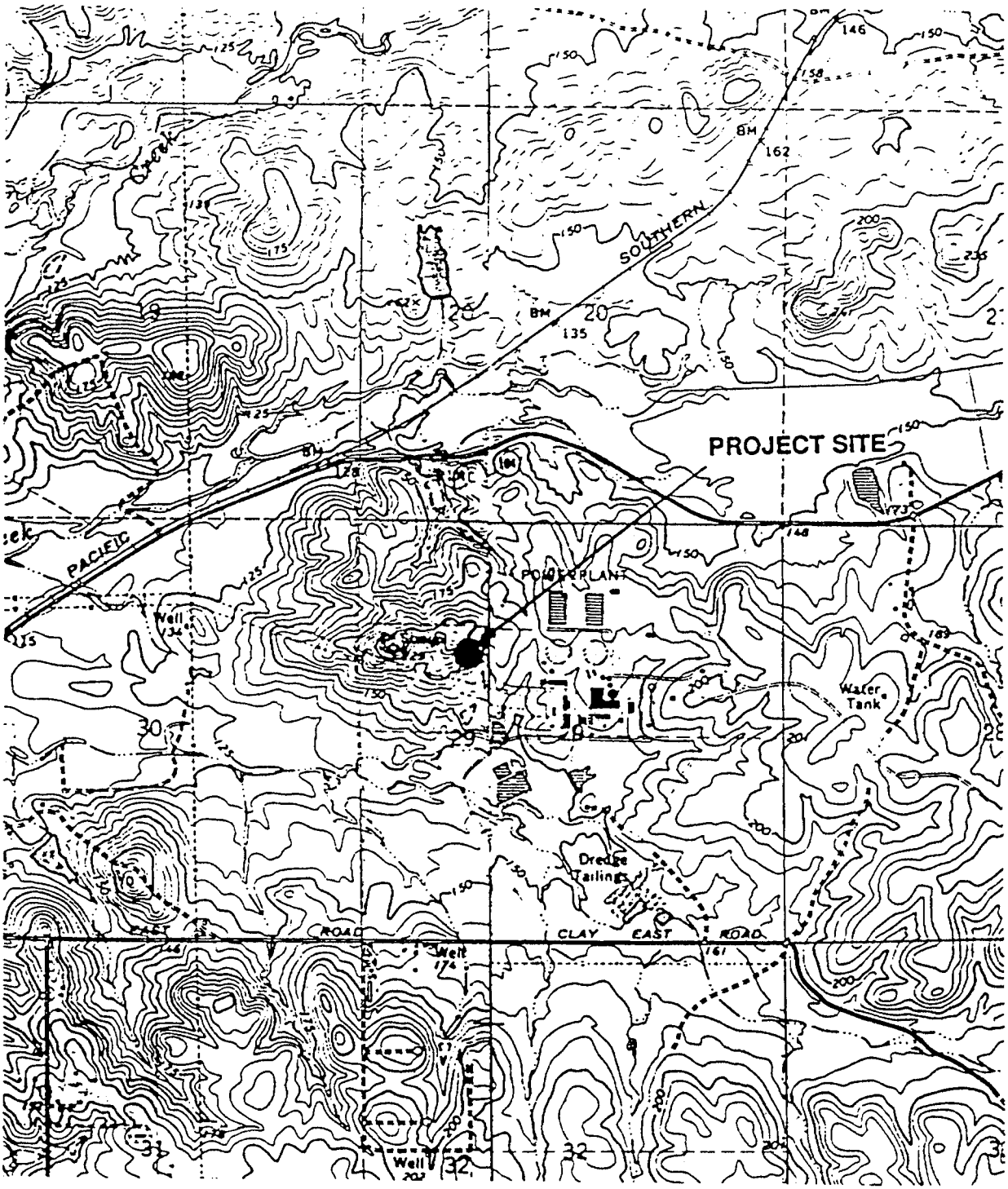
FIGURES



TES

Scale: 1 = 24,000

DATE	May 28, 1993
JOB NO.	E306-01
DWG NO.	E306-01/01
DRAWN	J. Phillips
CHK'D	J. Phillips
APP'D	J. Hicks

