

3R - 204

REPORTS

DATE:

2002

Certified Mail: #7001 1940 0002 1371 7676

February 28, 2003

RECEIVED

MAR 05 2003

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2002 Pit Project Annual Groundwater Report

Dear Mr. Olson:

In accordance with reporting requirements, El Paso Field Services (EPFS) has enclosed annual reports for the 30 remaining groundwater impacted sites that were identified during our pit closure project of 1994 / 1995.

EPFS has organized the 30 Annual Reports (Volumes 1, 2 and 3) by land type. Volume 1 contains Annual Reports for sites found on Federal land. Volume 2 contains Non Federal sites and Volume 3 contains sites on Navajo land. Of the 30 reports submitted, EPFS is requesting closure of three sites located on Navajo lands. Of the three Navajo sites submitted for closure OCD has closed the Charley Pah #4 and the John Charles #8. The Rementa et al #1 has not been closed by either agency and EPFS reiterates request for closure of this site. EPFS understands closure of groundwater sites on Navajo land falls under jurisdiction of the Navajo Nation Environmental Protection Agency and original documents have been submitted to them for review. Other Navajo sites are included in the report for your information.

Three additional sites were submitted for closure in 2002. EPFS recently has received closure on the W.D. Heath B-5. Closure approval is pending on the D Loop Line Drip and Hammond # 41A. All of these sites are included in the 2002 Annual Report.

If you have any questions concerning the enclosed reports, please call me at (505) 599-2124.

Sincerely,



Scott T. Pope P.G.
Senior Environmental Scientist

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **Certified Mail # 7001 1940 0002 1371 7669**
Mr. Bill Liesse, BLM - w / enclosures (federal sites only), **Certified Mail # 7001 1940 0002 1371 7652**



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ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

El Paso Field Services

**San Juan Basin Pit Program
Groundwater Sites Project**

**2002 Annual Report
Federal Sites (Volume 1)**

March 2003



MWH

10619 South Jordan Gateway, Suite 100
Salt Lake City, Utah 84095

**EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT**

**K27 LD072
Meter Code: LD072**

SITE DETAILS

LEGAL DESCRIPTION: Twn: 25N Rng: 6W Sec: 4 Unit: E
NMOCD Haz Ranking: 40 **Land Type:** Federal **Operator:** El Paso Field Services

PREVIOUS ACTIVITIES

Site Assessment: 7/94 **Excavation:** 8/94 **Soil Boring:** 9/99
Monitor Well: 9/95 **Geoprobe:** 9/95 **Additional MWs:** 12/99
Downgradient MWs: 12/99 **Replace MW:** 7/00 **Quarterly Initiated:** NA
ORC Nutrient Injection: NA **Re-Excavation:** NA **PSH Removal Initiated:** 2/98
Annual Initiated: NA **Quarterly Resumed:** NA

SUMMARY OF 2002 ACTIVITIES

MW-1: Quarterly free-product recovery activities and water level monitoring was performed.

MW-2: Quarterly free-product recovery activities and water level monitoring was performed.

MW-3:

- Quarterly water level monitoring was performed.
- Approximately 0.75 gallons of free-product/water mixture was removed from MW-3 during July 2002.

Site-Wide Activities: No other activities were performed at this site during 2002.

SUMMARY TABLES AND GRAPHS

- Historical BTEX concentrations and groundwater elevations for MW-1 are presented graphically in Figure 5.
- Free-product removal data are summarized in Table 1 and presented graphically in Figures 6 and 7.
- Field documentation is presented in Attachment 1.

SITE MAP

Site maps are attached as Figures 1 through 4.

**EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT**

**K27 LD072
Meter Code: LD072**

GEOLOGIC LOGS AND WELL COMPLETION DIAGRAMS

No subsurface activities were performed at this site during 2002.

DISPOSITION OF GENERATED WASTES

All phase-separated hydrocarbons were disposed of at the EPFS Kutz Separator located in Bloomfield, New Mexico.

ISOCONCENTRATION MAPS

No isoconcentration maps were prepared for this site, however, the attached site maps present both potentiometric surface data collected during 2002.

