N65928.AR.002478
NTC ORLANDO
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UNDERGROUND PROJECT SAMPLING AND ANALYSIS WORK PLAN NTC ORLANDO FL
7/26/1995
BIONOMICS LABORATORY, INC

WEBER-BENNETT / BENNETT-AZALEA 115 KV LINE UNDERGROUNDING PROJECT SAMPLING AND ANALYSIS WORK ORDER NO. 0068

FOR: **ORLANDO UTILITIES COMMISSION**
TRANSMISSION ENGINEERING DIVISION
6003 PERSHING AVENUE
ORLANDO, FLORIDA 32802

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DATE: JULY 26, 1995

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INTRODUCTION

An environmental assessment was conducted for the Orlando Utilities Commission to evaluate potential contamination along the proposed route of the Weber-Bennett and Bennett Azalea transmission line undergrounding project. Five sites of concern were identified by OUC's ENVD and R. W. Beck.

Site 1	Intersection Marks and Mills
Site 2	Coy Dr. (T-line Structure 62) to Warehouse Rd. (T-line Structure 68)
Site 3	Sub. 11 (T-line Structure 88) across southern boundary of NTC to T-line Structure 98)
Site 4	Intersection Old Cheney Hwy and Semoran Blvd. (between T-line Structure 116 & 117)
Site 5	Intersection of Old Cheney Hwy and E. Colonial Dr. (between T-line Structures 127 - 128)

OBJECTIVE/SCOPE

The investigation focused on the subsurface (soil and ground water) conditions along the existing 115 kV above ground Transmission Line. The objective of this assessment was to characterize local soil and ground water conditions and, to determine the ground water flow direction and elevation and the potential impact of any contamination prior to the construction of the proposed Undergrounding Transmission Line project.

Soil borings were to be conducted along each study area with corresponding Organic Vapor Analysis (OVA) readings to assess potential organic and petroleum contamination. Temporary monitoring wells were also sampled to assess groundwater for organic and inorganic contaminants of concern. Analysis of the groundwater based on the scope of services included:

EPA 601 Purgeable Halocarbons
EPA 602 for BTEX and MTBE
EPA 608 Pesticides / PCB's
EPA 610 PAH
Metals: TAL list (Site 3) only
NPDES Parameters:
- TOC
- pH
- Metals: dissolved Cd, Cr, Cu, Pb, Hg, Zn
- Benzene (see 602)
- Naphthalene (see 610)

Due to the nature of the temporary well installation significant turbidity levels were encountered in the groundwater samples. High turbidity levels would significantly impact the metals analysis. These samples were filtered (0.45μ) prior to preservation and analysis to reflect groundwater metal concentrations.

INVESTIGATIVE METHODS

In order to characterize the existing conditions along the 115kV Transmission Line (Site 1 through Site 5), **C & M** implemented a limited soil boring and hydrogeologic investigation which consisted of the installation of a total of fifty three (53) soil borings and fifteen (15) temporary wells or well points placed at five (5) different selected Site locations; at Site 1, consisted of two (2) soil borings and two (2) temporary wells; at Site 2, consisted of eighteen (18) soil borings and four (4) temporary wells; at Site 3, consisted of twenty four (24) soil borings and five (5) temporary wells; at Site 4, consisted of two (2) soil borings and two (2) temporary wells; and at Site 5, consisted of seven (7) soil borings and two (2) temporary wells. The purpose of the borings and temporary wells was to characterize to the extent possible, local soil and ground water conditions and to determine ground water flow direction and elevation at each Site location.

The soil boring program was conducted using both potable hand auger and a truck-mounted drill rig equipped with 4-inch diameter flight augers. The borings were advanced to different completion depths for each Site and the soil samples collected were screened using a Flame Ionization Detector (FID) an Organic Vapor Analyzer (OVA) for qualitative soil analysis. The OVA is capable of indicating the presence of Volatile Organic Compounds (VOCs) in the soil profile.

Soil samples were screened continuously at two foot intervals to characterize the local soil profile. A portion of each sample interval was placed in a 16-ounce glass jar, sealed and allowed to volatilize for a period of approximately five minutes. Following volatilization, a qualitative field headspace analysis was conducted to determine the presence of VOCs using an OVA.

Ground water samples were collected for different parameters from each temporary well installed at each Site location. The samples were subsequently delivered to Bionomics Laboratory, Inc. of Orlando, Florida for laboratory analysis. These parameters include Volatile Organics (EPA Methods 601 and 602), Extractable Organics (EPA Methods 608 and 610) and Metals. All samples were labeled and logged on Bionomics Laboratory Chain-of-Custody form.

INVESTIGATIVE RESULTS

SITE 1: INTERSECTION, MILLS AVENUE AND MARKS STREET

Surficial soil at the Site is generally characterized as low permeable silty fine sand from zero to seven feet with varying amounts of clay from seven to a depth of fifteen feet. Average depth to ground water is approximately 12.5 feet and exists under water table (unconfined) conditions. The highest or maximum OVA reading of 2.0 parts per million (ppm) was recorded at 10-12 feet.

Based upon the relative depth to water measurements obtained from the Temporary Wells (TW-1 93.50' and TW-2 94.00') survey and the aerial topography, the direction of ground water flow regime in the surficial aquifer underlying the Site is generally towards the northwest.

Laboratory results for two test wells at Site 1 revealed contamination from tetrachloroethene. TW - 2 levels of tetrachloroethene were high at 5,630 μg/L (ppb).

SITE 2: FROM COY DR. (T-LINE STRUCTURE 62) TO WAREHOUSE ROAD (T-LINE STRUCTURE 68)

The soil beneath the Site to a depth of approximately five feet consists generally of gray to light gray silty fine sand with varying amounts of silt to a depth of fourteen feet at TW-2. Average depth to ground water is approximately 8.5 feet and exists under water table (unconfined) conditions. The highest OVA reading of 5.0 ppm was recorded at 6-8 feet of TW-3.

Depth to ground water measurements obtained from the Temporary Wells (TW-1 99.40', TW-2 100.00', TW-3 101.00' and TW-4 102.20') survey and the aerial topography, the direction of ground water flow pattern in the surficial aquifer underlying the Site is generally towards the northwest.

No significant groundwater contaminants were found in any of the test wells. Problems with cross contamination in the laboratory for pesticides/PCB's by EPA 608 occurred due to the processing of other laboratory samples in the same analytical batch run with the OUC samples. These sites well need to be re-sampled to complete the EPA 608 analysis. The PAH (EPA 610) analysis for TW - 1 will also be completed by re-sample.

SITE 3: SUB. 11 (T-LINE STRUCTURE 88) ACROSS SOUTHERN BOUNDARY OF NAVAL TRAINING CENTER TO (T-LINE STRUCTURE 98)

The subsurface soil present on the Site consists generally of gray to light gray fine sand to organic rich silty fine sand with varying amounts of silt to a depth of ten feet. Average depth to ground water is approximately 4.0 feet and exists under water table (unconfined) conditions. The highest OVA reading of 5.0 ppm was recorded at TW-3 and soil boring location B-3(21).

Depth to ground water measurements obtained from the Temporary Wells (TW-I 107.60', TW-2 109.00', TW-3 112.00', TW-4 110.10', and TW-5 107.40') survey and the aerial topography, the direction of ground water flow pattern in the surficial aquifer underlying the Site is towards Lake Gear located southwest and towards Lake Susannah located northeast.

No significant groundwater contaminants were found in the test wells for Site 3. Due to the location of the site adjacent to the NTC, an expanded list of metals analysis was performed (TAL list) on the groundwater. The groundwater samples at this site were analyzed for both total metals and dissolved metals. In addition, a composite of the soil samples collected from all of the boreholes for Site 3 was prepared for analysis of the TAL metals. These results do not show any contaminants of concern.

SITE 4: INTERSECTION, OLD CHENEY HIGHWAY AND SEMORAN BOULEVARD (BETWEEN T-LINE STRUCTURES 116 AND 117)

The surficial soil present on the Site consists generally of gray to light gray silty fine sand with varying amounts of silt to a depth of ten feet. Average depth to ground water is approximately 5.0 feet and exists under water table (unconfined) conditions. The highest OVA reading of 10.0 ppm was recorded at TW-1.

Depth to ground water measurements obtained from the Temporary Wells (TW-1 93.10' and TW-2 92.50') survey and the aerial topography, the direction of ground water flow regime in the surficial aquifer underlying the Site is generally towards the northeast.

No significant contaminants were found in the test wells for Site 4. A positive result for methylene chloride was analyzed in TW - 2. Methylene chloride was also found in the associated lab blank. This is a common laboratory solvent that is frequently found in trace levels due to cross contamination. Current EPA and Bionomics CQAP approved quality control limits will allow up to 5X the method detection limit for this compound. As it was also detected in the laboratory blank, it is a result of trace lab contamination not a sample analyte. Insufficient sample was submitted for well TW - 1 to complete the analysis for EPA 608 or EPA 610. This site will need to be re-sampled to complete these analysis.

SITE 5: INTERSECTION OF OLD CHENEY HIGHWAY AND EAST COLONIAL DRIVE (BETWEEN T-LINE STRUCTURES 127-128)

The surficial soil present on the Site is generally characterized as low permeable organic rich gray to light gray silty fine sand with varying amounts of silt to a depth of ten feet. Average depth to ground water is approximately 5.0 feet and exists under water table (unconfined) conditions. The highest OVA reading of 10 ppm was recorded at TW-2.

Depth to ground water measurements obtained from the Temporary Wells (TW-1 91.60' and TW-2 91.10') survey and the aerial topography, the direction of ground water flow pattern in the surficial aquifer underlying the Site is generally towards the northeast.

No significant contaminants were found in the test wells for Site 5.

