FORMER GALLIA COMPRESSOR STATION CHARACTERIZATION REPORT

Gallia County, Ohio

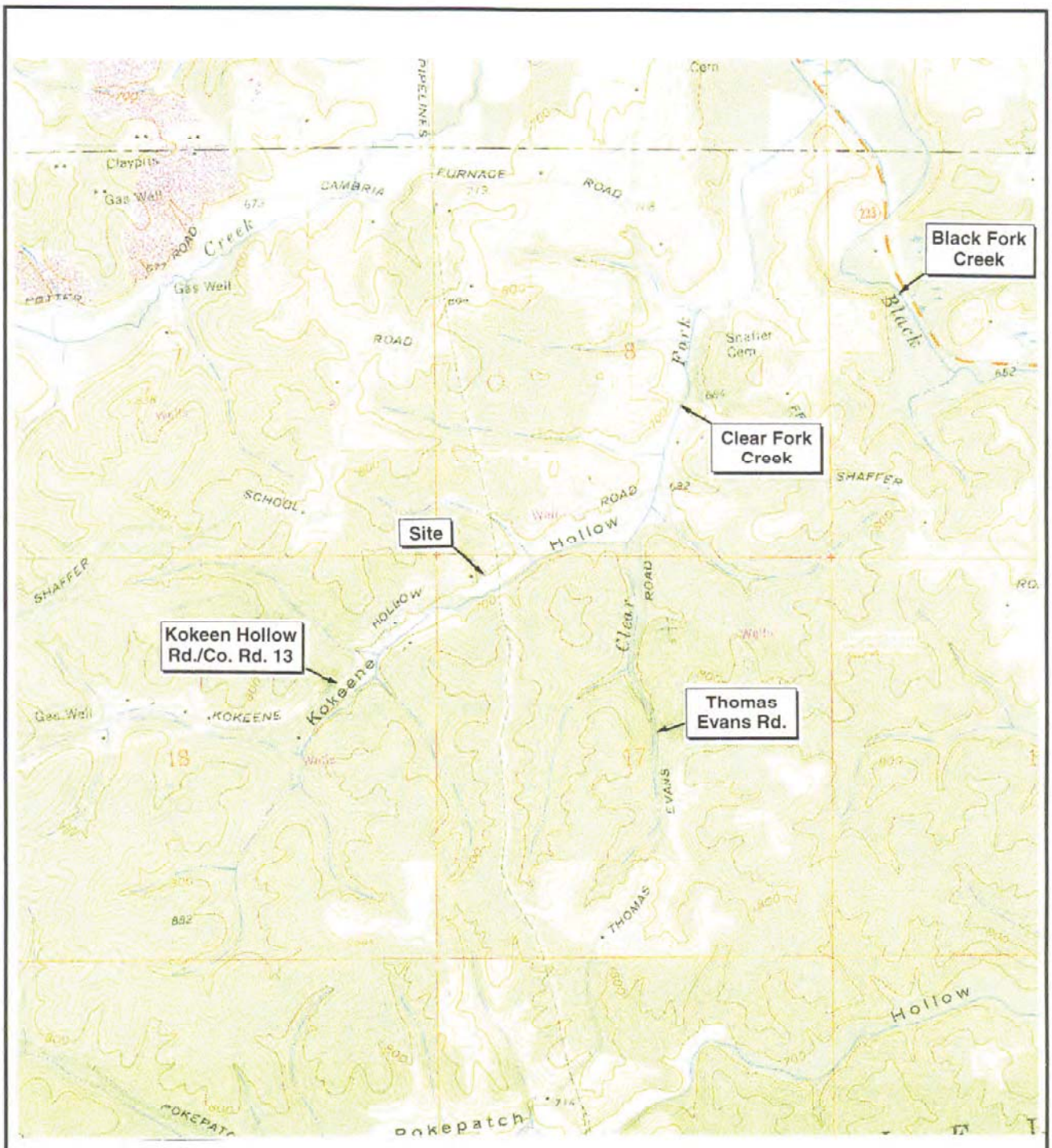
November 1999

Prepared for

COLUMBIA GAS TRANSMISSION CORPORATION

by

ROY F. WESTON, INC.
ENVIRONMENTAL STANDARDS, INC.



