

APPENDIX N
SEWER LINE VIDEO SURVEY REPORT

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File: 012/CY06

1622.20020905.001



Science Applications International Corporation
An Employee-Owned Company

September 5, 2002

Mr. Glen Beckham
U.S. Army Corps of Engineers, Louisville District
ATTN: CELRL-PM-M
600 Martin Luther King, Jr. Place
P.O. Box 59
Louisville, Kentucky 40202-0059

Reference: Contract No. DACA 62-00-D-0001, Delivery Order No. CY06
Contract No. DACA 27-97-D-0025, Delivery Order No. 0003
Contract No. F44650-99-0007, ECAS 186

Subject: Storm and Sanitary Sewer Video Survey Data for Phase II Remedial Investigations (RIs) at Load Lines 1, 2, 3, 4 and 12

Dear Mr. Beckham:

Enclosed for your records are video tape logs and paper copies of the project logs for the storm and sanitary sewer camera surveys conducted at Load Lines 1, 2, 3, 4, and 12. In addition, data provided for Load Lines 2, 3, and 4 includes a compact disk containing digital photographic records of the camera surveys. These surveys were performed as part of the Phase II RI field investigations at each of the facilities. Transmittal of these data completes a key action item derived from the July 17, 2002, comment response meeting for the draft Phase II RI report for Load Line 1. Science Applications International Corporation appreciates the opportunity to provide these services to the U.S. Corps of Engineers, Louisville District and RVAAP.

If you have questions or comments, please feel free to contact me at (865) 481-4614.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Kevin Jago
Project Manager

cc: John Jent - USACE

cc w/o Enclosure: Ike Diggs - SAIC
Mark Patterson - OSC
Martha Turpin - SAIC
Bob Whelove - OSC
Project File
SAIC CRF

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION	PIPE SIZE	TAPE #
1	08/09/2001	Ravenna Army	Load Line 4	GA 17	East	51.39	12"	003
2	08/09/2001	Ravenna Army	Load Line 4	GA 17	West	51.69	12"	003
3	08/09/2001	Ravenna Army	Load Line 4	GA 17	North	28.93	18"	003
4	08/09/2001	Ravenna Army	Load Line 4	GA 17	South	50.4	18"	003
5	08/09/2001	Ravenna Army	Load Line 4	Mh 10	South	174.76	18"	003
6	08/09/2001	Ravenna Army	Load Line 4	MH 9	South	104.28	18"	003
7	08/09/2001	Ravenna Army	Load Line 4	MH 15	West	175.56	24"	003
8	08/09/2001	Ravenna Army	Load Line 4	MH 11	5	66.5	24"	003
9	08/09/2001	Ravenna Army	Load Line 4	5	7	14.91	24"	003
10	08/09/2001	Ravenna Army	Load Line 4	11	12	100.4	24"	003
11	08/09/2001	Ravenna Army	Load Line 2	D.A. 12	B-3	173.77	15"	004
12	08/09/2001	Ravenna Army	Load Line 2	D.B. 12	B-3	254.49	24"	004
13	08/09/2001	Ravenna Army	Load Line 3	E.H. 5	E.H. 4	117.7	12"	005
14	08/09/2001	Ravenna Army	Load Line 3	E.H. 4	E.H. 3	102.59	12"	005
15	08/09/2001	Ravenna Army	Load Line 3	E.H. 5	E.H. 6	102.79	12"	005
16	08/09/2001	Ravenna Army	Load Line 3	E.H. 6	E.H.7	2.88	12"	005
17	08/09/2001	Ravenna Army	Load Line 3	409	West	46.03	10"	005
18	08/09/2001	Ravenna Army	Load Line 3	409	East	13.72	10"	005
19	08/09/2001	Ravenna Army	Load Line 4	W6	W5	213.33	8"	003
20	08/09/2001	Ravenna Army	Load Line 4	W5	W4	30.52	8"	003
21	08/09/2001	Ravenna Army	Load Line 4	W3-1	North	4	8"	003
22	08/09/2001	Ravenna Army	Load Line 4	E4	Southwest	144.54	8"	003
23	08/09/2001	Ravenna Army	Load Line 4	E4	North	113.03	8"	003
						2138.21 FT		

N-4



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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 57	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

