

RADIOLOGIC AND ENGINEERING ASSESSMENT

FOR

DOE ID NO.: GJ-11124-RS
ADDRESS: 506 COURT ROAD

AUGUST 1985

FOR

URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT OFFICE

ALBUQUERQUE OPERATIONS OFFICE

DEPARTMENT OF ENERGY

BY

BENDIX FIELD ENGINEERING CORPORATION
P.O. Box 1569
Grand Junction, Colorado 81502

APPROVED BY

M. K. Tucker *CDH*
M. TUCKER

DOE PROJECT ENGINEER

DATE

August 6, 1985

REA11124:REA-706

8508300282 850807
PDR WASTE
WM-54 PDR

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

The location, DOE ID No. GJ-11124-RS, is a single-family residence located at 506 Court Road, Grand Junction, Colorado.

The purpose of this assessment is to evaluate the extent of uranium millsite contamination at this property. This assessment includes recommended remedial action, estimated volume of material to be removed, and estimated cost of the proposed action.

1.2 Evaluation and Recommendation

The action recommended is the removal of contaminated material and restoration of the property to its original condition. The identified residual radioactive material found on this property is tailings; the estimated volume is: exterior, 38 cu. yd.; interior, 0 cu. yd.

Estimated cost to perform remedial action, including dislocation when applicable, is \$1,736. Remedial action on this property will take approximately 7 days to complete.

2.0 PROPERTY DESCRIPTION

2.1 General Description

Address: 506 Court Road, Grand Junction, Colorado

Zoning: Commercial (C-1)

Lot Size: Approximately 10,500 sf (0.24 acres)

Legal Description: Beginning 430 feet north of southeast corner, SW 4, SW 4, SW 4, Section 7, 1S 1E, west 165 feet, north 70 feet, east 165 feet, south to beginning except west 15 feet for road, City of Grand Junction, County of Mesa, State of Colorado.

Point of Reference: This property is located approximately 2 mile(s) northeast of the State of Colorado Tailings Repository. Appendix Figure 2.1 shows the property location relative to its surroundings.

Utilities: Utility locations are shown in Appendix Figure 2.2.

Electrical:	Overhead
Gas:	Underground
Telephone:	Overhead
Sewer:	Underground
Water:	Underground
Cable TV:	None

Bordering Properties:

North:	Single-family residence
South:	Commercial structure
East:	Commercial structure
West:	Court Road

2.2 Existing Facilities and Structures

Primary Structure:

Type:	Single-story residence
Size:	Approximately 742 sf
Construction Date:	1951
Construction:	Wood-frame
Foundation:	Concrete slab-on-grade
Footing Depth:	Not determined
Basement:	None
Crawl Space:	None
Condition:	Good

Other Structures:

Type:	Shed
Size:	Approximately 215 sf
Construction:	Wood-frame
Foundation:	Concrete slab-on-grade
Condition:	Good

General Remarks:

Structures, utilities, landscaping, and other special features of this property are included in Appendix Figure 2.2.

Historical Data:

This structure is not over 50 years old. Therefore, it does not meet the eligibility criteria for consideration of inclusion on the National Register of Historic Places.

3.0 RADIOLOGIC SURVEY

3.1 Introduction

Radiologic data were collected by Bendix at DOE ID No. GJ-11124-RS on July 10, 1985. Data collection methods were performed in accordance with procedures fully described in the Radiologic Support Operations Procedures Manual GJ-07(84) (Bendix Field Engineering Corporation, 1984). These data were evaluated to determine the areal and vertical extent of uranium mill tailings contamination at this property as well as any other contaminated material that may have originated from the millsite.

A review of historical information from the files of the Colorado Department of Health (CDH) and the inclusion data from Oak Ridge National Laboratory (ORNL) was conducted. These records indicate contamination located along the east and west property boundaries.

The Bendix radiologic survey was designed to investigate the entire property, with emphasis on previously identified areas of contamination. Conclusions based upon data analyses are discussed in Section 3.5, Extent of Contamination. Photocopies of the Official Survey Report, team leader notes, deconvolution graphs, and Exterior Gamma Scan map are included in the Appendix (Section 6.0).

3.2 Gamma Exposure-Rate Surveys

3.2.1 Exterior Findings

Background Readings: 14 to 16 uR/h
Highest Outside Gamma Reading (HOG): 29 uR/h

Exterior radium-concentration measurements are presented in Appendix Table 3.1. Grid-point survey results are shown in Appendix Figure 3.1.

3.2.2 Interior Findings

Background Readings: 14 to 16 uR/h
Highest Inside Gamma Reading (HIG): 16 uR/h

Interior gamma exposure-rate measurements are summarized in Appendix Table 3.2.

3.3 Boreholes, Soil Samples, and Other Measurements

Areas which displayed elevated gamma levels were further investigated; these areas are shown in Appendix Figure 3.2. Data from these investigations are included in Appendix Table 3.1.

3.4 Radon/Radon Daughter Concentration (RDC)

The working level was not assessed by CDH. No RDC measurements were taken by Bendix.

3.5 Extent of Contamination

Appendix Figure 3.3 shows identified areas and estimated depths of contamination on this property, based on assessments of all measurements taken. As noted in this figure, areas recommended for remedial action that contain identified residual radioactive materials are:

- (Area A) Surface Material: Lawn
Direction From Primary Structure: West
Other Directions: Near Court Road
Total Depth of Contamination: 18 inches
Approximate Square Footage: 100
- (Area B) Surface Material: Lawn
Direction From Primary Structure: West
Other Directions: North of Area A
Total Depth of Contamination: 6 inches
Approximate Square Footage: 170
- (Area C) Surface Material: Soil
Direction From Primary Structure: East
Total Depth of Contamination: 9 inches
Approximate Square Footage: 613
- (Area D) Surface Material: Soil
Direction From Primary Structure: East
Other Directions: This area encompasses Area C
Total Depth of Contamination: 6 inches
Approximate Square Footage: 557
- (Area E) Surface Material: Soil
Direction From Primary Structure: East
Other Directions: Northwest of Shed
Total Depth of Contamination: 6 inches
Approximate Square Footage: 20
- (Area F) Surface Material: Soil
Direction From Primary Structure: Southeast
Other Directions: South of shed
Total Depth of Contamination: 6 inches
Approximate Square Footage: 34

4.0 RECOMMENDED REMEDIAL ACTION

4.1 Decontamination and Restoration

The recommended remedial action for this property, DOE ID No. GJ-11124-RS, includes removal of all areas identified as containing radioactive material (as discussed in Section 3.5 and shown in Appendix Figure 3.3) and transport of removed material to the disposal site.

After remedial action is completed, the areas involved will be restored to original condition in accordance with the Bendix drawings, Vicinity Properties General Construction Specification (Bendix Field Engineering Corporation, 1984), and Statement of Work for Construction Subcontractor.

Dislocation of the occupants will not be required for this remedial action.

4.2 Evaluation of Recommended Remedial Action

Volume calculations of the areas included for remedial action are presented in Appendix Table 4.1. Cost estimates are presented in Appendix Table 4.2.

Estimated cost of remedial action is \$1,736.

This remedial action will result in removal of the identified residual radioactive materials.

There is no owner preference with respect to remedial action and no legal or other complications are foreseen at this time.

5.0 REFERENCES

ARIX, A Professional Corporation, Procedures Manual for the Grand Junction Remedial Action Program, for Colorado Department of Health, Radiation Control Division, and the U.S. Department of Energy, 1983.

