3R - 194

REPORTS

DATE:

1993

TABLE OF CONTENTS

Note: For the purposes of this report, the Citizen's Ditch is considered to run in a east to west direction. The meter site is described due north, the cornfield, due south. In actuality, the remediation site lies in a northwest to southeast tangent.

Project Background

The Jaquez Com. C #1 and Jaquez Com. E #1 meter sites are currently owned and operated by El Paso Natural Gas Co. (EPNG). They are located in section 6, township 29N, and range 9W, near the town of Blanco, NM. The two meter houses are situated approximately 40 feet of each other on the same location.

In past years, the Jaquez Com. C #1 well had a dehydration unit and associated pit located on site. The Jaquez Com. E #1 had an underground drip that was used to remove liquids from the line. It is not known whether the Jaquez Com. E #1 had its own pit or whether it may have shared a pit with the Jaquez Com. C #1. The pit(s) have been closed for an estimated 4-5 years.

These meter sites are located on the property of Mr. John Jaquez. In late 1992, the landowner expressed concern regarding a potential contamination problem found in a garden area located adjacent to the meter location. Preliminary investigations during the next few months confirmed that hydrocarbon contamination was present in Mr. Jaquez's garden area and on the meter site. The extent of contamination at that time, was unknown.

In late March of 1993, EPNG performed a comprehensive soil and groundwater investigation on the meter sites and the adjacent garden area. The investigation is discussed further in Section 2 of this report. Based on that investigation, EPNG identified a proposed plume of contamination. This is illustrated in the investigation site map located in Section 2c. Results of the investigation were discussed in a meeting with NMOCD in Santa Fe on May 18, 1993.

As a result of that meeting, on June 25, 1993, EPNG submitted a remedial plan to NMOCD for the Jaquez meter sites. The major components of the plan included:

* Excavation of as much contaminated soil as practical without jeopardizing the integrity of Citizen's Ditch or the pipeline facilities.

* Installation of recovery/monitor wells. The wells to be placed so that information about groundwater flow direction and gradient could be attained.

* Installation of a passive interceptor trench.

On July 2, 1993, EPNG received approval from NMOCD to proceed with remediation.

Remediation activities commenced on August 9, 1993. Excavation, backfill, and installation of monitor/recovery wells and the passive air stripping system were completed on September 3, 1993. Sampling of the monitor/recovery wells occurred on 9/7-8/93. Final survey of the site was completed on 9/10/93. The remediation activities are discussed further in Sections 3 and 4.

Preliminary Investigation

The goal of the preliminary investigation was to define the lateral and vertical extent of contamination on the meter site location and in the adjacent cornfield area. EPNG utilized the RECON(R) Multi-media Sampling System for collecting soil and groundwater samples. Soil and groundwater samples were collected at various depths from a total of 37 probe holes. The investigation site map in Section 2c depicts the location of the various probe sample points. Samples were analyzed for BTEX (Modified 8020), and Total Petroleum Hydrocarbons (TPH - Modified 418.1). For quality control purposes, EPNG selected various samples for analysis at a commercial laboratory. Analytical results from the investigation are located in Section 2b.

EPNG performed an evaluation of the analytical data and subsequently identified a contamination plume. This plume is depicted in the investigation site map located in Section 2c.

A summary of the investigation is as follows:

* There appeared to be three isolated areas of contamination in the cornfield area.

* The small plume in the southwest side of the cornfield was due to the tank vent that was anchored in that area.

* The area of contamination in the southeast corner of the cornfield was an anomaly. Its source was not known at the time, but it was deemed to be a separate source from that found on the north side of the field.

* Free phase product was discovered at probe holes 9 and 10 on the meter location.

* Groundwater contamination existed on the meter location and in the cornfield. Contamination appeared to be relatively localized.

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TPH 418.1 EPNG	TPH 418.1 RECON	TOTAL BTEX EPNG	TOTAL BTEX RECON	BENZENE EPNG	BENZENE RECON
PH-1, 18-20' (1-1S)	SOIL	3/31/93	NS	SL-01	NS	1770ppm	NS	1.743ppm	NS	0.6ppm
PH-1, 20-22' (1-2S)	SOIL	3/31/93	NS	SL-02	NS	ND	NS	0.005ppm	NS	0.001ppm
PH-1, 23' (1-3W)	WATER	3/31/93	N30367	GW-03	NR	ND	1860ppb	479ppb	538ppb	81ppb
PH-2, 8-10'	SOIL	3/31/93	NS	SL-04	NS	ND	NS	0.01ppm	NS	0.002ppm
PH-2, 15-17'	SOIL	3/31/93	NS	SL-08	NS	2720ppm	NS	5.4ppm	NS	2.1ppm
PH-3, 8-10' (3-1S)	SOIL	3/31/93	N30368	SL-05	4,042pp	1642ppm	NR		NR	0.9ppm
PH-4, 8-10' (4-1S)	SOIL	3/31/93	NS	SL-06	NS	ND	NS	0.051ppm	NS	0.008ppm
PH-4, 15-17' (4-2S)	SOIL	4/1/93	N30376	SL-12	133ppm	10	2.68ppm	1.9ppm	0.066ppm	0.196ppm
PH-4, 23' (4-3W)	WATER	4/1/93	N30377	GW-13	NR	6ppm	123ppb	136ppb	11ppb	3ppb
PH-5, 8-10'	SOIL	3/31/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-6, 8-10' (6-1S)	SOIL	3/31/93	N30369	SL-07	<10ppm	ND	0.055ppm	0.001ppm	<0.025ppm	ND
PH-6, 15-17' (6-2S)	SOIL	4/1/93	N30378	SL-14	<10ppm	ND	0.144ppm	0.193ppm	0.045ppm	0.001ppm
PH-6, 23' (6-3W)	WATER	4/1/93	N30379	GW-15	NR	8ppm	210ppb	371ppb	5.3ppb	3ppb
PH-7, 15-17'	SOIL	3/31/93	NS	SL-09	NS	ND	NS	0.02ppm	NS	0.002ppm
PH-7, 20' (7-2W)	WATER	4/1/93	N30375	GW-11	NR	ND	89ppb	4ppb	15ppb	<1ppb
PH-8, 10-12'	SOIL	4/1/93	NS	SL-16	NS	ND	NS	0.001ppm	NS	ND
PH-8, 17' (8-1W)	WATER	3/31/93	N30370	GW-10	NR	ND	14.3ppb	ND	5.3ppb	ND
PH-9, 15-17' (9-1S)	SOIL	4/1/93	N30380	NS	4,450pp	NS	NR	NS	NR	NS
PH-9, 17'	WATER	4/1/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-10, 15-17' (10-1S)	SOIL	4/1/93	N30381	SL-17	558ppm	646ppm	NR	2.07ppm	NR	0.379ppm
PH-10, 15'	WATER	4/1/93	NS	GW-18	NS	945ppm	NS	2173ppb	NS	376ppb
PH-11, 6-8' (11-2S)	SOIL	4/1/93	N30383	SL-20	<10ppm	ND	0.105ppm	0.008ppm	0.031ppm	ND
PH-11, 8' (11-1W)	WATER	4/1/93	N30382	GW-19	NR	ND	2.30ppb	12ppb	<0.5ppb	ND

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TPH 418.1 EPNG	TPH 418.1 RECON	TOTAL BTEX EPNG	TOTAL BTEX RECON	BENZENE EPNG	BENZENE RECON
PH-12, 4'	SOIL	4/1/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-12, 6-8'	SOIL	4/1/93	NS	SL-21	NS	ND	NS	ND	NS	ND
PH-12, 10'	WATER	4/1/93	NS	GW-22	NS	ND	NS	ND	NS	ND
PH-13 3' (13-3S)	SOIL	4/2/93	N30431	NS	1,292pp	NS	15ppm	NS	<0.025ppm	NS
PH-13, 6-8' (13-1S)	SOIL	4/2/93	N30429	SL-23	<10ppm	ND	NR	0.001ppm	NR	<0.001pp
PH-13, 8' (13-2W)	WATER	4/2/93	N30430	GW-24	NR	<5ppm	2.3ppb	1ppb	<0.5ppb	<1ppb
PH-14, 2-4'	SOIL	4/2/93	NS	SL-38	NS	1440	NS	0.423ppm	NS	0.142ppm
PH-14, 4-6' (14-1S)	SOIL	4/2/93	N30432	SL-25	<10ppm	ND	NR	0.260ppm	NR	0.110ppm
PH-14, 6-8'	SOIL	4/2/93	NS	SL-26	NS	10	NS	0.154ppm	NS	0.048ppm
PH-14, 8'	WATER	4/2/93	NS	GW-27	NS	<5ppm	NS	990ppb	NS	149ppb
PH-15, 2-4'	SOIL	4/2/93	NS	SL-39	NS	2832	NS	4.993ppm	NS	2.116ppm
PH-15, 6-8' (15-1S)	SOIL	4/2/93	N30433	SL-28	<10ppm	20ppm	NR	0.113ppm	NR	0.011ppm
PH-15, 8'	WATER	4/2/93	NS	GW-29	NS	<5ppm	NS	198ppb	NS	8ppb
PH-16, 3' (16-3S)	SOIL	4/2/93	N30436	NS	7,428pp	NS	186ppm	NS	8ppm	NS
PH-16, 6-8' (16-1S)	SOIL	4/2/93	N30434	SL-30	61ppm	10	NR	0.038ppm	NR	0.009ppm
PH-16, 8' (16-2W)	WATER	4/2/93	N30435	GW-31	NR	16	2099ppb	1595ppb	1100ppb	605ppb
PH-17, 2-4'	SOIL	4/2/93	NS	SL33	NS	ND	NS	0.005ppm	NS	0.003ppm
PH-17, 4-6' (17-4S)	SOIL	4/2/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-17, 6-8'	SOIL	4/2/93	NS	SL-32	NS	ND	NS	0.017ppm	NS	0.003ppm
PH-18, 4' (18-3S)	SOIL	4/2/93	N30439	SL-42	<10ppm	16ppm	0.026ppm	0.004ppm	<0.025ppm	ND
PH-18, 6-8' (18-1S)	SOIL	4/2/93	N30437	SL-34	<10ppm	ND	<0.025pp	ND	<0.025ppm	ND
PH-18, 8' (18-2W)	WATER	4/2/93	N30438	GW-35	NR	6ppm	0.7ppb	ND	<0.5ppb	ND
PH-19, 2-4'	SOIL	4/2/93	NS	SL-40	NS	ND	NS	0.004ppm	NS	0.001ppm
PH-19, 6-8' (19-1S)	SOIL	4/2/93	N30440	SL-36	<10ppm	10ppm	0.03ppm	ND	0.029ppm	ND
PH-19, 8' (19-2W)	WATER	4/2/93	N30441	GW-37	NR	ND	<0.5ppb	ND	<0.5ppb	ND

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TPH 418.1 EPNG	TPH 418.1 RECON	TOTAL BTEX EPNG	TOTAL BTEX RECON	BENZENE EPNG	BENZENE RECON
PH-20, 2-4'	SOIL	4/2/93	NS	SL-41	NS	2840	NS	5.689ppm	NS	0.278ppm
PH-21, 2-4'	SOIL	4/3/93	NS	SL-43	NS	34ppm	NS	0.009ppm	NS	ND
PH-21, 8'	WATER	4/3/93	NS	GW-44	NS	ND	NS	ND	NS	ND
PH-22, 2-4' (22-1S)	SOIL	4/3/93	N30442	SL-45	<10ppm	30ppm	<0.025pp	<0.001pp	<0.025ppm	ND
PH-22, 8'	WATER	4/3/93	NS	GW-46	NS	ND	NS	ND	NS	ND
PH-23, 2-4'	SOIL	4/3/93	NS	SL-47	NS	ND	NS	ND	NS	ND
PH-23, 4-6' (23-4S)	SOIL	4/3/93	N30443	NS	<10ppm	NS	<0.025pp	NS	<0.025ppm	NS
PH-23, 6-8'	SOIL	4/3/93	NS	SL-48	NS	ND	NS	<0.001pp	NS	ND
PH-23, 8' (23-2W)	WATER	4/3/93	N30444	GW-49	NR	7ppm	4.5ppb	153ppb	4.5ppb	148ppb
PH-24, 4-6' (24-3S)	SOIL	4/3/93	N30445	NS	<10ppm	NS	0.026ppm	NS	<0.025ppm	NS
PH-25, 4' (25-1S)	SOIL	4/3/93	N30446	SL-52	<10ppm	ND	0.27ppm	0.028ppm	.012ppm	0.012ppm
PH-26, 2-4'	SOIL	4/3/93	NS	SL-53	NS	ND	NS	<0.001pp	NS	ND
PH-26, 6-8' (26-3S)	SOIL	4/3/93	NS	SL-55	NS	ND	NS	ND	NS	ND
PH-26, 8'	WATER	4/3/93	NS	GW-54	NS	<5ppm	NS	<1ppb	NS	ND
PH-27, 4' (27-1S)	SOIL	4/3/93	N30447	NS	3,241pp	NS	11ppm	NS	<0.025ppm	NS
PH-28, 7' (28-1S)	SOIL	4/3/93	N30448	NS	<10ppm	NS	<0.025pp	NS	<0.025ppm	NS
PH-29, 4-6'	SOIL	4/3/93	NS	SL-56	NS	18ppm	NS	ND	NS	ND
PH-29, 8' (29-2W)	WATER	4/3/93	N30449	GW-57	NR	<5ppm	0.7ppb	ND	<0.5ppb	ND
PH-30, 7' (30-1S)	SOIL	4/3/93	N30450	NS	<10ppm	NS	<0.025pp	NS	<0.025ppm	NS
PH-31, 7' (31-1S)	SOIL	4/3/93	N30451	NS	821ppm	NS	23ppm	NS	0.87ppm	NS

