

AP - 017

ANNUAL MONITORING REPORT

YEAR(S):

2001

PLS 11/5

ANNUAL MONITORING REPORT

**EOTT PIPELINE COMPANY
TNM 97-17
LEA COUNTY, NEW MEXICO**

AP-17

RECEIVED

MAY 09 2001

**ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION**

PREPARED FOR:

**EOTT PIPELINE COMPANY
5805 EAST HIGHWAY 80
MIDLAND, TEXAS 79701**

PREPARED BY:

**ENVIRONMENTAL TECHNOLOGY GROUP, INC.
2540 WEST MARLAND
HOBBS, NEW MEXICO 88240**

April 2001

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INTRODUCTION

Environmental Technology Group, Inc. (ETGI), on behalf of EOTT Energy Corp. (EOTT), prepared this annual report in compliance with the New Mexico Oil Conservation Division (OCD) letter of May 1998, requiring submittal of an annual report by April 1 of each year. The report presents the results of the quarterly ground water monitoring events only. For reference, the Site Location Map is provided as Figure 1.

Ground water monitoring was conducted during four quarterly events in calendar year 2000 to assess the levels and extent of dissolved phase and phase-separated petroleum hydrocarbon (PSH) constituents. The ground water monitoring events consisted of measuring static water levels in the monitoring wells, checking for the presence of PSH, and purging and sampling of each well exhibiting sufficient recharge. Monitoring wells containing measurable levels of PSH were not sampled.

FIELD ACTIVITIES

The site monitoring wells were gauged and sampled on March 3, April 11, September 1, and November 21, 2000. During each sampling event, the monitoring wells, designated to be sampled, were purged of approximately 3 well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Ground water was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Pate Trucking, Hobbs, New Mexico, utilizing a licensed disposal facility (OCD AO SWD-730).

GROUND WATER GRADIENT

Locations of the monitoring wells and the inferred ground water gradient, as measured on November 21, 2000, are depicted on Figure 2, the Site Ground Water Gradient Map. The ground water elevation data are provided as Table 1. Ground water elevation contours, generated from the final quarterly event of calendar year 2000 water level measurements, indicated a general gradient of approximately 0.004 ft/ft to the southeast as measured between ground water monitoring wells MW-1 and MW-4. The depth to ground water, as measured from the top of the well casing, ranged between 20.91 to 23.43 feet for the shallow alluvial aquifer.

A measurable thickness of PSH was detected in monitoring well MW-4 during the annual monitoring period. A maximum thickness of 1.39 feet in monitoring well MW-4 was measured and is shown on Table 1.

LABORATORY RESULTS

Ground water samples collected during the sampling events were hand delivered to Environmental Laboratory of Texas, Midland, Texas for determination of benzene, toluene, ethyl benzene and total xylenes (BTEX) concentrations by EPA Method SW846-8021B. The ground water chemistry data are provided as Table 2 and the Laboratory Reports are provided as Appendix A.

Laboratory results for all of the site ground water samples, obtained during the calendar year 2000 monitoring period, indicated that Benzene and BTEX concentrations were at or below method detection limits for all of the on-site monitoring wells.

SUMMARY

This report presents the results of monitoring activities for the annual monitoring period of calendar year 2000. A measurable thickness of PSH was detected in monitoring well MW-4 during the annual monitoring period. A maximum thickness of 1.39 feet in monitoring well MW-4 was measured in this monitoring well.

Ground water elevation contours, generated from the final quarterly event of calendar year 2000 water level measurements, indicated a general gradient of approximately 0.004 ft/ft to the southeast as measured between ground water monitoring wells MW-1 and MW-4.

Laboratory results for all of the site ground water samples, obtained during the calendar year 2000 monitoring period, indicated that Benzene and BTEX concentrations were at or below method detection limits for all of the on-site monitoring wells.

