*38IHSSF3005*

DocumentID NONCD0002832

Site Name MARY CHAPPEL RESIDENCE

DocumentType Site Assessment Rpt (SAR)

RptSegment 2

DocDate 11/11/2010

DocRcvd 11/12/2010

Box SF3005

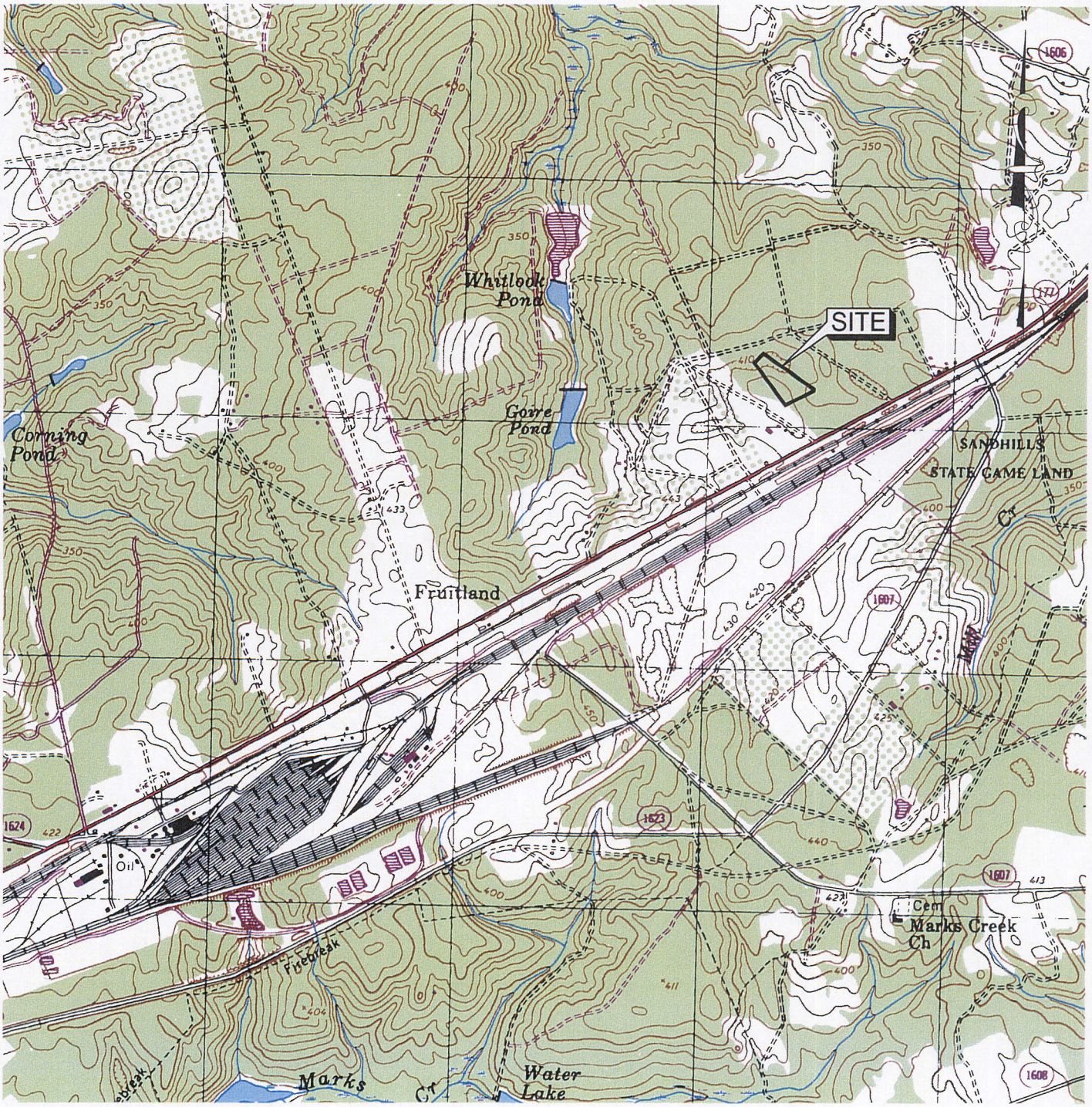
AccessLevel Public

Division Waste Management

Section Superfund

Program IHS (IHS)

