

00057598



**Rocky Mountain  
Remediation Services, L.L.C.**  
... protecting the environment

DATE: July 31, 1995

TO: File

FROM: M. C. Burmeister, Accelerated Actions, Bldg. T891B, X5891  
JRC J. R. Cirillo, Environmental Projects, Bldg. T891B, X5876  
M. T. Vess, Environmental Projects, Bldg. T891B, X6540

SUBJECT: RECORDS SUBMITTAL FOR OPERABLE UNIT 1 WATER TREATMENT FACILITY, AND  
OPERABLE UNIT 2 FIELD TREATABILITY UNIT – MBU-044-95

DOE Order: 1324.5

The records noted below for the Operable Unit 1 Water Treatment Unit, and the Operable Unit 2 Field Treatability Unit have been reviewed and verified as adequate. However, in some instances, the record date, name, signature, etc. may be missing. These deficiencies cannot be corrected due to the unavailability of the person(s) who created the record. The deficiencies noted above do not invalidate the accuracy of the record.

The above information applies to the following:

Records Transmittal numbers:

- 942609 through 942619;
- 942621;
- 942625 through 942626;
- 942629;
- 94818 through 94819;
- 94823 through 94826;
- 94828 through 94832;
- 94834.

Records Package numbers:

- 0071 through 0072;
- 0075;
- 0077 through 0084.

alc

cc:  
ERPD Project File (2)

ADMIN RECCRD

ROCKY FLATS PLANT, P.O. BOX 464, ARVADA, COLORADO 80007(303) 966-7000

BZ-A-000324

Y19

ADMIN RECCRD

4D101

VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OU-1 989067

Date: 7-29-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated  Low-Level RAD  Hazardous  Mixed

3. Prework/Background Organic Vapor Monitoring Results

Instrument Used: HNU Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): PPM

4. Verification Measurements CALIBRATED 0650 w/100 ppm isobutyl.

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0655	ACID TANK	-0-	2.2	2.0	2.2	2.0
	T-210	-0-	2.2	2.0	2.2	2.0
	BACKDOOR	-0-	2.2	2.0	2.2	2.0
	W/CHAMBERS	-0-	2.2	2.0	2.2	2.0

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRYE Karen Sue Frye 7-29-93  
Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

2

1. Project Name & Number: OU-1 989067

Date: 8-4-93 Site Number: \_\_\_\_\_

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results

Instrument Used: HNU Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
1010	891 Dean	-0-	1 ppm	NAB		
1025	891 Colgal	-0-	1 ppm	NAB		
1045	891 Colwell	-0-	1 ppm	NAB		

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRIE Karen Sue Frie 8-4-93  
 Print Name Signature Date

Subcontractor: RTG

3

VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: 04-1 989067

Date: 8-20-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated  Low-Level RAD  Hazardous  Mixed

3. Prework/Background Organic Vapor Monitoring Results

Instrument Used: HNU Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): PPM

4. Verification Measurements

*Calibrated 0650 w/ 100 ppm isobutyl.*

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0705	ACID TANK	-0-	2.1	2.0	2.1	2.0
	T-210	-0-	2.1	2.0	2.1	2.0
	BACKDOOR	-0-	2.1	2.0	2.1	2.0
	LV CHAMBERS	-0-	2.1	2.0	2.1	2.0

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRYE *Karen Sue Frye* 8-20-93  
 Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

3

1. Project Name & Number: OU-1 989067  
 Date: 8-24-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):  
 Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Pework/Background Organic Vapor Monitoring Results  
 Instrument Used: HNU Serial No. 101472  
 (Numeric Value): 0-20 (Units, i.e., ppm): PPM

4. Verification Measurements 11:45 CALIBRATED TO 100 PPM ISOBUTYLENE

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
1221	FOOTING DRAIN	<del>0</del> -0-	1.5	NAB	1.5	NAB
1235	Collection GALLERY	-0-	1.5	NAB	1.5	NAB
1245	Collection WELL	-0-	1.5	NAB	1.5	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRYE Karen Sue Frye 8-24-93  
Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OU-1 789067 4

Date: 9-9-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Pework/Background Organic Vapor Monitoring Results

Instrument Used: Thermo Environmental OVM Serial No. 580B-34778-249

(Numeric Value): 0-2000 ppm (Units, i.e., ppm): ppm

4. Verification Measurements *Calibrated 9.9.93 at 09:00 by M.C. Schreckengast using 101 ppm isobutylene. Read 95 ppm on 101 ppm standard.*