SOIL BORING
AND
GROUNDWATER
DATA TABLES

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
SOIL BORING AND OVA RESULTS

SITE #1

SAMPLE ID	DEPTH OF SAMPLE, ft.	DEPTH TO GROUNDWATER	OVA PPM	CHEMICAL ANALYSIS SAMPLE
B - 1 (1)	4 - 6'	---	0 ppm	
	10 - 12'	12 '	2 ppm	
TW - 1	12 - 14'			YES
B - 1 (2)	4 - 6'		0 ppm	
	10 - 12'		0 ppm	
	12 - 14'	13'		
TW - 2	14 - 15'			YES

B = Borehole
TW = Temporary Well

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNETT/BENNETT-AZALEA
TEMPORARY WELL GROUNDWATER DATA

SITE #1

LOCATION	TW 1	TW 2
LAB ID	B506567-01	B506567-02
DATE SAMPLED	06/24/95 11:10	06/24/95 11:35
DATE RECEIVED	06/26/95 13:50	06/26/95 13:50
WELL DEPTH, FT.	12 - 14'	14 - 15'

PARAMETER:	UNITS	D.L.		
pH	pH UNITS		6.21	5.6
Total Organic Carbon	mg/L	100	210.2	BDL
Turbidity	N.T.U.	0.1	1800	9200
EPA 601				
1,1,1-Trichloroethane	µg/L	1	BDL	BDL
1,1,2,2-Tetrachloroethane	µg/L	1	BDL	BDL
1,1,2-Trichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethene	µg/L	1	BDL	BDL
1,2-Dichlorobenzene	µg/L	1	BDL	BDL
1,2-Dichloroethane	µg/L	1	BDL	BDL
1,2-Dichloropropane	µg/L	1	BDL	BDL
1,3-Dichlorobenzene	µg/L	1	BDL	BDL
1,4-Dichlorobenzene	µg/L	1	BDL	BDL
2-Chloroethylvinyl ether	µg/L	1	BDL	BDL
Bromodichloromethane	µg/L	1	BDL	BDL
Bromoform	µg/L	1	BDL	BDL
Bromomethane	µg/L	1	BDL	BDL
Carbon Tetrachloride	µg/L	1	BDL	BDL
Chlorobenzene	µg/L	1	BDL	BDL
Chloroethane	µg/L	1	BDL	BDL
Chloroform	µg/L	1	BDL	BDL
Chloromethane	µg/L	1	BDL	BDL
cis-1,3-Dichloropropene	µg/L	1	BDL	BDL
Dibromochloromethane	µg/L	1	BDL	BDL
Dichlorodifluoromethane	µg/L	1	BDL	BDL
Methylene Chloride	µg/L	1	BDL	BDL
Tetrachloroethene	µg/L	1	21.8	5630
trans-1,2-Dichloroethene	µg/L	1	BDL	3.8
trans-1,3-Dichloropropene	µg/L	1	BDL	BDL
Trichloroethene	µg/L	1	BDL	15.6
Trichlorofluoromethane	µg/L	1	BDL	BDL
Vinyl Chloride	µg/L	1	BDL	BDL
EPA 602				
Benzene	µg/L	1	BDL	BDL
Ethylbenzene	µg/L	1	BDL	BDL
Methyl-tert-butyl ether	µg/L	1	BDL	BDL
Toluene	µg/L	1	BDL	BDL
Total VOA	µg/L	6	BDL	BDL
Total Xylenes	µg/L	3	BDL	BDL

NOTE: PCE value out of range

SITE #1 (cont.)

LOCATION	TW 1	TW 2
LAB ID	B506621-01	B506621-02
DATE SAMPLED	06/28/95 08:50	06/28/95 09:30
DATE RECEIVED	06/28/95 10:20	06/28/95 10:20
WELL DEPTH, FT.	12 - 14'	14 - 15'

PARAMETER:	UNITS	D.L.		
EPA 608				
Aldrin	µg/L	0.005	BDL	BDL
alpha-BHC	µg/L	0.038	BDL	BDL
beta-BHC	µg/L	0.01	BDL	BDL
delta-BHC	µg/L	0.017	BDL	BDL
gamma-BHC (Lindane)	µg/L	0.007	BDL	BDL
Chlordane	µg/L	0.022	BDL	BDL
4,4'-DDD	µg/L	0.042	BDL	BDL
4,4'-DDE	µg/L	0.079	BDL	BDL
4,4'-DDT	µg/L	0.029	BDL	BDL
Dieldrin	µg/L	0.02	BDL	BDL
Endosulfan I	µg/L	0.014	BDL	BDL
Endosulfan II	µg/L	0.064	BDL	BDL
Endosulfan Sulfate	µg/L	0.02	BDL	BDL
Endrin	µg/L	0.02	BDL	BDL
Endrin Aldehyde	µg/L	0.029	BDL	BDL
Heptachlor	µg/L	0.005	BDL	BDL
Heptachlor Epoxide	µg/L	0.035	BDL	BDL
Methoxychlor	µg/L	0.11	BDL	BDL
Toxaphene	µg/L	0.24	BDL	BDL
Aroclor 1016	µg/L	0.33	BDL	BDL
Aroclor 1221	µg/L	0.33	BDL	BDL
Aroclor 1232	µg/L	0.33	BDL	BDL
Aroclor 1242	µg/L	0.33	BDL	BDL
Aroclor 1248	µg/L	0.33	BDL	BDL
Aroclor 1254	µg/L	0.33	BDL	BDL
Aroclor 1260	µg/L	0.33	BDL	BDL
EPA 610				
Acenaphthene	µg/L	5	BDL	BDL
Acenaphthylene	µg/L	5	BDL	BDL
Anthracene	µg/L	5	BDL	BDL
Benzo (a) anthracene	µg/L	5	BDL	BDL
Benzo (a) pyrene	µg/L	5	BDL	BDL
Benzo (b) fluoranthene	µg/L	5	BDL	BDL
Benzo (ghi) perylene	µg/L	5	BDL	BDL
Benzo (k) fluoranthene	µg/L	5	BDL	BDL
Chrysene	µg/L	5	6.3	BDL
Dibenzo (a,h) anthacene	µg/L	5	BDL	BDL
Fluoranthene	µg/L	5	BDL	BDL
Fluorene	µg/L	5	BDL	BDL
Indeno (1,2,3-cd) pyrene	µg/L	5	BDL	BDL
Naphthalene	µg/L	5	BDL	BDL
Phenanthrene	µg/L	5	BDL	BDL
Pyrene	µg/L	5	BDL	BDL
1-Methyl naphthalene	µg/L	5	BDL	BDL
2-Methyl naphthalene	µg/L	5	BDL	BDL
Total Naphthalene	µg/L	15	BDL	BDL

SITE #1 (cont.)

LOCATION			TW 1	TW 2
LAB ID			B506621-01	B506621-02
PARAMETER:	**UNITS**	**D.L.**		
DISSOLVED METALS				
Cadmium, Dissolved	mg/L	0.0001	0.0002	BDL
Chromium, Dissolved	mg/L	0.01	BDL	BDL
Copper, Dissolved	mg/L	0.01	BDL	BDL
Mercury, Dissolved	mg/L	0.0002	BDL	BDL
Lead, Dissolved	mg/L	0.003	BDL	BDL
Zinc, Dissolved	mg/L	0.03	0.255	0.086

D.L. = Laboratory analyte detection reporting limit
BDL = Below Detection Limit

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
SOIL BORING AND OVA RESULTS

SITE #2

SAMPLE ID	DEPTH OF SAMPLE, ft.	DEPTH TO GROUNDWATER	OVA PPM	CHEMICAL ANALYSIS SAMPLE
B - 2 (1)	2 - 4'		0 ppm	
B - 2 (2)	2 - 4'		0 ppm	
B - 2 (3)	2 - 4'		0 ppm	
B - 2 (4)	2 - 4'		0 ppm	
	4 - 6'		0 ppm	
	6 - 8'	8'	0 ppm	
TW - 1	8 - 10'			YES
B - 2 (5)	2 - 4'	---	0 ppm	
B - 2 (6)	2 - 4'	---	0 ppm	
B - 2 (7)	2 - 4'	---	0 ppm	
B - 2 (8)	2 - 4'		0 ppm	
	4 - 6'		0 ppm	
	6 - 8'		2 ppm	
	8 - 10'	10'	0 ppm	
TW - 2	12 - 14'			YES
B - 2 (9)	2 - 4'	---	0 ppm	
B - 2 (10)	2 - 4'		0 ppm	
	4 - 6'		0 ppm	
	6 - 8'	8'	5 ppm	
TW - 3	8 - 10'		0 ppm	YES
B - 2 (11)	2 - 4'	---	0 ppm	
B - 2 (12)	2 - 4'	---	0 ppm	
B - 2 (13)	2 - 4'	---	0 ppm	
B - 2 (14)	2 - 4'	---	0 ppm	
B - 2 (15)	2 - 4'		0 ppm	
	4 - 6'		0 ppm	
	6 - 8'	8'	0 ppm	
TW - 4	8 - 10'		0 ppm	YES
B - 2 (16)	2 - 4'	---	0 ppm	
B - 2 (17)	2 - 4'	---	0 ppm	
B - 2 (18)	2 - 4'	---	0 ppm	

B = Borehole
TW = Temporary Well

SITE #2 (cont.)

