

# LEGEND

EXISTING MONITOR WELL

ABANDONED MONITOR WELL

SOIL BORING - 1999 LCI

⊗ SOIL BORING - 1996 GCI

SOIL BORING - 1991 SAIC

SOIL BORING - 1985 S&W

TEST PIT

SURFACE SOIL SAMPLE

OTHER SAMPLE LOCATION

MONITOR WELL ELEVATION
1962.32 (TOP OF WELL CASING)
1958.75 (GROUND SURFACE)

1957.87 TEST PIT ELEVATION

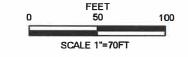


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APPROXIMATE LOCATION OF 1981 EXCAVATION AREA



APPROXIMATE LOCATION OF FORMER SOIL LANDFARM TREATMENT CELL







### FIGURE 8

LCI NO. 997111

LEPPO CONSULTANTS, INC.
Spokane, Washington

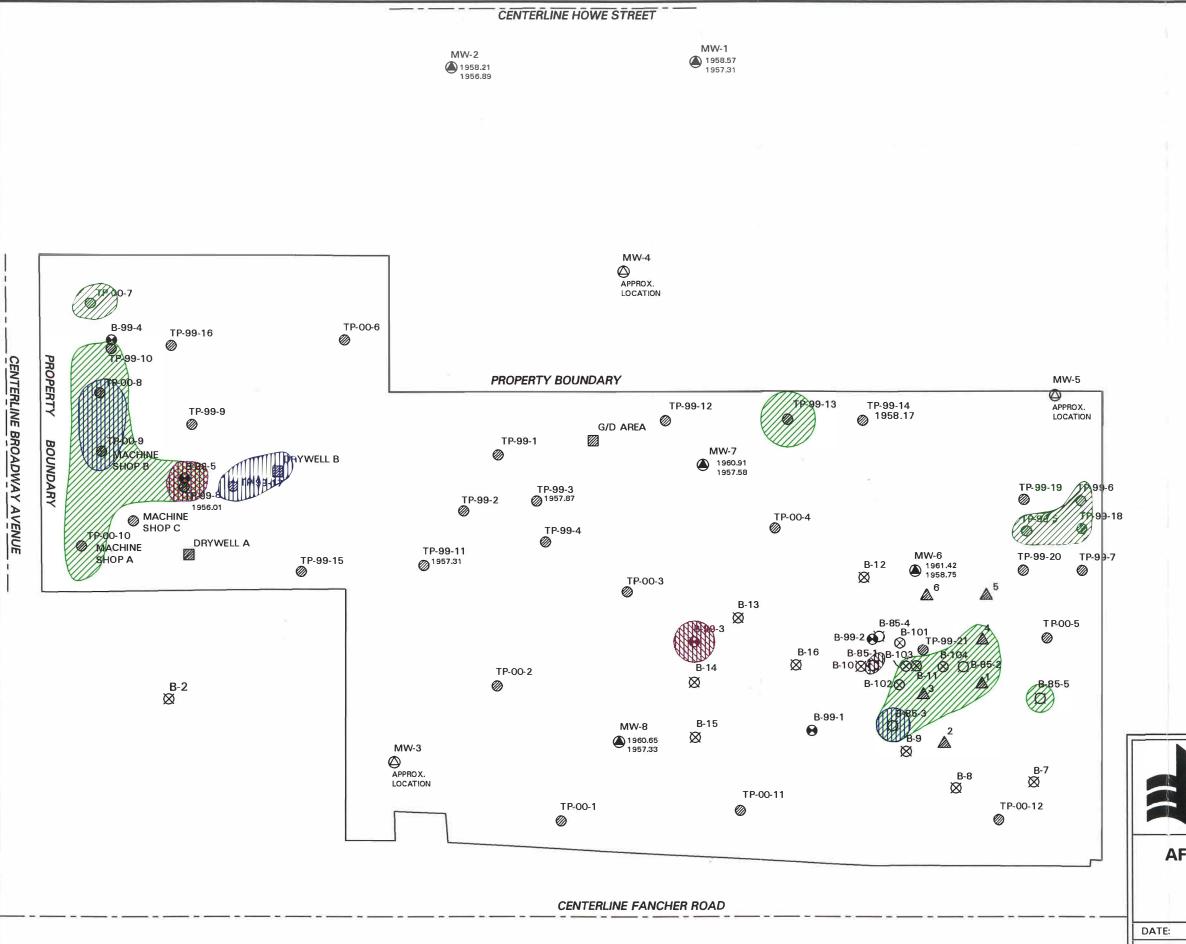
## SITE CHARACTERIZATION LOCATIONS

**NEVCO, INC. SITE** 

Fancher Way and East Broadway Spokane, Washington

 DATE:
 March 2000
 SCALE:
 1 in. = 70 ft.