0 1,000 2,000

Scale in Feet

Source: U.S.G.S. 7.5 Minute Series Quadrangle, Gallia, Ohio, 1961 photo revised 1975

N

QUADRANGLE LOCATION

COLUMBIA GAS TRANSMISSION CORPORATION

SITE LOCATION MAP
FORMER GALLIA COMPRESSOR STATION
CHARACTERIZATION REPORT

FIGURE 1-1 | 2/13/98

98C-3507

Table 4-3
Summary of Analytical Results

		PRA	**0**					
		PRA Description	**BACKGROUND**					
		Sample Type	**Normal Sample**					
		Sample Id	**GLI-ASU005-70001**		**GLI-ASU016-70001**		**GLI-ASU018-70001**	
		Depth - ft bgs	**1 - 3**		**1 - 3**		**1 - 3**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300	ND		ND		0.053 R	
METAL	**ANTIMONY, TOTAL**	31	10.0 R		ND		10.7 R	
	BARIUM, TOTAL	5500	25.8		39.6		8.7	
	BERYLLIUM, TOTAL	160	ND		ND		ND	
	CADMIUM, TOTAL	39	ND		8.6		ND	
	CHROMIUM, TOTAL	230	6.5		14.2		2.8	
	LEAD, TOTAL	400	ND		ND		ND	
	NICKEL, TOTAL	1600	ND		11.0		ND	
	ARSENIC, TOTAL	.43	2.6	X	ND		ND	

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA	**1**					
		PRA Description	**PRA #01 DISPLACEMENT METERS (A & B)**					
		Sample Type	**Normal Sample**					
		Sample Id	**GLI-ASU010-70001**		**GLI-ASU010-70002**		**GLI-ASU011-70001**	
		Depth - ft bgs	**0 - 1**		**1 - 1.5**		**0 - 1**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA					2	
		PRA Description					**PRA #02 CLEANERS (A & B)**	
		Sample Type					**Normal Sample**	
		Sample Id	**GLI-ASU011-70002**		**GLI-ASU011-70003**		**GLI-ASU003-70001**	
		Depth - ft bgs	**2 - 3**		**4 - 5**		**0 - 1**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA						
		PRA Description						
		Sample Type						
		Sample Id	**GLI-ASU003-70002**		**GLI-ASU003-70003**		**GLI-ASU004-70001**	
		Depth - ft bgs	**2 - 3**		**4 - 5**		**0 - 1**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA					3	
		PRA Description					**PRA #03 DEHYDRATION UNIT P**	
		Sample Type					**Normal Sample**	
		Sample Id	**GLI-ASU004-70002**		**GLI-ASU004-70003**		**GLI-ASU012-70001**	
		Depth - ft bgs	**2 - 3**		**4 - 5**		**0 - 1**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43					ND	

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA						
		PRA Description	**PAD**					
		Sample Type						
		Sample Id	**GLI-ASU012-70002**		**GLI-ASU012-70003**		**GLI-ASU013-70001**	
		Depth - ft bgs	**2 - 3**		**4 - 5**		**0 - 1**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43	ND		ND		ND	

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA						
		PRA Description						
		Sample Type						
		Sample Id	**GLI-ASU013-70002**		**GLI-ASU013-70003**		**GLI-ASU014-70001**	
		Depth - ft bgs	**2 - 3**		**4 - 5**		**0 - 1**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		0.008	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43	ND		ND		ND	

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA						
		PRA Description						
		Sample Type						
		Sample Id	**GLI-ASU014-70002**		**GLI-ASU014-70003**		**GLI-ASU015-70001**	
		Depth - ft bgs	**2 - 3**		**4 - 5**		**0 - 1**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43	ND		ND		ND	

