Georgia-Pacific Corporation
Georgia-Pacific West, Inc.
A wholly owned subsidiary

P.O. Box 1236
Bellingham, Washington 98227-1236
Telephone (360)733-4410
Fax (360)676-7217

November 6, 2002

Mr. Paul Skyllingstad
Washington Department of Ecology
Industrial Section
P.O. Box 47706
Olympia, WA 98504-7706

Dear Mr. Skyllingstad,

Please find enclosed the report from the supplemental investigation conducted at the Fort James Camas Specialty Chemical Facility on August 15, 2002. This report is submitted under the Voluntary Cleanup Agreement between Georgia-Pacific and Ecology.

If you have any questions, I can be reached at (360) 647-5695.

Sincerely,

R. J. "Chip" Hilarides
Field Services Manager

Cc: Teddy Le, Washington Department of Ecology
Steve Young, Fort James Camas (3)

FORT JAMES CAMAS
FORMER SPECIALTY CHEMICAL FACILITY
SUPPLEMENTAL SOIL INVESTIGATION

FINAL REPORT

Prepared by:
Georgia-Pacific Corp.
300 West Laurel Street
Bellingham, WA 98225

For review by:
Washington State Department of Ecology
Under the Voluntary Cleanup Program

November 6, 2002

TABLE OF CONTENTS

List of Tables

List of Figures

List of Appendices

EXECUTIVE SUMMARY

During the spring and summer of 2002 Fort James Camas completed the demolition of the former Specialty Chemical Facility, which was closed in 1999. All above ground structures were demolished and removed from the Site, except for Building 201, which is used by the Camas Mill for warehousing. In the summer of 2002, vertical containment walls were mostly removed. All horizontal impervious surfaces were left intact, along with stormwater conveyance systems. As a result of these demolition activities, all above ground sources of contamination have been removed from the Site.

Five (5) test pits were installed at the former Fort James Specialty Chemical Site ("the Site") on August 15, 2002. The test pits were sampled at 14 to 18 inches and 36 to 45 inches below ground surface and submitted for laboratory analysis for contaminants of concern identified from previous investigations (SECOR, January 2001) and based on suspected releases from historical operations. The test pits were located to detect contamination in the areas of the Site believed to represent the highest chance for release and soil contamination.

All soil sample results had concentrations of contaminants of concern below the Model Toxics Control Act (MTCA) Method C Industrial Soil Standard. All samples were also below the MTCA Method B Unrestricted Land Use (Direct Contact) Standard, except for samples from TP-4 for one contaminant, 1,4-dichlorobenzene (DCB). These results demonstrate that, even in areas of the site believed to have a high potential for contamination, the levels of contamination in soil were below the applicable MTCA Standards for this industrial property.

These soil investigation results, coupled with the SECOR 2000 data, indicate that soil conditions at the Specialty Chemical Site, are all below industrial cleanup standards. Furthermore, based on the groundwater data previously reported by SECOR and the lack of groundwater uses (no discharge to surface water), existing soil contamination does not pose a risk to human health or the environment.

1.0 INTRODUCTION

The Fort James Camas Specialty Chemicals Site is located at 906 NW Drake Street, Camas, WA. A regional map showing the location of the Site is provided as Figure 2.1. The 5-acre site is located north of the Georgia-Pacific Camas Business Center and the Fort James Camas LLC Pulp and Paper Mill. The site is bounded to the north by forested land, NW Benton Street, and residential areas; to the west by NW Drake Street and both commercial and residential properties; and to the east by a ravine and Blue Creek Canyon. The Camas Specialty Chemical Plant was permanently shutdown in 1999.

Existing site conditions have been previously documented in the *2000 Site Investigation Report* prepared by SECOR for the Specialty Chemicals Plant (January 2001). This report was submitted to Ecology in 2001 when Fort James entered into a voluntary cleanup agreement with Ecology.