 DRAWN:
 Jasper GeoGraphics
 CHECKED:
 DW





**EXISTING MONITOR WELL** 

ABANDONED MONITOR WELL

0 SOIL BORING - 1999 LCI

 $\otimes$ SOIL BORING - 1996 GCI

 $\boxtimes$ SOIL BORING - 1991 SAIC

 $\Box$ SOIL BORING - 1985 S&W

0 TEST PIT

SURFACE SOIL SAMPLE

 $\mathbb{Z}$ OTHER SAMPLE LOCATION

MONITOR WELL ELEVATION (TOP OF WELL CASING) 1962.32 1958.75 (GROUND SURFACE)

1957.87 TEST PIT ELEVATION

0 to ± 8ft BGS  $\pm\,8ft$  to  $\pm\,30ft$  BGS

±30ft to >30ft BGS

FEET 50 100 SCALE 1"=70FT





### FIGURE 10

LCI NO. 997111

LEPPO CONSULTANTS, INC. Spokane, Washington

## AFFECTED AREA AREAL EXTENT MAP

**NEVCO, INC. SITE** 

Fancher Way and East Broadway Spokane, Washington

DATE:	March 2000	SCALE:	1 in.	= 70 ft.	
DRAWN:	Jasper GeoGraphics		CHECKED:	DW	

**Table 1: Summary of Miscellaneous Soil Sampling Locations** 

Assessment Location	Date	Assessment Target	Field Observations	Samples Analyzed (depth in feet bgs)
Machine Shop A	7/19/99 9/1/99	Machine Shop	Ground surface comprised of ash/soil/cinder mixture. Black-stained soil to approximately 1.5' bgs. Apparently uncontaminated medium brown native soil to depth (TD).	
Machine Shop B	7/19/99 9/1/99	Machine Shop	Ground surface comprised of ash/soil/cinder mixture. Upper $\pm$ 1' consisted of black compacted/dense apparent soil/asphalt mixture. Soil appeared to have been melted. Strong petroleum odor noted. Ash layer observed from $\pm$ 1' to $\pm$ 1.5' bgs. Compacted black soil to $\pm$ 2' with apparently medium brown native soil to TD.	Machine Shop B (2') Machine Shop B (7')
Machine Shop C	7/19/99	Machine Shop	Excavated apparent fill material to $\pm$ 1.5' bgs. Apparently clean native soil to TD.	
Drywell A	9/1/99	Dry well	No affected soil encountered	
Drywell B	9/1/99	Dry well	Affected soil encountered in bottom of dry well, no affected soil found outside of concrete drywell structure.	Dry well B SS2 (2')
Gas/Diesel Station Area	7/19/99	Former facility storage building, gas/diesel fueling station	Ground surface stained gray. Upper 1' consisted of fill containing abundant decomposed and charred wood fragments with light petroleum odor. At $\pm$ 1.5' bgs encountered apparent wooden pipe filled with white moist fibrous substance. Two gray ash layers visible in TP side walls.	Gas/Diesel Sta. (2')
Surface Sample #1	9/1/99	Former plastic-lined landfarming pad	Soil appeared stained dark gray to $\pm$ 3' bgs. Black plastic sheeting observed in hole.	Surface Sample #1
Surface Sample #2	9/1/99	Former plastic-lined landfarming pad	Soil comprised of medium brown apparently native material. White and black plastic noted on ground surface. No evidence of petroleum contamination observed.	
Surface Sample #3	9/1/99	Former plastic-lined landfarming pad	Soil contained debris, probably comprised of fill. Soil was stained gray.	Surface Sample #3
Surface Sample #4	9/1/99	Former plastic-lined landfarming pad	Upper $\pm$ 1' – 2' appeared to be comprised of fill. No evidence of petroleum contamination observed.	Surface Sample #4
Surface Sample #5	9/1/99	Former plastic-lined landfarming pad	Soil comprised of medium brown apparently native material. No evidence of petroleum contamination observed.	
Surface Sample #6	9/1/99	Former plastic-lined landfarming pad	Soil comprised of medium brown apparently native material. Scattered pieces of asphalt observed on ground surface. No evidence of petroleum contamination observed.	

Table 2: Summary of Test Pit Field Program

Test Pit Number	Date	Assessment Target	Field Observations	Samples Analyzed (depth in feet bgs)
Machine Shop B	7/19/99 9/1/99	Machine Shop	Ground surface comprised of ash/soil/cinder mixture. Upper $\pm$ 1' consisted of black compacted/dense apparent soil/asphalt mixture. Soil appeared to have been melted. Strong petroleum odor noted. Ash layer observed from $\pm$ 1' to $\pm$ 1.5' below ground surface (bgs). Compacted black soil to $\pm$ 2' with apparently medium brown native soil to TD.	Machine Shop B (2') Machine Shop B (7')
Machine Shop C	7/19/99	Machine Shop	Excavated apparent fill material to $\pm$ 1.5' bgs. Apparently clean native soil to TD.	
TP99-1	7/19/99	Former facility storage building, gas/diesel fueling station	Upper ± 2 feet below ground surface (bgs) comprised of dark brown to gray soil located above apparently clean native tan to medium brown soil to TD. No evidence of petroleum contamination observed.	TP99-1 SS1 (4')
TP99-2	7/19/99	Former facility storage building, gas/diesel fueling station	Encountered buried dry well; excavated to approximately 8' bgs. No evidence of petroleum contamination observed.	
TP99-3	7/19/99	Former facility storage building, gas/diesel fueling station	Upper ± 2 feet below ground surface (bgs) comprised of stained dark gray to black soil situated above apparently clean native tan to medium brown soil to test pit (TP) total depth (TD). Faint petroleum odor noted in black soil. Encountered 4"metal pipe at approx. 4' bgs.	TP99-3 SS2 (2') TP99-3 SS4 (8')
TP99-4	7/19/99	Former facility storage building, gas/diesel fueling station	Excavated apparently clean soil to TD; approx. 1' gray ash layer at about 1' bgs with clean native tan to medium brown soil below this layer. No evidence of petroleum contamination observed.	
TP99-5	7/19/99	Bumer / Wigwam	Upper $\pm$ 8" stained soil with petroleum odor. Apparently clean fill to $\pm$ 4' situated above $\pm$ 1.5' layer soil apparently containing creosote. Soil condition to TD uncertain.	TP99-5 SS2 (3') TP99-5 SS5 (8')
TP99-6	7/19/99	Burner / Wigwam	Encountered edge/boundary of buried pit apparently filled with gray ash. Encountered vertical slabs of concrete apparently placed in pit.	TP99-6 SS2 (5') TP99-6 SS3 (7')
TP99-6A	9/24/99	Burner / Wigwam	As above.	TP99-6A (5')