LOCATION			TW 1	TW 2	TW 3	TW 4
LAB ID			B506359-01	B506359-02	B506359-03	B506359-04
EPA 610						
1-Methyl naphthalene	µg/L	5	see note 1*	BDL	BDL	BDL
2-Methyl naphthalene	µg/L	5	na	BDL	BDL	BDL
Acenaphthene	µg/L	5	na	BDL	BDL	BDL
Acenaphthylene	µg/L	5	na	BDL	BDL	BDL
Anthracene	µg/L	5	na	BDL	BDL	BDL
Benzo (a) anthracene	µg/L	5	na	BDL	BDL	BDL
Benzo (a) pyrene	µg/L	5	na	BDL	BDL	BDL
Benzo (b) fluoranthene	µg/L	5	na	BDL	BDL	BDL
Benzo (ghi) perylene	µg/L	5	na	BDL	BDL	BDL
Benzo (k) fluoranthene	µg/L	5	na	BDL	BDL	BDL
Chrysene	µg/L	5	na	BDL	BDL	BDL
Dibenzo (a,h) anthacene	µg/L	5	na	BDL	BDL	BDL
Fluoranthene	µg/L	5	na	BDL	BDL	BDL
Fluorene	µg/L	5	na	BDL	BDL	BDL
Indeno (1,2,3-cd) pyrene	µg/L	5	na	BDL	BDL	BDL
Naphthalene	µg/L	5	na	BDL	BDL	BDL
Phenanthrene	µg/L	5	na	BDL	BDL	BDL
Pyrene	µg/L	5	na	BDL	BDL	BDL
Total Naphthalene	µg/L	15	na	BDL	BDL	BDL
EPA 608			see note 2**	see note 2**	see note 2**	see note 2**
Dissolved Metals:						
Cadmium, Dissolved	mg/L	0.0001	BDL	BDL	BDL	0.0001
Chromium, Dissolved	mg/L	0.01	BDL	BDL	BDL	BDL
Copper, Dissolved	mg/L	0.01	0.011	0.011	0.011	0.012
Mercury, Dissolved	mg/L	0.0002	BDL	BDL	BDL	BDL
Lead, Dissolved	mg/L	0.003	BDL	BDL	BDL	0.004
Zinc, Dissolved	mg/L	0.03	BDL	BDL	0.185	0.07

D.L. = Laboratory analyte detection reporting limit
BDL = Below Detection Limit

NOTE (1)*: B506359-01 EPA 610 was lost due to laboratory error. Extract was spilled, insufficient sample to re-analyze
NOTE (2)**: All 608's were contaminated (cross contamination) during extraction and need to be recollected

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
SOIL BORING AND OVA RESULTS

SITE #3

SAMPLE ID	DEPTH OF SAMPLE, ft.	DEPTH TO GROUNDWATER	OVA PPM	CHEMICAL ANALYSIS SAMPLE
B - 3 (1)	2 - 4'	---	0 ppm	
B - 3 (2)	2 - 4'	---	0 ppm	
B - 3 (3)	2 - 4'	---	0 ppm	
B - 3 (4)	2 - 4'		0 ppm	
B - 3 (5)	2 - 4'	---	0 ppm	
B - 3 (6)	2 - 4'	---	0 ppm	
B - 3 (7)	2 - 4'		0 ppm	
B - 3 (8)	2 - 4'	4'	0 ppm	
	4 - 6'		0 ppm	
TW - 1	6 - 8'		0 ppm	YES
B - 3 (9)	2 - 4'	4'	0 ppm	
B - 3 (10)	2 - 4'		0 ppm	
B - 3 (11)	2 - 4'		0 ppm	
	4 - 6'		2 ppm	
	6 - 8'	7'	0 ppm	
TW - 2	8 - 10'		0 ppm	YES
B - 3 (12)	2 - 4'	---	0 ppm	
B - 3 (13)	2 - 4'	---	0 ppm	
B - 3 (14)	2 - 4'	---	0 ppm	
B - 3 (15)	2 - 4'		0 ppm	
	4 - 6'	5'	5 ppm	
	6 - 8'		0 ppm	
TW - 3	8 - 10'		0 ppm	YES
B - 3 (16)	2 - 4'	---	0 ppm	
B - 3 (17)	2 - 4'		0 ppm	
B - 3 (18)	2 - 4'		0 ppm	
B - 3 (19)	2 - 4'	4'	0 ppm	

SITE #3 CONT.

SAMPLE ID	DEPTH OF SAMPLE, ft.	DEPTH TO GROUNDWATER	OVA PPM	CHEMICAL ANALYSIS SAMPLE
B - 3 (20)	2 - 4'	4'	2 ppm	
	4 - 6'		0 ppm	
	6 - 8'		0 ppm	
TW - 4	8 - 10'		0 ppm	YES
B - 3 (21)	2 - 4'	4'	5 ppm	
B - 3 (22)	2 - 4'	4'	0 ppm	
B - 3 (23)	2 - 4'	4'	0 ppm	
B - 3 (240)	2 - 4'	4'	0 ppm	
	4 - 6'		0 ppm	
TW - 5	6 - 8'		0 ppm	YES

B = Borehole
TW = Temporary Well

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
TEMPORARY WELL GROUNDWATER DATA

SITE #3

LOCATION			TW 1	TW 2	TW 3
LAB ID			B507040-01	B507041-01	B507040-02
DATE SAMPLED			07/01/95 10:50	07/05/95 07:50	07/01/95 11:50
DATE RECEIVED			07/03/95 09:13	07/05/95 08:45	07/03/95 09:13
WELL DEPTH, FT.			6 - 8'	8 - 10'	8 - 10'
PARAMETER:	**UNITS**	**D.L.**			
pH	pH UNITS		6.45	7.18	7.01
Total Organic Carbon	mg/L	10	85.82	79.29	64.06
Turbidity	N.T.U.	0.1	1500	500	180
EPA 601					
1,1,1-Trichloroethane	µg/L	1	BDL	BDL	BDL
1,1,2,2-Tetrachloroethane	µg/L	1	BDL	BDL	BDL
1,1,2-Trichloroethane	µg/L	1	BDL	BDL	BDL
1,1-Dichloroethane	µg/L	1	BDL	BDL	BDL
1,1-Dichloroethene	µg/L	1	BDL	BDL	BDL
1,2-Dichlorobenzene	µg/L	1	BDL	BDL	BDL
1,2-Dichloroethane	µg/L	1	BDL	BDL	BDL
1,2-Dichloropropane	µg/L	1	BDL	BDL	BDL
1,3-Dichlorobenzene	µg/L	1	BDL	BDL	BDL
1,4-Dichlorobenzene	µg/L	1	BDL	BDL	BDL
2-Chloroethylvinyl ether	µg/L	1	BDL	BDL	BDL
Bromodichloromethane	µg/L	1	BDL	BDL	BDL
Bromoform	µg/L	1	BDL	BDL	BDL
Bromomethane	µg/L	1	BDL	BDL	BDL
Carbon Tetrachloride	µg/L	1	BDL	BDL	BDL
Chlorobenzene	µg/L	1	BDL	BDL	BDL
Chloroethane	µg/L	1	BDL	BDL	BDL
Chloroform	µg/L	1	BDL	BDL	BDL
Chloromethane	µg/L	1	BDL	BDL	BDL
cis-1,3-Dichloropropene	µg/L	1	BDL	BDL	BDL
Dibromochloromethane	µg/L	1	BDL	BDL	BDL
Dichlorodifluoromethane	µg/L	1	BDL	BDL	BDL
Methylene Chloride	µg/L	1	BDL	BDL	BDL
Tetrachloroethene	µg/L	1	0.71 (J)	BDL	1.3
trans-1,2-Dichloroethene	µg/L	1	BDL	BDL	BDL
trans-1,3-Dichloropropene	µg/L	1	BDL	BDL	BDL
Trichloroethene	µg/L	1	BDL	BDL	BDL
Trichlorofluoromethane	µg/L	1	BDL	BDL	BDL
Vinyl Chloride	µg/L	1	BDL	BDL	BDL
EPA 602					
Benzene	µg/L	1	BDL	BDL	BDL
Ethylbenzene	µg/L	1	BDL	BDL	BDL
Methyl-tert-butyl ether	µg/L	1	BDL	BDL	BDL
Toluene	µg/L	1	BDL	BDL	BDL
Total VOA	µg/L	6	BDL	BDL	BDL
Total Xylenes	µg/L	3	BDL	BDL	BDL

(J): Estimated value, less than calibration limit

SITE #3

LOCATION			TW 1	TW 2	TW 3
LAB ID			B507040-01	B504041-01	B507040-02
EPA 608					
4,4'-DDD	µg/L	0.042	BDL	BDL	BDL
4,4'-DDE	µg/L	0.079	BDL	BDL	BDL
4,4'-DDT	µg/L	0.029	BDL	BDL	BDL
Aldrin	µg/L	0.005	BDL	BDL	BDL
alpha-BHC	µg/L	0.038	BDL	BDL	BDL
Aroclor 1016	µg/L	0.33	BDL	BDL	BDL
Aroclor 1221	µg/L	0.33	BDL	BDL	BDL
Aroclor 1232	µg/L	0.33	BDL	BDL	BDL
Aroclor 1242	µg/L	0.33	BDL	BDL	BDL
Aroclor 1248	µg/L	0.33	BDL	BDL	BDL
Aroclor 1254	µg/L	0.33	BDL	BDL	BDL
Aroclor 1260	µg/L	0.33	BDL	BDL	BDL
beta-BHC	µg/L	0.01	BDL	BDL	BDL
Chlordane	µg/L	0.022	BDL	BDL	BDL
delta-BHC	µg/L	0.017	BDL	BDL	BDL
Dieldrin	µg/L	0.02	BDL	BDL	BDL
Endosulfan I	µg/L	0.014	BDL	BDL	BDL
Endosulfan II	µg/L	0.064	BDL	BDL	BDL
Endosulfan Sulfate	µg/L	0.02	BDL	BDL	BDL
Endrin	µg/L	0.02	BDL	BDL	BDL
Endrin Aldehyde	µg/L	0.029	BDL	BDL	BDL
gamma-BHC (Lindane)	µg/L	0.007	BDL	BDL	BDL
Heptachlor	µg/L	0.005	BDL	BDL	BDL
Heptachlor Epoxide	µg/L	0.035	BDL	BDL	BDL
Methoxychlor	µg/L	0.11	BDL	BDL	BDL
Toxaphene	µg/L	0.24	BDL	BDL	BDL
EPA 610					
Acenaphthene	µg/L	5	BDL	BDL	BDL
Acenaphthylene	µg/L	5	BDL	BDL	BDL
Anthracene	µg/L	5	BDL	BDL	BDL
Benzo (a) anthracene	µg/L	5	BDL	BDL	BDL
Benzo (a) pyrene	µg/L	5	BDL	BDL	BDL
Benzo (b) fluoranthene	µg/L	5	BDL	BDL	BDL
Benzo (ghi) perylene	µg/L	5	BDL	BDL	BDL
Benzo (k) fluoranthene	µg/L	5	BDL	BDL	BDL
Chrysene	µg/L	5	BDL	BDL	BDL
Dibenzo (a,h) anthacene	µg/L	5	BDL	BDL	BDL
Fluoranthene	µg/L	5	BDL	BDL	BDL
Fluorene	µg/L	5	BDL	BDL	BDL
Indeno (1,2,3-cd) pyrene	µg/L	5	BDL	BDL	BDL
Naphthalene	µg/L	5	BDL	BDL	BDL
Phenanthrene	µg/L	5	BDL	BDL	BDL
Pyrene	µg/L	5	BDL	BDL	BDL
1-Methyl naphthalene	µg/L	5	BDL	BDL	BDL
2-Methyl naphthalene	µg/L	5	BDL	BDL	BDL
Total Naphthalene	µg/L	15	BDL	BDL	BDL