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA					4	
		PRA Description					**PRA #04 LINE HEATER PAD**	
		Sample Type					**Normal Sample**	
		Sample Id	**GLI-ASU015-70002**		**GLI-ASU015-70003**		**GLI-ASU017-70001**	
		Depth - ft bgs	**2 - 3**		**4 - 5**		**4 - 5**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		0.008		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43	ND		ND			

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA	5					
		PRA Description	**PRA #05 COMPRESSOR PAD**					
		Sample Type	**Normal Sample**					
		Sample Id	**GLI-ASU006-70001**		**GLI-ASU006-70002**		**GLI-ASU006-70003**	
		Depth - ft bgs	**0 - 1**		**2 - 3**		**4 - 5**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		0.009	
	TOLUENE	16000	ND		ND		0.008	
	ETHYL BENZENE	7800	ND		ND		0.008	
	XYLENES (TOTAL)	1000000	ND		ND		0.024	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA						
		PRA Description						
		Sample Type						
		Sample Id	**GLI-ASU007-70001**		**GLI-ASU007-70002**		**GLI-ASU007-70003**	
		Depth - ft bgs	**0 - 1**		**2 - 3**		**4 - 5**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		0.011	
	TOLUENE	16000	ND		ND		0.011	
	ETHYL BENZENE	7800	ND		ND		0.011	
	XYLENES (TOTAL)	1000000	ND		ND		0.031	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA						
		PRA Description						
		Sample Type						
		Sample Id	**GLI-ASU008-70001**		**GLI-ASU008-70002**		**GLI-ASU008-70003**	
		Depth - ft bgs	**0 - 1**		**2 - 3**		**4 - 5**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA						
		PRA Description						
		Sample Type						
		Sample Id	**GLI-ASU009-70001**		**GLI-ASU009-70002**		**GLI-ASU009-70003**	
		Depth - ft bgs	**0 - 1**		**2 - 3**		**4 - 5**	
		Collected Date	**10/25/97**		**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300						
METAL	**ANTIMONY, TOTAL**	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA	6					
		PRA Description	PRA #06 VENTS (A,B & C)					
		Sample Type	Normal Sample					
		Sample Id	GLI-ASS002-40001		GLI-ASS003-40001		GLI-ASS004-40001	
		Depth - ft bgs	0 - .5		0 - .5		0 - .5	
		Collected Date	10/25/97		10/25/97		10/25/97	
		Laboratory	RECRA Pittsburgh		RECRA Pittsburgh		RECRA Pittsburgh	
		Sample Collector	Roy F. Weston, Inc.		Roy F. Weston, Inc.		Roy F. Weston, Inc.	
		Result Units	MG/KG		MG/KG		MG/KG	
Category	Analyte	Action Level	Result Flag	> CAL*	Result Flag	> CAL*	Result Flag	> CAL*
VOA	BENZENE	22						
	TOLUENE	16000						
	ETHYL BENZENE	7800						
	XYLENES (TOTAL)	1000000						
	4-METHYL-2-PENTANONE	6300						
METAL	ANTIMONY, TOTAL	31						
	BARIUM, TOTAL	5500						
	BERYLLIUM, TOTAL	160						
	CADMIUM, TOTAL	39						
	CHROMIUM, TOTAL	230						
	LEAD, TOTAL	400						
	NICKEL, TOTAL	1600						
	ARSENIC, TOTAL	.43						

