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907020

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CONESTOGA-ROVERS
& ASSOCIATES

2055 Niagara Falls Blvd., Suite #3, Niagara Falls, NY 14304
Telephone: 716-297-6150 Facsimile: 716-297-2265
www.CRAworld.com

January 7, 2002

Reference No. 5020

Mr. Martin Doster, P.E.
NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Mr. Doster:

Re: Monthly Progress Report
Supplemental Remedial Investigation/Feasibility Study
Dowcraft Corporation
Site Code #907020

On behalf of Dowcraft Corporation, Conestoga-Rovers & Associates (CRA) is submitting the Monthly Progress Report for the above-referenced site. This progress report is for the period of December 1, 2001 through December 31, 2001.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

James K. Kay/dh

James K. Kay, P. Eng.

JKK/dh/23
Enclosure
c.c.: G.A. Carlson (2 copies)
J.D. Charles
A. Kryzan
G. Pietraszek
H. Nicholson

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MONTHLY PROGRESS REPORT
SUPPLEMENTAL REMEDIAL INVESTIGATION/FEASIBILITY STUDY
DOWCRAFT CORPORATION
SITE CODE #907020
DECEMBER 1, 2001 THROUGH DECEMBER 31, 2001

Actions Taken to Comply with Order

The Order on Consent (Index #B9-500-96-08) (Order) was effective March 15, 2000. The activities described in the following sub-sections were those taken during this reporting period toward achieving compliance with the Order.

Field Activities

1. No field activities were performed during December 2001.

Analytical and/or Testing Results

The analytical results of the November 2001 and associated data validation report are presented in Attachment 1. The COC and other IRM monitoring data are summarized in Table 1.

Deliverables

1. The Monthly Progress Report, November 1, 2001 through November 30, 2001 dated December 6, 2001, was submitted to NYSDEC during this reporting period.

Scheduled Activities for Upcoming Month

1. In January 2002, CRA will submit an updated section of the RI/FS report discussing the recommended remedial action.

Project Schedule

A project schedule is attached as Figure 1. The schedule reflects the activities' durations and completion dates as stipulated in the Order or as modified with NYSDEC approval. In addition, the schedule shows the actual completion status of activities.

Approved Modifications

No modifications were requested during December 2001.

Citizen Participation Plan Activities

No activities were undertaken in support of the Citizen Participation Plan during this reporting period.

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-1				ESI-2					
		12/02/99	11/13/00	12/13/00	03/12/01	12/02/99	06/21/00	07/18/00	11/13/00	12/05/00	12/13/00
General Parameters	***Units***										
pH	S.U.	6.8	7.35	6.29	6.88	7.0	7.02	6.82	6.83	NM	6.91
Specific Cond.	ms/cm	318	520	570	390	609	NM	780	800	NM	840
Chlorides	mg/L	67.3	50	50	NM	67.3	80	NM	100	75	80
Dissolved Oxygen	mg/L	NM	9.2	3.5	NM	NM	NM	NM	8.9	NM	4.9
Oxi/Red Potential	mv	NM	435	105	NM	NM	NM	NM	230	NM	160
Temp	°C	NM	11.2	11.0	7.2	NM	NM	NM	11.3	NM	11.2
Color	--	gray	brown	colorless	colorless	colorless	brown	colorless	colorless	colorless	colorless
KMnO4	mg/L	NM	NM	NM	ND5	NM	ND5	ND5	NM	NM	NM
Chlorides (Lab)											
COCs Detected											
cis-1,2-Dichloroethene	ug/L	ND5	NA	NA	1.6J	210	NA	1600	210	NA	390
Trichloroethene	ug/L	ND7.4	NA	NA	42	1800	NA	3400	1900	NA	3600
Vinyl chloride	ug/L	ND10	NA	NA	ND10	ND100	NA	ND100	ND200	NA	ND200

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-2				ESI-3					
		03/13/01	06/21/01	09/17/01	11/07/01	12/02/99	06/21/00	07/18/00	11/13/00	12/05/00	12/13/00
General Parameters	***Units***										
pH	S.U.	6.92	7.61	7.56	6.85	6.7	7.11	6.92	NM*	NM	6.29
Specific Cond.	ms/cm	780	1270	1322	1260	641	NM	830	850	NM	570
Chlorides	mg/L	95	120	110	NM	NM	80	NM	85	75	75
Dissolved Oxygen	mg/L	NM	2.8	10.5	2.5	NM	NM	NM	13.3	NM	NM
Oxi/Red Potential	mv	NM	605.0	NM	320.0	NM	NM	NM	185	NM	NM
Temp	°C	8.3	14.1	17.8	15.9	NM	NM	NM	13.3	NM	NM
Color	–	colorless	brown	colorless	lt. brown	colorless	brown	colorless	brown	brown	brown
KMnO4 Chlorides (Lab)	mg/L	ND5	NM	NM	NM	NM	ND5	NM	NM	NM	NM
COCs Detected											
cis-1,2-Dichloroethene	ug/L	200	NA	405	70	2.3J	NA	11	NA	NA	NA
Trichloroethene	ug/L	960	NA	3800	530	33J	NA	120	NA	NA	NA
Vinyl chloride	ug/L	ND70	NA	ND10	ND50	ND10	NA	ND10	NA	NA	NA

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-3				ESI-4					
		03/13/01	06/21/01	09/17/01	11/07/01	12/02/99	11/13/00	12/14/00	03/13/01	09/17/01	11/07/01
General Parameters	***Units***										
pH	S.U.	7.03	7.30	6.84	6.65	6.9	NM*	7.08	7.18	6.74	6.84
Specific Cond.	ms/cm	630	740	1295	950	688	680	590	620	906	720
Chlorides	mg/L	45	130	115	NM	NM	NM	40	60	NM	NM
Dissolved Oxygen	mg/L	NM	1.3	3.5	2.4	NM	13.0	5.3	NM	NM	5.2
Oxi/Red Potential	mv	NM	600	NM	315	NM	185	335	NM	NM	300.0
Temp	°C	8.0	13.4	17.7	15.5	NM	13.3	11.0	8.5	17.1	16.5
Color	--	lt.brown	lt. pink	colorless	brown	colorless	colorless	brown	colorless	--	colorless
KMnO4	mg/L	ND5	NM	NM	NM	NM	NM	NM	ND5	NM	NM
Chlorides (Lab)											
COCs Detected											
cis-1,2-Dichloroethene	ug/L	ND5	NA	30	5.3	ND5	NA	NA	ND5	ND5	ND5
Trichloroethene	ug/L	4.7J	NA	150J	54	ND5	NA	NA	ND5	ND5	ND5
Vinyl chloride	ug/L	ND10	NA	ND10	ND10	ND10	NA	NA	ND10	ND10	ND10