Bendix Field Engineering Corporation, Procedures Manual Radiologic Support Operations Grand Junction Vicinity Properties, (GJ-07), for U.S. Department of Energy, UMTRA Project Office, Albuquerque Operations Office, Albuquerque, New Mexico, 1984.

Bendix Field Engineering Corporation, Engineering, Construction, and Land Support Manual Grand Junction Vicinity Properties Project, (GJ-08), for U.S. Department of Energy, UMTRA Project Office, Albuquerque Operations Office, Albuquerque, New Mexico, 1984.

Bendix Field Engineering Corporation, Grand Junction Vicinity Properties Operating Manual, (GJ-16) for U.S. Department of Energy, Nuclear Energy Programs, Division of Remedial Action Projects, UMTRA, 1984.

Bendix Field Engineering Corporation, Vicinity Properties General Construction Specification, for U.S. Department of Energy, Nuclear Energy Programs, Division of Remedial Action Projects, UMTRA, 1984.

Bendix Field Engineering Corporation, Environmental Assessment of Preliminary Cleanup Activities at Offsite Properties Contaminated by Tailings from the Grand Junction Inactive Uranium Millsite, (GJ-04), for U.S. Department of Energy, UMTRA Project Office, Albuquerque Operations Office, Albuquerque, New Mexico, 1983.

U.S. Department of Energy, Programmatic Memorandum of Agreement (DOE No. DE-GM04-84AL28460) between the U.S. Department of Energy, the Advisory Council on Historic Preservation, and the Colorado State Historic Preservation Officer, for UMTRA Project Office, Albuquerque Operations Office, Albuquerque, New Mexico, 1984.

U.S. Department of Energy, Vicinity Properties Management and Implementation Manual, for UMTRA Project Office, Albuquerque Operations Office, Albuquerque, New Mexico, 1984.

U.S. Environmental Protection Agency, Standards for Remedial Action at Inactive Uranium Processing Sites (40 CFR Part 192), Washington, D.C., 1983.

6.0 APPENDIX

This Appendix contains the following:

Appendix Tables:

Table 3.1	Radium Concentrations at Exterior Locations
Table 3.2	Summary of Interior Gamma Exposure Rates
Table 4.1	Area and Volume Calculations
Table 4.2	Estimated Cost of Decontamination and Restoration

Appendix Figures:

Figure 2.1	Vicinity Map
Figure 2.2	Site Plan
Figure 3.1	Exterior Grid-Point Exposure Rates
Figure 3.2	Exterior Sample Locations
Figure 3.3	Exterior Estimated Extent of Contamination

Official Survey Report

Team Leader Notes

Deconvolution Graphs (Apparent Radium-226 Concentration)

Exterior Gamma Scan Map

Radium Concentrations at Exterior Locations

DOE ID #GJ-11124-RS

506 Court Road

Page 1 of 4

Loc #	Grid Location	Depth (in.)	Meas. Type	In Situ Ra-226 (pCi/g)		Chem Ra-226 (pCi/g)	Comments
				Tot. Ct	Spectr.		
1	135258	00	DS	8.2		*	West of primary structure
		03	TC	6.5		*	
		06	TC	8.0		*	
		09	TC	8.3		*	DC = 18 inches Based on the deconvolution graph
		12	TC	7.6		*	
		15	TC	6.5		*	
		18	TC	5.2		*	
		21	TC	4.3		*	
		24	TC	4.0		*	
		27	TC	3.9		*	
		30	TC	3.9		*	
		33	TC	3.9		*	
		36	TC	3.8		*	
		39	TC	3.8		*	
		42	TC	3.6		*	
		45	TC	3.5		*	
2	135275	00	DS	4.5		*	West of primary structure
		06	DS	1.8		*	
3	136272	00	DS	5.9		*	West of primary structure
		03	TC	6.7		*	
		06	TC	6.2		*	
		09	TC	5.4		*	DC = 9 inches Based on the deconvolution graph
		12	TC	4.9		*	
		15	TC	4.6		*	
		18	TC	4.4		*	
		21	TC	4.4		*	
		24	TC	4.3		*	
		27	TC	4.2		*	
		30	TC	4.0		*	
		33	TC	4.0		*	
		36	TC	3.9		*	
		39	TC	3.9		*	
		42	TC	4.0		*	
		45	TC	4.0		*	
4	137261	00	DS	7.3		*	West of primary structure
		06	DS	5.5		*	
		12	DS	4.3		*	
		15	DS	2.0		*	
5	143271	00	DS	4.8		*	West of primary structure
		06	DS	1.4		*	

Radium Concentrations at Exterior Locations

DOE ID #GJ-11124-RS

506 Court Road

Page 2 of 4

Loc #	Grid Location	Depth (in.)	Meas. Type	In Situ Ra-226 (pCi/g)		Chem Ra-226 (pCi/g)	Comments
				Tot. Ct	Spectr.		
6	179269	00	DS	2.5		*	West of primary structure
		03	TC	3.6		*	
		06	TC	3.8		*	
		09	TC	4.0		*	DC = 0 inches
		12	TC	4.1		*	
		15	TC	4.2		*	
		18	TC	4.3		*	
		21	TC	4.3		*	
		24	TC	4.3		*	
		27	TC	4.1		*	
		30	TC	4.1		*	
		33	TC	4.1		*	
		36	TC	4.0		*	
		39	TC	4.1		*	
		42	TC	4.1		*	
7	189281	00	DS	2.3		*	Gas line
		06	DS	1.5		*	
8	200281	03	TC	3.1		*	North foundation
		06	TC	3.3		*	
		09	TC	3.4		*	DC = 0 inches
		12	TC	3.5		*	
		15	TC	3.5		*	
		18	TC	3.5		*	
		21	TC	3.5		*	
		24	TC	3.4		*	
		27	TC	3.3		*	
		30	TC	3.5		*	
		33	TC	3.3		*	
9	208282	00	DS	2.2		*	North of primary structure
		06	DS	1.9		*	
10	211265	03	TC	3.6		*	Water line
		06	TC	3.8		*	
		09	TC	4.0		*	DC = 0 inches
		12	TC	4.1		*	
		15	TC	4.1		*	
		18	TC	4.2		*	
		21	TC	4.2		*	
		24	TC	4.1		*	
		27	TC	4.1		*	
		30	TC	4.1		*	

Radium Concentrations at Exterior Locations

DOE ID #GJ-11124-RS

506 Court Road

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Loc #	Grid Location	Depth (in.)	Meas. Type	In Situ Ra-226 (pCi/g)		Chem Ra-226 (pCi/g)	Comments
				Tot. Ct	Spectr.		
10	211265	33	TC	4.1		*	
		36	TC	3.9		*	
11	211270	03	TC	2.9		*	Sewer line
		06	TC	3.1		*	
		09	TC	3.3		*	DC = 0 inches
		12	TC	3.5		*	
		15	TC	3.5		*	
		18	TC	3.5		*	
		21	TC	3.5		*	
		24	TC	3.5		*	
		27	TC	3.4		*	
		30	TC	3.5		*	
		33	TC	3.4		*	
		36	TC	3.5		*	
		39	TC	3.5		*	
12	227256	00	DS	3.6		*	East of primary structure
		06	DS	2.2		*	
13	246268	00	DS	3.9		*	East of primary structure
		06	DS	2.0		*	
14	249241	00	DS	5.4		*	South of shed
		06	DS	2.5		*	
15	270255	00	DS	5.1		*	East of shed
		06	DS	2.1		*	
16	270270	00	DS	6.9		*	East of primary structure
		03	TC	6.0		*	
		06	TC	5.6		*	
		09	TC	5.1		*	DC = 9 inches Based on the deconvolution graph
		12	TC	4.8		*	
		15	TC	4.5		*	
		18	TC	4.4		*	
		21	TC	4.3		*	
		24	TC	4.2		*	

