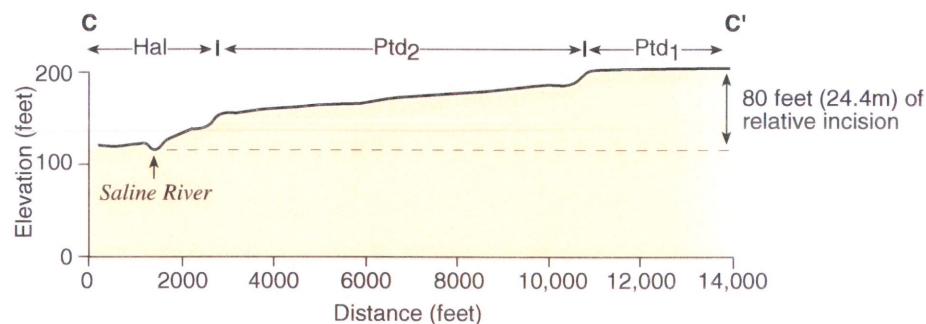


Estimated incision rates along Saline River

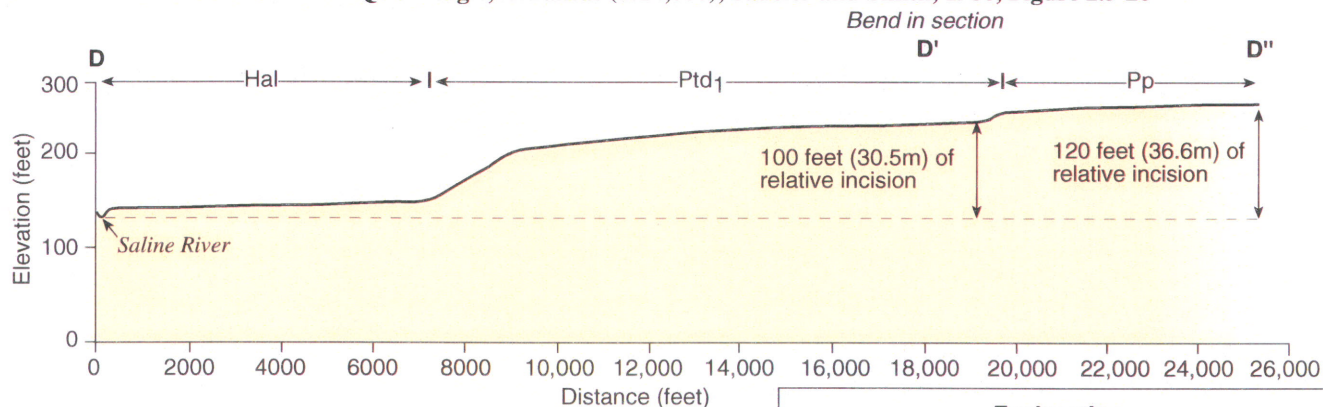
Datum	Amount of Incision	Estimated Age Range (Ka)*	Inferred Incision Rate (mm/yr)
Intermediate Complex	225 ft (69 m)	800-1300	0.05-0.09
Praire Complex	120 ft (37 m)	70-120	0.3-0.5
Deweyville Terraces	80-100 ft (24-31 m)	18-30	0.8-1.7

* Age estimates for Intermediate Complex, Praire Complex, and Deweyville Terraces from Saucier, 1994.

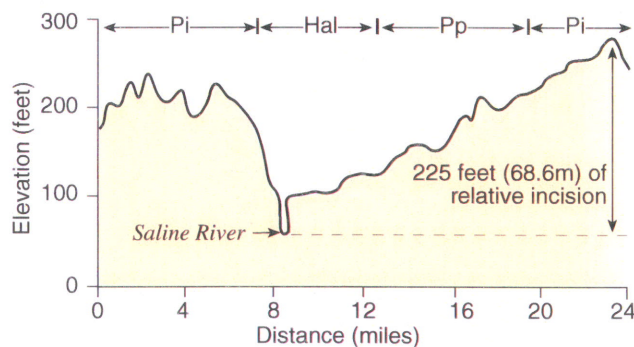
Section located on Herbine Quadrangle, Arkansas (1:24,000), Saucier and Smith, 1986, Figure 2.5-20



Section located on Rison Quadrangle, Arkansas (1:24,000), Saucier and Smith, 1986, Figure 2.5-20



Section is a part of cross section E-E' (Figure 2.5-21)

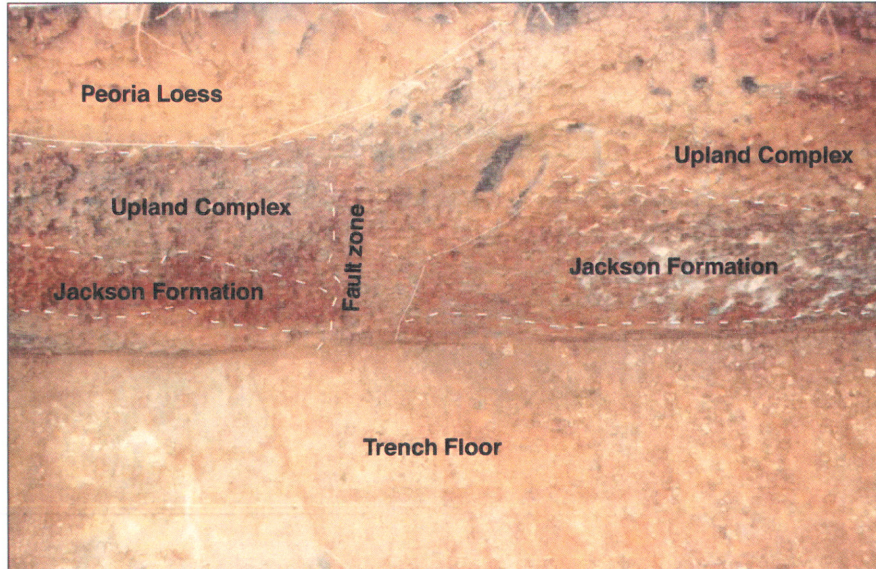


Explanation

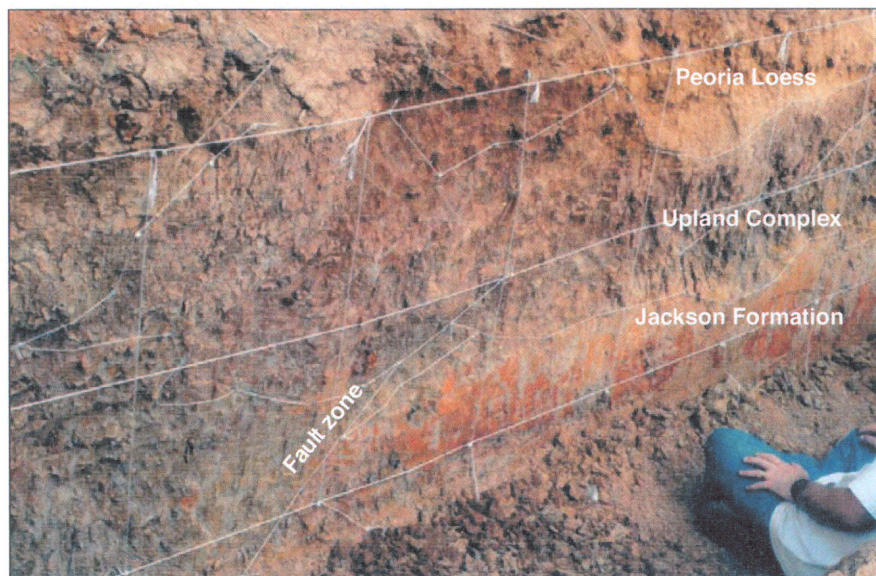
Hal	Holocene alluvium
Ptd(1,2)	Pleistocene Deweyville Complex terraces
Pp	Pleistocene Praire Complex
Pi	Pleistocene Intermediate Complex

