

Denny E. Frost
DEPUTY OIL & GAS INSPECTOR

FEB 26 1998

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE

P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT 1 COPY TO
NATURAL
RESOURCE DEPT
AND OIL GAS
ADMINISTRATION

Approved
PIT REMEDIATION AND CLOSURE REPORT

Operator: PNM Gas Services (*Amoco*) Telephone: 324-3764

Address: 603 W. Elm Street Farmington, NM 87401

Facility or Well Name: *Jicarilla Apache 102-5*

Location: Unit: *C* Sec. *4* T. *26* N R. *4* W County *Rio Arriba*

Pit Type: Separator ☒ Dehydrator ☐ Other ☐

Land Type: *Jicarilla Apache*

Pit Location: Pit dimensions: length *29* width *22* depth *4*

(Attach diagram) Reference: wellhead ☒ other ☐

Footage from reference: *90*

Direction from reference: *30* Degrees East North
West ← South

Depth to Ground Water:

(Vertical distance from contaminants to seasonal high water elevation of ground water)

Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) *e*

Wellhead Protection Area:

(Less than 200 feet from a private domestic water source, or: less than 1,000 feet from all other water sources)

Yes (20 points)
No (0 points) *e*

Distance to Surface Water:

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)

Less than 200 feet (20 points)
200 feet to 1,000 feet (10 points)
Greater than 1,000 feet (0 points) *e*

Distance to Ephemeral Stream (dry wash):

(Horizontal distance to all downgradient streams having a width of at least 10 feet)

Less than or equal to 100 feet (10 points)
Greater than 100 feet (0 points) *e*

Distance to Nearest Lake, Playa, or Watering Pond:

(Horizontal distance to all downgradient lakes, playas, and livestock or wildlife water ponds)

Less than or equal to 100 feet (10 points)
Greater than 100 feet (0 points) *e*

RANKING SCORE (TOTAL POINTS): *e*

Date Remediation Started: 7/1/97 Date Completed: 8/5/97

Remediation Method: Excavation X Approx. Cubic Yards 95

(Check all appropriate sections) Landfarmed X Amount Landfarmed (cubic yds): 95

Other _____

Remediation Location: Onsite X Offsite _____

(i.e., landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action:

Removed contaminated soil from all four side walls as to get A below 100 ppm head space remaining. Bottom is rock

Ground Water Encountered: No X Yes _____ Depth _____

Final Pit Closure Sampling:

Sample Location North, East, South, and west side walls.

(if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample depth 4'

Sample date 7/1/97 Sample time 1515

Sample Results

Soil: Benzene (ppm) ND Water: Benzene (ppb) _____

Total BTEX (ppm) 0.001 Toluene (ppb) _____

Field headspace (ppm) 39.2 Ethylbenzene (ppb) _____

TPH ND ppm Method 8015 Total Xylenes (ppb) _____

Ground Water Sample: Yes _____ No X (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE 7/9/97 PRINTED NAME Ronald A. Dedrick

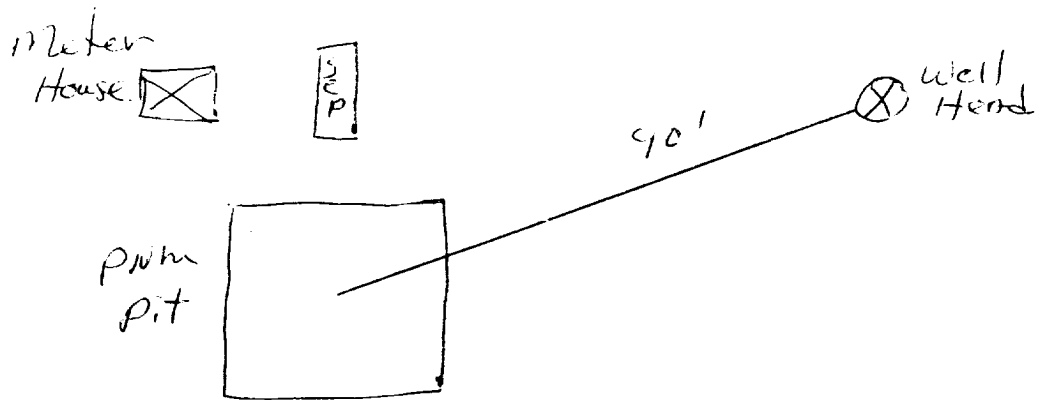
SIGNATURE Ronald A. Dedrick AND TITLE Environmental Technician II