Radium Concentrations at Exterior Locations

DOE ID #GJ-11124-RS

506 Court Road

Page 4 of 4

Loc #	Grid Location	Depth (in.)	Meas. Type	In Situ Ra-226 (pCi/g)		Chem Ra-226 (pCi/g)	Comments
				Tot. Ct	Spectr.		
16	270270	27	TC	4.2		*	
		30	TC	4.2		*	

Measurement GB = GAD-6 Borehole
Types: GS = GAD-6 Surface
DS = Delta Scintillometer
TC = Total Count Borehole
SS = Soil Sample
BH = Combined GAD-6 and
Total Count Borehole

Notes: DC = Depth of Contamination
* = No Soil Sample Taken
[n] = Reading Taken n-Inches
Above Floor or Ground
Date of Survey = 07-10-85
Team Leader = CH

Location	Number of Readings Taken at Waist Level	Range at Waist Level (uR/h)	Mean at Waist Level (uR/h)	Number of Readings Taken at Surface	Range at Surface (uR/h)	Mean Surface (uR/h)
Primary Structure	*	*	*	*	14-16	*
Shed	*	*	*	*	14-16	*

=====

* A walking gamma scan was performed to confirm the absence of interior contamination.

Table 4.1
Area and Volume Calculations
DOE ID No. GJ-11124-RS

Page 1 of 1

<u>AREA</u>	<u>CALCULATIONS(ft)</u>	<u>SF</u>	<u>DEPTH(ft)</u>	<u>CF</u>	<u>CUBIC YARDS</u>
EXTERIOR					
	Contaminated Fill				
A	10 x 10 =	100	x 1.5 =	150	
B	10 x 17 =	170	x 0.5 =	85	
C	15 x 21 =	315			
	17 x 14 =	238			
	6 x 10 =	60			
		613	x 0.8 =	490	
D	22 x 25 =	550			
	20 x 31 =	620			
	Minus Area "C"	(613)			
		557	x 0.5 =	279	
E	5 x 4 =	20	x 0.5 =	10	
F	17 x 2 =	34	x 0.5 =	17	
TOTAL VOLUME - EXTERIOR				= 1,031	= 1,031/27 = 38

See Appendix Figure 3.3 For Areas

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Table 4.2
Estimated Cost of Decontamination and Restoration
DOE ID No. GJ-11124-RS