CONCLUSIONS

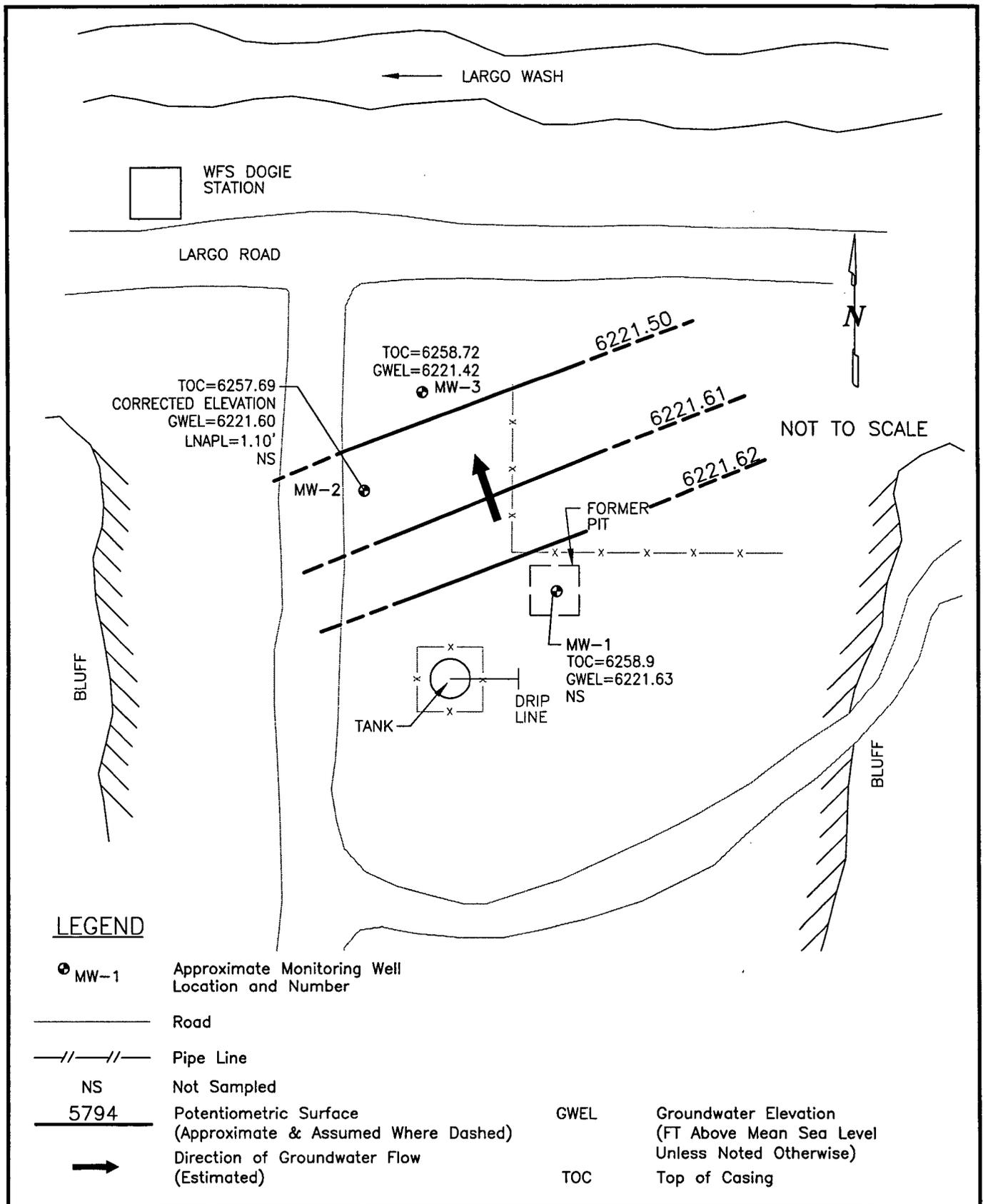
- The groundwater flow direction at this site trends to the northwest.
- Approximately 0.52 gallons of free-product was removed from MW-1 during 2002 bringing the cumulative total of recovered hydrocarbons at this well to 1.77 gallons since 2001.
- Approximately 1.33 gallons of free-product was removed from MW-2 during 2002 bringing the cumulative total of recovered hydrocarbons at this well to 2.68 gallons since 2001.
- Monitoring well MW-3 has not contained measurable free-product since its installation. However, during the July monitoring round, the field technician mistakenly noted the depth to water measurement in the depth to product space of the field form. A copy of an electronic memorandum has been included with the attached field documentation that explains the mistake to the field form.
- In addition, during the July monitoring round, the technician noted a black oil/water mix in the bailer sample collected at MW-3. Although the interface probe did not indicate free-phase hydrocarbons, the technician noted the volume of this mixture on the field form. During the next monitoring visit, no product was noted in MW-3.

**EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT**

**K27 LD072
Meter Code: LD072**

RECOMMENDATIONS

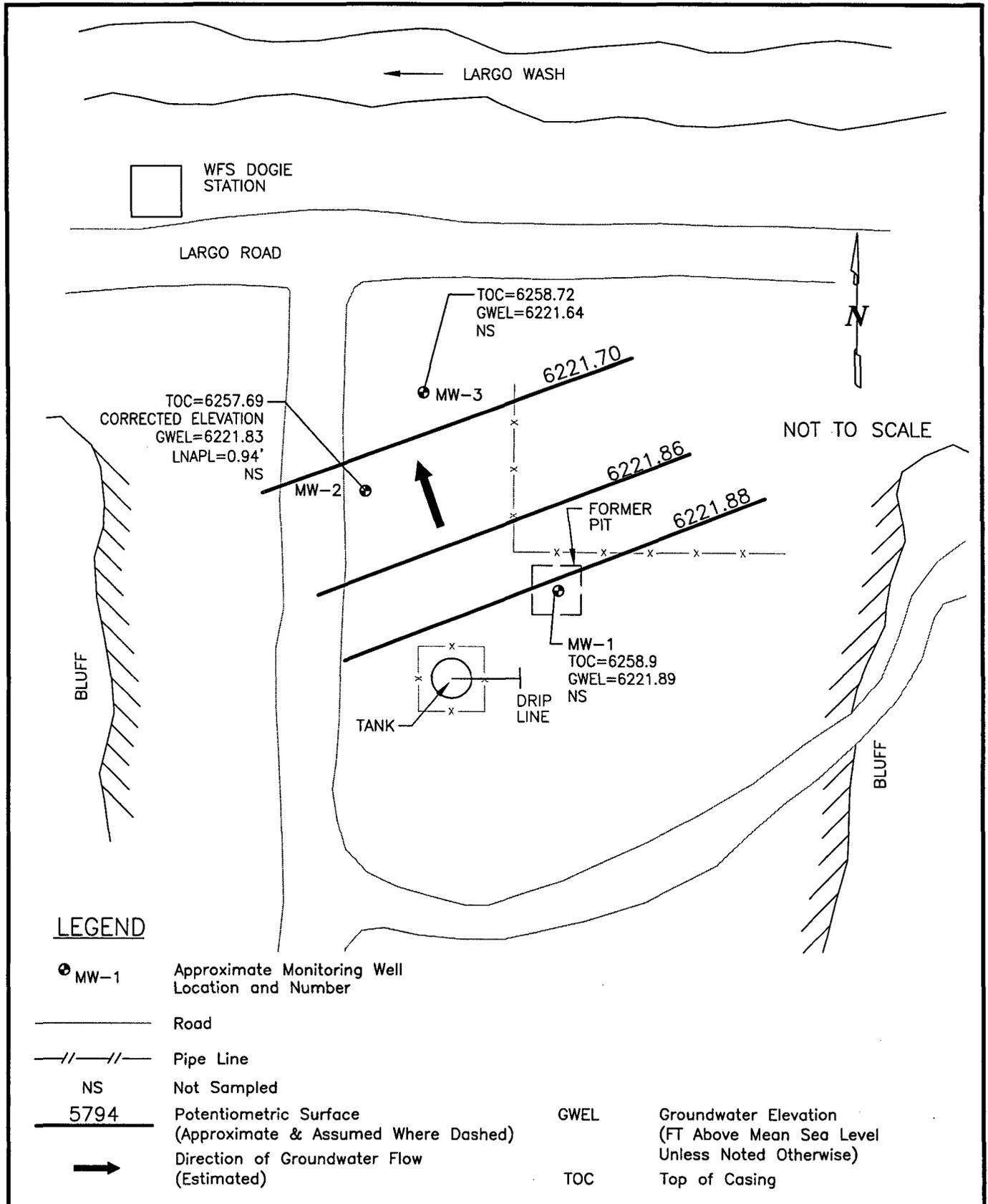
- EPFS will continue to perform free-product removal activities at MW-1 and MW-2 on a quarterly basis.
- EPFS recommends redevelopment of MW-1 and MW-2 in an attempt to increase free-product recovery.
- EPFS will continue to monitor MW-3 for the presence of free-product and groundwater levels on a quarterly basis.
- Once free-product recovery efforts are completed at this site, each well will be sampled on an annual basis until sample results approach closure criteria. The wells will then be scheduled for quarterly sampling until closure criteria are met.



K-27 LINE DRIP, METER LD072
JANUARY, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 1