**Table 2: Summary of Test Pit Field Program** 

Test Pit Number	Date	Assessment Target	Field Observations	Samples Analyzed (depth in feet bgs)
TP99-7	7/19/99	Burner / Wigwam	Surface soil stained gray. Encountered railroad tie a few inches bgs with apparently native medium brown soil beneath to TD. No evidence of petroleum contamination observed.	TP99-7 SS2 (7')
TP99-8	8/2/99	Machine Shop Area	Excavated soil appeared to be fill material – contained slag, crushed brick, wires, wood fragments. Encountered speckled black creosote-like material at TD (± 8' bgs).	TP99-8 SS1 (1') TP99-8 SS3 (8')
TP99-9	8/2/99	Apparent Log Floating Trench	Excavated apparently clean medium brown soil to TD; approx. 1' gray ash layer at about 1' bgs with clean native soil below this layer. No evidence of petroleum contamination observed.	
TP99-10	8/2/99	Machine Shop Area	Upper $\pm$ 3' bgs consisted of dark gray soil/ash mix. No obvious petroleum odor or stain observed in this material. From $\pm$ 3' to $\pm$ 7' bgs was medium brown soil that appeared unaffected. Encountered black dense petroleum compound in gravel interstices from $\pm$ 7 to TD ( $\pm$ 8' bgs). This compound appeared to be creosote.	TP99-10 SS2 (7')
TP99-10A	9/24/99	Machine Shop Area	As Above	TP99-10A (9')
TP99-11	8/2/99	Railroad Tracks	Upper $\pm$ 3' dark gray to black with strong petroleum odor. Apparently clean native medium brown soil below to TD.	TP99-11 SS2 (7')
TP99-12	8/2/99	Railroad Tracks	Upper ± 2' appeared to consist of medium gray ash above medium brown clean native soil to TD.	
TP99-13	8/2/99	Creosote Storage Tank	Approximately 1' to 2' of light brown to gray soil/ash mix above 1' - 2' very dense dark gray soil. Encountered abandoned septic tank below the soil.	TP99-13 SS1 (1.5')
TP99-14	8/2/99	Creosote Storage Tank	Upper 2' consisted of gray to brown soil above apparently clean medium brown native soil to TD.	TP99-14 SS2 (7.5')
TP99-15	8/2/99	Railroad Tracks	Upper $\pm$ 3' dark gray to black above apparently clean native soil below to TD.	
TP99-16	9/1/99	Machine Shop Area	Soil appeared gray to brown with no evidence of petroleum contamination observed.	TP99-16 SS3 (8')

Table 2: Summary of Test Pit Field Program

Test Pit Number	Date	Assessment Target	Field Observations	Samples Analyzed (depth in feet bgs)
TP99-17	9/1/99	Machine Shop Area	Upper $\pm$ 2' consisted of medium to dark brown apparently clean soil. Wire-wrapped wooden pipe encountered at about 2' bgs. Soil below this pipe appeared heavily contaminated by petroleum products to TD ( $\pm$ 8' bgs).	TP99-17 SS4 (8')
TP99-18	9/1/99	Burner / Wigwam	Soil appeared to consist of apparent soil/ash mix with pieces of concrete encountered to TD (± 7' bgs). No evidence of petroleum contamination observed.	
TP99-19	9/1/99	Burner / Wigwam	Upper ± 2' to 3' dark gray to black with no or very faint petroleum odor. Apparently clean native soil below to TD.	
TP99-20	9/1/99	Burner / Wigwam	Upper 1.5 to 2' comprised of soil/ash mixture with apparently tan to medium brown native soil below to TD. No evidence of petroleum contamination observed.	
TP99-21	9/1/99	Oil Storage Tank Area	Excavated soil appeared to consist of medium to dark brown clean material. A few pieces of asphalt observed in upper 1' – 2'. No evidence of petroleum contamination observed.	TP99-21 SS3 (7.5')
TP00-1	1/13/00	Open area southeast of 1981 excavation	Soil almost black at ground surface grading to medium brown at $\pm$ 3'bgs. Apparently clean soil to TD. No evidence of petroleum contamination observed.	TP00-1 SS1 (3')
TP00-2	1/13/00	Open area south of 1981 excavation	Upper ± 2' to 3' soil was dark gray to black grading to light to medium brown to TD. No evidence of petroleum contamination observed.	TP00-2 SS1 (2')
TP00-3	1/13/00	Open area west of 1981 excavation	Excavated soil dark brown grading to medium brown with depth. Soil appeared to be fill material; no TP sidewall sluffing occurred. Appeared to have excavated into fill emplaced after 1981 excavation. No evidence of petroleum contamination observed, although possible trace hydrocarbons noted using sheen test.	TP00-3 SS1 (3') TP00-3 SS4 (10')
TP00-4	1/13/00	Open area northwest of 1981 excavation	Excavated soil dark brown grading to medium brown with depth.  Soil appeared to be clean native material with no evidence of petroleum contamination observed.	TP00-4 SS1 (2')

