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*LIST #1510  
TEXACO/GULL  
KING*

**REVISED SUBSURFACE ASSESSMENT REPORT  
TEXACO FACILITY 63-232-0307**

**1637 WEST MEEKER STREET  
KENT, WASHINGTON**

**SECOR Job No. 00111-101-01**

**Submitted by  
SECOR**

**For  
Jeff Goold  
Project Manager  
Texaco Environmental Services  
3400 188th Street SW, Suite 630  
Lynnwood, Washington 98037**

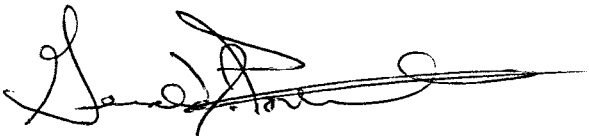
Submitted: December 12, 1994  
Revised: March 14, 1995

Prepared by:



**Daniel C. Martin  
Senior Hydrogeologist**

Reviewed by:



**Gerald J. Portele  
Project Manager**

detected in samples collected from borings B-8 and MW-22 coincide with the area of greatest soil impacts (Section 4.3).

Results from SECOR's first round of quarterly groundwater monitoring at new and existing wells (Figure 7) indicate a similar extent of groundwater impacts as that reported in previous investigative documents.

For laboratory quality assurance and quality control purposes, blind duplicate groundwater samples were collected at well locations MW-18, MW-21, and RMW-1. To evaluate the duplicate results, relative percent differences (RPDs) were calculated for corresponding analytes. RPD values for the duplicate sample collected from well MW-21 were within generally accepted levels ( $\pm 20$  percent) as shown in the brackets [ ] adjacent to the corresponding analyte results on Table 4. RPD values were not calculated for the duplicate sample collected from well MW-18, due to non-detectable results. Benzene and total xylene RPD values for the duplicate sample collected from well RMW-1 were above generally accepted levels. These elevated RPD values are not considered significant because the analytical results were close to the method reporting limit.

#### 4.5 ASSESSMENT OF THE CURRENT REMEDIATION SYSTEM

Contoured November 1, 1994 water level elevations were used to assess effect of groundwater extraction on groundwater flow. Using standard flow-net contouring assumptions where the direction of groundwater flow is perpendicular to the water level elevation contours, an estimation of capture zones at each recovery well was generated (Figure 8). To qualitatively check the capture zones shown on Figure 8, a method developed by Keely and Tsang (1983) was used to estimate capture zone parameters for recovery well RW-6. It should be noted that the Keely and Tsang (1983) method assumes that the aquifer is confined and is based on two-dimensional flow systems. However, this solution can be used for unconfined systems, where the amount of drawdown relative to the total saturated thickness is small. Although previous water level measurements taken from recovery well RW-6 indicate significant drawdown in the well casing during pumping, it is likely that this affect includes well inefficiencies due to the relatively thin well slot opening (0.010-inch) used to minimize migration of fine sand into the well casing. For the purpose of this qualitative assessment, it is assumed that aquifer drawdown in the vicinity of RW-6 is small relative to the total saturated thickness.

Based on the Keely and Tsang (1983) method, the radial extent of the capture zone that is perpendicular to natural (non-pumping) hydraulic gradient ( $y$ ) can be estimated using the equation:

$$y = Q/2BK_i$$

- where: Q = sustainable flow rate (during the operation of RW-6, a long-term flow rate of 0.96 gpm or 0.13 ft<sup>3</sup>/min was measured),  
B = aquifer thickness (review of RW-6 boring log and measured depth to water equates to an aquifer thickness of approximately 15 feet),  
K = hydraulic conductivity (using previous investigation estimate of  $8.4 \times 10^{-3}$  ft/min, and,  
i = static (non-pumping) hydraulic gradient (using previous investigation contour maps indicate a gradient of 0.01 ft/ft).

The downgradient extent of the capture zone or stagnation point (x) can be estimated using the equation:

$$x = Q/2\pi BKi$$

Using the values listed above, the radial extent of the capture zone perpendicular to static groundwater flow (y) and the stagnation point (x) equate to approximately 50 feet and 16 feet, respectively. The estimated capture zone shown on Figure 8 for well RW-6 is comparatively similar to capture zone values calculated above.

The groundwater capture zone map illustrates a larger capture zone at recovery well RW-4 relative to remaining recovery wells RW-2, RW-3, and RW-6 (Figure 8). Well RW-4 larger capture zone is evidenced by the larger well yields observed at this well. As shown on Figure 8, the estimated capture zone for recovery well RW-6 extends partially under West Meeker Street. However, the majority of impacts under West Meeker Street are outside the RW-6 capture zone and are likely migrating to hydraulically downgradient recovery wells RW-2 through RW-3.

#### 4.6 VACUUM ENHANCED PUMPING TEST

As described in Section 3.5, a vacuum enhanced pumping test was conducted at recovery well RW-3 by applying a vacuum within the well casing while the groundwater recovery system was in operation. Four vacuum levels were applied to recovery well RW-3, as follows: approximately 8 inches of water for 45 minutes; increased to 11 inches of water for 20 minutes; increased to 25 inches of water for 30 minutes; and ending with 33 inches of water for 435 minutes (7 hours 15 minutes).