In the spring and summer of 2002 Fort James' contractor, NW Demolition, completed the demolition of the Specialty Chemical Plant, including the six main buildings that were formerly used for chemical production and storage. Concrete slabs, impervious asphalt surfaces and substantial foundations were left in place following the demolition, as well as stormwater conveyances and essential infrastructure. Haag & Shaw Contractors performed additional demolition of vertical containment walls and above ground foundations at the Site during August 2002. The only remaining structure is the former warehouse (Building 201), which is used by the pulp and paper mill for equipment storage. All horizontal impervious surfaces and stormwater conveyance systems remain intact.

The purpose of this supplemental investigation is to document surface soil conditions in areas of the site with a potential for contamination from process operations at the former Fort James Camas Specialty Chemical Plant. This investigation supplements the information contained in the SECOR Report.

2.0 PROJECT BACKGROUND

2.1 Nature and Extent of Contamination - SECOR "2000 Site Investigation Report"

An initial soil and groundwater site assessment was conducted by SECOR in 2000. Figure 3.1 shows the locations of soil and groundwater samples completed during SECOR's investigation. The major findings and conclusions resulting from the investigation include the following:

- Two locations at the former Specialty Chemical Site ("the Site") have been identified as showing evidence of chemical impact to soil from past on-site operations. These areas include the Central Tank Farm/Wastewater Sump and adjacent to the Building 202 Transformer area. Soil impacts in these areas appear to be related to historical releases, not to recent activities.
- The Site is inactive and no extensive subsurface soil impacts were identified.
- The Site is generally sealed with an asphalt and/or concrete cap that limits surface recharge.
- An unsaturated, unconsolidated zone and a likely homogeneous basaltic sequence underlie the site, with no apparent sedimentary members.
- Selected VOCs were detected in groundwater, but in all cases levels are below the applicable MTCA standard. Groundwater concentrations of VOCs relative to historical sources indicate that natural attenuation processes are likely occurring at the site. There are no observable groundwater seeps to Blue Creek Canyon.
- Based on the above information, the potential for groundwater recharge and compound migration beneath and adjacent to the facility is minimized and the risk to human health and the environment is low. Therefore, additional groundwater investigations have not been recommended.

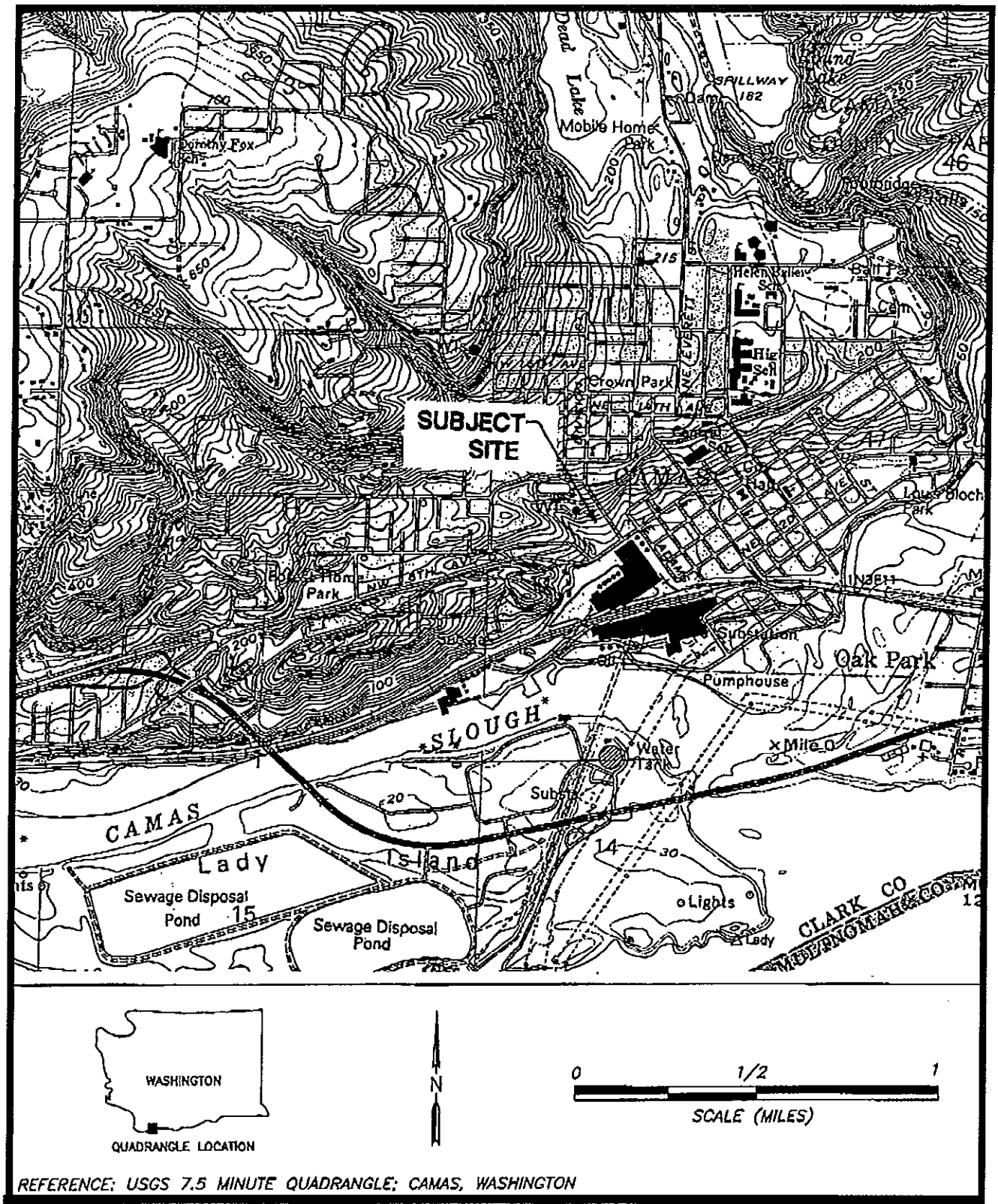
2.2 Recent Cleanup and Control Actions at the Site

