

**RADIOLOGIC AND ENGINEERING ASSESSMENT**

FOR

DOE ID NO.: GJ-03629-RM  
ADDRESS: 211 BELFORD AVENUE

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. Tucker*

M. TUCKER  
DOE PROJECT ENGINEER

DATE

*August 1, 1985*

REA03629:REA-613

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PDR WASTE PDR  
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## 1.0 EXECUTIVE SUMMARY

### 1.1 Introduction

The location, DOE ID No. GJ-03629-RM, is a single-family residence and triplex (3 unit dwelling) located at 211 Belford Avenue, 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, 17 cu. yd.; interior, 0 cu. yd.

Estimated cost to perform remedial action, including dislocation when applicable, is \$1,989. Remedial action on this property will take approximately 5 days to complete.

## 2.0 PROPERTY DESCRIPTION

### 2.1 General Description

Address: 211 Belford Avenue, Grand Junction, Colorado

Zoning: Residential (RMF-32)

Lot Size: Approximately 6,250 sf (0.14 acres)

Legal Description: Lots 3 and 4, Block 13, City of Grand Junction, County of Mesa, State of Colorado.

Point of Reference: This property is located approximately 2 mile(s) northwest 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:	Overhead

Bordering Properties:

North:	Belford Avenue
South:	Alley
East:	Single-family residence
West:	Single-family residence

### 2.2 Existing Facilities and Structures

Primary Structure:

Type:	Single-story residence with attached carport
Size:	Approximately 780 sf
Construction Date:	1945
Construction:	Wood-frame
Foundation:	Not determined
Footing Depth:	Not determined
Basement:	Yes (full)
Crawl Space:	None
Condition:	Good

Secondary Structure:

Type:	Two-story triplex residence
Size:	Approximately 2,250 sf
Construction Date:	Post 1945
Construction:	Wood-frame
Foundation:	Not determined
Footing Depth:	Not determined
Basement:	None
Crawl Space:	None
Condition:	Good

Other Structures:

Type:	Attached carport
Size:	Approximately 92 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:

These structures are not over 50 years old. Therefore, they do 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-03629-RM on June 25, 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 deposits of contaminated materials under and around the city sidewalk along the Belford Avenue easement and under or around the north entry sidewalk.

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: 15 to 17 uR/h  
Highest Outside Gamma Reading (HOG): 102 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: 13 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: Concrete  
Direction From Primary Structure: North  
Other Directions: On Belford Avenue easement  
Total Depth of Contamination: 15 inches  
Other (height or thickness): 4-inch-thick concrete  
Approximate Square Footage: 250
- (Area B) Surface Material: Concrete  
Direction From Primary Structure: North  
Total Depth of Contamination: 12 inches  
Other (height or thickness): 4-inch-thick concrete  
Approximate Square Footage: 48
- (Area C) Surface Material: Soil  
Direction From Primary Structure: North  
Other Directions: West of Area B  
Total Depth of Contamination: 9 inches  
Approximate Square Footage: 72
- (Area D) Surface Material: Weeds  
Direction From Primary Structure: North  
Other Directions: East of Area B  
Total Depth of Contamination: 6 inches  
Approximate Square Footage: 70
- (Area E) Surface Material: Weeds  
Direction From Primary Structure: Northwest  
Other Directions: North of Area A  
Total Depth of Contamination: 18 inches  
Approximate Square Footage: 9

#### **4.0 RECOMMENDED REMEDIAL ACTION**

##### **4.1 Decontamination and Restoration**

The recommended remedial action for this property, DOE ID No. GJ-03629-RM, 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 \$1,989.

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, 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-03629-RM

211 Belford Avenue

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	147229	00	DS	8.9		*	
2	148232	00	DS	15.1		*	Northwest of north structure Sand mixed with ash and cinders to 18-inch-depth
		06	DS	8.1		*	
		12	DS	4.5		*	
		24	DS	1.8		*	
3	149244	00	DS	7.4		*	North of north structure
		06	DS	5.8		*	
		12	DS	3.2		*	
		15	DS	2.0		*	
4	149270	00	DS	12.7		*	North of north structure
		06	DS	9.4		*	
		12	DS	2.7		*	
5	151229	00	DS	2.5		*	
6	155257	00	DS	6.1		*	North of north structure
		06	DS	<1.0		*	
7	155270	00	DS	19.6		*	Next to city sidewalk
		06	DS	2.0		*	
8	161251	00	DS	7.6		*	In yard north of north structure
		06	DS	2.0		*	
9	164257	03	TC	8.1		*	North yard next to sidewalk  DC = 9 inches Based on deconvolution graph
		06	TC	7.2		*	
		09	TC	6.0		*	
		12	TC	5.4		*	
		15	TC	5.0		*	
		18	TC	4.7		*	
		21	TC	4.6		*	
		24	TC	4.5		*	
		27	TC	4.4		*	
		30	TC	4.3		*	
		33	TC	4.3		*	
		36	TC	4.1		*	
10	164262	00	DS	3.6		*	Next to sidewalk Visible sand under sidewalk
		06	DS	3.3		*	
		12	DS	2.5		*	

## Radium Concentrations at Exterior Locations

DOE ID #GJ-03629-RM

211 Belford Avenue

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.		
11	180269	03	TC	3.4		*	Water line at north side of north structure
		06	TC	3.6		*	
		09	TC	3.9		*	
		12	TC	4.0		*	
		15	TC	4.0		*	DC = 0 inches
		18	TC	4.0		*	
		21	TC	4.0		*	
		24	TC	4.1		*	
		27	TC	4.2		*	
		30	TC	4.1		*	
		33	TC	4.2		*	
		36	TC	4.2		*	
		39	TC	4.2		*	
		42	TC	4.0		*	
		45	TC	4.0		*	
		48	TC	3.9		*	
		51	TC	3.9		*	
		54	TC	3.8		*	
		57	TC	3.8		*	
		60	TC	3.8		*	
12	190276	03	TC	2.5		*	Foundation at east side of north structure
		06	TC	2.8		*	
		09	TC	3.1		*	
		12	TC	3.2		*	
		15	TC	3.3		*	DC = 0 inches
		18	TC	3.3		*	
		21	TC	3.3		*	
		24	TC	3.2		*	
		27	TC	3.3		*	
		30	TC	3.4		*	
		33	TC	3.3		*	
		36	TC	3.4		*	
		39	TC	3.4		*	
		42	TC	3.3		*	
		45	TC	3.4		*	
		48	TC	3.4		*	
		51	TC	3.5		*	
		54	TC	3.4		*	
		57	TC	3.5		*	
		60	TC	3.5		*	

