HSWA LANL G/M/S '99 Off-Site

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

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ENTERED

PL I.D. **905039**

June 25, 1999

NMED HRMB
2044A Galisteo Street
Santa Fe, NM 87505

Project Name/Number: WHITE ROCK CANYON WRC-5-99

Attention: John Young

On **05/14/99,** Pinnacle Laboratories Inc., (ADHS License No. AZ0592), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

All analyses were performed by Barringer Laboratories, Inc., Denver, CO.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph.D.
General Manager

MR:jt

Enclosure

4101

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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CLIENT	:NMED HRMB	DATE RECEIVED	:05/14/99
PROJECT #	:WRC-5-99		
PROJECT NAME	:WHITE ROCK CANYON	REPORT DATE	:06/25/99

PL ID: 905039

	PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	905039-01	SPRING 5	AQUEOUS	05/11/99
02	905039-02	SPRING 6	AQUEOUS	05/13/99
03	905039-03	ANCHO SPRING	AQUEOUS	05/13/99

---TOTALS---

MATRIX	#SAMPLES
AQUEOUS	3

BARRINGER LABORATORIES, INC.
15000 W. 6TH AVE., SUITE 300 GOLDEN, CO 80401 (303) 277-1687 FAX (303) 277-1689

10-Jun-99

Kimberly D. McNeill
PINNACLE LABORATORIES INC.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107

Attn:
Project: 905039 PO #:
Received: 14-May-99 09:20

Job: 992097E Status: Final

ANALYTICAL REPORT PACKAGE

CASE NARRATIVE.....i

ANALYTICAL RESULTS.....R-1

QUALITY CONTROL REPORT.....Q-1

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10-Jun-99
Page: i

Kimberly D. McNeill
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Attn:
Project: 905039 PO #:
Received: 14-May-99 09:20

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CASE NARRATIVE

A total of 3 Water samples were received on 14-May-99. As stated in the chain of custody, the samples were run for the following analysis: Explosives. A table, to cross reference your sample ID to ours, is attached. Our procedures are summarized on the Quality Control Data Sheet.

Quality control standards for organic and inorganic analyses followed the appropriate SW-846 or EPA methodology. Quality control standards for radiochemistry followed our standard operating procedures or contractual requirements.

The samples were extracted beyond the EPA's recommended holding time of 7 days. Client sample 905039-01 broke in transit and 905039-03 was received with a broken lid.

Signed: 6/10/99
Organic
Manager

Signed: 6/10/99
Project Review

BARRINGER LABORATORIES, INC.
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10-Jun-99
Page: ii

Kimberly D. McNeill
PINNACLE LABORATORIES INC.
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Albuquerque, NM 87107

Attn:
Received: 14-May-99 09:20
Project: 905039
PO #:

Job: 992097E
Status: Final

Lab-ID	Matrix	Client Sample ID	Sampled
992097-1	Water	905039-01	13-May-99
992097-2	Water	905039-02	13-May-99
992097-3	Water	905039-03	13-May-99

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10-Jun-99
Page: R-1
Job: 992097E
Status: Final

PINNACLE LABORATORIES INC.

Explosives

Sample Id: 905039-02
Lab Id: 992097-2
Date Sampled: 13-May-99
Date Extracted: 24-May-99
Date Analyzed: 26-May-99

Project: 905039
Dilution Factor: 1:1
Matrix: Water
Method: 8330

Analyte	CAS Number	Concentration µg/l	MDL
HMX	2691-41-0	U	0.20
RDX	121-82-4	U	0.20
1,3,5-Trinitrobenzene	99-35-4	U	0.10
1,3-Dinitrobenzene	99-65-0	U	0.20
Nitrobenzene	98-95-3	U	0.40
Tetryl	479-45-8	U	0.60
TNT	118-96-7	U	0.60
Nitroglycerin	55-63-0	U	6.0
4-Amino-2,6-DNT	1946-51-0	U	0.90
2-Amino-4,6-DNT	35572-78-2	U	0.40
2,4-Dinitrotoluene	121-14-2	U	0.40
2,6-Dinitrotoluene	606-20-2	U	0.40
2-Nitrotoluene	88-72-2	U	0.40
4-Nitrotoluene	99-99-0	U	0.40
3-Nitrotoluene	99-08-1	U	0.40
PETN	78-11-5	U	6.0

Surrogate	Recovery	Limit
3,4-Dinitrotoluene	92%	56-120%

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10-Jun-99
Page: R-2
Job: 992097E
Status: Final

PINNACLE LABORATORIES INC.

Explosives

Sample Id: 905039-03
Lab Id: 992097-3
Date Sampled: 13-May-99
Date Extracted: 24-May-99
Date Analyzed: 26-May-99

Project: 905039
Dilution Factor: 1:1
Matrix: Water
Method: 8330

Analyte	CAS Number	Concentration µg/l	MDL
HMX	2691-41-0	U	0.20
RDX	121-82-4	U	0.20
1,3,5-Trinitrobenzene	99-35-4	U	0.10
1,3-Dinitrobenzene	99-65-0	U	0.20
Nitrobenzene	98-95-3	U	0.40
Tetryl	479-45-8	U	0.60
TNT	118-96-7	U	0.60
Nitroglycerin	55-63-0	U	6.0
4-Amino-2,6-DNT	1946-51-0	U	0.90
2-Amino-4,6-DNT	35572-78-2	U	0.40
2,4-Dinitrotoluene	121-14-2	U	0.40
2,6-Dinitrotoluene	606-20-2	U	0.40
2-Nitrotoluene	88-72-2	U	0.40
4-Nitrotoluene	99-99-0	U	0.40
3-Nitrotoluene	99-08-1	U	0.40
PETN	78-11-5	U	6.0

Surrogate	Recovery	Limit
3,4-Dinitrotoluene	T55%	56-120%

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PINNACLE LABORATORIES INC.