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA	7					
		PRA Description	PRA #07 PIPELINE LIQUIDS AND USED OIL UT (1,000 GAL.)					
		Sample Type	Field Duplicate (Rep)				Normal Sample	
		Sample Id	GLI-ASS001-41001		GLI-ASU001-71001		GLI-ASS001-40001	
		Depth - ft bgs	0 - 1		4 - 6		0 - 1	
		Collected Date	10/25/97		10/25/97		10/25/97	
		Laboratory	RECRA Pittsburgh		RECRA Pittsburgh		RECRA Pittsburgh	
		Sample Collector	Roy F. Weston, Inc.		Roy F. Weston, Inc.		Roy F. Weston, Inc.	
		Result Units	MG/KG		MG/KG		MG/KG	
Category	Analyte	Action Level	Result Flag	> CAL*	Result Flag	> CAL*	Result Flag	> CAL*
VOA	BENZENE	22	ND		ND		ND	
	TOLUENE	16000	ND		ND		ND	
	ETHYL BENZENE	7800	ND		ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND		ND	
	4-METHYL-2-PENTANONE	6300	0.057 R		ND		0.057 R	
METAL	ANTIMONY, TOTAL	31	11.3 R		10.0 R		11.4 R	
	BARIUM, TOTAL	5500	64.1		100		60.0	
	BERYLLIUM, TOTAL	160	1.3 J		1.6		1.4 J	
	CADMIUM, TOTAL	39	ND		ND		ND	
	CHROMIUM, TOTAL	230	18.6		17.2		15.1	
	LEAD, TOTAL	400	ND		31.7		ND	
	NICKEL, TOTAL	1600	24.4 J		22.7		21.9 J	
	ARSENIC, TOTAL	.43	ND		4.8	X	ND	

Notes:

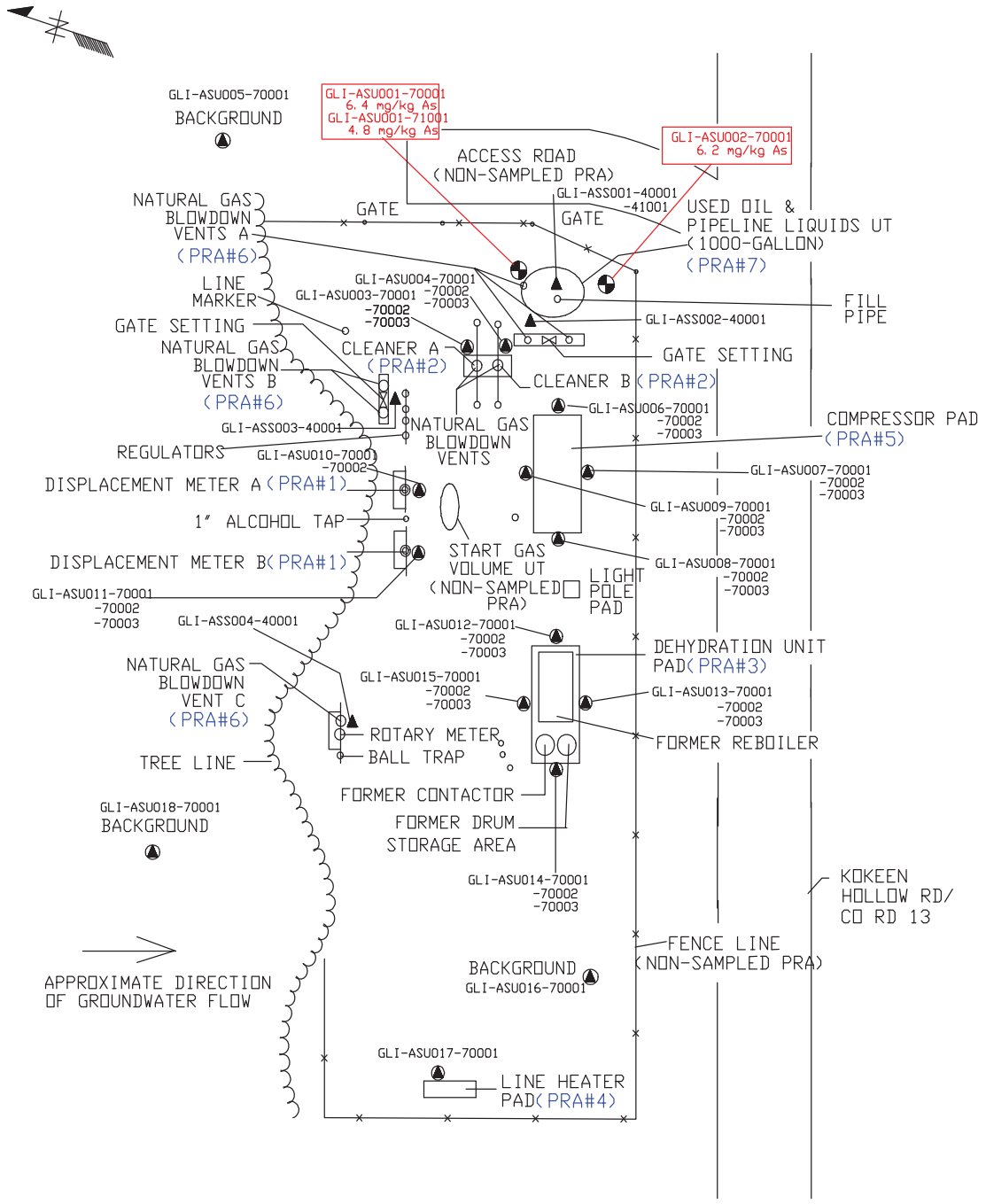
* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.

