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ALAMEDA POINT
SSIC NO. 5090.3

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN I)
Northern and Central California, Nevada, and Utah
Contract Number N62474-88-D-5086
Contract Task Order 0280

Prepared For

Navy Remedial Project Managers: Gary Munekawa and George Kikugawa
PRC Installation Coordinator: Duane Balch
Montgomery Watson Remedial Project Manager: Kenneth Leung

NAVAL AIR STATION, ALAMEDA
ALAMEDA, CALIFORNIA

REMEDIAL INVESTIGATION/FEASIBILITY STUDY
DATA TRANSMITTAL MEMORANDUM
SITES 1, 2, 3, RUNWAY AREA, 6, 7A, 7B, 7C, 9, 10B, 11, 13, 15, 16, AND 19

FINAL
VOLUME 2 OF 2
ATTACHMENTS A THROUGH K

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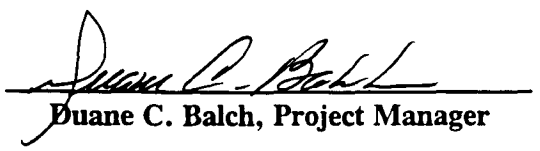

Duane C. Balch, Project Manager

May 1996

1215

CLEAN

Contract No. N62474-88-D-5086

Contract Task Order 280

Navy Remedial Project Managers: Gary Munekawa and George Kikugawa
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ALAMEDA, CALIFORNIA

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DATA TRANSMITTAL MEMORANDUM
SITES 1, 2, 3, RUNWAY AREA, 6, 7A, 7B, 7C, 9, 10B, 11, 13, 15, 16, AND 19

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July 11, 1995

N00236.001215
ALAMEDA POINT
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FINAL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
DATA TRANSMITTAL MEMORANDUM
SITES 1, 2, 3, RUNWAY AREA, 6, 7A, 7B, 7C, 9, 10B, 11, 13, 15, 16, AND 19

DATED 01 MAY 1996

THIS RECORD CONTAINS MULTIPLE VOLUMES
WHICH HAVE BEEN ENTERED SEPARATELY

VOLUME 1 OF 2 IS FILED AS ADMINISTRATIVE
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NAS ALAMEDA
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
DATA TRANSMITTAL MEMORANDUM
SITES 1, 2, 3, Runway Area, 6, 7A, 7B, 7C, 9,
10B, 11, 13, 15, 16, and 19

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ATTACHMENT A

ADDITIONAL FIELD WORK CONDUCTED AT SITES 4, 5, AND 10A

ATTACHMENT A

ADDITIONAL FIELD WORK CONDUCTED AT SITES 4, 5, AND 10A

Follow-on field sampling was originally conducted at Sites 4, 5, and 10A during the winter and spring of 1994. A data transmittal memorandum (CTO 260 DTM) for the field work and first quarter groundwater sampling was issued to the Navy on January 30, 1995 for these sites, as well as Sites 8, 12, and 14 (PRC and Montgomery Watson 1995). Additional field work and sampling was conducted at Sites 4, 5, and 10A during this field investigation, to further assess the nature and extent of chemicals in soil and/or groundwater detected during the winter/spring of 1994. Site descriptions and background for these three sites can be referenced in either the Phases 2B and 3 Data Summary Report (DSR) or the Phases 2B and 3 Field Sampling Plan (FSP). Analytical results from the follow-on field investigation and first quarter groundwater sampling are presented in the CTO 260 DTM.

Table A-1 lists the field work conducted at Sites 4, 5, and 10A. Sampling locations are shown on Figures 3-1 and 3-2. Analytical results for organic compounds detected in soil at all three sites are included as Table A-2, results for organic compounds detected in groundwater at all three sites are included as Table A-3, and results of quality control samples are included as Table A-4. Tables A-5 and A-6 list metals greater than 10 times soluble threshold limit concentration (STLC), and greater than the 95/95 STI, respectively.

A.1 RECENT WORK CONDUCTED AT SITE 4 AND ANALYTICAL RESULTS

Additional field work conducted at Site 4 included one CPT advancement (CPT-S04-05) and three additional soil borings (B04-43, B04-44, and B04-45), as shown on Figure 3-1.

One CPT (CPT-S04-05) was conducted to further evaluate the lithology and hydrogeologic characteristics in the vicinity of Site 4.

A total of nine soil samples were collected from three soil borings (B04-43, -44, and -45) and submitted for chemical analyses. Soil samples were collected from the surface and depths of 2.5 and 5 feet in borings B04-43 through B04-45.

Analytical Results

Analytical results are presented below:

Soil

- Analytical results for organic chemical analyses in soil are presented on Table A-2.
- Elevated levels of total petroleum hydrocarbons-extractables (TPH-E) as motor oil were detected in the 0-, 2.5-, and 5-foot depth soil samples obtained from all three soil borings (B04-43 through B04-45) located within Building 360. TPH-purgeable (TPH-P) as gasoline was also detected in the B04-43 surface sample.
- The volatile organic compound (VOC) trichloroethene (TCE) was detected in the 2.5-foot sample from B04-43.
- The semivolatile organic compound (SVOC) pyrene was detected in the 5-foot sample from B04-44.
- Lead exceeded 10 times the STLC in the surface sample taken from B04-45. Metals exceeding 10 times the STLC are shown on Table A-5.

A.2 RECENT WORK CONDUCTED AT SITE 5 AND ANALYTICAL RESULTS

Additional field work conducted at Site 5 included CPT, HydroPunch sampling, shallow soil sampling, shallow monitoring well installation, quarterly groundwater sampling, and piezometer installation.

Four additional CPT sampling points were conducted at Site 5 to evaluate the lithology and hydrogeologic characteristics below a depth of 15 feet and to identify the second water-bearing zone. CPT locations are shown on Figure 3-1.

Four HydroPunch samples (DHP-S05-08, DHP-S05-09, DHP-S05-11, and DHP-S05-12) were collected from the second water-bearing zone and two (SHP-S05-11 and SHP-S05-12) from the first water-bearing zone at Site 5. Locations are shown on Figure 3-2.

Three piezometers (PEZ S05-08, PEZ S05-09, and PEZ S05-10) were installed around the plating shop to ascertain groundwater flow direction in the first water-bearing zone.

Two shallow groundwater monitoring wells (M05-11 and M05-12) were located adjacent to the overspray trenches on the northwest and northeast side of the building, respectively. The monitoring wells were installed after the first quarter of groundwater sampling; therefore, analytical results are not included in this Attachment. Locations are shown on Figure 3-7.

Analytical Results

Analytical results are presented below:

Soil

- Analytical results for organic chemical analyses in soil are presented on Table A-2.
- TPH-E was detected in most soil samples obtained from the CPT samples and shallow monitoring well soil samples. The most elevated levels were detected in the 2.5-foot soil sample obtained from CPT-S05-12.
- Lead exceeded 10 times the STLC in seven soil samples from varying depths between 0 and 5 feet bgs. Lead was detected with the most frequency in soil samples obtained from M05-12 and CPT-S05-12. Metals exceeding 10 times the STLC are listed in Table A-5.

Groundwater - First Water-Bearing Zone

- Analytical results for organic chemical analyses in groundwater are presented on Table A-3.
- TPH-E as diesel was detected in the shallow HydroPunch SHP-S05-12.
- VOCs (including 1,1-DCA and 1,2-DCE) were detected in SHP-05-11 and SHP-05-12. Vinyl chloride was detected in SHP-05-11 and carbon disulfide was detected in SHP-05-11 and SHP-S05-12.
- Total dissolved solids (TDS) values ranged from 1,540 mg/L to 4,140 mg/L in HydroPunch locations SHP-05-11 and SHP-05-12.

- Metals (selenium and nickel) exceeded the 95/95 STI in the shallow HydroPunch SHP-S05-12. Metals exceeding the 95/95 STI are listed in Table A-6.

Groundwater - Second Water-Bearing Zone

- Analytical results for organic chemicals in groundwater are presented in Table A-3.
- TPH-E as diesel was detected in deep HydroPunch samples DHP-S05-08, DHP-S05-11, and DHP-S05-12.
- VOCs as carbon disulfide were detected in DHP-S05-08 and DHP-S05-11.
- The only TDS value for the second water-bearing zone was measured in DHP-S05-11 at 24,900 mg/L.

A.3 RECENT WORK CONDUCTED AT SITE 10A AND ANALYTICAL RESULTS

Field activities performed under CTO 280 at Site 10A included CPT, HydroPunch sampling, and piezometers installation.

One additional CPT sampling point (CPT-S10A-05) was conducted at Site 10A to evaluate the lithology and hydrogeologic characteristics below a depth of 15 feet and to identify the thickness of the second water-bearing zone. Locations are shown on Figure 3-1.

Two shallow HydroPunch groundwater samples (SHP-S10A-02 and SHP-S10A-05) were collected. The results of the shallow HydroPunch groundwater samples were used to assess the need for the second water-bearing zone wells. Locations are shown on Figure 3-2.

One deep HydroPunch groundwater sample (DHP-S10A-05) was collected to assess the need for additional second water-bearing zone wells.

Two piezometers where installed (PEZ-S10A-02 and PEZ-S10A-05) to ascertain groundwater flow direction in the shallow water-bearing zone. PEZ-S10A-02 was located at CPT-S10A-02 on the north side of Building 12. PEZ-S10A-05 was located at CPT-S10A-05 approximately in the middle of Building 12.

Analytical Results

Analytical results are presented below:

Groundwater - First Water-Bearing Zone

- Analytical results for organic chemicals in groundwater are shown on Table A-3.
- The VOCs bromodichloromethane and chloroform were detected in SHP-S10A-05. Acetone, 2-butanone, and chloroform were detected in a groundwater sample collected from SHP-S10A-02. Acetone and 2-butanone are common laboratory contaminants.
- TPH-E as diesel was detected in SHP-S10A-02.
- Metals (including chromium) exceeded the 95/95 STI in the shallow HydroPunch SHP-S10A-02. Metals exceeding the 95/95 STI are listed in Table A-6.
- A TDS of 446 mg/L was measured in SHP-S10A-02.

Groundwater - Second Water-Bearing Zone

- Analytical results for organic chemicals in groundwater are shown on Table A-3.
- No industrially related compounds were detected in the second water-bearing zone in sample DHP-S10A-05.
- A TDS value of 33,900 mg/L was found in DHP-S10A-05.

TABLE A-1

ADDITIONAL FIELD WORK CONDUCTED AT SITES 4, 5 AND 10A
CTO 280
ALAMEDA NAVAL AIR STATION

Site	CPT Advancement	CPT Soil Samples	Shallow HydroPunch	Deep HydroPunch	Piezometer Installation	Shallow Monitoring Well Installation	Shallow Soil Boring	GeoProbe
4	CPT-S04-05	NA	NA	NA	NA	NA	B04-43 B04-44 B04-45	NA
5	CPT-S05-08 CPT-S05-09 CPT-S05-11 CPT-S05-12	CPT-S05-08-0 CPT-S05-08-2.5 CPT-S05-08-5 CPT-S05-11-0 CPT-S05-11-2.5 CPT-S05-11-5 CPT-S05-12-0 CPT-S05-12-2.5 CPT-S05-12-5	SHP-S05-11 SHP-S05-12	DHP-S05-08 DHP-S05-09 DHP-S05-11 DHP-S05-12	PEZ-S05-08 PEZ-S05-09 PEZ-S05-10	M05-11 M05-12	NA	GPW-05-001 GPW-05-002 GPW-05-003 GPW-05-004 GPW-05-005
10A	CPT-S10A-05	NA	SHP-S10A-02 SHP-S10A-05	DHP-S10A-05	PEZ-S10A-02 PEZ-S10A-05	NA	NA	NA

NA - Field Task Not Applicable for Site

TABLE .-2

SUMMARY OF SOIL ORGANIC CHEMICAL ANALYSES FROM SITES 4, 5, AND 10A
CTO 280
ALAMEDA NAVAL AIR STATION

WELL NO.	SAMPLE DATE	SAMPLE DEPTH (feet bgs) *	USCS CLASSIFICATION * *	FIELD SCREEN (ppm/v) * * *	VOLATILE ORGANIC COMPOUNDS (ug/kg)	SEMIVOLATILE ORGANIC COMPOUNDS (ug/kg)	PESTICIDES, PCB'S AND DIOXINS (ug/kg)	TOTAL PETROLEUM HYDROCARBONS EXTRACTABLE (ug/kg)	TOTAL PETROLEUM HYDROCARBONS PURGEABLE (ug/kg)
B04-43	09/01/94	0 0	SP		NA	ND	NA	TPHC AS MOTOR OIL 3610000J(h)	TPHC AS UNLEADED GASOLINE 1300J(h)
B04-43	09/01/94	2 5	SP		TRICHLOROETHENE 59	ND	NA	TPHC AS MOTOR OIL 2380000J(h)	ND
B04-43	09/01/94	5 0	SP		TRICHLOROETHENE 77	ND	NA	TPHC AS MOTOR OIL 101000J(h)	ND
B04-44	09/01/94	0 0	SM		NA	ND	NA	TPHC AS MOTOR OIL 1990000J(h)	ND
B04-44	09/01/94	2 5	SM		ND	ND	NA	TPHC AS MOTOR OIL 240000J(h)	ND
B04-44	09/01/94	5 0	SM		ND	PYRENE 430	NA	TPHC AS MOTOR OIL 168000J(h)	ND
B04-45	09/15/94	0 0	SP		NA	ND	NA	TPHC AS MOTOR OIL 200000J(h)	ND
B04-45	09/15/94	2 5	SP		ND	ND	NA	TPHC AS MOTOR OIL 340000J(h)	ND
B04-45	09/15/94	5 0	SP		ND	ND	NA	TPHC AS MOTOR OIL 460000J(h)	ND
M05-11	11/05/94	0 0	SP	0 0	ND	ND	NA	TPHC AS MOTOR OIL 97000J(h)	ND
M05-11	11/05/94	2 5	SP	0 0	ND	ND	NA	TPHC AS MOTOR OIL 64000J(h)	ND
M05-11	11/05/94	5 0	SP	0 0	ND	ND	NA	TPHC AS MOTOR OIL 98000J(h)	ND

TABLE 2-2

SUMMARY OF SOIL ORGANIC CHEMICAL ANALYSES FROM SITES 4, 5, AND 10A
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

WELL NO.	SAMPLE DATE	SAMPLE DEPTH (feet bgs) *	USCS CLASSIFICATION **	FIELD SCREEN (ppm/v) ***	VOLATILE ORGANIC COMPOUNDS (ug/kg)	SEMIVOLATILE ORGANIC COMPOUNDS (ug/kg)	PESTICIDES, PCB'S AND DIOXINS (ug/kg)	TOTAL PETROLEUM HYDROCARBONS EXTRACTABLE (ug/kg)	TOTAL PETROLEUM HYDROCARBONS PURGEABLE (ug/kg)
M05-11	11/05/94	8 0	SP	0 0	ND	ND	NA	ND	ND
M05-12	11/05/94	0 0	SP	0 0	ND	ND	NA	TPHC AS MOTOR OIL 36000J(h)	ND
M05-12	11/05/94	2 5	SP	0 0	ND	ND	NA	TPHC AS MOTOR OIL 31000J(h)	ND
M05-12	11/05/94	5 0	SP	0 0	ND	ND	NA	TPHC AS MOTOR OIL 85000J(h)	ND
M05-12	11/05/94	9 0	SM	0 0	ND	ND	NA	ND	ND
CPT-S05-11	08/11/94	0 0	--	--	ND	ND	NA	TPHC AS MOTOR OIL 73000J(h)	ND
CPT-S05-11	08/11/94	2 5	--	--	ND	ND	NA	ND	ND
CPT-S05-11	08/11/94	5 0	--	--	ND	ND	NA	ND	ND
CPT-S05-12	08/12/94	0 0	--	--	ND	ND	NA	ND	ND
CPT-S05-12	08/12/94	2 5	--	--	ND	ND	NA	TPHC AS MOTOR OIL 430000J(h)	ND
CPT-S05-12	08/12/94	5 0	--	--	ND	ND	NA	TPHC AS MOTOR OIL 56000J(h)	ND
GPS05-003	08/11/94	1 0	--	--	ND	ND	NA	ND	ND

SUMMARY OF SOIL ORGANIC CHEMICAL ANALYSES FROM SITES 4, 5, AND 10A
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

WELL NO.	SAMPLE DATE	SAMPLE DEPTH (feet bgs) *	USCS CLASSIFICATION **	FIELD SCREEN (ppm/v) ***	VOLATILE ORGANIC COMPOUNDS (ug/kg)	SEMIVOLATILE ORGANIC COMPOUNDS (ug/kg)	PESTICIDES, PCB'S AND DIOXINS (ug/kg)	TOTAL PETROLEUM HYDROCARBONS EXTRACTABLE (ug/kg)	TOTAL PETROLEUM HYDROCARBONS PURGEABLE (ug/kg)
GPS05-003	08/11/94	3 0	--	--	ND	ND	NA	ND	ND
GPS05-003	08/11/94	5 5	--	--	ND	PHENOL 3800	NA	ND	ND

* Sample depth indicated represents the top of an 18-inch sample interval.

** USCS Interpretation (for soil borings only):

GW = well-graded gravel
GP = poorly-graded gravel
GM = silty gravel
GC = clayey gravel
SW = well-graded sand
SP = poorly-graded sand
SM = silty sand
SC = clayey sand
ML = inorganic silt and very fine sands
CL = inorganic clay, low-med plasticity
OL = organic silts and organic silty clays
MH = inorganic silts, micacaous or diatomaceous fine sand or silty soils
CH = inorganic clay, high plasticity
OH = organic silt/clay, med - high plasticity
PT = peat

*** Field screening results were obtained using a photoionization detector calibrated using a 100 ppm/v isobutylene standard gas (for soil borings only).

Analytical Data Comments:
ug/kg = Micrograms per kilogram
ug/L = Micrograms per liter
J = Value estimated at reported concentration
ND = Analytes reported below detection limits
NA = Not Analyzed
ppm/v = Parts per million volume
PCBs = Polychlorinated Biphenyls

Analytical QA/QC Comments:
(a) - Surrogate recovery problem
(b) - Blank contamination problems
(c) - Matrix spike recovery problems
(d) - Duplicate (precision) problems
(e) - Internal standards problems
(f) - Calibration problems
(g) - Quantification below reporting limit
(h) - Other problems, refer to data validation narrative

"--" = Not Applicable
CPT = Soil Sample obtained with hand-auger sampling tool.
GPS = Soil Sample obtained with GeoProbe device.

SUMMARY OF GROUNDWATER ORGANIC CHEMICAL ANALYSES AND TDS FROM SITES 4, 5, AND 10A
CTO 280
ALAMEDA NAVAL AIR STATION

WELL NO.	WATER BEARING ZONE	SAMPLE DATE	VOLATILE ORGANIC COMPOUNDS (ug/L)	SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)	PESTICIDES, PCB'S AND DIOXINS (ug/L)	TOTAL PETROLEUM HYDROCARBONS EXTRACTABLE (ug/L)	TOTAL PETROLEUM HYDROCARBONS PURGEABLE (ug/L)	TOTAL DISSOLVED SOLIDS (mg/L)
DHP-S05-08	2	08/10/94	CARBON DISULFIDE 4	ND	NA	TPHC AS DIESEL 260J(h)	ND	NA
DHP-S05-09	2	08/11/94	ND	ND	NA	ND	ND	NA
DHP-S05-11	2	08/12/94	CARBON DISULFIDE 5	ND	NA	TPHC AS DIESEL 280J(h)	ND	24900
SHP-S05-11	1	08/12/94	1,2-DICHLOROETHENE (TOTAL) 4 CARBON DISULFIDE 6 VINYL CHLORIDE 52	ND	NA	NA	ND	4140 J(h)
DHP-S05-12	2	08/11/94	ND	ND	NA	TPHC AS DIESEL 200J(h)	ND	NA
SHP-S05-12	1	08/12/94	1,1-DICHLOROETHANE 7 1,2-DICHLOROETHENE (TOTAL) 34 CARBON DISULFIDE 12	ND	NA	TPHC AS DIESEL 160J(h)	ND	1540
SHP-S10A-02	1	08/31/94	2-BUTANONE 11 ACETONE 6 CHLOROFORM 11	ND	NA	TPHC AS DIESEL 260J(h)	ND	446
DHP-S10A-05	2	08/11/94	ND	NA	NA	NA	NA	33900
SHP-S10A-05	1	08/16/94	BROMODICHLOROMETHANE 1 CHLOROFORM 38	ND	NA	NA	ND	NA
GPW05-001	1	08/10/94	ND	ND	NA	TPHC AS JP5 230J(h)	TPHC AS UNLEADED GASOLINE 110J(h)	NA
GPW05-002	1	08/10/94	1,1-DICHLOROETHANE 3	ND	NA	ND	ND	NA
GPW05-003	1	08/10/94	1,1-DICHLOROETHANE 4	ND	NA	ND	ND	NA
GPW05-004	1	08/11/94	ND	NA	NA	NA	NA	NA
GPW05-005	1	08/11/94	1,1-DICHLOROETHANE 12	ND	NA	ND	TPHC AS UNLEADED GASOLINE 70J(h)	318

Analytical Data Comments:

ug/kg = Micrograms per kilogram
ug/L = Micrograms per liter
J = Value estimated at reported concentration
SHP = "Shallow" HydroPunch obtained from first water-bearing zone.
DHP = "Deep" HydroPunch obtained from second water-bearing zone.
ND = Analytes reported below detection limits
NA = Not Analyzed
ppm/v = Parts per million volume
PCBs = Polychlorinated Biphenyls

Analytical QA/QC Comments:

(a) - Surrogate recovery problem
(b) - Blank contamination problems
(c) - Matrix spike recovery problems
(d) - Duplicate (precision) problems
(e) - Internal standards problems
(f) - Calibration problems
(g) - Quantification below reporting limit
(h) - Other problems, refer to data validation narrative

GPW = GeoProbe Sample from First Water Bearing Zone.

SUMMARY OF QUALITY CONTROL ORGANIC CHEMICAL ANALYSES FROM SITES 4, 5, AND 10A
CTO 280
ALAMEDA NAVAL AIR STATION

WELL NO.	SAMPLE DATE	VOLATILE ORGANIC COMPOUNDS (ug/L)	SEMIVOLATILE ORGANIC COMPOUNDS (ug/L)	PESTICIDES, PCB'S AND DIOXINS (ug/L)	TOTAL PETROLEUM HYDROCARBONS EXTRACTABLE (ug/L)	TOTAL PETROLEUM HYDROCARBONS PURGEABLE (ug/L)
S04-EB-13	09/01/94	ND	ND	NA	TPHC AS MOTOR OIL 610J(h)	ND
S04-EB-14	09/15/94	ND	ND	NA	ND	ND
S04-TB-13	09/01/94	1,2-DICHLOROETHANE 1	NA	NA	NA	NA
S04-TB-14	09/15/94	1,2-DICHLOROETHANE 0.9	NA	NA	NA	NA
S05-ER-19	08/15/94	CHLOROMETHANE 2J(f)	ND	NA	NA	NA
S05-ER-20	08/11/94	ND	ND	NA	NA	NA
S05-TB-01	08/12/94	1,2-DICHLOROETHANE 1	NA	NA	NA	NA
S05-TB-02	08/11/94	ND	NA	NA	NA	NA

Analytical Data Comments:
- ug/kg = Micrograms per kilogram
- ug/L = Micrograms per liter
- J = Value estimated at reported concentration
- TB = Trip Blank
- ER = Equipment Rinsate
- ND = Analytes reported below detection limits
- NA = Not Analyzed
- ppm/v = Parts per million volume
- PCBs = Polychlorinated Biphenyls

Analytical QA/QC Comments:
- (a) - Surrogate recovery problem
- (b) - Blank contamination problems
- (c) - Matrix spike recovery problems
- (d) - Duplicate (precision) problems
- (e) - Internal standards problems
- (f) - Calibration problems
- (g) - Quantification below reporting limit
- (h) - Other problems, refer to data validation narrative

TABLE A-5

METAL RESULTS IN SOIL EXCEEDING TEN TIMES THE STLC
FROM SITES 4, 5, AND 10A
CTO 280
ALAMEDA NAVAL AIR STATION

Sample Location and Depth	Sample Date	Metal	Detected Concentration (mg/kg)	STLC x 10 (mg/kg)[a]
B04-45-0	09/15/94	LEAD	52.2	50.00
CPT-S05-11-0	08/11/94	LEAD	60.7	50.00
CPT-S05-12-0	08/12/94	LEAD	173	50.00
CPT-S05-12-2.5	08/12/94	LEAD	161	50.00
CPT-S05-12-5	08/12/94	LEAD	69.9	50.00
M05-12-0	11/05/94	LEAD	190	50.00
M05-12-2.5	11/05/94	LEAD	172	50.00
M05-12-5	11/05/94	LEAD	185	50.00

Note: [a] For the purpose of a screening criteria for this document, soil concentrations have been compared to a value equal to 10 times the STLC.

J - Estimated Concentration

STLC - Solubility Threshold Limit Concentration

TABLE A-6

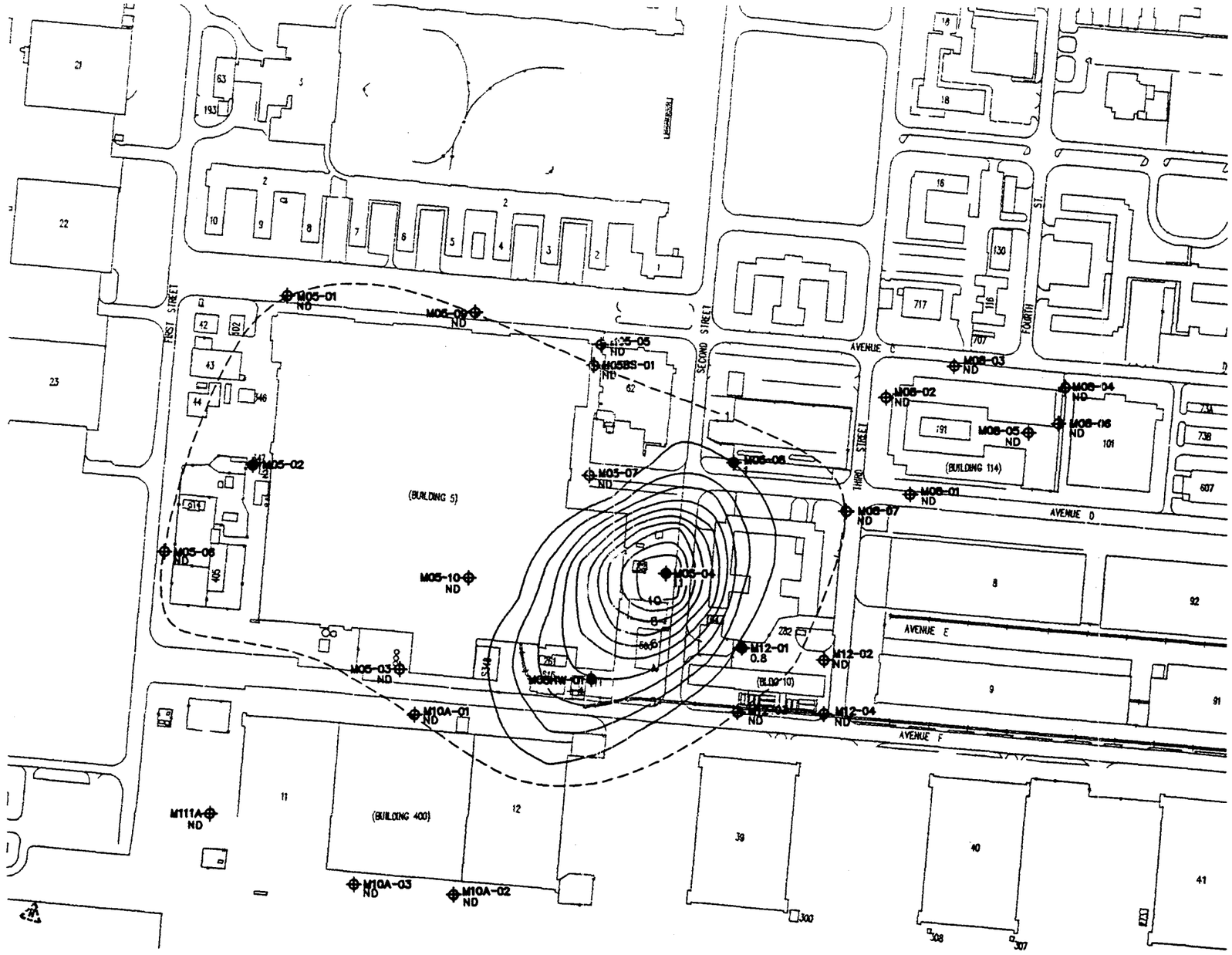
METAL RESULTS IN GROUNDWATER EXCEEDING 95 PERCENT/95 PERCENT STI FROM SITES 4, 5, AND 10A CTO 280 ALAMEDA NAVAL AIR STATION

Sample Location	Sample Date	Metal	Detected Concentration (ug/L)	Upper Tolerance Limit (ug/L)[a]
SHP-S05-12	08/12/94	NICKEL	86.0 J	6.6
	08/12/94	SELENIUM	2.7 J	1.0
SHP-S10A-02	08/31/94	CHROMIUM	17.4 J	3.2
GPW05-005	08/11/94	ARSENIC	79.0	36.3

Note: [a] This value represents the upper tolerance interval of the 95 percent/95 percent STI (95/95 STI). The 95/95 STI is the value below which 95 percent of the groundwater samples are expected to fall 95 percent of the time, based on previous groundwater samples collected from NAS Alameda from areas of non-industrial use.

J - Estimated concentration

STI - Statistical Tolerance Interval



LEGEND

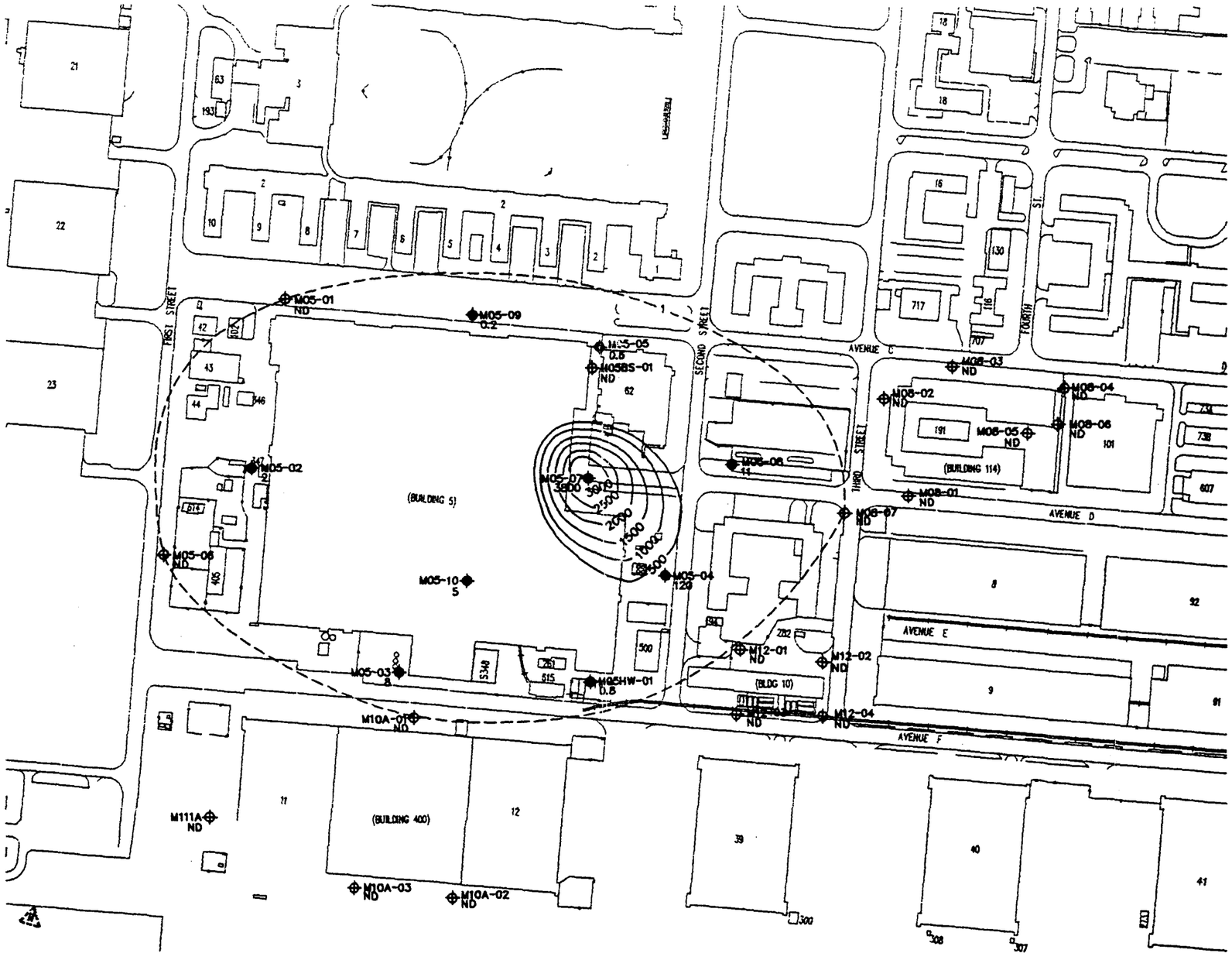
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 260
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- 5 — TETRACHLOROETHENE ISOCONTOUR CONTOUR INTERVAL = 1 µg/L
- —1— APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 5 µg/L

150 0 150 300
SCALE: 1" = 300'

NAS ALAMEDA
ALAMEDA, CALIFORNIA
TETRACHLOROETHENE CONCENTRATIONS (µg/L) IN FIRST WATER-BEARING ZONE
JULY-AUGUST 1994

FILE NAME: S:\GIS\ALAMEDA\260CONT\260COTL.DWG
DATE: 04/19/94 TWL DN



LEGEND

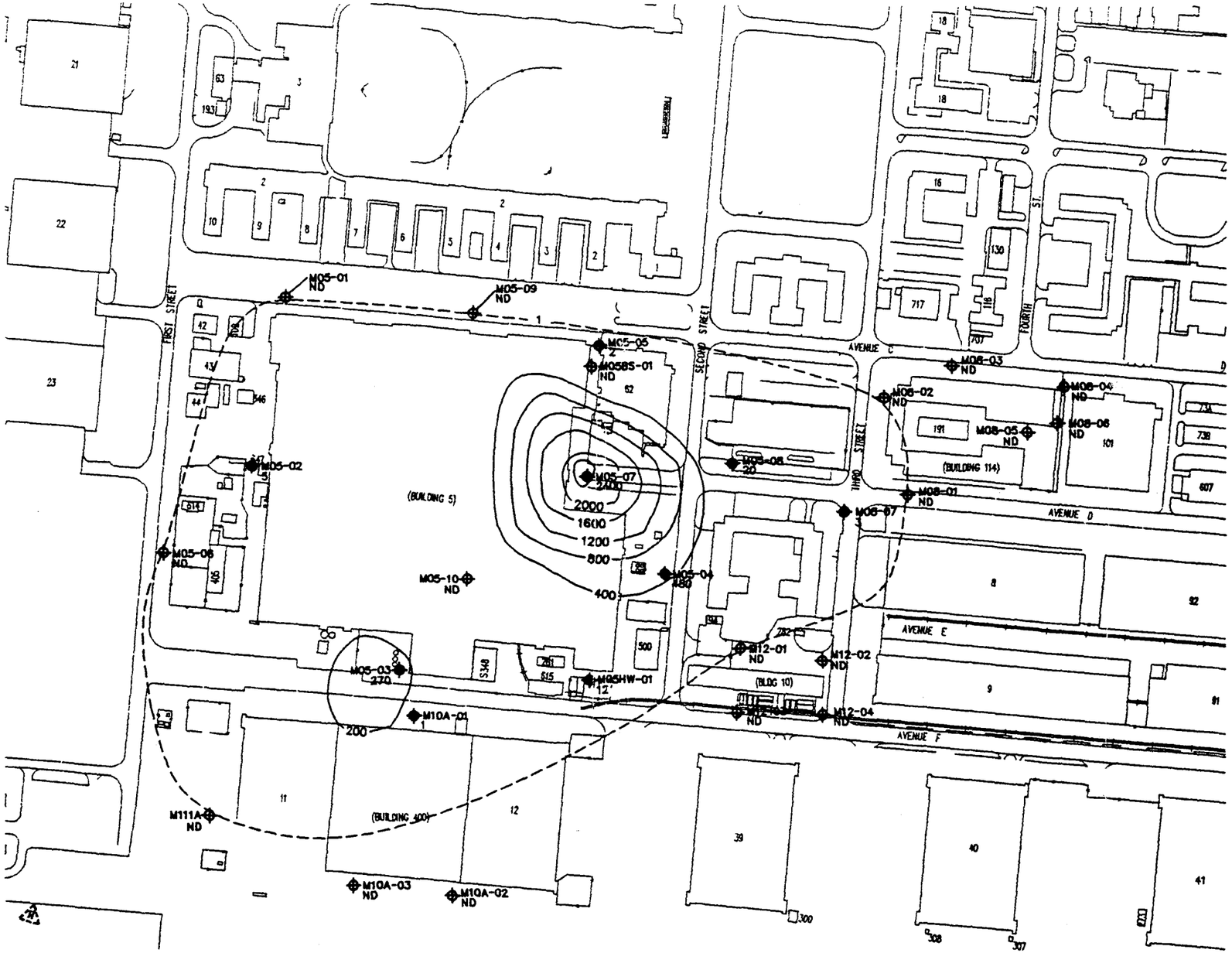
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 260
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- -5- 1,1-DICHLOROETHENE ISOCONTOUR CONTOUR INTERVAL = 500 µg/L
- —1— APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 6 µg/L

150 0 150 300
SCALE: 1" = 300'

NAS ALAMEDA
ALAMEDA, CALIFORNIA
1,1-DICHLOROETHENE CONCENTRATIONS (µg/L) IN FIRST WATER-BEARING ZONE
JULY-AUGUST 1994

DATE: 04/18/94 TWL DN FILE NAME: S:\228\VLAMEDA\260CONT\260CGTL.DWG



LEGEND

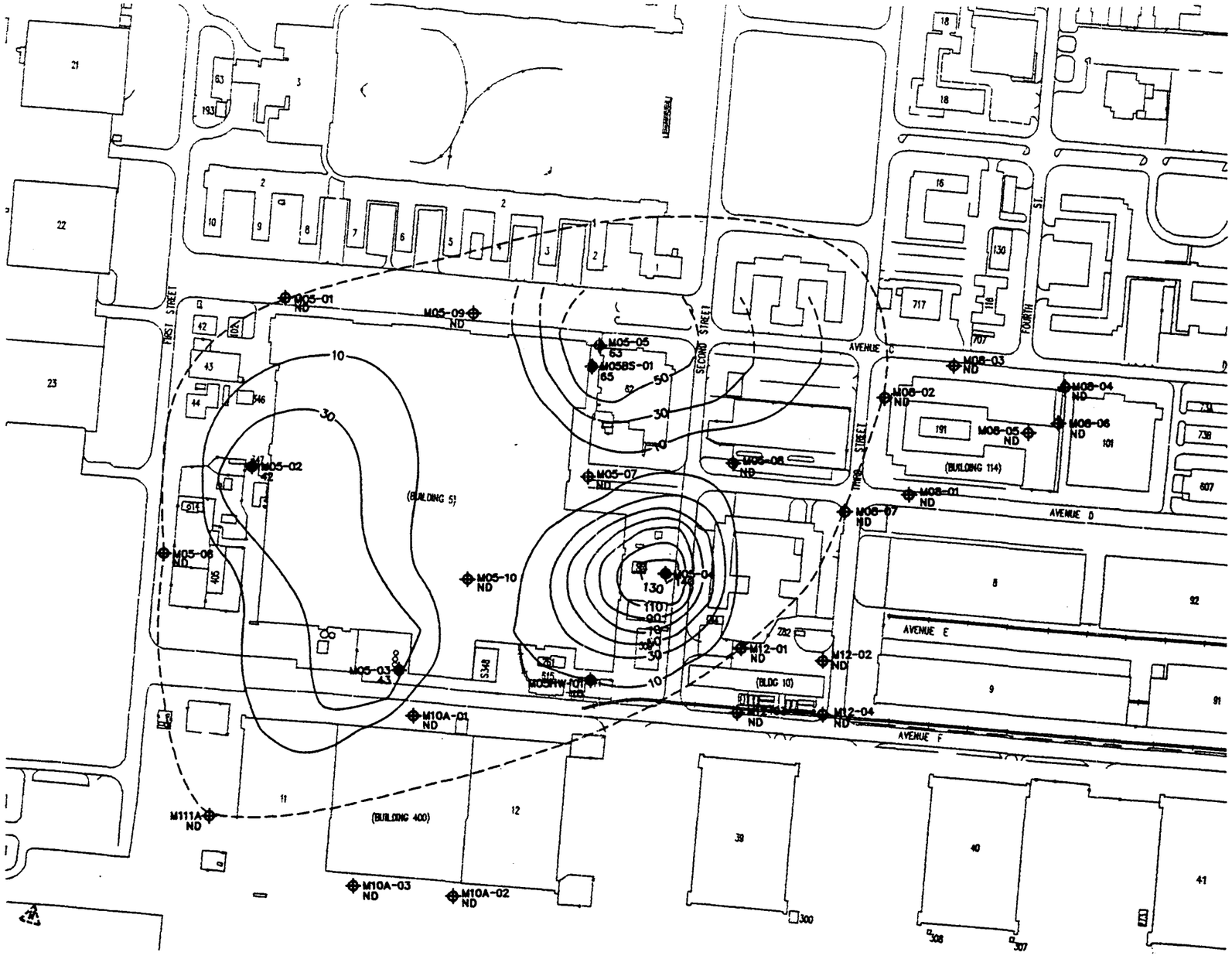
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 260
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- 5 TRICHLOROETHYLENE ISOCONTOUR CONTOUR INTERVAL = 400 µg/L
- —1— APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 5 µg/L

150 0 150 300
SCALE: 1" = 300'

NAS ALAMEDA
ALAMEDA, CALIFORNIA
TRICHLOROETHYLENE CONCENTRATIONS (µg/L) IN FIRST WATER-BEARING ZONE
JULY-AUGUST 1994

DATE: 04/18/94 TRL DH FILE NAME: S:\QS\ALAMEDA\380CONT\380COT1.DWG



LEGEND

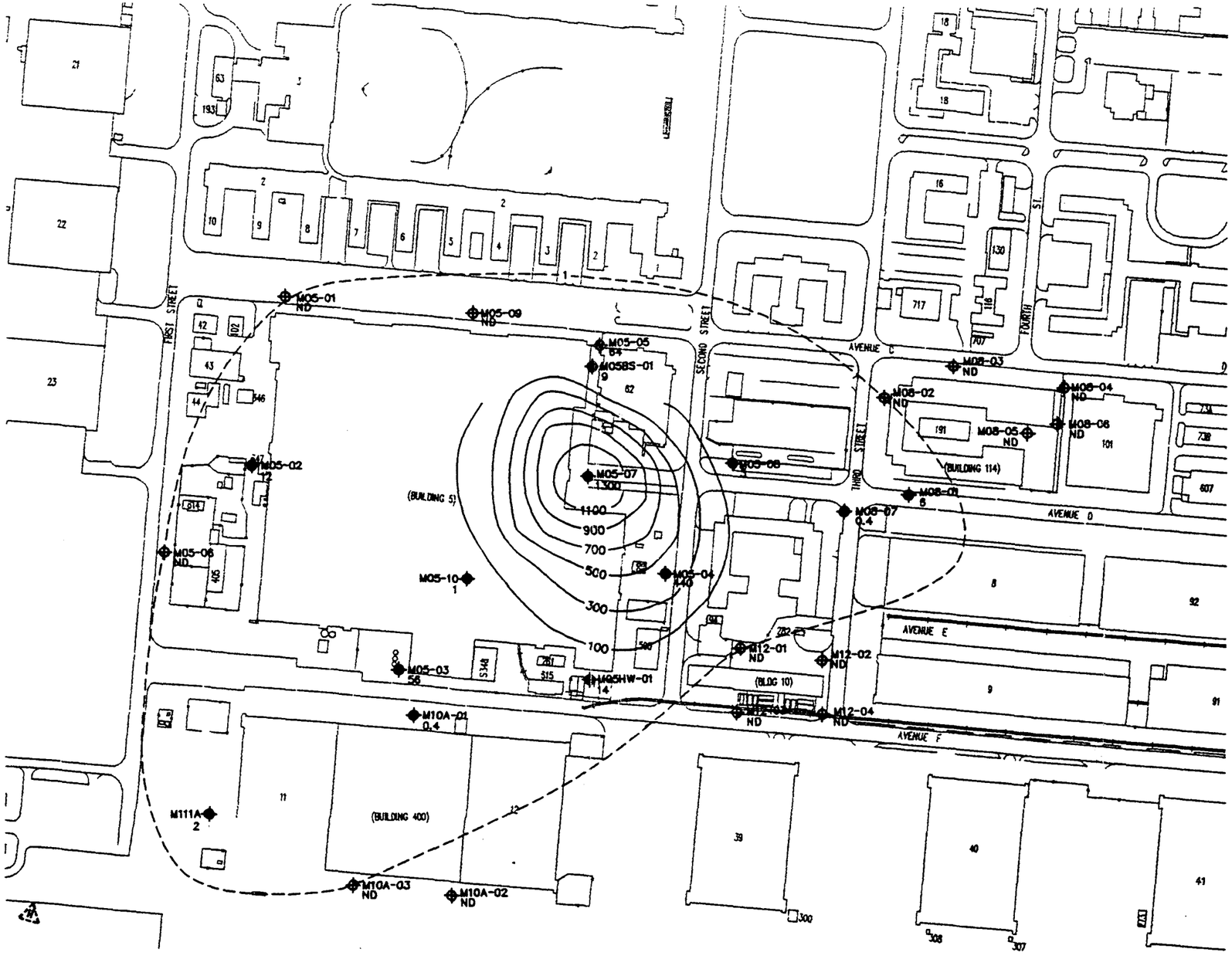
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 260
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- 5 — VINYL CHLORIDE ISOCONTOUR CONTOUR INTERVAL = 20 µg/L
- — 1 — APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 0.5 µg/L

150 0 150 300
SCALE: 1" = 300'

NAS ALAMEDA
ALAMEDA, CALIFORNIA
VINYL CHLORIDE CONCENTRATIONS (µg/L) IN FIRST WATER-BEARING ZONE
JULY-AUGUST 1994

FILE NAME: S:\GIS\ALAMEDA\260CONT\260COTL.DWG
DATE: 04/18/94 TWL DN



LEGEND

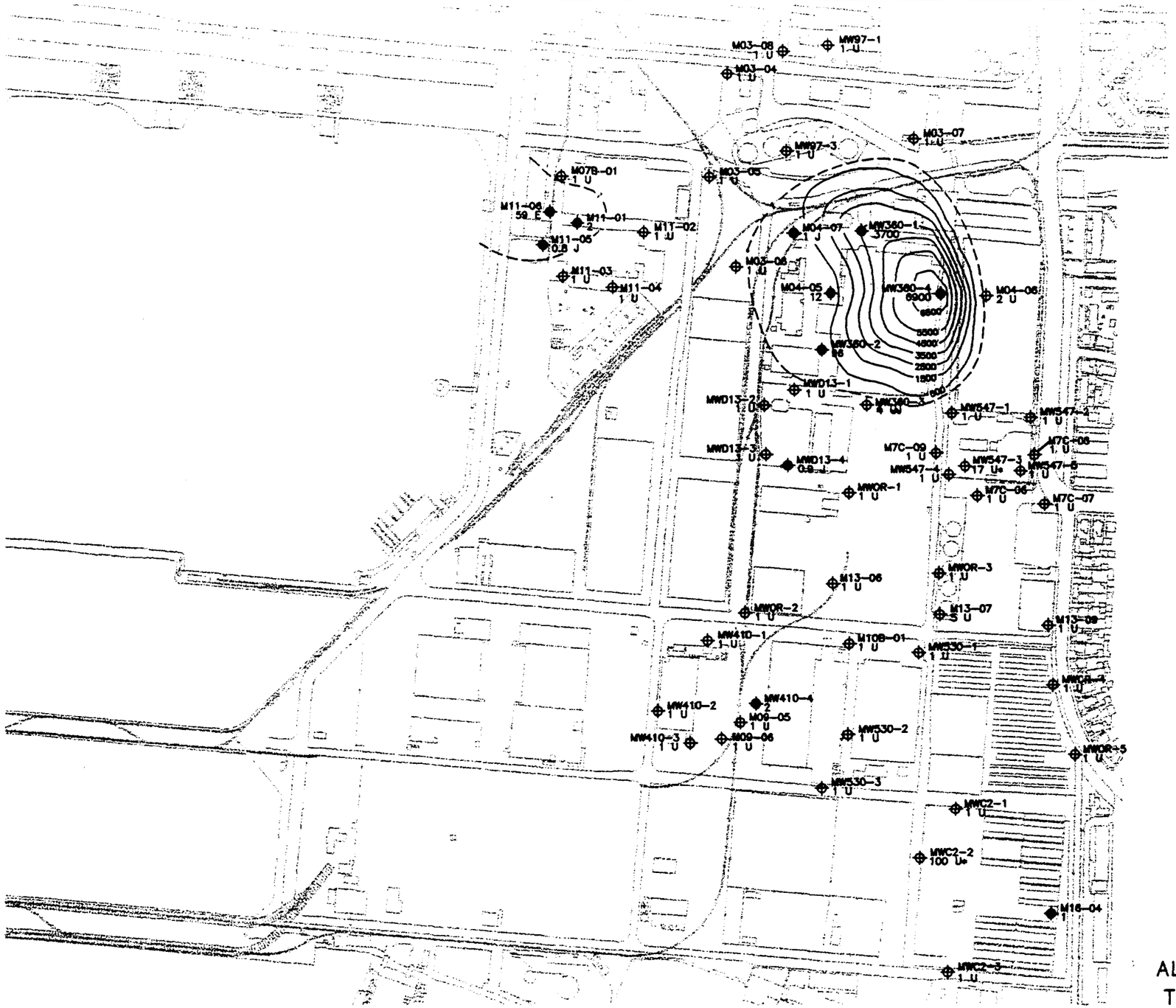
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 260
- FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- 5 — 1,2-DICHLOROETHENE ISOCONTOUR CONTOUR INTERVAL = 200 µg/L
- —1— APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 6 µg/L

150 0 150 300
SCALE: 1" = 300'

NAS ALAMEDA
ALAMEDA, CALIFORNIA
1,2-DICHLOROETHENE CONCENTRATIONS (µg/L) IN FIRST WATER-BEARING ZONE JULY-AUGUST 1994

DATE: 04/18/94 TWL DN FILE NAME: S:\DIS\ALAMEDA\260CONT\260COT1.DWG



LEGEND

- ◆ FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 280
- ◆ FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- * RAISED DETECTION LIMIT DUE TO DILUTION CAUSED BY HIGH CONCENTRATIONS OF OTHER TARGET ANALYTES
- —500— TRICHLOROETHYLENE ISOCONTOUR
- --1-- APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 5 µg/L

200 0 200 400
SCALE: FEET

NAS ALAMEDA
ALAMEDA, CALIFORNIA
TRICHLOROETHYLENE CONCENTRATIONS (µg/L)
IN FIRST WATER-BEARING ZONE
SEPTEMBER-OCTOBER 1994

DATE: 17/04/95 FILE NAME: S:\GIS\ALAMEDA\280CONT\VOC\ALAVOC2.DWG DN

LEGEND

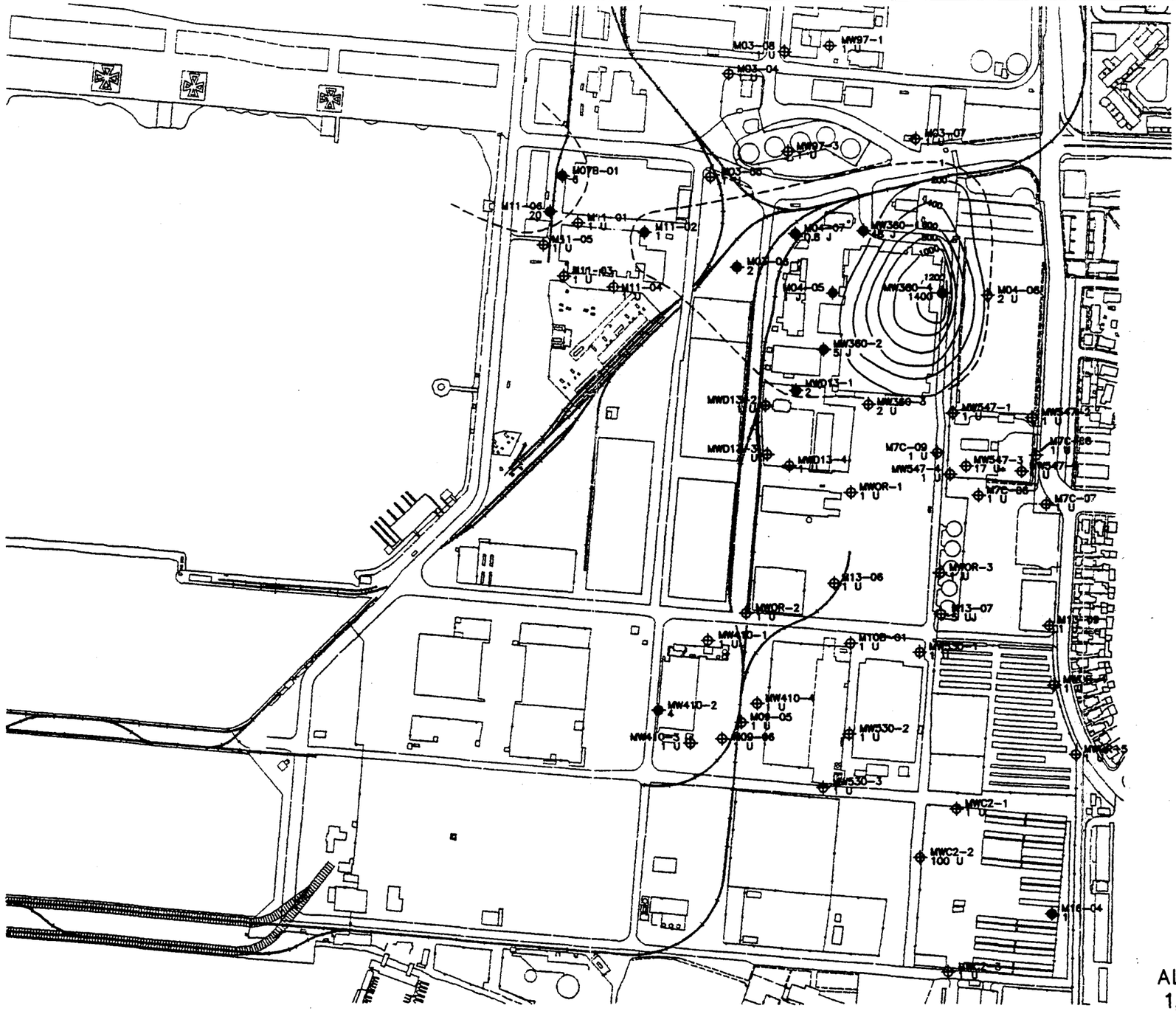
- ◆ FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 280
- ◆ FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- * RAISED DETECTION LIMIT DUE TO DILUTION CAUSED BY HIGH CONCENTRATIONS OF OTHER TARGET ANALYTES
- —40— VINYL CHLORIDE ISOCONTOUR
- --1-- APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 0.5 µg/L

200 0 200 400
SCALE: FEET

NAS ALAMEDA
ALAMEDA, CALIFORNIA
VINYL CHLORIDE CONCENTRATIONS (g/L)
IN FIRST WATER-BEARING ZONE
SEPTEMBER-OCTOBER 1994

DATE: 17/04/95 DN FILE NAME: S:\GIS\ALAMEDA\280CONT\VOC\ALAVOC2.DWG



LEGEND

- ⊕ FIRST WATER-BEARING ZONE MONITORING WELL LOCATION INSTALLED DURING CTO 280
- ◆ FIRST WATER-BEARING ZONE MONITORING WELL LOCATION CHEMICAL CONCENTRATION ABOVE LOWER DETECTION LIMIT
- * RAISED DETECTION LIMIT DUE TO DILUTION CAUSED BY HIGH CONCENTRATIONS OF OTHER TARGET ANALYTES
- —40— 1,2-DICHLOROETHENE ISOCONTOUR
- --1-- APPROXIMATE EXTENT OF CONTAMINATION

NOTE: CALIFORNIA MAXIMUM CONTAMINANT LIMIT = 6 µg/L

NAS ALAMEDA
ALAMEDA, CALIFORNIA
1,2-DICHLOROETHENE CONCENTRATIONS (µg/L) IN FIRST WATER-BEARING ZONE
SEPTEMBER-OCTOBER 1994

DATE: 04/14/9 DH FILE NAME: S:\GIS\ALAMEDA\280CONT\VOC\ALAVOC2.DWG

ATTACHMENT B

SOIL, SEDIMENT, AND GROUNDWATER ANALYTICAL DATA (LIMITED DISTRIBUTION)

ATTACHMENT B

SOIL, SEDIMENT, AND GROUNDWATER ANALYTICAL DATA (LIMITED DISTRIBUTION)

Due to the large volume of paper, a full data package for soil and first quarter groundwater analyses conducted under CTO 280 is included as Attachment B, under separate cover.