DocCat Facility




GRAPHIC SCALE

1000 0 500 1000 2000

( IN FEET )

TOPO SOURCE: NCGS DRG
HAMLET NC, DATE 2002, CONTOUR INTERVAL 10 FOOT

A-1974

| | |
|---|---|
| SCALE: | 1" = 2000' |
| DATE: | NOV. 2010 |
| DRAWN BY: | BTR |
| PROJECT NO: | 1054-10-2003 |

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# VICINITY MAP

MARY CHAPPELL PROPERTY
1061 HWY 177 N
HAMLET, NORTH CAROLINA

FIGURE NO.

1

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S:\PROJECTS\2_IHSB Orphan Priority Sites 2010\IHSB Contract Projects\1054-10-2003 Chappel_Hamlet_NONCD0002832\CAD\B1390.dwg, Layout1, 11/8/2010 12:46:22 PM, 1:1

FIGURE NO. 2

SITE MAP

MARY CHAPPELL PROPERTY - 1061 HWY 177 N
HAMLET, NORTH CAROLINA

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| | |
|---|---|
| SCALE: 1' = 60' | DATE: NOV. 2010 |
| PROJECT NUMBER: 1054-10-2003 | DRAWN BY: BTR |
| DRAWING NUMBER: B-1390 | CHECKED BY: |

S:\PROJECTS\2_IHSB Orphan Priority Sites 2010\IIHSB Contract Projects\1054-10-2003 Chappel_Hamlet_NONCD0002832\CAD\B1391.dwg, Layout1, 11/9/2010 2:14:23 PM, 1:1

FIGURE NO. 3

VOC CONSTITUENTS IN SOIL
SEPTEMBER 2010

MARY CHAPPELL PROPERTY - 1061 HWY 177 N
HAMLET, NORTH CAROLINA

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| | |
|---|---|
| SCALE: 1' = 60' | DATE: NOV. 2010 |
| PROJECT NUMBER: 1054-10-2003 | DRAWN BY: BTR |
| DRAWING NUMBER: B-1391 | CHECKED BY: |

GP-1 17'-21' BGS mg/Kg
Di-n-butylphthalate 0.041J

GP-1
GP-2
MARY CHAPPELL WELL (WSW-1)
GP-3
GP-6
GP-7
GP-4
GP-5
HWY 177 N

## LEGEND

- MONITOR WELL LOCATIONS
- SOIL BORING LOCATION
- (0.041J) CONSTITUENT CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg)

NOTE: REFER TO TABLE 2 FOR DETAILED SAMPLE DATA AND SAMPLE INTERVALS.

GRAPHIC SCALE

60 0 30 60

( IN FEET )

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SCALE: 1" = 60'
DATE: NOV. 2010
PROJECT NUMBER: 1054-10-2003
DRAWN BY: BTR
DRAWING NUMBER: B-1392
CHECKED BY:

# SVOC CONSTITUENTS IN SOIL SEPTEMBER 2010

MARY CHAPPELL PROPERTY - 1061 HWY 177 N
HAMLET, NORTH CAROLINA

FIGURE NO.
4

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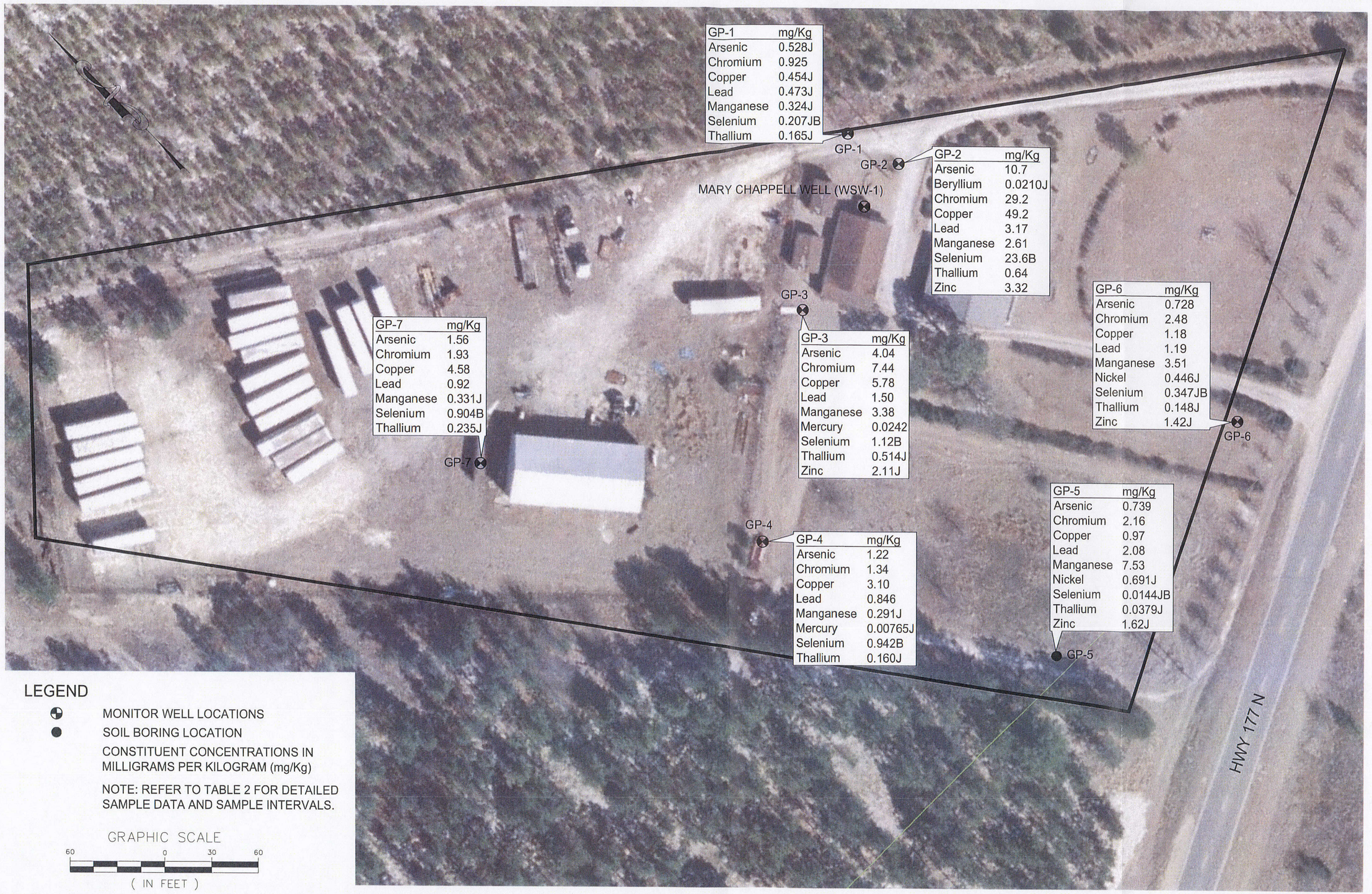


LEGEND

- MONITOR WELL LOCATIONS
- SOIL BORING LOCATION

CONSTITUENT CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/Kg)

NOTE: REFER TO TABLE 2 FOR DETAILED SAMPLE DATA AND SAMPLE INTERVALS.

