



TACOMA-PIERCE COUNTY
HEALTH
DEPARTMENT

Federico Cruz-Urbe, MD, MPH
Director of Health

Governed by a local
Board of Health

- Community Based
- Competitive
- Integrated
- Preventive

Summary

6 November, 2001

Robert Shea
Brown & Haley Distribution Center
1940 East 11th Street
Tacoma, WA 98421

RE: Underground Storage Tank Removal: Assessment Project
Site: 1940 East 11th Street, Tacoma, WA
Parcel #: 2275200661
TPCHD Permit # 9904

Dear Ms. Shea:

This letter is to inform you that the Tacoma-Pierce County Health Department (TPCHD) has reviewed the July 2001 Final Report and October 2001 Addendum to the Final Report, submitted by Sound Environmental Strategies, for the above referenced property.

Information contained in these reports indicates that petroleum related contamination associated with the underground storage tank (UST) onsite has been remediated to within acceptable levels. At this time, the TPCHD requires no further investigation or remedial actions. This determination is based solely on information provided to the TPCHD and does not constitute a determination from any other regulatory agency.

This no further action determination is made only with respect to the UST identified in the TPCHD permit # 9904 and applies only to the area of the property where said UST was removed at 1940 East 11th St, Tacoma, WA, as identified in this report.

The TPCHD and its officers and employees are immune from all liability and no cause of action of any nature may arise from any act or omission in providing this determination.

If you have any questions regarding this property, please contact me at (253) 798-6566.

Sincerely,

Mark LaVergne
Environmental Health Specialist
Source Protection Program

cc: Carol Johnson, Department of Ecology
Linda Drake, Sound Environmental Strategies

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3629 South D Street
Tacoma, WA 98418-6813

253/798-6500
TDD: 798-6050
800/992-2456

www.healthdept.co.pierce.wa.us



www.soundenvironmental.com

October 22, 2001

Mr. Mark LaVergne
Tacoma Pierce County Health Department
3629 South D Street
Tacoma, Washington 98418

Subject: ADDENDUM TO REQUEST FOR NO FURTHER ACTION LETTER
BROWN AND HALEY FACILITY
1940 EAST 11TH STREET
TACOMA, WASHINGTON

Dear Mr. LaVergne:

Sound Environmental Strategies (SES), formerly Creative Environmental Technologies, Inc., prepared this Addendum to address your questions and concerns, and to make corrections to our Request For No Further Action Letter, dated July 19, 2001, for the Brown and Haley Facility at 1940 East 11th Street in Tacoma, Washington.

Corrections to the Request for No Further Action Letter:

On Page 1, third paragraph, and on page 4, first paragraph, reference is made to "two diesel USTs" having been located on the Site. Only one tank was on the site.

Page 1, third paragraph, first sentence should read: "Saltbush Environmental performed UST decommissioning activities for **one** diesel UST at the Site with oversight from TPCHD."

Page 4, first paragraph, first and second sentence should read: "**One** diesel UST was located at this Site and **was** partially submerged beneath shallow groundwater during its operational life. The **tank** was decommissioned by removal and soil and groundwater impacts were observed in the tank excavation."

In the Site Map that accompanied our previous letter, one of the samples was miss-labeled. "S8-EW-6" should read "S8-E-7". The corrected Site Map is attached to this letter.

Sample S1-E-6' from the east sidewall of the excavation:

During our recent telephone conversation you inquired about sample S1-E-6', which contained a concentration of 1300 mg/kg of diesel range petroleum hydrocarbons. You

asked whether the sampling location was excavated further and the contaminated soil removed. The sample location was excavated deeper to remove the contaminated soil. After the additional excavation, no field evidence of additional contaminated soil was apparent. The sidewall was not re-sampled at the S1-E-6' sample location because two samples, S2-NE-8' and S8-E-7', were collected to represent soil conditions along the east sidewall (see attached Site Map). Neither of these two samples contained detectable hydrocarbons.

In addition, boring BH3 was drilled approximately 5 feet to the east of the S1-E-6' sample location and neither contaminated soil nor groundwater was encountered in the borehole. Monitoring well MW4, installed approximately 10 feet west of sample location S1-E-6' did not detect contaminated groundwater during two groundwater monitoring events.

There is no evidence that soil with concentrations exceeding the MTCA Method A Cleanup Level for diesel range hydrocarbons (2000 mg/kg) remains at the Site.

Closing

Please accept these corrections and clarifications as part of our request for a No Further Action Letter on the Brown and Haley Facility. If you have any further questions or comments regarding this addendum or other matter, please do not hesitate to call us.

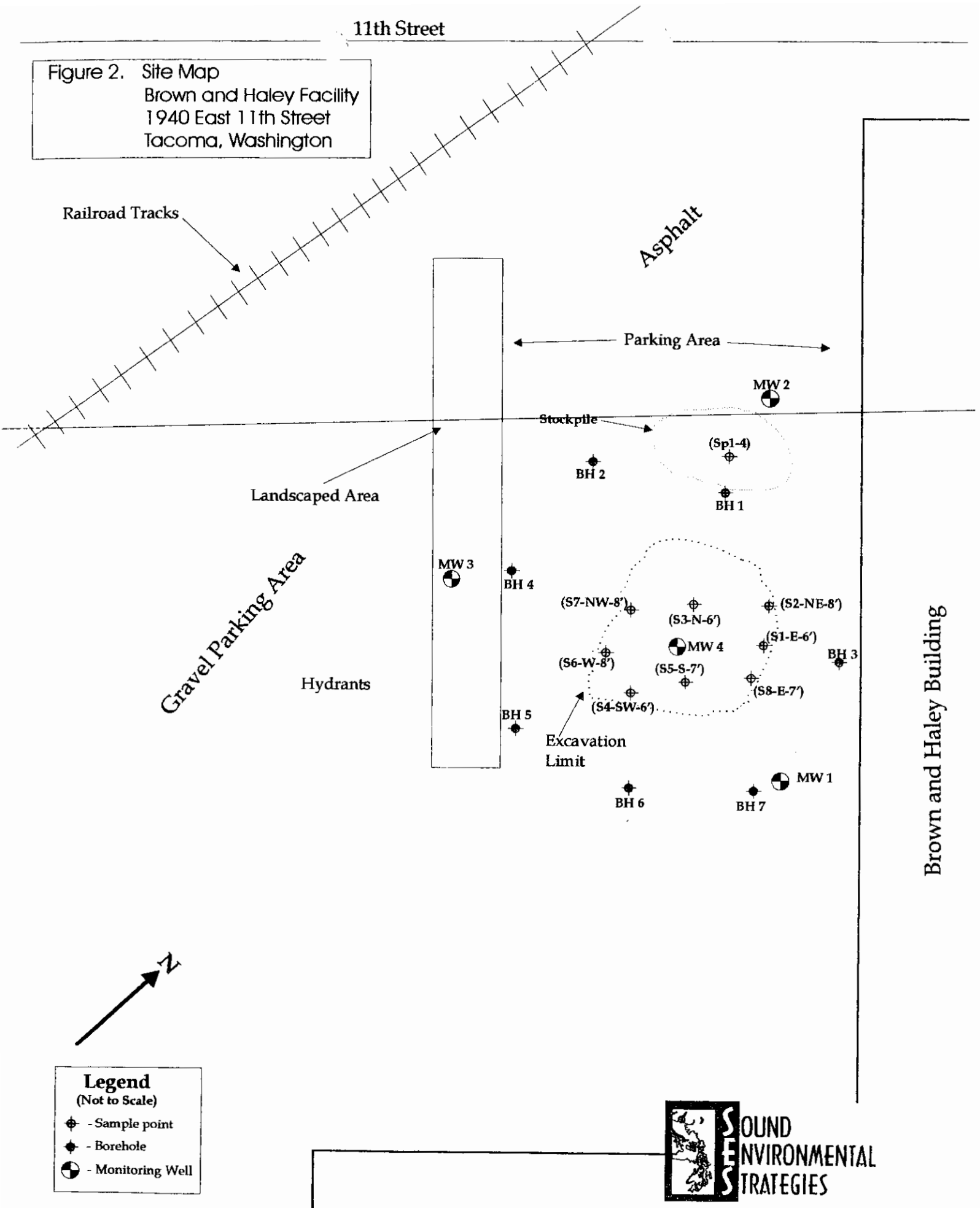
Respectfully,
Sound Environmental Strategies



Linda Drake, RG
Principal Hydrogeologist

c: Mr. Robert Shea

Figure 2. Site Map
Brown and Haley Facility
1940 East 11th Street
Tacoma, Washington



Legend
(Not to Scale)

- ⊕ - Sample point
- - Borehole
- ◐ - Monitoring Well



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July 19, 2001

Mr. Mark LaVergne
Tacoma Pierce County Health Department
3629 South D Street
Tacoma, Washington 98418

**SUBJECT: REQUEST FOR NO FURTHER ACTION LETTER
BROWN AND HALEY FACILITY
1940 EAST 11TH STREET
TACOMA, WASHINGTON**

Dear Mr. LaVergne:

Sound Environmental Strategies (SES), formerly Creative Environmental Technologies, Inc., (CETI) prepared this summary technical memorandum describing environmental activities conducted on behalf of Mr. Robert Shea at the Brown and Haley facility (Site) in Tacoma (Figure 1). This memorandum describes UST decommissioning activities, subsurface observations, and performance/compliance monitoring results conducted at the Site beginning in March 1998. SES suggests that the data collected over the past three years supports a request for a No Further Action letter. This memorandum presents the data that support this request.

This technical memorandum is divided into three main sections supported by the tables and attached figures. The investigation and remediation work at the Site is chronicled in the *Summary of Environmental Activities*, and followed by SES' understanding of the *Site Conceptual Model*. The memorandum closes with a *Conclusions* section and a formal request for a No Further Action letter from the Tacoma Pierce County Health Department (TPCHD).

SUMMARY OF ENVIRONMENTAL ACTIVITIES

UST Decommissioning, March 1998

Saltbush Environmental performed UST decommissioning activities for two diesel USTs at the Site with oversight from TPCHD. Diesel range hydrocarbon impacts to soil and groundwater within the UST excavation were identified during these activities. Shallow groundwater was present at depths estimated to be 5-6 feet below ground surface (BGS). At this time, TPCHD recommended further delineation of subsurface impacts and the installation of groundwater monitoring wells.

Delineation Activities, August 2000

SES, formerly CETI, used a direct push drill rig to conduct 7 soil borings to delineate the subsurface impacts associated with the USTs (see Figure 2 and attached photos). Table 1 lists the analytical results of the soil and groundwater samples that were collected from the borings. These borings were drilled at an approximate 20-foot radius from the former UST location. No soil or groundwater impacts above MTCA cleanup criteria were identified during the delineation effort. The subsurface impacts appeared to be limited to the vicinity of the former UST location.

Table 1. Soil Sample Results from the Borings

<i>Composite Sample Results</i>								
	Borehole 1 Comp B1-S1 & B1-S2	Borehole 2 Comp B2-S1 & B2-S2	Borehole 3 Comp B3-S1 & B3-S2	Borehole 4 Comp B4-S1 & B4-S2	Borehole 5 Comp B5-S1 & B5-S2	Borehole 6 Comp B6-S1 & B6-S2	Borehole 7 Comp B7-S1 & B7-S2	Cleanup Level Method A
Diesel	42	<25	<25	<25	<25	<25	<25	200
Oil	100	<100	<100	<100	<100	<100	<100	200
<i>Water Sample Results Collected at 6 feet BGS</i>								
	B1-S3-6'	B2-S3-6'	B3-S3-6'	B4-S3-6'	B5-S3-6'	B6-S3-6'	B7-S3-6'	
Diesel	<250	<250	<250	<250	<250	<250	<250	200
Oil	<1000	<1000	<1000	<1000	<1000	<1000	<1000	200

*complete analytical results can be found in Attachment B

Soil Remediation, September 2000

SES, formerly CETI, removed approximately 180 tons of impacted soil from the vicinity of the former UST location. Soil was removed until no visual, olfactory or analytical evidence of impacts were present. Groundwater encountered in the excavation precluded the removal of some soil impacts at depths below 6 feet BGS in the eastern end of the excavation (S1-E-6', Table 2). Diesel and oil range hydrocarbons were detected at concentrations of 1,300 mg/kg and 2,900 mg/kg, respectively, in this saturated zone sample. Based on the presence of oil range hydrocarbons that could represent a waste oil source, a RCRA 8 Metal analysis was also performed on this sample. Table 2 lists the analytical results from the soil remediation, and includes the results of the RCRA 8 Metal Analysis. Analytical Results are included as Attachment B. Results indicated that metals were unlikely to be a constituent of concern at the site. Other samples collected from the excavation sidewalls contained no detectable petroleum hydrocarbons in the diesel or oil range.

The 180 tons of impacted soil was transported to Fife Sand and Gravel Edgewood, Washington facility for disposal. Weight Tickets are included as Attachment D.

Table 2. Soil Sample Results from Sidewalls and Bottom of Excavation

Sample ID	Sample Location			Diesel	MTCA Method A Cleanup Limit	Oil	MTCA Method A Cleanup Limit	
S1-E-6'	E Excavation Sidewall			1300	200	2900	200	
S2-NE-8'	NE Excavation Sidewall			<25	200	<100	200	
S3-N-6'	N Excavation Sidewall			<25	200	<100	200	
S4-SW-6'	SW Excavation Sidewall			<25	200	<100	200	
S5-S-7'	S Excavation Sidewall			<25	200	<100	200	
S6-W-8'	W Excavation Sidewall			<25	200	<100	200	
S7-NW-8'	NW Excavation Sidewall			<25	200	<100	200	
S8-E-7'	E Excavation Sidewall			<25	200	<100	200	
RCRA 8 Metals	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Sample S1-E-6'	<5	11	<0.3	21	26	<0.05	<8	<0.7
MTCA Cleanup Limit	20	5600	2	100	250	400*	400*	1

*complete analytical results can be found in Attachment B

Groundwater Monitoring, November 2000

SES, formerly CETI, installed four monitoring wells at the Site as requested by TPCHD. Four two-inch wells were installed to fifteen feet depths with screened intervals from 5 to 15 feet. Boring logs and well construction details can be found in Attachment C. Water samples were collected from the monitoring wells in November 2000 and March 2001. No diesel or oil range petroleum hydrocarbons were detected in either sampling event. The analytical results listed in Table 3 suggest that the subsurface petroleum hydrocarbon impacts at the Site have successfully been addressed and no petroleum hydrocarbon impacts are migrating via the groundwater pathway. Monitoring well collection data and analytical results are included as Attachment F.

Table 3. Groundwater Analytical Results Collected During the Two Monitoring Events

	Monitoring Well 1		Monitoring Well 2		Monitoring Well 3		Monitoring Well 4	
	Diesel	Oil	Diesel	Oil	Diesel	Oil	Diesel	Oil
Sampling Date								
11/17/2000	<250	<1000	<250	<1000	<250	<1000	<250	<1000
3/23/2001	<250	<1000	<250	<1000	<250	<1000	<250	<1000
MTCA Method A Cleanup Levels	1000 ug/L	1000 ug/L	1000 ug/L	1000 ug/L	1000 ug/L	1000 ug/L	1000 ug/L	1000 ug/L

*complete analytical results can be found in Attachment B

Abandonment of Groundwater Monitoring Wells, May 2001

Following submittal of the groundwater monitoring events for the four wells, SES discussed the results with TPCHD. Upon review of the data, TPCHD concurred that the two quarters of groundwater monitoring were sufficient to demonstrate a lack of groundwater impacts. This correspondence occurred with you during a telephone call with Ms. Linda Drake of SES on May 4, 2001. Based on that correspondence, the four monitoring wells were abandoned. Documentation of the well abandonment is included in Attachment D.