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-5					ESI-6				
		12/02/99	11/13/00	12/05/00	12/14/00	03/13/01	06/01/00	06/21/00	07/18/00	11/13/00	12/05/00
General Parameters	***Units***										
pH	S.U.	7.3	NM*	NM	7.32	NM	6.81	7.18	NM	7.32	NM
Specific Cond.	ms/cm	624	980	NM	580	NM	NM	NM	NM	780	NM
Chlorides	mg/L	NM	90	60	45	NM	95	65	NM	100	45
Dissolved Oxygen	mg/L	NM	11.4	NM	2.1	NM	NM	NM	NM	7.1	NM
Oxi/Red Potential	mv	NM	195	NM	345	NM	NM	NM	NM	325	NM
Temp	°C	NM	14.3	NM	11.0	NM	NM	NM	NM	10.3	NM
Color	--	colorless	brown	colorless	colorless	NM	brown	colorless	NM	brown	brown
KMnO4	mg/L	NM	NM	NM	NM	NM	NM	ND5	ND5	NM	NM
Chlorides (Lab)											
COCs Detected											
cis-1,2-Dichloroethene	ug/L	ND5	NA	NA	NA	NA	2.3J	NA	400	NA	NA
Trichloroethene	ug/L	ND5	NA	NA	NA	NA	33J	NA	7300	NA	NA
Vinyl chloride	ug/L	ND10	NA	NA	NA	NA	ND10	NA	ND500	NA	NA

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-6			ESI-7					
		12/14/00	03/13/01	06/21/01	12/02/99	11/13/00	12/13/00	03/12/01	09/17/01	11/07/01
General Parameters	***Units***									
pH	S.U.	6.67	7.14	7.42	6.8	7.36	6.52	7.07	7.07	7.13
Specific Cond.	ms/cm	1070	850	1810	311	670	480	520	794	730
Chlorides	mg/L	85	80	NM**	NM	NM	35	40	NM	NM
Dissolved Oxygen	mg/L	1.2	NM	NM	NM	9.6	4.2	NM	NM	2.4
Oxi/Red Potential	mv	235	NM	620	NM	380	145	NM	NM	320
Temp	°C	10.4	8.9	13.9	NM	11.4	9.1	8.1	16.6	15.1
Color	--	brown	colorless	lt. purple	brown	brown	brown	colorless	--	colorless
KMnO4 Chlorides (Lab)	mg/L	NM	ND5	NM	NM	NM	NM	ND5	NM	NM
COCs Detected										
cis-1,2-Dichloroethene	ug/L	NA	740	NA	5.1	NA	NA	62	230	310
Trichloroethene	ug/L	NA	2400	NA	79	NA	NA	760	3500	3500
Vinyl chloride	ug/L	NA	ND150	NA	ND10	NA	NA	ND50	ND250	ND250

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-10								
		12/03/99	06/21/00	07/18/00	11/13/00	12/05/00	12/13/00	03/13/01	09/18/01	11/06/01
General Parameters	***Units***									
pH	S.U.	6.5	6.36	6.49	7.09	NM	6.51	6.69	7.04	7.34
Specific Cond.	ms/cm	473	NM	550	560	NM	530	640	840	750
Chlorides	mg/L	NM	60	NM	55	40	45	65	NM	NM
Dissolved Oxygen	mg/L	NM	NM	NM	9.3	NM	3.5	NM	NM	4.6
Oxi/Red Potential	mv	NM	NM	NM	30	NM	170	NM	NM	360
Temp	°C	NM	NM	NM	16.0	NM	14.6	14.0	17.3	17.1
Color	--	brown	colorless	colorless	lt. brown	colorless	colorless	lt. brown	--	colorless
KMnO4 Chlorides (Lab)	mg/L	NM	ND5	ND5	NM	NM	NM	ND5	NM	NM
COCs Detected										
cis-1,2-Dichloroethene	ug/L	93	NA	1100	330	NA	410	420	200	21
Trichloroethene	ug/L	48	NA	73	36	NA	11.4	13J	750	130
Vinyl chloride	ug/L	43	NA	100	79	NA	34	73	37	ND10

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-11								
		12/03/99	06/21/00	07/18/00	11/13/00	12/05/00	12/13/00	03/13/01	09/18/01	11/06/01
General Parameters	***Units***									
pH	S.U.	6.7	6.7	6.6	7.72	NM	6.80	6.72	6.98	6.85
Specific Cond.	ms/cm	507	NM	590	580	NM	650	710	720	590
Chlorides	mg/L	NM	65	NM	60	45	50	50	NM	NM
Dissolved Oxygen	mg/L	NM	NM	NM	8.8	NM	3.2	NM	NM	4.6
Oxi/Red Potential	mv	NM	NM	NM	-20	NM	190	NM	NM	350
Temp	°C	NM	NM	NM	16.0	NM	15.2	14.2	16.9	16.9
Color	--	colorless	colorless	colorless	lt. brown	colorless	lt. brown	lt. brown	--	brown
KMnO4	mg/L	NM	ND5	ND5	NM	NM	NM	ND5	NM	NM
Chlorides (Lab)										
COCs Detected										
cis-1,2-Dichloroethene	ug/L	32	NA	200	200	NA	210	120	67	18
Trichloroethene	ug/L	ND7.1	NA	26	110	NA	75	10	59	11
Vinyl chloride	ug/L	17	NA	76	72	NA	54	99	33	13

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-12								
		12/03/99	*06/21/00*	*07/18/00*	*11/14/00*	*12/05/00*	*12/13/00*	*03/13/01*	*09/18/01*	*11/06/01*
General Parameters	***Units***									
pH	S.U.	6.8	6.79	NM	NM*	NM	6.96	6.90	7.43	6.42
Specific Cond.	ms/cm	487	NM	NM	520	NM	550	700	610	790
Chlorides	mg/L	NM	70	NM	60	45	45	60	NM	NM
Dissolved Oxygen	mg/L	NM	NM	NM	9.1	NM	2.2	NM	NM	4.4
Oxi/Red Potential	mv	NM	NM	NM	175	NM	230	NM	NM	335
Temp	°C	NM	NM	NM	16.0	NM	15.4	14.1	16.2	17.8
Color	--	colorless	gray	colorless	colorless	colorless	colorless	colorless	--	colorless
KMnO4 Chlorides (Lab)	mg/L	NM	ND5	ND5	NM	NM	NM	ND5	NM	NM
COCs Detected										
cis-1,2-Dichloroethene	ug/L	4.7J	NA	51	24	NA	8.9	36	7	61
Trichloroethene	ug/L	52	NA	200	260	NA	120	280	15	71
Vinyl chloride	ug/L	ND10	NA	ND20	ND22	NA	ND10	ND20	ND10	33