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CROSS SECTIONS USED TO INFER
INCISION RATE AND UPLIFT RATE



A) Photo of Trench 4 showing fault zone within Saline River source zone. Exposed fault possibly deforms Peoria Loess. Photo provided by R. Cox, 2003.



B) Photo of Trench 5 showing deformed Eocene Jackson Formation and possible deformation of Peoria Loess. Photo provided by R. Cox, 2003.

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TRENCH EXPOSURES OF THE SALINE RIVER
FAULT ZONE NEAR MONTICELLO, ARKANSAS

FIGURE 2.5-24

REV. 1



A) Subtle anticline (shown by yellow dashed line) exposed in banks of Saline River. Deweyville terrace surface approximately 20 feet above the river is in the background. Photograph provided by Randy Cox.



B) Close up view of Holocene sediments involved in folding. Photograph provided by Randy Cox.

Note: Site described in Cox et al. (2002).

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SALINE RIVER CUT BANK EXPOSURE
ALONG THE SALINE RIVER LINEAMENT

FIGURE 2.5-25

REV. 1



Note: small white features are sand blows.
From Cox, 2003.

0 0.6 mile
Scale



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AERIAL PHOTOGRAPH OF LIQUEFACTION
FEATURES NEAR MONTROSE,
ASHLEY COUNTY, ARKANSAS

FIGURE 2.5-26

REV. 1

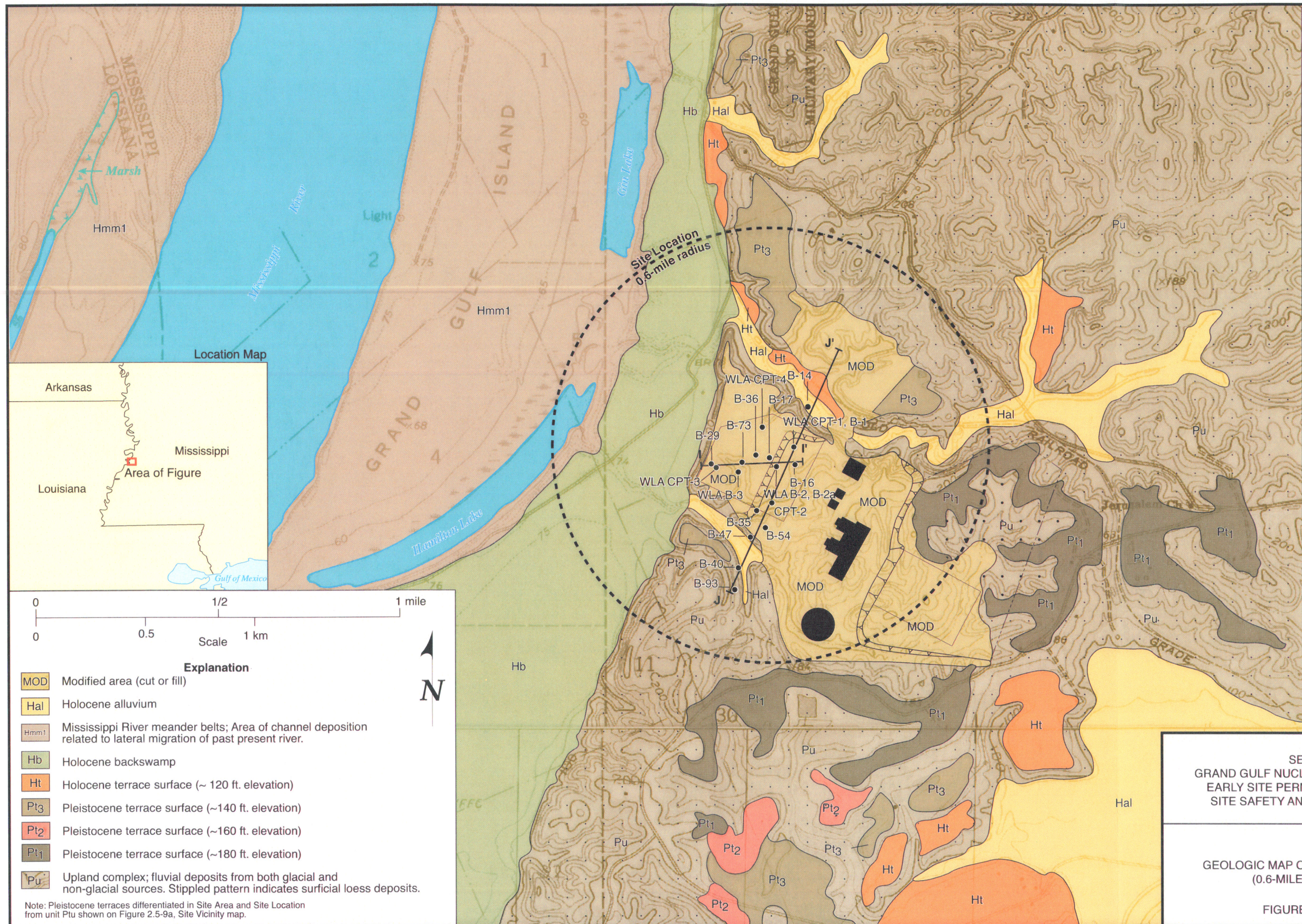




Photo showing upper and lower graded surfaces and cut slope at proposed location of new facility. View in photograph is towards the east.