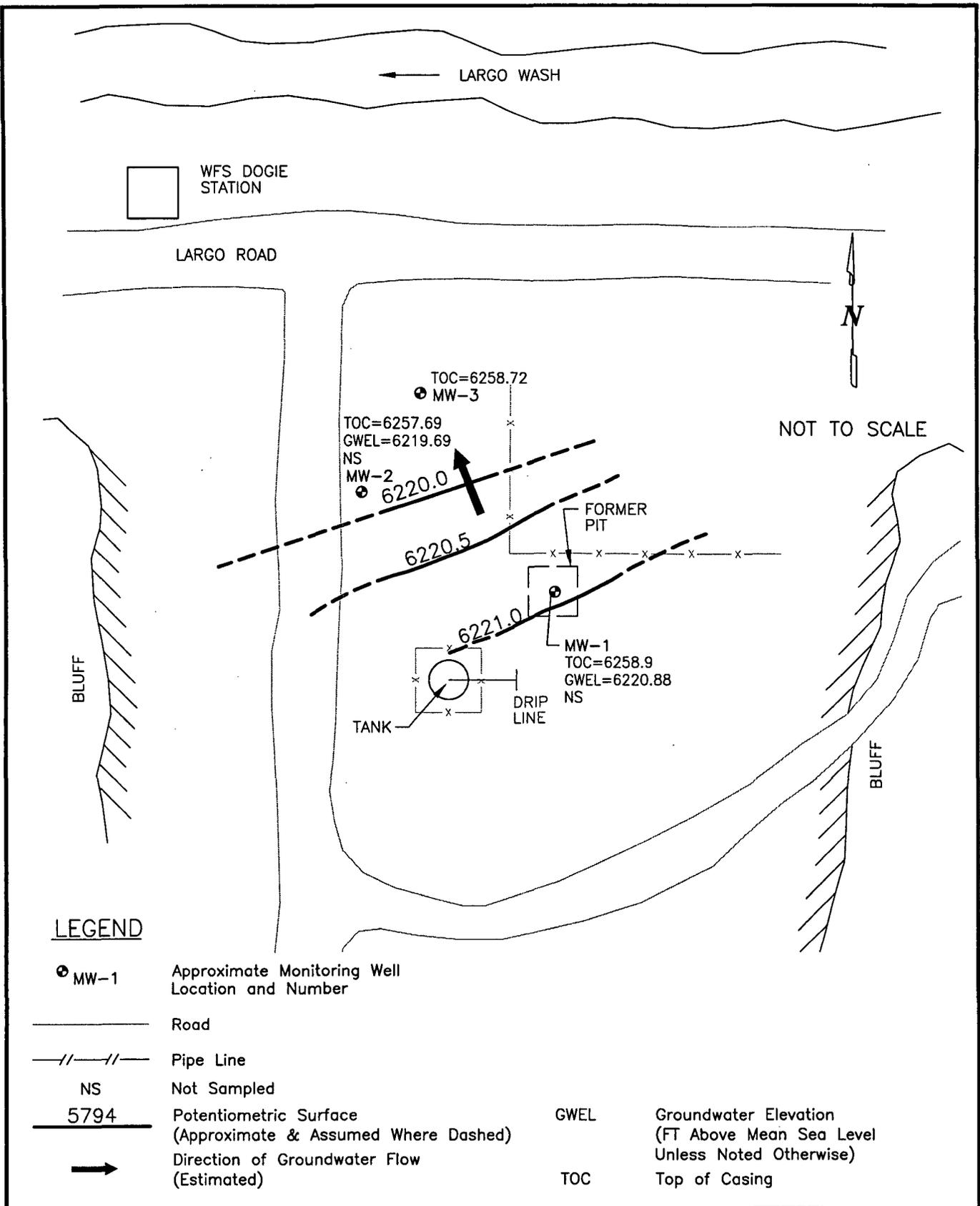


K-27 LINE DRIP, METER LD072
APRIL, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 2