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		ESI-13R					IBH-1				
		12/03/99	11/13/00	12/05/00	12/13/00	03/13/01	11/13/00	12/05/00	12/13/00	03/12/01	06/21/01
General Parameters	***Units***										
pH	S.U.	6.7	NM*	NM	6.16	6.09	7.02	NM	7.27	7.30	NM
Specific Cond.	ms/cm	560	550	NM	510	630	780	NM	1500	930	NM
Chlorides	mg/L	NM	75	130	40	95	110	NM**	40***	70	NM
Dissolved Oxygen	mg/L	NM	8.8	NM	6.9	NM	7.7	NM	8.0	NM	NM
Oxi/Red Potential	mv	NM	360	NM	130	NM	320	NM	440	NM	NM
Temp	°C	NM	10.3	NM	11.6	7.3	10.0	NM	11.3	9.2	NM
Color	--	lt. brown	colorless	colorless	colorless	colorless	colorless	magenta	lt. pink	colorless	--
KMnO4 Chlorides (Lab)	mg/L	NM	NM	NM	NM	ND5	NM	NM	47	ND5	NM
COCs Detected											
cis-1,2-Dichloroethene	ug/L	37	240	NA	74	82	210	NA	ND5	150	NA
Trichloroethene	ug/L	63	430	NA	130	130	2500	NA	ND5	800	NA
Vinyl chloride	ug/L	ND10	ND40	NA	ND10	ND10	ND250	NA	ND10	ND70	NA

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		IBH-1		IBH-2						
		09/17/01	11/07/01	11/13/00	12/05/00	12/14/00	03/12/01	06/21/01	09/17/01	11/07/01
General Parameters	***Units***									
pH	S.U.	7.46	7.19	7.00	NM	7.26	NM	7.20	7.27	6.41
Specific Cond.	ms/cm	1849	1150	840	NM	1180	NM	2390	1439	1200
Chlorides	mg/L	NM**	NM	65	50	60-65***	NM	NM**	115	NM
Dissolved Oxygen	mg/L	14.2	1.2	9.0	NM	1.5	NM	1.2	9.3	1.2
Oxi/Red Potential	mv	NA	310	360	NM	565	NM	685	NM	525
Temp	°C	13.3	13.5	12.7	NM	11.4	NM	11.7	14.5	14.7
Color	--	dk.purple	colorless	colorless	lt. pink	purple	NM	dk. purple	colorless	lt. brown
KMnO4 Chlorides (Lab)	mg/L	NM**	NM	NM	NM	140	NM	NM	NM	NM
COCs Detected										
cis-1,2-Dichloroethene	ug/L	ND5	28	NA	NA	NA	NA	NA	16	23
Trichloroethene	ug/L	ND5	83	NA	NA	NA	NA	NA	250	380
Vinyl chloride	ug/L	ND10	ND10	NA	NA	NA	NA	NA	ND10	ND20

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		IBH-3							IBH-4		
		11/13/00	12/05/00	12/14/00	03/12/01	06/21/01	09/17/01	11/07/01	11/13/00	12/05/00	12/13/00
General Parameters	***Units***										
pH	S.U.	7.06	NM	7.50	6.85	7.37	7.29	6.39	7.20	NM	6.91
Specific Cond.	ms/cm	NM	NM	620	750	769	1300	940	840	NM	3580
Chlorides	mg/L	90	70***	55-60***	NM	165	130	NM	100	20	NM**
Dissolved Oxygen	mg/L	8.9	NM	2.9	NM	2.7	7.2	2.0	9.0	NM	1.9
Oxi/Red Potential	mv	375	NM	515	NM	620	NM	545	485	NM	570
Temp	°C	12.9	NM	11.5	10.7	11.2	14.3	14.2	9.9	NM	11.5
Color	--	colorless	magenta	magenta	colorless	pink	pink	lt. brown	lt. pink	lt. pink	purple
KMnO4 Chlorides (Lab)	mg/L	NM	NM	25	ND5	NM	NM	NM	NM	NM	NM
COCs Detected											
cis-1,2-Dichloroethene	ug/L	NA	NA	NA	ND5	NA	ND5	ND5	43J	NA	ND5
Trichloroethene	ug/L	NA	NA	NA	ND5	NA	ND5	ND5	1300	NA	ND5
Vinyl chloride	ug/L	NA	NA	NA	ND10	NA	ND10	ND10	ND100	NA	ND10

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		IBH-4				IBH-5				
		03/12/01	06/21/01	09/17/01	11/07/01	11/13/00	12/05/00	12/13/00	03/12/01	06/21/01
General Parameters	***Units***									
pH	S.U.	7.28	7.67	7.53	7.11	7.05	NM	7.28	7.10	7.28
Specific Cond.	ms/cm	950	1380	1780	1160	900	NM	1110	750	747
Chlorides	mg/L	NM	NM	NM**	NM	100	**	35***	NM	NM**
Dissolved Oxygen	mg/L	NM	5.06	7	1.1	8.9	NM	1.6	NM	5.1
Oxi/Red Potential	mv	NM	680	NM**	565	375	NM	510	NM	615
Temp	°C	9.7	14.3	13.1	13.5	11.8	NM	10.9	9.2	15.9
Color	--	pink-brown	--	dk. purple	dk. purple	colorless	purple	magenta	dk. brown	--
KMnO4 Chlorides (Lab)	mg/L	ND5	NM	NM	NM	NM	NM	NM	ND5	NM**
COCs Detected										
cis-1,2-Dichloroethene	ug/L	96	NA	ND5	ND5	410J	NA	ND5	460	NA
Trichloroethene	ug/L	1200	NA	ND5	ND5	11000	NA	ND5	3200	NA
Vinyl chloride	ug/L	ND100	NA	ND10	ND10	ND1000	NA	ND10	ND10	NA