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PHOTO OF PROPOSED LOCATION
OF NEW FACILITY

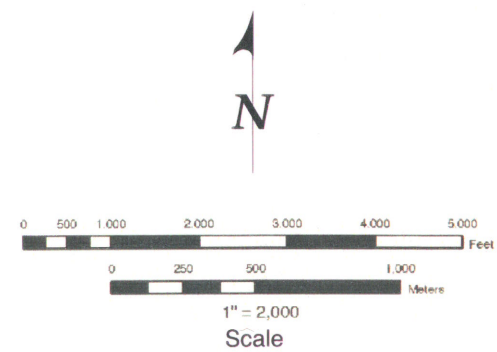
FIGURE 2.5-28

REV. 1

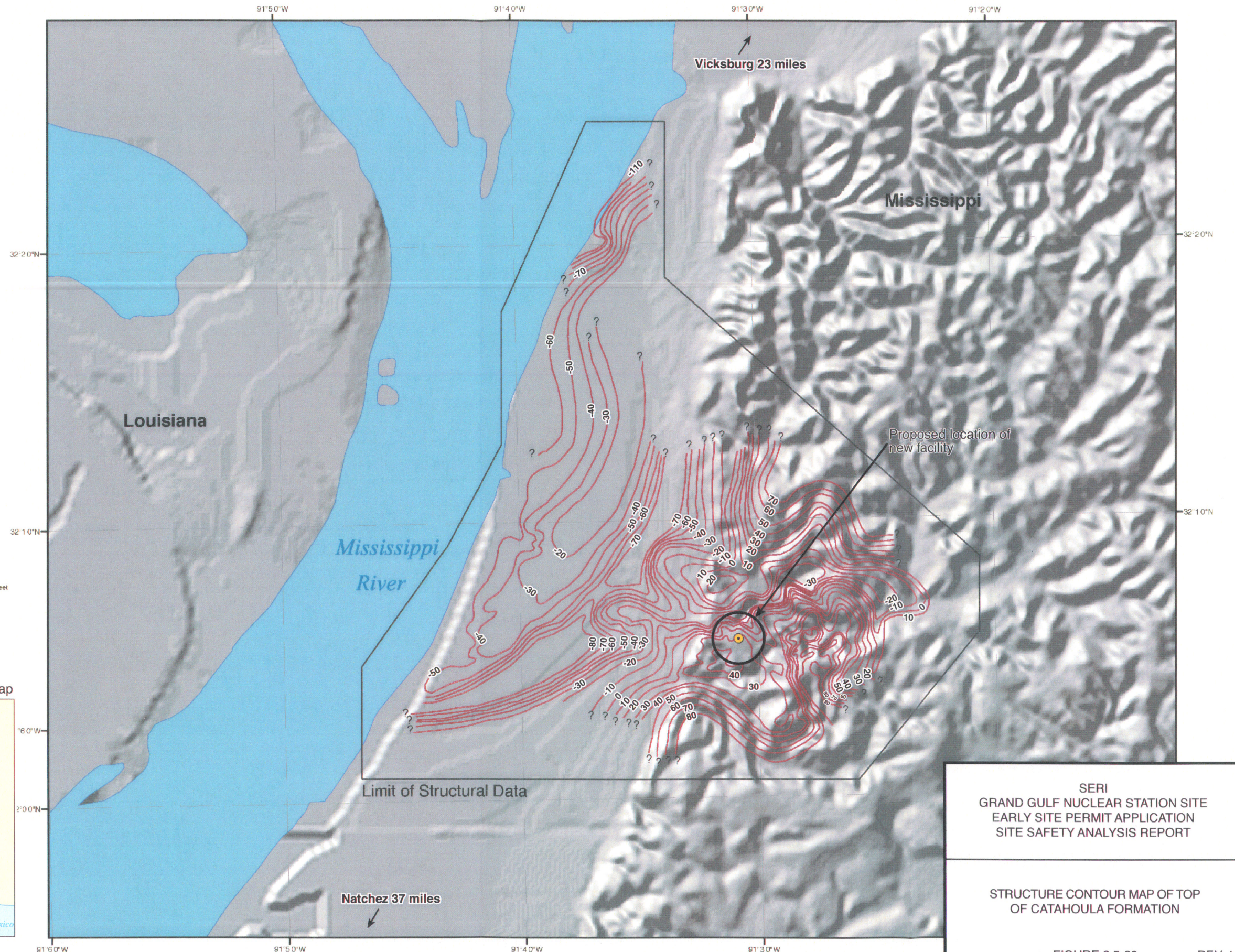
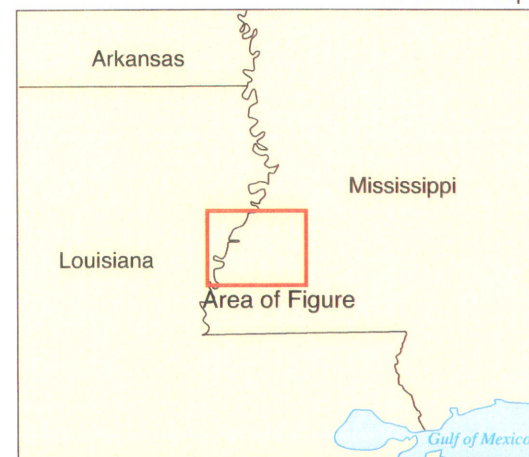
Explanation