Site Conceptual Model

Two diesel USTs were located at this Site and were partially submerged beneath shallow groundwater during their operational life. The tanks were decommissioned by removal and soil and groundwater impacts were observed in the tank excavation. Soil impacts below groundwater were documented. Delineation and investigation activities were performed. No soil impacts outside a 20-foot radius from the former UST location were identified.

The depth to groundwater is less than 6 feet BGS. Site soils, which are poorly graded sand with wood debris that likely represent fill that is 3 to 5 feet thick, are underlain by native marine sediments with shell debris. Shallow groundwater is within native sediments that range from poorly to moderately graded, medium grained sand with intercalated finer grained silt. Groundwater is tidally influenced and likely flows west northwest toward the nearby Sitcum Waterway (less than 1,000 feet northwest). Seven direct push boring one-time-only groundwater samples (Table 1) were collected in a circular pattern at a radius of 20 feet from the former USTs, and two monitoring events (Table 3) from each of four groundwater monitoring wells failed to identify diesel or oil range hydrocarbons in groundwater above method quantifiable detection limits.

CONCLUSIONS

The qualitative direct push groundwater sampling results from the 7 borings taken 20 feet or less from the former UST location and the quantitative groundwater monitoring well sampling results clearly show that no migration via the groundwater pathway is occurring. Observations of subsurface soil impacted with petroleum hydrocarbons in contact with groundwater and oily sheens atop groundwater in the tank excavation by TPCHD have been effectively addressed by remediation activities.

On behalf of Mr. Robert Shea, SES requests that TPCHD provide a No Further Action letter for the Site.

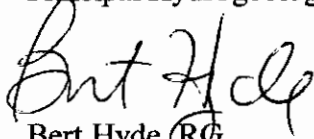
Closing

If you have any questions regarding this technical memorandum or other matters, please do not hesitate to call us at either our Seattle Office (Mr. Bert Hyde, RG) at (206) 306-1900 or our Tacoma Office (Ms. Linda Drake, RG) at (253) 627-3347. We appreciate your consideration of this request.

Respectfully,
Sound Environmental Strategies



Linda Drake, RG
Principal Hydrogeologist



Bert Hyde, RG
President

cc: Mr. Robert Shea

Attachment A – Figures/Photos/Boring and Excavation
Attachment B – Analytical Results
Attachment C – Boring Logs/Well Construction
Attachment D – Documentation of Well Abandonment
Attachment E – Weight Tickets
Attachment F – Monitoring Well Collection/Analytical Results

ATTACHMENT A – FIGURES/PHOTOS/BORING/EXCAVATION



Loading contaminated soil directly into dump truck.



12 inch thick concrete slab with 2 inch pipes.



Sheen and oil observed on groundwater in SW portion of excavation.

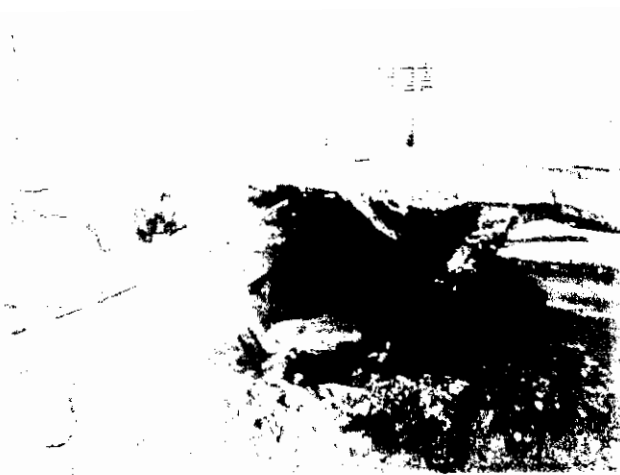


View showing 8 inch water pipe and conduit.

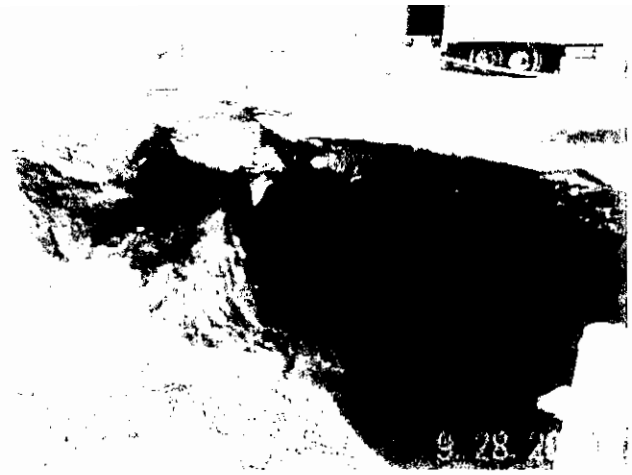


View of south east portion of excavation.

Site Photographs
Job # 192-1TM
1940 East 11th Street
Tacoma, Washington



View of excavation from the SW.



View of excavation from the NW.



Area of contaminated soil excavation outlined in red.

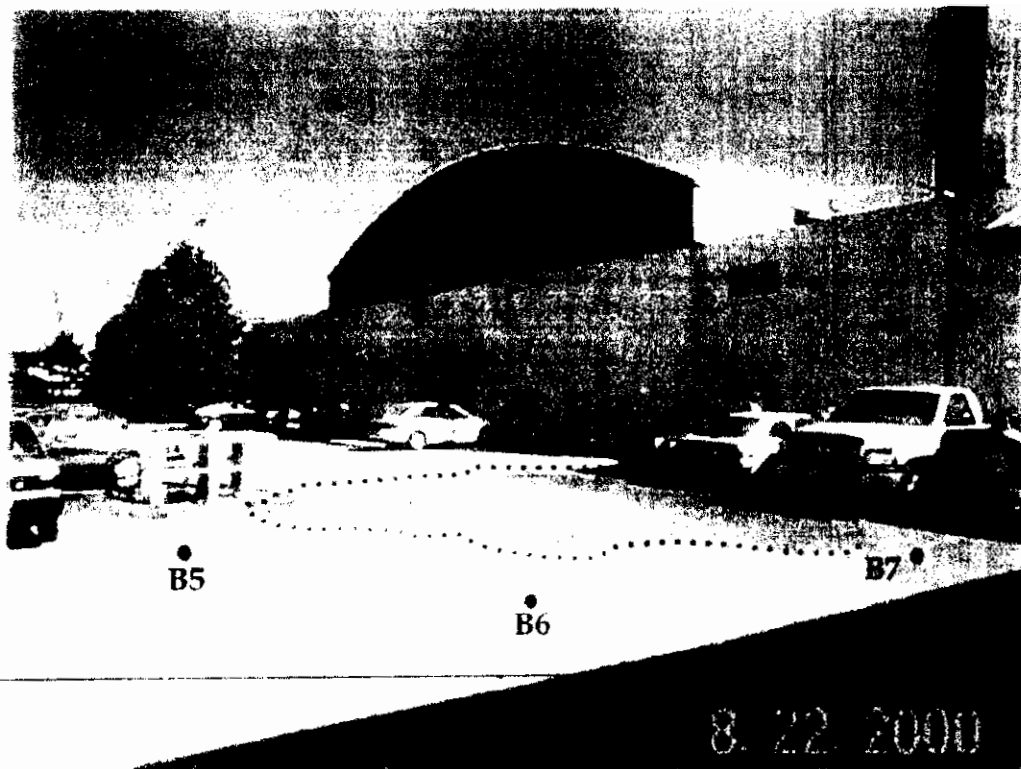


Groundwater excavation showing the 12 inch thick concrete slab with 2 inch pipes.

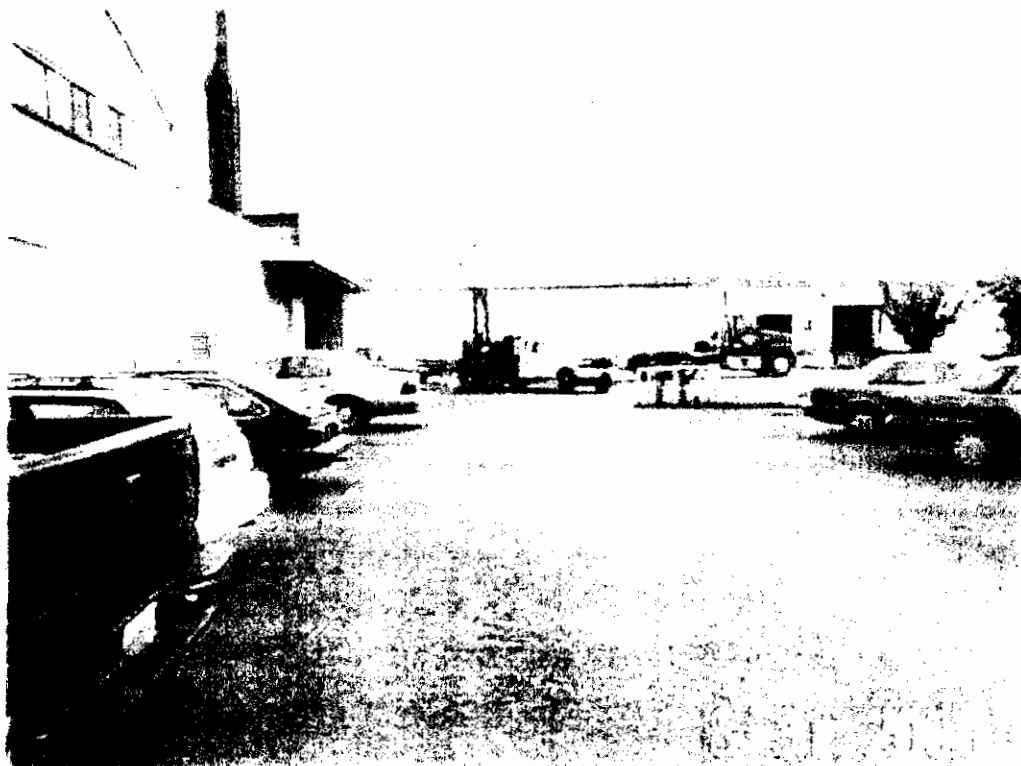


Groundwater observed at 6 feet BGS.

Site Photographs
 Job # 192-1TM
 1940 East 11th Street
 Tacoma, Washington

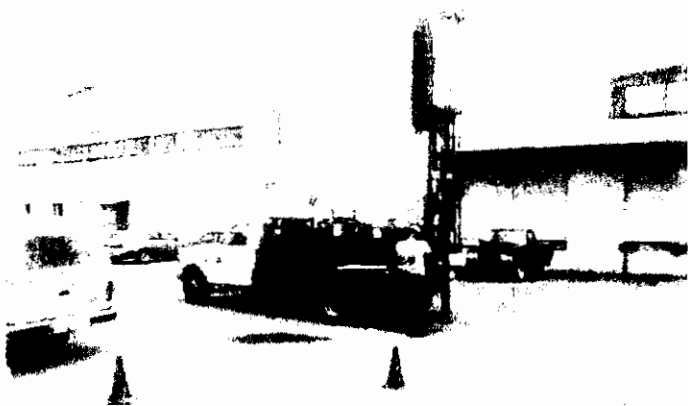


View of the job site from the south showing the patched UST removal area outlined in red and three boring locations (●).



View of the job site from the north.

Site Photographs
 Job # 192-1TM
 1940 East 11th Street
 Tacoma, Washington



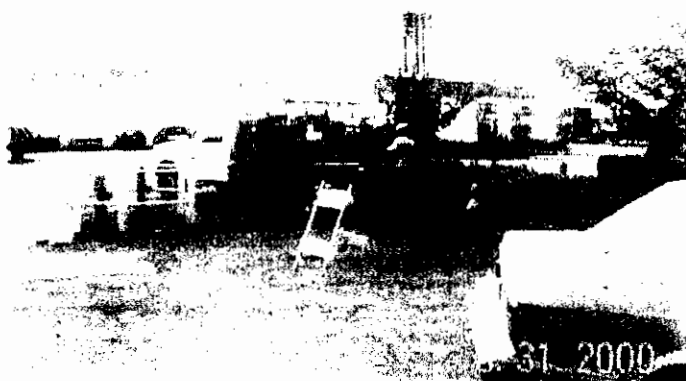
Boring seven (B7-83100) location.



Boring three (B3-83100) location.



Collecting groundwater sample from Boring one (B1-83100).



Boring four (B4-83100) location.

Site Photographs
 Job # 192-1TM
 1940 East 11th Street
 Tacoma, Washington

ATTACHMENT B – ANALYTICAL RESULTS



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10/13/2000

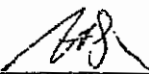
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

P.O.#: 5324
Project: 192-1
Client ID: S1-E-6'
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/02/2000
Spectra Project: 2000100007
Spectra Number: 1

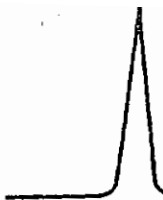
<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	1300	mg/Kg	NWTPH-D
Oil	2900	mg/Kg	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	66	NWTPH-D

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager



SPECTRA Laboratories

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10/13/2000

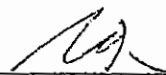
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

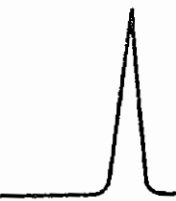
P.O.#: 5324
Project: 192-1
Client ID: S3-N-6'
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/02/2000
Spectra Project: 2000100007
Spectra Number: 3

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	< 25	mg/Kg	NWTPH-D
Oil	< 100	mg/Kg	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	48	NWTPH-D

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Steve Felke, Laboratory Manager



SPECTRA Laboratories

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10/13/2000

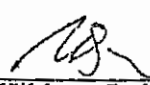
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

P.O.#: 5324
Project: 192-1
Client ID: S4-SW-6'
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/02/2000
Spectra Project: 2000100007
Spectra Number: 4

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	< 25	mg/Kg	NWTPH-D
Oil	< 100	mg/Kg	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	50	NWTPH-D

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10/13/2000

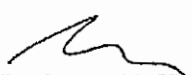
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

P.O.#: 5324
Project: 192-1
Client ID: S5--S-7'
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/02/2000
Spectra Project: 2000100007
Spectra Number: 5

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	< 25	mg/Kg	NWTPH-D
Oil	< 100	mg/Kg	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	43	NWTPH-D

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Steve Hikka Laboratory Manager



SPECTRA Laboratories

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10/13/2000

Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

P.O.#: 5324
Project: 192-1
Client ID: S6-W-8'
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/02/2000
Spectra Project: 2000100007
Spectra Number: 6

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	< 25	mg/Kg	NWTPH-D
Oil	< 100	mg/Kg	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	49	NWTPH-D

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Steve Spencer, Laboratory Manager



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10/13/2000

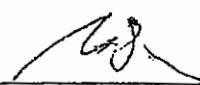
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

P.O.#: 5324
Project: 192-1
Client ID: S7-NW-8'
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/02/2000
Spectra Project: 2000100007
Spectra Number: 7

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	< 25	mg/Kg	NWTPH-D
Oil	< 100	mg/Kg	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	43	NWTPH-D

SPECTRA LABORATORIES



Laboratory Manager



SPECTRA Laboratories

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10/13/2000

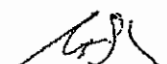
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

P.O.#: 5324
Project: 192-1
Client ID: S8-E-7'
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/02/2000
Spectra Project: 2000100007
Spectra Number: 8

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	< 25	mg/Kg	NWTPH-D
Oil	< 100	mg/Kg	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
4-Bromofluorobenzene	51	NWTPH-D

SPECTRA LABORATORIES



Steve Hihhs, Laboratory Manager



SPECTRA Laboratories

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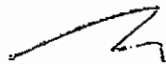
10/20/2000

Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Mr. Steve Spencer

P.O.#: #5324
Project: #192-1
Client ID: S1-E-6' Additional testing
Sample Matrix: Soil
Date Sampled: 09/28/2000
Date Received: 10/16/2000
Spectra Project: 2000100188
Spectra Number: 1