The application of a vacuum at recovery well RW-3 resulted in an increase in the observed groundwater extraction rate from 2.5 gpm to approximately 4.3 gpm with the maximum vacuum of 33 inches of water. The increased extraction rate of nearly 2 gpm resulted in incremental water level drawdown responses at monitoring wells MW-10, MW-19, and B-5 (Figure 8). No apparent responses were observed at wells MW-22, B-2, and RW-2. Monitoring wells B-5, MW-10, MW-19, B-2, MW-22, and RW-2 are located from well RW-3 at distances of 26 feet, 44 feet, 60 feet, 70 feet, 82 feet, and 104 feet, respectively. Water level monitoring data collected within well RW-3 indicates that the water level remained relatively stable as the extraction rate increased. Since the pump was operating at full capacity the entire test, additional flow could not be applied to generate additional drawdown in the recovery well. Based on the increase in groundwater extraction rate and the observed drawdown response in nearby monitoring wells, it appears that the addition of vacuum can be used to enhance the radius of influence and the capture of groundwater.

During the test, no vacuum responses were observed at adjacent monitoring wells B-5, MW-10, MW-19, B-2, MW-22, and RW-2. At the highest applied vacuum of 33 inches of water, air flow measurements exiting well RW-3 did not exceed 14 cubic feet per minute (ft<sup>3</sup>/min). Air flows generally under 25 ft<sup>3</sup>/min are indicative of relatively low soil permeabilities. PID readings throughout the test fluctuated between 60 and 90 PID units. No general trend of increased PID readings was observed with increases in vacuum applied at RW-3. Although no air samples were collected for laboratory analysis and quantification, the measured PID and air flow readings indicated an estimated petroleum hydrocarbon removal rate of less than 0.1 pounds per day (lb/day).

Additional vacuum enhanced pumping was performed at recovery well RW-6 from November 1 through 8, 1994. With a vacuum of 40 inches of water applied at RW-6, the groundwater extraction rate increased from approximately 1 gpm (no vacuum) to 2.5 gpm. PID readings measuring at 922 PID units and one air sample for laboratory analysis were collected from the vacuum exhaust on November 8, 1994. Monitoring results indicate gasoline-range petroleum hydrocarbon removal rate in the vapor phase of approximately 1 lb/day. The November 8, 1994 air sample laboratory report is included in Appendix B. An unexpected pump failure in RW-6 prevented obtaining data from adjacent wells to evaluate the actual effects of vacuum enhancement with respect to increased pumping radius of influence.

#### **4.7 SUBSURFACE UTILITIES**

To evaluate the potential for contaminant migration in the subsurface due to existing buried utilities beneath West Meeker Street, SECOR compiled utility information from various sources including previous environmental reports and city of Kent records.

Of the subsurface utilities located within the site vicinity, the sanitary and storm sewer systems appear to be the only utilities that are present at sufficient depths (i.e., greater than 5 feet below ground surface) to potentially effect the migration of petroleum hydrocarbons. Other subsurface utilities (i.e., natural gas, water, electric, and cable), are typically buried at depths of less than 4 feet below ground surface. As shown on Figure 9, both sanitary and storm sewer drain lines pass through areas of known impacts within West Meeker Street. These utilities are projected on schematic geologic cross section B-B' (Figure 4).

Based on the increased sand content in the fine-grained unit where petroleum hydrocarbons impacts are the greatest along West Meeker Street (see Section 4.1 and Section 4.3), it is less likely that the utility trench backfill would provide a significant increase in soil permeabilities relative to native soils, resulting in a preferential pathway of migration along the trenches. The absence of significant preferential migration along the trenches is evidenced by the apparent orientation of subsurface impacts which trend in a generally northeast to southwest direction (see Section 4.4), approximately perpendicular to the orientation of the trenches.

## 5.0 SUMMARY

SECOR's subsurface assessment results confirm the presence of significant soil and groundwater contamination under West Meeker Street, immediately south of the Texaco property. Impacts under the street include the presence of LPH in a newly installed well along the centerline of West Meeker Street. Petroleum hydrocarbons present above the water table are likely acting as an ongoing source of the identified groundwater contamination south of the Texaco property. Based on groundwater elevation contours reflecting conditions generated from the present groundwater recovery system, petroleum hydrocarbons underlying West Meeker Street are likely being recovered by wells located south of the street.

Soil types encountered during the subsurface assessment were similar to soils described in previous investigation boring logs. Generally, the site appears to be underlain by a relatively wide spread, fine-grained unit consisting of clays and silts at depths of approximately 10 to 20 feet below ground surface. The fine-grained unit appears to laterally grade with more sand beneath West Meeker Street, in those areas where the greatest impacts were encountered. Underlying the fine-grained unit is a coarse-grained unit that occurs at depths of approximately 20 to 36 feet below ground surface (maximum depth explored).

Hydrogeologic conditions encountered during SECOR's subsurface assessment were similar to conditions described in previous investigation reports. Generally, groundwater was first encountered during drilling in the coarse-grained unit, at depths of approximately 13 to 16 feet below ground surface. Historical water level data indicate that groundwater seasonally fluctuates approximately 7 feet per year. Due to this fluctuation, it appears that groundwater fluctuates seasonally between unconfined and semiconfined conditions. When water level elevations are seasonally low (summer), unconfined conditions likely prevail with the water table intersecting the underlying coarse-grained unit. Semiconfined conditions likely occur when the water table rises and intersects the shallower, fine-grained unit.

Results from SECOR's first round of quarterly groundwater monitoring at new and existing wells indicate a similar extent of groundwater impacts as that reported in previous investigative documents.

