LANL '08 TA-21, SWMU 21-022(f)

TA 21 CLOSURE PROJECT
LOS ALAMOS NATIONAL LABORATORY
MAIL STOP C 349
231-0727
FAX 606-1526

DATE 2-20-08

TO Katie Roberts **FAX#**

ORGANIZATION NMED **PHONE**

FROM M. Thacker **RETURN FAX**

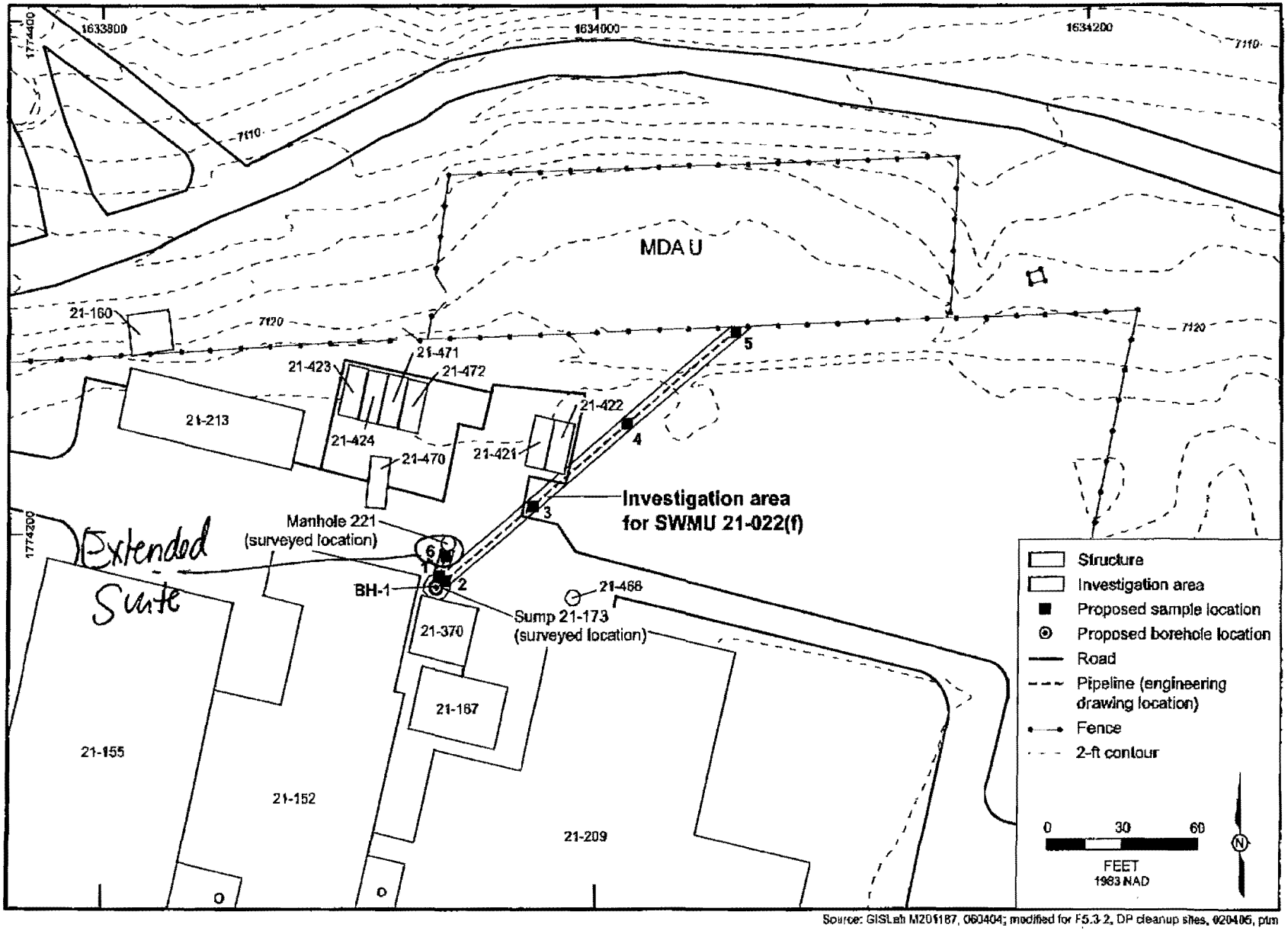
PHONE

#PAGES INCL. COVER

MESSAGE: Extended suite for 21-022 (f), the last one!