In the spring and summer of 2002 Fort James' contractor, NW Demolition, completed the demolition of the plant including the six main buildings that were formerly used for chemical production and storage. Concrete slabs, impervious asphalt surfaces and substantial foundations were left in place following the demolition, as well as stormwater conveyances and essential infrastructure. Haag & Shaw Contractors completed additional demolition of vertical containment walls and above ground foundations at the Site during August 2002.

The removal of buildings and other potential sources of contamination at the site have eliminated the potential for further contamination of soil at the site.

2.3 Summary of Existing Data Gaps

Based on the work described in sections 2.1 and 2.2 and an analysis of available data and operating records, the following data gaps were identified:



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; CAMAS, WASHINGTON

Figure 2-1 Specialty Chemical Site Location

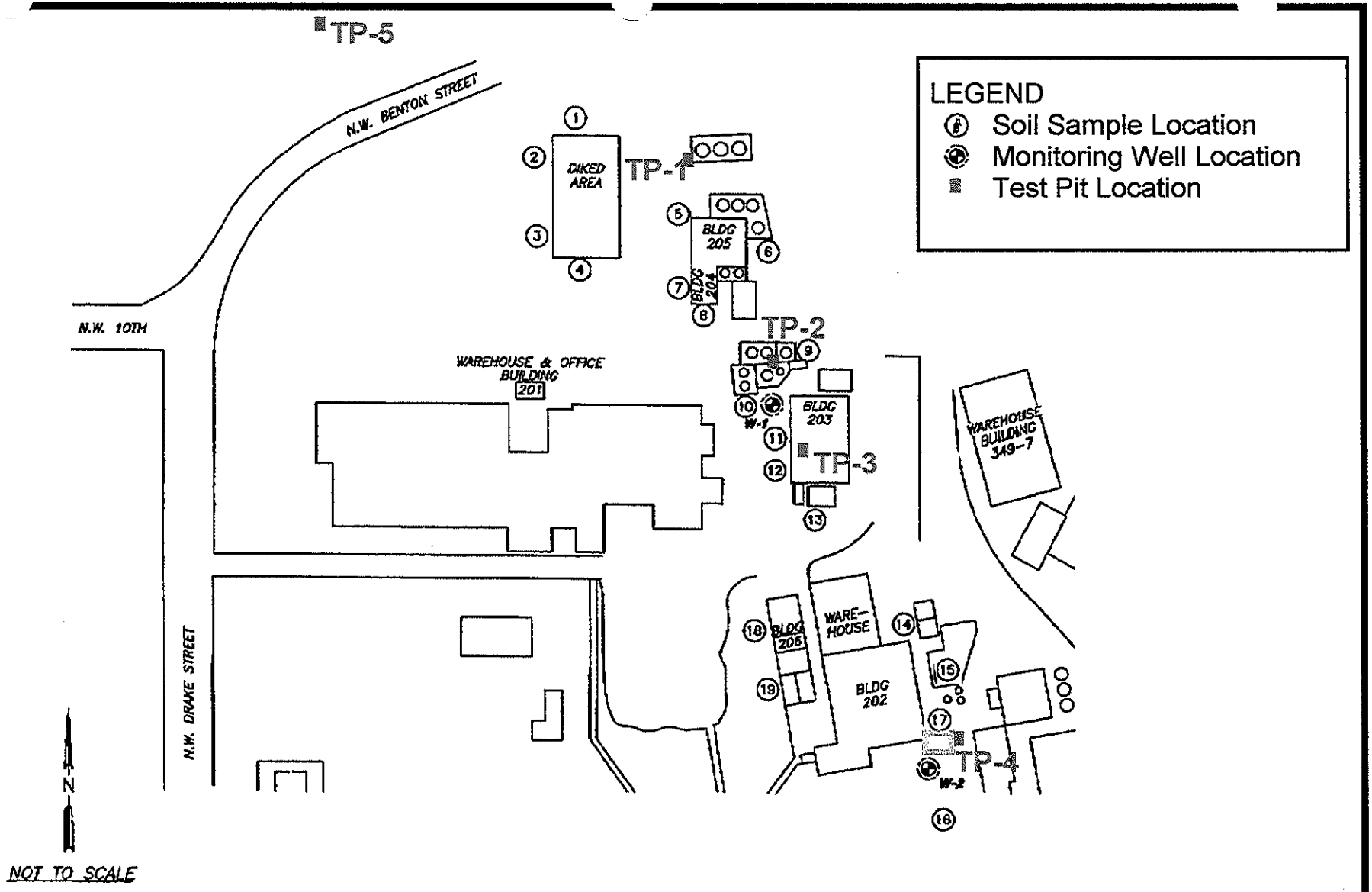


Figure 3.1 Soil Sample and Groundwater Sample Locations

1. **Process Area Specific Investigations:** Potential localized process area impacts to surface soils were suspected in the immediate vicinity of the building 203 main process area and the Central Tank Farm/Wastewater Sump. While substantial impacts were not detected in the soils adjacent to the process areas, samples immediately below these key process areas were collected to determine if localized contamination existed.
2. **Oil Storage Area:** Bulk oil storage occurred at the northern end of the Site, and a possible historical release may have occurred. A test pit was advanced in this area to determine if localized impacts are evident.
3. **Transformer Area:** Low levels of PCBs were detected adjacent to the former building 202 transformer area. A localized analysis in the immediate location of the former transformers was performed to evaluate the presence of PCBs.