— Contour of top of Catahoula Formation; contour interval = 10 feet

Data source: Figure 2.5-30 of Ref. 16



Location Map

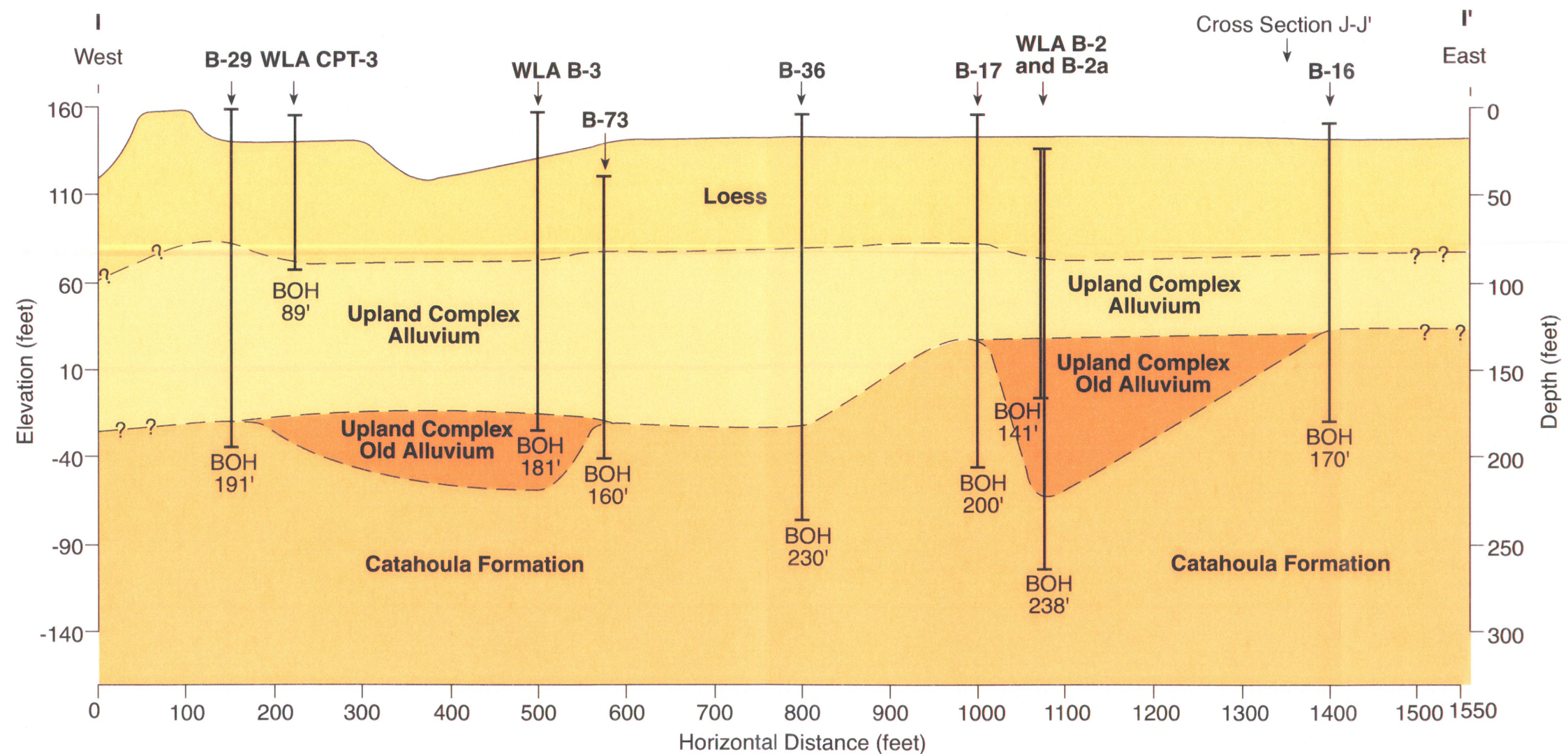


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STRUCTURE CONTOUR MAP OF TOP
OF CATAHOULA FORMATION

FIGURE 2.5-29

REV. 1



Note: Boring elevations above or below ground surface where projected to plane of section, or due to surface modifications.

Vertical exaggeration=2x

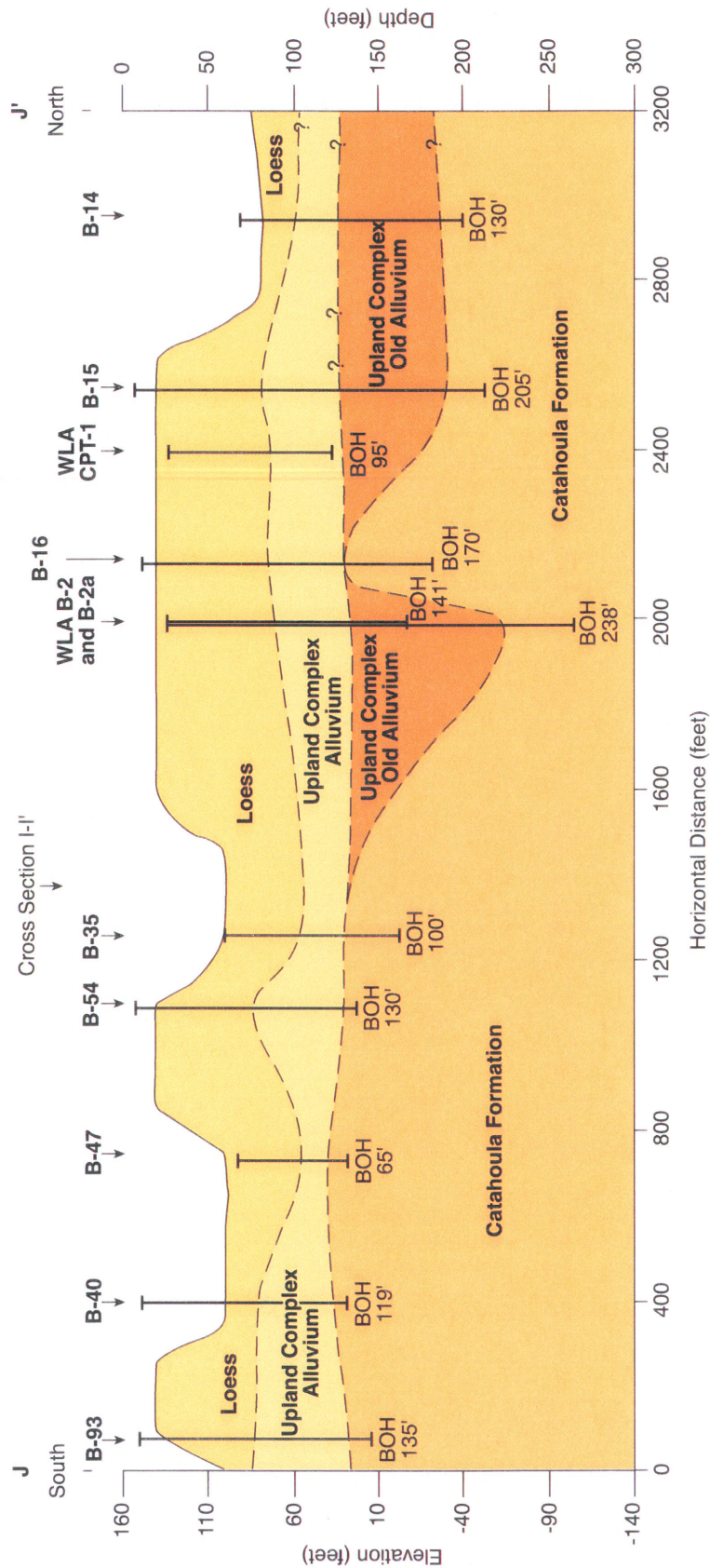
Location of cross section shown on Figure 2.5-27

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CROSS SECTION I-I' OF SITE LOCATION

FIGURE 2.5-30

REV. 1



Note: Boring elevations above or below ground surface where projected to plane of section, or due to surface modifications.

Vertical exaggeration=4x

Location of cross section shown on Figure 2.5-27

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CROSS SECTION J-J' OF SITE LOCATION

