2R - 6

REPORTS

DATE:
APRIL 1997

Remediation System Operations

1997 First Quarterly Report

Amoco Pipeline Station
Artesia, New Mexico

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April 30, 1997

Clayton Mittelhauser

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1.0 INTRODUCTION

This report summarizes the results of the remediation system operations for the period of January 16, 1997 through April 15, 1997.

The primary objectives of the remediation system continue to have been met since the system installation, namely:

- Approximately 131 gallons of product have been recovered.
- No free product has been observed in the downgradient wells.

No oil was recovered in the fourth quarter. For most of 1996 the only oil that was recovered was the oil that was placed in the recovery tank from wells which were bailed. Free product is not reaching the interception trench, and free product appeared in only two of the three wells (MW-10, MW-12, and MW-13) located in close proximity and north of the trench. The levels in the wells (MW-10 and MW-13) were only .05 feet and .02 feet. These were exactly the same levels observed on 1/10/97.

The air stripper continues to have operational problems. During the first quarter a lightning strike caused failure on the coyote pump protector, which was replaced. Failure of the pump protector also led to failure of the pumps in the interception trench, which were also replaced.

The discharge limit from the air stripper for benzene, for the sample taken on 4/02/97, was slightly exceeded, but the discharge limits for ethylbenzene, toluene, and xylene were met.

As promised in the last report, an evaluation of the remediation system operation was conducted during the first quarter of 1997 to determine what changes should be made to the operation of the system. These proposed changes are described in Section 1.1.

As previously stated, the cleanup objectives for the landfarming area were met in 1996 for TPH as gas and diesel. A dramatic reduction in the TPH value as oil was achieved, but the values still slightly exceed the objective of 5,000 mg/Kg. Landfarming was suspended in November 1996 and will resume during the next quarter. The landfarming will continue until the cleanup objectives are met.

1.1 RECOMMENDED CHANGES IN THE SYSTEM OPERATION

Amoco has conducted a review of the system operations. The major conclusions are:

- There is no movement of free product to the interception trench. Free product levels in all wells have remained essentially constant for the last 5 quarters.

- Only one well (MW-2) has product in excess of .16 feet. This well is located approximately 3,000 feet north of the interception trench.

- The oil water separator is serving no purpose since free product in not reaching the interception trench.

- The air stripper has experienced numerous operational difficulties. The difficulties have included failure due to calcium deposits, mechanical failure due to lightning, and the corrosive effects due to the high H_2S content.

For the reasons stated above, we plan to discontinue operations of the air stripper and to do the following:

- Obtain samples from MW-11 and MW-14 on a quarterly basis and determine the BETX concentrations.

- Install Oxygen Releasing Compounds (ORCs) in the three sumps within the interception trench in order to enhance in the biodegradation of any BETX reaching the trench.

- Bail MW-2 on a quarterly basis if the free product level exceeds 1.0 feet. If the well continues to recharge to over 1.0 feet each quarter, develop a more aggressive product recovery system.

- Prepare annual, rather than quarterly reports unless a significant change in the system operation occurs (such as the occurrence of free product in MW-11 or MW-14).

- Dismantle the air stripper and associated equipment (e.g., oil/water separator and pumps) after 2 more quarters unless significantly elevated BETX levels are detected in MW-11 or MW-14. The results of analysis of samples from the next two quarters will be submitted to the Oil Conservation Division, and approval to dismantle the air stripper will be requested before the actual dismantling. If significant levels of BETX are observed in these wells after the air stripper system is dismantled, a risk-based assessment of the effects of the BETX, incorporating the results of natural attentuation, will be made.

2.0 LABORATORY RESULTS

2.1 MONTHLY BETX RESULTS FOR THE INFLUENT AND EFFLUENT OF THE AIR STRIPPER

The samples for the influent and effluent of the air stripper were taken on 4/02/97. The results from this sampling event are summarized in Table 1. All figures and tables are presented at the end of the text before the appendices. The analytical results are presented in Appendix A. Samples were not obtained at other times due to failure of the pump protector and pumps, as described in the introduction.

2.2 QUARTERLY BETX RESULTS FOR MONITORING WELLS WITH NO FREE PRODUCT

The quarterly BETX results for monitoring wells which did not contain free product are presented in Table 2. The analytical results are presented in Appendix A for the samples taken on 4/02/97.

The two monitoring wells south of the interception trench (monitoring wells MW-11 and MW-14) have never shown any indication of free product. In addition, neither those wells, or any other well, show the presence of BETX.

3.0 PRODUCT THICKNESS

Product thickness measurements were taken in the monitoring wells during the April sampling event. Table 3 contains product thickness information. The free product thickness map is shown in Figure 9. The product thickness maps from January 10, 1997; September 30, 1996; April 16 and 17, 1996; November 25 and 26, 1995; October 2, 1995; June 16, 1995; February 9, 1995; and July 2, 1996 are shown in Figures 8,7, 6, 5, 4, 3, 2, and 1. It is clear from the data that the product thickness has decreased in all of the wells (with the exception of Well No. 2) over the duration of the remediation period. In addition, the product thickness has remained essentially constant in all wells containing free product for the last 5 quarters.

4.0 FLUIDS PUMPED

Due to the failure of the pump protector and pumps, the air stripper operated only intermittently during the quarter. On 4/02/97 the pumping rate was 17.5 GPM, which is typical of prior pumping rates when the air stripper was receiving water from the interception trench. The average pumping rate has been approximately 6 GPM.

No oil was recovered between January 1997 and April 1997. As noted in the Introduction, there currently appears to be no movement of the oil. The only well showing a depth in excess of .16 feet is Well No. 2, which is near the storage tank. The wells in closest proximity to the interception trench (8, 10, 12, 13) contain .05 feet of product, or less.

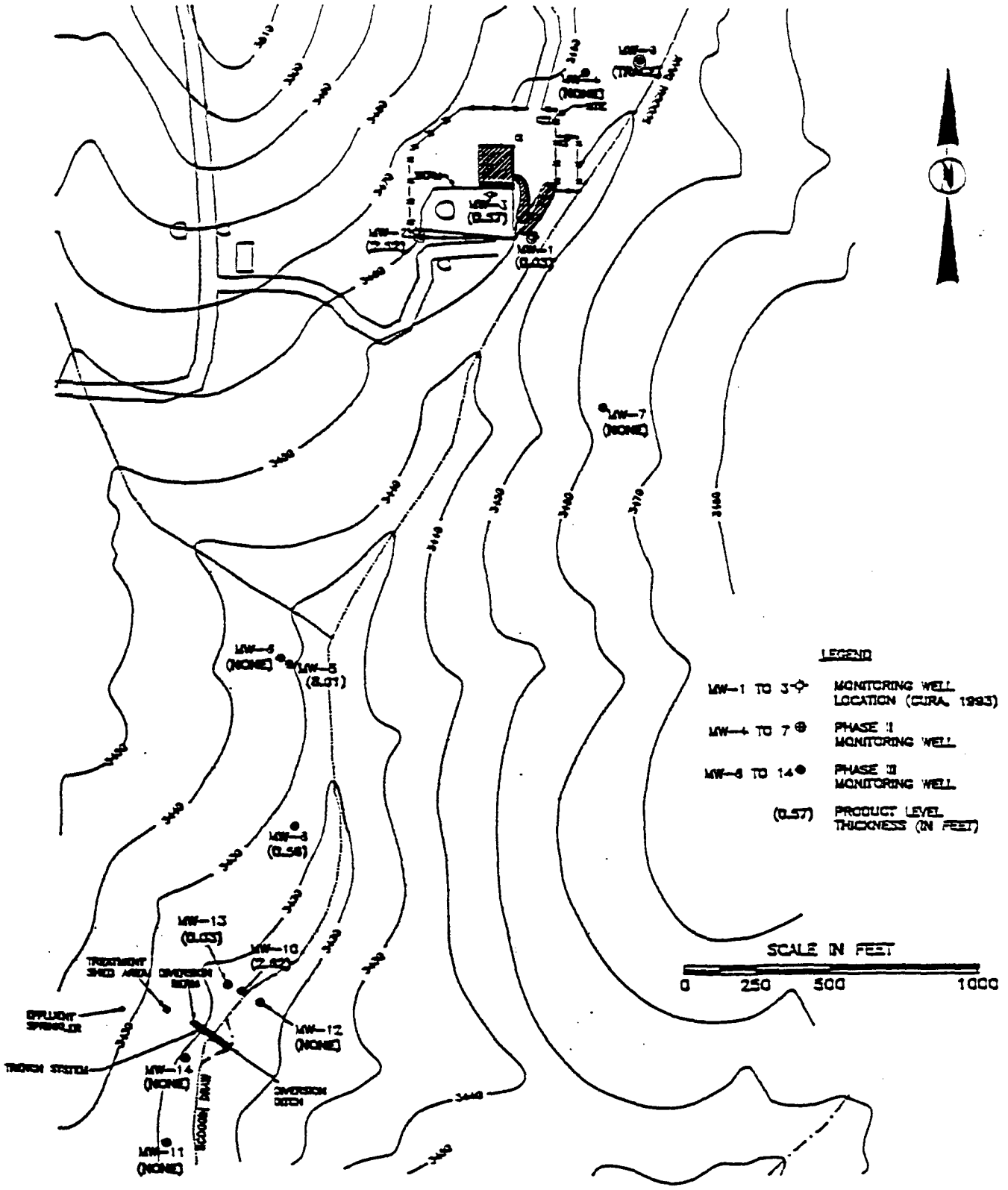
5.0 SOIL REMEDIATION

The soil remediation program began in early 1995. The remediation goal is TPH values of 5,000 mg/Kg, expressed as gas, diesel, or oil. The table below summarizes all results, to date:

Sampling Date	Average TPH Values (Values in mg/Kg)			
	As Gas	As Diesel	As Oil	Number of Samples
4/27/95	<100	5,847	44,433	3
7/28/95	<100	1,149	34,130	3
10/12/95	<10	<100	6,247	3
12/29/95	<100	4,200	19,666	3
4/22/96	<10	<10	6,750	3
6/28/96	<100	<100	9,700	4
7/2/96	<50	<50	6,673	9
10/14/96	<10	1,333	6,386	9

All analytical results are included in previous quarterly reports. As shown by the table, the TPH goals for gas and diesel have been met, while the TPH goal as oil has not yet been met. Disking and sampling were discontinued in November 1996 due to the low biological activity and frozen soils encountered during the winter months. Disking and sampling will begin again in the second quarter of 1997 until the TPH goal as oil is met.

