

3R - 176

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.

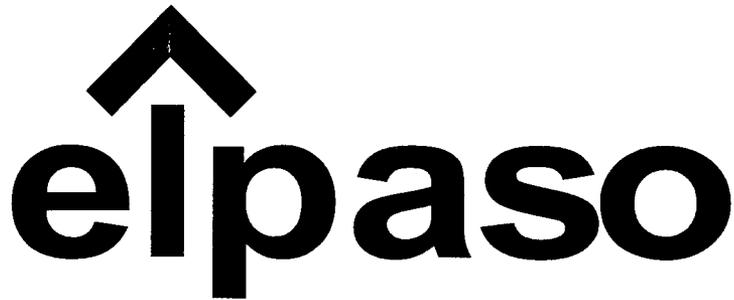
If you have any questions concerning the enclosed reports, please call me at (505) 599-2124.

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 Navajo Sites (Volume 3)

March 2003



MWH

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

EL PASO FIELD SERVICES ANNUAL GROUNDWATER REPORT

NAVAJO SITES VOLUME III

TABLE OF CONTENTS

Site Map

METER or LINE ID	SITE NAME	TOWNSHIP	RANGE	SECTION	UNIT
71816	Jennepah #1	28N	09W	36	H
95608	Gallegos Canyon Unit #124E	28N	12W	35	N
93126	John Charles #8	27N	09W	13	B
75155	Ramenta et al #1	27N	09W	13	J
71531	Charley Pah #4	27N	09W	12	K



MWH

MONTGOMERY WATSON HARZA

ACRONYMS

B	Benzene
E	Ethylbenzene
EPFS	El Paso Field Services
ft	foot/feet
GWEL	groundwater elevation
ID	identifier
MW	Monitoring Well
PSH	Phase Separated Hydrocarbons
NMWQCC	New Mexico Water Quality Control Commission
T	Toluene
TOC	Top Of Casing
NE	not established
NS	not sampled
ORC	oxygen release compound
OCD	Oil Conservation Division
ppb	parts per billion
µg/L	micrograms per liter
X	Total Xylenes

**EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT**

**GCU #124E
Meter Code: 95608**

SITE DETAILS

LEGAL DESCRIPTION: Twn: 28N Rng: 12W Sec: 35 Unit: N
NMOCD Haz Ranking: 20 **Land Type:** Navajo **Operator:** Amoco Production

PREVIOUS ACTIVITIES

Site Assessment: Jan-95 **Excavation:** Oct-95 (196 cy) **Soil Boring:** Mar-98
Monitor Well: Jun-98 **Geoprobe:** NA **Additional MWs:** *
Downgradient MWs: * **Replace MW:** NA **Quarterly Initiated:** Jun-98
ORC Nutrient Injection: NA **Re-Excavation:** NA **PSH Removal Initiated:** Apr-99
Annual Initiated: NA **Quarterly Resumed:** NA

* Attempts were made in November 2000 to install additional wells that resulted in dry holes.

SUMMARY OF 2002 ACTIVITIES

MW-1:

- Weekly free-product recovery was performed through July 15, 2002. Because only minimal amounts of free-phase hydrocarbons were recovered during the first half of the year, the frequency of product removal activities were reduced to quarterly after July 2002.
- A routine inspection of the passive skimmer in MW-1 indicated that replacement was required. Pending replacement of the skimmer unit, product was removed by hand-bailing after August 2002.

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

SUMMARY TABLES AND GRAPHS

- Product removal data are summarized in Table 1, and presented graphically in Figure 2.
- Historical analytical data along with current groundwater elevation data are presented graphically in Figure 3.
- Field documentation is presented in Attachment 2.

SITE MAP

A site map is attached as Figure 1.

