uscus-symbol	2	first uscs symbol
16 1-oth-uscs	25	other uscs symbol
17 1-tsf	10	measured consistency
18 2-uscs-symbol	2	second uscs symbol
19 2-oth-uscs	25	other uscs symbol
20 2-tsf	10	measured consistency
21 3-uscs-symbol	2	third uscs symbol
22 3-oth-uscs	25	other uscs symbol
23 hnu	10	hnu (organics)
24 alpha	10	alpha reading
25 beta-gamma	10	beta-gamma reading
26 rinsate	1	rinsate sample (y/n)
27 type-sample	9	sample type (g/c)
28 media-sample	13	sample media (e/h)
29 soi-preserve	1	preservation? (y/N)
30 preserve-type	7	type of preservative
31 blank	1	blank (y/n)
32 spike	1	spike? (y/n)
33 duplicate	1	duplicate? (y/n)
34 no-duplicate	5	sample no. of duplicate
35 split	1	split (y/n)
36 no-split	5	sample no. of split
37 subsoi-comments	20	comments
-----		
Totals:	320	maximum width of fields
	110	estimated number of delimiters
	430	estimated maximum record width

Data Base Field name =====	maximum length =====	Field description =====
Soil-surface-monitor part.		description, seg.
1 sample-id	5	key, unique soil sample number
2 loctation	50	sample location
3 date-sample	8	collection date
4 time-sample	10	collection time (military)
5 north-coord	15	north coordinate
6 east-coord	15	east coordinate
7 start-depth	12	sample depth interval
8 depth-units	3	units of depth (i,c,f,m)
9 type-sample	10	sample type
10 media-soil	13	sample media
11 other-soil-medi	59	other media
12 soil preserve	1	preservative? (y/n)
13 preserve-type	7	type of preservative
14 rinsate	1	rinsate sample (y/n)
15 blank	1	blank? (y/n)
16 spike	1	spike? (y/n)
17 id-spike	20	spike identification
18 duplicate	1	duplicate of sample? (y/n)
19 id-duplicate	10	id no. of duplicate
20 1-triplicate	1	triplicate of sample? (y/n)
21 1-id-triplicate	30	id no.s of trips
22 split	1	split of sample (y/n)
23 id-split	10	id no. of split
24 comments-soil	20	comments
-----		
Totals:	304	maximum width of fields
	71	estimated number of delimiters
	375	estimated maximum record width

Laboratory Results Data Format

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Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,		description seg., lab-results seg.,
1 sample-id	5	
2 suffix	25	suffix code
3 param-code	9	CAS number
4 lab-result	20	
5 qualif	10	qualifier
6 units	15	
7 error	20	
8 bland-id	15	
9 ext-date	8	
10 analy-date	8	analysis date
11 prod-code	6	
12 conform-flag	1	
13 lab-code	9	
14 ID-lab	9	
15 MG-value	20	
16 MG-units	20	
17 lab-comments	10	
	-----	
Totals:	210	maximum width of fields
	50	estimated number of delimiters
	260	estimated maximum record width

Results-lab part.,	description seg.,	rad-results seg.
1 sample-id	5	
2 filter	10	filter parameters
3 rad-units	20	
4 Rtest-rad	20	type of test
5 detect-param	1	
6 results-rad	10	
7 sigma-2	10	
8 radlab-id	20	
9 rad-comments	10	
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Totals:	106	maximum width of fields
	26	estimated number of delimiters
	132	estimated maximum record width

## Walkover Radiation Data Format

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Data Base Field name	maximum length	Field description
Walkover Monitor part., sample description		
1 rad-id	5	key, sample id number
2 edition	2	edition number
3 date-rad	8	date of sample
4 time-rad	5	time of sample (military)
5 page-check	10	checked by (initials)
6 site	59	site
7 survey	20	surveyors
8 sur-area	59	area
9 rec-check	59	recorded by
10 count-time	5	count time
11 unit-count	1	units of count
12 1-background	5	1st background count
13 2-background	5	2nd background count
14 1-reading	10	1st device reading
15 2-reading	10	2nd (dup) device reading
16 device-type	6	device type (spa3 or fidler)
17 1-scaler	10	1st scaler model
18 1-serial	10	1st serial number
19 1-probe	10	1st probe model
20 1-pserial	10	1st probe serial number
21 2-scaler	10	2nd scaler number
22 2-serial	10	2nd serial number
23 2-probe	10	2nd probe model
24 2-pserial	10	2nd probe serial number
25 rad-comments	20	comments
Totals:	369	maximum width of fields
	74	estimated number of delimiters
	443	estimated maximum record width