## Radium Concentrations at Exterior Locations

DOE ID #GJ-03629-RM

211 Belford Avenue

Page 3 of 4

Loc #	Grid Location	Depth (in.)	Meas. Type	In Situ Ra-226 (pCi/g)		Chem Ra-226 (pCi/g)	Comments
				Tot. Ct	Spectr.		
12	190276	63	TC	3.4		*	
		66	TC	3.3		*	
13	230271	03	TC	2.6		*	Foundation at east side of south structure
		06	TC	2.9		*	
		09	TC	3.2		*	
		12	TC	3.2		*	
		15	TC	3.2		*	DC = 0 inches
		18	TC	3.2		*	
		21	TC	3.2		*	
		24	TC	3.3		*	
		27	TC	3.3		*	
		30	TC	3.2		*	
		33	TC	3.4		*	
		36	TC	3.4		*	
14	261256	03	TC	2.5		*	Sewer line at south side of south structure
		06	TC	2.9		*	
		09	TC	3.1		*	
		12	TC	3.3		*	
		15	TC	3.4		*	DC = 0 inches
		18	TC	3.4		*	
		21	TC	3.5		*	
		24	TC	3.6		*	
		27	TC	3.6		*	
		30	TC	3.6		*	
		33	TC	3.6		*	
		36	TC	3.7		*	
		39	TC	3.7		*	
		42	TC	3.8		*	
		45	TC	3.8		*	
		48	TC	3.8		*	
		51	TC	3.8		*	
		54	TC	3.7		*	
		57	TC	3.7		*	
15	261271	00	DS	1.3		*	Gas line south of south structure
		27	DS	1.1		*	
16	280240	00	DS	1.3		*	Background in southwest corner of property
		03	TC	2.6		*	
		06	TC	3.1		*	
		09	TC	3.3		*	
		12	TC	3.4		*	DC = 0 inches

## Radium Concentrations at Exterior Locations

DOE ID #GJ-03629-RM

211 Belford Avenue

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	280240	15	TC	3.5		*	
		18	TC	3.5		*	
		21	TC	3.6		*	
		24	TC	3.6		*	
		27	TC	3.6		*	
		30	TC	3.5		*	
		33	TC	3.5		*	
		36	TC	3.6		*	
		39	TC	3.5		*	

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 = 06-25-85  
 Team Leader = JD

Table 3.2

## Summary of Interior Gamma Exposure Rates

DOE ID No. GJ-03629-RM

211 Belford Avenue

Page 1 of 1

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)
Basement North Structure	*	*	*	*	14-16	*
Crawl Space South Structure	-	-	-	09	16-17	16
Ground Floor South Structure	*	*	*	*	13-15	*
Garages South Structure	*	*	*	*	13-15	*

\* A walking gamma scan was performed to confirm the absence of interior contamination at this location.

Table 4.1  
Area and Volume Calculations  
DOE ID No. GJ-03629-RM

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					
Concrete					
A	5 x 50 =	250	x 0.3 =	75	
B	3 x 16 =	48	x 0.3 =	14	
Volume of Concrete				= 89	= 89/27 = 3
Contaminated Fill					
A	5 x 50 =	250	x 1.0 =	250	
B	3 x 16 =	48	x 0.7 =	34	
C	9 x 8 =	72	x 0.8 =	58	
D	2 x 18 =	36			
	2 x 17 =	34			
				70	x 0.5 = 35
E	3 x 3 =	9	x 1.5 =	14	
Volume of Fill				= 391	= 391/27 = 14
TOTAL VOLUME - EXTERIOR					= 17