EPFS GROUNDWATER SITES
2002 ANNUAL GROUNDWATER REPORT

GCU #124E
Meter Code: 95608

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

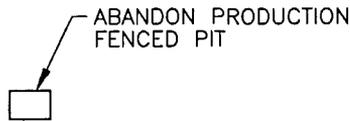
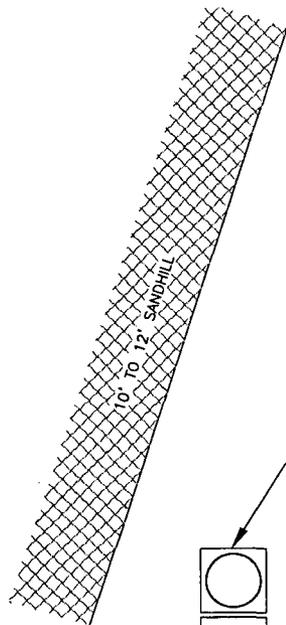
No isoconcentration maps were generated for this site. However, the attached site map presents the depth to water and product removal data collected during 2002.

CONCLUSIONS

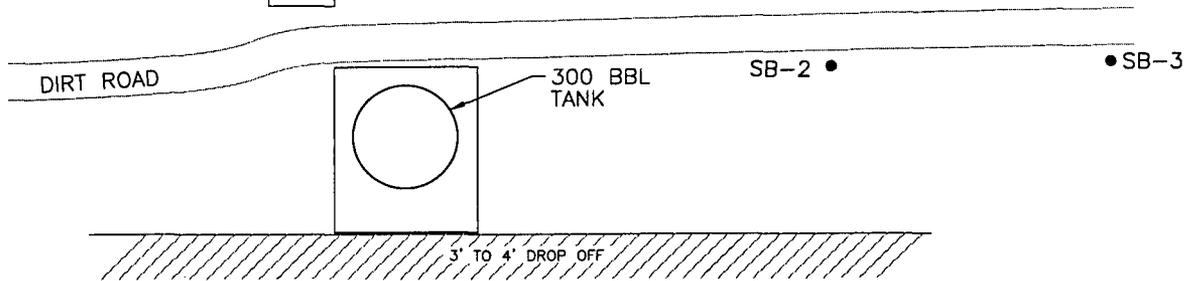
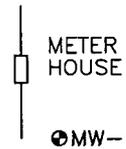
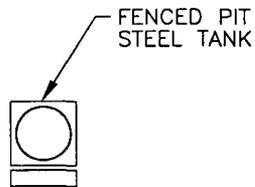
- The free-product recovery rate remained steady at MW-1 with a total of 0.97 gallons of free-phase hydrocarbons recovered during 2002 as compared with 1.06 gallons of recovered hydrocarbons during 2001.
- A total of 18.94 gallons of free-product have been removed from MW-1 since 1999.

RECOMMENDATIONS

- EPFS intends to redevelop MW-1 in an attempt to increase the free-product recovery rate.
- Following redevelopment of MW-1, the passive skimmer system will be replaced.
- When free-product removal is completed at MW-1, this well will be sampled annually until BTEX constituents approach federal and New Mexico OCD standards. Sampling will then continue on a quarterly basis until dissolved contaminant concentrations are below federal and New Mexico OCD standards for three and four consecutive quarters, respectively.
- Following approval for closure by both the Navajo Nation EPA and New Mexico OCD, all monitoring wells will be removed according to the approved EPFS Monitoring Well Abandonment Plan.

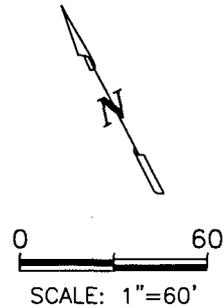


MW-1	DEPTH TO WATER (FEET)	PRODUCT VOLUME REMOVED (GALLONS)
1/2/02	28.96	0.16
4/3/02	29.33	0.01
7/2/02	29.99	0.0
10/16/02	29.65	0.008