k27ld_02.dwg



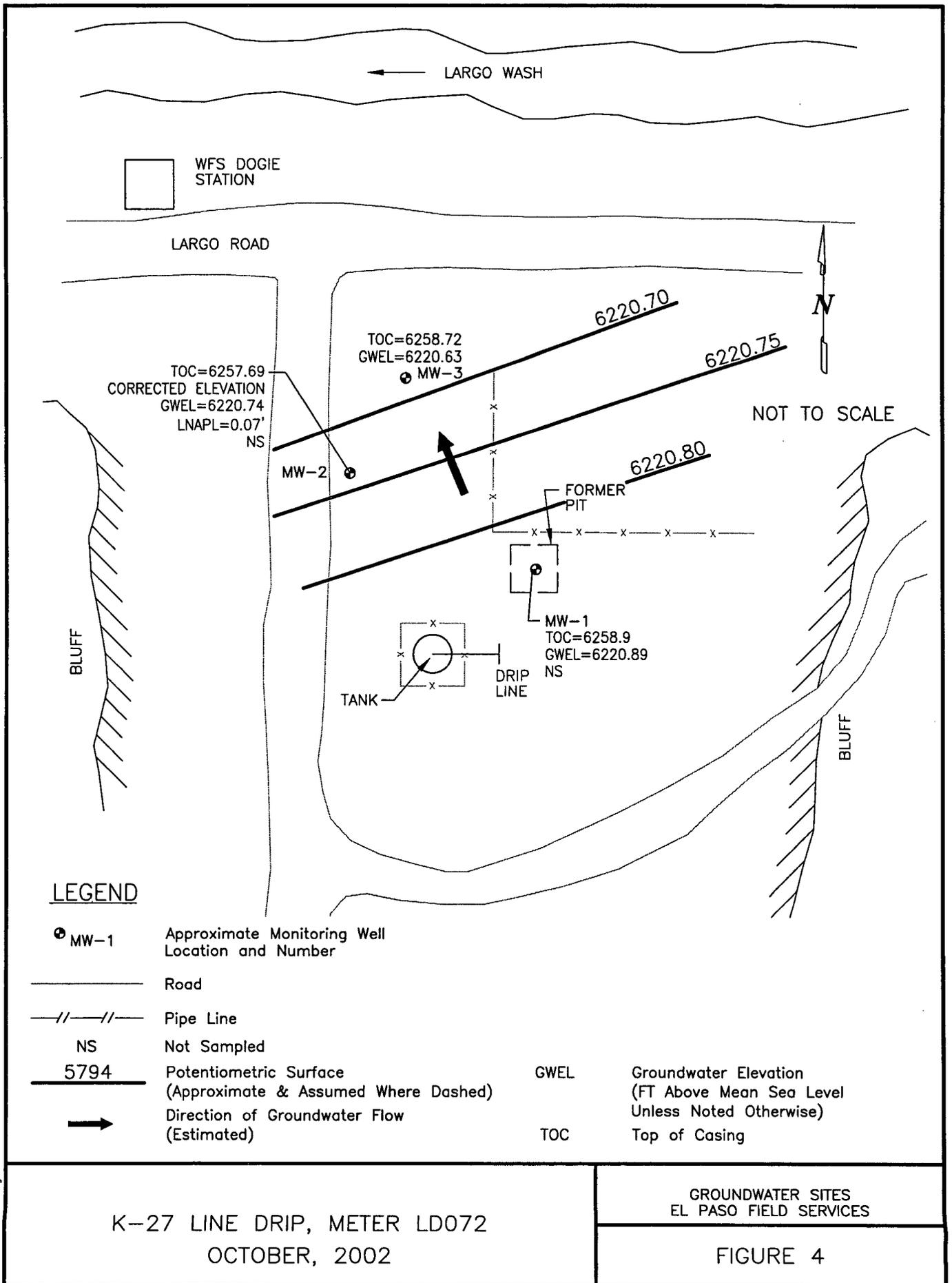
LEGEND

- ⊕ MW-1 Approximate Monitoring Well Location and Number
- Road
- /-/-/- Pipe Line
- NS Not Sampled
- 5794 Potentiometric Surface (Approximate & Assumed Where Dashed)
- Direction of Groundwater Flow (Estimated)
- GWEL Groundwater Elevation (FT Above Mean Sea Level Unless Noted Otherwise)
- TOC Top of Casing

K-27 LINE DRIP, METER LD072
JULY, 2002

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 3



k27ld_02.dwg

Figure 5
 Historical BTEX Concentration and Groundwater Elevation vs. Time
 K-27 Line Drip (Meter # LD072)
 MW-1