Vacuum enhanced pumping field tests indicate that this technology would be beneficial towards enhancement of site remediation. The application of a vacuum at the recovery wells will increase groundwater extraction rates, resulting in larger capture zones. Additionally, in areas of elevated soil impacts (i.e., under West Meeker Street), the application of a vacuum appears to remove significant quantities of petroleum hydrocarbons in the vapor phase.

TABLE 2  
GROUNDWATER ELEVATION DATA  
Texaco Facility 63-232-0307  
1637 West Meeker Street, Kent, Washington

REVISED 3/95

Well ID.	Date Sounded	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Level Elevation (feet)	Difference From Previous Measurement (feet)
MW-5	09/15/94	37.23	-	17.85	0	19.38	**
	11/01/94	35.45	-	15.68	0	19.77	0.39
MW-6	09/15/94	35.52	-	15.50	0	20.02	**
	11/01/94	35.52	-	14.89	0	20.63	0.61
MW-7	11/01/94	35.51	-	13.59	0	21.92	**
MW-8	11/01/94	35.75	-	14.32	0	21.43	**
MW-10	09/15/94	35.03	-	16.38	0	18.65	**
	11/01/94	35.03	-	16.08	0	18.95	0.30
MW-11	09/15/94	34.96	-	16.82	0	18.14	**
	11/01/94	34.96	-	16.58	0	18.38	0.24
MW-12	09/15/94	36.13	-	19.20	0	16.93	**
	11/01/94	36.13	-	18.02	0	18.11	1.18
MW-13	11/01/94	36.09	-	16.85	0	19.24	**
MW-14	09/15/94	35.58	-	18.55	0	17.03	**
	11/01/94	35.58	-	17.21	0	18.37	1.34
MW-15	09/15/94	34.55	-	16.25	0	18.30	**
	11/01/94	34.55	-	16.00	0	18.55	0.25
MW-16	11/01/94	35.41	-	15.49	0	19.92	**
MW-17	09/15/94	35.28	-	15.36	0	19.92	**
	11/01/94	35.28	-	14.52	0	20.76	0.84
MW-18	09/15/94	34.83	-	18.96	0	15.87	**
	11/01/94	34.83	-	14.60	0	20.23	4.36
MW-19	09/15/94	37.20	-	18.72	0	18.48	**
	11/01/94	37.20	-	18.20	0	19.00	0.52
MW-20	09/15/94	38.37	-	14.98	0	23.39	**
	11/01/94	38.37	-	19.85	0	18.52	-4.87

NOTES: Elevations relative to City of Kent datum.  
Well MW-5 was resurveyed after wellhead modification on October 7, 1994.  
\*\* Not calculated, previous measurement not available.

TABLE 2  
GROUNDWATER ELEVATION DATA  
Texaco Facility 63-232-0307  
1637 West Meeker Street, Kent, Washington

REVISED 3/95

Well I.D.	Date Sounded	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Water (feet)	Product Thickness (feet)	Water Level Elevation (feet)	Difference From Previous Measurement (feet)
MW-21	09/15/94	36.18	-	17.25	0	18.93	**
	11/01/94	36.18	-	16.88	0	19.30	0.37
MW-22	11/02/94	36.28	16.51	17.10	0.59	19.62*	**
B-2	11/01/94	34.60	-	16.04	0	18.56	**
B-5	09/15/94	34.54	-	16.75	0	17.79	**
	11/01/94	34.54	-	16.42	0	18.12	0.33
B-6	09/15/94	35.52	-	18.49	0	17.03	**
	11/01/94	35.52	-	17.51	0	18.01	0.98
RMW-1	09/15/94	36.34	-	19.58	0	16.76	**
	11/01/94	36.34	-	18.26	0	18.08	1.32
RMW-2	09/15/94	35.39	-	18.66	0	16.73	**
	11/01/94	35.39	-	-	0	-	**
RW-2	11/01/94	32.93	-	22.23	0	10.70	**
RW-3	11/01/94	33.27	-	19.88	0	13.39	**
RW-4	11/01/94	34.39	-	17.37	0	17.02	**
RW-5	11/01/94	35.06	-	15.95	0	19.11	**
RW-6	11/01/94	34.90	-	24.23	0	10.67	**

NOTES: Elevations relative to City of Kent datum.

\* Equivalent Water Level = Top of Casing Elevation - Depth to Water + (0.75 x Apparent Product Thickness). This equation assumes a product specific gravity of 0.75.

\*\* Not calculated, previous measurement not available.