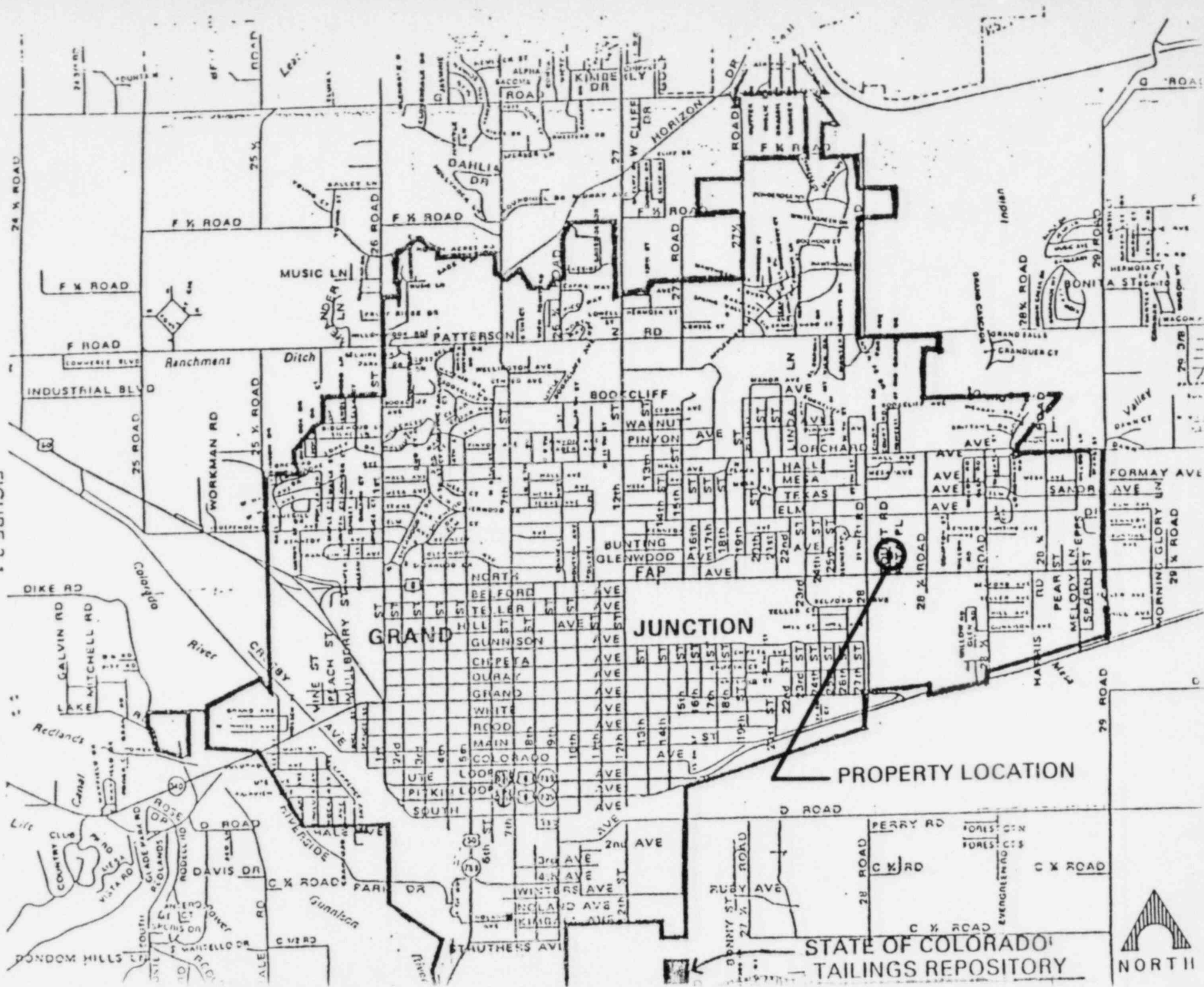
Page 1 of 1

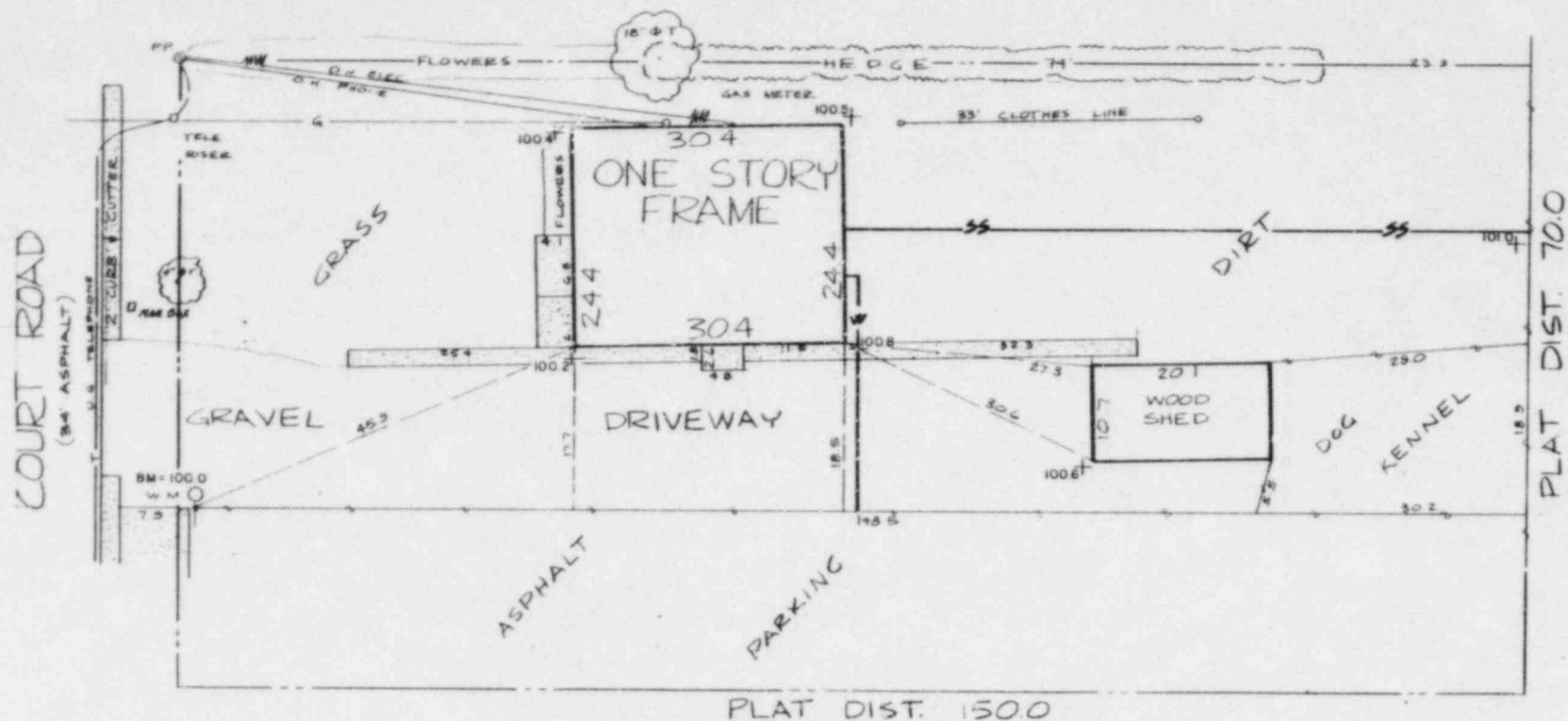
EXTERIOR

Remove identified residual radioactive material		
37 cy @ \$14.50/cy	\$	537
1 cy @ \$44/cy		44
Replace areas with roadbase		
2 cy @ \$11.50/cy		23
Replace areas with topsoil		
36 cy @ \$9.50/cy		342
Replace areas with sod		
270 sf @ \$.50/sf		135
		<hr/>
TOTAL EXTERIOR	\$	1,081
TOTAL INTERIOR		0
ACCESS CONTROL		100
		<hr/>
SUBTOTAL	\$	1,181
CONTINGENCY @ 5%		59
		<hr/>
SUBTOTAL	\$	1,240
CONTRACTOR OVERHEAD & PROFIT @ 40%		496
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GRAND TOTAL	\$	1,736

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REA11124/REA-706/AP

FIGURE 2.1
VICINITY MAP






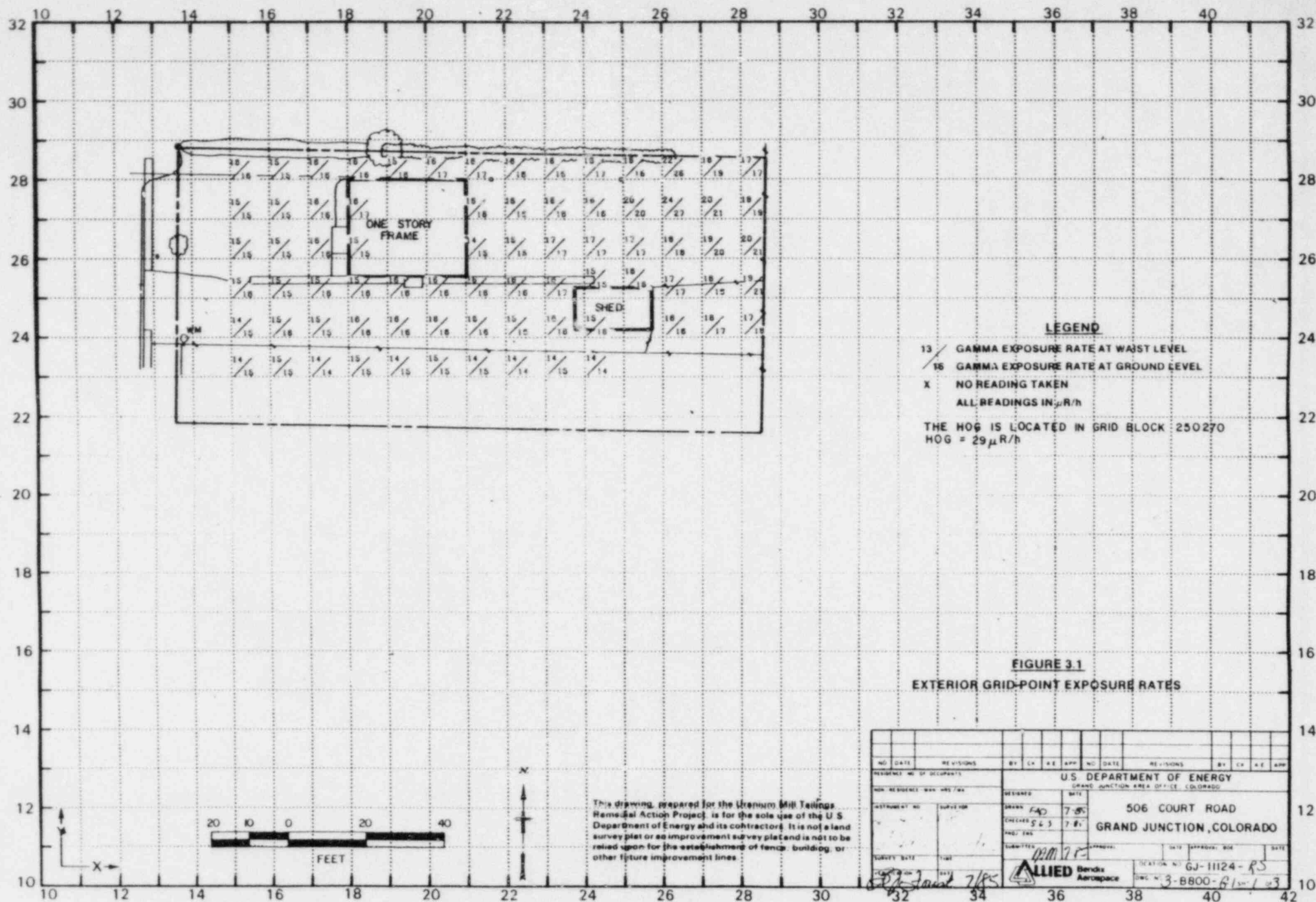
BEG. 430' N. OF SE COR. SW $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$, SEC. 7
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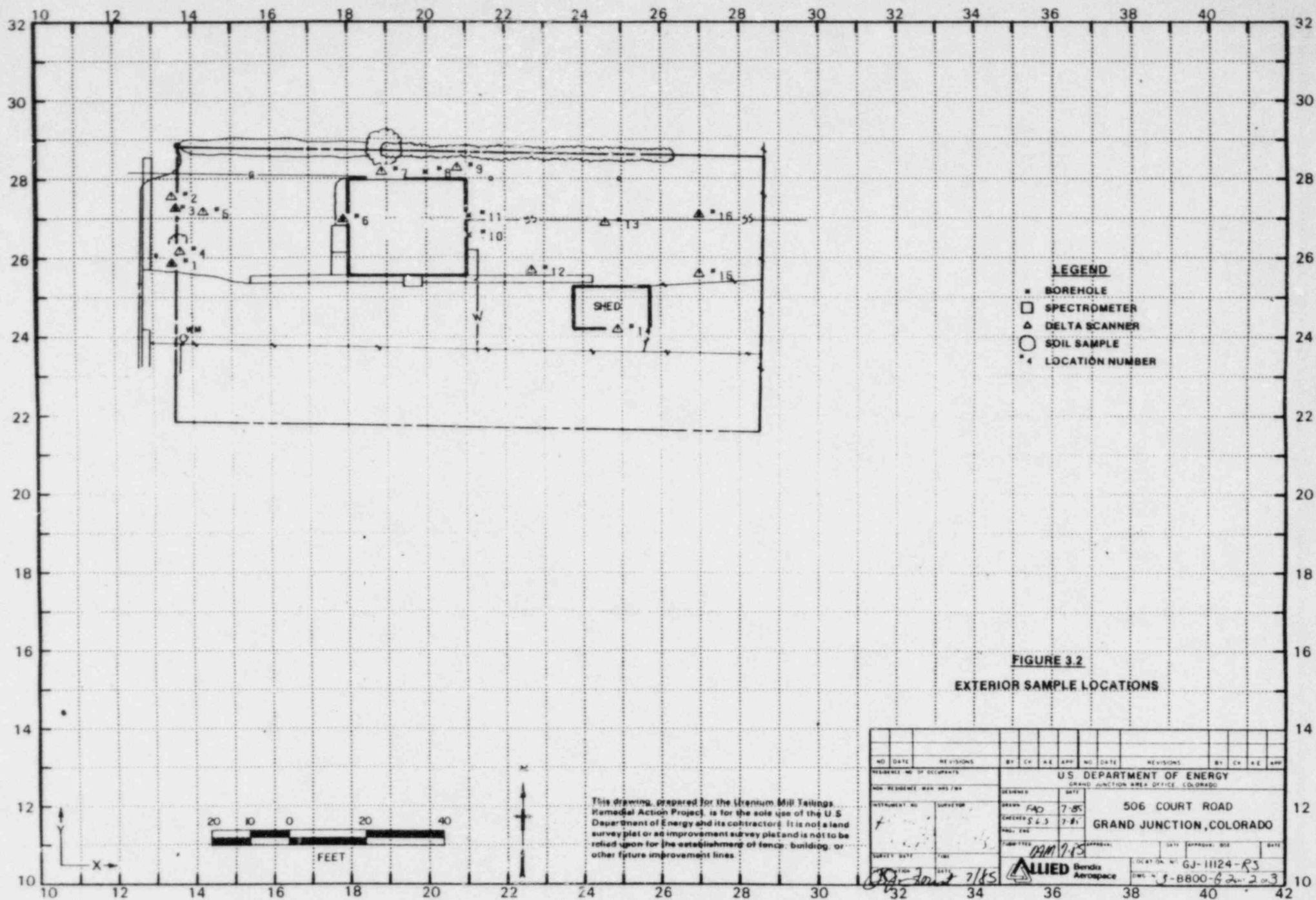


