District I
P.O. Box 1991 Conumy & Tourt
rict II
Draw DEPLIETY OIL & GAS INSPECTOR

State of New Mexico Energy, Minerals and Natural Resources Department SUBMIT I COPY TO APPROPRIATE DISTRICT OFFICE AND I COPY TO SANTA FE OFFICE

# OIL CONSERVATION DIVISION

District III 100 Rio Brazos Rd, Azte 6 6 8 1997

2040 South Pacheco Street Santa Fe. New Mexico 87505

IT REMIDIATION AND CLOSURE REPORT

Approved Groundwiter and pit closure Both.

	Section 14 county and and Editorial Manufacture and Additional Confession and Con	`	
Operator:	PNM Gas Services ( Amoco	) Telephone: 324-3	764
Address:	603 W. Elm Street Farmington, NM 87	7401	· · · · · · · · · · · · · · · · · · ·
Facility or We	ell Name: McCoy A #1A		
Location:	Unit F Sec	18 T 31N R 101	W County San Juan
Pit Type:	Separator Dehydra	ottor Other	None
Land Type:	BLM State	Fee 🔽 Other	No
Pit Location:	Pit dimensions: length		depth 8
(Attach diagram	n) Reference: wellhead	other	
	Footage from reference:	120'	<u> </u>
	Direction from reference: 80	Degrees <u>Z</u> East	North <u>•</u>
		West	of South
Depth to Grou	and Water:	Less than 50 feet 50 feet to 99 feet	(20 points) (10 points)
(Vertical distance from co seasonal high water eleval water	ation of ground	Greater than 100 feet	( 0 points) 20
water	DEGEIV	<b>追(D)</b>	
Wellhead Prot	<del>-</del>	Yes	(20 points)
(Less than 200 feet from a domestic water source, or feet from all other water s	r. less than 1,000 (0) [[] GOLFIJO	DUV. No	( 0 points) 2
	DIGIC 3		
Distance to Su		Less than 200 feet 200 feet to 1,000 feet Greater than 1,000 feet	(20 points) (10 points) ( 0 points) 20
(Horizontal distance to pe ponds, rivers, streams, cre canals and ditches			AL DOINTS).
Ī		RANKING SCORE (TOT.	AL POINTS): 60

Coy A #1A  Date Remediation Started:	2/7	/96	Date Com	pleted:	2/12/96
emediation Method:	Excavation	x	Approx. Ci	ubic Yard	794
heck all propriate	Landfarmed	х	Amount La	andfarmed (cub	oic yds)
ctions)	Other				
Remediation Location: i.e., landfarmed onsite, name and ocation of offsite facility)	Onsite		Offsite	Tierra Enviro	nmental
Backfill Material Location:					
General Description of Rem	nedial Action:				
Excavated contaminated soil backfilled with clean fill and c	to a pit size of 57' graded to surface.	x 47' x 8' and hauled	d contaminated so	oil to a commerc	cial landfarm. Pit was
Ground Water Encountered	<b>d:</b> No _	Y	'es <u>√</u>	Dept	h 8'
Final Pit Closure Sampling:	Sample Location	Bottom of pit.	-		
(if multiple samples, attach sample result and diagram of	Sample depth	8'	_,,		
sample locations and depths.)	Sample date	2/7/96	Sample	e time	10:05:00 AM
	Sample Results			_	
	Benzene	(ppm) 0.	1935		
	Total BT	EX (ppm)	4.1182		
	Field head	dspace (ppm)			
	ТРН	140.00	Method		
Vertical Extent (ft)		Risk Asse	essment form attac	ched Yes	No 🔽
Ground Water Sample:	Yes	No		see attached Gr	roundwater Site
I HEREBY CERTIFY THA KNOWLEDGE AND MY E		TION ABOVE IS T	RUE AND COM	PLETE TO TH	IE BEST OF MY
DATE July 28, 1997 SIGNATURE	mus Al	(a.O.	PRINTED AND TITI		ver Bearden ninistrator III