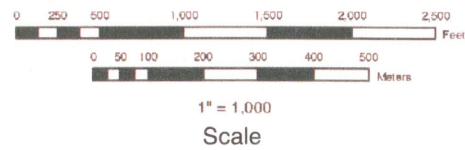
FIGURE 2.5-31

REV. 1

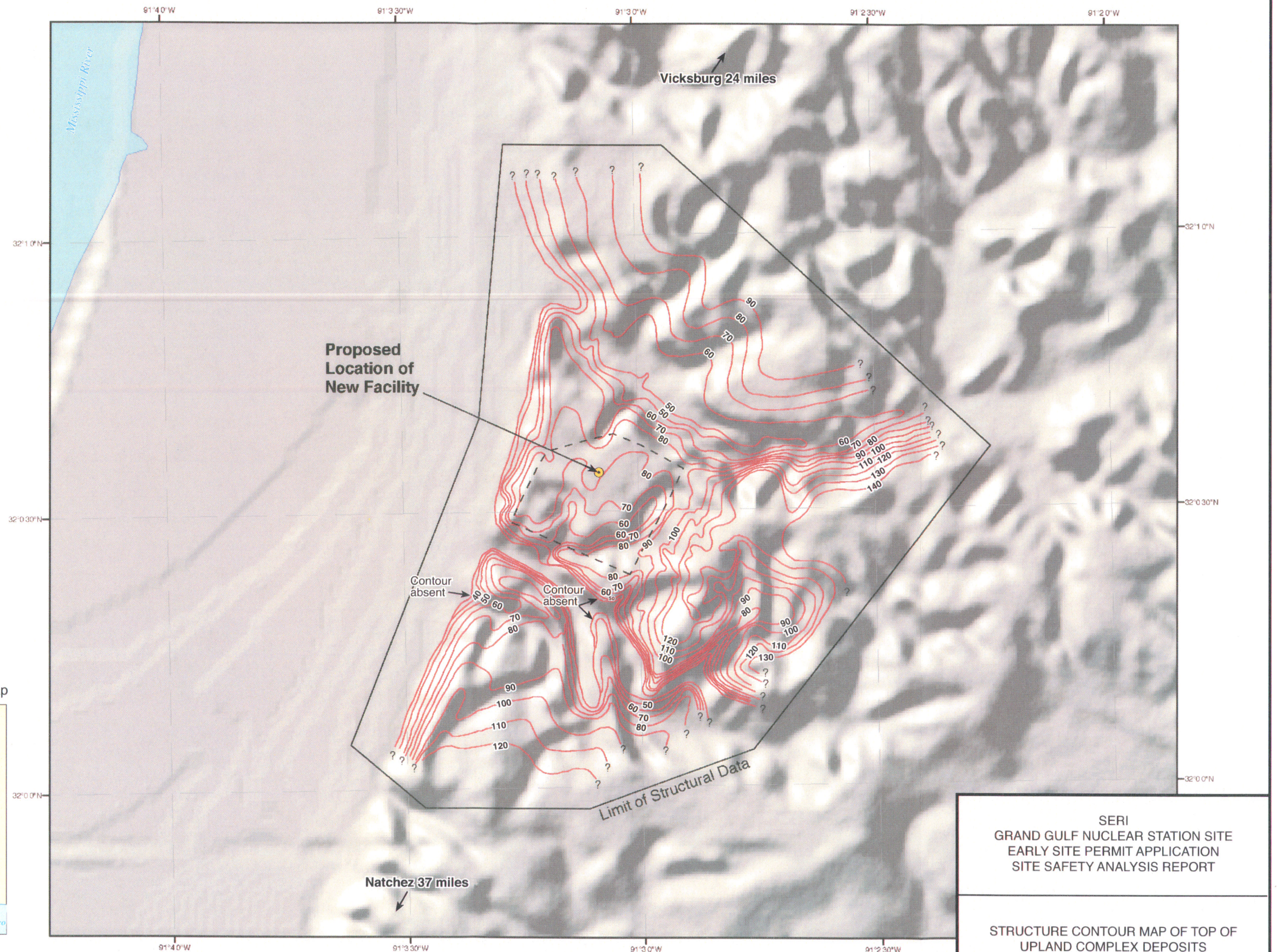
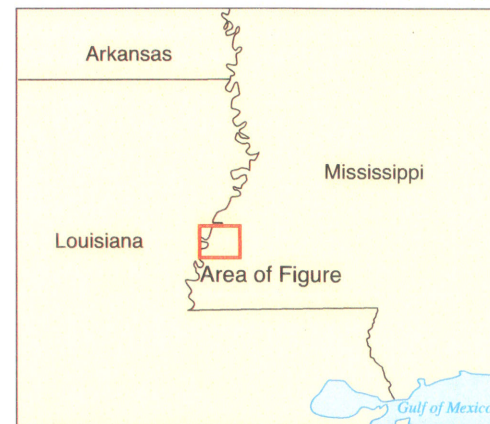
Explanation

- Grand Gulf Site
- Contour of top of Upland Complex Deposits; contour interval = 10 feet

Data source: Figure 2.5-28 of Ref. 16



Location Map



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STRUCTURE CONTOUR MAP OF TOP OF
UPLAND COMPLEX DEPOSITS

FIGURE 2.5-32

REV. 1



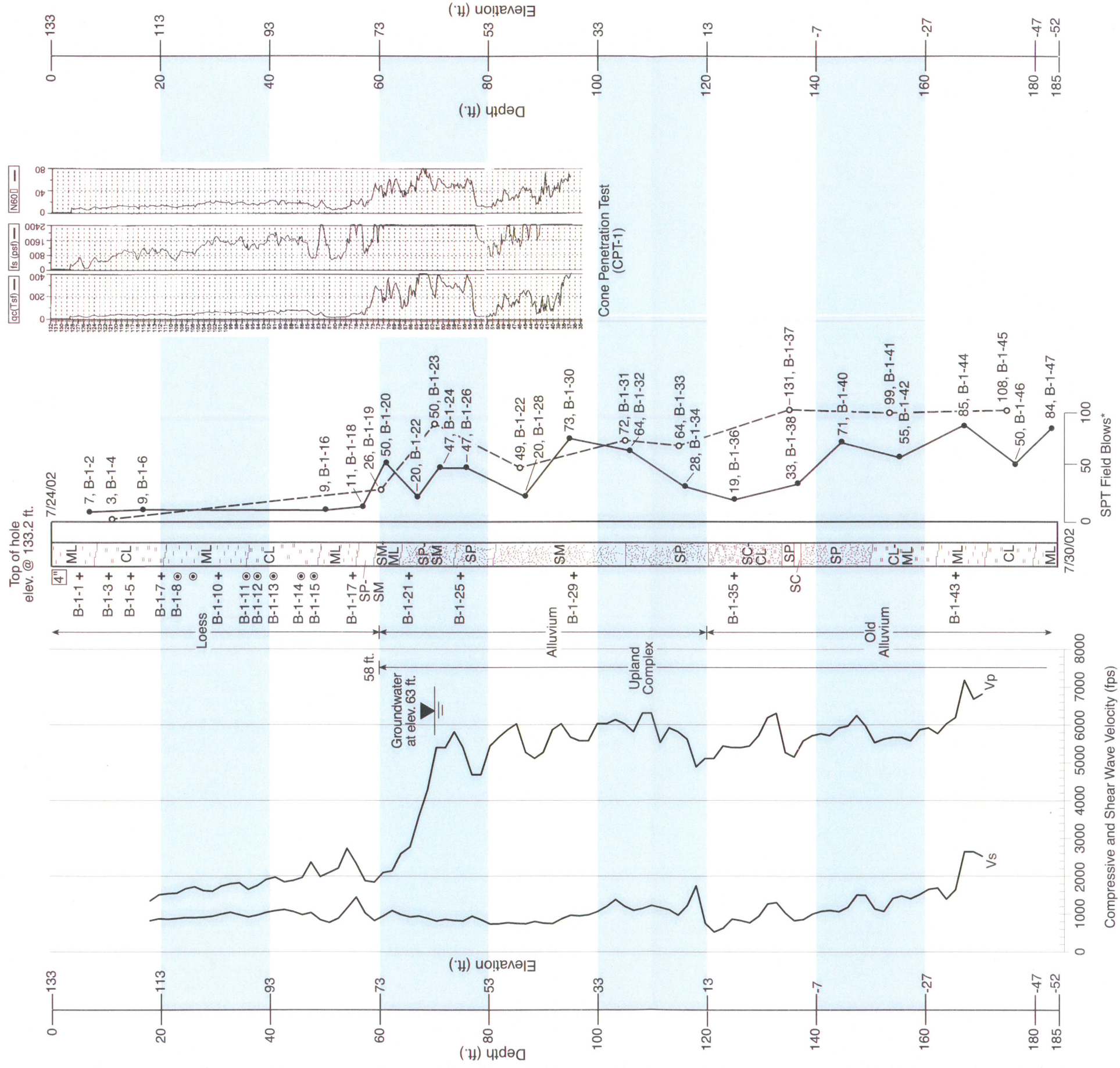
Photo showing example of possible Pleistocene terrace surface (elevation approximately 200 feet) in Site Area. Photo taken on south side of Bayou Pierre, near Port Gibson.