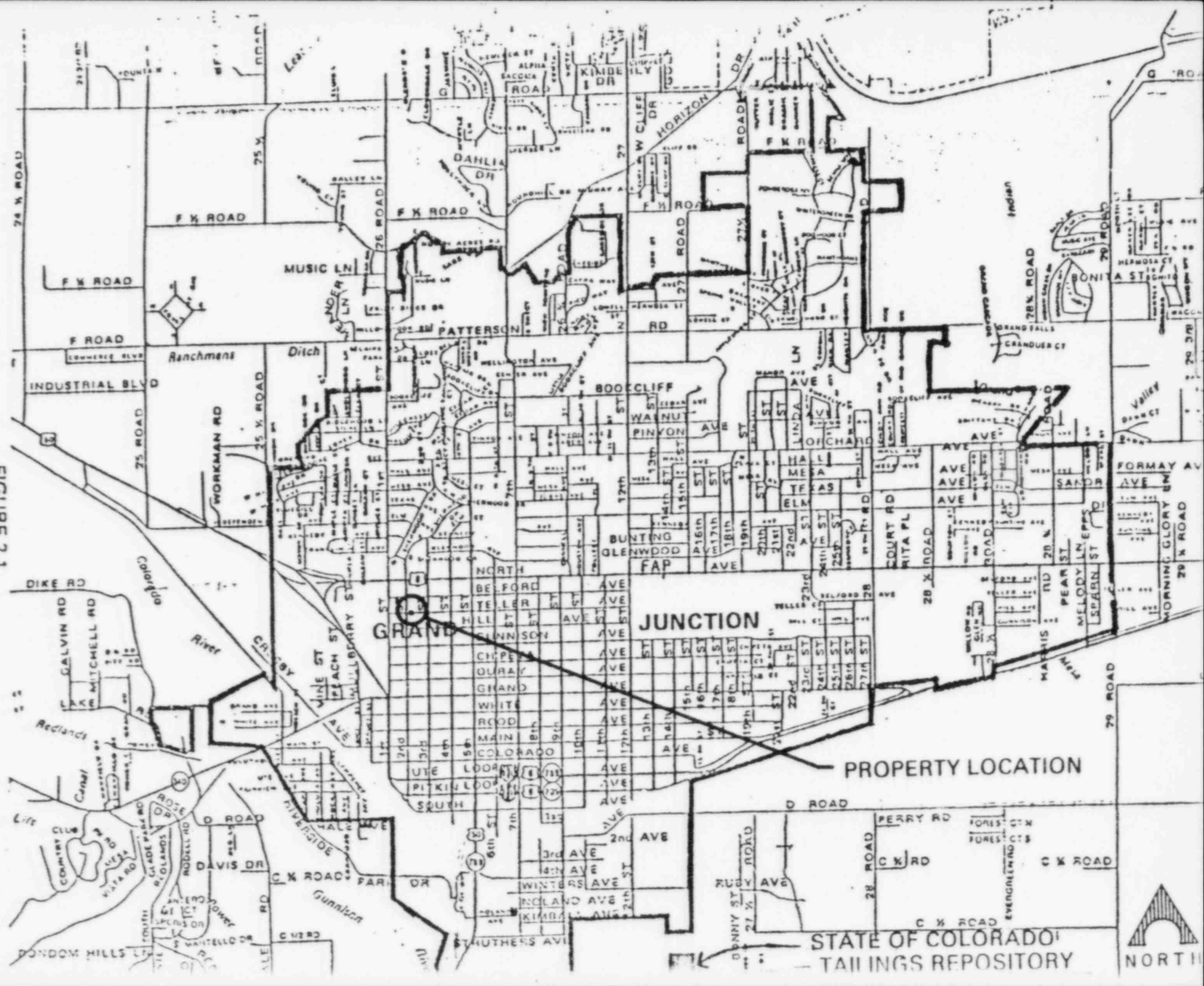
See Appendix Figure 3.3 For Areas

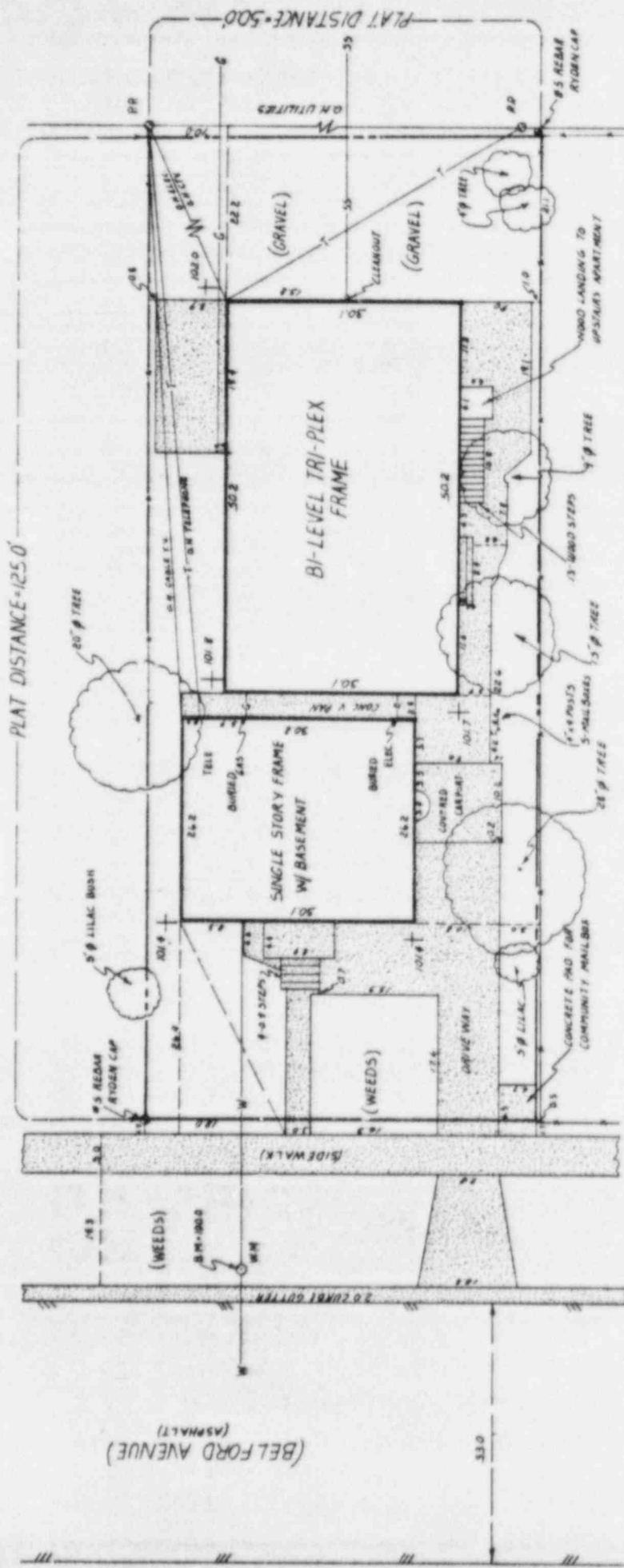
EXTERIOR

Remove identified residual radioactive material 14 cy @ \$14.50/cy (machine-open)	\$ 203
Remove/replace concrete sidewalk 298 sf @ \$3/sf	894
Replace areas with compacted roadbase 11 cy @ \$11.50/cy	127
Replace areas with topsoil 3 cy @ \$9.50/cy	29
	<hr/>
TOTAL EXTERIOR	\$ 1,253
TOTAL INTERIOR	0
ACCESS CONTROL	100
	<hr/>
SUBTOTAL	\$ 1,353
CONTINGENCY @ 5%	68
	<hr/>
SUBTOTAL	\$ 1,421
CONTRACTOR OVERHEAD & PROFIT @ 40%	568
	<hr/>
GRAND TOTAL	\$ 1,989