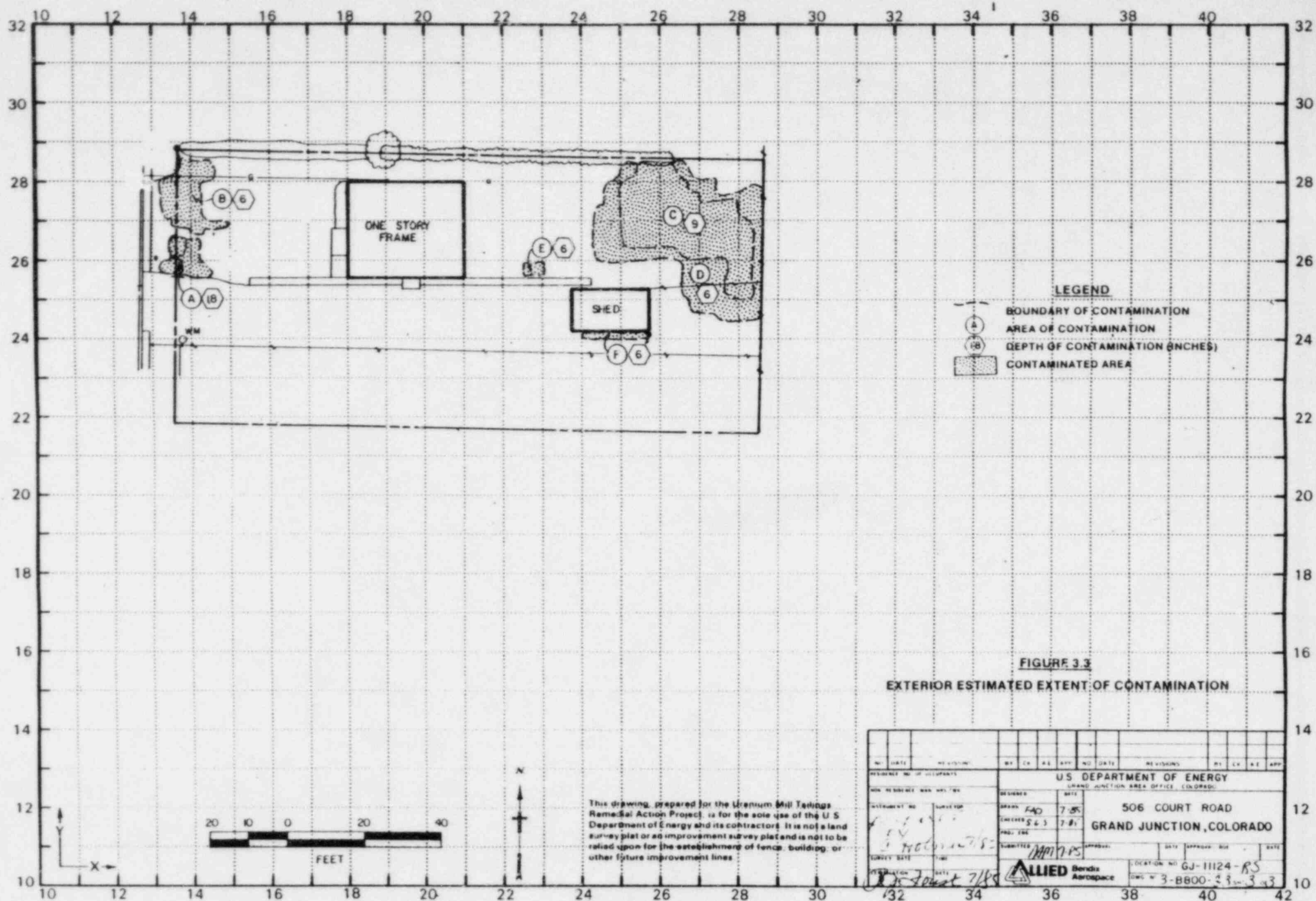
This drawing, prepared for the Uranium Mill Tailings Remedial Action Project, is for the sole use of the U.S. Department of Energy and its contractors. It is not a land survey plan or a legal document. It is not to be relied upon for the establishment of lines, buildings, or other features on the ground.