ATTACHMENT C

SOIL AND GROUNDWATER DETECTION TABLES FOR METALS

ALAMEDA CTO 280
SITE -0
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
GPS05-003-1.0 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13200 MG/KG		
		ARSENIC	0.68 MG/KG	J	g
		BARIUM	19.1 MG/KG	J	g
		CALCIUM	4920 MG/KG		
		CHROMIUM	2.7 MG/KG		
		COBALT	13.6 MG/KG		
		IRON	30000 MG/KG		
		LEAD	2.0 MG/KG		
		MAGNESIUM	9700 MG/KG		
		MANGANESE	527 MG/KG		
		POTASSIUM	298 MG/KG	J	g
		SODIUM	495 MG/KG	J	g
		VANADIUM	74.9 MG/KG		
		ZINC	30.5 MG/KG		
GPS05-003-3.0 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4120 MG/KG		
		ARSENIC	1.5 MG/KG	J	g
		BARIUM	28.1 MG/KG	J	g
		CALCIUM	2200 MG/KG		
		CHROMIUM	29.1 MG/KG		
		COBALT	5.3 MG/KG	J	g
		IRON	7910 MG/KG		
		LEAD	1.8 MG/KG		
		MAGNESIUM	2190 MG/KG		
		MANGANESE	108 MG/KG		
		NICKEL	25.2 MG/KG		
		POTASSIUM	666 MG/KG	J	g
		SODIUM	301 MG/KG	J	g
		VANADIUM	18.7 MG/KG		
		ZINC	19.8 MG/KG		
GPS05-003-5.5 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4710 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	37.5 MG/KG	J	g
		CALCIUM	2030 MG/KG		
		CHROMIUM	27.2 MG/KG		
		COBALT	4.4 MG/KG	J	g
		IRON	8780 MG/KG		
		LEAD	1.9 MG/KG		
		MAGNESIUM	2550 MG/KG		
		MANGANESE	91.5 MG/KG		
		NICKEL	29.3 MG/KG		
		POTASSIUM	803 MG/KG	J	g
		SODIUM	285 MG/KG	J	g
		VANADIUM	19.3 MG/KG		
		ZINC	23.4 MG/KG		
GPS16-001-6.0 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3780 MG/KG		
		ARSENIC	1.3 MG/KG	J	g
		BARIUM	23.5 MG/KG	J	g
		CALCIUM	2150 MG/KG		
		CHROMIUM	26.2 MG/KG		
		COBALT	4.4 MG/KG	J	g
		IRON	6510 MG/KG		
		LEAD	2.0 MG/KG		
		MAGNESIUM	2050 MG/KG		
		MANGANESE	87.1 MG/KG		
		NICKEL	24.2 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE -0 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
GPS16-001-6.0 AST12 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	522 MG/KG	J	g
		SODIUM	72.2 MG/KG	J	g
		VANADIUM	15.9 MG/KG		
		ZINC	17.6 MG/KG		
GPS16-002-6.0 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3570 MG/KG		
		ARSENIC	1.0 MG/KG	J	g
		BARIUM	23.9 MG/KG	J	g
		CALCIUM	1900 MG/KG		
		CHROMIUM	21.1 MG/KG		
		COBALT	3.3 MG/KG	J	g
		IRON	6570 MG/KG		
		LEAD	1.5 MG/KG		
		MAGNESIUM	2110 MG/KG		
		MANGANESE	88.0 MG/KG		
		NICKEL	23.8 MG/KG		
		POTASSIUM	572 MG/KG	J	g
		SODIUM	69.3 MG/KG	J	g
		VANADIUM	15.5 MG/KG		
		ZINC	17.6 MG/KG		
GPS16-003-6.0 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4340 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	36.4 MG/KG	J	g
		CALCIUM	2300 MG/KG		
		CHROMIUM	28.1 MG/KG		
		COBALT	4.2 MG/KG	J	g
		IRON	7600 MG/KG		
		LEAD	2.2 MG/KG		
		MAGNESIUM	2270 MG/KG		
		MANGANESE	92.3 MG/KG		
		NICKEL	25.8 MG/KG		
		POTASSIUM	612 MG/KG	J	g
		SODIUM	82.7 MG/KG	J	g
		VANADIUM	20.0 MG/KG		
		ZINC	23.1 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE -0 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
GPW05-001 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	80.5 UG/L	J	g
		ARSENIC	20.7 UG/L		
		CALCIUM	5940 UG/L		
		IRON	105 UG/L		
		MAGNESIUM	2340 UG/L	J	g
		MANGANESE	65.4 UG/L		
		POTASSIUM	3270 UG/L	J	g
		SODIUM	6550 UG/L		
		ZINC	15.7 UG/L	J	g
GPW05-002 AST12 05GB002 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	46.0 UG/L	J	g
		ARSENIC	9.4 UG/L	J	g
		BARIUM	10.6 UG/L	J	g
		CALCIUM	7440 UG/L		
		IRON	93.2 UG/L	J	g
		MAGNESIUM	2560 UG/L	J	g
		MANGANESE	76.8 UG/L		
		POTASSIUM	4630 UG/L	J	g
		SODIUM	27500 UG/L		
		ZINC	15.7 UG/L	J	g
GPW05-003 AST12 05GB002DUP 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	7.9 UG/L	J	g
		CALCIUM	7560 UG/L		
		MAGNESIUM	2570 UG/L	J	g
		MANGANESE	77.6 UG/L		
		POTASSIUM	4560 UG/L	J	g
		SODIUM	27500 UG/L		
		ZINC	12.1 UG/L	J	g
GPW05-005 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	501 UG/L		
		ARSENIC	79.0 UG/L		
		BARIUM	149 UG/L	J	g
		CALCIUM	13900 UG/L		
		IRON	1930 UG/L		
		MAGNESIUM	5100 UG/L		
		MANGANESE	61.2 UG/L		
		POTASSIUM	7120 UG/L		
		SODIUM	71800 UG/L		
		VANADIUM	8.8 UG/L	J	g
		ZINC	19.1 UG/L	J	g
GPW16-001 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	58.9 UG/L	J	g
		ARSENIC	5.9 UG/L	J	g
		BARIUM	27.8 UG/L	J	g
		CADMIUM	1.0 UG/L	J	g
		CALCIUM	9750 UG/L		
		MAGNESIUM	2090 UG/L	J	g
		MANGANESE	21.6 UG/L		
		POTASSIUM	13900 UG/L		
		SODIUM	47100 UG/L		
		ZINC	16.9 UG/L	J	g
GPW16-002 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	58.2 UG/L	J	g
		ARSENIC	6.7 UG/L	J	g
		BARIUM	27.8 UG/L	J	g
		CALCIUM	9490 UG/L		
		MAGNESIUM	2060 UG/L	J	g
		MANGANESE	20.9 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE -0 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
GPW16-002 AST12 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM SODIUM ZINC	13500 UG/L 46200 UG/L 18.1 UG/L	 J	 g
GPW16-003 AST12 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM ZINC	5.1 UG/L 12.0 UG/L 9920 UG/L 1930 UG/L 24.4 UG/L 15000 UG/L 48400 UG/L 29.6 UG/L	J J J	g g g
GPW16-004 AST12 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM ZINC	18.5 UG/L 11500 UG/L 5710 UG/L 11.4 UG/L 7740 UG/L 7090 UG/L 8.7 UG/L 17.3 UG/L	J J J J	g g g g
GPW16-005 AST12 ER 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM IRON SODIUM ZINC	111 UG/L 18.3 UG/L 278 UG/L 30.2 UG/L	J J J	g g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-001 AST05 SS1-RA-1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9040 MG/KG		
		ARSENIC	6.1 MG/KG		
		BARIUM	198 MG/KG		
		CADMIUM	8.3 MG/KG	J	h
		CALCIUM	13300 MG/KG		
		CHROMIUM	44.3 MG/KG	J	d
		COPPER	208 MG/KG		
		IRON	15200 MG/KG		
		LEAD	158 MG/KG	J	h
		MAGNESIUM	4350 MG/KG		
		MANGANESE	282 MG/KG		
		MERCURY	0.48 MG/KG		
		NICKEL	40.1 MG/KG	J	d
		POTASSIUM	986 MG/KG		
		SILVER	1.6 MG/KG	J	d,g
		SODIUM	279 MG/KG	J	g
		VANADIUM	32.7 MG/KG		
		ZINC	220 MG/KG		
280-S01-002 AST05 SS1-RA-2 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10100 MG/KG		
		ARSENIC	4.3 MG/KG		
		BARIUM	106 MG/KG		
		CADMIUM	9.1 MG/KG	J	h
		CALCIUM	6840 MG/KG		
		CHROMIUM	45.1 MG/KG	J	d
		COPPER	177 MG/KG		
		IRON	19200 MG/KG		
		LEAD	205 MG/KG	J	h
		MAGNESIUM	3430 MG/KG		
		MANGANESE	214 MG/KG		
		MERCURY	0.60 MG/KG		
		NICKEL	51.1 MG/KG	J	d
		POTASSIUM	1220 MG/KG		
		SILVER	1.8 MG/KG	J	d,g
		SODIUM	277 MG/KG	J	g
		VANADIUM	54.7 MG/KG		
		ZINC	356 MG/KG		
280-S01-003 AST03 SS1-RA-3 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8230 MG/KG		
		ARSENIC	5.6 MG/KG		
		BARIUM	144 MG/KG		
		BERYLLIUM	0.44 MG/KG	J	g
		CADMIUM	5.1 MG/KG		
		CALCIUM	5130 MG/KG		
		CHROMIUM	43.2 MG/KG		
		COBALT	9.3 MG/KG	J	g
		COPPER	152 MG/KG		
		IRON	18800 MG/KG		
		LEAD	94.3 MG/KG	J	d
		MAGNESIUM	4370 MG/KG		
		MANGANESE	314 MG/KG		
		MERCURY	1.4 MG/KG	J	f
		NICKEL	91.7 MG/KG		
		VANADIUM	84.3 MG/KG		
		ZINC	591 MG/KG		
280-S01-004 AST03	CLP METALS (TOTAL)	ALUMINUM	6630 MG/KG		
		ARSENIC	4.6 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-004 AST03 SS1-RA-4 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	92.9 MG/KG		
		BERYLLIUM	0.45 MG/KG	J	g
		CADMIUM	0.90 MG/KG	J	g
		CALCIUM	6890 MG/KG		
		CHROMIUM	30.0 MG/KG		
		COPPER	29.9 MG/KG		
		IRON	12500 MG/KG		
		LEAD	55.3 MG/KG	J	d
		MAGNESIUM	2910 MG/KG		
		MANGANESE	227 MG/KG		
		NICKEL	25.8 MG/KG		
		VANADIUM	24.7 MG/KG		
		ZINC	96.8 MG/KG		
280-S01-005 AST03 SS1-RA-4DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6570 MG/KG		
		ARSENIC	5.8 MG/KG		
		BARIUM	73.0 MG/KG		
		BERYLLIUM	0.40 MG/KG	J	g
		CADMIUM	0.99 MG/KG		
		CALCIUM	6820 MG/KG		
		CHROMIUM	45.9 MG/KG		
		COPPER	28.8 MG/KG		
		IRON	11800 MG/KG		
		LEAD	51.5 MG/KG	J	d
		MAGNESIUM	2710 MG/KG		
		MANGANESE	214 MG/KG		
		NICKEL	26.4 MG/KG		
		VANADIUM	23.4 MG/KG		
		ZINC	88.1 MG/KG		
280-S01-006 AST03 SS1-RA-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7920 MG/KG		
		ARSENIC	4.9 MG/KG		
		BARIUM	67.6 MG/KG		
		BERYLLIUM	0.57 MG/KG	J	g
		CADMIUM	1.8 MG/KG		
		CALCIUM	3510 MG/KG		
		CHROMIUM	32.5 MG/KG		
		COPPER	64.4 MG/KG		
		IRON	19100 MG/KG		
		LEAD	91.9 MG/KG	J	d
		MAGNESIUM	3550 MG/KG		
		MANGANESE	417 MG/KG		
		NICKEL	26.7 MG/KG		
		VANADIUM	33.3 MG/KG		
		ZINC	137 MG/KG		
280-S01-007 AST03 SS1-RA-6 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5630 MG/KG		
		BARIUM	57.3 MG/KG	J	g
		BERYLLIUM	1.1 MG/KG	J	g
		CADMIUM	2.8 MG/KG		
		CALCIUM	3720 MG/KG	J	g
		CHROMIUM	44.5 MG/KG		
		COPPER	36.5 MG/KG		
		IRON	10500 MG/KG		
		LEAD	223 MG/KG	J	d
		MAGNESIUM	2730 MG/KG	J	g
		MANGANESE	178 MG/KG		
		NICKEL	34.8 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-007 AST03 SS1-RA-6 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM ZINC	20.1 MG/KG 124 MG/KG	J	g
280-S01-008 AST03 SS1-RA-7 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE NICKEL VANADIUM ZINC	5630 MG/KG 46.2 MG/KG 0.34 MG/KG 1.2 MG/KG 2500 MG/KG 109 MG/KG 12400 MG/KG 52.1 MG/KG 5140 MG/KG 178 MG/KG 118 MG/KG 22.2 MG/KG 62.8 MG/KG	 J J 	 g d
280-S01-009 AST01 SS1-RA-8 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM VANADIUM ZINC	10800 MG/KG 4.8 MG/KG 97.5 MG/KG 0.59 MG/KG 12.0 MG/KG 6390 MG/KG 99.5 MG/KG 11.7 MG/KG 81.8 MG/KG 21500 MG/KG 643 MG/KG 5420 MG/KG 518 MG/KG 43.6 MG/KG 1280 MG/KG 43.0 MG/KG 578 MG/KG	 J J J J J	 g c c d d
280-S01-010 AST01 SS1-RA-9 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM VANADIUM ZINC	7160 MG/KG 68.8 MG/KG 0.55 MG/KG 0.63 MG/KG 3990 MG/KG 44.7 MG/KG 10000 MG/KG 83.5 MG/KG 2780 MG/KG 154 MG/KG 20.9 MG/KG 1200 MG/KG 23.7 MG/KG 151 MG/KG	 J J J J	 g c,g c d
280-S01-011 AST01 SS1-RA-10 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM	9670 MG/KG 105 MG/KG 0.60 MG/KG 0.56 MG/KG 7870 MG/KG 29.8 MG/KG	 J J J	 g c,g c

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-011 AST01 SS1-RA-10 0.00 - 0.00	CLP METALS (TOTAL)	COPPER	23.3 MG/KG	J	d
		IRON	12700 MG/KG		
		LEAD	50.4 MG/KG		
		MAGNESIUM	3350 MG/KG		
		MANGANESE	179 MG/KG		
		NICKEL	27.8 MG/KG		
		POTASSIUM	1180 MG/KG		
		SODIUM	493 MG/KG	J	g
		VANADIUM	27.4 MG/KG		
		ZINC	142 MG/KG	J	d
280-S01-012 AST01 SS1-RA-11 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10900 MG/KG		
		ARSENIC	4.5 MG/KG		
		BARIUM	52.0 MG/KG		
		BERYLLIUM	0.35 MG/KG	J	g
		CADMIUM	0.74 MG/KG	J	c,g
		CALCIUM	4930 MG/KG		
		CHROMIUM	43.0 MG/KG	J	c
		IRON	15500 MG/KG		
		LEAD	50.9 MG/KG		
		MAGNESIUM	4140 MG/KG		
		MANGANESE	214 MG/KG		
		NICKEL	40.0 MG/KG		
		POTASSIUM	1360 MG/KG		
		VANADIUM	37.3 MG/KG		
		ZINC	70.7 MG/KG	J	d
280-S01-013 AST01 SS1-RA-12 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5130 MG/KG		
		BARIUM	22.1 MG/KG	J	g
		BERYLLIUM	0.69 MG/KG	J	g
		CADMIUM	0.11 MG/KG	J	c,g
		CALCIUM	3830 MG/KG		
		CHROMIUM	29.2 MG/KG	J	c
		IRON	8450 MG/KG		
		LEAD	23.7 MG/KG		
		MAGNESIUM	2040 MG/KG		
		MANGANESE	158 MG/KG		
		NICKEL	28.8 MG/KG		
		POTASSIUM	876 MG/KG	J	g
		VANADIUM	25.3 MG/KG		
280-S01-014 AST01 SS1-RA-12DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5160 MG/KG		
		BARIUM	23.2 MG/KG	J	g
		BERYLLIUM	0.59 MG/KG	J	g
		CADMIUM	0.11 MG/KG	J	c,g
		CALCIUM	4040 MG/KG		
		CHROMIUM	31.6 MG/KG	J	c
		IRON	8690 MG/KG		
		LEAD	14.0 MG/KG		
		MAGNESIUM	2070 MG/KG		
		MANGANESE	117 MG/KG		
		NICKEL	26.1 MG/KG		
		POTASSIUM	785 MG/KG	J	g
		VANADIUM	23.1 MG/KG		
280-S01-015 AST01 SS1-RA-13	CLP METALS (TOTAL)	ALUMINUM	5680 MG/KG		
		BARIUM	29.9 MG/KG	J	g
		BERYLLIUM	0.75 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-015 AST01 SS1-RA-13 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM	0.21 MG/KG	J	c,g
		CALCIUM	3370 MG/KG		
		CHROMIUM	31.9 MG/KG	J	c
		IRON	8510 MG/KG		
		LEAD	26.8 MG/KG		
		MAGNESIUM	2400 MG/KG		
		MANGANESE	104 MG/KG		
		NICKEL	25.0 MG/KG		
		POTASSIUM	954 MG/KG	J	g
		SILVER	2.7 MG/KG		
		VANADIUM	26.5 MG/KG		
280-S01-016 AST01 SS1-RA-14 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8050 MG/KG		
		ARSENIC	3.8 MG/KG		
		BARIUM	61.8 MG/KG		
		BERYLLIUM	0.67 MG/KG	J	g
		CADMIUM	0.68 MG/KG	J	c,g
		CALCIUM	5330 MG/KG		
		CHROMIUM	34.0 MG/KG	J	c
		COPPER	25.3 MG/KG	J	d
		IRON	14200 MG/KG		
		LEAD	752 MG/KG		
		MAGNESIUM	2570 MG/KG		
		MANGANESE	172 MG/KG		
		NICKEL	33.3 MG/KG		
		POTASSIUM	1300 MG/KG		
		VANADIUM	32.7 MG/KG		
		ZINC	93.5 MG/KG	J	d
280-S01-017 AST01 SS1-RA-15 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9850 MG/KG		
		BARIUM	54.5 MG/KG		
		BERYLLIUM	0.69 MG/KG	J	g
		CADMIUM	0.44 MG/KG	J	c,g
		CALCIUM	5470 MG/KG		
		CHROMIUM	40.1 MG/KG	J	c
		IRON	14900 MG/KG		
		LEAD	36.1 MG/KG		
		MAGNESIUM	3960 MG/KG		
		MANGANESE	168 MG/KG		
		NICKEL	41.9 MG/KG		
		POTASSIUM	1630 MG/KG		
		VANADIUM	32.0 MG/KG		
		ZINC	69.8 MG/KG	J	d
280-S01-018 AST01 SS1-RA-16 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7110 MG/KG		
		BARIUM	39.7 MG/KG		
		BERYLLIUM	0.45 MG/KG	J	g
		CADMIUM	0.20 MG/KG	J	c,g
		CALCIUM	3950 MG/KG		
		CHROMIUM	33.3 MG/KG	J	c
		IRON	10100 MG/KG		
		LEAD	23.6 MG/KG		
		MAGNESIUM	2680 MG/KG		
		MANGANESE	180 MG/KG		
		NICKEL	30.6 MG/KG		
		POTASSIUM	1250 MG/KG		
		VANADIUM	27.8 MG/KG		
280-S01-019	CLP METALS (TOTAL)	ALUMINUM	5360 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-019 AST01 SS1-RA-17 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	28.0 MG/KG	J	g
		BERYLLIUM	0.70 MG/KG	J	g
		CADMIUM	0.18 MG/KG	J	c,g
		CALCIUM	7480 MG/KG		
		CHROMIUM	30.3 MG/KG	J	c
		IRON	8920 MG/KG		
		LEAD	21.5 MG/KG		
		MAGNESIUM	2250 MG/KG		
		MANGANESE	147 MG/KG		
		NICKEL	27.7 MG/KG		
		POTASSIUM	856 MG/KG	J	g
		VANADIUM	23.3 MG/KG		
280-S01-020 AST01 SS1-RA-18 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	11000 MG/KG		
		ARSENIC	5.3 MG/KG		
		BARIUM	45.7 MG/KG		
		BERYLLIUM	0.67 MG/KG	J	g
		CADMIUM	1.2 MG/KG	J	c
		CALCIUM	5370 MG/KG		
		CHROMIUM	30.8 MG/KG	J	c
		COPPER	28.5 MG/KG	J	d
		IRON	18300 MG/KG		
		LEAD	34.3 MG/KG		
		MAGNESIUM	4640 MG/KG		
		MANGANESE	256 MG/KG		
		NICKEL	28.1 MG/KG		
		POTASSIUM	781 MG/KG	J	g
		SODIUM	569 MG/KG	J	g
		VANADIUM	39.4 MG/KG		
		ZINC	108 MG/KG	J	d
280-S01-021 AST01 SS1-RA-19 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6530 MG/KG		
		BARIUM	45.0 MG/KG		
		BERYLLIUM	0.53 MG/KG	J	g
		CADMIUM	0.99 MG/KG	J	c,g
		CALCIUM	3360 MG/KG		
		CHROMIUM	31.9 MG/KG	J	c
		COPPER	23.5 MG/KG	J	d
		IRON	10500 MG/KG		
		LEAD	45.1 MG/KG		
		MAGNESIUM	2560 MG/KG		
		MANGANESE	176 MG/KG		
		NICKEL	30.8 MG/KG		
		POTASSIUM	808 MG/KG	J	g
		VANADIUM	29.1 MG/KG		
		ZINC	67.7 MG/KG	J	d
280-S01-022 AST02 SS1-AA-1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6050 MG/KG		
		ARSENIC	5.2 MG/KG		
		BARIUM	39.6 MG/KG		
		CADMIUM	1.4 MG/KG		
		CALCIUM	6580 MG/KG	J	d
		CHROMIUM	35.2 MG/KG	J	h
		COBALT	5.2 MG/KG	J	g
		COPPER	17.6 MG/KG	J	c
		IRON	9790 MG/KG		
		LEAD	338 MG/KG		
		MAGNESIUM	2540 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-022 AST02 SS1-AA-1 0.00 - 0.00	CLP METALS (TOTAL)	MANGANESE	128 MG/KG		
		NICKEL	24.5 MG/KG		
		POTASSIUM	665 MG/KG	J	g
		SODIUM	119 MG/KG	J	g
		VANADIUM	23.8 MG/KG		
		ZINC	58.0 MG/KG		
280-S01-023 AST02 SS1-AA-1DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5440 MG/KG		
		ARSENIC	4.9 MG/KG		
		BARIUM	33.5 MG/KG	J	g
		CADMIUM	1.7 MG/KG		
		CALCIUM	7410 MG/KG	J	d
		CHROMIUM	32.3 MG/KG	J	h
		COBALT	6.3 MG/KG	J	g
		COPPER	43.3 MG/KG	J	c
		IRON	9700 MG/KG		
		LEAD	430 MG/KG		
		MAGNESIUM	3350 MG/KG		
		MANGANESE	137 MG/KG		
		NICKEL	26.3 MG/KG		
		POTASSIUM	580 MG/KG	J	g
		SODIUM	163 MG/KG	J	g
		VANADIUM	23.1 MG/KG		
		ZINC	69.7 MG/KG		
280-S01-024 AST02 SS1-AA-2 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5740 MG/KG		
		BARIUM	51.9 MG/KG		
		CADMIUM	3.0 MG/KG		
		CALCIUM	2860 MG/KG	J	d
		CHROMIUM	45.8 MG/KG	J	h
		COBALT	4.8 MG/KG	J	g
		COPPER	35.1 MG/KG	J	c
		IRON	13100 MG/KG		
		LEAD	202 MG/KG		
		MAGNESIUM	3190 MG/KG		
		MANGANESE	193 MG/KG		
		NICKEL	31.1 MG/KG		
		POTASSIUM	482 MG/KG	J	g
		SODIUM	113 MG/KG	J	g
		VANADIUM	28.7 MG/KG		
		ZINC	117 MG/KG		
280-S01-025 AST02 SS1-AA-3 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4280 MG/KG		
		BARIUM	41.4 MG/KG		
		CADMIUM	0.74 MG/KG	J	g
		CALCIUM	21600 MG/KG	J	d
		CHROMIUM	66.7 MG/KG	J	h
		COBALT	4.2 MG/KG	J	g
		IRON	7400 MG/KG		
		LEAD	23.5 MG/KG		
		MAGNESIUM	2210 MG/KG		
		MANGANESE	124 MG/KG		
		NICKEL	24.8 MG/KG		
		POTASSIUM	521 MG/KG	J	g
		SODIUM	95.0 MG/KG	J	g
		VANADIUM	20.3 MG/KG		
		ZINC	96.1 MG/KG		
280-S01-026	CLP METALS (TOTAL)	ALUMINUM	11400 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-026 AST05 SS1-BA-1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	5.8 MG/KG		
		BARIUM	106 MG/KG		
		CADMIUM	5.0 MG/KG	J	h
		CALCIUM	4010 MG/KG		
		CHROMIUM	45.2 MG/KG	J	d
		COBALT	9.7 MG/KG	J	g
		COPPER	80.4 MG/KG		
		IRON	29500 MG/KG		
		LEAD	134 MG/KG	J	h
		MAGNESIUM	4530 MG/KG		
		MANGANESE	495 MG/KG		
		MERCURY	0.43 MG/KG		
		NICKEL	48.7 MG/KG	J	d
		POTASSIUM	1390 MG/KG		
		SILVER	1.8 MG/KG	J	d,g
		SODIUM	298 MG/KG	J	g
		VANADIUM	35.8 MG/KG		
		ZINC	214 MG/KG		
280-S01-027 AST05 SS1-BA-2 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10500 MG/KG		
		ARSENIC	3.0 MG/KG		
		BARIUM	90.9 MG/KG		
		CADMIUM	7.0 MG/KG	J	h
		CALCIUM	5460 MG/KG		
		CHROMIUM	33.8 MG/KG	J	d
		COBALT	9.8 MG/KG		
		COPPER	134 MG/KG		
		IRON	27600 MG/KG		
		LEAD	102 MG/KG	J	h
		MAGNESIUM	4740 MG/KG		
		MANGANESE	279 MG/KG		
		NICKEL	31.5 MG/KG	J	d
		POTASSIUM	960 MG/KG	J	g
		SODIUM	381 MG/KG	J	g
		VANADIUM	27.5 MG/KG		
		ZINC	313 MG/KG		
280-S01-028 AST05 SS1-BA-3 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8660 MG/KG		
		ARSENIC	3.5 MG/KG		
		BARIUM	56.7 MG/KG		
		CADMIUM	7.5 MG/KG	J	h
		CALCIUM	3710 MG/KG		
		CHROMIUM	40.8 MG/KG	J	d
		COPPER	56.2 MG/KG		
		IRON	13300 MG/KG		
		LEAD	71.2 MG/KG	J	h
		MAGNESIUM	3400 MG/KG		
		MANGANESE	214 MG/KG		
		MERCURY	0.39 MG/KG		
		NICKEL	42.9 MG/KG	J	d
		POTASSIUM	1010 MG/KG		
		SILVER	7.2 MG/KG	J	d
		SODIUM	176 MG/KG	J	g
		VANADIUM	29.5 MG/KG		
		ZINC	153 MG/KG		
280-S01-029 AST05	CLP METALS (TOTAL)	ALUMINUM	15400 MG/KG		
		ARSENIC	8.2 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-029 AST05 SS1-BA-4 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	1090 MG/KG		
		BERYLLIUM	1.4 MG/KG		
		CADMIUM	0.30 MG/KG	J	g,h
		CALCIUM	10100 MG/KG		
		CHROMIUM	36.0 MG/KG	J	d
		COBALT	7.7 MG/KG	J	g
		COPPER	30.1 MG/KG		
		IRON	9480 MG/KG		
		LEAD	18.0 MG/KG	J	h
		MAGNESIUM	3550 MG/KG		
		MANGANESE	141 MG/KG		
		NICKEL	36.3 MG/KG	J	d
		POTASSIUM	1030 MG/KG		
		SELENIUM	2.2 MG/KG		
		SILVER	0.29 MG/KG	J	d,g
		SODIUM	3370 MG/KG		
		THALLIUM	0.44 MG/KG	J	g
		VANADIUM	44.9 MG/KG		
		ZINC	43.7 MG/KG		
280-S01-030 AST05 SS1-BA-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7730 MG/KG		
		ARSENIC	3.4 MG/KG		
		BARIUM	58.4 MG/KG		
		CADMIUM	4.7 MG/KG	J	h
		CALCIUM	3470 MG/KG		
		CHROMIUM	43.0 MG/KG	J	d
		COPPER	71.6 MG/KG		
		IRON	12700 MG/KG		
		LEAD	111 MG/KG	J	h
		MAGNESIUM	3060 MG/KG		
		MANGANESE	201 MG/KG		
		MERCURY	0.20 MG/KG		
		NICKEL	35.7 MG/KG	J	d
		SILVER	2.4 MG/KG	J	d
		SODIUM	149 MG/KG	J	g
		VANADIUM	26.6 MG/KG		
		ZINC	166 MG/KG		
280-S01-031 AST05 SS1-BA-5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	11100 MG/KG		
		ARSENIC	5.3 MG/KG		
		BARIUM	77.8 MG/KG		
		CADMIUM	4.3 MG/KG	J	h
		CALCIUM	5710 MG/KG		
		CHROMIUM	30.8 MG/KG	J	d
		COPPER	52.9 MG/KG		
		IRON	17500 MG/KG		
		LEAD	72.3 MG/KG	J	h
		MAGNESIUM	3720 MG/KG		
		MANGANESE	355 MG/KG		
		MERCURY	0.18 MG/KG		
		NICKEL	24.0 MG/KG	J	d
		POTASSIUM	966 MG/KG	J	g
		SILVER	1.9 MG/KG	J	d,g
		SODIUM	196 MG/KG	J	g
		VANADIUM	28.7 MG/KG		
		ZINC	146 MG/KG		
280-S01-032	CLP METALS (TOTAL)	ALUMINUM	17100 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-032 AST17 M-003-E-0 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	1.7 MG/KG	J	c,g
		ARSENIC	27.6 MG/KG		
		BARIUM	147 MG/KG		
		BERYLLIUM	1.7 MG/KG		
		CADMIUM	0.25 MG/KG	J	g
		CALCIUM	8290 MG/KG		
		CHROMIUM	51.4 MG/KG		
		COBALT	11.1 MG/KG		
		COPPER	31.7 MG/KG		
		IRON	22600 MG/KG		
		LEAD	35.3 MG/KG		
		MAGNESIUM	9500 MG/KG		
		MANGANESE	437 MG/KG		
		NICKEL	62.2 MG/KG		
		POTASSIUM	1980 MG/KG		
		SODIUM	377 MG/KG	J	g
		VANADIUM	51.2 MG/KG		
		ZINC	51.7 MG/KG		
280-S01-033 AST17 M-003-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	22600 MG/KG		
		ANTIMONY	2.3 MG/KG	J	c,g
		ARSENIC	4.9 MG/KG		
		BARIUM	1130 MG/KG		
		BERYLLIUM	1.8 MG/KG		
		CADMIUM	0.38 MG/KG	J	g
		CALCIUM	40700 MG/KG		
		CHROMIUM	27.0 MG/KG		
		COBALT	14.9 MG/KG		
		COPPER	90.8 MG/KG		
		IRON	15900 MG/KG		
		LEAD	14.6 MG/KG		
		MAGNESIUM	3730 MG/KG		
		MANGANESE	243 MG/KG		
		NICKEL	32.9 MG/KG		
		POTASSIUM	962 MG/KG	J	g
		SODIUM	1300 MG/KG	J	g
		VANADIUM	68.7 MG/KG		
		ZINC	13.9 MG/KG		
280-S01-034 AST17 M-003-E-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3830 MG/KG		
		ANTIMONY	0.75 MG/KG	J	c,g
		ARSENIC	4.5 MG/KG		
		BARIUM	20.7 MG/KG	J	g
		BERYLLIUM	0.36 MG/KG	J	g
		CALCIUM	6420 MG/KG		
		CHROMIUM	18.4 MG/KG		
		COBALT	4.3 MG/KG	J	g
		COPPER	4.2 MG/KG	J	g
		IRON	5970 MG/KG		
		LEAD	1.8 MG/KG		
		MAGNESIUM	1310 MG/KG		
		MANGANESE	64.2 MG/KG		
		NICKEL	15.0 MG/KG		
		POTASSIUM	564 MG/KG	J	g
		SODIUM	96.6 MG/KG	J	g
		VANADIUM	14.7 MG/KG		
		ZINC	14.4 MG/KG		
280-S01-035	CLP METALS (TOTAL)	ALUMINUM	19500 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-035 AST17 M-003-B-0 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	2.6 MG/KG	J	c,g
		ARSENIC	32.4 MG/KG		
		BARIUM	1120 MG/KG		
		BERYLLIUM	1.8 MG/KG		
		CADMIUM	0.24 MG/KG	J	g
		CALCIUM	17300 MG/KG		
		CHROMIUM	20.2 MG/KG		
		COBALT	14.5 MG/KG		
		COPPER	73.3 MG/KG		
		IRON	12900 MG/KG		
		LEAD	15.3 MG/KG		
		MAGNESIUM	3050 MG/KG		
		MANGANESE	211 MG/KG		
		NICKEL	35.7 MG/KG		
		POTASSIUM	1140 MG/KG	J	g
		SODIUM	1420 MG/KG	J	g
		VANADIUM	55.8 MG/KG		
		ZINC	39.8 MG/KG		
280-S01-036 AST17 M-003-B-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13800 MG/KG		
		ANTIMONY	1.4 MG/KG	J	c,g
		ARSENIC	17.8 MG/KG		
		BARIUM	135 MG/KG		
		BERYLLIUM	1.4 MG/KG		
		CADMIUM	1.2 MG/KG		
		CALCIUM	8680 MG/KG		
		CHROMIUM	34.5 MG/KG		
		COBALT	9.7 MG/KG	J	g
		COPPER	43.7 MG/KG		
		IRON	18400 MG/KG		
		LEAD	58.3 MG/KG		
		MAGNESIUM	5300 MG/KG		
		MANGANESE	350 MG/KG		
		NICKEL	34.3 MG/KG		
		POTASSIUM	1440 MG/KG		
		SODIUM	390 MG/KG	J	g
		VANADIUM	40.8 MG/KG		
		ZINC	96.3 MG/KG		
280-S01-037 AST17 M-003-B-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5240 MG/KG		
		ARSENIC	3.4 MG/KG		
		BARIUM	19.6 MG/KG	J	g
		BERYLLIUM	0.54 MG/KG	J	g
		CALCIUM	16500 MG/KG		
		CHROMIUM	23.6 MG/KG		
		COBALT	4.8 MG/KG	J	g
		COPPER	5.0 MG/KG	J	g
		IRON	6710 MG/KG		
		LEAD	2.3 MG/KG		
		MAGNESIUM	1560 MG/KG		
		MANGANESE	85.3 MG/KG		
		NICKEL	15.9 MG/KG		
		POTASSIUM	801 MG/KG	J	g
		SODIUM	184 MG/KG	J	g
		VANADIUM	17.6 MG/KG		
		ZINC	15.2 MG/KG		
280-S01-038	CLP METALS (TOTAL)	ALUMINUM	5770 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-038 AST16 M-028-C-0 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	1.0 MG/KG	J	g
		ARSENIC	3.8 MG/KG		
		BARIUM	46.0 MG/KG		
		CADMIUM	0.52 MG/KG	J	g
		CALCIUM	3900 MG/KG		
		CHROMIUM	30.8 MG/KG		
		COBALT	6.6 MG/KG	J	g
		COPPER	21.8 MG/KG		
		IRON	11900 MG/KG		
		LEAD	53.1 MG/KG		
		MAGNESIUM	2700 MG/KG		
		MANGANESE	167 MG/KG		
		NICKEL	28.4 MG/KG		
		POTASSIUM	885 MG/KG	J	g
		SODIUM	129 MG/KG	J	g
		VANADIUM	23.7 MG/KG		
		ZINC	70.8 MG/KG		
280-S01-039 AST16 M-028-C-ODUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6930 MG/KG		
		ARSENIC	4.4 MG/KG		
		BARIUM	43.1 MG/KG		
		CADMIUM	0.45 MG/KG	J	g
		CALCIUM	3550 MG/KG		
		CHROMIUM	34.0 MG/KG		
		COBALT	6.3 MG/KG	J	g
		COPPER	28.1 MG/KG		
		IRON	15100 MG/KG		
		LEAD	41.5 MG/KG		
		MAGNESIUM	3000 MG/KG		
		MANGANESE	201 MG/KG		
		NICKEL	30.9 MG/KG		
		POTASSIUM	919 MG/KG	J	g
		SODIUM	144 MG/KG	J	g
		VANADIUM	25.6 MG/KG		
		ZINC	81.4 MG/KG		
280-S01-040 AST16 M-028-C-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10400 MG/KG		
		ANTIMONY	2.9 MG/KG	J	g
		ARSENIC	2.1 MG/KG		
		BARIUM	125 MG/KG		
		CADMIUM	11.0 MG/KG		
		CALCIUM	6300 MG/KG		
		CHROMIUM	49.7 MG/KG		
		COBALT	8.3 MG/KG	J	g
		COPPER	218 MG/KG		
		IRON	17200 MG/KG		
		LEAD	179 MG/KG		
		MAGNESIUM	4540 MG/KG		
		MANGANESE	395 MG/KG		
		MERCURY	0.84 MG/KG		
		NICKEL	29.3 MG/KG		
		POTASSIUM	842 MG/KG	J	g
		SILVER	8.4 MG/KG		
		SODIUM	293 MG/KG	J	g
		VANADIUM	32.0 MG/KG		
		ZINC	470 MG/KG		
280-S01-041	CLP METALS (TOTAL)	ALUMINUM	11900 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-041 AST16 M-028-C-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	26.5 MG/KG		
		ARSENIC	14.5 MG/KG		
		BARIUM	445 MG/KG		
		BERYLLIUM	8.6 MG/KG		
		CADMIUM	62.6 MG/KG		
		CALCIUM	20500 MG/KG		
		CHROMIUM	112 MG/KG		
		COBALT	19.3 MG/KG	J	g
		COPPER	969 MG/KG		
		IRON	146000 MG/KG		
		LEAD	1520 MG/KG		
		MAGNESIUM	3920 MG/KG	J	g
		MANGANESE	1460 MG/KG		
		MERCURY	0.33 MG/KG		
		NICKEL	121 MG/KG		
		SILVER	19.7 MG/KG		
		SODIUM	508 MG/KG	J	g
		VANADIUM	42.3 MG/KG	J	g
		ZINC	2330 MG/KG		
280-S01-042 AST17 M-030-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8040 MG/KG		
		ANTIMONY	1.0 MG/KG	J	c,g
		ARSENIC	7.2 MG/KG		
		BARIUM	74.9 MG/KG		
		BERYLLIUM	0.76 MG/KG	J	g
		CADMIUM	0.68 MG/KG	J	g
		CALCIUM	3500 MG/KG		
		CHROMIUM	32.2 MG/KG		
		COBALT	7.5 MG/KG	J	g
		COPPER	21.1 MG/KG		
		IRON	11800 MG/KG		
		LEAD	35.7 MG/KG		
		MAGNESIUM	3080 MG/KG		
		MANGANESE	205 MG/KG		
		NICKEL	37.9 MG/KG		
		POTASSIUM	975 MG/KG	J	g
		SODIUM	148 MG/KG	J	g
		VANADIUM	32.4 MG/KG		
		ZINC	61.0 MG/KG		
280-S01-043 AST17 M-030-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	25900 MG/KG		
		ANTIMONY	1.0 MG/KG	J	c,g
		ARSENIC	24.0 MG/KG		
		BARIUM	112 MG/KG		
		BERYLLIUM	2.5 MG/KG		
		CADMIUM	0.72 MG/KG	J	g
		CALCIUM	8830 MG/KG		
		CHROMIUM	37.0 MG/KG		
		COBALT	23.6 MG/KG		
		COPPER	46.8 MG/KG		
		IRON	40900 MG/KG		
		LEAD	74.8 MG/KG		
		MAGNESIUM	10900 MG/KG		
		MANGANESE	841 MG/KG		
		NICKEL	52.2 MG/KG		
		POTASSIUM	2140 MG/KG		
		SODIUM	555 MG/KG	J	g
		VANADIUM	69.2 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-043 AST17 M-030-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	136 MG/KG		
280-S01-044 AST17 M-030-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6320 MG/KG		
		ANTIMONY	0.60 MG/KG	J	c,g
		ARSENIC	7.8 MG/KG		
		BARIUM	29.5 MG/KG	J	g
		BERYLLIUM	0.79 MG/KG	J	g
		CALCIUM	3990 MG/KG		
		CHROMIUM	35.0 MG/KG		
		COBALT	4.8 MG/KG	J	g
		COPPER	4.7 MG/KG	J	g
		IRON	10700 MG/KG		
		LEAD	1.8 MG/KG		
		MAGNESIUM	2490 MG/KG		
		MANGANESE	130 MG/KG		
		NICKEL	28.8 MG/KG		
		POTASSIUM	608 MG/KG	J	g
		SODIUM	241 MG/KG	J	g
		VANADIUM	30.2 MG/KG		
		ZINC	22.0 MG/KG		
280-S01-046 AST17 M-030-E-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4800 MG/KG		
		ANTIMONY	0.66 MG/KG	J	c,g
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	22.2 MG/KG	J	g
		BERYLLIUM	0.47 MG/KG	J	g
		CADMIUM	1.8 MG/KG		
		CALCIUM	2590 MG/KG		
		CHROMIUM	27.5 MG/KG		
		COBALT	4.3 MG/KG	J	g
		COPPER	13.2 MG/KG		
		IRON	7470 MG/KG		
		LEAD	2.8 MG/KG		
		MAGNESIUM	1830 MG/KG		
		MANGANESE	101 MG/KG		
		NICKEL	25.5 MG/KG		
		POTASSIUM	487 MG/KG	J	g
		SODIUM	103 MG/KG	J	g
		VANADIUM	20.5 MG/KG		
		ZINC	40.6 MG/KG		
280-S01-047 AST17 M-030-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5490 MG/KG		
		ANTIMONY	0.83 MG/KG	J	c,g
		ARSENIC	2.6 MG/KG		
		BARIUM	21.8 MG/KG	J	g
		BERYLLIUM	0.47 MG/KG	J	g
		CALCIUM	3390 MG/KG		
		CHROMIUM	29.7 MG/KG		
		COBALT	6.8 MG/KG	J	g
		COPPER	4.8 MG/KG	J	g
		IRON	8550 MG/KG		
		LEAD	3.1 MG/KG		
		MAGNESIUM	2250 MG/KG		
		MANGANESE	105 MG/KG		
		NICKEL	23.9 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-047 AST17 M-030-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	806 MG/KG	J	g
		SODIUM	191 MG/KG	J	g
		VANADIUM	22.8 MG/KG		
		ZINC	20.8 MG/KG		
280-S01-048 AST17 M-030-E-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5650 MG/KG		
		ANTIMONY	0.98 MG/KG	J	c,g
		ARSENIC	1.9 MG/KG	J	g
		BARIUM	25.5 MG/KG	J	g
		BERYLLIUM	0.73 MG/KG	J	g
		CADMIUM	0.12 MG/KG	J	g
		CALCIUM	2970 MG/KG		
		CHROMIUM	33.7 MG/KG		
		COBALT	4.5 MG/KG	J	g
		COPPER	4.9 MG/KG	J	g
		IRON	9190 MG/KG		
		LEAD	2.4 MG/KG		
		MAGNESIUM	2160 MG/KG		
		MANGANESE	107 MG/KG		
		NICKEL	27.0 MG/KG		
		POTASSIUM	584 MG/KG	J	g
		SODIUM	171 MG/KG	J	g
		VANADIUM	25.8 MG/KG		
		ZINC	20.3 MG/KG		
280-S01-049 AST17 M-030-C-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8390 MG/KG		
		ANTIMONY	1.2 MG/KG	J	c,g
		ARSENIC	4.8 MG/KG		
		BARIUM	323 MG/KG		
		BERYLLIUM	0.92 MG/KG	J	g
		CADMIUM	1.4 MG/KG		
		CALCIUM	3500 MG/KG		
		CHROMIUM	33.1 MG/KG		
		COBALT	7.0 MG/KG	J	g
		COPPER	38.7 MG/KG		
		IRON	12000 MG/KG		
		LEAD	135 MG/KG		
		MAGNESIUM	3370 MG/KG		
		MANGANESE	251 MG/KG		
		MERCURY	0.21 MG/KG	J	f
		NICKEL	37.8 MG/KG		
		POTASSIUM	1330 MG/KG		
		SODIUM	149 MG/KG	J	g
		VANADIUM	36.0 MG/KG		
		ZINC	154 MG/KG		
280-S01-050 AST17 M-030-C-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	12100 MG/KG		
		ANTIMONY	1.0 MG/KG	J	c,g
		ARSENIC	3.6 MG/KG		
		BARIUM	60.0 MG/KG		
		BERYLLIUM	1.3 MG/KG		
		CADMIUM	0.25 MG/KG	J	g
		CALCIUM	5120 MG/KG		
		CHROMIUM	35.4 MG/KG		
		COBALT	7.2 MG/KG	J	g
		COPPER	22.3 MG/KG		
		IRON	17600 MG/KG		
		LEAD	11.3 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-050 AST17 M-030-C-2.5 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM	4350 MG/KG		
		MANGANESE	259 MG/KG		
		NICKEL	32.8 MG/KG		
		POTASSIUM	1120 MG/KG		
		SODIUM	204 MG/KG	J	g
		VANADIUM	37.8 MG/KG		
		ZINC	46.8 MG/KG		
280-S01-051 AST17 M-030-C-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6860 MG/KG		
		ANTIMONY	0.65 MG/KG	J	c,g
		ARSENIC	4.1 MG/KG		
		BARIUM	32.8 MG/KG	J	g
		BERYLLIUM	0.56 MG/KG	J	g
		CADMIUM	0.22 MG/KG	J	g
		CALCIUM	3020 MG/KG		
		CHROMIUM	33.3 MG/KG		
		COBALT	5.6 MG/KG	J	g
		COPPER	7.9 MG/KG		
		IRON	11900 MG/KG		
		LEAD	6.9 MG/KG		
		MAGNESIUM	2520 MG/KG		
		MANGANESE	232 MG/KG		
		NICKEL	29.6 MG/KG		
		POTASSIUM	843 MG/KG	J	g
		SODIUM	119 MG/KG	J	g
		VANADIUM	27.1 MG/KG		
		ZINC	28.7 MG/KG		
280-S01-052 AST22 M-031-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3950 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	27.1 MG/KG	J	g
		CALCIUM	1940 MG/KG		
		CHROMIUM	28.4 MG/KG	J	c
		COBALT	4.2 MG/KG	J	g
		COPPER	9.9 MG/KG	J	c,d
		IRON	8460 MG/KG		
		LEAD	11.1 MG/KG	J	c
		MAGNESIUM	2380 MG/KG		
		MANGANESE	111 MG/KG	J	c
		NICKEL	26.1 MG/KG		
		SODIUM	107 MG/KG	J	g
		VANADIUM	18.1 MG/KG		
		ZINC	29.8 MG/KG	J	c
280-S01-053 AST22 M-031-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3520 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	16.6 MG/KG	J	g
		CALCIUM	3980 MG/KG		
		CHROMIUM	27.3 MG/KG	J	c
		COBALT	4.2 MG/KG	J	g
		COPPER	5.8 MG/KG	J	c,d
		IRON	7470 MG/KG		
		LEAD	1.3 MG/KG	J	c
		MAGNESIUM	1840 MG/KG		
		MANGANESE	85.2 MG/KG	J	c
		NICKEL	26.5 MG/KG		
		SODIUM	139 MG/KG	J	g
		VANADIUM	18.6 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-053 AST22 M-031-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	15.5 MG/KG	J	c
280-S01-054 AST22 M-031-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	2530 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	9.8 MG/KG	J	g
		CALCIUM	5500 MG/KG		
		CHROMIUM	18.3 MG/KG	J	c
		COBALT	3.8 MG/KG	J	g
		COPPER	6.1 MG/KG	J	c,d
		IRON	5670 MG/KG		
		LEAD	2.2 MG/KG	J	c
		MAGNESIUM	1540 MG/KG		
		MANGANESE	80.2 MG/KG	J	c
		NICKEL	17.5 MG/KG		
		SODIUM	165 MG/KG	J	g
		VANADIUM	12.8 MG/KG		
		ZINC	13.4 MG/KG	J	c
280-S01-055 AST22 M-031-E-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3650 MG/KG		
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	26.7 MG/KG	J	g
		CALCIUM	1730 MG/KG		
		CHROMIUM	27.6 MG/KG	J	c
		COBALT	4.7 MG/KG	J	g
		COPPER	8.9 MG/KG	J	c,d
		IRON	7950 MG/KG		
		LEAD	8.4 MG/KG	J	c
		MAGNESIUM	2190 MG/KG		
		MANGANESE	89.2 MG/KG	J	c
		MERCURY	0.13 MG/KG		
		NICKEL	27.1 MG/KG		
		POTASSIUM	720 MG/KG	J	g
		SODIUM	127 MG/KG	J	g
		VANADIUM	16.8 MG/KG		
		ZINC	25.8 MG/KG	J	c
280-S01-056 AST22 M-031-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5460 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	77.1 MG/KG	J	g
		CALCIUM	2390 MG/KG		
		CHROMIUM	37.2 MG/KG	J	c
		COBALT	7.4 MG/KG		
		COPPER	11.6 MG/KG	J	c,d
		IRON	11300 MG/KG		
		LEAD	2.3 MG/KG	J	c
		MAGNESIUM	2920 MG/KG		
		MANGANESE	113 MG/KG	J	c
		NICKEL	41.9 MG/KG		
		SODIUM	184 MG/KG	J	g
		VANADIUM	26.9 MG/KG		
		ZINC	27.6 MG/KG	J	c
280-S01-057 AST22 M-031-E-5.0	CLP METALS (TOTAL)	ALUMINUM	2660 MG/KG		
		ARSENIC	2.3 MG/KG	J	g
		BARIUM	9.8 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-057 AST22 M-031-E-5.0 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	46900 MG/KG		
		CHROMIUM	19.0 MG/KG	J	c
		COBALT	3.3 MG/KG	J	g
		COPPER	8.0 MG/KG	J	c,d
		IRON	5850 MG/KG		
		LEAD	1.2 MG/KG	J	c
		MAGNESIUM	1940 MG/KG		
		MANGANESE	110 MG/KG	J	c
		NICKEL	16.6 MG/KG		
		SODIUM	367 MG/KG	J	g
		VANADIUM	16.0 MG/KG		
		ZINC	13.1 MG/KG	J	c
280-S01-058 AST22 M-031-C-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3330 MG/KG		
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	25.7 MG/KG	J	g
		CALCIUM	1710 MG/KG		
		CHROMIUM	24.7 MG/KG	J	c
		COBALT	4.8 MG/KG	J	g
		COPPER	8.1 MG/KG	J	c,d
		IRON	7120 MG/KG		
		LEAD	8.1 MG/KG	J	c
		MAGNESIUM	1970 MG/KG		
		MANGANESE	86.7 MG/KG	J	c
		NICKEL	24.7 MG/KG		
		SODIUM	131 MG/KG	J	g
		VANADIUM	14.7 MG/KG		
		ZINC	25.2 MG/KG	J	c
280-S01-059 AST22 M-031-C-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	2780 MG/KG		
		ARSENIC	1.0 MG/KG	J	g
		BARIUM	28.9 MG/KG	J	g
		CALCIUM	1600 MG/KG		
		CHROMIUM	22.4 MG/KG	J	c
		COBALT	4.1 MG/KG	J	g
		COPPER	4.8 MG/KG	J	c,d
		IRON	6030 MG/KG		
		LEAD	1.1 MG/KG	J	c
		MAGNESIUM	1610 MG/KG		
		MANGANESE	56.3 MG/KG	J	c
		MOLYBDENUM	1.0 MG/KG	J	g
		NICKEL	25.1 MG/KG		
		SODIUM	122 MG/KG	J	g
		VANADIUM	14.4 MG/KG		
		ZINC	29.9 MG/KG	J	c
280-S01-060 AST22 M-031-C-2.5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3440 MG/KG		
		ARSENIC	0.87 MG/KG	J	g
		BARIUM	26.0 MG/KG	J	g
		CALCIUM	1810 MG/KG		
		CHROMIUM	25.0 MG/KG	J	c
		COBALT	4.4 MG/KG	J	g
		COPPER	5.4 MG/KG	J	c,d
		IRON	6660 MG/KG		
		LEAD	1.0 MG/KG	J	c
		MAGNESIUM	1630 MG/KG		
		MANGANESE	56.9 MG/KG	J	c
		NICKEL	26.3 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-060 AST22 M-031-C-2.5DUP 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM VANADIUM ZINC	124 MG/KG 16.4 MG/KG 17.6 MG/KG	J J	g c
280-S01-061 AST22 M-031-C-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL SODIUM VANADIUM ZINC	2790 MG/KG 2.1 MG/KG 8.9 MG/KG 2890 MG/KG 25.7 MG/KG 4.5 MG/KG 4.8 MG/KG 6120 MG/KG 9.2 MG/KG 1570 MG/KG 71.4 MG/KG 19.7 MG/KG 132 MG/KG 14.1 MG/KG 15.0 MG/KG	 J J J J J J J J J	 g g c g c,d c c g c
280-S01-062 AST16 M-032-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ANTIMONY ARSENIC BARIUM CADMIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	6250 MG/KG 0.93 MG/KG 2.1 MG/KG 49.2 MG/KG 0.24 MG/KG 4130 MG/KG 33.2 MG/KG 6.4 MG/KG 10.1 MG/KG 9550 MG/KG 11.5 MG/KG 2170 MG/KG 102 MG/KG 30.3 MG/KG 754 MG/KG 161 MG/KG 22.9 MG/KG 38.7 MG/KG	 J J J J J 	 g g g g g
280-S01-063 AST16 M-032-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ANTIMONY ARSENIC BARIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	4590 MG/KG 0.77 MG/KG 2.7 MG/KG 23.1 MG/KG 3520 MG/KG 23.9 MG/KG 4.6 MG/KG 7.8 MG/KG 7880 MG/KG 8.0 MG/KG 1860 MG/KG 84.1 MG/KG 20.3 MG/KG 683 MG/KG 110 MG/KG 19.6 MG/KG 21.4 MG/KG	 J J J J J 	 g g g g g
280-S01-064	CLP METALS (TOTAL)	ALUMINUM	2770 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-064 AST16 M-032-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	0.69 MG/KG	J	g
		ARSENIC	1.3 MG/KG	J	g
		BARIUM	25.5 MG/KG	J	g
		CALCIUM	1780 MG/KG		
		CHROMIUM	24.3 MG/KG		
		COBALT	4.0 MG/KG	J	g
		COPPER	4.4 MG/KG	J	g
		IRON	5720 MG/KG		
		LEAD	3.2 MG/KG		
		MAGNESIUM	1270 MG/KG		
		MANGANESE	56.1 MG/KG		
		NICKEL	19.5 MG/KG		
		POTASSIUM	499 MG/KG	J	g
		SODIUM	86.2 MG/KG	J	g
		VANADIUM	14.5 MG/KG		
280-S01-065 AST22 M-033-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7810 MG/KG		
		ARSENIC	4.8 MG/KG		
		BARIUM	50.2 MG/KG	J	g
		CALCIUM	3790 MG/KG		
		CHROMIUM	30.2 MG/KG	J	c
		COBALT	7.4 MG/KG		
		COPPER	29.1 MG/KG	J	c,d
		IRON	19500 MG/KG		
		LEAD	41.5 MG/KG	J	c
		MAGNESIUM	4250 MG/KG		
		MANGANESE	297 MG/KG	J	c
		MERCURY	0.16 MG/KG		
		NICKEL	30.2 MG/KG		
		POTASSIUM	881 MG/KG	J	g
		SODIUM	179 MG/KG	J	g
		VANADIUM	32.5 MG/KG		
		ZINC	196 MG/KG	J	c
280-S01-066 AST22 M-033-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3430 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	14.4 MG/KG	J	g
		CALCIUM	1760 MG/KG		
		CHROMIUM	23.1 MG/KG	J	c
		COBALT	3.8 MG/KG	J	g
		COPPER	5.5 MG/KG	J	c,d
		IRON	7320 MG/KG		
		LEAD	2.5 MG/KG	J	c
		MAGNESIUM	1800 MG/KG		
		MANGANESE	98.3 MG/KG	J	c
		NICKEL	23.4 MG/KG		
		SODIUM	103 MG/KG	J	g
		VANADIUM	16.7 MG/KG		
		ZINC	18.5 MG/KG	J	c
280-S01-067 AST22 M-033-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4290 MG/KG		
		ARSENIC	2.1 MG/KG	J	g
		BARIUM	24.5 MG/KG	J	g
		CALCIUM	2010 MG/KG		
		CHROMIUM	30.7 MG/KG	J	c
		COBALT	4.9 MG/KG	J	g
		COPPER	6.3 MG/KG	J	c,d
		IRON	9050 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-067 AST22 M-033-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	LEAD	2.4 MG/KG	J	c
		MAGNESIUM	2420 MG/KG		
		MANGANESE	93.0 MG/KG	J	c
		NICKEL	34.9 MG/KG		
		SODIUM	126 MG/KG	J	g
		VANADIUM	21.2 MG/KG		
		ZINC	21.9 MG/KG	J	c
280-S01-068 AST22 M-034-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6840 MG/KG		
		ARSENIC	3.4 MG/KG	J	g
		BARIUM	271 MG/KG		
		CADMIUM	3.8 MG/KG		
		CALCIUM	5190 MG/KG		
		CHROMIUM	46.2 MG/KG	J	c
		COBALT	7.3 MG/KG		
		COPPER	46.1 MG/KG	J	c,d
		IRON	15000 MG/KG		
		LEAD	108 MG/KG	J	c
		MAGNESIUM	4480 MG/KG		
		MANGANESE	356 MG/KG	J	c
		NICKEL	39.9 MG/KG		
		POTASSIUM	1130 MG/KG		
		SILVER	0.78 MG/KG		
		SODIUM	518 MG/KG	J	g
		VANADIUM	29.6 MG/KG		
		ZINC	133 MG/KG	J	c
280-S01-069 AST22 M-034-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	19500 MG/KG		
		ARSENIC	7.6 MG/KG		
		BARIUM	55.8 MG/KG	J	g
		CALCIUM	4830 MG/KG		
		CHROMIUM	72.8 MG/KG	J	c
		COBALT	14.2 MG/KG		
		COPPER	30.2 MG/KG	J	c,d
		IRON	35700 MG/KG		
		LEAD	8.0 MG/KG	J	c
		MAGNESIUM	12300 MG/KG		
		MANGANESE	419 MG/KG	J	c
		NICKEL	77.9 MG/KG		
		POTASSIUM	3380 MG/KG		
		SODIUM	3120 MG/KG		
		VANADIUM	59.1 MG/KG		
		ZINC	79.2 MG/KG	J	c
280-S01-070 AST22 M-034-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5320 MG/KG		
		ARSENIC	2.1 MG/KG	J	g
		BARIUM	61.0 MG/KG	J	g
		CALCIUM	2700 MG/KG		
		CHROMIUM	27.8 MG/KG	J	c
		COBALT	5.1 MG/KG	J	g
		COPPER	19.3 MG/KG	J	c,d
		IRON	11300 MG/KG		
		LEAD	18.0 MG/KG	J	c
		MAGNESIUM	2950 MG/KG		
		MANGANESE	119 MG/KG	J	c
		NICKEL	27.7 MG/KG		
		POTASSIUM	1070 MG/KG	J	g
		SILVER	3.3 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-070 AST22 M-034-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	460 MG/KG	J	g
		VANADIUM	24.3 MG/KG		
		ZINC	80.7 MG/KG	J	c
280-S01-071 AST22 M-035-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6480 MG/KG		
		ARSENIC	8.8 MG/KG		
		BARIUM	43.5 MG/KG	J	g
		CALCIUM	2480 MG/KG		
		CHROMIUM	32.7 MG/KG	J	c
		COBALT	7.7 MG/KG		
		COPPER	13.9 MG/KG	J	c,d
		IRON	13100 MG/KG		
		LEAD	11.4 MG/KG	J	c
		MAGNESIUM	3570 MG/KG		
		MANGANESE	213 MG/KG	J	c
		NICKEL	38.3 MG/KG		
		POTASSIUM	1160 MG/KG		
		SILVER	1.3 MG/KG		
		SODIUM	107 MG/KG	J	g
		VANADIUM	23.9 MG/KG		
		ZINC	42.0 MG/KG	J	c
280-S01-072 AST22 M-035-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7180 MG/KG		
		ANTIMONY	6.7 MG/KG		
		ARSENIC	5.3 MG/KG		
		BARIUM	80.8 MG/KG	J	g
		CADMIUM	4.2 MG/KG		
		CALCIUM	4100 MG/KG		
		CHROMIUM	40.1 MG/KG	J	c
		COBALT	7.4 MG/KG		
		COPPER	163 MG/KG	J	c,d
		IRON	16300 MG/KG		
		LEAD	154 MG/KG	J	c
		MAGNESIUM	4360 MG/KG		
		MANGANESE	328 MG/KG	J	c
		NICKEL	42.3 MG/KG		
		POTASSIUM	1200 MG/KG		
		SILVER	0.91 MG/KG		
		SODIUM	187 MG/KG	J	g
		VANADIUM	26.4 MG/KG		
		ZINC	199 MG/KG	J	c
280-S01-073 AST22 M-035-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3160 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	18.9 MG/KG	J	g
		CALCIUM	1670 MG/KG		
		CHROMIUM	26.1 MG/KG	J	c
		COBALT	15.9 MG/KG		
		COPPER	8.3 MG/KG	J	c,d
		IRON	6770 MG/KG		
		LEAD	4.0 MG/KG	J	c
		MAGNESIUM	1670 MG/KG		
		MANGANESE	52.7 MG/KG	J	c
		NICKEL	46.3 MG/KG		
		SODIUM	125 MG/KG	J	g
		VANADIUM	17.3 MG/KG		
		ZINC	30.3 MG/KG	J	c

