FILE 007/001 #2

VALLEY CAMP OF UTAH, INC.

Scofield Route
Helper, Utah 84526

November 18, 1988

Certified Return Receipt Requested No. P302 658 319

RECEIVED
NOV 22 1988
DIV. OF OIL, GAS & MINING

Mr. Randy Harden
Utah Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Re: 002A and 003A Sediment Pond Certifications

Dear Mr. Harden:

Enclosed is a copy of the soil sample results for the embankment analysis of 002A and 003A Sediment Ponds.

If you have any questions, please call myself or Barry Barnum.

Sincerly,

Steven K. Tanner

SKT/gs

Enclosure

ROLLINS,
BROWN and
GUNNELL,
INC. professional engineers

November 16, 1988

NOV 17 1988

VALLEY CAMP OF UTAH, INC.

Barry Barnum
Scofield Route
Helper, UT 84526

Gentlemen:

We have completed the required testing of soil samples obtained from two test pits excavated at Valley Camp near Scofield, Utah. The location of the test pits are shown in Figure No. 1 with their logs presented in Figure No. 2. It will be observed that the subsurface materials in both areas consist of a brown gravelly sandy silty clay.

Sampling of the test pits occurred at three-foot intervals throughout the depth investigated. Each sample was classified according to the Unified Soil Classification System. The symbols designating the soil type are shown on the logs.

The in-place unit weight and natural moisture content are also shown on the logs ranging from about 90 pounds per cubic foot to about 110 pounds per cubic foot and 6% to 11% respectively for Test Hole No. 1 and from 91 pounds per cubic foot to 97 pounds per cubic foot and 8.6% to 21.5% respectively for Test Hole No. 2.

The saturated unit weight for samples obtained from about 6 feet below the ground surface in Test Hole No. 1 is 118.2 pounds per cubic foot.

1435 WEST 820 NORTH
POST OFFICE BOX 711
PROVO, UTAH 84603

PROVO 374-5771
SALT LAKE CITY 521-5771
AREA CODE 801

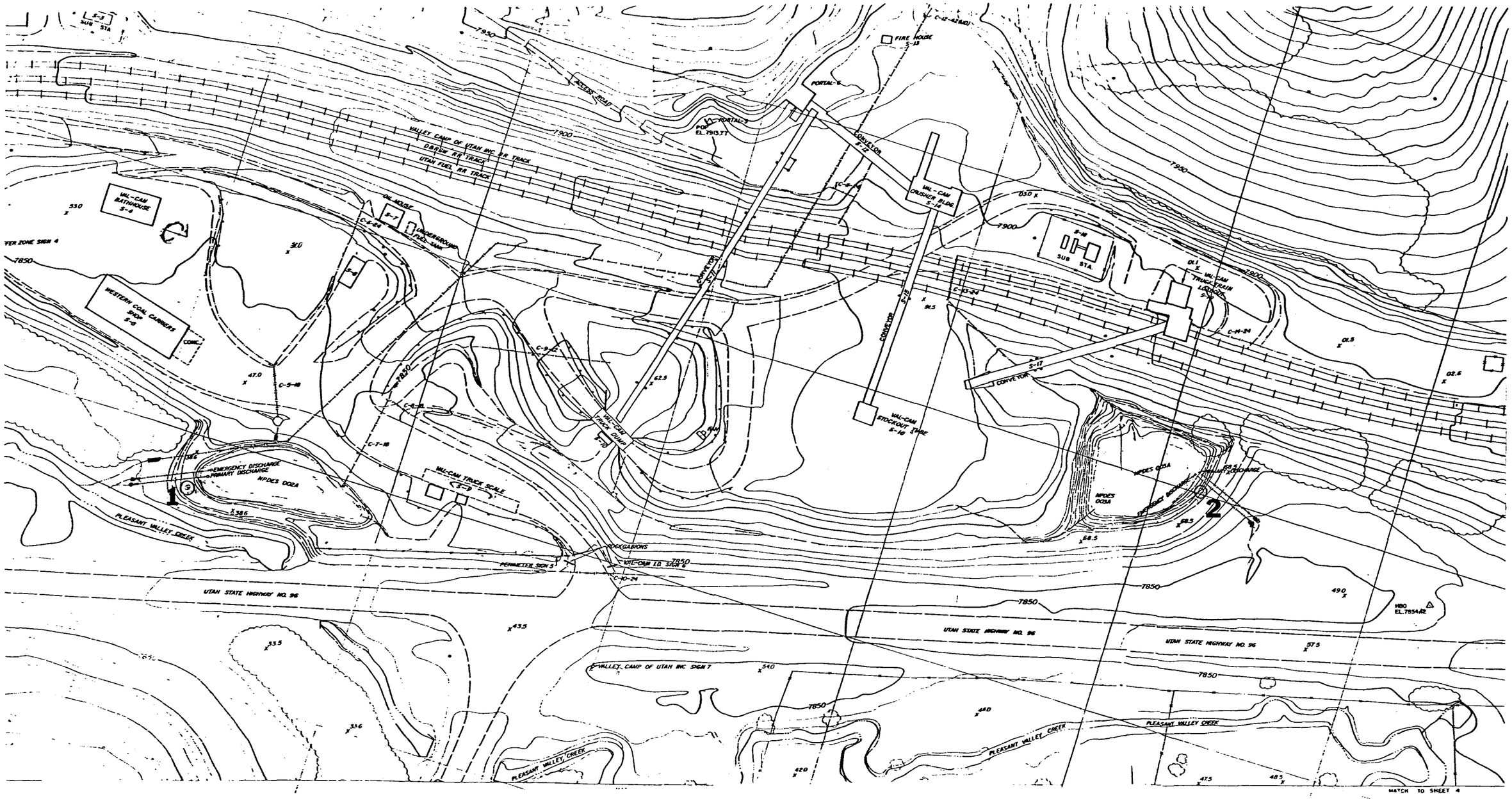
A consolidated drained direct shear test was performed on the samples from a depth of 6 feet in Test Hole No. 1. The results are shown in Figure No. 3 in the form of a Mohr envelope. The results indicate a friction angle of 38.5 degrees and a cohesion of 1 psi.