FIGURES



CHECK BY	HMM
DRAWN BY	BCP
DATE	5-3-95
SCALE	AS SHOWN
CAD NO.	2773.00-02
PRJ NO.	2773:02C

FREE PRODUCT
THICKNESS MAP
FEBRUARY 9, 1995

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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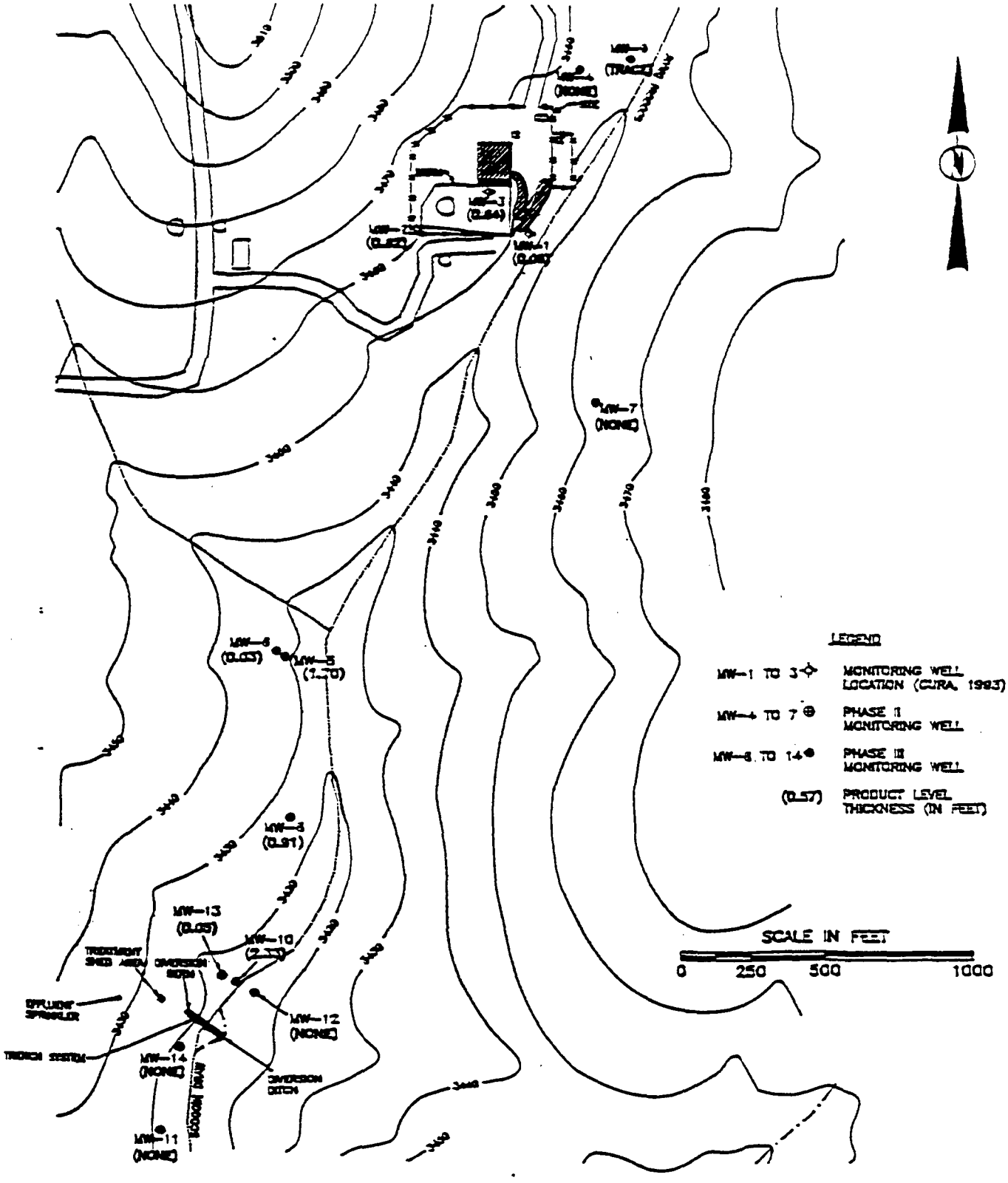
FIGURE 1



CHECK BY	HMM
DRAWN BY	BCP
DATE	7-25-95
SCALE	AS SHOWN
CAD NO.	27751025
PRJ NO.	2775.00-02

FREE PRODUCT THICKNESS MAP
JUNE 16, 1995

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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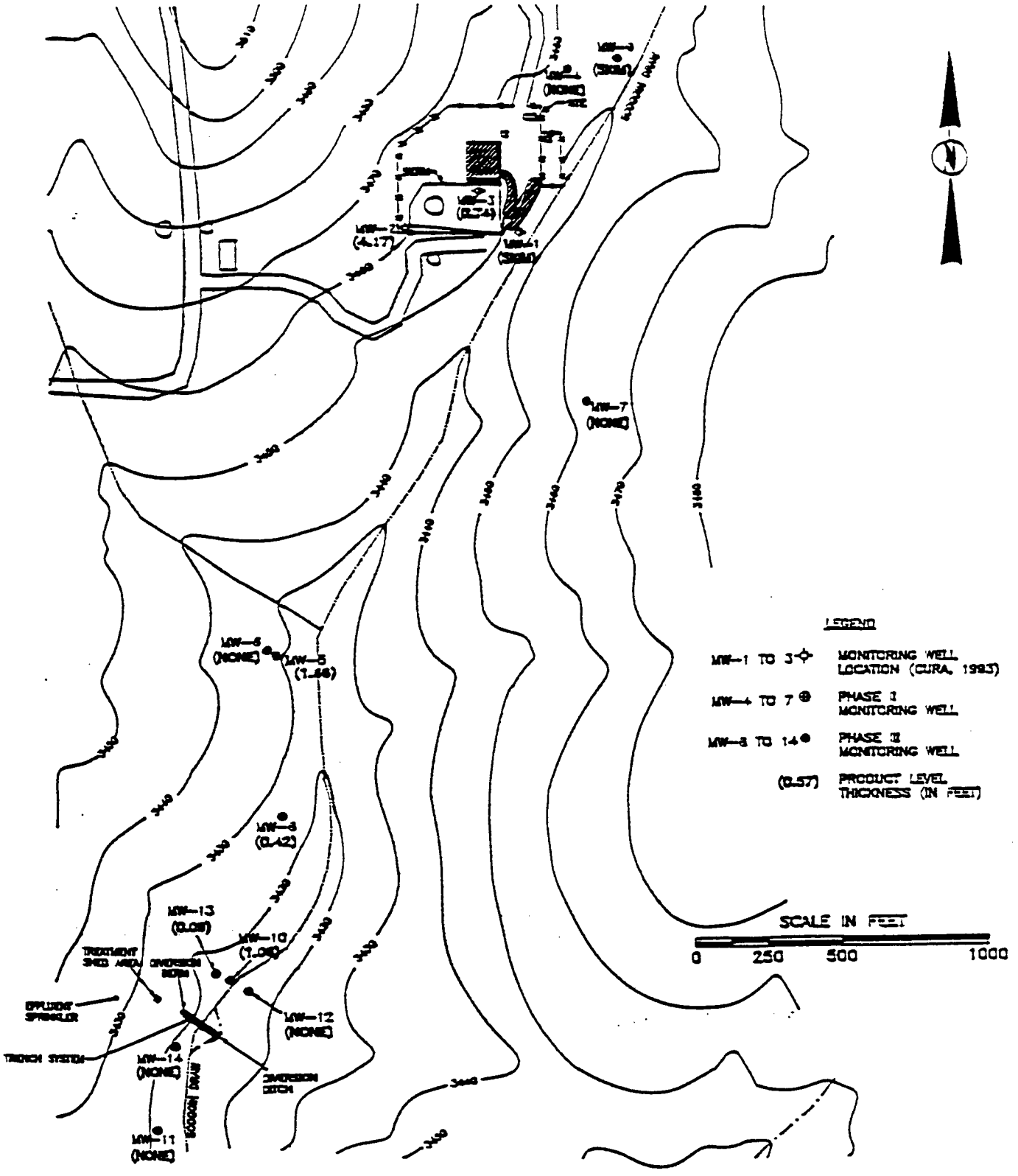
FIGURE 2