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TPH 418.1 EPNG	TPH 418.1 RECON	TOTAL BTEX EPNG	TOTAL BTEX RECON	BENZENE EPNG	BENZENE RECON
PH-32, 7' (32-1S)	SOIL	4/3/93	N30452	NS	<10ppm	NS	<0.025pp	NS	0.025ppm	NS
PH-33, 2-4'	SOIL	4/3/93	NS	SL-58	NS	ND	NS	<0.001pp	NS	ND
PH-33, 8' (33-2W)	WATER	4/3/93	N30453	SL-59	NR	NR	2.1ppb	NR	<0.5ppb	NR
PH-34, 4-6' (34-1S)	SOIL	4/3/93	N30458	SL60	<10ppm	NR	NR	0.001ppm	NR	ND
PH-34, 8' (34-3W)	WATER	4/3/93	N30454	GW-61	NR	NR	1.1ppb	ND	<0.5ppb	ND
PH-35, 8' (35-1W)	WATER	4/3/93	N30455	GW-62	NR	NR	<0.025pp	ND	<0.5ppb	ND
PH-36, 8' (36-1W)	WATER	4/3/93	N30456	GW-63	NR	NR	0.6ppb	1ppb	<0.5ppb	ND
PH-37, 8' (37-1W)	WATER	4/3/93	N30457	GW-64	NR	NR	0.6ppb	ND	<0.5ppb	ND

NS = NO SAMPLE TAKEN
ND = NONE DETECTED
NR = NOT REQUESTED

REGULATORY LIMITS:	TPH	TOTAL BTEX	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENE
SOIL	100ppm	50ppm	10ppm	NA	NA	NA
WATER	n/a		10ppb	750ppb	750ppb	620ppb

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TOLUENE EPNG	TOLUENE RECON	ETHYL-BENZENE EPNG	ETHYL-BENZENE RECON	XYLENE EPNG	XYLENE RECON
PH-1, 18-20' (1-1S)	SOIL	3/31/93	NS	SL-01	NS	0.7ppm	NS	0.05ppm	NS	0.4ppm
PH-1, 20-22' (1-2S)	SOIL	3/31/93	NS	SL-02	NS	0.003ppm	NS	ND	NS	0.001ppm
PH-1, 23' (1-3W)	WATER	3/31/93	N30367	GW-03	846ppb	255ppb	52.6ppb	15ppb	423ppb	128ppb
PH-2, 8-10'	SOIL	3/31/93	NS	SL-04	NS	0.002ppm	NS	ND	NS	0.002ppm
PH-2, 15-17'	SOIL	3/31/93	NS	SL-08	NS	2.8ppm	NS	0.07ppm	NS	0.5ppm
PH-3, 8-10' (3-1S)	SOIL	3/31/93	N30368	SL-05	NR	3.2ppm	NR	0.15ppm	NR	1.2ppm
PH-4, 8-10' (4-1S)	SOIL	3/31/93	NS	SL-06	NS	0.020ppm	NS	0.002ppm	NS	0.021ppm
PH-4, 15-17' (4-2S)	SOIL	4/1/93	N30376	SL-12	0.39ppm	0.762ppm	0.22ppm	0.109ppm	2.0ppm	0.829ppm
PH-4, 23' (4-3W)	WATER	4/1/93	N30377	GW-13	35ppb	80ppb	8.6ppb	6ppb	68ppb	47ppb
PH-5, 8-10'	SOIL	3/31/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-6, 8-10' (6-1S)	SOIL	3/31/93	N30369	SL-07	<0.025pp	0.001ppm	0.027ppm	ND	0.028ppm	ND
PH-6, 15-17' (6-2S)	SOIL	4/1/93	N30378	SL-14	0.055ppm	0.012ppm	<0.025ppm	0.017ppm	0.044ppm	0.163ppm
PH-6, 23' (6-3W)	WATER	4/1/93	N30379	GW-15	<0.5ppb	23ppb	35ppb	37ppb	170ppb	308ppb
PH-7, 15-17'	SOIL	3/31/93	NS	SL-09	NS	0.006ppm	NS	0.001ppm	NS	0.009ppm
PH-7, 20' (7-2W)	WATER	4/1/93	N30375	GW-11	35ppb	2ppb	4.1ppb	ND	35ppb	2ppb
PH-8, 10-12'	SOIL	4/1/93	NS	SL-16	NS	0.001ppm	NS	ND	NS	ND
PH-8, 17' (8-1W)	WATER	3/31/93	N30370	GW-10	3.1ppb	ND	<1ppb	ND	5.9ppb	ND
PH-9, 15-17' (9-1S)	SOIL	4/1/93	N30380	NS	NR	NS	NR	NS	NR	NS
PH-9, 17'	WATER	4/1/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-10, 15-17' (10-1S)	SOIL	4/1/93	N30381	SL-17	NR	0.899ppm	NR	0.089ppm	NR	0.703ppm
PH-10, 15'	WATER	4/1/93	NS	GW-18	NS	681ppb	NS	126ppb	NS	990ppb
PH-11, 6-8' (11-2S)	SOIL	4/1/93	N30383	SL-20	0.044ppm	0.003ppm	<0.025ppm	ND	0.03ppm	0.005ppm
PH-11, 8' (11-1W)	WATER	4/1/93	N30382	GW-19	0.5ppb	2ppb	<0.5ppb	1ppb	1.8ppb	9ppb

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TOLUENE EPNG	TOLUENE RECON	ETHYL-BENZENE EPNG	ETHYL-BENZENE RECON	XYLENE EPNG	XYLENE RECON
PH-12, 4'	SOIL	4/1/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-12, 6-8'	SOIL	4/1/93	NS	SL-21	NS	ND	NS	ND	NS	ND
PH-12, 10'	WATER	4/1/93	NS	GW-22	NS	ND	NS	ND	NS	ND
PH-13 3' (13-3S)	SOIL	4/2/93	N30431	NS	<0.025pp	NS	1.9ppm	NS	13ppm	NS
PH-13, 6-8' (13-1S)	SOIL	4/2/93	N30429	SL-23	NR	0.001ppm	NR	ND	NR	ND
PH-13, 8' (13-2W)	WATER	4/2/93	N30430	GW-24	0.5ppb	ND	<0.5ppb	nd	1.8ppb	1ppb
PH-14, 2-4'	SOIL	4/2/93	NS	SL-38	NS	0.077ppm	NS	0.021ppm	NS	0.183ppm
PH-14, 4-6' (14-1S)	SOIL	4/2/93	N30432	SL-25	NR	0.007ppm	NR	0.015ppm	NR	0.128ppm
PH-14, 6-8'	SOIL	4/2/93	NS	SL-26	NS	0.020ppm	NS	0.005ppm	NS	0.081ppm
PH-14, 8'	WATER	4/2/93	NS	GW-27	NS	ND	NS	91ppb	NS	750ppb
PH-15, 2-4'	SOIL	4/2/93	NS	SL-39	NS	1.107ppm	NS	0.194ppm	NS	1.576ppm
PH-15, 6-8' (15-1S)	SOIL	4/2/93	N30433	SL-28	NR	0.024ppm	NR	0.008ppm	NR	0.070ppm
PH-15, 8'	WATER	4/2/93	NS	GW-29	NS	57ppb	NS	15ppb	NS	111ppb
PH-16, 3' (16-3S)	SOIL	4/2/93	N30436	NS	<.025pp	NS	18ppm	NS	160ppm	NS
PH-16, 6-8' (16-1S)	SOIL	4/2/93	N30434	SL-30	NR	0.003ppm	NR	ND	NR	0.026ppm
PH-16, 8' (16-2W)	WATER	4/2/93	N30435	GW-31	460ppb	551ppb	59ppb	46ppb	480ppb	393ppb
PH-17, 2-4'	SOIL	4/2/93	NS	SL33	NS	ND	NS	ND	NS	0.002ppm
PH-17, 4-6' (17-4S)	SOIL	4/2/93	NS	NS	NS	NS	NS	NS	NS	NS
PH-17, 6-8'	SOIL	4/2/93	NS	SL-32	NS	0.001ppm	NS	0.001ppm	NS	0.012ppm
PH-18, 4' (18-3S)	SOIL	4/2/93	N30439	SL-42	<0.025pp	0.001	<0.025ppm	ND	0.026ppm	0.003ppm
PH-18, 6-8' (18-1S)	SOIL	4/2/93	N30437	SL-34	<0.025pp	ND	<0.025ppm	ND	<0.025pp	ND
PH-18, 8' (18-2W)	WATER	4/2/93	N30438	GW-35	0.7ppb	ND	<0.5ppb	ND	<0.5ppb	ND
PH-19, 2-4'	SOIL	4/2/93	NS	SL-40	NS	0.001ppm	NS	ND	NS	0.002ppm
PH-19, 6-8' (19-1S)	SOIL	4/2/93	N30440	SL-36	<0.025pp	ND	<0.025ppm	ND	<0.025pp	ND
PH-19, 8' (19-2W)	WATER	4/2/93	N30441	GW-37	<0.5ppb	ND	<0.5ppb	ND	<0.5ppb	ND

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TOLUENE EPNG	TOLUENE RECON	ETHYL-BENZENE EPNG	ETHYL-BENZENE RECON	XYLENE EPNG	XYLENE RECON
PH-20, 2-4'	SOIL	4/2/93	NS	SL-41	NS	1.990ppm	NS	0.270ppm	NS	3.151ppm
PH-21, 2-4'	SOIL	4/3/93	NS	SL-43	NS	0.009ppm	NS	ND	NS	ND
PH-21, 8'	WATER	4/3/93	NS	GW-44	NS	ND	NS	ND	NS	ND
PH-22, 2-4' (22-1S)	SOIL	4/3/93	N30442	SL-45	<0.025pp	<0.001pp	<0.025ppm	ND	<0.025pp	ND
PH-22, 8'	WATER	4/3/93	NS	GW-46	NS	ND	NS	ND	NS	ND
PH-23, 2-4'	SOIL	4/3/93	NS	SL-47	NS	ND	NS	ND	NS	ND
PH-23, 4-6' (23-4S)	SOIL	4/3/93	N30443	NS	<0.025pp	NS	<0.025ppm	NS	<0.025pp	NS
PH-23, 6-8'	SOIL	4/3/93	NS	SL-48	NS	<0.001pp	NS	ND	NS	ND
PH-23, 8' (23-2W)	WATER	4/3/93	N30444	GW-49	<0.5ppb	1ppb	<0.5ppb	2ppb	<0.5ppb	2ppb
PH-24, 4-6' (24-3S)	SOIL	4/3/93	N30445	NS	<0.025pp	NS	<0.025ppm	NS	0.026ppm	NS
PH-25, 4' (25-1S)	SOIL	4/3/93	N30446	SL-52	0.038ppm	0.001ppm	<0.025ppm	ND	0.11ppm	0.015
PH-26, 2-4'	SOIL	4/3/93	NS	SL-53	NS	<0.001pp	NS	ND	NS	ND
PH-26, 6-8' (26-3S)	SOIL	4/3/93	NS	SL-55	NS	ND	NS	ND	NS	ND
PH-26, 8'	WATER	4/3/93	NS	GW-54	NS	<1ppb	NS	ND	NS	ND
PH-27, 4' (27-1S)	SOIL	4/3/93	N30447	NS	<0.025pp	NS	1.5ppm	NS	9.9ppm	NS
PH-28, 7' (28-1S)	SOIL	4/3/93	N30448	NS	<0.025pp	NS	<0.025ppm	NS	<0.025pp	NS
PH-29, 4-6'	SOIL	4/3/93	NS	SL-56	NS	ND	NS	ND	NS	ND
PH-29, 8' (29-2W)	WATER	4/3/93	N30449	GW-57	0.7ppb	ND	<0.5ppb	ND	<0.5ppb	ND
PH-30, 7' (30-1S)	SOIL	4/3/93	N30450	NS	<0.025pp	NS	<0.025ppm	NS	<0.025pp	NS
PH-31, 7' (31-1S)	SOIL	4/3/93	N30451	NS	<0.025pp	NS	2.2ppm	NS	20ppm	NS

JAQUEZ COM C #1 & E #1
SOIL & GROUNDWATER INVESTIGATION

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	EPNG SAMPLE NUMBER	RECON SAMPLE NUMBER	TOLUENE EPNG	TOLUENE RECON	ETHYL-BENZENE EPNG	ETHYL-BENZENE RECON	XYLENE EPNG	XYLENE RECON
PH-32, 7' (32-1S)	SOIL	4/3/93	N30452	NS	<0.025pp	NS	<0.025ppm	NS	<0.025pp	NS
PH-33, 2-4'	SOIL	4/3/93	NS	SL-58	NS	<0.001pp	NS	ND	NS	ND
PH-33, 8' (33-2W)	WATER	4/3/93	N30453	SL-59	1.3ppb	NR	<0.5ppb	NR	0.8ppb	NR
PH-34, 4-6' (34-1S)	SOIL	4/3/93	N30458	SL60	NR	0.001ppm	NR	ND	NR	ND
PH-34, 8' (34-3W)	WATER	4/3/93	N30454	GW-61	1.1ppb	ND	<0.5ppb	ND	<0.5ppb	ND
PH-35, 8' (35-1W)	WATER	4/3/93	N30455	GW-62	<0.5ppb	ND	<0.5ppb	ND	<0.5ppb	ND
PH-36, 8' (36-1W)	WATER	4/3/93	N30456	GW-63	<0.5ppb	1ppb	<0.5ppb	ND	0.6ppb	ND
PH-37, 8' (37-1W)	WATER	4/3/93	N30457	GW-64	0.6ppb	ND	<0.5ppb	ND	<0.5ppb	ND

NS = NO SAMPLE TAKEN
ND = NONE DETECTED
NR = NOT REQUESTED

REGULATORY LIMITS:	TPH	TOTAL BTEX	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENE
SOIL	100ppm	50ppm	10ppm	NA	NA	NA
WATER	n/a		10ppb	750ppb	750ppb	620ppb

LEGEND	REFERENCE DRAWINGS		REVISIONS						PRINT RECORD				
	DWG. NO.	TITLE	NO.	DATE	BY	DESCRIPTION	W.O.	APP.	PRT.	SEP.	DATE	TO	W.O.

ENG. RECORD		DATE
DRAFTING DESIGN	RAF	4/8/93
COMPUTER GRAPHICS	RAF	4/8/93
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	CORNFLD	

El Paso NATURAL GAS COMPANY

JACQUEZ GAS COM E #1 & C #1 WELLS INVESTIGATION SITE MAP

SE/4 SECTION 6, T-29-N, R-9-W, N.M.P.M.

SCALE: 1" = 20'

W.O.: 51570 & 52452

DWG. NO.

REV.

Remediation of Meter Site Location North of Citizen's Ditch

Excavation activities commenced on 8/9/93. As stated in the remedial plan, the goal of the excavation on the meter location was to remove *as much of the contamination from the old pit as practical.* A total of 1000 cubic yards of contaminated soil was removed from this area. The excavation boundaries were ultimately dictated by the location of the pipeline facilities and Citizen's Ditch.