Table 4-3
Summary of Analytical Results

		PRA				
		PRA Description				
		Sample Type				
		Sample Id	**GLI-ASU001-70001**		**GLI-ASU002-70001**	
		Depth - ft bgs	**4 - 6**		**7 - 9**	
		Collected Date	**10/25/97**		**10/25/97**	
		Laboratory	**RECRA Pittsburgh**		**RECRA Pittsburgh**	
		Sample Collector	**Roy F. Weston, Inc.**		**Roy F. Weston, Inc.**	
		Result Units	**MG/KG**		**MG/KG**	
Category	Analyte	Action Level	**Result Flag**	**> CAL***	**Result Flag**	**> CAL***
VOA	**BENZENE**	22	ND		ND	
	TOLUENE	16000	ND		ND	
	ETHYL BENZENE	7800	ND		ND	
	XYLENES (TOTAL)	1000000	ND		ND	
	4-METHYL-2-PENTANONE	6300	ND		ND	
METAL	**ANTIMONY, TOTAL**	31	10.0 R		10.0 R	
	BARIUM, TOTAL	5500	119		70.6	
	BERYLLIUM, TOTAL	160	2.0		2.0	
	CADMIUM, TOTAL	39	ND		ND	
	CHROMIUM, TOTAL	230	15.1		25.4	
	LEAD, TOTAL	400	42.2		ND	
	NICKEL, TOTAL	1600	20.4		34.0	
	ARSENIC, TOTAL	.43	6.4	X	6.2	X

Notes:

* "> CAL" equals "X" when reported value is above characterization action level for this locale.
J flag - Numerical value is an estimated quantity.
ND indicates Non-Detect
Blank cells in result column indicate an analysis was not performed for that analyte.



LEGEND:

- ▲ SURFACE/SEDIMENT SAMPLE LOCATION
- SURFACE AND AT DEPTH SAMPLE LOCATION
- AT DEPTH SAMPLE LOCATION

NOTES:

SAMPLE LOCATIONS INDICATED IN RED EXHIBIT RESULTS WHICH EXCEED CALS AND BACKGROUND LEVELS

GROUNDWATER FLOW DIRECTION IS NOT BASED ON THE COLLECTION OF FIELD DATA AND MAY NOT REPRESENT ACTUAL CONDITIONS.

