State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
GOVERNOR

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

I N T E R N A L
M E M O R A N D U M

To: Mr. Jim Piatt, Chief
Groundwater Remediation and Protection Bureau

Through: Benito Garcia, Chief
Hazardous and Radioactive Materials Bureau

Through: Barbara Hoditschek, RCRA Program Manager
Hazardous and Radioactive Materials Bureau

From: Stephanie Stoddard, RCRA Permits Program

Re: TPH contamination in Ten Site Canyon, LANL

Date: September 28, 1993

Prior to 1991 a poorly designed surface impoundment (designated TA-35 TSL-125) was located outside building 125 at Technical Area 35. It's purpose was to contain waste dielectric oil used by Marx generators inside building 125. The surface impoundment overtopped several times between October 1986 and July of 1990. DOE/LANL contacted the Surface Water Quality Bureau and The Hazardous Waste Bureau regarding the first such incident, October 9, 1986. On June 9, 1988 the impoundment contents were sampled and found to contain hazardous constituents.

LANL conducted "closure" activities in 1991, prior to approval of any closure plan by HRMB. Upon review of the closure work conducted, HRMB disapproved the plan because no sampling, analysis, or clean-up was conducted subsequent to the last time the impoundment overtopped, July 1990.

A closure plan for this unit was finally approved in September of 1992 after it was amended to include the sampling and analysis of dielectric oil (for hazardous constituents and TPH) remaining down the side of Ten Site Canyon and at the canyon bottom. The RCRA performance standard for clean closure requires that no hazardous constituents above published values (or calculated values whenever published values are not available) remain at the site for all media impacted by the unit. LANL has demonstrated through samping and analysis backed by knowledge of process that no hazardous constituents remain at the site, including Ten Site Canyon. However, a significant amount of TPH contamination remains in the canyon. TPH is not regulated under RCRA as long as it can be shown that the TPH is not commingled with hazardous

constituents. After consultation with Peter Monahan of your staff, it was determined that this contamination is regulated by the WQCC, so HRMB has referred this site to your bureau for further investigation.

Enclosed please find a copy of the letter issued to DOE/LANL, analytical results for TPH sampling down Ten Site Canyon (conducted 12/93) and a map showing sampling locations. If I can be of any assistance to your staff regarding this matter, please have them contact me at X4308. Thank you.

To : Philip R. Fresquez, EM-8, MS K490

Thru : Chris Leibman, Section Leader, Organic Analysis

From : Stuart Nielsen

Date : 6 January 1993

Subject: Results for Analytical Request Number 13905

Samples 92.33183 through 92.33191 received under request number 13905 were soil samples. The request was for the determination of Total Recoverable Petroleum Hydrocarbons.

The determinations were carried out using EM-9 Procedure IH274 which is based on EPA Method 418.1. The results are given in the attached tables.

These data are recorded in notebook S025145 on pages 132 through 143. If you have any questions concerning these results please contact me (5-7422) or Chris (5-6789).