The excavation boundaries are as follows:

Western boundary - The Jaquez Com. C #1 meter run.

Eastern boundary - The Jaquez Com. E #1 meter run.

Northern boundary - Probe hole #7 (PH-7) as noted in the investigation site map.

Southern boundary - A staked line, approximately 30' from the northern ditch bank. This was determined by an engineering survey which was performed to determine a safe working distance from the ditch. The goal of the evaluation was to prevent a breach of the ditch bank.

A depiction of the excavated area is located on the remediation site map in Section 6.

The depth of the majority of the excavation was approximately 16'. Groundwater began to seep into the hole at this depth. The excavation depth along the southern edge of the hole was approximately 13'. Groundwater was more shallow in this area due to the influence from the ditch. In the southeast corner of the excavation, free product was observed seeping into the hole at a depth of approximately 12'. Excavation did not proceed past the 13' depth or the 30' boundary due to critical cracking in the excavation wall.

Soil sample results from the excavation are located in Section 3c. A summary of the soil analyses for the excavated area is as follows:

* The north wall at PH-7 was clean.

* The floor of the excavation on the north side at 16' was clean.

* The east wall, south end was highly contaminated. This was based on visual observations of soil staining and odor. No samples were collected in this area.

* The west wall, middle section exceeded guideline requirements.

* The west wall, south end was clean.

* The floor of the excavation along the south end was highly contaminated. This was based on a visual observation of soil staining and odor. No samples were collected in

this area.

* The south wall of the excavation was highly contaminated. This was based on a visual observation of soil staining and odor. No samples were collected in this area.

All contaminated soil was transported to the Envirotech Landfarm located on Highway 44, approximately 10 miles south of Bloomfield, NM.

The excavated area was backfilled with clean soil obtained through a local contractor. A two foot cap was installed over the entire excavated area to accommodate settling and to prevent ponding from future precipitation.

Monitor/Recovery Well Installation Meter Site Area

Five monitor wells, R1-R5, were installed on the meter site location. The wells were constructed with 4" casings to accommodate a recovery system if needed. The location of the monitor wells are depicted in the remediation site map in Section 6. The first two wells were placed in the areas where floating product was observed during the RECON investigation (PH-9 and PH-10).

Boring logs for each of the wells are included in this section. The wells were sampled on 9/7 and 9/8/93. No free phase product was observed in any of the wells at that time. The analytical results from the monitor well sampling are located in Section 3d.

A summary of the groundwater analyses are as follows:

* Monitor wells R-1, R-2, and R-4 exceeded at least one of the WQCC limits for BTEX.

* Free floating product was not observed in any of the wells.

All wells were constructed according to appropriate state and federal guidelines. The quality assurance protocol utilized in the construction of the wells is available upon request.

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. R-1

PROJECT NAME: JAQUEZ — PROJECT NO: 10633
ELEVATION: — BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope — GWL: depth 5' — date/time 8/23
DRILLED BY: Rodgers Inc — GWL: depth 14.5' — date/time 8/23/93 1415
DRILLING/RIG METHODS: HSA 6¼ ID
DATE/TIME STARTED: 8/23/93 1255 — DATE/TIME COMPLETION(S): 8/23/93 1515
AIR MONITORING TYPE: — BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHANG (feet)	AIR MONITORING UNITS: NOU BZ	BH	S	DRILLING CONDITIONS AND (BLOW COUNTS)
1	1	2	SS 24	Brown Silty Sand, Fine - Medium grained, Rounded - Sub Angular, Trace moisture, Loose.			0	0	0	No odor or visible Contamination.
2										
3	2	4	SS 24	Same as above Moist at 4' Trace Clay, Trace Medium gravel			0	0	0	
4										
5	3	5	12	Same as above		5	0	0	0	▼ perched water @ 5'
6	4	7	24	Brown Sand with Silt, Medium - Coarse grained, Rounded - Subrounded, Trace gravel, Trace Clay, Saturated Loose			0	0	0	
7						7				
8	5	9	18	Brown-Gray Clayey Sand, Medium-Coarse Sand with Silt, Moist, Loose Brown-Gray Clay with Some Silt and Fine Sand, Medium Plastic, moist, Soft		8	0	0	0	
9										
10	6	10	12	Same as above Stiff		10	0	0	2	- No odor
11	7	12	24	Gray - DK Gray Clay with Fine Sand, Medium Plastic, moist, Soft.			0	1.0	170	- Very Strong Drip Odor @ 10'.
12										
13	8	14	24	Same as above with Silt, Trace Sand, wet at bottom			0	20	200	
14						14.5	0	20	100	- Noted product @ Bottom of Sampler
15	9	15	12	Gray-DK Gray Sand, Medium - Coarse grained, Trace Silt and Clay, Saturated, Loose						
16	10	17	24	Gray - DK Gray Clayey Sand, Medium - Coarse grained Sand, with Silt, Saturated, Loose		15.5	0	20	200	- Visible product and Sheen - Very Strong odor
17							0	100	150	- Very black @ Bottom of Spoon
18	11	19	24	Gray - DK Grey Sand, Medium - Coarse Sand, Trace Silt and Clay, Saturated, Loose		18	0	20	50	DK Gray Sand w/odor above
19						19				above clean brown Sand.
20	12	20	12	Brown Medium - Coarse grained Sand, Rounded - Sub Rounded, Saturated, Loose TOB - 20			0	20	5	Driller noted 1.5 - 2.0' of heave sand inside augers. Drilled to 20', Pullup let sand drop out.

COMMENTS: Will set well @ 20' as agreed on with Nancy Prince with EPNG

GEOLOGIST SIGNATURE S. Pope

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. R-2

PROJECT NAME: JAQUEZ PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth date/time
DRILLED BY: Rodgers GWL: depth date/time
DRILLING/RIG METHODS: HSA 6 1/4 ID
DATE/TIME STARTED: 8/24/93 745 DATE/TIME COMPLETION(S): 900 8/24/93
AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHNG (feet)	AIR MONITORING UNITS: NOU BZ	BH	S	DRILLING CONDITIONS AND (BLOK COUNTS)
				Brown-Gray Silty Sand, Fine-Medium with some clay, moist, Loose	SM		0	0	0	No odor or Visible Contamination
5							0	0	0	
6	1	7	SS 24	Gray Clay, Trace silt, Medium Plastic, Moist, Medium Stiff.	CL	5	0	0	150	
7						7				
8	2	9	SS 24	Gray-DK Gray Interbedded Sand and Clay. Medium-Coarse grained sand, Medium Plastic Medium Stiff Clay, Moist.	SW/CL		0	3	170	Dark Hydrocarbon Staining, Strong odor
9						9				
10	3	10	SS 12	DK Gray-Black Sandy Clay, Medium Plastic, wet, Soft.	CL		0	20	150	Highly contaminated, very Strong odor.
11										
12										
13						13				
14	4	15	SS 24	Brown-Gray Clayey Sand, Medium-Coarse Sand, Saturated @ 14.5, Loose			0	20	150	▼ 14.5 Water @ 14.5
15					SC					
16										
17										
18						18				
19	5	20	SS 24	Gray Medium-Coarse Sand, trace silt, saturated Loose	SW		0	5.0	5.0	- Gray discolored sand ends @ 19.0' Brown clean sand begins.
20				Brown-clay, Trace Fine Sand, Trace Silt Medium Plastic, Wet, Stiff.	CL	19	0	5	0	
				TOB - 20'						

COMMENTS:

GEOLOGIST SIGNATURE S. Pope

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. R-3

PROJECT NAME: Jacquez PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth 14' date/time 1145 8/24/93
DRILLED BY: Rodgers GWL: depth date/time
DRILLING/RIG METHODS: HSA 6 1/4 ID
DATE/TIME STARTED: 8/24/93 1100 DATE/TIME COMPLETION(S): 8/24/93 1200
AIR MONITORING TYPE: HNU. CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION (CLASSIFICATION SYSTEM: USCS)	USCS SYMBOL	DEPTH CHNG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOK COUNTS)
1				Brown Silty Sand, some Clay, Fine-Medium Sand, Moist, Loose	SM					
2										
3						3.0	0	0	0	Driller noted change @ 3.0'
4				Gray Silty Sandy Clay, Medium Plastic Moist, Soft	CL					
5						5.0				
6	1		55	Brown Sandy Clay with Sand and Silt, Low Plastic, Moist, Soft	CL		0	0	0	- Contamination begins @ 6.5
7		7	24	Brown Clay with Sand and Silt, Medium Plastic, Moist, Soft	CL	6.0	0	0	15	- Black Degraded odor
8				Black Sandy Clay, Medium-Coarse Sand, Medium Plastic, Soft	CL	7.0				
9										
10										
11	2		55	Gray Clay with Silt, Trace Sand, Medium Plastic, Roots, oxistaining, moist, Soft			0	0	1.0	No odor, No visible contamination
12		12	24		CL					
13	3			Gray inter bedded Sand and Clay, Fine-Medium Sand, Saturated @ Bottom, Medium Plastic, Soft Clay. Increasing Sand with Depth			0	20	170	12-13' HNU = 1.0 ← 13-14' ▽ - Water @ 14'
14		14				14.0				
15	4	15		Gray-DK Gray, Medium-Coarse Sand with Clay and Silt, saturated, Loose	SW		0	20	190	
16							0	20	200	
17										
18				Gray Medium-Coarse Sand, Trace Silt, Saturated, Loose	SW		0	5	0	-Slight gray staining above 19'. No odor
19	5			Brown Medium-Coarse Sand, Trace Silt Saturated, Loose, 3" Brown Clay @ Bottom	SW					
20		20		TOB - 20'						

COMMENTS: Set well @ 20.0'

GEOLOGIST SIGNATURE

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. R-4

PROJECT NAME: JAQUEZ PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth 13.5 date/time 8/25/93 815
DRILLED BY: Rodgers Inc GWL: depth date/time
DRILLING/RIG METHODS: HSA 6¼ ID
DATE/TIME STARTED: 8/25/93 730 DATE/TIME COMPLETION(S): 8/25/93 915
AIR MONITORING TYPE: HNU CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHANG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOW COUNTS)
1				Brown Silty Sand, Trace Clay, Trace moisture, Loose						
2										
3							0	0	0	
4										
5			SS							
6	1									▼ 6.5
7		7	24	Brown Silty Sand with Clay, Fine-Medium Sand, Medium Plastic, wet @ Bottom, Soft		6.5	0	0	0	No visible contamination or odor
8	2		SS	Brown Sand with Silt, Trace Clay, Medium-Coarse Sand, Wet, Loose.		7.5	0	0	0	
9		9	24			9.0				
10	3		SS	Brown Silty Sandy Clay, Medium Plastic, Moist, Soft			0	0	0	
11		11	24							Noted discolored cuttings beginning @ 11'
12				Gray-Silty Sand with Clay, Medium-Coarse Sand, Saturated, Loose		12.0	0	0	150	
13			SS							▼ 13.5 water
14	4			Gray Clay, Trace Silt and Sand Fine-Medium Sand, Medium Plastic, Saturated, Med Stiff		13.5	0	0	20	← Clay
15		15	24			15.0				
16	5		SS	DK Gray-Black Clayey Sand, with Silt Medium-Coarse Sand, wet, Loose			0	0	150	← Sandy Zones
17		17	24				0	0	20	← Bottom of sampler
18				Gray-DK Gray, Medium-Coarse Sand, Trace Silt, Saturated Loose		17.5	0	0	20	
19	6		SS							
20		20	18	Brown Medium-Coarse Sand, Trace Silt, Saturated Loose, 3" Brown Clay @ Bottom.		19.0	0	0	0	
				TOB-20'						

COMMENTS: Will Set well at 20'

GEOLOGIST SIGNATURE S. T Pope

BURLINGTON ENVIRONMENTAL
4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No. B-1
Well No. R-5

PROJECT NAME: JAQUEZ PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth date/time
DRILLED BY: Rodgers GWL: depth date/time
DRILLING/RIG METHODS: HSA 6 1/4 ID
DATE/TIME STARTED: 8/25/93 1100 DATE/TIME COMPLETION(S): 8/25/93 1230
AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION (CLASSIFICATION SYSTEM: USCS)	USCS SYMBOL	DEPTH CHANG (feet)	AIR MONITORING UNITS NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOW COUNTS)
1	1	2	SS 24	Brown Silty Sand, Fine - Medium Sand Dry, Loose.	SM		0	0	0	No odor or Visible Contamination.
2						2.0				
3				Brown Medium - Coarse Sand, Trace Silt, Moist Loose	SW					
4										
5										
6	2	7	SS 24	Brown Sandy Silty Clay, Fine - Medium Sand Medium Plastic, Moist, Medium Stiff	CL	6.0				
7						7.0				Contamination begins @ 7.0. Strong sewer odor
8	3	9		DK Gray - Black Sandy Silty Clay, Medium Coarse Sand,	CL					
9										
10	4	10	SS 12	TOB - 10		9.5				

COMMENTS: Move back to edge of fence due to contamination found in hole

GEOLOGIST SIGNATURE S. T. Pope

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No. B-2
Well No. R-5

PROJECT NAME: JAQUEZ PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth date/time
DRILLED BY: Rodgers Inc GWL: depth date/time
DRILLING/RIG METHODS: HSA 6 1/4 ID
DATE/TIME STARTED: 8/25/93 1315 DATE/TIME COMPLETION(S): 8/25/93 1530
AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION (CLASSIFICATION SYSTEM: USCS)	USCS SYMBOL	DEPTH CHANG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOK COUNTS)
1				Brown Silty Sand, Trace Clay, Medium-Coarse Sand, Moist, Loose.	SM		0	0	0	
2										
3										
4										
5		5				5.5				
6	1	7	SS 24	Brown Sandy Silty Clay, Medium-Coarse Sand, Medium Plastic, Medium Stiff Moist			0	0	0	
7										
8	2	9	SS 24	Same as above 4" Sand lense @8'	CL		0	0	0	
9										
10	3	11	SS 24	Brown Medium-Coars Sand with Clay, Moist, Loose	SW	10	0	0	0	
11							0	0	0	
12	4	12	SS 12				0	0	0	
13	5	14	SS 24	Brown Silty Sandy Clay, Fine-Medium Sand, Slightly Plastic, Oxi Staining, Moist, Medium Stiff	CL	12.5	0	0	5	-Noted Black discolration @ 14' (2"). 14.5-15.5 Black Zone 20 NDU's
14										
15	6	16	SS 24	Gray Silty Clay, Trace Sand, Medium Plastic Moist, Medium Stiff.	CL	15	0	0	20	▼ 16' Water
16	7	17	SS 12	Brown Medium-Coarse Sand with Clay and Silt, Saturated, Loose.	SW	16	0	0	5	
17						17				
18	8	19	SS 24	Gray Silty Clay, Trace Sand, Medium Plastic, Moist, Soft.	CL		0	0	0	
19										
20	9	21	SS 24	Brown Medium-Coarse Sand, Trace Clay, Trace Silt, Saturated Loose	SW	20	0	0	0	
21										
22	10	22	SS 12	Brown Clay w/Silt, Trace Sand, Med Plastic Moist	CL	21.5	0	0	0	
23	11	24	SS 24	Brown Clay, Trace Silt, Medium Plastic, Moist, Stiff.	CL	22.0	0	0	0	
24				TOB-24						
25										

