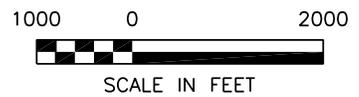


SOURCE:
 U.S.G.S. 7.5 Min. Quadrangle, ST. MARIES, IDAHO.



IDAHO



ST. MARIES CREOSOTE SITE
 ST. MARIES, IDAHO

MARB1-15656-210

SITE VICINITY MAP



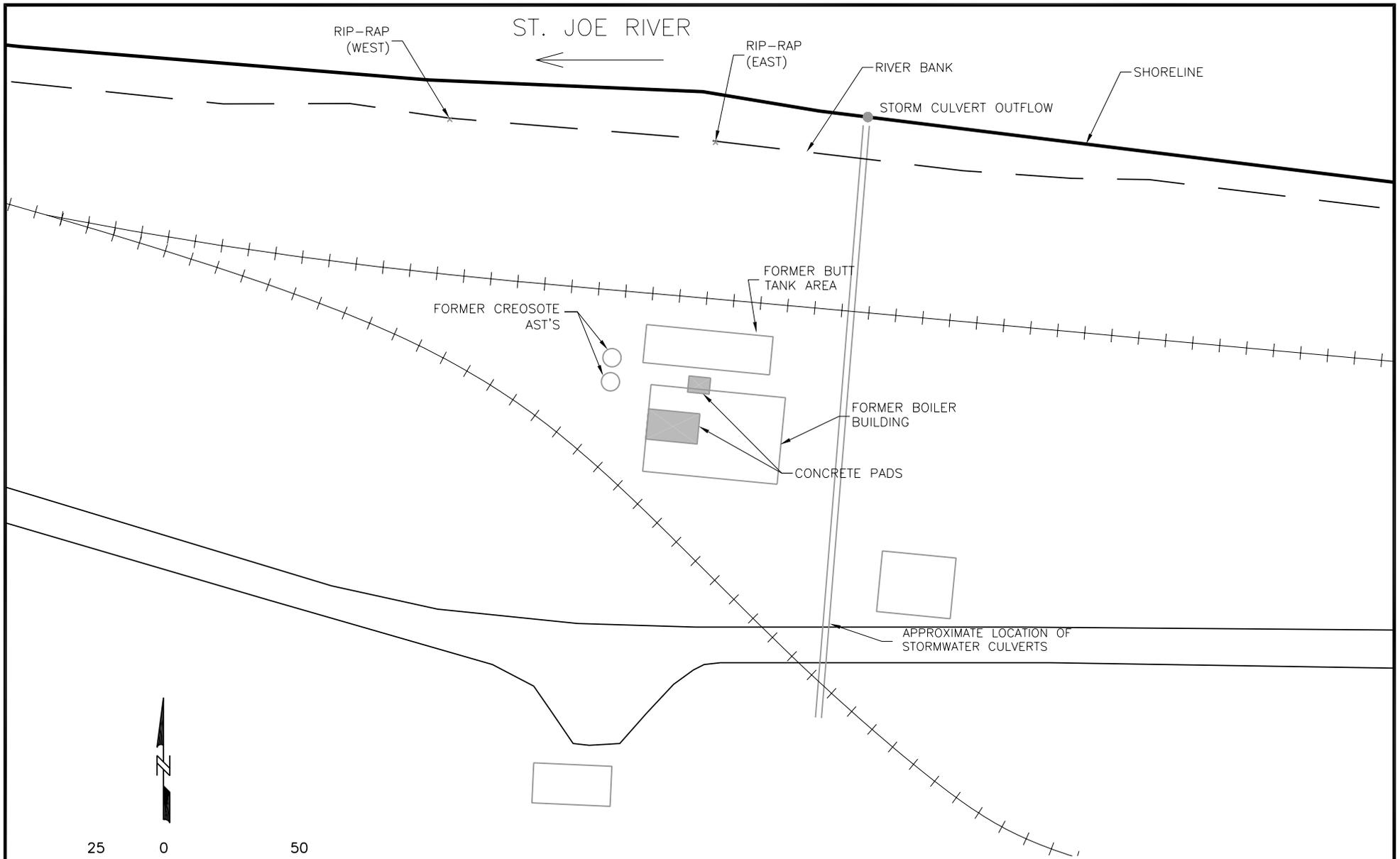
DATE: 12/05/01

DRWN: A.S./UKN

FILE: 15656S004

LAYOUT: ANSI_AVI-CP

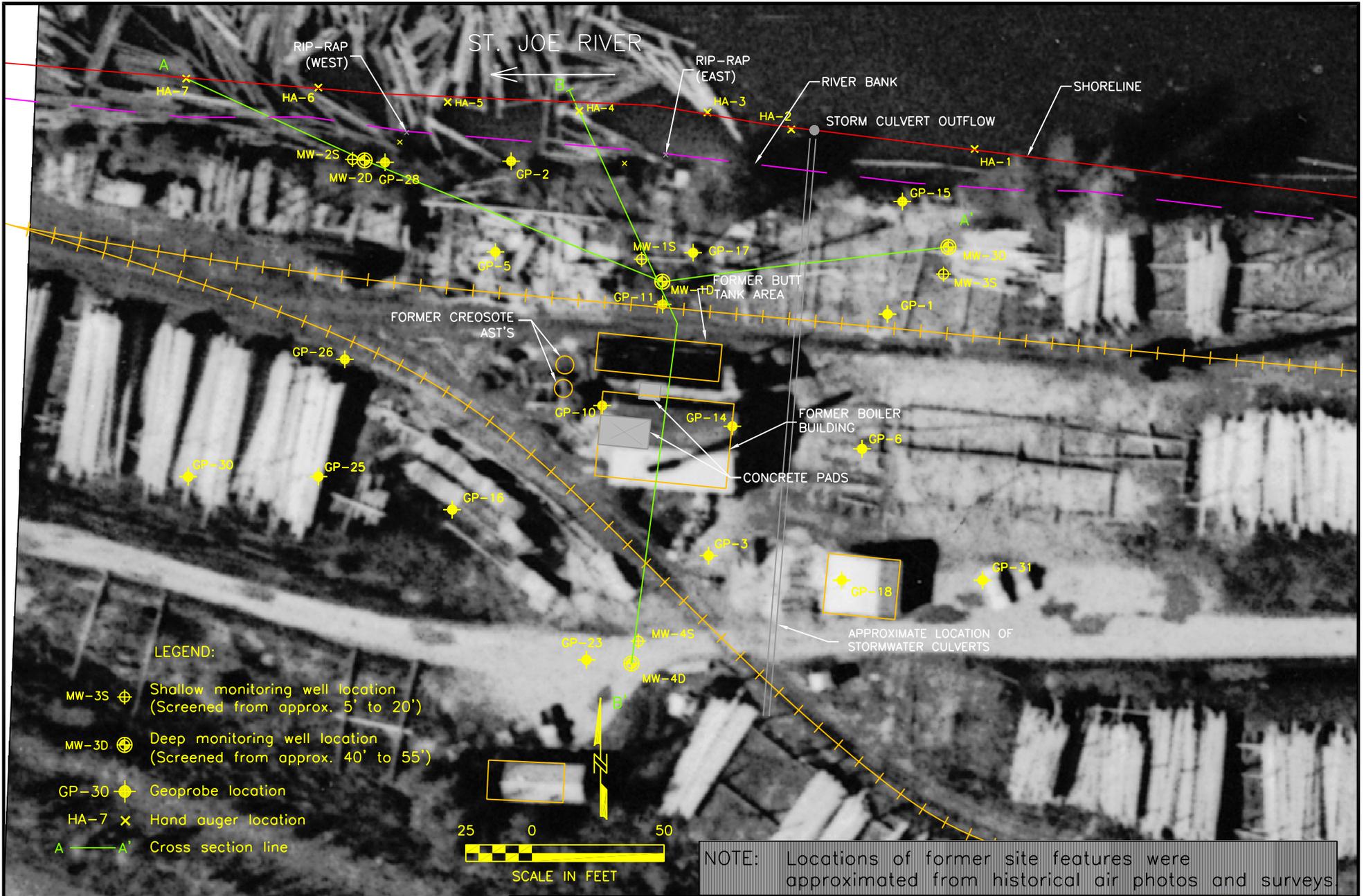
FIGURE 1-1



NOTE: Locations of former site features were approximated from historical air photos and surveys.