GRAPHIC SCALE

60 0 30 60

( IN FEET )

SCALE: 1" = 60'
DATE: NOV. 2010
PROJECT NUMBER: 1054-10-2003
DRAWN BY: BTR
DRAWING NUMBER: B-1393
CHECKED BY:

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METALS IN SOIL
SEPTEMBER 2010

MARY CHAPPELL PROPERTY - 1061 HWY 177 N
HAMLET, NORTH CAROLINA

FIGURE NO.
5

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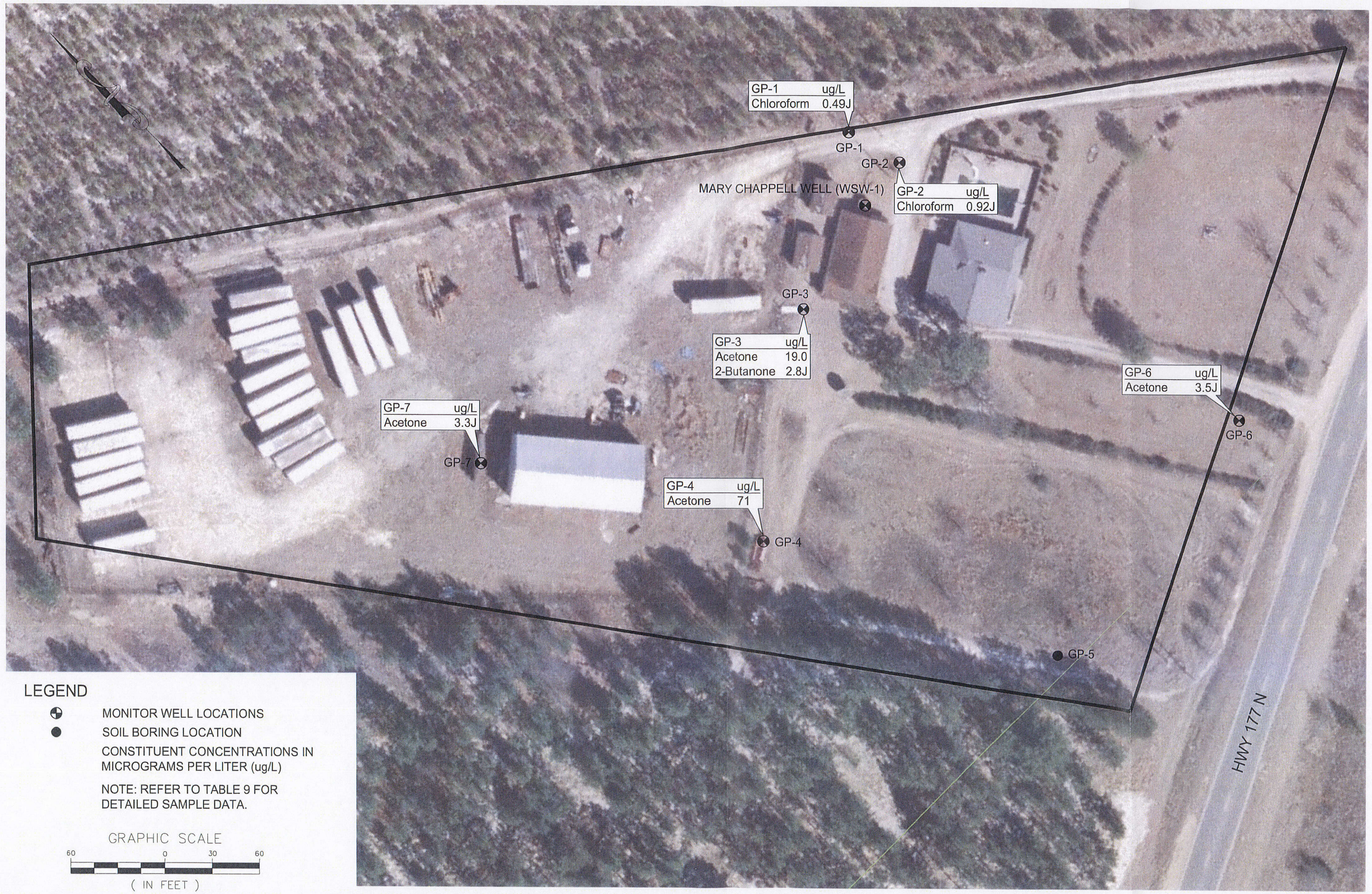
| | | | | |
|---|---|---|---|---|
| FIGURE NO. 6 | GROUNDWATER CONTOUR MAP SEPTEMBER 2010<br>MARY CHAPPELL PROPERTY - 1061 HWY 177 N<br>HAMLET, NORTH CAROLINA | S&ME<br>WWW.SMEINC.COM<br>NC ENGINEER LICENSE #F-0176<br>3201 SPRING FOREST RD, RALEIGH, NC 27616 | SCALE: 1' = 60'<br>PROJECT NUMBER: 1054-10-2003<br>DRAWING NUMBER: B-1394 | DATE: NOV. 2010<br>DRAWN BY: BTR<br>CHECKED BY: |