# 960207/005 Taken on Lottom of hire 3/8.5. SOIL AT 3'B.S. hale 3'C.S.



LAB: (505) 325-5667

8-Feb-96

4511

10260

2-1000

# TOTAL PETROLEUM HYDROCARBONS

Attn:

Denver Bearden

Company: PNM Gas Services

Address:

603 W. Elm

OFF: (505) 325-8786

City, State: Farmington, NM 87401

Project Name:

PNM Gas Services - McCoy #A1A

**Project Location:** Sampled by:

9602071005; Center of Pit - 8ft. depth

Date:

7-Feb-96 Time: Date:

8-Feb-96

Date:

COC No.:

Job No.

Sample No.

10:05

Analyzed by: Type of Sample: RB DC

Soil

### Laboratory Analysis

Laboratory Identification	Sample Identification	Total Petroleum Hydrocarbons
	PNM Gas Services - McCoy #A1A	
10260-4511	9602071005; Center of Pit - 8ft. depth	140 mg/kg

# **Quality Assurance Report**

Laboratory Identification	Analyzed Value	Acceptable Range	Units of Measure
Laboratory Fortified Blank Soil - QCBS2	< 25	<25	mg/kg
Laboratory Fortified Spike Soil - QCSS1	915	828 - 1024	mg/kg

Method - EPA Method 418.1 Total Petroleum Hydrocarbons

Approved by: Date:

P. O. BOX 2606 • FARMINGTON, NM 87499



LAB: (505) 325-5667

# AROMATIC VOLATILE ORGANICS

Attn:

Denver Bearden

Date:

8-Feb-96

Company: PNM Gas Services

COC No.:

4511

Address:

Sample No.

10260

603 W. Elm

City, State: Farmington, NM 87401

Job No.

2-1000

Project Name:

PNM Gas Services - McCoy #1A1

**Project Location:** 

9602071005; Center of Pit - 8ft. depth

Date:

7-Feb-96 Time:

Sampled by: Analyzed by: RB DC

Date:

8-Dec-96

10:00

Type of Sample:

Soil

# **Aromatic Volatile Organics**

Component		Result	Units of Measure	Detection Limit	Units of Measure
Benzene		193.5	ug/k <b>g</b>	0.2	ug/kg
Toluene		1470.6	ug/kg	0.2	ug/kg
Ethylbenzene		181.7	ug/kg	0.2	ug/kg
m,p-Xylene		1945.6	ug/kg	0.2	ug/kg
o-Xylene		326.8	ug/kg	0.2	ug/kg
	TOTAL	4118.2	ug/kg		

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

Approved by:

P. O. BOX 2606 • FARMINGTON, NM 87499



LAB: (505) 325-5667

# AROMATIC VOLATILE ORGANICS

Attn:

Denver Bearden

Company: PNM Gas Services

Address:

603 W. Elm

Project Name:

**Project Location:** 

City, State: Farmington, NM 87401

COC No.:

8-Feb-96

Sample No.

4511

Job No.

Date:

10261 2-1000

PNM Gas Services - McCoy #A1A

9602071031; Bottom of Pit - Standing Liquid

RB

Date:

7-Feb-96 Time:

10:31

Sampled by: Analyzed by:

DC

Date:

7-Feb-96

Type of Sample:

Liquid

### Aromatic Volatile Organics

			Units of	Detection	Units of
Component		Result	Measure	Limit	Measure
Benzene		1420.8	ug/L	0.2	ug/L
Toluene		7997.6	ug/L	0.2	ug/L
Ethylbenzene		724.7	ug/L	0.2	ug/L
m,p-Xylene		8817.3	ug/L	0.2	ug/L
o-Xylene		1683.9	ug/L	0.2	ug/L
	TOTAL	20644.3	ug/L	<u></u>	