3.0 SUPPLEMENTAL SITE INVESTIGATION ACTIVITIES

3.1 OBJECTIVES

The overall technical approach for the supplemental sampling event at the former Specialty Chemical site is described in the "Former Specialty Chemical Facility Supplemental Investigation Sampling and Analysis Plan" August 6, 2002, submitted to Ecology for review prior to sampling. The project was performed in compliance with WAC 173-340 (MTCA).

The technical approach presented in this proposal was designed to supplement the site characterization in the SECOR *2000 Site Investigation Report.*

3.2 SUPPLEMENTAL INVESTIGATION TASKS

The supplemental investigation included:

1. **Installed four test pits:** Four test pits were located at key process areas in the site, as shown in Figure 3.1. A sample was collected at a depth of 6-18 inches and a second sample at a depth of 36-48 inches from each test pit. PID analyses were done at all sample locations and depths. If high photo ionization detector readings (>50ppm) were encountered, the project team would evaluate the need for additional test pits to ensure that characterization was complete for this investigation.
2. **Performed chemical analyses:** Soil samples were analyzed from the key process areas for VOCs, SVOCs, TPH and PCBs, as applicable. The analyses focus on historical site uses and use the results of the SECOR *2000 Site Investigation Report* to identify appropriate analytes.
3. **Performed data validation of laboratory results**: Data validation was performed according to the procedures detailed in EPA's functional guidelines for the validation of organic data (*USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, February 1994*). Chemical data was compared to prospective MTCA criteria to identify which specific site areas may require additional investigation or remedial action.