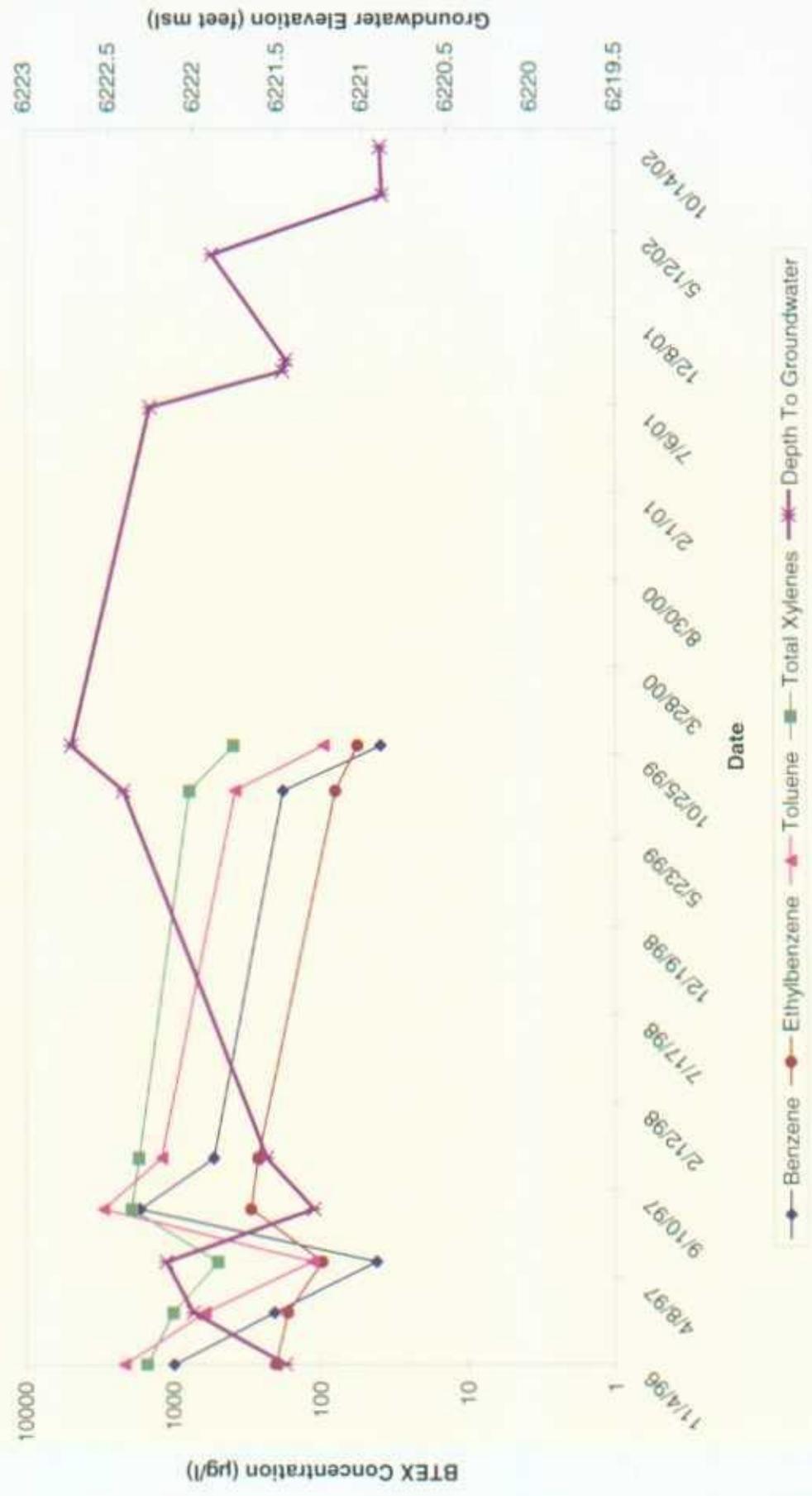


TABLE 1

SUMMARY OF FREE-PRODUCT RECOVERY
K-27 LINE DRIP (METER #LD072)
 (Page 1 of 1)

MW Identification	Date	Depth to Product (feet bgs)	Depth to Water (feet bgs)	Product Thickness (feet)	Volume Removed (gallons)	Cumulative Removed (gallons)
1	01-Apr-2002	NA	37.01	0.00	0.00	1.25
1	15-Jul-2002	37.85	38.02	0.17	0.50	1.75
1	08-Oct-2002	38.00	38.01	0.01	0.02	1.77
2	02-Jan-2002	35.87	36.97	1.10	0.75	2.10
2	01-Apr-2002	35.67	36.61	0.94	0.50	2.60
2	08-Oct-2002	36.94	37.01	0.07	0.08	2.68
3	01-Apr-2002	NA	37.08	0.00	0.00	0.00
3	15-Jul-2002	NA	37.13	0.00	0.75	0.75
3	08-Oct-2002	NA	38.09	0.00	0.00	0.75