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Arsenic	< 5	mg/Kg	SW846 6010B
Barium	11	mg/Kg	SW846 6010B
Cadmium	< 0.3	mg/Kg	SW846 6010B
Chromium	21	mg/Kg	SW846 6010B
Lead	26	mg/Kg	SW846 6010B
Mercury	<0.05	mg/Kg	SW846 7471A
Selenium	< 8	mg/Kg	SW846 6010B
Silver	< 0.7	mg/Kg	SW846 6010B

SPECTRA LABORATORIES



Steve Hibbs Laboratory Manager

SPECTRA Laboratories

221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

5324 - CHAIN of CUSTODY

PAGE 1 of 1

CLIENT: <u>NETT</u>		PROJECT: <u>192-1</u>		CONTACT: <u>STEVE SPENCER</u>		PHONE: <u>602-3347</u>		PURCHASE ORDER #:	
SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NUMBER OF CONTAINERS					
S1-E-6'	9-28-00		Soil	1					
S2-NE-8'				1					
S3-N-6'				1					
S4-SW-6'				1					
S5-S-7'				1					
S6-W-8'				1					
S7-NE-8'				1					
S8-E-7'				1					

HYDROCARBONS	ORGANICS	TCLP D-LIST	METALS	OTHER
NWTPH-HCID				
BTEX/NWTPH-G				
BTEX				
NWTPH-G				
NWTPH-D				
1664 SGT-HEM				
1664 HEM				
8260 VOA				
8260 CHLOR SOLVENTS				
8270 SEMI-VOA				
PAH/PNA-8270				
8081 ORG. CHLOR PEST.				
8082 PCB				
TCLP METALS (8)				
TCLP-VOA				
TCLP 8270 SEMI-VOA				
TCLP PEST.				
TCLP HERB.				
TOTAL METALS ICP/DCP				
TOTAL METALS GFAA				
TOTAL LEAD				
pH 9040/9045				
TOX 9020/9076				
TOC 9060/PSEP				
FLASH POINT				
SOLIDS (SPECIFY)				
NORMAL / RUSH				

RELINQUISHED BY	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RECEIVED BY					
RELINQUISHED BY					
RECEIVED BY					

SPECIAL INSTRUCTIONS/COMMENTS:



SPECTRA Laboratories

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09/08/2000

Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Steve Spencer

P.O.#: 5256
Project: 192-1 TM
Sample Matrix: Soil
Date Sampled: 08/31/2000
Date Received: 08/31/2000
Spectra Project: 2000080340

<u>Spectra #</u>	<u>Client ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
3	Composite B1-S1 & B1-S2	Diesel	42	mg/Kg	NWTPH-D
3	Composite B1-S1 & B1-S2	Oil	100	mg/Kg	NWTPH-D
6	Composite B2-S1 & B2-S2	Diesel	<25	mg/Kg	NWTPH-D
6	Composite B2-S1 & B2-S2	Oil	<100	mg/Kg	NWTPH-D
9	Composite B3-S1 & B3-S2	Diesel	<25	mg/Kg	NWTPH-D
9	Composite B3-S1 & B3-S2	Oil	<100	mg/Kg	NWTPH-D
12	Composite B4-S1 & B4-S2	Diesel	<25	mg/Kg	NWTPH-D
12	Composite B4-S1 & B4-S2	Oil	<100	mg/Kg	NWTPH-D
15	Composite B5-S1 & B5-S2	Diesel	<25	mg/Kg	NWTPH-D
15	Composite B5-S1 & B5-S2	Oil	<100	mg/Kg	NWTPH-D
18	Composite B6-S1 & B6-S2	Diesel	<25	mg/Kg	NWTPH-D
18	Composite B6-S1 & B6-S2	Oil	<100	mg/Kg	NWTPH-D
21	Composite B7-S1 & B7-S2	Diesel	<25	mg/Kg	NWTPH-D
21	Composite B7-S1 & B7-S2	Oil	<100	mg/Kg	NWTPH-D
22	B1-S3-6'	Diesel	<250	ug/L	NWTPH-D
22	B1-S3-6'	Oil	<1000	ug/L	NWTPH-D
23	B2-S3-6'	Diesel	<250	ug/L	NWTPH-D
23	B2-S3-6'	Oil	<1000	ug/L	NWTPH-D
24	B3-S3-6'	Diesel	<250	ug/L	NWTPH-D

SPECTRA LABORATORIES


Michael Deckert, Chemist

a7/dt



SPECTRA Laboratories

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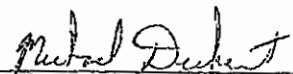
09/08/2000

Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Steve Spencer

P.O.#: 5256
Project: 192-1 TM
Sample Matrix: Water
Date Sampled: 08/31/2000
Date Received: 08/31/2000
Spectra Project: 2000080340

<u>Spectra #</u>	<u>Client ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
24	B3-S3-6'	Oil	<1000	ug/L	NWTPH-D
25	B4-S3-6'	Diesel	<250	ug/L	NWTPH-D
25	B4-S3-6'	Oil	<1000	ug/L	NWTPH-D
26	B5-S3-6'	Diesel	<250	ug/L	NWTPH-D
26	B5-S3-6'	Oil	<1000	ug/L	NWTPH-D
27	B6-S3-6'	Diesel	<250	ug/L	NWTPH-D
27	B6-S3-6'	Oil	<1000	ug/L	NWTPH-D
28	B7-S3-6'	Diesel	<250	ug/L	NWTPH-D
28	B7-S3-6'	Oil	<1000	ug/L	NWTPH-D

SPECTRA LABORATORIES


Michael Deckert, Chemist

a7/dt

CHAIN of CUSTODY

PAGE 1 of 3

SPECTRA Laboratories

080340

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LIENT: C E T I				HYDROCARBONS		ORGANICS		TCLP D-LIST		METALS		OTHER		RETURN																	
PROJECT: 192-1 Tm				NUMBER OF CONTAINERS																											
CONTACT: STEVE SPENCER																															
PHONE: 627-3347																															
PURCHASE ORDER #: 5256																															
SAMPLE ID	DATE SAMPLED	TIME SAMPLED	MATRIX	NWTPH-HCID	BTEX/NWTPH-G	BTEX	NWTPH-G	NWTPH-D	1664 SGT-HEM	1664 HEM	8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8081 ORG. CHLOR PEST.	8082 PCB	TCLP METALS (8)	TCLP VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	PH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)		
1-51-3'	8-31-00		Soil																											1	
1-52-6'																															2
2-51-3'																															11
2-52-6'																															12
3-51-3'																															7
3-52-6'																															8
4-51-3'																															10
4-52-6'																															11
5-51-3'																															12
5-52-6'																															14

RELINQUISHED BY	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY	<i>[Signature]</i>	ERIC MELLAND	CETI	8-31-00	1:05pm
RECEIVED BY	<i>[Signature]</i>	TERENCE L. J.	Apex	8-31-00	1:31p
RELINQUISHED BY					
RECEIVED BY					

SPECIAL INSTRUCTIONS/COMMENTS:

1 - means composite samples

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.

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PAGE 2 of 3

[illegible]

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.

ATTACHMENT C – BORING LOGS/WELL CONSTRUCTION

Borehole/Well

MW 1

Site and Job Number

B&H 192-1 TM

Date

10-30-00

Time

10:45 AM

Depth ft BGS	ASTM Soil Class	Water Table	Well Design	Description	Blows/ft	Sample	Additional notes (contamination)
0				3" ASPHALT			
5				MEDIUM TO WELL GRADED SAND, MD. IST. FINE GRAVELS. NO ODOR OBSERVED (MW 1-1030-5')	17 22 22		
10				MEDIUM GRADED SAND, WET, WITH APPRECIABLE FINES AND SILT LAYERS, NO ODOR OBSERVED (MW 1-1030-10')	4 9		
15				MEDIUM GRADED SAND, WET, WITH FINES AND SILT, SOME WOOD PIECES, NO ODOR (MW 1-1030-15')	14 17 20		



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F: (253) 572-4207
E-Mail: ceti@cetinw.com
www.cetinw.com

Borehole/Well Log

Drill method: HOLLOW STEM PIERCE

Sample method: 2" SPLIT SPOON

Borehole/Well		Site and Job Number		Date	Time		
MW 2		B&H 192-17M		10-30-00	9:40 AM		
Depth ft BGS	ASTM Soil Class	Water Table	Well Design	Description	Blows/6"	Sample	Additional notes (contamination)
0				3" ASPHALT			
5				POORLY SORTED SAND w/ SMALL DEBRIS AND TREATED WOOD PIECES. TREATED WOOD TYPE ODOR OBSERVED. (MW2-1030-5')	17 250		
10				NOT ENOUGH RECOVERY	750		
15				(WET) POORLY (GRADED) SAND w/ SOME FINE GRASSES AND WOOD PIECES. SLIGHT ORGANIC TYPE ODOR. (MW2-1030-15')	8 750		- SPOON OBSERVED ON SOIL WHEN REMOVING PUCKER TO SET WELL CAPING.



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www.cetinw.com

Borehole/Well Log

Drill method: YELLOW STEEL AISER

Sample method: 2" SPLIT SPOON



Borehole/Well Log

Drill method: HOLLOW STEM! RUBER

Sample method: 2" SPLIT SPOON



Borehole/Well Log

Drill method: *HOLLOW STEM TIGER*

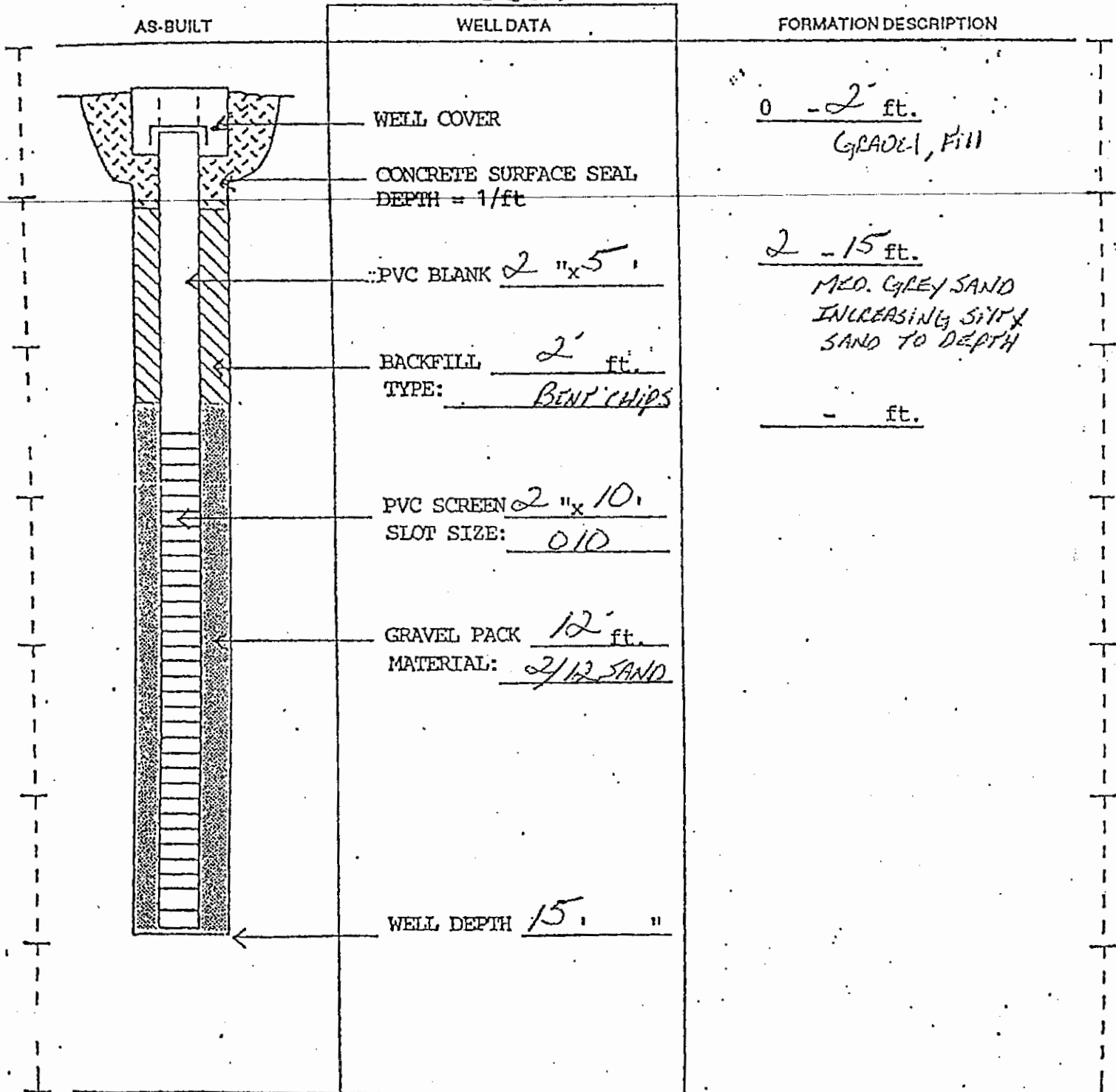
Sample method: 2" SPLIT SPOON

START CARD NO. R 44644

PROJECT NAME: Brown & Haley Candy
 WELL IDENTIFICATION NO. AFT 699
 DRILLING METHOD: HSA
 DRILLER: James M. Goble
 FIRM: Cascade Drilling, Inc.
 SIGNATURE: [Signature]
 CONSULTING FIRM: Creative Env.
 REPRESENTATIVE: Steve Spencer

COUNTY: PIERCE
 LOCATION: SE 1/4 NW 1/4 Sec 34 Twn 21N R 3E
 STREET ADDRESS OF WELL: 1940 - E. 11th St. Tacoma, WA
 WATER LEVEL ELEVATION: _____
 GROUND SURFACE ELEVATION: N/A
 INSTALLED: 10/30/00
 DEVELOPED: NO