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PHOTO OF POSSIBLE PLEISTOCENE
TERRACE IN SITE AREA

FIGURE 2.5-33

REV. 1



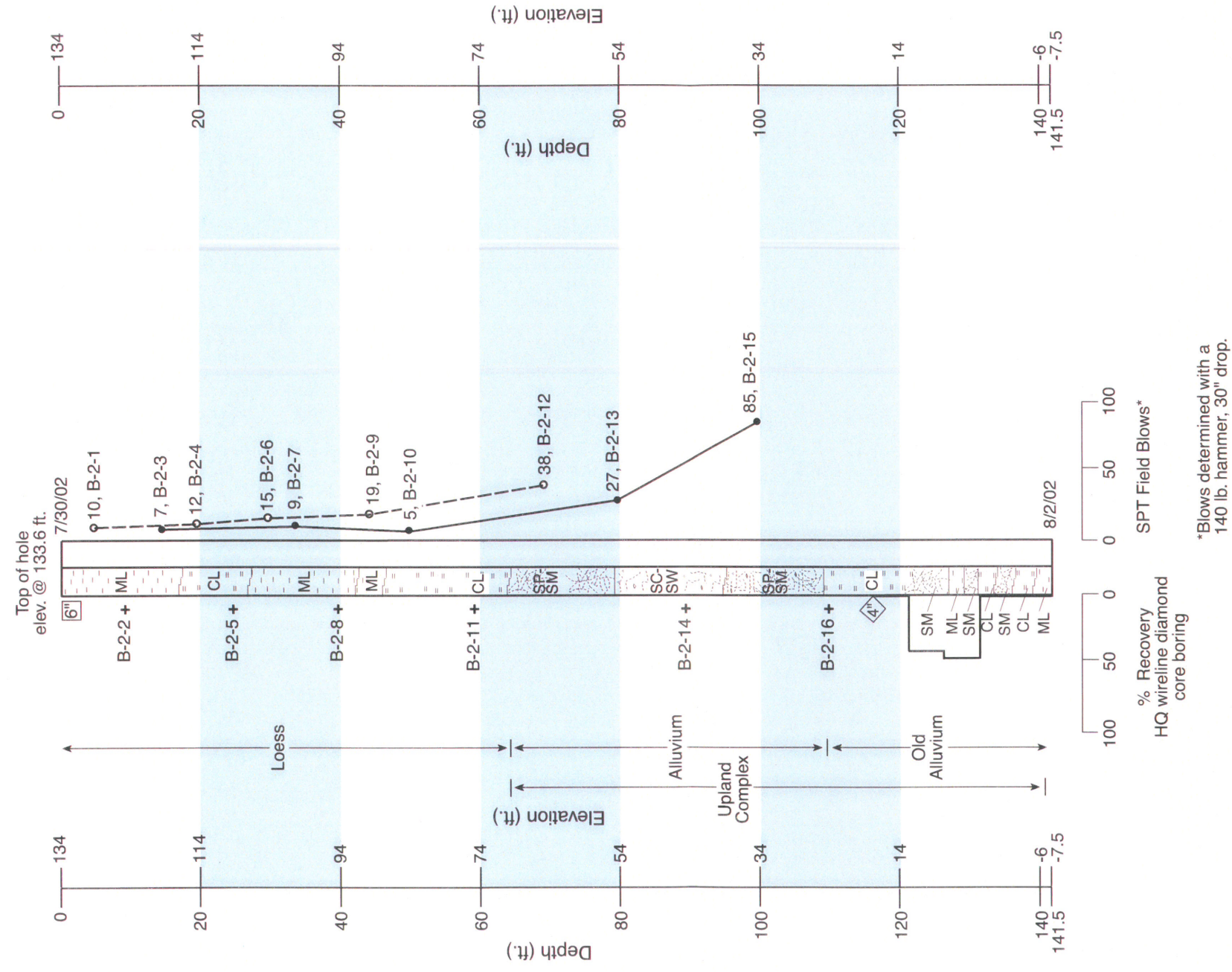
- Notes: 1. Downhole geophysics in bald hole performed by T. Martin of Geovision.
2. Groundwater level interpreted from geophysical log.
3. Vs = Shear Wave Velocity
Vp = Compressional Wave Velocity
4. CPT-1 is located approximately 10 feet northeast of B-1.

*Blows determined with a 140 lb. hammer, 30" drop.

Explanation	
•	SPT sampler
⊙	SPT sampler (pushed)
○	3.0" O.D. "ModCal" sampler
+	3.0" O.D. thin wall Shelby Sampler (pushed)
4"	Mud rotary hole diameter

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BORING SUMMARY SHEET,
BORING 1