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0945	ACID TANK	0	0	NAB	0	NAB
	T-210	0	0	NAB	0	NAB
	BACK DOOR	0	0	NAB	0	NAB
	BETWEEN UV CHAMBERS	0	0	NAB	0	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRYE Karen Sue Frye 9-9-93  
 Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)



VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OU-1 989067 7

Date: 9-29-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Pework/Background Organic Vapor Monitoring Results

Instrument Used: HNU Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements CALIBRATED 0850 USING 100 ppm / isobutylene

Time	LOCATION Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0854	ACID TANK	0	2.5	NAB	2.5	NAB
	T-210	0	2.5	NAB	2.5	NAB
	BACK DOOR	0	2.5	NAB	2.5	NAB
↓	BETWEEN LVCHAMBERS	0	2.5	NAB	2.5	NAB
0936	FOOTING DRAIN	0	2.5	NAB	2.5	NAB
	RECOVERY WELL	0	2.0	NAB	KSF	
1022	COLLECTION GALLERY	0	2.0	NAB	2.0	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRYE Karen Sue Frye 9-29-93  
 Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OU-1 989067

Date: 9-30-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prewrite/Background Organic Vapor Monitoring Results

Instrument Used: Thermo Environmental Instr. Serial No. 580B-34780-249

(Numeric Value): 0-2000 (Units, i.e., ppm): ppm

4. Verification Measurements

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
1100	4V INF	-0-	-0-	-0-	-0-	-0-
1140	4V EFF	-0-	-0-	-0-	0	0
1235	1X INF	-0-	-0-	-0-	-0-	-0-
1250	1X EFF	-0-	-0-	-0-	-0-	-0-

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRYE Karen Sue Frye 9-30-93  
Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

Calibrated 9/30/93, 10:35 by M.D. Schreckengast. Read 102 ppm on 101 ppm isobutylene standard.

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

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1. Project Name & Number: OU-1 987067

Date: 10-7-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results

Instrument Used: HNU Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements Calibrated 0700 using 103 ppm Isobutylene

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0705	ACID TANK	-0-	2.8	NAB	2.8	NAB
↓	T-210	-0-	2.8	NAB	2.8	NAB
↓	BACK DOOR	-0-	2.8	NAB	2.8	NAB
↓	BETWEEN LIU CHAMBERS	-0-	2.8	NAB	2.8	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE ERVE Karen Sue Erve 10-7-93  
Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OU 1 989067

Date: 10-27-93 Site Number: 891

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results

Instrument Used: HMy Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements

Time	Location Depth P.O. (FT)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
13:05	891 footing drain	2.4	2.4	2.4	2.4	2.4
13:30	collection gallery P-101	2.3	2.3	2.3	2.3	2.3

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: Robert Olson [Signature] 10-27-93  
 Print Name Signature Date

Subcontractor: RTG

12:45 Calibrated with 100 ppm isobutylene.

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OUI FTU / ~~9881~~ 989067 2  
 Date: 11-4-93 Site Number: 891 Treatment Plant

2. Historical Characterization (check one):  
 Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results  
 Instrument Used: HNU Serial No. 101472  
 (Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements

Time	Location Depth P.O. (ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
13:50	CONTROL ROOM DOOR	-0-	4.3	4.3	4.3	4.3
13:50	1X-2	-0-	4.3	4.3	4.3	4.3
13:50	1X-4	-0-	4.3	4.3	4.3	4.3

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: R. Olson [Signature] 11-4-93  
 Print Name Signature Date

Subcontractor: RTG

Calibrated 07:15 11-4-93 with 100 ppm isobutylene.

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OU-1 Bldg. 891 / 989067  
 Date: 11-9-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):  
 Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results  
 Instrument Used: HNu Serial No. 101472  
 (Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
1020	CONTROL ROOM DOOR	-0-	3.6	NAB	3.6	NAB
1020	T-210	-0-	3.6	NAB	3.6	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE FRYE Karen Sue Frye 11-9-93  
Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

CALIBRATED 1015 11-9-93 WITH 100 ppm ISOBUTYLENE.  
 BY K. S. FRYE

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: 04-1 Bldg. 891 / 989067

Date: 12-3-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prewrite/Background Organic Vapor Monitoring Results

Instrument Used: HN4 Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements CALIBRATED 0800 WITH 103 PPM ISOBUTYLENE BY WAYNE WALLACE. JW

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
1020	ACID TANK	-0-	2.3	NAB*	2.3	NAB
	T-210	-0-	2.3	NAB	2.3	NAB
	BACK DOOR	-0-	2.3	NAB	2.3	NAB
	BETWEEN UV CHAMBERS	-0-	2.3	NAB	2.3	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified. \*NAB = NOT ABOVE BACKGROUND.