0651



SCALE: 1" = _____

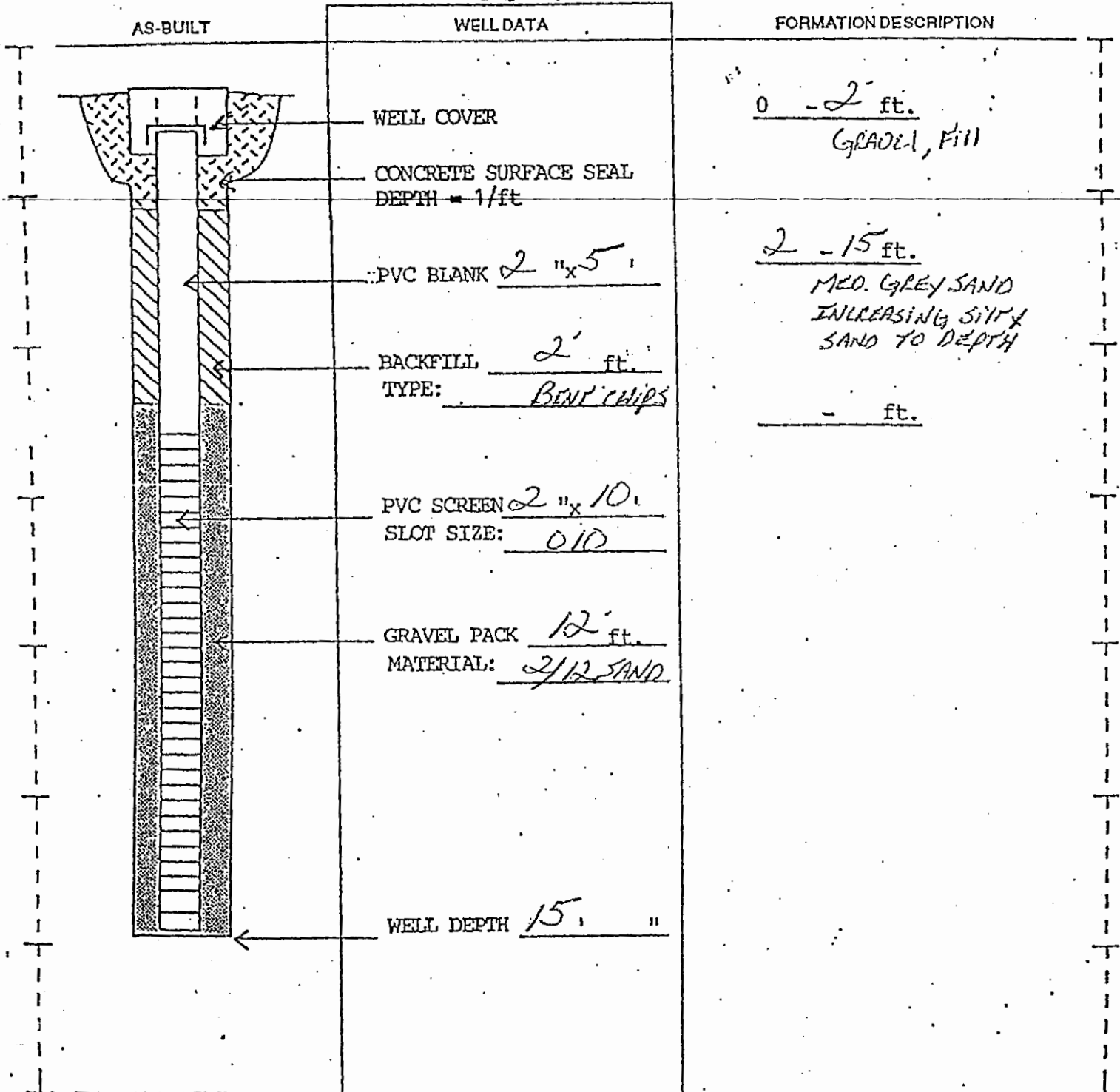
PAGE _____ OF _____

START CARD NO. R49612

PROJECT NAME: Brown & Haley Candy
 WELL IDENTIFICATION NO. AFT 697
 DRILLING METHOD: HSA
 DRILLER: James M. Goble
 FIRM: Cascade Drilling, Inc.
 SIGNATURE: [Signature]
 CONSULTING FIRM: Creative Env.
 REPRESENTATIVE: Steve Spencer

COUNTY: PIERCE
 LOCATION: SE 1/4 NW 1/4 Sec 34 Twn 21N R 3E
 STREET ADDRESS OF WELL: 1940 - E. 11th St. Tacoma, WA
 WATER LEVEL ELEVATION: _____
 GROUND SURFACE ELEVATION: N/A
 INSTALLED: 10/30/00
 DEVELOPED: NO

0651



SCALE: 1" = _____

PAGE _____ OF _____

Borehole/Well		Site and Job Number		Date	Time		
B1-83100		Brown & Haley 192-1		8-31-00			
Depth ft BGS	ASTM Soil Class	Water Table	Well Design	Description	Blows/6"	Sample	Additional notes (contamination)
0							
3	SW			Sample hand Little Recovery 0-3' BGS no good - Sand - well graded		B1-S1-3'	
6	SW	✓		Full Recovery 3-6' Sample collected 5-6' BGS - Well graded Sand		B1-S2-6'	
						B1-S3-6' - H ₂ O	
				NOTE - Screen Between 5 and 9' BGS			
				Groundwater Sample Collected at 6' BGS. Using Casagrande Temp well			



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Borehole/Well Log

B

Drill method:

Sample method:

Borehole/Well		Site and Job Number		Date	Time		
BZ.		Brown & Leiby 192-1TM		8-31-00	9:50		
Depth ft BGS	ASTM Soil Class	Water Table	Well Design	Description	Blows/6"	Sample	Additional notes (contamination)
0							
3		SWS		Sample collected from 2-3' Bgs. Well graded sand - no opp or visible indications of carbonaceous material	BZ-S1-	3'	
6			"V"	Sampled collected at 5-6' Bgs. Well graded sand - no opp or visible indications	BZ-S2-	6'	
				NOTE: Screened 6'-10' Bgs and collected water sample			



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Borehole/Well Log

Drill method:

Sample method:

[illegible]

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Borehole/Well Log

Drill method:

Sample method:

[illegible]

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www.cetinw.com

Borehole/Well Log

Drill method:

Sample method:

[illegible]

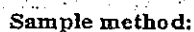
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F: (253) 572-4207
E-Mail: ceti@cetinw.com
www.cetinw.com

Borehole/Well Log

Drill method:

Sample method:

B6-53-4



Sample method:

SOIL BORING REPORT

Notification # R 49806

Project Name: BROWN & HALEY CANDY

County: PIERCE

Drilling Method: Probe / Water

Location: NE1/4SW1/4 Sec34 T21N R3

Driller: Kasey S Goble

Street Address of Boring: 1940 E. 11th St. Tacoma, WA

Firm: Cascade Drilling, Inc.

Water Level Elevation: N/A

Signature: [Signature]

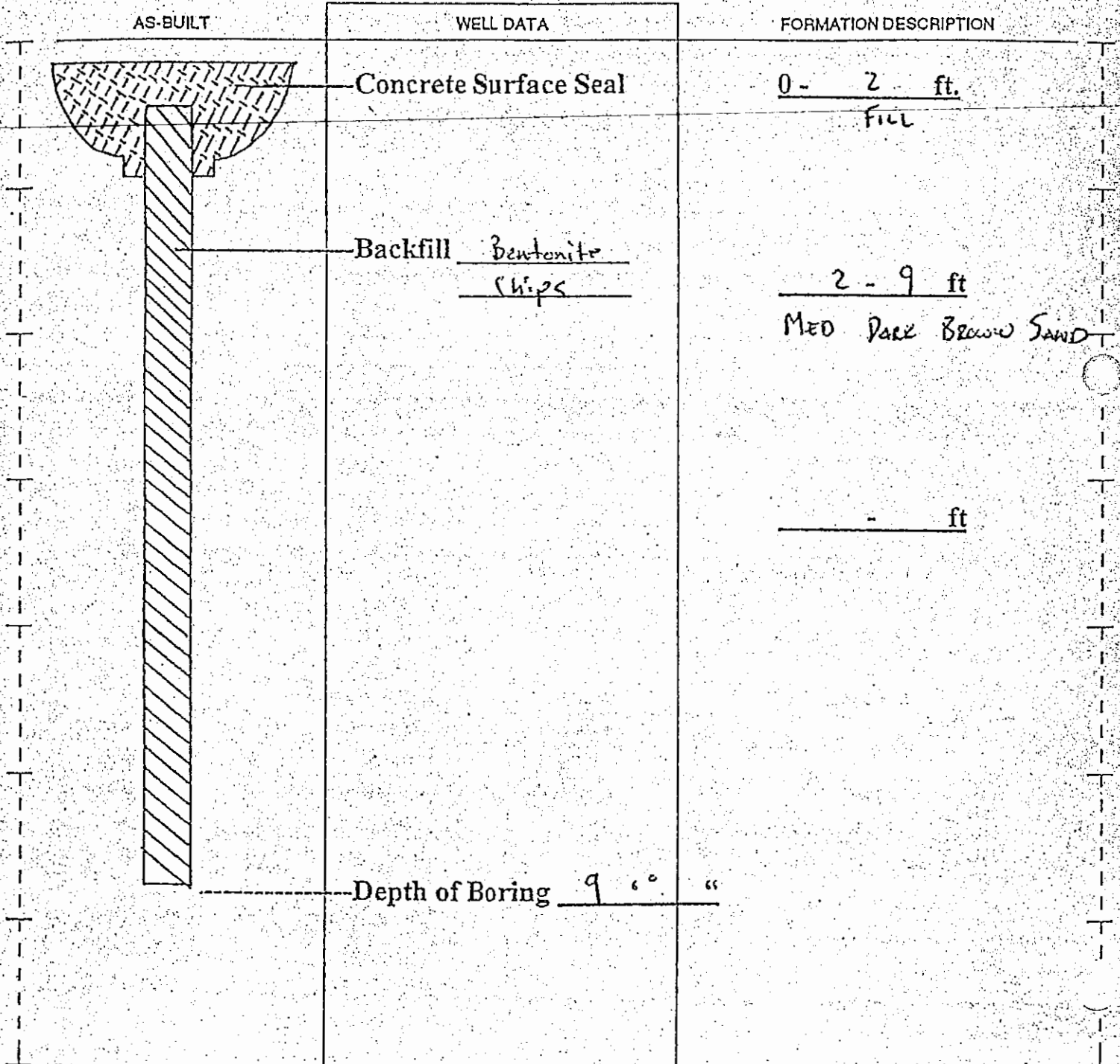
Ground Surface Elevation: N/A

Consulting Firm: Creative Env Tech

Representative: Steve Spencer

Date of Drilling: 8-31-00

Invoice # 0511



SCALE: 1" =

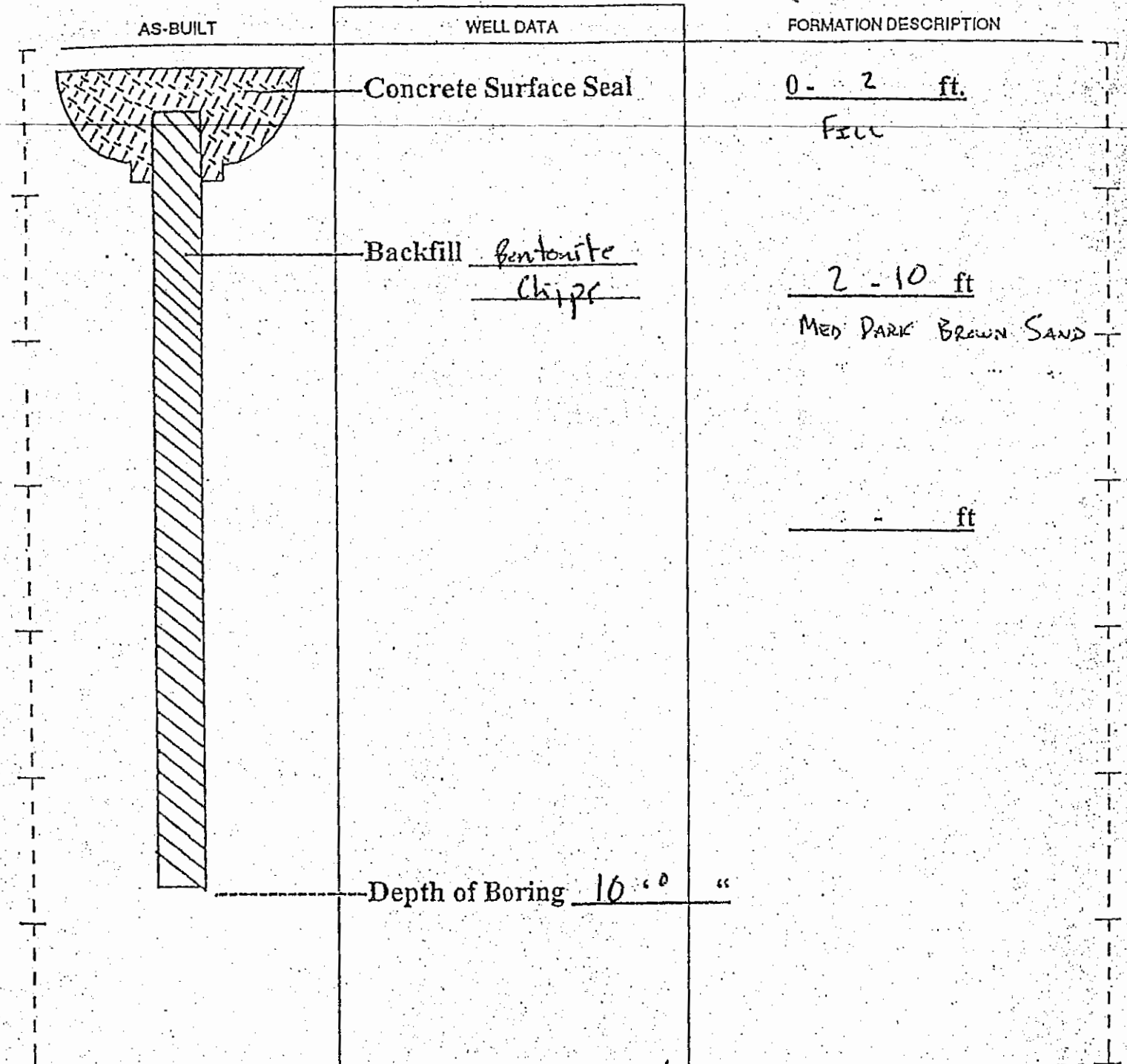
PAGE OF

SOIL BORING REPORT

Notification # R 49806

Project Name: <u>BROWN & HALEY CANDY</u> Logging Method: <u>Probe/Water</u> Driller: <u>Rasey S Goble</u> Firm: <u>Cascade Drilling, Inc.</u> Signature: <u>[Signature]</u> Consulting Firm: <u>Creative Env Tech</u> Representative: <u>Steve Spencer</u>	County: <u>PIERCE</u> Location: <u>NE1/4SW1/4 Sec34 T21N R3E</u> Street Address of Boring: <u>1940 E. 11th St, Tacoma, WA</u> Water Level Elevation: <u>N/A</u> Ground Surface Elevation: <u>N/A</u> Date of Drilling: <u>8-31-00</u>
--	--

Invoice # 0511



SOIL BORING REPORT

Notification # R 49806

Project Name: BROWN & HALEY CANDY

County: PIERCE

Drilling Method: Probe/water

Location: NE1/4SW1/4 Sec34 T21N R3

Driller: Kasey S. Goble

Street Address of Boring:

Firm: Cascade Drilling, Inc.