LR073085  
REA03629/REA-613/LMR

FIGURE 2.1  
VICINITY MAP





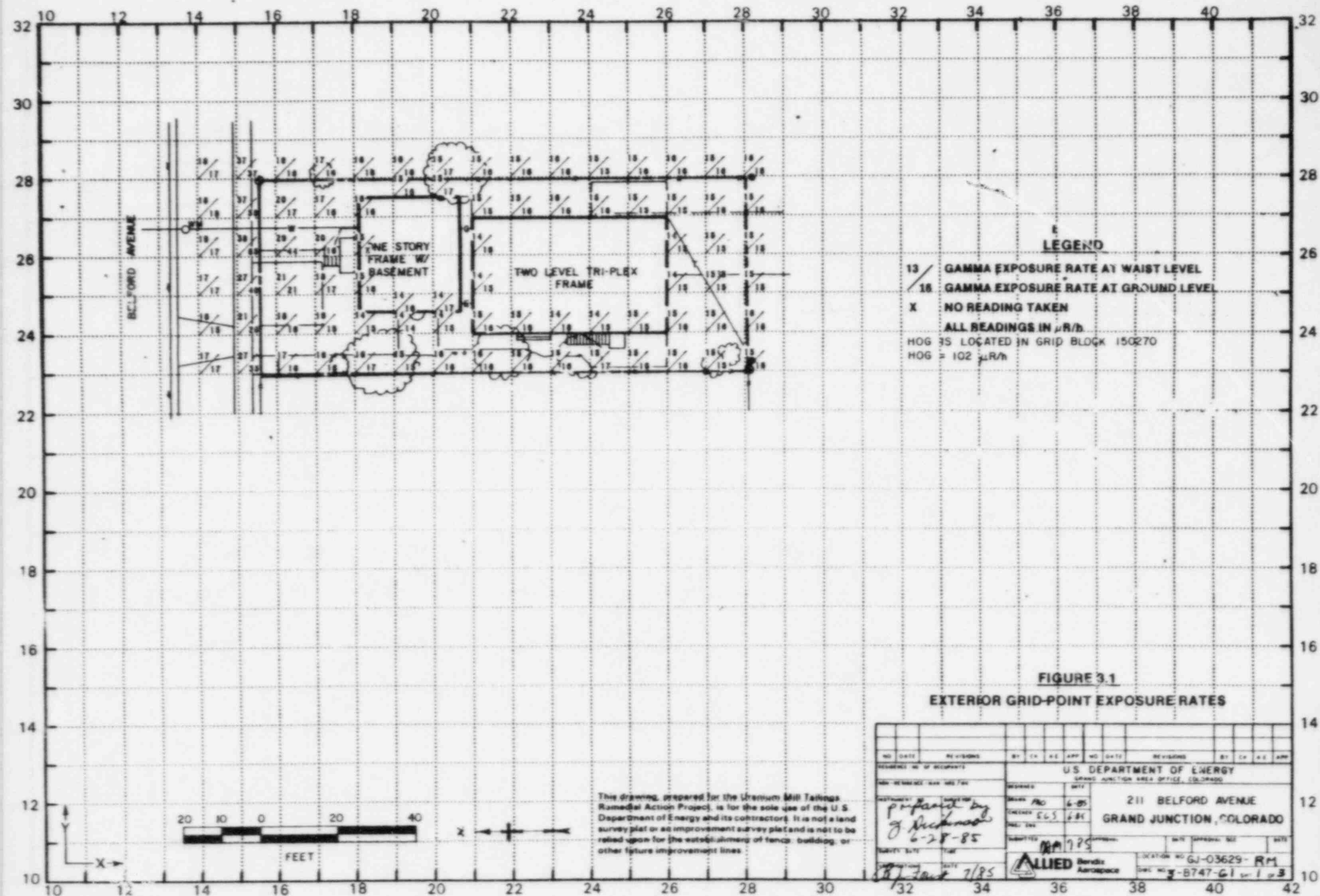
LOTS 3+4, BLOCK 13  
MESA COUNTY, COLORADO