CHECK BY	HMM
DRAWN BY	BCP
DATE	10-16-95
SCALE	AS SHOWN
CAD NO.	2775.00-02
PRJ NO.	27751C2F

FREE PRODUCT THICKNESS MAP
OCTOBER 2, 1995

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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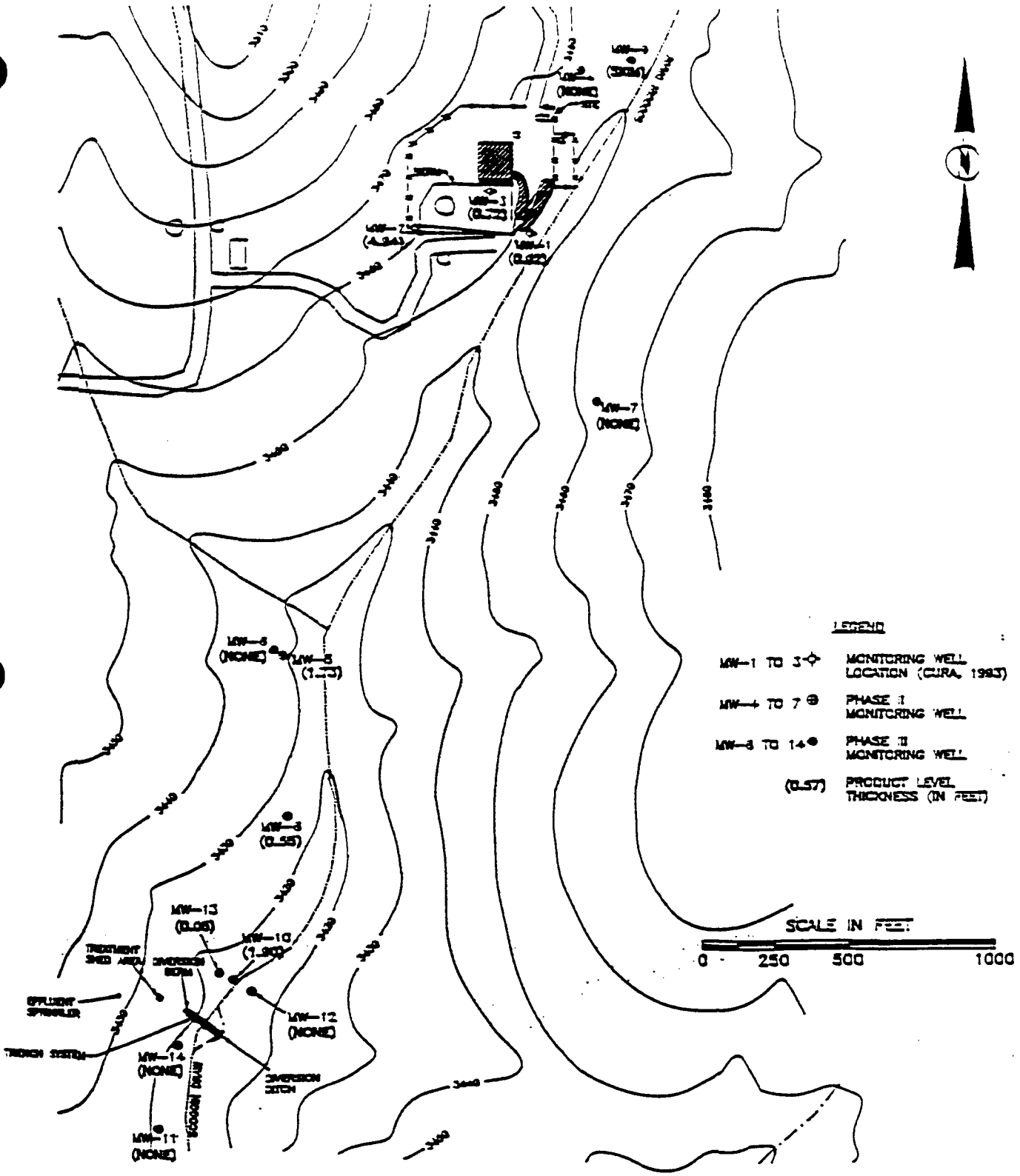
FIGURE 3



CHECK BY	HMM
DRAWN BY	BCP
DATE	1-12-96
SCALE	AS SHOWN
CAD NO.	27750.00-02
PRJ NO.	27751026

FREE PRODUCT
THICKNESS MAP
NOVEMBER 25-26, 1995

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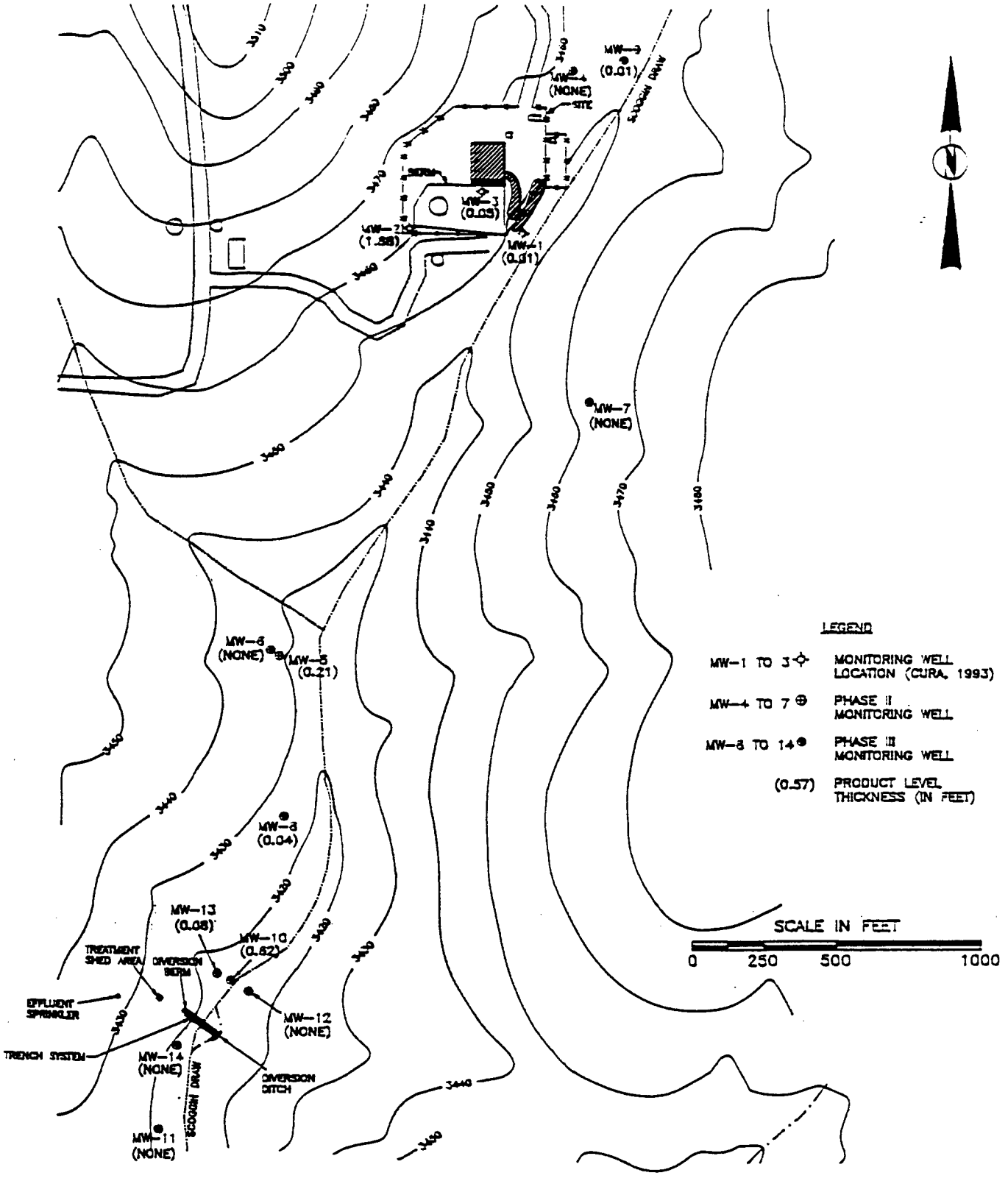
FIGURE 4



CHECK BY	HMM
DRAWN BY	BCP
DATE	4-24-96
SCALE	AS SHOWN
CAD NO.	2775.00-02
PRJ NO.	2775102H

FREE PRODUCT
THICKNESS MAP
APRIL 16-17, 1996

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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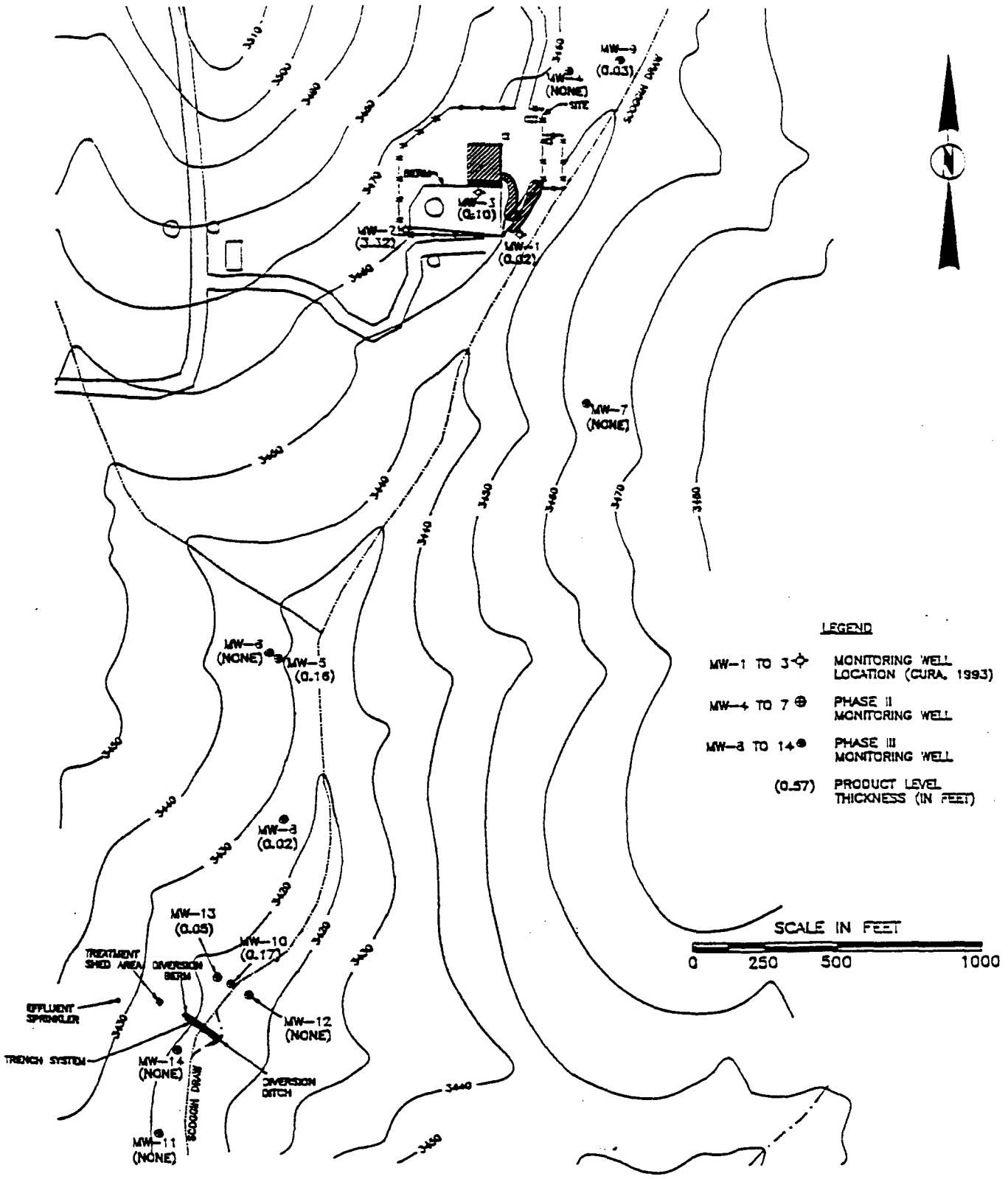
FIGURE 5