1940 E. 11th St, Tacoma WA

Signature: [Signature]

Water Level Elevation: N/A

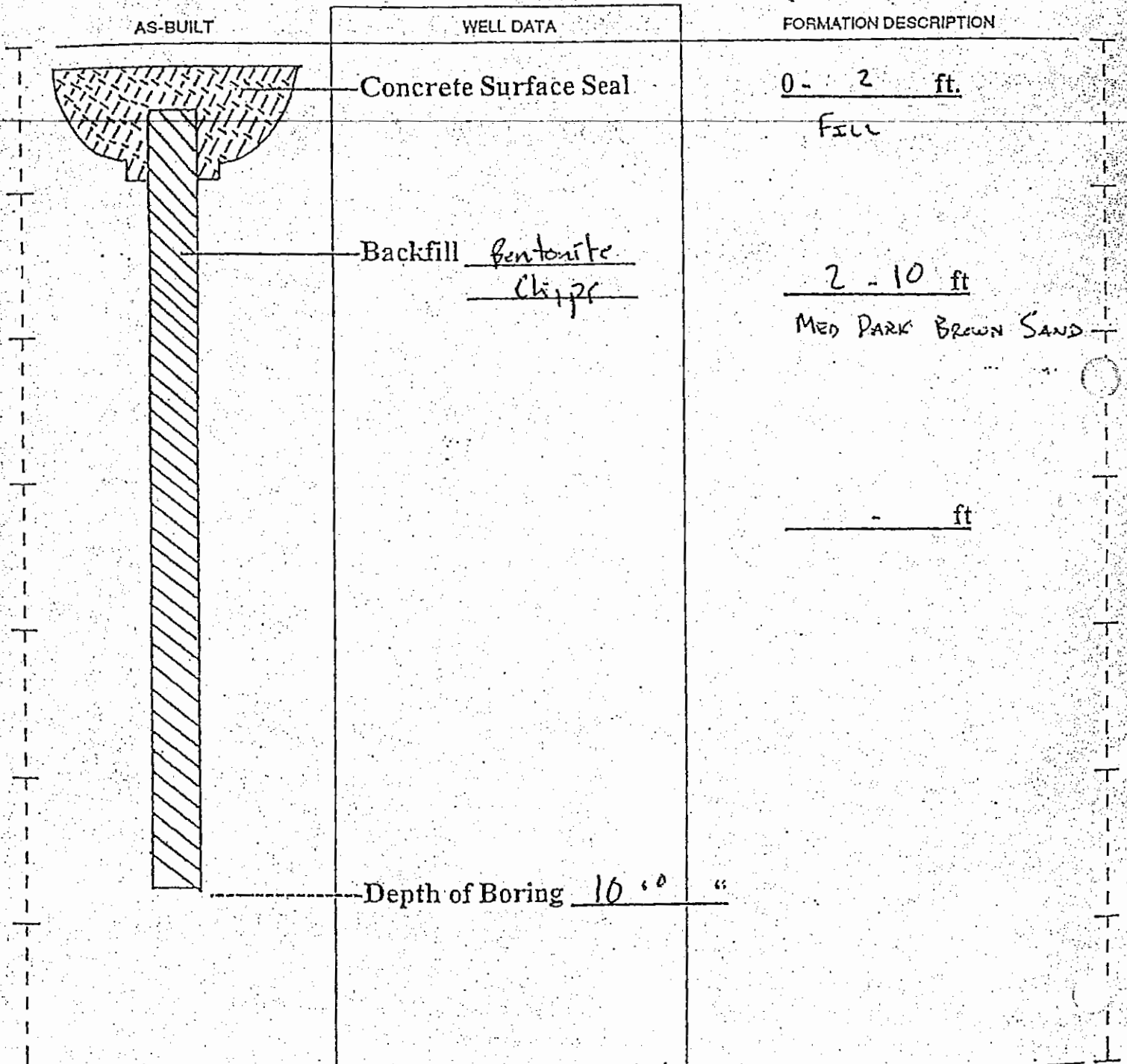
Consulting Firm: Creative Env Tech

Ground Surface Elevation: N/A

Representative: Steve Spencer

Date of Drilling: 8-31-00

Invoice # 0511



SOIL BORING REPORT

Notification # R 49806

Project Name: BROWN & HALEY CANDY

County: PIERCE

Drilling Method: Probe/Water

Location: NE1/4SW1/4 Sec34 T21N R3E

Driller: Kasey S Goble

Street Address of Boring: 1940 E. 11th St, Tacoma WA

Firm: Cascade Drilling, Inc.

Water Level Elevation: N/A

Signature: [Signature]

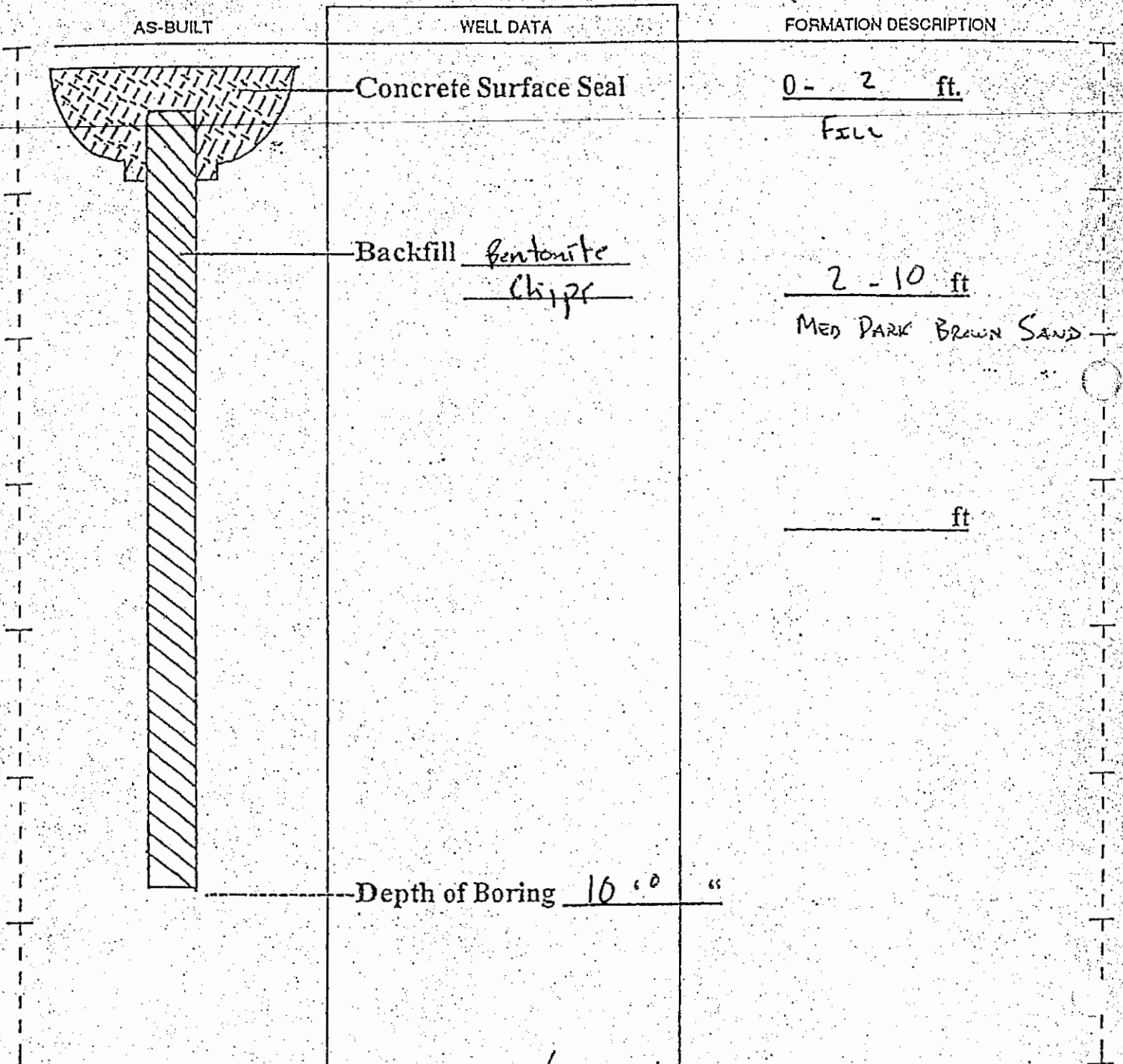
Ground Surface Elevation: N/A

Consulting Firm: Creative Env Tech

Date of Drilling: 8-31-00

Representative: Steve Spencer

Invoice # 0511



SCALE: 1" = _____

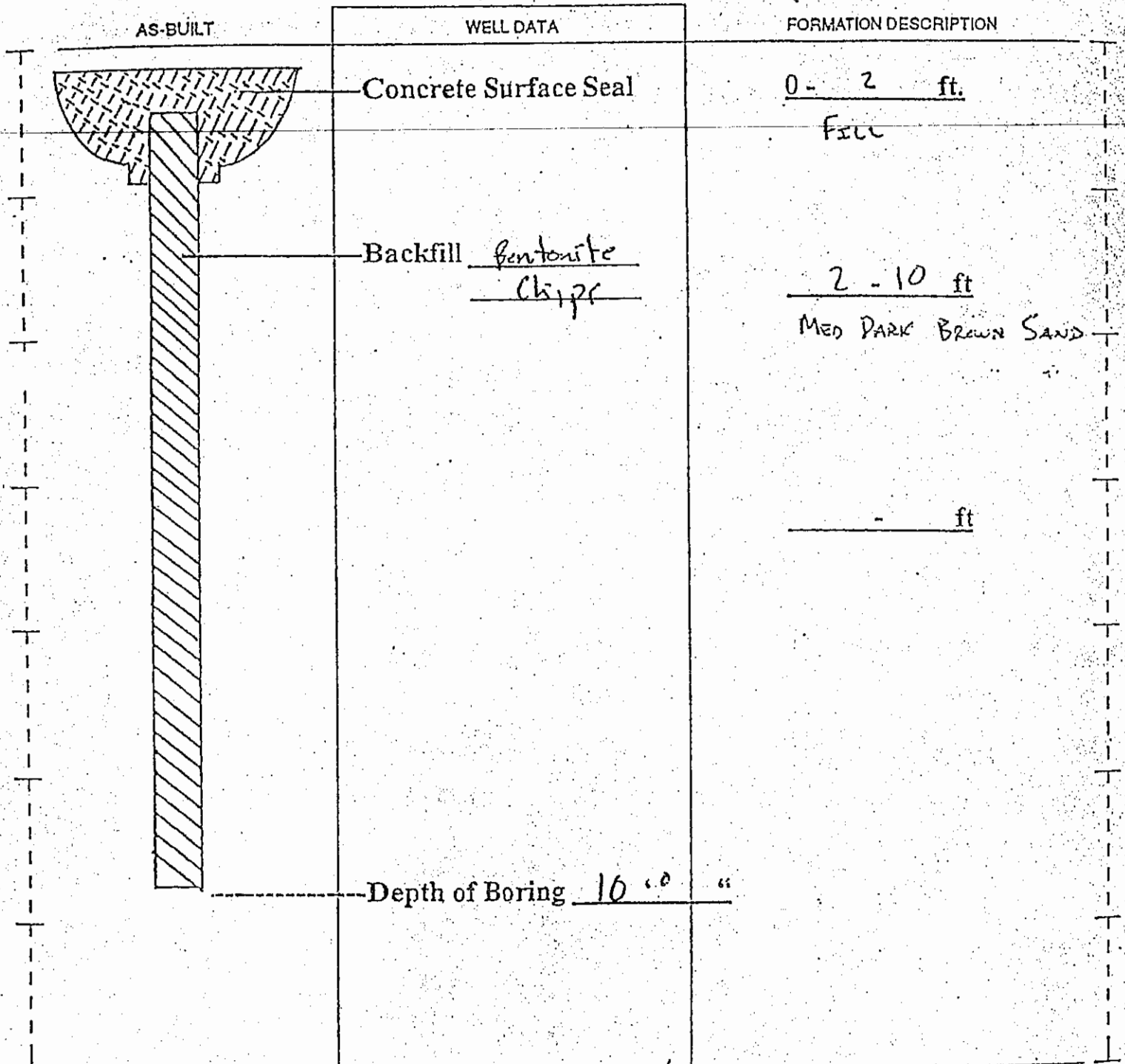
PAGE 4 OF 6

SOIL BORING REPORT

Notification # R 49806

Project Name: <u>BROWN & HALLEY CANDY</u> Logging Method: <u>Probe / water</u> Driller: <u>Kasey S. Goble</u> Firm: <u>Cascade Drilling, Inc.</u> Signature: <u>[Signature]</u> Consulting Firm: <u>Creative Env Tech</u> Representative: <u>Steve Spencer</u>	County: <u>PIERCE</u> Location: <u>NE1/4SW1/4 Sec34 T21N R3E</u> Street Address of Boring: <u>1940 E. 11th St, Tacoma, WA</u> Water Level Elevation: <u>N/A</u> Ground Surface Elevation: <u>N/A</u> Date of Drilling: <u>8-31-00</u>
--	--

Invoice # 0511

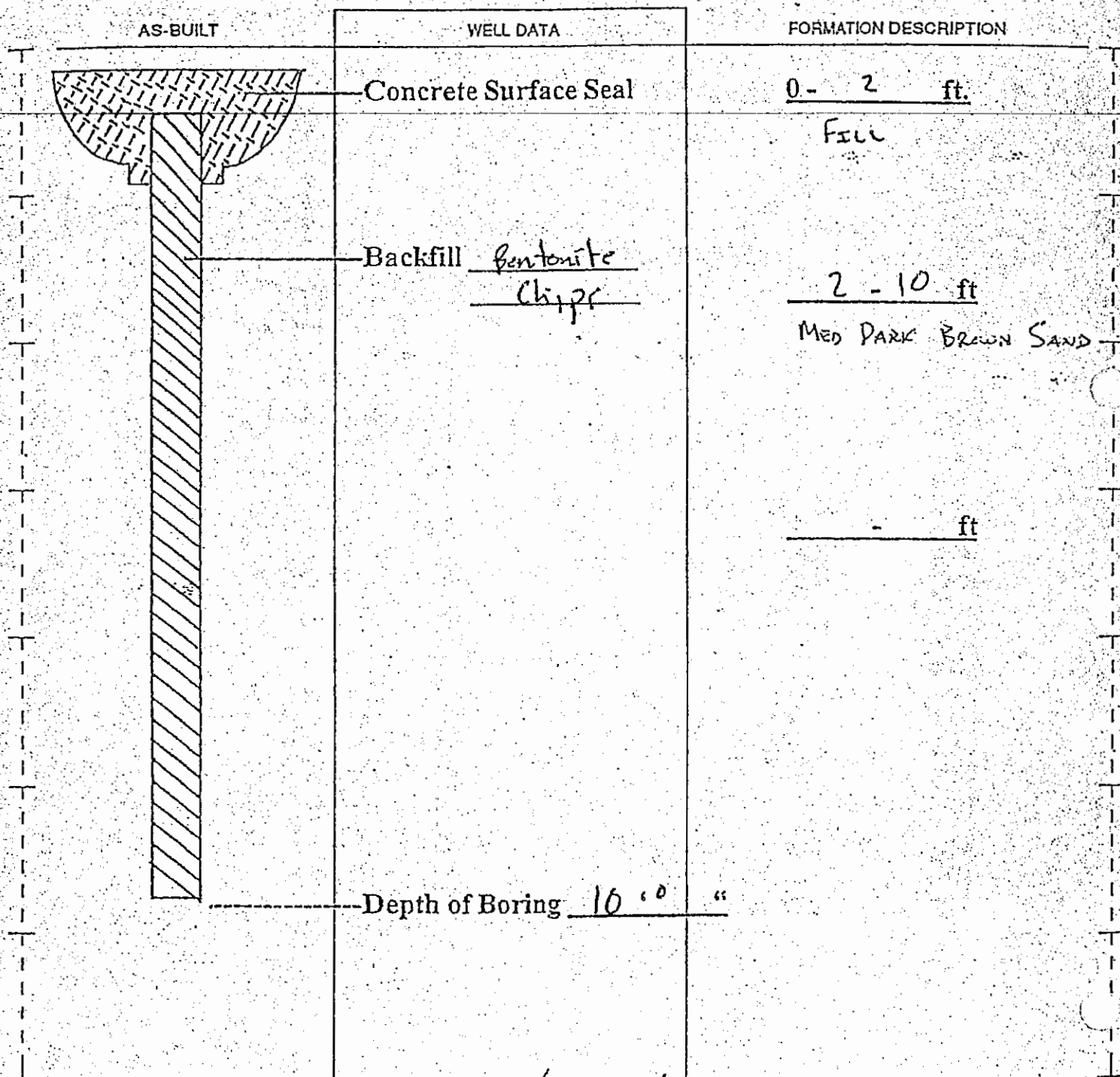


SOIL BORING REPORT

Notification # R 49806

Project Name: <u>BROWN & HALEY CANDY</u>	County: <u>PIERCE</u>
Drilling Method: <u>Probe / water</u>	Location: <u>NE 1/4 SW 1/4 Sec 34 T 21 N R 3 E</u>
Driller: <u>Kasey S. Goble</u>	Street Address of Boring: <u>1940 E. 11th St, Tacoma, WA</u>
Firm: <u>Cascade Drilling, Inc.</u>	Water Level Elevation: <u>N/A</u>
Signature: <u>[Signature]</u>	Ground Surface Elevation: <u>N/A</u>
Consulting Firm: <u>Creative Env Tech.</u>	Date of Drilling: <u>8-31-00</u>
Representative: <u>Steve Spencer</u>	