Table 2: Summary of Test Pit Field Program

Test Pit Number	Date	Assessment Target	Field Observations	Samples Analyzed (depth in feet bgs)
TP00-5	1/13/00	Open area north of oil storage tank and pole drying rack area	Upper $\pm$ 2' to 3' appeared to be fill material with stratified medium to dark brown horizons, pieces of asphalt observed. Soil underneath this fill consisted of medium brown apparently clean native material. No evidence of petroleum contamination observed.	TP00-5 SS1 (3')
TP00-6	1/13/00	Open area northwest of Machine Shop Area	Upper± 3 - 4' appeared to be medium brown fill material with pieces of debris observed. Below fill material soil graded to medium gray to TD. No evidence of petroleum contamination observed.	TP00-6 SS1 (2')
TP00-7	1/13/00	West of TP99-10 / B99-4	Upper 1' consisted of black ash, with a second ash layer noted at $\pm$ 3' bgs. Below ash layer soil graded from medium to dark brown to tan to medium brown. Soil appeared to be native material, although burnt cinder odor noted. No evidence of petroleum contamination observed.	TP00-7 SS1 (3')
TP00-8	1/13/00	Between TP99-10 / B99-4 and Machine Shop B / TP00- 9	Soil from ground surface to $\pm$ 3 - 4' consisted of dark gray to black ash/soil mixture. Soil graded to medium brown undisturbed material to TD. No evidence of petroleum contamination observed.	TP00-8 SS1 (2') TP00-8 SS3 (8')
TP00-9	1/13/00	Machine Shop B location	Upper $\pm$ 6 to 7' bgs disturbed from previous excavation activity. Soil below this depth appeared to be unaffected native material. No evidence of petroleum contamination observed.	TP00-9 SS1 (8')
TP00-10	1/13/00	Machine Shop A location	Upper $\pm$ 6 to 7' bgs disturbed from previous excavation activity. Soil below this depth appeared to be unaffected native material. No evidence of petroleum contamination observed.	TP00-10 SS1 (6')
TP00-11	1/13/00	Open area east of 1981 excavation	Upper $\pm$ 2' to 3' of soil appeared medium brown to gray grading to medium brown native material at TD. No evidence of petroleum contamination observed.	TP00-11 SS1 (2')
TP00-12	1/13/00	Open area northeast of oil storage tank and pole drying rack area	Upper $\pm$ 1' to 2' of soil appeared dark brown to black grading with depth to medium brown native soil to TD. No evidence of petroleum contamination observed.	TP00-12 SS1 (1')

**Table 3: Exploratory Borehole Field Observations** 

BORING	LOCATION	EXPLORATION	TERMINATION	GROUND-	NOTES
NO.		TARGET	(ft.)	WATER ENCOUNTERED	
B99-1	Located northeast of 1981 excavation	Verify northeast extent of 1981 excavation, verify eastern extent of near surface soil contamination, verify depth of soil contamination found in B85-3 and B8501	40	No	No petroleum stain or odors observed. Photoionization detector (PID) 5 to 42 parts per million (ppm)
B99-2	Located north of 1981 excavation	Verify northern extent of 1981 excavation, verify westward extent of near surface soil contamination, verify depth of soil contamination found in B85-3 and B8501	40	No	No petroleum stain or odors observed. PID<1 to 10 ppm
B99-3	Located in the approximate center of 1981 excavation, in creosote tanks area	Verify the depth of the 1981 remedial excavation	64	Yes (59.5' bgs)	Petroleum odor noted at 10' bgs; PID to 105 ppm. Petroleum product observed at 40' bgs, with increasing product observed to borehole TD in groundwater.
B99-4	Located west of the Machine Shop Area	Verify the depth of near-surface contamination found in TP99-10	40	No	No petroleum stain or odors observed. PID<1 to 5 ppm. Methylene chloride testing indicated, possible petroleum presence.
B99-5	Located in Machine Shop Area	Verify the depth of near-surface contamination found in TP99-8	40	No	No petroleum stain or odors observed. PID<1 to 1 ppm. Methylene chloride testing indicated, possible petroleum presence.