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-273 AST02 SS1-RA-20 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3150 MG/KG		
		BARIUM	31.6 MG/KG	J	g
		CADMIUM	0.27 MG/KG	J	g
		CALCIUM	1440 MG/KG	J	d
		CHROMIUM	29.0 MG/KG	J	h
		COBALT	1.4 MG/KG	J	g
		COPPER	20.3 MG/KG	J	c
		IRON	6610 MG/KG		
		LEAD	20.0 MG/KG		
		MAGNESIUM	1770 MG/KG		
		MANGANESE	85.8 MG/KG		
		NICKEL	19.3 MG/KG		
		POTASSIUM	752 MG/KG	J	g
		SODIUM	1920 MG/KG		
		VANADIUM	15.5 MG/KG		
280-S01-274 AST02 SS1-RA-21 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4210 MG/KG		
		BARIUM	20.5 MG/KG	J	g
		CADMIUM	0.16 MG/KG	J	g
		CALCIUM	2260 MG/KG	J	d
		CHROMIUM	26.4 MG/KG	J	h
		COBALT	4.2 MG/KG	J	g
		IRON	6720 MG/KG		
		LEAD	16.9 MG/KG		
		MAGNESIUM	2040 MG/KG		
		MANGANESE	88.0 MG/KG		
		NICKEL	21.2 MG/KG		
		POTASSIUM	592 MG/KG	J	g
		SODIUM	465 MG/KG	J	g
		VANADIUM	18.9 MG/KG		
		ZINC	26.0 MG/KG		
280-S01-275 AST17 M-030-E-5.0DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4430 MG/KG		
		ANTIMONY	0.65 MG/KG	J	c,g
		ARSENIC	2.4 MG/KG		
		BARIUM	22.2 MG/KG	J	g
		BERYLLIUM	0.45 MG/KG	J	g
		CALCIUM	2530 MG/KG		
		CHROMIUM	25.9 MG/KG		
		COBALT	3.7 MG/KG	J	g
		COPPER	4.1 MG/KG	J	g
		IRON	6740 MG/KG		
		LEAD	1.4 MG/KG		
		MAGNESIUM	1550 MG/KG		
		MANGANESE	84.2 MG/KG		
		NICKEL	20.6 MG/KG		
		POTASSIUM	458 MG/KG	J	g
		SODIUM	122 MG/KG	J	g
		VANADIUM	18.9 MG/KG		
		ZINC	14.5 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-239 AST10 CPT-1-5C 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	86.2 UG/L	J	g
		CADMIUM	0.92 UG/L	J	g
		CALCIUM	343000 UG/L		
		IRON	911 UG/L		
		MAGNESIUM	831000 UG/L		
		MANGANESE	6520 UG/L		
		POTASSIUM	250000 UG/L	J	h
		SODIUM	5750000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 02
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S02-009 AST17 M-016-E-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	15000 MG/KG		
		ANTIMONY	1.5 MG/KG	J	c,g
		ARSENIC	4.9 MG/KG		
		BARIUM	60.1 MG/KG		
		BERYLLIUM	1.5 MG/KG		
		CADMIUM	1.7 MG/KG		
		CALCIUM	4320 MG/KG		
		CHROMIUM	58.7 MG/KG		
		COBALT	10.9 MG/KG	J	g
		COPPER	34.5 MG/KG		
		IRON	19700 MG/KG		
		LEAD	34.9 MG/KG		
		MAGNESIUM	6250 MG/KG		
		MANGANESE	278 MG/KG		
		MERCURY	0.19 MG/KG	J	f
		NICKEL	57.2 MG/KG		
		POTASSIUM	1850 MG/KG		
		SODIUM	733 MG/KG	J	g
		VANADIUM	46.1 MG/KG		
		ZINC	82.0 MG/KG		
280-S02-010 AST17 M-016-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9290 MG/KG		
		ANTIMONY	1.7 MG/KG	J	c,g
		ARSENIC	3.8 MG/KG		
		BARIUM	277 MG/KG		
		BERYLLIUM	1.1 MG/KG	J	g
		CADMIUM	1.8 MG/KG		
		CALCIUM	5090 MG/KG		
		CHROMIUM	49.7 MG/KG		
		COBALT	7.8 MG/KG	J	g
		COPPER	47.4 MG/KG		
		IRON	16400 MG/KG		
		LEAD	170 MG/KG		
		MAGNESIUM	3900 MG/KG		
		MANGANESE	243 MG/KG		
		NICKEL	43.0 MG/KG		
		POTASSIUM	1360 MG/KG	J	g
		SODIUM	224 MG/KG	J	g
		VANADIUM	41.0 MG/KG		
		ZINC	135 MG/KG		
280-S02-011 AST18 M-016-E-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5690 MG/KG		
		ARSENIC	2.3 MG/KG	J	g
		BARIUM	21.2 MG/KG	J	c,g
		BERYLLIUM	0.64 MG/KG	J	g
		CALCIUM	3340 MG/KG		
		CHROMIUM	35.6 MG/KG		
		COBALT	5.7 MG/KG	J	g
		COPPER	5.8 MG/KG		
		IRON	8860 MG/KG		
		LEAD	4.2 MG/KG		
		MAGNESIUM	2820 MG/KG		
		MANGANESE	144 MG/KG		
		NICKEL	26.9 MG/KG		
		POTASSIUM	906 MG/KG	J	g
		SODIUM	1280 MG/KG	J	g
		VANADIUM	22.2 MG/KG		
		ZINC	24.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 02 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S02-012 AST18 M-016-B-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	12800 MG/KG		
		ARSENIC	4.1 MG/KG		
		BARIUM	76.0 MG/KG	J	c
		BERYLLIUM	0.86 MG/KG	J	g
		CADMIUM	1.5 MG/KG		
		CALCIUM	4690 MG/KG		
		CHROMIUM	55.9 MG/KG		
		COBALT	9.1 MG/KG	J	g
		COPPER	29.2 MG/KG		
		IRON	18900 MG/KG		
		LEAD	34.8 MG/KG		
		MAGNESIUM	6210 MG/KG		
		MANGANESE	293 MG/KG		
		NICKEL	53.5 MG/KG		
		POTASSIUM	1520 MG/KG		
		SODIUM	660 MG/KG	J	g
		VANADIUM	40.9 MG/KG		
		ZINC	71.7 MG/KG		
280-S02-013 AST17 M-016-B-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5390 MG/KG		
		ANTIMONY	0.97 MG/KG	J	c,g
		ARSENIC	2.8 MG/KG		
		BARIUM	19.2 MG/KG	J	g
		BERYLLIUM	0.79 MG/KG	J	g
		CALCIUM	3360 MG/KG		
		CHROMIUM	28.5 MG/KG		
		COBALT	7.0 MG/KG	J	g
		COPPER	5.2 MG/KG	J	g
		IRON	9500 MG/KG		
		LEAD	4.8 MG/KG		
		MAGNESIUM	2700 MG/KG		
		MANGANESE	245 MG/KG		
		NICKEL	23.4 MG/KG		
		POTASSIUM	865 MG/KG	J	g
		SODIUM	323 MG/KG	J	g
		VANADIUM	20.7 MG/KG		
		ZINC	25.0 MG/KG		
280-S02-014 AST18 M-016-B-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7080 MG/KG		
		ARSENIC	3.1 MG/KG		
		BARIUM	33.7 MG/KG	J	c,g
		BERYLLIUM	0.73 MG/KG	J	g
		CALCIUM	4840 MG/KG		
		CHROMIUM	42.5 MG/KG		
		COBALT	8.9 MG/KG	J	g
		COPPER	18.3 MG/KG		
		IRON	18500 MG/KG		
		LEAD	15.2 MG/KG		
		MAGNESIUM	3110 MG/KG		
		MANGANESE	333 MG/KG		
		NICKEL	39.0 MG/KG		
		POTASSIUM	1010 MG/KG	J	g
		SODIUM	403 MG/KG	J	g
		VANADIUM	25.5 MG/KG		
		ZINC	40.0 MG/KG		
280-S02-117 AST32	CLP METALS (TOTAL)	ALUMINUM	9870 MG/KG		
		ARSENIC	2.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 02 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S02-117 AST32 M-023C-0.0 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	96.4 MG/KG		
		BERYLLIUM	0.96 MG/KG	J	g
		CADMIUM	12.3 MG/KG		
		CALCIUM	17600 MG/KG		
		CHROMIUM	46.6 MG/KG	J	d,h
		COBALT	9.7 MG/KG	J	g
		COPPER	22.5 MG/KG		
		IRON	16500 MG/KG		
		LEAD	15.5 MG/KG	J	d
		MAGNESIUM	7010 MG/KG		
		MANGANESE	401 MG/KG		
		NICKEL	50.2 MG/KG		
		POTASSIUM	1330 MG/KG		
		SELENIUM	0.55 MG/KG	J	g
		SODIUM	427 MG/KG	J	g
		VANADIUM	32.0 MG/KG		
		ZINC	46.2 MG/KG		
280-S02-118 AST32 M-023C-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5850 MG/KG		
		ARSENIC	2.3 MG/KG		
		BARIUM	71.1 MG/KG		
		BERYLLIUM	1.2 MG/KG		
		CALCIUM	4020 MG/KG		
		CHROMIUM	34.4 MG/KG	J	d,h
		COBALT	8.5 MG/KG	J	g
		COPPER	14.8 MG/KG		
		IRON	10200 MG/KG		
		LEAD	38.5 MG/KG	J	d
		MAGNESIUM	2440 MG/KG		
		MANGANESE	190 MG/KG		
		MERCURY	0.19 MG/KG		
		NICKEL	29.2 MG/KG		
		POTASSIUM	769 MG/KG	J	g
		SODIUM	125 MG/KG	J	g
		VANADIUM	25.0 MG/KG		
		ZINC	67.6 MG/KG		
280-S02-119 AST32 M-023C-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6370 MG/KG		
		ARSENIC	2.8 MG/KG		
		BARIUM	55.8 MG/KG		
		BERYLLIUM	1.2 MG/KG		
		CADMIUM	0.26 MG/KG	J	g
		CALCIUM	6470 MG/KG		
		CHROMIUM	33.7 MG/KG	J	d,h
		COBALT	5.8 MG/KG	J	g
		COPPER	16.6 MG/KG		
		IRON	12100 MG/KG		
		LEAD	31.2 MG/KG	J	d
		MAGNESIUM	3600 MG/KG		
		MANGANESE	219 MG/KG		
		NICKEL	24.3 MG/KG		
		POTASSIUM	787 MG/KG	J	g
		SODIUM	1320 MG/KG		
		VANADIUM	26.8 MG/KG		
		ZINC	51.5 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-037 AST05 NPS-S03-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7570 MG/KG		
		ANTIMONY	8.9 MG/KG	J	c,g
		ARSENIC	17.3 MG/KG		
		BARIUM	2820 MG/KG		
		CADMIUM	12.1 MG/KG	J	h
		CALCIUM	11500 MG/KG		
		CHROMIUM	444 MG/KG	J	d
		COBALT	14.4 MG/KG	J	g
		COPPER	208 MG/KG		
		IRON	69000 MG/KG		
		LEAD	1240 MG/KG	J	h
		MAGNESIUM	6420 MG/KG		
		MANGANESE	502 MG/KG		
		MERCURY	0.97 MG/KG		
		NICKEL	100 MG/KG	J	d
		SODIUM	4670 MG/KG		
		VANADIUM	24.8 MG/KG		
		ZINC	1190 MG/KG		
280-S03-038 AST06 NPS-S03-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4610 MG/KG		
		ANTIMONY	0.99 MG/KG	J	c
		ARSENIC	5.2 MG/KG		
		BARIUM	197 MG/KG		
		BERYLLIUM	0.33 MG/KG	J	g
		CADMIUM	4.9 MG/KG	J	c,d
		CALCIUM	5090 MG/KG		
		CHROMIUM	112 MG/KG	J	c
		COPPER	112 MG/KG	J	d
		IRON	11200 MG/KG		
		LEAD	630 MG/KG	J	d,h
		MAGNESIUM	2900 MG/KG		
		MANGANESE	171 MG/KG		
		NICKEL	58.1 MG/KG		
		POTASSIUM	574 MG/KG	J	g
		SODIUM	191 MG/KG	J	g
		VANADIUM	18.3 MG/KG		
		ZINC	431 MG/KG		
280-S03-039 AST05 NPS-S03-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6350 MG/KG		
		ANTIMONY	1.2 MG/KG	J	c,g
		ARSENIC	4.4 MG/KG		
		BARIUM	1810 MG/KG		
		CADMIUM	0.53 MG/KG	J	g,h
		CALCIUM	4660 MG/KG		
		CHROMIUM	25.0 MG/KG	J	d
		COPPER	26.6 MG/KG		
		IRON	15300 MG/KG		
		LEAD	81.1 MG/KG	J	h
		MAGNESIUM	4250 MG/KG		
		MANGANESE	471 MG/KG		
		NICKEL	30.7 MG/KG	J	d
		SODIUM	1600 MG/KG		
		VANADIUM	20.5 MG/KG		
		ZINC	312 MG/KG		
280-S03-040 AST05 NPS-S03-04	CLP METALS (TOTAL)	ALUMINUM	9860 MG/KG		
		ARSENIC	17.9 MG/KG		
		BARIUM	69.6 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-040 AST05 NPS-S03-04 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM	3.2 MG/KG	J	h
		CALCIUM	13200 MG/KG		
		CHROMIUM	50.5 MG/KG	J	d
		COBALT	67.8 MG/KG		
		COPPER	77.5 MG/KG		
		IRON	38800 MG/KG		
		LEAD	201 MG/KG	J	h
		MAGNESIUM	6940 MG/KG		
		MANGANESE	2140 MG/KG		
		MERCURY	0.47 MG/KG		
		NICKEL	218 MG/KG	J	d
		POTASSIUM	1870 MG/KG	J	g
		SODIUM	11500 MG/KG		
		VANADIUM	38.4 MG/KG		
		ZINC	597 MG/KG		
280-S03-044 AST05 NPS-S03-07 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6220 MG/KG		
		ARSENIC	2.9 MG/KG		
		BARIUM	131 MG/KG		
		CADMIUM	7.5 MG/KG	J	h
		CALCIUM	3020 MG/KG		
		CHROMIUM	99.0 MG/KG	J	d
		COPPER	730 MG/KG		
		IRON	10200 MG/KG		
		LEAD	93.5 MG/KG	J	h
		MAGNESIUM	1990 MG/KG		
		MANGANESE	96.1 MG/KG		
		MERCURY	10.0 MG/KG		
		MOLYBDENUM	24.3 MG/KG		
		NICKEL	662 MG/KG	J	d
		SILVER	2.7 MG/KG	J	d,g
		SODIUM	310 MG/KG	J	g
		VANADIUM	12.9 MG/KG	J	g
		ZINC	458 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-024 AST35 CPT-S03-01-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	11200 MG/KG		
		ARSENIC	3.1 MG/KG		
		BARIUM	17.3 MG/KG	J	g
		BERYLLIUM	1.7 MG/KG		
		CALCIUM	6570 MG/KG		
		COBALT	10.5 MG/KG	J	g
		COPPER	40.8 MG/KG		
		IRON	34300 MG/KG	J	d
		LEAD	3.2 MG/KG	J	f
		MAGNESIUM	4100 MG/KG		
		MANGANESE	887 MG/KG	J	c,d
		POTASSIUM	213 MG/KG	J	g
		SODIUM	468 MG/KG	J	g
		VANADIUM	43.1 MG/KG		
		ZINC	83.3 MG/KG	J	d
280-S03-025 AST35 CPT-S03-01-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5770 MG/KG		
		BARIUM	35.8 MG/KG	J	g
		BERYLLIUM	0.57 MG/KG	J	g
		CALCIUM	2180 MG/KG		
		CHROMIUM	32.7 MG/KG		
		COPPER	10.3 MG/KG		
		IRON	10700 MG/KG	J	d
		LEAD	6.3 MG/KG		
		MAGNESIUM	3130 MG/KG		
		MANGANESE	162 MG/KG	J	c,d
		NICKEL	27.3 MG/KG		
		POTASSIUM	859 MG/KG	J	g
		SODIUM	434 MG/KG	J	g
		VANADIUM	21.0 MG/KG		
		ZINC	25.4 MG/KG	J	d
280-S03-026 AST35 CPT-S03-01-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3740 MG/KG		
		BARIUM	28.4 MG/KG	J	g
		BERYLLIUM	0.30 MG/KG	J	g
		CALCIUM	1460 MG/KG		
		CHROMIUM	24.8 MG/KG		
		COPPER	10.2 MG/KG		
		IRON	7300 MG/KG	J	d
		LEAD	52.2 MG/KG	J	f
		MAGNESIUM	1960 MG/KG		
		MANGANESE	73.4 MG/KG	J	c,d
		NICKEL	21.2 MG/KG		
		POTASSIUM	590 MG/KG	J	g
		SODIUM	399 MG/KG	J	g
		VANADIUM	15.6 MG/KG		
		ZINC	17.8 MG/KG	J	d
280-S03-027 AST49 M03-04-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4230 MG/KG		
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	32.1 MG/KG	J	g
		CALCIUM	2010 MG/KG		
		CHROMIUM	33.6 MG/KG	J	c
		COBALT	4.4 MG/KG	J	g
		COPPER	5.1 MG/KG	J	g
		IRON	7630 MG/KG		
		LEAD	9.8 MG/KG		
		MAGNESIUM	1830 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-027 AST49 M03-04-0 0.00 - 0.00	CLP METALS (TOTAL)	MANGANESE	76.1 MG/KG		
		NICKEL	20.0 MG/KG		
		POTASSIUM	643 MG/KG	J	g
		VANADIUM	17.2 MG/KG		
		ZINC	18.4 MG/KG		
280-S03-028 AST49 M03-04-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6740 MG/KG		
		ANTIMONY	1.0 MG/KG	J	c,g
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	43.9 MG/KG		
		BERYLLIUM	0.31 MG/KG	J	g
		CADMIUM	0.07 MG/KG	J	g
		CALCIUM	2980 MG/KG		
		CHROMIUM	29.9 MG/KG	J	c
		COBALT	5.5 MG/KG	J	g
		COPPER	8.6 MG/KG		
		IRON	11300 MG/KG		
		LEAD	7.2 MG/KG		
		MAGNESIUM	2960 MG/KG		
		MANGANESE	145 MG/KG		
		NICKEL	27.8 MG/KG		
		POTASSIUM	1040 MG/KG	J	g
		SODIUM	715 MG/KG	J	g
		VANADIUM	27.5 MG/KG		
		ZINC	23.9 MG/KG		
280-S03-030 AST49 M03-04-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5690 MG/KG		
		ARSENIC	4.1 MG/KG		
		BARIUM	36.8 MG/KG	J	g
		CADMIUM	0.07 MG/KG	J	g
		CALCIUM	3300 MG/KG		
		CHROMIUM	32.9 MG/KG	J	c
		COBALT	4.8 MG/KG	J	g
		COPPER	8.7 MG/KG		
		IRON	9470 MG/KG		
		LEAD	5.9 MG/KG		
		MAGNESIUM	2540 MG/KG		
		MANGANESE	118 MG/KG		
		NICKEL	25.5 MG/KG		
		POTASSIUM	835 MG/KG	J	g
		VANADIUM	22.7 MG/KG		
		ZINC	22.8 MG/KG		
280-S03-031 AST52 M03-05-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7770 MG/KG		
		ARSENIC	4.5 MG/KG		
		BARIUM	43.9 MG/KG		
		BERYLLIUM	0.77 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	3500 MG/KG		
		CHROMIUM	27.0 MG/KG	J	h
		COBALT	6.4 MG/KG	J	g
		COPPER	11.7 MG/KG		
		IRON	14600 MG/KG		
		LEAD	10.9 MG/KG		
		MAGNESIUM	3140 MG/KG		
		MANGANESE	244 MG/KG		
		MERCURY	0.21 MG/KG	J	c
		NICKEL	26.9 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-031 AST52 M03-05-0 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	1130 MG/KG		
		SODIUM	330 MG/KG	J	g,h
		VANADIUM	26.3 MG/KG		
		ZINC	42.6 MG/KG		
280-S03-032 AST52 M03-05-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4180 MG/KG		
		ARSENIC	2.6 MG/KG		
		BARIUM	25.8 MG/KG	J	g
		BERYLLIUM	0.56 MG/KG	J	g
		CALCIUM	2140 MG/KG		
		CHROMIUM	25.1 MG/KG	J	h
		COBALT	4.0 MG/KG	J	g
		COPPER	5.5 MG/KG		
		IRON	8190 MG/KG		
		LEAD	2.3 MG/KG		
		MAGNESIUM	2070 MG/KG		
		MANGANESE	86.8 MG/KG		
		NICKEL	24.3 MG/KG		
		POTASSIUM	667 MG/KG	J	g
		SODIUM	288 MG/KG	J	g,h
		VANADIUM	18.4 MG/KG		
		ZINC	19.7 MG/KG		
280-S03-033 AST52 M03-05-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4760 MG/KG		
		ARSENIC	2.4 MG/KG		
		BARIUM	28.2 MG/KG	J	g
		BERYLLIUM	0.44 MG/KG	J	g
		CALCIUM	2670 MG/KG		
		CHROMIUM	32.2 MG/KG	J	h
		COBALT	4.9 MG/KG	J	g
		COPPER	6.1 MG/KG		
		IRON	8820 MG/KG		
		LEAD	2.8 MG/KG		
		MAGNESIUM	2230 MG/KG		
		MANGANESE	89.0 MG/KG		
		NICKEL	25.6 MG/KG		
		POTASSIUM	770 MG/KG	J	g
		SODIUM	272 MG/KG	J	g,h
		VANADIUM	22.8 MG/KG		
		ZINC	21.1 MG/KG		
280-S03-034 AST52 M03-06-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4120 MG/KG		
		ARSENIC	2.5 MG/KG		
		BARIUM	28.0 MG/KG	J	g
		BERYLLIUM	0.52 MG/KG	J	g
		CADMIUM	0.12 MG/KG	J	g
		CALCIUM	2520 MG/KG		
		CHROMIUM	24.3 MG/KG	J	h
		COBALT	4.8 MG/KG	J	g
		COPPER	7.6 MG/KG		
		IRON	9580 MG/KG		
		LEAD	5.9 MG/KG		
		MAGNESIUM	2520 MG/KG		
		MANGANESE	134 MG/KG		
		NICKEL	21.0 MG/KG		
		POTASSIUM	634 MG/KG	J	g
		SODIUM	236 MG/KG	J	g,h
		VANADIUM	23.2 MG/KG		

Validity (Qual) : J - Estimated concentration

'oplicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-034 AST52 M03-06-0 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	30.8 MG/KG		
280-S03-035 AST52 M03-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7780 MG/KG		
		ARSENIC	7.4 MG/KG		
		BARIUM	317 MG/KG		
		BERYLLIUM	1.5 MG/KG		
		CADMIUM	0.27 MG/KG	J	g
		CALCIUM	9750 MG/KG		
		COBALT	8.6 MG/KG	J	g
		COPPER	55.6 MG/KG		
		IRON	7180 MG/KG		
		LEAD	24.2 MG/KG		
		MAGNESIUM	1240 MG/KG		
		MANGANESE	114 MG/KG		
		MOLYBDENUM	3.1 MG/KG	J	g
		NICKEL	23.4 MG/KG		
		POTASSIUM	509 MG/KG	J	g
		SODIUM	1180 MG/KG	J	h
		VANADIUM	22.9 MG/KG		
		ZINC	34.8 MG/KG		
280-S03-036 AST52 M03-06-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6250 MG/KG		
		ARSENIC	24.8 MG/KG		
		BARIUM	449 MG/KG		
		BERYLLIUM	0.85 MG/KG	J	g
		CADMIUM	0.27 MG/KG	J	g
		CALCIUM	93200 MG/KG		
		CHROMIUM	15.5 MG/KG	J	h
		COBALT	6.0 MG/KG	J	g
		COPPER	34.7 MG/KG		
		IRON	6880 MG/KG		
		LEAD	93.4 MG/KG		
		MAGNESIUM	8570 MG/KG		
		MANGANESE	194 MG/KG		
		NICKEL	22.4 MG/KG		
		POTASSIUM	800 MG/KG	J	g
		SODIUM	1200 MG/KG	J	g,h
		VANADIUM	24.7 MG/KG		
		ZINC	53.7 MG/KG		
280-S03-094 AST49 M03-04-10.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	18900 MG/KG		
		ANTIMONY	1.1 MG/KG	J	c,g
		ARSENIC	9.2 MG/KG		
		BARIUM	102 MG/KG		
		BERYLLIUM	0.41 MG/KG	J	g
		CADMIUM	0.29 MG/KG	J	g
		CALCIUM	17000 MG/KG		
		CHROMIUM	54.2 MG/KG	J	c
		COBALT	14.2 MG/KG		
		COPPER	32.8 MG/KG		
		IRON	25600 MG/KG		
		LEAD	26.8 MG/KG		
		MAGNESIUM	8760 MG/KG		
		MANGANESE	405 MG/KG		
		MERCURY	0.31 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-094 AST49 M03-04-10.0 0.00 - 0.00	CLP METALS (TOTAL)	NICKEL	58.2 MG/KG		
		POTASSIUM	2950 MG/KG		
		SODIUM	5800 MG/KG		
		VANADIUM	52.0 MG/KG		
		ZINC	87.7 MG/KG		
280-S03-106 AST52 M03-07-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9080 MG/KG		
		ARSENIC	6.1 MG/KG		
		BARIUM	76.1 MG/KG		
		BERYLLIUM	1.0 MG/KG	J	g
		CADMIUM	0.38 MG/KG	J	g
		CALCIUM	4110 MG/KG		
		CHROMIUM	41.7 MG/KG	J	h
		COBALT	11.1 MG/KG	J	g
		COPPER	24.5 MG/KG		
		IRON	17500 MG/KG		
		LEAD	124 MG/KG		
		MAGNESIUM	4480 MG/KG		
		MANGANESE	283 MG/KG		
		MERCURY	0.82 MG/KG	J	c
		NICKEL	48.2 MG/KG		
		POTASSIUM	1400 MG/KG	J	g
		SODIUM	867 MG/KG	J	g,h
		VANADIUM	38.2 MG/KG		
		ZINC	108 MG/KG		
280-S03-107 AST52 M03-07-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	19600 MG/KG		
		ARSENIC	8.6 MG/KG		
		BARIUM	1060 MG/KG		
		BERYLLIUM	1.9 MG/KG		
		CADMIUM	1.3 MG/KG	J	g
		CALCIUM	15000 MG/KG		
		CHROMIUM	49.7 MG/KG	J	h
		COBALT	6.0 MG/KG	J	g
		COPPER	119 MG/KG		
		IRON	30700 MG/KG		
		LEAD	2380 MG/KG		
		MAGNESIUM	3140 MG/KG		
		MANGANESE	243 MG/KG		
		NICKEL	47.5 MG/KG		
		POTASSIUM	2020 MG/KG		
		SILVER	2.4 MG/KG	J	g
		SODIUM	2810 MG/KG	J	h
		VANADIUM	69.3 MG/KG		
		ZINC	1260 MG/KG		
280-S03-108 AST52 M03-07-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5020 MG/KG		
		ARSENIC	2.4 MG/KG		
		BARIUM	64.3 MG/KG		
		BERYLLIUM	0.53 MG/KG	J	g
		CALCIUM	1490 MG/KG		
		CHROMIUM	25.4 MG/KG	J	h
		COBALT	3.2 MG/KG	J	g
		COPPER	7.5 MG/KG		
		IRON	7430 MG/KG		
		LEAD	5.4 MG/KG		
		MAGNESIUM	1920 MG/KG		
		MANGANESE	57.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-108 AST52 M03-07-5 0.00 - 0.00	CLP METALS (TOTAL)	NICKEL	16.2 MG/KG		
		POTASSIUM	886 MG/KG	J	g
		SODIUM	786 MG/KG	J	g,h
		VANADIUM	20.8 MG/KG		
		ZINC	20.3 MG/KG		
280-S03-109 AST49 M03-08-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5570 MG/KG		
		ARSENIC	1.2 MG/KG	J	g
		BARIUM	25.3 MG/KG	J	g
		CALCIUM	3070 MG/KG		
		CHROMIUM	36.4 MG/KG	J	c
		COBALT	6.4 MG/KG	J	g
		COPPER	4.9 MG/KG	J	g
		IRON	9660 MG/KG		
		LEAD	1.7 MG/KG		
		MAGNESIUM	2280 MG/KG		
		MANGANESE	116 MG/KG		
		NICKEL	29.1 MG/KG		
		POTASSIUM	655 MG/KG	J	g
		VANADIUM	26.6 MG/KG		
		ZINC	21.9 MG/KG		
280-S03-110 AST49 M03-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8240 MG/KG		
		ANTIMONY	0.92 MG/KG	J	c,g
		ARSENIC	2.3 MG/KG	J	g
		BARIUM	42.3 MG/KG	J	g
		BERYLLIUM	0.36 MG/KG	J	g
		CADMIUM	0.16 MG/KG	J	g
		CALCIUM	3380 MG/KG		
		CHROMIUM	38.3 MG/KG	J	c
		COBALT	7.9 MG/KG	J	g
		COPPER	12.3 MG/KG		
		IRON	14100 MG/KG		
		LEAD	8.2 MG/KG		
		MAGNESIUM	3800 MG/KG		
		MANGANESE	169 MG/KG		
		NICKEL	35.7 MG/KG		
		POTASSIUM	1500 MG/KG		
		VANADIUM	30.0 MG/KG		
		ZINC	37.8 MG/KG		
280-S03-111 AST49 M03-08-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	12600 MG/KG		
		ARSENIC	8.8 MG/KG		
		BARIUM	98.0 MG/KG		
		BERYLLIUM	0.59 MG/KG	J	g
		CADMIUM	0.27 MG/KG	J	g
		CALCIUM	21000 MG/KG		
		CHROMIUM	42.5 MG/KG	J	c
		COBALT	10.5 MG/KG	J	g
		COPPER	28.5 MG/KG		
		IRON	21300 MG/KG		
		LEAD	33.1 MG/KG		
		MAGNESIUM	6830 MG/KG		
		MANGANESE	326 MG/KG		
		MERCURY	0.32 MG/KG		
		NICKEL	47.1 MG/KG		
		POTASSIUM	2150 MG/KG		
		SODIUM	1630 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-111 AST49 M03-08-5.0 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM ZINC	40.9 MG/KG 81.9 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-073 AST35 CPT-S03-01(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	332 UG/L	J	d,g
		CALCIUM	712000 UG/L		
		COBALT	193 UG/L	J	c,d,g
		IRON	7760 UG/L	J	h
		MAGNESIUM	2160000 UG/L		
		MANGANESE	4640 UG/L		
		NICKEL	623 UG/L	J	c,g
		POTASSIUM	497000 UG/L		
		SODIUM	15500000 UG/L		
		ZINC	2230 UG/L		
280-S03-074 AST10 CPT-S03-02 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM	5.1 UG/L	J	g
		CALCIUM	681000 UG/L		
		COBALT	250 UG/L	J	g
		IRON	10500 UG/L		
		MAGNESIUM	2030000 UG/L		
		MANGANESE	4120 UG/L		
		NICKEL	556 UG/L	J	d,g
		POTASSIUM	572000 UG/L	J	h
		SODIUM	15800000 UG/L		
		ZINC	828 UG/L	J	c
280-S03-075 AST34 CPT-S03-03 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	48.1 UG/L	J	g
		BERYLLIUM	1.8 UG/L	J	g
		CADMIUM	17.2 UG/L	J	g
		CALCIUM	50200 UG/L	J	h
		CHROMIUM	15.4 UG/L	J	c,d
		IRON	3340 UG/L	J	h
		MAGNESIUM	121000 UG/L	J	h
		MANGANESE	788 UG/L	J	h
		NICKEL	41.3 UG/L		
		POTASSIUM	168000 UG/L	J	h
		SODIUM	3380000 UG/L		
		THALLIUM	51.8 UG/L	J	d,g
		ZINC	677 UG/L	J	h
280-S03-076 AST10 CPT-S03-04 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	2070 UG/L		
		ANTIMONY	8.3 UG/L	J	g
		BARIUM	30.6 UG/L	J	g
		BERYLLIUM	2.1 UG/L	J	d,g
		CALCIUM	27700 UG/L		
		CHROMIUM	6.9 UG/L	J	d,g
		COPPER	7.4 UG/L	J	g
		IRON	3570 UG/L		
		MAGNESIUM	58600 UG/L		
		MANGANESE	203 UG/L		
		NICKEL	17.1 UG/L	J	d,g
		POTASSIUM	97800 UG/L	J	h
		SODIUM	2010000 UG/L		
280-S03-077 AST34 CPT-S03-05 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	104 UG/L	J	c,d,g
		BARIUM	40.9 UG/L	J	g
		BERYLLIUM	3.0 UG/L	J	g
		CALCIUM	142000 UG/L	J	h
		CHROMIUM	26.6 UG/L	J	c,d,g
		COBALT	21.3 UG/L	J	g
		IRON	1900 UG/L	J	h
		MAGNESIUM	456000 UG/L	J	h

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-077	CLP METALS (TOTAL)	MANGANESE	4160 UG/L	J	h
AST34		NICKEL	75.9 UG/L		
CPT-S03-05		POTASSIUM	357000 UG/L	J	h
0.00 - 0.00		SILVER	41.2 UG/L	J	c,d,g
		SODIUM	6500000 UG/L		
		THALLIUM	69.2 UG/L	J	d,g
		ZINC	341 UG/L	J	h

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 04
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S04-001 AST35 B04-43-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6230 MG/KG		
		BARIUM	58.4 MG/KG		
		BERYLLIUM	0.65 MG/KG	J	g
		CADMIUM	0.68 MG/KG	J	g
		CALCIUM	4730 MG/KG		
		CHROMIUM	52.9 MG/KG		
		COPPER	16.0 MG/KG		
		IRON	9750 MG/KG	J	d
		LEAD	34.4 MG/KG	J	f
		MAGNESIUM	2570 MG/KG		
		MANGANESE	128 MG/KG	J	c,d
		NICKEL	34.4 MG/KG		
		POTASSIUM	772 MG/KG	J	g
		SILVER	3.0 MG/KG		
		SODIUM	258 MG/KG	J	g
		VANADIUM	24.8 MG/KG		
		ZINC	56.1 MG/KG	J	d
280-S04-002 AST35 B04-43-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6100 MG/KG		
		BARIUM	52.7 MG/KG		
		BERYLLIUM	0.70 MG/KG	J	g
		CADMIUM	0.52 MG/KG	J	g
		CALCIUM	3650 MG/KG		
		CHROMIUM	56.3 MG/KG		
		COPPER	21.8 MG/KG		
		IRON	10500 MG/KG	J	d
		LEAD	15.5 MG/KG	J	f
		MAGNESIUM	2820 MG/KG		
		MANGANESE	117 MG/KG	J	c,d
		NICKEL	37.8 MG/KG		
		POTASSIUM	790 MG/KG	J	g
		SILVER	2.8 MG/KG		
		SODIUM	139 MG/KG	J	g
		VANADIUM	27.4 MG/KG		
		ZINC	38.4 MG/KG	J	d
280-S04-003 AST35 B04-43-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7770 MG/KG		
		BARIUM	52.3 MG/KG		
		BERYLLIUM	0.88 MG/KG	J	g
		CADMIUM	0.15 MG/KG	J	g
		CALCIUM	2640 MG/KG		
		CHROMIUM	55.5 MG/KG		
		COPPER	11.5 MG/KG		
		IRON	13000 MG/KG	J	d
		LEAD	7.4 MG/KG	J	f
		MAGNESIUM	3060 MG/KG		
		MANGANESE	183 MG/KG	J	c,d
		NICKEL	39.6 MG/KG		
		POTASSIUM	1030 MG/KG	J	g
		SODIUM	149 MG/KG	J	g
		VANADIUM	27.2 MG/KG		
		ZINC	28.4 MG/KG	J	d
280-S04-004 AST35 B04-44-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5850 MG/KG		
		BARIUM	40.4 MG/KG	J	g
		BERYLLIUM	0.45 MG/KG	J	g
		CALCIUM	2980 MG/KG		
		CHROMIUM	34.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 04 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S04-004	CLP METALS (TOTAL)	COPPER	8.7 MG/KG		
AST35		IRON	9560 MG/KG	J	d
B04-44-0		LEAD	7.9 MG/KG	J	f
0.00 - 0.00		MAGNESIUM	2430 MG/KG		
		MANGANESE	141 MG/KG	J	c,d
		NICKEL	27.6 MG/KG		
		POTASSIUM	552 MG/KG	J	g
		SODIUM	266 MG/KG	J	g
		VANADIUM	24.8 MG/KG		
		ZINC	25.0 MG/KG	J	d
280-S04-005	CLP METALS (TOTAL)	ALUMINUM	6970 MG/KG		
AST35		BARIUM	26.4 MG/KG	J	g
B04-44-2.5		BERYLLIUM	0.66 MG/KG	J	g
0.00 - 0.00		CALCIUM	4620 MG/KG		
		CHROMIUM	37.5 MG/KG		
		COPPER	9.3 MG/KG		
		IRON	10600 MG/KG	J	d
		LEAD	4.0 MG/KG	J	f
		MAGNESIUM	3830 MG/KG		
		MANGANESE	138 MG/KG	J	c,d
		NICKEL	31.1 MG/KG		
		POTASSIUM	386 MG/KG	J	g
		SODIUM	314 MG/KG	J	g
		VANADIUM	29.3 MG/KG		
		ZINC	23.9 MG/KG	J	d
280-S04-006	CLP METALS (TOTAL)	ALUMINUM	11500 MG/KG		
AST35		ARSENIC	3.5 MG/KG		
B04-44-5		BARIUM	70.0 MG/KG		
0.00 - 0.00		BERYLLIUM	1.0 MG/KG	J	g
		CALCIUM	4770 MG/KG		
		CHROMIUM	51.8 MG/KG		
		COBALT	10.0 MG/KG	J	g
		COPPER	17.9 MG/KG		
		IRON	17500 MG/KG	J	d
		LEAD	27.6 MG/KG	J	f
		MAGNESIUM	5540 MG/KG		
		MANGANESE	258 MG/KG	J	c,d
		NICKEL	50.6 MG/KG		
		POTASSIUM	1170 MG/KG	J	g
		SODIUM	502 MG/KG	J	g
		VANADIUM	40.4 MG/KG		
		ZINC	47.9 MG/KG	J	d
280-S04-007	CLP METALS (TOTAL)	ALUMINUM	6540 MG/KG		
AST38		ARSENIC	1.2 MG/KG	J	g
B04-45-0		BARIUM	64.6 MG/KG	J	d
0.00 - 0.00		BERYLLIUM	0.45 MG/KG	J	g
		CALCIUM	5970 MG/KG		
		CHROMIUM	43.9 MG/KG		
		COBALT	4.2 MG/KG	J	g
		COPPER	33.3 MG/KG		
		IRON	10700 MG/KG		
		LEAD	52.2 MG/KG		
		MAGNESIUM	3040 MG/KG		
		MANGANESE	306 MG/KG	J	c
		NICKEL	25.8 MG/KG		

Validity (Qual) : J - Estimated concentration

pplicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 04 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S04-007 AST38 B04-45-0 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	819 MG/KG	J	g
		SODIUM	145 MG/KG	J	g
		VANADIUM	22.5 MG/KG		
		ZINC	68.7 MG/KG		
280-S04-008 AST38 B04-45-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7330 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	62.9 MG/KG	J	d
		BERYLLIUM	0.34 MG/KG	J	g
		CALCIUM	3730 MG/KG		
		CHROMIUM	46.2 MG/KG		
		COBALT	4.0 MG/KG	J	g
		COPPER	8.8 MG/KG		
		IRON	10000 MG/KG		
		LEAD	10.3 MG/KG		
		MAGNESIUM	2070 MG/KG		
		MANGANESE	120 MG/KG	J	c
		NICKEL	25.0 MG/KG		
		POTASSIUM	828 MG/KG	J	g
		SODIUM	1000 MG/KG	J	g
		VANADIUM	28.9 MG/KG		
		ZINC	23.7 MG/KG		
280-S04-009 AST38 B04-45-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6580 MG/KG		
		ARSENIC	2.2 MG/KG	J	g
		BARIUM	60.5 MG/KG	J	d
		BERYLLIUM	0.50 MG/KG	J	g
		CALCIUM	3910 MG/KG		
		CHROMIUM	67.4 MG/KG		
		COBALT	4.7 MG/KG	J	g
		COPPER	17.4 MG/KG		
		IRON	10500 MG/KG		
		LEAD	22.8 MG/KG		
		MAGNESIUM	2930 MG/KG		
		MANGANESE	225 MG/KG	J	c
		NICKEL	48.6 MG/KG		
		POTASSIUM	969 MG/KG	J	g
		SODIUM	786 MG/KG	J	g
		VANADIUM	26.1 MG/KG		
		ZINC	39.6 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 05
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S05-010 AST16 CPT-S05-11-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7660 MG/KG		
		ANTIMONY	1.0 MG/KG	J	g
		ARSENIC	1.9 MG/KG	J	g
		BARIUM	59.8 MG/KG		
		CADMIUM	0.14 MG/KG	J	g
		CALCIUM	3730 MG/KG		
		CHROMIUM	25.2 MG/KG		
		COBALT	7.7 MG/KG	J	g
		COPPER	9.8 MG/KG		
		IRON	13500 MG/KG		
		LEAD	60.7 MG/KG		
		MAGNESIUM	4080 MG/KG		
		MANGANESE	160 MG/KG		
		NICKEL	24.6 MG/KG		
		POTASSIUM	790 MG/KG	J	g
		SODIUM	208 MG/KG	J	g
		VANADIUM	30.9 MG/KG		
		ZINC	23.6 MG/KG		
280-S05-011 AST16 CPT-S05-11-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5820 MG/KG		
		ANTIMONY	0.82 MG/KG	J	g
		ARSENIC	1.3 MG/KG	J	g
		BARIUM	44.7 MG/KG		
		CALCIUM	3100 MG/KG		
		CHROMIUM	28.4 MG/KG		
		COBALT	5.2 MG/KG	J	g
		COPPER	7.5 MG/KG		
		IRON	10500 MG/KG		
		LEAD	4.2 MG/KG		
		MAGNESIUM	3220 MG/KG		
		MANGANESE	123 MG/KG		
		NICKEL	24.8 MG/KG		
		POTASSIUM	709 MG/KG	J	g
		SODIUM	114 MG/KG	J	g
		VANADIUM	23.5 MG/KG		
		ZINC	21.4 MG/KG		
280-S05-012 AST16 CPT-S05-11-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7030 MG/KG		
		ANTIMONY	1.2 MG/KG	J	g
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	43.5 MG/KG		
		CALCIUM	3350 MG/KG		
		CHROMIUM	24.6 MG/KG		
		COBALT	6.0 MG/KG	J	g
		COPPER	10.2 MG/KG		
		IRON	12300 MG/KG		
		LEAD	7.0 MG/KG		
		MAGNESIUM	3920 MG/KG		
		MANGANESE	165 MG/KG		
		NICKEL	23.2 MG/KG		
		POTASSIUM	727 MG/KG	J	g
		SODIUM	134 MG/KG	J	g
		VANADIUM	29.2 MG/KG		
		ZINC	22.5 MG/KG		
280-S05-013 AST13 CPT-S05-12-0	CLP METALS (TOTAL)	ALUMINUM	4190 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	24.9 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 05 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S05-013 AST13 CPT-S05-12-0 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	2260 MG/KG		
		CHROMIUM	27.7 MG/KG		
		COBALT	6.6 MG/KG	J	g
		IRON	8250 MG/KG		
		LEAD	173 MG/KG		
		MAGNESIUM	2310 MG/KG		
		MANGANESE	105 MG/KG		
		NICKEL	26.6 MG/KG		
		POTASSIUM	570 MG/KG	J	g
		SODIUM	211 MG/KG	J	g
		VANADIUM	17.6 MG/KG		
		ZINC	22.8 MG/KG		
280-S05-014 AST13 CPT-S05-12-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5350 MG/KG		
		ARSENIC	1.5 MG/KG	J	g
		BARIUM	32.2 MG/KG	J	g
		CALCIUM	2560 MG/KG		
		CHROMIUM	22.9 MG/KG		
		COBALT	5.5 MG/KG	J	g
		IRON	8980 MG/KG		
		LEAD	161 MG/KG		
		MAGNESIUM	2820 MG/KG		
		MANGANESE	148 MG/KG		
		NICKEL	23.7 MG/KG		
		POTASSIUM	512 MG/KG	J	g
		SODIUM	296 MG/KG	J	g
		VANADIUM	16.7 MG/KG		
		ZINC	20.1 MG/KG		
280-S05-015 AST13 CPT-S05-12-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4770 MG/KG		
		ANTIMONY	0.71 MG/KG	J	c
		ARSENIC	2.3 MG/KG		
		BARIUM	24.2 MG/KG	J	g
		CALCIUM	3690 MG/KG		
		CHROMIUM	27.5 MG/KG		
		COBALT	6.1 MG/KG	J	g
		IRON	10300 MG/KG		
		LEAD	69.9 MG/KG		
		MAGNESIUM	2380 MG/KG		
		MANGANESE	110 MG/KG		
		NICKEL	22.6 MG/KG		
		POTASSIUM	593 MG/KG	J	g
		SODIUM	412 MG/KG	J	g
		VANADIUM	19.0 MG/KG		
		ZINC	20.3 MG/KG		
280-S05-043 AST50 M05-11-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	11400 MG/KG		
		ANTIMONY	0.79 MG/KG	J	c,g
		BARIUM	29.3 MG/KG	J	g
		CALCIUM	4640 MG/KG		
		CHROMIUM	13.4 MG/KG	J	c,h
		COBALT	8.0 MG/KG	J	g
		COPPER	4.4 MG/KG	J	g
		IRON	21300 MG/KG		
		LEAD	3.1 MG/KG		
		MAGNESIUM	6320 MG/KG		
		MANGANESE	226 MG/KG		
		NICKEL	14.4 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 05 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S05-043 AST50 M05-11-0 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	606 MG/KG	J	g
		SODIUM	396 MG/KG	J	g
		VANADIUM	57.5 MG/KG		
		ZINC	20.4 MG/KG		
280-S05-044 AST50 M05-11-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7230 MG/KG		
		ARSENIC	0.87 MG/KG	J	g
		BARIUM	45.7 MG/KG		
		BERYLLIUM	0.27 MG/KG	J	g
		CALCIUM	3670 MG/KG		
		CHROMIUM	25.4 MG/KG	J	c,h
		COBALT	7.5 MG/KG	J	g
		COPPER	6.9 MG/KG		
		IRON	12600 MG/KG		
		LEAD	8.5 MG/KG		
		MAGNESIUM	3400 MG/KG		
		MANGANESE	151 MG/KG		
		NICKEL	23.8 MG/KG		
		POTASSIUM	953 MG/KG	J	g
		SODIUM	377 MG/KG	J	g
		VANADIUM	29.6 MG/KG		
		ZINC	22.6 MG/KG		
280-S05-045 AST50 M05-11-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7570 MG/KG		
		ANTIMONY	0.86 MG/KG	J	c,g
		ARSENIC	1.1 MG/KG	J	g
		BARIUM	43.4 MG/KG	J	g
		BERYLLIUM	0.29 MG/KG	J	g
		CALCIUM	3180 MG/KG		
		CHROMIUM	26.4 MG/KG	J	c,h
		COBALT	6.6 MG/KG	J	g
		COPPER	24.1 MG/KG		
		IRON	13600 MG/KG		
		LEAD	5.3 MG/KG		
		MAGNESIUM	3700 MG/KG		
		MANGANESE	160 MG/KG		
		NICKEL	28.2 MG/KG		
		POTASSIUM	914 MG/KG	J	g
		SODIUM	523 MG/KG	J	g
		VANADIUM	29.2 MG/KG		
		ZINC	434 MG/KG		
280-S05-046 AST50 M05-11-8.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10600 MG/KG		
		ANTIMONY	1.1 MG/KG	J	c,g
		ARSENIC	2.6 MG/KG		
		BARIUM	94.3 MG/KG		
		BERYLLIUM	0.35 MG/KG	J	g
		CADMIUM	0.07 MG/KG	J	g
		CALCIUM	3150 MG/KG		
		CHROMIUM	51.0 MG/KG	J	c,h
		COBALT	9.9 MG/KG	J	g
		COPPER	11.3 MG/KG		
		IRON	16900 MG/KG		
		LEAD	3.3 MG/KG		
		MAGNESIUM	4680 MG/KG		
		MANGANESE	185 MG/KG		
		NICKEL	51.9 MG/KG		
		POTASSIUM	1660 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 05 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S05-046 AST50 M05-11-8.0 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	1200 MG/KG	J	g
		VANADIUM	35.2 MG/KG		
		ZINC	36.4 MG/KG		
280-S05-047 AST50 M05-12-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7180 MG/KG		
		ANTIMONY	1.0 MG/KG	J	c,g
		ARSENIC	0.74 MG/KG	J	g
		BARIUM	30.9 MG/KG	J	g
		CALCIUM	3270 MG/KG		
		CHROMIUM	25.9 MG/KG	J	c,h
		COBALT	6.7 MG/KG	J	g
		COPPER	6.0 MG/KG		
		IRON	13500 MG/KG		
		LEAD	190 MG/KG		
		MAGNESIUM	3460 MG/KG		
		MANGANESE	156 MG/KG		
		NICKEL	20.9 MG/KG		
		POTASSIUM	727 MG/KG	J	g
		SODIUM	488 MG/KG	J	g
		VANADIUM	29.1 MG/KG		
		ZINC	20.8 MG/KG		
280-S05-048 AST50 M05-12-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7270 MG/KG		
		ANTIMONY	0.75 MG/KG	J	c,g
		ARSENIC	0.92 MG/KG	J	g
		BARIUM	38.3 MG/KG	J	g
		BERYLLIUM	0.38 MG/KG	J	g
		CALCIUM	6400 MG/KG		
		CHROMIUM	24.6 MG/KG	J	c,h
		COBALT	7.1 MG/KG	J	g
		COPPER	10.5 MG/KG		
		IRON	16400 MG/KG		
		LEAD	172 MG/KG		
		MAGNESIUM	3640 MG/KG		
		MANGANESE	168 MG/KG		
		NICKEL	18.8 MG/KG		
		POTASSIUM	649 MG/KG	J	g
		SODIUM	506 MG/KG	J	g
		VANADIUM	38.9 MG/KG		
		ZINC	19.6 MG/KG		
280-S05-049 AST50 M05-12-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7420 MG/KG		
		ANTIMONY	1.0 MG/KG	J	c,g
		ARSENIC	0.80 MG/KG	J	g
		BARIUM	30.0 MG/KG	J	g
		BERYLLIUM	0.28 MG/KG	J	g
		CALCIUM	3150 MG/KG		
		CHROMIUM	26.8 MG/KG	J	c,h
		COBALT	6.5 MG/KG	J	g
		COPPER	4.9 MG/KG	J	g
		IRON	14300 MG/KG		
		LEAD	185 MG/KG		
		MAGNESIUM	3840 MG/KG		
		MANGANESE	174 MG/KG		
		NICKEL	17.0 MG/KG		
		POTASSIUM	699 MG/KG	J	g
		SODIUM	526 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 05 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S05-049 AST50 M05-12-5.0 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM ZINC	31.4 MG/KG 19.2 MG/KG		
280-S05-050 AST50 M05-12-9.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ANTIMONY ARSENIC BARIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	11000 MG/KG 1.4 MG/KG 2.6 MG/KG 57.4 MG/KG 3810 MG/KG 42.1 MG/KG 11.3 MG/KG 10.6 MG/KG 16800 MG/KG 3.2 MG/KG 4970 MG/KG 167 MG/KG 50.6 MG/KG 1830 MG/KG 1250 MG/KG 35.1 MG/KG 39.4 MG/KG	 J J J J J 	 c,g g c,h g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 05
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S05-016 AST14 CPT-S05-08 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	139 UG/L	J	g
		CADMIUM	1.7 UG/L	J	g
		CALCIUM	1020000 UG/L		
		COBALT	99.9 UG/L	J	g
		IRON	2050 UG/L		
		MAGNESIUM	1740000 UG/L		
		MANGANESE	24500 UG/L		
		POTASSIUM	102000 UG/L		
		SELENIUM	6.2 UG/L	J	g
		SODIUM	8190000 UG/L		
		ZINC	695 UG/L		
280-S05-017 AST14 CPT-S05-09 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	104 UG/L	J	g
		CADMIUM	1.8 UG/L	J	g
		CALCIUM	959000 UG/L		
		COBALT	36.4 UG/L	J	g
		MAGNESIUM	1560000 UG/L		
		MANGANESE	20000 UG/L		
		NICKEL	42.7 UG/L	J	c,g
		POTASSIUM	158000 UG/L		
		SODIUM	8290000 UG/L		
		ZINC	108 UG/L		
280-S05-019 AST14 CPT-S05-11 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	582 UG/L		
		CALCIUM	478000 UG/L		
		COBALT	44.7 UG/L	J	g
		IRON	1170 UG/L		
		MAGNESIUM	1200000 UG/L		
		MANGANESE	8600 UG/L		
		NICKEL	52.7 UG/L	J	c,g
		POTASSIUM	198000 UG/L		
		SODIUM	6780000 UG/L		
		ZINC	414 UG/L		
280-S05-020 AST14 CPT-S05-12 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	162 UG/L	J	g
		CALCIUM	680000 UG/L		
		COBALT	52.9 UG/L	J	g
		IRON	1010 UG/L		
		MAGNESIUM	1410000 UG/L		
		MANGANESE	8150 UG/L		
		NICKEL	40.1 UG/L	J	c,g
		POTASSIUM	140000 UG/L		
		SODIUM	7020000 UG/L		
		ZINC	610 UG/L		
280-S05-024 AST14 CPT-S05-11S 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	7.2 UG/L	J	g
		BARIUM	512 UG/L		
		CALCIUM	158000 UG/L		
		MAGNESIUM	85300 UG/L		
		MANGANESE	555 UG/L		
		POTASSIUM	31500 UG/L		
		SODIUM	1190000 UG/L		
		VANADIUM	15.2 UG/L	J	g
280-S05-025 AST14 CPT-S05-12S 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	49.2 UG/L	J	g
		ARSENIC	17.5 UG/L		
		BARIUM	141 UG/L	J	g
		CALCIUM	29500 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 05 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S05-025 AST14 CPT-S05-12S 0.00 - 0.00	CLP METALS (TOTAL)	IRON	82.3 UG/L	J	g
		MAGNESIUM	17800 UG/L		
		MANGANESE	113 UG/L		
		MOLYBDENUM	22.7 UG/L	J	g
		NICKEL	86.0 UG/L	J	c
		POTASSIUM	20800 UG/L		
		SELENIUM	2.7 UG/L	J	g
		SODIUM	524000 UG/L		
		VANADIUM	29.0 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-028 AST06 NPS-S06-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4040 MG/KG		
		ANTIMONY	1.3 MG/KG	J	c
		ARSENIC	2.8 MG/KG		
		BARIUM	82.3 MG/KG		
		CADMIUM	51.1 MG/KG	J	c,d
		CALCIUM	1520 MG/KG		
		CHROMIUM	94.3 MG/KG	J	c
		COBALT	10.0 MG/KG	J	g
		COPPER	485 MG/KG	J	d
		IRON	10500 MG/KG		
		LEAD	398 MG/KG	J	d,h
		MAGNESIUM	2690 MG/KG		
		MANGANESE	167 MG/KG		
		MOLYBDENUM	5.1 MG/KG	J	g
		NICKEL	41.4 MG/KG		
		POTASSIUM	690 MG/KG	J	g
		SODIUM	1510 MG/KG		
		VANADIUM	17.8 MG/KG		
		ZINC	654 MG/KG		
280-S06-029 AST06 NPS-S06-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4280 MG/KG		
		ANTIMONY	0.88 MG/KG	J	c
		ARSENIC	2.8 MG/KG		
		BARIUM	390 MG/KG		
		BERYLLIUM	0.64 MG/KG	J	g
		CADMIUM	0.25 MG/KG	J	c,d
		CALCIUM	2310 MG/KG		
		CHROMIUM	69.9 MG/KG	J	c
		COPPER	163 MG/KG	J	d
		IRON	16100 MG/KG		
		LEAD	361 MG/KG	J	d,h
		MAGNESIUM	3400 MG/KG		
		MANGANESE	222 MG/KG		
		NICKEL	38.8 MG/KG		
		POTASSIUM	536 MG/KG	J	g
		SODIUM	619 MG/KG	J	g
		VANADIUM	16.9 MG/KG		
		ZINC	451 MG/KG		
280-S06-030 AST06 NPS-S06-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3850 MG/KG		
		ARSENIC	4.9 MG/KG		
		BARIUM	150 MG/KG		
		BERYLLIUM	0.31 MG/KG	J	g
		CADMIUM	4.9 MG/KG	J	c,d
		CALCIUM	1870 MG/KG		
		CHROMIUM	69.9 MG/KG	J	c
		COPPER	162 MG/KG	J	d
		IRON	24100 MG/KG		
		LEAD	223 MG/KG	J	d,h
		MAGNESIUM	2290 MG/KG		
		MANGANESE	844 MG/KG		
		NICKEL	32.3 MG/KG		
		POTASSIUM	497 MG/KG	J	g
		SODIUM	431 MG/KG	J	g
		VANADIUM	17.1 MG/KG		
		ZINC	945 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-001 AST15 B06-20-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5540 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	42.4 MG/KG		
		BERYLLIUM	0.38 MG/KG	J	g
		CALCIUM	2780 MG/KG	J	d
		CHROMIUM	30.6 MG/KG		
		COBALT	4.8 MG/KG	J	g
		IRON	8610 MG/KG		
		LEAD	4.4 MG/KG	J	h
		MAGNESIUM	2230 MG/KG		
		MANGANESE	95.5 MG/KG		
		NICKEL	26.0 MG/KG		
		POTASSIUM	993 MG/KG	J	g
		SODIUM	126 MG/KG	J	g
		VANADIUM	23.5 MG/KG		
		ZINC	21.6 MG/KG	J	h
280-S06-002 AST15 B06-20-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8180 MG/KG		
		ARSENIC	2.8 MG/KG		
		BARIUM	65.8 MG/KG		
		BERYLLIUM	0.77 MG/KG	J	g
		CALCIUM	3270 MG/KG	J	d
		CHROMIUM	41.0 MG/KG		
		COBALT	8.1 MG/KG	J	g
		IRON	12600 MG/KG		
		LEAD	5.2 MG/KG	J	h
		MAGNESIUM	3970 MG/KG		
		MANGANESE	119 MG/KG		
		NICKEL	44.3 MG/KG		
		POTASSIUM	1370 MG/KG		
		SODIUM	203 MG/KG	J	g
		VANADIUM	30.5 MG/KG		
		ZINC	32.3 MG/KG	J	h
280-S06-003 AST16 B06-20-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4900 MG/KG		
		ANTIMONY	0.87 MG/KG	J	g
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	37.3 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	2590 MG/KG		
		CHROMIUM	24.1 MG/KG		
		COBALT	5.0 MG/KG	J	g
		COPPER	5.2 MG/KG	J	g
		IRON	7830 MG/KG		
		LEAD	2.6 MG/KG		
		MAGNESIUM	2030 MG/KG		
		MANGANESE	75.6 MG/KG		
		NICKEL	24.9 MG/KG		
		POTASSIUM	770 MG/KG	J	g
		SODIUM	126 MG/KG	J	g
		VANADIUM	18.3 MG/KG		
		ZINC	21.9 MG/KG		
280-S06-004 AST15 B06-20-10 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	29500 MG/KG		
		ARSENIC	12.7 MG/KG		
		BARIUM	139 MG/KG		
		CALCIUM	7950 MG/KG	J	d
		CHROMIUM	105 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-004 AST15 B06-20-10 0.00 - 0.00	CLP METALS (TOTAL)	COBALT	19.9 MG/KG		
		COPPER	61.3 MG/KG		
		IRON	42300 MG/KG		
		LEAD	42.2 MG/KG	J	h
		MAGNESIUM	13600 MG/KG		
		MANGANESE	481 MG/KG		
		MERCURY	0.69 MG/KG	J	f
		NICKEL	130 MG/KG		
		POTASSIUM	4560 MG/KG		
		SODIUM	4110 MG/KG		
		VANADIUM	77.8 MG/KG		
		ZINC	158 MG/KG	J	h
280-S06-005 AST15 B06-20-14 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8230 MG/KG		
		ARSENIC	2.3 MG/KG	J	g
		BARIUM	69.5 MG/KG		
		BERYLLIUM	0.28 MG/KG	J	g
		CALCIUM	2920 MG/KG	J	d
		CHROMIUM	37.9 MG/KG		
		COBALT	7.3 MG/KG	J	g
		IRON	13100 MG/KG		
		LEAD	5.2 MG/KG	J	h
		MAGNESIUM	3830 MG/KG		
		MANGANESE	136 MG/KG		
		NICKEL	38.7 MG/KG		
		POTASSIUM	1330 MG/KG		
		SODIUM	1150 MG/KG	J	g
		VANADIUM	26.0 MG/KG		
		ZINC	34.3 MG/KG	J	h
280-S06-006 AST15 B06-21-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4840 MG/KG		
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	33.8 MG/KG	J	g
		BERYLLIUM	0.51 MG/KG	J	g
		CALCIUM	3490 MG/KG	J	d
		CHROMIUM	23.7 MG/KG		
		COBALT	3.8 MG/KG	J	g
		IRON	7660 MG/KG		
		LEAD	2.1 MG/KG	J	h
		MAGNESIUM	2020 MG/KG		
		MANGANESE	85.7 MG/KG		
		NICKEL	21.2 MG/KG		
		POTASSIUM	825 MG/KG	J	g
		SODIUM	143 MG/KG	J	g
		VANADIUM	16.4 MG/KG		
		ZINC	19.0 MG/KG	J	h
280-S06-007 AST15 B06-21-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5980 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	45.1 MG/KG		
		BERYLLIUM	0.53 MG/KG	J	g
		CALCIUM	2570 MG/KG	J	d
		CHROMIUM	34.9 MG/KG		
		COBALT	5.2 MG/KG	J	g
		IRON	9350 MG/KG		
		LEAD	3.3 MG/KG	J	h
		MAGNESIUM	2560 MG/KG		
		MANGANESE	99.0 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-007 AST15 B06-21-2.5 0.00 - 0.00	CLP METALS (TOTAL)	NICKEL	29.1 MG/KG		
		POTASSIUM	919 MG/KG	J	g
		SODIUM	98.7 MG/KG	J	g
		VANADIUM	21.6 MG/KG		
		ZINC	21.8 MG/KG	J	h
280-S06-008 AST15 B06-21-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4830 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	36.5 MG/KG	J	g
		BERYLLIUM	0.52 MG/KG	J	g
		CALCIUM	2230 MG/KG	J	d
		CHROMIUM	29.3 MG/KG		
		COBALT	4.5 MG/KG	J	g
		IRON	8530 MG/KG		
		LEAD	2.4 MG/KG	J	h
		MAGNESIUM	2430 MG/KG		
		MANGANESE	95.8 MG/KG		
		NICKEL	27.2 MG/KG		
		POTASSIUM	891 MG/KG	J	g
		SODIUM	125 MG/KG	J	g
		VANADIUM	18.9 MG/KG		
		ZINC	20.6 MG/KG	J	h
280-S06-009 AST16 B06-21-10 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	34500 MG/KG		
		ANTIMONY	1.8 MG/KG	J	g
		ARSENIC	9.7 MG/KG		
		BARIUM	147 MG/KG		
		BERYLLIUM	2.8 MG/KG		
		CADMIUM	0.50 MG/KG	J	g
		CALCIUM	9350 MG/KG		
		CHROMIUM	102 MG/KG		
		COBALT	20.6 MG/KG		
		COPPER	66.5 MG/KG		
		IRON	44000 MG/KG		
		LEAD	38.3 MG/KG		
		MAGNESIUM	15700 MG/KG		
		MANGANESE	476 MG/KG		
		MERCURY	0.99 MG/KG		
		NICKEL	133 MG/KG		
		POTASSIUM	5380 MG/KG		
		SODIUM	3870 MG/KG		
		VANADIUM	87.2 MG/KG		
		ZINC	161 MG/KG		
280-S06-010 AST15 B06-21-14 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13500 MG/KG		
		ARSENIC	5.9 MG/KG		
		BARIUM	29.3 MG/KG	J	g
		BERYLLIUM	1.0 MG/KG	J	g
		CALCIUM	2880 MG/KG	J	d
		CHROMIUM	53.0 MG/KG		
		COBALT	9.0 MG/KG	J	g
		COPPER	40.9 MG/KG		
		IRON	19200 MG/KG		
		LEAD	4.8 MG/KG	J	h
		MAGNESIUM	6140 MG/KG		
		MANGANESE	195 MG/KG		
		NICKEL	40.6 MG/KG		
		POTASSIUM	2330 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-010 AST15 B06-21-14 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	2080 MG/KG		
		VANADIUM	39.8 MG/KG		
		ZINC	45.6 MG/KG	J	h
280-S06-011 AST15 B06-22-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4590 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	27.2 MG/KG	J	g
		BERYLLIUM	0.42 MG/KG	J	g
		CALCIUM	2280 MG/KG	J	d
		CHROMIUM	23.9 MG/KG		
		COBALT	4.7 MG/KG	J	g
		IRON	7900 MG/KG		
		LEAD	2.7 MG/KG	J	h
		MAGNESIUM	2100 MG/KG		
		MANGANESE	88.7 MG/KG		
		NICKEL	22.3 MG/KG		
		POTASSIUM	783 MG/KG	J	g
		SODIUM	87.7 MG/KG	J	g
		VANADIUM	18.4 MG/KG		
		ZINC	18.9 MG/KG	J	h
280-S06-013 AST15 B06-22-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	14500 MG/KG		
		ARSENIC	0.66 MG/KG	J	g
		BARIUM	36.2 MG/KG	J	g
		BERYLLIUM	1.5 MG/KG		
		CADMIUM	0.21 MG/KG	J	g
		CALCIUM	5010 MG/KG	J	d
		COBALT	16.8 MG/KG		
		COPPER	45.4 MG/KG		
		IRON	35900 MG/KG		
		LEAD	1.1 MG/KG	J	h
		MAGNESIUM	8590 MG/KG		
		MANGANESE	489 MG/KG		
		POTASSIUM	1370 MG/KG		
		SODIUM	268 MG/KG	J	g
		VANADIUM	95.8 MG/KG		
		ZINC	23.0 MG/KG	J	h
280-S06-014 AST15 B06-22-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4710 MG/KG		
		ARSENIC	1.3 MG/KG	J	g
		BARIUM	36.7 MG/KG	J	g
		BERYLLIUM	0.58 MG/KG	J	g
		CALCIUM	2200 MG/KG	J	d
		CHROMIUM	24.9 MG/KG		
		COBALT	4.1 MG/KG	J	g
		IRON	8110 MG/KG		
		LEAD	2.1 MG/KG	J	h
		MAGNESIUM	2140 MG/KG		
		MANGANESE	88.0 MG/KG		
		NICKEL	23.5 MG/KG		
		POTASSIUM	771 MG/KG	J	g
		SODIUM	122 MG/KG	J	g
		VANADIUM	18.5 MG/KG		
		ZINC	18.3 MG/KG	J	h
280-S06-015 AST15	CLP METALS (TOTAL)	ALUMINUM	30900 MG/KG		
		ARSENIC	8.9 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-015 AST15 B06-22-10 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	118 MG/KG		
		BERYLLIUM	2.4 MG/KG		
		CALCIUM	4880 MG/KG	J	d
		CHROMIUM	104 MG/KG		
		COBALT	22.0 MG/KG		
		COPPER	58.7 MG/KG		
		IRON	44200 MG/KG		
		LEAD	38.4 MG/KG	J	h
		MAGNESIUM	12900 MG/KG		
		MANGANESE	481 MG/KG		
		MERCURY	0.97 MG/KG	J	f
		NICKEL	113 MG/KG		
		POTASSIUM	5310 MG/KG		
		SODIUM	3050 MG/KG		
		VANADIUM	88.1 MG/KG		
		ZINC	151 MG/KG	J	h
280-S06-016 AST15 B06-22-14 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10900 MG/KG		
		ARSENIC	3.8 MG/KG		
		BARIUM	25.8 MG/KG	J	g
		CADMIUM	1.7 MG/KG		
		CALCIUM	2870 MG/KG	J	d
		CHROMIUM	41.7 MG/KG		
		COBALT	8.1 MG/KG	J	g
		IRON	16900 MG/KG		
		LEAD	3.7 MG/KG	J	h
		MAGNESIUM	5030 MG/KG		
		MANGANESE	192 MG/KG		
		NICKEL	37.0 MG/KG		
		POTASSIUM	1870 MG/KG		
		SODIUM	1680 MG/KG		
		VANADIUM	34.8 MG/KG		
		ZINC	48.0 MG/KG	J	h
280-S06-017 AST15 B06-23-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5350 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	37.9 MG/KG	J	g
		CALCIUM	5170 MG/KG	J	d
		CHROMIUM	31.4 MG/KG		
		COBALT	5.0 MG/KG	J	g
		IRON	9420 MG/KG		
		LEAD	3.6 MG/KG	J	h
		MAGNESIUM	2370 MG/KG		
		MANGANESE	107 MG/KG		
		NICKEL	28.8 MG/KG		
		POTASSIUM	748 MG/KG	J	g
		SODIUM	179 MG/KG	J	g
		VANADIUM	21.5 MG/KG		
		ZINC	34.4 MG/KG	J	h
280-S06-018 AST15 B06-23-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4950 MG/KG		
		ARSENIC	1.9 MG/KG	J	g
		BARIUM	40.7 MG/KG	J	g
		CALCIUM	2490 MG/KG	J	d
		CHROMIUM	30.9 MG/KG		
		COBALT	3.9 MG/KG	J	g
		IRON	8400 MG/KG		
		LEAD	2.5 MG/KG	J	h