FIGURE 2.2 SITE PLAN

U.S. DEPARTMENT OF ENERGY		DOE ID NO
GRAND JUNCTION PROJECT OFFICE, COLORADO		GJ 11124 RS
ADDRESS 506 COURT ROAD		 Allied Engineering Corporation Grand Junction, Colorado
GRAND JUNCTION, COLO		
SURV WHL/G2685	DRAFT TJ/7585	OR WCF/7585
DRAWING NO 3C 800	F1	SHEET 1 OF 1







3/85

DOE ID NO. GJ-11124-RS

Date July 15, 85

U.S. DEPARTMENT OF ENERGY
URANIUM MILL TAILINGS REMEDIAL ACTION PROJECT
GRAND JUNCTION VICINITY PROPERTIES

Official Survey Report

Property Address 506 Court Road

Property Owner Junction Bell Federal Credit Union

Address of Owner (if different from above) 504 Court Road

Report Prepared By Carol Holmes

I. PRESENCE/ABSENCE OF RESIDUAL RADIOACTIVE MATERIALS

☐ No evidence of residual radioactive material on surveyed property.

☒ Residual radioactive materials found at the following locations:

☒ In open areas.

☐ Under or around exterior improvements.

☒ Under or around a typically nonoccupied structure.

☐ Under or around a typically occupied structure.

II. RESULTS OF RADIOLOGIC ASSESSMENT

☐ Levels of radiation from residual radioactive materials, if any, do not exceed EPA Standards and no action is required under the Uranium Mill Tailings Remedial Action Project.

☒ Levels of radiation from residual radioactive materials exceed EPA Standards such that Remedial Action is recommended and will be accomplished, with your consent, as soon as budget and schedule permit.

cc:

G. A. Franz, III, GJ/CDH

J. Themelis, Mgr. UMTRA Proj. Off.

HIG = 16 uR/h
HOG = 29 uR/h

MEMORANDUM

ALLIED Bendix
Aerospace

Bendix Field Engineering Corporation
Grand Junction Operations
Grand Junction, Colorado

Date: July 9, 1985
To: Files
From: Carol Holmes
Subject: Team Leader Notes - GJ-11124-RS

Address: 506 Court Road

Contact Person: Pat Busch
Junction Bell Federal Credit Union

Team Members

C. Holmes (Team Leader)	D. Dow
H. Lucero	V. Young
J. Johnson	V. Rothman

Instruments

Crutch Scintillometer: C-3502, C-1182, C-1136
Delta Scintillometer: C-3942, C-4062
Total Count: C-4006, C-1062

This house has recently been repossessed by Junction Bell Federal Credit Union. Their representative is Pat Busch.

The house is being rented by Mrs. Busch's son, whom was present while the survey was being completed.

Contamination was found in the east and west yard. The survey confirms Oak Ridge National Laboratory's (ORNL's) survey to be correct.

There was no interior involvement of contamination in either the shed or the house.

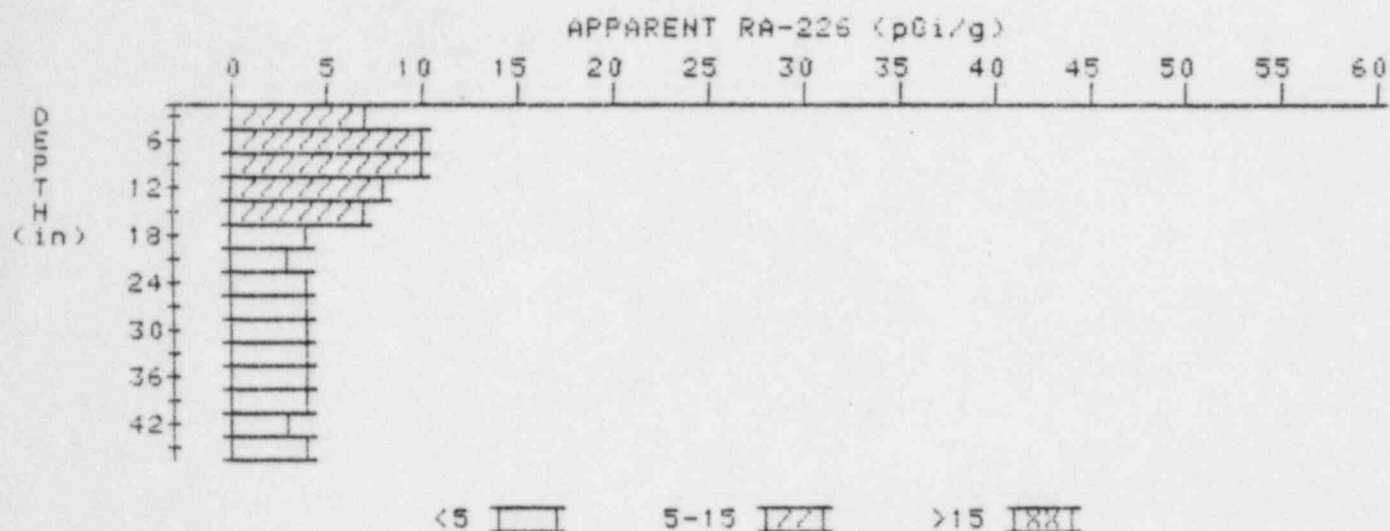
APPARENT RADIUM-226 CONCENTRATION DECONVOLUTION GRAPH

1

PROPERTY NUMBER: GJ-11124-RS

HOLE NUMBER: 1

LOCATION: 135258



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	6.5	6.5
6	8.0	10.1
9	8.3	10.1
12	7.6	8.3
15	6.5	6.9
18	5.2	4.5
21	4.3	3.2
24	4.0	3.6
27	3.9	3.7
30	3.9	3.9
33	3.9	4.1
36	3.8	3.6
39	3.8	4.2
42	3.6	3.4
45	3.5	3.5