ST. MARIES FORMER CREOSOTE SITE RI/FS ST. MARIES, IDAHO MARB1-15656-210			SITE PLAN		
DATE: 3/8/02	DRWN: A.S./SEA	FILE: 15656S047	LAYOUT: ANSI_BI-CP	FIGURE 2-1	





ST. MARIES CREOSOTE SITE
 ST. MARIES, IDAHO
 MARB1015656-210

BORING AND CROSS SECTION LOCATIONS

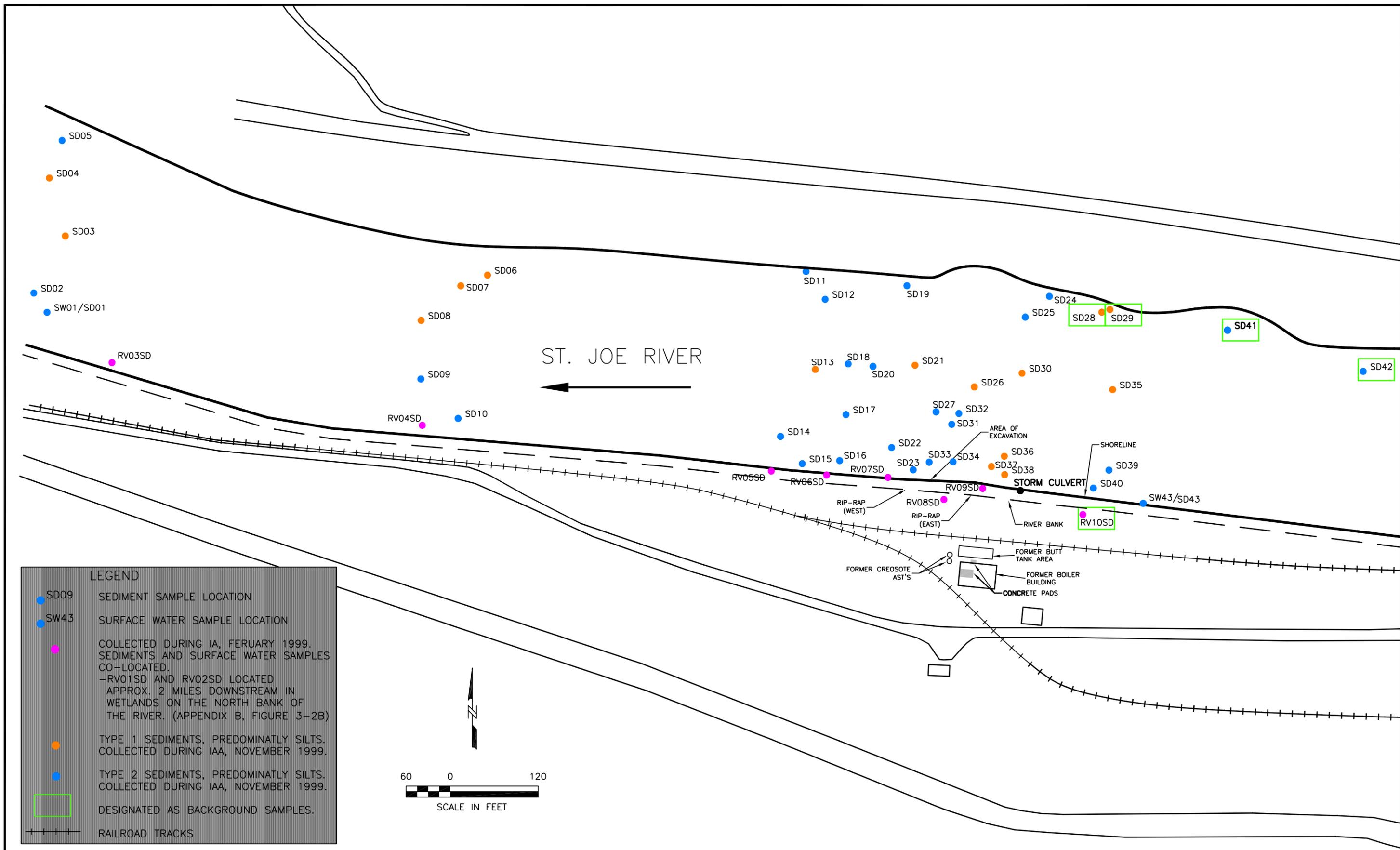
DATE: 3/5/02

DRWN: A.S./SEA

FILE: 15656S045

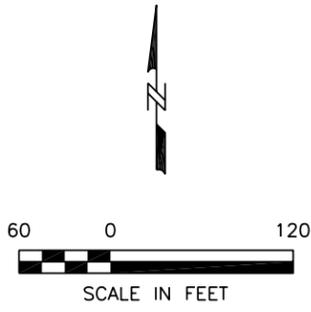
LAYOUT: 1960 OLD AERIAL

FIGURE 3-1

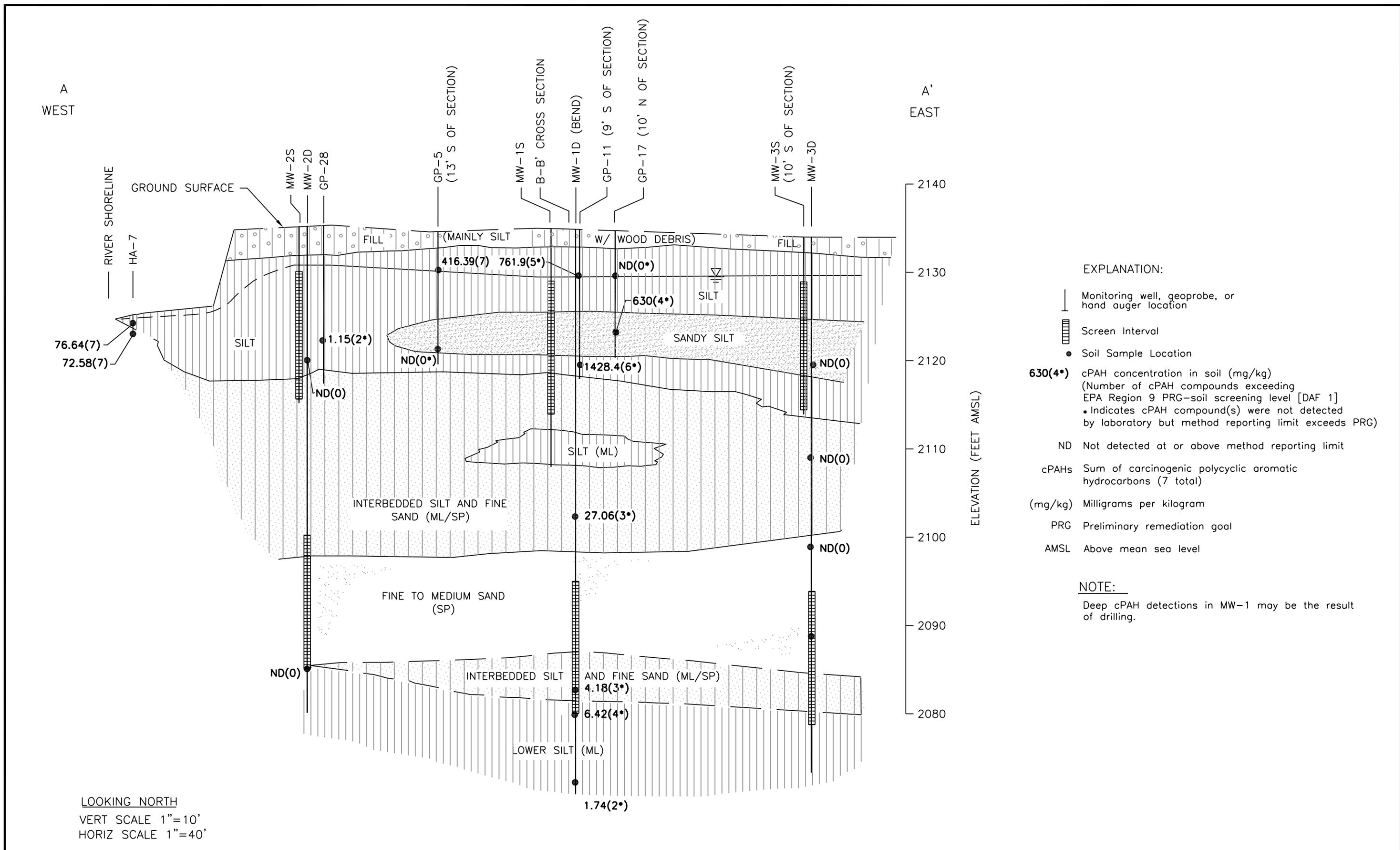


LEGEND

- SD09 SEDIMENT SAMPLE LOCATION
- SW43 SURFACE WATER SAMPLE LOCATION
- COLLECTED DURING IA, FERUARY 1999. SEDIMENTS AND SURFACE WATER SAMPLES CO-LOCATED.
-RV01SD AND RV02SD LOCATED APPROX. 2 MILES DOWNSTREAM IN WETLANDS ON THE NORTH BANK OF THE RIVER. (APPENDIX B, FIGURE 3-2B)
- TYPE 1 SEDIMENTS, PREDOMINATLY SILTS. COLLECTED DURING IAA, NOVEMBER 1999.
- TYPE 2 SEDIMENTS, PREDOMINATLY SILTS. COLLECTED DURING IAA, NOVEMBER 1999.
- DESIGNATED AS BACKGROUND SAMPLES.
- RAILROAD TRACKS