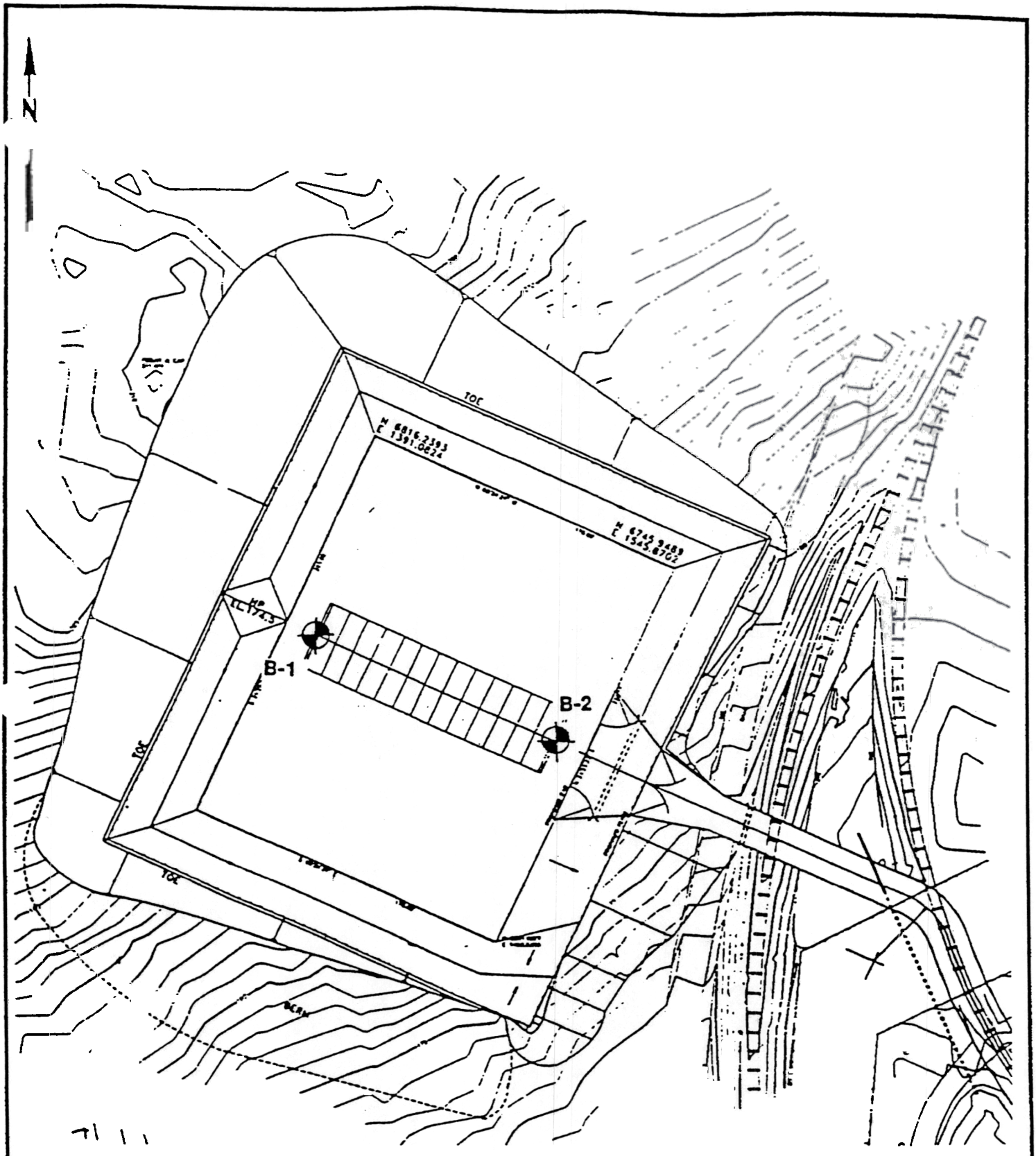
EGC ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
CONSULTANTS IN APPLIED EARTH SCIENCE

PROJECT SITE LOCATION MAP
Independent Spent Fuel Storage Facility
Sacramento County, California

Sacramento Municipal Utility District

FIGURE NO. 1

REV NO.