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

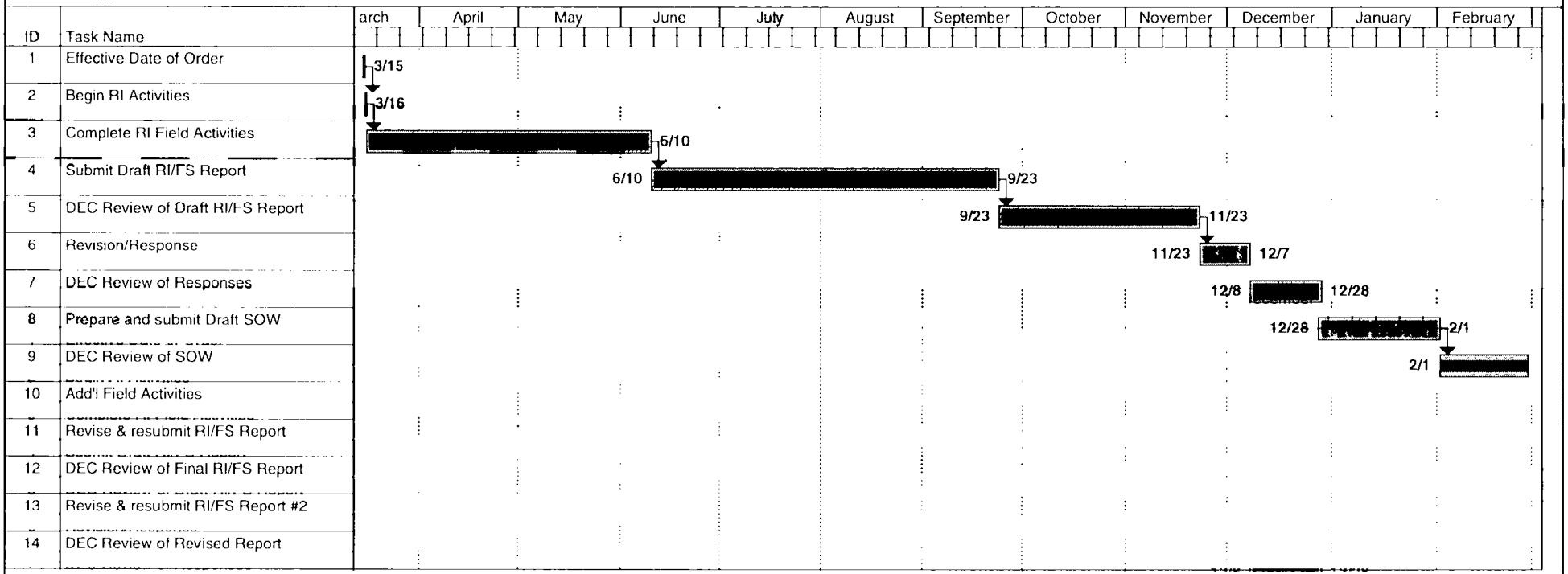
		IBH-5		PW-2							
		09/17/01	11/06/01	12/02/99	11/13/00	12/05/00	12/14/00	03/13/01	06/21/01	09/18/01	11/06/01
General Parameters	***Units***										
pH	S.U.	7.30	7.19	7.1	NM*	NM	7.33	7.69	7.96	7.41	7.44
Specific Cond.	ms/cm	2100	1000	555	890	NM	1300	1590	3370	1680	1420
Chlorides	mg/L	NM**	NM	NM	90	**	65-70***	90	NM**	105	NM
Dissolved Oxygen	mg/L	14.9	1.3	NM	9.4	NM	3.8	NM	1.4	1.6	1.4
Oxi/Red Potential	mv	NM**	375	NM	335	NM	530	NM	590	NM	380
Temp	°C	14.5	13.6	NM	11.2	NM	12.0	8.9	14.9	14.5	15.4
Color	--	dk. purple	lt. brown	colorless	lt. brown	purple	purple	lt.pink	--	colorless	dk. brown
KMnO4 Chlorides (Lab)	mg/L	NM**	NM	NM	NM	NM	824	ND5	NM**	NM	NM
COCs Detected											
cis-1,2-Dichloroethene	ug/L	ND5	15	740	760	NA	13J	550	NA	370	490
Trichloroethene	ug/L	ND5	100	6900	3600	NA	100	1800	NA	1200	1100
Vinyl chloride	ug/L	ND10	ND10	ND500	240	NA	ND50	93J	NA	100	210

TABLE 1
ADDITIONAL INTERIM REMEDIAL MEASURE COCs DETECTED
FORMER DOWCRAFT FACILITY
FALCONER, NEW YORK

		PW-3R						
		05/11/00	*11/13/00*	*12/05/00*	*12/14/00*	*03/12/01*	*09/17/01*	*11/6/001*
General Parameters	***Units***							
pH	S.U.	7.3	7.30	NM	7.33	7.63	8.45	8.08
Specific Cond.	ms/cm	460	600	NM	1300	870	3550	1580
Chlorides	mg/L	NM	30	**	65-70***	50	NM**	NM
Dissolved Oxygen	mg/L	NM	NM	NM	1.9	NM	10.9	13.0
Oxi/Red Potential	mv	NM	315	NM	550	NM	NM	440
Temp	°C	NM	12.4	NM	11.5	9.9	13.1	13.4
Color	--	colorless	colorless	purple	purple	lt. yellow	dk. purple	pink-brown
KMnO4	mg/L	NM	NM	NM	303	ND5	NM	NM
Chlorides (Lab)								
COCs Detected								
cis-1,2-Dichloroethene	ug/L	1600J	1000J	NA	6.7	1300	ND12	560/580
Trichloroethene	ug/L	62500	79000	NA	ND5	120000	ND12	7500/7400
Vinyl chloride	ug/L	ND500	ND4000	NA	ND10	ND200	ND25	ND500/ND500

Notes:
* pH probe malfunction.
** Color of sample too dark to observe color change.
*** Estimated value, color change of chloride sample not readily apparent.
NM Not measured
NA Not analyzed

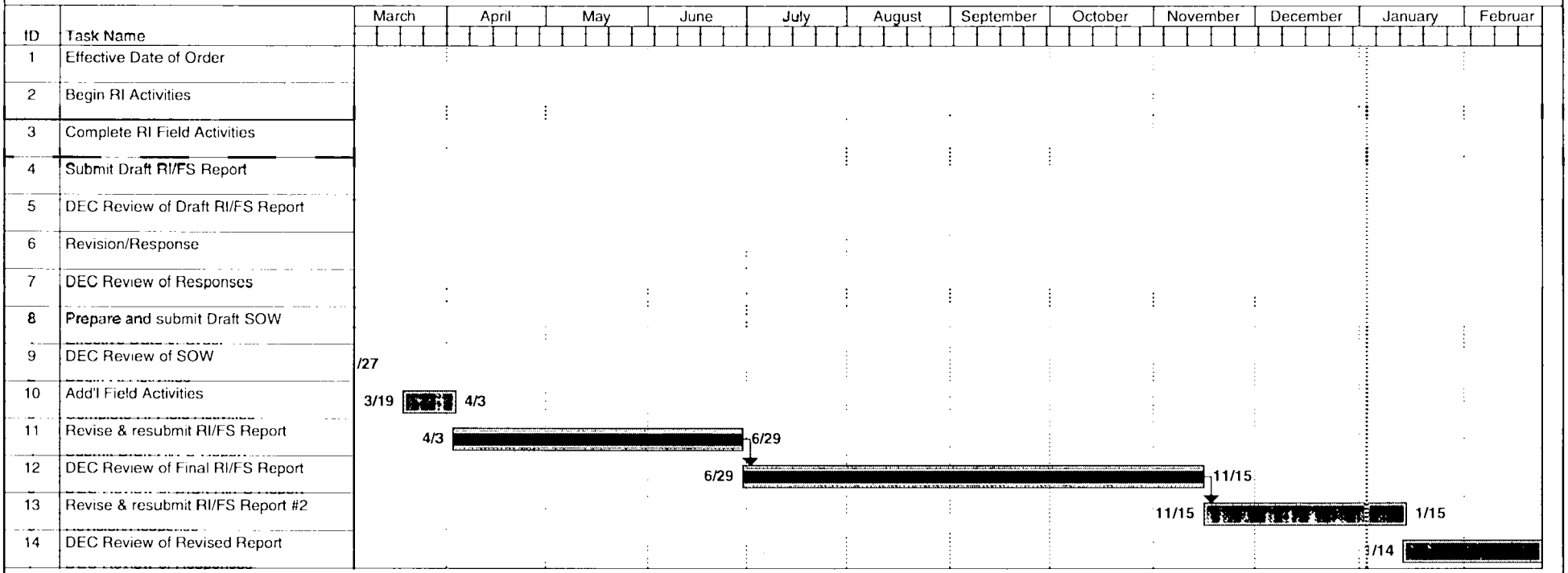
Project **Schedule**
Supplemental Remedial Investigation/Focused Feasibility Study
Former Dowcraft Corporation
Site Code #907020