COMMENTS: Will Set Well @ 22'

GEOLOGIST SIGNATURE Scott T. Pope

MONITORING WELL INSTALLATION RECORD

Borehole # R-1
Well # R-1
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

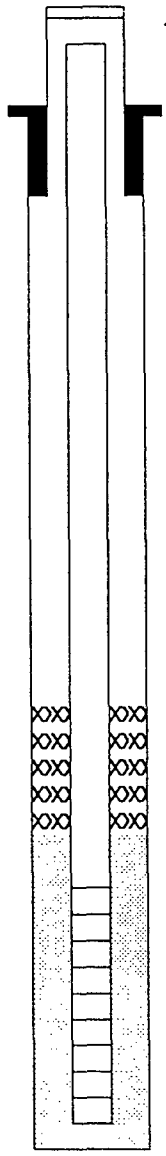
Elevation
Well Location NORTH OF DITCH
GWL Depth 14.5
Installed By RODGERS INC

Date/Time Started 8/23/93 1515
Date/Time Completed 8/23/93 1615

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC
Client Personnel On-Site NANCY PRINCE

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.8
Bottom of Protective Casing		+2.5
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout	5% BENTONITE	0.0
Bottom of Grout		-7.0
Top of Well Riser	4" SCH 40 PVC	+2.5
Bottom of Well Riser		-9.6
Top of Well Screen	4" SCH 40 PVC	-9.6
Bottom of Well Screen	.010 SLOT	-20.0
Top of Peltonite Seal	1/2" BENTONITE PELLETS	-7.0
Bottom of Peltonite Seal		-9.0
Top of Gravel Pack		-9.0
Bottom of Gravel Pack		-20.0
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-14.5
Total Depth of Borehole		-20.0



Top of Protective Casing +2.8
Top of Riser +2.5
Ground Surface 0.0
Top of Seal -7.0
Top of Gravel Pack -9.0
Top of Screen -9.6
Bottom of Screen -20.0
Bottom of Borehole -20.0

Comments: CLAY RING IN BOTTOM OF AUGERS WOULD NOT ALLOW PELLETS TO DROP THROUGH AUGERS. HAD TO PULL AUGERS TO SET SEAL. WATER LEVEL AT 12.25. NO PRODUCT (1630)

Geologist Signature Scott T. Pope

MONITORING WELL INSTALLATION RECORD

Borehole # R-2
Well # R-2
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

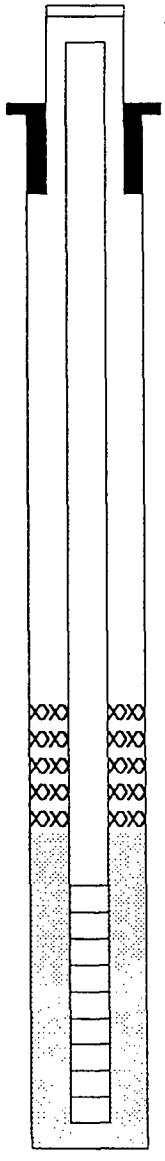
Elevation
Well Location NORTH OF DITCH
GWL Depth 14.5
Installed By RODGERS INC

Date/Time Started 8/24/93 0900
Date/Time Completed 8/24/93 0945

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC.
Client Personnel On-Site NANCY PRINCE

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.6
Bottom of Protective Casing		-1.7
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout	5% BENTONITE	0.0
Bottom of Grout		-6.0
Top of Well Riser	4" SCH 40 PVC	+2.3
Bottom of Well Riser		-9.6
Top of Well Screen	4" SCH 40 PVC	-9.6
Bottom of Well Screen	.010 SLOT	-20.0
Top of Peltonite Seal	1/2" BENTONITE PELLETS	-6.0
Bottom of Peltonite Seal		-8.0
Top of Gravel Pack	10-20 SILICA	-8.0
Bottom of Gravel Pack		-20.0
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-14.5
Total Depth of Borehole		-20.0



Top of Protective Casing +2.6
Top of Riser +2.3
Ground Surface 0.0
Top of Seal -6.0
Top of Gravel Pack -8.0
Top of Screen -9.6
Bottom of Screen -20.0
Bottom of Borehole -20.0

Comments: PULLED AUGERS TO SET SEAL.

Geologist Signature Scott T. Pope

JAL_MW2.WK1

MONITORING WELL INSTALLATION RECORD

Borehole # R-3
Well # R-3
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

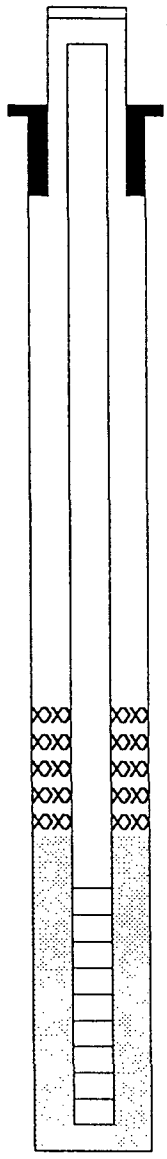
Elevation
Well Location NORTH OF DITCH
GWL Depth 14.0
Installed By RODGERS INC.

Date/Time Started 8/24/93 1200
Date/Time Completed 8/24/93 1300

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC.
Client Personnel On-Site NANCY PRINCE

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.8
Bottom of Protective Casing		-1.2
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout	5% BENTONITE	0.0
Bottom of Grout		-6.0
Top of Well Riser	4" SCH 40 PVC	+2.5
Bottom of Well Riser		-9.6
Top of Well Screen	4" SCH 40 PVC	-9.6
Bottom of Well Screen	.010 SLOT	-20.0
Top of Peltonite Seal	1/2" BENTONITE PELLETS	-6.0
Bottom of Peltonite Seal		-8.0
Top of Gravel Pack	10-20 SILICA	-8.0
Bottom of Gravel Pack		-20.0
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-14.0
Total Depth of Borehole		-20.0



Top of Protective Casing +2.8
Top of Riser +2.5
Ground Surface 0.0
Top of Seal -6.0
Top of Gravel Pack -8.0
Top of Screen -9.6
Bottom of Screen -20.0
Bottom of Borehole -20.0

Comments:

Geologist Signature Scott T. Pope

JAL_MW2.WK1

MONITORING WELL INSTALLATION RECORD

Borehole # R-4
Well # R-4
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

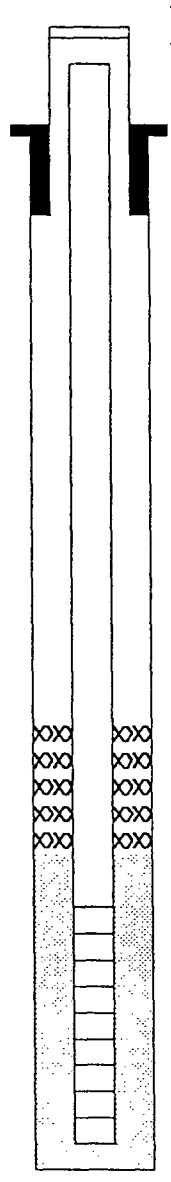
Elevation
Well Location NORTH OF DITCH
GWL Depth 13.5
Installed By RODGERS INC.

Date/Time Started 8/25/93 0915
Date/Time Completed 8/25/93 1030

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC
Client Personnel On-Site NANCY PRINCE

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	-2.8
Bottom of Protective Casing		-1.2
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout	5% BENTONITE	0.0
Bottom of Grout		-7.0
Top of Well Riser	4" SCH 40 PVC	+2.5
Bottom of Well Riser		-9.6
Top of Well Screen	4" SCH 40 PVC	-9.6
Bottom of Well Screen	.010 SLOT	-20.0
Top of Peltonite Seal	1/2" BENTONITE PELLETS	-7.0
Bottom of Peltonite Seal		-9.0
Top of Gravel Pack	10-20 SILICA	-9.0
Bottom of Gravel Pack		-20.0
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-13.5
Total Depth of Borehole		-20.0



Top of Protective Casing +2.8
Top of Riser +2.5
Ground Surface 0.0
Top of Seal -7.0
Top of Gravel Pack -9.0
Top of Screen -9.6
Bottom of Screen -20.0
Bottom of Borehole -20.0

Comments: Had some problems getting well to set at 20.0 due to heave sands.

Geologist Signature Scott T. Pope

MONITORING WELL INSTALLATION RECORD

Borehole # R-5
Well # R-5
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

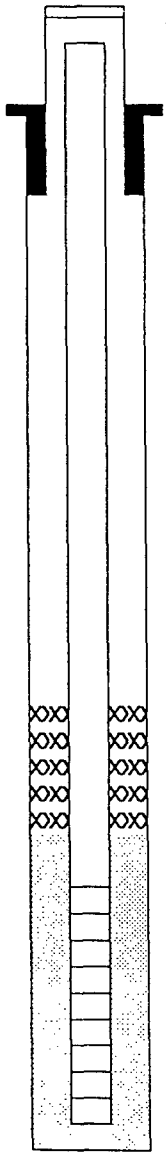
Elevation
Well Location NORTH OF DITCH
GWL Depth 16.0
Installed By RODGERS INC.

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC
Client Personnel On-Site NANCY PRINCE

Date/Time Started 8/25/93 1530
Date/Time Completed 8/25/93 1630

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.8
Bottom of Protective Casing		-1.5
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout	5% BENTONITE	0.0
Bottom of Grout		-7.5
Top of Well Riser	4" SCH 40 PVC	+2.5
Bottom of Well Riser		-11.6
Top of Well Screen	4" SCH 40 PVC	-11.6
Bottom of Well Screen	.010 SLOT	-22.0
Top of Peltonite Seal	1/2" BENTONITE PELLETS	-7.5
Bottom of Peltonite Seal		-9.5
Top of Gravel Pack	10-20 SILICA	-9.5
Bottom of Gravel Pack		-24.0
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-16.0
Total Depth of Borehole		-24.0



Top of Protective Casing +2.8
Top of Riser +2.5
Ground Surface 0.0
Top of Seal -7.5
Top of Gravel Pack -9.5
Top of Screen -11.6
Bottom of Screen -22
Bottom of Borehole -24

Comments:

Geologist Signature Scott T. Pope

JAL_MW2.WK1

El Paso Natural Gas Company
Field Ser[redacted] Laboratory
Analytical Summary Report
Jaquez Com. C #1 & Jaquez Com. E #1 Remediation

					LIMIT TPH > 100	LIMITS Benzene > 10 , Total BTEX > 50 EPA 8020 - BTEX (Soil MG/KG)				
Sample Number	Sample Location	Matrix	Time	Date	IR TPH Mod. 418.1 (MG/KG)	B	T	E	X	Total BTEX
	METER SITE AREA									
*7	North Wall, West End, 8' Down	Soil	0730	8/11/93	<5	Not Run	Not Run	Not Run	Not Run	Not Run
*8	North Wall, Middle Section, 9' Down	Soil	0735	8/11/93	<5	Not Run	Not Run	Not Run	Not Run	Not Run
*9	North Wall, East End, 8'6" Down	Soil	0746	8/11/93	<5	Not Run	Not Run	Not Run	Not Run	Not Run
*10	West Wall, North End, 11'6" Down	Soil	1010	8/11/93	>200	Not Run	Not Run	Not Run	Not Run	Not Run
*11	West Wall, South End, 9' Down	Soil	1015	8/11/93	<5	Not Run	Not Run	Not Run	Not Run	Not Run
N30851	North Floor, West Half, 16' Depth	Soil	1542	8/9/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30852	North Floor, East Half, 16' Depth	Soil	1550	8/9/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30853	East Wall, 6' North of Meter Run Inlet, 13' Down	Soil	1410	8/10/93	11,632 D	51.2	123 D	18.2	931 D	1123
N30854	East Wall, 2' South of Meter Run Inlet, 13'Down	Soil	1415	8/10/93	7,260 D	38.3	358 D	18.3	489 D	904
N30855	East Wall, 10' South of Meter Run Inlet, 13' Down	Soil	1423	8/10/93	3,572	0.87	14.0	2.41	4.67	22
N30856	East Wall, 18' South of Meter Run Inlet, 13' Down	Soil	1428	8/10/93	4,201	<0.5	10.2	6.93	7.72	25

Notes: The result followed by a "D" is the data qualifier indicating that the sample result exceeded the calibration curve limit for this test.
Limits are based on New Mexico Regulations and are for soils only.
* = Onsite Laboratory Analysis

JAQUEZ COM. C #1 & JAQUEZ COM. E #1
MONITOR WELL
WATER ANALYSIS SUMMARY

Sample Number	Well Number	Date Sampled	Time Sampled	Date Analyzed	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX mg/L	Static Level T.O.P.
N30969	R-1	7-Sep-93	1153	13-Sep-93	*991*	164	113	*1111*	2.38	13.15'
N30970	R-2	7-Sep-93	1205	10-Sep-93	*278*	651	59.0	538	1.53	11.90'
N30971	R-3	7-Sep-93	1435	10-Sep-93	<2.0	61.4	22	207	0.29	12.75'
N30972	R-4	7-Sep-93	1445	13-Sep-93	*104*	267	39.9	370	0.78	12.60'
N30973	R-5	7-Sep-93	1521	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	15.50'
N30974	M-1	8-Sep-93	1142	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	3.85'
N30975	M-2	8-Sep-93	1150	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	3.00'
N30976	M-3	8-Sep-93	1205	10-Sep-93	*116*	<2.0	3.0	37.6	0.16	4.30'
N30977	M-4	8-Sep-93	1425	10-Sep-93	*213*	13.3	58	519	0.80	2.65'
N30978	M-4 FD	8-Sep-93	1425	10-Sep-93	217	13.6	65	576	0.87	n/a
N30979	M-5	8-Sep-93	1445	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	3.55'

T.O.P. = Top of Pipe

Regulatory Limits:
Benzene < 10 ug/L
Toluene < 750 ug/L
Ethylbenzene < 750 ug/L
Total Xylenes < 620 ug/L

Remediation of Cornfield Area South of Citizen's Ditch

Excavation

Excavation in the cornfield/garden area commenced on 8/16/93. The goal of this activity was to remove *as much contaminated soil and groundwater as practical.* Approximately 2950 cubic yards of contaminated soil was excavated and transported to the Envirotech landfarm on Highway 44, south of Bloomfield, NM. Approximately 3200 bbls of water were removed from the excavation throughout the 2 week period. The water was transported to EPNG's oil water separator located just north of Blanco Plant.