GLI-ASB001-70001 SAMPLE ID
GLI - SITE
ASB001 - LOCATION ID
70001 - SAMPLE ID

15' 45'
0 30' 60'
APPROXIMATE SCALE

FIGURE 4-2
WESTON
ANALYTICAL RESULTS WHICH EXCEED CALS AND/OR BACKGROUND LEVELS

FORMER GALLIA COMPRESSOR STATION
GALLIA COUNTY, OH
CHARACTERIZATION REPORT

CLIENT: COLUMBIA GAS TRANSMISSION CORPORATION

FIELD SKETCHED BY: KMA	08/05/97	W.O. NO. 10873-097
		FIGURE: 4-2
DRWN: CR	10/07/99	FILE: galia4-2.dgn

It should be noted that the laboratory reporting limits for benzo(a)pyrene (0.33 mg/kg), dibenzo(a,h)anthracene (0.33 mg/kg), and arsenic (1.0 mg/kg) slightly exceeded the respective CALs. No concentrations of benzo(a)pyrene or dibenzo(a,h)anthracene were detected in any of the site samples, and the site background level for arsenic (3.37 mg/kg) was above the respective reporting limit. PAHs such as benzo(a)pyrene and dibenzo(a,h)anthracene are usually considered as part of a group because they are commonly found as mixtures of compounds in the environment. Three soil samples and two duplicate samples were analyzed for PAHs. No PAHs were reported as detected in these samples. The lack of other PAHs in samples from the site supports the laboratory data indicating that benzo(a)pyrene and dibenzo(a,h)anthracene are not present in soil at the site.

The Comprehensive Analytical Result tables, as prepared by ESi, and the sample chain-of-custody forms (COCs) are included in Appendix C of this Characterization Report. Columbia maintains a hard copy of all analytical data, should additional review be needed.

4.3.1 Background Sampling Results

Three background soil samples (ASU005, ASU016, and ASU018) were collected in areas not considered to be impacted by site operations, and analyzed for CWP Table 1 constituents (Table 3-2). Table 4-3 summarizes the results of the background samples. Laboratory analytical results indicated the presence of various metals at concentrations below the CALs, with the exception of arsenic. Arsenic was detected in one sample above the CAL, at a concentration of 2.6 mg/kg (ASU005-70001). The CAL for arsenic is 0.43 mg/kg. VOCs, SVOCs, PCBs, and cyanide were not detected in any of the site background samples.

As provided for in the CWP, the highest concentration of a constituent detected in the background samples, or the value calculated in Appendix G, is used to establish the background concentration for the site. These values are used to evaluate the results of the remaining PRAs. The calculated background concentrations for metals are presented in Appendix G and are listed below:

- arsenic – 3.37 mg/kg;

- barium – 49.40 mg/kg;
- chromium – 15.67 mg/kg; and
- nickel – 14.00 mg/kg.

4.3.2 Soil Potential Release Areas

PRA #1 Displacement Meters (A&B)

Five soil samples (associated with soil borings ASU010 and ASU011) were collected adjacent to the two displacement meters. Only two samples were collected at Displacement Meter A, instead of three as proposed in the SAP, due to bedrock encountered. No concentrations of BTEX or PCBs were detected in these samples.

PRA #2 Cleaners (A&B)

Six soil samples (associated with soil borings ASU003 and ASU004) were collected adjacent to the two cleaners. The samples were also positioned to characterize two natural gas blowdown vents. No concentrations of BTEX or PCBs were detected in these samples.

PRA #3 Dehydration Unit Pad

Twelve soil samples (associated with soil borings ASU012 through ASU015) were collected in the vicinity of the dehydration unit pad. The samples were positioned to also characterize the former reboiler, former contractor, and former drum storage area. No concentrations of PCBs, glycol, or arsenic were detected in any of these samples. Xylenes were detected below the CAL in two of the samples, both at concentrations of 0.008 mg/kg.

PRA #4 Line Heater Pad

One soil sample (associated with soil boring ASU017) was collected adjacent to the line heater pad. Only one sample was collected (4 to 5 ft bgs), instead of three as proposed in the SAP, due to a heavy gravel material encountered at the shallow depths. No concentrations of BTEX or PCBs were detected in this sample.

PRA #5 Compressor Pad

Twelve soil samples (associated with soil borings ASU006 through ASU009) were collected in the vicinity of the compressor pad. No concentrations of PCBs were detected in any of these samples. Two soil samples indicated the presence of benzene (0.0091 mg/kg and 0.011 mg/kg), toluene (0.008 mg/kg and 0.011 mg/kg), ethylbenzene (0.008 mg/kg and 0.011 mg/kg), and xylenes (0.024 mg/kg and 0.031 mg/kg), at concentrations well below the respective CALs.