LOCATION			TW 1	TW 2	TW 3
LAB ID			B507040-01	B504041-01	B507040-02
DISSOLVED METALS:					
Aluminum	mg/L	0.05	0.155	BDL	BDL
Antimony	mg/L	0.005	BDL	BDL	BDL
Arsenic	mg/L	0.005	BDL	BDL	BDL
Barium	mg/L	0.03	BDL	BDL	BDL
Beryllium	mg/L	0.004	BDL	BDL	BDL
Cadmium	mg/L	0.0001	BDL	BDL	BDL
Calcium	mg/L	0.5	18.2	70	24.3
Chromium	mg/L	0.005	BDL	BDL	BDL
Cobalt	mg/L	0.03	BDL	BDL	BDL
Copper	mg/L	0.01	BDL	BDL	BDL
Iron	mg/L	0.03	BDL	BDL	BDL
Lead	mg/L	0.005	BDL	BDL	BDL
Magnesium	mg/L	0.5	1.27	2.3	0.88
Manganese	mg/L	0.03	BDL	BDL	BDL
Mercury	mg/L	0.0002	BDL	BDL	BDL
Nickel	mg/L	0.03	BDL	BDL	BDL
Potassium	mg/L	0.5	1.57	2.13	BDL
Selenium	mg/L	0.005	BDL	0.005	BDL
Silver	mg/L	0.01	BDL	BDL	BDL
Sodium	mg/L	0.5	2.04	5.04	1.64
Thallium	mg/L	0.002	BDL	BDL	BDL
Vanadium	mg/L	0.03	BDL	BDL	BDL
Zinc	mg/L	0.03	BDL	0.126	BDL
TOTAL METALS:					
Aluminum	mg/L	0.05	33.7	3.04	0.794
Antimony	mg/L	0.005	BDL	BDL	BDL
Arsenic	mg/L	0.005	BDL	0.042	BDL
Barium	mg/L	0.03	0.065	0.041	BDL
Beryllium	mg/L	0.004	BDL	BDL	BDL
Cadmium	mg/L	0.0001	0.0001	0.0002	0.0002
Calcium	mg/L	0.5	53.4	112	28
Chromium	mg/L	0.005	0.037	0.006	BDL
Cobalt	mg/L	0.03	BDL	BDL	BDL
Copper	mg/L	0.01	0.023	0.012	BDL
Iron	mg/L	0.03	0.232	0.431	0.15
Lead	mg/L	0.005	0.02	0.131	0.008
Magnesium	mg/L	0.5	2.34	2.69	1.07
Manganese	mg/L	0.03	BDL	BDL	BDL
Mercury	mg/L	0.0002	0.0009	0.0003	BDL
Nickel	mg/L	0.03	BDL	BDL	BDL
Potassium	mg/L	0.5	1.84	2.15	BDL
Selenium	mg/L	0.005	BDL	0.007	BDL
Silver	mg/L	0.01	BDL	BDL	BDL
Sodium	mg/L	0.5	2.22	5.5	1.96
Thallium	mg/L	0.002	BDL	BDL	BDL
Vanadium	mg/L	0.03	BDL	BDL	BDL
Zinc	mg/L	0.03	0.144	0.584	0.057

D.L. = Laboratory analyte detection reporting limit

BDL = Below Detection Limit

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
TEMPORARY WELL GROUNDWATER DATA

SITE #3

LOCATION	TW 4	TW 5
LAB ID	B507040-03	B507040-04
DATE SAMPLED	07/01/95 12:20	07/01/95 12:55
DATE RECEIVED	07/03/95 09:13	07/03/95 09:13
WELL DEPTH, FT.	8 - 10'	6 - 8'

PARAMETER:	UNITS	D.L.		
pH	pH UNITS		6.9	7
Total Organic Carbon	mg/L	10	55.16	741.1
Turbidity	N.T.U.	0.1	340	4300
EPA 601				
1,1,1-Trichloroethane	µg/L	1	BDL	BDL
1,1,2,2-Tetrachloroethane	µg/L	1	BDL	BDL
1,1,2-Trichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethene	µg/L	1	BDL	BDL
1,2-Dichlorobenzene	µg/L	1	BDL	BDL
1,2-Dichloroethane	µg/L	1	BDL	BDL
1,2-Dichloropropane	µg/L	1	BDL	BDL
1,3-Dichlorobenzene	µg/L	1	BDL	BDL
1,4-Dichlorobenzene	µg/L	1	BDL	BDL
2-Chloroethylvinyl ether	µg/L	1	BDL	BDL
Bromodichloromethane	µg/L	1	BDL	BDL
Bromoform	µg/L	1	BDL	BDL
Bromomethane	µg/L	1	BDL	BDL
Carbon Tetrachloride	µg/L	1	BDL	BDL
Chlorobenzene	µg/L	1	BDL	BDL
Chloroethane	µg/L	1	BDL	BDL
Chloroform	µg/L	1	BDL	BDL
Chloromethane	µg/L	1	BDL	BDL
cis-1,3-Dichloropropene	µg/L	1	BDL	BDL
Dibromochloromethane	µg/L	1	BDL	BDL
Dichlorodifluoromethane	µg/L	1	BDL	BDL
Methylene Chloride	µg/L	1	BDL	BDL
Tetrachloroethene	µg/L	1	BDL	BDL
trans-1,2-Dichloroethene	µg/L	1	BDL	BDL
trans-1,3-Dichloropropen	µg/L	1	BDL	BDL
Trichloroethene	µg/L	1	BDL	BDL
Trichlorofluoromethane	µg/L	1	BDL	BDL
Vinyl Chloride	µg/L	1	BDL	BDL
EPA 602				
Benzene	µg/L	1	BDL	BDL
Ethylbenzene	µg/L	1	BDL	BDL
Methyl-tert-butyl ether	µg/L	1	BDL	BDL
Toluene	µg/L	1	BDL	BDL
Total VOA	µg/L	6	BDL	BDL
Total Xylenes	µg/L	3	BDL	BDL

SITE #3

LOCATION			TW 4	TW 5
LAB ID			B507040-03	B507040-04
EPA 608				
4,4'-DDD	µg/L	0.042	BDL	BDL
4,4'-DDE	µg/L	0.079	BDL	BDL
4,4'-DDT	µg/L	0.029	BDL	BDL
Aldrin	µg/L	0.005	BDL	BDL
alpha-BHC	µg/L	0.038	BDL	BDL
Aroclor 1016	µg/L	0.33	BDL	BDL
Aroclor 1221	µg/L	0.33	BDL	BDL
Aroclor 1232	µg/L	0.33	BDL	BDL
Aroclor 1242	µg/L	0.33	BDL	BDL
Aroclor 1248	µg/L	0.33	BDL	BDL
Aroclor 1254	µg/L	0.33	BDL	BDL
Aroclor 1260	µg/L	0.33	BDL	BDL
beta-BHC	µg/L	0.01	BDL	BDL
Chlordane	µg/L	0.022	BDL	BDL
delta-BHC	µg/L	0.017	BDL	BDL
Dieldrin	µg/L	0.02	BDL	BDL
Endosulfan I	µg/L	0.014	BDL	BDL
Endosulfan II	µg/L	0.064	BDL	BDL
Endosulfan Sulfate	µg/L	0.02	BDL	BDL
Endrin	µg/L	0.02	BDL	BDL
Endrin Aldehyde	µg/L	0.029	BDL	BDL
gamma-BHC (Lindane)	µg/L	0.007	BDL	BDL
Heptachlor	µg/L	0.005	BDL	BDL
Heptachlor Epoxide	µg/L	0.035	BDL	BDL
Methoxychlor	µg/L	0.11	BDL	BDL
Toxaphene	µg/L	0.24	BDL	BDL
EPA 610				
Acenaphthene	µg/L	5	BDL	BDL
Acenaphthylene	µg/L	5	BDL	BDL
Anthracene	µg/L	5	BDL	BDL
Benzo (a) anthracene	µg/L	5	BDL	BDL
Benzo (a) pyrene	µg/L	5	BDL	BDL
Benzo (b) fluoranthene	µg/L	5	BDL	BDL
Benzo (ghi) perylene	µg/L	5	BDL	BDL
Benzo (k) fluoranthene	µg/L	5	BDL	BDL
Chrysene	µg/L	5	BDL	BDL
Dibenzo (a,h) anthacene	µg/L	5	BDL	BDL
Fluoranthene	µg/L	5	BDL	BDL
Fluorene	µg/L	5	BDL	BDL
Indeno (1,2,3-cd) pyrene	µg/L	5	BDL	BDL
Naphthalene	µg/L	5	BDL	BDL
Phenanthrene	µg/L	5	BDL	BDL
Pyrene	µg/L	5	BDL	BDL
1-Methyl naphthalene	µg/L	5	BDL	BDL
2-Methyl naphthalene	µg/L	5	BDL	BDL
Total Naphthalene	µg/L	15	BDL	BDL