The excavation boundaries are as follows:

Northern boundary - The north fence of the cornfield. This fence was located at the foot of the slope leading to the ditch. The passive air stripper system is located approximately 5' north of the northern excavation boundary.

Southern boundary - The south fence of the cornfield. This fence is located at the northern edge of the well pad.

Eastern boundary - Probe hole number 12 (PH-12) was the approximate edge of the excavation. Towards the south end of the excavation, the eastern boundary veered further east approximately 10'.

Western boundary - Probe hole number 22 (PH-22) marked the approximate edge of the western boundary. Towards the south end of the excavation, the western boundary veered further west approximately 5'.

A depiction of the excavated area is located on the remediation site map in Section 6.

The depth of the entire excavation was approximately 7 feet. Groundwater was encountered at a depth of approximately 4 feet. Contaminated soil was observed near the surface at the north end of the excavation and dropped to a depth of approximately 3-4' as the excavation moved south.

In the southeast corner of the excavation two, 2" underground pipelines were discovered. EPNG was unaware of the existence of these lines. The lines appeared to be very old and showed signs of significant corrosion (i.e. holes in the pipe). The pipes appeared to be open ended in the SE area of the field. Pieces of what appeared to be a drum were found in the area near the end of the first pipeline found.

The first line was traced back to a nearby Amoco drip tank. It stopped at the base of the tank. The other line was traced back to the area near the Jaquez Com. C #1 wellhead. EPNG feels that these lines are the source of the isolated contaminated plume identified in the investigation. Sample numbers N30888, N30904, and N30908 confirm the high level of contamination in this area. The locations of these pipelines are depicted in the remediation site map in Section 6.

Soil sample results from the excavation are located in Section 4c. A summary of the soil analyses for the excavated area is as follows:

* The north wall is still contaminated due to excavation limitations.

* The east half of the south wall exceeds TPH criteria.

* The west half of the south wall is clean.

* The east wall is clean with the exception of a small area towards the north end. Additional soil was excavated from this area. Resampling of this area was inadvertently omitted. However, soil samples taken during the investigation indicate this area to be at the edge of the plume.

* The west wall is clean with the exception of two isolated areas. Information from the investigation indicate this area to be at the edge of the plume.

* The floor of the excavation is clean with the exception of a relatively small area in the southeast corner of the cornfield. This area coincides with the two underground mystery pipelines.

Interceptor Trench/Passive Air Stripper System

An interceptor system was installed along the north fence of the cornfield area. The purpose of this was to prevent any remaining contamination from migrating into the garden area. The system consists of 4" slotted PVC pipe installed in a gravel bed just above the water table. The system is driven by a series of wind turbines. The trench extends from approximately PH-12 to PH-22.

Monitor/Recovery Well Installation Cornfield Area

Five monitor wells, M1-M5, were installed in the cornfield area. The wells were constructed with 4" casings to accommodate a recovery system if needed. The location of the monitor wells are depicted in the remediation site map in Section 6. Three monitor wells are located on the downstream side of the interceptor trench, one at each end and one in the center. The other two wells are located on the east and west sides of the cornfield area.

Boring logs for each of the wells are included in this section. The wells were sampled on 9/7 and 9/8/93. No free phase product was observed in any of the wells at that time. The analytical results from the monitor well sampling are located in Section 4d.

A summary of the groundwater analyses are as follows:

* Monitor wells M-3 and M-4 exceeded at least one of the WQCC limits of BTEX.

* Free floating product was not observed in any of the wells.

All wells were constructed according to appropriate state and federal guidelines. The quality assurance protocol utilized in the construction of the wells is available upon request.

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. M-1

PROJECT NAME: JAQUEZ PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth 3' date/time 8/26/93 845
DRILLED BY: Rodgers Inc GWL: depth date/time
DRILLING/RIG METHODS: HSA 6 1/4 ID
DATE/TIME STARTED: 8/26/93 830 DATE/TIME COMPLETION (S): 8/26/93 1000
AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHANG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOW COUNTS)
1	1	2	SS 24	Brown - Gray Sand, Medium - Coarse Sand, Moist, Loose			0	0	0	▼ 3 water @ 3'
2										
3	2	4	SS 24	Same as above Wood, Trace clay, saturated			0	0	0	No odor or visible
4										
5	3	5	SS 12	Same as above			0	0	0	Contamination.
6	4	7	SS 24	Same as above Trace silt and Clay	SW		0	0	0	
7										
8	5	9	SS 24	Gray Sand Medium - Coarse Sand, Trace graval, Saturated Loose			0	0	0	
9										
10	6	10	SS 12	Same as above wood trace silt.			0	0	0	-1" clay lense @ 10'
11		12		No Sample due to heave Sands			0	0	0	-Problems with heave Sands
12										
13	7	14		Same as above			0	0	0	
14										
15										

COMMENTS: Will set well at 13'

GEOLOGIST SIGNATURE S. T. Pope

BURLINGTON ENVIRONMENTAL
4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. M-2

PROJECT NAME: JACQUEZ PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth 2.5' date/time 1135 8/26/93
DRILLED BY: Rodgers Inc GWL: depth date/time
DRILLING/RIG METHODS: HSA 6 1/4 ID
DATE/TIME STARTED: 8/26/93 1130 DATE/TIME COMPLETION(S): 8/26/93 1230
AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHANG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOK COUNTS)
1	1	2	CT 2'	Brown Clayey Sand, Medium-Coarse Sand,	SC		0	0	0	Continious Core Barrel Used for TOP 5'
2				Brown-Gray Sand, Medium-Coarse grained, Roots, Oxi stains, Moist, Loose						
3	2	5	CT 3'	Same as above Saturated at 2.5'			0	0	0	▼ water at 2.5'
4										No odor or Visible Contamination
5										
6	3	7	SS 24'	Same as above Trace silt, and gravel	SW		0	0	0	
7										
8	4	9	SS 24'	No sampling due to heave Sands			0	0	0	No visible contamination
9										
10										
11										
12										
13				TOB-2.5						
14										
15										

COMMENTS: Will set well at 12.5'

GEOLOGIST SIGNATURE S. Pope

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. M-3

PROJECT NAME: Jacquez PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth 30' date/time 8/26/93 1400
DRILLED BY: Rodgers Inc GWL: depth date/time
DRILLING/RIG METHODS: HSA 6¼ ID
DATE/TIME STARTED: 8/26/93 1345 DATE/TIME COMPLETION (S): 8/26/93 1520
AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHNG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOW COUNTS)
1	1	2	SS 24	Brown Clayey Sand, Fine-Medium Sand Some Silt, roots, Moist, Loose	SC	5	0	0	0	
2				Brown - Gray Medium - Coarse Sand,			0	0	0	
3	2	4	SS 24	Trace Clay, roots and organics, Moist Loose. Saturated @ 3'	SW		0	0	0	
4						4	0			Contamination begins @
	3	5	SS 12	Gray-Black Medium-Coarse Sand,			0	200	200	← 4', Black Staining
5			SS	Trace gravel, Saturated, Loose	SW		0	200	200	← 6' Strong Hydrocarbon Odor
6	4	7	24	Brown - Medium - Coarse Sand,		6.0	0	200	100	- Noted Sheen on water in spoon.
7			SS	Trace silt, Saturated, Loose						
8	5	9	24	Same as above	SW		0	200	15	Problems getting samples due to heave sands.
9										
10				No samples due to heave sands						
11										
12		12								
13	6	13	SS 24	Brown - Medium - Coarse Sand Trace Silt and Clay, Saturated loose			0	100	5	
14				TOB - 13.0						
15										

COMMENTS: Will set well at 12.8'

GEOLOGIST SIGNATURE S T Pope

BURLINGTON ENVIRONMENTAL

4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. M-4

PROJECT NAME: JAQUEZ PROJECT NO: 10633

ELEVATION: BOREHOLE LOCATION/COORDINATES:

LOGGED BY: S. Pope GWL: depth 2.7' date/time 8/27/93 1230

DRILLED BY: Rodgers Inc GWL: depth date/time

DRILLING/RIG METHODS: HSA 6 1/4

DATE/TIME STARTED: 8/27/93 1215 DATE/TIME COMPLETION(S): 8/27/93 1330

AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHNG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOW COUNTS)
1–6				Reddish Brown Silty Clay, Trace Fine Sand, low Plasticity, Moist, Soft. Fill.	CL					
7–9	1	9	SS 18	Gray - DK Gray - Silty Sand, with Clay, Fine - Medium Sand, Saturated, Loose	SM	7.0	0	0	1	- Noted visible staining slight odor.
10–11	2	11	SS 18	Gray - Dk Gray, Medium - Coarse Sand, Trace Silt and Clay, Saturated, Loose	SW	10.0	0	0	10	
12–15				TOB - 12.5						

COMMENTS: No sampling after 11' due to heave sands. Will set well at 12.5

GEOLOGIST SIGNATURE Scott T Pope

BURLINGTON ENVIRONMENTAL
4000 Monroe Road
Farmington, NM 87401

RECORD OF SUBSURFACE EXPLORATION

Page of
Borehole No.
Well No. M-5

PROJECT NAME: JAQUEZ PROJECT NO: 10633
ELEVATION: BOREHOLE LOCATION/COORDINATES:
LOGGED BY: S. Pope GWL: depth 2.7' date/time 8/27/93 915
DRILLED BY: Rodgers Inc GWL: depth date/time
DRILLING/RIG METHODS: HSA 6 1/4 ID
DATE/TIME STARTED: 8/27/93 900 DATE/TIME COMPLETION(S): 8/27/93 1030
AIR MONITORING TYPE: HNU, CGI BZ = Breathing Zone; BH = Borehole; S = Sample

DEPTH (feet)	SAMPLE NUMBER	SAMPLE INTERVAL	SAMP TYPE RECOV. (in)	SAMPLE DESCRIPTION CLASSIFICATION SYSTEM: USCS	USCS SYMBOL	DEPTH CHANG (feet)	AIR MONITORING UNITS: NDU BZ	BH	S	DRILLING CONDITIONS AND (BLOW COUNTS)
1	1	2	SS 15	Brown - Gray, Sandy Clay, Fine - Medium Sand, Medium Plastic, Medium Stiff, Roots and other organic matter, Moist. Wet @ 3'	CL		0	0	0	No evidence of visible contamination or odor. ▼ water at 2.7'
2										
3	2	4	SS 24				0	0	0	
4						4.0				
5	3	6	SS 24	Gray - Medium - Coarse Sand, Trace Silt, Some Roots, Saturated, Loose	SW		0	0	0	No evidence of contamination
6										
7	4	7	SS 12	Same as above Bottom 5" Clay		7.0	0	0	0	
8	5	9	SS 24	Brown - Gray Clay with Silt, Trace Sand, Highly Plastic, wet, Soft. Increasing Sand with depth.			0	0	0	
9										
10	6	11	SS 24	Same as above 3" Sand Lense @ 9'	CL		0	0	0	
11										
12	7	12	SS 12	Same as above 3" Sand lense @ 11'			0	0	0	
13				TOB - 12.5						
14										
15										

COMMENTS: Will set well at 12.5'

GEOLOGIST SIGNATURE Scott T. Pope

MONITORING WELL INSTALLATION RECORD

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # M-1
Well # M-1
Page 1 of 1

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

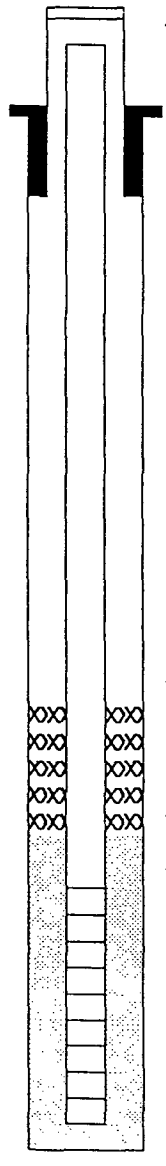
Elevation
Well Location SOUTH OF DITCH
GWL Depth -3'
Installed By RODGERS INC

Date/Time Started 8/26/93 1000
Date/Time Completed 8/26/93 1100

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC
Client Personnel On-Site ALTON JAMES

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.5
Bottom of Protective Casing		-1.5
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout		N/A
Bottom of Grout		N/A
Top of Well Riser	4" SCH 40 PVC	+2.2
Bottom of Well Riser		-2.7
Top of Well Screen	4" SCH 40 PVC	-2.7
Bottom of Well Screen	.010 SLOT	-13.0
Top of Peltonite Seal	1/2" BENTONITE PELLETS	0.0
Bottom of Peltonite Seal		-2.0
Top of Gravel Pack	10-20 SILICA	-2.0
Bottom of Gravel Pack		-8.0
Top of Natural Cave-In		-8.0
Bottom of Natural Cave-In		-13.0
Top of Groundwater		-3.0
Total Depth of Borehole		-13.0



Top of Protective Casing +2.5
Top of Riser +2.2
Ground Surface 0.0
Top of Seal 0.0
Top of Gravel Pack -2.0
Top of Screen -2.7
Bottom of Screen -13.0
Bottom of Borehole -13.0

Comments: Problems with heave sands coming inside augers.