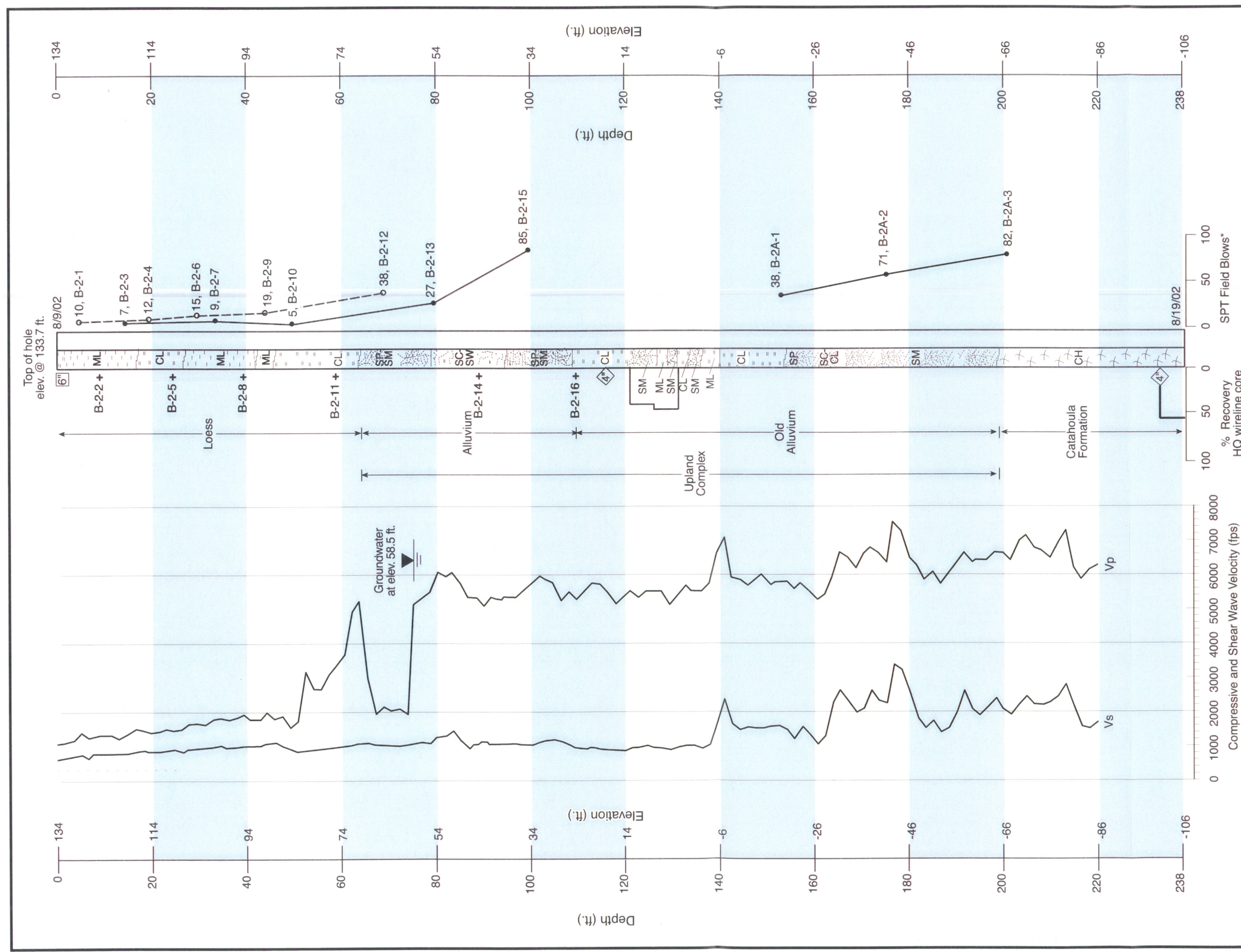


*Blows determined with a 140 lb. hammer, 30" drop.

Explanation
• SPT sampler ○ 3.0" O.D. "ModCal" sampler + 3.0" O.D. thin wall Shelby Sampler (pushed)
 Mud rotary hole diameter  Wireline corehole diameter

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BORING SUMMARY SHEET,
BORING 2



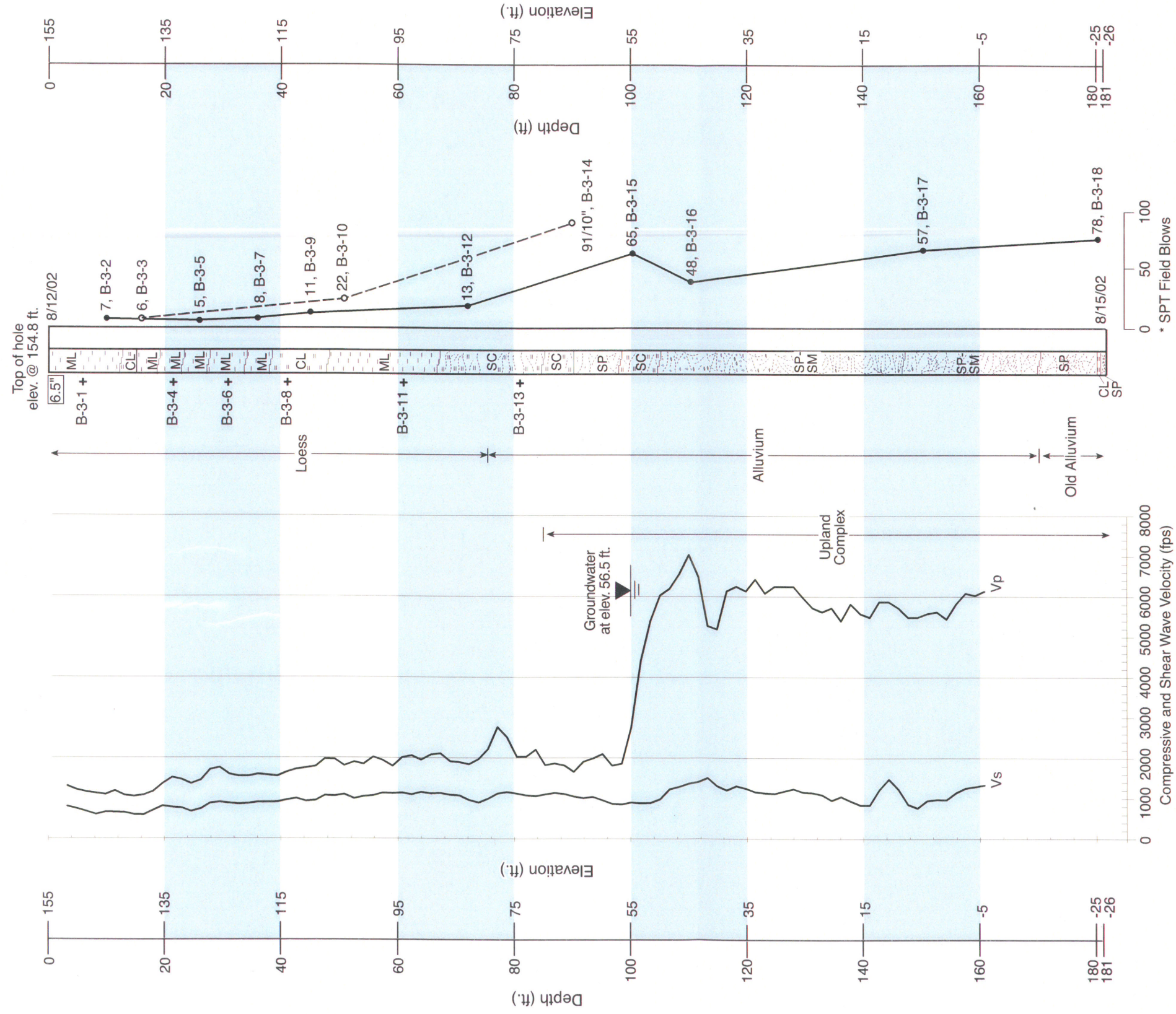
Notes: 1. Downhole geophysics in bald hole performed by T. Martin of Geovision.
2. Groundwater level interpreted from geophysical log.
3. Vs = Shear Wave Velocity
Vp = Compressional Wave Velocity

*Blows determined with a 140 lb. hammer, 30" drop.