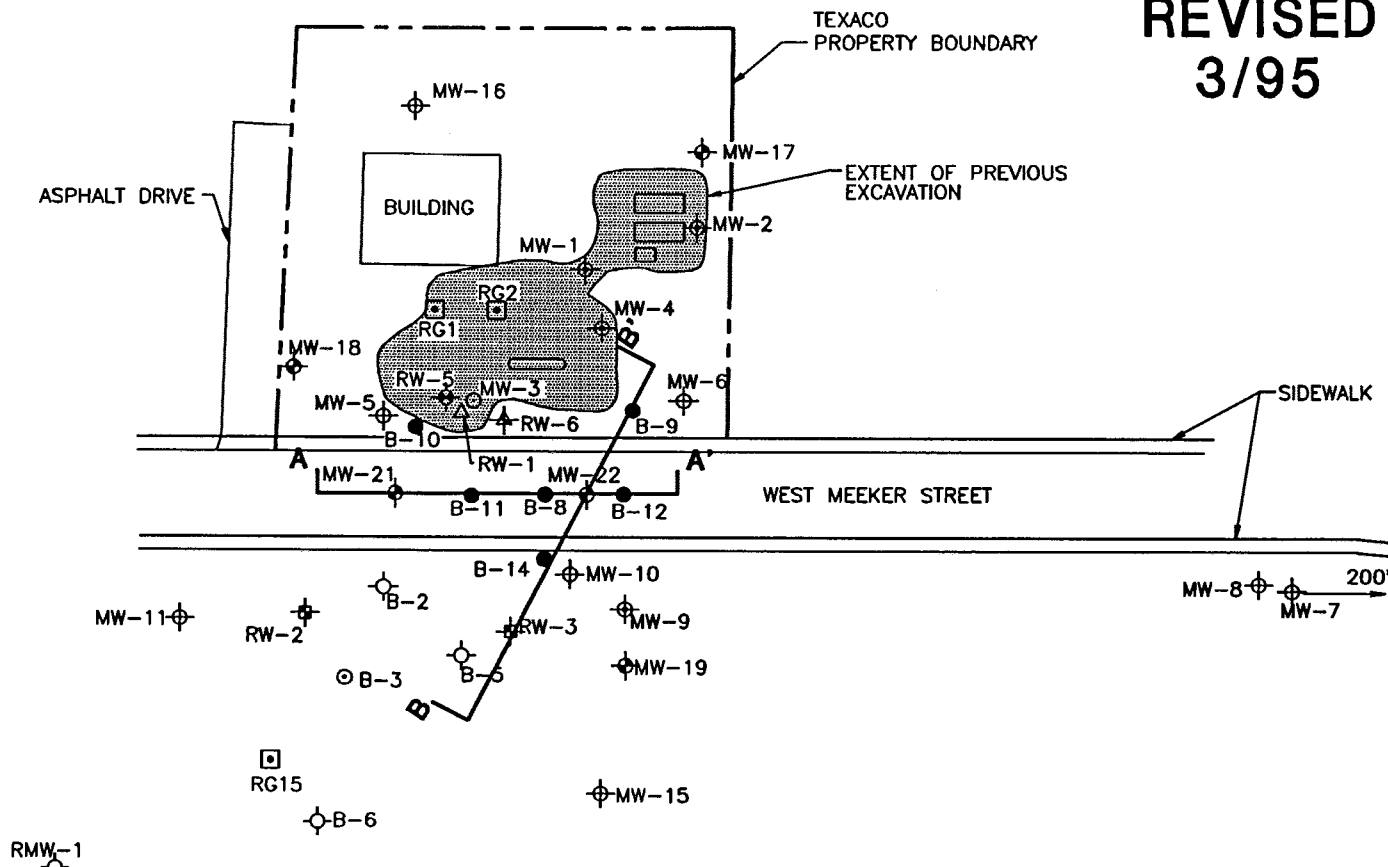
TABLE 4  
GROUNDWATER ANALYTICAL RESULTS  
Texaco Facility 63-232-0307  
1637 West Meeker Street, Kent, Washington

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Well Location	Sample Date	TPH-G (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Total Xylenes (ug/L)	Dissolved Lead (ug/L)
B-8 (a)	08/19/94	110,000	16,000	25,000	2,800	15,000	*
MW-5	09/22/94	170	14	(2.0)	(2.0)	53	--
MW-6	09/22/94	--	--	--	--	--	--
MW-10	09/16/94	440	13	2.2	3.3	1.2	--
MW-11	09/16/94	--	--	0.88	--	--	--
MW-12	09/16/94	--	--	--	--	--	--
MW-14	09/16/94	--	--	--	--	--	--
MW-15	09/16/94	--	--	--	--	--	--
MW-17	09/22/94	--	--	--	--	--	--
MW-18 (Duplicate)	09/22/94 09/22/94	-- --	0.51 --	-- --	-- --	-- --	-- --
MW-19	09/16/94	1,300	6.6	2.1	11	63	--
MW-20	09/16/94	--	--	--	--	--	--
MW-21 (Duplicate)	08/19/94 (a) 09/16/94 09/16/94	790 510 510 [0%]	100 17 15 [12%]	37 2.8 2.5 [11%]	30 2.8 3.3 [16%]	200 31 28 [10%]	* -- --
MW-22	10/07/94	100,000	9,200	19,000	3,000	16,000	2.7
B-5	09/16/94	15,000	110	150	670	2,300	--
B-6	09/16/94	--	12	--	--	4.1	--
RMW-1 (Duplicate)	09/16/94 09/16/94	-- 54	6.2 8.8 [35%]	0.84 0.86 [2%]	-- --	2.8 3.7 [28%]	-- --
RMW-2	09/16/94	--	--	--	--	--	--
RW-2	10/17/94	8,000	65	11	42	220	*
RW-3	10/17/94	12,000	510	110	95	440	*
RW-4	10/17/94	500	250	6.9	21	93	*
Reporting Limit		50	0.50	0.50	0.50	1.0	2.0
MTCA Method A Cleanup Level		1,000.0	5.0	40.0	30.0	20.0	5.0

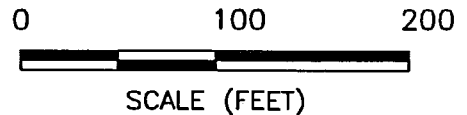
NOTES: TPH-G = Total petroleum hydrocarbons within the gasoline range (toluene to dodecane) by Ecology Method WTPH-G.  
Benzene, toluene, ethyl benzene, and total xylenes by EPA Method 8020.  
Lead by EPA Method 7421.  
ug/L = Micrograms per liter [parts per billion (ppb)].  
-- = Constituent not detected above the listed method reporting limit  
\* = Constituent not analyzed  
[ ] = Constituent detected above the designated cleanup level.  
MTCA = Model Toxics Control Act Cleanup Regulation [WAC 173-340-720(2)(a)(i), as amended 12/93].  
(a) Sample collected from temporary monitoring well constructed in boring.  
Laboratory analyses performed by North Creek Analytical, Bothell, Washington.  
[ ] = Relative Percent Difference (RPD), where RPD = [(sample concentration - duplicate concentration)/mean] x 100 percent.