Invoice # 0511

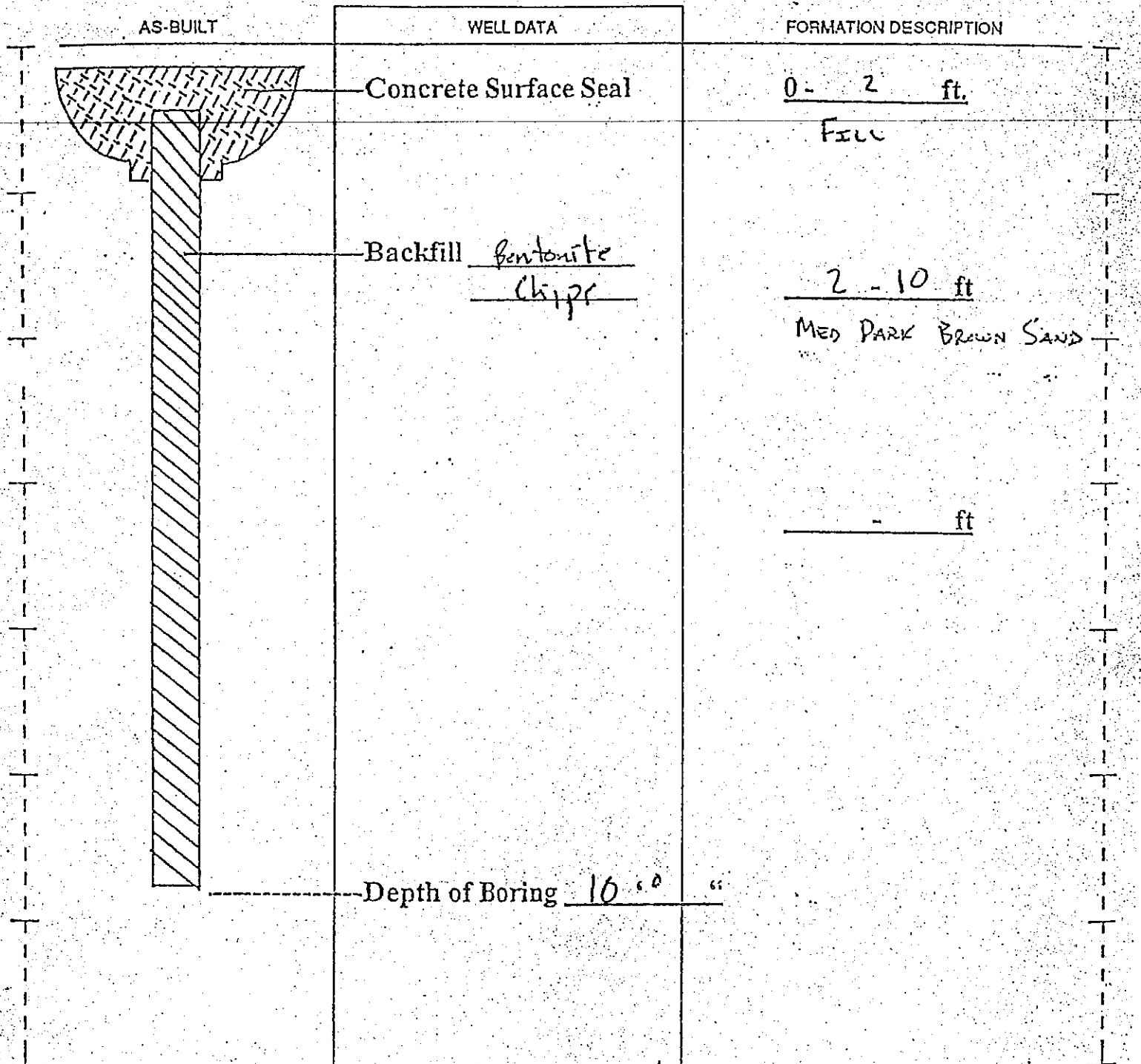


SOIL BORING REPORT

Notification # R 49806

Project Name: BROWN & HALEY CANDY County: PIERCE
 Drilling Method: Probe / Water Location: NE1/4 Sec 34 T21N R3E
 Driller: Kasey S. Goble Street Address of Boring: 1940 E. 11th St, Tacoma WA
 Firm: Cascade Drilling, Inc. Water Level Elevation: N/A
 Signature: [Signature] Ground Surface Elevation: N/A
 Consulting Firm: Creative Env Tech. Date of Drilling: 8-31-00
 Representative: Steve Spencer

Invoice # 0511



**ATTACHMENT D – DOCUMENTATION OF WELL
ABANDONMENT**

P.O. Box 1184 • Woodinville, WA 98072 • 425-485-8908
6100 SE 101st Ave., Unit 2-D • Portland, OR 97266 • 503-775-41

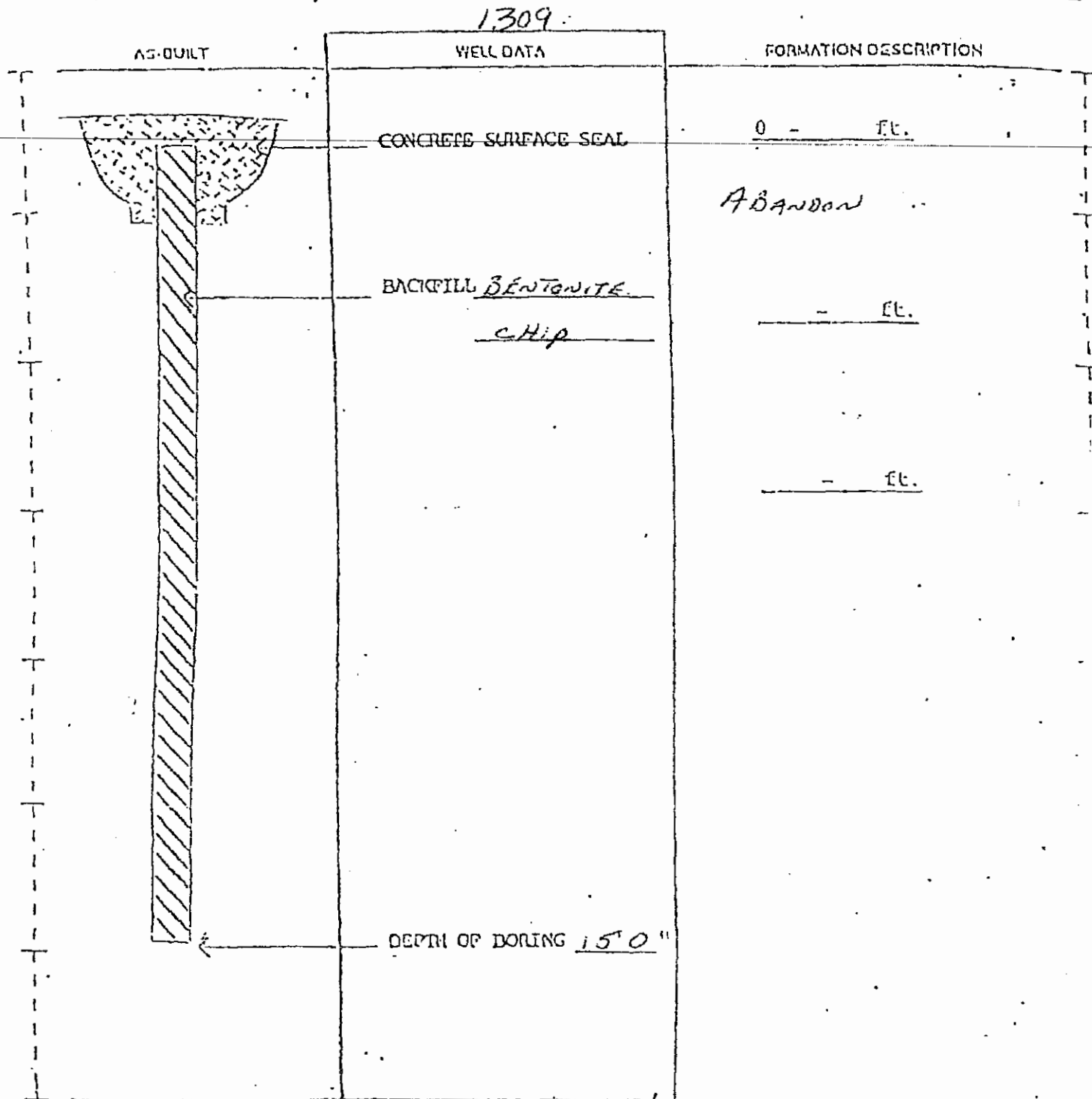
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RESOURCE PROTECTION WELL REPORT

START CARD NO. A47003

PROJECT NAME: Brown & Haley
WELL IDENTIFICATION NO. n/a
DRILLING METHOD: Abandon
DRILLER: F. Lynn Goble
FIRM: Cascade Drilling, Inc.
SIGNATURE: Lynn Goble
CONSULTING FIRM: Sound Env.
REPRESENTATIVE: Steve Spencer

COUNTY: PIERCE
LOCATION: NE 1/4 SW 1/4 Sec 34 T11N R3E
STREET ADDRESS OF WELL: 1940 E. 11th St, Tacoma
WATER LEVEL ELEVATION: N/A
GROUND SURFACE ELEVATION: N/A
INSTALLED: n/a
DEVELOPED: 5-14-01



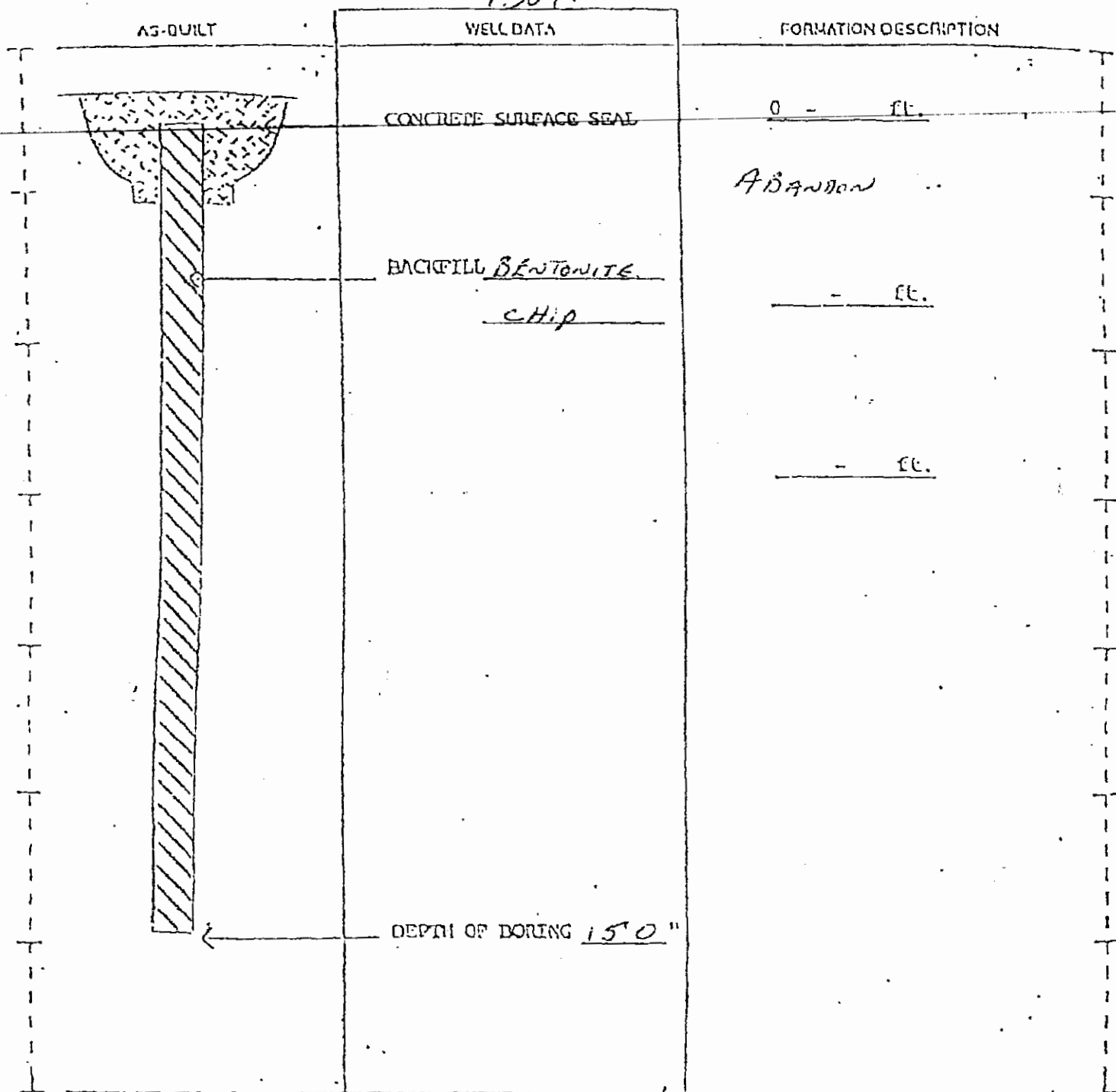
RESOURCE PROTECTION WELL REPORT

START CARD NO. A47003

PROJECT NAME: Brown & Haley
WELL IDENTIFICATION NO. n/a
DRILLING METHOD: Abandon
DRILLED: F. Lynn Gable
FIRM: Cascade Drilling, Inc.
SIGNATURE: F. Lynn Gable
CONSULTING FIRM: Sound Env.
REPRESENTATIVE: Steve Spencer

COUNTY: PIERCE
LOCATION: NE 1/4 SW 1/4 Sec 34 T21N R3E
STREET ADDRESS OF WELL: 1940 E. 11th St Tacoma
WATER LEVEL ELEVATION: N/A
GROUND SURFACE ELEVATION: N/A
INSTALLED: n/a
DEVELOPED: 5-14-01