LEGEND

- MONITOR WELL LOCATIONS
- SOIL BORING LOCATION

CONSTITUENT CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L)

NOTE: REFER TO TABLE 9 FOR DETAILED SAMPLE DATA.

GRAPHIC SCALE

60 0 30 60

( IN FEET )

SCALE: 1" = 60'
DATE: NOV. 2010
PROJECT NUMBER: 1054-10-2003
DRAWN BY: BTR
DRAWING NUMBER: B-1395
CHECKED BY:

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# SHALLOW GROUNDWATER CONSTITUENTS SEPTEMBER 2010

MARY CHAPPELL PROPERTY - 1061 HWY 177 N
HAMLET, NORTH CAROLINA

FIGURE NO.
7

S:\PROJECTS\2_IHSB Orphan Priority Sites 2010\IHSB Contract Projects\1054-10-2003 Chappel_Hamlet_NONCD0002832\CAD\B1395.dwg, Layout1, 11/8/2010 2:17:25 PM, 1:1

| MARY L. CHAPPELL | WSW-1 | ug/L |
|---|---|---|
| VOCS BY EPA 8260B | CHLOROMETHANE | 0.66J |
| | NAPHTHALENE | 2.8 |
| | TRICHLOROETHENE | 34 |
| SVOCs BY EPA 8270D | ND | |
| METALS BY EPA 6010C | BERYLLIUM | 0.276J |
| | CADMIUM | 0.37J |
| | CHROMIUM | 1.86JB |
| | COPPER | 108 |
| | LEAD | 67.7 |
| | MANGANESE | 4.30 |
| | THALLIUM | 0.612JB |
| | ZINC | 32.0 |

| WILLIAM BROWN | WSW-5 | ug/L |
|---|---|---|
| VOCS BY EPA 8260B | TRICHLOROETHENE | 1.2 |
| SVOCs BY EPA 8270D | ND | |
| METALS BY EPA 6010C | ARSENIC | 3.43J |
| | COPPER | 14.3 |
| | THALLIUM | 0.402JB |
| | ZINC | 5.37J |

| MARK CHAPPELL | WSW-2 | ug/L |
|---|---|---|
| VOCs BY EPA 8260B | ND | |
| SVOCs BY EPA 8270D | ND | |
| METALS BY EPA 6010C | COPPER | 99.4 |
| | LEAD | 8.28J |
| | MANGANESE | 4.69J |
| | THALLIUM | 0.48JB |
| | ZINC | 26.3 |

| HERMAN RUSSELL | WSW-4 | ug/L |
|---|---|---|
| VOCs BY EPA 8260B | ND | |
| SVOCs BY EPA 8270D | BIS (2-ENP) | 1.8J |
| METALS BY EPA 6010C | COPPER | 15 |
| | THALLIUM | 0.918JB |
| | SELENIUM | 3.91J |
| | SILVER | 1.91J |
| | ZINC | 8.40J |

LEGEND

APPROXIMATE WATER SUPPLY WELL LOCATION

GRAPHIC SCALE

200 0 100 200

( IN FEET )

DATE: NOV. 2010

SCALE: 1" = 200'

DRAWN BY: BTR

PROJECT NUMBER: 1054-10-2003

CHECKED BY:

DRAWING NUMBER: B-1396

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WATER SUPPLY WELL
GROUNDWATER CONSTITUENTS

MARY CHAPPELL PROPERTY - 1061 HWY 177 N
HAMLET, NORTH CAROLINA

FIGURE NO.