If you have any questions regarding the information contained herein, please contact me.

Yours truly,

Steven L. Smith

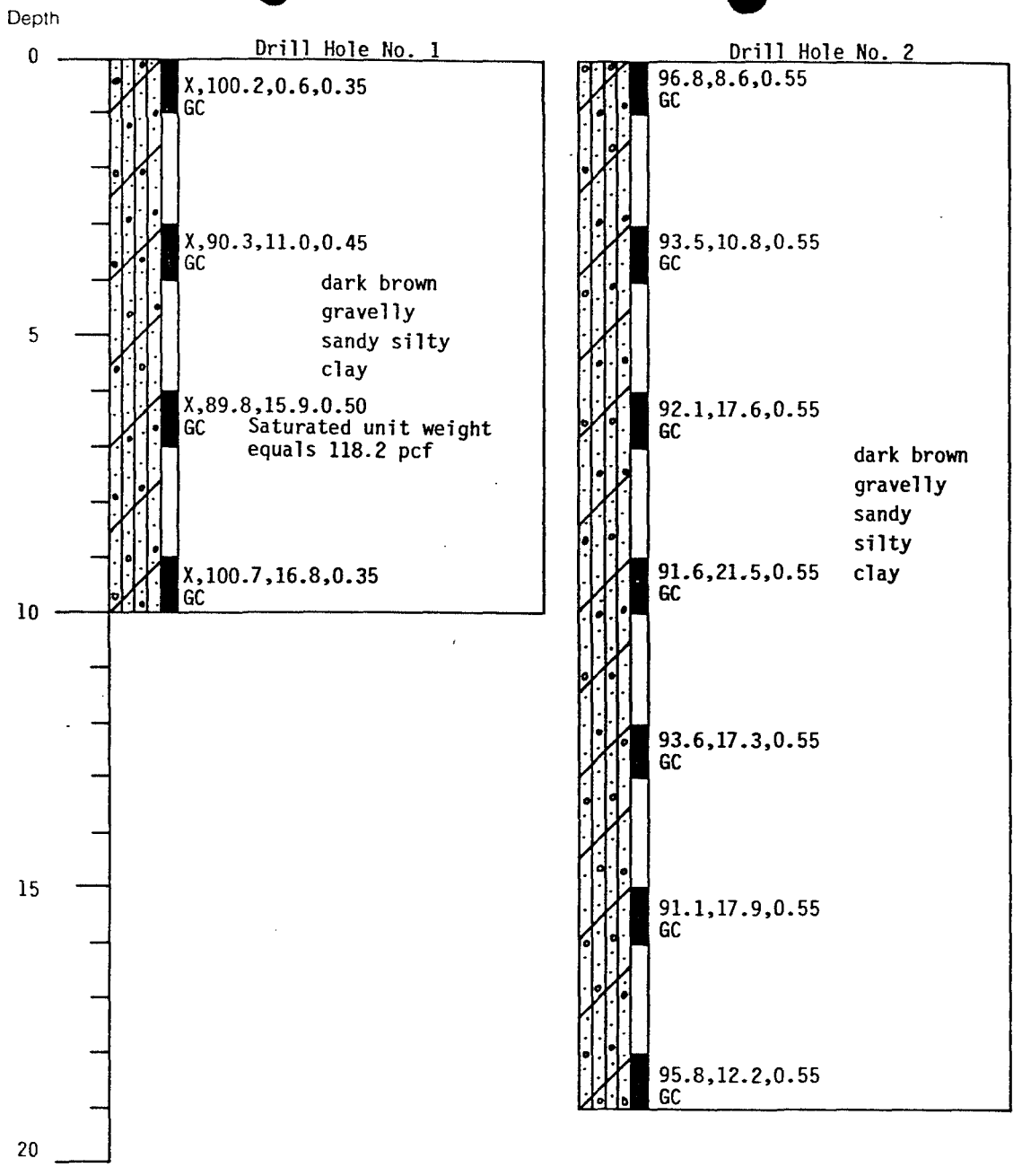
SLS:jsh



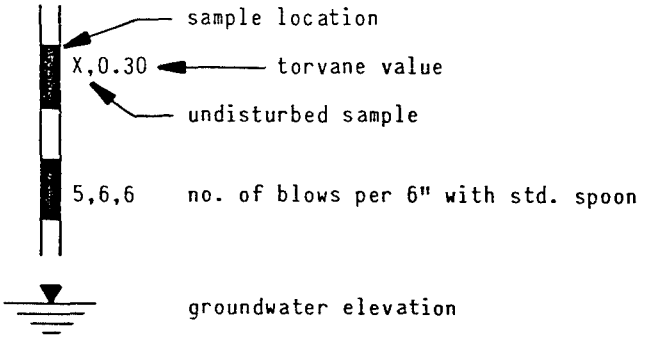
ROLLINS, BROWN and GUNNELL, INC. professional engineers