ST. MARIES CREOSOTE SITE ST. MARIES, IDAHO MARB1-15731-210		SEDIMENT AND SURFACE WATER SAMPLING LOCATIONS	
DATE: 2/21/02	DRWN: A.S./SEA	FILE: 15656S038	LAYOUT: ANSL_B
			FIGURE 3-2



EXPLANATION:

- Monitoring well, geoprobe, or hand auger location
- Screen Interval
- Soil Sample Location
- 630(4*)** cPAH concentration in soil (mg/kg)
(Number of cPAH compounds exceeding EPA Region 9 PRG-soil screening level [DAF 1])
* Indicates cPAH compound(s) were not detected by laboratory but method reporting limit exceeds PRG)
- ND Not detected at or above method reporting limit
- cPAHs Sum of carcinogenic polycyclic aromatic hydrocarbons (7 total)
- (mg/kg) Milligrams per kilogram
- PRG Preliminary remediation goal
- AMSL Above mean sea level

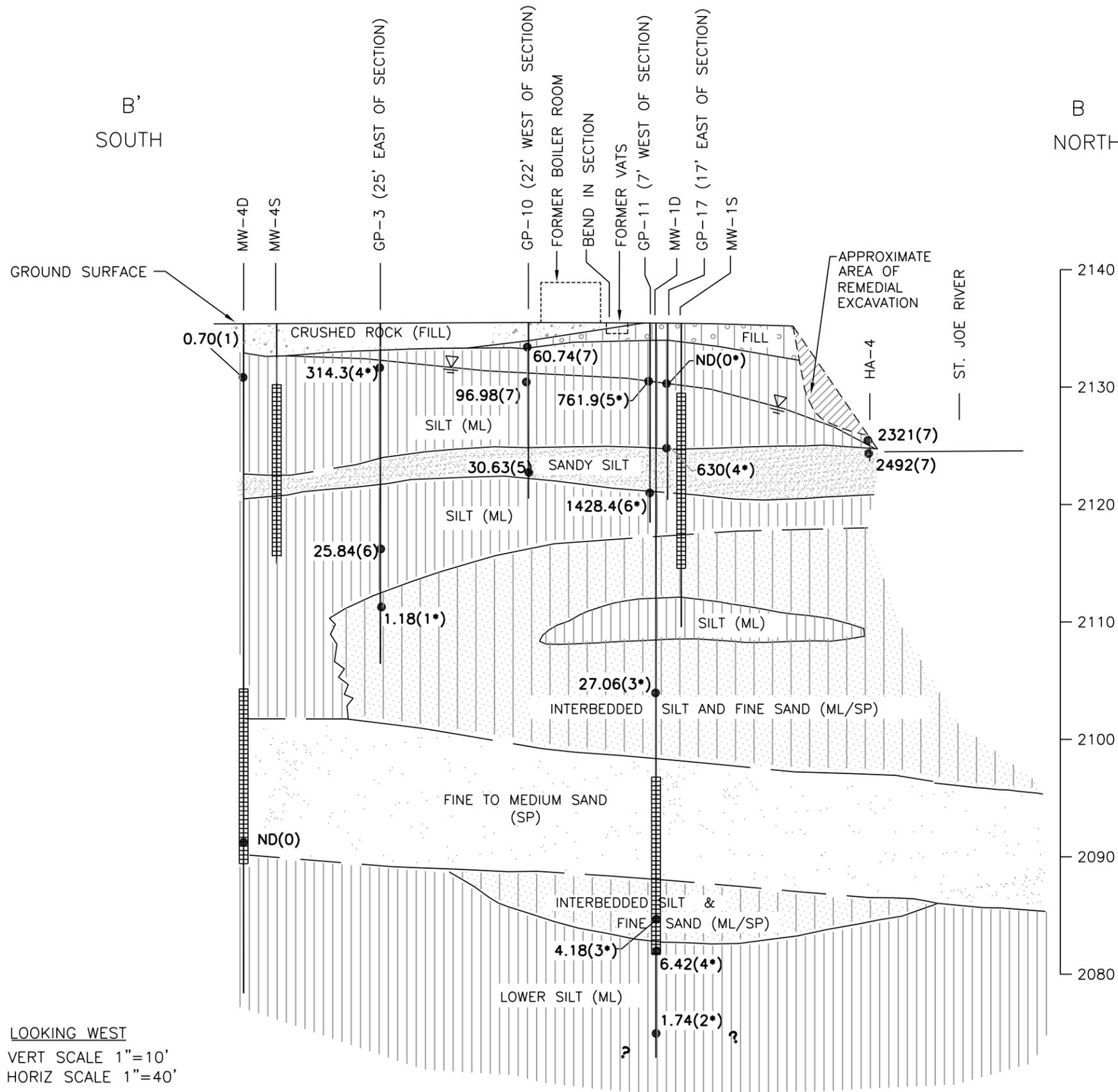
NOTE:
Deep cPAH detections in MW-1 may be the result of drilling.

LOOKING NORTH
VERT SCALE 1"=10'
HORIZ SCALE 1"=40'



B'
SOUTH

B
NORTH



EXPLANATION:

- Monitoring well, geoprobe, or hand auger location
- Screen Interval
- Soil Sample Location
- 630(4*)** cPAH concentration in soil (mg/kg)
(Number of cPAH compounds exceeding EPA Region 9 PRG-soil screening level [DAF 1]
* Indicates cPAH compound(s) were not detected by laboratory but method reporting limit exceeds PRG)
- ND Not detected at or above method reporting limit
- cPAHs Sum of carcinogenic polycyclic aromatic hydrocarbons (7 total)
- (mg/kg) Milligrams per kilogram
- PRG Preliminary remediation goal
- AMSL Above mean sea level

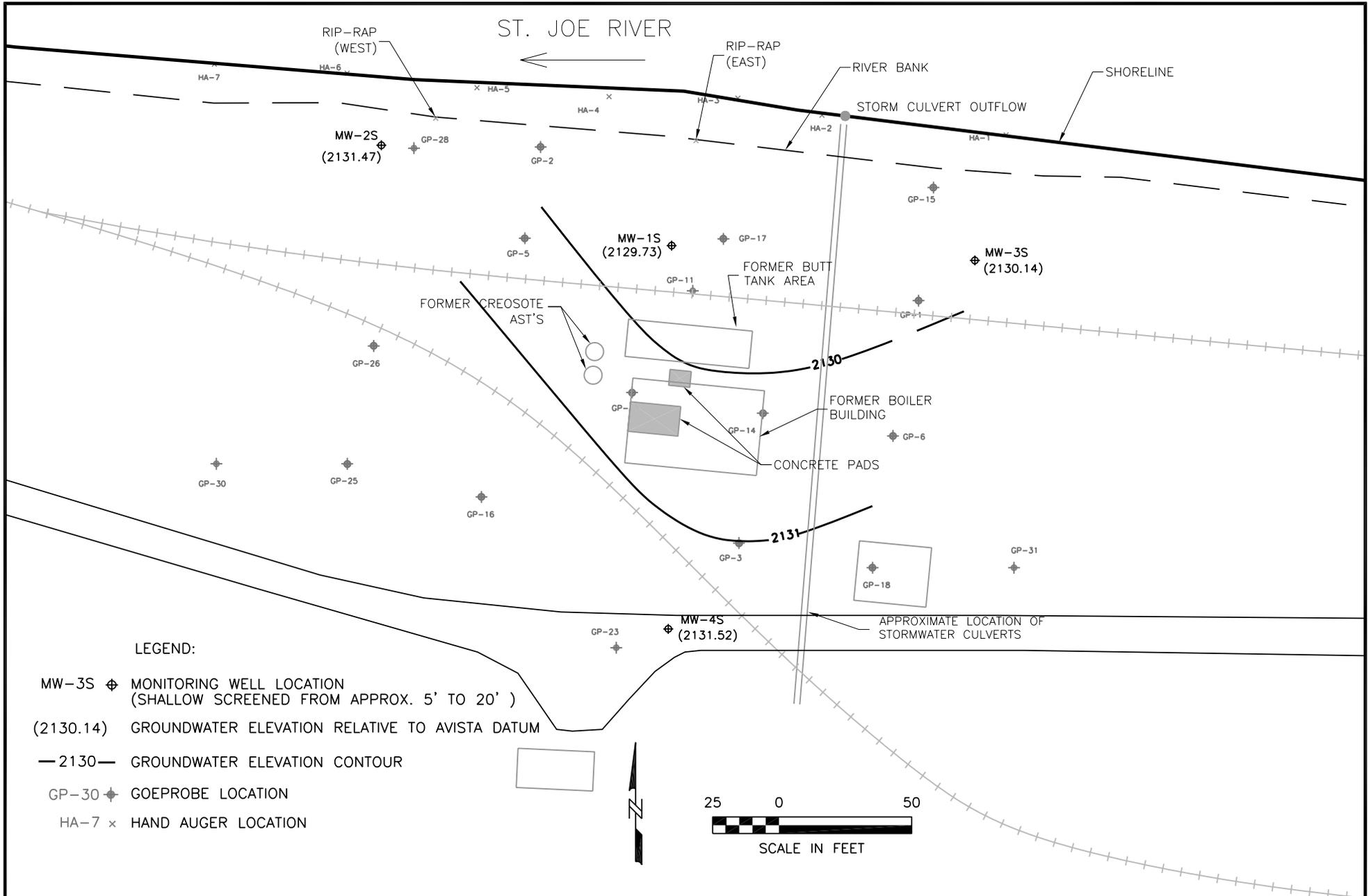
NOTE:

Deep cPAH detections in MW-1 may be the result of drilling.

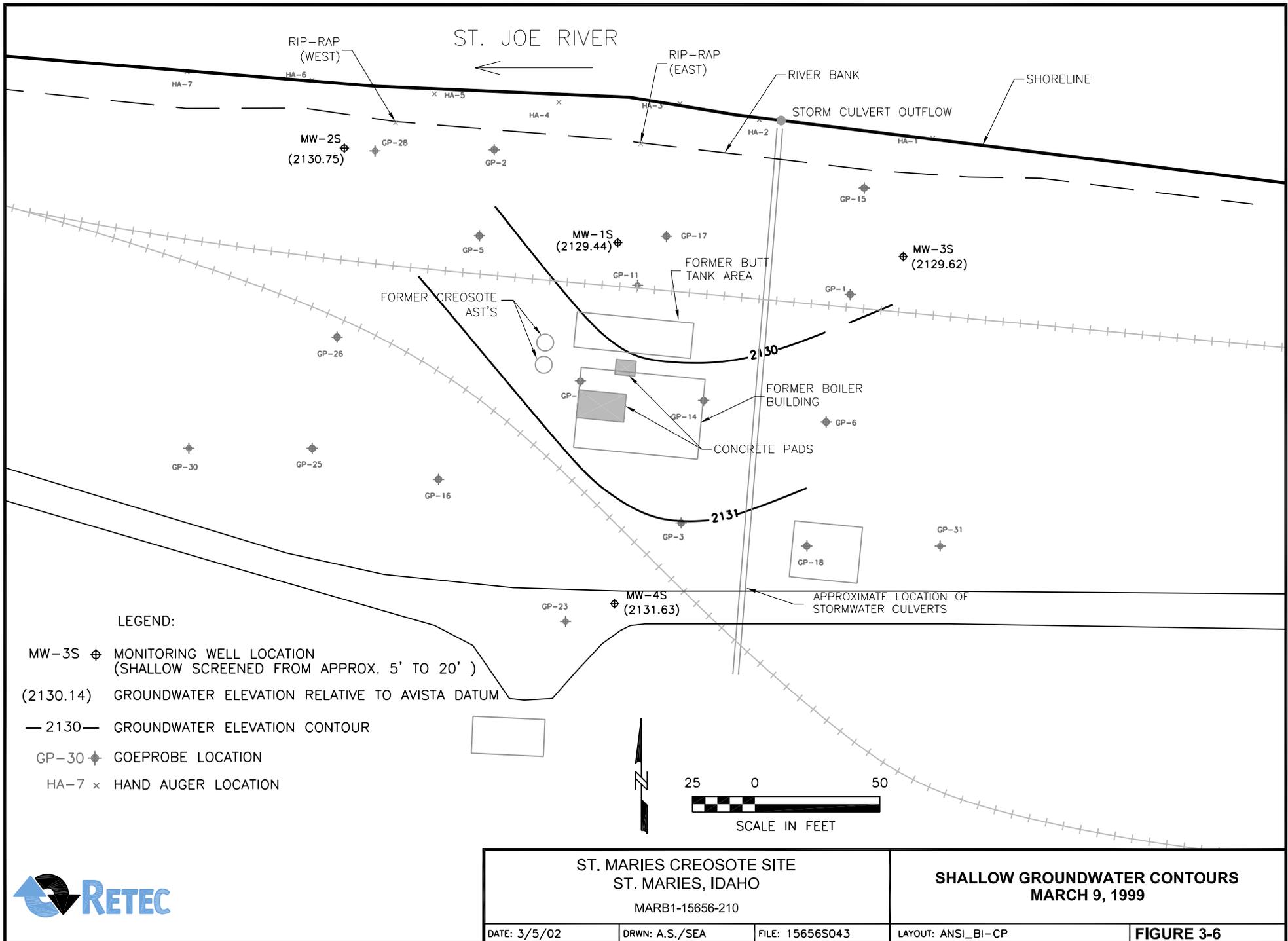
LOOKING WEST
VERT SCALE 1"=10'
HORIZ SCALE 1"=40'