Node Radiation Data Format

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Data Base Field name =====	maximum length =====	Field description =====
Node Rad part., sample description		
1 rad-id	5	key, sample id number
2 loct-rad	50	description of location
3 rad-n-coord	15	north coordinate
4 rad-e-coord	15	east coordinate
5 date-rad	8	date of sample
6 time-rad	10	time of sample
7 rad-device	7	device type (spa3 or pic)
8 pic-serial	7	pic serial number
9 pic-duration	3	pic duration in minutes
10 pic-total	12	total uR
11 pic-grid-cpm	10	uR per hour
12 serial-no	7	spa3 serial number
13 duration	3	spa3 duration in minutes
14 avg-count	12	spa3 total counts
15 grid-cpm	10	spa3 grid counts per minute
16 rad-collect-id	20	collectors initials
17 rad-weather	20	weather at time of sample
18 rad-comments	100	comments
	-----	
Totals:	304	maximum width of fields
	53	estimated number of delimiters
	357	estimated maximum record width

Grid Id to Coordinates Data Format

Data Base Field name =====	maximum length =====	Field description =====
Grid id part., sample description		
1 grid-id	7	key, sample id number
2 rad-n-coord	6	north coordinate
3 rad-e-coord	7	east coordinate
	-----	
Totals:	20	maximum width of fields
	8	estimated number of delimiters
	28	estimated maximum record width

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Groundwater data format

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<u>Data Base</u> <u>Field name</u>	<u>maximum</u> <u>length</u>	<u>Field</u> <u>description</u>
Subwater monitoring part.,		description seg.
1 water-id	5	key, sample ID
2 well-number	15	
3 loct-water	50	descript of location
4 date-water-samp	8	
5 time-water-samp	10	
6 gr-samp-type	6	type of water sample
7 gr-other	10	
8 gr-pollute	20	
9 gr-temp	4	
10 gr-units	10	
11 1-do-value	25	dissolved oxygen
12 1-conduct	10	conductivity
13 1-pH	4	
14 2-do	25	diss. ox.
15 2-conduct	10	
16 2-pH	4	
17 last-do	25	diss. oxy
18 last-cond	10	
19 last-pH	4	
20 media-wat	3	sample media
21 other-wat-media	15	
22 wat-rinsate	1	
23 wat-preserve	1	flag
24 preserve-type	7	
25 wat-other-pres	15	
26 sequence-wat	2	seq. number
27 wat-blank	1	flag
28 wat-duplicate	1	flag
29 id-dup-wat	10	
30 1-wat-triplicat	1	
31 1-triplicate-id	30	
32 wat-split	1	flag
33 id-split-wat	10	
34 wat-spike	1	flag
35 id-wat-spike	20	
36 wat-filter	1	flag
37 wat-comments	10	
-----		
Totals:	385	maximum width of fields
	110	estimated number of delimiters
	495	estimated maximum record width

## Fernald RI/FS Data Transfer

## Facility Testing Data Diskette

This readme file describes the data included in the 12 February 1991 data transmittal from the Fernald Remedial Investigation / Feasibility Study database to the US-DOE. This transmittal consists of 4 data files. As with previous transmittals, the data files are compressed. The compressed file is FTP.ARC (1,042,223 bytes in size). The program PKXARC is also included for restoring the files to their original size.

The data files contain Facility Testing data records. Analysis results for Facilities Testing samples were received from several laboratories working under different contracts. The data is in different formats. These results are stored in separate segments on the database. Thus separate files of results are provided.

IT laboratory results, the standard RI/FS laboratory, are in the file FTPCHM.ALL. Samples analyzed under a WMCO contract are in the file FTPRADW.ALL.

Below is a listing of the data files being sent. Also shown are their estimated sizes and a description of their contents.

	file size in bytes	contents
FTP-DES.ALL	2,679,480	FTP samples, description info.
FTPCHM.ALL	1,746,028	FTP chemical results, IT laboratory
FTPRAD.ALL	252,650	FTP rad. results, IT laboratory
FTPRADW.ALL	578,728	FTP rad. results, WMCO laboratory

Total of 4 files, 5,256,886 bytes in size

The following tables provide the detailed description of the records for every possible data file type. Every type may not be present in this transmittal.

The fields are named, numbered, briefly described, and the maximum size is stated. At the end of each chart is the estimated maximum size for the record.

## Facility-test data format

Data Base Field name =====	maximum length =====	Field description =====
Facility-test part., description seg.		
1 sample-id	5	key, unique sample number
2 type-samp	5	soil or water sample
3 well-id	10	well/boring id no.
4 well-boring	10	monitoring, boring, or piezometer
5 coll-date	8	collection date (mmddyy)
6 coll-time	4	collection time (hhmm)
7 samp-depth	15	sample depth interval
8 preserv	1	preservative (y/n)
9 sequence	3	sequence number
10 blank	1	blank? (y/n)
11 spike	1	spike? (y/n)
12 dup	1	duplicate? (y/n)
13 num-dup	5	duplicate of sample number
14 split	1	split? (y/n)
15 spl-num	5	split of sample number
16 ftp-comments	10	general comments
Facility-test part., vis-class-soils seg.		
17 blow-1	3	first blow on sampler
18 length-1	2	per numerical length 1
19 blow-2	3	second blow on sampler
20 length-2	2	per numerical length 2
21 blow-3	3	third blow on sampler
22 length-3	2	per numerical length 3
23 units-1	11	units of (first) blow
24 recov	2	recovery of sample
25 1-uscs	2	first USCS symbol
26 1-tsf	8	1st meas. cons. (TSF)
27 2-uscs	2	second USCS symbol
28 2-tsf	8	2nd meas. cons. (TSF)
29 3-uscs	2	third USCS symbol
30 3-tsf	8	3rd meas. cons. (TSF)
31 hnu	10	HNU reading (ppm)
32 alpha	10	alpha reading (cpm)
33 beta-gamma	20	beta-gamma reading (cpm)
34 1-comments	20	comments/notes