QUALITY CONTROL REPORT

Lab Id: Method Blank
Date Sampled: NA
Date Extracted: 24-May-99
Date Analyzed: 26-May-99

Project: 905039
Dilution Factor: 1:1
Matrix: Water
Method: 8330

Analyte	CAS Number	Concentration µg/l	MDL
HMX	2691-41-0	U	0.20
RDX	121-82-4	U	0.20
1,3,5-Trinitrobenzene	99-35-4	U	0.10
1,3-Dinitrobenzene	99-65-0	U	0.20
Nitrobenzene	98-95-3	U	0.40
Tetryl	479-45-8	U	0.60
TNT	118-96-7	U	0.60
Nitroglycerin	55-63-0	U	6.0
4-Amino-2,6-DNT	1946-51-0	U	0.90
2-Amino-4,6-DNT	35572-78-2	U	0.40
2,4-Dinitrotoluene	121-14-2	U	0.40
2,6-Dinitrotoluene	606-20-2	U	0.40
2-Nitrotoluene	88-72-2	U	0.40
4-Nitrotoluene	99-99-0	U	0.40
3-Nitrotoluene	99-08-1	U	0.40
PETN	78-11-5	U	6.0

Surrogate	Recovery	Limit
3,4-Dinitrotoluene	96%	56-120%

BARRINGER LABORATORIES, INC.
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10-Jun-99
Page: Q-2

Kimberly D. McNeill
PINNACLE LABORATORIES INC.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107

Attn:
Received: 14-May-99 09:20
Project: 905039
PO #:

Job: 992097E
Status: Final

Abbreviations:

Parameters:

HMX	: Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
RDX	: Hexahydro-1,3,5-trinitro-1,3,5-triazine
Tetryl	: Methyl-2,4,6-trinitrophenylnitramine
TNT	: 2,4,6-Trinitrotoluene
4-Amino-2,6-DNT	: 4-Amino-2,6-Dinitrotoluene
2-Amino-4,6-DNT	: 2-Amino-4,6-Dinitrotoluene
PETN	: Pentaerythritol tetranitrate

Units:

µg/l	: micrograms per liter
%	: percent

Quality codes:

T	: Surrogate recovery outside reporting limit
U	: Undetected at reported limit

BARRINGER LABORATORIES, INC.
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10-Jun-99
Page: Q-3

Kimberly D. McNeill
PINNACLE LABORATORIES INC.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107

Attn:
Received: 14-May-99 09:20
Project: 905039
PO #:

Job: 992097E
Status: Final

QUALITY CONTROL DATA SHEET

Received by: kz
Via: Fed Ex

Sample Container Type: 1L amber
Additional Lab Preparation: None

Parameter	Method	Preservative	Init	Analysis Dates
Explosives	8330	4°C	RDH	05/26

Barringer Laboratories, Inc. will return or dispose of your samples 30 days from the date your final report is mailed, unless otherwise specified by contract. Barringer Laboratories, Inc. reserves the right to return samples prior to the 30 days if radioactive levels exceed our license.

PINNACLE LABORATORIES

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 5/13/99 PAGE: 1 OF 1

PLI Accession #:

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER:

COMPANY: NMED-HRMB
ADDRESS: 2044A Galisteo St.
Santa Fe, NM ~~87501~~ 87505
PHONE: 505/827-1558 x1036
FAX: 505/827-~~1558~~ 1544

BILL TO: Steven Vigil
COMPANY: NMED-HRMB
ADDRESS: 2044A Galisteo St
Santa Fe, NM 87505

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	HE 8330 Line Item 16 RDX HMX	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐ MTBE ☐ TMB ☐ PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐ / DBCP ☐		8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides /PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method 1311)	Metals:		NUMBER OF CONTAINERS
Spring 5	5/11/99	1030	Water				X																										
Spring 6	5/13/99	0836	Water				X																										
Ancho Spring	5/13/99	1035	Water				X																										

PROJECT INFORMATION

PROJ. NO.: White Rock Canyon
PROJ. NAME: WRC-5-99
P.O. NO.:
SHIPPED VIA: Fed Ex

SAMPLE RECEIPT

NO. CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE/ICE	

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL) ☒

CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER

METHANOL PRESERVATION ☐

COMMENTS: FIXED FEE ☐

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: John R. Young Time: 1350	Signature: Time:
Printed Name: John Young Date: 5/13/99	Printed Name: Date:
Company: NMED-HRMB See reverse side (Force Magure)	Company:
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Nicole White Time: 5/14/99 0920	Signature: Time:
Printed Name: N. WHITE Date:	Printed Name: Date:
Company: BLI	Pinnacle Laboratories Inc.