CHECK BY	HMM
DRAWN BY	BCP
DATE	7-16-96
SCALE	AS SHOWN
CAD NO.	2775.00-02
PRJ NO.	27751021

FREE PRODUCT
THICKNESS MAP
JULY 2, 1996

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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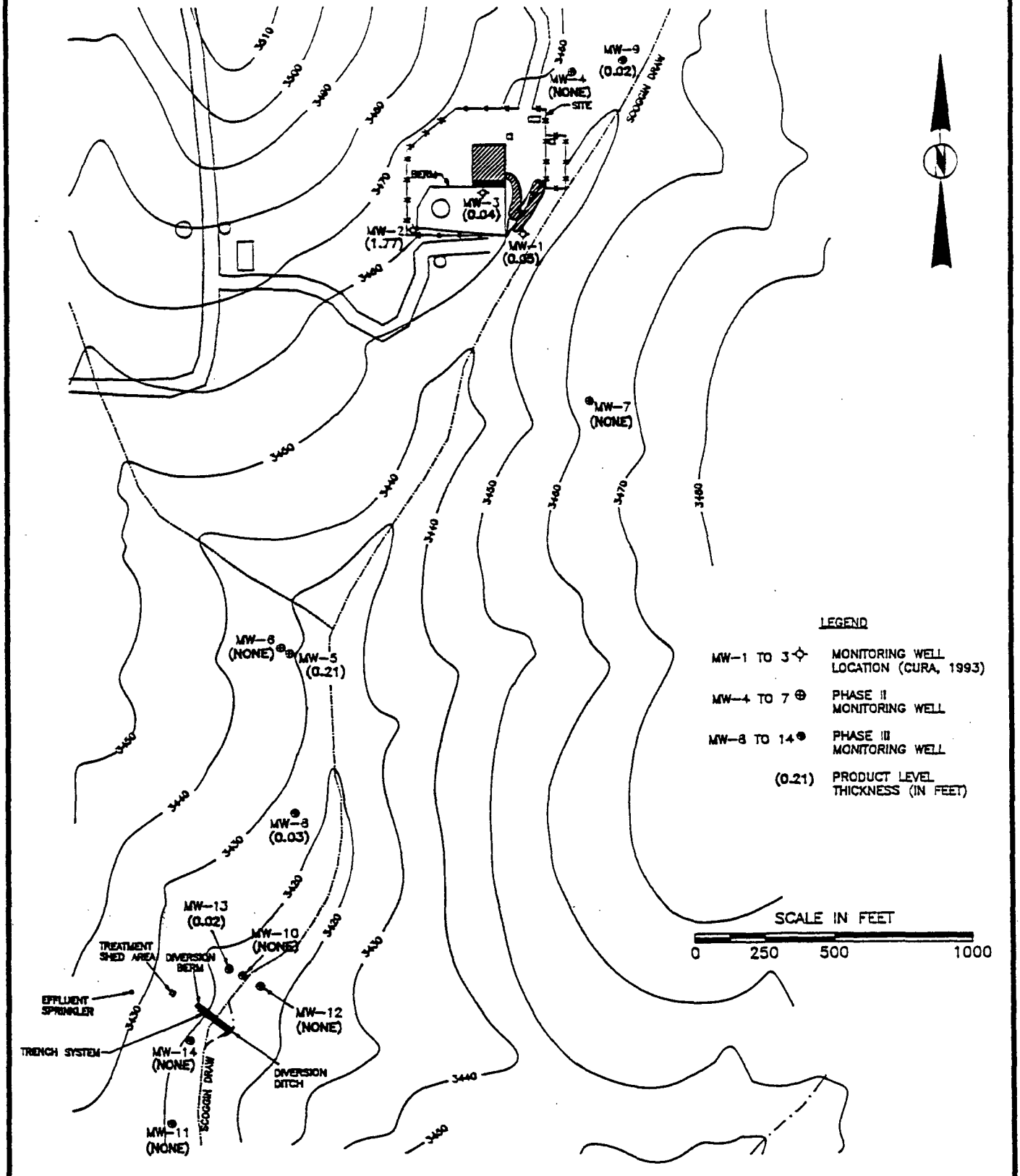
FIGURE 6



CHECK BY	HMM
DRAWN BY	BCP
DATE	10-9-96
SCALE	AS SHOWN
CAD NO.	2775.00-02
PRJ NO.	2775102J

FREE PRODUCT
THICKNESS MAP
SEPTEMBER 30, 1996

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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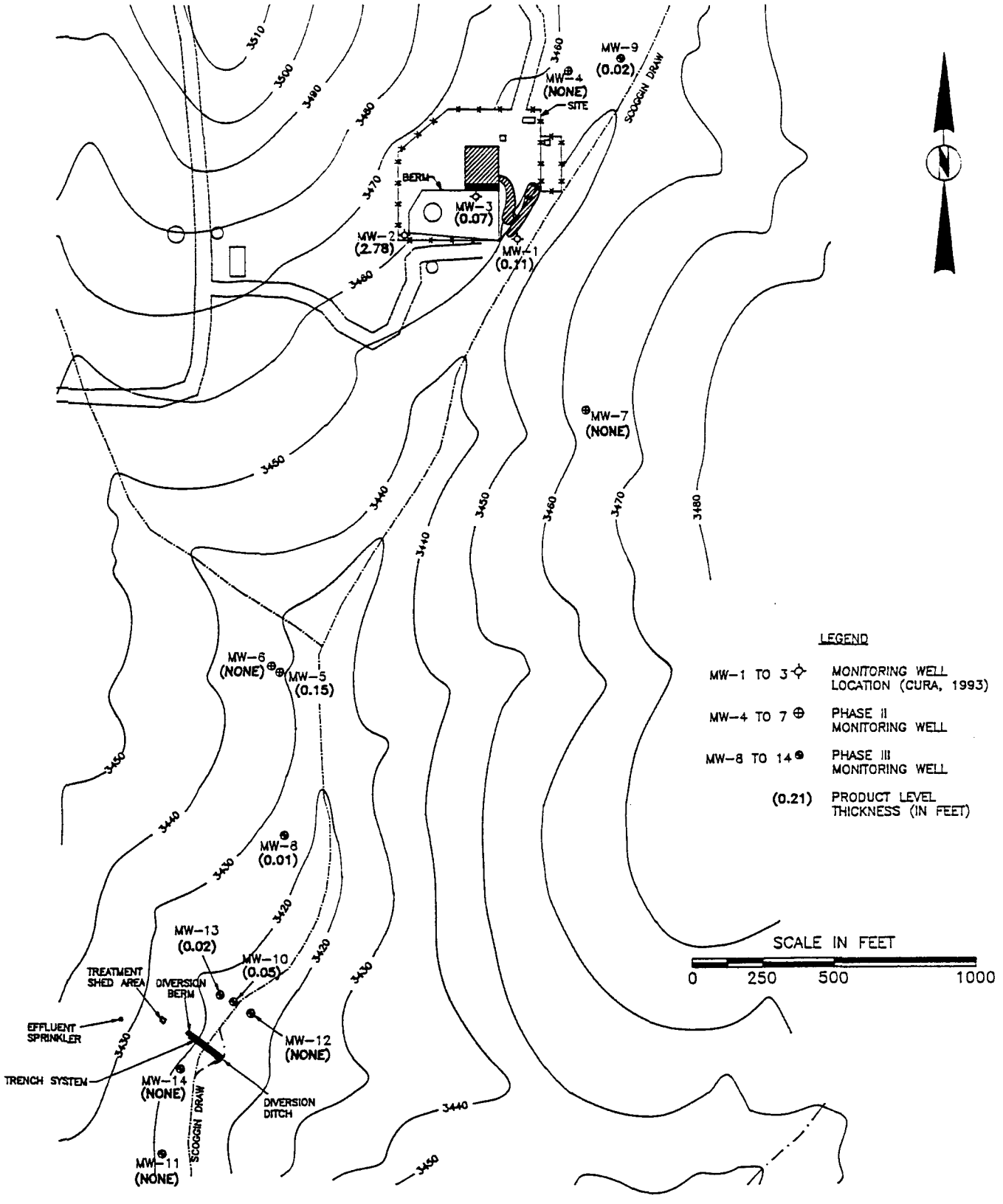
FIGURE 7