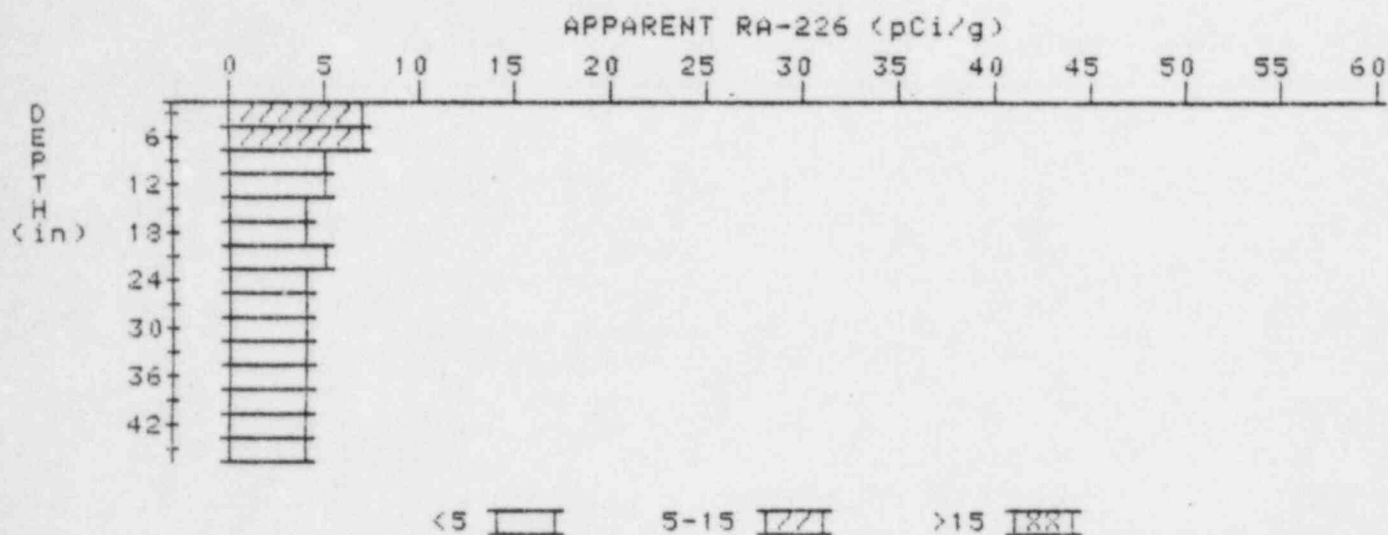
APPARENT RADIUM-226 CONCENTRATION DECONVOLUTION GRAPH

3

PROPERTY NUMBER: GJ-11124-RS

HOLE NUMBER: 3

LOCATION: 136272



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	6.7	6.7
6	6.2	6.7
9	5.4	4.9
12	4.9	4.5
15	4.6	4.4
18	4.4	4.0
21	4.4	4.6
24	4.3	4.3
27	4.2	4.4
30	4.0	3.6
33	4.0	4.2
36	3.9	3.7
39	3.9	3.7
42	4.0	4.2
45	4.0	4.0

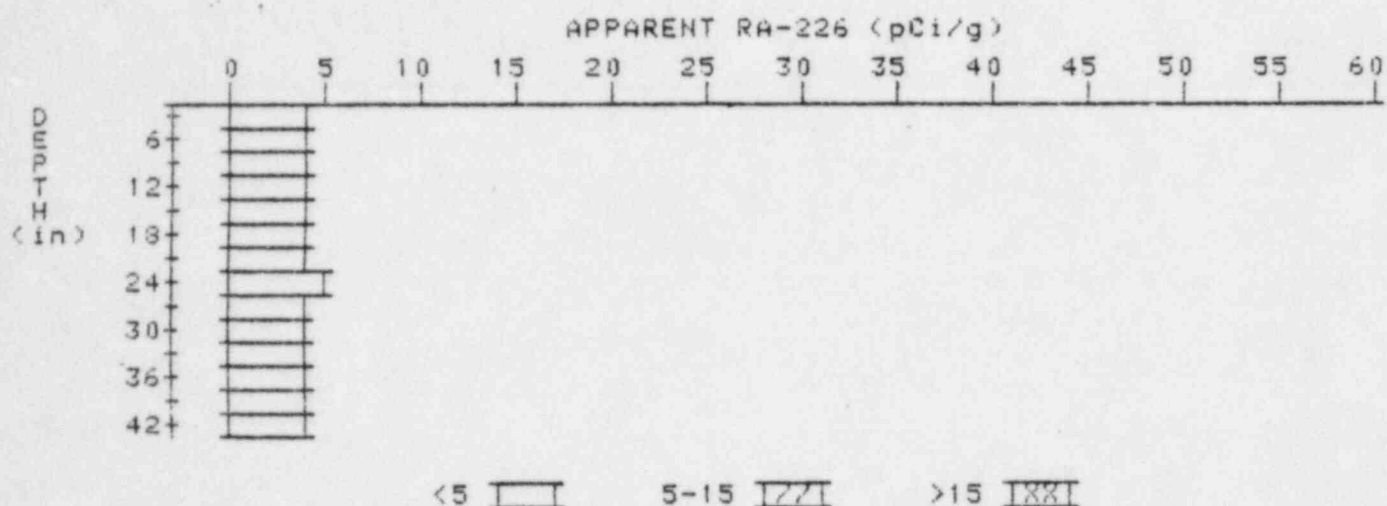
APPARENT RADIUM-226 CONCENTRATION DECONVOLUTION GRAPH

6

PROPERTY NUMBER: GJ-11124-RS

HOLE NUMBER: 6

LOCATION: 179269



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	3.6	3.6
6	3.8	3.8
9	4.0	4.2
12	4.1	4.1
15	4.2	4.2
18	4.3	4.5
21	4.3	4.3
24	4.3	4.7
27	4.1	3.7
30	4.1	4.1
33	4.1	4.3
36	4.0	3.6
39	4.1	4.3
42	4.1	4.1

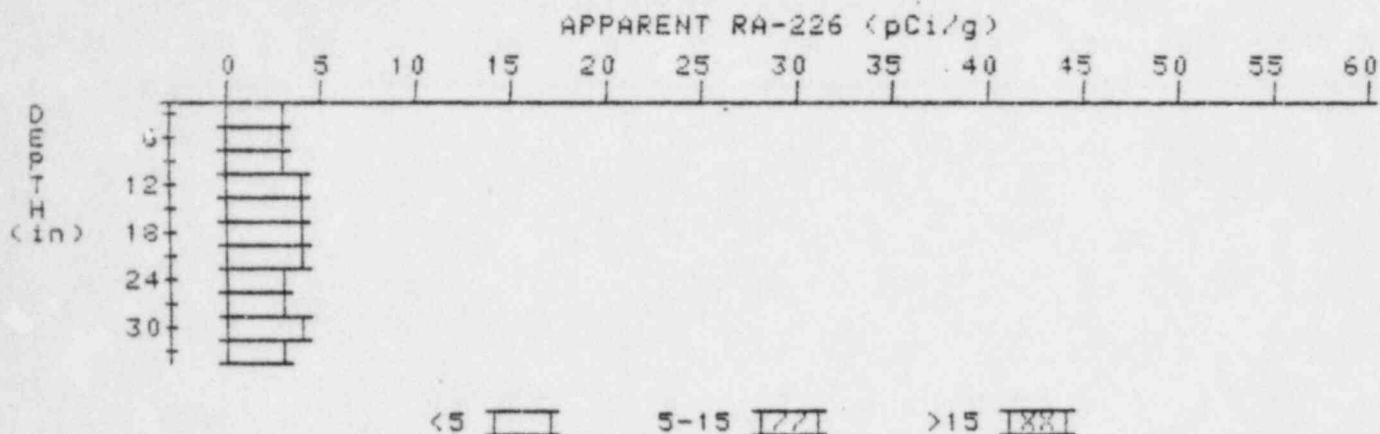
APPARENT RADIUM-226 CONCENTRATION DECONVOLUTION GRAPH