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON): SPRAY & CLOSE

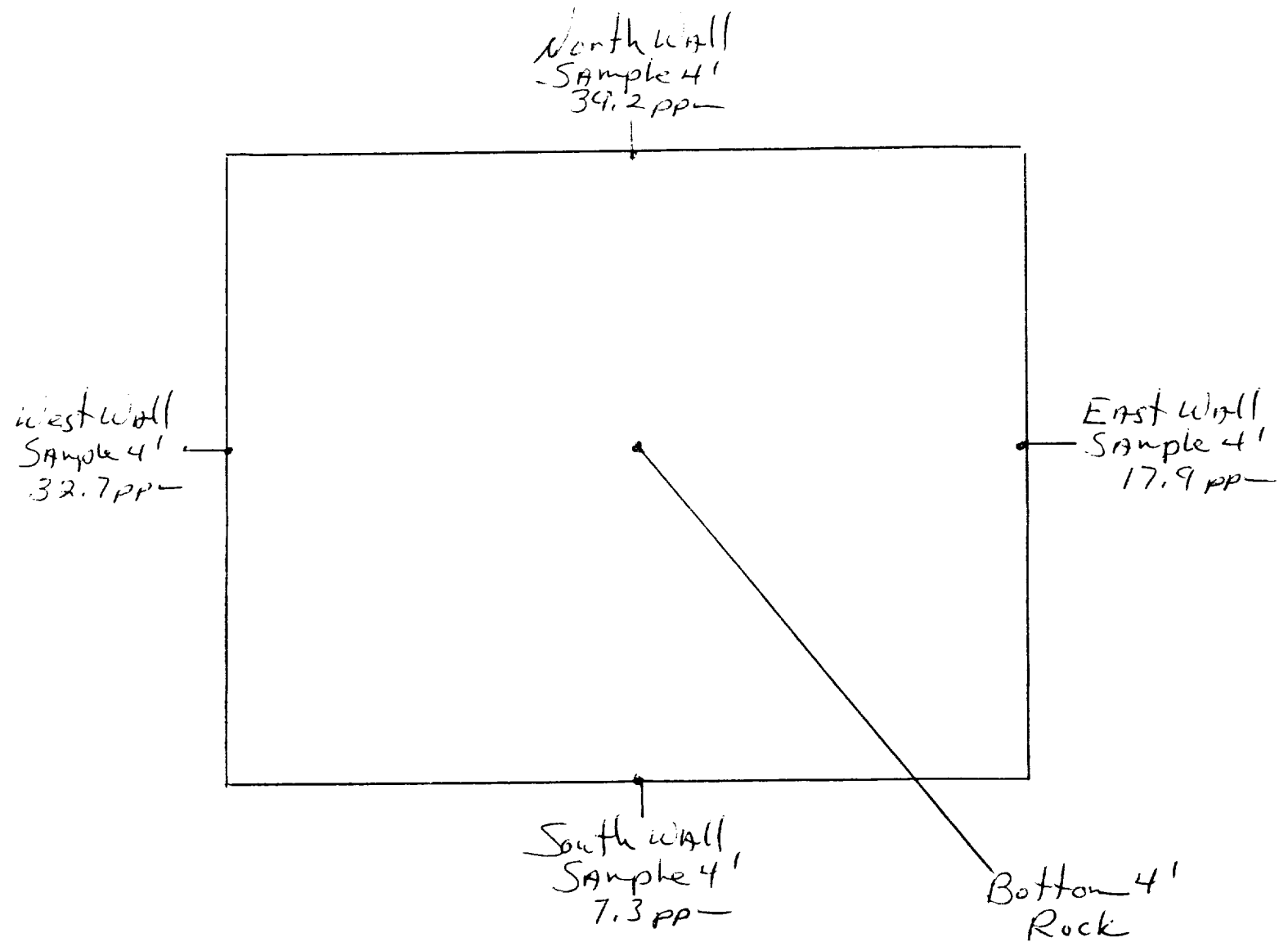
SIGNED: Leo C. Mann DATE: 7-9-97

J1C171117 17 pache 102-3
Sec. 4 T26N R4W Unit G
Amoco



JICARINA Hpbw 1020
Sec. 4 T26N R4W Unit G
Amoco

29'x22'x4'



OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *8-Jul-97*
COC No.: *5500*
Sample No.: *15186*
Job No.: *2-1000*

Project Name: ***PNM Gas Services -Jicarilla Apache 102-5***
Project Location: ***9707011515; 4pt. Composite***
Sampled by: *PA* Date: *1-Jul-97* Time: *15:15*
Analyzed by: *DC/HR* Date: *8-Jul-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	ND	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: 0548-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	200	185	7.8	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	84	89	(70-130)	5	20%

Method - SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography

Approved by: *Heidi Reese*
Date: *7/9/97*

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

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ANALYTICAL REPORT

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *9-Jul-97*
COC No.: *5500*
Sample No.: *15186*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-5*

Project Location: *9707011515; 4pt. Composite*

Sampled by: *PA* Date: *1-Jul-97* Time: *15:15*

Analyzed by: *DC* Date: *8-Jul-97*

Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/kg	1	ug/kg
<i>Toluene</i>	ND	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	ND	ug/kg	1	ug/kg
<i>m,p-Xylene</i>	1	ug/kg	1	ug/kg
<i>o-Xylene</i>	ND	ug/kg	1	ug/kg
<i>TOTAL</i>		1		ug/kg

ND - Not Detected at Limit of Quantitation

Method - SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography

Approved by: *Heidi Reese*
Date: *7/9/97*

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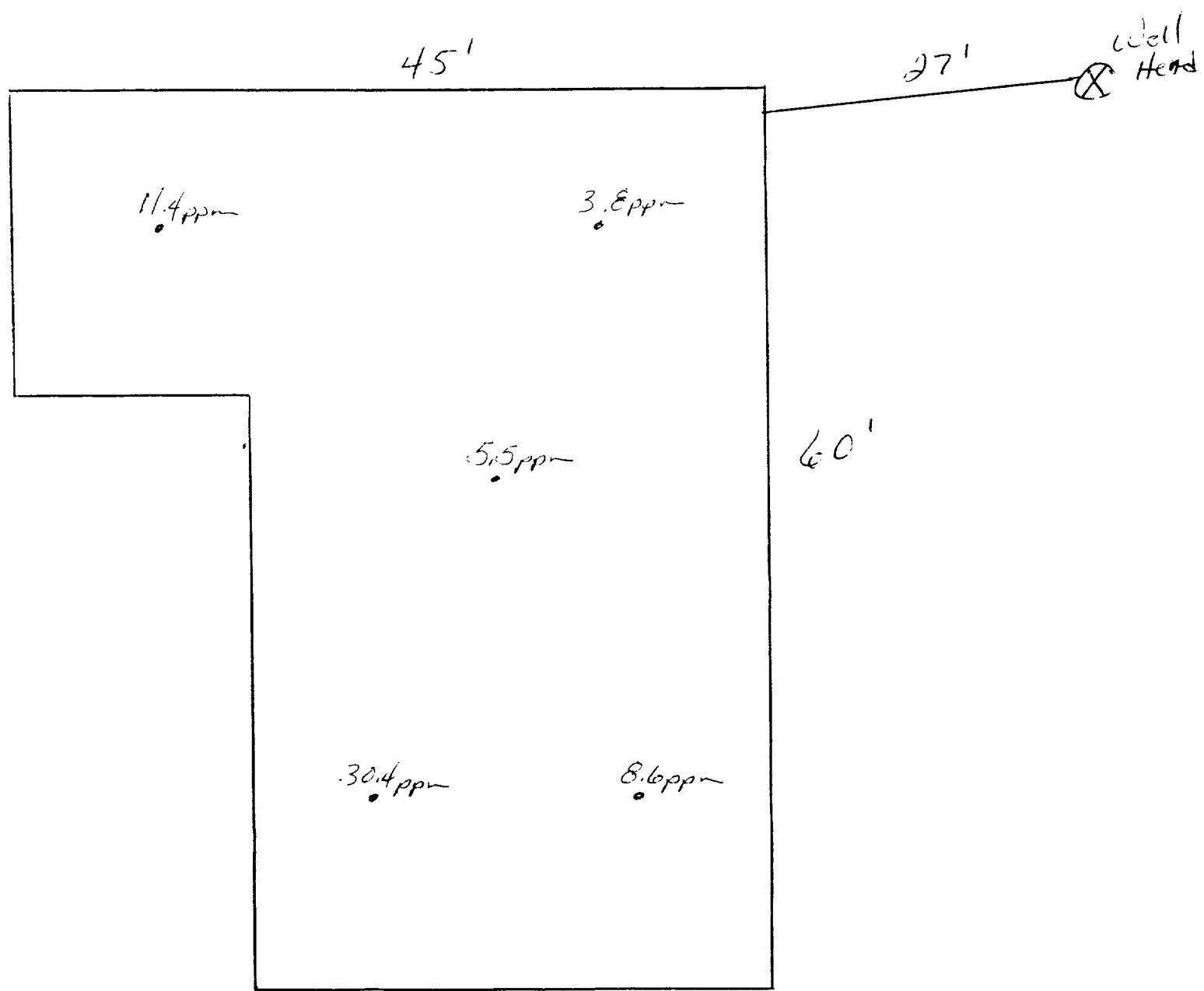
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AND OIL GAS
ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