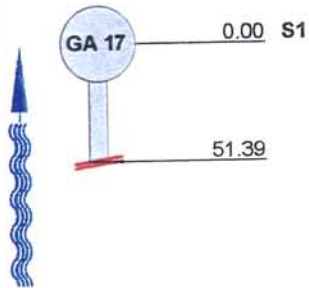
CITY: Ravenna	MAP #1:	TVD LGTH: 51.39 FT
STREET: Load Line 4	MAP #2:	MH: GA 17
LOCALE: EASEMENT	TAPE #: 003	MH: East

INSPECT REASON: OTHER	PIPE SIZE: 12"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START

inspection abandoned, END Seen Enough



51.39 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 58	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

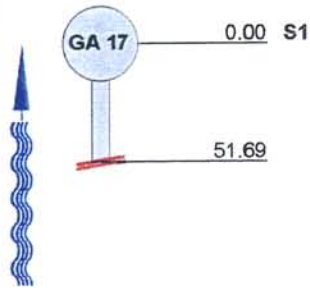
CITY: Ravenna	MAP #1:	TV'D LGTH: 51.69 FT
STREET: Load Line 4	MAP #2:	MH: GA 17
LOCALE: EASEMENT	TAPE #: 003	MH: West

INSPECT REASON: OTHER	PIPE SIZE: 12"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

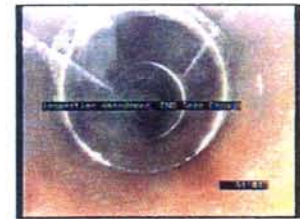
1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START

inspection abandoned, END Seen Enough



51.69 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 59	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

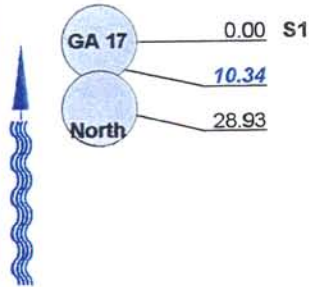
CITY: Ravenna	MAP #1:	TV'D LGTH: 28.93 FT
STREET: Load Line 4	MAP #2:	MH: GA 17
LOCALE: EASEMENT	TAPE #: 003	MH: North

INSPECT REASON: OTHER	PIPE SIZE: 18"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START
Circumferential Crack, from 02 to 04 o'clock
 inspection ends at upstream manhole, END



10.34 FT //



28.93 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 60	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

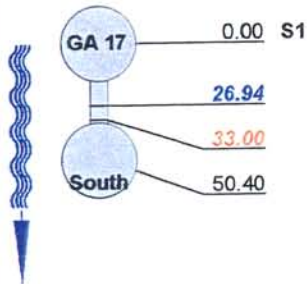
CITY: Ravenna	MAP #1:	TV'D LGTH: 50.4 FT
STREET: Load Line 4	MAP #2:	MH: GA 17
LOCALE: EASEMENT	TAPE #: 003	MH: South

INSPECT REASON: OTHER	PIPE SIZE: 18"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at upstream manhole, START
Longitudinal Crack, at 03 o'clock
Multiple Fractures from 03 to 09 o'clock
 inspection ends at downstream manhole, END MH 10



26.94 FT //



33 FT //



50.4 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 61	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

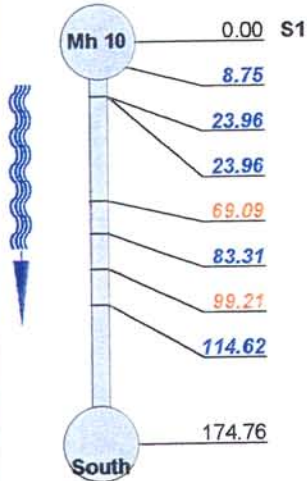
CITY: Ravenna	MAP #1:	TVD LGTH: 174.76 FT
STREET: Load Line 4	MAP #2:	MH: Mh 10
LOCALE: EASEMENT	TAPE #: 003	MH: South

INSPECT REASON: OTHER	PIPE SIZE: 18"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at upstream manhole, START

Circumferential Crack, from 09 to 12 o'clock

Longitudinal Crack, at 06 o'clock

Longitudinal Crack, at 10 o'clock

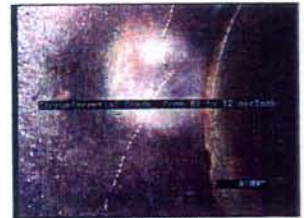
Multiple Fractures from 09 to 11 o'clock

Multiple Cracks, from 06 to 12 o'clock

Hole in pipe at 09 o'clock

Multiple Cracks, from 12 to 06 o'clock

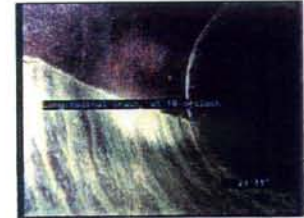
inspection ends at downstream manhole, END