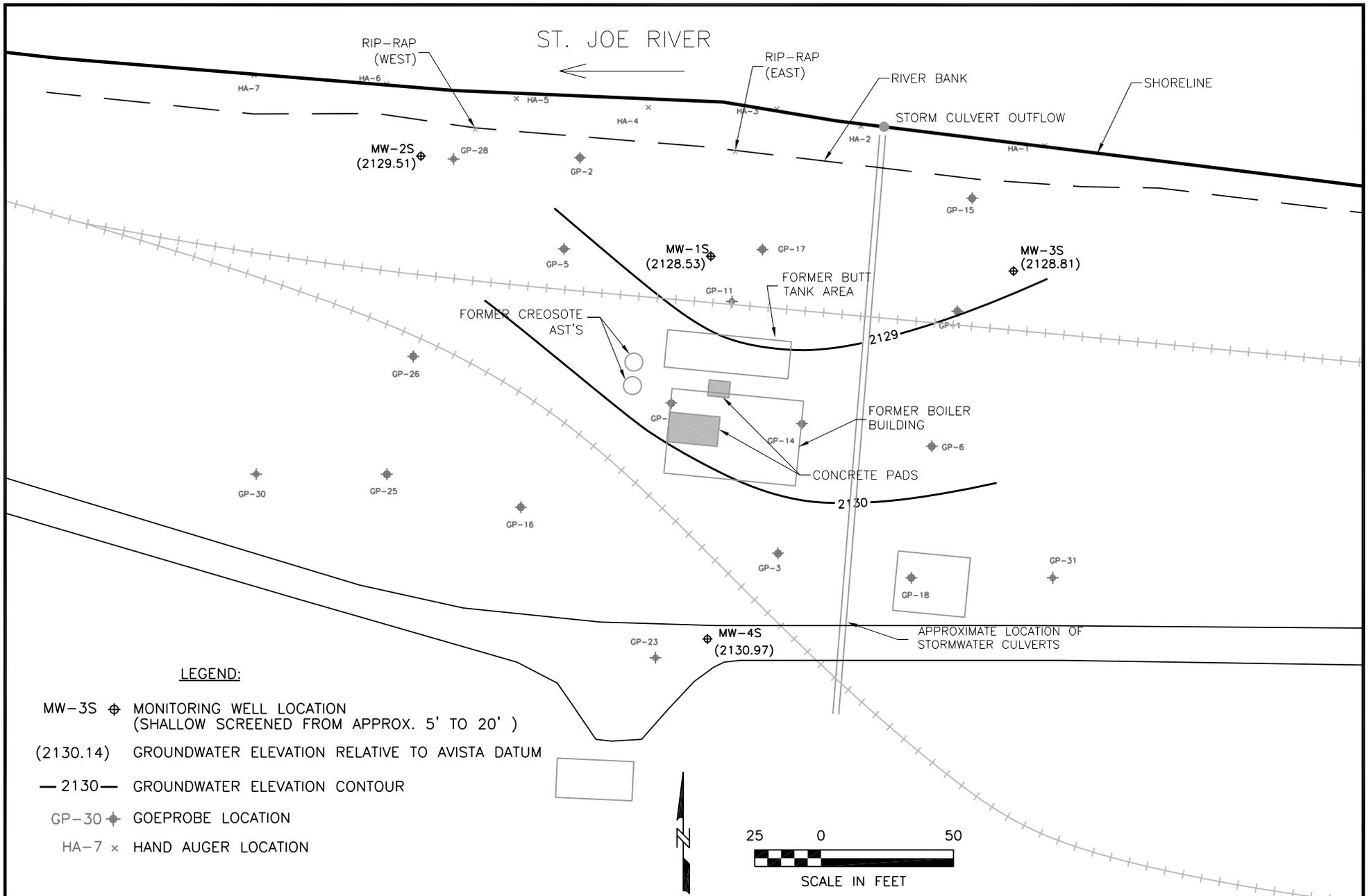


ST. MARIES FORMER CREOSOTE SITE ST. MARIES, IDAHO MARB1-15656-210		CROSS SECTION B-B' DISTRIBUTION OF cPAHs IN SOIL	
DATE: 2/28/02	DRWN: A.S./SEA	FILE: 15656S041	LAYOUT: ANSL_BI-CP
			FIGURE 3-4

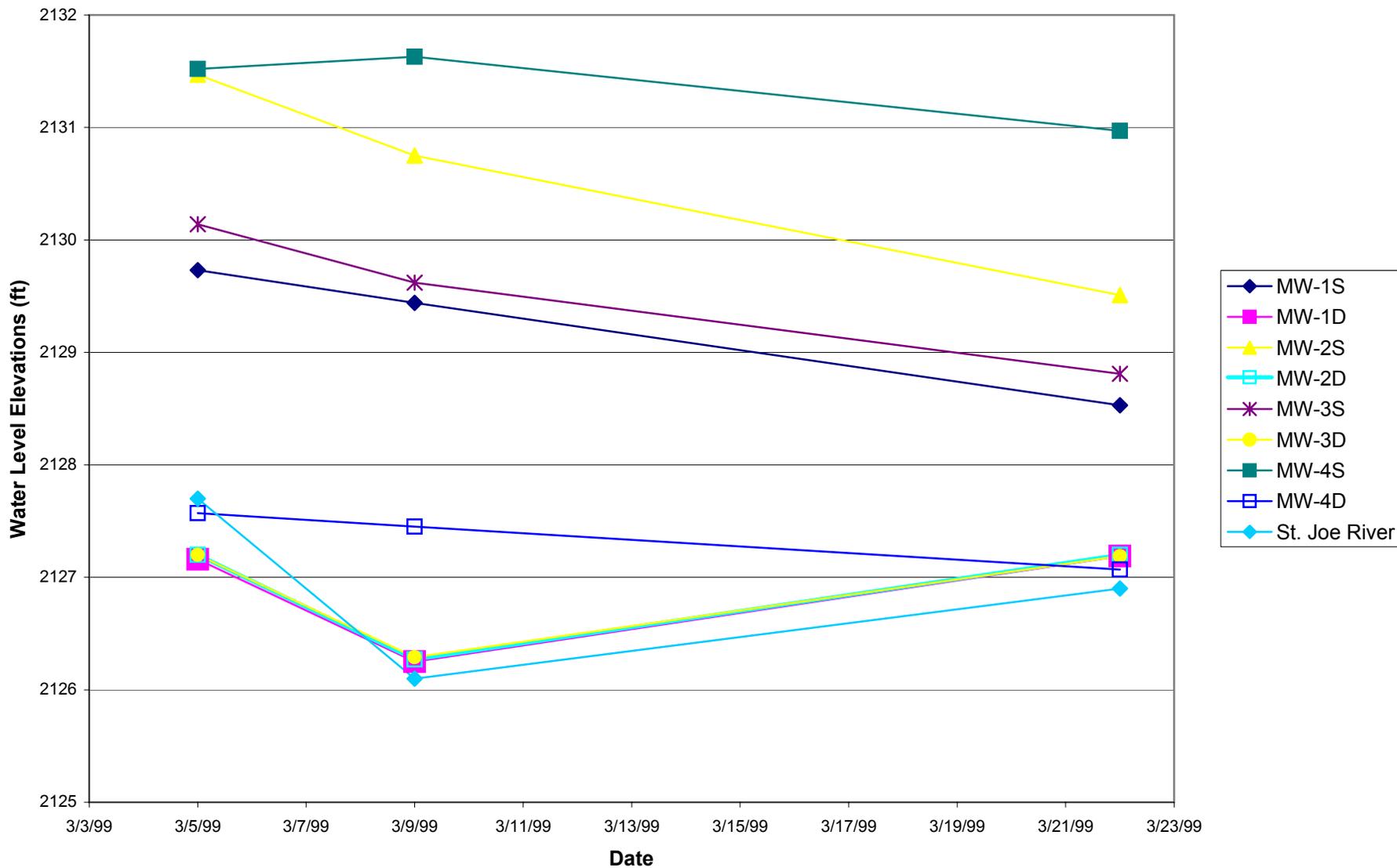


ST. MARIES CREOSOTE SITE ST. MARIES, IDAHO MARB1-15656-210			SHALLOW GROUNDWATER CONTOURS MARCH 5, 1999		
DATE: 3/5/02	DRWN: A.S./SEA	FILE: 15656S034	LAYOUT: ANSI_BI-CP	FIGURE 3-5	





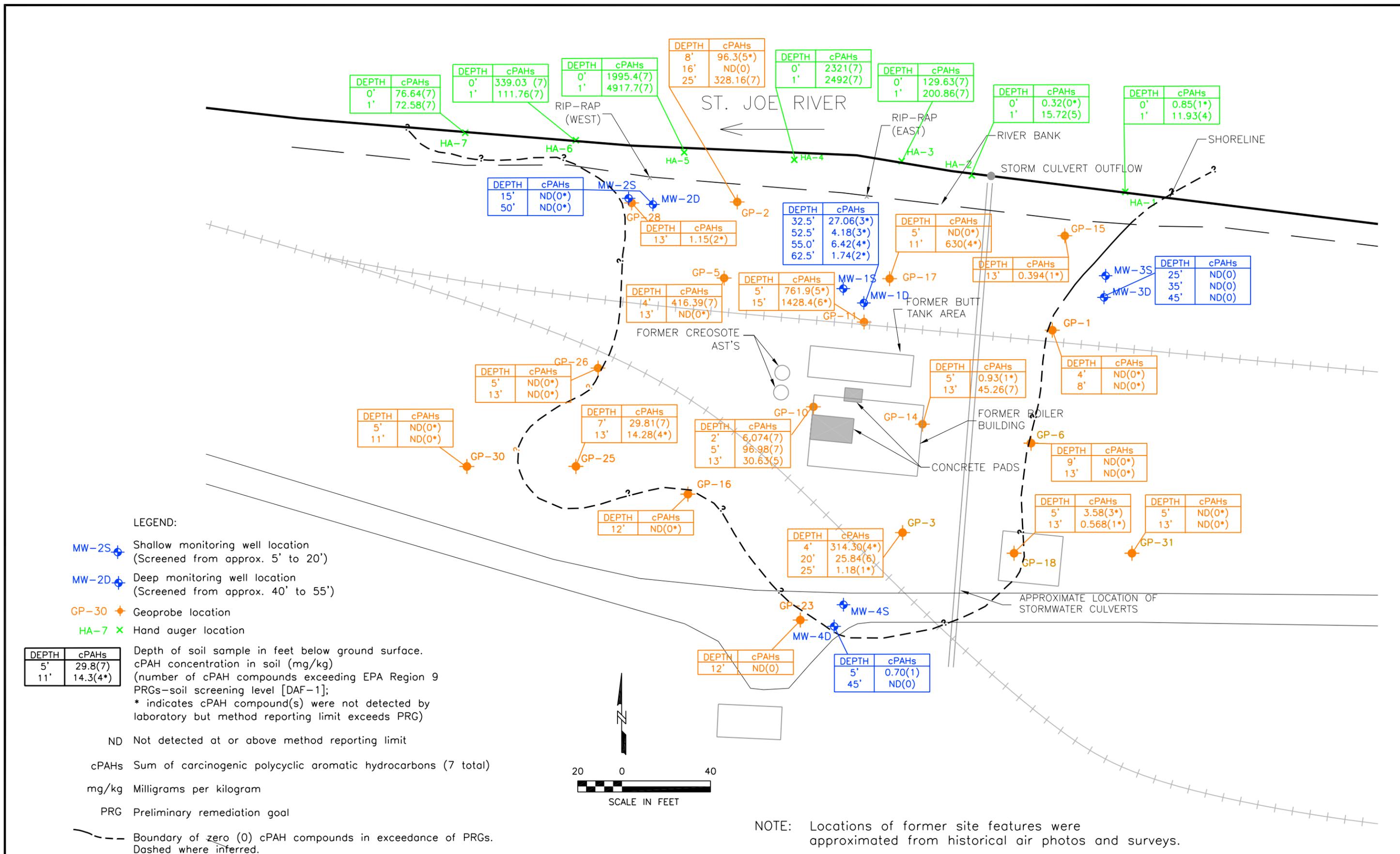
ST. MARIES CREOSOTE SITE ST. MARIES, IDAHO MARB1-15656-210			SHALLOW GROUNDWATER CONTOURS MARCH 22, 1999		
DATE: 3/5/02	DRWN: A.S./SEA	FILE: 15656S044	LAYOUT: ANSI_BI-CP	FIGURE 3-7	