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-018 AST15 B06-23-2.5 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM	2140 MG/KG		
		MANGANESE	104 MG/KG		
		NICKEL	23.7 MG/KG		
		POTASSIUM	786 MG/KG	J	g
		SODIUM	93.9 MG/KG	J	g
		VANADIUM	21.4 MG/KG		
		ZINC	19.8 MG/KG	J	h
280-S06-019 AST15 B06-23-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5800 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	50.4 MG/KG		
		CALCIUM	2840 MG/KG	J	d
		CHROMIUM	30.6 MG/KG		
		COBALT	4.5 MG/KG	J	g
		IRON	9570 MG/KG		
		LEAD	2.5 MG/KG	J	h
		MAGNESIUM	2290 MG/KG		
		MANGANESE	103 MG/KG		
		NICKEL	28.8 MG/KG		
		POTASSIUM	797 MG/KG	J	g
		SODIUM	150 MG/KG	J	g
		VANADIUM	23.5 MG/KG		
		ZINC	22.6 MG/KG	J	h
280-S06-021 AST15 B06-23-10 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	33800 MG/KG		
		ARSENIC	10.8 MG/KG		
		BARIUM	143 MG/KG		
		CALCIUM	6300 MG/KG	J	d
		CHROMIUM	110 MG/KG		
		COBALT	20.7 MG/KG		
		COPPER	59.3 MG/KG		
		IRON	42300 MG/KG		
		LEAD	38.0 MG/KG	J	h
		MAGNESIUM	13400 MG/KG		
		MANGANESE	456 MG/KG		
		MERCURY	0.79 MG/KG	J	f
		NICKEL	120 MG/KG		
		POTASSIUM	4820 MG/KG		
		SODIUM	3450 MG/KG		
		VANADIUM	83.0 MG/KG		
		ZINC	146 MG/KG	J	h
280-S06-022 AST15 B06-23-14 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13900 MG/KG		
		ARSENIC	4.4 MG/KG		
		BARIUM	33.1 MG/KG	J	g
		BERYLLIUM	0.39 MG/KG	J	g
		CALCIUM	2680 MG/KG	J	d
		CHROMIUM	49.3 MG/KG		
		COBALT	8.9 MG/KG	J	g
		COPPER	17.7 MG/KG		
		IRON	20800 MG/KG		
		LEAD	5.1 MG/KG	J	h
		MAGNESIUM	6640 MG/KG		
		MANGANESE	191 MG/KG		
		NICKEL	48.1 MG/KG		
		POTASSIUM	2300 MG/KG		
		SODIUM	2300 MG/KG		
		VANADIUM	40.9 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-022 AST15 B06-23-14 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	48.5 MG/KG	J	h
280-S06-023 AST29 M06-06-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5590 MG/KG		
		ANTIMONY	0.61 MG/KG	J	c,g
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	39.6 MG/KG	J	g
		CALCIUM	3440 MG/KG		
		CHROMIUM	34.6 MG/KG	J	h
		COBALT	4.4 MG/KG	J	g
		IRON	9410 MG/KG		
		LEAD	11.4 MG/KG		
		MAGNESIUM	2330 MG/KG		
		MANGANESE	115 MG/KG		
		NICKEL	28.8 MG/KG		
		POTASSIUM	903 MG/KG	J	g
		SODIUM	112 MG/KG	J	g
		VANADIUM	22.4 MG/KG		
		ZINC	26.8 MG/KG		
280-S06-024 AST29 M06-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5050 MG/KG		
		ANTIMONY	0.83 MG/KG	J	c,g
		ARSENIC	2.9 MG/KG		
		BARIUM	52.5 MG/KG		
		CADMIUM	0.78 MG/KG	J	g
		CALCIUM	4480 MG/KG		
		CHROMIUM	39.9 MG/KG	J	h
		COBALT	4.2 MG/KG	J	g
		IRON	9120 MG/KG		
		LEAD	18.3 MG/KG		
		MAGNESIUM	2110 MG/KG		
		MANGANESE	99.3 MG/KG		
		NICKEL	26.3 MG/KG		
		POTASSIUM	813 MG/KG	J	g
		SODIUM	122 MG/KG	J	g
		VANADIUM	24.0 MG/KG		
		ZINC	25.2 MG/KG		
280-S06-025 AST29 M06-06-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4350 MG/KG		
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	26.2 MG/KG	J	g
		CALCIUM	2520 MG/KG		
		CHROMIUM	35.3 MG/KG	J	h
		COBALT	3.8 MG/KG	J	g
		IRON	7770 MG/KG		
		LEAD	2.3 MG/KG		
		MAGNESIUM	1990 MG/KG		
		MANGANESE	90.9 MG/KG		
		NICKEL	23.3 MG/KG		
		POTASSIUM	842 MG/KG	J	g
		SODIUM	120 MG/KG	J	g
		VANADIUM	19.6 MG/KG		
		ZINC	19.6 MG/KG		
280-S06-026 AST29	CLP METALS (TOTAL)	ALUMINUM	32000 MG/KG		
		ARSENIC	12.1 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-026 AST29 M06-06-10 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	121 MG/KG		
		BERYLLIUM	3.9 MG/KG		
		CADMIUM	0.16 MG/KG	J	g
		CALCIUM	4200 MG/KG		
		CHROMIUM	123 MG/KG	J	h
		COBALT	18.6 MG/KG		
		COPPER	60.2 MG/KG		
		IRON	41900 MG/KG		
		LEAD	39.7 MG/KG		
		MAGNESIUM	12100 MG/KG		
		MANGANESE	404 MG/KG		
		MERCURY	0.97 MG/KG		
		NICKEL	106 MG/KG		
		POTASSIUM	4930 MG/KG		
		SODIUM	6730 MG/KG		
		VANADIUM	90.3 MG/KG		
		ZINC	151 MG/KG		
280-S06-027 AST29 M06-06-14 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10700 MG/KG		
		ANTIMONY	0.70 MG/KG	J	c,g
		ARSENIC	5.5 MG/KG		
		BARIUM	26.6 MG/KG	J	g
		CALCIUM	2670 MG/KG		
		CHROMIUM	45.8 MG/KG	J	h
		COBALT	7.7 MG/KG	J	g
		IRON	15500 MG/KG		
		LEAD	3.7 MG/KG		
		MAGNESIUM	4820 MG/KG		
		MANGANESE	163 MG/KG		
		NICKEL	33.0 MG/KG		
		POTASSIUM	1970 MG/KG		
		SODIUM	3140 MG/KG		
		VANADIUM	34.0 MG/KG		
		ZINC	33.0 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-059 AST25 CPT-S06-01 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	157 UG/L	J	g
		CALCIUM	985000 UG/L		
		MAGNESIUM	1730000 UG/L		
		MANGANESE	37000 UG/L		
		NICKEL	211 UG/L	J	g
		POTASSIUM	114000 UG/L		
		SODIUM	8570000 UG/L		
		ZINC	654 UG/L		
280-S06-060 AST25 CPT-S06-02 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	580 UG/L	J	g
		CALCIUM	1870000 UG/L		
		CHROMIUM	47.2 UG/L	J	g
		MAGNESIUM	635 UG/L	J	g
		MANGANESE	21.0 UG/L	J	g
		POTASSIUM	83000 UG/L		
		SODIUM	4020000 UG/L		
280-S06-061 AST30 CPT-S06-03 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	417000 UG/L		
		IRON	2390 UG/L		
		MAGNESIUM	1320000 UG/L		
		MANGANESE	1630 UG/L		
		NICKEL	186 UG/L	J	g
		POTASSIUM	365000 UG/L		
		SODIUM	10100000 UG/L		
		ZINC	378 UG/L		
280-S06-062 AST30 CPT-S06-04 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	681000 UG/L		
		IRON	2350 UG/L		
		MAGNESIUM	1890000 UG/L		
		MANGANESE	4330 UG/L		
		POTASSIUM	483000 UG/L		
		SODIUM	12400000 UG/L		
		THALLIUM	51.6 UG/L	J	g
		ZINC	1020 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-035 AST33 NPS-S07A-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7090 MG/KG	J	d
		ARSENIC	10.8 MG/KG		
		BARIUM	140 MG/KG	J	c,d
		CADMIUM	7.5 MG/KG		
		CALCIUM	5890 MG/KG		
		CHROMIUM	66.0 MG/KG	J	h
		COBALT	9.0 MG/KG	J	g
		COPPER	97.7 MG/KG		
		IRON	27900 MG/KG	J	d
		LEAD	1260 MG/KG	J	c,d
		MAGNESIUM	4910 MG/KG		
		MANGANESE	549 MG/KG	J	c
		MERCURY	1.1 MG/KG		
		NICKEL	55.2 MG/KG		
		POTASSIUM	1170 MG/KG	J	g
		VANADIUM	39.9 MG/KG		
		ZINC	913 MG/KG	J	c
280-S07A-036 AST06 NPS-S07A-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8510 MG/KG		
		ARSENIC	6.6 MG/KG		
		BARIUM	893 MG/KG		
		BERYLLIUM	0.80 MG/KG		
		CADMIUM	2.1 MG/KG	J	c,d
		CALCIUM	22400 MG/KG		
		CHROMIUM	50.5 MG/KG	J	c
		COBALT	11.2 MG/KG	J	g
		COPPER	297 MG/KG	J	d
		IRON	42200 MG/KG		
		LEAD	301 MG/KG	J	d,h
		MAGNESIUM	7980 MG/KG		
		MANGANESE	853 MG/KG		
		NICKEL	71.6 MG/KG		
		POTASSIUM	790 MG/KG	J	g
		SODIUM	1130 MG/KG	J	g
		VANADIUM	32.3 MG/KG		
		ZINC	1090 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-011 AST31 B07A-10-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13100 MG/KG		
		ANTIMONY	12.3 MG/KG	J	c,g
		ARSENIC	7.2 MG/KG		
		BARIUM	1120 MG/KG	J	c
		BERYLLIUM	4.3 MG/KG	J	h
		CADMIUM	33.4 MG/KG	J	c
		CALCIUM	6530 MG/KG		
		CHROMIUM	175 MG/KG	J	c,h
		COBALT	11.0 MG/KG	J	h
		COPPER	1170 MG/KG	J	g
		IRON	52000 MG/KG		
		LEAD	2180 MG/KG		
		MAGNESIUM	3480 MG/KG		
		MANGANESE	775 MG/KG		
		MERCURY	0.64 MG/KG	J	c,d
		MOLYBDENUM	6.4 MG/KG	J	h,g
		NICKEL	121 MG/KG	J	c
		POTASSIUM	1220 MG/KG		
		SILVER	10.1 MG/KG	J	c
		SODIUM	687 MG/KG	J	g
		VANADIUM	31.8 MG/KG		
		ZINC	2390 MG/KG		
280-S07A-012 AST31 B07A-10-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	24100 MG/KG		
		ARSENIC	10.9 MG/KG		
		BARIUM	74.9 MG/KG	J	c
		BERYLLIUM	2.9 MG/KG		
		CADMIUM	0.28 MG/KG	J	c,g
		CALCIUM	6780 MG/KG		
		CHROMIUM	74.8 MG/KG	J	c,h
		COBALT	16.0 MG/KG		
		COPPER	38.8 MG/KG		
		IRON	31600 MG/KG		
		LEAD	19.4 MG/KG		
		MAGNESIUM	9980 MG/KG		
		MANGANESE	304 MG/KG		
		MERCURY	0.49 MG/KG	J	c,d
		NICKEL	91.3 MG/KG	J	c
		POTASSIUM	3400 MG/KG		
		SODIUM	2900 MG/KG		
		VANADIUM	64.9 MG/KG		
		ZINC	99.4 MG/KG		
280-S07A-013 AST31 B07A-10-7 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	34900 MG/KG		
		ARSENIC	5.5 MG/KG		
		BARIUM	105 MG/KG	J	c
		BERYLLIUM	4.3 MG/KG		
		CALCIUM	4480 MG/KG		
		CHROMIUM	106 MG/KG	J	c,h
		COBALT	10.0 MG/KG	J	g
		COPPER	52.5 MG/KG		
		IRON	37300 MG/KG		
		LEAD	46.4 MG/KG		
		MAGNESIUM	13100 MG/KG		
		MANGANESE	248 MG/KG		
		MERCURY	0.55 MG/KG	J	c,d
		NICKEL	79.3 MG/KG	J	c
		POTASSIUM	5050 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-013 AST31 B07A-10-7 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	10500 MG/KG		
		VANADIUM	88.9 MG/KG		
		ZINC	113 MG/KG		
280-S07A-014 AST31 B07A-10-13 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	33100 MG/KG		
		ARSENIC	6.4 MG/KG		
		BARIUM	55.2 MG/KG	J	c,g
		BERYLLIUM	4.5 MG/KG		
		CALCIUM	4400 MG/KG		
		CHROMIUM	96.5 MG/KG	J	c,h
		COBALT	15.7 MG/KG	J	g
		COPPER	30.6 MG/KG		
		IRON	41500 MG/KG		
		LEAD	8.7 MG/KG		
		MAGNESIUM	14200 MG/KG		
		MANGANESE	418 MG/KG		
		NICKEL	86.4 MG/KG	J	c
		POTASSIUM	5710 MG/KG		
		SODIUM	13600 MG/KG		
		VANADIUM	81.6 MG/KG		
		ZINC	99.0 MG/KG		
280-S07A-015 AST31 B07A-11-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	27300 MG/KG		
		ARSENIC	4.4 MG/KG		
		BARIUM	209 MG/KG	J	c
		BERYLLIUM	3.2 MG/KG		
		CADMIUM	0.19 MG/KG	J	c,g
		CALCIUM	6720 MG/KG		
		CHROMIUM	67.7 MG/KG	J	c,h
		COBALT	14.6 MG/KG		
		COPPER	32.8 MG/KG		
		IRON	29300 MG/KG		
		LEAD	30.9 MG/KG		
		MAGNESIUM	5470 MG/KG		
		MANGANESE	441 MG/KG		
		NICKEL	43.0 MG/KG	J	c
		SODIUM	742 MG/KG	J	g
		VANADIUM	75.7 MG/KG		
		ZINC	84.6 MG/KG		
280-S07A-016 AST31 B07A-11-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	29600 MG/KG		
		ARSENIC	8.8 MG/KG		
		BARIUM	116 MG/KG	J	c
		BERYLLIUM	3.8 MG/KG		
		CALCIUM	6520 MG/KG		
		CHROMIUM	96.7 MG/KG	J	c,h
		COBALT	12.5 MG/KG	J	g
		COPPER	49.0 MG/KG		
		IRON	34500 MG/KG		
		LEAD	31.8 MG/KG		
		MAGNESIUM	9850 MG/KG		
		MANGANESE	226 MG/KG		
		MERCURY	0.71 MG/KG	J	c,d
		NICKEL	79.8 MG/KG	J	c
		POTASSIUM	4120 MG/KG		
		SODIUM	3350 MG/KG		
		VANADIUM	74.4 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-016 AST31 B07A-11-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	121 MG/KG		
280-S07A-017 AST31 B07A-11-7 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	33900 MG/KG		
		ARSENIC	12.0 MG/KG		
		BARIUM	84.1 MG/KG	J	c
		BERYLLIUM	5.1 MG/KG		
		CADMIUM	0.17 MG/KG	J	c,g
		CALCIUM	5080 MG/KG		
		CHROMIUM	96.9 MG/KG	J	c,h
		COBALT	18.5 MG/KG		
		COPPER	61.0 MG/KG		
		IRON	42200 MG/KG		
		LEAD	35.1 MG/KG		
		MAGNESIUM	11500 MG/KG		
		MANGANESE	755 MG/KG		
		MERCURY	0.53 MG/KG	J	c,d
		NICKEL	101 MG/KG	J	c
		POTASSIUM	4200 MG/KG		
		SODIUM	7970 MG/KG		
		VANADIUM	84.0 MG/KG		
		ZINC	145 MG/KG		
280-S07A-018 AST31 B07A-11-13 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	34700 MG/KG		
		ARSENIC	7.6 MG/KG		
		BARIUM	59.0 MG/KG	J	c,g
		BERYLLIUM	4.6 MG/KG		
		CALCIUM	4480 MG/KG		
		CHROMIUM	101 MG/KG	J	c,h
		COBALT	12.7 MG/KG	J	g
		COPPER	31.4 MG/KG		
		IRON	39800 MG/KG		
		LEAD	9.1 MG/KG		
		MAGNESIUM	14000 MG/KG		
		MANGANESE	351 MG/KG		
		NICKEL	81.7 MG/KG	J	c
		POTASSIUM	5780 MG/KG		
		SODIUM	13500 MG/KG		
		VANADIUM	82.9 MG/KG		
		ZINC	93.4 MG/KG		
280-S07A-019 AST31 B07A-12-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	34300 MG/KG		
		ANTIMONY	5.7 MG/KG	J	c,g
		BARIUM	854 MG/KG	J	c
		BERYLLIUM	8.7 MG/KG	J	h
		CADMIUM	0.25 MG/KG	J	c,g,h
		CALCIUM	27900 MG/KG		
		CHROMIUM	41.3 MG/KG	J	c,h
		COBALT	52.5 MG/KG		
		COPPER	43.9 MG/KG		
		IRON	66800 MG/KG		
		MAGNESIUM	18600 MG/KG		
		MANGANESE	1950 MG/KG		
		NICKEL	64.2 MG/KG	J	c
		POTASSIUM	3790 MG/KG		
		SODIUM	2460 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-019 AST31 B07A-12-0 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM	217 MG/KG		
		ZINC	114 MG/KG		
280-S07A-020 AST31 B07A-12-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	28700 MG/KG		
		ARSENIC	7.2 MG/KG		
		BARIUM	108 MG/KG	J	c
		BERYLLIUM	4.3 MG/KG		
		CALCIUM	10800 MG/KG		
		CHROMIUM	90.8 MG/KG	J	c,h
		COBALT	11.9 MG/KG	J	g
		COPPER	47.7 MG/KG		
		IRON	33700 MG/KG		
		LEAD	32.5 MG/KG		
		MAGNESIUM	9550 MG/KG		
		MANGANESE	232 MG/KG		
		MERCURY	0.51 MG/KG	J	c,d
		NICKEL	75.2 MG/KG	J	c
		POTASSIUM	4010 MG/KG		
		SODIUM	3210 MG/KG		
		VANADIUM	74.8 MG/KG		
		ZINC	99.3 MG/KG		
280-S07A-021 AST31 B07A-12-7 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	28700 MG/KG		
		ARSENIC	6.4 MG/KG		
		BARIUM	203 MG/KG	J	c
		BERYLLIUM	4.6 MG/KG		
		CADMIUM	0.61 MG/KG	J	c,g
		CALCIUM	4380 MG/KG		
		CHROMIUM	112 MG/KG	J	c,h
		COBALT	10.0 MG/KG	J	g
		COPPER	77.9 MG/KG		
		IRON	33700 MG/KG		
		LEAD	45.4 MG/KG		
		MAGNESIUM	10400 MG/KG		
		MANGANESE	239 MG/KG		
		MERCURY	0.60 MG/KG	J	c,d
		NICKEL	86.7 MG/KG	J	c
		POTASSIUM	4330 MG/KG		
		SODIUM	5810 MG/KG		
		VANADIUM	77.6 MG/KG		
		ZINC	159 MG/KG		
280-S07A-022 AST31 B07A-12-7DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	34500 MG/KG		
		ARSENIC	6.7 MG/KG		
		BARIUM	173 MG/KG	J	c
		BERYLLIUM	6.1 MG/KG		
		CADMIUM	0.43 MG/KG	J	c,g
		CALCIUM	7270 MG/KG		
		CHROMIUM	129 MG/KG	J	c,h
		COBALT	13.1 MG/KG	J	g
		COPPER	70.8 MG/KG		
		IRON	47100 MG/KG		
		LEAD	223 MG/KG		
		MAGNESIUM	12000 MG/KG		
		MANGANESE	318 MG/KG		
		MERCURY	0.70 MG/KG	J	c,d

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-022 AST31 B07A-12-7DUP 0.00 - 0.00	CLP METALS (TOTAL)	NICKEL	103 MG/KG	J	c
		POTASSIUM	5210 MG/KG		
		SODIUM	7860 MG/KG		
		VANADIUM	90.7 MG/KG		
		ZINC	175 MG/KG		
280-S07A-023 AST31 B07A-12-13 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	37500 MG/KG		
		ARSENIC	8.4 MG/KG		
		BARIUM	63.2 MG/KG	J	c,g
		BERYLLIUM	6.7 MG/KG		
		CALCIUM	5210 MG/KG		
		CHROMIUM	105 MG/KG	J	c,h
		COBALT	14.6 MG/KG	J	g
		COPPER	37.9 MG/KG		
		IRON	46700 MG/KG		
		LEAD	14.6 MG/KG		
		MAGNESIUM	16100 MG/KG		
		MANGANESE	430 MG/KG		
		NICKEL	86.4 MG/KG	J	c
		POTASSIUM	6110 MG/KG		
		SODIUM	15200 MG/KG		
		VANADIUM	92.1 MG/KG		
		ZINC	124 MG/KG		
280-S07A-116 AST52 M07A-08-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9540 MG/KG		
		ARSENIC	5.0 MG/KG		
		BARIUM	98.6 MG/KG		
		BERYLLIUM	1.2 MG/KG		
		CADMIUM	0.56 MG/KG	J	g
		CALCIUM	3290 MG/KG		
		CHROMIUM	14.9 MG/KG	J	h
		COBALT	7.5 MG/KG	J	g
		COPPER	22.8 MG/KG		
		IRON	25800 MG/KG		
		LEAD	50.8 MG/KG		
		MAGNESIUM	4200 MG/KG		
		MANGANESE	290 MG/KG		
		MERCURY	0.17 MG/KG	J	c
		NICKEL	18.6 MG/KG		
		POTASSIUM	1140 MG/KG		
		SODIUM	815 MG/KG	J	g,h
		VANADIUM	32.8 MG/KG		
		ZINC	94.8 MG/KG		
280-S07A-117 AST52 M07A-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	29300 MG/KG		
		ARSENIC	15.3 MG/KG		
		BARIUM	87.5 MG/KG		
		BERYLLIUM	2.4 MG/KG		
		CADMIUM	0.30 MG/KG	J	g
		CALCIUM	4220 MG/KG		
		CHROMIUM	96.9 MG/KG	J	h
		COBALT	17.0 MG/KG	J	g
		COPPER	55.2 MG/KG		
		IRON	43800 MG/KG		
		LEAD	27.4 MG/KG		
		MAGNESIUM	14000 MG/KG		
		MANGANESE	481 MG/KG		
		NICKEL	105 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-117 AST52 M07A-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	5430 MG/KG		
		SODIUM	13900 MG/KG	J	h
		VANADIUM	91.4 MG/KG		
		ZINC	116 MG/KG		
280-S07A-118 AST52 M07A-08-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	33000 MG/KG		
		ARSENIC	11.7 MG/KG		
		BARIUM	71.7 MG/KG	J	g
		BERYLLIUM	2.1 MG/KG		
		CALCIUM	4580 MG/KG		
		CHROMIUM	92.2 MG/KG	J	h
		COBALT	11.7 MG/KG	J	g
		COPPER	40.6 MG/KG		
		IRON	35900 MG/KG		
		LEAD	39.2 MG/KG		
		MAGNESIUM	11800 MG/KG		
		MANGANESE	237 MG/KG		
		NICKEL	73.5 MG/KG		
		POTASSIUM	4930 MG/KG		
		SODIUM	10800 MG/KG	J	h
		VANADIUM	83.0 MG/KG		
		ZINC	141 MG/KG		
280-S07A-119 AST52 M07A-09-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9320 MG/KG		
		ARSENIC	3.8 MG/KG		
		BARIUM	115 MG/KG		
		BERYLLIUM	1.2 MG/KG		
		CADMIUM	1.2 MG/KG		
		CALCIUM	3230 MG/KG		
		CHROMIUM	15.3 MG/KG	J	h
		COBALT	7.6 MG/KG	J	g
		COPPER	31.8 MG/KG		
		IRON	28300 MG/KG		
		LEAD	101 MG/KG		
		MAGNESIUM	4500 MG/KG		
		MANGANESE	635 MG/KG		
		MERCURY	0.31 MG/KG	J	c
		NICKEL	23.0 MG/KG		
		POTASSIUM	1320 MG/KG		
		SODIUM	589 MG/KG	J	g,h
		VANADIUM	35.2 MG/KG		
		ZINC	163 MG/KG		
280-S07A-120 AST53 M07A-09-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	16100 MG/KG		
		ARSENIC	7.5 MG/KG		
		BARIUM	216 MG/KG		
		BERYLLIUM	2.1 MG/KG		
		CADMIUM	0.27 MG/KG	J	g
		CALCIUM	5220 MG/KG		
		CHROMIUM	20.3 MG/KG		
		COBALT	11.8 MG/KG	J	g
		COPPER	36.6 MG/KG		
		IRON	36300 MG/KG		
		LEAD	11.0 MG/KG		
		MAGNESIUM	5630 MG/KG		
		MANGANESE	1130 MG/KG		
		MERCURY	0.25 MG/KG		
		NICKEL	23.1 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-120 AST53 M07A-09-2.5 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	2380 MG/KG		
		SODIUM	2610 MG/KG		
		VANADIUM	47.3 MG/KG		
		ZINC	104 MG/KG		
280-S07A-121 AST53 M07A-09-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	24800 MG/KG		
		ARSENIC	8.6 MG/KG		
		BARIUM	50.9 MG/KG	J	g
		BERYLLIUM	2.3 MG/KG		
		CALCIUM	3660 MG/KG		
		CHROMIUM	84.0 MG/KG		
		COBALT	14.6 MG/KG	J	g
		COPPER	55.2 MG/KG		
		IRON	37600 MG/KG		
		LEAD	12.0 MG/KG		
		MAGNESIUM	11200 MG/KG		
		MANGANESE	345 MG/KG		
		NICKEL	70.3 MG/KG		
		POTASSIUM	4260 MG/KG		
		SODIUM	8010 MG/KG		
		VANADIUM	69.4 MG/KG		
		ZINC	78.4 MG/KG		
280-S07A-122 AST53 M07A-09-5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	35400 MG/KG		
		ARSENIC	10.2 MG/KG		
		BARIUM	68.0 MG/KG	J	g
		BERYLLIUM	2.9 MG/KG		
		CADMIUM	0.24 MG/KG	J	g
		CALCIUM	4400 MG/KG		
		CHROMIUM	90.6 MG/KG		
		COBALT	19.1 MG/KG	J	g
		COPPER	44.3 MG/KG		
		IRON	49300 MG/KG		
		LEAD	16.3 MG/KG		
		MAGNESIUM	14000 MG/KG		
		MANGANESE	354 MG/KG		
		NICKEL	105 MG/KG		
		POTASSIUM	5650 MG/KG		
		SODIUM	14400 MG/KG		
		VANADIUM	90.3 MG/KG		
		ZINC	101 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-081 AST07 CPT-S07A-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	5.4 UG/L	J	g
		BARIUM	392 UG/L	J	g
		BERYLLIUM	2.3 UG/L	J	g
		CADMIUM	2.4 UG/L	J	g
		CALCIUM	698000 UG/L	J	h
		CHROMIUM	3.6 UG/L	J	g
		IRON	5530 UG/L	J	h
		MAGNESIUM	1010000 UG/L		
		MANGANESE	13700 UG/L	J	h
		NICKEL	45.6 UG/L	J	g
		POTASSIUM	70100 UG/L		
		SODIUM	5120000 UG/L		
		THALLIUM	14.8 UG/L	J	g
		ZINC	271 UG/L		
280-S07A-082 AST04 CPT-S07A-02 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	12.2 UG/L	J	g
		BARIUM	2350 UG/L		
		CALCIUM	598000 UG/L		
		IRON	9890 UG/L	J	c
		MAGNESIUM	793000 UG/L		
		MANGANESE	5220 UG/L		
		NICKEL	21.3 UG/L	J	g
		POTASSIUM	96400 UG/L	J	h
		SODIUM	3900000 UG/L		
280-S07A-083 AST07 CPT-S07A-03 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	10.2 UG/L	J	h
		BARIUM	2230 UG/L		
		BERYLLIUM	2.4 UG/L	J	g
		CALCIUM	544000 UG/L	J	h
		IRON	17300 UG/L	J	h
		MAGNESIUM	1470000 UG/L		
		MANGANESE	3570 UG/L	J	h
		NICKEL	35.7 UG/L	J	
		POTASSIUM	256000 UG/L		
		SELENIUM	6.5 UG/L	J	h,d
		SODIUM	8430000 UG/L		
		ZINC	622 UG/L		
280-S07A-084 AST07 CPT-S07A-03DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	2290 UG/L		
		BERYLLIUM	3.2 UG/L	J	g
		CADMIUM	1.6 UG/L	J	g
		CALCIUM	554000 UG/L	J	h
		COBALT	13.2 UG/L	J	c
		IRON	18900 UG/L	J	h
		MAGNESIUM	1490000 UG/L		
		MANGANESE	3640 UG/L	J	h
		POTASSIUM	276000 UG/L		
		SODIUM	8520000 UG/L		
		ZINC	625 UG/L		
280-S07A-085 AST04 CPT-S07A-04 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	1780 UG/L		
		CALCIUM	580000 UG/L		
		IRON	30700 UG/L	J	c
		MAGNESIUM	1240000 UG/L		
		MANGANESE	4170 UG/L		
		POTASSIUM	191000 UG/L	J	h
		SODIUM	6270000 UG/L		
		ZINC	1100 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-022 AST06 NPS-S09-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6130 MG/KG		
		ANTIMONY	1.3 MG/KG	J	c
		ARSENIC	2.9 MG/KG		
		BARIUM	208 MG/KG		
		BERYLLIUM	0.41 MG/KG	J	g
		CADMIUM	9.9 MG/KG	J	c,d
		CALCIUM	3600 MG/KG		
		CHROMIUM	87.7 MG/KG	J	c
		COPPER	87.1 MG/KG	J	d
		IRON	14500 MG/KG		
		LEAD	153 MG/KG	J	d,h
		MAGNESIUM	4230 MG/KG		
		MANGANESE	201 MG/KG		
		MOLYBDENUM	4.3 MG/KG	J	g
		NICKEL	83.4 MG/KG		
		POTASSIUM	690 MG/KG	J	g
		SODIUM	169 MG/KG	J	g
		VANADIUM	25.1 MG/KG		
		ZINC	351 MG/KG		
280-S09-023 AST06 NPS-S09-01DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5810 MG/KG		
		ANTIMONY	1.1 MG/KG	J	c
		ARSENIC	2.6 MG/KG		
		BARIUM	155 MG/KG		
		BERYLLIUM	0.44 MG/KG	J	g
		CADMIUM	6.5 MG/KG	J	c,d
		CALCIUM	4340 MG/KG		
		CHROMIUM	54.2 MG/KG	J	c
		COBALT	15.3 MG/KG		
		COPPER	108 MG/KG	J	d
		IRON	12200 MG/KG		
		LEAD	114 MG/KG	J	d,h
		MAGNESIUM	3690 MG/KG		
		MANGANESE	167 MG/KG		
		NICKEL	86.1 MG/KG		
		POTASSIUM	676 MG/KG	J	g
		SODIUM	150 MG/KG	J	g
		VANADIUM	23.6 MG/KG		
		ZINC	368 MG/KG		
280-S09-024 AST33 NPS-S09-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9290 MG/KG	J	d
		ANTIMONY	53.3 MG/KG	J	c
		ARSENIC	25.1 MG/KG		
		BARIUM	218 MG/KG	J	c,d
		BERYLLIUM	11.5 MG/KG		
		CADMIUM	158 MG/KG		
		CALCIUM	4790 MG/KG	J	g
		CHROMIUM	6470 MG/KG	J	h
		COBALT	71.1 MG/KG	J	g
		COPPER	683 MG/KG		
		IRON	210000 MG/KG	J	d
		LEAD	1370 MG/KG	J	c,d
		MAGNESIUM	3330 MG/KG	J	g
		MANGANESE	854 MG/KG	J	c
		MERCURY	1.5 MG/KG		
		MOLYBDENUM	353 MG/KG		
		NICKEL	1660 MG/KG		
		SILVER	11.4 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-024 AST33 NPS-S09-02 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM ZINC	64.0 MG/KG 2200 MG/KG	J J	g c
280-S09-025 AST33 NPS-S09-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM CADMIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE NICKEL SODIUM VANADIUM ZINC	3200 MG/KG 3.1 MG/KG 23.0 MG/KG 1.6 MG/KG 1880 MG/KG 84.9 MG/KG 7650 MG/KG 22.2 MG/KG 2080 MG/KG 104 MG/KG 31.7 MG/KG 1610 MG/KG 16.5 MG/KG 138 MG/KG	J J J J J J J	d c,d h d c,d c c

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-001 AST50 M09-05-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4410 MG/KG		
		ARSENIC	0.84 MG/KG	J	g
		BARIUM	38.4 MG/KG	J	g
		BERYLLIUM	0.22 MG/KG	J	g
		CALCIUM	4340 MG/KG		
		CHROMIUM	30.2 MG/KG	J	c,h
		COBALT	5.5 MG/KG	J	g
		COPPER	5.0 MG/KG	J	g
		IRON	8720 MG/KG		
		LEAD	1.3 MG/KG		
		MAGNESIUM	2060 MG/KG		
		MANGANESE	100 MG/KG		
		NICKEL	19.1 MG/KG		
		POTASSIUM	619 MG/KG	J	g
		SODIUM	254 MG/KG	J	g
		VANADIUM	24.3 MG/KG		
		ZINC	17.8 MG/KG		
280-S09-002 AST50 M09-05-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4490 MG/KG		
		BARIUM	38.8 MG/KG	J	g
		CALCIUM	2940 MG/KG		
		CHROMIUM	25.7 MG/KG	J	c,h
		COBALT	5.0 MG/KG	J	g
		COPPER	4.7 MG/KG	J	g
		IRON	8650 MG/KG		
		LEAD	1.4 MG/KG		
		MAGNESIUM	2090 MG/KG		
		MANGANESE	99.2 MG/KG		
		NICKEL	22.9 MG/KG		
		POTASSIUM	570 MG/KG	J	g
		SODIUM	264 MG/KG	J	g
		VANADIUM	23.6 MG/KG		
		ZINC	17.8 MG/KG		
280-S09-003 AST50 M09-05-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4550 MG/KG		
		ANTIMONY	0.89 MG/KG	J	c,g
		ARSENIC	0.92 MG/KG	J	g
		BARIUM	50.7 MG/KG		
		CALCIUM	4700 MG/KG		
		CHROMIUM	25.8 MG/KG	J	c,h
		COBALT	5.2 MG/KG	J	g
		COPPER	5.4 MG/KG	J	g
		IRON	8760 MG/KG		
		LEAD	2.6 MG/KG		
		MAGNESIUM	2120 MG/KG		
		MANGANESE	107 MG/KG		
		NICKEL	20.6 MG/KG		
		POTASSIUM	872 MG/KG	J	g
		SODIUM	318 MG/KG	J	g
		VANADIUM	21.6 MG/KG		
		ZINC	19.5 MG/KG		
280-S09-004 AST36 CPTS09-05-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4750 MG/KG	J	d
		BARIUM	146 MG/KG		
		BERYLLIUM	0.70 MG/KG	J	g
		CALCIUM	10400 MG/KG		
		CHROMIUM	47.0 MG/KG		
		COPPER	7.4 MG/KG		

Validity (Qual) : J - Estimated concentration

pplicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-004 AST36 CPTS09-05-0 0.00 - 0.00	CLP METALS (TOTAL)	IRON	8310 MG/KG		
		LEAD	3.4 MG/KG		
		MAGNESIUM	2240 MG/KG		
		MANGANESE	102 MG/KG		
		NICKEL	28.5 MG/KG		
		POTASSIUM	833 MG/KG	J	g
		SODIUM	175 MG/KG	J	g
		VANADIUM	20.8 MG/KG		
		ZINC	21.0 MG/KG		
280-S09-005 AST36 CPTS09-05-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4390 MG/KG	J	d
		BARIUM	28.0 MG/KG	J	g
		BERYLLIUM	0.63 MG/KG	J	g
		CALCIUM	2430 MG/KG		
		CHROMIUM	26.6 MG/KG		
		COPPER	6.5 MG/KG		
		IRON	7570 MG/KG		
		LEAD	2.4 MG/KG		
		MAGNESIUM	2310 MG/KG		
		MANGANESE	87.1 MG/KG		
		NICKEL	23.4 MG/KG		
		POTASSIUM	921 MG/KG	J	g
		SODIUM	95.2 MG/KG	J	g
		VANADIUM	18.7 MG/KG		
		ZINC	20.4 MG/KG		
280-S09-006 AST36 CPTS09-05-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13900 MG/KG	J	d
		ARSENIC	4.0 MG/KG		
		BARIUM	61.9 MG/KG		
		BERYLLIUM	1.5 MG/KG		
		CALCIUM	3390 MG/KG		
		CHROMIUM	56.4 MG/KG		
		COBALT	10.7 MG/KG	J	g
		COPPER	16.0 MG/KG		
		IRON	21500 MG/KG		
		LEAD	10.4 MG/KG		
		MAGNESIUM	5100 MG/KG		
		MANGANESE	182 MG/KG		
		NICKEL	50.8 MG/KG		
		POTASSIUM	2130 MG/KG		
		SODIUM	297 MG/KG	J	g
		VANADIUM	42.3 MG/KG		
		ZINC	51.3 MG/KG		
280-S09-007 AST36 CPTS09-06-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4200 MG/KG	J	d
		BARIUM	69.6 MG/KG		
		BERYLLIUM	0.77 MG/KG	J	g
		CALCIUM	8100 MG/KG		
		CHROMIUM	29.8 MG/KG		
		IRON	7220 MG/KG		
		LEAD	2.4 MG/KG		
		MAGNESIUM	1950 MG/KG		
		MANGANESE	104 MG/KG		
		NICKEL	19.6 MG/KG		
		POTASSIUM	598 MG/KG	J	g
		SODIUM	202 MG/KG	J	g
		VANADIUM	19.3 MG/KG		
		ZINC	17.9 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-008 AST36 CPTS09-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3630 MG/KG	J	d
		BARIUM	21.6 MG/KG	J	g
		BERYLLIUM	0.39 MG/KG	J	g
		CALCIUM	1920 MG/KG		
		CHROMIUM	23.4 MG/KG		
		IRON	6410 MG/KG		
		LEAD	2.1 MG/KG		
		MAGNESIUM	1840 MG/KG		
		MANGANESE	75.4 MG/KG		
		NICKEL	17.0 MG/KG		
		POTASSIUM	571 MG/KG	J	g
		SODIUM	78.4 MG/KG	J	g
		VANADIUM	15.3 MG/KG		
		ZINC	16.2 MG/KG		
280-S09-009 AST36 CPTS09-06-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3620 MG/KG	J	d
		BARIUM	19.7 MG/KG	J	g
		BERYLLIUM	0.78 MG/KG	J	g
		CALCIUM	2160 MG/KG		
		CHROMIUM	32.0 MG/KG		
		IRON	7260 MG/KG		
		LEAD	2.6 MG/KG		
		MAGNESIUM	1740 MG/KG		
		MANGANESE	77.4 MG/KG		
		NICKEL	18.3 MG/KG		
		POTASSIUM	625 MG/KG	J	g
		SODIUM	68.0 MG/KG	J	g
		VANADIUM	20.9 MG/KG		
		ZINC	16.6 MG/KG		
280-S09-010 AST36 CPTS09-07-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7680 MG/KG	J	d
		BARIUM	61.8 MG/KG	J	g
		BERYLLIUM	0.87 MG/KG	J	g
		CALCIUM	5120 MG/KG		
		CHROMIUM	110 MG/KG		
		COBALT	11.3 MG/KG	J	g
		COPPER	11.2 MG/KG	J	g
		IRON	14500 MG/KG		
		LEAD	5.8 MG/KG		
		MAGNESIUM	4170 MG/KG		
		MANGANESE	163 MG/KG		
		NICKEL	46.1 MG/KG		
		POTASSIUM	2170 MG/KG	J	g
		SODIUM	236 MG/KG	J	g
		VANADIUM	35.4 MG/KG		
		ZINC	39.9 MG/KG		
280-S09-011 AST36 CPTS09-07-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3300 MG/KG	J	d
		BARIUM	17.8 MG/KG	J	g
		BERYLLIUM	0.40 MG/KG	J	g
		CALCIUM	1350 MG/KG		
		CHROMIUM	178 MG/KG		
		COPPER	7.3 MG/KG		
		IRON	6440 MG/KG		
		LEAD	4.3 MG/KG		
		MAGNESIUM	1940 MG/KG		
		MANGANESE	76.5 MG/KG		
		NICKEL	19.6 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-011 AST36 CPTS09-07-2.5 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM SODIUM VANADIUM ZINC	918 MG/KG 167 MG/KG 15.0 MG/KG 19.2 MG/KG	J J	g g
280-S09-012 AST36 CPTS09-07-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CALCIUM CHROMIUM COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	3680 MG/KG 22.9 MG/KG 0.45 MG/KG 2780 MG/KG 44.3 MG/KG 6.6 MG/KG 6710 MG/KG 2.6 MG/KG 1880 MG/KG 75.9 MG/KG 21.1 MG/KG 567 MG/KG 126 MG/KG 16.5 MG/KG 17.7 MG/KG	J J J J J 	d g g g g
280-S09-013 AST36 CPTS09-08-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	4210 MG/KG 153 MG/KG 0.75 MG/KG 0.49 MG/KG 5070 MG/KG 74.7 MG/KG 8.1 MG/KG 7240 MG/KG 4.5 MG/KG 1920 MG/KG 78.2 MG/KG 21.4 MG/KG 608 MG/KG 82.7 MG/KG 22.1 MG/KG 21.3 MG/KG	J J J J J 	d g g g g
280-S09-014 AST36 CPTS09-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CALCIUM CHROMIUM COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	4030 MG/KG 39.4 MG/KG 1.2 MG/KG 2470 MG/KG 25.4 MG/KG 6.5 MG/KG 9150 MG/KG 3.0 MG/KG 2020 MG/KG 88.1 MG/KG 23.9 MG/KG 778 MG/KG 91.5 MG/KG 15.8 MG/KG 25.3 MG/KG	J J J J 	d g g g
280-S09-015 AST37 CPTS09-08-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM	4580 MG/KG 1.3 MG/KG 46.9 MG/KG 0.91 MG/KG	 J J	 g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-015 AST37 CPTS09-08-5.0 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM	0.29 MG/KG	J	g
		CALCIUM	6370 MG/KG	J	d
		CHROMIUM	34.3 MG/KG	J	d
		COPPER	6.1 MG/KG		
		IRON	7740 MG/KG		
		LEAD	22.2 MG/KG	J	c,d
		MAGNESIUM	2120 MG/KG		
		MANGANESE	89.2 MG/KG		
		NICKEL	23.3 MG/KG		
		POTASSIUM	783 MG/KG	J	g
		SODIUM	143 MG/KG	J	g
		VANADIUM	18.8 MG/KG		
		ZINC	41.2 MG/KG	J	d
280-S09-016 AST36 CPTS09-09-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3770 MG/KG	J	d
		BARIUM	45.1 MG/KG		
		BERYLLIUM	0.36 MG/KG	J	g
		CALCIUM	3380 MG/KG		
		CHROMIUM	30.4 MG/KG		
		COPPER	6.9 MG/KG		
		IRON	6960 MG/KG		
		LEAD	3.0 MG/KG		
		MAGNESIUM	2000 MG/KG		
		MANGANESE	83.5 MG/KG		
		NICKEL	20.3 MG/KG		
		POTASSIUM	670 MG/KG	J	g
		SODIUM	96.1 MG/KG	J	g
		VANADIUM	16.3 MG/KG		
		ZINC	18.5 MG/KG		
280-S09-017 AST36 CPTS09-09-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3910 MG/KG	J	d
		BARIUM	84.1 MG/KG		
		BERYLLIUM	0.55 MG/KG	J	g
		CALCIUM	3140 MG/KG		
		CHROMIUM	29.8 MG/KG		
		IRON	6960 MG/KG		
		LEAD	2.3 MG/KG		
		MAGNESIUM	1950 MG/KG		
		MANGANESE	79.7 MG/KG		
		NICKEL	18.4 MG/KG		
		POTASSIUM	598 MG/KG	J	g
		SODIUM	93.3 MG/KG	J	g
		VANADIUM	18.3 MG/KG		
		ZINC	17.3 MG/KG		
280-S09-018 AST36 CPTS09-09-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3450 MG/KG	J	d
		BARIUM	63.0 MG/KG		
		BERYLLIUM	0.37 MG/KG	J	g
		CALCIUM	2330 MG/KG		
		CHROMIUM	23.5 MG/KG		
		COPPER	6.6 MG/KG		
		IRON	6570 MG/KG		
		LEAD	2.5 MG/KG		
		MAGNESIUM	1950 MG/KG		
		MANGANESE	75.3 MG/KG		
		NICKEL	19.9 MG/KG		
		POTASSIUM	618 MG/KG	J	g
		SODIUM	68.7 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-018 AST36 CPTS09-09-5.0 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM ZINC	16.0 MG/KG 17.4 MG/KG		
280-S09-019 AST37 CPTS09-10-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	5270 MG/KG 0.85 MG/KG 57.8 MG/KG 0.92 MG/KG 0.11 MG/KG 7160 MG/KG 56.0 MG/KG 5.7 MG/KG 7930 MG/KG 6.8 MG/KG 2190 MG/KG 101 MG/KG 27.5 MG/KG 845 MG/KG 162 MG/KG 23.6 MG/KG 20.3 MG/KG	 J J J J J J J J J	 g g g d d c,d g g d
280-S09-020 AST37 CPTS09-10-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ANTIMONY ARSENIC BARIUM BERYLLIUM CALCIUM CHROMIUM COPPER IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	4300 MG/KG 0.47 MG/KG 1.6 MG/KG 266 MG/KG 0.83 MG/KG 16800 MG/KG 28.5 MG/KG 4.1 MG/KG 6700 MG/KG 1930 MG/KG 94.7 MG/KG 17.4 MG/KG 594 MG/KG 270 MG/KG 19.1 MG/KG 15.7 MG/KG	 J J J J J J J J J	 c g g d d g g g d
280-S09-021 AST37 CPTS09-10-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CALCIUM CHROMIUM COPPER IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	4580 MG/KG 45.9 MG/KG 0.75 MG/KG 4440 MG/KG 34.6 MG/KG 4.6 MG/KG 7360 MG/KG 2060 MG/KG 88.2 MG/KG 21.1 MG/KG 663 MG/KG 248 MG/KG 23.1 MG/KG 16.4 MG/KG	 J J J J J J J	 g d d g g g d
280-S09-167 AST50 M09-06-0	CLP METALS (TOTAL)	ALUMINUM BARIUM CALCIUM	4870 MG/KG 25.0 MG/KG 9360 MG/KG	 J 	 g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-167 AST50 M09-06-0 0.00 - 0.00	CLP METALS (TOTAL)	CHROMIUM	27.9 MG/KG	J	c,h
		COBALT	5.2 MG/KG	J	g
		COPPER	5.2 MG/KG	J	g
		IRON	9020 MG/KG		
		LEAD	1.3 MG/KG		
		MAGNESIUM	2240 MG/KG		
		MANGANESE	104 MG/KG		
		NICKEL	21.8 MG/KG		
		POTASSIUM	618 MG/KG	J	g
		SODIUM	341 MG/KG	J	g
		VANADIUM	24.1 MG/KG		
		ZINC	18.3 MG/KG		
280-S09-168 AST50 M09-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4050 MG/KG		
		ARSENIC	1.3 MG/KG	J	g
		BARIUM	28.1 MG/KG	J	g
		CALCIUM	14000 MG/KG		
		CHROMIUM	30.0 MG/KG	J	c,h
		COBALT	4.1 MG/KG	J	g
		COPPER	4.3 MG/KG	J	g
		IRON	7560 MG/KG		
		LEAD	1.6 MG/KG		
		MAGNESIUM	1920 MG/KG		
		MANGANESE	105 MG/KG		
		NICKEL	18.5 MG/KG		
		POTASSIUM	568 MG/KG	J	g
		SODIUM	413 MG/KG	J	g
		VANADIUM	20.4 MG/KG		
		ZINC	17.3 MG/KG		
280-S09-169 AST50 M09-06-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5330 MG/KG		
		ANTIMONY	1.2 MG/KG	J	c,g
		ARSENIC	2.2 MG/KG	J	g
		BARIUM	45.9 MG/KG		
		CALCIUM	3920 MG/KG		
		CHROMIUM	28.4 MG/KG	J	c,h
		COBALT	5.7 MG/KG	J	g
		COPPER	6.2 MG/KG		
		IRON	11300 MG/KG		
		LEAD	2.8 MG/KG		
		MAGNESIUM	2230 MG/KG		
		MANGANESE	135 MG/KG		
		NICKEL	21.7 MG/KG		
		POTASSIUM	713 MG/KG	J	g
		SODIUM	373 MG/KG	J	g
		VANADIUM	25.1 MG/KG		
		ZINC	27.5 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-053 AST09 CPT-S09-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	2.9 UG/L	J	g
		BARIUM	98.4 UG/L	J	g
		CALCIUM	56300 UG/L		
		COBALT	13.6 UG/L	J	g
		COPPER	15.1 UG/L	J	g
		IRON	1430 UG/L		
		MAGNESIUM	114000 UG/L		
		MANGANESE	1100 UG/L		
		NICKEL	107 UG/L		
		POTASSIUM	72400 UG/L		
		SODIUM	2060000 UG/L		
		ZINC	658 UG/L		
280-S09-054 AST09 CPT-S09-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	299 UG/L		
		ANTIMONY	8.7 UG/L	J	g
		ARSENIC	5.5 UG/L	J	g
		BARIUM	30.1 UG/L	J	g
		CALCIUM	5160 UG/L		
		CHROMIUM	2.8 UG/L	J	g
		COBALT	48.2 UG/L	J	g
		COPPER	19.9 UG/L	J	g
		IRON	1150 UG/L		
		MAGNESIUM	3520 UG/L	J	g
		MANGANESE	34.1 UG/L		
		NICKEL	140 UG/L		
		POTASSIUM	25200 UG/L		
		SODIUM	402000 UG/L		
		VANADIUM	40.0 UG/L	J	g
280-S09-055 AST09 CPT-S09-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	17400 UG/L		
		ANTIMONY	6.9 UG/L	J	g
		ARSENIC	9.2 UG/L	J	g
		BARIUM	167 UG/L	J	g
		CHROMIUM	51.5 UG/L		
		COBALT	32.6 UG/L	J	g
		LEAD	6.0 UG/L		
		SODIUM	385000 UG/L		
		VANADIUM	37.0 UG/L	J	g
		ZINC	108 UG/L		
280-S09-056 AST33 CPT-S09-04 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8210 UG/L		
		BARIUM	126 UG/L	J	g
		CALCIUM	10400 UG/L		
		IRON	12200 UG/L	J	c,d
		MAGNESIUM	10700 UG/L		
		MANGANESE	399 UG/L		
		MERCURY	0.33 UG/L		
		POTASSIUM	18800 UG/L	J	h
		SODIUM	546000 UG/L		
		ZINC	259 UG/L		
280-S09-057 AST33 CPT-S09-05(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	4.7 UG/L	J	g
		BARIUM	34.2 UG/L	J	g
		CALCIUM	66100 UG/L		
		IRON	561 UG/L	J	c,d
		MAGNESIUM	158000 UG/L		
		MANGANESE	794 UG/L		
		POTASSIUM	79900 UG/L	J	h

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-057 AST33 CPT-S09-05(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	1980000 UG/L		
280-S09-058 AST30 CPT-S09-05(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	285 UG/L		
		ANTIMONY	37.5 UG/L	J	g
		ARSENIC	3.0 UG/L	J	g
		BARIUM	96.4 UG/L	J	g
		CADMIUM	13.5 UG/L		
		CALCIUM	38000 UG/L		
		COBALT	9.8 UG/L	J	g
		COPPER	5.4 UG/L	J	g
		IRON	583 UG/L		
		MAGNESIUM	63700 UG/L		
		MANGANESE	683 UG/L		
		NICKEL	106 UG/L		
		POTASSIUM	31800 UG/L		
		SODIUM	1800000 UG/L		
		ZINC	116 UG/L		
280-S09-059 AST35 CPT-S09-06(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	377 UG/L	J	d
		BERYLLIUM	2.8 UG/L	J	c,g
		CALCIUM	102000 UG/L		
		IRON	17700 UG/L	J	h
		MAGNESIUM	72500 UG/L		
		MANGANESE	1640 UG/L		
		NICKEL	31.7 UG/L	J	c,g
		POTASSIUM	88200 UG/L		
		SODIUM	873000 UG/L		
		VANADIUM	10.7 UG/L	J	c,g
		ZINC	12.7 UG/L	J	g
280-S09-061 AST36 CPT-S09-07(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	33.0 UG/L		
		BARIUM	267 UG/L		
		BERYLLIUM	4.3 UG/L	J	g
		CALCIUM	92900 UG/L		
		CHROMIUM	24.5 UG/L		
		COPPER	5.7 UG/L	J	g
		IRON	12200 UG/L		
		MAGNESIUM	38700 UG/L		
		MANGANESE	2220 UG/L		
		NICKEL	157 UG/L		
		POTASSIUM	37100 UG/L		
		SODIUM	797000 UG/L		
		ZINC	144 UG/L		
280-S09-062 AST36 CPT-S09-07(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	19.2 UG/L	J	g
		CALCIUM	4540 UG/L	J	g
		COPPER	6.8 UG/L	J	g
		IRON	86.8 UG/L	J	g
		MAGNESIUM	5900 UG/L		
		MANGANESE	49.6 UG/L		
		MOLYBDENUM	48.2 UG/L	J	g
		NICKEL	117 UG/L		
		POTASSIUM	19200 UG/L		
		SODIUM	496000 UG/L		
		VANADIUM	13.2 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-062 AST36 CPT-S09-07(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	6.7 UG/L	J	g
280-S09-063 AST37 CPT-S09-08(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	32.2 UG/L 280 UG/L 2.9 UG/L 99000 UG/L 9620 UG/L 24600 UG/L 2150 UG/L 28000 UG/L 22500 UG/L	 J 	 g
280-S09-064 AST36 CPT-S09-08(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM COPPER IRON MAGNESIUM MANGANESE MOLYBDENUM NICKEL POTASSIUM SODIUM ZINC	346 UG/L 72700 UG/L 6.9 UG/L 735 UG/L 84000 UG/L 2250 UG/L 37.7 UG/L 22.6 UG/L 29400 UG/L 208000 UG/L 9.7 UG/L	 J J J J	 g g g g
280-S09-065 AST35 CPT-S09-09(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM ZINC	27.8 UG/L 785 UG/L 4.3 UG/L 104000 UG/L 11300 UG/L 36100 UG/L 767 UG/L 29000 UG/L 106000 UG/L 20.9 UG/L	 J J J 	 d c,g h
280-S09-066 AST37 CPT-S09-09(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM CALCIUM COBALT IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM	338 UG/L 37.6 UG/L 3540 UG/L 25.6 UG/L 639 UG/L 4380 UG/L 422 UG/L 64.9 UG/L 4580 UG/L 454000 UG/L 9.5 UG/L	 J J J J J J	 g g g g g g
280-S09-067 AST35 CPT-S09-010(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM CHROMIUM COPPER IRON LEAD	20.2 UG/L 675 UG/L 2.8 UG/L 93900 UG/L 206 UG/L 28.1 UG/L 3770 UG/L 28.9 UG/L	 J J J J J	 d c,g d h d

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-067 AST35 CPT-S09-010(SHALL) 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM	31400 UG/L		
		MANGANESE	1070 UG/L		
		NICKEL	39.7 UG/L	J	c,g
		POTASSIUM	61400 UG/L		
		SODIUM	93000 UG/L		
		VANADIUM	102 UG/L	J	c
		ZINC	42.6 UG/L		
280-S09-068 AST37 CPT-S09-10(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	88.2 UG/L	J	g
		ARSENIC	4.2 UG/L	J	g
		BARIUM	55.8 UG/L	J	g
		CADMIUM	0.41 UG/L	J	g
		CALCIUM	5140 UG/L		
		COBALT	41.6 UG/L	J	g
		IRON	201 UG/L		
		MAGNESIUM	5740 UG/L		
		MANGANESE	153 UG/L		
		NICKEL	115 UG/L		
		POTASSIUM	15700 UG/L		
		SODIUM	534000 UG/L		
280-S09-093 AST33 CPT-S09-11(SHALLOW 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	4.8 UG/L	J	g
		BARIUM	27.7 UG/L	J	g
		CALCIUM	67100 UG/L		
		IRON	2270 UG/L	J	c,d
		MAGNESIUM	175000 UG/L		
		MANGANESE	1130 UG/L		
		POTASSIUM	86100 UG/L	J	h
		SODIUM	2380000 UG/L		
280-S09-094 AST33 CPT-S09-11(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	74.4 UG/L	J	g
		CALCIUM	23400 UG/L		
		MAGNESIUM	32600 UG/L		
		MANGANESE	726 UG/L		
		POTASSIUM	32100 UG/L	J	h
		SODIUM	1250000 UG/L		
280-S09-095 AST33 CPT-S09-12(SHALLOW 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	11000 UG/L		
		ARSENIC	12.3 UG/L		
		BARIUM	74.9 UG/L	J	g
		CALCIUM	19500 UG/L		
		IRON	15000 UG/L	J	c,d
		MAGNESIUM	9610 UG/L		
		MANGANESE	220 UG/L		
		POTASSIUM	15500 UG/L	J	h
		SODIUM	151000 UG/L		
		VANADIUM	47.2 UG/L	J	g
		ZINC	84.0 UG/L		
280-S09-096 AST33 CPT-S09-12(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	1520 UG/L		
		ARSENIC	6.3 UG/L	J	g
		BARIUM	46.4 UG/L	J	g
		IRON	2510 UG/L	J	c,d
		MAGNESIUM	3540 UG/L	J	g
		MANGANESE	63.3 UG/L		
		POTASSIUM	10700 UG/L	J	h
		SODIUM	416000 UG/L		
		VANADIUM	39.9 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 10
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S10B-094 AST06 NPS-S10B-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4170 MG/KG		
		ARSENIC	3.6 MG/KG		
		BARIUM	35.0 MG/KG	J	g
		CADMIUM	2.6 MG/KG	J	c,d
		CALCIUM	3180 MG/KG		
		CHROMIUM	95.1 MG/KG	J	c
		COPPER	14.3 MG/KG	J	d
		IRON	10300 MG/KG		
		LEAD	39.5 MG/KG	J	d,h
		MAGNESIUM	3250 MG/KG		
		MANGANESE	257 MG/KG		
		NICKEL	55.2 MG/KG		
		POTASSIUM	594 MG/KG	J	g
		SODIUM	2270 MG/KG		
		VANADIUM	18.1 MG/KG		
		ZINC	212 MG/KG		
280-S10B-095 AST06 NPS-S10B-01DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	2670 MG/KG		
		ARSENIC	3.4 MG/KG		
		BARIUM	84.2 MG/KG		
		CADMIUM	1.7 MG/KG	J	c,d
		CALCIUM	1460 MG/KG		
		CHROMIUM	93.2 MG/KG	J	c
		COPPER	22.2 MG/KG	J	d
		IRON	8790 MG/KG		
		LEAD	18.4 MG/KG	J	d,h
		MAGNESIUM	2330 MG/KG		
		MANGANESE	112 MG/KG		
		NICKEL	41.1 MG/KG		
		POTASSIUM	599 MG/KG	J	g
		SODIUM	1330 MG/KG		
		THALLIUM	0.49 MG/KG		
		VANADIUM	14.2 MG/KG		
		ZINC	191 MG/KG		
280-S10B-096 AST06 NPS-S10B-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5180 MG/KG		
		ANTIMONY	0.94 MG/KG	J	c
		ARSENIC	3.7 MG/KG		
		BARIUM	80.5 MG/KG		
		BERYLLIUM	0.36 MG/KG	J	g
		CADMIUM	6.4 MG/KG	J	c,d
		CALCIUM	5050 MG/KG		
		CHROMIUM	45.1 MG/KG	J	c
		COPPER	44.3 MG/KG	J	d
		IRON	12600 MG/KG		
		LEAD	70.6 MG/KG	J	d,h
		MAGNESIUM	4040 MG/KG		
		MANGANESE	242 MG/KG		
		MOLYBDENUM	7.4 MG/KG	J	g
		NICKEL	53.1 MG/KG		
		POTASSIUM	547 MG/KG	J	g
		SODIUM	275 MG/KG	J	g
		VANADIUM	20.0 MG/KG		
		ZINC	575 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 10
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S10A-001 AST34 CPT-S10A-02S 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	21.6 UG/L	J	g
		CALCIUM	9210 UG/L	J	h
		CHROMIUM	17.4 UG/L	J	c,d
		IRON	123 UG/L	J	h
		MAGNESIUM	2100 UG/L	J	g,h
		POTASSIUM	6720 UG/L	J	h
		SODIUM	50900 UG/L		
280-S10A-003 AST11 CPT-S10A-05 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	15.7 UG/L	J	g
		BARIUM	107 UG/L	J	g
		CALCIUM	521000 UG/L		
		IRON	1250 UG/L		
		MAGNESIUM	1300000 UG/L		
		MANGANESE	4210 UG/L		
		POTASSIUM	346000 UG/L		
		SELENIUM	6.1 UG/L		
		SODIUM	9810000 UG/L		
		ZINC	195 UG/L		
280-S10B-110 AST04 CPT-S10B-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	50600 UG/L		
		BARIUM	143 UG/L	J	g
		BERYLLIUM	39.5 UG/L		
		CADMIUM	20.2 UG/L		
		CALCIUM	755000 UG/L		
		COBALT	3560 UG/L		
		COPPER	153 UG/L		
		IRON	244000 UG/L	J	c
		MAGNESIUM	1260000 UG/L		
		MANGANESE	93900 UG/L		
		NICKEL	11400 UG/L		
		POTASSIUM	32600 UG/L	J	h
		SODIUM	1700000 UG/L		
		THALLIUM	47.2 UG/L		
		ZINC	7340 UG/L		
280-S10B-111 AST04 CPT-S10B-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	12900 UG/L		
		BARIUM	164 UG/L	J	g
		BERYLLIUM	5.7 UG/L		
		CALCIUM	99600 UG/L		
		CHROMIUM	60.5 UG/L		
		IRON	48700 UG/L	J	c
		LEAD	12.6 UG/L		
		MAGNESIUM	31100 UG/L		
		MANGANESE	1490 UG/L		
		NICKEL	112 UG/L		
		POTASSIUM	10100 UG/L	J	h
		SODIUM	189000 UG/L		
		VANADIUM	54.9 UG/L		
		ZINC	1380 UG/L		
280-S10B-112 AST04 CPT-S10B-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	15500 UG/L		
		BARIUM	151 UG/L	J	g
		BERYLLIUM	5.8 UG/L		
		CADMIUM	11.5 UG/L		
		CALCIUM	474000 UG/L		
		CHROMIUM	147 UG/L		
		COBALT	85.9 UG/L		
		IRON	25700 UG/L	J	c