Table 4: PAH Compounds, SOIL 1 - 8100 Screen

Sample Name / Number / Depth	Sample Collection Date	o-Cresol (2-Methylphenol)	m.p.Cresol (3&4-Methylphe not)	Naphthale <sub>ne</sub>	Асепарһтуепе	Асепарһtһепе	Fluorene	Phenanthrene	Anthracene	Fivoranthene	Pyrene	Benzo (a) anthracene	Сhrysene	Benzo (b) fluoranthene	Велzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	dibenzo (a,h) anthracene	Велго (ghi) регуле <sub>пе</sub>	Pentach olorophenol	Total PAHs
Machine Shop B (2')	7/19	ND <sup>2</sup>	ND	ND	8.08	ND	ND	4.47	3.98	98.6	189	64.6	75	7.05	139	80.9	24.3	7.65	19.9	6.03	723
Machine Shop B SS3 (7')	9/1	ND	ND	ND	ND	ND	ND	ND	ND	0.929	1.59	0.774	1.09	1.57	0.492	1.35	0.447	ND	0.398	ND	9
Drywell B SS2 (2')	9/1	ND	ND	ND	ND	ND	ND	0.356	ND	0.642	0.639	0.756	1.20	1.58	1.11	3.66	1.18	2.03	1.36	0.794	15
TP99 - 1 SS1 (4')	7/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
TP99 - 3 SS2 (2')	7/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
TP99 -5 SS2 (3')	7/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.33	ND	ND	ND	ND	ND	ND	ND	ND	2.54	0
TP99 - 6 SS2 (5')	7/19	ND	ND	ND	0.466	ND	ND	0.96	0.68	2.40	3.38	5.42	10.2	10.9	17.1	25.5	16.7	14.3	13.9	6.37	122
TP99 - 6 SS3 (7')	7/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
TP99 - 7 SS2 (7')	7/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
TP99 - 8 SS1 (1')	8/2	ND	ND	ND	0.37	ND	ND	1.92	0.775	12.2	17.2	9.51	15.7	23.1	7.36	14.6	9.15	3.38	13.3	ND	129
TP99 - 8 SS3 (8')	8/2	ND	ND	ND	1.14	ND	ND	1.01	4.64	100	163	12.3	153	29.7	308	123	24	37.9	31.7	2.83	989
TP99 - 10 SS2 (7')	8/2	ND	ND	4.98	14.5	12.3	16.6	37.2	ND	119	41.4	21.1	415	38.2	367	209	15.9	28.3	50.3	51.4	1386
TP99 - 11 SS2 (7')	8/2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
TP99 - 13 SS1 (1.5')	8/2	ND	ND	ND	ND	ND	0.814	1.89	2.04	1.48	3.89	1.68	3.06	2.72	0.978	2.64	2.42	2.28	5.18	16.3	31
TP99 - 14 SS2 (7.5')	8/2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
TP99 - 16 SS3 (8')	9/1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
TP99 - 17 SS4 (8')	9/1	ND	ND	ND	ND	ND	ND	ND	9.04	87.3	128	6.52	120	9.43	115	42.8	11.1	7.93	59.2	6.21	596
TP99 - 21 SS3 (7.5')	9/1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Surface Sample #1	9/1	ND	ND	ND	ND	ND	ND	ND	ND	0.804	1.04	1.11	1.33	2.01	1.14	2.41	1.42	1.24	0.811	1.28	13
Surface Sample #4	9/1	ND	ND	ND	ND	ND	ND	ND	ND	0.427	0.490	0.348	0.526	0.716	ND	0.770	0.339	0.337	0.384	2.49	4
Surface Sample #3	9/1	ND	ND	ND	ND	ND	ND	0.519	ND	1.87	2.14	1.35	1.73	1.66	0.766	1.7	0.469	0.502	0.488	1.32	13
Carcinogenic (C) / non-carcinogenic (NC)		NC	NC .	NC	NC	NC	NC	NC	NC	NC	NC	С	С	С	С	С	С	С		С	
MTCA Method A Cleanup Standard																					1.0
MTCA Method B Cleanup Standard		4000	4000 / 400 <sup>(3)</sup>	3200		4800	3200		24000	3200	2400	0.137	0.137	0.137	0.137	0.137	0.137	0.137		8.33	0.137

<sup>(1)</sup> All data reported in milligrams per kilogram (mg/kg). PAH - Polycyclic Aromatic Hydrocarbons
(2) ND - Non Detect

<sup>(3)</sup> Cresol m- has a cleanup standard of 4000 mg/kg, cresol p- has a cleanup standard of 400 mg/kg

Table 4: PAH Compounds, SOIL 1 - 8100 Screen (Continued)

Sample Name / Number / Depth	Sample Collection Date	o-Cresol (2-Methylphenol)	m.p-Cresol (3&4-Methylphenol)	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo (a) anthracene	Сһгузепе	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	dibenzo (a,h) anthracene	Benzo (ghi) peryle <sub>ne</sub>	Pentacholorophenol	Total PAHs
B99-1 SS2 (10')	11/4	NA <sup>2</sup>	NA	ND <sup>3</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.624	ND	0.624
B99-2 SS2 (10')	11/4	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B99-4 SS5 (35')	11/4	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B99-5 SS 3 (25')	11/4	NA	NA	ND	0.0564	ND	1.59	4.49	10.9	31.3	52.5	17.1	ND	6.76	65.1	24.7	2.66	6.86	8.02	3.39	232
MW7 SS3 (15')	11/2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW7 SS10 (50')	11/3	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW8 SS3 (15')	11/2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW8 SS10 (50')	11/2	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-1 SS1 (3')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-2 SS1 (2')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-3 SS1 (3')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.383	ND	0.383
TP00-3 SS4 (10')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-4 SS1 (2')	1/13	NA	NA	ND	ND	ND	Z	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-5 SS1 (3')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-6 SS1 (2')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.39	ND
TP00-7 SS1 (3')	1/13	NA	NA	ND	ND	ND	ND	0.576	ND	1.16	0.869	0.572	0.768	0.611	ND	ND	ND	ND	ND	0.32	4.556
TP00-7 SS2 (5')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-8 SS3 (8')	1/13	NA	NA	ND	ND	ИD	ND	ND	ND	ND	0.331	ND	0.398	0.763	ND	0.456	ND	ND	ND	ND	1.948
TP00-9 SS1 (8')	1/13	NA	NA	ND	0.858	0.382	0.303	1.56	2.17	9.4	10.4	5.94	7.14	7.03	2.15	6.02	1.74	0.495	1.77	0.44	57.36
TP00-10 SS1 (6')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-11 SS1 (2')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP00-12 SS1 (1')	1/13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carcinogenic (C) / non- carcinogenic (NC)		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	С	С	С	С	С	С	С		С	
Cleanup Standard																					1.0
MTCA Method B Cleanup Standard		4000	4000 / 400 <sup>(4)</sup>	3200		4800	3200		24000	3200	2400	0.137	0.137	0.137	0.137	0.137	0.137	0.137		8.33	0.137

<sup>(1)</sup> All data reported in milligrams per kilogram (mg/kg). PAH - Polycyclic Aromatic Hydrocarbons (2) NA - Not Analyzed