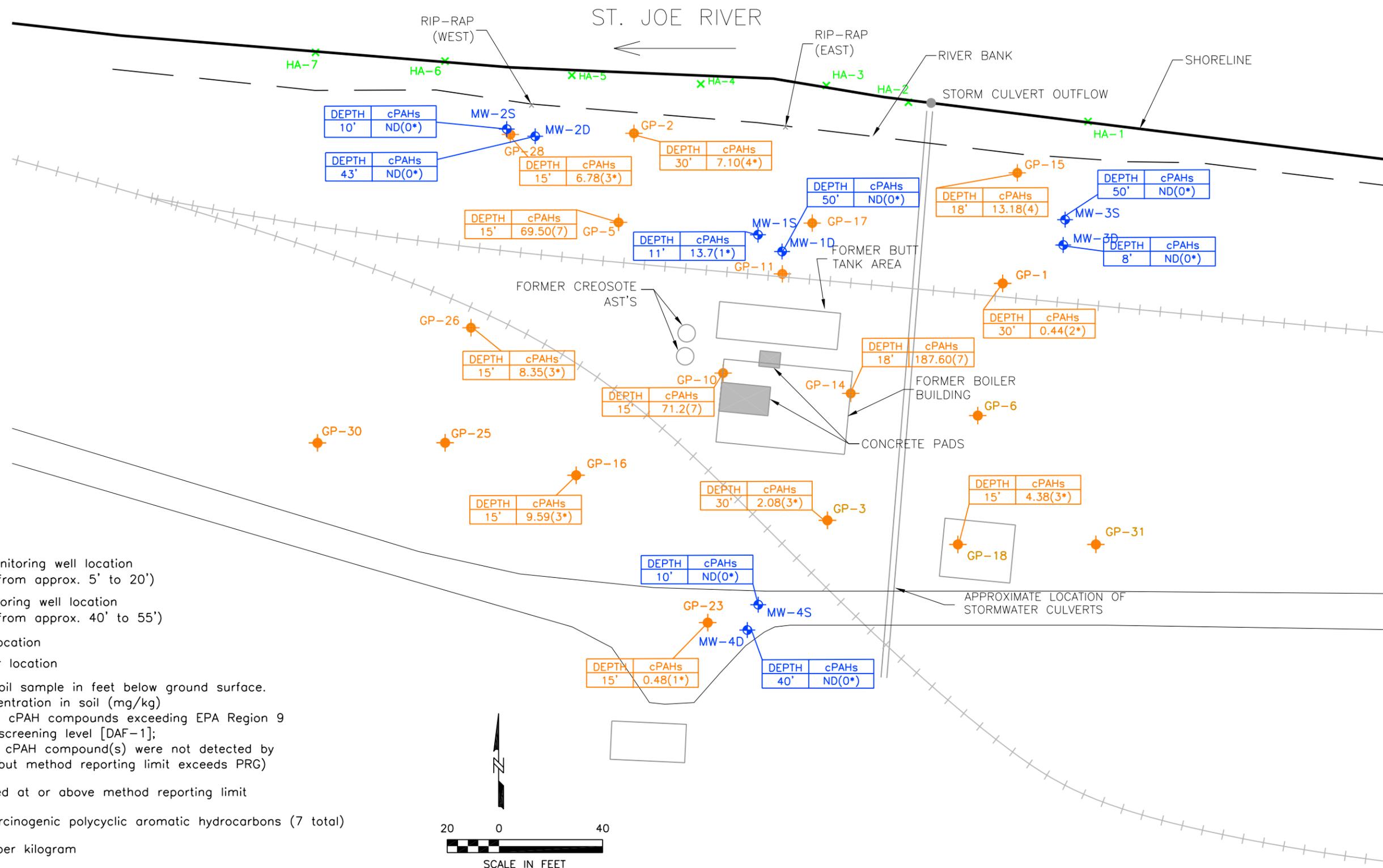


ST. MARIES CREOSOTE SITE
 ST. MARIES, IDAHO
 (MARB1-15656-210)

**GROUNDWATER ELEVATION MEASUREMENTS
 VERSUS TIME**

FIGURE 3-8





LEGEND:

- MW-2S Shallow monitoring well location (Screened from approx. 5' to 20')
- MW-2D Deep monitoring well location (Screened from approx. 40' to 55')
- GP-30 Geoprobe location
- HA-7 Hand auger location

DEPTH	cPAHs
30'	2.084(3*)

DEPTH of soil sample in feet below ground surface.
 cPAH concentration in soil (mg/kg)
 (number of cPAH compounds exceeding EPA Region 9 PRGs—soil screening level [DAF-1];
 * indicates cPAH compound(s) were not detected by laboratory but method reporting limit exceeds PRG)

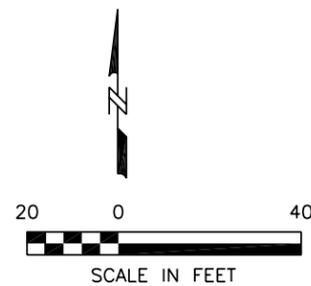
ND Not detected at or above method reporting limit

cPAHs Sum of carcinogenic polycyclic aromatic hydrocarbons (7 total)

mg/kg Milligrams per kilogram

PRG Preliminary remediation goal

Boundary of zero (0) cPAH compounds in exceedance of PRGs. Dashed where inferred.



NOTE: Locations of former site features were approximated from historical air photos and surveys.