3.3 PROJECT STAFF

Mr. Roger (Chip) Hilarides was the overall Program Manager for Georgia-Pacific.

Mr. John Ratcliff of Haag & Shaw Contractors, Camas, Washington, was responsible for the operators and equipment used for creation of the test pits.

Mr. Bill Souders and Mr. Jim Horn of Fort James Camas LLC were responsible for sample collection, packaging, and documentation.

Columbia Analytical Services, Kelso, WA was responsible for all laboratory analyses.

3.4 TEST PIT INSTALLATION AND SOIL SAMPLING

3.4.1 Sample Station Locations

A total of five test pits were installed in the locations shown in Figure 3-1 on August 15, 2002. The focus of this portion of the investigation is on the near surface soil areas. The SECOR *2000 Site Investigation Report* evaluated deeper soil areas throughout the site. The specific sample locations are described as follows:

- TP-1 – Adjacent to former bulk oil storage tanks. Test pit was advanced in the open area between the asphalt paving and the southwest corner of the tank foundations.
- TP-2 – Inside the center portion of the southern containment wall of the Building 203 tank farm, adjacent to the wastewater sump.
- TP-3 – Underneath the main process area slab of Building 203, immediately adjacent to the floor drains.
- TP-4 – Underneath the former transformer locations adjacent to building 202.
- TP-5 – Off-site background sample, located Northwest of the site across NW Benton Street.

3.4.2 Test Pit Installation

Test pits were advanced using an excavator. The overlying concrete or asphalt layer was carefully broken using a Bobcat with hammer attachment and peeled back using techniques to minimize disturbance of the underlying soils. The shallow samples were collected from the first layer of soils encountered below the concrete/asphalt and structural fill. Sample depths ranged from 14 to 18 inches below ground surface (BGS). Decontamination of sampling equipment with deionized water was performed prior to collecting each sample. Soils were removed from the test pit using a clean shovel to collect a representative amount of soil from the test pit onto a clean 30-mil poly mat. The sample was then homogenized into sample jars to ensure a uniform sample from each soil layer and each test pit location.

The backhoe operator then removed approximately 2 to 3 feet of underlying soils, exposing soils at approximately 36 to 48 inches BGS. The second soil sample was then collected from the area 36 inches to 48 inches BGS, using the techniques described above.

Vapor field screening of soil samples using a TE580EZ photo ionization detector (PID) with an 11.8ev lamp was performed during test pit development to detect potential volatile organic compounds (VOCs). The PID monitoring results are discussed in section 4.0 and recorded in the field notes contained in Appendix A.

Photographs of all stages of the test pit advancement are contained in Appendix B. Ecology was invited to be present during test pit installation, but a representative was not able to attend.

3.4.3 Soil Sampling

Chain-of-custody forms were used to track sample custody to document the proper handling and integrity of the samples. Custody seals were placed on all sample shipment containers prior to shipment and all were intact when received by the laboratory. Chain of custody documentation is included in Appendix C.

3.4.4 Chemical Analyses

Chemical analyses of the soil samples were completed as shown in Table 3-1. All chemical analyses were performed according to the EPA or Ecology approved protocols as listed in Table 3.1. Columbia Analytical, Kelso, WA, performed all analyses.