FIGURES



FIGURE
1

Not To Scale

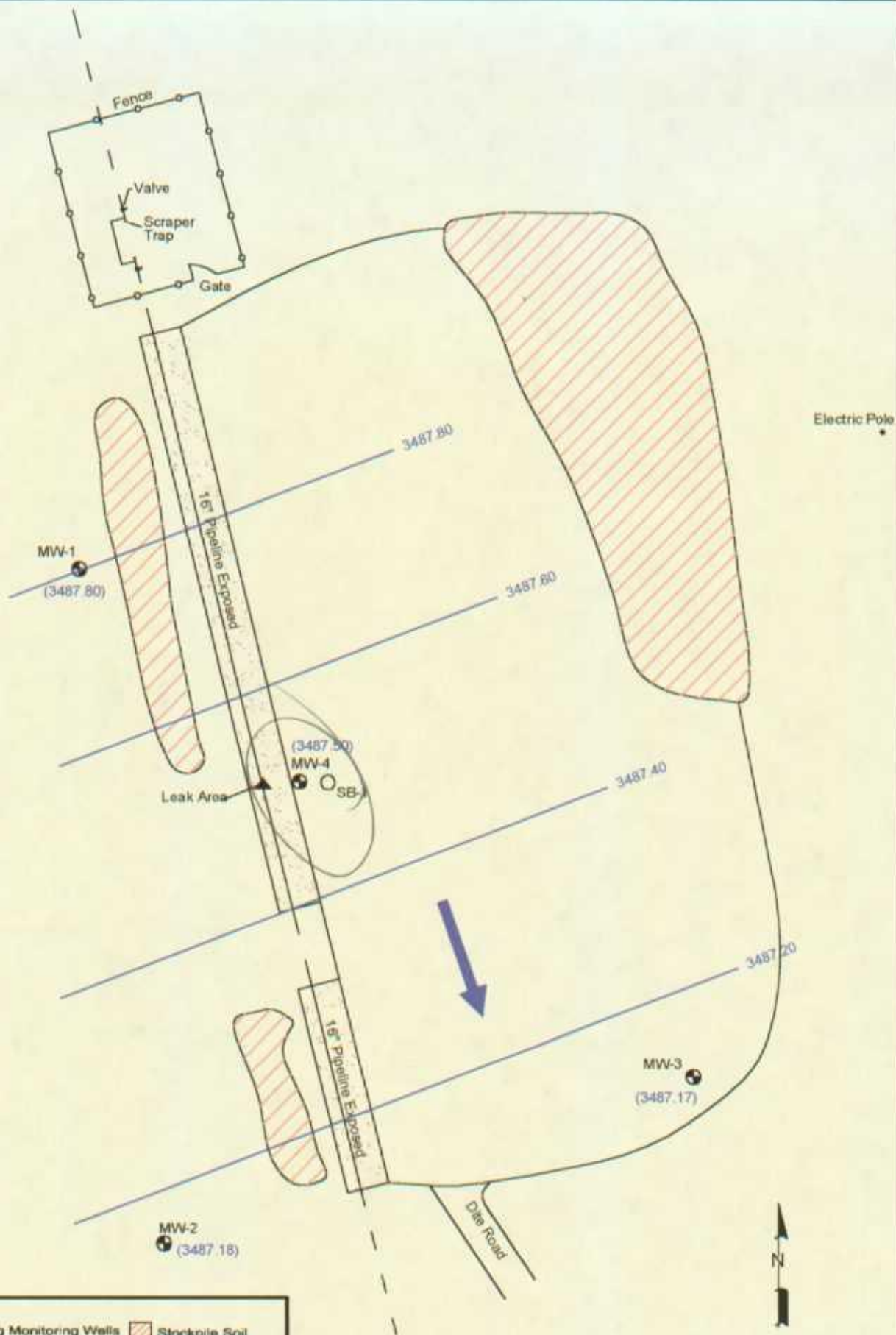
Site Location Map

EOTT Energy Corp.
TNM 97-17
Lea County, NM

Environmental
Technology
Group, Inc.

11 - 22 - 99 RS

ETGI Project #: EOT2024C



LEGEND:

- Existing Monitoring Wells
 - Existing Soil Borings
 - Groundwater Gradient Contour
 - ▨ Stockpile Soil
 - ▨ Excavated Area
- (3487.17) Groundwater Elevation (in feet)

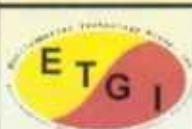


Figure 2
Site Groundwater
Gradient Map (11/21/00)

TNM 97-17
Lea County, NM

**Environmental Technology
Group, Inc.**

Scale: 1" = 40'	Prep By: RS	Checked By: CR
November 21, 2000	ETGI Project #: EOT2824C	

TABLES

TABLE 1

GROUND WATER ELEVATION TABLE
ANNUAL REPORTEOTT ENERGY CORPORATION
TNM 97- 17
LEA COUNTY, NEW MEXICO
ETGI PROJECT # EOT 2024C