<sup>(3)</sup> ND - Non-Detect

<sup>(4)</sup> Cresol m- has a cleanup standard of 4000 mg/kg, cresol p- has a cleanup standard of 400 mg/kg

Table 5: PAH Compounds, SOIL 1 - 8270 GC/MS

Sample Name / Number / Depth	Sample Collection Date	o-Gresol (2-Methylphenol)	m,p-Cresol (3&4-Methylphenol)	Naphthalene	Асепарhthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo (a) anthracene	Сћузепе	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	aibenzo (a,h) anthracene	Велго (ghi) регуепе	Pentacholorophenol	Total PAHs
Drywell B SS2 (2')	9/1	NA <sup>2</sup>	NA	1	0.0569		ND	0.0893		0.322	0.399	0.211	0.335	0.315	0.272	0.311	0.229	0.0754	0.322	0.0616	2.95
TP99 - 6A (5')	9/24	NA	NA				0.0258	1	0.186	0.401	0.348	0.192	0.424	0.371	0.227	0.174	0.224	0.0818	l .		3.24
TP99-10A (9')	9/24	NA	NA	1.43	4.98	1.98	4.11	9.89	182	251	1000	933	898	81.2	79.4	34.5	18.8	8.64	19.2	ND	3515.63
TP99 - 17 SS4 (8')	9/1	NA	NA	ND	1.10	0.586	0.231	2.75	11.1	78.7	46.1	32. <u>4</u>	37.4	185	186	69.4	34.4	18.3	34.2	ND	735.75
TP00-6 SS2 (5')	1/17	NA	NA	ND	ND	ND	ND	ND	ND	0.0106	0.0169	ND	0.0148		0.0148		1	ND	0.0275		0.14
TP00-7 SS2 (5')	1/17	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Surface Sample #1	9/1	NA NA	NA	0.0252		ND	ND		0.0713	0.410	0.5190	0.341	0.509	0.562	0.475	0.534	0.391	0.130	0.496	0.157	4.37
Surface Sample #3	9/1	NA	NA	0.0517	0.190	ND	ND	0.276	0.190	1.32	1.55	1.34	0.107	0.231	0.235	1.20	0.811	0.269	1.01	0.217	8.07
B99-1 SS8 (40')	11/4	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B99-2 SS6 (30')	11/4	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B99-3 SS2 (10')	11/3	NA	NA	ND	ND	0.0180	0.0187	0.0666	0.0217	0.0599	0.0547	0.0180	0.0292	0.0150	0.0135	0.0150	0.0112	ND	0.0135	ND	0.36
B99-3 SS8 (40')	11/3	NA	NA	0.324	0.0880	1.28	0.644	5.58	4.58	0.202	7.60	0.600	0.208	ND	6.83	3.34	1.58	ND	1.54	36.80	33.98
B99-3 SS13 (64')	11/3	NA	NA	0.0249	0.590	13.9	14.8	3.56	1.61	3.06	2.85	0.942	1.60	0.548	0.448	0.446	0.169	ND	0.175	0.0384	44.11
B99-5 SS6 (40')	11/4	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carcinogenic (C) / non- carcinogenic (NC)		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	С	С	С	С	С	С	С		С	
MTCA Method A Cleanup Standard																					1.0
MTCA Method B Cleanup Standard		4000	4000 / 400 <sup>(4)</sup>	3200		4800	3200		24000	3200	2400	0.137	0.137	0.137	0.137	0.137	0.137	0.137		8.33	0.137

<sup>(1)</sup> All data reported in milligrams per kilogram (mg/kg). PAH - Polycyclic Aromatic Hydrocarbons

<sup>(2)</sup> NA - Not Analyzed (3) ND - Non Detect

<sup>(4)</sup> Cresol, m- has a cleanup standard of 4000 mg/kg, cresol p- has a cleanup standard of 400 mg/kg