Site Plan and Location of Drill Holes
Valley Camp of Utah

FIGURE NO. 1



KEY



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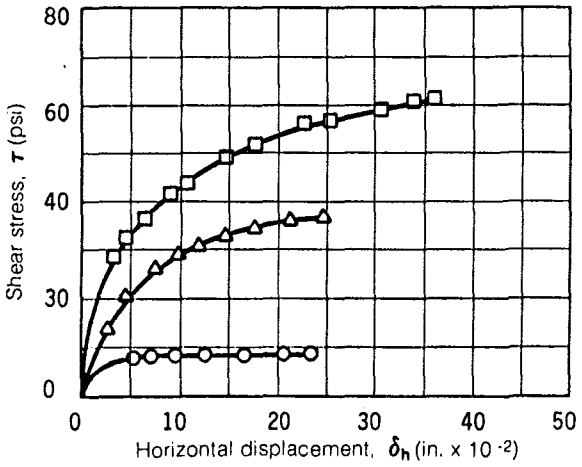
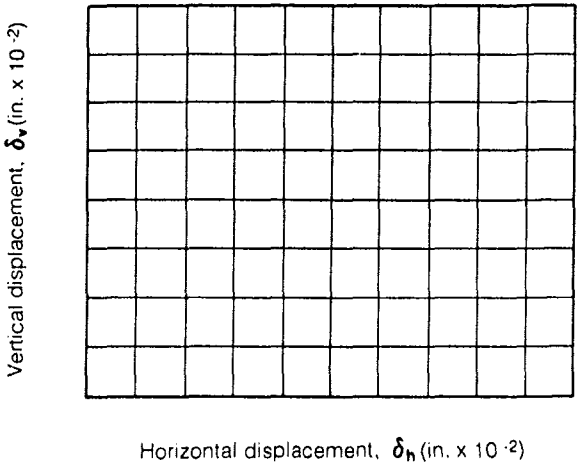
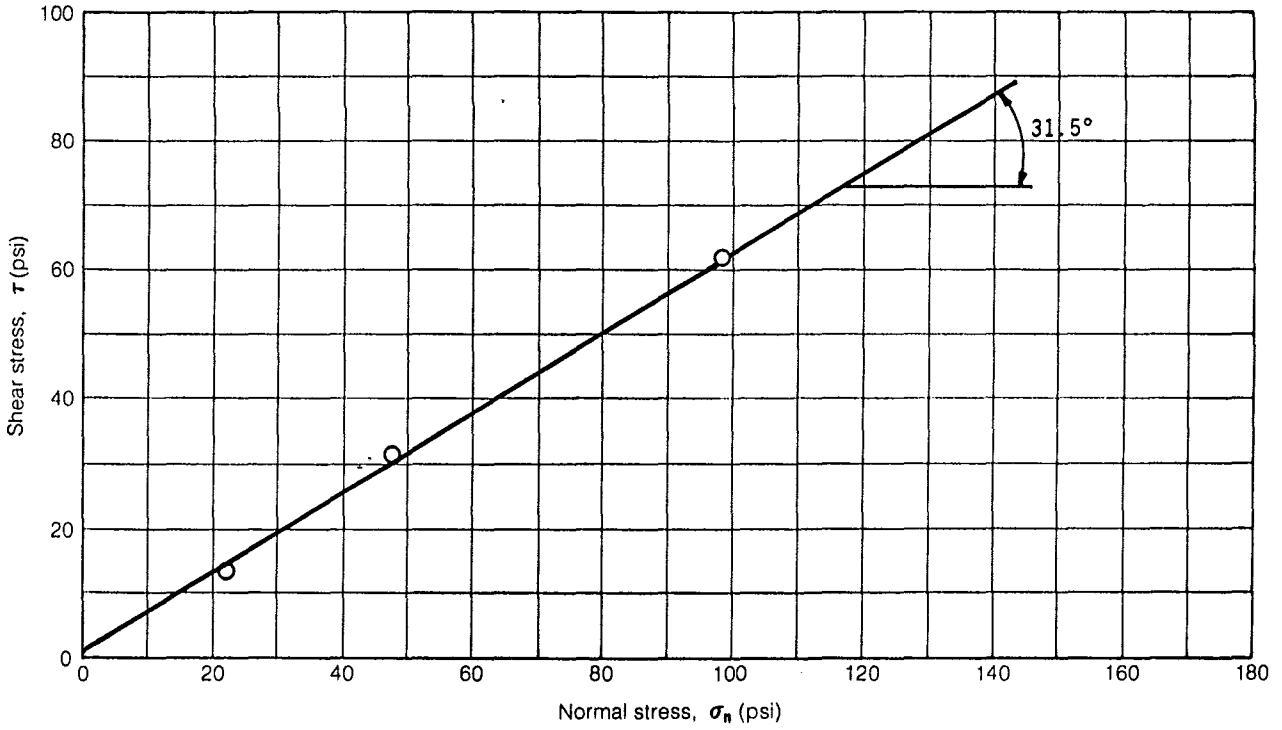
PROFESSIONAL ENGINEERS

Log of Borings for:
Valley Camp of Utah

Figure No. 2







Test no. or symbol	Sample size (inches)	Sample data		Degree of saturation (%)*	Normal stress σ_n (psi)	Maximum shear stress τ (psi)	Strain rate (inches / minute)	Shear strength parameters	
		Dry density (pcf)	Moisture content (%)					Friction angle ϕ (degrees)	Cohesion (c / psi)
○		88.6	15.9	100	22.7	13.0	.005	31.5	1
□		88.6	15.9	100	45.8	31.1	.005		
△		88.6	15.9	100	99.2	61.0	.005		

*Assumed

ROLLINS, BROWN AND GUNNELL, INC.
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DIRECT SHEAR TEST
Project: Valley Camp of Utah

HOLE NO. 1
DEPTH: 6'

FIGURE NO. 3