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

Approved by: 2/4 / Date: 2/8/96

P. O. BOX 2606 • FARMINGTON, NM 87499

PNMGS Well Site: McCoy A1A

# **Groundwater Site Summary Report**

Quarter/Year: 3<sup>rd</sup> 1996 through 2<sup>nd</sup> 1997

Copies: WFS(1) Operator (1)

NMOCD District Office (1) NMOCD Santa Fe (1)

Telephone: 505-241-2974

Operator: Amoco

Sec: 18 Twn: 31 Rng: 10 Unit: F

Canvon: Animas River

Vulnerable Class: Original

OCD Ranking: 40

Lead Agency: NMOCD

Topo Map: previously submitted

Well Completion Diagram: previously submitted

Site Map with Analysis: Figure 1

Groundwater Contour Map: Figure 2 (May 1996)

Groundwater Hydrograph Figure 3

Analytical Results: attached

### Activities for Second Quarter (April through June) 1997:

PNM conducted groundwater sampling for benzene, toluene, ethylbenzene, and xylenes (BTEX) at the McCoy A1A well site on May 20, 1997. Prior to sampling, water level measurements were taken in each of the five monitoring wells. Groundwater sampling was conducted in strict compliance with EPA protocol. PNM delivered the samples to OnSite Technologies, Farmington, New Mexico, for chemical analyses of BTEX using EPA Method 8020.

### Results:

Figure 1 is a site map of the McCoy A1A well site and includes the groundwater analytical results for the past four quarters. BTEX has not been detected in groundwater samples taken from each of the wells over four consecutive calendar quarters. Figure 2 is a groundwater contour map of the site for the month of May. The groundwater flow has shifted slightly (approximately 15°) from the southwest to a more westerly direction. Figure 3 is the hydrograph (water level versus time) for the site. Water levels rose at the site once again due to an increase in precipitation during the second quarter of this year.

### **Future Actions:**

Consistent with PNM's San Juan Basin Groundwater Management Plan, we request closure of the McCoy A1A well site with the second quarter 1997 filing of the San Juan Pit Closure Reports. This request is based upon the analytical data collected over the last year at the site. BTEX concentrations have been consistently below WQCC standards for four consecutive quarters.

### Public Service Company of New Mexico - Gas Services

Environmental Services Division - Alvarado Square, MS-0408 Albuquerque, NM 87158

Contact: Maureen Gannon

PNMGS: mcA1Acls.doc 21-Jul-97

Figure 1. McCoy A1A Site Map With Analytical Results (Concentrations in ppb)

