

Denny E. Frost
DEPUTY OIL & GAS INSPECTOR

JUN 23 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 A-2 - Amoco*
Location: Unit: *B* Sec. *18* T. *24* N R. *5* W County *Rio Arriba*
Pit Type: Separator _____ Dehydrator ☒ Other _____
Land Type: *Jicarilla Apache*

Pit Location: Pit dimensions: length *50'* width *47'* depth *5'*
(Attach diagram) Reference: wellhead ☒ other _____
Footage from reference: *90'*
Direction from reference: *60* Degrees _____ East *←* North _____
West _____ of 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)	<i>2</i>
Greater than 100 feet	(0 points)	

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)	<i>2</i>
No	(0 points)	

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)	<i>2</i>
Greater than 1,000 feet	(0 points)	

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)	<i>2</i>

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)	<i>2</i>
Greater than 100 feet	(0 points)	

RANKING SCORE (TOTAL POINTS): *2*

Date Remediation Started:

9/11/97

Date Completed:

11/24/97

Remediation Method:

Excavation

X

Approx. Cubic Yards

43.5(Check all
appropriate
sections)

Landfarmed

X

Amount Landfarmed (cubic yds):

43.5

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 it below 100 ppm head space
reading. 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

9/11/97

Sample time

1402

Sample Results

Soil: Benzene (ppm)

ND

Water: Benzene (ppb)

Total BTEX (ppm)

0.021

Toluene (ppb)

Field headspace (ppm)

90.8

Ethylbenzene (ppb)

TPH 18 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

9/15/97

PRINTED NAME

Ronald A. Dedrick

SIGNATURE

Ronald A. Dedrick

AND TITLE

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

APPROVED: YES

X

NO

(REASON): _____

SIGNED:

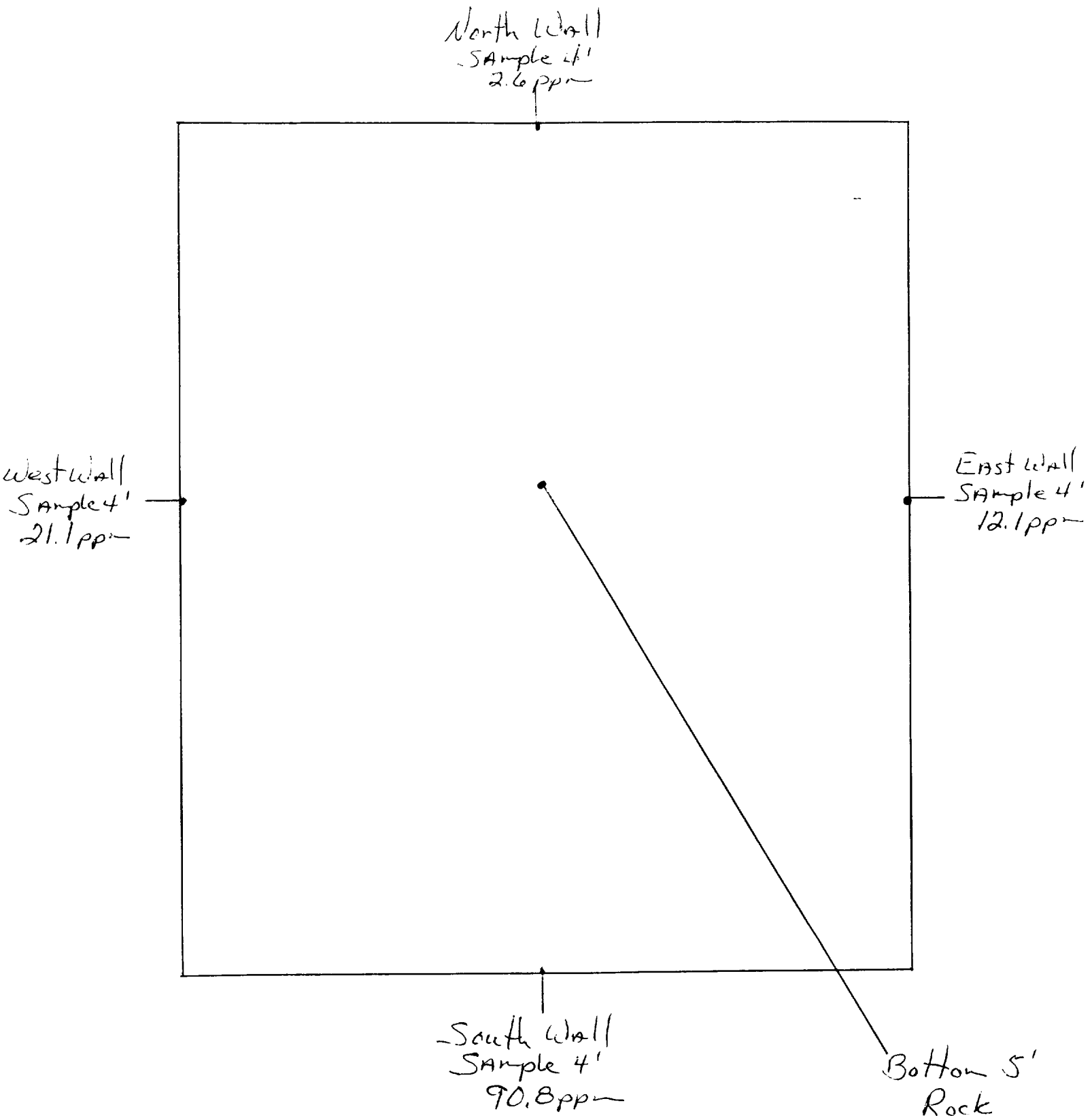
Lee C. Mammill

DATE:

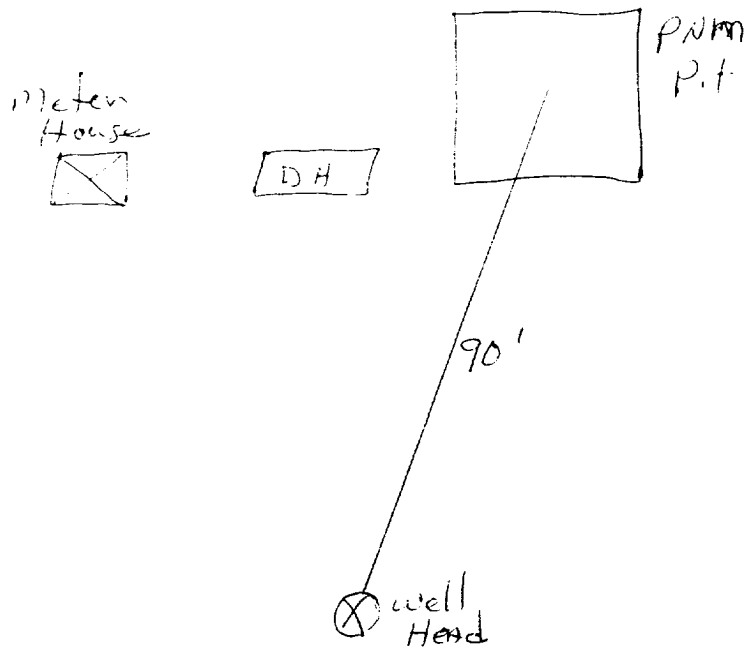
9-30-97

Jicarilla A-2
Sec. 18 T26N R5W Unit B
Amoco

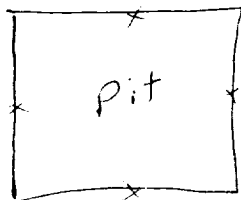
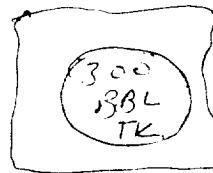
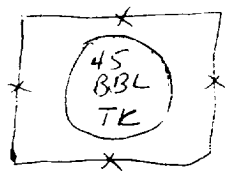
50' x 47' x 5'



Jicarilla A-2
Sec. 18 T26N R5W Unit B
Amoco



Sep



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: *18-Sep-97*
COC No.: *5587*
Sample No.: *16164*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-2*
Project Location: *9709111402; 4pt. Composite*
Sampled by: *PA*
Analyzed by: *DC/HR*
Sample Matrix: *Soil*

Date: *11-Sep-97* Time: *14:02*
Date: *17-Sep-97*

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Diesel Range Organics (C10 - C28)</i>	<i>18</i>	<i>mg/kg</i>	<i>5</i>	<i>mg/kg</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: 0555-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>177</i>	<i>12.5</i>	<i>15%</i>

Matrix Spike

Parameter	1 - Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>87</i>	<i>88</i>	<i>(70-130)</i>	<i>1</i>	<i>20%</i>

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

Approved by: *[Signature]*
Date: *9/18/97*

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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: *17-Sep-97*
COC No.: *5587*
Sample No.: *16164*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-2*
Project Location: *9709111402; 4pt. Composite*
Sampled by: *PA* Date: *11-Sep-97* Time: *14:02*
Analyzed by: *DC* Date: *12-Sep-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>	1	ug/kg	1	ug/kg
<i>Ethylbenzene</i>	2	ug/kg	1	ug/kg
<i>m,p-Xylene</i>	14	ug/kg	1	ug/kg
<i>o-Xylene</i>	4	ug/kg	1	ug/kg
	<i>TOTAL</i>	21		ug/kg

ND - Not Detected at Limit of Quantitation

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

Approved by: *Jac*
Date: *9/17/97*

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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 A-2
Location: Unit: B Sec. 18 T. 26 N R. 5 W County Rio Arriba
Land Type: Jicarilla Apache

Date Remediation Started: 9/11/97 Date Completed: 10/31/97
Remediation Method: Landfarmed X Approx. cubic yards 435
Composted
Other

Depth to Ground Water: (pts.) 2
Distance to an Ephemeral Stream: (pts.) 2
Distance to Nearest Lake, Playa, or Watering Pond: (pts.) 2
Wellhead Protection Area: (pts.) 2
Distance to Surface Water: (pts.) 2
Ranking Score (Total Points): 2