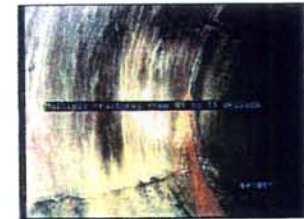
8.75 FT //



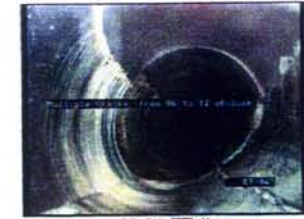
23.96 FT //



23.96 FT //



69.09 FT //



83.31 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 62	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

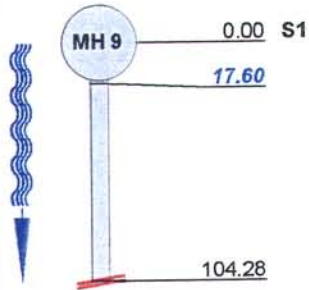
CITY: Ravenna	MAP #1:	TVD LGTH: 104.28 FT
STREET: Load Line 4	MAP #2:	MH: MH 9
LOCALE: EASEMENT	TAPE #: 003	MH: South

INSPECT REASON: OTHER	PIPE SIZE: 18"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at upstream manhole, START
Multiple Cracks, from 09 to 03 o'clock



17.6 FT //

inspection abandoned, END Too slick for camera to travel!!!!



104.28 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 63	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 160

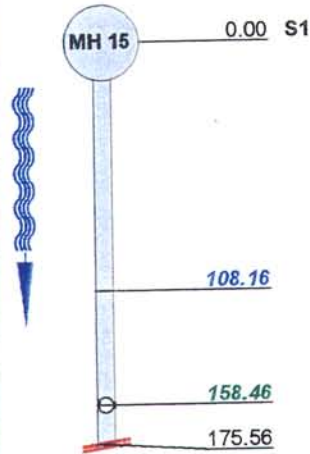
CITY: Ravenna	MAP #1:	TVD LGTH: 175.56 FT
STREET: Load Line 4	MAP #2:	MH: MH 15
LOCALE: EASEMENT	TAPE #: 003	MH: West

INSPECT REASON: OTHER	PIPE SIZE: 24"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION

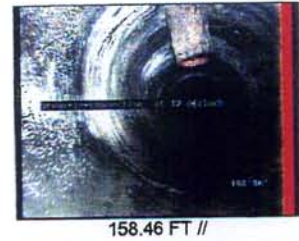
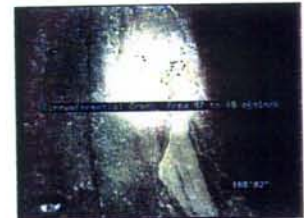


inspection begins at upstream manhole, START

Circumferential Crack, from 07 to 10 o'clock

break-in-connection, at 12 o'clock

inspection abandoned, END Seen Enough





INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 64	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

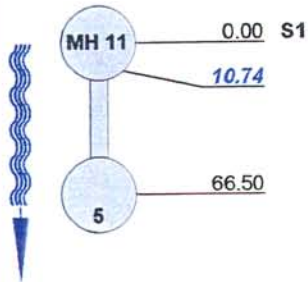
CITY: Ravenna	MAP #1:	TVD LGTH: 66.5 FT
STREET: Load Line 4	MAP #2:	MH: MH 11
LOCALE: EASEMENT	TAPE #: 003	MH: 5

INSPECT REASON: OTHER	PIPE SIZE: 24"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START
Longitudinal Crack, at 06 o'clock



10.74 FT //

inspection ends at upstream manhole, END



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 65	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

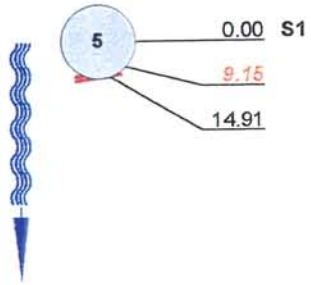
CITY: Ravenna	MAP #1:	TV'D LGTH: 14.91 FT
STREET: Load Line 4	MAP #2:	MH: 5
LOCALE: EASEMENT	TAPE #: 003	MH: 7

INSPECT REASON: OTHER	PIPE SIZE: 24"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START
debris
 inspection abandoned, END Debris too high



9.15 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 66	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 470