Figure 6
 Summary of Free-Product Recovery
 K-27 Line Drip (Meter #LD072)
 MW-1

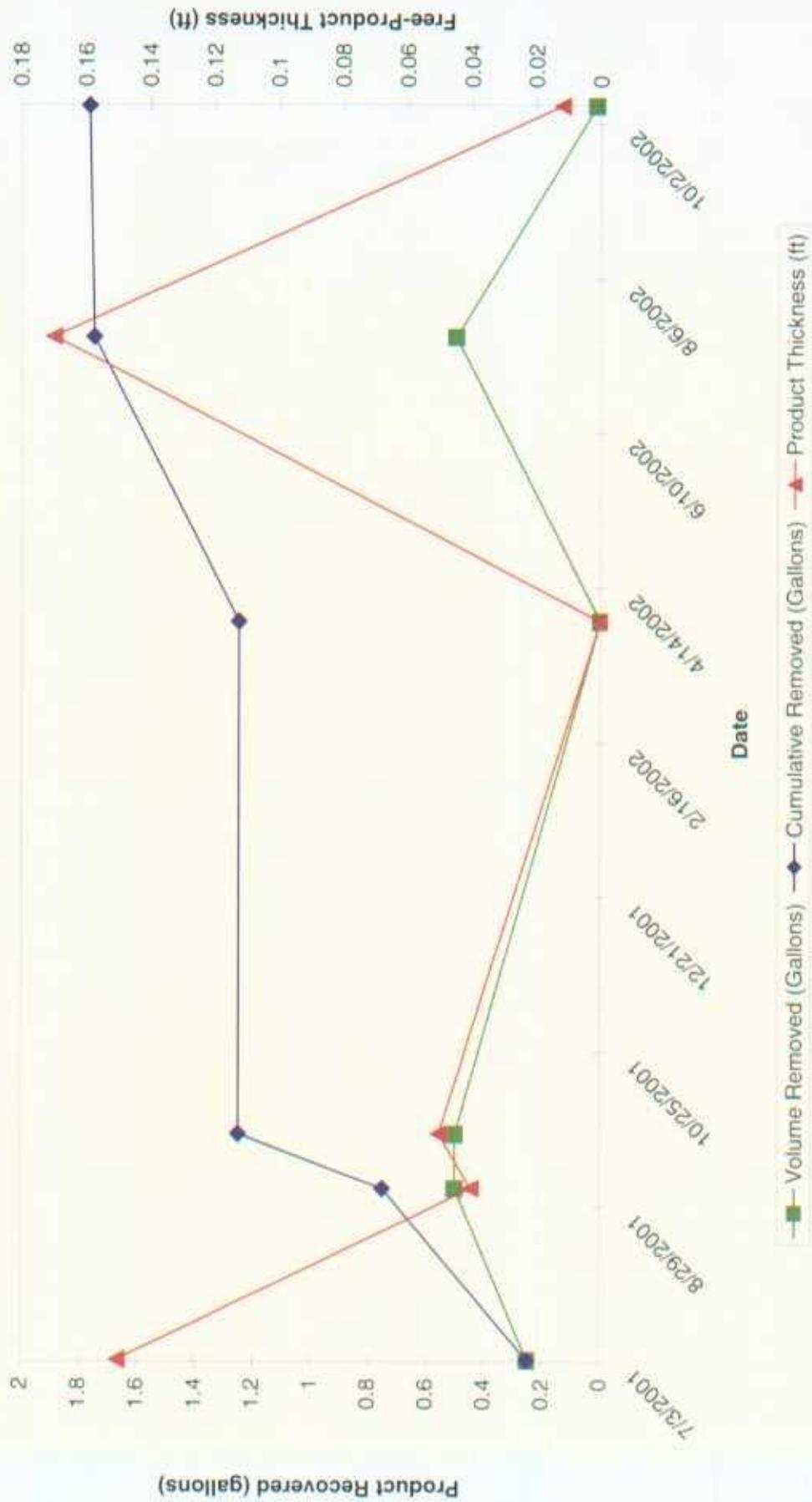
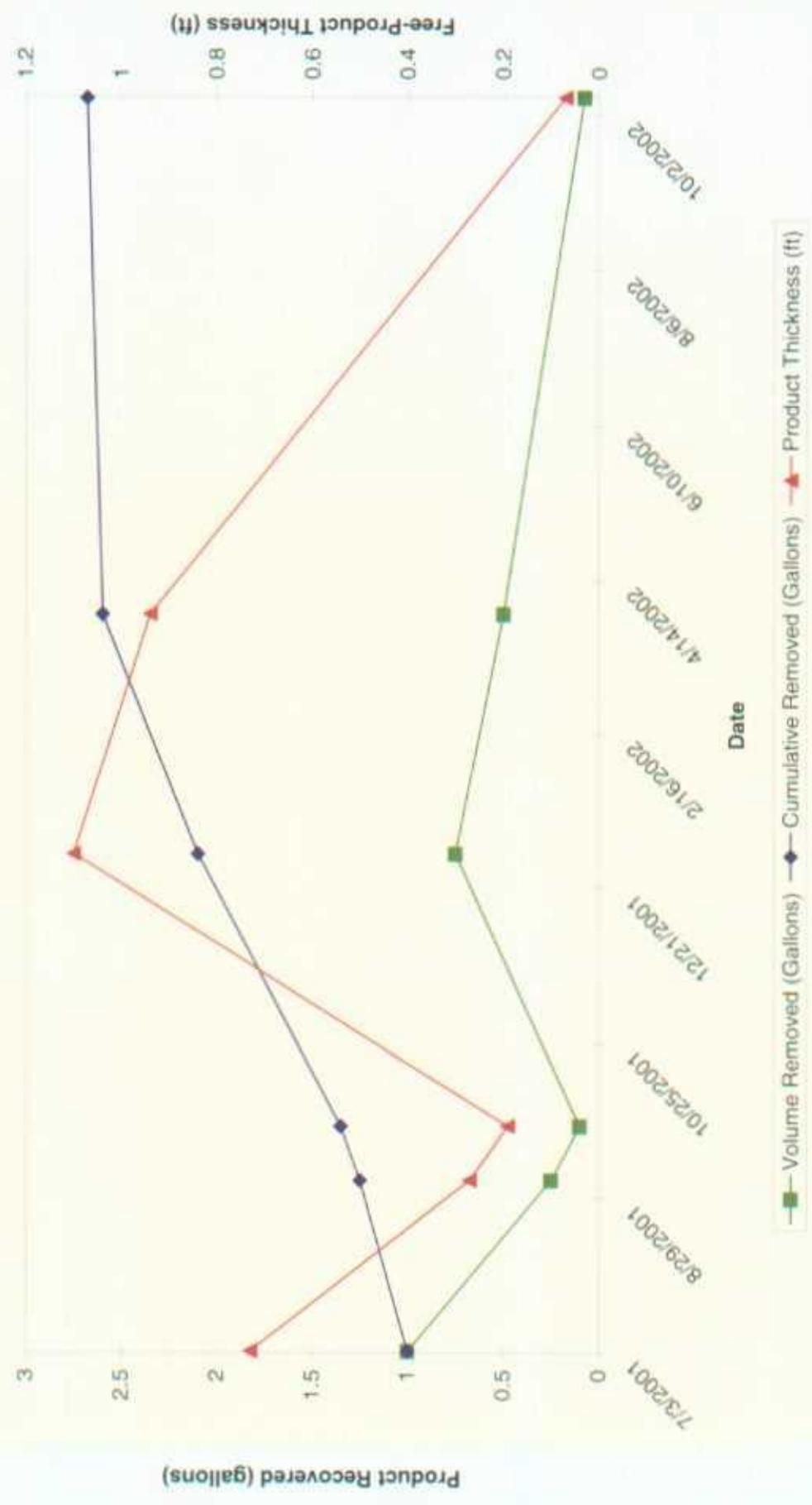