Project: 5020 schedule
Date: Thu 1/3/02

Task | Summary | Rolled Up Progress | Project Summary
Progress | Rolled Up Task | Split
Milestone | Rolled Up Milestone | External Tasks

Project **Schedule**
Supplemental Remedial Investigation/Focused Feasibility Study
Former Dowcraft Corporation
Site Code #907020

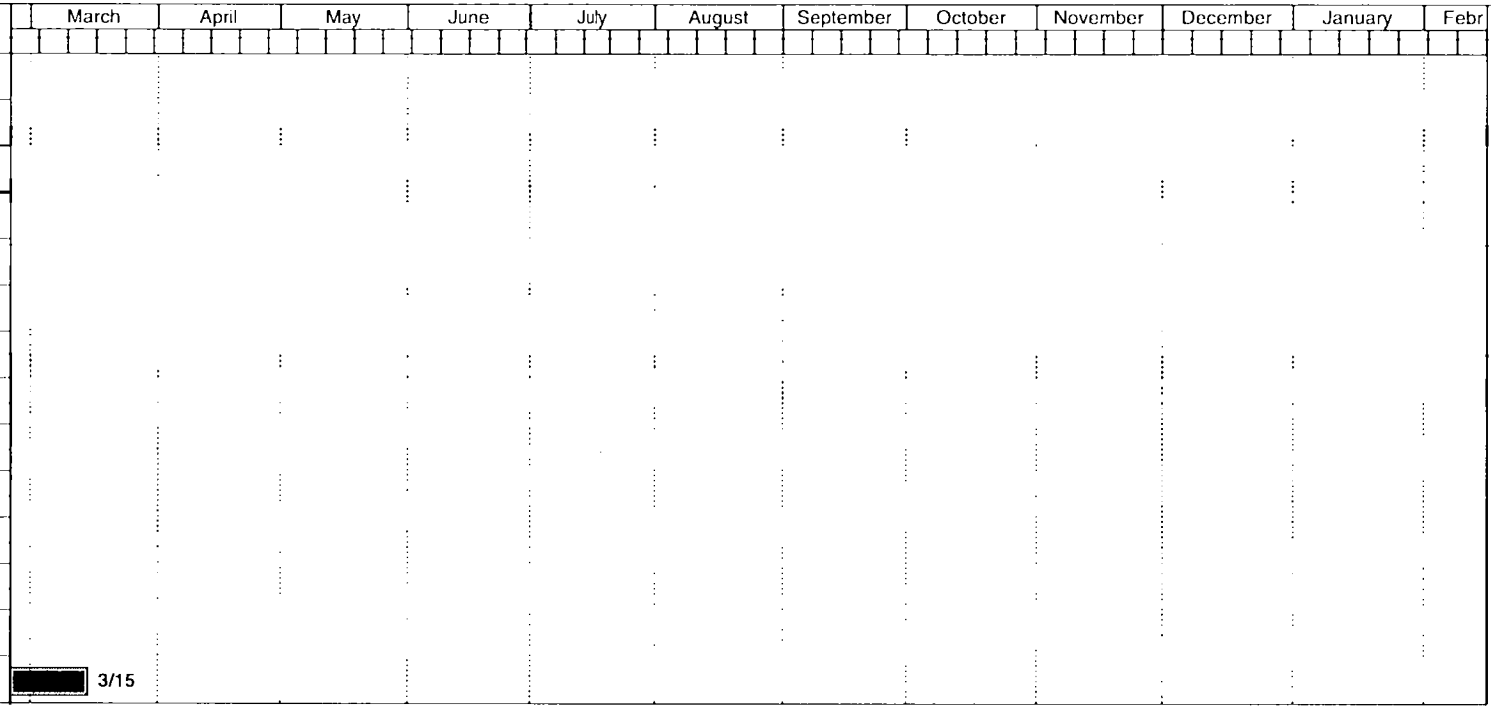


Project: 5020 schedule
Date: Thu 1/3/02

Task	Summary	Rolled Up Progress	Project Summary
Progress	Rolled Up Task	Split	
Milestone	Rolled Up Milestone	External Tasks	

Project **Schedule**
Supplemental Remedial Investigation/Focused Feasibility Study
Former Dowcraft Corporation
Site Code #907020

ID	Task Name
1	Effective Date of Order
2	Begin RI Activities
3	Complete RI Field Activities
4	Submit Draft RI/FS Report
5	DEC Review of Draft RI/FS Report
6	Revision/Response
7	DEC Review of Responses
8	Prepare and submit Draft SOW
9	DEC Review of SOW
10	Add'l Field Activities
11	Revise & resubmit RI/FS Report
12	DEC Review of Final RI/FS Report
13	Revise & resubmit RI/FS Report #2
14	DEC Review of Revised Report



Project: 5020 schedule
Date: Thu 1/3/02

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary

ATTACHMENT 1

ANALYTICAL DATA AND DATA VALIDATION REPORT

Carol

ANALYTICAL DATA ASSESSMENT AND VALIDATION
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

TABLE OF CONTENTS

LIST OF TABLES

1.0 INTRODUCTION

The following document details an assessment and validation of analytical results reported by Severn Trent Laboratories (STL) for groundwater samples collected at the Dowcraft Site (Site) in Jamestown, New York, in November 2001. Samples were submitted for Target Compound List (TCL) volatile organic compound (VOC) analyses. For sample identification, a sampling and analysis summary is presented in Table 1.

A summary of the analytical data is presented in Table 2. The quality assurance/quality control (QA/QC) criteria by which these data have been assessed are outlined in the analytical methods and the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", October 1999, EPA 540/R-99/008.

The data quality assessment and validation presented in the following subsections were performed based on all raw data including calibrations, surrogate recoveries, spike recoveries, and blank results.

2.0 SAMPLE HOLDING TIMES

All sample analyses were performed within the required hold time of 14 days from the date of collection.

All samples were properly preserved and cooled at 4°C (±2°C) after collection. All samples were received by the laboratory in good condition.

3.0 CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS) TUNING AND MASS CALIBRATION

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the VOC method requires the analysis of the specific tuning compound bromofluorobenzene (BFB). The resulting spectra must meet the criteria cited in the method before analysis is initiated. Analysis of the tuning compound must then be repeated every 12 hours throughout sample analysis to ensure the continued optimization of the instrument.