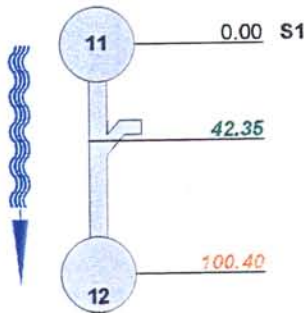
CITY: Ravenna	MAP #1:	TVD LGTH: 100.4 FT
STREET: Load Line 4	MAP #2:	MH: 11
LOCALE: EASEMENT	TAPE #: 003	MH: 12

INSPECT REASON: OTHER	PIPE SIZE: 24"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

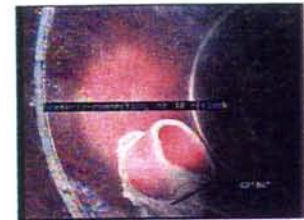
OBSERVATION



inspection begins at upstream manhole, START

break-in-connection, at 10 o'clock

debris Large rock!!!!!!1



42.35 FT //



100.4 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 75	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 1080

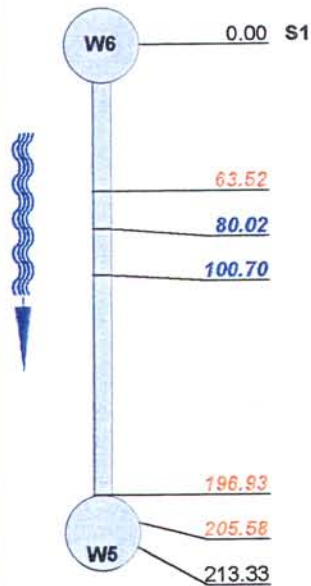
CITY: Ravenna	MAP #1:	TV'D LGTH: 213.33 FT
STREET: Load Line 4	MAP #2:	MH: W6
LOCALE: EASEMENT	TAPE #: 003	MH: W5

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION

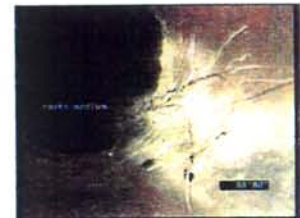


inspection begins at upstream manhole, START

debris
roots medium
roots medium

scale/mineral deposits heavy from 08 to 09 o'clock
debris

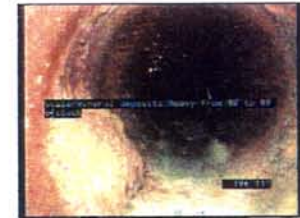
inspection ends at downstream manhole, END



80.02 FT //



100.7 FT //



196.93 FT //



INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 76	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 130

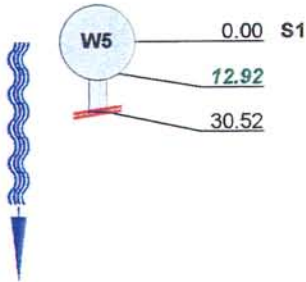
CITY: Ravenna	MAP #1:	TVD LGTH: 30.52 FT
STREET: Load Line 4	MAP #2:	MH: W5
LOCALE: EASEMENT	TAPE #: 003	MH: W4

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at upstream manhole, START
corrosion light
 camera blocked, inspection abandoned, END could not pass heavy deposits



12.92 FT //



30.52 FT //



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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 77	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

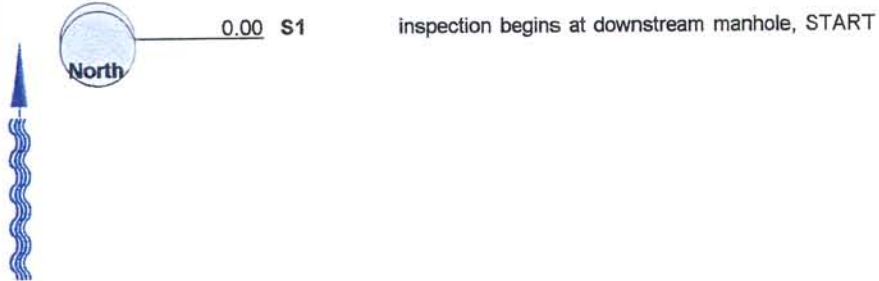
CITY: Ravenna	MAP #1:	TVD LGTH: 4 FT
STREET: Load Line 4	MAP #2:	MH: W3-1
LOCALE: EASEMENT	TAPE #: 003	MH: North

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION





INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 78	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 830