NOT TO SCALE

NOTES

Legend:

B-1 Boring Location

DATE	May 28, 1993
JOB NO.	E306-01
DWG NO.	E306-01/02
DRAWN	J. Phillips
CHK'D	J. Phillips
APP'D	J. Hicks

EGC ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.
CONSULTANTS IN APPLIED EARTH SCIENCE

BORING LOCATION MAP
Independent Spent Fuel Storage Facility
Sacramento County, California

Sacramento Municipal Utility District

FIGURE NO. 2

EXPLORATORY BORING LOG

CLIENT: Sacramento Municipal Utility District
LOCATION: Rancho Seco Nuclear Generating Station
Sacramento County, California

JOB NO: E306-01
DATE: 4/27/93

BORING B - 1

DRILL RIG: Mobile B-61
DRILLER: B&F
WT. OF HAMMER/DROP: 140 pounds/30 inches

BORING ELEV.: 195 Feet
BORING DIAM.: 8-inch
LOGGED BY: JMP

MATERIAL DESCRIPTION AND REMARKS	CONSISTENCY	USCS	DEPTH (ft.)	SMPL	N blows per ft.	DRY DENSITY (pcf)	WATER CONTENT (%)	PLASTICITY INDEX (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
6-inch root zone Sandy SILT, brown, low plasticity, moist	STIFF	ML	1 2 3 4 5 6	BS #1				10.6	
Hard Pan, Cemented Silty SAND, trace gravel, light brown, dry	HARD	SP	10 11	1	50/5"				9000+
Sandy CLAY, trace gravel, brown, low plasticity, dry	STIFF	CL	12 13 14 15 16	BS #2					
Sandy SILT, trace gravel, brown, low plasticity, dry	HARD	ML	17 18 19	2	50/5"	95	14.9		9000+
			20 21	3	106	92	14.0		9000+
SAND, fine to medium, brown, dry	VERY DENSE	SP	22 23 24 25	4	63	93	7.5		
				5	62				

ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.

SUBSURFACE EXPLORATION LOG B-1
Rancho Seco Nuclear Generating Station
Sacramento County, California
Sacramento Municipal Utility District

FIGURE NO. 3

EXPLORATORY BORING LOG

CLIENT: Sacramento Municipal Utility District
LOCATION: Rancho Seco Nuclear Generating Station
Sacramento County, California

JOB NO: E306-01
DATE: 4/27/93

BORING B - 1

DRILL RIG: Mobile B-61
DRILLER: B&F
WT. OF HAMMER/DROP: 140 pounds/30 inches

BORING ELEV.: 195 Feet
BORING DIAM.: 8-inch
LOGGED BY: JMP

MATERIAL DESCRIPTION AND REMARKS	CONSISTENCY	USCS	DEPTH (ft.)	SMPL	N blows per ft.	DRY DENSITY (pcf)	WATER CONTENT (%)	PLASTICITY INDEX (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
Gravel at 26.0 feet			26	5	62				
			27						
			28						
SILT, orange brown, low plasticity, dry	HARD	ML	29	6	135				9000+
			30						
			31						
			32						
			33						
			34						
			35						
			36	7	25 / 1/2"				9000+
Gravel layer @ 37.0 feet			37						
			38						
			39						
			40						
			41	8	60 / 6"				9000+
			42						
			43						
			44						
Sandy Gravel, gray, dry	VERY DENSE	GW	45						
			46	9	150 / 6"				
			47						
			48						
SILT, orange brown, low plasticity, dry	HARD	ML	49						
			50	10	50 / 5"				9000+

ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.

SUBSURFACE EXPLORATION LOG B-1
Rancho Seco Nuclear Generating Station
Sacramento County, California
Sacramento Municipal Utility District

FIGURE NO. 3

EXPLORATORY BORING LOG

CLIENT: Sacramento Municipal Utility District
LOCATION: Rancho Seco Nuclear Generating Station
Sacramento County, California

JOB NO: E306-01
DATE: 4/27/93

BORING B - 1

DRILL RIG: Mobile B-61
DRILLER: B&F
WT. OF HAMMER/DROP: 140 pounds/30 inches

BORING ELEV.: 195 Feet
BORING DIAM.: 8-inch
LOGGED BY: JMP

MATERIAL DESCRIPTION AND REMARKS	CONSISTENCY	USCS	DEPTH (ft.)	SMPL	N blows per ft.	DRY DENSITY (pcf)	WATER CONTENT (%)	PLASTICITY INDEX (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
SILT, orange brown, low plasticity, dry	HARD	ML	51	10	50/5"				9000+
Sandy CLAY, brown, low plasticity, trace gravel, dry	HARD	CL	56	11	50/5"				9000+
		CL	61	12	50/6"				9000+
End of boring @ 62.0 feet. Groundwater not encountered.									

Notes: BS = bulk sample

ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.