LEGEND

- ⊕ MW-1 Approximate Monitoring Well Location and Number
- Dry 2000 Borehole



gallegos124_02.dwg

GALLEGOS CANYON UNIT 124E
METER 95608

GROUNDWATER SITES
EL PASO FIELD SERVICES

FIGURE 1

TABLE 1

SUMMARY OF FREE-PRODUCT RECOVERY
 GALLEGOS CANYON UNIT #124E (METER #95608)
 (Page 1 of 2)

MW Identification	Sample Date	Depth to Product (bgs feet)	Depth to Water (bgs feet)	Product Thickness (bgs feet)	Volume Removed (gallons)	Cumulative Volume Removed (gallons)
1	02-Jan-2002	28.85	28.96	0.11	0.16	18.01
1	07-Jan-2002	28.94	28.99	0.05	0.38	18.39
1	23-Jan-2002	26.35	29.35	3.00	0.11	18.50
1	30-Jan-2002	29.22	29.24	0.02	0.01	18.51
1	07-Feb-2002	29.66	29.70	0.04	0.38	18.89
1	14-Feb-2002	29.28	29.29	0.01	0.01	18.90
1	20-Feb-2002	29.75	29.76	0.01	0.01	18.91
1	04-Mar-2002	NA	29.30	0.00	0.01	18.92
1	11-Mar-2002	NA	29.17	0.00	0.01	18.93
1	21-Mar-2002	NA	29.47	0.00	0.01	18.94
1	28-Mar-2002	NA	29.33	0.00	0.01	18.95
1	03-Apr-2002	NA	29.33	0.00	0.01	18.96
1	12-Apr-2002	NA	29.70	0.00	0.00	18.96
1	18-Apr-2002	NA	29.31	0.00	0.00	18.96
1	25-Apr-2002	NA	30.11	0.00	0.00	18.96

TABLE 1

SUMMARY OF FREE-PRODUCT RECOVERY
 GALLEGOS CANYON UNIT #124E (METER #95608)
 (Page 2 of 2)

MW Identification	Sample Date	Depth to Product (bgs feet)	Depth to Water (bgs feet)	Product Thickness (bgs feet)	Volume Removed (gallons)	Cumulative Volume Removed (gallons)
1	03-May-2002	NA	30.18	0.00	0.00	18.96
1	10-May-2002	NA	30.25	0.00	0.00	18.96
1	17-May-2002	NA	29.57	0.00	0.00	18.96
1	24-May-2002	NA	29.70	0.00	0.00	18.96
1	31-May-2002	NA	29.54	0.00	0.00	18.96
1	07-Jun-2002	NA	29.42	0.00	0.00	18.96
1	12-Jun-2002	NA	29.21	0.00	0.00	18.96
1	21-Jun-2002	NA	30.12	0.00	0.00	18.96
1	27-Jun-2002	NA	30.18	0.00	0.00	18.96
1	02-Jul-2002	29.98	29.99	0.01	0.00	18.96
1	11-Jul-2002	NA	30.06	0.00	0.00	18.96
1	15-Jul-2002	NA	29.63	0.00	0.01	0.01
1	16-Oct-2002	29.24	29.65	0.41	0.01	0.01

Figure 2
Free-Product Recovery vs. Time
Gallegos Canyon Unit #124E (Meter #95608)
MW-1