Table 3.1 Analytical Parameters and Methods for Soil Samples

Analytical Parameter(s)	Method	TP-1	TP-2	TP-3	TP-4	TP-5 (bkgd)
VOCs (including TICs)	EPA-8260B		X	X	X	X
SVOCs (including TICs)	EPA-8270 SIM		X	X		X
Polychlorinated Biphenyls	EPA-8082				X	X
TPH	DOE-WTPH-HCID	X				X (deep only)

3.5 TEST PIT SOIL SAMPLE ANALYTICAL RESULTS

Analytical results for this supplemental investigation are contained in Appendix C. All compounds detected and the analytical results for all samples from both the SECOR 2000 investigation and this supplemental investigation are included in Table 3.2. The MTCA Method B Soil standards for unrestricted land use (direct contact), MTCA Method C Soil

Table 3.2 Test Pit Sampling Analytical Results (Combined with SECOR 2000 results - detected COCs)

Sample No.	Sample Date	Sample Depth (ft BGS)	TPH-HCID (mg/kg)			VOCs (mg/kg)								SVOCs	PCBs	TDP	MDB
			Gas	Diesel	Oil	PCE	Acetone	1,2-DCB	1,4-DCB	Chloro-benzene	1,3-DCB	MC	All Other				
GP 1	8/01/2000	2.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 2B	8/02/2000	7.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 3	8/01/2000	14	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 4	8/01/2000	19	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<1.65 - 10.0	--	--	--
GP 5	8/01/2000	4.5	<20	<50	<100	--	--	--	--	--	--	--	--	--	--	--	--
GP 6	8/01/2000	17.5	<20	<50	<100	--	--	--	--	--	--	--	--	--	--	--	--
GP 7C	8/01/2000	6	<20	<50	<100	--	--	--	--	--	--	--	--	--	--	--	--
GP 8	8/01/2000	31.5	<20	<50	<100	--	--	--	--	--	--	--	--	<0.33 - 2.0	--	--	--
GP 9	8/01/2000	12	<20	<50	<100	2.95	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 9	8/01/2000	27.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 10	8/01/2000	21.5	<20	<50	<100	0.25	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 11	8/01/2000	10.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.66 - 4.0	--	ND	--
GP 12	8/02/2000	14.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	ND	--
GP 13	8/02/2000	6.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.66 - 4.0	--	ND	--
GP 14	8/02/2000	8	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 15	8/02/2000	7.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 16	8/03/2000	2.7	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 17	8/02/2000	6	<20	<50	<100	<0.1	5.13	50.1	1.1	<0.1	<0.1	0.75	ND	946	0.289	--	31
GP 17C	8/02/2000	11.5	<20	<50	<100	<0.1	<1.0	0.38	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	<0.067-<0.134	--	--
GP 18	8/03/2000	1.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<0.33 - 2.0	--	--	--
GP 19	8/03/2000	1.5	<20	<50	<100	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.5	ND	<1.65 - 10.0	--	--	--
GP 20	8/03/2000	5.5	<20	<50	<100	--	--	--	--	--	--	--	ND	--	--	--	--
TP 1-1	8/15/2002	1.3	<20	140	170	--	--	--	--	--	--	--	--	--	--	--	--
TP 1-2	8/15/2002	3	<20	<50	<100	--	--	--	--	--	--	--	--	--	--	--	--
TP 2-1	8/15/2002	1.5	--	--	--	<6.1	<61	<6.1	<6.1	<6.1	<6.1	<13	ND	4.45	--	--	--
TP 2-2	8/15/2002	3.2	--	--	--	<6.4	<64	<0.32	<6.4	<6.4	<6.4	<13	ND	0.23	--	--	--
TP 3-1	8/15/2002	1.2	--	--	--	50	<54	<5.4	<5.4	<5.4	<5.4	<11	ND	1.11	--	--	--
TP 3-2	8/15/2002	3.8	--	--	--	13	<63	<6.3	<6.3	<6.3	<6.3	<13	ND	ND	--	--	--
TP 4-1	8/15/2002	1.5	--	--	--	<6.2	<62	29	130	54	33	<13	ND	--	<0.1 - 0.2	--	--
TP 4-2	8/15/2002	3.8	--	--	--	9.4	<63	14	100	22	17	<13	ND	--	<0.1 - 0.2	--	--
TP 5-1 (bkgd)	8/15/2002	1.5	--	--	--	<5.8	<58	<5.8	<5.8	<5.8	<5.8	<12	ND	14.4	--	--	--
TP 5-2 (bkgd)	8/15/2002	3.5	<20	<50	150	<5.8	<58	<5.8	<5.8	<5.8	<5.8	<13	ND	12.93	--	--	--
MTCA Method B Unr. land use dir.cont.[5]			100	2,000	2,000	800 [2]	8,000	7,200	42	1,600	NE	133 [3]	NE	7,200 (1,2-DCB)	1.6/5.6 [4]	NE	NE
MTCA Method C Ind. direct contact[5]			NE	NE	NE	35000 [2]	350,000	315,000	5,470	70,000	NE	17,500 [3]	NE	315,000 (1,2 DCB)	70/245 [4]	NE	NE
EPA Region IX PRGs - Industrial [1]			NE	NE	NE	3	6,000	370	8	530	63	21	NE	370 (1,2 DCB)	0.74/21 [4]	NE	NE