CHECK BY	HMM
DRAWN BY	BCP
DATE	1-23-97
SCALE	AS SHOWN
CAD NO.	2775.00-02
PRJ NO.	2775102K

FREE PRODUCT
THICKNESS MAP
JANUARY 10, 1997

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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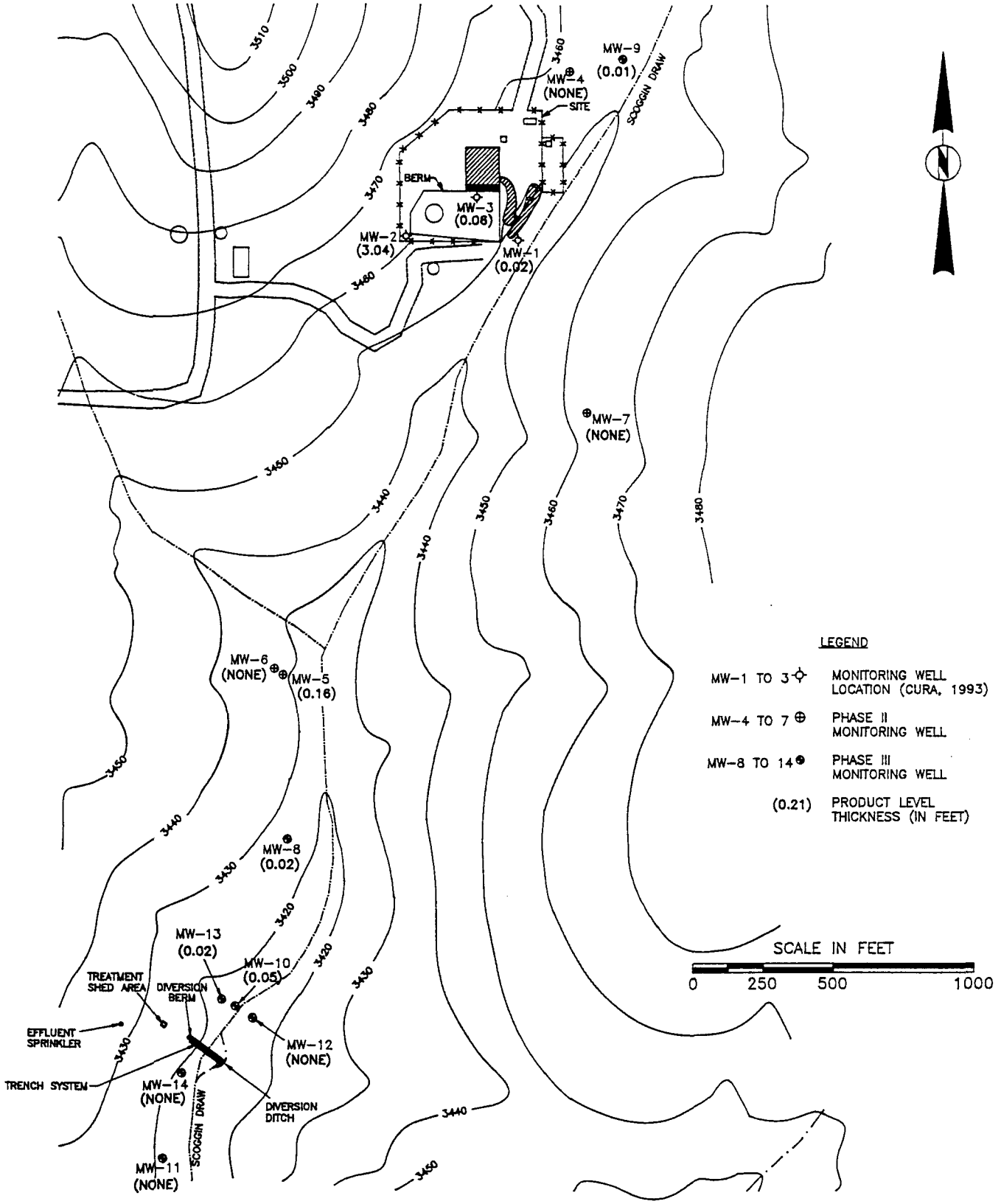
FIGURE 8



CHECK BY	HMM
DRAWN BY	BCP
DATE	4-16-97
SCALE	AS SHOWN
CAD NO.	2775.00-02
PRJ NO.	2775102L

FREE PRODUCT
THICKNESS MAP
APRIL 2, 1997

AMOCO PIPELINE COMPANY
ARTESIA, NEW MEXICO

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FIGURE
9

TABLES

TABLE 1

Monthly BETX Results for the Influent and Effluent of the Air Stripper

Amoco Pipeline Company
Artesia, New Mexico

INFLUENT														
Sample Date:	11/25/94	12/21/94	02/28/95	04/12/95	07/12/95	10/12/95	11/04/95	01/16/96	02/28/96	03/13/96	04/16/96	05/23/96	07/02/96	07/06/96
Benzene	2,970	3,070	3,060	3,300	2,700	1,900	2,100	2,000	2,400	2,800	2,200	2,400	1,900	2,000
Ethylbenzene	364	338	442	476	380	250	340	210	280	310	260	240	280	260
Toluene	808	1,220	1,350	1,130	420	190	81	29	<20	<25	20	61	160	170
Xylene	1,770	2,130	2,750	2,500	1,900	1,100	1,800	840	1,000	1,200	910	780	1,000	920
EFFLUENT														
Sample Date:	11/25/94	12/21/94	02/28/95	04/12/95	07/12/95	10/12/95	11/04/95	01/16/96	02/28/96	03/13/96	04/16/96	05/23/96	07/02/96	07/06/96
Benzene	1.8	6.6	3.3	3.6	4.6	<1.0	3.5	<1.0	540	160	220	<1.0	3.8	8.0
Ethylbenzene	<1.0	<1.0	1.4	2.8	1.5	<1.0	<1.0	<1.0	63	20	25	<1.0	<1	1.2
Toluene	<1.0	5.1	2.2	2.8	1.1	<1.0	<1.0	<1.0	<5	1.8	2.2	<1.0	<1	<1
Xylene	<1.0	5.7	6.6	14.5	6.5	<1.0	3.0	<1.0	240	80	99	<1.0	2.9	4.1

INFLUENT														
Sample Date:	8/2/96	10/15/96	11/10/96	01/10/97	01/10/97	04/02/97								
Benzene	1,200	2,400	2,400	810	2,200	1,800								
Ethylbenzene	210	290	270	100	220	180								
Toluene	160	<50	26	<50	<50	<20								
Xylene	810	960	950	300	750	470								
EFFLUENT														
Sample Date:	8/2/96	10/15/96	11/10/96	01/10/97	01/10/97	04/02/97								
Benzene	9.3	<1	520	1.9	2.0	19								
Ethylbenzene	1.6	<1	62	<1	<1	1.9								
Toluene	<1.0	<1	6.2	<1	<1	<1.0								
Xylene	7.9	<1	220	1.5	1.6	5.8								

NOTES: 1. All results are in ug/L.
2. Permit effluent limits are benzene (10 ug/L), ethylbenzene (750 ug/L), xylene (620 ug/L), and toluene (750 ug/L).

TABLE 2

Quarterly BETX Results for Monitoring Wells With No Free Product

Amoco Pipeline Company
Artesia, New Mexico

WELL 4											
Sample Date:	11/25/94	12/22/94	02/16/95	06/16/95	10/02/95	11/26/95	04/17/96	07/06/96	09/30/96	01/10/97	04/02/97
Benzene	<1	<1	<1	54.4	9.8	4.7	6.3	5.0	<1	<1	1.3
Ethylbenzene	<1	<1	<1	2.5	<1	1.3	<1.0	<1	<1	<1	<1
Toluene	<1	<1	<1	<1	<1	2.0	1.1	<1	<1	<1	<1
Xylene	<1	<1	<1	6.7	<1	3.8	3.6	2.0	<1	<1	<1
WELL 6											
Sample Date:	11/25/94	12/21/94	02/16/95	06/16/95	10/02/95	11/26/95	04/16/96	07/06/96	09/30/96	01/10/97	04/02/97
Benzene	FREE	FREE	2.2	FREE	3.1	5.8	<1	<1	<1	<1	<1
Ethylbenzene	PRODUCT	PRODUCT	<1	PRODUCT	<1	6.1	<1	<1	2.0	<1	<1
Toluene	PRESENT	PRESENT	<1	PRESENT	<1	<1.0	<1	<1	<1	<1	<1
Xylene			<1		2.5	19	3.7	<1	<1	<1	<1
WELL 7											
Sample Date:	11/25/94	12/22/94	02/16/95	06/16/95	10/02/95	11/26/95	04/17/96	07/06/96	09/30/96	01/10/97	04/02/97
Benzene	<1	1590	846	3100	880	3000	1900	1,800	170	160	<1
Ethylbenzene	<1	39	20.9	58.7	17	51	130	160	<2	<1	<1
Toluene	<1	<10	<10	3.6	<10	4.6	<20	<10	<2	<1	<1
Xylene	<1	86.5	52.7	140	35	200	100	120	11	3.2	<1
WELL 10											
Sample Date:	11/17/94	12/22/94	02/16/95	06/14/95	10/02/95	11/25/95	04/16/96	07/02/96	09/30/96	01/10/97	04/02/97
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62	N/A	N/A
Ethylbenzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.2	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A
Xylene	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.2	N/A	N/A
WELL 11											
Sample Date:	11/17/94	12/22/94	02/16/95	06/14/95	10/02/95	11/25/95	04/16/96	07/02/96	09/30/96	01/10/97	04/02/97
Benzene	<1	<1	<1	<1	<1	1.3	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	2.1	1.1	<1	<1	1.5	<1
Toluene	<1	<1	<1	<1	<1	5.3	2.8	<1	<1	1.2	<1
Xylene	<1	<1	<1	<1	<1	6.1	3.7	<1	<1	6	<1
WELL 12											
Sample Date:	11/17/94	12/22/94	02/16/95	06/16/95	10/02/95	11/26/95	04/16/96	07/02/96	09/30/96	01/10/97	04/02/97
Benzene	75	5.6	<1	<1	<1	1.1	1.5	4.1	30	2.3	<1
Ethylbenzene	1	<1	<1	<1	<1	<1.0	1.8	<1	<1	<1	<1
Toluene	1.1	<1	<1	<1	<1	3.5	5.1	<1	<1	<1	<1
Xylene	1	<1	<1	<1	<1	5.1	5.8	1.2	<1	<1	<1
WELL 14											
Sample Date:	11/17/94	12/22/94	02/16/95	06/16/95	10/02/95	11/26/95	04/16/96	07/02/96	09/30/96	01/10/97	04/02/97
Benzene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	1.7	<1	<1	<1	<1	<1
Toluene	<1	<1	<1	<1	<1	3.6	1.7	<1	<1	<1	<1
Xylene	<1	<1	<1	<1	<1	6.8	2.4	<1	<1	<1	<1

NOTE: All results are in ug/L.