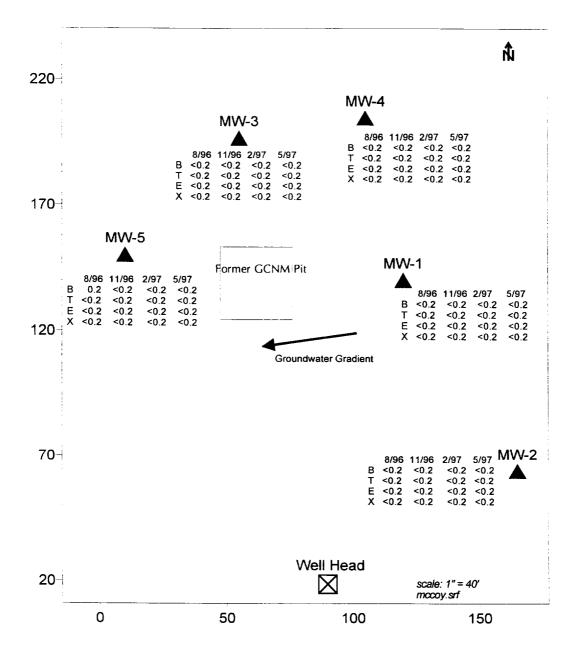
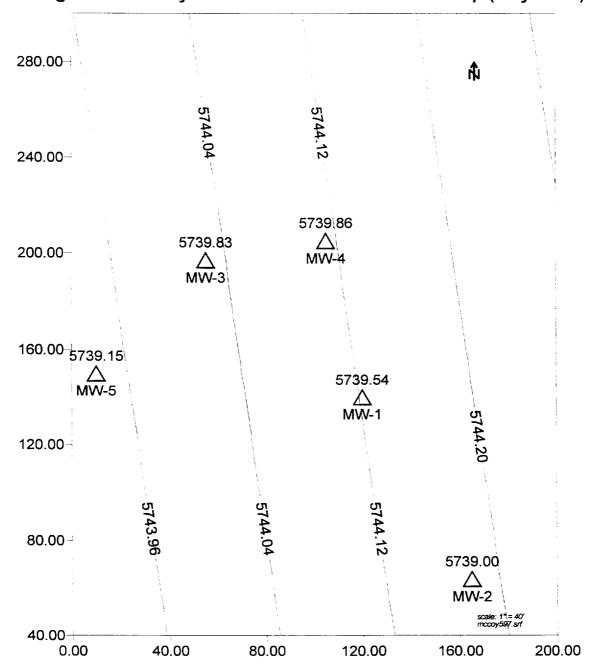
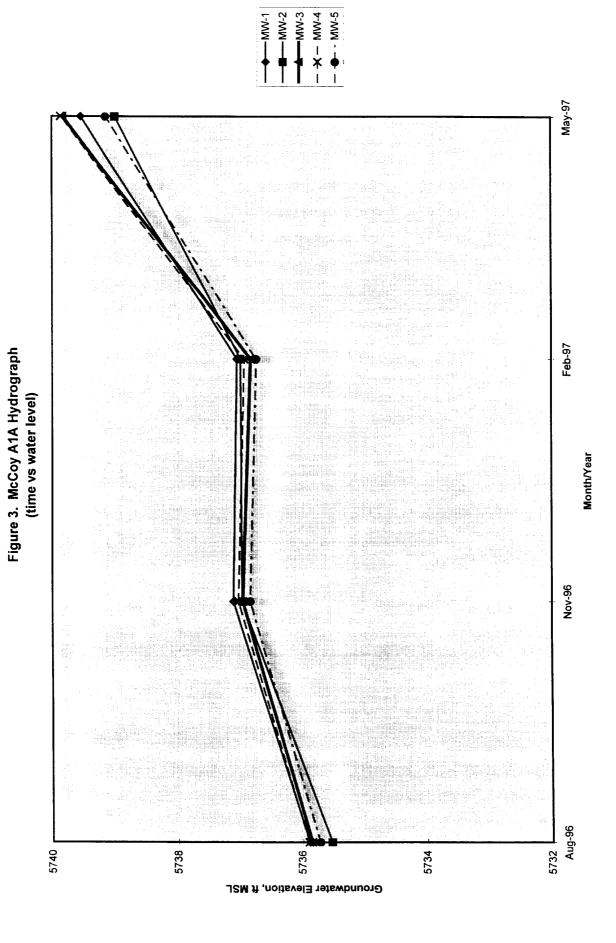


Figure 2. McCoy A1A Groundwater Countour Map (May 1997)







LAB: (505) 325-1556

# ANALYTICAL REPORT

Attn:

Denver Bearden

Company: PNM Gas Services

Address:

603 W. Elm

City, State: Farmington, NM 87401

Date: 28-May-97

COC No.:

5557

Sample No.:

14661

Job No.:

2-1000

Project Name:

PNM Gas Services - McCoy A1A

**Project Location:** Sampled by:

9705201330; MW-1 MS/MG

Date: Date:

20-May-97 Time:

22-May-97

13:30

Analyzed by: Sample Matrix:

DC

Liquid

Parameter		Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene		ND	ug/L	0.2	ug/L
Toluene		ND	ug/L	0.2	ug/L
Ethylbenzene		ND	ug/L	0.2	ug/L
m,p-Xylene		ND	ug/L	0.2	ug/L
o-Xylene		ND	ug/L	0.2	ug/L
	TOTAL	ND	ug/L		