Final Closure Sampling:

Sampling Date: 10/29/97 Time 0847
Sampling Results:
Field Headspace (ppm) 50.7
TPH (ppm) 30 Method 8015
Other

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

DATE 11/3/97 PRINTED NAME Ray Burnham
SIGNATURE Ray Burnham AND TITLE Environmental Technician II

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE

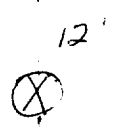
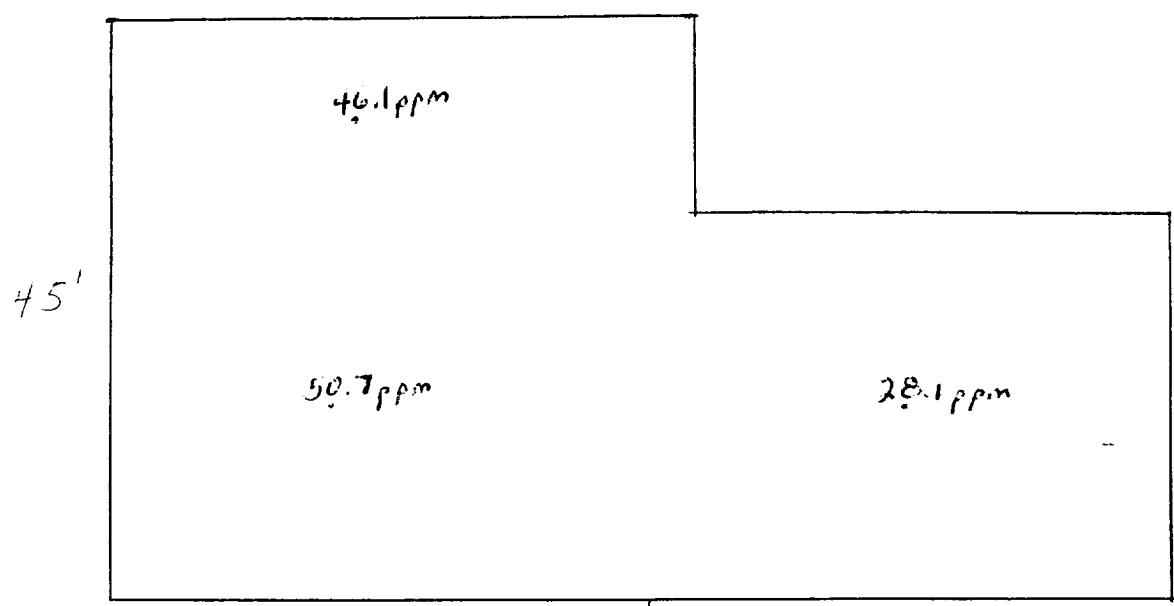
APPROVED: YES X NO (REASON) use as Backfill
SIGNED: Ken C. Mammill DATE: 11-04-97

Jicani H-2

Sec. 18 T26N R5W Unit B

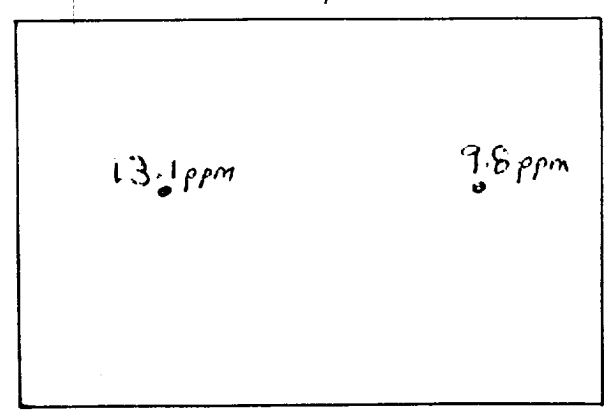
Amoco

Land farm



40'

90'



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: *31-Oct-97*
COC No.: *5548*
Sample No.: *16725*
Job No.: *2-1000*

Project Name: *PNM Gas Services - Jicarilla A-2 Landfarm*

Project Location: *9710290847; 5pt. Composite*

Sampled by: *RB* Date: *29-Oct-97* Time: *8:47*

Analyzed by: *DC/HR* Date: *31-Oct-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>	<i>30</i>	<i>mg/kg</i>	<i>5</i>	<i>mg/kg</i>

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

DRO QC No.: 0555-STD

Continuing Calibration Verification

Parameter	Method Blank	Unit of Measure	True Value	Analyzed Value	RPD	RPD Limit
<i>Diesel Range (C10 - C28)</i>	<i>ND</i>	<i>ppm</i>	<i>200</i>	<i>223</i>	<i>10.7</i>	<i>15%</i>

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
<i>Diesel Range (C10-C28)</i>	<i>134</i>	<i>108</i>	<i>(70-130)</i>	<i>8</i>	<i>20%</i>

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

Approved by: *JAC*
Date: *10/31/97*

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