Table 6: Petroleum Screen and Total Metals, SOIL<sup>1</sup>

		PETRO	LEUM SC	REEN <sup>2</sup>		ME	TALS 3	
Sample Name /	Collection	Gasoline	Diesel	Heavy Oil				
Number / Depth	Date	Range	Range	Range	As	Cd	Cr	Pb
Machine Shop B (2')	7/19	ND 4	1790	3700	9.31	ND	8.98	10.9
Machine Shop B SS3 (7')	9/2	ND	ND	ND	3.82	ND	6.87	6.90
Gas/Diesel Sta. (2')	7/19	ND	ND	164	12.7	ND	8.32	44
Drywell B SS2 (2')	9/1	ND	135	270	3.2	0.499	12.60	29.1
TP99 - 1 SS1 (4')	7/19	ND	ND	ND	ND	ND	0.24	ND
TP99 - 3 SS2 (2')	7/19	ND	ND	ND	ND	ND	0.22	ND
TP99 - 3 SS4 (8')	7/19	ND	ND	ND	ND	ND	0.66	ND
TP99 -5 SS2 (3')	7/19	ND	69	ND	ND	ND	ND	ND
TP99 - 5 SS3 (8')	7/19	ND	93	ND	ND	ND	ND	ND
TP99 - 6 SS2 (5')	7/19	ND	200	2620	11.9	ND	8.65	124
TP99 - 6 SS3 (7')	7/19	ND	ND	ND	NA	NA	NA	NA
TP99 - 7 SS2 (7')	7/19	ND	ND	ND	ND	ND	ND	ND
TP99 - 8 SS1 (1')	8/2	NA	NA	NA	ND	ND	12.40	68.9
TP99 - 8 SS3 (8')	8/2	ND	2280	7050	ND	ND	8.87	9.86
TP99 - 10 SS2 (7')	8/2	ND	7210	12000	ND	ND	3.29	5.23
TP99 - 11 SS2 (7')	8/2	ND	ND	ND	3.26	ND	6.30	ND
TP99 - 13 SS1 (1.5')	8/2	ND	357	515	ND	ND	10.20	14.6
TP99 - 14 SS2 (7.5')	8/2	ND	ND	ND	3.48	ND	8.45	ND
TP99 - 16 SS3 (8')	9/1	ND	ND	ND	ND	ND	9.31	10.2
TP99 - 17 SS4 (8')	9/1	ND	4000	4380	ND	ND	5.04	9.53
TP99 - 21 SS3 (7.5')	9/1	ND	ND	ND	ND	ND	3.08	4.73
Surface Sample #1	9/1	ND	62.7	137	10.90	ND	11	21.2
Surface Sample #3	9/1	ND	113	208	6.86	ND	7.5	44.8
Surface Sample #4	9/1	ND	56.7	104	ND	ND	13.0	16.6
B99-1 SS2 (10')	11/4	NA <sup>5</sup>	NA	NA	17.6	ND	7.15	6.14
B99-2 SS2 (10')	11/4	NA	NA	NA	ND	ND	7.25	8.82
B99-3 SS8 (40')	11/3	NA	NA	NA	ND	ND	12.4	10.5
B99-5 SS6 (40')	11/4	NA	NA	NA	ND	ND	6.27	5.6
MW7 SS3 (15')	11/2	NA	NA	NA	ND	ND	4.57	7.50
MW8 SS10 (50')	11/3	NA	NA	NA	ND	ND	5.12	3.45
TP00-7 SS1 (3')	1/17	NA	NA	NA	ND	ND	1.21	ND
TP00-8 SS1 (2')	1/17	NA	NA	NA	ND	ND	7.37	24.7
MTCA Cleanup Standard Method A		100	200	200	20	2	100	250
		100 	200	200			Cr III	230
MTCA Cleanup Standard							80,000 Cr	
Method B				j	1.67	80	IV 400	No Standard

<sup>(1)</sup> All data reported in milligrams per kilogram (mg/kg)

<sup>(2)</sup> Analyzed using WDOE method WTPH-HCID
(3) Analyzed using EPA methods 6010 / 7000 series

<sup>(4)</sup> ND - Non-Detect

<sup>(5)</sup> NA - Not Analyzed

Table 7: BTEX, MTBE, and Diesel-Range (Semivolatile) Compounds, SOIL 1

				BTEX & MTBE	2		Semivolatiles <sup>3</sup>									
Sample Name / Number / Depth	Collection Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	MTBE	Fuel Oil	Kerosene/ Jet Fuel	Unknown Diesel Range	Unknown Fuel Oil	Unknown Lube Oil Range	Diesel	Lube O			
TP99-17 SS4 (8')	9/1	ND ⁴	ND	ND	ND	ND	NA <sup>5</sup>	NA	NA	NA	NA	NA	NA			
Drywell B SS2 (2')	9/1	NA	NA	NA	NA	NA	ND	ND	110	ND	ND	ND	553			
TP99 - 6A (5')	9/24	ND	ND	ND	ND	ND	ND	ND	340	ND	ND	ND	2,260			
TP99-10A (9')	9/24	ND	ND	ND	ND	ND	ND	ND	12,900	ND	27,100	ND	ND			
B99-1 SS2 (10')	11/4	NA	NA	NA	NA	NA	ND	ND	18.3	ND	32	ND	ND			
B99-1 SS8 (40')	11/4	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
B99-2 SS2 (10')	11/4	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
B99-2 SS6 (30')	11/4	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
B99-3 SS2 (10')	11/3	NA	NA	NA	NA	NA	ND	ND	19.0	ND	117	ND	ND			
B99-3 SS8 (40')	11/3	NA	NA	NA	NA	NA	ND	ND	ND	ND	1,110	4250	ND			
B99-3 SS13 (64')	11/3	NA	NA	NA	NA	NA	ND	ND	ND	ND	153	327	ND			
B99-4 SS5 (35')	11/4	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
B99-5 SS3 (25')	11/4	NA	NA	NA	NA	NA	ND	ND	618	ND	2,110	ND	ND			
B99-5 SS6 (40')	11/4	NA	NA	NA	NA	NA	ND	ND	ND	ND	33.6	ND	ND			
MW7 SS3 (15')	11/2	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
MW7 SS10 (50')	11/3	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
MW8 SS3 (15')	11/2	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
MW8 SS10 (50')	11/2	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
TP00-2 SS1 (2')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
TP00-3 SS1 (3')	1/17	NA	NA	NA	NA	NA	ND	ND	10	ND	ND	ND	170			
TP00-3 SS4 (10')	1/17	NA	NA	NA	NA	NA	ND	ND	11	ND	ND	ND	ND			
TP00-4 SS1 (2')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
TP00-6 SS2 (2')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
TP00-7 SS1 (3')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
TP00-7 SS2 (5')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
TP00-8 SS1 (2')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	7420	ND	ND			
TP00-11 SS1 (2')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
TP00-12 SS1 (1')	1/17	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND			
MTCA Method A Cleanup Standard		0.5	40	20	20		200	200	200	200	200	200	200			
MTCA Method B Cleanup Standard		34.5	16,000	8,000	160,000											

<sup>(1)</sup> All data reported in milligrams per kilogram (mg/kg). Benzene, Toluene, Ethylbenzene, Total Xylenes and Methyl tert Butyl Ether.