SITE #3

LOCATION			TW 4	TW 5
LAB ID			B507040-03	B507040-04
DISSOLVED METALS:				
Aluminum	mg/L	0.05	BDL	0.124
Antimony	mg/L	0.005	BDL	BDL
Arsenic	mg/L	0.005	BDL	BDL
Barium	mg/L	0.03	BDL	BDL
Beryllium	mg/L	0.004	BDL	BDL
Cadmium	mg/L	0.0001	BDL	BDL
Calcium	mg/L	0.5	35.8	84.6
Chromium	mg/L	0.005	BDL	BDL
Cobalt	mg/L	0.03	BDL	BDL
Copper	mg/L	0.01	BDL	BDL
Iron	mg/L	0.03	0.627	0.281
Lead	mg/L	0.005	BDL	BDL
Magnesium	mg/L	0.5	4.27	1.63
Manganese	mg/L	0.03	BDL	BDL
Mercury	mg/L	0.0002	BDL	BDL
Nickel	mg/L	0.03	BDL	BDL
Potassium	mg/L	0.5	3.86	1.75
Selenium	mg/L	0.005	BDL	BDL
Silver	mg/L	0.01	BDL	BDL
Sodium	mg/L	0.5	22.2	4.09
Thallium	mg/L	0.002	BDL	BDL
Vanadium	mg/L	0.03	BDL	BDL
Zinc	mg/L	0.03	0.045	BDL
TOTAL METALS:				
Aluminum	mg/L	0.05	0.29	83.6
Antimony	mg/L	0.005	BDL	BDL
Arsenic	mg/L	0.005	BDL	0.049
Barium	mg/L	0.03	BDL	0.115
Beryllium	mg/L	0.004	BDL	BDL
Cadmium	mg/L	0.0001	BDL	0.0019
Calcium	mg/L	0.5	40	746
Chromium	mg/L	0.005	BDL	0.08
Cobalt	mg/L	0.03	BDL	BDL
Copper	mg/L	0.01	BDL	0.055
Iron	mg/L	0.03	1.57	7.03
Lead	mg/L	0.005	0.004	0.123
Magnesium	mg/L	0.5	4.28	6.39
Manganese	mg/L	0.03	BDL	0.153
Mercury	mg/L	0.0002	BDL	0.0003
Nickel	mg/L	0.03	BDL	BDL
Potassium	mg/L	0.5	3.97	2.37
Selenium	mg/L	0.005	BDL	0.009
Silver	mg/L	0.01	BDL	BDL
Sodium	mg/L	0.5	21.8	4.67
Thallium	mg/L	0.002	BDL	BDL
Vanadium	mg/L	0.03	BDL	0.11
Zinc	mg/L	0.03	0.107	1.11

D.L. = Laboratory analyte detection reporting limit

BDL = Below Detection Limit

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNETT/BENNETT-AZALEA
TEMPORARY WELL GROUNDWATER DATA

SITE 3

LOCATION	**SOIL COMPOSITE**
LAB ID	B507252-01
DATE SAMPLED	06/28/95 09:30
DATE RECEIVED	07/13/95 13:03

PARAMETER:	UNITS	D.L.	
% Solids	%	0.01	89.5
Aluminum	mg/Kg	2.5	139
Antimony	mg/Kg	0.25	BDL
Arsenic	mg/Kg	5	BDL
Barium	mg/Kg	1.5	BDL
Beryllium	mg/Kg	0.2	BDL
Cadmium	mg/Kg	0.5	BDL
Calcium	mg/Kg	25	266
Chromium	mg/Kg	0.5	BDL
Cobalt	mg/Kg	1.5	BDL
Copper	mg/Kg	0.5	BDL
Iron	mg/Kg	1.5	20.2
Lead	mg/Kg	2.5	3.3
Magnesium	mg/Kg	25	BDL
Manganese	mg/Kg	1.5	BDL
Mercury	mg/Kg	0.1	BDL
Nickel	mg/Kg	1.5	BDL
Potassium	mg/Kg	25	BDL
Selenium	mg/Kg	5	BDL
Silver	mg/Kg	0.5	BDL
Sodium	mg/Kg	25	BDL
Thallium	mg/Kg	0.1	BDL
Vanadium	mg/Kg	1.5	BDL
Zinc	mg/Kg	1.5	1.55

D.L. = Laboratory analyte detection reporting limit
BDL = Below Detection Limit

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
SOIL BORING AND OVA RESULTS

SITE #4

SAMPLE ID	DEPTH OF SAMPLE, ft.	DEPTH TO GROUNDWATER	OVA PPM	CHEMICAL ANALYSIS SAMPLE
B - 4 (1)	2 - 4'	4'	10 ppm	
TW-1	4 - 6'		0 ppm	YES
B - 4 (2)	2 - 4'	---	3 ppm	
	4 - 6'	6'	5 ppm	
	6 - 8'		0 ppm	
TW - 2	8 - 10'			YES

B = Borehole
TW = Temporary Well

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
TEMPORARY WELL GROUNDWATER DATA

SITE #4

LOCATION	TW 1	TW 2
LAB ID	B506455-01	B506455-02
DATE SAMPLED	06/21/95 12:50	06/21/95 12:20
DATE RECEIVED	06/21/95 13:45	06/21/95 13:45
WELL DEPTH, FT.	4 - 6'	8 - 10'

PARAMETER:	UNITS	D.L.		
pH	pH UNITS		6.96	6.27
Total Carbon	mg/L	10	929.5	870.4
Turbidity	N.T.U.	0.1	2900	2800
EPA 601				
1,1,1-Trichloroethane	µg/L	1	BDL	BDL
1,1,2,2-Tetrachloroethane	µg/L	1	BDL	BDL
1,1,2-Trichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethene	µg/L	1	BDL	BDL
1,2-Dichlorobenzene	µg/L	1	BDL	BDL
1,2-Dichloroethane	µg/L	1	BDL	BDL
1,2-Dichloropropane	µg/L	1	BDL	BDL
1,3-Dichlorobenzene	µg/L	1	BDL	BDL
1,4-Dichlorobenzene	µg/L	1	BDL	BDL
2-Chloroethylvinyl ether	µg/L	1	BDL	BDL
Bromodichloromethane	µg/L	1	BDL	BDL
Bromoform	µg/L	1	BDL	BDL
Bromomethane	µg/L	1	BDL	BDL
Carbon Tetrachloride	µg/L	1	BDL	BDL
Chlorobenzene	µg/L	1	BDL	BDL
Chloroethane	µg/L	1	BDL	BDL
Chloroform	µg/L	1	BDL	BDL
Chloromethane	µg/L	1	BDL	BDL
cis-1,3-Dichloropropene	µg/L	1	BDL	BDL
Dibromochloromethane	µg/L	1	BDL	BDL
Dichlorodifluoromethane	µg/L	1	BDL	BDL
Methylene Chloride	µg/L	1	BDL	1.5(JB)
Tetrachloroethene	µg/L	1	BDL	BDL
trans-1,2-Dichloroethene	µg/L	1	BDL	BDL
trans-1,3-Dichloropropene	µg/L	1	BDL	BDL
Trichloroethene	µg/L	1	BDL	BDL
Trichlorofluoromethane	µg/L	1	BDL	BDL
Vinyl Chloride	µg/L	1	BDL	BDL
EPA 602				
Benzene	µg/L	1	BDL	BDL
Ethylbenzene	µg/L	1	BDL	BDL
Methyl-tert-butyl ether	µg/L	1	BDL	BDL
Toluene	µg/L	1	BDL	BDL
Total VOA	µg/L	6	BDL	BDL
Total Xylenes	µg/L	3	BDL	BDL

SITE #4 (cont)

LOCATION			TW 1	TW 2
LAB ID			B506455-01	B506455-02
EPA 610				
1-Methyl naphthalene	µg/L	5	na	BDL
2-Methyl naphthalene	µg/L	5	na	BDL
Acenaphthene	µg/L	5	na	BDL
Acenaphthylene	µg/L	5	na	BDL
Anthracene	µg/L	5	na	BDL
Benzo (a) anthracene	µg/L	5	na	BDL
Benzo (a) pyrene	µg/L	5	na	BDL
Benzo (b) fluoranthene	µg/L	5	na	BDL
Benzo (ghi) perylene	µg/L	5	na	BDL
Benzo (k) fluoranthene	µg/L	5	na	BDL
Chrysene	µg/L	5	na	BDL
Dibenzo (a,h) anthacene	µg/L	5	na	BDL
Fluoranthene	µg/L	5	na	BDL
Fluorene	µg/L	5	na	BDL
Indeno (1,2,3-cd) pyrene	µg/L	5	na	BDL
Naphthalene	µg/L	5	na	BDL
Phenanthrene	µg/L	5	na	BDL
Pyrene	µg/L	5	na	BDL
Total Naphthalene	µg/L	15	na	BDL
EPA 608				
4,4'-DDD	µg/L	0.042	na	BDL
4,4'-DDE	µg/L	0.079	na	BDL
4,4'-DDT	µg/L	0.029	na	BDL
Aldrin	µg/L	0.005	na	BDL
alpha-BHC	µg/L	0.038	na	BDL
Aroclor 1016	µg/L	0.33	na	BDL
Aroclor 1221	µg/L	0.33	na	BDL
Aroclor 1232	µg/L	0.33	na	BDL
Aroclor 1242	µg/L	0.33	na	BDL
Aroclor 1248	µg/L	0.33	na	BDL
Aroclor 1254	µg/L	0.33	na	BDL
Aroclor 1260	µg/L	0.33	na	BDL
beta-BHC	µg/L	0.01	na	BDL
Chlordane	µg/L	0.022	na	BDL
delta-BHC	µg/L	0.017	na	BDL
Dieldrin	µg/L	0.02	na	BDL
Endosulfan I	µg/L	0.014	na	BDL
Endosulfan II	µg/L	0.064	na	BDL
Endosulfan Sulfate	µg/L	0.02	na	BDL
Endrin	µg/L	0.02	na	BDL
Endrin Aldehyde	µg/L	0.029	na	BDL
gamma-BHC (Lindane)	µg/L	0.007	na	BDL
Heptachlor	µg/L	0.005	na	BDL
Heptachlor Epoxide	µg/L	0.035	na	BDL
Methoxychlor	µg/L	0.11	na	BDL
Toxaphene	µg/L	0.24	na	BDL