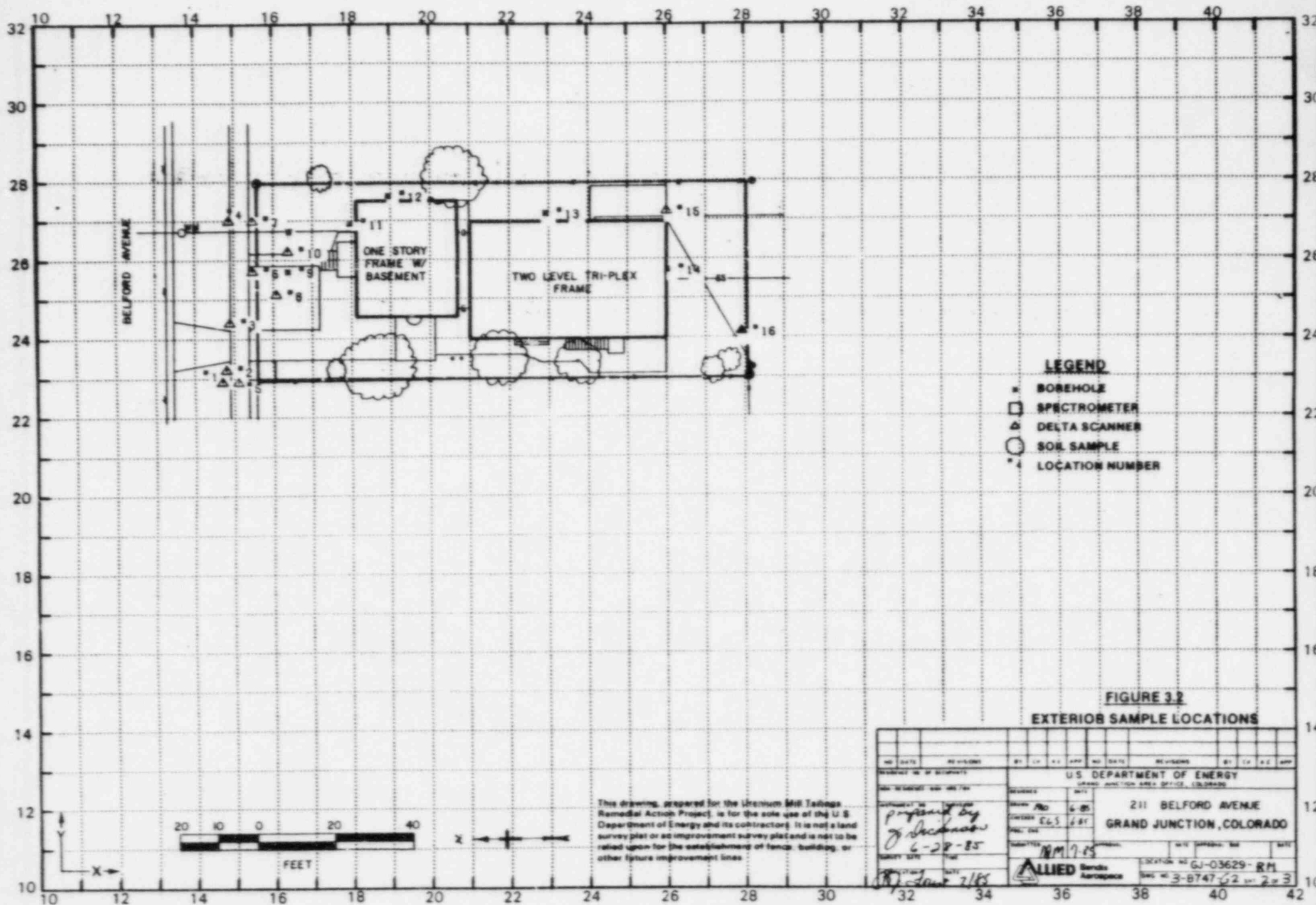
FIGURE 2.2 SITE PLAN

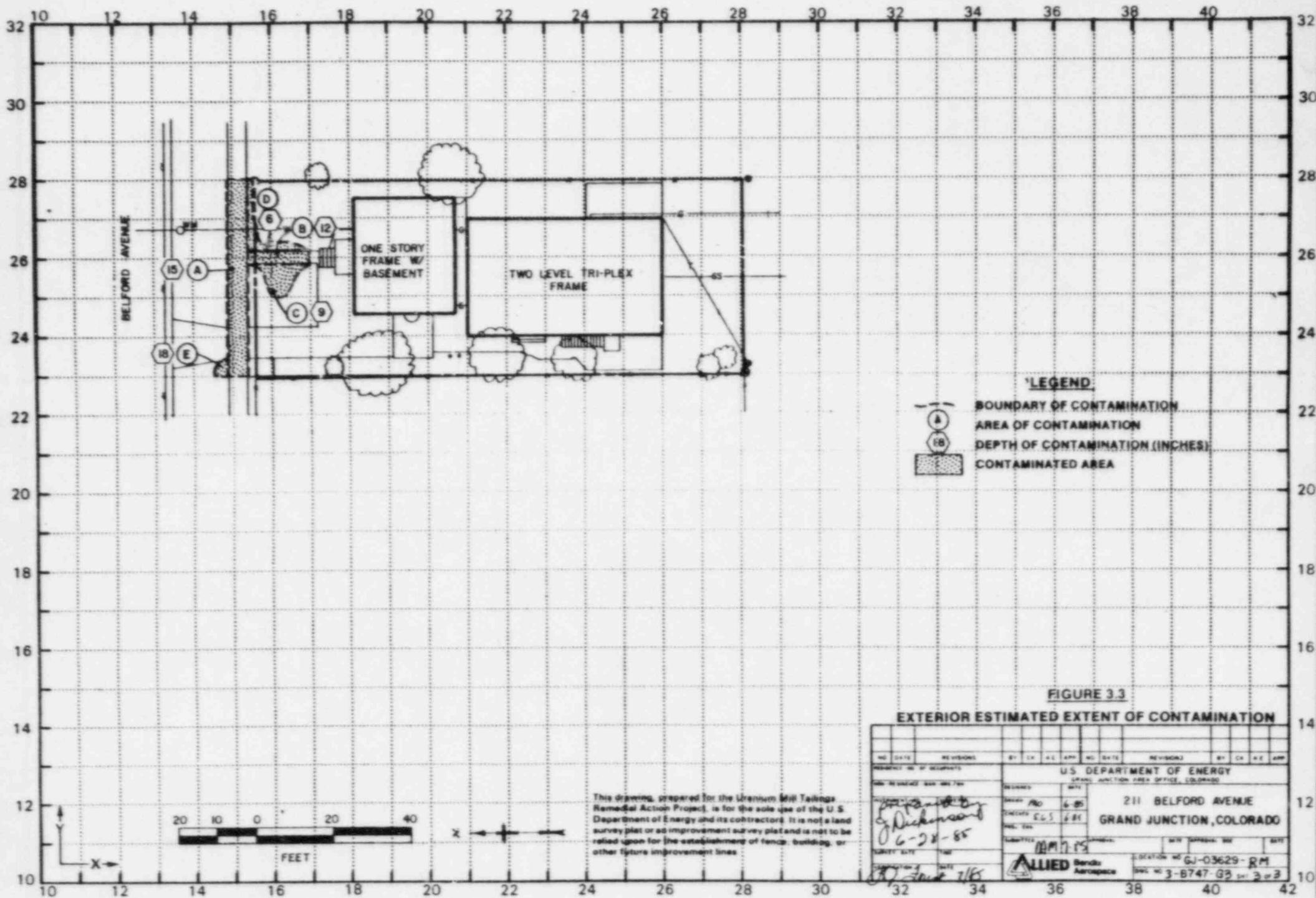
U.S. DEPARTMENT OF ENERGY GRAND JUNCTION PROJECT OFFICE, COLORADO	SCALE NO. 3-C-141-11
ADDRESS 211 BELFORD AVENUE GRAND JUNCTION, COLORADO	DATE 10-1-85
SURV. # 5/4-19-B-5	GRAPH. TRC/6-30-B-5
DESIGNED BY 3-C-141-11	PROJECT 1 OF 1



This drawing, prepared for the Uranium Mill Tailings Remedial Action Project, is for the site plan of the U.S. Department of Energy and its contractors. It is not a land survey plan or an improvement survey plan and is not to be used for the establishment of fence, building, or other future improvement lines.







DOE ID NO.

GJ-0362--RM

Date

June 26, 1985

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

Official Survey Report

Property Address 211 Belford Avenue  
Property Owner First Security Savings and Loan  
Address of Owner (if different from above) 1211 North 7th Street  
Report Prepared By J. Dickerson

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 = 102 uR/h

ALLIED Bendix  
Aerospace

Bendix Field Engineering Corporation  
Grand Junction Operations  
Grand Junction, Colorado

Date: June 25, 1985

To: Files

From: John Dickerson

Subject: Team Leader Notes - GJ-03629-RM

Address: 211 Belford Avenue

Owner: First Security Savings and Loan

Telephone: 241-3333

Contact Person: Allison

Team Members

J. Dickerson (Team Leader)  
P. Hardy  
S. Garcia  
V. Young

V. Rothman  
H. Mattison  
D. Bell  
G. Larsen

Instruments

See Operational Summary sheet.

Historical data indicates contaminated material in and/or under the city sidewalk along Belford Avenue.

The gas, water, and sewer lines egress from triplex (south structure) and were investigated by total count logs. The utilities to the north structure were investigated, limited to waterline. The sewer line runs south, underneath the concrete and southern structure. The gas line lies beneath the concrete walkway between structures.

No interior involvement was found.

Team Leader Notes  
John Dickerson  
GJ-03629-RM  
June 25, 1985  
Page 2

Contamination appears to be limited to the north yard, associated with the sidewalks.

Spillover contamination extends eastward beneath the city sidewalk at 215 Belford Avenue. Spillover to the west was also noted at 205 Belford Avenue, entirely within the easement to Belford. The contaminated area is approximately 5 by 6 feet and consists of sand mixed with ash, cinders, and coal (spectrometer reading taken indicates elevated potassium).

The property was visited/inspected by D. Diss (Health and Safety) at 1000 hours. No problems/hazards were noted.

Team members cleaned up evidence of the survey; all members were "frisked" before departure.