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**LEGEND**

- ⊕ MONITORING WELL BY AGI
- ⊕ MONITORING WELL BY SECOR
- ⊕ MONITORING WELL BY OTHERS
- ⊕ MONITORING WELL BY AGI CONVERTED TO MONITORING WELL BY SECOR
- ⊕ MONITORING WELL BY AGI (ABANDONED)
- ⊕ MONITORING WELL BY OTHERS (ABANDONED)
- ⊕ RECOVERY WELL BY AGI
- ⊕ RECOVERY WELL BY SECOR
- ⊕ RECOVERY WELL BY AGI (ABANDONED)
- ⊕ REINTRODUCTION GALLERY BY AGI
- SOIL BORING BY SECOR
- ▭ FORMER UST
- ▭ FORMER PUMP ISLAND
- TRACE OF SCHEMATIC GEOLOGIC CROSS SECTION



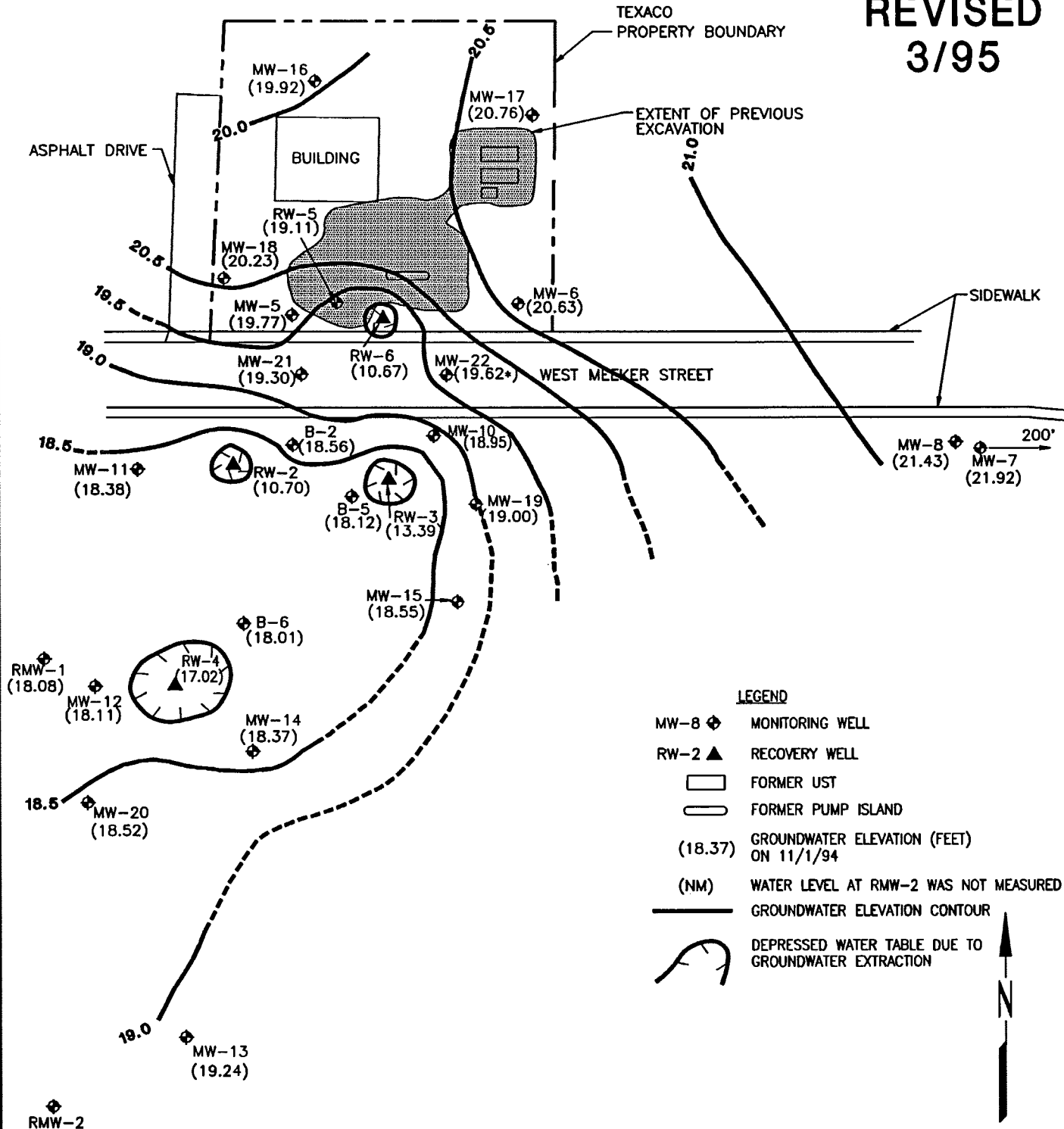
THE LOCATION OF FEATURES SHOWN ABOVE THAT EXISTED PRIOR TO SECOR'S ASSESSMENT WERE OBTAINED FROM BACKGROUND DOCUMENTS