8

PROPERTY NUMBER: GJ-11124-RS

HOLE NUMBER: 8

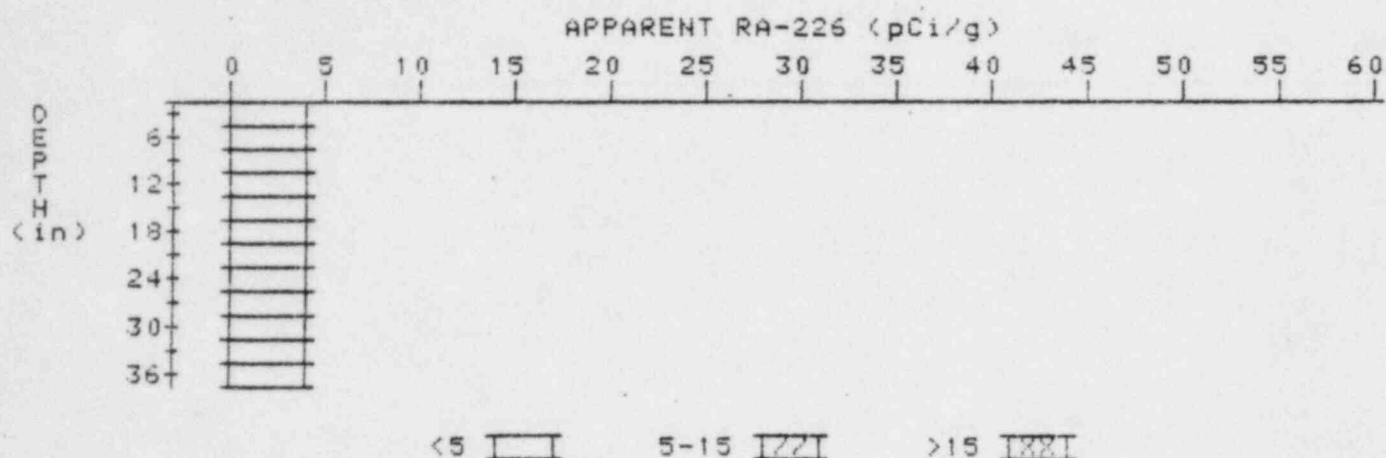
LOCATION: 200281



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	3.1	3.1
6	3.3	3.5
9	3.4	3.4
12	3.5	3.7
15	3.5	3.5
18	3.5	3.5
21	3.5	3.7
24	3.4	3.4
27	3.3	2.8
30	3.5	4.2
33	3.3	3.3

APPARENT RADIUM-226 CONCENTRATION 10 DECONVOLUTION GRAPH

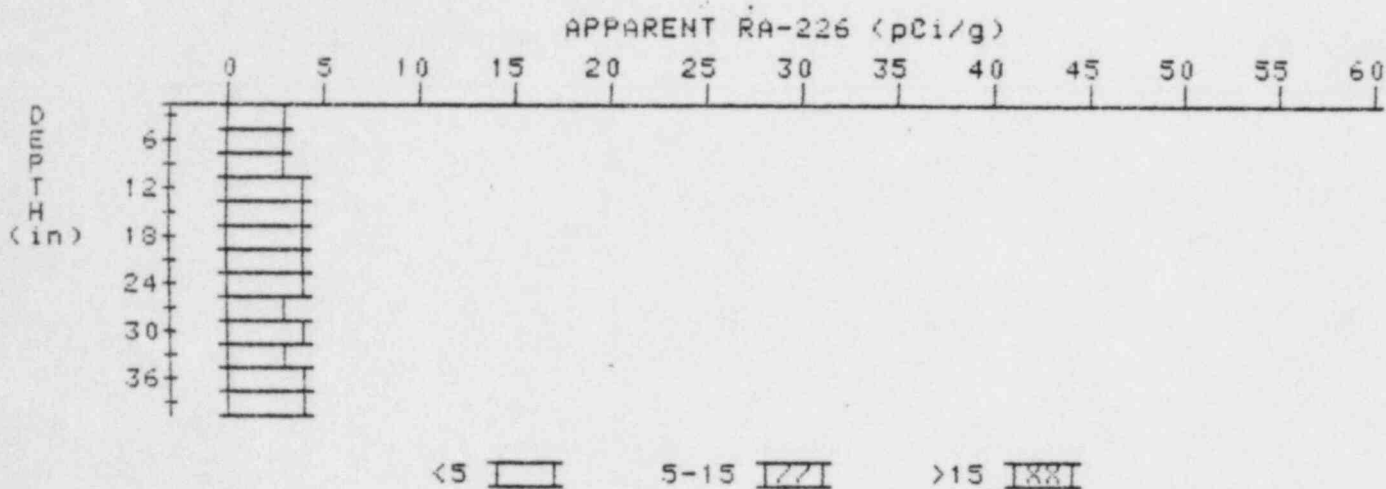
PROPERTY NUMBER: GJ-11124-RS
HOLE NUMBER: 10
LOCATION: 211265



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	3.6	3.6
6	3.8	3.8
9	4.0	4.2
12	4.1	4.3
15	4.1	3.9
18	4.2	4.4
21	4.2	4.4
24	4.1	3.9
27	4.1	4.1
30	4.1	4.1
33	4.1	4.5
36	3.9	3.9

APPARENT RADIUM-226 CONCENTRATION 11 DECONVOLUTION GRAPH

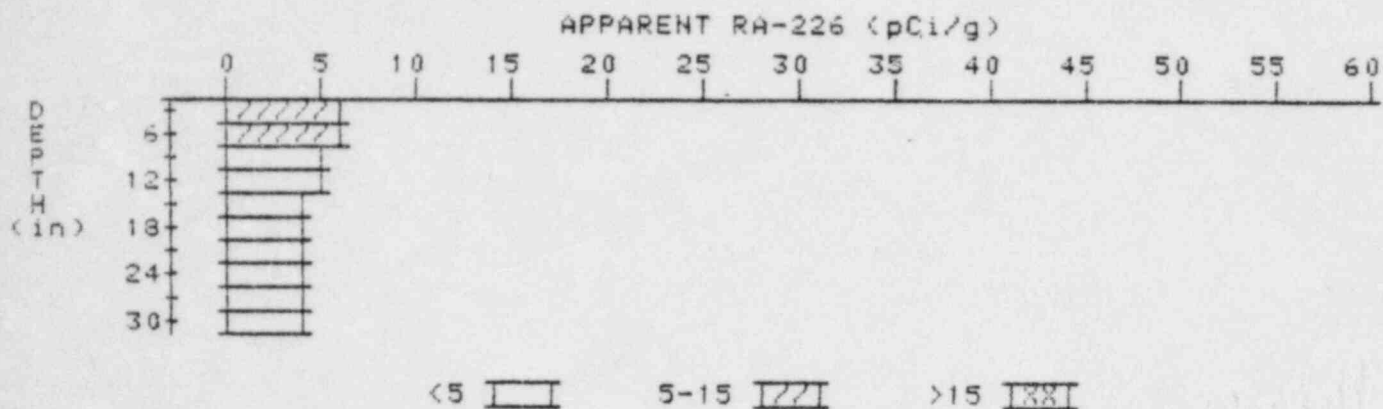
PROPERTY NUMBER: GJ-11124-RS
HOLE NUMBER: 11
LOCATION: 211270



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	2.9	2.9
6	3.1	3.1
9	3.3	3.3
12	3.5	3.9
15	3.5	3.5
18	3.5	3.5
21	3.5	3.5
24	3.5	3.7
27	3.4	3.0
30	3.5	3.9
33	3.4	3.0
36	3.5	3.7
39	3.5	3.5

APPARENT RADIUM-226 CONCENTRATION 16 DECONVOLUTION GRAPH

PROPERTY NUMBER: GJ-11124-RS
HOLE NUMBER: 16
LOCATION: 270270



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	6.0	6.0
6	5.6	5.8
9	5.1	4.7
12	4.8	4.8
15	4.5	4.1
18	4.4	4.4
21	4.3	4.3
24	4.2	4.0
27	4.2	4.2
30	4.2	4.2