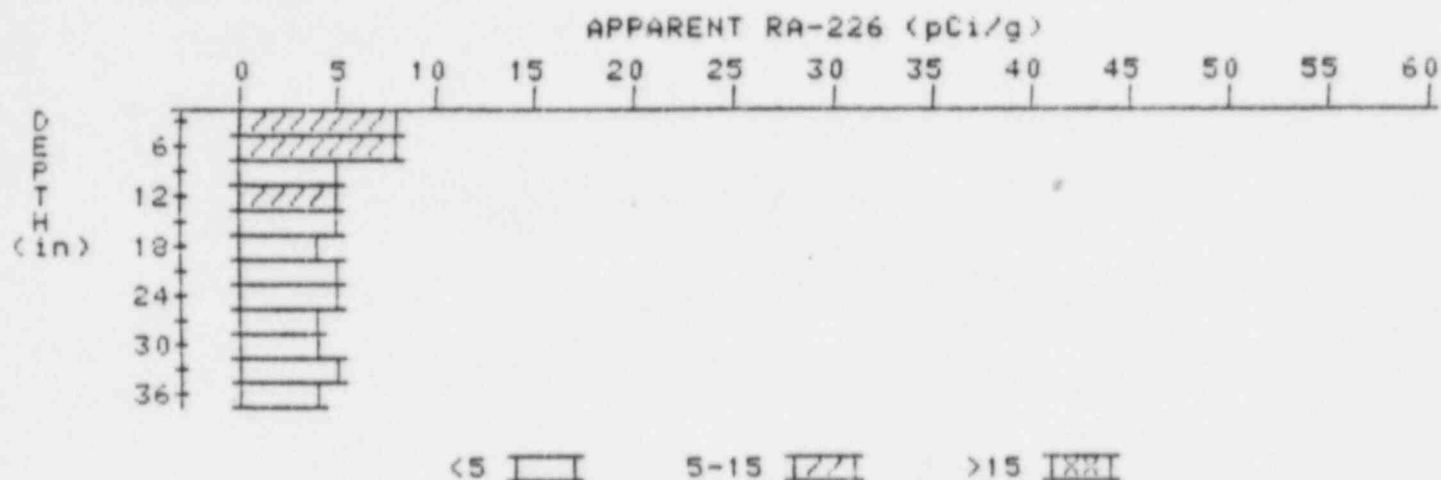
# APPARENT RADIUM-226 CONCENTRATION DECONVOLUTION GRAPH

9

PROPERTY NUMBER: GJ-03629-RM

HOLE NUMBER: 9

LOCATION: 164257



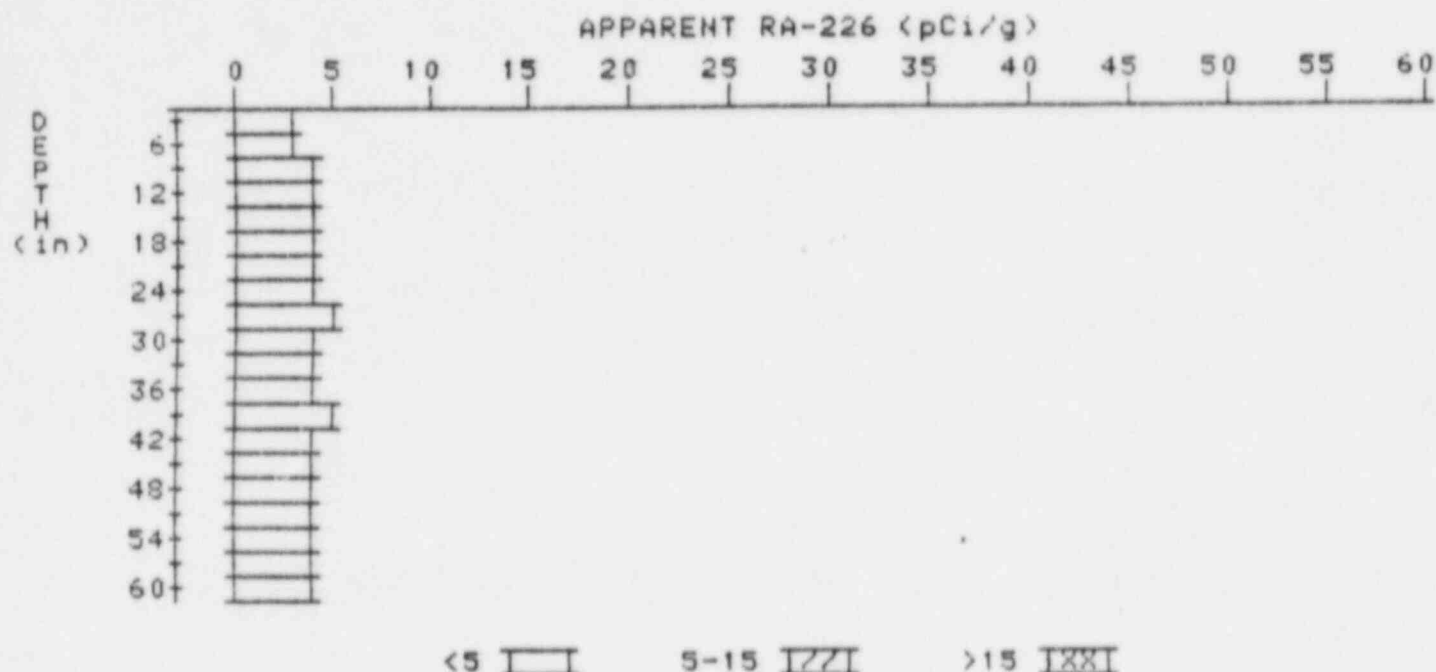
Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	8.1	8.1
6	7.2	7.7
9	6.0	4.9
12	5.4	5.0
15	5.0	4.8
18	4.7	4.3
21	4.6	4.6
24	4.5	4.5
27	4.4	4.4
30	4.3	4.1
33	4.3	4.7
36	4.1	4.1

# APPARENT RADIUM-226 CONCENTRATION 11 DECONVOLUTION GRAPH

PROPERTY NUMBER: GJ-03629-RM

HOLE NUMBER: 11

LOCATION: 180269



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	3.4	3.4
6	3.6	3.4
9	3.9	4.3
12	4.0	4.2
15	4.0	4.0
18	4.0	4.0
21	4.0	3.8
24	4.1	4.1
27	4.2	4.6
30	4.1	3.7
33	4.2	4.4
36	4.2	4.2
39	4.2	4.6
42	4.0	3.6
45	4.0	4.2
48	3.9	3.7
51	3.9	4.1
54	3.8	3.6