WELL NUMBER	DATE MEASURED	CASING WELL ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	03/03/00	3,510.90	-	22.33	0.00	3,488.57
	04/11/00	3,510.90	-	22.31	0.00	3,488.59
	09/01/00	3,510.90	-	23.43	0.00	3,487.47
	11/21/00	3,510.90	-	23.10	0.00	3,487.80
MW - 2	03/03/00	3,509.23	-	21.35	0.00	3,487.88
	04/11/00	3,509.23	-	21.31	0.00	3,487.92
	09/01/00	3,509.23	-	22.23	0.00	3,487.00
	11/21/00	3,509.23	-	22.05	0.00	3,487.18
MW - 3	03/03/00	3,508.82	-	20.95	0.00	3,487.87
	04/11/00	3,508.82	-	20.91	0.00	3,487.91
	09/01/00	3,508.82	-	21.80	0.00	3,487.02
	11/21/00	3,508.82	-	21.65	0.00	3,487.17
MW - 4	03/03/00	3,509.15	20.71	22.10	1.39	3,488.23
	04/11/00	3,509.15	20.71	22.10	1.39	3,488.23
	09/01/00	3,509.15	21.81	21.95	0.14	3,487.32
	11/21/00	3,509.15	21.51	22.42	0.91	3,487.50

TABLE 2

**GROUND WATER CHEMISTRY
ANNUAL REPORT**

EOTT ENERGY CORPORATION

TNM 97 - 17

LEA COUNTY, NEW MEXICO

ETGI PROJECT # EOT 2024C

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				
		BENZENE	TOLUENE	ETHYL- BENZENE	M,P- XYLENES	O- XYLENES
MW - 1	03/03/00	<0.001	<0.001	<0.001	<0.001	<0.001
	04/11/00	<0.001	0.001	<0.001	<0.001	<0.001
	09/01/00	<0.001	<0.001	<0.001	<0.001	<0.001
	11/21/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 2	03/03/00	<0.001	<0.001	<0.001	<0.001	<0.001
	04/11/00	<0.001	<0.001	<0.001	<0.001	<0.001
	09/01/00	<0.001	<0.001	<0.001	<0.001	<0.001
	11/21/00	<0.001	<0.001	<0.001	<0.001	<0.001
MW - 3	03/03/00	<0.001	<0.001	<0.001	<0.001	<0.001
	04/11/00	<0.001	<0.001	<0.001	<0.001	<0.001
	09/01/00	<0.001	<0.001	<0.001	<0.001	<0.001
	11/21/00	<0.001	<0.001	<0.001	<0.001	<0.001

APPENDIX

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. JESSE TAYLOR
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 505-392-3760
FAX: 915-520-4310

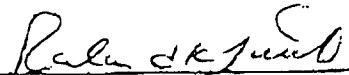
SampleType: Water
Sample Condition: Intact/ Iced/HCl
Project #: EOT 1015C
Project Name: TNM 97-17
Project Location: Lea County, N.M.

Sampling Date: 03/03/00
Receiving Date: 03/03/00
Analysis Date: 03/07/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
23977	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001
23978	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
23979	MW-3	<0.001	<0.001	<0.001	<0.001	<0.001

% IA	97	94	92	93	91
% EA	100	95	93	95	94
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Raland K. Tuttle

3-7-00
Date

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

67 II

Phone #: 864-916-3916
FAX #: 864-916-3916

Midnapur 79204

10/5/10

Project Name:

Signature: Len Cowart NYA

Sanjiv Signature:

LEA COUNTY N/PA

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		TPH 418.1	TCLP Metals Ag As B	Total Metals Ag As B	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI	
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER	DATE								TIME
	MW1	2	✓	✓						X	X			3-3	0908	✓						
	MW2	1	✓	✓						✓	✓			✓	0940	✓						
	MW3	1	✓	✓						✓	✓			✓	0850	✓						

Date: /

Time:

Received by:

REMARKS

3-3-00

1

G. McManus

Date:

Time:

2019-2020

Date:

Time:

Received by 73601000

REMARKS	MAIL LOGS: K. Dutton VALLEY GARDEN FROST 10:5 AM
---------	--

Apr 20 00 03:12p

ENVIRONMENTAL**LAB OF  , INC.***"Don't Treat Your Soil Like Dirt!"*

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: MR. JESSE TAYLOR
 P.O. BOX 4845
 MIDLAND, TEXAS 79704
 FAX: 915-520-4310
 FAX: 505-392-3760

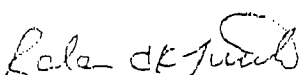
SampleType: Water
 Sample Condition: Intact/ Iced/HCl
 Project #: EOT 1015C
 Project Name: TNM 97-17
 Project Location: None Given