Mark

30318



Source: GISLab M201187, 060404; modified for F5.3-2, DP cleanup sites, 020406, ptm

Figure 5.3-2. SWMU 21-022(f) proposed sample locations

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 284 **EVENT NAME:** SWMU 21-022(f) DP Site Aggregate Area. Fall_Winter 2007

SAMPLE ID: RE21-08-8744

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		1-15-2008	MEDIA:	~~AIIII~~ EKT 01/15/08	Qbt3
TIME COLLECTED (HH:MM)		1419	SUB-MEDIA:	UA	OK
PRS ID:	21-022(f)	OK	SAMPLE TECH CODE:	~~SS~~	HA
LOCATION ID:	~~UNK~~ EKT 01/15/08	21-603141	FIELD QC TYPE:	NA	
LOCATION TYPE:	GENERIC	OK	FIELD PREP:	NA	
TOP DEPTH:	~~0~~ EKT 01/15/08	8.5ft	SAMPLE USAGE:	INV	
BOTTOM DEPTH:	~~0~~ EKT 01/15/08	9.5ft	SCREEN/PORT DESC:		NA
FIELD MATRIX:		R	EXCAVATED: YES / NO / NA		

COMPOSITE TYPE: — COMPOSITE TIME INTERVAL: — WATER FLOWING: YES / NO / NA

BOREHOLE: YES / NO / NA BOREHOLE DECLINATION: — BOREHOLE DIRECTION: —

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
2		8290	125 ML GLASS	Ice	Y	
1		NMEDEXP+8082	250 ML AMBER GLASS	Ice	Y	

SAMPLE DESC: Gray Tuff *QuickTurn-15day

SAMPLE COMMENTS:
Location 6a - Extended Suite

LOCATION DESC:

FIELD SCREENING/MEASUREMENT RESULTS: PID Background = 0.0 ppm

α - 31 dpm β - 814 dpm PID - 0.0 ppm

COLLECTED BY (PRINT) ERIC K TOSA **REVIEWED BY (PRINT)** M Whitaker

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) ERIC K TOSA	1/16/08	(Printed Name)	1-16-08
(Signature) Eric K. Tosa	16:35	(Signature) [signature]	1635
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

Sample ID: **RE21-08-8744** **EPA Method 8290**

Client Data		Sample Data		Laboratory Data			
Name:	Los Alamos National Laboratory	Matrix:	Soil	Lab Sample:	30168-001	Date Received:	18-Jan-08
Project:	08-520C	Sample Size:	11.5 g	QC Batch No.:	9905	Date Extracted:	26-Jan-08
Date Collected:	15-Jan-08	%Solids:	87.2	Date Analyzed DB-5:	30-Jan-08	Date Analyzed DB-225:	NA
Time Collected:	1419						

Analyte	Conc. (pg/g)	DL [a]	EMPC[b]	Qualifiers
2,3,7,8-TCDD	ND	0.112		
1,2,3,7,8-PeCDD	ND	0.131		
1,2,3,4,7,8-HxCDD	ND	0.153		
1,2,3,6,7,8-HxCDD	ND	0.161		
1,2,3,7,8,9-HxCDD	ND	0.150		
1,2,3,4,6,7,8-HpCDD	ND		0.186	
OCDD	1.87			J
2,3,7,8-TCDF	ND	0.0839		
1,2,3,7,8-PeCDF	ND	0.160		
2,3,4,7,8-PeCDF	ND	0.162		
1,2,3,4,7,8-HxCDF	ND	0.0848		
1,2,3,6,7,8-HxCDF	ND	0.0900		
2,3,4,6,7,8-HxCDF	ND	0.0995		
1,2,3,7,8,9-HxCDF	ND	0.115		
1,2,3,4,6,7,8-HpCDF	ND	0.150		
1,2,3,4,7,8,9-HpCDF	ND	0.0879		
OCDF	ND	0.396		

	Labeled Standard	%R	LCL-UCL[d]	Qualifiers
IS	13C-2,3,7,8-TCDD	95.6	40 - 135	
	13C-1,2,3,7,8-PeCDD	91.7	40 - 135	
	13C-1,2,3,4,7,8-HxCDD	97.4	40 - 135	
	13C-1,2,3,6,7,8-HxCDD	95.5	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDD	90.8	40 - 135	
	13C-OCDD	74.2	40 - 135	
	13C-2,3,7,8-TCDF	80.7	40 - 135	
	13C-1,2,3,7,8-PeCDF	68.4	40 - 135	
	13C-2,3,4,7,8-PeCDF	71.9	40 - 135	
	13C-1,2,3,4,7,8-HxCDF	94.1	40 - 135	
	13C-1,2,3,6,7,8-HxCDF	94.0	40 - 135	
	13C-2,3,4,6,7,8-HxCDF	93.2	40 - 135	
	13C-1,2,3,7,8,9-HxCDF	102	40 - 135	
	13C-1,2,3,4,6,7,8-HpCDF	85.6	40 - 135	
	13C-1,2,3,4,7,8,9-HpCDF	88.2	40 - 135	
	13C-OCDF	74.3	40 - 135	
CRS	37Cl-2,3,7,8-TCDD	87.7	40 - 135	