57  
60

3.8  
3.8

3.8  
3.8

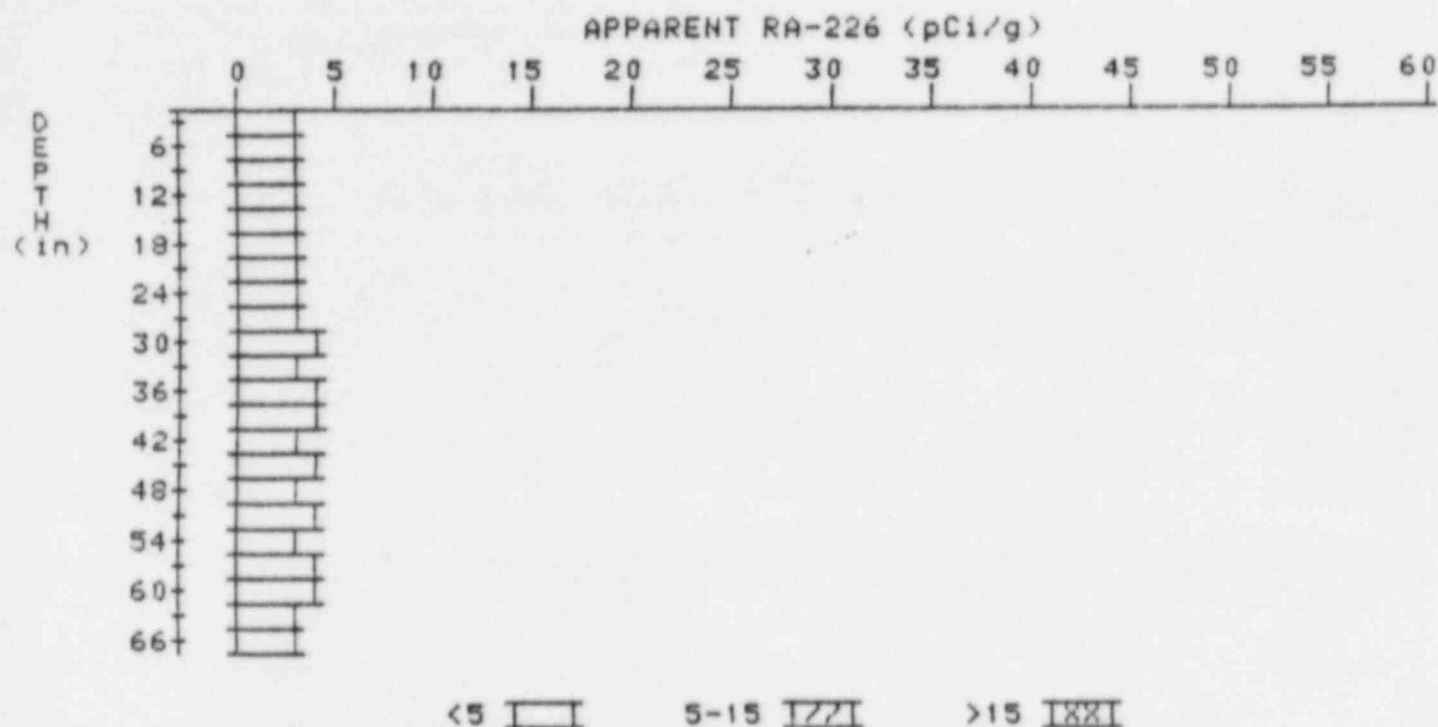
# APPARENT RADIUM-226 CONCENTRATION 12

## DECONVOLUTION GRAPH

PROPERTY NUMBER: GJ-03629-RM

HOLE NUMBER: 12

LOCATION: 190276



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	2.5	2.5
6	2.8	2.8
9	3.1	3.5
12	3.2	3.2
15	3.3	3.5
18	3.3	3.3
21	3.3	3.5
24	3.2	2.8
27	3.3	3.3
30	3.4	3.8
33	3.3	2.9
36	3.4	3.6
39	3.4	3.6
42	3.3	2.9
45	3.4	3.6
48	3.4	3.2

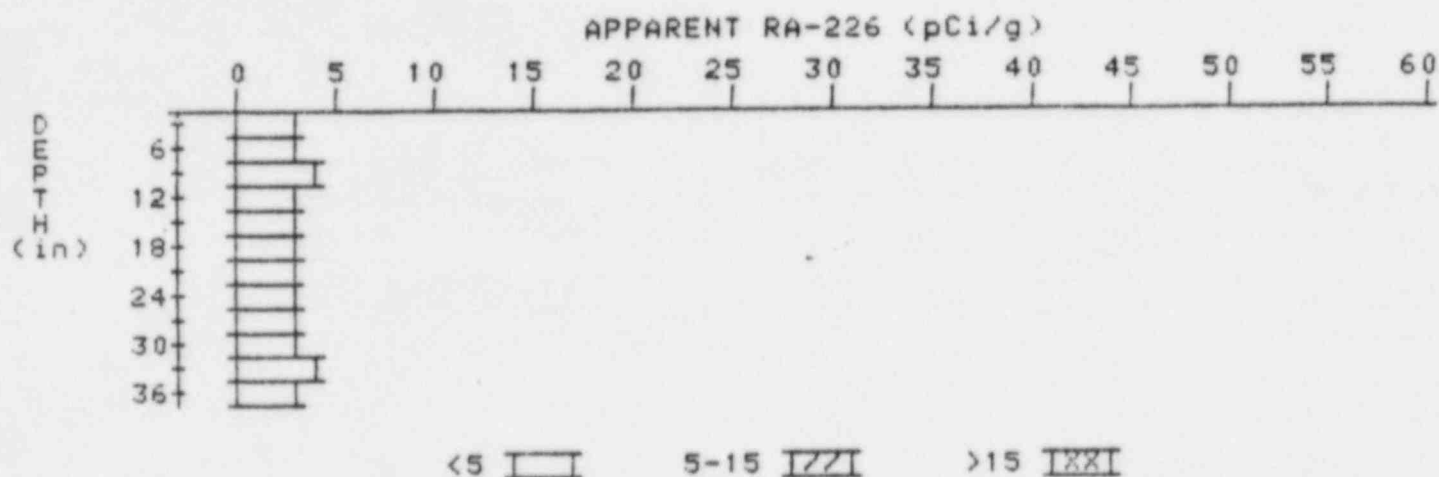
51  
54  
57  
60  
63  
66

3.5  
3.4  
3.5  
3.5  
3.4  
3.3

3.9  
3.0  
3.7  
3.7  
3.4  
3.3

# APPARENT RADIUM-226 CONCENTRATION 13 DECONVOLUTION GRAPH

PROPERTY NUMBER: GJ-03629-RM  
HOLE NUMBER: 13  
LOCATION: 230271



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	2.6	2.6
6	2.9	2.9
9	3.2	3.7
12	3.2	3.2
15	3.2	3.2
18	3.2	3.2
21	3.2	3.0
24	3.3	3.5
27	3.3	3.5
30	3.2	2.7
33	3.4	3.8
36	3.4	3.4