Sampling Date: 04/11/00
 Receiving Date: 04/12/00
 Analysis Date: 4/19/00

ELTH	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
24812	MW-1	<0.001	0.001	<0.001	<0.001	<0.001
24813	MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
24814	MW-3	<0.001	<0.001	<0.001	<0.001	<0.001

% IA	97	95	94	101	94
% EA	100	96	96	101	93
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


 Roland K. Tuttle

4-20-00
 Date

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

COE # 123

Phone #: (815) 664-9166
FAX #: (815) 352-3760

Jose Tapia

Company Name & Address: *ETG*
P.O. BOX 4945 MIDLAND TX 79704

Project Name: *Twinn 97-17*

Sampler Signature: 

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX	PRESERVATIVE METHOD	SAMPLING
				WATER	HCL	
				SOIL	HN03	
				AIR	ICE	
				SLUDGE	NONE	
				OTHER	OTHER	
		# CONTAINERS	Volume/Amount		DATE	TIME
					2000	

	2	✓	X	X	4-11	0940
mw1	✓			X		0945
mw2	✓			✓		0905
mw3	✓			✓		0905

[illegible][illegible][illegible]

Relinquished by:	Date:	Time:	Received by:
James [signature]	4-12-00	0900	[signature]

[illegible]

	BTEX 8/120/516
	TPH 418.1
	TCLP Metals Ag As Ba Cd Cr Pb Hg Se
	Total Metals Ag As Ba Cd Cr Pb Hg Se
	TCLP Volatiles
	TCLP Semi Volatiles
	TDS
	RCl

A full-page view of a sheet of graph paper. The grid consists of approximately 20 columns and 20 rows of squares. In the bottom-left corner, there is a small handwritten 'x' followed by a horizontal arrow pointing to the right.

REMARKS

5 Mail Requests H. Dutton

103

Invoice ~~bonanza~~ ~~front~~ 10/15 m

ENVIRONMENTAL LAB OF , Inc.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

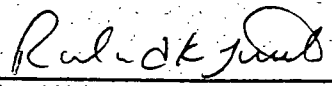
Sample Type: Water
Sample Condition: Intact/ Iced/ HCL/30 deg. F
Project #: EOT 2024C
Project Name: TNM97-17
Project Location: Monument, NM

Sampling Date: 09/01/00
Receiving Date: 09/01/00
Analysis Date: 09/06/00&09/07/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L	TOTAL BTEX mg/L
30332	MW 1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
30333	MW 2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
30334	MW 3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
30335	EB 1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

% IA	88	87	86	84	82
% EA	88	86	87	86	84
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Raland K. Tuttle

9-8-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: BETH ALDRICH
P.O. BOX 4845
MIDLAND, TEXAS 79704
FAX: 915-520-4310

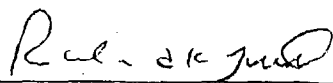
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -3 deg. C
Project #: EOT 2024c
Project Name: TNM 97-17
Project Location: Lea Co., N.M.

Sampling Date: 11/21/00
Receiving Date: 11/22/00
Analysis Date: 11/24/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
34225	MW 1	<0.001	<0.001	<0.001	<0.001	<0.001
34226	MW 2	<0.001	<0.001	<0.001	<0.001	<0.001
34227	MW 3	<0.001	<0.001	<0.001	<0.001	<0.001

%IA	86	88	91	96	89
%EA	91	100	102	108	97
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B, 5030


Raland K. Tuttle

11-29-00
Date

COC # 278

Project Manager: **BETH ALDRICH**
 Phone #: (805) 397-4882
 FAX #: (305) 397-4701

Company Name & Address: **ETGZ**
2540 W MARLAND HOBBAS NM

Project #: **ET 2024C**
 Project Name: **TNM 97-17**

Project Location: **LEA COUNTY NM**
 Sampler Signature: *[Signature]*

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX					PRESERVATIVE METHOD					SAMPLING	
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER	DATE	TIME
	MW 1	2	✓	✓					✓					11-21	1335
	MW 2	1	✓	✓											1355
	MW 3	1	✓	✓											1315
	EB 1	1	✓	✓					✓					✓	1405
						</									

TPH 418.1	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	TDS	RCI
-----------	-------------------------------------	--------------------------------------	----------------	---------------------	-----	-----

Relinquished by: *[Signature]* Date: 11-22-13

Relinquished by: *[Signature]* Date: 11-22-13

Relinquished by: *[Signature]* Date: 11-22-13

REMARKS: **INVOICE: EOTT**
FAX RESULTS: HOBBAS OFFICE
MAIL RESULTS: EOTT