Geologist Signature Scott T. Pope

MONITORING WELL INSTALLATION RECORD

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Borehole # M-2
Well # M-2
Page 1 of 1

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

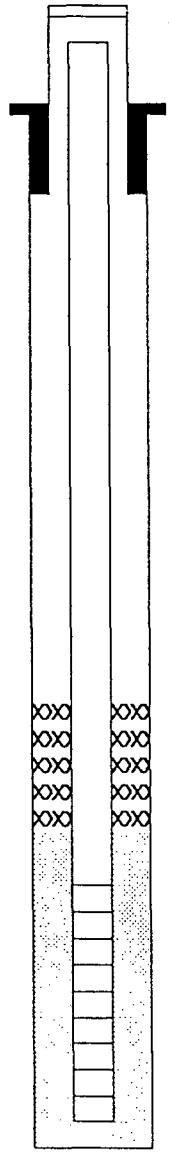
Elevation
Well Location SOUTH OF DITCH
GWL Depth -3.0
Installed By RODGERS INC.

Date/Time Started 8/26/93 1230
Date/Time Completed 8/26/93 1300

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC
Client Personnel On-Site ALTON JAMES

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.8
Bottom of Protective Casing		-1.2
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout		N/A
Bottom of Grout		N/A
Top of Well Riser	4" SCH 40 PVC	+2.5
Bottom of Well Riser		-2.4
Top of Well Screen	4" SCH 40 PVC	-2.4
Bottom of Well Screen	.010 SLOT	-12.7
Top of Peltonite Seal	1/2" BENTONITE PELLETS	0.0
Bottom of Peltonite Seal		-2.0
Top of Gravel Pack	10-20 SILICA	-2.0
Bottom of Gravel Pack		-12.7
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-3.0
Total Depth of Borehole		-12.7



Top of Protective Casing +2.8
Top of Riser +2.5
Ground Surface 0.0
Top of Seal 0.0
Top of Gravel Pack -2.0
Top of Screen -2.4
Bottom of Screen -12.7
Bottom of Borehole -12.7

Comments:

Geologist Signature Scott T. Pope

JAL_MW2.WK1

MONITORING WELL INSTALLATION RECORD

Borehole # M-3
Well # M-3
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

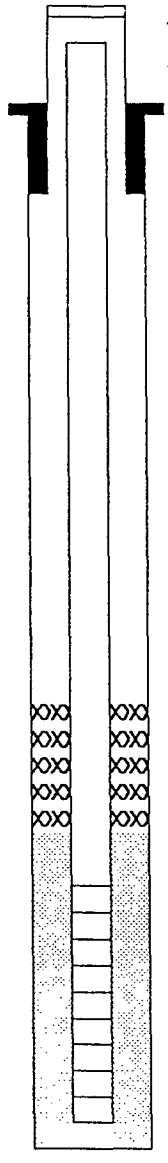
Elevation
Well Location SOUTH OF DITCH
GWL Depth -3.0
Installed By RODGERS INC

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC
Client Personnel On-Site ALTON JAMES

Date/Time Started 8/26/93 1520
Date/Time Completed 8/26/93 1600

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.8
Bottom of Protective Casing		-1.2
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout		N/A
Bottom of Grout		N/A
Top of Well Riser	4" SCH 40 PVC	+2.5
Bottom of Well Riser		-2.5
Top of Well Screen	4" SCH 40 PVC	-2.5
Bottom of Well Screen	.010 SLOT	-12.8
Top of Peltonite Seal	1/2" BENTONITE PELLETS	0.0
Bottom of Peltonite Seal		-2.0
Top of Gravel Pack	10-20 SILICA	-2.0
Bottom of Gravel Pack		-12.8
Top of Natural Cave-In		N/A
Bottom of Natural Cave-In		N/A
Top of Groundwater		-3.0
Total Depth of Borehole		-12.8



Top of Protective Casing +2.8
Top of Riser +2.5
Ground Surface 0.0
Top of Seal 0.0
Top of Gravel Pack -2.0
Top of Screen -2.5
Bottom of Screen -12.8
Bottom of Borehole -12.8

Comments:

Geologist Signature Scott T. Pope

JAL_MW2.WK1

MONITORING WELL INSTALLATION RECORD

Borehole # M-4
Well # M-4
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

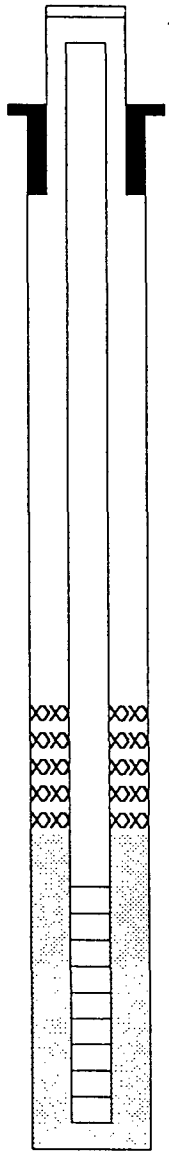
Elevation
Well Location SOUTH OF DITCH
GWL Depth -2.7
Installed By RODGERS INC.

Date/Time Started 8/27/93 1330
Date/Time Completed 8/27/93 1500

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC.
Client Personnel On-Site ALTON JAMES

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.8
Bottom of Protective Casing		-1.2
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout		N/A
Bottom of Grout		N/A
Top of Well Riser	4" SCH 40 PVC	+2.5
Bottom of Well Riser		-2.2
Top of Well Screen	4" SCH 40 PVC	-2.2
Bottom of Well Screen	.010 SLOT	-12.5
Top of Peltonite Seal	1/2" BENTONITE PELLETS	0.0
Bottom of Peltonite Seal		-2.0
Top of Gravel Pack	10-20 SILICA	-2.0
Bottom of Gravel Pack		-9.0
Top of Natural Cave-In		-9.0
Bottom of Natural Cave-In		-12.5
Top of Groundwater		-2.7
Total Depth of Borehole		-12.5



Top of Protective Casing +2.8
Top of Riser +2.5
Ground Surface 0.0
Top of Seal 0.0
Top of Gravel Pack -2.0
Top of Screen -2.2
Bottom of Screen -12.5
Bottom of Borehole -12.5

Comments: Many problems with heave sands. Could not get sand fall out. Had 3.5 feet of natural gravel pack.

Geologist Signature Scott T. Pope

MONITORING WELL INSTALLATION RECORD

Borehole # M-5
Well # M-5
Page 1 of 1

Burlington Environmental Inc.
4000 Monroe Road
Farmington, New Mexico 87401
(505) 326-2262 FAX (505) 326-2388

Project Name JAQUEZ
Project Number 10633 Phase 2008
Project Location BLANCO, NM

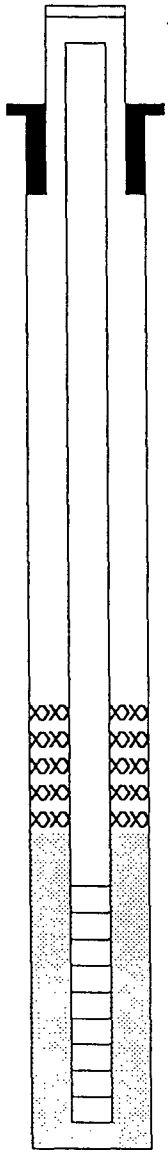
Elevation
Well Location SOUTH OF DITCH
GWL Depth -2.7
Installed By RODGERS INC

Date/Time Started 8/27/93 1030
Date/Time Completed 8/27/93 1130

On-Site Geologist SCOTT POPE
Personnel On-Site SCOTT POPE
Contractors On-Site RODGERS INC.
Client Personnel On-Site ALTON JAMES

Depths in Reference to Ground Surface

Item	Material	Depth (feet)
Top of Protective Casing	8" STEEL	+2.8
Bottom of Protective Casing		-1.2
Top of Permanent Borehole Casing		N/A
Bottom of Permanent Borehole Casing		N/A
Top of Concrete	PREMIX	+.3
Bottom of Concrete		0.0
Top of Grout		N/A
Bottom of Grout		N/A
Top of Well Riser	4" SCH 40 PVC	+2.4
Bottom of Well Riser		-2.5
Top of Well Screen	4" SCH 40 PVC	-2.5
Bottom of Well Screen	.010 SLOT	-12.8
Top of Peltonite Seal	1/2" BENTONITE PELLETS	0.0
Bottom of Peltonite Seal		-2.0
Top of Gravel Pack	10-20 SILICA	-2.0
Bottom of Gravel Pack		-10.0
Top of Natural Cave-In		-10.0
Bottom of Natural Cave-In		-12.8
Top of Groundwater		-2.7
Total Depth of Borehole		-12.8



Top of Protective Casing +2.8
Top of Riser +2.4
Ground Surface 0.0
Top of Seal 0.0
Top of Gravel Pack -2.0
Top of Screen -2.5
Bottom of Screen -12.8
Bottom of Borehole -12.8

Comments: Had 2.8' of heave sand inside the auger.

Geologist Signature Scott T. Pope

El Paso Natural Gas Company
Field Ser[redacted] Laboratory
Analytical Summary Report
Jaquez Com. C #1 & Jaquez Com. E #1 Remediation

					LIMIT TPH > 100	LIMITS Benzene > 10 , Total BTEX > 50 EPA 8020 - BTEX (Soil MG/KG)				
Sample Number	Sample Location	Matrix	Time	Date	IR TPH Mod. 418.1 (MG/KG)	B	T	E	X	Total BTEX
	CORNFIELD AREA									
N30867	East Wall: NE Corner	Soil	950	8/17/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30871	East Wall: 25' South of NE Corner @ 3' Depth	Soil	1615	8/17/93	1,333	<0.25	<0.25	<0.25	3.7	4
N30885	East Wall: 77' South of NE Corner @ 5' Depth	Soil	1534	8/19/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30889	East Wall: 92' South of North East Corner @ 5' Depth	Soil	1112	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30915	East Wall: 112' South , 5' East of NE Corner @ 4' Depth	Soil	1107	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30865	Floor: 5' South, 11' East of PH-22 @ 4' Depth	Soil	1614	8/16/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30868	Floor: NE Corner	Soil	952	8/17/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30869	Floor: North Edge, 4' East of Flowline, 6.5' Depth	Soil	1031	8/17/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30870	Floor: North Edge, 8' West of Flowline, @ 8' Depth	Soil	1256	8/17/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30874	Floor: 25' South, 8' West of NE Corner @ 7' Depth	Soil	939	8/18/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30875	Floor: 25' South, 8' West from NE Corner @ 7' Depth	Soil	943	8/18/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30877	Floor: 25' South, 20' East of PH-22 @ 7' Depth	Soil	1412	8/18/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30901	Floor: 25' South, 30' East from PH-33 @ 7' Depth	Soil	1545	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30876	Floor: 25' South, 40' East from PH-22, 7' Depth	Soil	1409	8/18/93	<10	<0.25	<0.25	<0.25	0.32	0.3
N30900	Floor: 25' South, 55' East of PH-33 @ 7' Depth	Soil	1530	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30892	Floor: 32' South, 6' East of PH-22 @ 5' Depth	Soil	1304	8/20/93	100	<0.25	<0.25	<0.25	<0.25	0
N30879	Floor: 45' South, 8' East of PH-22 @ 7'	Soil	1146	8/19/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30880	Floor: 45' South, 35' East of PH-22 @ 7' Depth	Soil	1150	8/19/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30881	Floor: 45' South of TH#22, Bottom of Wall @ 7' Depth	Soil	1158	8/19/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30890	Floor: 55' South, 10' East of PH-22 @ 6' Depth	Soil	1254	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30893	Floor: 55' South, 30' East of PH-22 @ 6' Depth	Soil	1310	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30911	Floor: 55' South, 55' East from PH-33 @ 7' Depth	Soil	815	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30913	Floor: 55' South, 40' East of PH-33 @ 7' Depth	Soil	825	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30883	Floor: 77' South, 32' West of NE Corner @ 7' Depth	Soil	1509	8/19/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30884	Floor: 77' South, 18' West of NE Corner @ 7' Depth	Soil	1515	8/19/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30894	Floor: 80' South of PH-22 @ 3' Depth	Soil	1420	8/20/93	* 7995 D	<0.25	<0.25	<0.25	0.27	0.3
N30895	Floor: 80' South of PH-22 @ 7' Depth	Soil	1434	8/20/93	<10	<0.25	<0.25	<0.25	0.69	0.7
N30886	Floor: 92' South, 38' West of NE Corner @ 7' Depth	Soil	1055	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30887	Floor: 92' South, 24' West of NE Corner @ 7' Depth	Soil	1102	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0

El Paso Natural Gas Company
Field Service Laboratory
Analytical Summary Report
Jaquez Com. C #1 & Jaquez Com. E #1 Remediation

						LIMITS Benzene > 10 , Total BTEX > 50				
					LIMIT TPH > 100	EPA 8020 - BTEX (Soil MG/KG)				
Sample Number	Sample Location	Matrix	Time	Date	IR TPH Mod. 418.1 (MG/KG)	B	T	E	X	Total BTEX
N30888	Floor: 92' South, 13' West of NE Corner @ 7' Depth	Soil	1108	8/20/93	5645 D	<0.25	<0.25	6.4	85.9	92
N30904	Floor: 110' South of NE @ 3' Depth	Soil	1039	8/23/93	10499 D	0.26	21.3	<0.25	119 D	141
N30907	Floor: 110' South, 20' West of NE Corner @ 7' Depth	Soil	1353	8/23/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30906	Floor: 110' South, 30' West of NE Corner @ 7' Depth	Soil	1352	8/23/93	25	<0.25	<0.25	<0.25	0.65	0.7
N30908	Floor: 118' South of North East Corner @ 4' Depth (Wall)	Soil	1518	8/23/93	10584 D	<0.25	57.2 D	7.0	183 D	247
N30909	Floor: 118' South of NE Corner @ 7' Depth	Soil	1523	8/23/93	310	<0.25	24	0.38	27	51
N30910	Floor: 118' South, 52' West of NE Corner @ 7' Depth	Soil	1538	8/23/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30925	Floor: 20' West of SE Corner @ 7' Depth	Soil	1000	8/25/93	69	<0.25	1.1	<0.25	<0.25	1
N30917	Floor: 30' West of SE Corner @ 7' Depth	Soil	1352	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30927	Floor: 40' West of SE Corner @ 7' Depth	Soil	1010	8/25/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30916	South Wall: SE Corner @ 5' Depth	Soil	1306	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30905	South Wall: 5' East of SW Corner @ 4' Depth	Soil	1335	8/23/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30914	South Wall: 55' South, 40' East of PH-33 @ 4' Depth	Soil	830	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30912	South Wall: 55' South, 55' East of PH-33 @ 4' Depth	Soil	820	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30926	South Wall: 20' West of SE Corner @ 4' Depth	Soil	1005	8/25/93	10227 D	0.85	1.2	3.2	27	31
N30918	South Wall: 30' West of SE Corner @ 4' Depth	Soil	1356	8/24/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30928	South Wall: 40' West of SE Corner @ 4' Depth	Soil	1015	8/25/93	9888 D	<1.0	1.5	6.7	147	155
N30866	West Wall: 5' South of PH-22, NW Corner @ 3' Depth	Soil	1617	8/16/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30878	West Wall: 32' South of Test Hole #22, West Wall	Soil	1415	8/18/93	546	<0.25	<0.25	0.32	4.1	4
N30882	West Wall: 45' South of PH-22 @ 3' Depth	Soil	1253	8/19/93	56	<0.25	<0.25	<0.25	<0.25	0
N30891	West Wall: 55' South of PH-22 @ 4' Depth	Soil	1255	8/20/93	<10	0.69	<0.25	<0.25	<0.25	0.7
N30902	West Wall: 37' South, 10' East from PH-33 @ 4' Depth	Soil	1600	8/20/93	<10	<0.25	<0.25	<0.25	<0.25	0
N30903	West Wall: 50' South, 12' East of PH-33 @4' Depth	Soil	830	8/23/93	<10	<0.25	<0.25	<0.25	<0.25	0

Notes: The result followed by a "D" is the data qualifier indicating that the sample result exceeded the calibration curve limit for this test.
Limits are based on New Mexico Regulations and are for soils only.
* N30894 as also Tested for TPH by Modified 8015 with a result of 1000 ppm C14 - C35.