SITE #4 (cont)

LOCATION			TW 1	TW 2
LAB ID			B506455-01	B506455-02
DISSOLVED METALS				
Cadmium, Dissolved	mg/L	0.0001	BDL	BDL
Chromium, Dissolved	mg/L	0.005	BDL	BDL
Copper, Dissolved	mg/L	0.01	0.01	0.011
Lead, Dissolved	mg/L	0.003	BDL	BDL
Mercury, Dissolved	mg/L	0.0002	BDL	BDL
Zinc. Dissolved	mg/L	0.03	BDL	BDL

D.L. = Laboratory analyte detection reporting limit
BDL = Below Detection Limit
(JB): Found in associated laboratory blank

NOTE: not enough sample (TW 1) submitted to run 608 & 610 analysis

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
SOIL BORING AND OVA RESULTS

SITE #5

SAMPLE ID	DEPTH OF SAMPLE, ft.	DEPTH TO GROUNDWATER	OVA PPM	CHEMICAL ANALYSIS SAMPLE
B - 5 (1)	2 - 4'		0 ppm	
	4 - 6'	5'	2 ppm	
B - 5 (2)	2 - 4'	4'	0 ppm	
	4 - 6'		0 ppm	
B - 5 (3)	2 - 4'	4'	5 ppm	
	4 - 6'		0 ppm	
B - 5 (4)	2 - 4'		0 ppm	
	4 -6'	5'	0 ppm	
B - 5 (5)	2 - 4'		0 ppm	
	4 - 6'	6'	2 ppm	
	6 - 8'		0 ppm	
TW - 1	8 - 10'			YES
B - 5 (6)	2 - 4'		5 ppm	
	4 - 6'	5'	0 ppm	
B - 5 (7)	2 - 4'		2 ppm	
	4 - 6'		10 ppm	
	6 - 8'	8'	2 ppm	
TW - 2	8 - 10'			YES

B = Borehole
TW = Temporary Well

OUC TRANSMISSION LINE UNDERGROUND PROJECT
WEBER-BENNET/BENNET-AZALEA
TEMPORARY WELL GROUNDWATER DATA

SITE #5

LOCATION	TW 1	TW 2
LAB ID	B506454-01	B506454-02
DATE SAMPLED	06/20/95 13:15	06/20/95 12:45
DATE RECEIVED	06/21/95 13:45	06/21/95 13:45
WELL DEPTH, FT.	8 - 10'	8 - 10'

PARAMETER:	UNITS	D.L.		
pH	pH UNITS		7.17	6.64
Total Carbon	mg/L	10	341.9	8862
Trubidity	N.T.U.	0.1	1200	36000
EPA 601				
1,1,1-Trichloroethane	µg/L	1	BDL	BDL
1,1,2,2-Tetrachloroethane	µg/L	1	BDL	BDL
1,1,2-Trichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethane	µg/L	1	BDL	BDL
1,1-Dichloroethene	µg/L	1	BDL	BDL
1,2-Dichlorobenzene	µg/L	1	BDL	BDL
1,2-Dichloroethane	µg/L	1	BDL	BDL
1,2-Dichloropropane	µg/L	1	BDL	BDL
1,3-Dichlorobenzene	µg/L	1	BDL	BDL
1,4-Dichlorobenzene	µg/L	1	BDL	BDL
2-Chloroethylvinyl ether	µg/L	1	BDL	BDL
Bromodichloromethane	µg/L	1	BDL	BDL
Bromoform	µg/L	1	BDL	BDL
Bromomethane	µg/L	1	BDL	BDL
Carbon Tetrachloride	µg/L	1	BDL	BDL
Chlorobenzene	µg/L	1	BDL	BDL
Chloroethane	µg/L	1	BDL	BDL
Chloroform	µg/L	1	BDL	BDL
Chloromethane	µg/L	1	BDL	BDL
cis-1,3-Dichloropropene	µg/L	1	BDL	BDL
Dibromochloromethane	µg/L	1	BDL	BDL
Dichlorodifluoromethane	µg/L	1	BDL	BDL
Methylene Chloride	µg/L	1	BDL	BDL
Tetrachloroethene	µg/L	1	BDL	BDL
trans-1,2-Dichloroethene	µg/L	1	BDL	BDL
trans-1,3-Dichloropropene	µg/L	1	BDL	BDL
Trichloroethene	µg/L	1	BDL	BDL
Trichlorofluoromethane	µg/L	1	BDL	BDL
Vinyl Chloride	µg/L	1	BDL	BDL
EPA 602				
Benzene	µg/L	1	BDL	BDL
Ethylbenzene	µg/L	1	BDL	BDL
Methyl-tert-butyl ether	µg/L	1	BDL	BDL
Toluene	µg/L	1	BDL	BDL
Total VOA	µg/L	6	BDL	BDL
Total Xylenes	µg/L	3	BDL	BDL

SITE #5 (cont.)

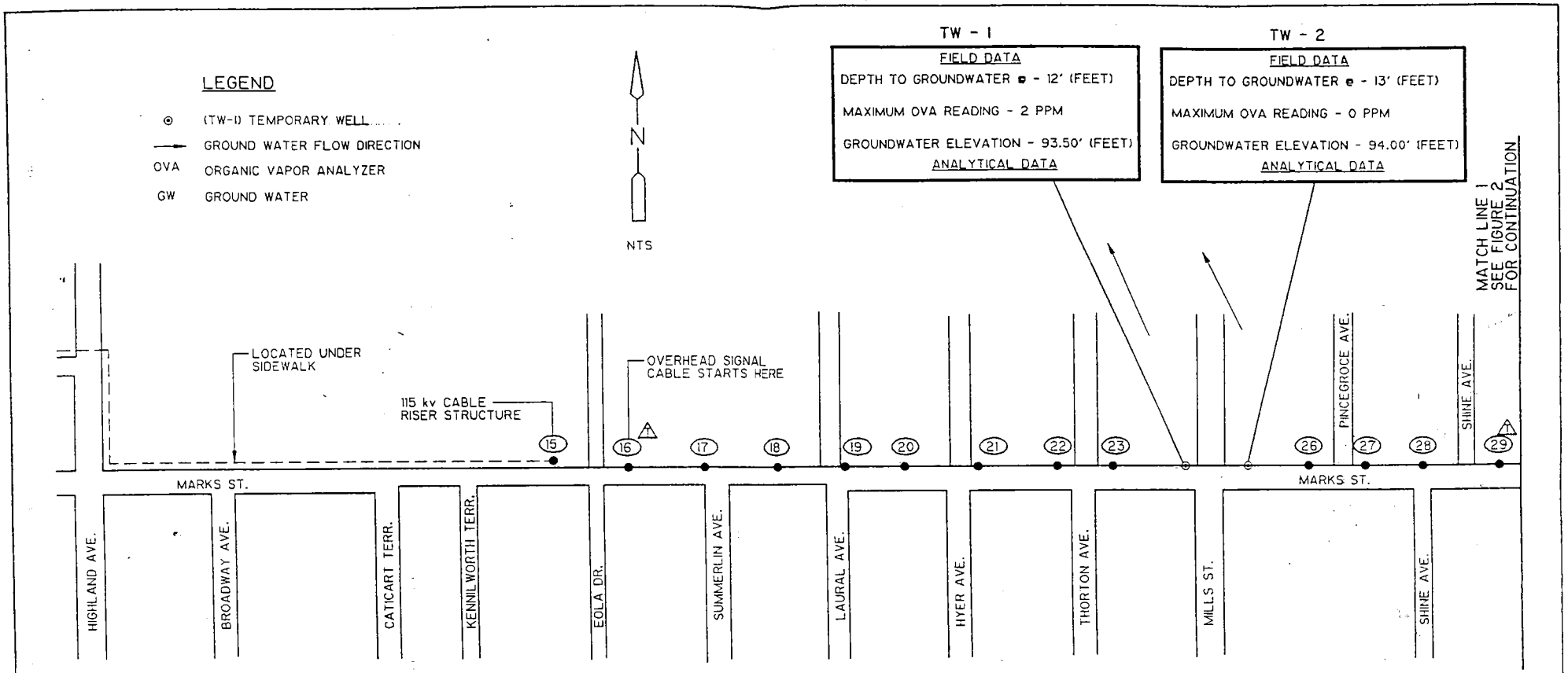
LOCATION			TW 1	TW 2
LAB ID			B506454-01	B506454-02
EPA 608				
4,4'-DDD	µg/L	0.042	BDL	BDL
4,4'-DDE	µg/L	0.079	BDL	BDL
4,4'-DDT	µg/L	0.029	BDL	BDL
Aldrin	µg/L	0.005	BDL	BDL
alpha-BHC	µg/L	0.038	BDL	BDL
Aroclor 1016	µg/L	0.33	BDL	BDL
Aroclor 1221	µg/L	0.33	BDL	BDL
Aroclor 1232	µg/L	0.33	BDL	BDL
Aroclor 1242	µg/L	0.33	BDL	BDL
Aroclor 1248	µg/L	0.33	BDL	BDL
Aroclor 1254	µg/L	0.33	BDL	BDL
Aroclor 1260	µg/L	0.33	BDL	BDL
beta-BHC	µg/L	0.01	BDL	BDL
Chlordane	µg/L	0.022	BDL	BDL
delta-BHC	µg/L	0.017	BDL	BDL
Dieldrin	µg/L	0.02	BDL	BDL
Endosulfan I	µg/L	0.014	BDL	BDL
Endosulfan II	µg/L	0.064	BDL	BDL
Endosulfan Sulfate	µg/L	0.02	BDL	BDL
Endrin	µg/L	0.02	BDL	BDL
Endrin Aldehyde	µg/L	0.029	BDL	BDL
gamma-BHC (Lindane)	µg/L	0.007	BDL	BDL
Heptachlor	µg/L	0.005	BDL	BDL
Heptachlor Epoxide	µg/L	0.035	BDL	BDL
Methoxychlor	µg/L	0.11	BDL	BDL
Toxaphene	µg/L	0.24	BDL	BDL
EPA 610				
1-Methyl naphthalene	µg/L	5	BDL	BDL
2-Methyl naphthalene	µg/L	5	BDL	BDL
Acenaphthene	µg/L	5	BDL	BDL
Acenaphthylene	µg/L	5	BDL	BDL
Anthracene	µg/L	5	BDL	BDL
Benzo (a) anthracene	µg/L	5	BDL	BDL
Benzo (a) pyrene	µg/L	5	BDL	BDL
Benzo (b) fluoranthene	µg/L	5	BDL	BDL
Benzo (ghi) perylene	µg/L	5	BDL	BDL
Benzo (k) fluoranthene	µg/L	5	BDL	BDL
Chrysene	µg/L	5	BDL	BDL
Dibenzo (a,h) anthacene	µg/L	5	BDL	BDL
Fluoranthene	µg/L	5	BDL	BDL
Fluorene	µg/L	5	BDL	BDL
Indeno (1,2,3-cd) pyrene	µg/L	5	BDL	BDL
Naphthalene	µg/L	5	BDL	BDL
Phenanthrene	µg/L	5	BDL	BDL
Pyrene	µg/L	5	BDL	BDL
Total Naphthalene	µg/L	15	BDL	BDL