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DWN AJW  
 APPR \_\_\_\_\_  
 DATE 12/9/94  
 JOB# \_\_\_\_\_  
00111-101-01

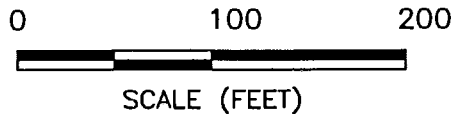
**FIGURE 2  
SITE PLAN  
TEXACO FACILITY 63-232-0307  
1637 WEST MEEKER STREET  
KENT, WASHINGTON**

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3/95**



**LEGEND**

- MW-8 ◊ MONITORING WELL
- RW-2 ▲ RECOVERY WELL
- FORMER UST
- FORMER PUMP ISLAND
- (18.37) GROUNDWATER ELEVATION (FEET) ON 11/1/94
- (NM) WATER LEVEL AT RMW-2 WAS NOT MEASURED
- GROUNDWATER ELEVATION CONTOUR
- ⤵ DEPRESSED WATER TABLE DUE TO GROUNDWATER EXTRACTION



RMW-2 (NM)

\* GROUNDWATER ELEVATION ESTIMATED BY ADDING 75% OF PRODUCT THICKNESS TO MEASURED WATER ELEVATION COLLECTED ON 11/2/94.

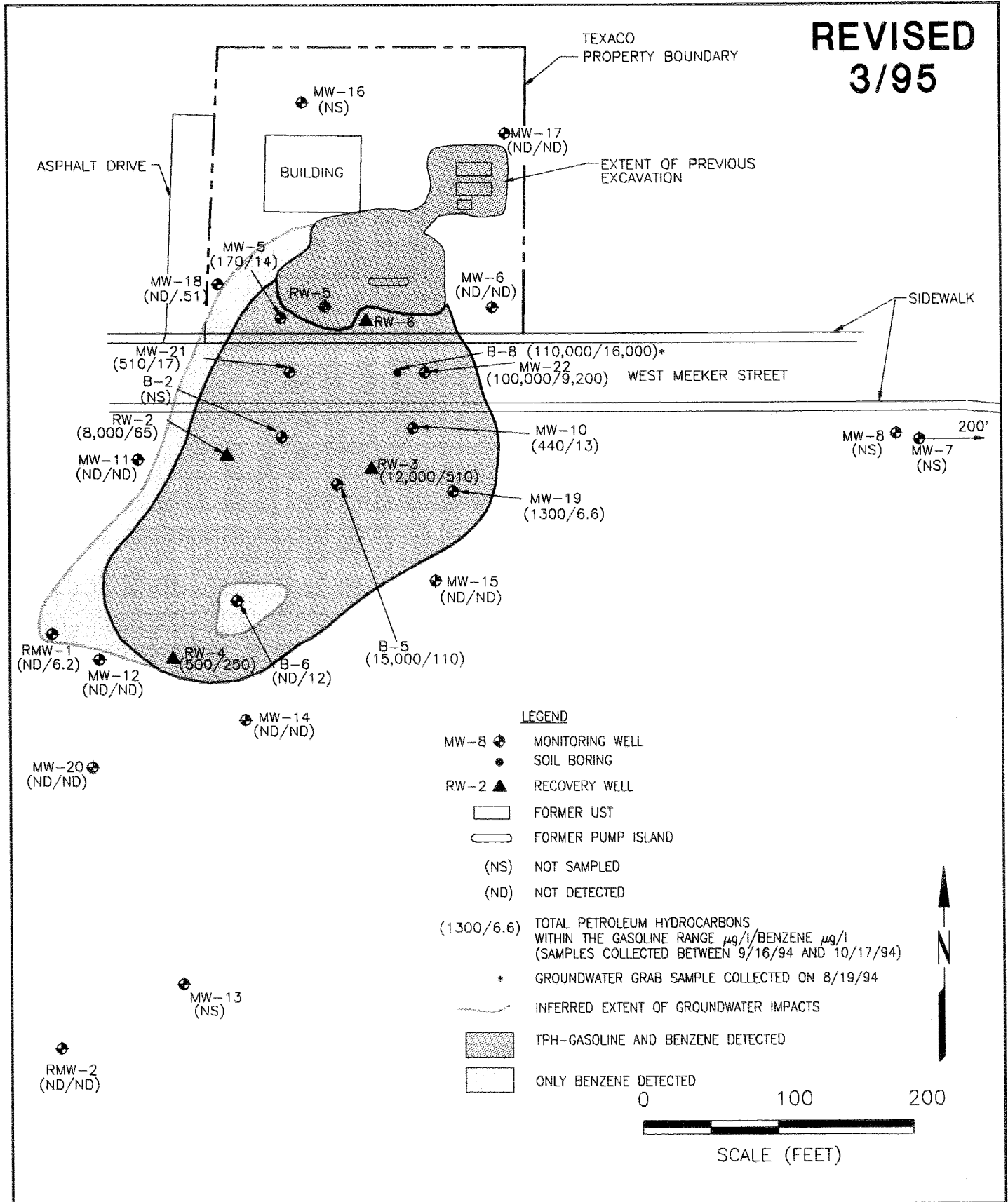
ESTIMATED GROUNDWATER EXTRACTION RATES:  
 RW-2 AT 1.8 GPM, RW-3 AT 2.5 GPM, RW-4 AT 3.7 GPM,  
 RW-5 AT 0 GPM, AND RW-6 AT 1 GPM