8

S:\PROJECTS\2_HSB Orphan Priority Sites 2010\IHSB Contract Projects\1054-10-2003 Chappel_Hamlet_NONCD0002832\CAD\B1396.dwg, Layout1, 11/8/2010 1:57:09 PM, 1:1

GRAPHIC SCALE

200 0 100 200

( IN FEET )

| William Brown | 115 Fruitland | PIN 840300707057 |
|---|---|---|
| 1.2 ppb trichloroethene | | 9/18/2008 |
| 0.6 ppb MTBE | | 12/17/2008 |
| 2.4 ppb MTBE | | 9/11/2008 |
| Trace - Isopropyl Ether | | 9/11/2008 |

| Ken & Marilyn Steen | 109 George Dawkins Dr | PIN 840300605211 |
|---|---|---|
| 1.4 ppb trichloroethene | | 2/17/2010 |
| 1.6 ppb trichloroethene | | 9/22/2009 |
| 1.2 ppb trichloroethene | | 4/2/2009 |
| 3.3 ppb tetrahydrofuran | | 10/7/2008 |
| 1.6 ppb trichloroethene | | 10/7/2008 |

| John James | 1153 N NC Hwy 177 | PIN 841300016228 |
|---|---|---|
| ND - VOCs | | 10/7/2008 |

| Rose Ward | 1147 Hw 177 North | PIN 841300015228 |
|---|---|---|
| ND - VOCs | | 3/19/2009 |

| Mary Chappell | 1061 N Hwy 177 | PIN 840300804278 |
|---|---|---|
| 47.8 ppb trichloroethene | | 9/22/2009 |
| 25.7 ppb trichloroethene | | 4/22/2009 |
| 35.3 ppb trichloroethene | | 3/23/2009 |
| 70.6 ppb trichloroethene | | 1/28/2009 |
| 0.68 ppm Lead | | 11/20/2008 |
| 4.6 pH | | 11/20/2008 |
| 0.091 ppm Lead | | 10/22/2008 |
| 3.9 pH | | 10/22/2008 |
| 36 ppb trichloroethene | | 8/28/2008 |

| Mark Chappell | 1039 N. NC Hwy 177 | PIN 840200892914 |
|---|---|---|
| ND - VOCs | | 3/29/2010 |
| ND - VOCs | | 9/22/2009 |
| ND - VOCs | | 3/30/2009 |
| ND - VOCs | | 8/29/2008 |
| 4 pH | | 10/22/2008 |
| <0.005 Lead | | 10/22/2008 |

| Herman Russell | 127 Fruitland | PIN 840200799739 |
|---|---|---|
| 0.3 ppb trichloroethene | | 10/7/2008 |

| Gwendolyn Mason | 196 George Dawkins Dr | PIN 840200698297 |
|---|---|---|
| 1.0 ppb trichloroethene | | 2/17/2010 |
| 1.1 ppb trichloroethene | | 9/22/2009 |
| 0.9 ppb trichloroethene | | 4/8/2009 |
| 2.6 ppb trichloroethene | | 10/27/2008 |

| James Williams | 975 Hwy 177 | PIN 840200696143 |
|---|---|---|
| ND - VOCs | | 10/27/2008 |

| Anna Harrison | 961 NC Hwy 177 | PIN 840200693023 |
|---|---|---|
| 0.12 ppb trichloroethene | | 9/17/2008 |
| 0.26 ppb p-dichlorobenzene (1,4) | | 9/17/2008 |
| 0.32 ppb naphthalene | | 9/17/2008 |
| <0.005 Lead | | 10/22/2008 |
| 4.2 pH | | 10/22/2008 |

| Prentice Dawkins | 109 George Dawkins | PIN 840200588766 |
|---|---|---|
| ND - VOCs | | 10/27/2008 |

