From: "Kevin Taylor" <ktaylor@scientech.com>
To: "'Marjorie McLaughlin'" <MMM3@nrc.gov>
Date: Tue, May 10, 2005 6:31 PM
Subject: Whittaker site

Marjorie:

Because of the identification of contamination at or beyond the current fence line, two areas extending 5 - 10 feet beyond the existing fence line will be demarcated by Pat Horkman and Don Hubet (Greenville Metals) for placement of a temporary fence as follows:

1 - Along the east-west fence at the northwest corner of Section 2, approximately 100 feet (section h-i on the attached map) (See attached survey).

2 - At the southwest corner of Section 2 along the west fence line with Greenville metals, approximately 116 feet (section k-l on the attached map).

We do not plan on excavating material beyond the fence for 4 to 8 weeks. Therefore, there are no immediate plans to relocate any sections of the fence.

We are not planning on doing any formal soil sampling (for the Final Status Survey) until the fence line contamination is addressed. Excavation of this material could cross-contaminate the existing excavated areas.

Please call me if you have any questions.

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B|5

Mail Envelope Properties   (42813619.8C4 : 22 : 10436)

Subject: Whittaker site
Creation Date   Mon, May 9, 2005 3:59 PM
From: "Kevin Taylor" <ktaylor@scientech.com>

Created By: ktaylor@scientech.com

Recipients
nrc.gov
  kp1_po.KP_DO
    MMM3 (Marjorie McLaughlin)

aig.com
  roger.pennifill CC

wkr.com
  elardiere CC

scientech.com
  rmoss CC ('Rich Moss')

Post Office   **Route**
  kp1_po.KP_DO   nrc.gov
                                                                       aig.com
                                                                       wkr.com
                                                                       scientech.com

Files   **Size**   **Date & Time**
  MESSAGE   1183   Monday, May 9, 2005   3:59 PM
  TEXT.htm   3014
  fenceln-2.pdf   35511
  fenceline 4-27-05.xls   499712
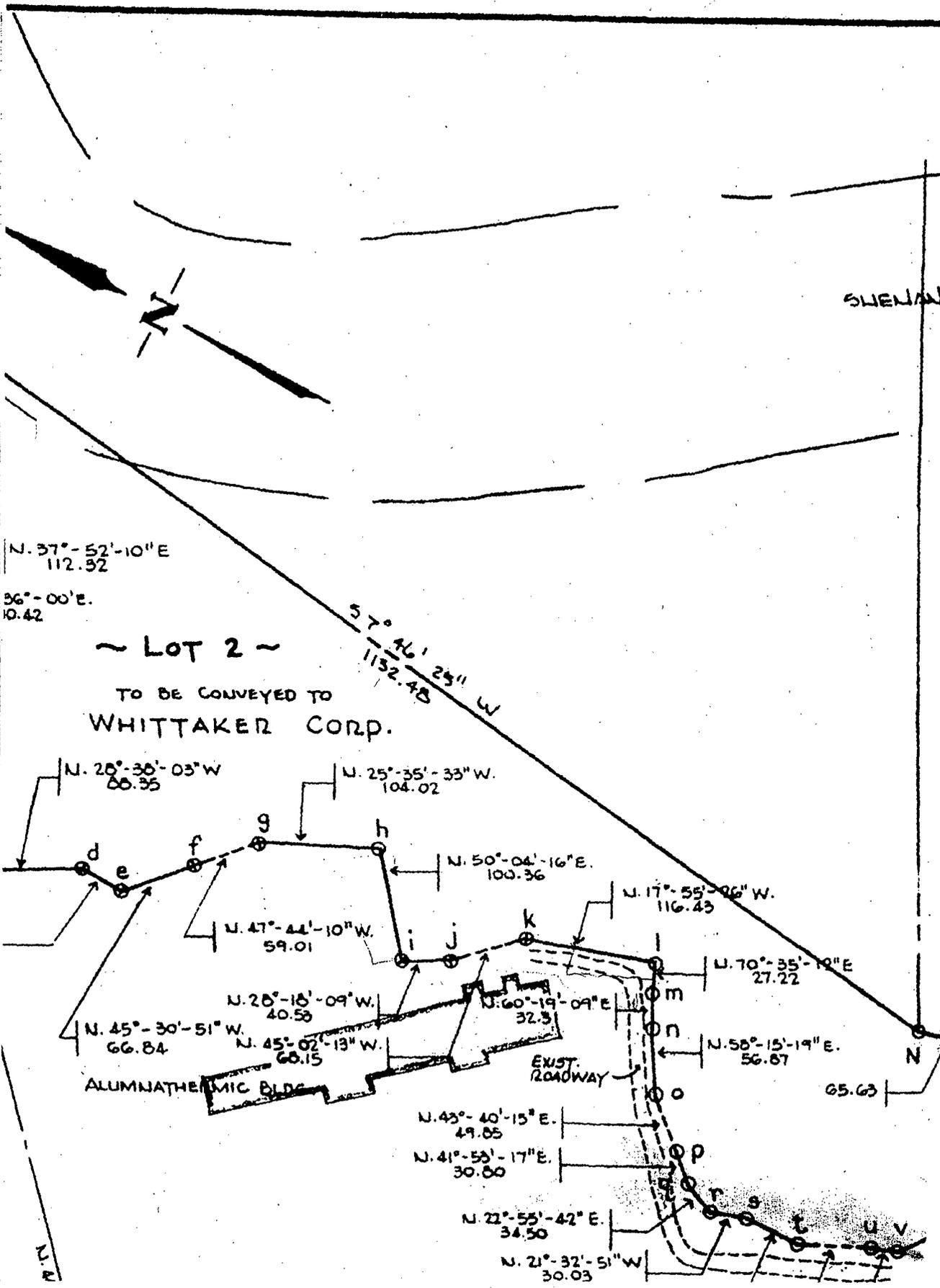 Mime.822   729235

Options
 Expiration Date: None
 Priority: Standard
 ReplyRequested: No
 Return Notification: None

 Concealed Subject: No
 Security: Standard

N

SWENAN

N. 37°-52'-10"E
112.32

36°-00'E.
10.42

~ LOT 2 ~

TO BE CONVEYED TO
WHITTAKER CORP.