Operator: PNM Gas Services (Amoco) Telephone: 324-3764	
Address: 603 W. Elm Street Farmington, NM 87401	
Facility or Well Name: Jicarilla Apache 102-5	
Location:	Unit: <u>6</u> Sec. <u>4</u> T. <u>26</u> N R. <u>4</u> W County <u>Rio Arriba</u>
Land Type: Jicarilla Apache	
Date Remediation Started: <u>7/1/97</u> Date Completed: <u>7/16/97</u>	
Remediation Method: Landfarmed <input checked="" type="checkbox"/> Approx. cubic yards <u>95</u>	
Composted <input type="checkbox"/>	
Other <input type="checkbox"/>	
Depth to Ground Water: (pts.) <u>0</u>	Final Closure Sampling:
Distance to an Ephemeral Stream: (pts.) <u>0</u>	Sampling Date: <u>7/16/97</u> Time <u>1006</u>
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) <u>0</u>	Sampling Results:
Wellhead Protection Area: (pts.) <u>0</u>	Field Headspace (ppm) <u>30.4</u>
Distance to Surface Water: (pts.) <u>0</u>	TPH (ppm) <u>ND</u> Method <u>8015</u>
Ranking Score (Total Points): <u>0</u>	Other _____
I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF	
DATE <u>7/24/97</u>	PRINTED NAME <u>Ronald A. Dedrick</u>
SIGNATURE <u>Ronald A. Dedrick</u>	AND TITLE <u>Environmental Technician II</u>
AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE	
APPROVED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (REASON) <u>use as Backfill</u>	
SIGNED: <u>Keith M. Merrill</u>	DATE: <u>7-29-97</u>

Jicarilla Apache 102-3
Sec. 4 T26N R4W Unit G
Amoco

Landfarm



OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: *Denver Bearden*
Company: *PNM Gas Services*
Address: *603 W. Elm*
City, State: *Farmington, NM 87401*

Date: *24-Jul-97*
COC No.: *5526*
Sample No.: *15378*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla Apache 102-5 Landfarm*
Project Location: *9707161006; 5pt. Composite*
Sampled by: *RB* Date: *16-Jul-97* Time: *10:06*
Analyzed by: *DC* Date: *22-Jul-97*
Sample Matrix: *Soil*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	ND	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: 0548-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	ND	ppm	200	194	2.9	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	88	93	(70-130)	5	20%

Method - *SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography*

Approved by: *[Signature]*
Date: *7/24/97*