ND - Not Detected at Limit of Quantitation

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

P.O. BOX 2606 • FARMINGTON, NM 87499



LAB: (505) 325-1556

# ANALYTICAL REPORT

Attn:

Denver Bearden

Date: 28-May-97

Company: PNM Gas Services

COC No.:

Job No.:

5557

Address:

603 W. Elm

Sample No.:

14662

City, State: Farmington, NM 87401

2-1000

Project Name:

PNM Gas Services - McCoy A1A

**Project Location:** 

9705201400; MW-2

MS/MG

Date: Date:

20-May-97 Time:

22-May-97

14:00

Sampled by: Analyzed by: Sample Matrix:

DC

Liquid

Parameter		Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene		ND	ug/L	0.2	ug/L
Toluene		ND	ug/L	0.2	ug/L
Ethylbenzene		ND	ug/L	0.2	ug/L
m,p-Xylene		ND	ug/L	0.2	ug/L
o-Xylene		ND	ug/L	0.2	ug/L
	TOTAL	ND	ug/ <b>L</b>		

ND - Not Detected at Limit of Quantitation

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



LAB: (505) 325-1556

### ANALYTICAL REPORT

Attn:

Denver Bearden

Company: PNM Gas Services

Address:

603 W. Elm

City, State: Farmington, NM 87401

Date:

28-May-97

COC No.:

5557

Sample No.:

14663

Job No.:

2-1000

Project Name:

PNM Gas Services - McCoy A1A

Project Location: Sampled by:

9705201430; MW-3

MS/MG

Date: Date: 20-May-97 Time:

22-May-97

14:30

Analyzed by: Sample Matrix: DC

Liquid

Parameter		Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene		ND	ug/L	0.2	ug/L
Toluene		ND	ug/L	0.2	ug/L
Ethylbenzene		ND	ug/L	0.2	ug/L
m,p-Xylene		ND	ug/L	0.2	ug/L
o-Xylene		ND	ug/ <b>L</b>	0.2	ug/L
	TOTAL	ND	ug/L		

ND - Not Detected at Limit of Quantitation

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

### ANALYTICAL REPORT

Attn:

Denver Bearden

Date: 28-May-97

Company: PNM Gas Services

COC No.:

5557

Address: 603 W. Elm

Sample No.:

14664

City, State: Farmington, NM 87401

Job No.:

2-1000

Project Name:

PNM Gas Services - McCoy A1A

**Project Location:** 

9705201500; MW-4 MS/MG

Date:

20-May-97 Time:

15:00

Sampled by: Analyzed by:

DC

Date:

22-May-97

Sample Matrix:

Liquid

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/L
o-Xylene	ND	ug/L	0.2	ug/L
TOTAL	ND	ug/L		

ND - Not Detected at Limit of Quantitation

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

Approved By:



LAB: (505) 325-1556

# TECHNOLOGIES, LTD.

# ANALYTICAL REPORT

Attn:

Denver Bearden

Date: 28-May-97

Company: PNM Gas Services

COC No.:

*5557* 

Address:

603 W. Elm

Sample No.:

14665

City, State: Farmington, NM 87401

Job No.:

2-1000

Project Name:

PNM Gas Services - McCoy A1A

Project Location:

9705201530; MW-5 MS/MG

Date:

20-May-97 Time:

15:30

Sampled by: Analyzed by: Sample Matrix:

DC

Liquid

Date:

ug/L

22-May-97

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Benzene	ND	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/L
o-Xylene	ND	ug/ <b>L</b>	0.2	ug/L

ND

ND - Not Detected at Limit of Quantitation

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

TOTAL

Approved By:

Date:

- Isohn in Di Blenden i followith with the Enditor

LAB: (505) 325-1556

# ANALYTICAL REPORT

Attn:

Denver Bearden

Date:

28-May-97

Company: PNM Gas Services

COC No.:

5557

Address:

603 W. Elm

Sample No.:

