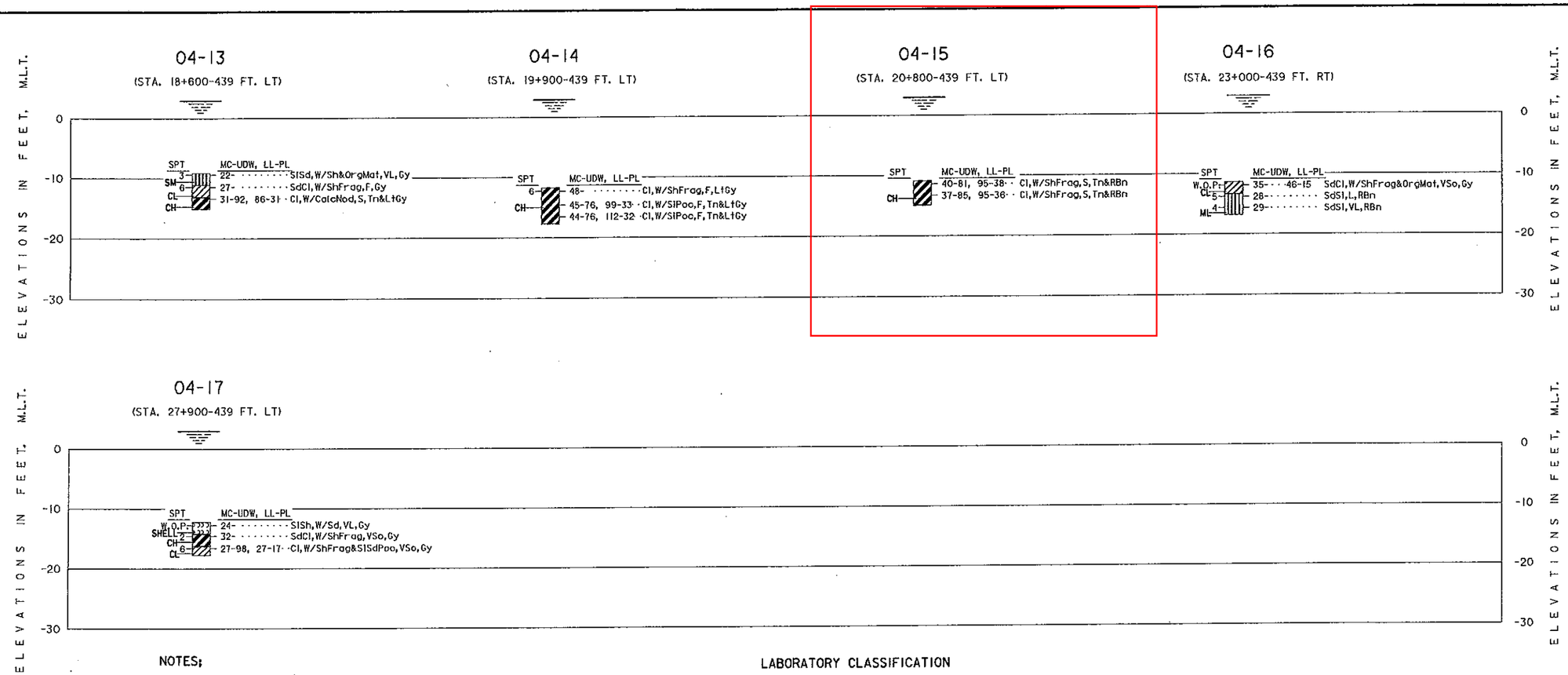

NOTES;

1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH ASTM 2487-93 "CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOILS CLASSIFICATION SYSTEM)". CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE MATERIAL AS DETERMINED BY VISUAL CLASSIFICATION POCKET PENETROMETER TESTS AND PENETRATION RESISTANCE DURING SAMPLING.
2. FIGURES TO THE RIGHT OF BORING LOGS ARE WATER CONTENTS IN PERCENT OF THE DRY WEIGHT, DRY DENSITY, LIQUID LIMIT, AND PLASTIC LIMIT. (MC-UDW),(LL-PL) FIGURES TO THE LEFT OF BORING LOGS ARE BLOW PER FOOT OF PENETRATION FROM STANDARD PENETRATION TESTING.
3. BORINGS WERE DRILLED USING WET ROTARY DRILLING TECHNIQUES AND UNDISTURBED SAMPLES WERE RECOVERED WITH A 3-INCH DIAMETER THIN WALL SAMPLER WHERE COHESIVE MATERIALS WERE ENCOUNTERED.WHERE COHESIONLESS MATERIALS WERE ENCOUNTERED, DISTURBED SAMPLES WERE TAKEN WITH A SPLIT SPOON SAMPLER DURING PERFORMANCE OF STANDARD PENETRATION TESTING.

VISUAL CLASSIFICATIONS

Bl Block	Ly Layer(s)	Str Structure
Blk Blockey	Mat Material	So Soft
Bn Brown	Med Medium	St Stones
Calc Calcereous	Mu Muck	Sta Stains
Cem Cement(ed)	Nod Nodules	Tn Tan(nish)
Cl Clay(ey)	NO TEST No test made	Tr Trace(s)
D Dense	Odr Odor	V Very
D.C. Driller's Classification	Ol Olive	Veg Vegetation
Dec Decay(ed)	Org Organic	W/ With
Dk Dark	Poc Pocket(s)	WASHED Washed
Fer Ferrous	Prt Parting	W.O.H. Weight of hammer
F Firm	Ru Rust	W.O.P. Weight Of Pipe
Frag Fragment(s)	R Red	Wd Wood(en)
Gy Gray(ish)	S Stiff	Y Yellow(ish)
Hcbn Hydrocarbon	Sd Sand(y)	
H Hard	Sh Shell(y)	
L Loose	Sl Silt(y)	
Lt Light	Slks Slicken Sides	
	Sms Seams	

LABORATORY CLASSIFICATION

- CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
- CL INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, LEAN CLAYS.
- GM SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
- GP POORLY-GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
- ML INORGANIC SILTS AND VERY FINE SANDS, WITH SLIGHT PLASTICITY.
- OH ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
- SC CLAYEY SANDS, SAND-CLAY MIXTURES.
- SHELL AND SHELL FRAGMENTS.
- SM SILTY SANDS, SAND-SILT MIXTURES.
- SP POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.

INVITATION NO. W912HY-04-B-0014

US Army Corps of Engineers
Galveston District

Date	By	Description	Rev.

Drawn by: RTA
Designed by: RTA
Checked by: MEM
Submitted by: MARK E. MAZOCH, P.E. Assistant Engineer
Approved by: Chief, Engineering and Construction Division
Date: 1951 MARM 04
Scale: AS SHOWN
Approval Recommended:
Rev. X

URS
URS GROUP, INC.
HOUSTON, TEXAS

U.S. ARMY ENGINEER DISTRICT, GALVESTON
CORPS OF ENGINEERS
GALVESTON, TEXAS

PREPARED UNDER THE DIRECTION OF
LEONARD D. WATERWORTH, Col., C.E.,
DISTRICT ENGINEER

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS
(45-FOOT PROJECT)
UPPER BAY AND BARGE LANES
PIPELINE DREDGING

LOGS OF BORINGS
STA. 18+600 TO STA. 27+900

Drawing No.:
F-7
Sheet 52 of 55
File No. HSC 401-497

...\Hsc\401-497\URS\F07.dgn 5/5/2004 8:46:33 AM