All instrument tuning data were reviewed. The tuning compound was analyzed at the required frequency throughout the analytical periods. All tuning criteria were met for the analysis, indicating proper optimization of the instrumentation.

4.0 INSTRUMENT CALIBRATION

4.1 GC/MS CALIBRATION

4.1.1 INITIAL CALIBRATION

To quantify compounds of interest in samples, calibration of the GC/MS over a specific concentration range must be performed. Initially, a five-point calibration curve containing all compounds of interest is analyzed.

Linearity of the curve and instrument sensitivity were evaluated against the following criteria:

i) all relative response factors (RRFs) must be greater than or equal to 0.05; and

ii) percent relative standard deviation (%RSD) values must not exceed 30 percent.

The initial calibration data for VOCs were reviewed. All RRFs and %RSDs met the above criteria indicating acceptable analyte sensitivity and linearity, with the exception of a low acetone response. All associated positive acetone results were qualified as estimated and all non-detect acetone results were rejected due to poor analyte sensitivity (see Table 3).

4.1.2 CONTINUING CALIBRATION

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours.

The following criteria were employed to evaluate continuing calibration data:

i) all RRF values must be greater than or equal to 0.05; and

ii) percent difference (%D) values must not exceed 25 percent.

Low RRF values were observed for acetone in the continuing calibration standards. All associated data were previously rejected due to poor instrument response during initial calibration.

The chloromethane and 4-methyl-2-pentanone responses exceeded the 25 %D criteria for the continuing calibration analyzed on November 16, 2001. All associated data were qualified as estimated (see Table 4).

5.0 SURROGATE SPIKE RECOVERIES

In accordance with the method, all samples, blanks, and standards analyzed for VOCs were spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency.

All samples, blanks, and standards were spiked with the proper surrogates and all recoveries were within the control limits, indicating good analytical efficiency.

6.0 INTERNAL STANDARD RECOVERIES

To ensure that changes in GC/MS response and sensitivity do not affect sample analysis results, internal standard compounds are added to all samples, blanks, and spike samples prior to analyses. All results are calculated as a ratio of the internal standard response. The criteria by which the internal standard results are assessed are as follows:

i) internal standard area counts must not vary by more than a factor of two (-50 percent to +100 percent) from the associated calibration standard; and

ii) the retention time of the internal standard must not vary more than ±20 seconds from the associated calibration standard.

All internal standard recoveries were acceptable, indicating adequate analytical efficiency and all analyte quantities were performed using the proper internal standard.

7.0 LABORATORY BLANK ANALYSES

The purpose of assessing the results of laboratory blank analyses is to determine the existence and magnitude of sample contamination introduced during analysis. Laboratory blanks are prepared from deionized water and analyzed as samples.

Laboratory blanks were analyzed at a minimum frequency of one per analytical batch. All laboratory blank results were non-detect for the compounds of interest, with the exception of toluene, methylene chloride, and bromomethane present at low concentrations. All associated sample results with similar concentrations to that of the blank were qualified as non-detect (see Table 5).

8.0 BLANK SPIKE ANALYSES

Blank spikes are prepared and analyzed as samples to assess the analytical efficiencies of the method employed, independent of sample matrix effects.

Blank samples were spiked with benzene, chlorobenzene, 1,1-dichloroethene, toluene, and trichloroethene. All blank spike sample analyses yielded recoveries within the method control limits, indicating acceptable analytical accuracy.

9.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES

The recoveries of MS/MSD analyses are used to assess the analytical accuracy achieved on individual sample matrices. The RPD between the MS and MSD is used to assess analytical precision.

An MS/MSD was analyzed at the required frequency for all parameters.

All recoveries were acceptable indicating adequate analytical accuracy and precision.

10.0 FIELD QA/QC

10.1 FIELD DUPLICATES

To assess the analytical and sampling protocol precision, a field duplicate (as identified in Table 1), was collected and submitted "blind" to the laboratory. All data outside of estimated regions of detection demonstrated acceptable agreement indicating adequate sampling and analytical procedures.

10.2 TRIP BLANKS

One trip blank was submitted for VOC analyses to evaluate the possibility of cross-contamination during sample collection, shipment, and/or storage. All results were non-detect indicating acceptable field and laboratory procedures with the exception of methylene chloride present at 2.5 µg/L. All associated data were previously qualified as non-detect due to method blank contamination.

11.0 CONCLUSION

Based on the assessment detailed in the foregoing, the data produced by STL are acceptable with the noted exceptions and qualifications.

TABLE 1

SAMPLING AND ANALYSIS SUMMARY
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Sample ID	*Location ID*	***Collection*** *Date* ***(mm/dd/yy)***	***Collection*** *Time* ***(hr:min)***	*Analysis/Parameters*	*Comment*
GW-5020-061101-PK-001	PW-3R	11/06/01	14:45	TCL Volatiles	
GW-5020-061101-PK-002	PW-3R	11/06/01	14:45	TCL Volatiles	Field duplicate of GW-5020-061101-PK-001
GW-5020-061101-PK-003	PW-2	11/06/01	15:15	TCL Volatiles	MS/MSD
GW-5020-061101-PK-004	IBH-5	11/06/01	16:00	TCL Volatiles	
GW-5020-061101-PK-005	ESI -10	11/06/01	16:30	TCL Volatiles	
GW-5020-061101-PK-006	ESI-11	11/06/01	17:00	TCL Volatiles	
GW-5020-061101-PK-007	ESI-12	11/06/01	17:15	TCL Volatiles	
GW-5020-071101-PK-008	ESI-2	11/07/01	9:30	TCL Volatiles	
GW-5020-071101-PK-009	ESI-3	11/07/01	9:05	TCL Volatiles	
GW-5020-071101-PK-010	ESI-4	11/07/01	8:50	TCL Volatiles	
GW-5020-071101-PK-011	ESI-8	11/07/01	9:55	TCL Volatiles	
GW-5020-071101-PK-012	IBH-1	11/07/01	10:30	TCL Volatiles	
GW-5020-071101-PK-013	IBH-2	11/07/01	11:50	TCL Volatiles	
GW-5020-071101-PK-014	IBH-3	11/07/01	11:15	TCL Volatiles	
GW-5020-071101-PK-015	IBH-4	11/07/01	10:50	TCL Volatiles	
Trip Blank	Trip Blank	11/06/01	-	TCL Volatiles	Trip Blank

Notes:

MS	Matrix Spike.
MSD	Matrix Spike Duplicate.
TCL	Target Compound List.