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*International Incorporated*

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 APPR \_\_\_\_\_  
 DATE 12/9/94  
 JOB# \_\_\_\_\_  
00111-101-01

**FIGURE 6  
 GROUNDWATER ELEVATION CONTOUR MAP  
 TEXACO FACILITY 63-232-0307  
 1637 WEST MEEKER STREET  
 KENT, WASHINGTON**

**REVISED  
3/95**

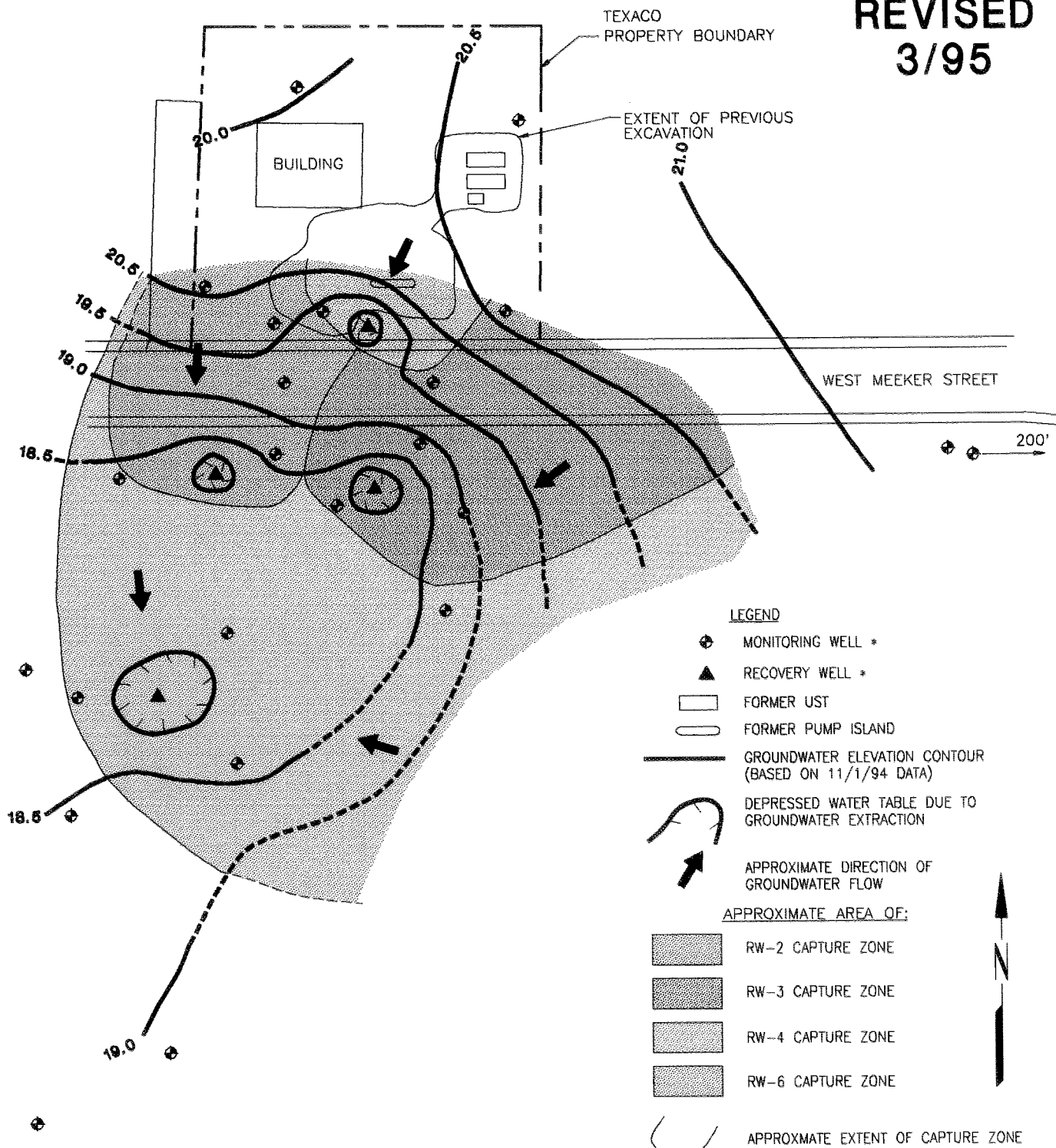


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 International Incorporated

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 APPR \_\_\_\_\_  
 DATE 12/9/94  
 JOB# 8RR  
00111-101-01

**FIGURE 7  
 GROUNDWATER ANALYTICAL RESULTS  
 TEXACO FACILITY 63-232-0307  
 1637 WEST MEEKER STREET  
 KENT, WASHINGTON**

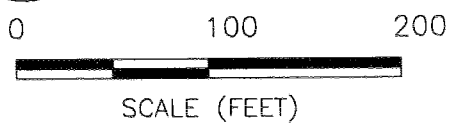
**REVISED  
3/95**



**LEGEND**

- ⊕ MONITORING WELL \*
  - ▲ RECOVERY WELL \*
  - FORMER UST
  - FORMER PUMP ISLAND
  - GROUNDWATER ELEVATION CONTOUR (BASED ON 11/1/94 DATA)
  - - - DEPRESSED WATER TABLE DUE TO GROUNDWATER EXTRACTION
  - APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- APPROXIMATE AREA OF:**
- [Pattern] RW-2 CAPTURE ZONE
  - [Pattern] RW-3 CAPTURE ZONE
  - [Pattern] RW-4 CAPTURE ZONE
  - [Pattern] RW-6 CAPTURE ZONE
  - APPROXIMATE EXTENT OF CAPTURE ZONE