TABLE 3

Monitoring Well Water / Product Levels

Amoco Pipeline Company
Artesia, New Mexico

WELL IDENTIFICATION	DATE	DEPTH TO PRODUCT (feet)	DEPTH TO WATER (feet)	PRODUCT LEVEL THICKNESS (feet)	
MW-1	05/21/93		20.73	0.21	
	11/17/94	17.54	17.56	0.02	
	02/09/95	18.02	18.05	0.03	
	06/16/95	19.15	19.21	0.06	
	10/02/95	SKIM	16.48	SKIM	
	11/26/95	15.85	15.87	0.02	(1)
	04/16-17/96	14.32	14.33	0.01	
	07/06/96	15.55	15.57	0.02	
	09/30/96	11.70	11.75	0.05	
	01/10/97	12.79	12.90	0.11	
	04/02/97	13.60	13.62	0.02	
MW-2	05/21/93		27.56	1.75	
	11/17/94	23.28	26.67	3.39	
	02/09/95	23.98	26.50	2.52	
	06/16/95	25.63	26.45	0.82	
	10/02/95	22.01	26.18	4.17	
	11/26/95	21.23	26.17	4.94	(1)
	04/16-17/96	20.58	22.46	1.88	
	07/06/96	21.86	25.18	3.32	
	09/30/96	19.17	20.94	1.77	
	01/10/97	20.20	22.98	2.78	
	04/02/97	21.00	24.04	3.04	
MW-3	05/21/93		17.81	1.36	
	11/17/94	13.07	13.65	0.58	
	02/09/95	13.75	14.32	0.57	
	06/16/95	15.20	15.84	0.64	
	10/02/95	10.69	11.43	0.74	
	11/26/95	9.69	10.41	0.72	(1)
	04/16-17/96	9.58	9.63	0.05	
	07/06/96	11.70	11.80	0.10	
	09/30/96	8.71	8.75	0.04	
	01/10/97	10.33	10.40	0.07	
	04/02/97	11.36	11.42	0.06	
MW-4	11/17/94	NONE	28.28	NONE	
	02/09/95	NONE	28.51	NONE	
	06/16/95	NONE	29.58	NONE	
	10/02/95	NONE	24.42	NONE	
	11/26/95	NONE	22.61	NONE	
	04/16-17/96	NONE	20.63	NONE	
	07/06/96	NONE	26.44	NONE	
	09/30/96	NONE	21.88	NONE	
	01/10/97	NONE	25.24	NONE	
	04/02/97	NONE	25.49	NONE	

TABLE 3

Monitoring Well Water / Product Levels

Amoco Pipeline Company
Artesia, New Mexico

WELL IDENTIFICATION	DATE	DEPTH TO PRODUCT (feet)	DEPTH TO WATER (feet)	PRODUCT LEVEL THICKNESS (feet)	
MW-5	11/17/94	16.22	24.19	7.97	
	02/09/95	16.84	24.85	8.01	(1)
	06/16/95	19.44	21.14	1.70	
	10/02/95	16.19	17.85	1.66	
	11/26/95	17.58	19.31	1.73	(1)
	04/16-17/96	17.04	17.25	0.21	
	07/06/96	16.20	16.36	0.16	
	09/30/96	11.17	11.38	0.21	
	01/10/97	13.45	13.60	0.15	
	04/02/97	14.19	14.35	0.16	
MW-6	11/17/94	TRACE	14.53	TRACE	
	02/09/95	NONE	15.02	NONE	
	06/16/95	16.24	16.27	0.03	
	10/02/95	NONE	13.55	NONE	
	11/26/95	NONE	14.84	NONE	
	04/16-17/96	NONE	13.80	NONE	
	07/06/96	NONE	14.55	NONE	
	09/30/96	NONE	9.62	NONE	
	01/10/97	NONE	12.26	NONE	
	04/02/97	NONE	12.03	NONE	
MW-7	11/17/94	NONE	34.33	NONE	
	02/09/95	NONE	34.67	NONE	
	06/16/95	NONE	35.61	NONE	
	10/02/95	NONE	33.79	NONE	
	11/26/95	NONE	33.2	NONE	
	04/16-17/96	NONE	30.95	NONE	
	07/06/96	NONE	33.36	NONE	
	09/30/96	NONE	29.15	NONE	
	01/10/97	NONE	30.72	NONE	
	04/02/97	NONE	31.85	NONE	
MW-8	11/17/94	13.69	14.95	1.26	
	02/09/95	14.46	15.02	0.56	
	06/16/95	15.50	16.41	0.91	
	10/02/95	13.03	13.45	0.42	
	11/26/95	14.16	14.71	0.55	(1)
	04/16-17/96	13.66	13.70	0.04	
	07/05/96	13.05	13.07	0.02	(1)
	09/30/96	8.04	8.07	0.03	
	01/10/97	9.89	9.90	0.01	
	04/02/97	10.58	10.60	0.02	

TABLE 3

Monitoring Well Water / Product Levels

Amoco Pipeline Company
Artesia, New Mexico

WELL IDENTIFICATION	DATE	DEPTH TO PRODUCT (feet)	DEPTH TO WATER (feet)	PRODUCT LEVEL THICKNESS (feet)	
MW-9	11/17/94	23.07	23.10	0.03	
	02/09/95	TRACE	23.41	TRACE	
	06/16/95	TRACE	24.65	TRACE	
	10/02/95	SKIM	20.73	SKIM	
	11/26/95	SKIM	19.52	SKIM	
	04/16-17/96	17.53	17.54	0.01	
	07/06/96	21.20	21.23	0.03	
	09/30/96	16.00	16.02	0.02	
	01/10/97	17.55	17.57	0.02	
	04/02/97	18.91	18.92	0.01	
MW-10	11/17/94	19.02	21.24	2.22	
	02/09/95	19.74	22.36	2.62	
	06/16/95	20.97	23.30	2.33	
	10/02/95	18.49	19.55	1.06	
	11/25/95	20.13	22.03	1.90	(1)
	04/16-17/96	20.26	20.88	0.62	
	07/05/96	19.86	20.03	0.17	(1)
	09/30/96	NONE	15.62	NONE	
	01/10/97	19.00	19.05	0.05	
	04/02/97	19.35	19.40	0.05	
MW-11	11/17/94	NONE	19.34	NONE	
	02/09/95	NONE	19.61	NONE	
	06/16/95	NONE	20.08	NONE	
	10/02/95	NONE	19.74	NONE	
	11/25/95	NONE	19.94	NONE	
	04/16-17/96	NONE	19.68	NONE	
	07/06/96	NONE	19.75	NONE	
	09/30/96	NONE	18.65	NONE	
	01/10/97	NONE	19.92	NONE	
	04/02/97	NONE	14.50	NONE	
MW-12	11/17/94	NONE	16.47	NONE	
	02/09/95	NONE	16.78	NONE	
	06/16/95	NONE	17.28	NONE	
	10/02/95	NONE	16.03	NONE	
	11/25/95	NONE	16.63	NONE	
	04/16-17/96	NONE	16.55	NONE	
	07/06/96	NONE	16.45	NONE	
	09/30/96	NONE	13.81	NONE	
	01/10/97	NONE	18.92	NONE	
	04/02/97	NONE	15.20	NONE	

TABLE 3

Monitoring Well Water / Product Levels

Amoco Pipeline Company
Artesia, New Mexico

WELL IDENTIFICATION	DATE	DEPTH TO PRODUCT (feet)	DEPTH TO WATER (feet)	PRODUCT LEVEL THICKNESS (feet)	
MW-13	11/17/94	20.41	20.49	0.08	
	02/09/95	20.84	20.87	0.03	
	06/16/95	21.35	21.40	0.05	
	10/02/95	19.35	19.44	0.09	
	11/25/95	21.53	21.58	0.05	(1)
	04/16-17/96	21.82	21.90	0.08	
	07/05/96	21.00	21.05	0.05	(1)
	09/30/96	16.40	16.42	0.02	
	01/10/97	19.17	19.19	0.02	
	04/02/97	18.50	18.52	0.02	
MW-14	11/17/94	NONE	18.11	NONE	
	02/09/95	NONE	18.45	NONE	
	06/16/95	NONE	18.93	NONE	
	10/02/95	NONE	18.63	NONE	
	11/26/95	NONE	18.83	NONE	
	04/16-17/96	NONE	18.55	NONE	
	07/06/96	NONE	18.58	NONE	
	09/30/96	NONE	17.63	NONE	
	01/10/97	NONE	17.42	NONE	
	04/02/97	NONE	17.82	NONE	

(1) Well bailed after level measurements taken.

APPENDIX A

LABORATORY RESULTS

- BETX Results For The Influent and Effluent Of The Air Stripper -- Samples Taken 11/10/96
- Quarterly BETX Results for Monitoring Wells with no Free Product

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Mr. Hank Mittelhauser
CLAYTON ENVIRONMENTAL
1240 Iroquois Drive
Suite 206
Naperville, IL 60563

RECEIVED
APR 17 1997

04/11/1997

NET Job Number: 97.03451

IEPA Cert. No.: 100221
WDNR Cert. No.: 999447130
A2LA Cert. No.: 0453-01

Enclosed is the Analytical and Quality Control reports for the following samples submitted to Bartlett Division of NET, Inc. for analysis.

Project Description: Amoco Pipeline Co.-Artesia Station

Sample Number	Sample Description	Date Taken	Date Received
404147	Influent; Grab	04/02/1997	04/03/1997
404148	Effluent; Grab	04/02/1997	04/03/1997
404149	Monitor Well #11; Grab	04/02/1997	04/03/1997
404150	Monitor Well #14; Grab	04/02/1997	04/03/1997
404151	Monitor Well #12; Grab	04/02/1997	04/03/1997
404152	Monitor Well #6; Grab	04/02/1997	04/03/1997
404153	Monitor Well #7; Grab	04/02/1997	04/03/1997
404154	Monitor Well #4; Grab	04/02/1997	04/03/1997
404155	Trip Blank		04/03/1997

Sample analysis in support of the project referenced above has been completed and results are presented on the following pages. These results apply only to the samples analyzed. Reproduction of this report only in whole is permitted. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Procedures used follow NET Standard Operating Procedures which reference the methods listed on your report. Should you have questions regarding procedures or results, please do not hesitate to call. NET has been pleased to provide these analytical services for you.

This Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Approved by:

Mary Pearson

Mary Pearson
Project Manager

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ANALYTICAL REPORT

Mr. Hank Mittelhauser
CLAYTON ENVIRONMENTAL
1240 Iroquois Drive
Suite 206
Naperville, IL 60563

04/11/1997

Sample No. : 404147

NET Job No.: 97.03451

Sample Description: Influent; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 11:00
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	1,800	ug/L	04/09/1997	1.0	kaf	1890	8240 (1)
Ethyl Benzene	180	ug/L	04/09/1997	1.0	kaf	1890	8240 (1)
Toluene	<20	ug/L	04/09/1997	1.0	kaf	1890	8240 (1)
Xylenes, Total	470	ug/L	04/09/1997	1.0	kaf	1890	8240 (1)
Surr: Toluene-d8	90.0	%	04/09/1997	88-110	kaf	1890	8240 (1)
Surr: Bromofluorobenzene	91.6	%	04/09/1997	86-115	kaf	1890	8240 (1)
Surr: 1,2-Dichloroethane-d4	78.8	%	04/09/1997	76-114	kaf	1890	8240 (1)

VOA analyzed at a 20x dilution.

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ANALYTICAL REPORT

Mr. Hank Mittelhauser
CLAYTON ENVIRONMENTAL
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Suite 206
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04/11/1997

Sample No. : 404148

NET Job No.: 97.03451

Sample Description: Effluent; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 11:10
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	19	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Ethyl Benzene	1.9	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Toluene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Xylenes, Total	5.8	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Surr: Toluene-d8	92.2	%	04/11/1997	88-110	kaf	1894	8240 (1)
Surr: Bromofluorobenzene	93.8	%	04/11/1997	86-115	kaf	1894	8240 (1)
Surr: 1,2-Dichloroethane-d4	82.8	%	04/11/1997	76-114	kaf	1894	8240 (1)

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ANALYTICAL REPORT

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04/11/1997

Sample No. : 404149

NET Job No.: 97.03451

Sample Description: Monitor Well #11; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 11:50
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Ethyl Benzene	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Toluene	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Xylenes, Total	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Surr: Toluene-d8	93.8	%	04/10/1997	88-110	kaf	1892	8240 (1)
Surr: Bromofluorobenzene	96.4	%	04/10/1997	86-115	kaf	1892	8240 (1)
Surr: 1,2-Dichloroethane-d4	77.0	%	04/10/1997	76-114	kaf	1892	8240 (1)

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04/11/1997

Sample No. : 404150

NET Job No.: 97.03451

Sample Description: Monitor Well #14; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 12:26
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Ethyl Benzene	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Toluene	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Xylenes, Total	<1.0	ug/L	04/10/1997	1.0	kaf	1892	8240 (1)
Surr: Toluene-d8	91.6	%	04/10/1997	88-110	kaf	1892	8240 (1)
Surr: Bromofluorobenzene	96.4	%	04/10/1997	86-115	kaf	1892	8240 (1)
Surr: 1,2-Dichloroethane-d4	83.6	%	04/10/1997	76-114	kaf	1892	8240 (1)

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ANALYTICAL REPORT

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04/11/1997

Sample No. : 404151

NET Job No.: 97.03451

Sample Description: Monitor Well #12; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 12:45
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Ethyl Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Toluene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Xylenes, Total	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Surr: Toluene-d8	93.6	%	04/11/1997	88-110	kaf	1894	8240 (1)
Surr: Bromofluorobenzene	99.0	%	04/11/1997	86-115	kaf	1894	8240 (1)
Surr: 1,2-Dichloroethane-d4	84.6	%	04/11/1997	76-114	kaf	1894	8240 (1)

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ANALYTICAL REPORT

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04/11/1997

Sample No. : 404152

NET Job No.: 97.03451

Sample Description: Monitor Well #6; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 13:15
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Ethyl Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Toluene	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Xylenes, Total	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Surr: Toluene-d8	93.6	%	04/11/1997	88-110	kaf	1893	8240 (1)
Surr: Bromofluorobenzene	96.4	%	04/11/1997	86-115	kaf	1893	8240 (1)
Surr: 1,2-Dichloroethane-d4	82.0	%	04/11/1997	76-114	kaf	1893	8240 (1)

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ANALYTICAL REPORT

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04/11/1997

Sample No. : 404153

NET Job No.: 97.03451

Sample Description: Monitor Well #7; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 14:00
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Ethyl Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Toluene	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Xylenes, Total	<1.0	ug/L	04/11/1997	1.0	kaf	1893	8240 (1)
Surr: Toluene-d8	94.4	%	04/11/1997	88-110	kaf	1893	8240 (1)
Surr: Bromofluorobenzene	97.8	%	04/11/1997	86-115	kaf	1893	8240 (1)
Surr: 1,2-Dichloroethane-d4	84.8	%	04/11/1997	76-114	kaf	1893	8240 (1)

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ANALYTICAL REPORT

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04/11/1997

Sample No. : 404154

NET Job No.: 97.03451

Sample Description: Monitor Well #4; Grab
Amoco Pipeline Co.-Artesia Station

Date Taken: 04/02/1997
Time Taken: 15:12
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	1.3	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Ethyl Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Toluene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Xylenes, Total	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Surr: Toluene-d8	93.0	%	04/11/1997	88-110	kaf	1894	8240 (1)
Surr: Bromofluorobenzene	95.0	%	04/11/1997	86-115	kaf	1894	8240 (1)
Surr: 1,2-Dichloroethane-d4	85.0	%	04/11/1997	76-114	kaf	1894	8240 (1)

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ANALYTICAL REPORT

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04/11/1997

Sample No. : 404155

NET Job No.: 97.03451

Sample Description: Trip Blank
Amoco Pipeline Co.-Artesia Station

Date Taken:
Time Taken:
IEPA Cert. No. 100221

Date Received: 04/03/1997
Time Received: 10:15
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
UST VOLATILES 8240 - AQUEOUS							
Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Ethyl Benzene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Toluene	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Xylenes, Total	<1.0	ug/L	04/11/1997	1.0	kaf	1894	8240 (1)
Surr: Toluene-d8	91.8	%	04/11/1997	88-110	kaf	1894	8240 (1)
Surr: Bromofluorobenzene	96.0	%	04/11/1997	86-115	kaf	1894	8240 (1)
Surr: 1,2-Dichloroethane-d4	82.8	%	04/11/1997	76-114	kaf	1894	8240 (1)

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QUALITY CONTROL REPORT

CONTINUING CALIBRATION VERIFICATION

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1240 Iroquois Drive
Suite 206
Naperville, IL 60563
Mr. Hank Mittelhauser

04/11/1997

NET Job Number: 97.03451

Analyte	Run Batch Number	CCV True Conc.	Conc. Found	Percent Recovery
UST VOLATILES 8240 - AQUEOUS				
Benzene	1890	50.0	45.7	91.4
Ethyl Benzene	1890	50.0	44.6	89.2
Toluene	1890	50.0	43.6	87.2
Xylenes, Total	1890	150	130	86.7
UST VOLATILES 8240 - AQUEOUS				
Benzene	1892	50.0	52.4	104.8
Ethyl Benzene	1892	50.0	51.4	102.8
Toluene	1892	50.0	50.3	100.6
Xylenes, Total	1892	150	152	101.3
UST VOLATILES 8240 - AQUEOUS				
Benzene	1893	50.0	44.0	88.0
Ethyl Benzene	1893	50.0	43.9	87.8
Toluene	1893	50.0	44.4	88.8
Xylenes, Total	1893	150	132	88.0
UST VOLATILES 8240 - AQUEOUS				
Benzene	1894	50.0	50.5	101.0
Ethyl Benzene	1894	50.0	50.2	100.4
Toluene	1894	50.0	49.9	99.8
Xylenes, Total	1894	150	151	100.7

CCV - Continuing Calibration Verification

NATIONAL ENVIRONMENTAL TESTING, INC.

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QUALITY CONTROL REPORT

BLANK ANALYSIS

CLAYTON ENVIRONMENTAL
1240 Iroquois Drive
Suite 206
Naperville, IL 60563
Mr. Hank Mittelhauser

04/11/1997

NET Job Number: 97.03451

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
UST VOLATILES 8240 - AQUEOUS						8240B (9)
Benzene		1890	<1.0	ug/L	1.0	8240B (9)
Ethyl Benzene		1890	<1.0	ug/L	1.0	8240B (9)
Toluene		1890	<1.0	ug/L	1.0	8240B (9)
Xylenes, Total		1890	<1.0	ug/L	1.0	8240B (9)
Surr: 1,2-Dichloroethane-d4		1890	76.4	%	76-114	8240B (9)
Surr: Toluene-d8		1890	92.0	%	88-110	8240B (9)
Surr: Bromofluorobenzene		1890	93.0	%	86-115	8240B (9)
UST VOLATILES 8240 - AQUEOUS						8240B (9)
Benzene		1892	<1.0	ug/L	1.0	8240B (9)
Ethyl Benzene		1892	<1.0	ug/L	1.0	8240B (9)
Toluene		1892	<1.0	ug/L	1.0	8240B (9)
Xylenes, Total		1892	<1.0	ug/L	1.0	8240B (9)
Surr: 1,2-Dichloroethane-d4		1892	79.4	%	76-114	8240B (9)
Surr: Toluene-d8		1892	94.2	%	88-110	8240B (9)
Surr: Bromofluorobenzene		1892	95.4	%	86-115	8240B (9)
UST VOLATILES 8240 - AQUEOUS						8240B (9)
Benzene		1893	<1.0	ug/L	1.0	8240B (9)
Ethyl Benzene		1893	<1.0	ug/L	1.0	8240B (9)
Toluene		1893	<1.0	ug/L	1.0	8240B (9)
Xylenes, Total		1893	<1.0	ug/L	1.0	8240B (9)
Surr: 1,2-Dichloroethane-d4		1893	82.6	%	76-114	8240B (9)
Surr: Toluene-d8		1893	93.8	%	88-110	8240B (9)
Surr: Bromofluorobenzene		1893	97.0	%	86-115	8240B (9)
UST VOLATILES 8240 - AQUEOUS						8240B (9)
Benzene		1894	<1.0	ug/L	1.0	8240B (9)
Ethyl Benzene		1894	<1.0	ug/L	1.0	8240B (9)
Toluene		1894	<1.0	ug/L	1.0	8240B (9)
Xylenes, Total		1894	<1.0	ug/L	1.0	8240B (9)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

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QUALITY CONTROL REPORT

BLANK ANALYSIS

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04/11/1997

NET Job Number: 97.03451

Analyte	Prep Batch Number	Run Batch Number	Blank Analysis Results	Units	Reporting Limit	Analytical Method
Surr: 1,2-Dichloroethane-d4		1894	80.4	%	76-114	8240B (9)
Surr: Toluene-d8		1894	93.4	%	88-110	8240B (9)
Surr: Bromofluorobenzene		1894	96.0	%	86-115	8240B (9)

Advisory Control Limits for Blanks:

All compounds should be less than the Reporting Limit, except for phthalate esters, toluene, methylene chloride, acetone and chloroform should be less than 5 times the Reporting Limit.