SITE #5 (cont.)

LOCATION			TW 1	TW 2
LAB ID			B506454-01	B506454-02
DISSOLVED METALS				
Cadmium, Dissolved	mg/L	0.0001	BDL	BDL
Chromium, Dissolved	mg/L	0.005	BDL	0.008
Copper, Dissolve	mg/L	0.01	BDL	0.015
Lead, Dissolved	mg/L	0.003	BDL	BDL
Mercury, Dissolved	mg/L	0.0002	BDL	0.0008
Zinc, Dissolved	mg/L	0.03	BDL	BDL

D.L. = Laboratory analyte detection reporting limit
BDL = Below Detection Limit

INVESTIGATIVE
SITE
LOCATION
MAPS



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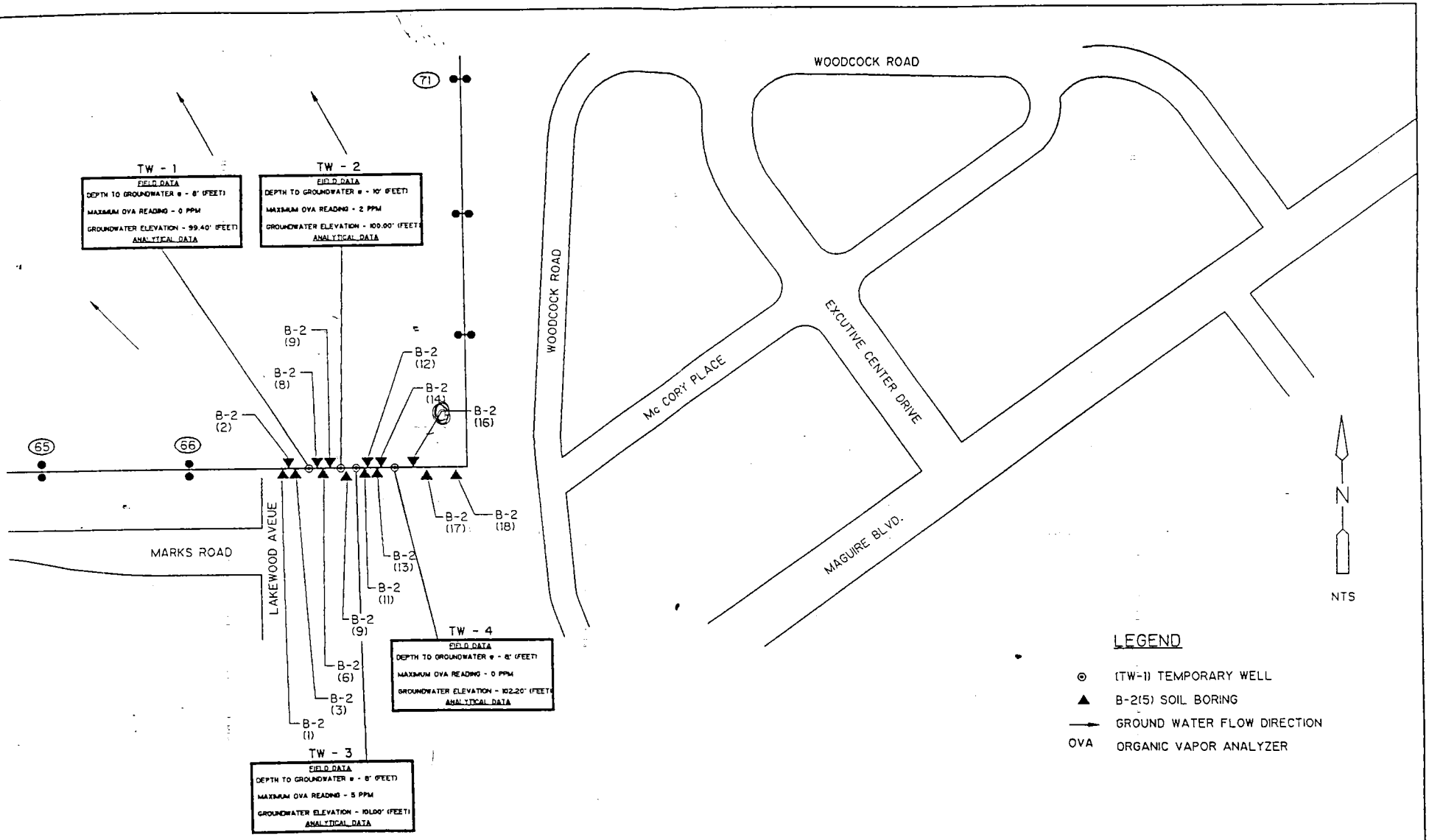
ORLANDO UTILITIES COMMISSION TRANSMISSION LINE UPGRADE PROJECT
WEBER - BENNETT/BENNETT - AZALEA LINE

SITE NO. 1

07/24/95 0:52:05 CM-FIG1 G:\ACAD\C&M\



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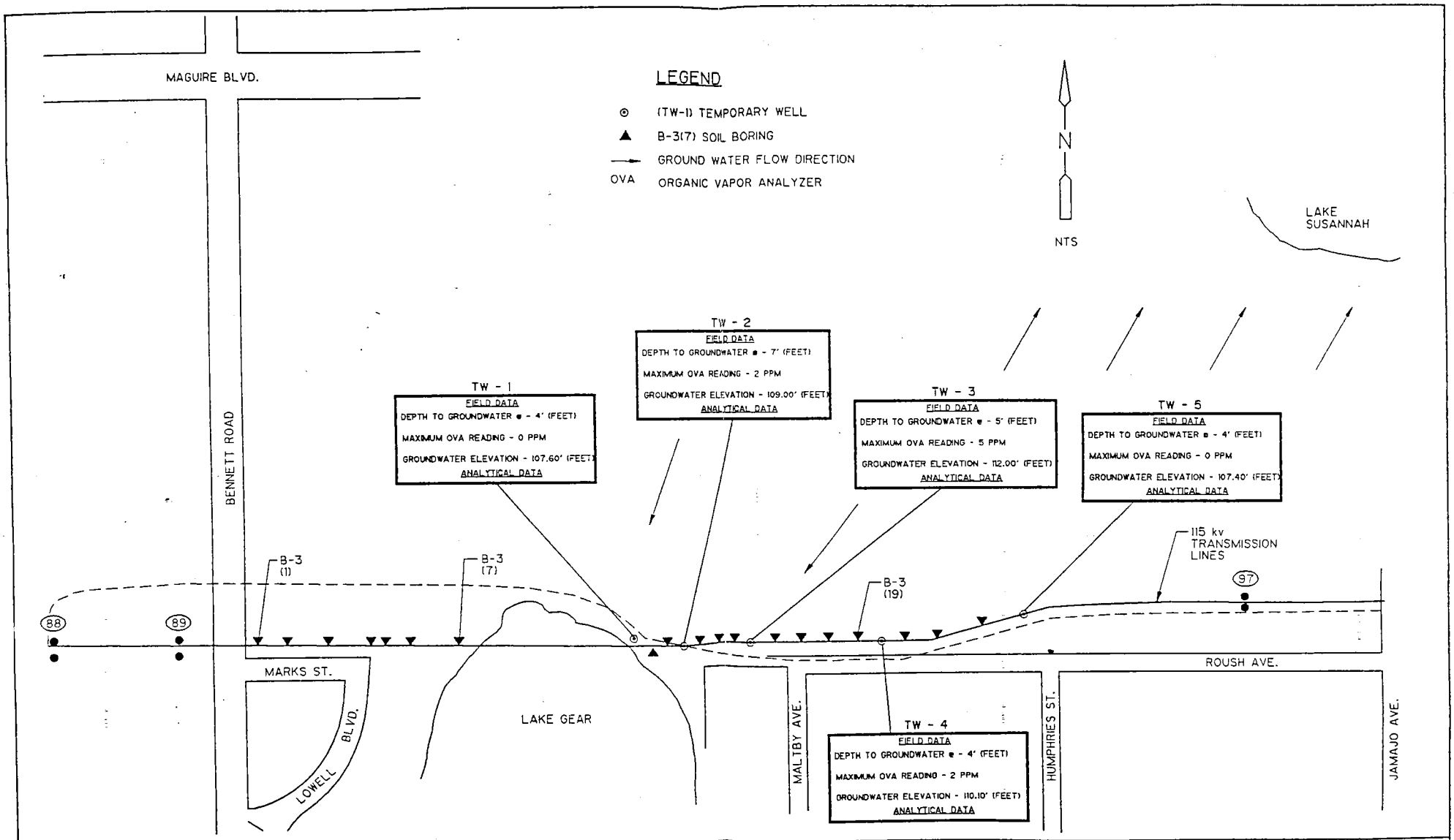
ORLANDO UTILITIES COMMISSION TRANSMISSION LINE UPGRADE PROJECT
WEBER - BENNETT/BENNETT - AZALEA LINE
SITE NO. 2