1309

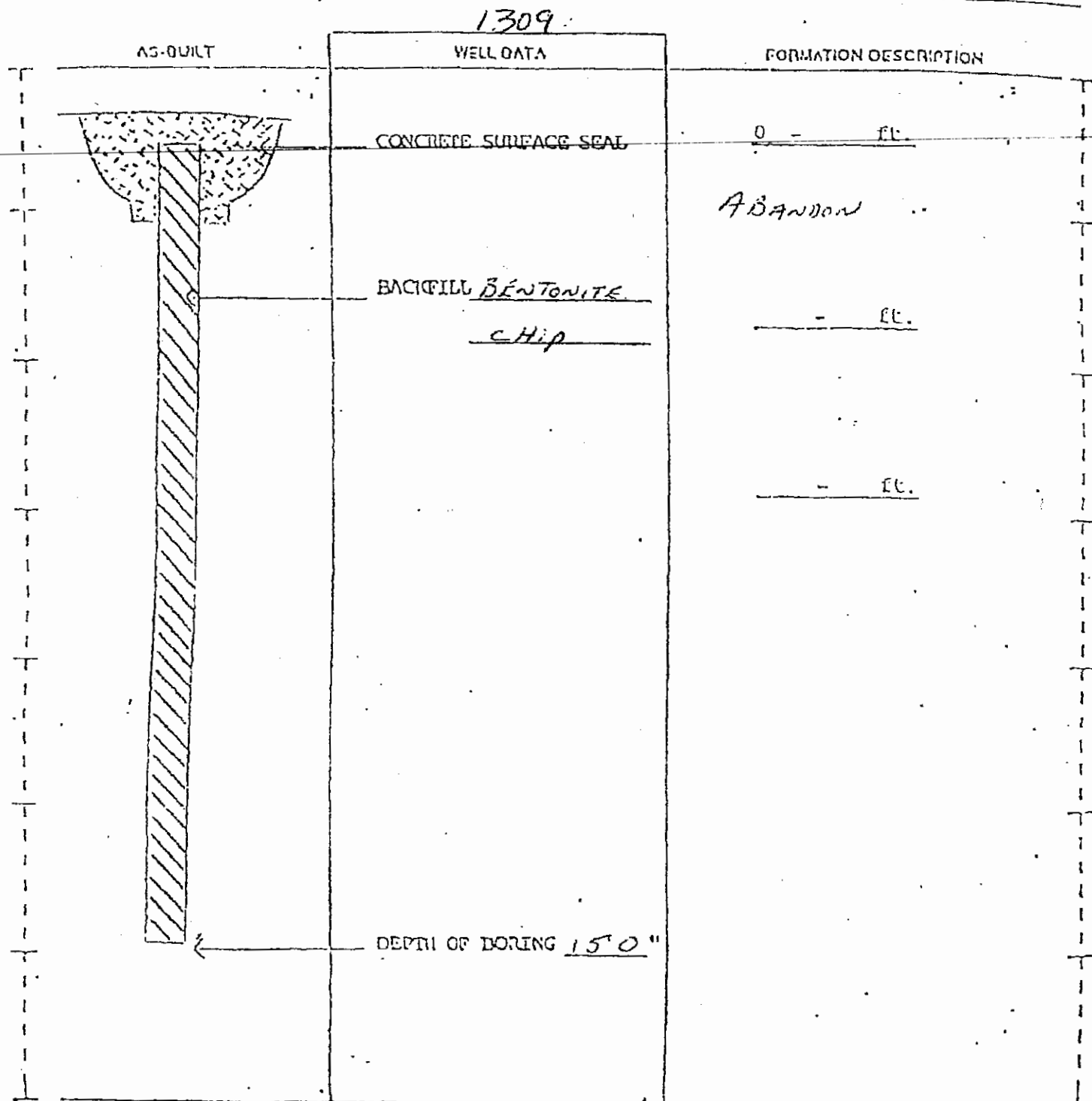


RESOURCE PROTECTION WELL REPORT

START CARD NO. A47003

PROJECT NAME: Brown & Haley
WELL IDENTIFICATION NO. n/a
DRILLING METHOD: Abandon
DRILLED: F-Lynn Goble
FIRM: Cascade Drilling, Inc.
SIGNATURE: F-Lynn Goble
CONSULTING FIRM: Sound Env.
REPRESENTATIVE: Steve Spencer

COUNTY: PIERCE
LOCATION: NE 1/4 SW 1/4 Sec 34 T21N R3E
STREET ADDRESS OF WELL: 1940 E. 11th St Tacoma
WATER LEVEL ELEVATION: N/A
GROUND SURFACE ELEVATION: N/A
INSTALLED: n/a
DEVELOPED: 5-14-01

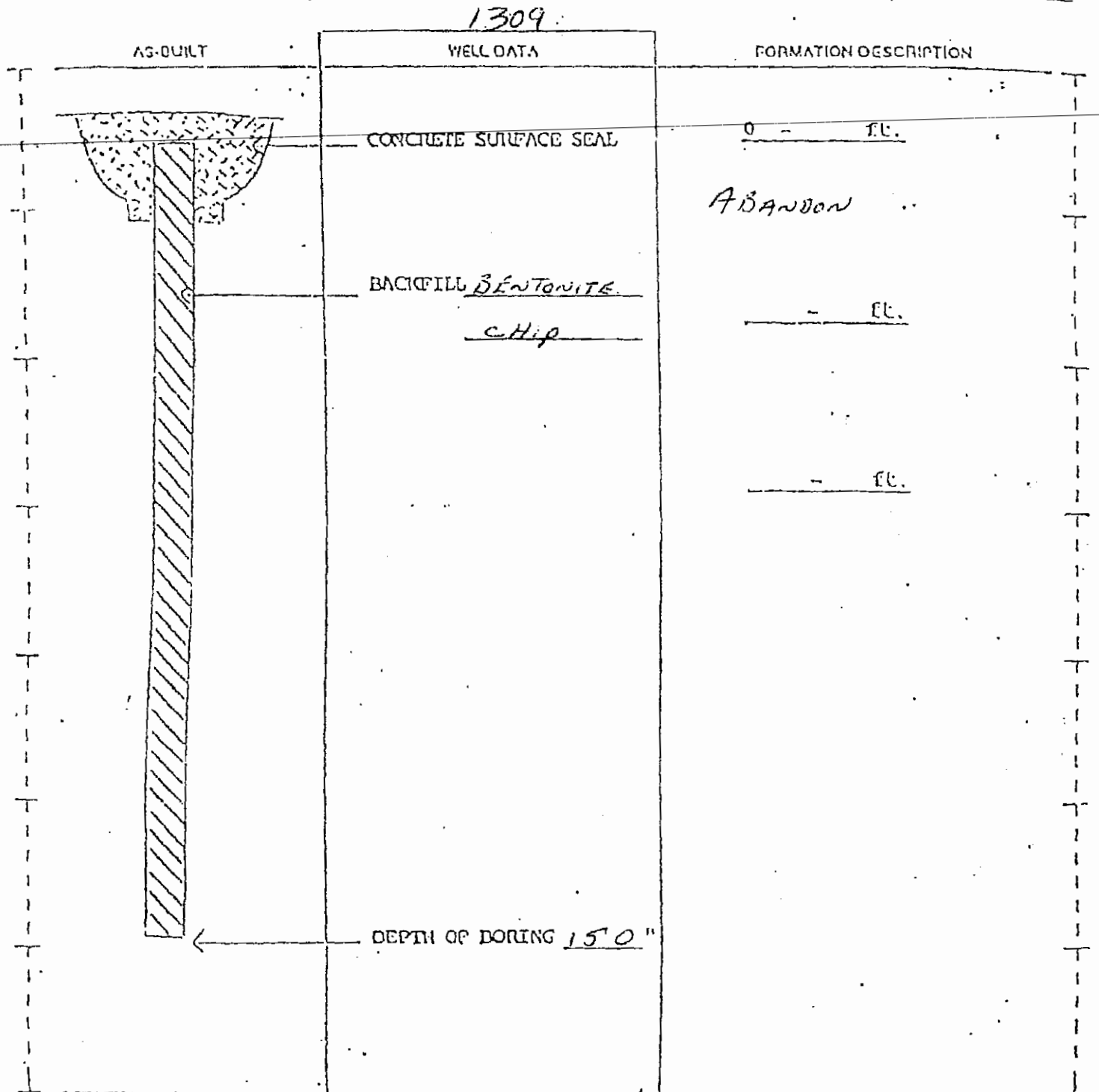


RESOURCE PROTECTION WELL REPORT

START CARD NO. A47003

PROJECT NAME: Brown & Haley
WELL IDENTIFICATION NO. n/a
DRILLING METHOD: Abandon
DRILLER: F. Lynn Gable
FIRM: Cascade Drilling, Inc.
SIGNATURE: Lynn Gable
CONSULTING FIRM: Sound Env.
REPRESENTATIVE: Steve Spencer

COUNTY: PIERCE
LOCATION: NE 1/4 SW 1/4 Sec 34 T11N R3E
STREET ADDRESS OF WELL: 1940 E. 11th St Tacoma
WATER LEVEL ELEVATION: N/A
GROUND SURFACE ELEVATION: N/A
INSTALLED: n/a
DEVELOPED: 5-14-01



ATTACHMENT E – WEIGHT TICKETS

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 198-1 12:16 09/28/2000

Customer: CETA
Truck: 899
Job: 100
Product: 915
Contaminated Soil

Scale: 25000 KG
GROSS: 25000 KG
TARE: 25000 KG
NET: 25000 KG
TONE: 25000 KG
TNE: 25000 KG

Comments:

Weightmaster: 3611

Job Totals Loads 0 Tons 0.00

RECEIVED BY:



MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 198-1 12:15 09/28/2000

Customer: CETA
Truck: 899
Job: 100
Product: 915
Contaminated Soil

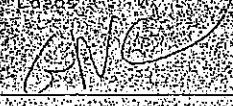
Scale: 25000 KG
GROSS: 25000 KG
TARE: 25000 KG
NET: 25000 KG
TONE: 25000 KG
TNE: 25000 KG

Comments:

Weightmaster: 3611

Job Totals Loads 0 Tons 0.00

RECEIVED BY:



MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 198-1 12:32 09/28/2000

Customer: CETA
Truck: 899
Job: 100
Product: 915
Contaminated Soil

Scale: 25000 KG
GROSS: 25000 KG
TARE: 25000 KG
NET: 25000 KG
TONE: 25000 KG
TNE: 25000 KG

Comments:

Weightmaster: 3611

Job Totals Loads 0 Tons 0.00

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 198-1 12:22 09/28/2000

Customer: CETA
Truck: 899
Job: 100
Product: 915
Contaminated Soil

Scale: 25000 KG
GROSS: 25000 KG
TARE: 25000 KG
NET: 25000 KG
TONE: 25000 KG
TNE: 25000 KG

Comments:

Weightmaster: 3611

Job Totals Loads 0 Tons 0.00



TICKET NO. 108546

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Elle, WA 98424-3623
Phone: (253) 922-7710

PO # 102-1 09/28/2000

Customer: CET
Contract: RES
Product: 915
Scale: 35110
GROSS: 15820 KG
NET: 13200 KG
TARE: 2620 KG
CPE: T.I. - 10
Rivets: Edge
Job: Contaminated Soil
15820 KG
20200 KG
20200 TNE
0.00

Comments:
Heightmaster: 100
Job Total: Load 0 Tons 0.00

RECEIVED BY: *[Signature]*

TICKET NO. 108546

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Elle, WA 98424-3623
Phone: (253) 922-7710

PO # 102-1 09/28/2000

Customer: CET
Contract: RES
Product: 915
Scale: 35110
GROSS: 15820 KG
NET: 13200 KG
TARE: 2620 KG
CPE: T.I. - 10
Rivets: Edge
Job: Contaminated Soil
15820 KG
20200 KG
20200 TNE
0.00

Comments:
Heightmaster: 100
Job Total: Load 0 Tons 0.00

RECEIVED BY: *[Signature]*

TICKET NO. 108546

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Elle, WA 98424-3623
Phone: (253) 922-7710

PO # 102-1 09/28/2000

Customer: CET
Contract: RES
Product: 915
Scale: 35110
GROSS: 15820 KG
NET: 13200 KG
TARE: 2620 KG
CPE: T.I. - 10
Rivets: Edge
Job: Contaminated Soil
15820 KG
20200 KG
20200 TNE
0.00

Comments:
Heightmaster: 100
Job Total: Load 0 Tons 0.00

RECEIVED BY: *[Signature]*

TICKET NO. 108577

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Elle, WA 98424-3623
Phone: (253) 922-7710

PO # 102-1 09/28/2000

Customer: CET
Contract: RES
Product: 915
Scale: 35110
GROSS: 15820 KG
NET: 13200 KG
TARE: 2620 KG
CPE: T.I. - 10
Rivets: Edge
Job: Contaminated Soil
15820 KG
20200 KG
20200 TNE
0.00

Comments:
Heightmaster: 100
Job Total: Load 0 Tons 0.00

RECEIVED BY: *[Signature]*

MATERIAL TICKET

Life

SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PAGE # 7 PAGES 1-6
2:35 03/28/2000

Classmate	CEI II		G.E. III - (Creative)	3
Truck	RES		Rivers Edge #3 Endogga	
Job				
Product	9-5		Continental Bof 1-8	
		Scm		
BROSE	06800	1	155004 KC	260000
TRAE	06800	3	15524 KC	
UNIT	1390		13500 HR	10000
	CL 153		13 68 TRK	10000

Comments

Weihnachten: B-tta

Sub Totals: Loans 100.00

RECEIVED BY:

TICKET NO.

108587

MATERIAL TICKET

Life

SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

09/23/2020

[illegible]

90884

1990

Job Title: _____ Page: 62

11/18/52

MATERIAL TICKET

Life

SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3823
Phone: (253) 922-7710

PO 03/08/2000

Customer	ACT	AGE	10	AGE	10
BUCK	RS3	1975	1975	1975	1975
165					
Product	93	93	93	93	93
93					
DATE	11/5/88	DATE	11/5/88	DATE	11/5/88
TIME	2450	TIME	1530	TIME	1530
LINE	2700	LINE	2700	LINE	2700
DATE	11/2/88	DATE	11/2/88	DATE	11/2/88

Comments:

Net Profit was \$5,000,000

[illegible]

RECEIVED BY

TICKET NO.

19A54

MATERIAL TICKET

Life

SAND & GRAVELS
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

80-1157-1-109

OUTSTANDING DEBTS: \$1,000,000.00
 INCOME TAXES: \$1,000,000.00
 PROPERTY TAXES: \$1,000,000.00
 OTHER TAXES: \$1,000,000.00
 TOTAL TAXES: \$1,000,000.00
 TOTAL DEBTS: \$1,000,000.00
 TOTAL ASSETS: \$1,000,000.00
 TOTAL EQUITY: \$1,000,000.00
 TOTAL LIABILITIES: \$1,000,000.00
 TOTAL NET WORTH: \$1,000,000.00

上海外灘

Cherry Pie

Job Totals Loads 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699

TICKET NO.
108571

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 1132-1
DATE 05/28/2000
Customer: CDT
Job: 1132-1
Product: 301
GROSS: 36500 KG
NET: 34300 KG
TARE: 2200 KG
TONE: 0.00

Comments:

Neighborhood: Bette

Job Totals: Loads 0 Tons 0.00

RECEIVED BY: *AVC*

TICKET NO.
108564

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 1132-1
DATE 05/28/2000
Customer: CDT
Job: 1132-1
Product: 301
GROSS: 36500 KG
NET: 34300 KG
TARE: 2200 KG
TONE: 0.00

Comments:

Neighborhood: Bette

Job Totals: Loads 0 Tons 0.00

RECEIVED BY:

TICKET NO.
108556

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 1132-1
DATE 05/28/2000
Customer: CDT
Job: 1132-1
Product: 301
GROSS: 36500 KG
NET: 34300 KG
TARE: 2200 KG
TONE: 0.00

Comments:

Neighborhood: Bette

Job Totals: Loads 0 Tons 0.00

RECEIVED BY: *AVC*

TICKET NO.
108559

MATERIAL TICKET



SAND & GRAVEL
3120 Freeman Road East
Fife, WA 98424-3623
Phone: (253) 922-7710

PO # 1132-1
DATE 05/28/2000
Customer: CDT
Job: 1132-1
Product: 301
GROSS: 36500 KG
NET: 34300 KG
TARE: 2200 KG
TONE: 0.00

Comments:

Neighborhood: Bette

Job Totals: Loads 0 Tons 0.00

RECEIVED BY: *AVC*

TICKET NO.

102530

MATERIAL TICKET



3120 Freeman Road East
 File, WA 98424-3623
 Phone: (253) 922-7710

PO # 192-1

10-23 09/28/2000

Customer: CRYI

C.E.T. (Coral)

Truck: 809

Riverside Sunnyside BRSS

Job:

Job:

Product: 801

Sand - PTT

Scale
 GROSS 25680 1 25680 KG
 TARE 25680 1 11490 KG
 NET 31920 1 14420 KG
 Yards 0.97
 Tons 13.90 1 11.42 TNE

Comments:

Weightmaster: Bette

Job Totals Loads 0 Tons 0.00

RECEIVED BY: 

TICKET NO.