JAQUEZ COM. C #1 & JAQUEZ COM. E #1
MONITOR WELL
WATER ANALYSIS SUMMARY

Sample Number	Well Number	Date Sampled	Time Sampled	Date Analyzed	Benzene ug/L	Toluene ug/L	Ethyl-Benzene ug/L	Total Xylene ug/L	Total BTEX mg/L	Static Level T.O.P.
N30969	R-1	7-Sep-93	1153	13-Sep-93	*991*	164	113	*1111*	2.38	13.15'
N30970	R-2	7-Sep-93	1205	10-Sep-93	*278*	651	59.0	538	1.53	11.90'
N30971	R-3	7-Sep-93	1435	10-Sep-93	<2.0	61.4	22	207	0.29	12.75'
N30972	R-4	7-Sep-93	1445	13-Sep-93	*104*	267	39.9	370	0.78	12.60'
N30973	R-5	7-Sep-93	1521	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	15.50'
N30974	M-1	8-Sep-93	1142	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	3.85'
N30975	M-2	8-Sep-93	1150	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	3.00'
N30976	M-3	8-Sep-93	1205	10-Sep-93	*116*	<2.0	3.0	37.6	0.16	4.30'
N30977	M-4	8-Sep-93	1425	10-Sep-93	*213*	13.3	58	519	0.80	2.65'
N30978	M-4 FD	8-Sep-93	1425	10-Sep-93	217	13.6	65	576	0.87	n/a
N30979	M-5	8-Sep-93	1445	10-Sep-93	<2.0	<2.0	<2.0	<2.0	N/A	3.55'

T.O.P. = Top of Pipe

Regulatory Limits:
Benzene < 10 ug/L
Toluene < 750 ug/L
Ethylbenzene < 750 ug/L
Total Xylenes < 620 ug/L

Site Hydrogeology

North of the ditch, all wells (R1-R5) were drilled to between 20 and 24 feet in depth. A 15 foot screen was installed in each well. During drilling, a dense, plastic clay layer was encountered in these wells between 5 and 11 feet. This layer appears to vary in thickness across the site, and probably pinches out to the north and east. This layer may serve as a partially confining layer, because first water was encountered below the clay layer at between 13.5 and 14.5, but static water levels are between 1 and 2 feet higher in all but R-5.

South of the ditch, all wells (M1-M5) were drilled to between 12.5 and 14 feet in depth. A 10 foot screen was installed in each well. M-4 was installed in backfill in the remediated area. M-2 and M-5 on the east side of the site, encountered very clayey sands from the surface to about 7 feet. M-1 and M-4 on the west side of the site, encountered uniformly medium grained sand.

Based on contaminant patterns determined in the preliminary investigation, groundwater flow was assumed to be to the southwest on both the north and south sides of the ditch. However, water level readings taken from wells installed after soil remediation suggest other flow patterns.

Water level readings were taken between September 1 and 3 during development activities, on September 7 just prior to sampling, and again on September 28. A tabulation of the readings are located in Section 5a. This data indicates that north of the ditch, groundwater gradient is shallow, approximately .0125 ft/ft and that groundwater flow is either parallel or slightly sub-parallel to the ditch.

South of the ditch, the gradient is much steeper, approximately .067 ft/ft. Groundwater flow direction is generally to the southwest, away from the ditch. The water level in M-4 is significantly higher than M-3 and M-5. This is most likely an artificial mound effect due to M-4 being the only well completed in backfill.

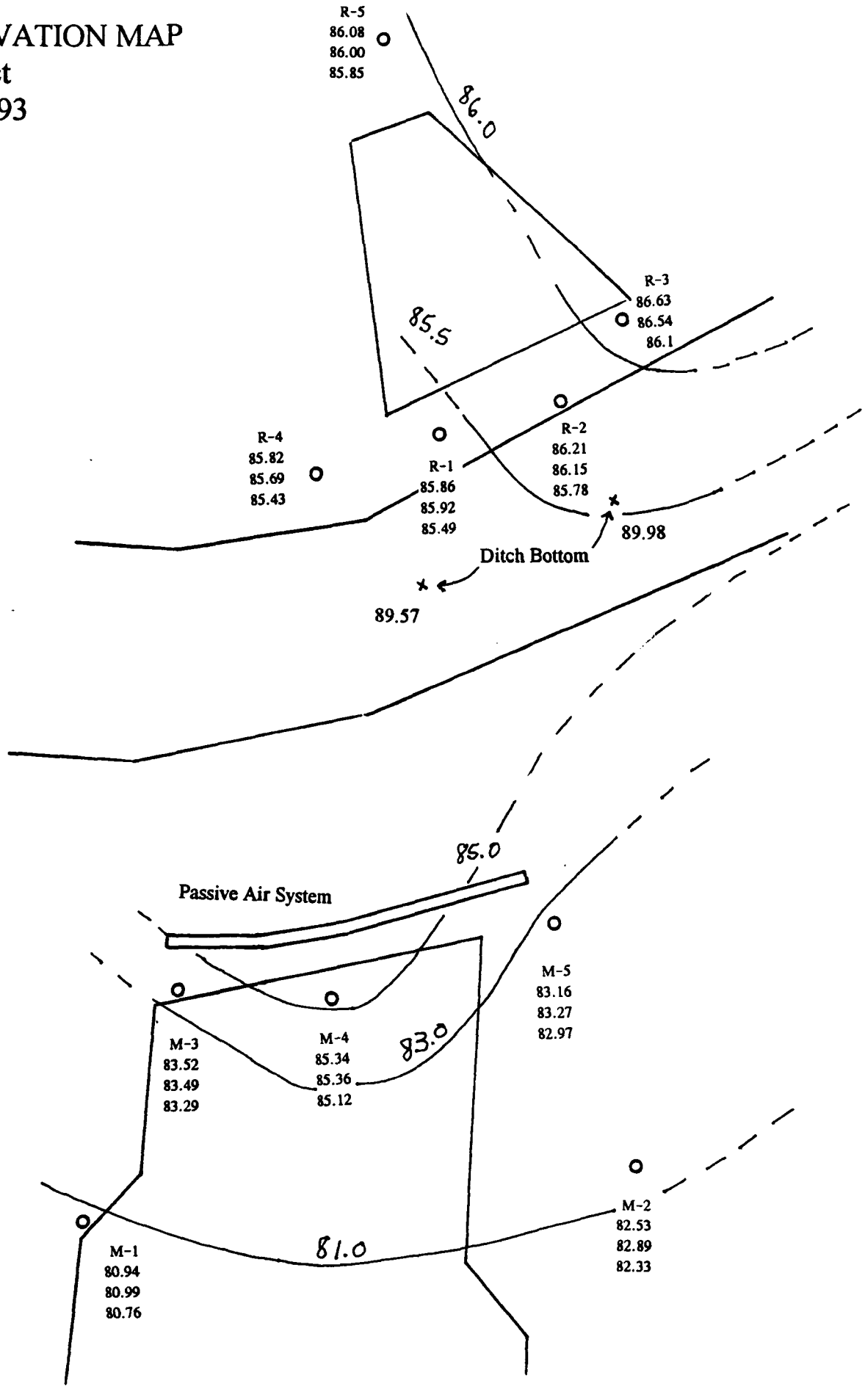
It should be noted that the base of the ditch elevation is 89.57, and that water level elevations north of the ditch are between 85 and 86 feet, and south of the ditch between 83 and 85 feet. This indicates a possible discharge from the ditch into the aquifer. A site map depicting a water elevation summary is located in Section 5b.

JAQUEZ COM. C #1 & JAQUEZ COM. E #1
GROUNDWATER LEVELS
SEPTEMBER, 1993

Date	R-1	R-2	R-3	R-4	R-5	M-1	M-2	M-3	M-4	M-5
9/1-3/93	85.86	86.21	86.63	85.82	86.08	80.94	82.53	83.52	85.34	83.16
9/7-8/93	85.92	86.15	86.54	85.69	86.00	80.99	82.89	83.49	85.36	83.27
9/28/93	85.49	85.78	86.1	85.43	85.85	80.76	82.33	83.29	85.12	82.97

NOTE: BASED ON REFERENCE DATUM OF 100.0

WATER ELEVATION MAP
Jacquez Project
September, 1993



LEGEND

	R-1
9/1-3/93	85.86
9/7/93	85.92
9/28/93	85.49

Contours based on 09/28/93 data.

LEGEND

REFERENCE DRAWINGS

DWG. NO.	TITLE

REVISIONS

NO.	DATE	BY	DESCRIPTION	W.O.	APP.

PRINT RECORD

PPT. SEP.	DATE	TO	W.O.

ENG. RECORD		DATE
DRAFTING DESIGN	RAF	9/27/93
COMPUTER GRAPHICS	RAH	9/27/93
CHECKED		
PROJECT APPROVAL		
DESIGN APPROVAL		
COMPUTER SAVE NAME	CORNFL1	

El Paso NATURAL GAS COMPANY

JACQUEZ GAS COM E #1 & C #1 WELLS REMEDIATION SITE MAP

SE/4 SECTION 6, T-29-N, R-9-W, N.M.P.M.

SCALE: 1" = 20'
W.O.: 51570 & 52452

DWG. NO.

REV.

AP

New Mexico
DRUG FREE
It's a State of Mind

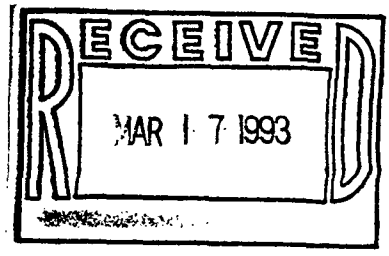
STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DIVISION
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

Certified Receipt #P987-892-056



March 15, 1993

El Paso Natural Gas Company
Attn. Sandra Miller
Sr. Env. Scientist
Box 4990
Farmington, NM 87499

RE: Contamination on the John Jaquez property, 0-6-29N-09W, San Juan County, New Mexico

Dear Ms. Miller:

Abandoned dehydrator pits which serviced meter runs from Amoco Jaquez Gas Com C #1 and Amoco Jaquez Gas Com E #1 apparently are the source for hydrocarbon contamination in John Jaquez's fields. Mr. Jaquez's fields, including his garden area, are located down dip and across the Bloomfield Citizens' Irrigation Ditch. The Oil Conservation Division analyzed soil samples collected 11/30/92 from the garden area. They showed hydrocarbon contamination of over 10,000 ppm and BTEX concentrations in excess of state standards. Subsequent excavation by EPNG crews 12/11/92 proved the presence of residual hydrocarbons near the abandoned pits. EPNG has subsequently excavated in the Jaquez garden area revealing a major contamination plume. EPNG is directed to define the extent of contamination plumes associated with its flow lines and dehydrator pits, propose steps to remediate the hydrocarbon contamination in the plumes and remediate the contamination. Due to the close association of these pits to the Bloomfield Citizens' Irrigation Ditch, potential groundwater contamination must be addressed in the remediation plan. Active remediation is to be initiated by April 15, 1993.

El Paso Natural Gas Company is the responsible party for this remediation. Failure to comply with Oil Conservation Division Rules and Regulations will result in fines of one thousand dollars per day per violation from the date of this letter. If you have questions please feel free to call this office.

Yours truly,

Denny G. Foust

Denny G. Foust
Environmental Geologist

XC: Environmental File
OCD-Environmental Bureau
John Jaquez
DGF File
David Hall-EPNG

El Paso
Natural Gas Company

P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499

March 18, 1993

Mr. Denny Foust
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: Contamination on the John Jaquez Property
Sec.6, T.29N, R.9W, San Juan County, NM

Dear Mr. Foust,

This letter is in response to your letter dated March 15, 1993 regarding the referenced project. To date, El Paso Natural Gas Co. (EPNG) has performed a preliminary investigation at the Jaquez Com. E #1 and Jaquez Com. C #1 meter sites. The investigation has been limited to visual observations and spot sampling taken from backhoe excavations. This investigation extended to an adjacent garden area belonging to Mr. John Jaquez. Initial analytical results indicate that hydrocarbon contamination exists within this garden area. At this time, the vertical and lateral extent of the contamination is not known. Also, as yet, groundwater contamination has not been established.

EPNG proposes to perform a subsurface investigation to define the area of contamination which may be associated with EPNG facilities. Our preferred method of survey is to collect and analyze soil-gas samples with Burlington Environmental's RECON Multi- media Sampling System.