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 10 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S10B-112 AST04 CPT-S10B-03 0.00 - 0.00	CLP METALS (TOTAL)	LEAD	55.7 UG/L		
		MAGNESIUM	636000 UG/L		
		MANGANESE	13700 UG/L		
		NICKEL	234 UG/L		
		POTASSIUM	75800 UG/L	J	h
		SODIUM	5270000 UG/L		
		THALLIUM	52.7 UG/L		
		VANADIUM	86.2 UG/L		
		ZINC	465 UG/L		
280-S10B-114 AST04 CPT-S10B-04 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	29.3 UG/L	J	g
		CALCIUM	63900 UG/L		
		IRON	59.1 UG/L	J	c,g
		MAGNESIUM	65000 UG/L		
		MANGANESE	122 UG/L		
		POTASSIUM	25500 UG/L	J	h
		SODIUM	1860000 UG/L		
		VANADIUM	22.4 UG/L	J	g
280-S10B-115 AST04 CPT-S10B-05 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	14.3 UG/L	J	g
		BARIUM	85.4 UG/L	J	g
		CALCIUM	223000 UG/L		
		IRON	6840 UG/L	J	c
		MAGNESIUM	303000 UG/L		
		MANGANESE	4810 UG/L		
		POTASSIUM	108000 UG/L	J	h
		SODIUM	3700000 UG/L		
		ZINC	166 UG/L		
280-S10B-127 AST30 CPT-S10B-05(SHALLO 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	15.2 UG/L		
		BARIUM	222 UG/L		
		CALCIUM	35800 UG/L		
		COPPER	13.7 UG/L	J	g
		MAGNESIUM	11700 UG/L		
		MANGANESE	27.6 UG/L		
		POTASSIUM	29800 UG/L		
		SODIUM	616000 UG/L		
280-S10B-128 AST30 CPT-S10B-06(DEEP) 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	63.8 UG/L	J	g
		CALCIUM	29800 UG/L		
		CHROMIUM	7.5 UG/L	J	g
		COPPER	16.3 UG/L	J	g
		MAGNESIUM	17300 UG/L		
		MANGANESE	48.8 UG/L		
		POTASSIUM	26700 UG/L		
		SODIUM	124000 UG/L		
		ZINC	28.1 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-001 AST57 B13-28-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3150 MG/KG	J	d
		ARSENIC	9.0 MG/KG		
		BARIUM	68.5 MG/KG		
		BERYLLIUM	0.44 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	2050 MG/KG		
		CHROMIUM	18.3 MG/KG		
		COBALT	3.6 MG/KG	J	g
		COPPER	10.8 MG/KG		
		IRON	5960 MG/KG		
		LEAD	65.7 MG/KG		
		MAGNESIUM	814 MG/KG	J	g
		MANGANESE	51.4 MG/KG		
		SODIUM	122 MG/KG	J	g
		VANADIUM	18.1 MG/KG		
		ZINC	19.8 MG/KG		
280-S13-002 AST57 B13-28-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	14900 MG/KG	J	d
		ARSENIC	2.9 MG/KG		
		BARIUM	67.9 MG/KG		
		BERYLLIUM	1.2 MG/KG		
		CADMIUM	0.19 MG/KG	J	g
		CALCIUM	2650 MG/KG		
		CHROMIUM	60.2 MG/KG		
		COBALT	8.1 MG/KG	J	g
		COPPER	10.9 MG/KG		
		IRON	15300 MG/KG		
		LEAD	3.0 MG/KG		
		MAGNESIUM	3340 MG/KG		
		MANGANESE	109 MG/KG		
		NICKEL	42.4 MG/KG		
		POTASSIUM	1110 MG/KG	J	g
		SODIUM	315 MG/KG	J	g
		VANADIUM	38.7 MG/KG		
		ZINC	32.5 MG/KG		
280-S13-003 AST57 B13-28-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9100 MG/KG	J	d
		ARSENIC	2.9 MG/KG		
		BARIUM	60.0 MG/KG		
		BERYLLIUM	1.2 MG/KG		
		CADMIUM	0.26 MG/KG	J	g
		CALCIUM	1750 MG/KG		
		CHROMIUM	30.0 MG/KG		
		COBALT	9.9 MG/KG	J	g
		COPPER	9.4 MG/KG		
		IRON	14900 MG/KG		
		LEAD	2.7 MG/KG		
		MAGNESIUM	2700 MG/KG		
		MANGANESE	179 MG/KG		
		NICKEL	47.1 MG/KG		
		POTASSIUM	969 MG/KG	J	g
		SODIUM	255 MG/KG	J	g
		VANADIUM	27.3 MG/KG		
		ZINC	26.3 MG/KG		
280-S13-004 AST57 B13-29-0	CLP METALS (TOTAL)	ALUMINUM	2900 MG/KG	J	d
		ARSENIC	15.3 MG/KG		
		BARIUM	74.8 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-004 AST57 B13-29-0 0.00 - 0.00	CLP METALS (TOTAL)	BERYLLIUM	0.49 MG/KG	J	g
		CADMIUM	0.26 MG/KG	J	g
		CALCIUM	11800 MG/KG		
		CHROMIUM	10.7 MG/KG		
		COBALT	14.4 MG/KG		
		COPPER	23.1 MG/KG		
		IRON	6430 MG/KG		
		LEAD	378 MG/KG		
		MAGNESIUM	979 MG/KG	J	g
		MANGANESE	56.6 MG/KG		
		MERCURY	0.40 MG/KG		
		NICKEL	118 MG/KG		
		SELENIUM	5.4 MG/KG		
		SODIUM	232 MG/KG	J	g
		VANADIUM	44.6 MG/KG		
		ZINC	29.3 MG/KG		
280-S13-005 AST57 B13-29-0 DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3690 MG/KG	J	d
		ARSENIC	5.8 MG/KG		
		BARIUM	50.0 MG/KG		
		BERYLLIUM	0.73 MG/KG	J	g
		CADMIUM	0.17 MG/KG	J	g
		CALCIUM	2150 MG/KG		
		CHROMIUM	11.1 MG/KG		
		COBALT	3.2 MG/KG	J	g
		COPPER	7.5 MG/KG		
		IRON	5880 MG/KG		
		LEAD	148 MG/KG		
		MAGNESIUM	508 MG/KG	J	g
		MANGANESE	33.3 MG/KG		
		NICKEL	30.3 MG/KG		
		SODIUM	444 MG/KG	J	g
		VANADIUM	32.6 MG/KG		
		ZINC	13.0 MG/KG		
280-S13-006 AST57 B13-29-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5440 MG/KG	J	d
		ARSENIC	4.9 MG/KG		
		BARIUM	32.9 MG/KG	J	g
		BERYLLIUM	0.53 MG/KG	J	g
		CADMIUM	0.19 MG/KG	J	g
		CALCIUM	2000 MG/KG		
		CHROMIUM	32.8 MG/KG		
		COBALT	7.1 MG/KG	J	g
		COPPER	8.3 MG/KG		
		IRON	6200 MG/KG		
		LEAD	39.8 MG/KG		
		MAGNESIUM	1560 MG/KG		
		MANGANESE	56.7 MG/KG		
		NICKEL	25.6 MG/KG		
		POTASSIUM	943 MG/KG	J	g
		SODIUM	130 MG/KG	J	g
		VANADIUM	22.4 MG/KG		
		ZINC	14.5 MG/KG		
280-S13-007 AST57 B13-29-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13200 MG/KG	J	d
		ARSENIC	6.2 MG/KG		
		BARIUM	56.6 MG/KG		
		BERYLLIUM	1.5 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-007 AST57 B13-29-5.0 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM	0.33 MG/KG	J	g
		CALCIUM	3830 MG/KG		
		CHROMIUM	56.6 MG/KG		
		COBALT	6.0 MG/KG	J	g
		COPPER	12.5 MG/KG		
		IRON	21300 MG/KG		
		LEAD	4.3 MG/KG		
		MAGNESIUM	3520 MG/KG		
		MANGANESE	87.5 MG/KG		
		NICKEL	50.3 MG/KG		
		POTASSIUM	1390 MG/KG		
		SODIUM	376 MG/KG	J	g
		VANADIUM	52.3 MG/KG		
		ZINC	32.8 MG/KG		
280-S13-008 AST57 B13-30-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	493 MG/KG	J	d
		ARSENIC	4.5 MG/KG		
		BARIUM	11.6 MG/KG	J	g
		CADMIUM	0.17 MG/KG	J	g
		CALCIUM	1310 MG/KG		
		CHROMIUM	337 MG/KG		
		COBALT	7.1 MG/KG	J	g
		COPPER	9.8 MG/KG		
		IRON	3380 MG/KG		
		LEAD	207 MG/KG		
		MAGNESIUM	157 MG/KG	J	g
		MANGANESE	49.4 MG/KG		
		MOLYBDENUM	5.9 MG/KG	J	g
		NICKEL	278 MG/KG		
		SELENIUM	1.0 MG/KG	J	g
		SODIUM	492 MG/KG	J	g
		VANADIUM	22.9 MG/KG		
		ZINC	7.4 MG/KG		
280-S13-009 AST57 B13-30-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4830 MG/KG	J	d
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	14.3 MG/KG	J	g
		BERYLLIUM	0.51 MG/KG	J	g
		CADMIUM	0.13 MG/KG	J	g
		CALCIUM	2520 MG/KG		
		CHROMIUM	29.0 MG/KG		
		COBALT	3.2 MG/KG	J	g
		COPPER	4.4 MG/KG	J	g
		IRON	5740 MG/KG		
		LEAD	12.5 MG/KG		
		MAGNESIUM	1370 MG/KG		
		MANGANESE	65.6 MG/KG		
		NICKEL	28.9 MG/KG		
		SODIUM	571 MG/KG	J	g
		VANADIUM	21.8 MG/KG		
		ZINC	17.5 MG/KG		
280-S13-010 AST57 B13-30-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	12100 MG/KG	J	d
		ARSENIC	3.3 MG/KG		
		BARIUM	75.3 MG/KG		
		BERYLLIUM	1.4 MG/KG		
		CADMIUM	0.27 MG/KG	J	g
		CALCIUM	2030 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-010 AST57 B13-30-5.0 0.00 - 0.00	CLP METALS (TOTAL)	CHROMIUM	33.6 MG/KG		
		COBALT	8.8 MG/KG	J	g
		COPPER	11.0 MG/KG		
		IRON	14700 MG/KG		
		LEAD	3.2 MG/KG		
		MAGNESIUM	3280 MG/KG		
		MANGANESE	94.4 MG/KG		
		NICKEL	49.2 MG/KG		
		POTASSIUM	1360 MG/KG		
		SODIUM	473 MG/KG	J	g
		VANADIUM	32.4 MG/KG		
		ZINC	33.2 MG/KG		
280-S13-011 AST57 B13-31-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	1420 MG/KG	J	d
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	35.0 MG/KG	J	g
		BERYLLIUM	0.35 MG/KG	J	g
		CADMIUM	0.16 MG/KG	J	g
		CALCIUM	3560 MG/KG		
		CHROMIUM	20.1 MG/KG		
		COBALT	2.6 MG/KG	J	g
		COPPER	4.8 MG/KG	J	g
		IRON	2790 MG/KG		
		LEAD	167 MG/KG		
		MAGNESIUM	339 MG/KG	J	g
		MANGANESE	22.6 MG/KG		
		MERCURY	0.30 MG/KG		
		SODIUM	576 MG/KG	J	g
		VANADIUM	10.1 MG/KG	J	g
		ZINC	7.0 MG/KG		
280-S13-012 AST57 B13-31-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13200 MG/KG	J	d
		ARSENIC	3.0 MG/KG		
		BARIUM	69.6 MG/KG		
		BERYLLIUM	1.8 MG/KG		
		CADMIUM	0.28 MG/KG	J	g
		CALCIUM	1960 MG/KG		
		CHROMIUM	49.8 MG/KG		
		COBALT	9.7 MG/KG	J	g
		COPPER	11.1 MG/KG		
		IRON	18000 MG/KG		
		LEAD	3.8 MG/KG		
		MAGNESIUM	3390 MG/KG		
		MANGANESE	96.6 MG/KG		
		NICKEL	47.0 MG/KG		
		POTASSIUM	1200 MG/KG		
		SODIUM	400 MG/KG	J	g
		VANADIUM	37.5 MG/KG		
		ZINC	36.3 MG/KG		
280-S13-013 AST57 B13-31-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10300 MG/KG	J	d
		ARSENIC	5.0 MG/KG		
		BARIUM	68.0 MG/KG		
		BERYLLIUM	2.0 MG/KG		
		CADMIUM	0.30 MG/KG	J	g
		CALCIUM	2310 MG/KG		
		CHROMIUM	35.0 MG/KG		
		COBALT	9.3 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-013 AST57 B13-31-5.0 0.00 - 0.00	CLP METALS (TOTAL)	COPPER	10.0 MG/KG		
		IRON	14600 MG/KG		
		LEAD	2.5 MG/KG		
		MAGNESIUM	3050 MG/KG		
		MANGANESE	92.2 MG/KG		
		NICKEL	51.0 MG/KG		
		POTASSIUM	1460 MG/KG		
		SODIUM	388 MG/KG	J	g
		VANADIUM	39.4 MG/KG		
		ZINC	34.0 MG/KG		
280-S13-014 AST57 B13-31-5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	11500 MG/KG	J	d
		ARSENIC	4.1 MG/KG		
		BARIUM	80.2 MG/KG		
		BERYLLIUM	2.0 MG/KG		
		CADMIUM	0.32 MG/KG	J	g
		CALCIUM	2220 MG/KG		
		CHROMIUM	44.5 MG/KG		
		COBALT	6.5 MG/KG	J	g
		COPPER	10.7 MG/KG		
		IRON	16600 MG/KG		
		LEAD	2.9 MG/KG		
		MAGNESIUM	3180 MG/KG		
		MANGANESE	101 MG/KG		
		NICKEL	54.7 MG/KG		
		POTASSIUM	1400 MG/KG		
		SODIUM	425 MG/KG	J	g
		VANADIUM	34.4 MG/KG		
		ZINC	33.7 MG/KG		
280-S13-015 AST13 B13-32-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7580 MG/KG		
		ANTIMONY	4.8 MG/KG	J	c
		ARSENIC	18.8 MG/KG		
		BARIUM	114 MG/KG		
		CADMIUM	18.0 MG/KG		
		CALCIUM	4080 MG/KG		
		CHROMIUM	37.8 MG/KG		
		COBALT	3.1 MG/KG	J	g
		COPPER	40.3 MG/KG		
		IRON	74800 MG/KG		
		LEAD	431 MG/KG		
		MAGNESIUM	2200 MG/KG		
		MANGANESE	297 MG/KG		
		NICKEL	35.6 MG/KG		
		POTASSIUM	927 MG/KG	J	g
		SILVER	1.6 MG/KG	J	g
		SODIUM	193 MG/KG	J	g
		VANADIUM	24.6 MG/KG		
		ZINC	7120 MG/KG		
280-S13-016 AST13 B13-32-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8570 MG/KG		
		ANTIMONY	0.63 MG/KG	J	c
		ARSENIC	2.7 MG/KG		
		BARIUM	73.0 MG/KG		
		CALCIUM	3650 MG/KG		
		CHROMIUM	35.4 MG/KG		
		COBALT	6.5 MG/KG	J	g
		COPPER	16.4 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-016 AST13 B13-32-2.5 0.00 - 0.00	CLP METALS (TOTAL)	IRON	13000 MG/KG		
		LEAD	79.6 MG/KG		
		MAGNESIUM	2270 MG/KG		
		MANGANESE	109 MG/KG		
		NICKEL	29.2 MG/KG		
		POTASSIUM	987 MG/KG	J	g
		SILVER	0.49 MG/KG	J	g
		SODIUM	267 MG/KG	J	g
		VANADIUM	24.8 MG/KG		
		ZINC	99.6 MG/KG		
280-S13-017 AST13 B13-32-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9530 MG/KG		
		ARSENIC	3.9 MG/KG		
		BARIUM	46.5 MG/KG		
		CALCIUM	1570 MG/KG		
		CHROMIUM	40.3 MG/KG		
		COBALT	11.1 MG/KG	J	g
		IRON	12000 MG/KG		
		LEAD	3.3 MG/KG		
		MAGNESIUM	2430 MG/KG		
		MANGANESE	112 MG/KG		
		NICKEL	29.9 MG/KG		
		POTASSIUM	1520 MG/KG		
		SILVER	0.23 MG/KG	J	g
		SODIUM	286 MG/KG	J	g
		VANADIUM	34.5 MG/KG		
		ZINC	27.0 MG/KG		
280-S13-018 AST13 M13-06-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4150 MG/KG		
		ARSENIC	2.2 MG/KG		
		BARIUM	28.3 MG/KG	J	g
		CALCIUM	2440 MG/KG		
		CHROMIUM	27.7 MG/KG		
		COBALT	4.0 MG/KG	J	g
		IRON	6890 MG/KG		
		LEAD	1.6 MG/KG		
		MAGNESIUM	2070 MG/KG		
		MANGANESE	85.1 MG/KG		
		NICKEL	22.1 MG/KG		
		POTASSIUM	550 MG/KG	J	g
		SODIUM	70.0 MG/KG	J	g
		VANADIUM	19.1 MG/KG		
		ZINC	17.7 MG/KG		
280-S13-019 AST13 M13-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4610 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	91.4 MG/KG		
		CALCIUM	2640 MG/KG		
		CHROMIUM	30.0 MG/KG		
		COBALT	4.2 MG/KG	J	g
		IRON	7210 MG/KG		
		LEAD	1.5 MG/KG		
		MAGNESIUM	2080 MG/KG		
		MANGANESE	89.1 MG/KG		
		NICKEL	23.0 MG/KG		
		POTASSIUM	576 MG/KG	J	g
		SODIUM	100 MG/KG	J	g
		VANADIUM	18.6 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-019 AST13 M13-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	17.5 MG/KG		
280-S13-020 AST13 M13-06-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3790 MG/KG		
		ANTIMONY	0.80 MG/KG	J	c,g
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	23.7 MG/KG	J	g
		CALCIUM	1620 MG/KG		
		CHROMIUM	23.9 MG/KG		
		COBALT	5.3 MG/KG	J	g
		IRON	6950 MG/KG		
		LEAD	1.5 MG/KG		
		MAGNESIUM	2140 MG/KG		
		MANGANESE	79.0 MG/KG		
		NICKEL	25.0 MG/KG		
		POTASSIUM	629 MG/KG	J	g
		SODIUM	82.4 MG/KG	J	g
		VANADIUM	15.5 MG/KG		
		ZINC	18.5 MG/KG		
280-S13-021 AST13 M13-07-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3410 MG/KG		
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	26.5 MG/KG	J	g
		CALCIUM	2970 MG/KG		
		CHROMIUM	25.9 MG/KG		
		COBALT	3.3 MG/KG	J	g
		IRON	6300 MG/KG		
		LEAD	2.9 MG/KG		
		MAGNESIUM	1850 MG/KG		
		MANGANESE	80.4 MG/KG		
		NICKEL	21.0 MG/KG		
		POTASSIUM	432 MG/KG	J	g
		SODIUM	74.4 MG/KG	J	g
		VANADIUM	15.9 MG/KG		
		ZINC	16.9 MG/KG		
280-S13-022 AST13 M13-07-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3790 MG/KG		
		ARSENIC	1.5 MG/KG	J	g
		BARIUM	21.8 MG/KG	J	g
		CALCIUM	2450 MG/KG		
		CHROMIUM	26.7 MG/KG		
		COBALT	3.8 MG/KG	J	g
		IRON	6660 MG/KG		
		LEAD	1.8 MG/KG		
		MAGNESIUM	1870 MG/KG		
		MANGANESE	84.7 MG/KG		
		NICKEL	22.6 MG/KG		
		POTASSIUM	504 MG/KG	J	g
		SODIUM	69.6 MG/KG	J	g
		VANADIUM	16.3 MG/KG		
		ZINC	17.3 MG/KG		
280-S13-023 AST13 M13-07-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5740 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	36.4 MG/KG	J	g
		CALCIUM	3050 MG/KG		

Validity (Qual) : J - Estimated concentration

oplicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-023 AST13 M13-07-2.5 0.00 - 0.00	CLP METALS (TOTAL)	CHROMIUM	29.9 MG/KG		
		COBALT	5.8 MG/KG	J	g
		IRON	9510 MG/KG		
		LEAD	1.7 MG/KG		
		MAGNESIUM	2790 MG/KG		
		MANGANESE	107 MG/KG		
		NICKEL	33.0 MG/KG		
		POTASSIUM	927 MG/KG	J	g
		SODIUM	110 MG/KG	J	g
		VANADIUM	21.4 MG/KG		
		ZINC	25.6 MG/KG		
280-S13-024 AST13 M13-07-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4350 MG/KG		
		ARSENIC	3.3 MG/KG		
		BARIUM	40.3 MG/KG	J	g
		CALCIUM	2520 MG/KG		
		CHROMIUM	25.5 MG/KG		
		COBALT	3.5 MG/KG	J	g
		IRON	6830 MG/KG		
		LEAD	3.5 MG/KG		
		MAGNESIUM	2130 MG/KG		
		MANGANESE	88.0 MG/KG		
		NICKEL	22.6 MG/KG		
		POTASSIUM	669 MG/KG	J	g
		SODIUM	175 MG/KG	J	g
		VANADIUM	18.6 MG/KG		
		ZINC	18.1 MG/KG		
280-S13-025 AST53 M13-08-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3890 MG/KG		
		ARSENIC	3.5 MG/KG		
		BARIUM	50.9 MG/KG		
		BERYLLIUM	0.52 MG/KG	J	g
		CADMIUM	0.08 MG/KG	J	g
		CALCIUM	1590 MG/KG		
		CHROMIUM	27.7 MG/KG		
		COBALT	3.6 MG/KG	J	g
		IRON	7060 MG/KG		
		LEAD	2.7 MG/KG		
		MAGNESIUM	1110 MG/KG		
		MANGANESE	157 MG/KG		
		NICKEL	15.1 MG/KG		
		POTASSIUM	595 MG/KG	J	g
		SODIUM	261 MG/KG	J	g
		VANADIUM	19.5 MG/KG		
		ZINC	113 MG/KG		
280-S13-026 AST53 M13-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5100 MG/KG		
		ARSENIC	1.9 MG/KG	J	g
		BARIUM	62.2 MG/KG		
		BERYLLIUM	0.48 MG/KG	J	g
		CALCIUM	1950 MG/KG		
		CHROMIUM	25.5 MG/KG		
		COBALT	4.9 MG/KG	J	g
		IRON	7930 MG/KG		
		LEAD	2.2 MG/KG		
		MAGNESIUM	1480 MG/KG		
		MANGANESE	174 MG/KG		
		NICKEL	19.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-026 AST53 M13-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM SODIUM VANADIUM ZINC	634 MG/KG 325 MG/KG 18.9 MG/KG 18.2 MG/KG	J J	g g
280-S13-027 AST53 M13-08-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM CALCIUM CHROMIUM COBALT IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	3880 MG/KG 2.0 MG/KG 33.3 MG/KG 0.32 MG/KG 1650 MG/KG 21.7 MG/KG 2.9 MG/KG 6850 MG/KG 1.8 MG/KG 1340 MG/KG 163 MG/KG 15.2 MG/KG 543 MG/KG 341 MG/KG 17.3 MG/KG 16.5 MG/KG	 J J J J J J 	 g g g g g g
280-S13-028 AST53 M13-09-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	5830 MG/KG 13.8 MG/KG 63.0 MG/KG 0.66 MG/KG 0.09 MG/KG 2730 MG/KG 27.2 MG/KG 4.5 MG/KG 12.6 MG/KG 11100 MG/KG 6.5 MG/KG 2230 MG/KG 200 MG/KG 22.6 MG/KG 848 MG/KG 590 MG/KG 20.9 MG/KG 31.9 MG/KG	 J J J J J 	 g g g g g
280-S13-029 AST53 M13-09-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM CALCIUM CHROMIUM COBALT IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	4830 MG/KG 2.6 MG/KG 46.6 MG/KG 0.39 MG/KG 1800 MG/KG 22.8 MG/KG 4.1 MG/KG 6150 MG/KG 1.8 MG/KG 1340 MG/KG 93.1 MG/KG 15.4 MG/KG 605 MG/KG 309 MG/KG 16.6 MG/KG 16.1 MG/KG	 J J J J 	 g g g g
280-S13-030	CLP METALS (TOTAL)	ALUMINUM	5070 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-030 AST53 M13-09-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	2.2 MG/KG	J	g
		BARIUM	48.8 MG/KG		
		BERYLLIUM	0.48 MG/KG	J	g
		CADMIUM	0.07 MG/KG	J	g
		CALCIUM	1650 MG/KG		
		CHROMIUM	23.3 MG/KG		
		COBALT	5.1 MG/KG	J	g
		IRON	6830 MG/KG		
		LEAD	2.5 MG/KG		
		MAGNESIUM	1550 MG/KG		
		MANGANESE	81.7 MG/KG		
		NICKEL	19.5 MG/KG		
		POTASSIUM	592 MG/KG	J	g
		SODIUM	343 MG/KG	J	g
		VANADIUM	17.7 MG/KG		
		ZINC	19.2 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-073 AST10 CPT-S13-02 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	8.6 UG/L	J	g
		BARIUM	115 UG/L	J	g
		CALCIUM	50100 UG/L		
		CHROMIUM	2.5 UG/L	J	d,g
		COPPER	27.5 UG/L		
		IRON	1330 UG/L		
		MAGNESIUM	71800 UG/L		
		MANGANESE	1540 UG/L		
		POTASSIUM	3330 UG/L	J	g,h
		SODIUM	388000 UG/L		
280-S13-074 AST07 CPT-S13-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	84.6 UG/L	J	g
		ANTIMONY	6.4 UG/L	J	g
		ARSENIC	12.5 UG/L		
		BARIUM	73.0 UG/L	J	g
		BERYLLIUM	1.9 UG/L	J	g
		CALCIUM	27700 UG/L	J	h
		IRON	78.3 UG/L	J	h
		MAGNESIUM	20100 UG/L		
		MANGANESE	381 UG/L	J	h
		POTASSIUM	7470 UG/L		
		SODIUM	101000 UG/L		
		ZINC	68.2 UG/L		
280-S13-075 AST07 CPT-S13-04DEEP 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	5.6 UG/L	J	g
		BARIUM	52.1 UG/L	J	g
		BERYLLIUM	1.4 UG/L	J	g
		CALCIUM	17300 UG/L	J	h
		IRON	71.4 UG/L	J	h
		MAGNESIUM	13300 UG/L		
		MANGANESE	310 UG/L	J	h
		POTASSIUM	2270 UG/L	J	g
		SODIUM	84400 UG/L		
280-S13-076 AST34 CPT-S13-05 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	44.5 UG/L	J	g
		BERYLLIUM	2.1 UG/L	J	g
		CALCIUM	15900 UG/L	J	h
		MAGNESIUM	19800 UG/L	J	h
		MANGANESE	207 UG/L	J	h
		NICKEL	19.3 UG/L	J	g
		POTASSIUM	10700 UG/L	J	h
		SODIUM	78400 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 15
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S15-065 AST10 CPT-S15-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	25.5 UG/L	J	g
		BARIUM	71.8 UG/L	J	g
		CALCIUM	737000 UG/L		
		COPPER	38.8 UG/L	J	g
		IRON	377 UG/L	J	g
		MAGNESIUM	1530000 UG/L		
		MANGANESE	5400 UG/L		
		POTASSIUM	244000 UG/L	J	h
		SELENIUM	9.6 UG/L	J	g
		SODIUM	9240000 UG/L		
280-S15-067 AST10 CPT-S15-03 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	12.6 UG/L	J	g
		BARIUM	125 UG/L	J	g
		BERYLLIUM	5.9 UG/L	J	d,g
		CADMIUM	3.0 UG/L	J	g
		CALCIUM	1180000 UG/L		
		CHROMIUM	8.5 UG/L	J	d,g
		COBALT	78.8 UG/L	J	g
		COPPER	44.5 UG/L	J	g
		IRON	4150 UG/L		
		MAGNESIUM	2240000 UG/L		
		MANGANESE	23500 UG/L		
		NICKEL	95.6 UG/L	J	d,g
		POTASSIUM	220000 UG/L	J	h
		SODIUM	13200000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments :
a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 15
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S15-001 AST02 S15-S6-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6730 MG/KG		
		ARSENIC	8.3 MG/KG		
		BARIUM	61.6 MG/KG		
		CADMIUM	1.9 MG/KG		
		CALCIUM	2830 MG/KG	J	d
		CHROMIUM	58.6 MG/KG	J	h
		COBALT	5.8 MG/KG	J	g
		COPPER	39.4 MG/KG	J	c
		IRON	12900 MG/KG		
		LEAD	132 MG/KG		
		MAGNESIUM	3540 MG/KG		
		MANGANESE	211 MG/KG		
		MERCURY	0.18 MG/KG	J	f
		NICKEL	32.3 MG/KG		
		POTASSIUM	995 MG/KG	J	g
		SODIUM	245 MG/KG	J	g
		VANADIUM	26.0 MG/KG		
		ZINC	140 MG/KG		
280-S15-002 AST02 S15-S7-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4480 MG/KG		
		ANTIMONY	3.2 MG/KG	J	c,g
		ARSENIC	9.1 MG/KG		
		BARIUM	34.3 MG/KG	J	g
		CADMIUM	0.37 MG/KG	J	g
		CALCIUM	1770 MG/KG	J	d
		CHROMIUM	30.3 MG/KG	J	h
		COBALT	3.6 MG/KG	J	g
		COPPER	259 MG/KG	J	c
		IRON	9220 MG/KG		
		LEAD	249 MG/KG		
		MAGNESIUM	2520 MG/KG		
		MANGANESE	130 MG/KG		
		MERCURY	1.7 MG/KG	J	f
		NICKEL	18.7 MG/KG		
		POTASSIUM	733 MG/KG	J	g
		SODIUM	579 MG/KG	J	g
		VANADIUM	22.1 MG/KG		
		ZINC	195 MG/KG		
280-S15-003 AST02 S15-S8-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7430 MG/KG		
		ARSENIC	18.2 MG/KG		
		BARIUM	58.3 MG/KG	J	g
		CADMIUM	0.19 MG/KG	J	g
		CALCIUM	3730 MG/KG	J	d
		CHROMIUM	82.5 MG/KG	J	h
		COBALT	6.2 MG/KG	J	g
		COPPER	103 MG/KG	J	c
		IRON	14300 MG/KG		
		LEAD	546 MG/KG		
		MAGNESIUM	5570 MG/KG		
		MANGANESE	226 MG/KG		
		MERCURY	0.63 MG/KG	J	f
		NICKEL	39.7 MG/KG		
		POTASSIUM	1710 MG/KG	J	g
		SODIUM	9720 MG/KG		
		VANADIUM	41.2 MG/KG		
		ZINC	259 MG/KG		
280-S15-004	CLP METALS (TOTAL)	ALUMINUM	3560 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 15 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S15-004 AST02 S15-59-0 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.1 MG/KG	J	c,g
		ARSENIC	4.7 MG/KG		
		BARIUM	37.0 MG/KG	J	g
		CALCIUM	1720 MG/KG	J	d
		CHROMIUM	27.6 MG/KG	J	h
		COBALT	4.1 MG/KG	J	g
		COPPER	23.5 MG/KG	J	c
		IRON	7590 MG/KG		
		LEAD	128 MG/KG		
		MAGNESIUM	2120 MG/KG		
		MANGANESE	103 MG/KG		
		NICKEL	18.8 MG/KG		
		POTASSIUM	675 MG/KG	J	g
		SODIUM	2210 MG/KG		
		VANADIUM	19.3 MG/KG		
		ZINC	68.5 MG/KG		
280-S15-005 AST02 S15-60-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6580 MG/KG		
		ANTIMONY	2.9 MG/KG	J	c,g
		ARSENIC	15.5 MG/KG		
		BARIUM	45.4 MG/KG	J	g
		CALCIUM	2930 MG/KG	J	d
		CHROMIUM	42.3 MG/KG	J	h
		COBALT	3.6 MG/KG	J	g
		COPPER	141 MG/KG	J	c
		IRON	14200 MG/KG		
		LEAD	597 MG/KG		
		MAGNESIUM	4400 MG/KG		
		MANGANESE	117 MG/KG		
		MERCURY	0.37 MG/KG	J	f
		NICKEL	32.9 MG/KG		
		POTASSIUM	1440 MG/KG	J	g
		SODIUM	7250 MG/KG		
		VANADIUM	33.0 MG/KG		
		ZINC	225 MG/KG		
280-S15-006 AST02 S15-61-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7980 MG/KG		
		ANTIMONY	4.3 MG/KG	J	c,g
		ARSENIC	13.2 MG/KG		
		BARIUM	280 MG/KG		
		CADMIUM	1.3 MG/KG	J	g
		CALCIUM	3590 MG/KG	J	d
		CHROMIUM	128 MG/KG	J	h
		COBALT	9.3 MG/KG	J	g
		COPPER	126 MG/KG	J	c
		IRON	24200 MG/KG		
		LEAD	954 MG/KG		
		MAGNESIUM	5990 MG/KG		
		MANGANESE	244 MG/KG		
		MERCURY	1.5 MG/KG	J	f
		NICKEL	41.6 MG/KG		
		POTASSIUM	1720 MG/KG		
		SODIUM	8620 MG/KG		
		VANADIUM	45.4 MG/KG		
		ZINC	399 MG/KG		
280-S15-007 AST02	CLP METALS (TOTAL)	ALUMINUM	9130 MG/KG		
		ARSENIC	13.6 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
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e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 15 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S15-007 AST02 S15-61-0DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	138 MG/KG		
		CADMIUM	0.82 MG/KG	J	g
		CALCIUM	2860 MG/KG	J	d
		CHROMIUM	73.7 MG/KG	J	h
		COBALT	6.8 MG/KG	J	g
		COPPER	130 MG/KG	J	c
		IRON	19300 MG/KG		
		LEAD	589 MG/KG		
		MAGNESIUM	4790 MG/KG		
		MANGANESE	183 MG/KG		
		MERCURY	0.84 MG/KG	J	f
		NICKEL	41.4 MG/KG		
		POTASSIUM	2140 MG/KG		
		SODIUM	5900 MG/KG		
		VANADIUM	41.9 MG/KG		
		ZINC	392 MG/KG		
280-S15-008 AST02 S15-62-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4150 MG/KG		
		ANTIMONY	3.7 MG/KG	J	c,g
		ARSENIC	8.1 MG/KG		
		BARIUM	31.5 MG/KG	J	g
		CADMIUM	0.43 MG/KG	J	g
		CALCIUM	5160 MG/KG	J	d
		CHROMIUM	46.8 MG/KG	J	h
		COBALT	5.4 MG/KG	J	g
		COPPER	97.4 MG/KG	J	c
		IRON	12700 MG/KG		
		LEAD	785 MG/KG		
		MAGNESIUM	5040 MG/KG		
		MANGANESE	180 MG/KG		
		MERCURY	0.71 MG/KG	J	f
		NICKEL	23.3 MG/KG		
		POTASSIUM	1550 MG/KG	J	g
		SODIUM	16300 MG/KG		
		VANADIUM	24.8 MG/KG		
		ZINC	193 MG/KG		
280-S15-009 AST02 S15-63-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5310 MG/KG		
		ARSENIC	8.7 MG/KG		
		BARIUM	41.5 MG/KG	J	g
		CADMIUM	0.15 MG/KG	J	g
		CALCIUM	2730 MG/KG	J	d
		CHROMIUM	46.2 MG/KG	J	h
		COBALT	4.3 MG/KG	J	g
		COPPER	113 MG/KG	J	c
		IRON	15000 MG/KG		
		LEAD	251 MG/KG		
		MAGNESIUM	4070 MG/KG		
		MANGANESE	99.8 MG/KG		
		NICKEL	41.9 MG/KG		
		POTASSIUM	1400 MG/KG	J	g
		SODIUM	10700 MG/KG		
		VANADIUM	23.3 MG/KG		
		ZINC	139 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-031 AST06 NPS-S16-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3650 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	104 MG/KG		
		CADMIUM	1.7 MG/KG	J	c,d
		CALCIUM	4570 MG/KG		
		CHROMIUM	32.8 MG/KG	J	c
		COPPER	48.9 MG/KG	J	d
		IRON	8210 MG/KG		
		LEAD	250 MG/KG	J	d,h
		MAGNESIUM	2330 MG/KG		
		MANGANESE	98.4 MG/KG		
		MERCURY	0.32 MG/KG		
		NICKEL	30.5 MG/KG		
		POTASSIUM	606 MG/KG	J	g
		VANADIUM	16.1 MG/KG		
		ZINC	342 MG/KG		
280-S16-032 AST06 NPS-S16-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5740 MG/KG		
		ANTIMONY	1.2 MG/KG	J	c
		ARSENIC	3.0 MG/KG		
		BARIUM	98.1 MG/KG		
		BERYLLIUM	0.48 MG/KG	J	g
		CADMIUM	7.8 MG/KG	J	c,d
		CALCIUM	3000 MG/KG		
		CHROMIUM	234 MG/KG	J	c
		COPPER	54.2 MG/KG	J	d
		IRON	15200 MG/KG		
		LEAD	185 MG/KG	J	d,h
		MAGNESIUM	3100 MG/KG		
		MANGANESE	276 MG/KG		
		MERCURY	0.59 MG/KG		
		NICKEL	66.7 MG/KG		
		POTASSIUM	685 MG/KG	J	g
		SODIUM	335 MG/KG	J	g
		VANADIUM	23.2 MG/KG		
		ZINC	522 MG/KG		
280-S16-033 AST06 NPS-S16-02DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5190 MG/KG		
		ANTIMONY	1.1 MG/KG	J	c
		ARSENIC	6.8 MG/KG		
		BARIUM	84.2 MG/KG		
		BERYLLIUM	0.75 MG/KG	J	g
		CADMIUM	20.9 MG/KG	J	c,d
		CALCIUM	2920 MG/KG		
		CHROMIUM	89.1 MG/KG	J	c
		COBALT	10.4 MG/KG	J	g
		COPPER	69.2 MG/KG	J	d
		IRON	15600 MG/KG		
		LEAD	347 MG/KG	J	d,h
		MAGNESIUM	2880 MG/KG		
		MANGANESE	378 MG/KG		
		MERCURY	0.42 MG/KG		
		NICKEL	91.9 MG/KG		
		POTASSIUM	782 MG/KG	J	g
		SILVER	10.9 MG/KG		
		SODIUM	215 MG/KG	J	g
		VANADIUM	24.8 MG/KG		
		ZINC	694 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-001 AST03 S16-56 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4000 MG/KG		
		BARIUM	25.2 MG/KG	J	g
		CADMIUM	0.18 MG/KG	J	g
		CALCIUM	2340 MG/KG		
		CHROMIUM	28.7 MG/KG		
		IRON	6760 MG/KG		
		LEAD	6.2 MG/KG	J	d
		MAGNESIUM	1980 MG/KG		
		MANGANESE	86.6 MG/KG		
		NICKEL	20.4 MG/KG		
		VANADIUM	15.6 MG/KG		
		ZINC	20.2 MG/KG		
280-S16-002 AST08 S16-57 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4020 MG/KG	J	d
		ANTIMONY	0.63 MG/KG	J	c,g
		BARIUM	39.4 MG/KG	J	g
		CADMIUM	2.4 MG/KG		
		CADMIUM	2.4 MG/KG		
		CALCIUM	2470 MG/KG		
		CHROMIUM	28.3 MG/KG		
		CHROMIUM	28.3 MG/KG		
		COPPER	9.1 MG/KG		
		IRON	7070 MG/KG		
		LEAD	16.7 MG/KG		
		MAGNESIUM	2000 MG/KG		
		MANGANESE	96.2 MG/KG		
		NICKEL	21.7 MG/KG	J	f
		SODIUM	71.0 MG/KG	J	g
		VANADIUM	15.2 MG/KG		
		ZINC	26.4 MG/KG		
280-S16-003 AST02 S16-58 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3970 MG/KG		
		BARIUM	23.1 MG/KG	J	g
		CADMIUM	0.70 MG/KG	J	g
		CALCIUM	2410 MG/KG	J	d
		CHROMIUM	30.9 MG/KG	J	h
		COBALT	3.5 MG/KG	J	g
		IRON	6690 MG/KG		
		LEAD	56.9 MG/KG		
		MAGNESIUM	2010 MG/KG		
		MANGANESE	103 MG/KG		
		NICKEL	22.1 MG/KG		
		POTASSIUM	360 MG/KG	J	g
		VANADIUM	15.0 MG/KG		
		ZINC	18.1 MG/KG		
280-S16-004 AST02 S16-59 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3840 MG/KG		
		BARIUM	46.4 MG/KG		
		CALCIUM	2580 MG/KG	J	d
		CHROMIUM	24.0 MG/KG	J	h
		COBALT	2.5 MG/KG	J	g
		IRON	6330 MG/KG		
		LEAD	2.2 MG/KG		
		MAGNESIUM	1900 MG/KG		
		MANGANESE	96.3 MG/KG		
		NICKEL	17.7 MG/KG		
		POTASSIUM	380 MG/KG	J	g
		VANADIUM	16.2 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-004 AST02 S16-59 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	18.6 MG/KG		
280-S16-005 AST02 S16-60 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3780 MG/KG		
		BARIUM	22.2 MG/KG	J	g
		BERYLLIUM	0.31 MG/KG	J	g
		CALCIUM	2190 MG/KG	J	d
		CHROMIUM	26.4 MG/KG	J	h
		COBALT	5.2 MG/KG	J	g
		IRON	6300 MG/KG		
		LEAD	2.5 MG/KG		
		MAGNESIUM	1920 MG/KG		
		MANGANESE	83.9 MG/KG		
		NICKEL	21.1 MG/KG		
		POTASSIUM	470 MG/KG	J	g
		VANADIUM	15.3 MG/KG		
		ZINC	18.6 MG/KG		
280-S16-006 AST03 S16-61 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3850 MG/KG		
		BARIUM	52.7 MG/KG		
		CADMIUM	0.37 MG/KG	J	g
		CALCIUM	9480 MG/KG		
		CHROMIUM	28.2 MG/KG		
		IRON	7070 MG/KG		
		LEAD	10.2 MG/KG	J	d
		MAGNESIUM	1950 MG/KG		
		MANGANESE	90.9 MG/KG		
		NICKEL	22.2 MG/KG		
		VANADIUM	12.7 MG/KG		
		ZINC	25.2 MG/KG		
280-S16-007 AST03 S16-62 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3470 MG/KG		
		BARIUM	48.4 MG/KG		
		CADMIUM	0.99 MG/KG		
		CALCIUM	4550 MG/KG		
		CHROMIUM	32.6 MG/KG		
		IRON	6210 MG/KG		
		LEAD	37.6 MG/KG	J	d
		MAGNESIUM	1830 MG/KG		
		MANGANESE	82.8 MG/KG		
		NICKEL	19.0 MG/KG		
		VANADIUM	13.3 MG/KG		
		ZINC	21.2 MG/KG		
280-S16-008 AST03 S16-63 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3940 MG/KG		
		BARIUM	25.5 MG/KG	J	g
		BERYLLIUM	0.33 MG/KG	J	g
		CADMIUM	0.20 MG/KG	J	g
		CALCIUM	2340 MG/KG		
		CHROMIUM	29.0 MG/KG		
		IRON	7910 MG/KG		
		LEAD	5.2 MG/KG	J	d
		MAGNESIUM	2060 MG/KG		
		MANGANESE	96.2 MG/KG		
		NICKEL	20.1 MG/KG		
		VANADIUM	16.3 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-008 AST03 S16-63 0.00 - 0.00	CLP METALS (TOTAL)	ZINC	35.5 MG/KG		
280-S16-009 AST03 S16-63DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4460 MG/KG		
		BARIUM	32.7 MG/KG	J	g
		BERYLLIUM	0.23 MG/KG	J	g
		CADMIUM	0.24 MG/KG	J	g
		CALCIUM	2990 MG/KG		
		CHROMIUM	31.8 MG/KG		
		IRON	8000 MG/KG		
		LEAD	11.0 MG/KG	J	d
		MAGNESIUM	2190 MG/KG		
		MANGANESE	100 MG/KG		
		NICKEL	21.5 MG/KG		
		VANADIUM	18.5 MG/KG		
		ZINC	26.2 MG/KG		
280-S16-010 AST08 S16-64 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4840 MG/KG	J	d
		ANTIMONY	0.57 MG/KG	J	c,g
		BARIUM	29.1 MG/KG	J	g
		CADMIUM	1.6 MG/KG		
		CADMIUM	1.6 MG/KG		
		CALCIUM	3180 MG/KG		
		CHROMIUM	30.5 MG/KG		
		CHROMIUM	30.5 MG/KG		
		COPPER	7.3 MG/KG		
		IRON	7230 MG/KG		
		LEAD	8.8 MG/KG		
		MAGNESIUM	2040 MG/KG		
		MANGANESE	101 MG/KG		
		NICKEL	23.9 MG/KG	J	f
		SODIUM	111 MG/KG	J	g
		VANADIUM	21.7 MG/KG		
		ZINC	28.4 MG/KG		
280-S16-011 AST03 S16-65 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5100 MG/KG		
		BARIUM	72.1 MG/KG		
		BERYLLIUM	0.46 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	3210 MG/KG		
		CHROMIUM	30.4 MG/KG		
		IRON	8780 MG/KG		
		LEAD	4.3 MG/KG	J	d
		MAGNESIUM	2660 MG/KG		
		MANGANESE	139 MG/KG		
		NICKEL	22.2 MG/KG		
		VANADIUM	17.6 MG/KG		
		ZINC	23.7 MG/KG		
280-S16-012 AST03 S16-66 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4210 MG/KG		
		BARIUM	38.0 MG/KG	J	g
		CALCIUM	2540 MG/KG		
		CHROMIUM	29.3 MG/KG		
		IRON	6760 MG/KG		
		LEAD	3.2 MG/KG	J	d
		MAGNESIUM	2070 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-012 AST03 S16-66 0.00 - 0.00	CLP METALS (TOTAL)	MANGANESE NICKEL VANADIUM ZINC	87.7 MG/KG 19.4 MG/KG 16.4 MG/KG 19.8 MG/KG		
280-S16-013 AST03 S16-67 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE NICKEL VANADIUM	3090 MG/KG 22.8 MG/KG 2280 MG/KG 25.0 MG/KG 5450 MG/KG 1.9 MG/KG 1560 MG/KG 68.9 MG/KG 15.3 MG/KG 13.1 MG/KG	 J J 	 g d
280-S16-014 AST03 S16-68 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE NICKEL VANADIUM ZINC	4230 MG/KG 29.6 MG/KG 0.29 MG/KG 3.6 MG/KG 2440 MG/KG 36.3 MG/KG 8710 MG/KG 99.1 MG/KG 2060 MG/KG 103 MG/KG 24.1 MG/KG 18.4 MG/KG 64.5 MG/KG	 J J J 	 g g d
280-S16-015 AST03 S16-69 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE NICKEL VANADIUM ZINC	4430 MG/L 32.3 MG/L 2480 MG/L 23.8 MG/L 7120 MG/L 2.6 MG/L 2050 MG/L 96.7 MG/L 21.2 MG/L 19.5 MG/L 21.6 MG/L	 J J 	 g d
280-S16-016 AST03 S16-70 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM CADMIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE NICKEL VANADIUM ZINC	4670 MG/KG 30.5 MG/KG 10.0 MG/KG 2670 MG/KG 58.9 MG/KG 7710 MG/KG 85.8 MG/KG 2210 MG/KG 93.9 MG/KG 24.9 MG/KG 21.8 MG/KG 46.2 MG/KG	 J J 	 g d
280-S16-017 AST03 S16-71	CLP METALS (TOTAL)	ALUMINUM BARIUM CADMIUM	3310 MG/KG 27.0 MG/KG 0.18 MG/KG	 J J	 g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-017 AST03 S16-71 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	2050 MG/KG		
		CHROMIUM	21.9 MG/KG		
		IRON	5630 MG/KG		
		LEAD	3.0 MG/KG	J	d
		MAGNESIUM	1650 MG/KG		
		MANGANESE	75.0 MG/KG		
		NICKEL	15.6 MG/KG		
		VANADIUM	13.8 MG/KG		
280-S16-018 AST28 B16-10-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6070 MG/KG		
		BARIUM	41.3 MG/KG	J	g
		CALCIUM	8560 MG/KG		
		CHROMIUM	59.6 MG/KG	J	h
		COBALT	4.8 MG/KG	J	g
		COPPER	8.6 MG/KG		
		IRON	8940 MG/KG		
		LEAD	3.2 MG/KG		
		MAGNESIUM	2570 MG/KG		
		MANGANESE	417 MG/KG		
		NICKEL	34.4 MG/KG		
		POTASSIUM	866 MG/KG	J	g
		SODIUM	434 MG/KG	J	g
		VANADIUM	27.7 MG/KG		
		ZINC	22.1 MG/KG		
280-S16-019 AST28 B16-10-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4560 MG/KG		
		BARIUM	9.7 MG/KG	J	g
		CALCIUM	2740 MG/KG		
		CHROMIUM	33.2 MG/KG	J	h
		COBALT	3.4 MG/KG	J	g
		COPPER	7.7 MG/KG		
		IRON	7240 MG/KG		
		MAGNESIUM	1900 MG/KG		
		MANGANESE	94.6 MG/KG		
		NICKEL	25.4 MG/KG		
		POTASSIUM	624 MG/KG	J	g
		SODIUM	312 MG/KG	J	g
		VANADIUM	21.2 MG/KG		
		ZINC	19.0 MG/KG		
280-S16-020 AST28 B16-10-2.5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3520 MG/KG		
		BARIUM	49.2 MG/KG		
		CALCIUM	2420 MG/KG		
		CHROMIUM	29.5 MG/KG	J	h
		COBALT	3.0 MG/KG	J	g
		COPPER	9.3 MG/KG		
		IRON	6680 MG/KG		
		LEAD	10.1 MG/KG		
		MAGNESIUM	1540 MG/KG		
		MANGANESE	90.8 MG/KG		
		NICKEL	20.1 MG/KG		
		POTASSIUM	416 MG/KG	J	g
		SODIUM	266 MG/KG	J	g
		VANADIUM	17.4 MG/KG		
		ZINC	20.0 MG/KG		
280-S16-021 AST28	CLP METALS (TOTAL)	ALUMINUM	4950 MG/KG		
		BARIUM	29.5 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-021 AST28 B16-10-5.0 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	3340 MG/KG		
		CHROMIUM	36.1 MG/KG	J	h
		COBALT	1.9 MG/KG	J	g
		COPPER	23.9 MG/KG		
		IRON	7240 MG/KG		
		MAGNESIUM	1900 MG/KG		
		MANGANESE	105 MG/KG		
		NICKEL	22.9 MG/KG		
		POTASSIUM	609 MG/KG	J	g
		SODIUM	121 MG/KG	J	g
		VANADIUM	21.6 MG/KG		
		ZINC	19.0 MG/KG		
280-S16-022 AST28 B16-11-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4710 MG/KG		
		BARIUM	28.0 MG/KG	J	g
		CALCIUM	2980 MG/KG		
		CHROMIUM	29.9 MG/KG	J	h
		COBALT	13.7 MG/KG		
		COPPER	7.7 MG/KG		
		IRON	7600 MG/KG		
		LEAD	5.8 MG/KG		
		MAGNESIUM	2130 MG/KG		
		MANGANESE	107 MG/KG		
		NICKEL	19.4 MG/KG		
		POTASSIUM	746 MG/KG	J	g
		SODIUM	93.7 MG/KG	J	g
		VANADIUM	20.8 MG/KG		
		ZINC	18.3 MG/KG		
280-S16-023 AST28 B16-11-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4720 MG/KG		
		BARIUM	30.2 MG/KG	J	g
		CALCIUM	3010 MG/KG		
		CHROMIUM	28.4 MG/KG	J	h
		COBALT	3.3 MG/KG	J	g
		COPPER	6.3 MG/KG		
		IRON	7360 MG/KG		
		MAGNESIUM	2130 MG/KG		
		MANGANESE	115 MG/KG		
		NICKEL	23.6 MG/KG		
		POTASSIUM	619 MG/KG	J	g
		SODIUM	90.3 MG/KG	J	g
		VANADIUM	20.9 MG/KG		
		ZINC	17.9 MG/KG		
280-S16-024 AST28 B16-11-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4310 MG/KG		
		BARIUM	30.0 MG/KG	J	g
		CALCIUM	2720 MG/KG		
		CHROMIUM	32.9 MG/KG	J	h
		COBALT	2.9 MG/KG	J	g
		COPPER	8.7 MG/KG		
		IRON	6900 MG/KG		
		MAGNESIUM	2050 MG/KG		
		MANGANESE	78.9 MG/KG		
		NICKEL	23.1 MG/KG		
		POTASSIUM	724 MG/KG	J	g
		SODIUM	88.8 MG/KG	J	g
		VANADIUM	19.2 MG/KG		
		ZINC	17.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-025 AST28 816-12-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5510 MG/KG		
		BARIUM	35.7 MG/KG	J	g
		CALCIUM	2850 MG/KG		
		CHROMIUM	34.6 MG/KG	J	h
		COBALT	3.9 MG/KG	J	g
		COPPER	12.9 MG/KG		
		IRON	8100 MG/KG		
		MAGNESIUM	2590 MG/KG		
		MANGANESE	108 MG/KG		
		NICKEL	27.1 MG/KG		
		POTASSIUM	828 MG/KG	J	g
		SODIUM	112 MG/KG	J	g
		VANADIUM	21.1 MG/KG		
		ZINC	21.4 MG/KG		
280-S16-026 AST28 816-12-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5280 MG/KG		
		BARIUM	30.2 MG/KG	J	g
		CALCIUM	3020 MG/KG		
		CHROMIUM	38.1 MG/KG	J	h
		COBALT	3.8 MG/KG	J	g
		COPPER	8.0 MG/KG		
		IRON	7650 MG/KG		
		MAGNESIUM	2250 MG/KG		
		MANGANESE	95.2 MG/KG		
		NICKEL	25.0 MG/KG		
		POTASSIUM	771 MG/KG	J	g
		SODIUM	88.1 MG/KG	J	g
		VANADIUM	20.5 MG/KG		
		ZINC	17.9 MG/KG		
280-S16-027 AST28 816-12-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4580 MG/KG		
		BARIUM	23.7 MG/KG	J	g
		CALCIUM	2560 MG/KG		
		CHROMIUM	26.8 MG/KG	J	h
		COBALT	3.5 MG/KG	J	g
		COPPER	6.9 MG/KG		
		IRON	6950 MG/KG		
		MAGNESIUM	2200 MG/KG		
		MANGANESE	89.4 MG/KG		
		NICKEL	21.0 MG/KG		
		POTASSIUM	769 MG/KG	J	g
		SODIUM	99.3 MG/KG	J	g
		VANADIUM	17.6 MG/KG		
		ZINC	17.3 MG/KG		
280-S16-028 AST49 M16-04-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4490 MG/KG		
		ANTIMONY	1.0 MG/KG	J	c,g
		ARSENIC	0.74 MG/KG	J	g
		BARIUM	25.5 MG/KG	J	g
		BERYLLIUM	0.26 MG/KG	J	g
		CALCIUM	3150 MG/KG		
		CHROMIUM	25.8 MG/KG	J	c
		COBALT	6.2 MG/KG	J	g
		COPPER	4.60 MG/KG	J	g
		IRON	7620 MG/KG		
		LEAD	1.4 MG/KG		
		MAGNESIUM	2090 MG/KG		
		MANGANESE	95.3 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-028 AST49 M16-04-0 0.00 - 0.00	CLP METALS (TOTAL)	NICKEL POTASSIUM VANADIUM ZINC	22.2 MG/KG 6382 MG/KG 20.5 MG/KG 15.7 MG/KG	 J 	 g
280-S16-029 AST49 M16-04-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM VANADIUM ZINC	3830 MG/KG 0.74 MG/KG 27.4 MG/KG 2150 MG/KG 25.8 MG/KG 4.7 MG/KG 4.6 MG/KG 7180 MG/KG 1.9 MG/KG 2020 MG/KG 86.7 MG/KG 20.4 MG/KG 669 MG/KG 19.3 MG/KG 17.2 MG/KG	 J J J J J J 	 g g c g g g
280-S16-030 AST49 M16-04-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM VANADIUM ZINC	5010 MG/KG 28.3 MG/KG 0.24 MG/KG 2860 MG/KG 32.6 MG/KG 4.8 MG/KG 4.9 MG/KG 8550 MG/KG 2.9 MG/KG 2170 MG/KG 93.2 MG/KG 25.9 MG/KG 567 MG/KG 26.9 MG/KG 19.5 MG/KG	 J J J J J J 	 g g c g g g
280-S16-109 AST49 M16-04-2.5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ANTIMONY ARSENIC BARIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM VANADIUM ZINC	4120 MG/KG 1.2 MG/KG 1.1 MG/KG 58.3 MG/KG 2390 MG/KG 26.2 MG/KG 4.7 MG/KG 4.2 MG/KG 7590 MG/KG 1.6 MG/KG 2120 MG/KG 93.6 MG/KG 20.2 MG/KG 741 MG/KG 19.7 MG/KG 17.1 MG/KG	 J J J J J J 	 c,g g c g g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-052 AST07 CPT-S16-01 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	81.1 UG/L	J	g
		BERYLLIUM	2.9 UG/L	J	g
		CADMIUM	5.5 UG/L	J	g
		CALCIUM	695000 UG/L	J	h
		COBALT	18.8 UG/L	J	c
		IRON	751 UG/L	J	h
		LEAD	3.5 UG/L	J	g
		MAGNESIUM	890000 UG/L		
		MANGANESE	11100 UG/L	J	h
		NICKEL	31.3 UG/L	J	g
		POTASSIUM	26000 UG/L		
		SODIUM	4990000 UG/L		
		ZINC	428 UG/L		
280-S16-053 AST04 CPT-S16-02 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	56.2 UG/L	J	g
		CADMIUM	14.3 UG/L		
		CALCIUM	50300 UG/L		
		IRON	1500 UG/L	J	c
		NICKEL	24.7 UG/L	J	g
		POTASSIUM	41700 UG/L	J	h
		SODIUM	2390000 UG/L		
280-S16-054 AST07 CPT-S16-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	2320 UG/L		
		ANTIMONY	10.9 UG/L	J	g
		ARSENIC	8.9 UG/L	J	g
		BARIUM	142 UG/L	J	g
		BERYLLIUM	2.0 UG/L	J	g
		CADMIUM	1.4 UG/L	J	g
		CALCIUM	24000 UG/L	J	h
		CHROMIUM	5.5 UG/L	J	g
		COBALT	12.0 UG/L	J	c
		COPPER	48.0 UG/L		
		IRON	11500 UG/L	J	h
		LEAD	4.6 UG/L		
		MAGNESIUM	27800 UG/L		
		MANGANESE	552 UG/L	J	h
		NICKEL	24.6 UG/L	J	g
		POTASSIUM	31300 UG/L		
		SODIUM	1120000 UG/L		
		VANADIUM	8.7 UG/L	J	g
		ZINC	2720 UG/L		
280-S16-075 AST33 CPT-S16-04 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	26.5 UG/L	J	g
		CALCIUM	10200 UG/L		
		MAGNESIUM	10900 UG/L		
		MANGANESE	119 UG/L		
		POTASSIUM	21500 UG/L	J	h
		SODIUM	752000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 19
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S19-014 AST05 NPS-S19-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5080 MG/KG		
		ARSENIC	3.3 MG/KG		
		BARIUM	224 MG/KG		
		CADMIUM	7.4 MG/KG	J	h
		CALCIUM	5190 MG/KG		
		CHROMIUM	59.9 MG/KG	J	d
		COPPER	44.4 MG/KG		
		IRON	16200 MG/KG		
		LEAD	90.0 MG/KG	J	h
		MAGNESIUM	3490 MG/KG		
		MANGANESE	208 MG/KG		
		MOLYBDENUM	5.4 MG/KG	J	g
		NICKEL	375 MG/KG	J	d
		SODIUM	158 MG/KG	J	g
		VANADIUM	19.0 MG/KG		
		ZINC	261 MG/KG		
280-S19-015 AST05 NPS-S19-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4410 MG/KG		
		ANTIMONY	13.3 MG/KG	J	c,g
		ARSENIC	16.0 MG/KG		
		BARIUM	106 MG/KG		
		CADMIUM	167 MG/KG	J	h
		CALCIUM	4120 MG/KG		
		CHROMIUM	2850 MG/KG	J	d
		COBALT	33.6 MG/KG		
		COPPER	673 MG/KG		
		IRON	14700 MG/KG		
		LEAD	1310 MG/KG	J	h
		MAGNESIUM	3880 MG/KG		
		MANGANESE	367 MG/KG		
		MERCURY	2.0 MG/KG		
		MOLYBDENUM	36.9 MG/KG		
		NICKEL	4100 MG/KG	J	d
		SELENIUM	1.1 MG/KG	J	g
		SILVER	245 MG/KG	J	d
		SODIUM	1610 MG/KG		
		VANADIUM	36.7 MG/KG		
		ZINC	627 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 19
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S19-038 AST09 CPT-S19-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	5.9 UG/L	J	g
		ARSENIC	3.2 UG/L	J	g
		BARIUM	293 UG/L		
		CALCIUM	139000 UG/L		
		CHROMIUM	5.2 UG/L	J	g
		COBALT	8.5 UG/L	J	g
		COPPER	14.7 UG/L	J	g
		MAGNESIUM	147000 UG/L		
		MANGANESE	300 UG/L		
		NICKEL	17.2 UG/L	J	g
		POTASSIUM	5830 UG/L		
		SODIUM	332000 UG/L		
280-S19-039 AST09 CPT-S19-02 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.0 UG/L	J	g
		BARIUM	74.1 UG/L	J	g
		CALCIUM	33300 UG/L		
		COBALT	10.3 UG/L	J	g
		COPPER	7.2 UG/L	J	g
		MAGNESIUM	32200 UG/L		
		MANGANESE	695 UG/L		
		NICKEL	26.5 UG/L	J	g
		POTASSIUM	4730 UG/L	J	g
		SODIUM	183000 UG/L		
		ZINC	587 UG/L		
280-S19-040 AST09 CPT-S19-02DUP 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	8.1 UG/L	J	g
		BARIUM	72.9 UG/L	J	g
		CALCIUM	32300 UG/L		
		COPPER	12.0 UG/L	J	g
		IRON	49.2 UG/L	J	g
		MAGNESIUM	32000 UG/L		
		MANGANESE	678 UG/L		
		NICKEL	16.7 UG/L	J	g
		SODIUM	182000 UG/L		
		ZINC	314 UG/L		
280-S19-041 AST34 CPT-S19-03 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	45.7 UG/L	J	g
		BERYLLIUM	2.1 UG/L	J	g
		CALCIUM	24300 UG/L	J	h
		IRON	134 UG/L	J	h
		MAGNESIUM	18500 UG/L	J	h
		MANGANESE	434 UG/L	J	h
		NICKEL	17.6 UG/L	J	g
		SODIUM	470000 UG/L		
		ZINC	66.4 UG/L	J	h
280-S19-042 AST27 CPT-S19-04 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	12.6 UG/L	J	g
		BARIUM	116 UG/L	J	g
		CADMIUM	0.58 UG/L	J	g
		CALCIUM	121000 UG/L		
		MAGNESIUM	175000 UG/L		
		MANGANESE	1700 UG/L		
		NICKEL	21.3 UG/L	J	g
		POTASSIUM	15900 UG/L		
		SODIUM	783000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-047 AST05 NPS-S11-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	10200 MG/KG		
		ANTIMONY	17.7 MG/KG	J	c,g
		ARSENIC	18.7 MG/KG		
		BARIUM	1370 MG/KG		
		CADMIUM	289 MG/KG	J	h
		CALCIUM	14300 MG/KG		
		CHROMIUM	992 MG/KG	J	d
		COBALT	45.3 MG/KG		
		COPPER	2310 MG/KG		
		IRON	48000 MG/KG		
		LEAD	12200 MG/KG	J	h
		MAGNESIUM	6100 MG/KG		
		MANGANESE	499 MG/KG		
		MERCURY	11.7 MG/KG		
		MOLYBDENUM	61.4 MG/KG		
		NICKEL	1220 MG/KG	J	d
		SILVER	51.2 MG/KG	J	d
		SODIUM	1450 MG/KG	J	g
		VANADIUM	62.6 MG/KG		
		ZINC	3420 MG/KG		
280-S7B11-048 AST33 NPS-S11-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8770 MG/KG	J	d
		ARSENIC	3.9 MG/KG		
		BARIUM	289 MG/KG	J	c,d
		CADMIUM	0.64 MG/KG	J	g
		CALCIUM	6740 MG/KG		
		CHROMIUM	31.1 MG/KG	J	h
		COBALT	10.7 MG/KG	J	g
		COPPER	30.4 MG/KG		
		IRON	15200 MG/KG	J	d
		LEAD	41.6 MG/KG	J	c,d
		MAGNESIUM	4080 MG/KG		
		MANGANESE	288 MG/KG	J	c
		NICKEL	37.7 MG/KG		
		POTASSIUM	1560 MG/KG		
		SODIUM	4280 MG/KG		
		VANADIUM	24.0 MG/KG		
		ZINC	128 MG/KG	J	c
280-S7B11-049 AST33 NPS-S11-02DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4800 MG/KG	J	d
		ARSENIC	2.8 MG/KG		
		BARIUM	305 MG/KG	J	c,d
		CADMIUM	0.80 MG/KG	J	g
		CALCIUM	3110 MG/KG		
		CHROMIUM	32.5 MG/KG	J	h
		COBALT	8.6 MG/KG	J	g
		COPPER	60.6 MG/KG		
		IRON	17400 MG/KG	J	d
		LEAD	44.8 MG/KG	J	c,d
		MAGNESIUM	3320 MG/KG		
		MANGANESE	204 MG/KG	J	c
		NICKEL	38.2 MG/KG		
		SODIUM	1770 MG/KG		
		VANADIUM	18.8 MG/KG		
		ZINC	733 MG/KG	J	c
280-S7B11-050 AST05	CLP METALS (TOTAL)	ALUMINUM	5560 MG/KG		
		ARSENIC	6.4 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-050	CLP METALS (TOTAL)	BARIUM	1500 MG/KG		
AST05		CADMIUM	4.8 MG/KG	J	h
NPS-S7B-01		CALCIUM	15900 MG/KG		
0.00 - 0.00		CHROMIUM	66.9 MG/KG	J	d
		COPPER	4520 MG/KG		
		IRON	28000 MG/KG		
		LEAD	1030 MG/KG	J	h
		MAGNESIUM	4270 MG/KG		
		MANGANESE	464 MG/KG		
		MOLYBDENUM	5.8 MG/KG	J	g
		NICKEL	58.6 MG/KG	J	d
		SODIUM	498 MG/KG	J	g
		VANADIUM	18.2 MG/KG		
		ZINC	2640 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 78 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-001 AST18 B11-08-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7730 MG/KG		
		ARSENIC	4.2 MG/KG		
		BARIUM	73.4 MG/KG	J	c
		BERYLLIUM	1.5 MG/KG		
		CALCIUM	4160 MG/KG		
		CHROMIUM	38.0 MG/KG		
		COBALT	8.6 MG/KG	J	g
		COPPER	10.4 MG/KG		
		IRON	12200 MG/KG		
		LEAD	7.4 MG/KG		
		MAGNESIUM	4190 MG/KG		
		MANGANESE	240 MG/KG		
		MERCURY	0.63 MG/KG		
		NICKEL	51.2 MG/KG		
		POTASSIUM	1220 MG/KG		
		SODIUM	192 MG/KG	J	g
		VANADIUM	28.6 MG/KG		
		ZINC	31.9 MG/KG		
280-S7B11-002 AST18 B11-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6310 MG/KG		
		ARSENIC	2.2 MG/KG		
		BARIUM	32.5 MG/KG	J	c,g
		BERYLLIUM	1.5 MG/KG		
		CALCIUM	2830 MG/KG		
		CHROMIUM	35.8 MG/KG		
		COBALT	6.8 MG/KG	J	g
		COPPER	6.6 MG/KG		
		IRON	9480 MG/KG		
		MAGNESIUM	2940 MG/KG		
		MANGANESE	106 MG/KG		
		NICKEL	34.0 MG/KG		
		POTASSIUM	1090 MG/KG		
		SODIUM	148 MG/KG	J	g
		VANADIUM	27.0 MG/KG		
		ZINC	22.0 MG/KG		
280-S7B11-003 AST18 B11-08-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6390 MG/KG		
		ARSENIC	2.9 MG/KG		
		BARIUM	74.0 MG/KG	J	c
		BERYLLIUM	1.4 MG/KG		
		CALCIUM	5210 MG/KG		
		CHROMIUM	37.3 MG/KG		
		COBALT	7.3 MG/KG	J	g
		COPPER	9.0 MG/KG		
		IRON	10500 MG/KG		
		LEAD	7.5 MG/KG		
		MAGNESIUM	5030 MG/KG		
		MANGANESE	318 MG/KG		
		NICKEL	50.2 MG/KG		
		POTASSIUM	1000 MG/KG	J	g
		SODIUM	419 MG/KG	J	g
		VANADIUM	26.1 MG/KG		
		ZINC	31.0 MG/KG		
280-S7B11-004 AST18 B11-09-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8680 MG/KG		
		ARSENIC	2.5 MG/KG		
		BARIUM	46.2 MG/KG	J	c
		BERYLLIUM	1.8 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-004 AST18 B11-09-0 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	7380 MG/KG		
		CHROMIUM	24.9 MG/KG		
		COBALT	6.2 MG/KG	J	g
		COPPER	10.1 MG/KG		
		IRON	13900 MG/KG		
		LEAD	21.7 MG/KG		
		MAGNESIUM	3950 MG/KG		
		MANGANESE	314 MG/KG		
		NICKEL	32.2 MG/KG		
		POTASSIUM	1170 MG/KG		
		SODIUM	118 MG/KG	J	g
		VANADIUM	25.8 MG/KG		
		ZINC	50.4 MG/KG		
280-S7B11-005 AST18 B11-09-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9730 MG/KG		
		ARSENIC	3.2 MG/KG		
		BARIUM	54.0 MG/KG	J	c
		BERYLLIUM	2.0 MG/KG		
		CADMIUM	1.1 MG/KG		
		CALCIUM	6910 MG/KG		
		CHROMIUM	38.5 MG/KG		
		COBALT	7.2 MG/KG	J	g
		COPPER	15.1 MG/KG		
		IRON	15800 MG/KG		
		LEAD	64.8 MG/KG		
		MAGNESIUM	4470 MG/KG		
		MANGANESE	233 MG/KG		
		NICKEL	28.8 MG/KG		
		POTASSIUM	1110 MG/KG		
		SODIUM	166 MG/KG	J	g
		VANADIUM	37.5 MG/KG		
		ZINC	74.5 MG/KG		
280-S7B11-006 AST18 B11-09-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4730 MG/KG		
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	52.0 MG/KG	J	c
		BERYLLIUM	0.53 MG/KG	J	g
		CALCIUM	2100 MG/KG		
		CHROMIUM	28.9 MG/KG		
		COBALT	3.9 MG/KG	J	g
		COPPER	5.3 MG/KG	J	g
		IRON	7600 MG/KG		
		MAGNESIUM	2250 MG/KG		
		MANGANESE	71.9 MG/KG		
		NICKEL	23.0 MG/KG		
		SODIUM	113 MG/KG	J	g
		VANADIUM	16.2 MG/KG		
		ZINC	19.9 MG/KG		
280-S7B11-007 AST19 B11-09-5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3880 MG/KG		
		ARSENIC	1.1 MG/KG	J	g
		BARIUM	22.6 MG/KG	J	g
		BERYLLIUM	0.31 MG/KG	J	g
		CADMIUM	0.12 MG/KG	J	g
		CALCIUM	1670 MG/KG		
		CHROMIUM	23.3 MG/KG		
		COBALT	3.3 MG/KG	J	g
		COPPER	5.3 MG/KG	J	g,h