<sup>(2)</sup> Analyzed using EPA Method 8021
(3) Analyzed using WDOE Method NWTPH-Dx

<sup>(4)</sup> ND - Non-Detect

<sup>(5)</sup> NA - Not Analyzed

Table 8: Volatile Petroleum Hydrocarbons / Extractable Petroleum Hydrocarbons<sup>1</sup>, SOIL<sup>2</sup>

		Volatile Petroleum Hydrocarbons by WDOE Interim TPH Policy Method									
											Total Volatile
			Aliph	natics			Aromatics			Hydrocarbons	
	Sample										
Sample Name /	Collection										
Number / Depth	Date	C5 - C6	C6 - C8	C8 - C10	C10 - C12	C8 - C10	C10 - C12	C12 - C13			
TP99 - 6A (5')	9/24	ND <sup>3</sup>	ND	ND	ND	ND	ND	ND			ND
TP99-10A (9')	9/24										

		E	Total Extractable Hydrocarbons								
Sample Name / Number / Depth	Sample Collection Date	C8 - C10	C10 - C12	C12 - C16	C16 - C21	C21 - C34	C10 - C12	C12 - C16	C16 - C21	C21 - C34	
TP99 - 6A (5') TP99-10A (9')	9/24 9/24	ND ND	ND ND	ND 13.3	37.3 18.9	778 ND	ND ND	ND 30.6	14.1 748	139 1580	968.4 2390.8

<sup>(1)</sup> VPH / EPH Analyses by modified WDOE Interim TPH Policy Method
(2) All data reported in milligrams per kilogram (mg/kg)
(3) ND - Non-Detect

Table 9: PAH Compounds <sup>1</sup>, WATER <sup>2</sup>

Sample Name / Number / Depth	Sample Collection Date	o-Cresol (2-Methylphenol)	m.p-Cresol (3&4-Methy/phenol)	Naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Вепго (а) ругепе	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Сһуѕепе	dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Pentacholorophenol	Phenanthrene	Pyrene	Total PAHs
MW - 6	9/28/99	ND <sup>3</sup>	ND	ND	ND	0.420	0.5	0.460	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.44	2.84
MW - 6	12/16/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-1	11/16/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	11/16/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-7	11/16/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-8	11/16/99	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carcinogenic (C) / non- carcinogenic (NC)		NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	С	С	С	С	С	С	С		C	
MTCA Method B Cleanup Standard (ug/l)		800	800 / 80 <sup>(4)</sup>	320		960	640		4800	640	480	0.012	0.012	0.012	0.012	0.012	0.012	0.012		0.729	0.012 (5)
MTCA Method A Cleanup Standard (ug/l)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA_	NA	NA	NA	0.1

<sup>(1)</sup> Analyzed by EPA Method 8270. PAH - Polycyclic Aromatic Hydrocarbons

<sup>(2)</sup> All data reported in micrograms per liter (ug/l)

<sup>(3)</sup> ND- Non-Detect

<sup>(4)</sup> Cresol m- has a cleanup standard of 800 ug/l, cresol p- has a cleanup standard of 80 ug/l

<sup>(5)</sup> The laboratory reporting limit for most PAH compounds is 0.1 ppb, and the reporting limit for cresols is 10.0 ppb. Both of these are well above the MTCA Method B cleanup standard of 0.012 ppb.

Table 10: Semivolatile Compounds<sup>1</sup>, WATER<sup>2</sup>

			ube										
			Kerosene/	Unknown Diesel	Unknown	Unknown Lube							
Sample Name	Collection Date	Fuel Oil	Jet Fuel	Range	Fuel Oil	Oil Range	Diesel	Lube Oil					
MW-6	9/28/99	ND <sup>3</sup>	ND	0.55	ND	ND	ND	ND					
MW-6	12/16/99	ND	ND	0.46	ND	0.86	ND	ND					
MW-1	11/16/99	ND	ND	ND	ND	ND	ND	ND					
MW-2	11/16/99	ND	ND	ND	ND	ND	ND	ND					
MW-7	11/16/99	ND	ND	ND	ND	ND	ND	ND					
MW-8	11/16/99	ND	ND	ND ND	ND	ND	ND	ND					
MTCA Method A Cleanup Standard		1.0	1.0	1.0	1.0	1.0	1.0	1.0					
MTCA Method B Cleanup Standard		NA <sup>4</sup>	NA	NA	NA	NA	NA	NA					

<sup>(1)</sup> Analyzed by WDOE Method NWTPH -Dx

<sup>(2)</sup> All data reported in milligrams per liter (mg/l)

<sup>(3)</sup> ND - Non-Detect

<sup>(4)</sup> NA - Not Applicable

Table 11: Total Metals<sup>1</sup>, WATER<sup>2</sup>

		METALS									
Sample Name / Number / Depth	Sample Collection Date	As	Cd	Cr	Pb						
MW - 6	9/28/99	ND <sup>3</sup>	ND	ND	ND						
MW - 6	12/16/99	ND	ND	26.3	ND						
MW - 1	11/16/99	ND	ND	ND	ND						
MW - 2	11/16/99	ND	ND	ND	ND						
MW - 7	11/16/99	ND	ND	ND	ND						
MW - 8	11/16/99	ND	ND	ND	ND						
MTCA Method A Cleanu	o Standard	5.0	5.0	50.0	5.0						

<sup>(1)</sup> Total Metals analyzed using EPA Methods 6010 / 7000 series

<sup>(2)</sup> All data reported in micrograms per liter (ug/l)

<sup>(3)</sup> ND - Non-Detect