ESTIMATED GROUNDWATER EXTRACTION RATES:  
 RW-2 AT 1.8 GPM, RW-3 AT 2.5 GPM, RW-4 AT 3.7 GPM,  
 AND RW-6 AT 1 GPM



\* REFER TO FIGURE 6 FOR WELL DESIGNATION AND GROUNDWATER ELEVATION

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*International Incorporated*

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 APPR \_\_\_\_\_  
 DATE 12/9/94  
 JOB# \_\_\_\_\_  
00111-101-01

**FIGURE 8**  
**GROUNDWATER CAPTURE ZONE MAP**  
**TEXACO FACILITY 63-232-0307**  
**1637 WEST MEEKER STREET**  
**KENT, WASHINGTON**

SEACOR 11040 Main Street, #240 Bellevue, WA 98004 Attention: Jerry Portele	Client Project ID: Texaco Kent, #63-232-0307 Sample Matrix: Water Analysis Method: WTPH-G First Sample #: 409-0912	Sampled: Sep 16, 1994 Received: Sep 19, 1994 Analyzed: Sep 20, 1994 Reported: Sep 27, 1994
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**TOTAL PETROLEUM HYDROCARBONS-GASOLINE RANGE**

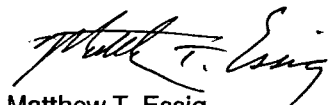
Sample Number	Sample Description	Sample Result μg/L (ppb)	Surrogate Recovery %
409-0912	G0307-RMW2	N.D.	95
409-0913	G0307-RMW1	N.D.	98
409-0914	G0307-MW DUP 1	510	139
409-0915	G0307-MW DUP 2	54	107
BLK092094	Method Blank	N.D.	96

<b>Reporting Limit:</b>	<b>50</b>
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4-Bromofluorobenzene surrogate recovery control limits are 50 - 150 %.  
 Volatile Total Petroleum Hydrocarbons are quantitated as Gasoline Range Organics (toluene - dodecane).  
 Analytes reported as N.D. were not detected above the stated Reporting Limit.

**NORTH CREEK ANALYTICAL Inc.**

Please Note: Report was amended on March 24, 1995.
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 Matthew T. Essig  
 Project Manager

SEACOR 11040 Main Street, #240 Bellevue, WA 98004 Attention: Jerry Portele	Client Project ID: Texaco Kent, #63-232-0307 Sample Matrix: Water Analysis Method: EPA 8020 First Sample #: 409-0912	Sampled: Sep 16, 1994 Received: Sep 19, 1994 Analyzed: Sep 20, 1994 Reported: Sep 27, 1994
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## BTEX DISTINCTION

Sample Number	Sample Description	Benzene $\mu\text{g/L}$ (ppb)	Toluene $\mu\text{g/L}$ (ppb)	Ethyl Benzene $\mu\text{g/L}$ (ppb)	Xylenes $\mu\text{g/L}$ (ppb)	Surrogate Recovery %
409-0912	G0307-RMW2	N.D.	N.D.	N.D.	N.D.	104
409-0913	G0307-RMW1	6.2	0.84	N.D.	2.8	107
409-0914	G0307-MW DUP 1	15	2.5	3.3	28	125
409-0915	G0307-MW DUP 2	8.8	0.86	N.D.	3.7	107
BLK092094	Method Blank	N.D.	N.D.	N.D.	N.D.	103

<b>Reporting Limits:</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>1.0</b>
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4-Bromofluorobenzene surrogate recovery control limits are 55 - 144 %.  
 Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

  
 Matthew T. Essig  
 Project Manager

Please Note:  
 Report was amended on March 24, 1995.

SEACOR 11040 Main Street, #240 Bellevue, WA 98004 Attention: Jerry Portele	Client Project ID: Texaco Kent, #63-232-0307 Sample Matrix: Water Analysis Method: EPA 7421 First Sample #: 409-0902	Sampled: Sep 16, 1994 Received: Sep 19, 1994 Analyzed: Sep 22, 1994 Reported: Sep 27, 1994
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## METALS ANALYSIS FOR: DISSOLVED LEAD

Sample Number	Sample Description	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
409-0902	G0307-MW10	2.0	N.D.
409-0903	G0307-MW11	2.0	N.D.
409-0904	G0307-MW12	2.0	N.D.
409-0905	G0307-MW14	2.0	N.D.
409-0906	G0307-MW15	2.0	N.D.
409-0907	G0307-MW19	2.0	N.D.
409-0908	G0307-MW20	2.0	N.D.
409-0909	G0307-B5	2.0	N.D.
409-0910	G0307-B6	2.0	N.D.
409-0911	G0307-B7	2.0	N.D.
409-0912	G0307-RMW2	2.0	N.D.
409-0913	G0307-RMW1	2.0	N.D.

Analytes reported as N.D. were not detected above the stated Reporting Limit.

NORTH CREEK ANALYTICAL Inc.

  
 Matthew T. Essig  
 Project Manager

Please Note:  
 Report was amended on March 24, 1995.