## Facility-test part., water-quality seq.

35 samp-type	20	sample type
36 air-temp	6	air temperature
37 air-tem-unit	10	units for air temperature
38 water-temp	6	water temperature
39 wat-tem-unit	10	units for water temperature
40 depth-samp	9	depth of sample
41 dep-sam-unit	11	units for sample depth
42 wat-lev-bef	9	water level before purge
43 wat-lev-unit	11	units for water level depth
44 wat-lev-aft	9	water level after purge
45 do-sat-air	9	DO saturation in air
46 pH1	9	pH reading 1
47 pH2	9	pH reading 2
48 pH3	9	pH reading 3
49 pH4	9	pH reading 4
50 spec-cond-1	9	specific conductivity reading 1
51 spec-cond-2	9	specific conductivity reading 2
52 spec-cond-3	9	specific conductivity reading 3
53 spec-cond-4	9	specific conductivity reading 4
54 do-1	9	dissolved oxygen reading 1
55 do-2	9	dissolved oxygen reading 2
56 do-3	9	dissolved oxygen reading 3
57 do-4	9	dissolved oxygen reading 4
58 qual-comm	20	comments, water quality form
	-----	
Totals:	441	maximum width of fields
	173	estimated number of delimiters
	614	estimated maximum record width

## Laboratory Results Data Format

Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,		description seg., lab-results seg.,
1 sample-id	5	
2 suffix	25	suffix code
3 param-code	9	CAS number
4 lab-result	20	
5 qualif	10	qualifier
6 units	15	
7 error	20	
8 bland-id	15	
9 ext-date	8	
10 analy-date	8	analysis date
11 prod-code	6	
12 conform-flag	1	
13 lab-code	9	
14 ID-lab	9	
15 MG-value	20	
16 MG-units	20	
17 lab-comments	10	
	-----	
Totals:	210	maximum width of fields
	50	estimated number of delimiters
	260	estimated maximum record width

Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,		description seg., rad-results seg.
1 sample-id	5	
2 filter	10	filter parameters
3 rad-units	20	
4 Rtest-rad	20	type of test
5 detect-param	1	
6 results-rad	10	
7 sigma-2	10	
8 radlab-id	20	
9 rad-comments	10	
	-----	
Totals:	106	maximum width of fields
	26	estimated number of delimiters
	132	estimated maximum record width

## WMCO Laboratory Results Data Format

Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,		description seg., WMCO-results seg., (Chemical results)
1 sample-id	5	
2 lab-id-num	11	lab id number
3 tst	30	test analysis
4 cas-code	9	parameter (CAS) code
5 det-symb	1	detection symbol
6 test-results	10	lab reading
7 results-units	11	units
8 compdate	8	date analysis completed
9 appdate	8	date analysis approved
10 suff-code	25	suffix code for sample
11 wmco-chem-qual	2	validation qualifier code
	-----	
Totals:	120	maximum width of fields
	32	estimated number of delimiters
	152	estimated maximum record width

Data Base Field name =====	maximum length =====	Field description =====
Results-lab part.,		description seg., WMCO-rad-results seg., (Radiological)
1 sample-id	5	
2 lab-sam-num	10	lab sample number
3 analysis	30	analysis performed
4 res-rad-wmco	10	analysis results (includes < )
5 unit-rad-wmco	12	units
6 date-complete	12	date analysis completed
7 wmco-rad-qual	2	validation qualification code
8 wm-rad-detect	1	detection parameter
9 wm-rad-result	10	numeric analysis results
	-----	
Totals:	92	maximum width of fields
	26	estimated number of delimiters
	118	estimated maximum record width

## WMCO Groundwater Monitoring Data Transfer

This readme file describes the groundwater data files received from Westinghouse Materials Company of Ohio during Quarter 4 of 1990. as with previous transmittals, the data files are compressed. The files are compressed into one file WMCOWG.ARC (464,793 bytes). The program PKXARC is also included for restoring the files to their original size.

The uncompressed files are in dBase4 format. They contain chemical results for Quarters 1, 2, and 3, 1990. The filenames and sizes in bytes are listed below.

For further information on the file contents please contact Kenneth A. Broberg at Westinghouse Materials Company of Ohio, Environmental Monitoring section (513) 738-6146.

filename	size in bytes	description
NETA.DBF	1,071,674	1st Quarter, 1990 Groundwater Monitoring Chemical Results
NETB.DBF	1,071,674	2nd Quarter, 1990 Groundwater Monitoring Chemical Results
NETC.DBF	1,068,461	3rd Quarter, 1990 Groundwater Monitoring Chemical Results