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Sample Location:		ESI-2	ESI-3	ESI-4	ESI-8	ESI-10
Sample ID:		GW-5020-071101-PK-008	GW-5020-071101-PK-009	GW-5020-071101-PK-010	GW-5020-071101-PK-011	GW-5020-061101-PK-005
Sample Date:		11/7/2001	11/7/2001	11/7/2001	11/7/2001	11/6/2001
Parameter	*Unit*					
Volatiles						
1,1,1-Trichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	1.8 J	ND 5.0
1,1,2,2-Tetrachloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1,2-Trichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	2.6 J	ND 5.0
1,1-Dichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1-Dichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,2-Dichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,2-Dichloropropane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
2-Butanone	µg/L	ND 20	ND 20	ND 20	ND 20	ND 20
2-Hexanone	µg/L	ND 20	ND 20	ND 20	ND 20	ND 20
4-Methyl-2-pentanone	µg/L	ND 20 J	ND 20	ND 20 J	ND 20 J	ND 20 J
Acetone	µg/L	R	R	R	R	R
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromodichloromethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromoform	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromomethane	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroethane	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10
Chloroform (Trichloromethane)	µg/L	ND 5.0	ND 5.0	ND 5.0	0.53 J	ND 5.0
Chloromethane	µg/L	ND 10 J	ND 10	ND 10 J	ND 10 J	ND 10 J
cis-1,2-Dichloroethene	µg/L	66	5.3	ND 5.0	310	21
cis-1,3-Dichloropropene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Dibromochloromethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Ethylbenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Styrene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	2.4 J	ND 5.0	ND 5.0	5.0	1.0 J

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

	Sample Location:	**ESI-2**	**ESI-3**	**ESI-4**	**ESI-8**	**ESI-10**
	Sample ID:	*GW-5020-071101-PK-008*	*GW-5020-071101-PK-009*	*GW-5020-071101-PK-010*	*GW-5020-071101-PK-011*	*GW-5020-061101-PK-005*
	Sample Date:	***11/7/2001***	***11/7/2001***	***11/7/2001***	***11/7/2001***	***11/6/2001***
Parameter	*Unit*					
Volatiles						
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
trans-1,2-Dichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	2.7 J	ND 5.0
trans-1,3-Dichloropropene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	530	54	0.76 J	3500	130
Vinyl chloride	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10
Xylene (total)	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Sample Location:		ESI-11	ESI-12	IBH-1	IBH-2	IBH-3
Sample ID:		GW-5020-061101-PK-006	GW-5020-061101-PK-007	GW-5020-071101-PK-012	GW-5020-071101-PK-013	GW-5020-071101-PK-014
Sample Date:		11/6/2001	11/6/2001	11/7/2001	11/7/2001	11/7/2001
Parameter	*Unit*					
Volatiles						
1,1,1-Trichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1,2,2-Tetrachloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1,2-Trichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1-Dichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1-Dichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,2-Dichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,2-Dichloropropane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
2-Butanone	µg/L	ND 20	ND 20	ND 20	ND 20	ND 20
2-Hexanone	µg/L	ND 20	ND 20	ND 20	ND 20	ND 20
4-Methyl-2-pentanone	µg/L	ND 20 J	ND 20	ND 20	ND 20 J	ND 20
Acetone	µg/L	R	R	R	R	R
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromodichloromethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromoform	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromomethane	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroethane	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10
Chloroform (Trichloromethane)	µg/L	ND 5.0	ND 5.0	ND 5.0	0.39 J	ND 5.0
Chloromethane	µg/L	ND 10 J	ND 10	ND 10	ND 10 J	ND 10
cis-1,2-Dichloroethene	µg/L	18	61	28	21	ND 5.0
cis-1,3-Dichloropropene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Dibromochloromethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Ethylbenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Styrene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	1.6 J	ND 5.0

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Sample Location:		ESI-11	ESI-12	IBH-1	IBH-2	IBH-3
Sample ID:		GW-5020-061101-PK-006	GW-5020-061101-PK-007	GW-5020-071101-PK-012	GW-5020-071101-PK-013	GW-5020-071101-PK-014
Sample Date:		11/6/2001	11/6/2001	11/7/2001	11/7/2001	11/7/2001
Parameter	*Unit*					
Volatiles						
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
trans-1,2-Dichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
trans-1,3-Dichloropropene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	11	71	83	380	0.37 J
Vinyl chloride	µg/L	13	33	ND 10	ND 10	ND 10
Xylene (total)	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Sample Location:		IBH-4	IBH-5	PW-2	PW-3R	PW-3R
Sample ID:		GW-5020-071101-PK-015	GW-5020-061101-PK-004	GW-5020-061101-PK-003	GW-5020-061101-PK-001	GW-5020-061101-PK-002
Sample Date:		11/7/2001	11/6/2001	11/6/2001	11/6/2001	11/6/2001 Duplicate
Parameter	Unit					
Volatiles						
1,1,1-Trichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1,2,2-Tetrachloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1,2-Trichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,1-Dichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	2.7 J	2.7 J
1,1-Dichloroethene	µg/L	ND 5.0	ND 5.0	ND 5.0	1.4 J	1.6 J
1,2-Dichloroethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
1,2-Dichloropropane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
2-Butanone	µg/L	ND 20	ND 20	ND 20	ND 20	ND 20
2-Hexanone	µg/L	ND 20	ND 20	ND 20	ND 20	ND 20
4-Methyl-2-pentanone	µg/L	ND 20	ND 20	ND 20 J	ND 20 J	ND 20 J
Acetone	µg/L	15 J	R	R	41 J	41 J
Benzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromodichloromethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromoform	µg/L	1.7 J	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Bromomethane	µg/L	U	ND 10	ND 10	ND 10	ND 10
Carbon disulfide	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Carbon tetrachloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chlorobenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Chloroethane	µg/L	ND 10	ND 10	ND 10	ND 10	ND 10
Chloroform (Trichloromethane)	µg/L	ND 5.0	ND 5.0	ND 5.0	0.64 J	0.63 J
Chloromethane	µg/L	ND 10	ND 10	ND 10 J	ND 10 J	ND 10 J
cis-1,2-Dichloroethene	µg/L	ND 5.0	15	490	560	580
cis-1,3-Dichloropropene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Dibromochloromethane	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Ethylbenzene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Methylene chloride	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Styrene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Tetrachloroethene	µg/L	ND 5.0	ND 5.0	22	5.7	5.7

TABLE 2

ANALYTICAL RESULTS SUMMARY
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

	Sample Location:	IBH-4	IBH-5	PW-2	PW-3R	PW-3R
	Sample ID:	GW-5020-071101-PK-015	GW-5020-061101-PK-004	GW-5020-061101-PK-003	GW-5020-061101-PK-001	GW-5020-061101-PK-002
	Sample Date:	11/7/2001	11/6/2001	11/6/2001	11/6/2001	11/6/2001 Duplicate
Parameter	Unit					
Volatiles						
Toluene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
trans-1,2-Dichloroethene	µg/L	ND 5.0	ND 5.0	7.0	6.5	6.0
trans-1,3-Dichloropropene	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0
Trichloroethene	µg/L	ND 5.0	100	1100	7500	7400
Vinyl chloride	µg/L	ND 10	ND 10	210	6.8 J	6.5 J
Xylene (total)	µg/L	ND 5.0	ND 5.0	ND 5.0	ND 5.0	ND 5.0

Notes:

J Estimated.