14666

City, State: Farmington, NM 87401

Job No.:

2-1000

Project Name:

PNM Gas Services - McCoy A1A

Project Location: Sampled by:

9705201600; MW-6 MS/MG

Date:

20-May-97 Time:

16:00

Analyzed by: Sample Matrix:

DC Liquid

Date:

22-May-97

_	Results as	Unit of	Limit of	Unit of Measure
Parameter	Received	Measure	Quantitation	
Benzene	ND	ug/L	0.2	ug/L
Toluene	ND	ug/L	0.2	ug/L
Ethylbenzene	ND	ug/L	0.2	ug/L
m,p-Xylene	ND	ug/L	0.2	ug/ <b>L</b>
o-Xylene	ND	ug/L	0.2	ug/L

ND - Not Detected at Limit of Quantitation

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- Taran I - I Billio



LAB: (505) 325-1556

# **QUALITY ASSURANCE REPORT**

for EPA Method 8020

Date Analyzed: 22-May-97

Internal QC No.:

0527-STD

Surrogate QC No.:

0528-STD

Reference Standard QC No.: 0529/30-QC

# Method Blank

		Unit of
Parameter	Result	Measure
Average Amount of All Analytes In Blank	<0.2	ppb

### Calibration Check

	Unit of	True	Analyzed		
Parameter	Measure	Value	Value	% Diff	Limit
Benzene	ppb	20.0	17.7	11	15%
Toluene	ppb	20.0	18.1	9	15%
Ethylbenzene	ppb	20.0	18.3	9	15%
m,p-Xylene	ppb	40.0	35.0	13	15%
o-Xylene	ppb	20.0	18.2	9	15%

### Matrix Spike

	1- Percent	2 - Percent			
Parameter	Recovered	Recovered	Limit	%RSD	Limit
Benzene	96	80	(39-150)	7	20%
Toluene	97	85	(46-148)	7	20%
Ethylbenzene	95	83	(32-160)	6	20%
m,p-Xylene	94	81	(35-145)	6	20%
o-Xylene	95	83	(35-145)	6	20%

### Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered	Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
14661-5557	87				
14662-5557	95				-
14663-5557	95				
14664-5557	102				
14665-5557	95				(120)
14666-5557	95				5/28 ior.

S1: Flourobenzene

		-
į	_	_
1	7	7
1	كما	7
	~	`

# CHAIN OF CU. ODY RECORD

Date: 5/20/97

Page.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499 LAB: (505) 325-5667 • FAX: (505) 325-6256

/ON SITE

TECHNOLOGIES, LTD.

Date/Time 5/10/57 1531 14661-5557 Results to be sent to both parties. LABID 1-1662 7997-1 14663 14665 てのりて Special Instructions: Date/Time Date/Time Alverado Square, Mail Stop 0408 Telefax No. ANALYSIS REQUESTED 10 Working Days Albuquerque, NM 87158 **PNM Gas Services** Maureen Gannon 505-848-2974 24-48 Hours Goldenrod - Client REPORT Company
Mailing Address City, State, Zip
Telephone Nr Date/Time 6/20/97 1534 Received by: Received by: Received by: Distribution: White - On Site Yellow - LAB Pink - Sampler N Number of Z HC MATRIX PRES. H20 Dept. 324-3763 11.0 Sample: Wash Oldie and Mauren Harn TIME Date/Time Date/Time Date\_ SAMPLE DATE (Client Signature Must Accompany Request) Job No. MWZ City, State, Zip Farmington, NM 87401 MUG NW 1 **PNM Gas Services** Relinquished by: Malwall Harry 603 W. Elm Street Denver Bearden SAMPLE IDENTIFICATION 9909 Na 9705201830 Meccoy AIA 972520 1530 910520 1500 9705201400 970520 430 9705201600 Purchase Order No.: Method of Shipment: Company Sampling Location: Address Name Relinquished by: Relinquished by: Authorized by: \_ INVOICE SEND