DATE: NOV. 2010
DRAWN BY: BTR
CHECKED BY:
SCALE: 1" = 200'
PROJECT NUMBER: 1054-10-2003
DRAWING NUMBER: B-1400

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# HISTORICAL WATER SUPPLY WELL CONSTITUENTS

MARY CHAPPELL PROPERTY - 1061 HWY 177 N
HAMLET, NORTH CAROLINA

FIGURE NO.
9

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1 View to the southwest of Mary Chappell site with supply well WSW-1 on the right.

2 View to the west from in front of supply well of buildings on the site.

3 View water supply well WSW-1 on Mary Chappell site.

4 View of boring GP-3 location marked for utility clearance (orange flag).

| S&ME | Limited Soil and Groundwater Assessment Report<br>Mary Chappell Site – Hamlet, North Carolina | S&ME Project No. 1054-09-2003 | |
|---|---|---|---|
| | | Taken by: GP / DW | Date Taken: 9/9-13/2010 |

5 View to the west of boring GP-4 location.

6 View to the south of boring GP-5 location marked for utility clearance.

7 View to the northeast of boring GP-6 location (orange flag) marked for utility clearance.

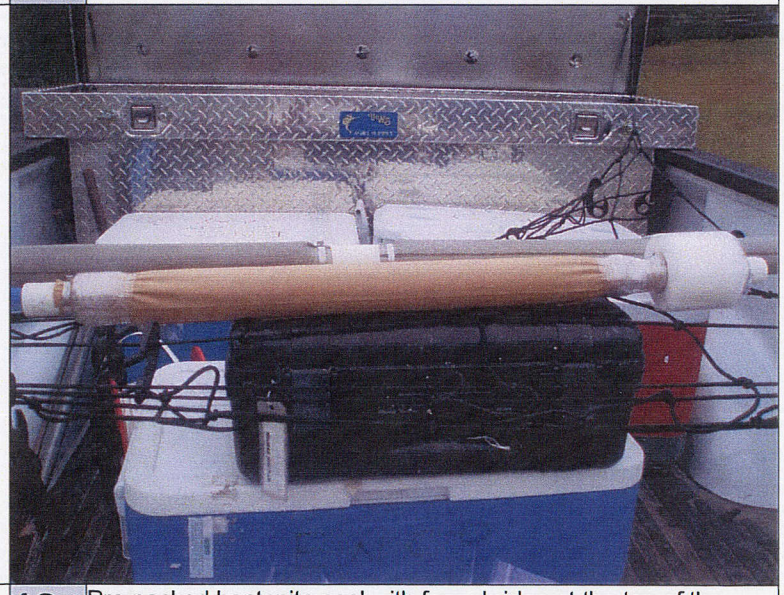
8 View to the northeast of the water supply well WSW-2 on the Mark Chappell property.

| S&ME | Limited Soil and Groundwater Assessment Report<br>Mary Chappell Site – Hamlet, North Carolina | S&ME Project No. 1054-09-2003 | |
|---|---|---|---|
| | | Taken by: GP / DW | Date Taken: 9/9-13/2010 |

9 View to the southwest of the William Brown water supply well WSW-5 at 115 Fruitland.

10 View to the northwest of the Geoprobe set up on GP-6.

11 View of pre-packed screen and gravel / filter.



12 Pre-packed bentonite seal with foam bridge at the top of the seal.

13 View to the northwest of completed well no. GP-2 .

14 Westward view of completed well GP-1.

15 View to the southeast of completed well GP 7 next to pallet of discarded containers with unknown contents.

16 View to the west of completed well GP-3.