PRA #6 Natural Gas Blowdown Vents (A, B, & C)

Three soil samples (ASS002, ASS003, and ASS004) were collected adjacent to three sets of natural gas blowdown vents. No concentrations of PCBs were detected in any of these samples.

PRA #7 Used Oil and Pipeline Liquids UT (1,000 gal)

Two subsurface soil samples (associated with soil borings ASU001 and ASU002), plus one duplicate sample, were collected adjacent to the used oil and pipeline liquids UT. The two soil borings were conducted to depths of 6 ft bgs (ASU001) and 9 ft bgs (ASU002), instead of 12 ft bgs as proposed in the SAP, due to bedrock encountered.

One surface soil sample (ASS001), plus one duplicate sample, was also collected adjacent to the fill port for the UT. No concentrations of VOCs, SVOCs, PCBs, or cyanide were detected in any of surface or subsurface soil samples. Barium, chromium, and nickel were detected in the surface soil sample at concentrations below their respective CALs, but greater than background levels. Barium, chromium, and nickel were detected in each of the subsurface samples at concentrations below their respective CALs and background levels. Arsenic was detected above the CAL and site background level (3.37 mg/kg) in the three subsurface soil samples, at concentrations of 6.4 mg/kg (ASU001-70001), 4.8 mg/kg (ASU001-71001[dup]), and 6.2 mg/kg (ASU002-70001).

4.4 Quality Assurance/Quality Control Criteria Assessment

The following is a summary of the overall QA/QC criteria assessment for analytical data generated as a result of the Former Gallia site characterization. This summary reflects the

APPENDIX G

CALCULATION OF SITE BACKGROUND CONCENTRATIONS

Former Gallia CS

Calculation of Barium Background Concentration:

GLI-ASU005-70001	**=**	**25.8 mg/kg**
GLI-ASU016-70001	**=**	**39.6 mg/kg**
GLI-ASU018-70001	**=**	**8.7 mg/kg**
Average	**=**	**24.70 mg/kg**

Barium concentration to be used as the background level is:

24.70 mg/kg (Average) X 2 = 49.40 mg/kg

Calculation of Arsenic Background Concentration:

GLI-ASU005-70001	**=**	**2.6 mg/kg**
GLI-ASU016-70001	**=**	**3.8 U mg/kg[(1)]**
GLI-ASU018-70001	**=**	**1.1 U mg/kg[(1)]**
Average	**=**	**1.68 mg/kg**

Arsenic concentration to be used as the background level is:

1.68 mg/kg (Average) X 2 = 3.37 mg/kg

Calculation of Chromium Background Concentration:

GLI-ASU005-70001	**=**	**6.5 mg/kg**
GLI-ASU016-70001	**=**	**14.2 mg/kg**
GLI-ASU018-70001	**=**	**2.8 mg/kg**
Average	**=**	**7.83 mg/kg**

Chromium concentration to be used as the background level is:

7.83 mg/kg (Average) X 2 = 15.67 mg/kg

Calculation of Nickel Background Concentration:

GLI-ASU005-70001	**=**	**10.0 U mg/kg(1)**
GLI-ASU016-70001	**=**	**11.0 mg/kg**
GLI-ASU018-70001	**=**	**10.7 UJ mg/kg(1)**
Average	**=**	**7.12 mg/kg**

Nickel concentration to be used as the background level is:

7.12 mg/kg (Average) X 2 = 14.24 mg/kg

Notes:

(1) Non-detect values (U) are treated as one half the detection limit for purposes of the average calculation.

Calculations based on "Data Collection and Evaluation, Human Health Risk Assessment Bulletin No. 2, Supplemental Guidance to RAGs," Office of Technical Services, USEPA Region IV, October 1996.