ND Non-detect at associated value.

R Rejected.

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING INITIAL CALIBRATION RESULTS
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Parameter	*Compound*	*Calibration Date*	*RRF*	*Associated Sample ID*	*Sample Results*	*Units*	*Qualifier*
VOCs	Acetone	11/11/01	0.033	GW-5020-061101-PK-001	41	µg/L	J
				GW-5020-061101-PK-002	41	µg/L	J
				GW-5020-061101-PK-003	ND 20	µg/L	R
				GW-5020-061101-PK-005	ND 20	µg/L	R
				GW-5020-061101-PK-006	ND 20	µg/L	R
				GW-5020-071101-PK-008	ND 20	µg/L	R
				GW-5020-071101-PK-010	ND 20	µg/L	R
				GW-5020-071101-PK-011	ND 20	µg/L	R
				GW-5020-071101-PK-013	ND 20	µg/L	R
VOCs	Acetone	11/19/01	0.028	GW-5020-061101-PK-004	ND 20	µg/L	R
				GW-5020-061101-PK-007	ND 20	µg/L	R
				GW-5020-071101-PK-009	ND 20	µg/L	R
				GW-5020-071101-PK-012	ND 20	µg/L	R
				GW-5020-071101-PK-014	ND 20	µg/L	R
				GW-5020-071101-PK-015	15 J	µg/L	*

Notes:

* Sample results were previously qualified as estimated by the laboratory.
J Estimated.
ND Non-detect at associated value.
R Rejected.
RRF Relative Response Factor.
VOCs Volatile Organic Compounds.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING CONTINUING CALIBRATION RESULTS
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Parameter	*Compound*	*Calibration Date*	*%D*	*Associated Sample ID*	*Sample Results*	*Units*	*Qualifier*
VOCs	4-Methyl-2-pentanone	11/16/01	34	GW--061101-PK-001	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--061101-PK-002	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--061101-PK-003	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--061101-PK-005	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--061101-PK-006	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--071101-PK-008	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--071101-PK-010	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--071101-PK-011	ND 20	µg/L	J
	4-Methyl-2-pentanone			GW--071101-PK-013	ND 20	µg/L	J
VOCs	Chloromethane	11/16/01	41	GW--061101-PK-001	ND 10	µg/L	J
	Chloromethane			GW--061101-PK-002	ND 10	µg/L	J
	Chloromethane			GW--061101-PK-003	ND 10	µg/L	J
	Chloromethane			GW--061101-PK-005	ND 10	µg/L	J
	Chloromethane			GW--061101-PK-006	ND 10	µg/L	J
	Chloromethane			GW--071101-PK-008	ND 10	µg/L	J
	Chloromethane			GW--071101-PK-010	ND 10	µg/L	J
	Chloromethane			GW--071101-PK-011	ND 10	µg/L	J
	Chloromethane			GW--071101-PK-013	ND 10	µg/L	J

Notes:

%D Percent Difference.
J Estimated.
ND Non-detect at associated value.
VOCs Volatile Organic Compounds.

TABLE 5

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
GROUNDWATER MONITORING
DOWCRAFT CORPORATION
NOVEMBER 2001

Parameter	*Blank ID/Date*	*Analyte*	*Blank Result*	*Sample ID*	*Sample Result*	*Qualified Sample Result*	*Units*
VOCs	11/16/01	Toluene	0.66J	GW--061101-PK-001	1.9J	ND 5.0	µg/L
		Toluene	0.66J	GW--061101-PK-002	1.9J	ND 5.0	µg/L
VOCs	11/16/01	Methylene chloride	9.6	GW--061101-PK-001	3.8J	ND 5.0	µg/L
		Methylene chloride	9.6	GW--061101-PK-002	4.2J	ND 5.0	µg/L
		Methylene chloride	9.6	GW--061101-PK-003	2.0J	ND 5.0	µg/L
		Methylene chloride	9.6	GW--061101-PK-005	1.6J	ND 5.0	µg/L
		Methylene chloride	9.6	GW--061101-PK-006	1.6J	ND 5.0	µg/L
		Methylene chloride	9.6	GW--071101-PK-008	0.53J	ND 5.0	µg/L
		Methylene chloride	9.6	GW--071101-PK-010	0.68J	ND 5.0	µg/L
VOCs	11/19/01	Bromomethane	1.5J	GW--061101-PK-004	0.87J	ND 10	µg/L
		Bromomethane	1.5J	GW--061101-PK-007	0.73J	ND 10	µg/L
VOCs	11/20/01	Bromomethane	1.1J	GW-5020-071101-PK-015	0.61J	ND 10	µg/L

Notes:

J Estimated.
ND Non-detect at associated value.
VOCs Volatile Organic Compounds.

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES	SHIPPED TO (Laboratory Name): STL PITTSBURGH	REFERENCE NUMBER: 5020

SAMPLER'S SIGNATURE: [signature] PRINTED NAME: [illegible]

SEQ. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. of Containers	PARAMETERS: TCL VOA								REMARKS
	[illegible]	1145	GW-5020-[illegible]-001	GW	2	2								
	[illegible]	1445	GW-5020-[illegible]-002 * DUPLICATE OF	GW	2	2								
	[illegible]	1505	GW-5020-[illegible]-003/MS/MSD	GW	6	6								
	[illegible]	[illegible]	GW-5020-[illegible]-004	GW	2	2								
	[illegible]	[illegible]	GW-5020-[illegible]-005	GW	2	2								
	[illegible]	1100	GW-5020-[illegible]-006	GW	2	2								
	[illegible]	1315	GW-5020-[illegible]-007	GW	2	2								
	[illegible]	[illegible]	GW-5020-[illegible]	GW	2	2								
	[illegible]	0905	GW-5020-[illegible]	GW	2	2								
	[illegible]	0950	GW-5020-[illegible]	GW	2	2								
	[illegible]	[illegible]	GW-5020-[illegible]	GW	2	2								
	[illegible]	[illegible]	GW-5020-[illegible]-012	GW	2	2								
	[illegible]	1150	GW-5020-[illegible]-013	GW	2	2								
	[illegible]	1115	GW-5020-[illegible]-PK-014	GW	2	2								
	[illegible]	[illegible]	GW-5020-[illegible]-015	GW	2	2								

TOTAL NUMBER OF CONTAINERS | HEALTH/CHEMICAL HAZARDS

RELINQUISHED BY: ① [signature]	DATE: 11/04/01 TIME: 1350	RECEIVED BY: ①	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:

METHOD OF SHIPMENT: WAY BILL No.

White –Fully Executed Copy Yellow –Receiving Laboratory Copy Pink –Shipper Copy Goldenrod –Sampler Copy	SAMPLE TEAM: [illegible] [illegible]	RECEIVED FOR LABORATORY BY: DATE: TIME: No CRA 07277