Completed By: KAREN SUE ENGELBREKTSON Karen Sue Engelbrektson 12-3-93  
Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: 04-1 Bldg. 891 / 989067 4  
 Date: 12-8-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):  
 Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results  
 Instrument Used: HNU Serial No. 101472  
 (Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements CALIBRATED 0705 WITH 103 ppm ISOBUTYLENE BY KAREN SUE ENGELBREKTSON. KSE

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0715	ACID TANK	-0-	2.2	NAB*	2.2	NAB
	T-210	-0-	2.2	NAB	2.2	NAB
	BACK DOOR BETWEEN	-0-	2.2	NAB	2.2	NAB
	HV CHAMBERS	-0-	2.2	NAB	2.2	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified. \*NAB = NOT ABOVE BACKGROUND

Completed By: KAREN SUE ENGELBREKTSON Karen Sue Engelbrektson 12-8-93  
 Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

3

1. Project Name & Number: OU-1 Bldg. 891 / 989067  
 Date: 12-16-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):  
 Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results  
 Instrument Used: HNU Serial No. 101472  
 (Numeric Value): 0-20 (Units, i.e., ppm): PPM

4. Verification Measurements CALIBRATED 0730 WITH 103ppm Isobutylene by KAREN SUE ENGELBREKTON, KSE

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0740	ACID TANK	-0-	2.3	NAB*	2.3	NAB
	T-210	-0-	2.3	NAB	2.3	NAB
	BACK DOOR	-0-	2.3	NAB	2.3	NAB
	BETWEEN W/ CHAMBERS	-0-	2.3	NAB	2.3	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified. \* NAB = NOT ABOVE BACKGROUND

Completed By: KAREN SUE ENGELBREKTON Karen Sue Engelbrekton 12-16-93  
Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

2

1. Project Name & Number: OU-1 Bldg. 891 / 989067

Date: 12-21-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):

Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results

Instrument Used: HNu Serial No. 101472

(Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements CALIBRATED 0830 WITH 103 ppm Isobutylene by KAREN SUE ENGLBERTSON. KSE

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0840	ACID TANK	-0-	2.3	NAB*	2.3 -0- KSE	NAB
	T-210	-0-	2.3	NAB	2.3	NAB
	BACK DOOR	-0-	2.3	NAB	2.3	NAB
	BETWEEN UV CHAMBERS	-0-	2.3	NAB	2.3	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified. \* NAB = NOT ABOVE BACKGROUND.

Completed By: KAREN SUE ENGLBERTSON Karen S. Englbertson 12-21-93  
 Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

VERIFICATION OF ORGANIC VAPOR MONITORING RESULTS

1. Project Name & Number: OU-1 Bldg. 891 / 989067  
 Date: 12-29-93 Site Number: 891 TREATMENT PLANT

2. Historical Characterization (check one):  
 Not potentially contaminated     Low-Level RAD     Hazardous     Mixed

3. Prework/Background Organic Vapor Monitoring Results

Instrument Used: #Nu Serial No. 101472  
 (Numeric Value): 0-20 (Units, i.e., ppm): ppm

4. Verification Measurements CALIBRATED WITH 100 ppm ISOBUTYLENE @ 0900  
BY WAYNE WALLACE 2/2

Time	Depth (Ft)	Initial Reading (ppm)	First Background Check (ppm)	First Verification Reading (ppm)	Second Background Check (ppm)	Second Verification Reading (ppm)
0950	UV INFLUENT	-0-	2.2	NAB	2.2	NAB
1020	UV EFFLUENT	-0-	2.2	NAB	2.2	NAB
1030	IX INFLUENT	-0-	2.2	NAB	2.2	NAB
1100	IX-4 EFFLUENT	-0-	2.2	NAB	2.2	NAB

5. If either of the verification measurements are above the preceding background measurement, the initial measurement has been verified.

Completed By: KAREN SUE ENGELBREXTSON Karen Sue Engelbrextson 12-29-93  
 Print Name Signature Date

Subcontractor: RESOURCE TECHNOLOGIES GROUP, INC. (RTG)

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