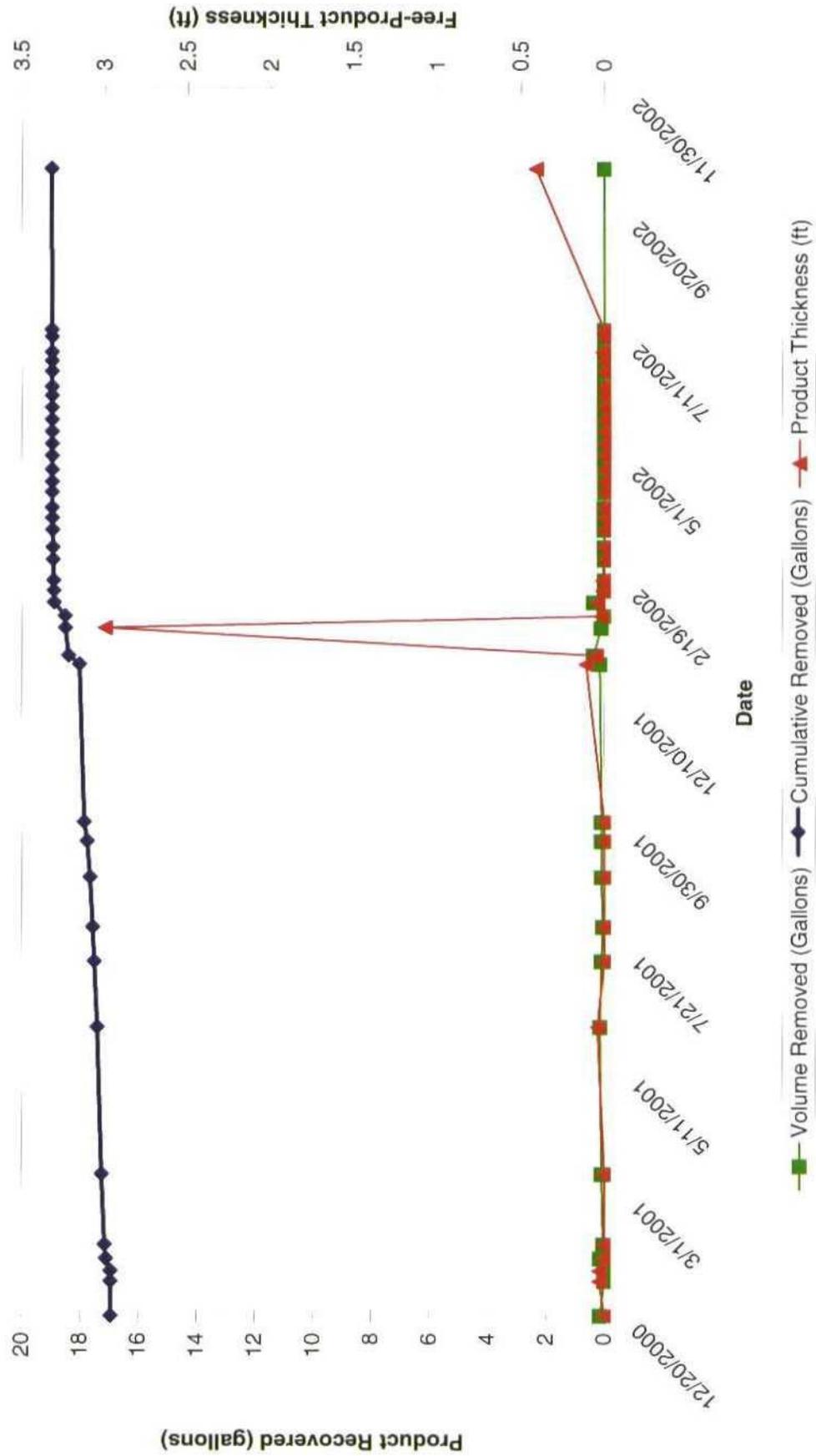
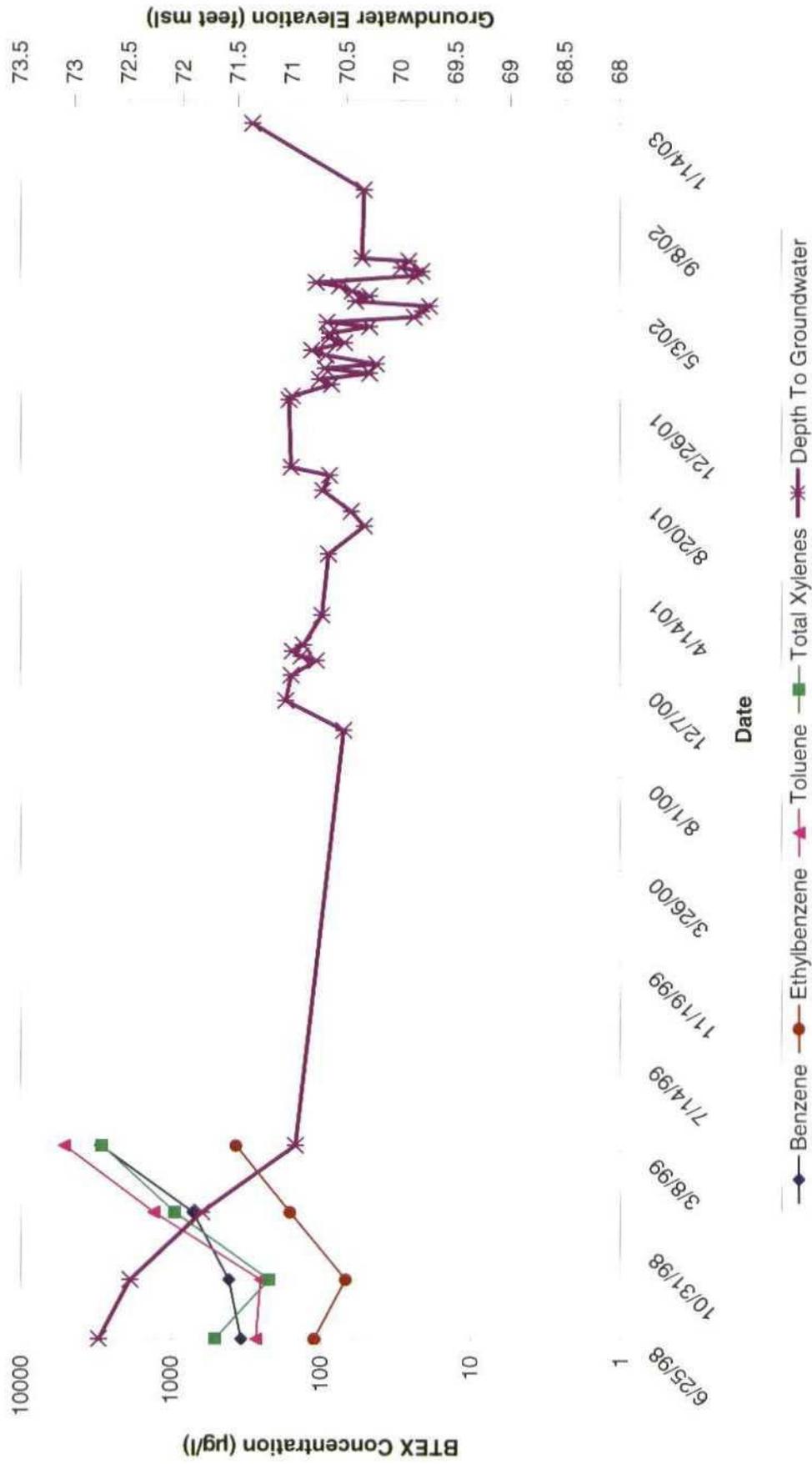


Figure 3
Historical BTEX Concentration and Groundwater Elevation vs. Time
Gallegos Canyon Unit #124E (Meter #03905)
MW-1



ATTACHMENT 1
FIELD DOCUMENTATION

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 Gallegos 124E

Well	Meter/Line No.	Time	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Volume Removed
MW4		11:15	no prod	29.63'	0.00	~1oz

Comments no product indicated by oil-water interface probe
very black, viscous, sandy material on bottom of probe after
measuring total depth

Left skimmer resting on bottom of well

Total Depth = 36.66' BTOC

no ~~mark~~ mark on casing - measured from North side of casing

Signature Ashley Lowe Date 07/15/02

Faxed 07/15/02