Totals			
Total TCDD	ND	0.112	
Total PeCDD	ND	0.241	
Total HxCDD	ND	0.155	
Total HpCDD	ND		0.186
Total TCDF	ND	0.0839	
Total PeCDF	ND	0.361	
Total HxCDF	ND	0.0969	
Total HpCDF	ND	0.161	

Toxic Equivalent Quotient (TEQ) Data [e]

TEQ (Min): **0.00187**

a. Sample specific estimated detection limit.
b. Estimated maximum possible concentration.
c. Method detection limit.
d. Lower control limit - upper control limit.
e. TEQ based on (1989) International Toxic Equivalent Factors (ITEF).
The results are reported in dry weight. The sample size is reported in wet weight.

Analyst: MAS

Approved By: William J. Luksemburg 31-Jan-2008 14:03

GEL Laboratories LLC

Report Date: January 29, 2008

PCB
Certificate of Analysis
Sample Summary

SDG Number:	08-521	Date Collected:	01/15/2008 12:00	Matrix:	S
Lab Sample ID:	201140004	Date Received:	01/18/2008 09:30	%Moisture:	12
		Client:	LANL008	Project:	LANL00800
Client ID:	RE21-08-8744	Method:	SW846 8082	SOP Ref:	GL-OA-E-040
Batch ID:	719711	Inst:	ECD8A.I	Dilution:	1
Run Date:	01/22/2008 13:47	Analyst:	JAOC	Inj. Vol:	1 uL
Prep Date:	01/21/2008 18:23	Aliquot:	29.92 g	Final Volume:	1 mL
Data File:	025f2501.d	Column:	1 CLP1	Level:	LOW
	025b2501.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.80	ug/kg	1.26	3.80	1
11104-28-2	Aroclor-1221	U	3.80	ug/kg	1.26	3.80	1
11141-16-5	Aroclor-1232	U	3.80	ug/kg	1.26	3.80	1
53469-21-9	Aroclor-1242	U	3.80	ug/kg	1.26	3.80	1
12672-29-6	Aroclor-1248	U	3.80	ug/kg	1.26	3.80	1
11097-69-1	Aroclor-1254	U	3.80	ug/kg	1.26	3.80	1
11096-82-5	Aroclor-1260	U	3.80	ug/kg	1.26	3.80	1

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories

Client Sample ID: RE21-08-8744

Lab Code: GEL

GEL Job No (SDG) 08-521

Matrix: SOIL

GEL Sample ID: 201140004

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 18-JAN-08

Extraction Type Sonication

Extraction Batch ID: 719584

Concentrated Extract Volume (mL) 10

Date Extracted: 22-JAN-08

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0128015a

Date Analyzed: 28-JAN-08 23:06

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	500	U
121-14-2	2,4-Dinitrotoluene	500	U
121-82-4	RDX	500	U
19406-51-0	4-Amino-2,6-dinitrotoluene	500	U
2691-41-0	HMX	500	U
35572-78-2	2-Amino-4,6-dinitrotoluene	500	U
479-45-8	Tetryl	500	U
606-20-2	2,6-Dinitrotoluene	500	U
78-11-5	PETN	1000	U
88-72-2	o-Nitrotoluene	500	U
98-95-3	Nitrobenzene	500	U
99-08-1	m-Nitrotoluene	500	U
99-35-4	1,3,5-Trinitrobenzene	500	U
99-65-0	m-Dinitrobenzene	500	U
99-99-0	p-Nitrotoluene	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: General Engineering Laboratories

Client Sample ID: RE21-08-8744

Lab Code: GEL

GEL Job No (SDG) 08-521

Matrix: SOIL

GEL Sample ID: 201140004

Sample Amount 2

Moisture: 12.0

Amount Units g

Date Received: 18-JAN-08

Extraction Type Sonication

Extraction Batch ID: 719584

Concentrated Extract Volume (mL) 10

Date Extracted: 22-JAN-08

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS0123016.wiff

Date Analyzed: 23-JAN-08 17:28

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	1000	U
59229-75-3	2,6-Diamino-4-nitrotoluene	2000	U
618-87-1	3,5-Dinitroaniline	1000	U
6629-29-4	2,4-Diamino-6-nitrotoluene	2000	U
78-30-8	tris(o-cresyl) phosphate	1000	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$