1.6 Bore log Report:

Information on subsurface conditions obtained from the boring operation is typically presented in the form of a boring record commonly known as 'boring log'. It is also known as sub-soil investigation report which should contain the data obtained from bore holes, site recommendations about the suitable type of foundation, soil pressure and expected settlements.

It is essential to give a complete and accurate record of data collected. All relevant data for the bore bole is recorded in a boring log. A boring log gives the description or classification of various strata encountered at different depths. Any additional information that is obtained in the field soil consistency, UCC strength, standard Penetration test, Cone penetration Test is also indicated on the boring log. It should also show the water table.

The data obtained from a series of bore holes is presented in the form of a vertical section through the ground along the line of exploration. It indicates the boundaries of different strata, along with their classification. It is important to remember that conditions between bore holes are estimated by interpolation, which may not be correct. Obviously, larger the number of holes, the more accurate the subsurface profile.

A soil exploration report generally consists of the following:

1. Introduction, which gives the scope of the investigation.

2. Description of the proposed structure, the location and the geological conditions at the site.

3. Details of the field exploration programme, indicating the number of borings, their location and depths.

4. Details of the method of exploration.

5. General description of the sub-soil conditions as obtained from in-sites tests, such as standard penetration Test, cone test.

6. Details of the laboratory test conducted on the soil samples obtained and the results obtained.

7.Date and weather condition during investigation.

8.Depth of ground water table and the change in water levels.

9. Discussion of the results.

10.Recommendation about the allowable bearing pressure, the type of foundation or structure.

11.Conclusion:The main findings of the bore hole investigations should be clearly stated.

6/15/99	10		TE	ST	PIT LO	G	1	Pit No.: 001
Company Name: ACME ENVIRONMENTAL LTD								Surface Elevation: 425 ft msl
Site Name: Texeron Service Station								Total Depth: 10.4 ft
Location:								Start:
Section 22, T7S, R8W N425789, E259874 Gibson County IN								01/01/2000 at 7:00am
Logged By: C. Dana Chicago IL								01/01/2000 at 7:00pm
Contractor: Magmun Drilling Evansville, IN Conditions: Cold and Clear Comments: 1500 gallon diesel UST removal								Cat 442 Pit Dimensions: 30ft x 20ft x 10.4
								Graphical Log
T T T T	0.0	1.5	423.5		Topsoil			
	1.5	4.0	419,5		Brown, silt with minor sand, root structures, moist	001	grab	sample at 3.0 ft bls, slight petroleum odor, HNU reading 200
	5.5	1.0	418.5		Brown finegrained sand, wet	002	grab	sample at 6.0 ft, strong petrocum odor, HNU reading 1125
	6.5	2.7	415,8		brown slightly sandy clay, moist	003, 004		sample at 7.0 ft, slight pretroleum odor, HNU reading 300 sample at 8 ft, no petroeum odor, HNU reading 0.
п п п	9.2	1.2	414.6		dark brown clayey silt with trace of gravel	005		sample at 10 ft, no petroleum odor HNU reading 0.

Fig 1 Sample of bore log

[Fig1 <u>http://www.easysolve.com/el_rpt.htm</u>] Recordofboring[IS1892-1979]