Figure 7
 Summary of Free-Product Recovery
 K-27 Line Drip (Meter #LD072)
 MW-2



ATTACHMENT 1
FIELD DOCUMENTATION

Product Recovery and Well Observation Data

Project Name: San Juan River Basin
 Project Manager: Ashley Lowe
 Client Company: MWH
 Site Name: K-27

Project No: 220013
 Date: 10-8-02

Well	Time	Depth to Water (ft)	Depth to Product (ft)	Total Well Depth (ft)	Product Thickness (ft)	Volume Removed	Comments
MW-3	11:45	38.085	NA	42.84	0	0	
MW-1	11:52	38.010	37.998	51.25	0.012	~ 2 oz	
MW-2	12:22	37.01	36.94	46.67	0.07	~ 10 oz	

COMMENTS:

MW-2: light yellow product. Also removed very black oil-water-silt mixture (~2 gal)

MW-1: barely enough product to measure. When bailed, did not form complete layer, but bubbles on top of water. Also bailed ~1 gal of very black, odorous water-product-silt mixture.

Signature: Ashley Lowe Date: 10/8/02

AESE

PRODUCT RECOVERY

906 San Juan Blvd. Ste. D
 Farmington, NM 87401
 505.566.9116(9120fax)

Project Name San Juan River Basin Field Program

Project No. _____

Project Manager Ashley Lowe

Date 07/15/02

Client Company Montgomery Watson Harza

Site Name K-27 Line Drip

Well	Meter/Line No.	Time	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Volume Removed
MW-1		14:25	37.85'	38.02'	0.17'	~ 1/2 gal
MW-3		14:40	37.13'	none	5.71'	~ 3/4 gal

TD = 51.25'
 TD = 42.84'

Comments MW-1: very little product amount, but strong odor light-yellow in color; during recovery, product level did not decrease considerably. Called after 1/2 gal was bailed for ~20 mins.

After measuring total depth (TD), dark gray fine silt came back on bottom of probe

Signature Ashley Lowe Date 07/15/02

MW-3: Oil-water interface probe indicated no product, but bailer was full of product & no water. Probe contained very dark black odorous & sandy product on float, which probably affected probe sensor. Product was light yellow in color. It floated on a mucky dark black oil-water mix. "Colloquial" suspension of black ~~substance~~ substance in yellow product. Bailed entire amount of yellow product. Well still contains crude-water mix.



"martin nee"
<Martin.Nee@aese.co
m>

To: <Marc.S.Greeley@us.mwhglobal.com>
cc:
Subject: RE: K-27 Line Drip Question

02/18/2003 08:08 AM
Please respond to
Martin.Nee

Ashley's field notes indicate that the depth to water was 37.125 btoc. The probe did not indicate product, i.e. no solid tone. After retrieving the bailer it was full of product. Ashley described the product as light yellow product floating on mucky dark black mix, "colloidal" suspension of black stuff in yellow liquid. Her notes go on to say "no product indicated w/probe, but all product in bailer - probe float probably stuck in muck.

I believe the 37.125 was a water level and no product measurement was recorded.

She didn't realize there was product there until after a bailer was removed and by then it was too late to get an accurate depth to product measurement.

Martin

-----Original Message-----

From: Marc.S.Greeley@us.mwhglobal.com
[mailto:Marc.S.Greeley@us.mwhglobal.com]
Sent: Monday, February 17, 2003 2:04 PM
To: martin.nee@aese.com
Cc: lynn.benally@elpaso.com; Marc.S.Greeley@us.mwhglobal.com
Subject: K-27 Line Drip Question

Martin,

We are in the final stages of cranking out the GW sites annual report and I have a question regarding a product measurement taken on 7/15/02 at the K-27 Line Drip site. We show a product measurement at MW-3 of 37.13 feet bgs, no water was detected, and only 0.75 gallons recovered. This is a strange data point considering that we haven't really found any product in that well, and that the product was completely gone three months later. Please double check any field notes or other resources that you may have to check to make sure that the measurement was accurate. It actually seems believable if you use the depth to product value in the depth to water. Please let me know as soon as you can.

m

Marc Greeley
Supervising Environmental Scientist
MWH Salt Lake City
801.617.3456 (office)