SUBSURFACE EXPLORATION LOG B-1
Rancho Seco Nuclear Generating Station
Sacramento County, California
Sacramento Municipal Utility District

FIGURE NO. 3

EXPLORATORY BORING LOG

CLIENT: Sacramento Municipal Utility District
LOCATION: Rancho Seco Nuclear Generating Station
Sacramento County, California

JOB NO: E306-01
DATE: 4/27/93

BORING B - 2

DRILL RIG: Mobile B-61
DRILLER: B&F
WT. OF HAMMER/DROP: 140 pounds/30 inches

BORING ELEV.: 183 Feet
BORING DIAM.: 8-inch
LOGGED BY: JMP

MATERIAL DESCRIPTION AND REMARKS	CONSISTENCY	USCS	DEPTH (ft.)	SMPL	N blows per ft.	DRY DENSITY (pcf)	WATER CONTENT (%)	PLASTICITY INDEX (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
6-inch root zone Sandy CLAY, brown, low plasticity, moist	STIFF	CL	1						
			2						
			3						
			4						
			5						
			6	1	16				3000
			7						
			8						
			9						
SAND, grayish brown, wet	MED DENSE	SP	10						
			11	2	25				
			12						
Sandy SILT, orange brown, low plasticity, dry	HARD	ML	13						
				3	100/5"	87	17.9		9000+
			14						
			15						
			16	4	68	77	12.2		9000+
			17						
			18						
			19						
				5	57	81	16.8		
			20						
			21						
			22						
			23						
Sandy GRAVEL, grayish brown, slightly moist	VERY DENSE	GW	24						
			25						
				6	50/4"				

EXPLORATORY BORING LOG

CLIENT: Sacramento Municipal Utility District
LOCATION: Rancho Seco Nuclear Generating Station
Sacramento County, California

JOB NO: E306-01
DATE: 4/27/93

BORING B - 2

DRILL RIG: Mobile B-61
DRILLER: B&F
WT. OF HAMMER/DROP: 140 pounds/30 inches

BORING ELEV.: 183 Feet
BORING DIAM.: 8-inch
LOGGED BY: JMP

MATERIAL DESCRIPTION AND REMARKS	CONSISTENCY	USCS	DEPTH (ft.)	SMPL	N blows per ft.	DRY DENSITY (pcf)	WATER CONTENT (%)	PLASTICITY INDEX (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
Sandy GRAVEL, grayish brown, slightly moist	VERY DENSE	GW	26	6	50/4"				
			27						
			28						
			29						
			30						
			31	7	50/4"				
			32						
			33						
Sandy SILT, orange brown, low plasticity, slightly moist	HARD	ML	34						
			35						
			36	8	50/4"				9000+
			37						
			38						
			39						
Light brown below @ 40 feet			40						
			41	9	50/5"				9000+
			42						
			43						
			44						
			45						
			46	10	50/6"				9000+
			47						
			48						
			49						
			50	11	50/5"				9000+

ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.

SUBSURFACE EXPLORATION LOG B-2
Rancho Seco Nuclear Generating Station
Sacramento County, California
Sacramento Municipal Utility District

FIGURE NO. 4

EXPLORATORY BORING LOG

CLIENT: Sacramento Municipal Utility District
LOCATION: Rancho Seco Nuclear Generating Station
Sacramento County, California

JOB NO: E306-01
DATE: 4/27/93

BORING B - 2

DRILL RIG: Mobile B-61
DRILLER: B&F
WT. OF HAMMER/DROP: 140 pounds/30 inches

BORING ELEV.: 183 Feet
BORING DIAM.: 8-inch
LOGGED BY: JMP

MATERIAL DESCRIPTION AND REMARKS	CONSISTENCY	USCS	DEPTH (ft.)	SMPL	N blows per ft.	DRY DENSITY (pcf)	WATER CONTENT (%)	PLASTICITY INDEX (%)	UNCONFINED COMPRESSIVE STRENGTH (psf)
Sandy SILT, orange brown, low plasticity, slightly moist	HARD	ML	51	11	50/5"				9000+
Silty SAND, brown, dry	VERY DENSE	SM	52, 53, 54, 55, 56	12	62				
			57, 58, 59, 60, 61, 62, 63, 64, 65						
SILT, brown, low plasticity, dry	HARD	ML	66	13	80				9000+
			67, 68, 69, 70, 71, 72, 73, 74						
End of boring @ 75 feet. Groundwater not encountered.			75	14	50/5"				9000+

ENVIRONMENTAL GEOTECHNICAL CONSULTANTS, INC.

SUBSURFACE EXPLORATION LOG B-2
Rancho Seco Nuclear Generating Station
Sacramento County, California
Sacramento Municipal Utility District

FIGURE NO. 4