The RECON System is equipped with a hydraulic unit which can drive a 1" probe to depths up to 35 feet. Soil-gas samples can then be collected and analyzed on-site for BTXE components and/or Total Petroleum Hydrocarbon (TPH).

It is also EPNG's intent to assess potential groundwater contamination at this site. The RECON System is capable of collecting and analyzing groundwater samples in conjunction with the soil-gas sampling effort.

EPNG will utilize the on-site analyses as a screening tool. EPNG will also collect selected soil and groundwater samples for analysis by a commercial laboratory.

EPNG will limit its investigation to those areas which may have been affected by EPNG's operations. Those areas are:

1. The Meter Site Location - The first sample point will be placed at the center of the former dehydrator pit. Subsequent sample points will be placed at 25 foot increments in four directions from the initial point. Sampling will continue in a rectangular grid pattern until such time as a plume boundary has been defined, or until barriers such as the ditch, prohibits further sampling. The 25 foot intervals may be decreased as a boundary becomes evident.

2. The Cornfield/Garden Area - EPNG defines this area as that fenced section of property that is located adjacent to the meter location, on the south side of Citizen's Ditch. This area is approximately 100' wide x 80' long. The sampling plan for this area will involve a rectangular grid to include staggered points placed at 25 foot centers. The 25 foot increments my be decreased as potential plume boundaries become evident.

3. The West Garden Area - EPNG defines this area as that fenced section of property that is located adjacent to the Cornfield/Garden Area on the west side. This area is approximately 50' wide x 80'long. The sampling plan for this area will include a rectangular grid with staggered sample points placed at 25 foot centers. The 25 foot increments may be decreased as potential plume boundaries become evident.

4. The Strip Between the Ditch and the Cornfield/Garden Area - EPNG proposes to perform sampling in the section of land between the Citizen's Ditch and the Cornfield/Garden Area. The first sample point will be located as near the dehydrator pit as possible. Subsequent sample points will be placed in 50 foot increments east and west of the initial point. Samples will continue until a plume boundary is identified or until physical barriers prohibit further sampling. Because of the contours of the land, the samples secured in this area may have to be obtained with a hand auger. The 50 foot increments will be decreased as a plume boundary becomes evident.

Other Sampling - The four areas described above are those which have the most potential to be impacted by EPNG's flow lines or location pits. For this reason, our investigation efforts will concentrate in those areas. We, however, do recognize that our efforts to define a plume may lead us off the specific areas mentioned above. We will continue placing sample points in 25-50 foot segments until a plume boundary has been defined.

Tentative Schedule

Week of 3/22/93 - Coordinate the labor and equipment to perform the survey.

Week of 3/29/93 - Perform the survey.

Weeks of 4/5/93 & 4/12/93 - Gather data and determine a remedial plan.

Week of 4/19/93 - Submit plan to NMOCD

Weeks of 4/26/93 & 5/3/93 - Coordinate the labor and equipment to execute remediation.

Week of 5/10/93 - Pending approval of plan by NMOCD, active remediation to commence.

Amoco's facilities, including past and existing pits, are in close proximity to the areas designated for our investigation. Although ready to initiate the necessary measures for remedial action per your demand, EPNG neither believes it is entirely responsible nor does it accept full responsibility for the contamination of Mr. Jaquez's property.

If you have any questions regarding our investigation plan, you may reach me at 599-2141.

Yours Truly,

Sandra D. Miller

Sandra D. Miller
Sr. Environmental Scientist

xc: W.D. Hall, EPNG
John Jaquez

El Paso
Natural Gas Company

P. O. BOX 4990
FARMINGTON, NEW MEXICO 87499

June 25, 1993

Mr. William C. Olson
New Mexico Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, NM 87504

Re: Hydrocarbon Contamination Near Jaquez GC C #1
& Jaquez GC E #1, San Juan County, New Mexico

Dear Bill:

By letter dated March 15, 1993, Mr. Denny Foust from your agency threatened an enforcement action, including fines, against El Paso Natural Gas Company ("El Paso") if El Paso does not immediately remediate the hydrocarbon contamination at the site named above. El Paso recognizes that the New Mexico Oil Conservation Division ("OCD") does have the required authority and jurisdiction to make such a demand.

Although El Paso is prepared to initiate and complete remedial action at the site, El Paso's actions should not be construed as a waiver of its rights to contribution from any other responsible party.

Enclosed for your review and approval is El Paso's proposed remedial plan. The plan is supported by the conclusions drawn from the soil and groundwater investigations conducted earlier and does not vary from our discussion on May 18, 1993.

Jaquez Com. C #1 & Jaquez Com. E #1
Remedial Plan

I. ADDITIONAL INVESTIGATION

a. Complete four shallow hand auger borings south of Citizen's Ditch, along the north fence line of the cornfield. The purpose of this is to confirm the presence or absence of light non-aqueous phase liquid (LNAPL). EPNG will have to have this information prior to beginning remediation activities as it is critical to our remedial methods discussed in section IIIb of this plan.

b. Complete preliminary capture zone modeling, using permeability estimates. These estimates will be based on soil samples collected during the RECON investigation and/or the activity associated with Ia above. This information will help to determine the number and placement of LNAPL recovery wells as discussed in section IIb of this plan.

Note: This work has already been initiated. Items Ia and Ib should be completed the week of June 21.

II. REMEDIATION - METER SITE LOCATION, NORTH OF DITCH

a. Excavate and remove as much contaminated soil as possible from the meter site area. To date, approximately 10 cubic yards have been removed from this area. EPNG anticipates an additional 100-200 cubic yards of contaminated soil to be removed. This will be dependant on maintaining the integrity of Citizen's Ditch and the metering facilities on site. EPNG plans to dispose of the soil at Envirotech's landfarm facility located on Highway 44.

b. In order to recover the LNAPL discovered during the RECON investigation, EPNG will install 4 inch recovery wells along the north side of Citizen's Ditch. The number of wells to be installed will be dependant on the modeling performed per section Ib of this plan. The first well will be installed near PH-9, where free floating product was identified during the investigation. Additional wells will be installed at spacings indicated by the capture zone model, until we reach the edge of the plume. All recovery wells will be equipped with hydrocarbon specific pumps. All recovered product will be collected in tanks and disposed at EPNG's oil water separator facility, located just north of Blanco Plant.

c. For control purposes, install 2, two inch monitor wells. One well will be located outside the plume of contamination to the east, and one outside the plume of contamination to the west.

d. All monitor and recovery wells will be installed so that they intercept the water table. In order to accommodate seasonal fluctuations of the water table, there will be 5 feet of screen above the water and 10 feet of screen below the water. If an impermeable, uncontaminated layer is encountered below the water table, 5 feet of screen may be used instead of ten. It is anticipated that the total depth of these wells will be approximately 30 feet.

III. REMEDIATION - CORNFIELD AREA, SOUTH OF DITCH

a. Excavate and remove as much contaminated soil as possible from the cornfield area. To date, approximately 40 cubic yards have been removed from this area. EPNG anticipates an additional 3000 cubic yards of contaminated soil to be removed. This will be dependant on obtaining landowner approval and maintaining the integrity of Citizen's Ditch. EPNG plans to dispose of the contaminated soil at Envirotech's landfarm facility located on Highway 44. Because of the shallow water table in the cornfield area, water generated during the excavation activities will be pumped into a holding tank and then disposed via EPNG's oil water separator facility located just north of Blanco Plant. Excavated soil will be replaced with a topsoil quality material.

b. Install an interceptor system along the north fence of the cornfield area. The purpose of this is to prevent further migration of the contamination into the agricultural area. Depending on the presence or absence of free floating product in this area (determined from the borings described in section Ia), the system will be per the following scenarios:

1. Absence of floating product - A passive air stripper system. This system will consist of slotted PVC pipe installed in a gravel bed just above the water table. The system will be driven by a series of wind turbines. This type set up will also include a shallow monitor well that will be used to confirm that floating product has not entered the system.

2. Presence of floating product - A series of hydrocarbon specific skimmer pumps installed in either shallow wells or a trench. Product recovered from this system will be handled and disposed as described in section IIb.

In either case, a monitoring system will be designed to confirm that the interceptor system is effectively preventing migration of hydrocarbons into the cornfield area. The monitoring system will include strategically placed monitor well(s), accompanied by a monitoring program that will include monthly groundwater sampling for the first six months, followed by sampling on a quarterly basis.

IV. FURTHER INFORMATION

As information becomes available, EPNG will notify NMOCD of further details of this plan. This information will include the exact number of monitor/recovery wells, the location of each well, and the specific method as outlined in IIIb.

As soon as OCD approves El Paso's plan, El Paso will initiate cleanup activities. If you have any questions or comments regarding the proposed plan, feel free to contact me at 505/599-2141 or David Hall at 915/541-3531.

Sincerely,

Sandra D. Miller
Sr. Environmental Scientist

cc: Mr. Denny Foust, Aztec NMOCD
Mr. David Hall, EPNG
Mr. John Jaquez Jr., Landowner

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

July 2, 1993

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-242-355

Ms. Sandra D. Miller
Sr. Environmental Scientist
El Paso Natural Gas Company
P.O. Box 4990
Farmington, New Mexico 87499

RE: HYDROCARBON CONTAMINATION
JAQUEZ GC C#1 & JAQUEZ GC E#1 WELL SITES
SAN JUAN COUNTY, NEW MEXICO

Dear Ms. Miller:

The New Mexico Oil Conservation Division (OCD) has completed a review of the El Paso Natural Gas Company's (EPNG) June 25, 1993 "HYDROCARBON CONTAMINATION NEAR JAQUEZ GC C#1 & JAQUEZ GC E#1, SAN JUAN COUNTY, NEW MEXICO". This document contains EPNG's plan for remediation of hydrocarbon contaminated soil and ground water related to EPNG's operations at the Jaquez GC C#1 and Jaquez GC E#1 well sites.

The above referenced remediation plan **is approved with the following conditions:**

1. Upon completion of the excavations during the soil remediation projects, final soil samples will be taken to confirm that remaining soils meet the OCD's recommended remediation levels as contained in the OCD's February 1993 Unlined Surface Impoundment Closure Guidelines.

2. A remediation report describing all activities and containing the results of all soil and ground water sampling performed will be submitted to OCD by August 27, 1993.

3. EPNG will notify OCD at least 72 hours in advance of commencement of the remediation project such that OCD may have the opportunity to witness the activities and/or split samples.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: OCD Aztec District Office
Mr. John Jaquez Jr.

El Paso
Natural Gas Company

P. O BOX 4990
FARMINGTON NEW MEXICO 87499

August 27, 1993

Mr. William C. Olson
New Mexico Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, NM 87504

Re: Extension to the Jaquez Com. C #1 & Jaquez Com. E #1
Remediation Report Deadline

Dear Bill:

El Paso Natural Gas Co. (EPNG) began remedial activities at the Jaquez Com. C #1 and Jaquez Com. E #1 meter locations on August 9, 1993. The remediation activities have been executed according to the EPNG plan submitted to your office in June of this year.

Your approval of this plan indicated that a final report be submitted to your office by August 27, 1993. Remedial activities, however, are not yet complete. EPNG anticipates that remedial activities (excavation and construction) at this site will be complete by September 3, 1993. Also, we have scheduled sampling of the monitor wells for the week immediately following the Labor Day weekend. For these reasons, EPNG respectfully requests an extension to the August 27 deadline for the final report. So that analytical results from the monitor wells may be included, EPNG proposes a new report target date of October 1, 1993. This will also allow for preparation of site drawings.

If you have any questions regarding this schedule, you may reach me at 505/599-2141.

Sincerely,

Sandra D. Miller

Sandra D. Miller
Sr. Environmental Scientist

cc: Mr. Denny Foust, Aztec NMOCD
Mr. David Hall, EPNG
Mr. John Jaquez Jr., Landowner

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

September 2, 1993

Ms. Sandra D. Miller
Sr. Environmental Scientist
El Paso Natural Gas Company
P.O. Box 4990
Farmington, New Mexico 87499

RE: HYDROCARBON CONTAMINATION
JAQUEZ GC C#1 & JAQUEZ GC E#1 WELL SITES
SAN JUAN COUNTY, NEW MEXICO

Dear Ms. Miller:

The New Mexico Oil Conservation Division (OCD) has received El Paso Natural Gas Company's (EPNG) August 27, 1993 "EXTENSION TO THE JAQUEZ COM C#1 & JAQUEZ COM E#1 REMEDIATION REPORT DEADLINE". This document requests an extension of the deadline for submission of a report on the remedial activities at the Jaquez Com C#1 and Jaquez Com E#1 sites from August 27, 1993 to October 1, 1993.

The above referenced request **is hereby approved.**

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: OCD Aztec District Office
Mr. John Jaquez Jr.

Conclusion & Further Action

Based on the contents of this report, EPNG concludes the following:

Meter Site Location

1. Excavation on the meter site location succeeded in removing the majority of the contaminated soil.

2. Contaminated soil left on the meter site is minimal. EPNG estimates that the excavation boundaries were within 10' of the edge of the plume on the west and east sides and at the edge on the north side.

3. The free floating product that was observed during excavation of the southeast corner appeared to be of minimal quantity (i.e. < 5 gallons). It appears that the product was trapped in an isolated pocket, possibly held by the hydraulic head of the ditch and was released during excavation.

4. No free phase product was observed in any monitor well.

5. Groundwater contamination is of limited aerial extent.

Cornfield/Garden Area

1. Excavation in the cornfield/garden area succeeded in removing the majority of the contaminated soil.

2. Excavation was beyond or at the edge of contamination in all areas with the exception of the northern wall.

3. No free phase product was observed in any monitor well.

4. Groundwater contamination is of limited aerial extent. The aquifer materials have relatively low porosity, and are very shallow, and well oxygenated. Natural attenuation (biodegradation) of the remaining contamination will continue to serve to limit further migration of contaminants.

5. The two mysterious underground pipelines were the source of the contamination found in the southeast corner of the field and are directly related to the wellhead facilities.

Further Action

1. Continue to monitor the groundwater quality on a monthly basis for a total of six months from the time of installation of monitor wells.

2. Determine the need for in situ remediation of groundwater at the end of the six month period.

3. Hydrocarbon specific skimmer pumps will not be utilized on the meter site location at this time. Per the remedial plan, the pumps were to be used to remove free phase product from the wells. There has been no sign of product in any of the monitor wells as of yet.