07/24/95 0:46:17
CM-FIG2
C:\ACVC&M\



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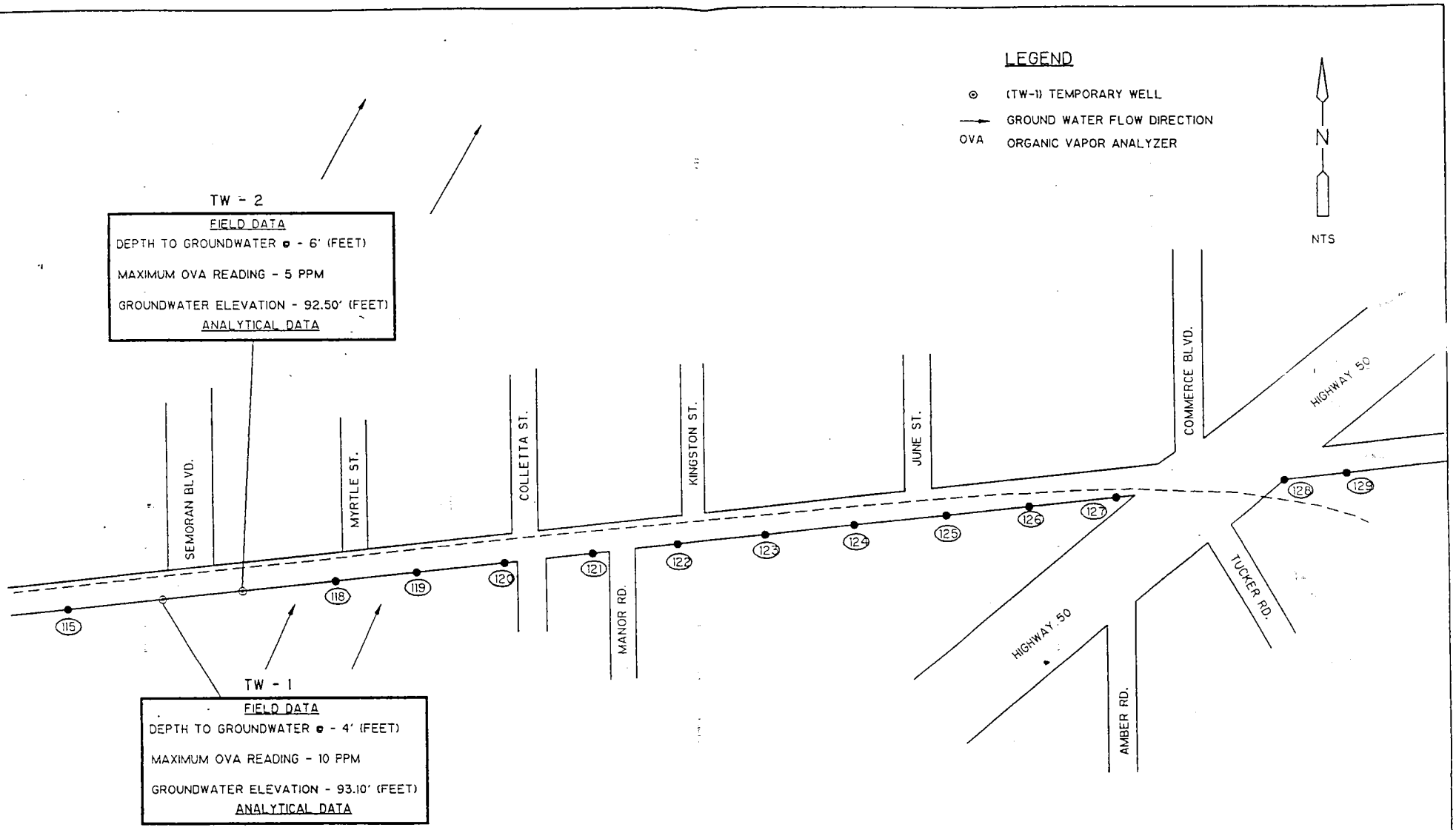
ORLANDO UTILITIES COMMISSION TRANSMISSION LINE UPGRADE PROJECT
WEBER - BENNETT/BENNETT - AZALEA LINE
SITE NO. 3



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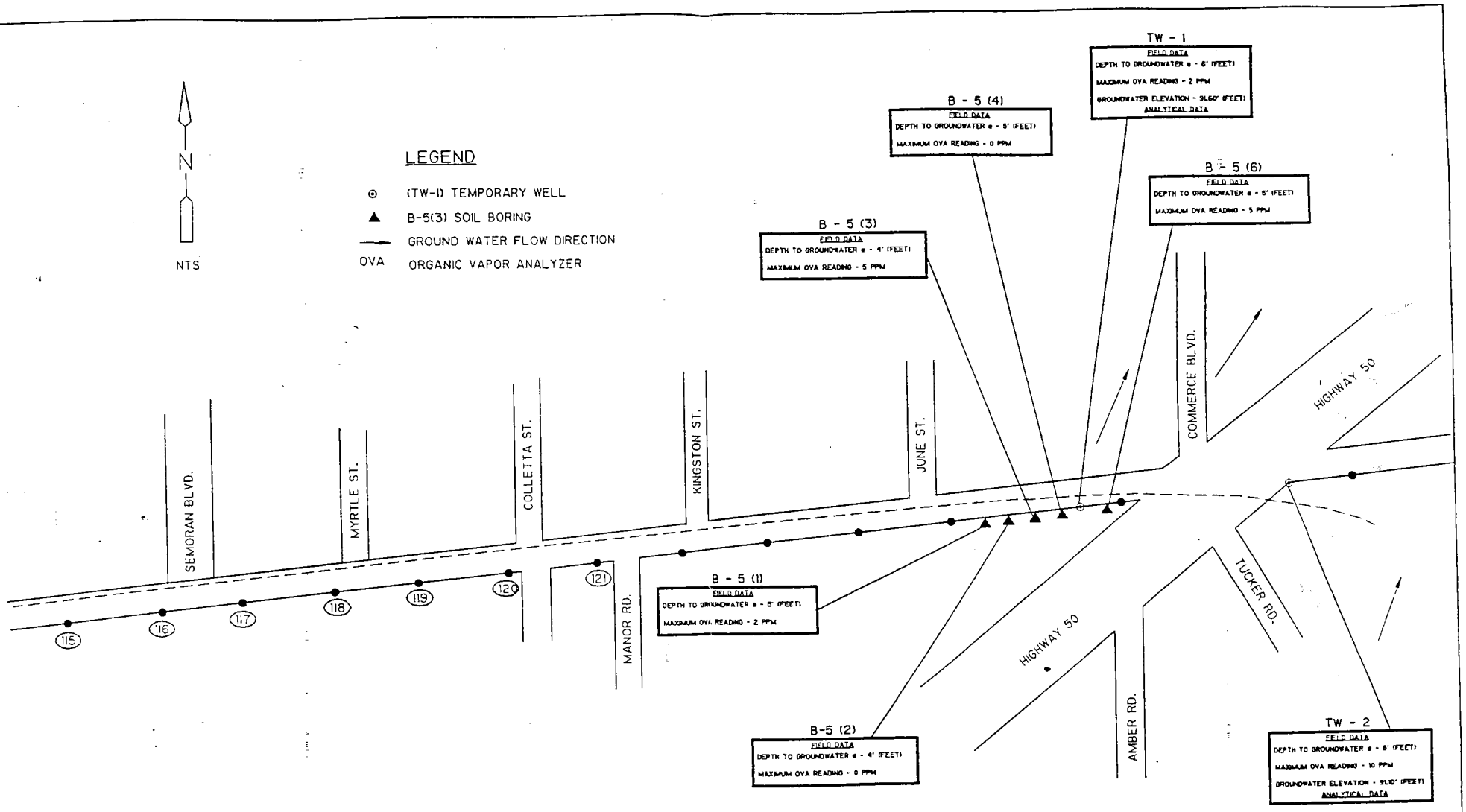
ORLANDO UTILITIES COMMISSION TRANSMISSION LINE UPGRADE PROJECT
WEBER - BENNETT/BENNETT - AZALEA LINE
SITE NO. 4

07/24/95 0:25:31
CM-FIG4
C:\ACAD\CM\



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ORLANDO UTILITIES COMMISSION TRANSMISSION LINE UPGRADE PROJECT
WEBER - BENNETT/BENNETT - AZALEA LINE

SITE NO. 5