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

CLAYTON ENVIRONMENTAL
1240 Iroquois Drive
Suite 206
Naperville, IL 60563
Mr. Hank Mittelhauser

04/11/1997

NET Job Number: 97.03451

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
UST VOLATILES 8240 - AQUEOUS					
Benzene		1890	20.0	19.4	97.0
Ethyl Benzene		1890	20.0	19.5	97.5
Toluene		1890	20.0	19.1	95.5
Xylenes, Total		1890	60.0	57.2	95.3
Surr: 1,2-Dichloroethane-d4		1890	50.0	38.4	76.8
Surr: Toluene-d8		1890	50.0	46.3	92.6
Surr: Bromofluorobenzene		1890	50.0	46.1	92.2
UST VOLATILES 8240 - AQUEOUS					
Benzene		1892	20.0	18.1	90.5
Ethyl Benzene		1892	20.0	20.0	100.0
Toluene		1892	20.0	18.7	93.5
Xylenes, Total		1892	60.0	56.4	94.0
Surr: 1,2-Dichloroethane-d4		1892	50.0	40.1	80.2
Surr: Toluene-d8		1892	50.0	46.6	93.2
Surr: Bromofluorobenzene		1892	50.0	47.5	95.0
UST VOLATILES 8240 - AQUEOUS					
Benzene		1893	20.0	17.1	85.5
Ethyl Benzene		1893	20.0	18.8	94.0
Toluene		1893	20.0	18.4	92.0
Xylenes, Total		1893	60.0	55.0	91.7
Surr: 1,2-Dichloroethane-d4		1893	50.0	42.3	84.6
Surr: Toluene-d8		1893	50.0	47.0	94.0
Surr: Bromofluorobenzene		1893	50.0	47.9	95.8
UST VOLATILES 8240 - AQUEOUS					
Benzene		1894	20.0	18.2	91.0
Ethyl Benzene		1894	20.0	19.2	96.0
Toluene		1894	20.0	18.2	91.0
Xylenes, Total		1894	60.0	55.0	91.7
Surr: 1,2-Dichloroethane-d4		1894	50.0	43.2	86.4
Surr: Toluene-d8		1894	50.0	46.0	92.0

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QUALITY CONTROL REPORT

LABORATORY CONTROL STANDARD

CLAYTON ENVIRONMENTAL
1240 Iroquois Drive
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Mr. Hank Mittelhauser

04/11/1997

NET Job Number: 97.03451

Analyte	Prep Batch Number	Run Batch Number	True Conc.	Conc. Found	LCS % Recovery
Surr: Bromofluorobenzene		1894	50.0	47.2	94.4

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QUALITY CONTROL REPORT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

CLAYTON ENVIRONMENTAL
1240 Iroquois Drive
Suite 206
Naperville, IL 60563
Mr. Hank Mittelhauser

04/11/1997

NET Job Number: 97.03451

Analyte	Prep Batch Number	Run Batch Number	Matrix Spike Result	Sample Result	Spike Amount	Units	Percent Recovery	MSD Result	MSD Spike Amount	Units	Percent Recovery	MS/MSD RPD
UST VOLATILES 8240 - AQUEOU												
Benzene		1890	67.2	50	20.0	ug/L	86.0	66.6	20.0	ug/L	83.0	3.6
Ethyl Benzene		1890	24.9	5.0	20.0	ug/L	99.5	24.4	20.0	ug/L	97.0	2.5
Toluene		1890	38.0	19	20.0	ug/L	95.0	37.4	20.0	ug/L	92.0	3.2
Xylenes, Total		1890	96.1	39	60.0	ug/L	95.2	93.8	60.0	ug/L	91.3	4.2
UST VOLATILES 8240 - AQUEOU												
Benzene		1892	19.2	<1.0	20.0	ug/L	96.0	19.1	20.0	ug/L	95.5	0.5
Ethyl Benzene		1892	20.3	<1.0	20.0	ug/L	101.5	20.6	20.0	ug/L	103.0	1.5
Toluene		1892	19.5	<1.0	20.0	ug/L	97.5	20.1	20.0	ug/L	100.5	2.9
Xylenes, Total		1892	58.8	<1.0	60.0	ug/L	98.0	60.7	60.0	ug/L	101.2	3.1

NOTE: Matrix Spike Samples may not be samples from this job.

Advisory Control Limits for MS/MSDs:

For Inorganic Parameters and GC Volatiles, the spike recovery should be 75 - 125% if the spike added value was greater than or equal to one fourth of the sample result value. If not, the control limits are not established. The RPD for the MS/MSD pair should be less than 20.

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

RPD calculations are performed on the Percent Recovery calculated from the observed Matrix spike and Matrix Spike Duplicate results.

NET Midwest, Bartlett Division

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in the results column indicates the analyte was not detected at or above the reported value.
mg/L	:	Concentration in units of milligrams of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per million (ppm).
ug/g	:	Concentration in units of micrograms of analyte per gram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per million (ppm) or mg/Kg.
ug/L	:	Concentration in units of micrograms of analyte per liter of sample. Measurement used for aqueous samples. Can also be expressed as parts per billion (ppb).
ug/Kg	:	Concentration in units of micrograms of analyte per kilogram of sample. Measurement used for non-aqueous samples. Can also be expressed as parts per billion (ppb).
TCLP	:	These initials appearing in front of an analyte name indicate that the Toxicity Characteristic Leaching Procedure (TCLP) was performed for this test.
Surr:	:	These initials are the abbreviation for surrogate. Surrogates are compounds that are chemically similar to the compounds of interest. They are part of the method quality control requirements.
%	:	Percent; To convert ppm to %, divide the result by 10,000. To convert % to ppm, multiply the result by 10,000.
ICP	:	Indicates analysis was performed using Inductively Coupled Plasma Spectroscopy.
AA	:	Indicates analysis was performed using Atomic Absorption Spectroscopy.
GFAA	:	Indicates analysis was performed using Graphite Furnace Atomic Absorption Spectroscopy.
PQL	:	Practical Quantitation Limit; the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions.

Method References

(1) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986.

(2) ASTM "American Society for Testing Materials"

(3) Methods 100 through 499: see "Methods for Chemical Analysis of Water and Wastes", USEPA, 600/4-79-020, Rev. 1983.

(4) See "Standard Methods for the Examination of Water and Wastewater", 17th Ed, APHA, 1989.

(5) Methods 600 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants", USEPA Federal Register Vol. 49 No. 209, October 1984.

(6) Methods 500 through 599: see "Methods for the Determination of Organic Compounds in Drinking Water," USEPA 600/4-88/039, Rev. 1988.

(7) See "Methods for the Determination of Metals in Environmental Samples", Supplement I EPA-600/R-94/111, May 1994.

(8) See "Standard Methods for the Examination of Water and Wastewater", 18th Ed., APHA, 1992.

(9) Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", USEPA SW-846, 3rd Edition, 1986, Including Updates I and II.

NATIONAL ENVIRONMENTAL TESTING, INC.

CHAIN OF CUSTODY RECORD

COMPANY Amoco Pipeline Co.
ADDRESS MC POB 63062 POB 7513 Chicago, IL 60680-7513
PHONE 312-856-7251 FAX 312-856-3731
PROJECT NAME/LOCATION Amoco Pipeline Co - Artesia Station
PROJECT NUMBER Facility # 10195
PROJECT MANAGER MR. Doug Gurney

REPORT TO: H. Mittelhauser / D. Gurney
INVOICE TO:
P.O. NO.
NET QUOTE NO.

MBF Services

SAMPLED BY Clayton M Barnhill
(PRINT NAME) Clayton M Barnhill
SIGNATURE

(PRINT NAME)
SIGNATURE

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	# and Type of Containers: HCl	NaOH	HNO_3	H_2SO_4	OTHER	ANALYSES: BTEX 8020
4/2/97	11:00	3 VOA's Influent	H_2O	X		X					X
4/2/97	11:10	3 VOA's Effluent	H_2O	X		X					X
4/2/97	11:50	3 VOAs Monitor Well #11	H_2O	X		X					X
4/2/97	12:26	3 VOA's Monitor Well #14	H_2O	X		X					X
4/2/97	12:45	3 VOA's Monitor Well #12	H_2O	X		X					X
4/2/97	13:15	3 VOA's Monitor Well #6	H_2O	X		X					X
4/2/97	14:00	3 VOA's Monitor Well #7	H_2O	X		X					X
4/2/97	15:12	3 VOA's Monitor Well #4	H_2O	X		X					X
		2 VOA's TripBlank									

To assist us in selecting the proper method

Is this work being conducted for regulatory compliance monitoring? Yes ✓ No ____

Is this work being conducted for regulatory enforcement action? Yes ____ No ____

Which regulations apply: RCRA ____ NPDES Wastewater ____ UST ____ Drinking Water ____ Other ____ None ____

COMMENTS

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
FIELD FILTERED? YES / NO
COC SEALS PRESENT AND INTACT? YES / NO
VOLATILES FREE OF HEADSPACE? YES / NO
TEMPERATURE UPON RECEIPT: 16.4°C
Bottles supplied by NET? YES NO
blue ice

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA ____
I REQUEST NET TO DISPOSE OF ALL SAMPLE REMAINDERS Clayton M Barnhill DATE 4/2/97

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	RELINQUISHED BY:	DATE	TIME	RECEIVED FOR NET BY:
Clayton M Barnhill	4/2/97	17:00			4/3/97	10:15	

METHOD OF SHIPMENT: FEDEX OVERNIGHT

REMARKS: Please Send Copy of Report ASAP To H. Mittelhauser #2775

PT 1 - ORIGINAL - WHITE PT 2 - NET PROJECT MANAGER - YELLOW PT 3 - CUSTOMER COPY - PINK