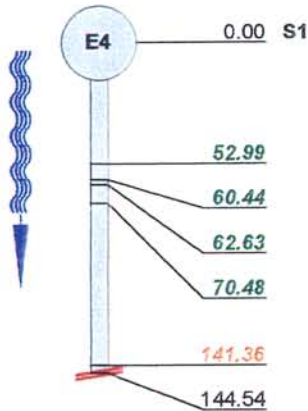
CITY: Ravenna	MAP #1:	TV/D LGTH: 144.54 FT
STREET: Load Line 4	MAP #2:	MH: E4
LOCALE: EASEMENT	TAPE #: 003	MH: Southwest

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at upstream manhole, START

roots light

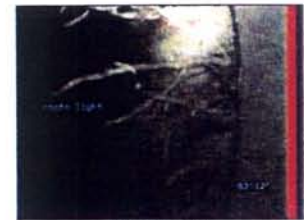
roots light

roots light

roots light

debris

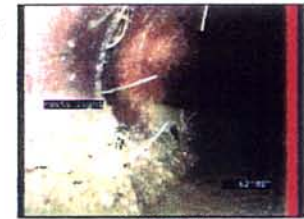
camera blocked, inspection abandoned, END Can't pass heavy mud!



52.99 FT //



60.44 FT //



62.63 FT //



70.48 FT //



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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 79	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 620

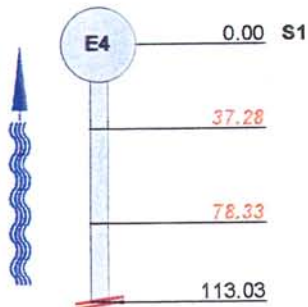
CITY: Ravenna	MAP #1:	TV/D LGTH: 113.03 FT
STREET: Load Line 4	MAP #2:	MH: E4
LOCALE: EASEMENT	TAPE #: 003	MH: North

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION

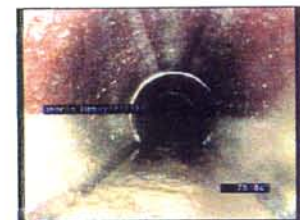


inspection begins at downstream manhole, START

debris

debris Heavy!!!!!!

camera blocked, inspection abandoned, END Debris too heavy to pass!!!!



78.33 FT //

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION	PIPE SIZE	TAPE #
1	08/08/2001	Ravenna Army	Load Line 3	E.B. 20	North	53.08	12"	002
2	08/08/2001	Ravenna Army	Load Line 3	E.B. 20	East	27.34	12"	002
3	08/08/2001	Ravenna Army	Load Line 3	E.B 21	North	50.3	12"	002
4	08/08/2001	Ravenna Army	Load Line 3	E.B. 21	South	8.45	12"	002
5	08/08/2001	Ravenna Army	Load Line 3	E.B. 21	East	53.48	12"	002
6	08/08/2001	Ravenna Army	Load Line 3	E.H. 13	North	52.99	12"	002
7	08/08/2001	Ravenna Army	Load Line 3	E.H 13	South	52.19	12"	002
8	08/08/2001	Ravenna Army	Load Line 3	E.H. 13	East	51.49	12"	002
9	08/08/2001	Ravenna Army	Load Line 3	E.H. 13	East	9.64	24"	002
10	08/08/2001	Ravenna Army	Load Line 3	E.H 13	West	12.43	24"	002
11	08/08/2001	Ravenna Army	Load Line 3	E.B. 4	North	8.65	12"	002
12	08/08/2001	Ravenna Army	Load Line 3	E.B. 4	South	52.69	12"	002
13	08/08/2001	Ravenna Army	Load Line 3	419	South	54.87	8"	002
14	08/08/2001	Ravenna Army	Load Line 3	419	East	51.39	8"	002
15	08/08/2001	Ravenna Army	Load Line 3	424	West	39.47	8"	002
16	08/08/2001	Ravenna Army	Load Line 3	424	South	51.39	8"	002
17	08/08/2001	Ravenna Army	Load Line 3	404	West	51.79	10"	002
18	08/08/2001	Ravenna Army	Load Line 3	404	East	51.2	10"	002
19	08/08/2001	Ravenna Army	Load Line 3	427	West	177.05	8"	002
20	08/08/2001	Ravenna Army	Load Line 3	427	North	26.44	8"	002
21	08/08/2001	Ravenna Army	Load Line 4	E2	Northeast	1	8"	003
22	08/08/2001	Ravenna Army	Load Line 4	E6	South	51	8"	003
23	08/08/2001	Ravenna Army	Load Line 4	E6	East	10.44	8"	003
24	08/08/2001	Ravenna Army	Load Line 4	C/B 13	West	25.85	8"	003
25	08/08/2001	Ravenna Army	Load Line 4	C/B 13	East	52.19	8"	003
						1076.81 FT		