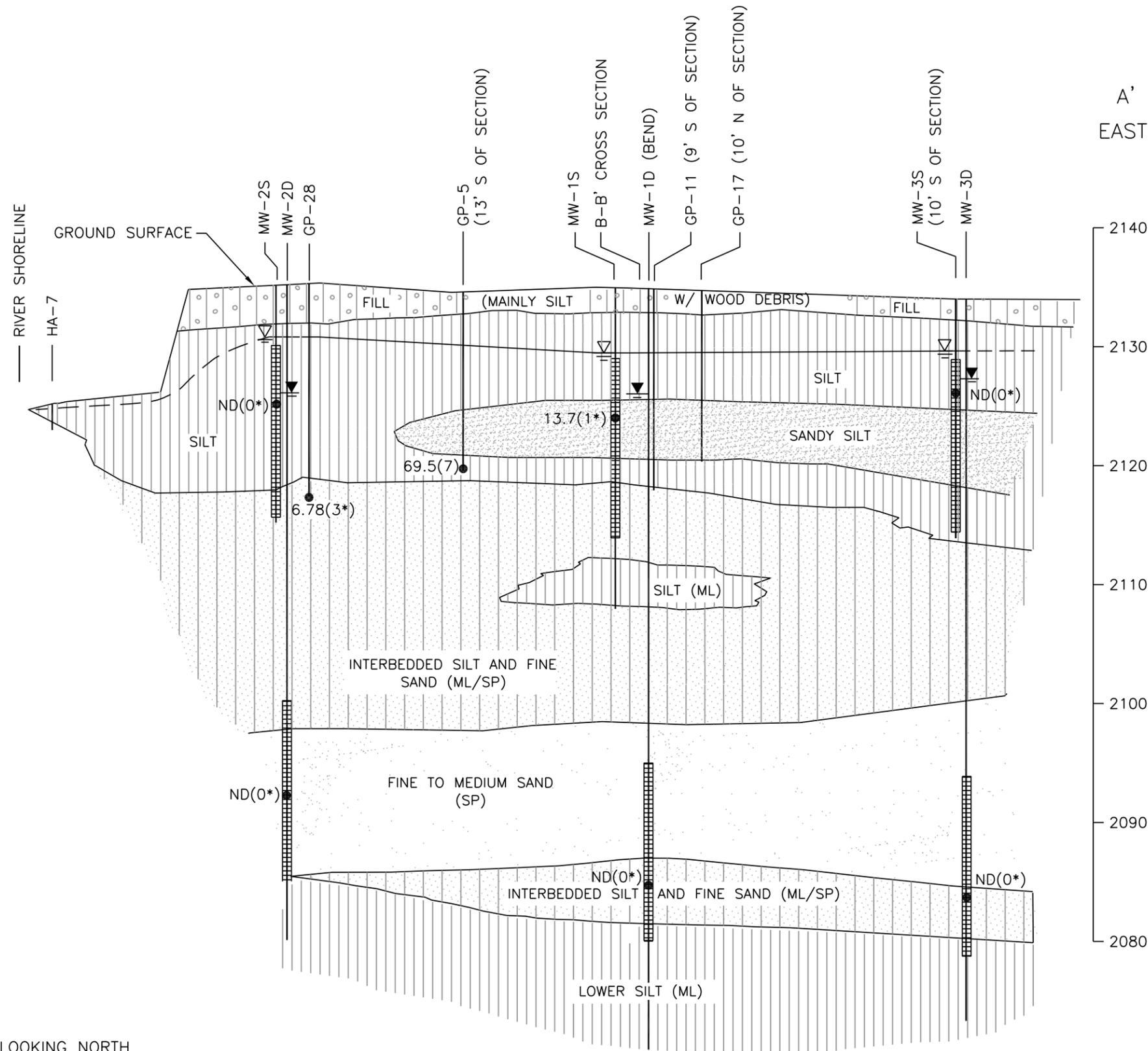


ST. MARIES FORMER CREOSOTE SITE RI/FS
 ST. MARIES, IDAHO
 MARB1-15656-210

DISTRIBUTION OF cPAHs IN GROUNDWATER

A
WEST

A'
EAST



- EXPLANATION:
- Monitoring well, geoprobe, or hand auger location
 - Screen Interval
 - Groundwater Sample Location
 - 13.7(1*) cPAH concentration in groundwater (ug/L)
(Number of cPAH compounds exceeding EPA Region 9 PRG-tap water;
* Indicates cPAH compound(s) were not detected by laboratory but method reporting limit exceeds PRG)
 - ND Not detected at or above method reporting limit
 - cPAHs Sum of carcinogenic polycyclic aromatic hydrocarbons (7 total)
 - (ug/L) Micrograms per liter
 - PRG Preliminary remediation goal
 - AMSL Above mean sea level
 - Groundwater level - upper silt unit - 3/9/99
 - Groundwater level - sand unit - 3/9/99

LOOKING NORTH
VERT SCALE 1"=10'
HORIZ SCALE 1"=40'



ST. MARIES FORMER CREOSOTE SITE RI/FS
ST. MARIES, IDAHO
MARB1-15656-210

CROSS SECTION A-A'
DISTRIBUTION OF cPAHs IN GROUNDWATER

DATE: 2/28/02

DRWN: A.S./SEA

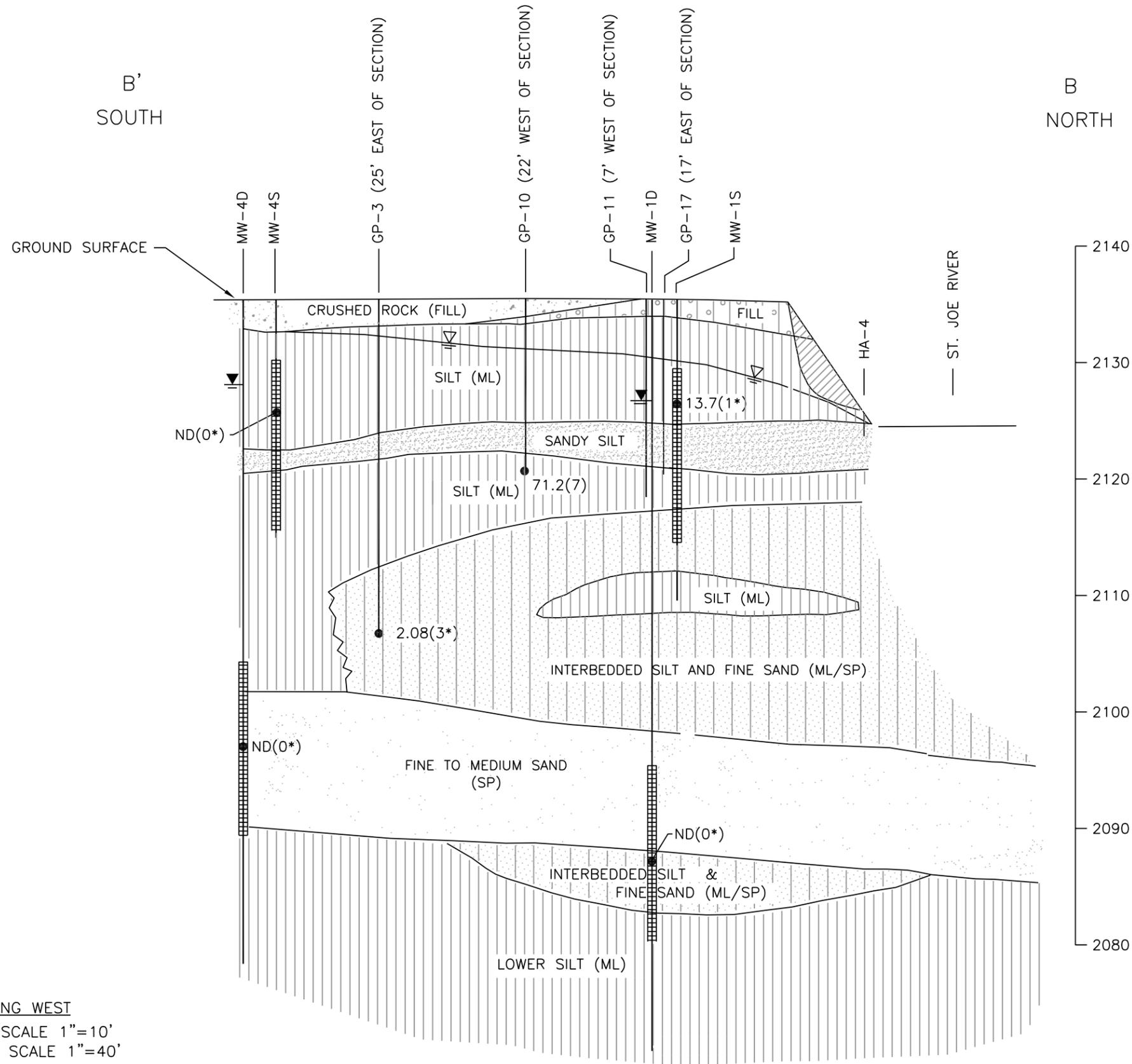
FILE: 15656S042

LAYOUT: ANSI_BI-CP

FIGURE 3-11

B'
SOUTH

B
NORTH



- EXPLANATION:
- Monitoring well, geoprobe, or hand auger location
 - Screen Interval
 - Groundwater Sample Location
 - 2.08(3*) cPAH concentration in groundwater (ug/L)
(Number of cPAH compounds exceeding EPA Region 9 PRG-tap water;
* Indicates cPAH compound(s) were not detected by laboratory but method reporting limit exceeds PRG)
 - ND Not detected at or above method reporting limit
 - cPAHs Sum of carcinogenic polycyclic aromatic hydrocarbons (7 total)
 - (ug/L) Micrograms per liter
 - PRG Preliminary remediation goal
 - AMSL Above mean sea level
 - Groundwater level - upper silt unit - 3/9/99
 - Groundwater level - sand unit - 3/9/99

LOOKING WEST
VERT SCALE 1"=10'
HORIZ SCALE 1"=40'