198535

MATERIAL TICKET



3120 Freeman Road East
 File, WA 98424-3623
 Phone: (253) 922-7710

PO # 192-1

11-25 09/28/2000

Customer: CETIV

C.E.T. (Coral)

Truck: 809

Riverside Edge Hill

Job:

Job:

Product: 801

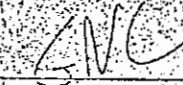
Sand - PTT

Scale
 GROSS 34790 1 34790 KG
 TARE 34790 1 15820 KG
 NET 40580 1 18970 KG
 Yards 0.97
 Tons 20.91 1 18.97 TNE

Comments:

Weightmaster: Bette

Job Totals Loads 0 Tons

RECEIVED BY: 

Date 9/29

NO. 2145

Truck No. 17

Truck Charge

Driver Charge

Sub Total

*Add Charge

Total Charge

Driver Hours 2.4

Driver Hours 2.4

Billing Address

Job Number 192-1

Reason

From

To

No. Loads

Hours

1 5.76 2 2

1 11.52 1 1/2

40 5.76 1 1/2

1 5.76 1 1/2

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

Total Miles

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

File

SAND & GRAVEL

3120 FREEMAN ROAD E.

PUYALLUP, WA 98371/922-7710

**ATTACHMENT F – MONITORING WELL
COLLECTION/ANALYTICAL RESULTS**



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

11/22/2000

Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Steve Spencer

P.O.#: 5369
Project: 192-1TM
Client ID: MWI-S1-1117
Sample Matrix: Water
Date Sampled: 11/17/2000
Date Received: 11/17/2000
Spectra Project: 2000110175
Spectra Number: 1

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	<250	ug/L	NWTPH-D
Oil	<1000	ug/L	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
p-Terphenyl	88	NWTPH-D

SPECTRA LABORATORIES



Steve Hibbs, Laboratory Manager

Page 1 of 1



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

11/22/2000

Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Steve Spencer

P.O.#: 5369
Project: 192-1TM
Client ID: MW2-S3-1117
Sample Matrix: Water
Date Sampled: 11/17/2000
Date Received: 11/17/2000
Spectra Project: 2000110175
Spectra Number: 2

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	<250	ug/L	NWTPH-D
Oil	<1000	ug/L	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
p-Terphenyl	91	NWTPH-D

SPECTRA LABORATORIES


Steve Hibbe Laboratory Manager



SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

11/22/2000

Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Steve Spencer

P.O.#: 5369
Project: 192-1TM
Client ID: MW3-S2-1117
Sample Matrix: Water
Date Sampled: 11/17/2000
Date Received: 11/17/2000
Spectra Project: 2000110175
Spectra Number: 3

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	<250	ug/L	NWTPH-D
Oil	<1000	ug/L	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
p-Terphenyl	90	NWTPH-D

SPECTRA LABORATORIES



Steve Hibbs Laboratory Manager



SPECTRA Laboratories

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11/22/2000

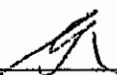
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Steve Spencer

P.O.#: 5369
Project: 192-1TM
Client ID: MW4-S4-1117
Sample Matrix: Water
Date Sampled: 11/17/2000
Date Received: 11/17/2000
Spectra Project: 2000110175
Spectra Number: 4

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
Diesel	<250	ug/L	NWTPH-D
Oil	<1000	ug/L	NWTPH-D

<u>Surrogate</u>	<u>Recovery</u>	<u>Method</u>
p-Terphenyl	94	NWTPH-D

SPECTRA LABORATORIES


Steve Hibbs Laboratory Manager

CHAIN OF CUS ONLY

SPECTRA Laboratories

PAGE 1 of 1

2000/10/15
221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

STANDARD ☒ RUSH ☐

CLIENT: CFTI
PROJECT: 192-100
CONTACT: STONE SPENCER
PHONE: 627-3347
FAX: 527-4207 e-MAIL:
PURCHASE ORDER #: 5369

HYDROCARBONS				ORGANICS				METALS				OTHER			
NWTPH-HCID				BTEX				BTEX/NWTPH-G				NWTPH-G			
NWTPH-D-X				1664 SGT-HEM				1664 HEM							
								8260 VOA				8260 CHLOR SOLVENTS			
								8270 SEMI-VOA				PAH/PNA-8270			
								8062 PCB							
								TOTAL METALS RCRA 8				TOTAL METALS (SPECIFY)			
								TCMP METALS RCRA 8				TCMP METALS (SPECIFY)			
												PH 9040/9045			
												TX/TOX 9076			
												TOC 9060/PSEP			
												FLASH POINT			
												SOLIDS (SPECIFY)			

Well Sampling Field Notes

Name of person collecting data: ERIC MELLAND

Others present: NONE

Site: B&H 192-1

Date: 11-17-00

Well Designation: MW 1

Weather: CLEAR, SUNNY, 45°F

General condition of the well and immediate area, well head condition: EXCELLENT

Depth to water: 6.0' Depth of well: 15' Diameter of well casing: 2"

	1	2	3	4	5	6
PID reading:						
PH:	<u>6.75</u>	<u>6.81</u>	<u>6.85</u>			
Conductivity:	<u>390</u>	<u>402</u>	<u>401</u>			
Turbidity:						
Temperature:	<u>14.2</u>	<u>14.3</u>	<u>14.3</u>			
Dissolved Oxygen:						

Safety precautions:

Thickness of sediment:

Type of pump used: PARASTOLTIC Rate of flow: _____

Notes on the purge water (appearance, odor, amount of sediment): SOME SUSPENDED SOLIDS, SLIGHT
ODOR (NOT HYDROCARBON)
MORE CLEAR WHEN SAMPLED (2:15P)

Volume of purge water drawn from well: 60 gallons

Storage of purge water: 55 gal. drum

Samples taken (sample designation, analysis and time collected): (MW1-S1-1117) 2:15pm

Other observations: VERY SLOW RECHARGE - 1' EVERY 10 MIN.



Creative Environmental Technologies, Inc.
P.O. Box 1803
Tacoma, Washington 98401-1803
P: 253.627.3347
F: 253.572.4207
E-Mail: ceti@cetinw.com
www.cetinw.com

169

Well Sampling Field Notes

Name of person collecting data: ERIC MELAND

Others present: _____

Site: 192 - 1 Date: 11-17-00

Well Designation: MW 2 Weather: CLEAR, SUNNY, 45°F

General condition of the well and immediate area, well head condition: EXCELLENT

Depth to water: 6.4" Depth of well: 14'9" Diameter of well casing: 2"

	1	2	3	4	5	6
PID reading:						
- PH:	<u>6.70</u>	<u>6.84</u>	<u>6.82</u>			
- Conductivity:	<u>315</u>	<u>317</u>	<u>308</u>			
Turbidity:						
- Temperature:	<u>14.6</u>	<u>15.0</u>	<u>15.0</u>			
Dissolved Oxygen:						

Safety precautions:

Thickness of sediment:

Type of pump used: PERISTALTIC Rate of flow: _____

Notes on the purge water (appearance, odor, amount of sediment): SLIGHT ODOR, MOSTLY CLEAR, TRACE OF SUS. SOLIDS

Volume of purge water drawn from well: 4.5 gallons

Storage of purge water: 55 gallon drum

Samples taken (sample designation, analysis and time collected):

Other observations:

(MW 2 - S3 - 1117) 3:36pm



Creative Environmental Technologies, Inc.
P.O. Box 1803
Tacoma, Washington 98401-1803
P: 253.627.3347
F: 253.572.4207
E-Mail: ceti@cetinw.com
www.cetinw.com

Well Sampling Field Notes

Name of person collecting data: ERIC MELLAND
Others present: _____

Site: 192-1 Date: 11-17-00

Well Designation: MW 3 Weather: CLEAR, SUNNY, 45°F

General condition of the well and immediate area, well head condition: EXCELLENT

Depth to water: 6.5" Depth of well: 15' Diameter of well casing: 2"

	1	2	3	4	5	6
PID reading:						
- PH:	<u>6.70</u>	<u>6.74</u>	<u>6.80</u>			
- Conductivity:	<u>391</u>	<u>404</u>	<u>404</u>			
Turbidity:						
- Temperature:	<u>14.3</u>	<u>14.3</u>	<u>14.3</u>			
Dissolved Oxygen:						

Safety precautions: _____

Thickness of sediment: _____

Type of pump used: PERISTALTIC Rate of flow: _____

Notes on the purge water (appearance, odor, amount of sediment): CLEAR, TRACE OF SUS.
SOLIDS, NO ODOR

Volume of purge water drawn from well: 4.50 gallons

Storage of purge water: 55 gallon drum

Samples taken (sample designation, analysis and time collected): (MW 3 - S2 - 1117) 2:50p

Other observations: _____



Creative Environmental Technologies, Inc.
P.O. Box 1803
Tacoma, Washington 98401-1803
P: 253.627.3347
F: 253.572.4207
E-Mail: ceti@cetinw.com
www.cetinw.com

Well Sampling Field Notes

Name of person collecting data: ERIC MELLAND

Others present: _____

Site: 192-1 Date: 11-17-00

Well Designation: MW 4 Weather: SUNNY, CLEAR, 45°F

General condition of the well and immediate area, well head condition: EXCELLENT

Depth to water: 6.4' Depth of well: 15' Diameter of well casing: 2"

	1	2	3	4	5	6
PID reading:						
- PH:	<u>7.10</u>	<u>7.20</u>	<u>7.21</u>			
- Conductivity:	<u>298</u>	<u>293</u>	<u>299</u>			
Turbidity:						
- Temperature:	<u>12.6</u>	<u>12.9</u>	<u>12.9</u>			
Dissolved Oxygen:						

Safety precautions:

Thickness of sediment:

Type of pump used: PARASTOLIC Rate of flow: 600 RPM

Notes on the purge water (appearance, odor, amount of sediment): SLIGHTLY CLOUDY w/
SUSPENDED FINE STRANDS
TRACE OF S.S. SOLIDS
SLIGHT HYDRO. ODOR

Volume of purge water drawn from well: 4.5 gallons

Storage of purge water: 55 gallon drum

Samples taken (sample designation, analysis and time collected): (MW 4-S4-1117)(4:15pm)

Other observations:



Creative Environmental Technologies, Inc.
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SPECTRA Laboratories

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

03/30/2001

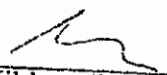
Creative Environmental Technologies, Inc
P.O. Box 1803
Tacoma, WA 98401
Attn: Linda Drake

P.O.#: 5430
Project: Brown & Haley
Sample Matrix: Water
Date Sampled: 03/23/2001
Date Received: 03/23/2001
Spectra Project: 2001030274

<u>Spectra #</u>	<u>Client ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>
1	MW-1-23201	Diesel	<250		
1	MW-1-23201	Oil	<1000	ug/L	NWTPH-D
2	MW-2-23201			ug/L	NWTPH-D
2	MW-2-23201	Diesel	<250		
		Oil	<1000	ug/L	NWTPH-D
3	MW-3-23201			ug/L	NWTPH-D
3	MW-3-23201	Diesel	<250		
		Oil	<1000	ug/L	NWTPH-D
4	MW-4-23201			ug/L	NWTPH-D
4	MW-4-23201	Diesel	<250		
		Oil	<1000	ug/L	NWTPH-D

March Sampling
of Monitoring
wells

SPECTRA LABORATORIES


Steve Hibbs, Laboratory Manager

Well Sampling Field Notes

Name of person collecting data: RCA / LAD

Others present: _____

Site: BROWNIE HALEY

Date: 23 MARCH 2001

Well Designation: MW1

Weather: Clear, Sunny ~ 70°

General condition of the well and immediate area, well head condition:

Generally clean. Water in annular space, pumped out prior to opening well.

Depth to water: 5.47 ft Depth of well: 15 ft Diameter of well casing: 2"

PID reading:

PH:

* Conductivity:

Turbidity:

Temperature:

Dissolved Oxygen:

Safety precautions:

* pH maintained constant slow decline.
Suspect calibration problem

Thickness of sediment:

Type of pump used: Peristaltic

Rate of flow: _____

Notes on the purge water (appearance, odor, amount of sediment):

1305 START Purge Gray Suspended sediment upon initial Evacuation.
1325 STOP

Volume of purge water drawn from well: 4 g

Storage of purge water: 55 g drum

Samples taken (sample designation, analysis and time collected):

Other observations:

PH & Cond. readings may be high due to calibration difficulty.



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Well Sampling Field Notes

Name of person collecting data: RCA

Others present: _____

Site: Brown & Haley

Date: 3/23/01

Well Designation: MW-2

Weather: Clear, Sunny ~70°

General condition of the well and immediate area, well head condition: clean. Approx. 1/4-in. water in annulus.

Depth to water: 6.15 ft Depth of well: 15 ft Diameter of well casing: 2"

	1g	2g	3g	4g	5	6
PID reading:						
* PH:	<u>7.50</u>	<u>6.80</u>	<u>6.33</u>	<u>6.35</u>		
Conductivity:	<u>206</u>	<u>215</u>	<u>211</u>	<u>213</u>		
Turbidity:						
Temperature:	<u>15.0</u>	<u>14.7</u>	<u>15.0</u>	<u>14.4</u>		
Dissolved Oxygen:						

Safety precautions:

Thickness of sediment:

Type of pump used: Peristaltic Rate of flow: _____

Notes on the purge water (appearance, odor, amount of sediment):

START 1344 Clear, Relatively free of suspended sediment.
STOP 1405

Volume of purge water drawn from well: ~4g

Storage of purge water: 55-g drum

Samples taken (sample designation, analysis and time collected): 14:05 MW2-32301

Other observations: One 1 (L) amber bottle for MW2A-D
pH & Cond. readings may be high because of calibration problems



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Well Sampling Field Notes

Name of person collecting data: RCA

Others present: _____

Site: Brown & Haley

Date: 3/23/01

Well Designation: MW13

Weather: Sunny, clear 70°

General condition of the well and immediate area, well head condition: Clean. Approx. 1/4" water in annulus.

Depth to water: 6.72 ft Depth of well: 15 ft Diameter of well casing: 2"

	1g	2g	3g	4g	5	6
PID reading:						
PH:	<u>6.59</u>	<u>6.72</u>	<u>6.70</u>	<u>6.66</u>		
* Conductivity:	<u>447</u>	<u>388</u>	<u>374</u>	<u>357</u>		
Turbidity:						
Temperature:	<u>17.2</u>	<u>14.7</u>	<u>14.9</u>	<u>14.2</u>		
Dissolved Oxygen:						

Safety precautions: _____

Thickness of sediment: _____

Type of pump used: Peristaltic

Rate of flow: _____

Notes on the purge water (appearance, odor, amount of sediment):

Start 1430 Some brn particulate debris upon initial evacuation of
Stop 1455 purge water

Volume of purge water drawn from well: 24g

Storage of purge water: 55-g drums

Samples taken (sample designation, analysis and time collected):

14:55

MW13-032301

Other observations:

One 1 (1) amber bottle for NWTPH

* Meter calibration problems.



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Well Sampling Field Notes

Name of person collecting data: RCH

Others present: _____

Site: Brown & Haley

Date: 3/23/01

Well Designation: MW4

Weather: Sunny, clear 70°

General condition of the well and immediate area, well head condition: Clean. Approx. 1/4-in. water in annulus.

Depth to water: 5.97 ft Depth of well: 15 ft Diameter of well casing: 2"

	1g	2g	3g	4g	5	6
PID reading:						
PH:	7.48	7.10	7.16	6.98		
* Conductivity:	178	184	178	182		
Turbidity:						
Temperature:	14.1	12.3	11.8	11.2		
Dissolved Oxygen:						

Safety precautions: _____

Thickness of sediment: _____

Type of pump used: Peristaltic

Rate of flow: _____

Notes on the purge water (appearance, odor, amount of sediment):

Start 1525 Slightly brn water upon initial evacuation of well.
Stop 1545 Clear after ~2 min.

Volume of purge water drawn from well: ~4g

Storage of purge water: 55-g drums

Samples taken (sample designation, analysis and time collected): MW4-32301

Other observations:

* Meter calibration problems.



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