Explanation	
•	SPT sampler
○	3.0" O.D. "ModCal" sampler
+	3.0" O.D. thin wall Shelby Sampler (pushed)
6"	Mud rotary hole diameter
4"	Wireline corehole diameter

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BORING SUMMARY SHEET,
BORING 2A



Notes: 1. Downhole geophysics in bold hole performed by T. Martin of Geovision.

2. Groundwater level interpreted from geophysical log.

3. Vs = Shear Wave Velocity
Vp = Compressional Wave Velocity

* Blows determined with a 140 lb. hammer, 30" drop.

Explanation

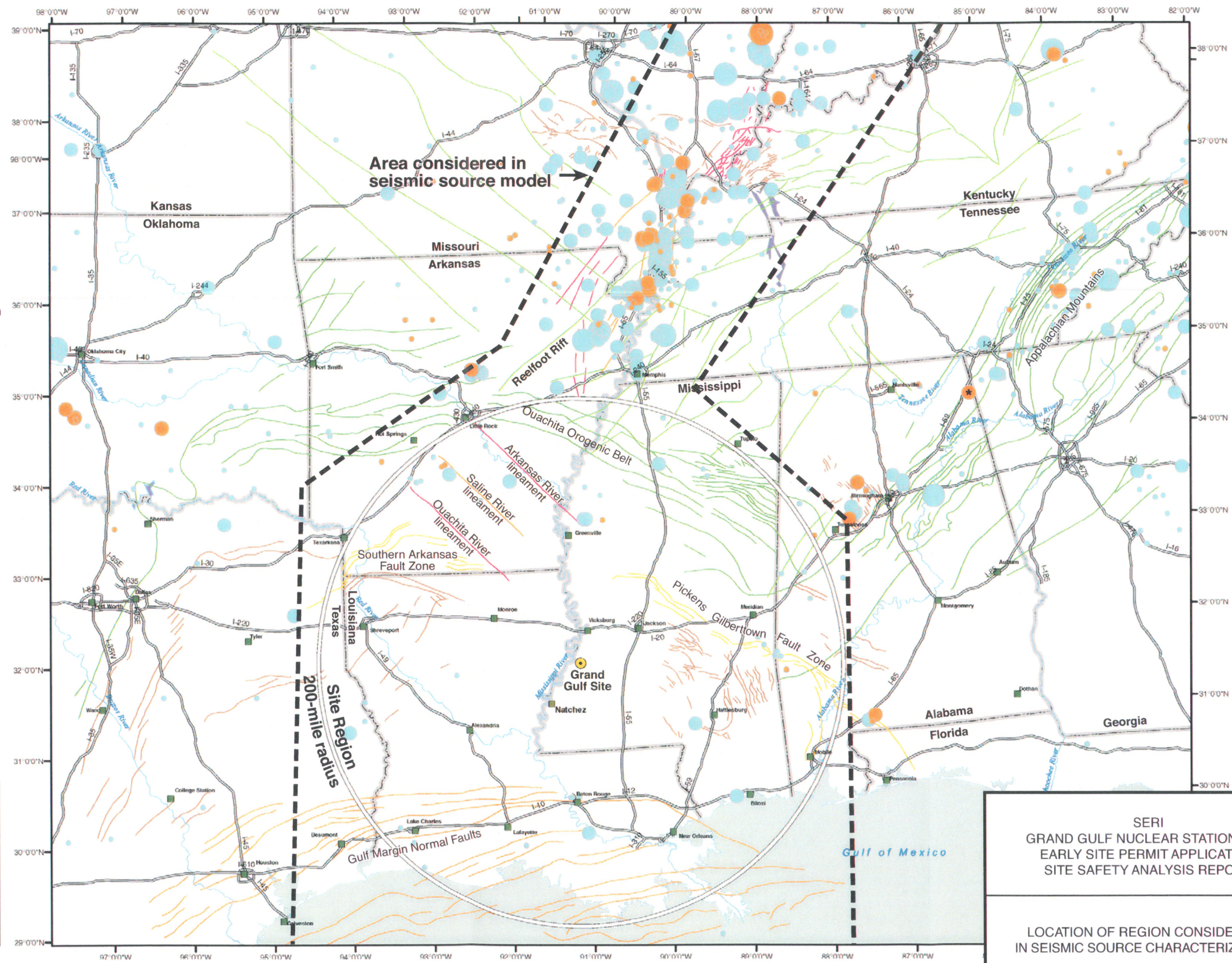
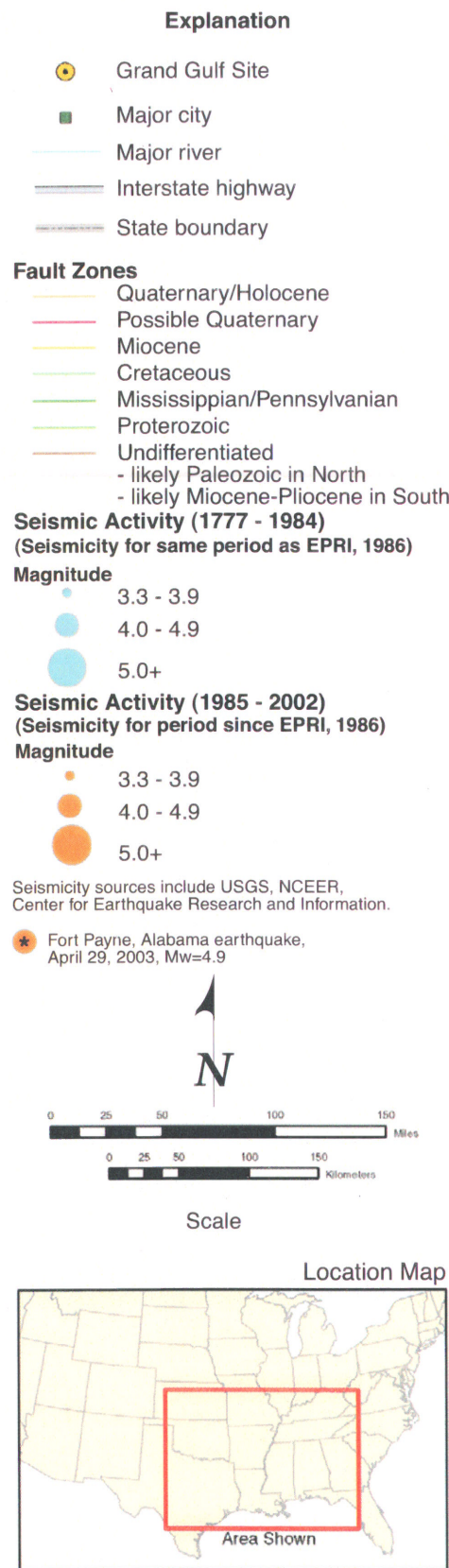
- SPT sampler
- 3.0" O.D. "ModCal" sampler
- + 3.0" O.D. thin wall Shelby Sampler (pushed)
- [6.5"] Mud rotary hole diameter

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BORING SUMMARY SHEET,
BORING 3

FIGURE 2.5-37

REV. 1



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LOCATION OF REGION CONSIDERED
IN SEISMIC SOURCE CHARACTERIZATION