S 7°-46'-29" W
1132.48

N. 28°-30'-03" W
88.35

N. 25°-35'-33" W.
104.02

g   h

d e   f

N. 50°-04'-16"E.
100.36

N. 17°-55'-26" W.
116.43

N. 47°-44'-10" W.
59.01

i j   k   l

N. 70°-35'-10"E
27.22

m

N. 28°-18'-09" W.
40.58

N. 60°-19'-09"E.
32.3

n

N. 58°-15'-19"E.
56.87

N

N. 45°-30'-51" W.
66.84

N. 45°-02'-13" W.
68.15

EXIST.
ROADWAY

65.63

ALUMNATHERMIC BLDG.

o

N. 43°-40'-15"E.
49.85

N. 41°-53'-17"E.
30.80

p

q r   s

N. 22°-55'-42"E.
34.50

t   u v

N. 21°-32'-51"W
30.03

Survey Cover Sheet

Survey Number_____

Surveyor:	J. Trowbridge		04/27/2005
	Print	Sign	Date
Reviewer:	\ P. Horkman		04/27/2005
	Print	Sign	Date

Survey Location:	Section 2-NW corner
Survey Purpose:	2x2 Na-I readings

Survey Meters

Meter Model #	2221/44-10	Meter Model #		Meter Model #	
Meter / Probe Serial #	163697/207829	Meter / Probe Serial #		Meter / Probe Serial #	
Cal Due	02/11/2006	Cal Due		Cal Due	
Efficiency	11.1%	Efficiency		Efficiency	
Type (α, βγ)	γ	Type (α, βγ)		Type (α, βγ)	
Sample Time	N/A	Sample Time		Sample Time	
Background Time	10 min.	Background Time		Background Time	
Background (cpm)	8900	Background (cpm)		Background (cpm)	
MDC (dpm/100cm^2)	N/A	MDC (dpm/100cm^2)		MDC (dpm/100cm^2)	
Guideline (dpm/100cm^2)	N/A	Guideline (dpm/100cm^2)		Guideline (dpm/100cm^2)	
Action Level (gross cpm)	N/A	Action Level (gross cpm)		Action Level (gross cpm)	

Circle One: Smear / **Direct** / Scan*

Point #	Log #	Units:cpm βγ	α
1	N/A	8304	N/A
2	N/A	12268	N/A
3	N/A	14831	N/A
4	N/A	134314	N/A
5	N/A	59210	N/A
6	N/A	26250	N/A
7	N/A	18254	N/A
8	N/A	11541	N/A
9	N/A	117740	N/A
10	N/A	20272	N/A
11	N/A	24377	N/A
12	N/A	17346	N/A
13	N/A	8566	N/A

Circle One: Smear / Direct / Scan* — Units:dpm/100cm2 βγ / α

Circle One: Smear / Direct / Scan* — Units:dpm/100cm2 βγ / α

* Scan Measurements: Calculate the ScanMDC. The average and maximum counts are to be recorded in the βγ and α columns respectively.

Survey Cover Sheet

Survey Location:	Section 2-NW corner
Survey Purpose:	2x2 Na-I readings
Diagram / Photo	

04/27/2005

Notes:	Readings taken at each fence post.
	Reading #4 taken 2' north of fence approx at a 2' depth, between posts 54 and 55.
	When the contamination was initially detected at reading point # 4 it was still on the south side of the fence, we then
	tried to remediate the contamination only to find out it continued north under the fence.
	Excavation was stopped due to concern of fence collapse.
	Reading #/Post #-1-57, 2-56, 3-55, 4-between 55 and 54, 5-54, 6-53, 7-52, 8-51, 9-50, 10-49, 11-48, 12-47, 13-46.

$$MDC_{Smear} \approx \frac{3 + 3.29\sqrt{R_B t_S \left(1 + \frac{t_S}{t_B}\right)}}{\varepsilon_s \left(\varepsilon_i\right)\left(t_S\right)}$$

$$ScanMDC = \frac{1.38\left(\frac{60}{i}\right)\sqrt{R_B\left(\frac{i}{60}\right)}}{\sqrt{0.5}\,\varepsilon_S\left(\varepsilon_i\right)\left(\frac{probe\ area}{100cm^2}\right)}$$

$$MDC_{Fixed} = \frac{3 + 3.29\sqrt{R_B t_S\left(1 + \frac{t_S}{t_B}\right)}}{\varepsilon_s\left(\varepsilon_i\right)\left(t_S\right)\left(\frac{probe\ area}{100cm^2}\right)}$$

$$A_I = R_B + \left(guideline * \varepsilon_s\left(\varepsilon_i\right)\right)$$

$$dpm\ /\ 100\ cm^2 = \frac{gross\ cpm - bkg\ cpm}{\varepsilon_s\left(\varepsilon_i\right)}$$

Where :

R_B = background counting rate

t_B = background counting time

t_S = sample counting time

A_I = action level

ε_s = surface efficiency

ε_i = intrinsic instrument efficiency

i = is inverse of the scanning speed in detector - widths per second (i.e., for 1/2 - width per second, $i = 2$)