- Detected above MRL

- Above MTCA method C Direct Contact - Industrial Land Use

- Above MTCA method B Direct Contact - Unrestricted Land Use

- Above PRGs

-- Not Analyzed

[1] EPA Region IX Preliminary Remedial Goals (PRGs) (10/1/2002), Direct Contact Industrial Soil screening levels (mg/kg)

[2] Non-carcinogen Value

[3] Carcinogen Value

[4] Based on Aroclor 1254/1016

[5] Calculated using DOE CLARC V3.1 (mg/kg)

standards for Industrial Soil and EPA Region IX Preliminary Remedial Goals (industrial soil) are shown at the bottom of Table 3.2. A discussion of the results follows.

3.5.1 Bulk Oil Storage Area (TP-1)

Test Pit TP-1 was advanced in the area identified as the most likely location for spilled oil from the bulk oil storage area to enter soils from past transfer and storage activities. TP-1 samples were analyzed for TPHs using method DOE-WTPH-HCID. TP-1-1 (16 inches BGS) had detectable levels of diesel range and residual range TPHs, but was non-detect for gasoline range. The level of Diesel Range TPH was 140 mg/kg, just above the method reporting level of 100 mg/kg, but well below the MTCA screening level of 2,000 mg/kg. Sample TP-1-2 was non-detect for all TPHs. The background sample was non-detect for gasoline and diesel range TPHs, but did detect residual TPHs at a similar level to those at TP-1-1 (150 and 170 mg/kg, respectively).

PID results were 8.5 ppm or less at TP-1-1 and 0 at TP-1-2, indicating minimal chemical impacts. PID results, including background readings, are recording in the field notes of Appendix A. No unusual odors, soil staining or product was identified anywhere throughout the test pit.

3.5.2 Central Tank Farm and Wastewater Sump (TP-2)

Test Pit TP-2 was advanced in the area identified as possibly impacted by potential chemical releases from the Central Tank Farm and wastewater sump. The area identified was between tank foundations in a low spot adjacent to the sump. TP-2 samples were analyzed for full suite VOCs and SVOCs, including tentatively identified compounds. Both the 18-inch and 38-inch samples were non-detect for all VOCs and standard SVOCs. The total composition of tentatively identified compounds is less than 4.5 mg/kg. PID analyses at both sample locations were 10.6 ppm or less, below the background readings, indicating minimal chemical impacts to soil.

3.5.3 Building 203 Process Area (TP-3)

Test Pit TP-3 was advanced under the main process area for building 203. The test pit was advanced in an area with obvious surface staining of the concrete pad and immediately adjacent to a main floor drain. Minor evidence of soil staining was evident in the near surface layer. TP-3 samples were analyzed for full suite VOCs and SVOCs, including tentatively identified compounds. The only VOC or SVOC detected above the method reporting limit was tetrachloroethene (PCE). At TP-3-1, PCE was detected at 50 mg/kg and at TP-3-2 was 13 mg/kg. The highest detection from the SECOR report was at geoprobe location GP-9 (sample depth = 12 feet), north of building 203 and adjacent to the Central Tank Farm, at a level of 2.95 mg/kg. The other PCE detection from the SECOR investigation was at GP-10 (sample depth = 21.5 feet), east of building 203 and directly south of the Central Tank Farm and Wastewater Sump, at a level of 0.25 mg/kg.