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-007 AST19 B11-09-SDUP 0.00 - 0.00	CLP METALS (TOTAL)	IRON	6860 MG/KG		
		LEAD	1.9 MG/KG		
		MAGNESIUM	2140 MG/KG		
		MANGANESE	68.5 MG/KG		
		NICKEL	21.9 MG/KG		
		POTASSIUM	676 MG/KG	J	g
		SODIUM	158 MG/KG	J	g
		VANADIUM	16.9 MG/KG		
		ZINC	18.5 MG/KG	J	h
280-S7B11-008 AST13 B11-10-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6020 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	42.7 MG/KG		
		CADMIUM	0.12 MG/KG	J	g
		CALCIUM	3070 MG/KG		
		CHROMIUM	30.3 MG/KG		
		COBALT	5.8 MG/KG	J	g
		COPPER	13.7 MG/KG		
		IRON	11100 MG/KG		
		LEAD	17.0 MG/KG		
		MAGNESIUM	3260 MG/KG		
		MANGANESE	150 MG/KG		
		NICKEL	26.8 MG/KG		
		POTASSIUM	658 MG/KG	J	g
		SODIUM	118 MG/KG	J	g
		VANADIUM	24.7 MG/KG		
		ZINC	50.8 MG/KG		
280-S7B11-009 AST13 B11-10-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6370 MG/KG		
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	45.8 MG/KG		
		CALCIUM	4050 MG/KG		
		CHROMIUM	27.5 MG/KG		
		COBALT	5.6 MG/KG	J	g
		COPPER	15.4 MG/KG		
		IRON	12300 MG/KG		
		LEAD	5.6 MG/KG		
		MAGNESIUM	3390 MG/KG		
		MANGANESE	147 MG/KG		
		NICKEL	23.3 MG/KG		
		POTASSIUM	545 MG/KG	J	g
		SODIUM	168 MG/KG	J	g
		VANADIUM	26.5 MG/KG		
		ZINC	31.6 MG/KG		
280-S7B11-010 AST13 B11-10-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6110 MG/KG		
		ANTIMONY	0.61 MG/KG	J	c,g
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	55.0 MG/KG		
		CALCIUM	3590 MG/KG		
		CHROMIUM	27.9 MG/KG		
		COBALT	6.1 MG/KG	J	g
		COPPER	13.4 MG/KG		
		IRON	11400 MG/KG		
		LEAD	5.2 MG/KG		
		MAGNESIUM	2880 MG/KG		
		MANGANESE	138 MG/KG		
		NICKEL	22.4 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 78 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-010 AST13 B11-10-5 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	552 MG/KG	J	g
		SODIUM	180 MG/KG	J	g
		VANADIUM	25.8 MG/KG		
		ZINC	28.0 MG/KG		
280-S7B11-011 AST19 B11-11-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	25900 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	26.9 MG/KG	J	g
		BERYLLIUM	1.2 MG/KG		
		CADMIUM	0.18 MG/KG	J	g
		CALCIUM	28700 MG/KG		
		CHROMIUM	44.7 MG/KG		
		COBALT	17.1 MG/KG		
		COPPER	60.3 MG/KG	J	h
		IRON	32200 MG/KG		
		LEAD	15.4 MG/KG		
		MAGNESIUM	15100 MG/KG		
		MANGANESE	558 MG/KG		
		NICKEL	45.3 MG/KG		
		POTASSIUM	430 MG/KG	J	g
		SODIUM	1020 MG/KG	J	g
		VANADIUM	82.5 MG/KG		
		ZINC	52.9 MG/KG	J	h
280-S7B11-012 AST19 B11-11-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8650 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	57.0 MG/KG		
		BERYLLIUM	0.70 MG/KG	J	g
		CALCIUM	7430 MG/KG		
		CHROMIUM	24.8 MG/KG		
		COBALT	5.6 MG/KG	J	g
		COPPER	11.8 MG/KG	J	h
		IRON	15700 MG/KG		
		LEAD	6.4 MG/KG		
		MAGNESIUM	4930 MG/KG		
		MANGANESE	217 MG/KG		
		NICKEL	20.2 MG/KG		
		POTASSIUM	486 MG/KG	J	g
		SODIUM	378 MG/KG	J	g
		VANADIUM	29.6 MG/KG		
		ZINC	23.4 MG/KG	J	h
280-S7B11-013 AST19 B11-11-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3560 MG/KG		
		ARSENIC	1.5 MG/KG	J	g
		BARIUM	19.0 MG/KG	J	g
		BERYLLIUM	0.40 MG/KG	J	g
		CALCIUM	1890 MG/KG		
		CHROMIUM	22.4 MG/KG		
		COBALT	4.1 MG/KG	J	g
		COPPER	5.3 MG/KG	J	g,h
		IRON	6840 MG/KG		
		LEAD	2.0 MG/KG		
		MAGNESIUM	1990 MG/KG		
		MANGANESE	80.4 MG/KG		
		NICKEL	22.1 MG/KG		
		POTASSIUM	530 MG/KG	J	g
		VANADIUM	14.3 MG/KG		
		ZINC	18.6 MG/KG	J	h

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 78 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-014 AST19 B11-12-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7730 MG/KG		
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	54.6 MG/KG		
		BERYLLIUM	0.58 MG/KG	J	g
		CADMIUM	2.4 MG/KG		
		CALCIUM	5850 MG/KG		
		CHROMIUM	25.7 MG/KG		
		COBALT	5.6 MG/KG	J	g
		COPPER	48.9 MG/KG	J	h
		IRON	12800 MG/KG		
		LEAD	74.2 MG/KG		
		MAGNESIUM	4480 MG/KG		
		MANGANESE	281 MG/KG		
		NICKEL	26.9 MG/KG		
		POTASSIUM	777 MG/KG	J	g
		SODIUM	562 MG/KG	J	g
		VANADIUM	25.4 MG/KG		
		ZINC	59.4 MG/KG	J	h
280-S7B11-015 AST19 B11-12-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4060 MG/KG		
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	16.7 MG/KG	J	g
		BERYLLIUM	0.61 MG/KG	J	g
		CALCIUM	2430 MG/KG		
		CHROMIUM	28.5 MG/KG		
		COBALT	2.8 MG/KG	J	g
		IRON	7110 MG/KG		
		LEAD	1.8 MG/KG		
		MAGNESIUM	2030 MG/KG		
		MANGANESE	81.6 MG/KG		
		NICKEL	20.6 MG/KG		
		POTASSIUM	487 MG/KG	J	g
		SODIUM	155 MG/KG	J	g
		VANADIUM	17.9 MG/KG		
		ZINC	17.2 MG/KG	J	h
280-S7B11-017 AST19 B11-12-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3820 MG/KG		
		ARSENIC	1.9 MG/KG	J	g
		BARIUM	15.5 MG/KG	J	g
		BERYLLIUM	0.23 MG/KG	J	g
		CALCIUM	2040 MG/KG		
		CHROMIUM	25.8 MG/KG		
		COBALT	3.7 MG/KG	J	g
		IRON	6730 MG/KG		
		LEAD	1.8 MG/KG		
		MAGNESIUM	1780 MG/KG		
		MANGANESE	77.9 MG/KG		
		NICKEL	20.4 MG/KG		
		POTASSIUM	440 MG/KG	J	g
		VANADIUM	15.6 MG/KG		
		ZINC	16.7 MG/KG	J	h
280-S7B11-018 AST19 B11-13-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	11100 MG/KG		
		BARIUM	10.3 MG/KG	J	g
		BERYLLIUM	0.89 MG/KG	J	g
		CALCIUM	2380 MG/KG		
		COBALT	8.4 MG/KG	J	g
		IRON	19300 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 78 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-018 AST19 B11-13-0 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM	8580 MG/KG		
		MANGANESE	327 MG/KG		
		POTASSIUM	176 MG/KG	J	g
		SODIUM	705 MG/KG	J	g
		VANADIUM	40.4 MG/KG		
		ZINC	19.0 MG/KG	J	h
280-S7B11-019 AST19 B11-13-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3310 MG/KG		
		ARSENIC	1.3 MG/KG	J	g
		BARIUM	14.9 MG/KG	J	g
		BERYLLIUM	0.26 MG/KG	J	g
		CALCIUM	1590 MG/KG		
		CHROMIUM	26.0 MG/KG		
		COBALT	2.9 MG/KG	J	g
		COPPER	5.0 MG/KG	J	g,h
		IRON	6430 MG/KG		
		LEAD	1.9 MG/KG		
		MAGNESIUM	1870 MG/KG		
		MANGANESE	75.7 MG/KG		
		NICKEL	20.2 MG/KG		
		POTASSIUM	508 MG/KG	J	g
		SODIUM	133 MG/KG	J	g
		VANADIUM	14.5 MG/KG		
		ZINC	16.1 MG/KG	J	h
280-S7B11-020 AST19 B11-13-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6020 MG/KG		
		ARSENIC	4.4 MG/KG		
		BARIUM	57.1 MG/KG		
		BERYLLIUM	0.82 MG/KG	J	g
		CALCIUM	6690 MG/KG		
		CHROMIUM	38.6 MG/KG		
		COBALT	9.1 MG/KG	J	g
		COPPER	13.9 MG/KG	J	h
		IRON	14000 MG/KG		
		LEAD	13.1 MG/KG		
		MAGNESIUM	5770 MG/KG		
		MANGANESE	276 MG/KG		
		NICKEL	61.9 MG/KG		
		POTASSIUM	883 MG/KG	J	g
		SODIUM	137 MG/KG	J	g
		VANADIUM	27.1 MG/KG		
		ZINC	44.1 MG/KG	J	h
280-S7B11-021 AST19 B11-14-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7620 MG/KG		
		ARSENIC	0.53 MG/KG	J	g
		BARIUM	18.4 MG/KG	J	g
		BERYLLIUM	0.80 MG/KG	J	g
		CADMIUM	0.12 MG/KG	J	g
		CALCIUM	2900 MG/KG		
		CHROMIUM	5.3 MG/KG		
		COBALT	4.6 MG/KG	J	g
		COPPER	14.0 MG/KG	J	h
		IRON	16000 MG/KG		
		LEAD	8.1 MG/KG		
		MAGNESIUM	4540 MG/KG		
		MANGANESE	253 MG/KG		
		POTASSIUM	264 MG/KG	J	g
		SODIUM	202 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-021 AST19 B11-14-0 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM	26.0 MG/KG		
		ZINC	26.8 MG/KG	J	h
280-S7B11-022 AST19 B11-14-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3440 MG/KG		
		ARSENIC	1.5 MG/KG	J	g
		BARIUM	25.7 MG/KG	J	g
		BERYLLIUM	0.22 MG/KG	J	g
		CALCIUM	1910 MG/KG		
		CHROMIUM	25.0 MG/KG		
		COBALT	3.6 MG/KG	J	g
		COPPER	4.9 MG/KG	J	g,h
		IRON	6490 MG/KG		
		LEAD	1.6 MG/KG		
		MAGNESIUM	1840 MG/KG		
		MANGANESE	75.7 MG/KG		
		NICKEL	18.8 MG/KG		
		POTASSIUM	551 MG/KG	J	g
		VANADIUM	15.2 MG/KG		
		ZINC	16.4 MG/KG	J	h
280-S7B11-023 AST19 B11-14-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3560 MG/KG		
		ARSENIC	1.5 MG/KG	J	g
		BARIUM	20.9 MG/KG	J	g
		BERYLLIUM	0.25 MG/KG	J	g
		CALCIUM	1760 MG/KG		
		CHROMIUM	23.1 MG/KG		
		COBALT	3.6 MG/KG	J	g
		COPPER	4.9 MG/KG	J	g,h
		IRON	7180 MG/KG		
		LEAD	1.7 MG/KG		
		MAGNESIUM	2020 MG/KG		
		MANGANESE	79.1 MG/KG		
		NICKEL	22.7 MG/KG		
		POTASSIUM	611 MG/KG	J	g
		VANADIUM	14.1 MG/KG		
		ZINC	18.4 MG/KG	J	h
280-S7B11-024 AST18 B07B-03-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13000 MG/KG		
		ARSENIC	5.8 MG/KG		
		BARIUM	144 MG/KG	J	c
		BERYLLIUM	2.5 MG/KG		
		CADMIUM	9.5 MG/KG		
		CALCIUM	4620 MG/KG		
		CHROMIUM	67.0 MG/KG		
		COBALT	9.6 MG/KG	J	g
		COPPER	71.4 MG/KG		
		IRON	17900 MG/KG		
		LEAD	416 MG/KG		
		MAGNESIUM	4340 MG/KG		
		MANGANESE	277 MG/KG		
		MERCURY	2.6 MG/KG		
		NICKEL	50.6 MG/KG		
		POTASSIUM	2060 MG/KG		
		SODIUM	172 MG/KG	J	g
		VANADIUM	40.1 MG/KG		
		ZINC	267 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-025 AST18 B07B-03-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8750 MG/KG		
		ARSENIC	3.1 MG/KG		
		BARIUM	55.6 MG/KG	J	c
		BERYLLIUM	1.4 MG/KG		
		CALCIUM	9110 MG/KG		
		CHROMIUM	41.3 MG/KG		
		COBALT	6.5 MG/KG	J	g
		COPPER	9.4 MG/KG		
		IRON	11500 MG/KG		
		LEAD	4.2 MG/KG		
		MAGNESIUM	2580 MG/KG		
		MANGANESE	118 MG/KG		
		NICKEL	36.0 MG/KG		
		POTASSIUM	980 MG/KG	J	g
		SODIUM	163 MG/KG	J	g
		VANADIUM	28.3 MG/KG		
		ZINC	23.9 MG/KG		
280-S7B11-026 AST18 B07B-03-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5430 MG/KG		
		ARSENIC	1.8 MG/KG	J	g
		BARIUM	28.5 MG/KG	J	c,g
		BERYLLIUM	1.3 MG/KG		
		CALCIUM	3310 MG/KG		
		CHROMIUM	39.2 MG/KG		
		COBALT	4.3 MG/KG	J	g
		COPPER	6.2 MG/KG		
		IRON	9280 MG/KG		
		LEAD	9.3 MG/KG		
		MAGNESIUM	2150 MG/KG		
		MANGANESE	88.2 MG/KG		
		NICKEL	25.9 MG/KG		
		SODIUM	103 MG/KG	J	g
		VANADIUM	32.1 MG/KG		
		ZINC	21.2 MG/KG		
280-S7B11-027 AST18 B07B-04-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9530 MG/KG		
		ARSENIC	4.0 MG/KG		
		BARIUM	50.6 MG/KG	J	c
		BERYLLIUM	2.1 MG/KG		
		CALCIUM	3920 MG/KG		
		CHROMIUM	35.3 MG/KG		
		COBALT	6.4 MG/KG	J	g
		COPPER	16.8 MG/KG		
		IRON	14200 MG/KG		
		LEAD	29.2 MG/KG		
		MAGNESIUM	3540 MG/KG		
		MANGANESE	218 MG/KG		
		MERCURY	0.16 MG/KG		
		NICKEL	33.7 MG/KG		
		POTASSIUM	1260 MG/KG		
		SODIUM	117 MG/KG	J	g
		VANADIUM	31.2 MG/KG		
		ZINC	53.7 MG/KG		
280-S7B11-028 AST18 B07B-04-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6710 MG/KG		
		ARSENIC	2.7 MG/KG		
		BARIUM	105 MG/KG	J	c
		BERYLLIUM	1.5 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-028 AST18 B07B-04-2.5 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	4660 MG/KG		
		CHROMIUM	32.7 MG/KG		
		COBALT	5.7 MG/KG	J	g
		COPPER	6.7 MG/KG		
		IRON	9260 MG/KG		
		MAGNESIUM	2050 MG/KG		
		MANGANESE	94.7 MG/KG		
		NICKEL	25.1 MG/KG		
		SODIUM	107 MG/KG	J	g
		VANADIUM	28.9 MG/KG		
		ZINC	18.7 MG/KG		
280-S7B11-029 AST18 B07B-04-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6510 MG/KG		
		ARSENIC	3.4 MG/KG		
		BARIUM	41.2 MG/KG	J	c,g
		BERYLLIUM	1.6 MG/KG		
		CALCIUM	10300 MG/KG		
		CHROMIUM	33.2 MG/KG		
		COBALT	7.0 MG/KG	J	g
		COPPER	8.5 MG/KG		
		IRON	12100 MG/KG		
		LEAD	3.6 MG/KG		
		MAGNESIUM	3030 MG/KG		
		MANGANESE	143 MG/KG		
		NICKEL	32.6 MG/KG		
		POTASSIUM	915 MG/KG	J	g
		SODIUM	140 MG/KG	J	g
		VANADIUM	25.2 MG/KG		
		ZINC	25.8 MG/KG		
280-S7B11-030 AST18 B07B-04-5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8730 MG/KG		
		ARSENIC	3.4 MG/KG		
		BARIUM	50.0 MG/KG	J	c
		BERYLLIUM	2.1 MG/KG		
		CALCIUM	3300 MG/KG		
		CHROMIUM	37.9 MG/KG		
		COBALT	4.7 MG/KG	J	g
		COPPER	10.6 MG/KG		
		IRON	14800 MG/KG		
		LEAD	3.4 MG/KG		
		MAGNESIUM	3050 MG/KG		
		MANGANESE	134 MG/KG		
		NICKEL	35.5 MG/KG		
		POTASSIUM	1150 MG/KG		
		SODIUM	102 MG/KG	J	g
		VANADIUM	30.2 MG/KG		
		ZINC	31.8 MG/KG		
280-S7B11-031 AST18 M11-05-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6320 MG/KG		
		ARSENIC	2.2 MG/KG		
		BARIUM	33.5 MG/KG	J	c,g
		BERYLLIUM	1.3 MG/KG		
		CALCIUM	3530 MG/KG		
		CHROMIUM	31.8 MG/KG		
		COBALT	4.5 MG/KG	J	g
		COPPER	10.1 MG/KG		
		IRON	10300 MG/KG		
		LEAD	4.1 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 78 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-031 AST18 M11-05-0 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM MANGANESE NICKEL SODIUM VANADIUM ZINC	2640 MG/KG 129 MG/KG 23.9 MG/KG 115 MG/KG 27.1 MG/KG 22.3 MG/KG	 J 	 g
280-S7B11-032 AST18 M11-05-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM CALCIUM CHROMIUM COBALT COPPER IRON MAGNESIUM MANGANESE NICKEL SODIUM VANADIUM ZINC	5370 MG/KG 2.3 MG/KG 27.9 MG/KG 1.5 MG/KG 3010 MG/KG 34.2 MG/KG 5.4 MG/KG 7.1 MG/KG 8780 MG/KG 2300 MG/KG 109 MG/KG 27.9 MG/KG 96.8 MG/KG 24.7 MG/KG 20.1 MG/KG	 J J J 	 c,g g g
280-S7B11-033 AST18 M11-05-5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ARSENIC BARIUM BERYLLIUM CALCIUM CHROMIUM COBALT COPPER IRON MAGNESIUM MANGANESE NICKEL SODIUM VANADIUM ZINC	5760 MG/KG 2.4 MG/KG 31.5 MG/KG 1.3 MG/KG 2750 MG/KG 33.5 MG/KG 3.7 MG/KG 6.1 MG/KG 8660 MG/KG 2330 MG/KG 142 MG/KG 27.4 MG/KG 345 MG/KG 25.8 MG/KG 19.1 MG/KG	 J J J 	 c,g g g
280-S7B11-151 AST26 M11-06-0.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM CALCIUM CHROMIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	19000 MG/KG 84.4 MG/KG 7630 MG/KG 34.7 MG/KG 11.9 MG/KG 27.7 MG/KG 34100 MG/KG 7.9 MG/KG 11300 MG/KG 449 MG/KG 33.7 MG/KG 908 MG/KG 514 MG/KG 86.7 MG/KG 53.0 MG/KG	 J J J 	 h g g,h
280-S7B11-152 AST26 M11-06-2.5	CLP METALS (TOTAL)	ALUMINUM BARIUM CALCIUM	3940 MG/KG 59.7 MG/KG 4150 MG/KG	 	

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-152 AST26 M11-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	CHROMIUM	26.9 MG/KG	J	h
		COBALT	2.9 MG/KG	J	g
		COPPER	5.4 MG/KG		
		IRON	7280 MG/KG		
		MAGNESIUM	1930 MG/KG		
		MANGANESE	91.2 MG/KG		
		NICKEL	20.9 MG/KG		
		POTASSIUM	486 MG/KG	J	g
		SODIUM	88.2 MG/KG	J	g,h
		VANADIUM	17.1 MG/KG		
		ZINC	16.1 MG/KG		
280-S7B11-153 AST26 M11-06-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	13400 MG/KG		
		ARSENIC	8.8 MG/KG		
		BARIUM	141 MG/KG		
		CALCIUM	14000 MG/KG		
		CHROMIUM	42.2 MG/KG	J	h
		COBALT	15.2 MG/KG		
		COPPER	28.9 MG/KG		
		IRON	31300 MG/KG		
		LEAD	8.0 MG/KG		
		MAGNESIUM	8490 MG/KG		
		MANGANESE	510 MG/KG		
		NICKEL	150 MG/KG		
		POTASSIUM	1280 MG/KG		
		SODIUM	162 MG/KG	J	g,h
		VANADIUM	46.7 MG/KG		
		ZINC	59.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 78
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-083 AST10 CPT-S7B-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	12.7 UG/L	J	g,h
		BARIUM	88.6 UG/L	J	g
		BERYLLIUM	3.6 UG/L	J	d,g,h
		CADMIUM	4.1 UG/L	J	g
		CALCIUM	464000 UG/L		
		COBALT	114 UG/L		
		COPPER	10.1 UG/L	J	g
		IRON	6090 UG/L		
		MAGNESIUM	1510000 UG/L		
		MANGANESE	7240 UG/L		
		NICKEL	273 UG/L	J	d
		POTASSIUM	729000 UG/L	J	h
		SODIUM	13900000 UG/L		
		ZINC	1460 UG/L	J	c
280-S7B11-084 AST10 CPT-S7B-02 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	93.4 UG/L	J	g
		BERYLLIUM	3.4 UG/L	J	d,g
		CALCIUM	300000 UG/L		
		COBALT	46.5 UG/L	J	g
		IRON	8490 UG/L		
		MAGNESIUM	957000 UG/L		
		MANGANESE	4370 UG/L		
		NICKEL	119 UG/L	J	d
		POTASSIUM	564000 UG/L	J	h
		SODIUM	10900000 UG/L		
		ZINC	1040 UG/L	J	c
280-S7B11-085 AST10 CPT-S7B-2DUP 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	11.8 UG/L	J	g
		BARIUM	129 UG/L	J	g
		BERYLLIUM	3.6 UG/L	J	d,g
		CALCIUM	319000 UG/L		
		COBALT	50.0 UG/L	J	g
		COPPER	18.0 UG/L	J	g
		IRON	6200 UG/L		
		MAGNESIUM	937000 UG/L		
		MANGANESE	4130 UG/L		
		NICKEL	127 UG/L	J	d
		POTASSIUM	568000 UG/L	J	h
		SODIUM	10900000 UG/L		
		ZINC	624 UG/L	J	c
280-S7B11-086 AST10 CPT-S11-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	20.8 UG/L	J	g
		ARSENIC	105 UG/L	J	d
		BARIUM	23.8 UG/L	J	g
		CALCIUM	22000 UG/L		
		CHROMIUM	1.6 UG/L	J	d,g
		COPPER	24.4 UG/L	J	g
		IRON	1110 UG/L		
		MAGNESIUM	6440 UG/L		
		MANGANESE	13.0 UG/L	J	g
		POTASSIUM	27600 UG/L	J	h
		SODIUM	255000 UG/L		
		VANADIUM	119 UG/L		
280-S7B11-087 AST10 CPT-S11-02 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	415 UG/L	J	g
		ANTIMONY	2.6 UG/L	J	g
		ARSENIC	29.1 UG/L	J	d
		CALCIUM	7080 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-087 AST10 CPT-S11-02 0.00 - 0.00	CLP METALS (TOTAL)	CHROMIUM	1.6 UG/L	J	d,g
		IRON	394 UG/L	J	g
		MAGNESIUM	3920 UG/L	J	g
		MANGANESE	15.8 UG/L	J	g
		POTASSIUM	3950 UG/L	J	h
		SODIUM	670000 UG/L		
		VANADIUM	71.3 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SEDIMT

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-027 AST06 NPS-S7C-01 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7290 MG/KG		
		ANTIMONY	0.62 MG/KG	J	c
		ARSENIC	2.6 MG/KG		
		BARIUM	63.3 MG/KG		
		BERYLLIUM	0.68 MG/KG	J	g
		CADMIUM	1.6 MG/KG	J	c,d
		CALCIUM	5210 MG/KG		
		CHROMIUM	30.8 MG/KG	J	c
		COPPER	19.0 MG/KG	J	d
		IRON	13900 MG/KG		
		LEAD	30.2 MG/KG	J	d,h
		MAGNESIUM	4720 MG/KG		
		MANGANESE	228 MG/KG		
		NICKEL	65.0 MG/KG		
		POTASSIUM	774 MG/KG	J	g
		SODIUM	289 MG/KG	J	g
		VANADIUM	22.8 MG/KG		
		ZINC	119 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-001 AST24 B7C-11-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4500 MG/KG		
		BARIUM	30.6 MG/KG	J	g
		BERYLLIUM	0.30 MG/KG	J	g
		CALCIUM	5780 MG/KG		
		CHROMIUM	28.2 MG/KG	J	h
		COPPER	6.4 MG/KG		
		IRON	7150 MG/KG		
		MAGNESIUM	2060 MG/KG		
		MANGANESE	86.3 MG/KG		
		NICKEL	19.7 MG/KG		
		POTASSIUM	655 MG/KG	J	g
		SODIUM	107 MG/KG	J	g
		VANADIUM	19.8 MG/KG		
		ZINC	17.1 MG/KG		
280-S7C-002 AST24 B7C-11-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5060 MG/KG		
		BARIUM	38.7 MG/KG	J	g
		BERYLLIUM	0.77 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	5630 MG/KG		
		CHROMIUM	29.5 MG/KG	J	h
		COPPER	7.2 MG/KG		
		IRON	8460 MG/KG		
		MAGNESIUM	2690 MG/KG		
		MANGANESE	109 MG/KG		
		NICKEL	28.3 MG/KG		
		POTASSIUM	689 MG/KG	J	g
		SODIUM	119 MG/KG	J	g
		VANADIUM	21.4 MG/KG		
		ZINC	20.2 MG/KG		
280-S7C-003 AST24 B7C-11-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8300 MG/KG		
		BARIUM	63.9 MG/KG		
		BERYLLIUM	0.71 MG/KG	J	g
		CALCIUM	2140 MG/KG		
		CHROMIUM	43.2 MG/KG	J	h
		COPPER	9.7 MG/KG		
		IRON	10300 MG/KG		
		MAGNESIUM	2000 MG/KG		
		MANGANESE	190 MG/KG		
		NICKEL	21.1 MG/KG		
		POTASSIUM	1000 MG/KG	J	g
		SODIUM	220 MG/KG	J	g
		VANADIUM	29.2 MG/KG		
		ZINC	22.4 MG/KG		
280-S7C-004 AST24 B7C-12-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8760 MG/KG		
		BARIUM	57.6 MG/KG		
		BERYLLIUM	0.70 MG/KG	J	g
		CADMIUM	0.18 MG/KG	J	g
		CALCIUM	2900 MG/KG		
		CHROMIUM	39.1 MG/KG	J	h
		COPPER	10.0 MG/KG		
		IRON	11700 MG/KG		
		LEAD	8.3 MG/KG		
		MAGNESIUM	2830 MG/KG		
		MANGANESE	148 MG/KG		
		NICKEL	32.4 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-004 AST24 B7C-12-0 0.00 - 0.00	CLP METALS (TOTAL)	POTASSIUM	961 MG/KG	J	g
		SODIUM	223 MG/KG	J	g
		VANADIUM	27.3 MG/KG		
		ZINC	32.4 MG/KG		
280-S7C-005 AST24 B7C-12-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9460 MG/KG		
		BARIUM	58.0 MG/KG		
		BERYLLIUM	0.95 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	2740 MG/KG		
		CHROMIUM	37.6 MG/KG	J	h
		COPPER	10.2 MG/KG		
		IRON	12800 MG/KG		
		LEAD	4.9 MG/KG		
		MAGNESIUM	2870 MG/KG		
		MANGANESE	166 MG/KG		
		MERCURY	0.46 MG/KG		
		NICKEL	36.4 MG/KG		
		POTASSIUM	1020 MG/KG	J	g
		SODIUM	262 MG/KG	J	g
		VANADIUM	28.0 MG/KG		
		ZINC	26.6 MG/KG		
280-S7C-006 AST24 B7C-12-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5010 MG/KG		
		BARIUM	59.2 MG/KG		
		BERYLLIUM	0.70 MG/KG	J	g
		CADMIUM	0.11 MG/KG	J	g
		CALCIUM	1400 MG/KG		
		CHROMIUM	24.5 MG/KG	J	h
		COPPER	8.1 MG/KG		
		IRON	8130 MG/KG		
		MAGNESIUM	1570 MG/KG		
		MANGANESE	151 MG/KG		
		POTASSIUM	699 MG/KG	J	g
		SODIUM	85.8 MG/KG	J	g
		VANADIUM	20.9 MG/KG		
		ZINC	17.2 MG/KG		
280-S7C-007 AST32 B7C-13-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6890 MG/KG		
		ARSENIC	3.4 MG/KG		
		BARIUM	52.7 MG/KG		
		BERYLLIUM	1.8 MG/KG		
		CADMIUM	4.3 MG/KG		
		CALCIUM	5400 MG/KG		
		CHROMIUM	40.0 MG/KG	J	d,h
		COBALT	6.9 MG/KG	J	g
		COPPER	20.1 MG/KG		
		IRON	13700 MG/KG		
		LEAD	52.2 MG/KG	J	d
		MAGNESIUM	3510 MG/KG		
		MANGANESE	312 MG/KG		
		NICKEL	29.9 MG/KG		
		POTASSIUM	833 MG/KG	J	g
		SODIUM	739 MG/KG	J	g
		VANADIUM	26.4 MG/KG		
		ZINC	110 MG/KG		
280-S7C-008	CLP METALS (TOTAL)	ALUMINUM	5010 MG/KG		

Validity (Qual) : J - Estimated concentration

pplicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-008 AST32 87C-13-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	1.4 MG/KG	J	g
		BARIUM	74.5 MG/KG		
		BERYLLIUM	1.1 MG/KG		
		CADMIUM	0.12 MG/KG	J	g
		CALCIUM	3300 MG/KG		
		CHROMIUM	35.1 MG/KG	J	d,h
		COBALT	4.9 MG/KG	J	g
		COPPER	11.9 MG/KG		
		IRON	8420 MG/KG		
		LEAD	37.9 MG/KG	J	d
		MAGNESIUM	2060 MG/KG		
		MANGANESE	147 MG/KG		
		NICKEL	25.0 MG/KG		
		POTASSIUM	658 MG/KG	J	g
		SELENIUM	0.73 MG/KG	J	g
		SODIUM	91.0 MG/KG	J	g
		VANADIUM	22.1 MG/KG		
		ZINC	54.9 MG/KG		
280-S7C-009 AST32 87C-13-2.5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4690 MG/KG		
		ARSENIC	2.1 MG/KG		
		BARIUM	35.7 MG/KG	J	g
		BERYLLIUM	0.52 MG/KG	J	g
		CALCIUM	2820 MG/KG		
		CHROMIUM	31.7 MG/KG	J	d,h
		COBALT	5.4 MG/KG	J	g
		COPPER	8.2 MG/KG		
		IRON	8180 MG/KG		
		LEAD	3.6 MG/KG	J	d
		MAGNESIUM	2340 MG/KG		
		MANGANESE	103 MG/KG		
		NICKEL	23.6 MG/KG		
		POTASSIUM	656 MG/KG	J	g
		SODIUM	91.0 MG/KG	J	g
		VANADIUM	21.9 MG/KG		
		ZINC	18.7 MG/KG		
280-S7C-010 AST32 87C-13-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6090 MG/KG		
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	59.7 MG/KG		
		BERYLLIUM	0.87 MG/KG	J	g
		CALCIUM	2390 MG/KG		
		CHROMIUM	36.9 MG/KG	J	d,h
		COBALT	7.1 MG/KG	J	g
		COPPER	11.1 MG/KG		
		IRON	10300 MG/KG		
		LEAD	12.0 MG/KG	J	d
		MAGNESIUM	2540 MG/KG		
		MANGANESE	168 MG/KG		
		NICKEL	27.0 MG/KG		
		POTASSIUM	877 MG/KG	J	g
		SELENIUM	1.0 MG/KG	J	g
		SODIUM	124 MG/KG	J	g
		VANADIUM	23.8 MG/KG		
		ZINC	27.1 MG/KG		
280-S7C-011 AST32	CLP METALS (TOTAL)	ALUMINUM	4230 MG/KG		
		ARSENIC	2.5 MG/KG		

Validity (Qual) : J - Estimated concentration

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e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-011 AST32 B7C-14-0 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	42.7 MG/KG	J	g
		BERYLLIUM	0.74 MG/KG	J	g
		CALCIUM	3810 MG/KG		
		CHROMIUM	19.9 MG/KG	J	d,h
		COBALT	5.3 MG/KG	J	g
		COPPER	7.4 MG/KG		
		IRON	7660 MG/KG		
		LEAD	2.7 MG/KG	J	d
		MAGNESIUM	2140 MG/KG		
		MANGANESE	105 MG/KG		
		NICKEL	24.3 MG/KG		
		POTASSIUM	577 MG/KG	J	g
		SODIUM	87.6 MG/KG	J	g
		VANADIUM	20.6 MG/KG		
		ZINC	20.6 MG/KG		
280-S7C-012 AST32 B7C-14-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4140 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	52.2 MG/KG		
		BERYLLIUM	0.90 MG/KG	J	g
		CALCIUM	3840 MG/KG		
		CHROMIUM	32.2 MG/KG	J	d,h
		COBALT	4.0 MG/KG	J	g
		COPPER	6.4 MG/KG		
		IRON	7150 MG/KG		
		LEAD	6.4 MG/KG	J	d
		MAGNESIUM	2010 MG/KG		
		MANGANESE	89.2 MG/KG		
		NICKEL	20.3 MG/KG		
		POTASSIUM	557 MG/KG	J	g
		SODIUM	93.5 MG/KG	J	g
		VANADIUM	21.1 MG/KG		
		ZINC	16.6 MG/KG		
280-S7C-013 AST32 B7C-14-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4580 MG/KG		
		ARSENIC	1.5 MG/KG	J	g
		BARIUM	24.5 MG/KG	J	g
		BERYLLIUM	0.85 MG/KG	J	g
		CALCIUM	3800 MG/KG		
		CHROMIUM	29.2 MG/KG	J	d,h
		COBALT	5.3 MG/KG	J	g
		COPPER	5.9 MG/KG		
		IRON	7600 MG/KG		
		LEAD	5.8 MG/KG	J	d
		MAGNESIUM	2160 MG/KG		
		MANGANESE	103 MG/KG		
		NICKEL	20.6 MG/KG		
		POTASSIUM	628 MG/KG	J	g
		SODIUM	107 MG/KG	J	g
		VANADIUM	21.6 MG/KG		
		ZINC	15.8 MG/KG		
280-S7C-014 AST32 B7C-15-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5660 MG/KG		
		ARSENIC	8.8 MG/KG		
		BARIUM	95.0 MG/KG		
		BERYLLIUM	1.1 MG/KG		
		CADMIUM	0.23 MG/KG	J	g
		CALCIUM	2930 MG/KG		

Validity (Qual) : J - Estimated concentration

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e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-014 AST32 B7C-15-0 0.00 - 0.00	CLP METALS (TOTAL)	CHROMIUM	30.2 MG/KG	J	d,h
		COBALT	5.4 MG/KG	J	g
		COPPER	16.4 MG/KG		
		IRON	9290 MG/KG		
		LEAD	61.6 MG/KG	J	d
		MAGNESIUM	1900 MG/KG		
		MANGANESE	226 MG/KG		
		NICKEL	23.0 MG/KG		
		POTASSIUM	679 MG/KG	J	g
		SELENIUM	0.74 MG/KG	J	g
		SODIUM	74.6 MG/KG	J	g
		VANADIUM	22.8 MG/KG		
		ZINC	62.5 MG/KG		
280-S7C-015 AST32 B7C-15-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4600 MG/KG		
		ARSENIC	2.4 MG/KG		
		BARIUM	42.8 MG/KG		
		BERYLLIUM	0.63 MG/KG	J	g
		CALCIUM	6960 MG/KG		
		CHROMIUM	35.5 MG/KG	J	d,h
		COBALT	4.2 MG/KG	J	g
		COPPER	5.7 MG/KG		
		IRON	7910 MG/KG		
		LEAD	2.1 MG/KG	J	d
		MAGNESIUM	2070 MG/KG		
		MANGANESE	104 MG/KG		
		NICKEL	22.7 MG/KG		
		POTASSIUM	530 MG/KG	J	g
		SELENIUM	0.66 MG/KG	J	g
		SODIUM	100 MG/KG	J	g
		VANADIUM	22.9 MG/KG		
		ZINC	17.6 MG/KG		
280-S7C-016 AST32 B7C-15-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5700 MG/KG		
		ARSENIC	1.6 MG/KG	J	g
		BARIUM	82.9 MG/KG		
		BERYLLIUM	0.88 MG/KG	J	g
		CALCIUM	2130 MG/KG		
		CHROMIUM	29.3 MG/KG	J	d,h
		COBALT	5.4 MG/KG	J	g
		COPPER	8.3 MG/KG		
		IRON	9030 MG/KG		
		LEAD	6.8 MG/KG	J	d
		MAGNESIUM	1930 MG/KG		
		MANGANESE	294 MG/KG		
		NICKEL	21.1 MG/KG		
		POTASSIUM	934 MG/KG	J	g
		SELENIUM	0.78 MG/KG	J	g
		SODIUM	279 MG/KG	J	g
		VANADIUM	19.7 MG/KG		
		ZINC	24.8 MG/KG		
280-S7C-017 AST32 M7C-06-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	14200 MG/KG		
		ARSENIC	3.2 MG/KG		
		BARIUM	142 MG/KG		
		BERYLLIUM	1.9 MG/KG		
		CALCIUM	11700 MG/KG		
		CHROMIUM	27.4 MG/KG	J	d,h

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
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d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-017 AST32 M7C-06-0 0.00 - 0.00	CLP METALS (TOTAL)	COBALT	10.8 MG/KG	J	g
		COPPER	31.1 MG/KG		
		IRON	19300 MG/KG		
		LEAD	17.1 MG/KG	J	d
		MAGNESIUM	6190 MG/KG		
		MANGANESE	493 MG/KG		
		NICKEL	26.9 MG/KG		
		POTASSIUM	2130 MG/KG		
		SELENIUM	0.64 MG/KG	J	g
		SODIUM	381 MG/KG	J	g
		VANADIUM	49.9 MG/KG		
		ZINC	55.1 MG/KG		
280-S7C-018 AST32 M7C-06-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5610 MG/KG		
		ARSENIC	19.4 MG/KG		
		BARIUM	111 MG/KG		
		BERYLLIUM	1.1 MG/KG		
		CALCIUM	3700 MG/KG		
		CHROMIUM	28.0 MG/KG	J	d,h
		COBALT	7.6 MG/KG	J	g
		COPPER	8.2 MG/KG		
		IRON	10500 MG/KG		
		LEAD	3.8 MG/KG	J	d
		MAGNESIUM	2330 MG/KG		
		MANGANESE	359 MG/KG		
		NICKEL	28.6 MG/KG		
		POTASSIUM	1030 MG/KG	J	g
		SODIUM	127 MG/KG	J	g
		VANADIUM	24.5 MG/KG		
		ZINC	22.3 MG/KG		
280-S7C-019 AST32 M7C-06-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3690 MG/KG		
		ARSENIC	2.0 MG/KG	J	g
		BARIUM	72.2 MG/KG		
		BERYLLIUM	0.65 MG/KG	J	g
		CALCIUM	3810 MG/KG		
		CHROMIUM	20.7 MG/KG	J	d,h
		COBALT	6.2 MG/KG	J	g
		COPPER	6.0 MG/KG		
		IRON	7050 MG/KG		
		LEAD	2.8 MG/KG	J	d
		MAGNESIUM	1860 MG/KG		
		MANGANESE	137 MG/KG		
		MERCURY	0.34 MG/KG		
		NICKEL	15.1 MG/KG		
		POTASSIUM	723 MG/KG	J	g
		SELENIUM	0.78 MG/KG	J	g
		SODIUM	109 MG/KG	J	g
		VANADIUM	15.8 MG/KG		
		ZINC	17.0 MG/KG		
280-S7C-021 AST24 M7C-07-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8290 MG/KG		
		BARIUM	85.6 MG/KG		
		BERYLLIUM	0.87 MG/KG	J	g
		CADMIUM	0.39 MG/KG	J	g
		CALCIUM	3310 MG/KG		
		CHROMIUM	21.8 MG/KG	J	h
		COBALT	8.6 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

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g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-021 AST24 M7C-07-0 0.00 - 0.00	CLP METALS (TOTAL)	COPPER	17.2 MG/KG		
		IRON	16100 MG/KG		
		LEAD	6.1 MG/KG		
		MAGNESIUM	6090 MG/KG		
		MANGANESE	371 MG/KG		
		NICKEL	35.0 MG/KG		
		POTASSIUM	1080 MG/KG		
		SODIUM	110 MG/KG	J	g
		VANADIUM	23.7 MG/KG		
		ZINC	36.3 MG/KG		
280-S7C-022 AST24 M7C-07-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8170 MG/KG		
		ARSENIC	34.3 MG/KG		
		BARIUM	137 MG/KG		
		BERYLLIUM	0.92 MG/KG	J	g
		CADMIUM	0.38 MG/KG	J	g
		CALCIUM	3900 MG/KG		
		CHROMIUM	28.8 MG/KG	J	h
		COPPER	51.2 MG/KG		
		IRON	14500 MG/KG		
		LEAD	89.9 MG/KG		
		MAGNESIUM	3100 MG/KG		
		MANGANESE	165 MG/KG		
		MERCURY	0.23 MG/KG		
		NICKEL	21.6 MG/KG		
		POTASSIUM	987 MG/KG	J	g
		SODIUM	278 MG/KG	J	g
		VANADIUM	27.2 MG/KG		
		ZINC	101 MG/KG		
280-S7C-023 AST24 M7C-07-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	14600 MG/KG		
		BARIUM	169 MG/KG		
		BERYLLIUM	1.4 MG/KG		
		CADMIUM	0.26 MG/KG	J	g
		CALCIUM	3260 MG/KG		
		CHROMIUM	50.4 MG/KG	J	h
		COBALT	11.8 MG/KG	J	g
		COPPER	22.7 MG/KG		
		IRON	23900 MG/KG		
		LEAD	19.3 MG/KG		
		MAGNESIUM	3640 MG/KG		
		MANGANESE	415 MG/KG		
		NICKEL	43.6 MG/KG		
		POTASSIUM	1190 MG/KG	J	g
		SODIUM	228 MG/KG	J	g
		VANADIUM	41.5 MG/KG		
		ZINC	47.4 MG/KG		
280-S7C-024 AST24 M7C-08-0.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	9350 MG/KG		
		BARIUM	80.3 MG/KG		
		BERYLLIUM	0.77 MG/KG	J	g
		CADMIUM	0.31 MG/KG	J	g
		CALCIUM	5990 MG/KG		
		CHROMIUM	48.1 MG/KG	J	h
		COPPER	21.7 MG/KG		
		IRON	13200 MG/KG		
		LEAD	23.6 MG/KG		
		MAGNESIUM	3440 MG/KG		

Validity (Qual) : J - Estimated concentration

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e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-024 AST24 M7C-08-0.0 0.00 - 0.00	CLP METALS (TOTAL)	MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	241 MG/KG 39.4 MG/KG 1470 MG/KG 154 MG/KG 32.0 MG/KG 45.3 MG/KG	 J 	 g
280-S7C-025 AST24 M7C-08-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	9250 MG/KG 140 MG/KG 0.70 MG/KG 0.48 MG/KG 5170 MG/KG 34.6 MG/KG 27.0 MG/KG 10100 MG/KG 67.8 MG/KG 2290 MG/KG 99.1 MG/KG 21.8 MG/KG 1180 MG/KG 601 MG/KG 29.3 MG/KG 126 MG/KG	 J J J J 	 g g h g
280-S7C-026 AST24 M7C-08-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM COPPER IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM ZINC	5840 MG/KG 50.7 MG/KG 0.80 MG/KG 0.13 MG/KG 2180 MG/KG 28.3 MG/KG 7.0 MG/KG 8700 MG/KG 1660 MG/KG 126 MG/KG 852 MG/KG 107 MG/KG 22.6 MG/KG 18.4 MG/KG	 J J J J J 	 g g h g g
280-S7C-087 AST24 M7C-08-5.0DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM CALCIUM CHROMIUM COPPER IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM ZINC	5250 MG/KG 58.6 MG/KG 0.77 MG/KG 0.15 MG/KG 1910 MG/KG 26.1 MG/KG 8.5 MG/KG 9000 MG/KG 1710 MG/KG 136 MG/KG 748 MG/KG 88.9 MG/KG 20.4 MG/KG 19.3 MG/KG	 J J J J J 	 g g h g g
280-S7C-095 AST24 M7C-09-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM BERYLLIUM CADMIUM	7130 MG/KG 376 MG/KG 0.60 MG/KG 0.20 MG/KG	 J J	 g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-095 AST24 M7C-09-0 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM	3550 MG/KG		
		CHROMIUM	36.0 MG/KG	J	h
		COPPER	8.5 MG/KG		
		IRON	9710 MG/KG		
		LEAD	9.3 MG/KG		
		MAGNESIUM	2410 MG/KG		
		MANGANESE	149 MG/KG		
		NICKEL	24.6 MG/KG		
		POTASSIUM	1000 MG/KG	J	g
		SODIUM	108 MG/KG	J	g
		VANADIUM	27.0 MG/KG		
		ZINC	88.3 MG/KG		
280-S7C-096 AST24 M7C-09-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	15000 MG/KG		
		BARIUM	150 MG/KG		
		BERYLLIUM	1.7 MG/KG		
		CADMIUM	0.28 MG/KG	J	g
		CALCIUM	8680 MG/KG		
		CHROMIUM	26.4 MG/KG	J	h
		COPPER	23.9 MG/KG		
		IRON	21500 MG/KG		
		LEAD	13.8 MG/KG		
		MAGNESIUM	6430 MG/KG		
		MANGANESE	404 MG/KG		
		NICKEL	33.2 MG/KG		
		POTASSIUM	3220 MG/KG		
		SODIUM	143 MG/KG	J	g
		VANADIUM	35.2 MG/KG		
		ZINC	61.2 MG/KG		
280-S7C-097 AST24 M7C-09-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8180 MG/KG		
		BARIUM	66.7 MG/KG		
		BERYLLIUM	0.91 MG/KG	J	g
		CADMIUM	0.20 MG/KG	J	g
		CALCIUM	2060 MG/KG		
		CHROMIUM	42.4 MG/KG	J	h
		COPPER	12.8 MG/KG		
		IRON	11700 MG/KG		
		LEAD	4.0 MG/KG		
		MAGNESIUM	2510 MG/KG		
		MANGANESE	221 MG/KG		
		NICKEL	24.8 MG/KG		
		POTASSIUM	1110 MG/KG	J	g
		SODIUM	220 MG/KG	J	g
		VANADIUM	32.6 MG/KG		
		ZINC	24.1 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-066 AST09 CPT-S7C-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	3.7 UG/L	J	g
		ARSENIC	9.7 UG/L	J	g
		BARIUM	177 UG/L	J	g
		CALCIUM	121000 UG/L		
		COPPER	16.1 UG/L	J	g
		IRON	3050 UG/L		
		MAGNESIUM	129000 UG/L		
		MANGANESE	12100 UG/L		
		NICKEL	27.5 UG/L	J	g
		SODIUM	63900 UG/L		
		THALLIUM	20.3 UG/L		
		ZINC	114 UG/L		
280-S7C-067 AST09 CPT-S7C-02 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.6 UG/L	J	g
		BARIUM	91.5 UG/L	J	g
		CALCIUM	31300 UG/L		
		COBALT	8.5 UG/L	J	g
		COPPER	21.9 UG/L	J	g
		IRON	171 UG/L		
		MAGNESIUM	35000 UG/L		
		MANGANESE	759 UG/L		
		NICKEL	19.2 UG/L	J	g
		SODIUM	106000 UG/L		
		ZINC	268 UG/L		
280-S7C-068 AST09 CPT-S7C-02DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	86.8 UG/L	J	g
		CALCIUM	33000 UG/L		
		COBALT	6.8 UG/L	J	g
		COPPER	6.2 UG/L	J	g
		IRON	116 UG/L		
		MAGNESIUM	35800 UG/L		
		MANGANESE	772 UG/L		
		NICKEL	19.9 UG/L	J	g
		SODIUM	109000 UG/L		
		ZINC	384 UG/L		
280-S7C-069 AST09 CPT-S7C-03 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	374 UG/L		
		BARIUM	72.9 UG/L	J	g
		CALCIUM	18400 UG/L		
		COPPER	19.2 UG/L	J	g
		IRON	475 UG/L		
		MAGNESIUM	19400 UG/L		
		MANGANESE	351 UG/L		
		SODIUM	306000 UG/L		
280-S7C-070 AST08 CPT-S7C-04 DEEP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	304 UG/L		
		ANTIMONY	7.1 UG/L	J	g
		ARSENIC	2.7 UG/L	J	g
		BARIUM	207 UG/L		
		CALCIUM	94200 UG/L		
		COPPER	18.2 UG/L	J	g
		IRON	353 UG/L		
		MAGNESIUM	95500 UG/L		
		MANGANESE	2440 UG/L		
		MOLYBDENUM	17.4 UG/L	J	g
		NICKEL	33.6 UG/L	J	g
		POTASSIUM	4830 UG/L	J	g
		SODIUM	190000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
- SITE A-
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-029 AST45 M-101-C-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6050 MG/KG		
		ARSENIC	2.7 MG/KG		
		BARIUM	44.1 MG/KG		
		BERYLLIUM	0.39 MG/KG	J	g
		CADMIUM	0.38 MG/KG	J	g
		CALCIUM	6410 MG/KG		
		CHROMIUM	23.5 MG/KG		
		COBALT	5.3 MG/KG	J	g
		COPPER	16.9 MG/KG		
		IRON	12700 MG/KG		
		LEAD	20.9 MG/KG		
		MAGNESIUM	3280 MG/KG		
		MANGANESE	170 MG/KG		
		NICKEL	22.9 MG/KG		
		POTASSIUM	727 MG/KG	J	g
		SODIUM	233 MG/KG	J	g
		VANADIUM	24.4 MG/KG		
		ZINC	49.5 MG/KG		
280-RA-031 AST45 M-101-C-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4550 MG/KG		
		ARSENIC	1.3 MG/KG	J	g
		BARIUM	23.3 MG/KG	J	g
		BERYLLIUM	0.34 MG/KG	J	g
		CALCIUM	2210 MG/KG		
		CHROMIUM	27.3 MG/KG		
		COBALT	4.8 MG/KG	J	g
		COPPER	4.5 MG/KG	J	g
		IRON	8220 MG/KG		
		LEAD	3.0 MG/KG		
		MAGNESIUM	1960 MG/KG		
		MANGANESE	95.4 MG/KG		
		NICKEL	27.2 MG/KG		
		POTASSIUM	520 MG/KG	J	g
		SILVER	0.33 MG/KG	J	c,g
		SODIUM	106 MG/KG	J	g
		VANADIUM	22.9 MG/KG		
		ZINC	18.5 MG/KG		
280-RA-032 AST45 M-101-C-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7200 MG/KG		
		ANTIMONY	0.93 MG/KG	J	c,g
		ARSENIC	2.9 MG/KG		
		BARIUM	58.1 MG/KG		
		BERYLLIUM	0.55 MG/KG	J	g
		CADMIUM	1.2 MG/KG		
		CALCIUM	5890 MG/KG		
		CHROMIUM	37.4 MG/KG		
		COBALT	7.1 MG/KG	J	g
		COPPER	20.7 MG/KG		
		IRON	12800 MG/KG		
		LEAD	34.9 MG/KG		
		MAGNESIUM	3790 MG/KG		
		MANGANESE	191 MG/KG		
		NICKEL	35.8 MG/KG		
		POTASSIUM	936 MG/KG	J	g
		SILVER	0.37 MG/KG	J	c,g
		SODIUM	252 MG/KG	J	g
		VANADIUM	27.7 MG/KG		
		ZINC	76.7 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-033 AST29 M-112-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6160 MG/KG		
		ANTIMONY	0.70 MG/KG	J	c,g
		ARSENIC	2.1 MG/KG	J	g
		BARIUM	25.8 MG/KG	J	g
		CALCIUM	5520 MG/KG		
		CHROMIUM	31.0 MG/KG	J	h
		COBALT	4.2 MG/KG	J	g
		IRON	10800 MG/KG		
		LEAD	3.8 MG/KG		
		MAGNESIUM	2590 MG/KG		
		MANGANESE	175 MG/KG		
		NICKEL	24.4 MG/KG		
		POTASSIUM	727 MG/KG	J	g
		SODIUM	175 MG/KG	J	g
		VANADIUM	24.9 MG/KG		
		ZINC	27.1 MG/KG		
280-RA-034 AST29 M-112-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6570 MG/KG		
		ANTIMONY	0.77 MG/KG	J	c,g
		ARSENIC	3.1 MG/KG		
		BARIUM	60.3 MG/KG		
		CALCIUM	9640 MG/KG		
		CHROMIUM	39.6 MG/KG	J	h
		COBALT	4.9 MG/KG	J	g
		IRON	9220 MG/KG		
		LEAD	4.3 MG/KG		
		MAGNESIUM	1770 MG/KG		
		MANGANESE	120 MG/KG		
		NICKEL	27.6 MG/KG		
		POTASSIUM	877 MG/KG	J	g
		SODIUM	127 MG/KG	J	g
		VANADIUM	22.4 MG/KG		
		ZINC	20.5 MG/KG		
280-RA-035 AST29 M-112-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	6620 MG/KG		
		ANTIMONY	0.85 MG/KG	J	c,g
		ARSENIC	3.6 MG/KG		
		BARIUM	26.7 MG/KG	J	g
		CALCIUM	2400 MG/KG		
		CHROMIUM	29.6 MG/KG	J	h
		COBALT	5.2 MG/KG	J	g
		IRON	9420 MG/KG		
		LEAD	3.1 MG/KG		
		MAGNESIUM	2460 MG/KG		
		MANGANESE	134 MG/KG		
		NICKEL	24.8 MG/KG		
		POTASSIUM	1120 MG/KG	J	g
		SODIUM	284 MG/KG	J	g
		VANADIUM	21.6 MG/KG		
		ZINC	23.9 MG/KG		
280-RA-036 AST16 M-113-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	8120 MG/KG		
		ANTIMONY	1.6 MG/KG	J	g
		ARSENIC	18.2 MG/KG		
		BARIUM	72.0 MG/KG		
		CADMIUM	1.1 MG/KG		
		CALCIUM	8180 MG/KG		
		CHROMIUM	49.5 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-036 AST16 M-113-A-0 0.00 - 0.00	CLP METALS (TOTAL)	COBALT	8.8 MG/KG	J	g
		COPPER	76.5 MG/KG		
		IRON	14800 MG/KG		
		LEAD	53.6 MG/KG		
		MAGNESIUM	5330 MG/KG		
		MANGANESE	290 MG/KG		
		NICKEL	49.1 MG/KG		
		POTASSIUM	1050 MG/KG		
		SODIUM	213 MG/KG	J	g
		VANADIUM	28.4 MG/KG		
		ZINC	160 MG/KG		
280-RA-037 AST16 M-113-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	23300 MG/KG		
		ANTIMONY	1.6 MG/KG	J	g
		ARSENIC	7.1 MG/KG		
		BARIUM	53.7 MG/KG	J	g
		BERYLLIUM	2.3 MG/KG		
		CALCIUM	5290 MG/KG		
		CHROMIUM	78.5 MG/KG		
		COBALT	8.5 MG/KG	J	g
		COPPER	59.4 MG/KG		
		IRON	34200 MG/KG		
		LEAD	10.2 MG/KG		
		MAGNESIUM	8940 MG/KG		
		MANGANESE	241 MG/KG		
		NICKEL	53.2 MG/KG		
		POTASSIUM	3530 MG/KG		
		SODIUM	1410 MG/KG	J	g
		VANADIUM	69.1 MG/KG		
		ZINC	68.9 MG/KG		
280-RA-038 AST16 M-113-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	26100 MG/KG		
		ANTIMONY	1.6 MG/KG	J	g
		ARSENIC	9.3 MG/KG		
		BARIUM	41.5 MG/KG	J	g
		BERYLLIUM	2.4 MG/KG		
		CADMIUM	0.17 MG/KG	J	g
		CALCIUM	5720 MG/KG		
		CHROMIUM	74.9 MG/KG		
		COBALT	16.6 MG/KG	J	g
		COPPER	39.5 MG/KG		
		IRON	41500 MG/KG		
		LEAD	7.8 MG/KG		
		MAGNESIUM	11800 MG/KG		
		MANGANESE	380 MG/KG		
		NICKEL	85.2 MG/KG		
		POTASSIUM	3530 MG/KG		
		SODIUM	1440 MG/KG	J	g
		VANADIUM	78.5 MG/KG		
		ZINC	89.2 MG/KG		
280-RA-039 AST16 M-114-A-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	7910 MG/KG		
		ANTIMONY	1.2 MG/KG	J	g
		ARSENIC	2.2 MG/KG		
		BARIUM	81.3 MG/KG		
		CALCIUM	16300 MG/KG		
		CHROMIUM	41.1 MG/KG		
		COBALT	8.2 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-039 AST16 M-114-A-0 0.00 - 0.00	CLP METALS (TOTAL)	COPPER	10.3 MG/KG		
		IRON	12500 MG/KG		
		LEAD	3.1 MG/KG		
		MAGNESIUM	3880 MG/KG		
		MANGANESE	182 MG/KG		
		NICKEL	45.6 MG/KG		
		POTASSIUM	1220 MG/KG		
		SODIUM	622 MG/KG	J	g
		VANADIUM	29.2 MG/KG		
		ZINC	30.5 MG/KG		
280-RA-040 AST16 M-114-A-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4800 MG/KG		
		ANTIMONY	1.1 MG/KG	J	g
		ARSENIC	2.1 MG/KG	J	g
		BARIUM	31.2 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	5360 MG/KG		
		CHROMIUM	28.4 MG/KG		
		COBALT	4.3 MG/KG	J	g
		COPPER	6.0 MG/KG		
		IRON	7740 MG/KG		
		LEAD	9.9 MG/KG		
		MAGNESIUM	2090 MG/KG		
		MANGANESE	110 MG/KG		
		NICKEL	27.3 MG/KG		
		POTASSIUM	680 MG/KG	J	g
		SODIUM	357 MG/KG	J	g
		VANADIUM	21.2 MG/KG		
		ZINC	26.4 MG/KG		
280-RA-041 AST16 M-114-A-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3770 MG/KG		
		ARSENIC	1.4 MG/KG	J	g
		BARIUM	43.7 MG/KG	J	g
		CALCIUM	1900 MG/KG		
		CHROMIUM	24.0 MG/KG		
		COBALT	4.0 MG/KG	J	g
		COPPER	4.3 MG/KG	J	g
		IRON	6550 MG/KG		
		LEAD	1.4 MG/KG		
		MAGNESIUM	1560 MG/KG		
		MANGANESE	89.7 MG/KG		
		NICKEL	22.2 MG/KG		
		POTASSIUM	480 MG/KG	J	g
		SODIUM	342 MG/KG	J	g
		VANADIUM	17.9 MG/KG		
280-RA-042 AST26 M-115-E-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5490 MG/KG		
		BARIUM	39.1 MG/KG	J	g
		CALCIUM	2390 MG/KG		
		CHROMIUM	35.6 MG/KG	J	h
		COBALT	4.9 MG/KG	J	g
		COPPER	8.0 MG/KG		
		IRON	9290 MG/KG		
		LEAD	3.2 MG/KG		
		MAGNESIUM	2550 MG/KG		
		MANGANESE	113 MG/KG		
		NICKEL	29.7 MG/KG		
		POTASSIUM	737 MG/KG	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-042 AST26 M-115-E-0 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	344 MG/KG	J	g,h
		VANADIUM	21.0 MG/KG		
		ZINC	21.6 MG/KG		
280-RA-043 AST26 M-115-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4910 MG/KG		
		BARIUM	32.3 MG/KG	J	g
		CALCIUM	2490 MG/KG		
		CHROMIUM	32.5 MG/KG	J	h
		COBALT	4.2 MG/KG	J	g
		COPPER	7.2 MG/KG		
		IRON	8360 MG/KG		
		LEAD	2.6 MG/KG		
		MAGNESIUM	2270 MG/KG		
		MANGANESE	88.9 MG/KG		
		NICKEL	24.3 MG/KG		
		POTASSIUM	680 MG/KG	J	g
		SODIUM	148 MG/KG	J	g,h
		VANADIUM	19.8 MG/KG		
		ZINC	19.5 MG/KG		
280-RA-044 AST26 M-115-E-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4470 MG/KG		
		BARIUM	35.6 MG/KG	J	g
		CALCIUM	2150 MG/KG		
		CHROMIUM	24.4 MG/KG	J	h
		COBALT	3.7 MG/KG	J	g
		COPPER	6.9 MG/KG		
		IRON	7620 MG/KG		
		MAGNESIUM	2160 MG/KG		
		MANGANESE	78.5 MG/KG		
		NICKEL	23.4 MG/KG		
		POTASSIUM	731 MG/KG	J	g
		SODIUM	255 MG/KG	J	g,h
		VANADIUM	17.4 MG/KG		
		ZINC	18.5 MG/KG		
280-RA-045 AST26 M-116-E-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4350 MG/KG		
		BARIUM	38.4 MG/KG	J	g
		CALCIUM	1950 MG/KG		
		CHROMIUM	25.5 MG/KG	J	h
		COBALT	3.4 MG/KG	J	g
		COPPER	7.5 MG/KG		
		IRON	8480 MG/KG		
		LEAD	2.9 MG/KG		
		MAGNESIUM	2360 MG/KG		
		MANGANESE	109 MG/KG		
		NICKEL	24.4 MG/KG		
		POTASSIUM	549 MG/KG	J	g
		SODIUM	72.8 MG/KG	J	g,h
		VANADIUM	18.1 MG/KG		
		ZINC	18.8 MG/KG		
280-RA-046 AST26 M-116-E-2.5DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5300 MG/KG		
		BARIUM	54.9 MG/KG		
		CALCIUM	2700 MG/KG		
		CHROMIUM	30.5 MG/KG	J	h
		COBALT	4.7 MG/KG	J	g
		COPPER	7.9 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-046 AST26 M-116-E-2.5DUP 0.00 - 0.00	CLP METALS (TOTAL)	IRON	8740 MG/KG		
		LEAD	3.0 MG/KG		
		MAGNESIUM	2340 MG/KG		
		MANGANESE	104 MG/KG		
		NICKEL	26.4 MG/KG		
		POTASSIUM	721 MG/KG	J	g
		SODIUM	88.7 MG/KG	J	g,h
		VANADIUM	22.7 MG/KG		
		ZINC	20.5 MG/KG		
280-RA-047 AST26 M-116-E-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	3620 MG/KG		
		BARIUM	27.8 MG/KG	J	g
		CALCIUM	1620 MG/KG		
		CHROMIUM	24.4 MG/KG	J	h
		COBALT	3.3 MG/KG	J	g
		COPPER	6.1 MG/KG		
		IRON	6830 MG/KG		
		MAGNESIUM	1840 MG/KG		
		MANGANESE	72.3 MG/KG		
		NICKEL	21.0 MG/KG		
		POTASSIUM	496 MG/KG	J	g
		SODIUM	62.6 MG/KG	J	g,h
		VANADIUM	15.4 MG/KG		
		ZINC	18.0 MG/KG		
280-RA-048 AST24 M-117-E-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4700 MG/KG		
		BARIUM	82.3 MG/KG		
		BERYLLIUM	0.67 MG/KG	J	g
		CADMIUM	0.11 MG/KG	J	g
		CALCIUM	2340 MG/KG		
		CHROMIUM	30.8 MG/KG	J	h
		COPPER	8.4 MG/KG		
		IRON	8180 MG/KG		
		LEAD	2.8 MG/KG		
		MAGNESIUM	2180 MG/KG		
		MANGANESE	97.0 MG/KG		
		NICKEL	25.1 MG/KG		
		POTASSIUM	789 MG/KG	J	g
		SODIUM	345 MG/KG	J	g
		VANADIUM	20.2 MG/KG		
		ZINC	18.3 MG/KG		
280-RA-049 AST24 M-117-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	5300 MG/KG		
		BARIUM	29.1 MG/KG	J	g
		BERYLLIUM	0.61 MG/KG	J	g
		CADMIUM	0.13 MG/KG	J	g
		CALCIUM	2680 MG/KG		
		CHROMIUM	27.6 MG/KG	J	h
		COPPER	7.4 MG/KG		
		IRON	8590 MG/KG		
		MAGNESIUM	2320 MG/KG		
		MANGANESE	99.1 MG/KG		
		NICKEL	23.4 MG/KG		
		POTASSIUM	807 MG/KG	J	g
		SODIUM	242 MG/KG	J	g
		VANADIUM	21.5 MG/KG		
		ZINC	18.3 MG/KG		
280-RA-050	CLP METALS (TOTAL)	ALUMINUM	4570 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-050 AST24 M-117-E-5.0 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	75.7 MG/KG		
		BERYLLIUM	0.38 MG/KG	J	g
		CADMIUM	0.10 MG/KG	J	g
		CALCIUM	2580 MG/KG		
		CHROMIUM	36.5 MG/KG	J	h
		COPPER	6.8 MG/KG		
		IRON	7520 MG/KG		
		MAGNESIUM	2040 MG/KG		
		MANGANESE	87.5 MG/KG		
		NICKEL	22.1 MG/KG		
		POTASSIUM	691 MG/KG	J	g
		SILVER	0.32 MG/KG	J	g
		SODIUM	157 MG/KG	J	g
		VANADIUM	20.7 MG/KG		
		ZINC	25.5 MG/KG		
280-RA-177 AST26 M-116-E-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4740 MG/KG		
		BARIUM	47.7 MG/KG		
		CALCIUM	2360 MG/KG		
		CHROMIUM	35.4 MG/KG	J	h
		COBALT	3.3 MG/KG	J	g
		COPPER	7.0 MG/KG		
		IRON	8380 MG/KG		
		LEAD	3.3 MG/KG		
		MAGNESIUM	2240 MG/KG		
		MANGANESE	104 MG/KG		
		NICKEL	25.0 MG/KG		
		POTASSIUM	650 MG/KG	J	g
		SODIUM	94.4 MG/KG	J	g,h
		VANADIUM	19.4 MG/KG		
		ZINC	20.0 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