N-20



INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 52	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

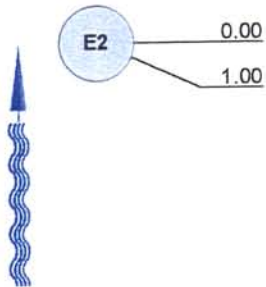
CITY: Ravenna	MAP #1:	TV'D LGTH: 1 FT
STREET: Load Line 4	MAP #2:	MH: E2
LOCALE: EASEMENT	TAPE #: 003	MH: Northeast

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: WASTEWATER	MATERIAL: STEEL JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at upstream manhole
 inspection abandoned, END too dirty to TV



INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 53	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 360

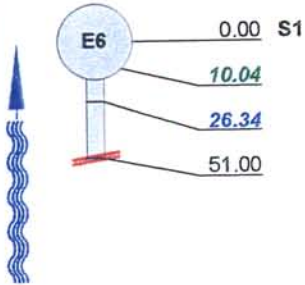
CITY: Ravenna	MAP #1:	TV'D LGTH: 51 FT
STREET: Load Line 4	MAP #2:	MH: E6
LOCALE: EASEMENT	TAPE #: 003	MH: South

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: WASTEWATER	MATERIAL: STEEL JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START
roots light
roots medium
 inspection abandoned, END seen enough





INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 54	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

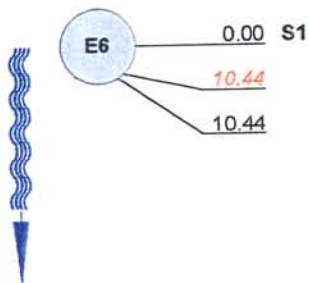
CITY: Ravenna	MAP #1:	TVD LGTH: 10.44 FT
STREET: Load Line 4	MAP #2:	MH: E6
LOCALE: EASEMENT	TAPE #: 003	MH: East

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: WASTEWATER	MATERIAL: STEEL JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at upstream manhole, START

debris Heavy!!!!

camera blocked, inspection abandoned Heavy debris-Could not pass!!!!



10.44 FT //



INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 55	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

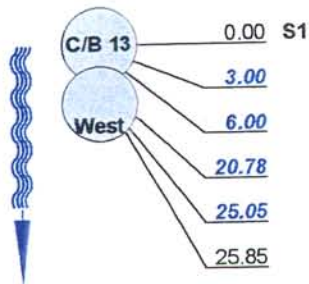
CITY: Ravenna	MAP #1:	TV'D LGTH: 25.85 FT
STREET: Load Line 4	MAP #2:	MH: C/B 13
LOCALE: EASEMENT	TAPE #: 003	MH: West

INSPECT REASON: OTHER	PIPE SIZE: 8"
SECTION TYPE: STORMWATER	MATERIAL: VCP JT LGTH:
AREA: Ravenna Army Ammunition Plant	LINING:
	RSRVD:

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START
Longitudinal Crack, at 10 o'clock
Longitudinal Crack, at 02 o'clock
Longitudinal Crack, at 03 o'clock
Longitudinal Crack, at 06 o'clock
 inspection ends at downstream manhole, END





INSPECTION REPORT

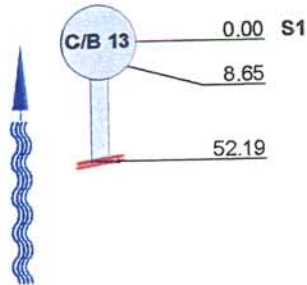
DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 56	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

CITY: Ravenna	MAP #1:	TVD LGTH: 52.19 FT
STREET: Load Line 4	MAP #2:	MH: C/B 13
LOCALE: EASEMENT	TAPE #: 003	MH: East
INSPECT REASON: OTHER	PIPE SIZE: 8"	JT LGTH:
SECTION TYPE: STORMWATER	MATERIAL: VCP	
AREA: Ravenna Army Ammunition Plant	LINING:	
	RSRVD:	

REMARK:

1:1000 POSITION

OBSERVATION



inspection begins at downstream manhole, START
 pipe material changes at this point to STEEL

inspection abandoned, END seen enough



8.65 FT //

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