All PCE detections, in both the SECOR investigation and in this supplemental investigation, are well below the MTCA Method B (unrestricted land use direct contact – 800 mg/kg) and Method C (Industrial direct contact – 35,000 mg/kg) soil standards for direct contact. PID analysis at both sample depths were 14.9 ppm or less, slightly above the background reading, but still indicating minimal chemical impacts to soil.

3.5.4 Building 202 Transformer Area (TP-4)

Test Pit TP-4 was advanced below and adjacent to the transformer pad at the southeast corner of building 202's foundation. The test pit was advanced in an area with suspected transformer oil and process area contamination. The TP-4 sample was proximal to geoprobe sample 17 from the SECOR investigation that identified several VOCs in soil. TP-4 samples were analyzed for full suite VOCs and polychlorinated biphenyls (PCBs). All Aroclor (PCB) congeners analyzed were non-detect at less than 0.1 mg/kg. VOCs detected in sample TP-4 include: PCE; chlorobenzene; 1,2-dichlorobenzene; 1,3-dichlorobenzene; and 1,4-dichlorobenzene. Only 1,4-dichlorobenzene is above the MTCA Method B soil standard (direct contact) at 130 mg/kg and 100 mg/kg for samples TP-4-1 and TP-4-2, respectively. None of the contaminants exceed the MTCA Method C soil standard for industrial direct contact. PID analysis at both sample depths were 14.8 ppm or less, above the background reading, but still indicating minimal chemical impacts to soil.

3.5.5 Background Test Pit

Test Pit TP-5 was advanced in a heavily wooded area across NW Benton Street, North West from the Specialty Chemical Site. The sample was used as a background monitoring point for the supplemental investigation. TPHs, PCBs, VOCs, and SVOCs were sampled at the background test pit. The only detection was for residual TPH (oil) in TP-5-2 at 150 mg/kg.

4.0 SUMMARY OF FINDINGS

4.1 Organic Compounds in Soil

None of the soil samples exceeded the MTCA Method C Industrial Soil Standards. Only one sample location, TP-4, detected any constituents above the MTCA Method B Soil Standards for unrestricted land use, and only for one compound, 1,4-dichlorobenzene (1,4-DCB) at 130 and 100 ppm respectively. The MTCA Method C level for 1,4-DCB is 5,470 mg/kg and the MTCA Method B level is 42 mg/kg, based on DOE's Cleanup Levels and Risk Calculations (CLARC) V3.1. The property is currently owned by Fort James and is zoned industrial.

The constituents detected in soils in both this investigation and the SECOR 2000 site investigation were not detected at levels of concern in the SECOR groundwater monitoring.

4.2 PID and Visual Observations

The field observations, as documented in Appendix A and B, indicate that below ground areas investigated do not show visible or detectable (odor) signs of contamination. While some minor soil staining was observed at TP-3, it did not result in elevated levels of contaminants of concern. The lack of detectable contaminants in these test pits was corroborated by the low PID readings measured during test pit installation, as documented in Appendix A.

5.0 CONCLUSIONS

The SECOR investigation (SECOR 2000) indicated soil contamination from VOCs in the area of the Central Tank Farm and Building 202 Transformer area. While the soil contamination did not exceed MTCA industrial standards, they indicated the possibility for hot spots of contamination. This supplemental investigation used the data from the SECOR investigation and an understanding of the processes that operated at the former Specialty Chemical Facility to identify the areas with a high likelihood for hot spot surface soil contamination. The results of this investigation conclude that hot spots of contamination are not present in high probability locations of the former Specialty Chemical Site. In fact all soils sampled in both the SECOR 2000 investigation and this Site Investigation are below the MTCA method C soil standards for industrial property.

These soil investigation results, coupled with the SECOR 2000 data, indicate that soil conditions at the Specialty Chemical Site, are all below industrial cleanup standards. Furthermore, based on the groundwater data previously reported by SECOR and the lack of groundwater uses (no discharge to surface water), existing soil contamination does not pose a risk to human health or the environment and no further site characterization is warranted for this industrial property.

6.0 REFERENCES

2000 Site Investigation Report. Former Fort James Specialty Chemicals, SECOR International Incorporated, (January 17, 2001).