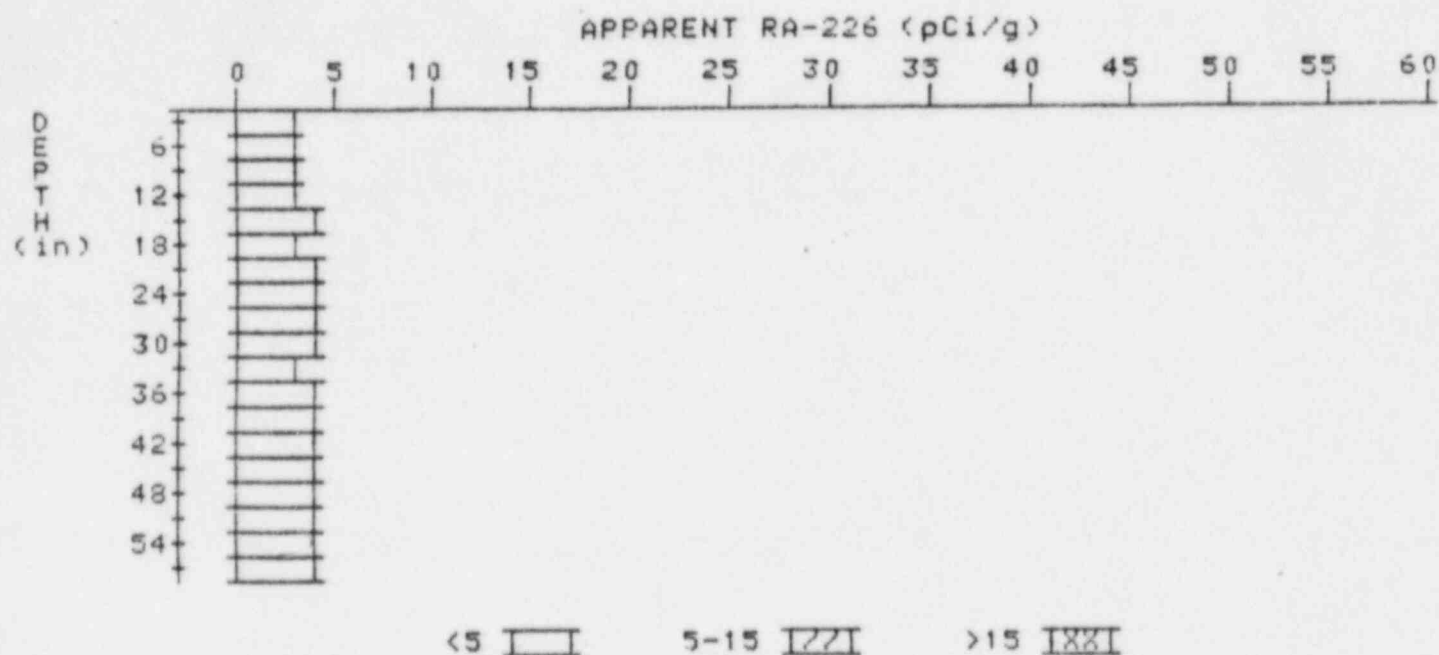
# APPARENT RADIUM-226 CONCENTRATION DECONVOLUTION GRAPH

14

PROPERTY NUMBER: GJ-03629-RM

HOLE NUMBER: 14

LOCATION: 261256



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	2.5	2.5
6	2.9	3.3
9	3.1	3.1
12	3.3	3.5
15	3.4	3.6
18	3.4	3.2
21	3.5	3.5
24	3.6	3.8
27	3.6	3.6
30	3.6	3.6
33	3.6	3.4
36	3.7	3.9
39	3.7	3.5
42	3.8	4.0
45	3.8	3.8
48	3.8	3.8
51	3.8	4.0
54	3.7	3.5

57

3.7

3.7

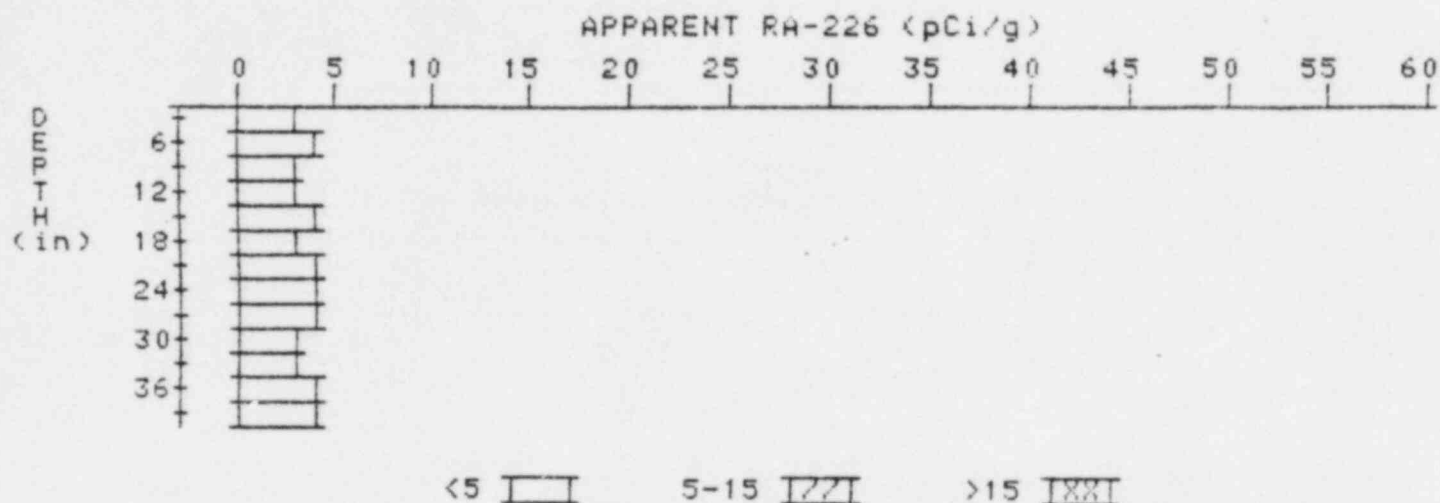
# APPARENT RADIUM-226 CONCENTRATION DECONVOLUTION GRAPH

16

PROPERTY NUMBER: GJ-03629-RM

HOLE NUMBER: 16

LOCATION: 280240



Depth (in)	Apparent Radium-226 (pCi/g) Undeconvolved	Apparent Radium-226 (pCi/g) Deconvolved
3	2.6	2.6
6	3.1	3.6
9	3.3	3.5
12	3.4	3.4
15	3.5	3.7
18	3.5	3.3
21	3.6	3.8
24	3.6	3.6
27	3.6	3.8
30	3.5	3.3
33	3.5	3.3
36	3.6	4.0
39	3.5	3.5