SOIL

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-007 AST57 B13-29-5.0 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM	0.33 MG/KG	J	g
		CALCIUM	3830 MG/KG		
		CHROMIUM	56.6 MG/KG		
		COBALT	6.0 MG/KG	J	g
		COPPER	12.5 MG/KG		
		IRON	21300 MG/KG		
		LEAD	4.3 MG/KG		
		MAGNESIUM	3520 MG/KG		
		MANGANESE	87.5 MG/KG		
		NICKEL	50.3 MG/KG		
		POTASSIUM	1390 MG/KG		
		SODIUM	376 MG/KG	J	g
		VANADIUM	52.3 MG/KG		
		ZINC	32.8 MG/KG		
280-S13-008 AST57 B13-30-0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	493 MG/KG	J	d
		ARSENIC	4.5 MG/KG		
		BARIUM	11.6 MG/KG	J	g
		CADMIUM	0.17 MG/KG	J	g
		CALCIUM	1310 MG/KG		
		CHROMIUM	337 MG/KG		
		COBALT	7.1 MG/KG	J	g
		COPPER	9.8 MG/KG		
		IRON	3380 MG/KG		
		LEAD	207 MG/KG		
		MAGNESIUM	157 MG/KG	J	g
		MANGANESE	49.4 MG/KG		
		MOLYBDENUM	5.9 MG/KG	J	g
		NICKEL	278 MG/KG		
		SELENIUM	1.0 MG/KG	J	g
		SODIUM	492 MG/KG	J	g
		VANADIUM	22.9 MG/KG		
		ZINC	7.4 MG/KG		
280-S13-009 AST57 B13-30-2.5 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	4830 MG/KG	J	d
		ARSENIC	1.7 MG/KG	J	g
		BARIUM	14.3 MG/KG	J	g
		BERYLLIUM	0.51 MG/KG	J	g
		CADMIUM	0.13 MG/KG	J	g
		CALCIUM	2520 MG/KG		
		CHROMIUM	29.0 MG/KG		
		COBALT	3.2 MG/KG	J	g
		COPPER	4.4 MG/KG	J	g
		IRON	5740 MG/KG		
		LEAD	12.5 MG/KG		
		MAGNESIUM	1370 MG/KG		
		MANGANESE	65.6 MG/KG		
		NICKEL	28.9 MG/KG		
		SODIUM	571 MG/KG	J	g
		VANADIUM	21.8 MG/KG		
		ZINC	17.5 MG/KG		
280-S13-010 AST57 B13-30-5.0 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	12100 MG/KG	J	d
		ARSENIC	3.3 MG/KG		
		BARIUM	75.3 MG/KG		
		BERYLLIUM	1.4 MG/KG		
		CADMIUM	0.27 MG/KG	J	g
		CALCIUM	2030 MG/KG		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-081 AST40 M-001-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM CALCIUM MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	4.4 UG/L 320 UG/L 36200 UG/L 39000 UG/L 108 UG/L 9.8 UG/L 38800 UG/L 482000 UG/L	J J 	g g
280-S01-082 AST40 M-001-AQ1DUP 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	6.1 UG/L 374 UG/L 44800 UG/L 443 UG/L 36200 UG/L 150 UG/L 36000 UG/L 435000 UG/L	J 	g
280-S01-086 AST40 M-001-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM CALCIUM MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	5.2 UG/L 103 UG/L 7010 UG/L 6430 UG/L 28.2 UG/L 14.8 UG/L 41600 UG/L 405000 UG/L	J J J 	g g g
280-S01-091 AST40 M-001-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM CADMIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	5.5 UG/L 58.3 UG/L 0.33 UG/L 437000 UG/L 324 UG/L 817000 UG/L 7440 UG/L 149000 UG/L 4410000 UG/L	J J J 	g g g
280-S01-097 AST40 M-002-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM BERYLLIUM CADMIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	6.2 UG/L 52.8 UG/L 1.2 UG/L 0.42 UG/L 223000 UG/L 175000 UG/L 91.4 UG/L 77500 UG/L 4480000 UG/L	J J J J 	g g g g
280-S01-101 AST40 M-003-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY CALCIUM MAGNESIUM POTASSIUM SODIUM	3.4 UG/L 122000 UG/L 13500 UG/L 4310 UG/L 21100 UG/L	J J 	g g
280-S01-106 AST40 M-003-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM CALCIUM MAGNESIUM	4.3 UG/L 3.7 UG/L 67.6 UG/L 47000 UG/L 21700 UG/L	J J J 	g g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-106 AST40 M-003-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	MANGANESE POTASSIUM SODIUM	96.2 UG/L 16700 UG/L 118000 UG/L		
280-S01-110 AST54 M-003-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CADMIUM CALCIUM MAGNESIUM MANGANESE MOLYBDENUM NICKEL POTASSIUM SELENIUM SODIUM VANADIUM	8.9 UG/L 366 UG/L 1.1 UG/L 0.92 UG/L 501000 UG/L 535000 UG/L 2320 UG/L 14.9 UG/L 13.1 UG/L 274000 UG/L 3.7 UG/L 5220000 UG/L 7.3 UG/L	J J J J J J J	g,h g,h g,h g g g,h g,h
280-S01-114 AST40 M-004-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM BERYLLIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	6.9 UG/L 5.2 UG/L 69.7 UG/L 2.3 UG/L 105000 UG/L 67800 UG/L 276 UG/L 40700 UG/L 424000 UG/L	J J J J	g g g g
280-S01-118 AST40 M-005-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	4.1 UG/L 8.4 UG/L 1.7 UG/L 33400 UG/L 405 UG/L 33800 UG/L 521 UG/L 31900 UG/L 228000 UG/L	J J J	g g g
280-S01-123 AST40 M-006-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	3.9 UG/L 149 UG/L 2.2 UG/L 64400 UG/L 715 UG/L 19000 UG/L 978 UG/L 9.8 UG/L 14300 UG/L 86500 UG/L	J J J J 	g g g g
280-S01-127 AST40 M-007-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	18.4 UG/L 2.3 UG/L 11100 UG/L 110 UG/L 6040 UG/L 281 UG/L 7560 UG/L 69300 UG/L	 J 	 g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-128 AST40 M-007-AQ1DUP 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	5.5 UG/L 18.0 UG/L 1.2 UG/L 11100 UG/L 107 UG/L 5980 UG/L 274 UG/L 11.4 UG/L 7640 UG/L 69000 UG/L	J J J 	g g g
280-S01-132 AST40 M-007-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM CADMIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM ZINC	3.9 UG/L 66.8 UG/L 3.5 UG/L 513000 UG/L 75.5 UG/L 813000 UG/L 9220 UG/L 54500 UG/L 3830000 UG/L 52.5 UG/L	J J J J 	g g g g
280-S01-134 AST41 M-025-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	15.8 UG/L 158 UG/L 282000 UG/L 981 UG/L 799000 UG/L 141 UG/L 364000 UG/L 6180000 UG/L	J J J J 	g g h h
280-S01-138 AST40 M-025-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BERYLLIUM CADMIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	3.7 UG/L 20.3 UG/L 1.2 UG/L 0.38 UG/L 10400 UG/L 7250 UG/L 31.1 UG/L 14800 UG/L 170000 UG/L	J J J 	g g g
280-S01-143 AST41 M-025-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM CHROMIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	183 UG/L 105000 UG/L 0.74 UG/L 4980 UG/L 185000 UG/L 2040 UG/L 70800 UG/L 1100000 UG/L	J J J J 	g h d,g h
280-S01-145 AST40 M-026-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM MAGNESIUM POTASSIUM SODIUM	294000 UG/L 865000 UG/L 505000 UG/L 8160000 UG/L	 	
280-S01-149 AST41 M-026-EQ1	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM	4.2 UG/L 5.7 UG/L 315 UG/L	J J 	g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-149 AST41 M-026-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	0.36 UG/L 232000 UG/L 2040 UG/L 375000 UG/L 1050 UG/L 140000 UG/L 2800000 UG/L	J J J 	g h h
280-S01-153 AST41 M-027-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM CALCIUM CHROMIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	4.6 UG/L 4.0 UG/L 260 UG/L 137000 UG/L 1.0 UG/L 279 UG/L 80200 UG/L 739 UG/L 65500 UG/L 417000 UG/L	J J J J J 	g g h d h
280-S01-158 AST41 M-027-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM CALCIUM IRON MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM SILVER SODIUM	3.7 UG/L 5.1 UG/L 153 UG/L 71300 UG/L 586 UG/L 87600 UG/L 674 UG/L 105 UG/L 62200 UG/L 2.2 UG/L 782000 UG/L	J J J J J J 	g g g h h g
280-S01-164 AST54 M-027-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM BERYLLIUM CADMIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SILVER SODIUM ZINC	17.5 UG/L 8.4 UG/L 86.9 UG/L 1.7 UG/L 0.79 UG/L 362000 UG/L 1150 UG/L 760000 UG/L 6080 UG/L 135000 UG/L 10.6 UG/L 3920000 UG/L 129 UG/L	J J J J J 	g g g g g
280-S01-166 AST41 M-028-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM CALCIUM CHROMIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	22.2 UG/L 290 UG/L 141000 UG/L 4.2 UG/L 29600 UG/L 43500 UG/L 1350 UG/L 68500 UG/L 114000 UG/L	 J J J 	 h d h
280-S01-167 AST41 M-028-AQ1DUP	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM	4.4 UG/L 20.4 UG/L 290 UG/L	J J 	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-167 AST41 M-028-AQ1DUP 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM CHROMIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	135000 UG/L 2.4 UG/L 30000 UG/L 43500 UG/L 1270 UG/L 67000 UG/L 117000 UG/L	J J J 	h d,g h
280-S01-171 AST54 M-028-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	15.8 UG/L 102 UG/L 1.5 UG/L 68500 UG/L 4140 UG/L 32700 UG/L 661 UG/L 36100 UG/L 113000 UG/L	 J J 	 g g
280-S01-175 AST54 M-028-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CADMIUM CALCIUM MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM SELENIUM SODIUM VANADIUM	11.0 UG/L 58.5 UG/L 1.1 UG/L 0.86 UG/L 96400 UG/L 78400 UG/L 138 UG/L 13.1 UG/L 21100 UG/L 3.4 UG/L 654000 UG/L 21.2 UG/L	 J J J J J J	 g g g g
280-S01-180 AST41 M-029-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM CHROMIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	262 UG/L 26500 UG/L 2.0 UG/L 181 UG/L 47500 UG/L 95.1 UG/L 34600 UG/L 164000 UG/L	 J J J 	 h d,g h
280-S01-185 AST41 M-029-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM CALCIUM CHROMIUM IRON LEAD MAGNESIUM MANGANESE POTASSIUM SODIUM	7.9 UG/L 392 UG/L 21200 UG/L 3.1 UG/L 36.6 UG/L 1.8 UG/L 37800 UG/L 40.8 UG/L 33700 UG/L 339000 UG/L	J J J J J J 	g h d,g g g h
280-S01-189 AST42 M-030-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	53.2 UG/L 46300 UG/L 13600 UG/L 38.8 UG/L 14200 UG/L 107000 UG/L 12.0 UG/L	J J	g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-194 AST42 M-030-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	35.4 UG/L	J	g
		CALCIUM	44800 UG/L		
		LEAD	2.3 UG/L	J	g
		MAGNESIUM	18900 UG/L		
		MANGANESE	48.9 UG/L		
		POTASSIUM	20300 UG/L		
		SODIUM	219000 UG/L		
		VANADIUM	21.2 UG/L	J	g
280-S01-198 AST55 M-030-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.8 UG/L	J	g
		BARIUM	175 UG/L	J	g
		BERYLLIUM	1.9 UG/L	J	g
		CALCIUM	477000 UG/L		
		IRON	10.0 UG/L	J	g
		MAGNESIUM	696000 UG/L		
		MANGANESE	3750 UG/L		
		MOLYBDENUM	18.3 UG/L	J	g
		NICKEL	9.6 UG/L	J	g
		POTASSIUM	262000 UG/L		
		SELENIUM	4.1 UG/L	J	g
		SODIUM	6720000 UG/L		
280-S01-202 AST41 M-031-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.2 UG/L	J	g
		BARIUM	64.5 UG/L	J	g
		CALCIUM	45600 UG/L	J	h
		CHROMIUM	0.74 UG/L	J	d,g
		IRON	18.6 UG/L	J	g
		MAGNESIUM	24200 UG/L		
		MANGANESE	298 UG/L		
		POTASSIUM	22700 UG/L	J	h
		SODIUM	158000 UG/L		
280-S01-207 AST41 M-031-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.4 UG/L	J	g
		BARIUM	67.4 UG/L	J	g
		CALCIUM	40200 UG/L	J	h
		IRON	25.2 UG/L	J	g
		MAGNESIUM	28900 UG/L		
		MANGANESE	323 UG/L		
		POTASSIUM	24300 UG/L	J	h
		SODIUM	197000 UG/L		
280-S01-212 AST55 M-031-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	8.4 UG/L	J	g
		ARSENIC	5.0 UG/L	J	g
		BARIUM	143 UG/L	J	g
		BERYLLIUM	1.8 UG/L	J	g
		CADMIUM	0.68 UG/L	J	g
		CALCIUM	417000 UG/L		
		IRON	922 UG/L		
		MAGNESIUM	660000 UG/L		
		MANGANESE	4260 UG/L		
		MOLYBDENUM	18.6 UG/L	J	g
		POTASSIUM	134000 UG/L		
		SILVER	5.8 UG/L	J	g
		SODIUM	4280000 UG/L		
280-S01-216 AST42 M-032-AQ1	CLP METALS (TOTAL)	BARIUM	92.7 UG/L	J	g
		CALCIUM	61100 UG/L		
		IRON	240 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 01 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S01-216 AST42 M-032-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	27600 UG/L 406 UG/L 22000 UG/L 101000 UG/L 8.5 UG/L	 J	 g
280-S01-220 AST54 M-033-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CADMIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SELENIUM SODIUM	8.3 UG/L 32.0 UG/L 1.1 UG/L 0.31 UG/L 45500 UG/L 26100 UG/L 297 UG/L 21900 UG/L 3.8 UG/L 168000 UG/L	J J J J J 	g g g g g
280-S01-224 AST42 M-034-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	139 UG/L 88700 UG/L 6320 UG/L 24700 UG/L 1490 UG/L 26900 UG/L 95200 UG/L	J 	g
280-S01-228 AST42 M-035-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	39.5 UG/L 70700 UG/L 17000 UG/L 252 UG/L 7380 UG/L 77400 UG/L	J 	
280-S01-229 AST42 M-035-AQ1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	31.4 UG/L 67600 UG/L 16000 UG/L 243 UG/L 6990 UG/L 70100 UG/L	J 	g
280-S01-288 AST55 M-002-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	120 UG/L 1.5 UG/L 255000 UG/L 15.5 UG/L 63300 UG/L 125 UG/L 24000 UG/L 309000 UG/L	J J J 	g g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 02
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S02-015 AST41 M-010-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	5.8 UG/L	J	g
		BARIUM	31.6 UG/L	J	g
		CALCIUM	86200 UG/L	J	h
		CHROMIUM	1.7 UG/L	J	d,g
		IRON	256 UG/L		
		MAGNESIUM	407000 UG/L		
		MANGANESE	88.6 UG/L		
		POTASSIUM	170000 UG/L	J	h
		SODIUM	2610000 UG/L		
280-S02-017 AST42 M-011-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	593 UG/L		
		CALCIUM	265000 UG/L		
		IRON	15900 UG/L		
		MAGNESIUM	258000 UG/L		
		MANGANESE	5320 UG/L		
		POTASSIUM	94900 UG/L		
		SODIUM	2130000 UG/L		
		VANADIUM	17.4 UG/L	J	g
280-S02-022 AST41 M-012-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	60.7 UG/L	J	g
		CADMIUM	0.66 UG/L	J	h,g
		CALCIUM	552000 UG/L	J	h
		MAGNESIUM	1130000 UG/L		
		MANGANESE	7920 UG/L		
		MOLYBDENUM	33.5 UG/L	J	h,g
		POTASSIUM	191000 UG/L	J	h
		SODIUM	7130000 UG/L		
		VANADIUM	16.4 UG/L	J	h,g
280-S02-024 AST55 M-013-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	18.7 UG/L		
		BARIUM	29.2 UG/L	J	g
		BERYLLIUM	1.5 UG/L	J	g
		CALCIUM	82000 UG/L		
		IRON	29.2 UG/L	J	g
		MAGNESIUM	2950 UG/L	J	g
		MOLYBDENUM	62.0 UG/L	J	g
		NICKEL	13.5 UG/L	J	g
		POTASSIUM	35400 UG/L		
		SELENIUM	6.7 UG/L		
		SODIUM	743000 UG/L		
		VANADIUM	65.1 UG/L		
280-S02-025 AST42 M-016-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	204 UG/L	J	g
		CALCIUM	444000 UG/L		
		IRON	21900 UG/L		
		MAGNESIUM	990000 UG/L		
		MANGANESE	1510 UG/L		
		POTASSIUM	271000 UG/L		
		SODIUM	7140000 UG/L		
280-S02-027 AST41 M-014-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	14.1 UG/L	J	g
		BARIUM	58.9 UG/L	J	g
		CALCIUM	380000 UG/L	J	h
		MAGNESIUM	717000 UG/L		
		MANGANESE	6510 UG/L		
		POTASSIUM	141000 UG/L	J	h
		SODIUM	5370000 UG/L		
280-S02-029	CLP METALS (TOTAL)	BARIUM	193 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 02 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S02-029 AST43 M-016-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	296000 UG/L 23400 UG/L 619000 UG/L 4270 UG/L 268000 UG/L 5640000 UG/L		
280-S02-033 AST55 M-016-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM BERYLLIUM CALCIUM MAGNESIUM MANGANESE MOLYBDENUM NICKEL POTASSIUM SODIUM	266 UG/L 1.9 UG/L 993000 UG/L 662000 UG/L 1390 UG/L 13.1 UG/L 12.2 UG/L 275000 UG/L 5920000 UG/L	 J J J 	 g g g
280-S02-037 AST41 M-020-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	191 UG/L 256000 UG/L 7400 UG/L 452000 UG/L 1460 UG/L 96000 UG/L 2330000 UG/L	J J J 	g h h
280-S02-039 AST42 M-021-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	200 UG/L 236000 UG/L 754000 UG/L 149 UG/L 374000 UG/L 6770000 UG/L		
280-S02-043 AST42 M-021-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	176 UG/L 247000 UG/L 26100 UG/L 884000 UG/L 5480 UG/L 307000 UG/L 7550000 UG/L	J 	g
280-S02-048 AST55 M-021-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	6.4 UG/L 69.8 UG/L 1.2 UG/L 119000 UG/L 6770 UG/L 260000 UG/L 590 UG/L 16.2 UG/L 104000 UG/L 1390000 UG/L	J J J J 	g g g g
280-S02-050 AST43 M-022-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM	555 UG/L 293000 UG/L 59.3 UG/L 585000 UG/L 207 UG/L 14.1 UG/L 262000 UG/L	 J J 	 g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 02 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S02-050 AST43 M-022-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	5670000 UG/L		
280-S02-054 AST43 M-022-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM COPPER IRON LEAD MAGNESIUM MANGANESE POTASSIUM	246 UG/L 3.4 UG/L 222000 UG/L 37.3 UG/L 20800 UG/L 1.6 UG/L 601000 UG/L 2450 UG/L 245000 UG/L	 J J 	 g g
280-S02-058 AST42 M-023-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	150 UG/L 433000 UG/L 1050000 UG/L 25.8 UG/L 303000 UG/L 8370000 UG/L	J J 	g g
280-S02-059 AST42 M-023-AQ1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM MAGNESIUM POTASSIUM SODIUM	204 UG/L 2.0 UG/L 445000 UG/L 1070000 UG/L 309000 UG/L 8360000 UG/L	J J 	g g
280-S02-063 AST42 M-023-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	1440 UG/L 0.60 UG/L 589000 UG/L 3780 UG/L 476000 UG/L 740 UG/L 240000 UG/L 5650000 UG/L	 J 	 g
280-S02-068 AST42 M-023-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	185 UG/L 0.38 UG/L 114000 UG/L 7070 UG/L 316000 UG/L 1740 UG/L 123000 UG/L 1820000 UG/L	J J 	g g
280-S02-070 AST43 M-024-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	1040 UG/L 184000 UG/L 10100 UG/L 157000 UG/L 837 UG/L 83000 UG/L 1200000 UG/L	 	
280-S02-075 AST43 M-024-EQ1	CLP METALS (TOTAL)	BARIUM CALCIUM IRON	587 UG/L 129000 UG/L 29200 UG/L	 	

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 02 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S02-075 AST43 M-024-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM MANGANESE POTASSIUM SODIUM	110000 UG/L 1040 UG/L 80200 UG/L 1040000 UG/L		
280-S02-130 AST56 M-023-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM ZINC	54.1 UG/L 700000 UG/L 110 UG/L 1050000 UG/L 8530 UG/L 169000 UG/L 6800000 UG/L 109 UG/L	J J	g g

Validity (Qual) : J - Estimated concentration

Applicable Comments :
a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-045 AST44 MW97-1-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	214 UG/L		
		CALCIUM	49800 UG/L		
		IRON	346 UG/L		
		MAGNESIUM	116000 UG/L		
		MANGANESE	574 UG/L		
		POTASSIUM	99600 UG/L		
		SODIUM	1930000 UG/L		
		VANADIUM	12.9 UG/L	J	g
280-S03-046 AST44 MW97-1-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	221 UG/L		
		CADMIUM	0.66 UG/L	J	g
		CALCIUM	51400 UG/L		
		IRON	262 UG/L		
		MAGNESIUM	120000 UG/L		
		MANGANESE	571 UG/L		
		POTASSIUM	104000 UG/L		
		SODIUM	1960000 UG/L		
		VANADIUM	15.5 UG/L	J	g
280-S03-050 AST44 MW97-2-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	29.6 UG/L	J	g
		BARIUM	317 UG/L		
		CALCIUM	274000 UG/L		
		IRON	26500 UG/L		
		MAGNESIUM	899000 UG/L		
		MANGANESE	1180 UG/L		
		MERCURY	0.24 UG/L		
		MOLYBDENUM	13.6 UG/L	J	g
		POTASSIUM	429000 UG/L		
		SODIUM	8350000 UG/L		
		VANADIUM	12.3 UG/L	J	g
280-S03-054 AST44 MW97-3-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	5.0 UG/L	J	g
		ARSENIC	5.2 UG/L	J	g
		BARIUM	75.2 UG/L	J	g
		CALCIUM	112000 UG/L		
		MAGNESIUM	32200 UG/L		
		MANGANESE	697 UG/L		
		POTASSIUM	17700 UG/L		
		SODIUM	35500 UG/L		
280-S03-059 AST56 M03-04-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	48.8 UG/L	J	g
		BERYLLIUM	2.2 UG/L	J	g
		CADMIUM	0.57 UG/L	J	g
		CALCIUM	44900 UG/L		
		CHROMIUM	3.6 UG/L	J	g
		IRON	79.3 UG/L	J	g
		LEAD	1.1 UG/L	J	g
		MAGNESIUM	24600 UG/L		
		MANGANESE	200 UG/L		
		POTASSIUM	23700 UG/L		
		SODIUM	280000 UG/L		
280-S03-063 AST55 M03-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	9.9 UG/L	J	g
		ARSENIC	27.3 UG/L		
		BARIUM	20.8 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	45500 UG/L		
		IRON	22.8 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 03 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S03-063 AST55 M03-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	34000 UG/L 301 UG/L 17.0 UG/L 33100 UG/L 490000 UG/L	 J 	 g
280-S03-068 AST55 M03-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM SODIUM	67.3 UG/L 47.2 UG/L 1.1 UG/L 21400 UG/L 35.6 UG/L 6590 UG/L 30.8 UG/L 16.3 UG/L 8380 UG/L 315000 UG/L	 J J J J 	 g g g g
280-S03-095 AST56 M03-07-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON LEAD MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	19.2 UG/L 246 UG/L 1.8 UG/L 128000 UG/L 733 UG/L 7.9 UG/L 234000 UG/L 1460 UG/L 144000 UG/L 3270000 UG/L 7.3 UG/L	 J J	 g g
280-S03-097 AST56 M03-08-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM COPPER IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	106 UG/L 382000 UG/L 18.1 UG/L 303 UG/L 1040000 UG/L 2340 UG/L 410000 UG/L 9190000 UG/L 29.6 UG/L	J J J J	g g g g
280-S03-098 AST58 D03-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM COBALT MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM	64.1 UG/L 595000 UG/L 30.1 UG/L 1220000 UG/L 12400 UG/L 59.2 UG/L 324000 UG/L 8940000 UG/L 14.3 UG/L	J J J J J J	g h g g d g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-031 AST51 M06-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	6.9 UG/L	J	g
		BARIUM	160 UG/L	J	g
		BERYLLIUM	1.3 UG/L	J	g
		CALCIUM	47400 UG/L		
		IRON	1570 UG/L		
		MAGNESIUM	41600 UG/L		
		MANGANESE	412 UG/L		
		MERCURY	0.62 UG/L	J	d
		NICKEL	11.9 UG/L	J	g
		POTASSIUM	31200 UG/L		
		SODIUM	477000 UG/L		
280-S06-035 AST54 M06-02-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	9.2 UG/L	J	g
		BARIUM	73.2 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	48200 UG/L		
		MAGNESIUM	18900 UG/L		
		MANGANESE	76.7 UG/L		
		POTASSIUM	20600 UG/L		
		SODIUM	55500 UG/L		
280-S06-036 AST54 M06-02-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	7.8 UG/L	J	g
		BARIUM	69.5 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	49600 UG/L		
		MAGNESIUM	19500 UG/L		
		MANGANESE	77.8 UG/L		
		POTASSIUM	20900 UG/L		
		SODIUM	50000 UG/L		
280-S06-040 AST51 M06-03-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	5.3 UG/L	J	g
		BARIUM	525 UG/L		
		BERYLLIUM	1.4 UG/L	J	g
		CALCIUM	122000 UG/L		
		MAGNESIUM	80900 UG/L		
		MANGANESE	299 UG/L		
		POTASSIUM	56200 UG/L		
		SODIUM	813000 UG/L		
280-S06-045 AST48 M06-04-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	5.1 UG/L	J	g
		BARIUM	33.5 UG/L	J	g
		BERYLLIUM	1.4 UG/L	J	g
		CALCIUM	8970 UG/L		
		MAGNESIUM	5760 UG/L		
		MANGANESE	7.1 UG/L	J	g
		POTASSIUM	5640 UG/L		
		SODIUM	37600 UG/L		
280-S06-050 AST48 M06-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	362 UG/L		
		ARSENIC	10.1 UG/L		
		BARIUM	8.8 UG/L	J	g
		BERYLLIUM	1.4 UG/L	J	g
		CALCIUM	1470 UG/L	J	g
		IRON	500 UG/L		
		MAGNESIUM	955 UG/L	J	g
		MANGANESE	10.3 UG/L	J	g
		POTASSIUM	4660 UG/L	J	g
		SODIUM	78200 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 06 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S06-050 AST48 M06-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	VANADIUM	12.1 UG/L	J	g
280-S06-054 AST54 M06-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	6.5 UG/L	J	g
		BARIUM	140 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	50000 UG/L		
		MAGNESIUM	33700 UG/L		
		MANGANESE	235 UG/L		
		POTASSIUM	42700 UG/L		
		SELENIUM	3.3 UG/L	J	g
		SODIUM	389000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-037 AST44 M07A-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	10.3 UG/L	J	g
		ARSENIC	10.6 UG/L	J	g
		BARIUM	644 UG/L		
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	376000 UG/L		
		IRON	10400 UG/L		
		MAGNESIUM	548000 UG/L		
		MANGANESE	1580 UG/L		
		POTASSIUM	196000 UG/L		
		SELENIUM	6.1 UG/L	J	g
		SODIUM	4630000 UG/L		
280-S07A-038 AST44 M07A-01-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	8.0 UG/L	J	g
		BARIUM	706 UG/L		
		CADMIUM	0.80 UG/L	J	g
		CALCIUM	392000 UG/L		
		IRON	13500 UG/L		
		MAGNESIUM	522000 UG/L		
		MANGANESE	1920 UG/L		
		POTASSIUM	188000 UG/L		
		SODIUM	4340000 UG/L		
280-S07A-042 AST46 M07A-02-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	94.0 UG/L		
		BARIUM	171 UG/L	J	g
		CALCIUM	441000 UG/L		
		MAGNESIUM	1120000 UG/L		
		MANGANESE	158 UG/L		
		POTASSIUM	355000 UG/L		
		SODIUM	9200000 UG/L		
280-S07A-046 AST46 M07A-03-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	60.7 UG/L		
		BARIUM	168 UG/L	J	g
		CALCIUM	400000 UG/L		
		CHROMIUM	19.2 UG/L	J	g
		IRON	2180 UG/L		
		MAGNESIUM	1210000 UG/L		
		MANGANESE	266 UG/L		
		POTASSIUM	371000 UG/L		
		SODIUM	9590000 UG/L		
280-S07A-050 AST46 M07A-04-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	50.2 UG/L	J	g
		BERYLLIUM	1.3 UG/L	J	g
		CALCIUM	7560 UG/L		
		MAGNESIUM	16800 UG/L		
		MANGANESE	161 UG/L		
		POTASSIUM	8360 UG/L		
		SODIUM	82000 UG/L		
		THALLIUM	4.3 UG/L	J	g
280-S07A-055 AST46 M07A-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	19.7 UG/L	J	g
		BARIUM	80.1 UG/L	J	g
		CALCIUM	321000 UG/L		
		IRON	2030 UG/L		
		MAGNESIUM	1110000 UG/L		
		MANGANESE	549 UG/L		
		POTASSIUM	340000 UG/L		
		SODIUM	9370000 UG/L		
280-S07A-059	CLP METALS (TOTAL)	ARSENIC	4.2 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-059 AST55 M07A-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	124 UG/L	J	g
		BERYLLIUM	1.6 UG/L	J	g
		CADMIUM	0.55 UG/L	J	g
		CALCIUM	159000 UG/L		
		IRON	2760 UG/L		
		MAGNESIUM	233000 UG/L		
		MANGANESE	2170 UG/L		
		NICKEL	18.2 UG/L	J	g
		POTASSIUM	136000 UG/L		
		SODIUM	2710000 UG/L		
280-S07A-063 AST55 M07A-07-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	22.7 UG/L		
		BARIUM	866 UG/L		
		BERYLLIUM	1.5 UG/L	J	g
		CADMIUM	0.38 UG/L	J	g
		CALCIUM	217000 UG/L		
		COBALT	8.9 UG/L	J	g
		IRON	7830 UG/L		
		MAGNESIUM	847000 UG/L		
		MANGANESE	854 UG/L		
		NICKEL	28.3 UG/L	J	g
		POTASSIUM	350000 UG/L		
		SELENIUM	3.1 UG/L	J	g
		SODIUM	7920000 UG/L		
280-S07A-067 AST46 W1-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	45.1 UG/L		
		BARIUM	20.7 UG/L	J	
		CALCIUM	82300 UG/L		
		IRON	4780 UG/L		
		MAGNESIUM	113000 UG/L		
		MANGANESE	1450 UG/L		
		POTASSIUM	59000 UG/L		
		SODIUM	1110000 UG/L		
280-S07A-071 AST46 W2-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	57.5 UG/L		
		BARIUM	222 UG/L		
		BERYLLIUM	1.7 UG/L	J	g
		CALCIUM	170000 UG/L		
		IRON	29400 UG/L		
		MAGNESIUM	111000 UG/L		
		MANGANESE	6220 UG/L		
		POTASSIUM	47200 UG/L		
		SODIUM	938000 UG/L		
280-S07A-076 AST46 W3-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	173 UG/L		
		BARIUM	1670 UG/L		
		CADMIUM	0.47 UG/L	J	g
		CALCIUM	253000 UG/L		
		IRON	42000 UG/L		
		MAGNESIUM	264000 UG/L		
		MANGANESE	1320 UG/L		
		POTASSIUM	94700 UG/L		
		SODIUM	2770000 UG/L		
280-S07A-123 AST55 M07A-08-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	3.6 UG/L	J	g
		BARIUM	156 UG/L	J	g
		BERYLLIUM	1.7 UG/L	J	g
		CADMIUM	0.43 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 07 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S07A-123 AST55 M07A-08-Q1 0.00 - 0.00	CLP METALS (TOTAL)	CALCIUM IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	97500 UG/L 6050 UG/L 103000 UG/L 803 UG/L 12.6 UG/L 37800 UG/L 1030000 UG/L	 J 	 g
280-S07A-124 AST55 M07A-09-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM IRON MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	168 UG/L 0.66 UG/L 143000 UG/L 26.1 UG/L 153000 UG/L 253 UG/L 10.6 UG/L 37500 UG/L 972000 UG/L	J J J J 	g g g g
280-S07A-125 AST58 D07A-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	1130 UG/L 675000 UG/L 4830 UG/L 875000 UG/L 6730 UG/L 103000 UG/L 3800000 UG/L	 J J	 h d
280-S07A-126 AST58 D07A-02-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON LEAD MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM SODIUM VANADIUM	938 UG/L 698000 UG/L 15400 UG/L 121 UG/L 1030000 UG/L 6690 UG/L 27.2 UG/L 34800 UG/L 4130000 UG/L 19.4 UG/L	 J J J J	 h g d g
280-S07A-127 AST58 D07A-03-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM ZINC	216 UG/L 543000 UG/L 2120 UG/L 25.8 UG/L 833000 UG/L 6990 UG/L 13.3 UG/L 45600 UG/L 3630000 UG/L 215 UG/L	 J J J J 	 h g g d

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-026 AST44 MW410-1-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	14.8 UG/L		
		BARIUM	37.1 UG/L	J	g
		CALCIUM	12900 UG/L		
		MAGNESIUM	10100 UG/L		
		MANGANESE	102 UG/L		
		POTASSIUM	17000 UG/L		
		SODIUM	292000 UG/L		
280-S09-031 AST44 MW410-2-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	28.5 UG/L		
		BARIUM	316 UG/L		
		CALCIUM	110000 UG/L		
		MAGNESIUM	58100 UG/L		
		MANGANESE	1160 UG/L		
		POTASSIUM	24700 UG/L		
		SODIUM	91100 UG/L		
280-S09-036 AST44 MW410-3-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	137 UG/L	J	g
		CALCIUM	53400 UG/L		
		MAGNESIUM	22900 UG/L		
		MANGANESE	122 UG/L		
		POTASSIUM	24100 UG/L		
		SODIUM	101000 UG/L		
		VANADIUM	7.5 UG/L	J	g
280-S09-040 AST46 MW410-4-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	7.2 UG/L	J	g
		BARIUM	122 UG/L	J	g
		CALCIUM	64000 UG/L		
		MAGNESIUM	104000 UG/L		
		MANGANESE	317 UG/L		
		POTASSIUM	43700 UG/L		
		SODIUM	918000 UG/L		
280-S09-044 AST54 M09-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	4.1 UG/L	J	g
		BARIUM	13.7 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	34800 UG/L		
		MAGNESIUM	10400 UG/L		
		MANGANESE	11.1 UG/L	J	g
		POTASSIUM	4460 UG/L	J	g
		SODIUM	22600 UG/L		
280-S09-045 AST54 M09-05-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	14.6 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	32800 UG/L		
		MAGNESIUM	9760 UG/L		
		MANGANESE	10.6 UG/L	J	g
		POTASSIUM	4570 UG/L	J	g
		SILVER	2.2 UG/L		
		SODIUM	22700 UG/L		
		VANADIUM	9.3 UG/L	J	g
280-S09-049 AST54 M09-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	19.2 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CADMIUM	0.41 UG/L	J	g
		CALCIUM	31200 UG/L		
		MAGNESIUM	8400 UG/L		
		MANGANESE	11.7 UG/L	J	g
		POTASSIUM	4890 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 09 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S09-049 AST54 M09-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	31600 UG/L		
280-S09-100 AST58 D09-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	99.0 UG/L 10.4 UG/L 1690000 UG/L 1820000 UG/L 14900 UG/L 11600 UG/L 5090000 UG/L	J J J J J	g g h g d

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 10
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S10B-017 AST46 MW530-1-01 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	77.1 UG/L	J	g
		BERYLLIUM	1.0 UG/L	J	g
		CALCIUM	109000 UG/L		
		IRON	3600 UG/L		
		MAGNESIUM	18400 UG/L		
		MANGANESE	146 UG/L		
		POTASSIUM	11600 UG/L		
		SODIUM	272000 UG/L		
280-S10B-022 AST46 MW530-2-01 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	13.1 UG/L		
		BARIUM	27.1 UG/L	J	g
		BERYLLIUM	1.3 UG/L	J	g
		CALCIUM	20000 UG/L		
		MAGNESIUM	11200 UG/L		
		MANGANESE	67.7 UG/L		
		POTASSIUM	14600 UG/L		
		SODIUM	242000 UG/L		
280-S10B-026 AST46 MW530-3-01 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	22.5 UG/L		
		BARIUM	25.8 UG/L	J	g
		BERYLLIUM	1.3 UG/L	J	g
		CALCIUM	35500 UG/L		
		MAGNESIUM	5630 UG/L		
		MANGANESE	140 UG/L		
		POTASSIUM	6710 UG/L		
		SODIUM	46600 UG/L		
280-S10B-138 AST58 D10B-1-01 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	60.4 UG/L	J	g
		CALCIUM	1040000 UG/L	J	h
		MAGNESIUM	1370000 UG/L		
		MANGANESE	11900 UG/L		
		NICKEL	20.4 UG/L	J	g
		POTASSIUM	10100 UG/L		
		SODIUM	5090000 UG/L	J	d
280-S10B-139 AST58 D10B-2-01 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	80.3 UG/L	J	g
		CALCIUM	209000 UG/L	J	h
		MAGNESIUM	203000 UG/L		
		MANGANESE	653 UG/L		
		POTASSIUM	10600 UG/L		
		SODIUM	1630000 UG/L	J	d
280-S10B-140 AST54 M10B-1-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	5.9 UG/L	J	g
		ARSENIC	6.4 UG/L	J	g
		BARIUM	162 UG/L	J	g
		BERYLLIUM	1.8 UG/L	J	g
		CALCIUM	133000 UG/L		
		MAGNESIUM	122000 UG/L		
		MANGANESE	739 UG/L		
		NICKEL	11.3 UG/L	J	g
		POTASSIUM	59200 UG/L		
		SODIUM	1290000 UG/L		
		VANADIUM	9.4 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-032 AST44 MWOR-1-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	64.5 UG/L	J	g
		ARSENIC	8.6 UG/L	J	g
		BARIUM	72.4 UG/L	J	g
		CALCIUM	206000 UG/L		
		IRON	305 UG/L		
		MAGNESIUM	20200 UG/L		
		MANGANESE	2940 UG/L		
		POTASSIUM	6320 UG/L		
		SODIUM	139000 UG/L		
280-S13-037 AST44 MWOR-2-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	35.2 UG/L	J	g
		CALCIUM	28100 UG/L		
		MAGNESIUM	18600 UG/L		
		MANGANESE	63.0 UG/L		
		POTASSIUM	9780 UG/L		
		SODIUM	145000 UG/L		
280-S13-041 AST44 MWOR-3-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	44.8 UG/L	J	g
		ARSENIC	5.0 UG/L	J	g
		BARIUM	56.2 UG/L	J	g
		CALCIUM	35700 UG/L		
		MAGNESIUM	15700 UG/L		
		MANGANESE	4.1 UG/L	J	g
		POTASSIUM	14500 UG/L		
		SODIUM	132000 UG/L		
		VANADIUM	7.7 UG/L	J	g
280-S13-046 AST44 MWOR-4-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	57.1 UG/L	J	g
		CALCIUM	22900 UG/L		
		MAGNESIUM	12100 UG/L		
		MANGANESE	8.1 UG/L	J	g
		POTASSIUM	2380 UG/L	J	g
		SODIUM	35700 UG/L		
280-S13-050 AST46 MWOR-5-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	9.7 UG/L	J	g
		BARIUM	468 UG/L		
		CALCIUM	224000 UG/L		
		IRON	12800 UG/L		
		MAGNESIUM	275000 UG/L		
		MANGANESE	2750 UG/L		
		POTASSIUM	111000 UG/L		
		SODIUM	2930000 UG/L		
280-S13-054 AST46 M13-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	9.2 UG/L	J	g
		BARIUM	15.6 UG/L	J	g
		CALCIUM	30600 UG/L		
		MAGNESIUM	17500 UG/L		
		MANGANESE	197 UG/L		
		POTASSIUM	6800 UG/L		
		SODIUM	86800 UG/L		
280-S13-059 AST47 M13-07-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	38.9 UG/L		
		BARIUM	229 UG/L		
		BERYLLIUM	1.3 UG/L	J	g
		CALCIUM	180000 UG/L		
		IRON	30900 UG/L		
		MAGNESIUM	59900 UG/L		
		MANGANESE	11000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 13 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S13-059 AST47 M13-07-Q1 0.00 - 0.00	CLP METALS (TOTAL)	NICKEL POTASSIUM SODIUM ZINC	14.7 UG/L 4050 UG/L 316000 UG/L 19.4 UG/L	J J J	g g g
280-S13-063 AST56 M13-08-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE SODIUM	47.8 UG/L 2.2 UG/L 19100 UG/L 9.3 UG/L 18300 UG/L 419 UG/L 134000 UG/L	J J J 	g g g
280-S13-064 AST56 M13-08-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE SODIUM VANADIUM	37.5 UG/L 1.8 UG/L 18900 UG/L 13.8 UG/L 18200 UG/L 416 UG/L 133000 UG/L 7.3 UG/L	J J J J	g g g g
280-S13-068 AST56 M13-09-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	9.8 UG/L 52.5 UG/L 1.8 UG/L 54300 UG/L 126 UG/L 30200 UG/L 1910 UG/L 3210 UG/L 72500 UG/L	J J J J 	g g g g
280-S13-099 AST55 M13-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE MOLYBDENUM NICKEL POTASSIUM SODIUM	5.2 UG/L 28.8 UG/L 75.5 UG/L 1.7 UG/L 42500 UG/L 9740 UG/L 29800 UG/L 1020 UG/L 106 UG/L 10.0 UG/L 15700 UG/L 218000 UG/L	J J J J J 	g g g g g
280-S13-100 AST58 D13-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM LEAD MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	230 UG/L 0.59 UG/L 137000 UG/L 1.1 UG/L 149000 UG/L 602 UG/L 4380 UG/L 157000 UG/L 9.4 UG/L	 J J J J J J	 g h g g d g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 15
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S15-049 AST47 M15-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	142 UG/L	J	g
		CALCIUM	46700 UG/L		
		CHROMIUM	15.1 UG/L		
		IRON	14.3 UG/L	J	g
		LEAD	1.7 UG/L	J	g
		MAGNESIUM	19000 UG/L		
		MANGANESE	156 UG/L		
		POTASSIUM	22600 UG/L		
		SODIUM	277000 UG/L		
		ZINC	15.2 UG/L	J	g
280-S15-059 AST47 M15-03-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	194 UG/L	J	g
		CALCIUM	67000 UG/L		
		CHROMIUM	36.4 UG/L		
		IRON	12.6 UG/L	J	g
		MAGNESIUM	27200 UG/L		
		MANGANESE	11.1 UG/L	J	g
		POTASSIUM	23800 UG/L		
		SODIUM	136000 UG/L		
		ZINC	12.2 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 16
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S16-034 AST46 MWC2-1-01 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	17.3 UG/L		
		BARIUM	31.0 UG/L	J	g
		BERYLLIUM	1.3 UG/L	J	g
		CALCIUM	12900 UG/L		
		LEAD	1.5 UG/L	J	g
		MAGNESIUM	5470 UG/L		
		MANGANESE	36.3 UG/L		
		POTASSIUM	10500 UG/L		
		SODIUM	123000 UG/L		
280-S16-039 AST47 MWC2-2-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	5.1 UG/L	J	g
		ARSENIC	4.2 UG/L	J	g
		BARIUM	89.1 UG/L	J	g
		CALCIUM	51900 UG/L		
		IRON	35.0 UG/L	J	g
		MAGNESIUM	26400 UG/L		
		MANGANESE	89.0 UG/L		
		POTASSIUM	21000 UG/L		
		SODIUM	91900 UG/L		
		ZINC	8.9 UG/L	J	g
280-S16-043 AST47 MWC2-3-01 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	3.9 UG/L	J	g
		ARSENIC	9.3 UG/L	J	g
		BARIUM	29.4 UG/L	J	g
		CALCIUM	15500 UG/L		
		IRON	107 UG/L		
		MAGNESIUM	5580 UG/L		
		MANGANESE	41.3 UG/L		
		POTASSIUM	14300 UG/L		
		SELENIUM	4.1 UG/L	J	g
		SODIUM	17600 UG/L		
		ZINC	11.6 UG/L	J	g
280-S16-047 AST54 M16-4-01 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	11.7 UG/L		
		BARIUM	79.6 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	69300 UG/L		
		MAGNESIUM	56100 UG/L		
		MANGANESE	334 UG/L		
		POTASSIUM	31000 UG/L		
		SODIUM	540000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 19
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S19-016 AST47 MWD13-1-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	8.8 UG/L	J	g
		BARIUM	52.8 UG/L	J	g
		CALCIUM	26500 UG/L		
		IRON	30.3 UG/L	J	g
		MAGNESIUM	25300 UG/L		
		MANGANESE	1610 UG/L		
		NICKEL	27.9 UG/L	J	g
		POTASSIUM	11700 UG/L		
		SELENIUM	3.2 UG/L	J	g
		SODIUM	389000 UG/L		
		ZINC	19.2 UG/L	J	g
280-S19-021 AST47 MWD13-2-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	118 UG/L	J	g
		CALCIUM	49000 UG/L		
		IRON	42.2 UG/L	J	g
		MAGNESIUM	19200 UG/L		
		MANGANESE	112 UG/L		
		NICKEL	24.1 UG/L	J	g
		POTASSIUM	16900 UG/L		
		SELENIUM	3.5 UG/L	J	g
		SODIUM	57700 UG/L		
		ZINC	65.3 UG/L		
280-S19-025 AST47 MWD13-3-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	6.6 UG/L	J	g
		BARIUM	27.7 UG/L	J	g
		CALCIUM	27600 UG/L		
		IRON	51.1 UG/L	J	g
		LEAD	2.9 UG/L	J	g
		MAGNESIUM	4540 UG/L	J	g
		MANGANESE	5.9 UG/L	J	g
		NICKEL	11.2 UG/L	J	g
		POTASSIUM	11000 UG/L		
		SODIUM	94200 UG/L		
		ZINC	19.3 UG/L	J	g
280-S19-029 AST47 MWD13-4-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	6.1 UG/L	J	g
		BARIUM	24.2 UG/L	J	g
		CALCIUM	30800 UG/L		
		IRON	10.1 UG/L	J	g
		POTASSIUM	16500 UG/L		
		SODIUM	230000 UG/L		
		VANADIUM	21.8 UG/L	J	g
		ZINC	11.6 UG/L	J	g
280-S19-033 AST55 M19-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	179 UG/L	J	g
		CADMIUM	0.99 UG/L	J	g
		CALCIUM	217000 UG/L		
		MAGNESIUM	243000 UG/L		
		MANGANESE	5480 UG/L		
		NICKEL	27.9 UG/L	J	g
		POTASSIUM	4110 UG/L	J	g
		SODIUM	619000 UG/L		
280-S19-034 AST55 M19-05-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	180 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CADMIUM	0.96 UG/L	J	g
		CALCIUM	218000 UG/L		
		COBALT	10.2 UG/L	J	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 19 (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S19-034 AST55 M19-05-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM	247000 UG/L 5540 UG/L 25.5 UG/L 3960 UG/L 629000 UG/L	 J J 	 g g
280-S19-060 AST58 D19-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	67.9 UG/L 687000 UG/L 780000 UG/L 10200 UG/L 15200 UG/L 2890000 UG/L	J J J	g h d

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-051 AST47 M7B-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	10.3 UG/L		
		BARIUM	224 UG/L		
		CALCIUM	54800 UG/L		
		IRON	15.6 UG/L	J	g
		MAGNESIUM	43400 UG/L		
		MANGANESE	333 UG/L		
		POTASSIUM	36800 UG/L		
		SODIUM	404000 UG/L		
		ZINC	18.0 UG/L	J	g
280-S7B11-055 AST47 M11-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	3.9 UG/L	J	g
		ARSENIC	6.4 UG/L	J	g
		BARIUM	57.3 UG/L	J	g
		CALCIUM	22000 UG/L		
		CHROMIUM	5.5 UG/L	J	g
		IRON	318 UG/L		
		MAGNESIUM	25900 UG/L		
		MANGANESE	282 UG/L		
		POTASSIUM	32900 UG/L		
		SODIUM	411000 UG/L		
		ZINC	18.8 UG/L	J	g
280-S7B11-059 AST47 M11-02-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.3 UG/L	J	g
		ARSENIC	3.5 UG/L	J	g
		BARIUM	77.0 UG/L	J	g
		CALCIUM	34800 UG/L		
		IRON	392 UG/L		
		MAGNESIUM	32100 UG/L		
		MANGANESE	301 UG/L		
		NICKEL	11.8 UG/L	J	g
		POTASSIUM	38700 UG/L		
		SODIUM	342000 UG/L		
		ZINC	12.1 UG/L	J	g
280-S7B11-064 AST47 M11-03-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	8.1 UG/L	J	g
		BARIUM	168 UG/L	J	g
		CALCIUM	63300 UG/L		
		IRON	822 UG/L		
		MAGNESIUM	25800 UG/L		
		MANGANESE	554 UG/L		
		POTASSIUM	15600 UG/L		
		SODIUM	187000 UG/L		
		ZINC	9.0 UG/L	J	g
280-S7B11-068 AST48 M11-04-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	4.0 UG/L	J	g
		ARSENIC	11.6 UG/L		
		BARIUM	85.2 UG/L	J	g
		BERYLLIUM	1.4 UG/L	J	g
		CALCIUM	42700 UG/L		
		MAGNESIUM	19100 UG/L		
		MANGANESE	453 UG/L		
		POTASSIUM	18800 UG/L		
		SODIUM	124000 UG/L		
		VANADIUM	7.9 UG/L	J	g
280-S7B11-072 AST46 M11-05-Q1	CLP METALS (TOTAL)	ARSENIC	6.1 UG/L	J	g
		BARIUM	825 UG/L		
		CALCIUM	419000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7B (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7B11-072 AST46 M11-05-Q1 0.00 - 0.00	CLP METALS (TOTAL)	IRON	5340 UG/L		
		MAGNESIUM	257000 UG/L		
		MANGANESE	3460 UG/L		
		POTASSIUM	91100 UG/L		
		SODIUM	1830000 UG/L		
280-S7B11-073 AST47 M11-05-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	678 UG/L		
		ANTIMONY	4.0 UG/L	J	g
		ARSENIC	10.7 UG/L		
		BARIUM	799 UG/L		
		CALCIUM	403000 UG/L		
		IRON	6300 UG/L		
		MAGNESIUM	259000 UG/L		
		MANGANESE	3410 UG/L		
		NICKEL	16.9 UG/L	J	g
		POTASSIUM	108000 UG/L		
		SODIUM	1370000 UG/L		
		ZINC	21.5 UG/L		
280-S7B11-117 AST54 M11-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	6.4 UG/L	J	g
		BARIUM	14.6 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	19700 UG/L		
		MAGNESIUM	15800 UG/L		
		MANGANESE	135 UG/L		
		POTASSIUM	17600 UG/L		
		SODIUM	194000 UG/L		
		VANADIUM	9.5 UG/L	J	

Validity (Qual) : J - Estimated concentration

Applicable Comments :
a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth.(ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-028 AST48 MW547-1-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	10.0 UG/L 28.2 UG/L 1.4 UG/L 8530 UG/L 7300 UG/L 983 UG/L 6960 UG/L 252000 UG/L	J J J	g g g
280-S7C-032 AST48 MW547-2-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	4.5 UG/L 81.2 UG/L 1.4 UG/L 36400 UG/L 24700 UG/L 1210 UG/L 8360 UG/L 126000 UG/L	J J J	g g g
280-S7C-036 AST48 MW547-3-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	28.4 UG/L 136 UG/L 1.4 UG/L 45300 UG/L 510 UG/L 50700 UG/L 3120 UG/L 16900 UG/L 212000 UG/L 7.2 UG/L	 J J J	 g g g
280-S7C-040 AST48 MW547-4-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM BERYLLIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM	32.3 UG/L 232 UG/L 1.1 UG/L 89700 UG/L 9520 UG/L 38400 UG/L 4490 UG/L 12700 UG/L 141000 UG/L	 J 	 g
280-S7C-041 AST48 MW547-4-Q1DUP 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM ZINC	27.4 UG/L 259 UG/L 92200 UG/L 8740 UG/L 39300 UG/L 4550 UG/L 13000 UG/L 140000 UG/L 33.8 UG/L		
280-S7C-045 AST48 MW547-5-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM BERYLLIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	83.8 UG/L 1.4 UG/L 33900 UG/L 26500 UG/L 1140 UG/L 4990 UG/L 200000 UG/L	J J J 	g g g
280-S7C-049	CLP METALS (TOTAL)	ARSENIC	12.9 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE 7C (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-S7C-049 AST48 M7C-06-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	64.4 UG/L	J	g
		BERYLLIUM	1.4 UG/L	J	g
		CADMIUM	0.39 UG/L	J	g
		CALCIUM	222000 UG/L		
		MAGNESIUM	85300 UG/L		
		MANGANESE	3400 UG/L		
		POTASSIUM	7430 UG/L		
		SODIUM	95600 UG/L		
		VANADIUM	9.6 UG/L	J	g
280-S7C-054 AST48 M7C-07-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	4.6 UG/L	J	g
		BARIUM	68.0 UG/L	J	g
		BERYLLIUM	1.4 UG/L	J	g
		CALCIUM	225000 UG/L		
		MAGNESIUM	114000 UG/L		
		MANGANESE	4450 UG/L		
		NICKEL	108 UG/L		
		POTASSIUM	7710 UG/L		
		SODIUM	172000 UG/L		
		ZINC	52.5 UG/L		
280-S7C-058 AST48 M7C-08-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	5.0 UG/L	J	g
		BARIUM	42.4 UG/L	J	g
		BERYLLIUM	1.4 UG/L	J	g
		CALCIUM	64200 UG/L		
		COPPER	25.1 UG/L		
		MAGNESIUM	14900 UG/L		
		MANGANESE	690 UG/L		
		POTASSIUM	18900 UG/L		
		SODIUM	35400 UG/L		
		VANADIUM	7.6 UG/L	J	g
		ZINC	34.0 UG/L		
280-S7C-062 AST51 M7C-09-Q1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	4.5 UG/L	J	g
		BARIUM	24.8 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	26800 UG/L		
		MAGNESIUM	28000 UG/L		
		MANGANESE	214 UG/L		
		MERCURY	0.22 UG/L	J	d
		POTASSIUM	2540 UG/L	J	g
		SODIUM	198000 UG/L		

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A-
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-051 AST58 M-101-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ARSENIC	10.8 UG/L		
		BARIUM	102 UG/L	J	g
		CALCIUM	51800 UG/L	J	h
		IRON	3090 UG/L		
		MAGNESIUM	15200 UG/L		
		MANGANESE	1560 UG/L		
		POTASSIUM	13300 UG/L		
		SODIUM	278000 UG/L	J	d
280-RA-055 AST58 M-101-CQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	184 UG/L	J	g
		CALCIUM	746000 UG/L	J	h
		IRON	184 UG/L	J	g
		MAGNESIUM	1610000 UG/L		
		MANGANESE	2090 UG/L		
		POTASSIUM	212000 UG/L		
		SODIUM	8930000 UG/L	J	d
280-RA-059 AST43 M-102-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	117 UG/L	J	g
		CALCIUM	88100 UG/L		
		IRON	383 UG/L		
		MAGNESIUM	21100 UG/L		
		MANGANESE	536 UG/L		
		POTASSIUM	7090 UG/L		
		SODIUM	94000 UG/L		
280-RA-060 AST43 M-102-AQ1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM	114 UG/L	J	g
		CALCIUM	87000 UG/L		
		MAGNESIUM	21200 UG/L		
		MANGANESE	560 UG/L		
		POTASSIUM	7590 UG/L		
		SODIUM	114000 UG/L		
280-RA-068 AST41 M-103-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	13.3 UG/L	J	g
		ARSENIC	12.7 UG/L	J	g
		BARIUM	53.6 UG/L	J	g
		CALCIUM	262000 UG/L	J	h
		MAGNESIUM	1380000 UG/L		
		MANGANESE	72.5 UG/L		
		POTASSIUM	309000 UG/L	J	h
		SODIUM	7760000 UG/L		
280-RA-077 AST55 M-105-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM	83.6 UG/L	J	g
		ARSENIC	9.6 UG/L	J	g
		BERYLLIUM	1.1 UG/L	J	g
		CALCIUM	1570 UG/L	J	g
		IRON	53.5 UG/L	J	g
		MAGNESIUM	877 UG/L	J	g
		POTASSIUM	5590 UG/L		
		SODIUM	96700 UG/L		
280-RA-081 AST41 M-105-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY	18.8 UG/L	J	g
		BARIUM	80.2 UG/L	J	g
		CALCIUM	478000 UG/L	J	h
		IRON	154 UG/L	J	g
		MAGNESIUM	1010000 UG/L		
		MANGANESE	9040 UG/L		
		POTASSIUM	180000 UG/L	J	h
		SILVER	4.0 UG/L	J	h,g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-081 AST41 M-105-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	SODIUM	6930000 UG/L		
280-RA-083 AST43 M-106-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM	14.6 UG/L 10000 UG/L 5430 UG/L 4.4 UG/L 5430 UG/L 7140 UG/L	J J 	g g
280-RA-088 AST43 M-107-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	53.0 UG/L 10200 UG/L 273 UG/L 5960 UG/L 182 UG/L 6700 UG/L 219000 UG/L 14.5 UG/L	J J	g g
280-RA-092 AST43 M-108-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	17.2 UG/L 8360 UG/L 91.6 UG/L 3010 UG/L 7.8 UG/L 3050 UG/L 64600 UG/L 41.0 UG/L	J J J J J J	g g g g
280-RA-096 AST42 M-108-BQ1 0.00 - 0.00	CLP METALS (TOTAL)	CADMIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SILVER SODIUM	1.1 UG/L 408000 UG/L 1100000 UG/L 11100 UG/L 157000 UG/L 26.7 UG/L 8010000 UG/L	J J 	g c
280-RA-098 AST43 M-109-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	29.2 UG/L 7760 UG/L 5140 UG/L 2.5 UG/L 13600 UG/L 280000 UG/L 29.6 UG/L	J J J	g g g
280-RA-099 AST43 M-109-AQ1DUP 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM LEAD MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	35.8 UG/L 7660 UG/L 2.0 UG/L 5090 UG/L 3.1 UG/L 13300 UG/L 286000 UG/L 17.7 UG/L	J J J J	g g g g
280-RA-103 AST43 M-110-AQ1	CLP METALS (TOTAL)	BARIUM CALCIUM IRON	62.3 UG/L 47900 UG/L 225 UG/L	J 	g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-103 AST43 M-110-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	MAGNESIUM MANGANESE POTASSIUM SODIUM	42600 UG/L 557 UG/L 30100 UG/L 286000 UG/L		
280-RA-107 AST43 M-112-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	25.2 UG/L 21000 UG/L 80.0 UG/L 9920 UG/L 117 UG/L 13300 UG/L 185000 UG/L 11.3 UG/L	J J J	g g g
280-RA-111 AST43 M-113-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM BARIUM CALCIUM COBALT COPPER IRON LEAD MAGNESIUM MANGANESE NICKEL POTASSIUM SODIUM VANADIUM ZINC	11700 UG/L 113 UG/L 125000 UG/L 10.4 UG/L 37.3 UG/L 15100 UG/L 7.4 UG/L 50600 UG/L 720 UG/L 63.0 UG/L 33000 UG/L 431000 UG/L 33.4 UG/L 202 UG/L	 J J J 	 g g g
280-RA-116 AST44 M-114-AQ1 0.00 - 0.00	CLP METALS (TOTAL)	ALUMINUM ANTIMONY ARSENIC BARIUM CALCIUM COPPER IRON MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM SODIUM	30.1 UG/L 9.8 UG/L 6.6 UG/L 35.2 UG/L 16900 UG/L 18.6 UG/L 235 UG/L 25700 UG/L 125 UG/L 16.6 UG/L 32700 UG/L 692000 UG/L	J J J J J J 	g g g g g g
280-RA-120 AST44 M-115-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	ANTIMONY ARSENIC BARIUM CALCIUM MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM SILVER SODIUM	22.6 UG/L 19.7 UG/L 44.8 UG/L 13200 UG/L 15900 UG/L 103 UG/L 13.0 UG/L 18500 UG/L 10.8 UG/L 440000 UG/L	J J J 	g g g
280-RA-124 AST43 M-116-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CADMIUM CALCIUM IRON MAGNESIUM	98.0 UG/L 0.40 UG/L 54800 UG/L 659 UG/L 173000 UG/L	J J 	g g

Validity (Qual) : J - Estimated concentration

Applicable Comments : a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ALAMEDA CTO 280
SITE A- (Continued)
ANALYTICAL SUMMARY RESULT FOR DETECTED ANALYTES
(VALIDATED DATA)

WATER

Sample No./SDG No. Field ID/Depth (ft)	Analytical Method	Detected Constituents	Concentration	Qual	Com
280-RA-124 AST43 M-116-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	MANGANESE MOLYBDENUM POTASSIUM SODIUM	362 UG/L 12.7 UG/L 75200 UG/L 2180000 UG/L	 J 	 g
280-RA-128 AST43 M-117-EQ1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE MOLYBDENUM POTASSIUM SODIUM	71.6 UG/L 17400 UG/L 321 UG/L 41400 UG/L 134 UG/L 19.4 UG/L 28000 UG/L 795000 UG/L	J J 	g g
280-RA-249 AST58 DRA-01-Q1 0.00 - 0.00	CLP METALS (TOTAL)	BARIUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM SODIUM VANADIUM	1260 UG/L 513000 UG/L 3650 UG/L 1040000 UG/L 2290 UG/L 168000 UG/L 6930000 UG/L 14.1 UG/L	 J J J	 h d g

Validity (Qual) : J - Estimated concentration

Applicable Comments :
a - Surrogate recovery problem
b - Blank contamination problems
c - Matrix spike recovery problems
d - Duplicate (precision) problems
e - Internal standard problems
f - Calibration problems
g - Quantification below reporting limit
h - Other problems, refer to data validation narrative

ATTACHMENT D

DISCUSSION OF STLC VALUES AND APPLICATION TO METALS COMPARISON

ATTACHMENT D

DISCUSSION OF STLC COMPARISON

Under California Code of Regulations Title 22, soluble threshold limit concentrations (STLCs) are used to define solid wastes that would pose a water quality threat if it were subjected to an acidic environment. In order to obtain analytical data that can be compared to STLCs, samples must be extracted following the California Waste Extraction Test (WET) method. The WET method uses a slightly acidic citrate buffer solution as an extraction medium. The leaching achieved by this method is typically more aggressive than the leaching that would occur under normal environmental conditions, because the soil is agitated with the leachate solution in a vigorous manner for a period of 48 hours.