ST. MARIES FORMER CREOSOTE SITE RI/FS
ST. MARIES, IDAHO
MARB1-15656-210

CROSS SECTION B-B'
DISTRIBUTION OF cPAHs IN GROUNDWATER

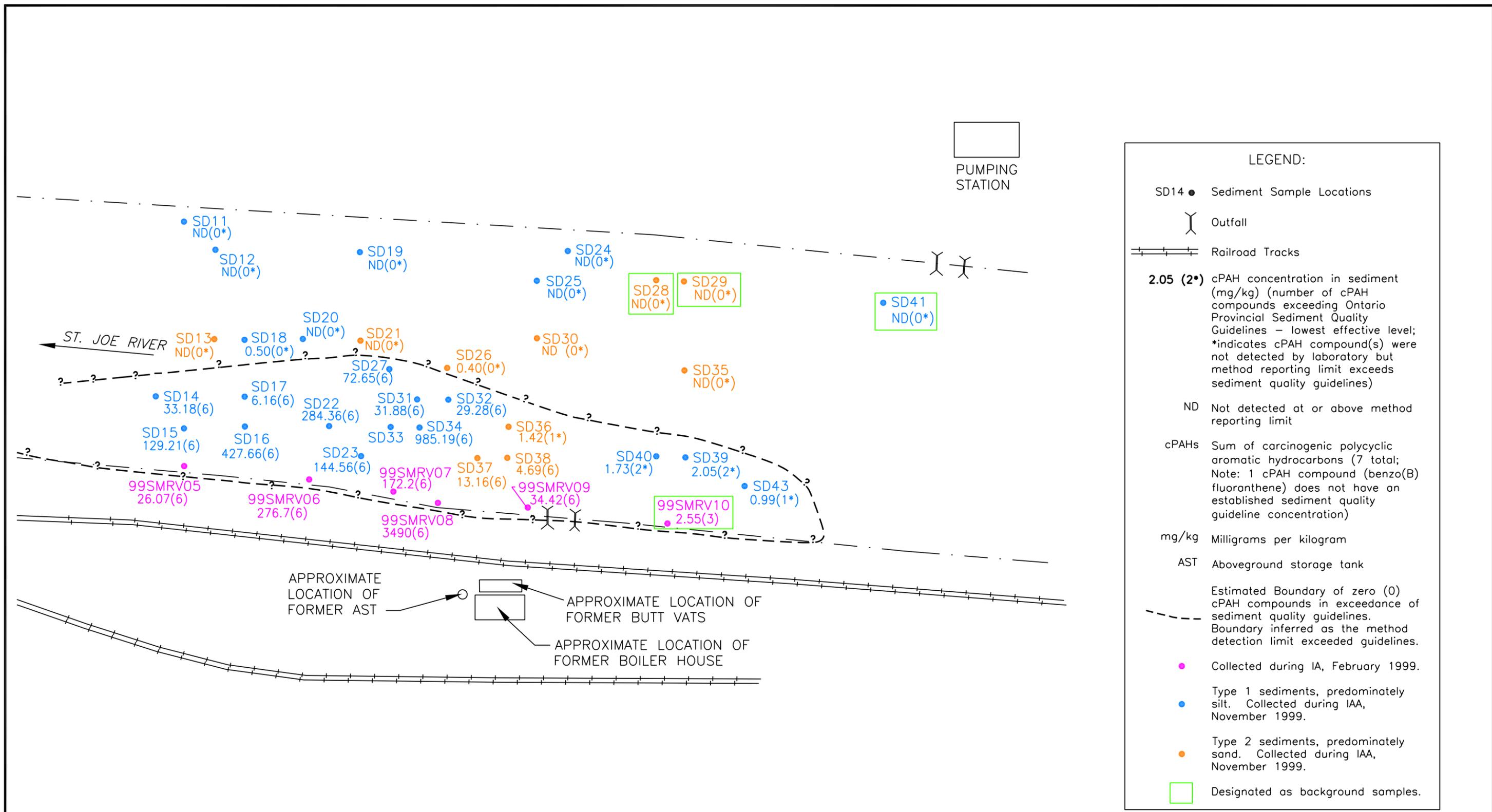
DATE: 1/29/02

DRWN: A.S./SEA

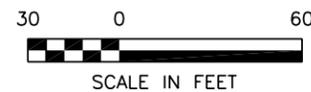
FILE: 15656S016

LAYOUT: ANSL_BI-CP

FIGURE 3-12



SOURCE: Ecology and Environment, Inc. (JUNE, 2000)



ST. MARIES CREOSOTE SITE
ST. MARIES, IDAHO
MARB1-15656-210

DISTRIBUTION OF cPAHs IN RIVER SEDIMENT

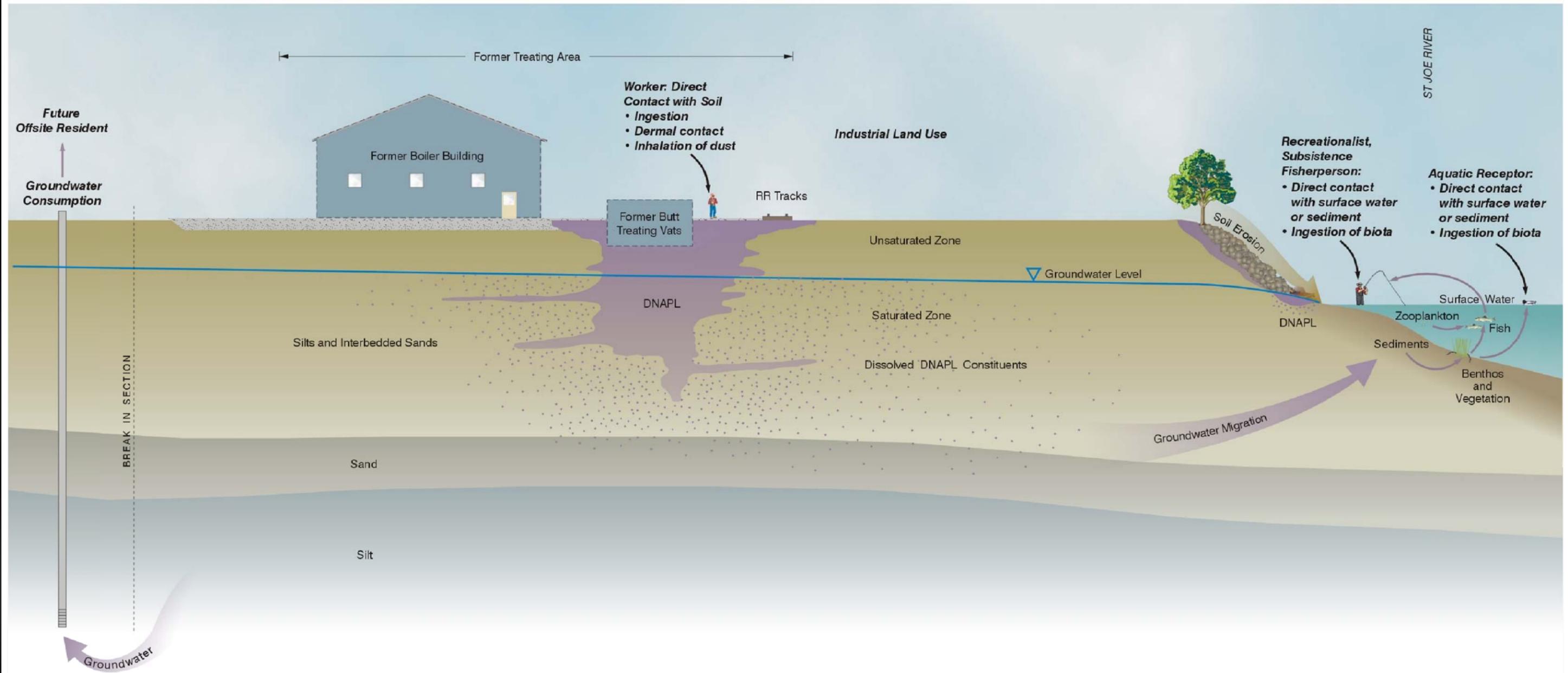
DATE: 2/28/02

DRWN: A.S./SEA

FILE: 15656S011

LAYOUT: ANSI_BI-CP

FIGURE 3-13



Note: Potential pathways of vapor inhalation not a risk based on non volatile nature of COI (see Appendix C).

DNAPL may be residual or mobile.

Exposure Pathways



ST. MARIES CREOSOTE SITE
ST. MARIES, IDAHO
MARB1-15656-210

CONCEPTIAL SITE MODEL
SHOWING POTENTIAL
MIGRATION AND
EXPOSURE PATHWAYS

DATE: 3/8/02

DRWN: A.S./SEA

FILE: 15656S048

LAYOUT: ANSL_BI-CP

FIGURE 4-1