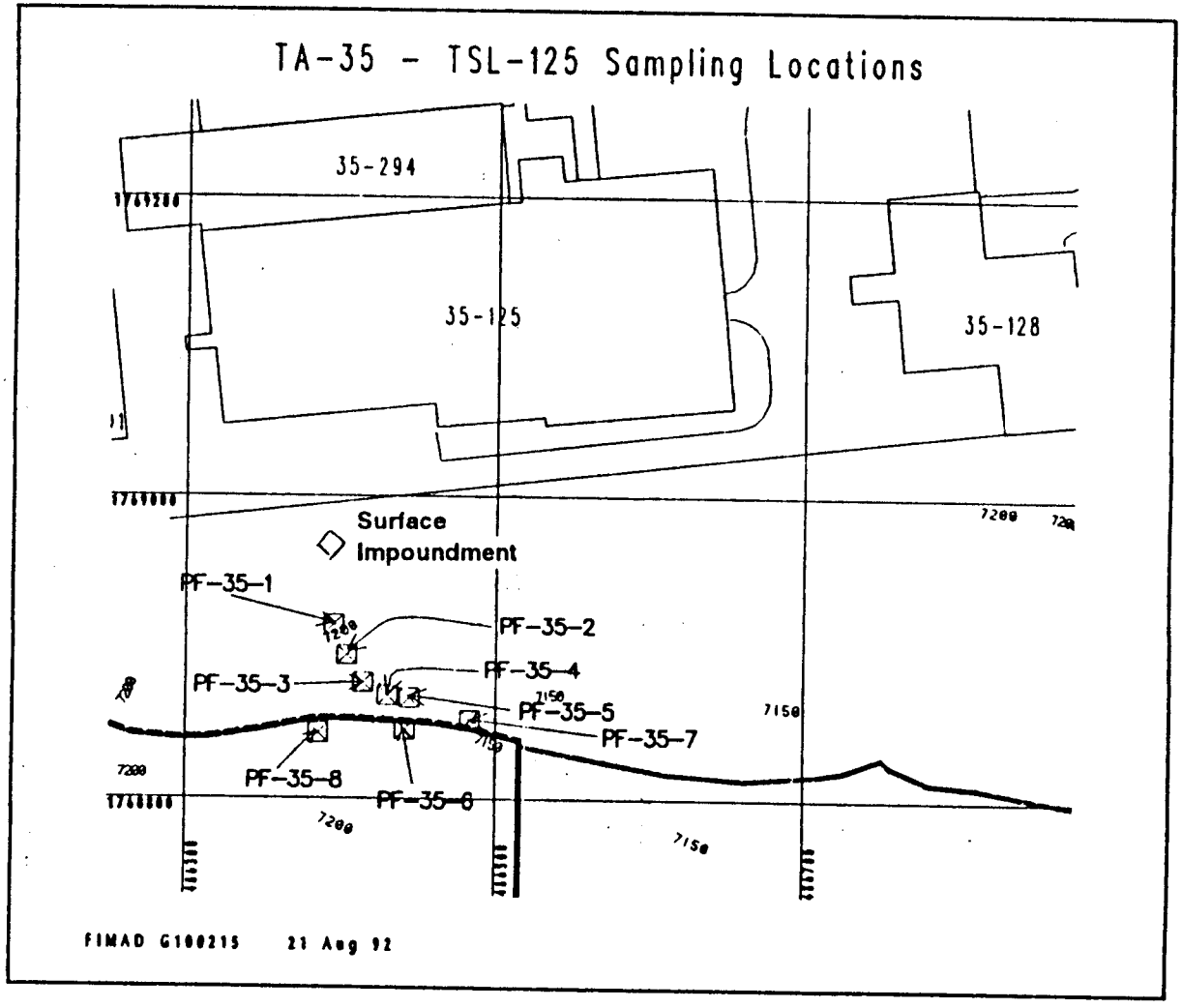
SAMPLE NUMBER CROSSWALK

Sample Location	FIMAD Number	Control Number	Master Log Number	Lab Sample Number
PF-35-1	1048	01215	AAA0999	92.33183
PF-35-2	1049	01216	AAA1000	92.33184
PF-35-2 (replicate)	1049	01217	AAA1001	92.33185
PF-35-3	1050	01218	AAA1002	92.33186
PF-35-4	1051	01219	AAA1003	92.33187
PF-35-5	1052	01220	AAA1004	92.33188
PF-35-6	1053	01221	AAA1005	92.33189
PF-35-7	1054	01222	AAA1006	92.33190
PF-35-8	1055	01223	AAA1007	92.33191
PF-35-TB	----	01224	AAA1009	-----
PF-35-FB	----	01224	AAA1010	-----

Analytial Results for Request 13905

	Sample Number	Total Recoverable Petroleum Hydrocarbons ug/g		
1	92.33183	3026	±	605
2	92.33184	20196	±	4039
	92.33185	30888	±	6178
3	92.33186	12918	±	2584
4	92.33187	8227	±	1645
5	92.33188	7.80	±	1.56
6	92.33189	62.4	±	12.5
7	92.33190	641	±	128
8	92.33191	227	±	45

MDL = 4



LEGEND

Boundary, O

Boundary

Contour 10

Fence, Secur

Roads, Paved

Sampling Loc

NORTH, NM State Plane NAD27

Grid provides NMSP coord.

Grid interval, in feet: 0

0 125 2

NOTICE: Information on this map is provisional and has not been checked for accuracy.