When a soil is analyzed by the WET method, 10 grams soil is extracted into 100 milliliters of solution. A conservative estimate would be to assume that all of the metal in the 10 grams soil would be extracted. The following calculation and conversion shows that if a soil contained 100 milligrams per kilogram of any given metal, and if it is assumed that *all* the metal is extracted, the maximum concentration in the leachate would be one-tenth the concentration in the original sample.

$$\frac{10 \text{ g soil}}{100 \text{ ml soln}} \times \frac{100 \text{ mg metal}}{\text{kg soil}} \text{ or } \frac{0.010 \text{ kg soil}}{0.1 \text{ L soln}} \times \frac{100 \text{ mg metal}}{\text{kg soil}} = 10 \text{ mg/L metal in soln}$$

In order to properly compare total metal concentrations in soil samples to STLC values, the metal can be assumed to pose a leachate problem if the concentration in the soil equals or exceeds ten times the STLC value. In the above example, the concentration of the metal was 100 mg/kg. After theoretical subjection to the WET procedure, the concentration in the extract was 10 mg/l, or one-tenth of the concentration in the original soil sample. The 10 mg/l concentration represents the *maximum* concentration that will be obtained when subjecting a soil sample of 100 mg/kg to the WET procedure. If the STLC for this metal is 10 mg/l, then the soil sample contains a quantity of metal that could produce a leachate concentration exceeding the regulatory limit (STLC).

This kind of comparison is conservative for two reasons: (1) the WET leaching procedure is much more aggressive than actual in situ leaching conditions, and (2) the assumption is made that *all* of the metal content is leached from the soil for the purposes of comparing to the STLC.

Please refer to the attached table for individual metal's STLC values.

TABLE D-1

SOLUBILITY THRESHOLD LIMIT CONCENTRATIONS (STLC)
(mg/L)

Metals	Concentrations
Antimony	15
Arsenic	5
Barium	100
Beryllium	0.75
Cadmium	1
Chromium	560
Chromium-VI	5
Cobalt	80
Copper	25
Lead	5
Mercury	0.2
Molybdenum	350
Nickel	20
Selenium	1
Silver	5
Thallium	7
Vanadium	24
Zinc	250

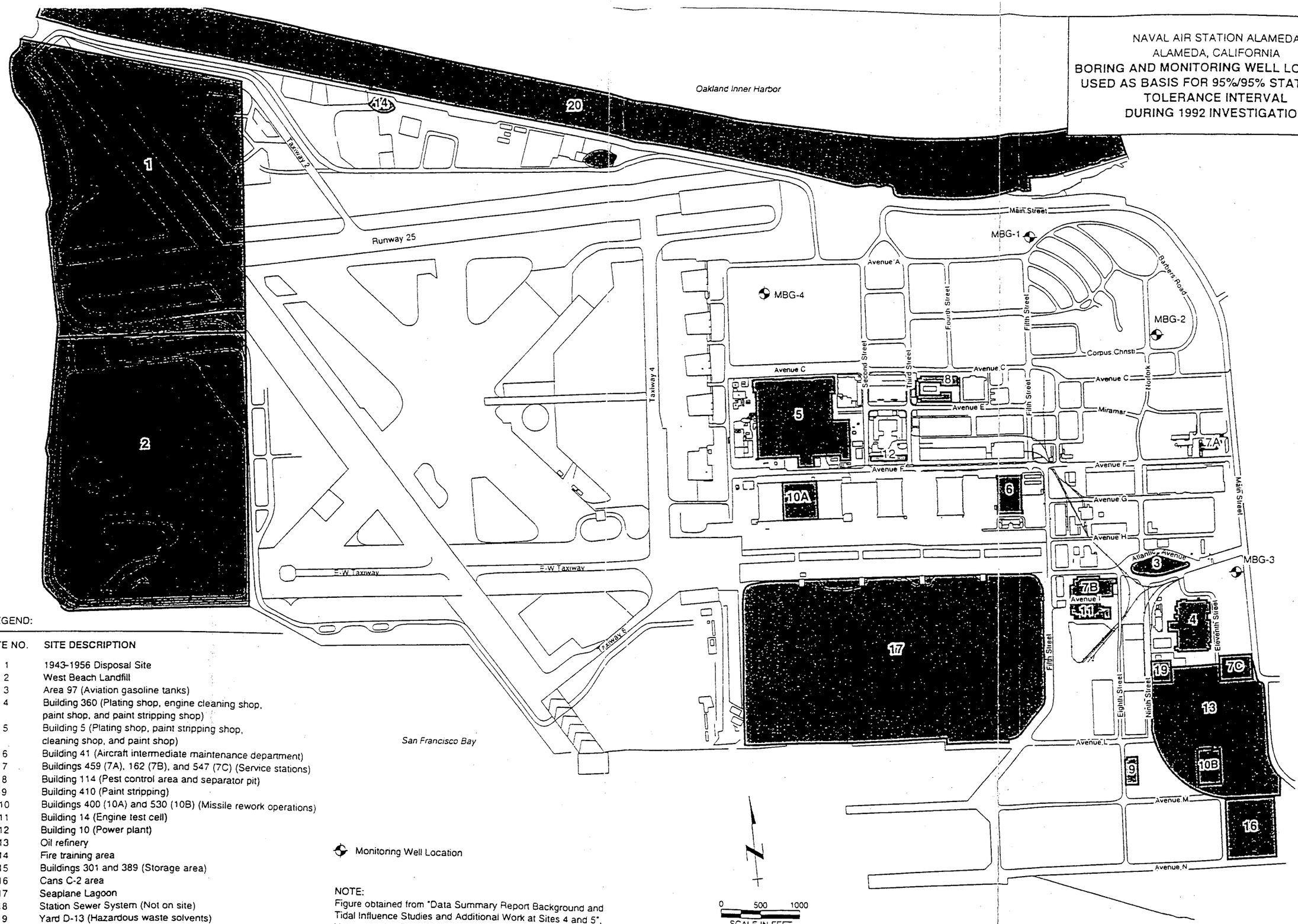
Note: Values obtained from California Assessment Code Title 26.

ATTACHMENT E

LOCATIONS OF MONITORING WELLS USED FOR STATISTICAL TOLERANCE INTERVAL

NAVAL AIR STATION ALAMEDA
ALAMEDA, CALIFORNIA

BORING AND MONITORING WELL LOCATIONS USED AS BASIS FOR 95%/95% STATISTICAL TOLERANCE INTERVAL DURING 1992 INVESTIGATION



LEGEND:

SITE NO.	SITE DESCRIPTION
1	1943-1956 Disposal Site
2	West Beach Landfill
3	Area 97 (Aviation gasoline tanks)
4	Building 360 (Plating shop, engine cleaning shop, paint shop, and paint stripping shop)
5	Building 5 (Plating shop, paint stripping shop, cleaning shop, and paint shop)
6	Building 41 (Aircraft intermediate maintenance department)
7	Buildings 459 (7A), 162 (7B), and 547 (7C) (Service stations)
8	Building 114 (Pest control area and separator pit)
9	Building 410 (Paint stripping)
10	Buildings 400 (10A) and 530 (10B) (Missile rework operations)
11	Building 14 (Engine test cell)
12	Building 10 (Power plant)
13	Oil refinery
14	Fire training area
15	Buildings 301 and 389 (Storage area)
16	Cans C-2 area
17	Seaplane Lagoon
18	Station Sewer System (Not on site)
19	Yard D-13 (Hazardous waste solvents)
20	Estuary (Oakland Inner Harbor)

Monitoring Well Location

NOTE:
Figure obtained from "Data Summary Report Background and Tidal Influence Studies and Additional Work at Sites 4 and 5", Volume 1 of 2, Draft Final, August 4, 1992.

01/95 AL

ATTACHMENT F

DEPTH TO GROUNDWATER MEASUREMENTS

ATTACHMENT F-1

DEPTH TO GROUNDWATER MEASUREMENTS
CTO 280
ALAMEDA NAVAL AIR STATION

Site	Well ID	Measurement Date	Depth to Groundwater (ft bgs)
1	M001-A	1/5/95	2.85
	M001-B	1/5/95	3.95
	M001-E	1/5/95	4.35
	M002-A	1/5/95	4.85
	M002-E	1/5/95	4.60
	M003-A	1/5/95	3.50
	M003-E	1/5/95	3.65
	M003-B	1/5/95	6.00
	M004-A	1/5/95	2.55
	M005-A	1/5/95	2.61
	M006-A	1/5/95	2.00
	M007-A	1/5/95	0.00*
	M025-A	1/5/95	3.90
	M025-E	1/5/95	3.90
	M025-C	1/5/95	3.90
	M026-A	1/5/95	3.35
	M026-E	1/5/95	3.00
	M027-A	1/5/95	3.45
	M027-E	1/5/95	3.35
	M027-B	1/5/95	Not Located
	M027-C	1/5/95	4.00
	M028-A	1/5/95	4.30
	M028-E	1/5/95	4.40
	M028-C	1/5/95	5.20
	M029-A	1/5/95	3.70
	M029-E	1/5/95	2.65
	M030A	1/5/95	2.00
	M030-E	1/5/95	2.00
	M030-C	1/5/95	5.40
	M031-A	1/5/95	0.25
	M031-E	1/5/95	0.25
	M031-C	1/5/95	4.35
	M032-A	1/5/95	2.30
	M033-A	1/5/95	3.80
	M034-A	1/5/95	2.20
	M035-A	1/5/95	4.20
2	M010-A	1/6/95	0.75
	M010-B	1/5/95	2.03
	M011-A		
	M012-A	1/6/95	1.95

ATTACHMENT F-1

DEPTH TO GROUNDWATER MEASUREMENTS
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

Site	Well ID	Measurement Date	Depth to Groundwater (ft bgs)
2 (cont.)	M012-B	1/5/95	3.32
	M013-C	1/5/95	3.33
	M014-A	1/6/95	2.29
	M014-B	1/5/95	3.72
	M015-A	1/6/95	4.52
	M016-A	1/5/95	6.96
	M016-E	1/5/95	7.09
	M016-B	1/5/95	7.07
	M017-A	1/6/95	7.78
	M018-A	1/6/95	6.69
	M018-E	1/6/95	5.98
	M019-A	1/6/95	Not Measured
	M019-E	1/6/95	5.77
	M020-A	1/5/95	4.95
	M020-E	1/5/95	3.90
	M020-B	1/5/95	5.12
	M021-A	1/5/95	2.81
	M021-E	1/5/95	6.35
	M021-C	1/5/95	3.20
	M022-A	1/5/95	1.31
	M022-E	1/5/95	1.10
	M023-A	1/5/95	2.32
	M023-E	1/5/95	2.54
	M023-C	1/5/95	3.11
	M023-B	1/5/95	3.09
	M024-A	1/5/95	3.92
	M024-E	1/5/95	4.26
Runway Area	M101-A	1/5/95	0.41
	M101-C	1/5/95	2.36
	M102-A	1/5/95	0.60
	M103-A	1/5/95	0.00*
	M103-B	1/5/95	1.78
	M104-A		Not located until 5/95
	M104-C		Not located until 5/95
	M105-A	1/5/95	0.62
	M105-B	1/5/95	3.72
	M106-A	1/5/95	0.53
	M107-A	1/5/95	1.15
	M108-A	1/5/95	2.21

ATTACHMENT F-1

DEPTH TO GROUNDWATER MEASUREMENTS
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

Site	Well ID	Measurement Date	Depth to Groundwater (ft bgs)
Runway Area (cont.)	M108-B	1/5/95	4.98
	M109-A	1/5/95	6.36
	M110-A	1/5/95	2.47
	M112-A	1/5/95	Not taken; in secured area.
	M113-A	1/5/95	0.40
	M114-A	1/5/95	0.00*
	M115-E	1/5/95	3.80
	M116-E	1/5/95	3.77
	M117-E	1/5/95	4.91
	DRA-01	1/5/95	3.80
3	MW97-1	1/5/95	4.94
	MW97-2	1/5/95	5.52
	MW97-3	1/5/95	1.99
	M03-04	1/5/95	6.29
	M03-05	1/5/95	5.74
	M03-06	1/5/95	6.29
	M03-07	1/5/95	2.94
	M03-08A	1/5/95	5.26
	D03-01	1/5/95	6.05
4	MW360-1	1/4/95	3.73
	MW360-2	1/4/95	4.35
	MW360-3	1/4/95	3.85
	MW360-4	1/4/95	4.41
	M04-05	1/4/95	4.41
	M04-06	1/6/95	2.01
	M04-07	1/4/95	4.50
	D04-01	1/4/95	5.61
5	D05-01	1/5/95	6.46
	D05-02	1/5/95	7.78
	D05-03	1/5/95	5.12
	M05-01	1/5/95	7.50
	M05-02	1/5/95	6.06
	M05-03	1/5/95	3.42
	M05-04	1/5/95	6.48
	M05-05	1/5/95	6.10
	M05-06	1/5/95	4.01
	M05-07	1/5/95	6.40

ATTACHMENT F-1

DEPTH TO GROUNDWATER MEASUREMENTS
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

Site	Well ID	Measurement Date	Depth to Groundwater (ft bgs)
5 (cont.)	M05-08	1/5/95	7.78
	M05-09	1/5/95	6.08
	M05-10	1/5/95	5.08
	M05-11	1/5/95	7.24
	M05-12	1/5/95	7.38
	M05BS-01	1/5/95	6.87
	M05HW-01	1/6/95	4.35
	PEZ-S05-08	1/6/95	5.06
	PEZ-S05-09	1/6/95	4.65
	PEZ-S05-10	1/6/95	4.25
6	M06-01	1/6/95	4.43
	M06-02	1/6/95	4.57
	M06-03	1/6/95	4.61
	M06-04	1/6/95	3.61
	M06-05	1/6/95	4.16
	M06-06	Helicopter equipment placed	
7A	W-1	1/5/95	0.45
	W-2	1/5/95	0.23
	W-3	1/5/95	1.27
	M07A-01	1/5/95	2.36
	M07A-02	1/4/95	5.60
	M07A-03	1/4/95	2.13
	M07A-04	1/5/95	0.28
	M07A-05	1/5/95	3.65
	M07A-06B	1/5/95	1.98
	M07A-07	1/5/95	2.22
	M07A-08	1/5/95	0.55
	M07A-09	1/5/95	0.82
	D07A-01	1/5/95	1.04
	D07A-02	1/4/95	2.67
	D07A-03	1/4/95	2.81
7B & 11	M07B-01	1/5/95	4.85
	M11-01	1/5/95	7.25
	M11-02	1/5/95	6.15
	M11-03	1/5/95	5.25
	M11-04	1/5/95	5.70
	M11-05	1/4/95	5.40

ATTACHMENT F-1

DEPTH TO GROUNDWATER MEASUREMENTS
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

Site	Well ID	Measurement Date	Depth to Groundwater (ft bgs)
7B & 11 (cont.)	M11-06	1/4/95	5.40
	D11-01	1/5/95	3.70
	WA-8	1/5/95	dry well
7C	MW547-1	1/4/95	2.66
	MW547-2	1/4/95	1.49
	MW547-3	1/4/95	3.96
	MW547-4	1/4/95	2.81
	MW547-5	1/4/95	2.44
	M07C-06	1/4/95	3.44
	M07C-07	1/4/95	1.75
	M07C-08	1/4/95	1.68
	M07C-09	1/4/95	2.94
	D07C-01	1/4/95	3.56
8	D08-01	1/6/95	1/8/04
	M08-01	1/6/95	1/5/04
	M08-02	1/6/95	1/7/04
	M08-03	1/6/95	1/7/04
	M08-04	1/6/95	1/4/04
	M08-05	1/6/95	1/4/04
	M08-06	1/6/95	1/5/04
	M08-07	1/6/95	1/6/04
9	MW410-1	1/6/95	4.10
	MW410-2	1/6/95	5.50
	MW410-3	1/6/95	4.15
	MW410-4	1/6/95	4.65
	M09-05	1/6/95	5.30
	M09-06	1/6/95	5.55
	D09-01	1/6/95	7.20
	PEZ-S09-05	1/6/95	4.95
	PEZ-S09-06	1/6/95	5.05
	PEZ-S09-07	1/6/95	4.90
	PEZ-S09-08	1/6/95	5.55
	PEZ-S09-09	1/6/95	5.45
	PEZ-S09-10	1/6/95	6.00

ATTACHMENT F-1

DEPTH TO GROUNDWATER MEASUREMENTS
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

Site	Well ID	Measurement Date	Depth to Groundwater (ft bgs)
10A	D10A-01	1/5/95	6.01
	M10A-01	1/5/95	2.25
	M10A-02	1/5/95	3.02
	M10A-03	1/5/95	2.41
	M111A	1/5/95	3.80
	PEZ-S10A-02	1/6/95	4.75
	PEZ-S10A-05	1/6/95	4.75
10B	MW530-1	1/4/95	4.74
	MW530-2	1/4/95	4.66
	MW530-3	1/4/95	2.43
	M10B-01	1/4/95	5.66
	D10B-01	1/4/95	4.09
	D10B-02	1/4/95	3.48
	PEZ-S10B-05	1/6/95	5.40
	PEZ-S10B-06	1/6/95	5.42
12	D12-01	1/6/95	5.80
	M12-01	1/6/95	5.26
	M12-02	1/6/95	5.72
	M12-03	1/6/95	4.19
	M12-04	1/6/95	4.16
13	M13-06	1/4/95	3.22
	M13-07		Not taken; in secured area.
	M13-08	1/4/95	1.21
	M13-09	1/6/95	1.90
	MWOR-1	1/4/95	3.70
	MW-1	1/4/95	3.07
	MWOR-2	1/4/95	3.93
	MWOR-3	1/4/95	2.73
	MWOR-4	1/4/95	1.33
	MWOR-5	1/4/95	2.35
	D13-01	1/4/95	2.46
14	M14-01	1/6/95	4.40
	M14-02	1/6/95	4.40
	M14-03	1/6/95	3.00
	D14-01	1/6/95	6.30

ATTACHMENT F-1

DEPTH TO GROUNDWATER MEASUREMENTS
CTO 280
ALAMEDA NAVAL AIR STATION
(Continued)

Site	Well ID	Measurement Date	Depth to Groundwater (ft bgs)
15	M15-01	1/6/95	0.01
	M15-02		Destroyed
	M15-03	1/6/95	2.96
16	M16-04	1/6/95	3.71
	MWC2-1	1/6/95	3.24
	MWC2-2	1/6/95	4.13
	MWC2-3	1/6/95	1.23
19	M19-05	1/5/95	4.05
	MWD13-1	1/5/95	4.15
	MWD13-2	1/5/95	3.10
	MWD13-3	1/5/95	4.05
	MWD13-4	1/5/95	4.25
	D19-01	1/5/95	4.70

Notes:
* - Artesian Conditions

ATTACHMENT G

CPT LITHOLOGIC PRINTOUTS

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-1
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/06/00 02:40
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	3.12	0.03	1.00	0.02	sensitive fine grained	UNDFND	UNDFD	1	.3
0.50	1.64	94.88	1.41	1.48	0.07	silty sand to sandy silt	>90	>48	30	UNDEFINED
0.75	2.46	278.14	2.66	0.96	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	107.54	0.53	0.49	0.17	sand	>90	>48	21	UNDEFINED
1.25	4.10	71.30	1.62	2.27	0.21	sandy silt to clayey silt	UNDFND	UNDFD	27	7.1
1.50	4.92	15.80	0.49	3.07	0.26	clayey silt to silty clay	UNDFND	UNDFD	8	1.5
1.75	5.74	15.50	0.28	1.79	0.31	clayey silt to silty clay	UNDFND	UNDFD	7	1.5
2.00	6.56	16.14	0.19	1.15	0.35	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
2.25	7.38	21.12	0.16	0.76	0.40	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
2.50	8.20	51.82	0.25	0.49	0.45	sand to silty sand	50-60	40-42	12	UNDEFINED
2.75	9.02	37.44	0.39	1.03	0.50	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.00	9.84	75.10	0.48	0.64	0.54	sand to silty sand	60-70	42-44	18	UNDEFINED
3.25	10.66	92.12	0.53	0.57	0.58	sand to silty sand	70-80	42-44	22	UNDEFINED
3.50	11.48	107.50	0.46	0.43	0.60	sand	70-80	42-44	21	UNDEFINED
3.75	12.30	58.18	0.14	0.25	0.62	sand to silty sand	50-60	40-42	14	UNDEFINED
4.00	13.12	50.74	0.23	0.46	0.64	sand to silty sand	50-60	40-42	12	UNDEFINED
4.25	13.94	69.70	0.26	0.37	0.66	sand to silty sand	60-70	40-42	17	UNDEFINED
4.50	14.76	81.54	0.44	0.54	0.68	sand to silty sand	60-70	40-42	20	UNDEFINED
4.75	15.58	102.20	0.37	0.36	0.71	sand	70-80	42-44	20	UNDEFINED
5.00	16.40	117.66	0.36	0.30	0.73	sand	70-80	42-44	23	UNDEFINED
5.25	17.22	113.14	0.49	0.43	0.75	sand	70-80	42-44	22	UNDEFINED
5.50	18.04	140.70	0.65	0.46	0.77	sand	80-90	42-44	27	UNDEFINED
5.75	18.86	106.20	0.69	0.65	0.79	sand to silty sand	70-80	42-44	25	UNDEFINED
6.00	19.69	121.86	0.46	0.38	0.81	sand	70-80	42-44	23	UNDEFINED
6.25	20.51	65.40	0.42	0.64	0.84	sand to silty sand	50-60	38-40	16	UNDEFINED
6.50	21.33	21.46	0.28	1.28	0.86	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
6.75	22.15	8.26	0.06	0.68	0.88	sensitive fine grained	UNDFND	UNDFD	4	.7
7.00	22.97	6.38	0.07	1.06	0.90	sensitive fine grained	UNDFND	UNDFD	3	.5
7.25	23.79	6.06	0.06	0.97	0.92	sensitive fine grained	UNDFND	UNDFD	3	.4
7.50	24.61	7.48	0.09	1.24	0.94	clayey silt to silty clay	UNDFND	UNDFD	4	.6
7.75	25.43	6.26	0.07	1.17	0.96	sensitive fine grained	UNDFND	UNDFD	3	.4
8.00	26.25	6.82	0.08	1.20	0.99	sensitive fine grained	UNDFND	UNDFD	3	.5
8.25	27.07	6.40	0.04	0.70	1.01	sensitive fine grained	UNDFND	UNDFD	3	.4
8.50	27.89	6.46	0.05	0.72	1.03	sensitive fine grained	UNDFND	UNDFD	3	.4
8.75	28.71	6.34	0.04	0.67	1.05	sensitive fine grained	UNDFND	UNDFD	3	.4
9.00	29.53	9.80	0.08	0.84	1.07	clayey silt to silty clay	UNDFND	UNDFD	5	.8
9.25	30.35	32.78	0.22	0.66	1.09	silty sand to sandy silt	<40	34-36	10	UNDEFINED
9.50	31.17	66.66	0.49	0.73	1.12	sand to silty sand	50-60	38-40	16	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	145.08	0.96	0.66	1.14	sand	70-80	42-44	28	UNDEFINED
10.00	32.81	233.08	1.80	0.77	1.16	sand	80-90	44-46	45	UNDEFINED
10.25	33.63	250.32	1.88	0.75	1.18	sand	>90	44-46	48	UNDEFINED
10.50	34.45	249.14	1.99	0.80	1.20	sand	>90	44-46	48	UNDEFINED
10.75	35.27	232.38	1.66	0.72	1.22	sand	80-90	42-44	45	UNDEFINED
11.00	36.09	217.12	1.47	0.68	1.24	sand	80-90	42-44	42	UNDEFINED
11.25	36.91	206.78	1.40	0.68	1.27	sand	80-90	42-44	40	UNDEFINED
11.50	37.73	174.54	1.35	0.77	1.29	sand	70-80	42-44	33	UNDEFINED
11.75	38.55	70.54	1.20	1.70	1.31	silty sand to sandy silt	50-60	38-40	23	UNDEFINED
12.00	39.37	55.50	1.66	2.99	1.33	sandy silt to clayey silt	UNDFND	UNDFD	21	5.3
12.25	40.19	129.82	5.84	4.50	1.35	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-2
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/06/94 10:10
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	43.84	0.36	0.82	0.02	silty sand to sandy silt	>90	>48	14	UNDEFINED
0.50	1.64	100.90	0.85	0.85	0.07	sand to silty sand	>90	>48	24	UNDEFINED
0.75	2.46	121.64	1.04	0.86	0.12	sand to silty sand	>90	>48	29	UNDEFINED
1.00	3.28	129.44	1.55	1.20	0.17	sand to silty sand	>90	>48	31	UNDEFINED
1.25	4.10	103.70	0.80	0.77	0.21	sand to silty sand	80-90	46-48	25	UNDEFINED
1.50	4.92	80.38	0.44	0.55	0.26	sand to silty sand	70-80	44-46	19	UNDEFINED
1.75	5.74	60.48	0.32	0.53	0.31	sand to silty sand	60-70	44-46	14	UNDEFINED
2.00	6.56	35.52	0.19	0.53	0.35	silty sand to sandy silt	50-60	40-42	11	UNDEFINED
2.25	7.38	32.06	0.21	0.65	0.40	silty sand to sandy silt	40-50	40-42	10	UNDEFINED
2.50	8.20	33.58	0.25	0.73	0.45	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
2.75	9.02	52.38	0.31	0.59	0.50	sand to silty sand	50-60	40-42	13	UNDEFINED
3.00	9.84	67.12	0.31	0.46	0.54	sand to silty sand	60-70	40-42	16	UNDEFINED
3.25	10.66	34.38	0.35	1.03	0.58	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.50	11.48	6.18	0.05	0.86	0.60	sensitive fine grained	UNDFND	UNDFD	3	.5
3.75	12.30	36.20	0.24	0.67	0.62	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.00	13.12	36.32	0.36	0.98	0.64	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.25	13.94	67.98	0.42	0.62	0.66	sand to silty sand	60-70	40-42	16	UNDEFINED
4.50	14.76	50.48	0.40	0.79	0.68	silty sand to sandy silt	50-60	38-40	16	UNDEFINED
4.75	15.58	33.96	0.25	0.73	0.71	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
5.00	16.40	12.78	0.23	1.77	0.73	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
5.25	17.22	4.68	0.05	1.06	0.75	sensitive fine grained	UNDFND	UNDFD	2	.3
5.50	18.04	4.38	0.05	1.23	0.77	sensitive fine grained	UNDFND	UNDFD	2	.3
5.75	18.86	4.20	0.06	1.48	0.79	sensitive fine grained	UNDFND	UNDFD	2	.3
6.00	19.69	4.76	0.07	1.37	0.81	sensitive fine grained	UNDFND	UNDFD	2	.3
6.25	20.51	5.60	0.08	1.45	0.84	sensitive fine grained	UNDFND	UNDFD	3	.4
6.50	21.33	5.60	0.05	0.81	0.86	sensitive fine grained	UNDFND	UNDFD	3	.4
6.75	22.15	5.46	0.07	1.21	0.88	sensitive fine grained	UNDFND	UNDFD	3	.4
7.00	22.97	6.00	0.05	0.90	0.90	sensitive fine grained	UNDFND	UNDFD	3	.4
7.25	23.79	4.58	0.03	0.61	0.92	sensitive fine grained	UNDFND	UNDFD	2	.3
7.50	24.61	5.90	0.06	0.97	0.94	sensitive fine grained	UNDFND	UNDFD	3	.4
7.75	25.43	4.98	0.04	0.76	0.96	sensitive fine grained	UNDFND	UNDFD	2	.3
8.00	26.25	8.12	0.04	0.45	0.99	sensitive fine grained	UNDFND	UNDFD	4	.6
8.25	27.07	21.72	0.10	0.44	1.01	silty sand to sandy silt	<40	32-34	7	UNDEFINED
8.50	27.89	22.50	0.07	0.33	1.03	silty sand to sandy silt	<40	32-34	7	UNDEFINED
8.75	28.71	9.70	0.06	0.60	1.05	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
9.00	29.53	7.08	0.05	0.72	1.07	sensitive fine grained	UNDFND	UNDFD	3	.5
9.25	30.35	9.44	0.03	0.30	1.09	sensitive fine grained	UNDFND	UNDFD	5	.7
9.50	31.17	11.64	0.03	0.29	1.12	sandy silt to clayey silt	UNDFND	UNDFD	4	.9

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-2 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	11.28	0.08	0.69	1.14	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
10.00	32.81	9.54	0.05	0.49	1.16	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
10.25	33.63	8.02	0.08	1.00	1.18	clayey silt to silty clay	UNDFND	UNDFD	4	.6
10.50	34.45	7.74	0.07	0.96	1.20	sensitive fine grained	UNDFND	UNDFD	4	.5
10.75	35.27	9.66	0.06	0.65	1.22	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
11.00	36.09	48.40	0.40	0.83	1.24	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
11.25	36.91	144.94	3.41	2.36	1.27	silty sand to sandy silt	70-80	40-42	46	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-4
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/06/00 01:20
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	46.78	0.37	0.79	0.02	silty sand to sandy silt	>90	>48	15	UNDEFINED
0.50	1.64	68.60	0.55	0.81	0.07	sand to silty sand	>90	>48	16	UNDEFINED
0.75	2.46	81.84	0.45	0.56	0.12	sand to silty sand	>90	>48	20	UNDEFINED
1.00	3.28	80.08	0.40	0.50	0.17	sand to silty sand	80-90	46-48	19	UNDEFINED
1.25	4.10	84.98	0.37	0.43	0.21	sand to silty sand	80-90	46-48	20	UNDEFINED
1.50	4.92	75.08	0.35	0.47	0.26	sand to silty sand	70-80	44-46	18	UNDEFINED
1.75	5.74	50.26	0.21	0.43	0.31	sand to silty sand	60-70	42-44	12	UNDEFINED
2.00	6.56	50.58	0.22	0.44	0.35	sand to silty sand	60-70	42-44	12	UNDEFINED
2.25	7.38	57.60	0.27	0.47	0.40	sand to silty sand	60-70	42-44	14	UNDEFINED
2.50	8.20	47.16	0.22	0.47	0.45	sand to silty sand	50-60	40-42	11	UNDEFINED
2.75	9.02	31.98	0.16	0.50	0.50	silty sand to sandy silt	40-50	38-40	10	UNDEFINED
3.00	9.84	37.18	0.15	0.40	0.54	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.25	10.66	44.90	0.25	0.56	0.58	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
3.50	11.48	37.14	0.24	0.65	0.60	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.75	12.30	12.00	0.16	1.36	0.62	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
4.00	13.12	17.88	0.21	1.19	0.64	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
4.25	13.94	21.92	0.30	1.38	0.66	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
4.50	14.76	6.40	0.07	1.05	0.68	sensitive fine grained	UNDFND	UNDFD	3	.5
4.75	15.58	3.86	0.03	0.83	0.71	sensitive fine grained	UNDFND	UNDFD	2	.2
5.00	16.40	3.78	0.03	0.71	0.73	sensitive fine grained	UNDFND	UNDFD	2	.2
5.25	17.22	4.12	0.05	1.19	0.75	sensitive fine grained	UNDFND	UNDFD	2	.3
5.50	18.04	4.32	0.05	1.06	0.77	sensitive fine grained	UNDFND	UNDFD	2	.3
5.75	18.86	4.16	0.03	0.83	0.79	sensitive fine grained	UNDFND	UNDFD	2	.3
6.00	19.69	5.28	0.07	1.42	0.81	sensitive fine grained	UNDFND	UNDFD	3	.4
6.25	20.51	4.32	0.03	0.61	0.84	sensitive fine grained	UNDFND	UNDFD	2	.3
6.50	21.33	4.36	0.04	0.82	0.86	sensitive fine grained	UNDFND	UNDFD	2	.3
6.75	22.15	4.46	0.03	0.66	0.88	sensitive fine grained	UNDFND	UNDFD	2	.3
7.00	22.97	5.04	0.03	0.60	0.90	sensitive fine grained	UNDFND	UNDFD	2	.3
7.25	23.79	5.06	0.03	0.61	0.92	sensitive fine grained	UNDFND	UNDFD	2	.3
7.50	24.61	5.38	0.04	0.66	0.94	sensitive fine grained	UNDFND	UNDFD	3	.3
7.75	25.43	5.70	0.03	0.45	0.96	sensitive fine grained	UNDFND	UNDFD	3	.4
8.00	26.25	5.60	0.02	0.30	0.99	sensitive fine grained	UNDFND	UNDFD	3	.4
8.25	27.07	5.98	0.02	0.35	1.01	sensitive fine grained	UNDFND	UNDFD	3	.4
8.50	27.89	6.88	0.02	0.31	1.03	sensitive fine grained	UNDFND	UNDFD	3	.5
8.75	28.71	7.94	0.03	0.32	1.05	sensitive fine grained	UNDFND	UNDFD	4	.6
9.00	29.53	12.00	0.02	0.18	1.07	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
9.25	30.35	11.06	0.01	0.09	1.09	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
9.50	31.17	6.52	0.03	0.44	1.12	sensitive fine grained	UNDFND	UNDFD	3	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-4 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	7.62	0.02	0.30	1.14	sensitive fine grained	UNDFND	UNDFD	4	.5
10.00	32.81	7.14	0.03	0.37	1.16	sensitive fine grained	UNDFND	UNDFD	3	.5
10.25	33.63	9.62	0.06	0.67	1.18	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
10.50	34.45	6.82	0.05	0.68	1.20	sensitive fine grained	UNDFND	UNDFD	3	.4
10.75	35.27	6.74	0.04	0.55	1.22	sensitive fine grained	UNDFND	UNDFD	3	.4
11.00	36.09	7.18	0.05	0.69	1.24	sensitive fine grained	UNDFND	UNDFD	3	.5
11.25	36.91	8.06	0.03	0.37	1.27	sensitive fine grained	UNDFND	UNDFD	4	.5
11.50	37.73	12.18	0.05	0.40	1.29	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
11.75	38.55	13.36	0.03	0.19	1.31	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
12.00	39.37	27.22	0.15	0.56	1.33	silty sand to sandy silt	<40	30-32	9	UNDEFINED
12.25	40.19	62.62	0.48	0.77	1.35	sand to silty sand	40-50	36-38	15	UNDEFINED
12.50	41.01	171.02	1.27	0.75	1.37	sand	70-80	40-42	33	UNDEFINED
12.75	41.83	195.38	1.71	0.88	1.40	sand	80-90	42-44	37	UNDEFINED
13.00	42.65	212.56	1.89	0.89	1.42	sand	80-90	42-44	41	UNDEFINED
13.25	43.47	188.16	2.14	1.14	1.44	sand	70-80	42-44	36	UNDEFINED
13.50	44.29	172.96	5.89	3.40	1.46	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.0
13.75	45.11	118.60	1.94	1.64	1.48	silty sand to sandy silt	60-70	40-42	38	UNDEFINED
14.00	45.93	96.56	3.29	3.41	1.50	sandy silt to clayey silt	UNDFND	UNDFD	37	9.3

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-1-5
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/11/94 8:40
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	50.76	0.24	0.47	0.02	sand to silty sand	>90	>48	12	UNDEFINED
0.50	1.64	259.38	1.39	0.54	0.07	sand	>90	>48	50	UNDEFINED
0.75	2.46	262.74	1.92	0.73	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	202.46	1.04	0.51	0.17	sand	>90	>48	39	UNDEFINED
1.25	4.10	151.54	0.70	0.46	0.21	sand	>90	>48	29	UNDEFINED
1.50	4.92	120.34	0.27	0.23	0.26	sand	>90	46-48	23	UNDEFINED
1.75	5.74	90.70	0.15	0.17	0.31	sand	80-90	44-46	17	UNDEFINED
2.00	6.56	78.30	0.19	0.25	0.35	sand to silty sand	70-80	44-46	19	UNDEFINED
2.25	7.38	65.48	0.19	0.29	0.40	sand to silty sand	60-70	42-44	16	UNDEFINED
2.50	8.20	55.44	0.19	0.34	0.45	sand to silty sand	60-70	40-42	13	UNDEFINED
2.75	9.02	61.12	0.21	0.34	0.50	sand to silty sand	60-70	40-42	15	UNDEFINED
3.00	9.84	52.22	0.19	0.36	0.54	sand to silty sand	50-60	40-42	13	UNDEFINED
3.25	10.66	61.66	0.24	0.39	0.58	sand to silty sand	60-70	40-42	15	UNDEFINED
3.50	11.48	64.06	0.24	0.38	0.60	sand to silty sand	60-70	40-42	15	UNDEFINED
3.75	12.30	44.66	0.27	0.60	0.62	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
4.00	13.12	65.60	0.20	0.30	0.64	sand to silty sand	60-70	40-42	16	UNDEFINED
4.25	13.94	43.46	0.28	0.64	0.66	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.50	14.76	32.28	0.10	0.32	0.68	silty sand to sandy silt	<40	36-38	10	UNDEFINED
4.75	15.58	25.16	0.12	0.48	0.71	silty sand to sandy silt	<40	34-36	8	UNDEFINED
5.00	16.40	78.04	0.33	0.42	0.73	sand to silty sand	60-70	40-42	19	UNDEFINED
5.25	17.22	55.08	0.25	0.46	0.75	sand to silty sand	50-60	38-40	13	UNDEFINED
5.50	18.04	16.62	0.24	1.45	0.77	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
5.75	18.86	39.74	0.22	0.54	0.79	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
6.00	19.69	17.28	0.28	1.63	0.81	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
6.25	20.51	12.38	0.12	0.99	0.84	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
6.50	21.33	5.26	0.02	0.36	0.86	sensitive fine grained	UNDFND	UNDFD	3	.4
6.75	22.15	5.48	0.02	0.40	0.88	sensitive fine grained	UNDFND	UNDFD	3	.4
7.00	22.97	5.68	0.02	0.34	0.90	sensitive fine grained	UNDFND	UNDFD	3	.4
7.25	23.79	5.00	0.04	0.76	0.92	sensitive fine grained	UNDFND	UNDFD	2	.3
7.50	24.61	4.50	0.02	0.52	0.94	sensitive fine grained	UNDFND	UNDFD	2	.3
7.75	25.43	4.94	0.03	0.66	0.96	sensitive fine grained	UNDFND	UNDFD	2	.3
8.00	26.25	5.62	0.05	0.86	0.99	sensitive fine grained	UNDFND	UNDFD	3	.4
8.25	27.07	7.96	0.04	0.50	1.01	sensitive fine grained	UNDFND	UNDFD	4	.6
8.50	27.89	6.20	0.02	0.26	1.03	sensitive fine grained	UNDFND	UNDFD	3	.4
8.75	28.71	6.54	0.01	0.08	1.05	sensitive fine grained	UNDFND	UNDFD	3	.4
9.00	29.53	6.54	-0.00	-0.07	1.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
9.25	30.35	10.46	-0.01	-0.11	1.09	undefined	UNDFND	UNDFD	UDF	UNDEFINED
9.50	31.17	21.40	0.01	0.07	1.12	silty sand to sandy silt	<40	30-32	7	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-1-5 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	9.52	0.01	0.11	1.14	sensitive fine grained	UNDFND	UNDFD	5	.7
10.00	32.81	9.06	-0.00	-0.01	1.16	undefined	UNDFND	UNDFD	UDF	UNDEFINED
10.25	33.63	22.10	0.04	0.19	1.18	silty sand to sandy silt	<40	30-32	7	UNDEFINED
10.50	34.45	10.74	-0.01	-0.08	1.20	undefined	UNDFND	UNDFD	UDF	UNDEFINED
10.75	35.27	8.86	-0.01	-0.07	1.22	undefined	UNDFND	UNDFD	UDF	UNDEFINED
11.00	36.09	8.88	-0.00	-0.02	1.24	undefined	UNDFND	UNDFD	UDF	UNDEFINED
11.25	36.91	8.46	0.01	0.09	1.27	sensitive fine grained	UNDFND	UNDFD	4	.6
11.50	37.73	16.12	0.03	0.21	1.29	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
11.75	38.55	8.64	0.01	0.08	1.31	sensitive fine grained	UNDFND	UNDFD	4	.6
12.00	39.37	28.06	0.22	0.80	1.33	silty sand to sandy silt	<40	32-34	9	UNDEFINED
12.25	40.19	115.44	0.65	0.57	1.35	sand	60-70	40-42	22	UNDEFINED
12.50	41.01	136.38	0.51	0.37	1.37	sand	70-80	40-42	26	UNDEFINED
12.75	41.83	117.70	0.40	0.34	1.40	sand	60-70	40-42	23	UNDEFINED
13.00	42.65	98.42	0.26	0.27	1.42	sand	60-70	38-40	19	UNDEFINED
13.25	43.47	163.00	0.59	0.36	1.44	sand	70-80	40-42	31	UNDEFINED
13.50	44.29	186.32	0.89	0.48	1.46	sand	70-80	42-44	36	UNDEFINED
13.75	45.11	67.58	0.49	0.73	1.48	sand to silty sand	40-50	36-38	16	UNDEFINED
14.00	45.93	31.70	0.56	1.77	1.50	sandy silt to clayey silt	UNDFND	UNDFD	12	2.9
14.25	46.75	61.76	1.87	3.03	1.52	sandy silt to clayey silt	UNDFND	UNDFD	24	5.9
14.50	47.57	174.88	7.74	4.43	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	294.20	6.07	2.06	1.57	sand to silty sand	>90	42-44	>50	UNDEFINED
15.00	49.21	363.54	4.09	1.12	1.59	sand	>90	44-46	>50	UNDEFINED
15.25	50.03	326.12	3.52	1.08	1.61	sand	>90	44-46	>50	UNDEFINED
15.50	50.85	327.26	2.33	0.71	1.63	sand	>90	44-46	>50	UNDEFINED
15.75	51.67	362.58	4.65	1.28	1.65	sand	>90	44-46	>50	UNDEFINED
16.00	52.49	361.10	5.34	1.48	1.68	sand to silty sand	>90	44-46	>50	UNDEFINED
16.25	53.31	399.18	3.95	0.99	1.70	sand	>90	44-46	>50	UNDEFINED
16.50	54.13	444.56	3.67	0.82	1.72	gravelly sand to sand	>90	44-46	>50	UNDEFINED
16.75	54.95	343.42	4.48	1.30	1.74	sand	>90	44-46	>50	UNDEFINED
17.00	55.77	287.82	2.92	1.01	1.76	sand	80-90	42-44	>50	UNDEFINED
17.25	56.59	295.24	6.99	2.37	1.78	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-6
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/06/00 7:54
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	52.38	0.46	0.87	0.02	silty sand to sandy silt	>90	>48	17	UNDEFINED
0.50	1.64	117.78	0.76	0.64	0.07	sand to silty sand	>90	>48	28	UNDEFINED
0.75	2.46	124.54	0.58	0.46	0.12	sand	>90	>48	24	UNDEFINED
1.00	3.28	108.04	0.43	0.40	0.17	sand	>90	>48	21	UNDEFINED
1.25	4.10	73.24	0.31	0.42	0.21	sand to silty sand	70-80	46-48	18	UNDEFINED
1.50	4.92	58.26	0.31	0.53	0.26	sand to silty sand	70-80	44-46	14	UNDEFINED
1.75	5.74	70.78	0.36	0.51	0.31	sand to silty sand	70-80	44-46	17	UNDEFINED
2.00	6.56	69.48	0.15	0.22	0.35	sand to silty sand	70-80	42-44	17	UNDEFINED
2.25	7.38	36.64	0.04	0.11	0.40	sand to silty sand	50-60	40-42	9	UNDEFINED
2.50	8.20	53.62	0.27	0.50	0.45	sand to silty sand	60-70	40-42	13	UNDEFINED
2.75	9.02	106.18	0.79	0.74	0.50	sand to silty sand	70-80	44-46	25	UNDEFINED
3.00	9.84	80.72	0.35	0.43	0.54	sand to silty sand	60-70	42-44	19	UNDEFINED
3.25	10.66	38.28	0.20	0.52	0.58	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.50	11.48	26.34	0.14	0.54	0.60	silty sand to sandy silt	<40	36-38	8	UNDEFINED
3.75	12.30	40.14	0.21	0.53	0.62	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.00	13.12	17.00	0.07	0.39	0.64	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
4.25	13.94	19.46	0.07	0.37	0.66	silty sand to sandy silt	<40	34-36	6	UNDEFINED
4.50	14.76	21.20	0.22	1.02	0.68	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
4.75	15.58	69.42	0.04	0.05	0.71	sand to silty sand	60-70	40-42	17	UNDEFINED
5.00	16.40	0.46	0.04	7.96	0.73	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.25	17.22	0.48	0.03	6.79	0.75	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.50	18.04	0.50	0.03	5.08	0.77	undefined	UNDFND	UNDFD	UDF	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-6-A
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/06/00 8:30
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	22.64	0.25	1.09	0.02	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
0.50	1.64	120.86	0.86	0.71	0.07	sand to silty sand	>90	>48	29	UNDEFINED
0.75	2.46	125.86	0.86	0.68	0.12	sand	>90	>48	24	UNDEFINED
1.00	3.28	140.54	0.59	0.42	0.17	sand	>90	>48	27	UNDEFINED
1.25	4.10	98.04	0.45	0.46	0.21	sand to silty sand	80-90	46-48	23	UNDEFINED
1.50	4.92	76.02	0.25	0.32	0.26	sand to silty sand	70-80	44-46	18	UNDEFINED
1.75	5.74	79.46	0.24	0.30	0.31	sand to silty sand	70-80	44-46	19	UNDEFINED
2.00	6.56	84.26	0.18	0.21	0.35	sand	70-80	44-46	16	UNDEFINED
2.25	7.38	44.38	0.19	0.43	0.40	sand to silty sand	50-60	40-42	11	UNDEFINED
2.50	8.20	39.80	0.18	0.45	0.45	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
2.75	9.02	47.18	0.35	0.74	0.50	silty sand to sandy silt	50-60	40-42	15	UNDEFINED
3.00	9.84	50.82	0.24	0.47	0.54	sand to silty sand	50-60	40-42	12	UNDEFINED
3.25	10.66	69.64	0.31	0.44	0.58	sand to silty sand	60-70	40-42	17	UNDEFINED
3.50	11.48	83.74	0.40	0.48	0.60	sand to silty sand	60-70	42-44	20	UNDEFINED
3.75	12.30	85.36	0.40	0.46	0.62	sand to silty sand	60-70	42-44	20	UNDEFINED
4.00	13.12	38.92	0.22	0.55	0.64	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.25	13.94	25.08	0.02	0.06	0.66	silty sand to sandy silt	<40	36-38	8	UNDEFINED
4.50	14.76	10.34	0.04	0.40	0.68	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
4.75	15.58	7.00	0.06	0.89	0.71	sensitive fine grained	UNDFND	UNDFD	3	.6
5.00	16.40	7.08	0.05	0.67	0.73	sensitive fine grained	UNDFND	UNDFD	3	.6
5.25	17.22	5.08	0.09	1.77	0.75	silty clay to clay	UNDFND	UNDFD	3	.4
5.50	18.04	9.94	0.16	1.65	0.77	clayey silt to silty clay	UNDFND	UNDFD	5	.8
5.75	18.86	8.02	0.10	1.25	0.79	clayey silt to silty clay	UNDFND	UNDFD	4	.6
6.00	19.69	7.54	0.09	1.17	0.81	undefined	UNDFND	UNDFD	UDF	UNDEFINED
6.25	20.51	7.66	0.08	0.99	0.84	sensitive fine grained	UNDFND	UNDFD	4	.6
6.50	21.33	7.26	0.06	0.80	0.86	sensitive fine grained	UNDFND	UNDFD	3	.6
6.75	22.15	6.18	0.04	0.65	0.88	sensitive fine grained	UNDFND	UNDFD	3	.4
7.00	22.97	7.30	0.05	0.75	0.90	sensitive fine grained	UNDFND	UNDFD	3	.6
7.25	23.79	6.80	0.05	0.81	0.92	sensitive fine grained	UNDFND	UNDFD	3	.5
7.50	24.61	8.12	0.06	0.71	0.94	sensitive fine grained	UNDFND	UNDFD	4	.6
7.75	25.43	27.52	0.11	0.38	0.96	silty sand to sandy silt	<40	34-36	9	UNDEFINED
8.00	26.25	26.34	0.05	0.20	0.99	silty sand to sandy silt	<40	32-34	8	UNDEFINED
8.25	27.07	10.88	0.05	0.47	1.01	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
8.50	27.89	20.46	0.16	0.77	1.03	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
8.75	28.71	29.36	0.11	0.38	1.05	silty sand to sandy silt	<40	34-36	9	UNDEFINED
9.00	29.53	28.20	0.12	0.41	1.07	silty sand to sandy silt	<40	32-34	9	UNDEFINED
9.25	30.35	25.24	0.08	0.33	1.09	silty sand to sandy silt	<40	32-34	8	UNDEFINED
9.50	31.17	20.10	0.12	0.62	1.12	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-6-A Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	15.20	0.17	1.11	1.14	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
10.00	32.81	12.16	0.06	0.53	1.16	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
10.25	33.63	8.56	0.04	0.45	1.18	sensitive fine grained	UNDFND	UNDFD	4	.6
10.50	34.45	11.24	0.03	0.25	1.20	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
10.75	35.27	11.82	0.08	0.69	1.22	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
11.00	36.09	55.26	0.20	0.37	1.24	sand to silty sand	40-50	36-38	13	UNDEFINED
11.25	36.91	27.92	0.25	0.91	1.27	silty sand to sandy silt	<40	32-34	9	UNDEFINED
11.50	37.73	26.10	0.16	0.60	1.29	silty sand to sandy silt	<40	30-32	8	UNDEFINED
11.75	38.55	94.70	0.60	0.63	1.31	sand to silty sand	60-70	38-40	23	UNDEFINED
12.00	39.37	137.10	0.82	0.60	1.33	sand	70-80	40-42	26	UNDEFINED
12.25	40.19	135.98	0.94	0.69	1.35	sand	70-80	40-42	26	UNDEFINED
12.50	41.01	135.70	0.82	0.61	1.37	sand	70-80	40-42	26	UNDEFINED
12.75	41.83	129.88	2.88	2.22	1.40	silty sand to sandy silt	60-70	40-42	41	UNDEFINED
13.00	42.65	140.22	6.49	4.63	1.42	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.25	43.47	251.50	6.83	2.72	1.44	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

* Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-7
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/29/94 11:18
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	69.42	0.46	0.66	0.02	sand to silty sand	>90	>48	17	UNDEFINED
0.50	1.64	117.74	1.23	1.05	0.07	sand to silty sand	>90	>48	28	UNDEFINED
0.75	2.46	78.44	0.45	0.58	0.12	sand to silty sand	>90	>48	19	UNDEFINED
1.00	3.28	60.76	0.27	0.45	0.17	sand to silty sand	70-80	46-48	15	UNDEFINED
1.25	4.10	58.14	0.30	0.51	0.21	sand to silty sand	70-80	44-46	14	UNDEFINED
1.50	4.92	69.68	0.35	0.51	0.26	sand to silty sand	70-80	44-46	17	UNDEFINED
1.75	5.74	62.54	0.31	0.49	0.31	sand to silty sand	70-80	44-46	15	UNDEFINED
2.00	6.56	60.42	0.28	0.46	0.35	sand to silty sand	60-70	42-44	14	UNDEFINED
2.25	7.38	54.48	0.28	0.52	0.40	sand to silty sand	60-70	42-44	13	UNDEFINED
2.50	8.20	59.04	0.31	0.53	0.45	sand to silty sand	60-70	42-44	14	UNDEFINED
2.75	9.02	72.18	0.38	0.52	0.50	sand to silty sand	60-70	42-44	17	UNDEFINED
3.00	9.84	63.92	0.38	0.60	0.54	sand to silty sand	60-70	40-42	15	UNDEFINED
3.25	10.66	27.48	0.24	0.86	0.58	silty sand to sandy silt	<40	36-38	9	UNDEFINED
3.50	11.48	25.98	0.21	0.82	0.60	silty sand to sandy silt	<40	36-38	8	UNDEFINED
3.75	12.30	13.46	0.21	1.54	0.62	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
4.00	13.12	6.08	0.11	1.86	0.64	silty clay to clay	UNDFND	UNDFD	4	.5
4.25	13.94	32.90	0.25	0.75	0.66	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
4.50	14.76	40.02	0.31	0.78	0.68	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.75	15.58	38.24	0.28	0.73	0.71	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
5.00	16.40	11.24	0.17	1.48	0.73	clayey silt to silty clay	UNDFND	UNDFD	5	1.0
5.25	17.22	3.30	0.01	0.39	0.75	sensitive fine grained	UNDFND	UNDFD	2	.2
5.50	18.04	2.68	0.01	0.34	0.77	sensitive fine grained	UNDFND	UNDFD	1	.1
5.75	18.86	3.28	0.02	0.48	0.79	sensitive fine grained	UNDFND	UNDFD	2	.2
6.00	19.69	4.18	0.01	0.30	0.81	sensitive fine grained	UNDFND	UNDFD	2	.3
6.25	20.51	4.26	0.01	0.30	0.84	sensitive fine grained	UNDFND	UNDFD	2	.3
6.50	21.33	4.56	0.01	0.32	0.86	sensitive fine grained	UNDFND	UNDFD	2	.3
6.75	22.15	5.84	0.02	0.28	0.88	sensitive fine grained	UNDFND	UNDFD	3	.4
7.00	22.97	6.62	0.01	0.19	0.90	sensitive fine grained	UNDFND	UNDFD	3	.5
7.25	23.79	7.76	0.02	0.28	0.92	sensitive fine grained	UNDFND	UNDFD	4	.6
7.50	24.61	6.58	0.02	0.28	0.94	sensitive fine grained	UNDFND	UNDFD	3	.5
7.75	25.43	12.94	0.01	0.11	0.96	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
8.00	26.25	25.16	0.02	0.09	0.99	silty sand to sandy silt	<40	32-34	8	UNDEFINED
8.25	27.07	51.84	0.30	0.57	1.01	sand to silty sand	40-50	36-38	12	UNDEFINED
8.50	27.89	9.08	0.06	0.66	1.03	clayey silt to silty clay	UNDFND	UNDFD	4	.7
8.75	28.71	8.68	0.01	0.09	1.05	sensitive fine grained	UNDFND	UNDFD	4	.7
9.00	29.53	8.24	0.01	0.11	1.07	sensitive fine grained	UNDFND	UNDFD	4	.6
9.25	30.35	7.04	0.01	0.14	1.09	sensitive fine grained	UNDFND	UNDFD	3	.5
9.50	31.17	6.24	0.01	0.18	1.12	sensitive fine grained	UNDFND	UNDFD	3	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-7 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	6.62	0.02	0.25	1.14	sensitive fine grained	UNDFND	UNDFD	3	.4
10.00	32.81	6.56	0.01	0.11	1.16	sensitive fine grained	UNDFND	UNDFD	3	.4
10.25	33.63	12.74	0.01	0.10	1.18	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
10.50	34.45	19.58	0.03	0.13	1.20	silty sand to sandy silt	<40	30-32	6	UNDEFINED
10.75	35.27	11.70	0.04	0.37	1.22	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
11.00	36.09	7.58	0.01	0.15	1.24	sensitive fine grained	UNDFND	UNDFD	4	.5
11.25	36.91	8.86	0.02	0.21	1.27	sensitive fine grained	UNDFND	UNDFD	4	.6
11.50	37.73	13.92	0.04	0.28	1.29	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
11.75	38.55	20.46	0.07	0.34	1.31	silty sand to sandy silt	<40	30-32	7	UNDEFINED
12.00	39.37	38.74	0.17	0.44	1.33	silty sand to sandy silt	<40	34-36	12	UNDEFINED
12.25	40.19	42.52	0.19	0.46	1.35	silty sand to sandy silt	<40	34-36	14	UNDEFINED
12.50	41.01	49.76	0.20	0.40	1.37	sand to silty sand	40-50	36-38	12	UNDEFINED
12.75	41.83	48.22	0.19	0.39	1.40	sand to silty sand	40-50	34-36	12	UNDEFINED
13.00	42.65	38.46	0.09	0.23	1.42	sand to silty sand	<40	32-34	9	UNDEFINED
13.25	43.47	63.56	2.22	3.50	1.44	clayey silt to silty clay	UNDFND	UNDFD	30	6.1
13.50	44.29	120.58	4.42	3.66	1.46	sandy silt to clayey silt	UNDFND	UNDFD	46	11.8
13.75	45.11	119.38	3.34	2.80	1.48	sandy silt to clayey silt	UNDFND	UNDFD	46	11.6
14.00	45.93	138.96	1.58	1.13	1.50	sand to silty sand	70-80	40-42	33	UNDEFINED
14.25	46.75	280.98	2.66	0.95	1.52	sand	>90	42-44	>50	UNDEFINED
14.50	47.57	329.92	3.86	1.17	1.55	sand	>90	44-46	>50	UNDEFINED
14.75	48.39	279.70	3.95	1.41	1.57	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.00	49.21	297.62	4.31	1.45	1.59	sand to silty sand	>90	42-44	>50	UNDEFINED
15.25	50.03	266.92	4.63	1.73	1.61	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.50	50.85	244.74	2.13	0.87	1.63	sand	80-90	42-44	47	UNDEFINED
15.75	51.67	117.60	5.38	4.58	1.65	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	186.02	5.24	2.82	1.68	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-8
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/28/94 8:22
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	86.52	0.38	0.44	0.02	sand to silty sand	>90	>48	21	UNDEFINED
0.50	1.64	194.72	1.63	0.84	0.07	sand	>90	>48	37	UNDEFINED
0.75	2.46	208.36	1.47	0.71	0.12	sand	>90	>48	40	UNDEFINED
1.00	3.28	162.40	0.86	0.53	0.17	sand	>90	>48	31	UNDEFINED
1.25	4.10	125.56	0.60	0.48	0.21	sand	>90	>48	24	UNDEFINED
1.50	4.92	99.24	0.49	0.49	0.26	sand to silty sand	80-90	46-48	24	UNDEFINED
1.75	5.74	85.92	0.44	0.52	0.31	sand to silty sand	70-80	44-46	21	UNDEFINED
2.00	6.56	83.62	0.47	0.57	0.35	sand to silty sand	70-80	44-46	20	UNDEFINED
2.25	7.38	114.72	0.59	0.52	0.40	sand	80-90	44-46	22	UNDEFINED
2.50	8.20	122.66	0.64	0.52	0.45	sand	80-90	44-46	23	UNDEFINED
2.75	9.02	118.36	0.56	0.47	0.50	sand	80-90	44-46	23	UNDEFINED
3.00	9.84	106.36	0.49	0.46	0.54	sand	70-80	42-44	20	UNDEFINED
3.25	10.66	86.70	0.42	0.48	0.58	sand to silty sand	70-80	42-44	21	UNDEFINED
3.50	11.48	69.16	0.35	0.51	0.60	sand to silty sand	60-70	40-42	17	UNDEFINED
3.75	12.30	84.28	0.44	0.53	0.62	sand to silty sand	60-70	42-44	20	UNDEFINED
4.00	13.12	38.94	0.35	0.91	0.64	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.25	13.94	21.54	0.08	0.36	0.66	silty sand to sandy silt	<40	34-36	7	UNDEFINED
4.50	14.76	40.08	0.21	0.52	0.68	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.75	15.58	32.96	0.46	1.40	0.71	sandy silt to clayey silt	UNDFND	UNDFD	13	3.2
5.00	16.40	19.70	0.13	0.65	0.73	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
5.25	17.22	36.64	0.41	1.12	0.75	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
5.50	18.04	7.12	0.08	1.12	0.77	sensitive fine grained	UNDFND	UNDFD	3	.6
5.75	18.86	7.96	0.03	0.40	0.79	sensitive fine grained	UNDFND	UNDFD	4	.6
6.00	19.69	6.16	0.03	0.49	0.81	sensitive fine grained	UNDFND	UNDFD	3	.5
6.25	20.51	6.22	0.03	0.53	0.84	sensitive fine grained	UNDFND	UNDFD	3	.5
6.50	21.33	6.76	0.06	0.83	0.86	sensitive fine grained	UNDFND	UNDFD	3	.5
6.75	22.15	7.06	0.04	0.63	0.88	sensitive fine grained	UNDFND	UNDFD	3	.5
7.00	22.97	7.68	0.11	1.45	0.90	clayey silt to silty clay	UNDFND	UNDFD	4	.6
7.25	23.79	6.34	0.04	0.58	0.92	sensitive fine grained	UNDFND	UNDFD	3	.4
7.50	24.61	7.10	0.07	0.99	0.94	sensitive fine grained	UNDFND	UNDFD	3	.5
7.75	25.43	6.76	0.07	1.01	0.96	sensitive fine grained	UNDFND	UNDFD	3	.5
8.00	26.25	8.70	0.05	0.54	0.99	sensitive fine grained	UNDFND	UNDFD	4	.7
8.25	27.07	6.64	0.00	0.07	1.01	sensitive fine grained	UNDFND	UNDFD	3	.5
8.50	27.89	6.08	0.01	0.18	1.03	sensitive fine grained	UNDFND	UNDFD	3	.4
8.75	28.71	7.60	0.01	0.18	1.05	sensitive fine grained	UNDFND	UNDFD	4	.5
9.00	29.53	15.46	0.07	0.44	1.07	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
9.25	30.35	8.88	0.01	0.08	1.09	sensitive fine grained	UNDFND	UNDFD	4	.7
9.50	31.17	7.38	0.02	0.25	1.12	sensitive fine grained	UNDFND	UNDFD	4	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-8 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	7.72	0.01	0.12	1.14	sensitive fine grained	UNDFND	UNDFD	4	.5
10.00	32.81	10.96	0.00	0.03	1.16	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
10.25	33.63	17.00	0.05	0.27	1.18	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
10.50	34.45	27.78	0.14	0.50	1.20	silty sand to sandy silt	<40	32-34	9	UNDEFINED
10.75	35.27	38.42	0.20	0.51	1.22	silty sand to sandy silt	<40	34-36	12	UNDEFINED
11.00	36.09	23.80	0.10	0.43	1.24	silty sand to sandy silt	<40	30-32	8	UNDEFINED
11.25	36.91	10.98	0.03	0.32	1.27	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
11.50	37.73	9.68	0.04	0.40	1.29	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
11.75	38.55	10.20	0.06	0.55	1.31	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
12.00	39.37	9.52	0.04	0.39	1.33	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
12.25	40.19	9.60	0.01	0.07	1.35	sensitive fine grained	UNDFND	UNDFD	5	.7
12.50	41.01	8.94	0.01	0.08	1.37	sensitive fine grained	UNDFND	UNDFD	4	.6
12.75	41.83	12.26	0.01	0.09	1.40	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
13.00	42.65	23.44	0.14	0.58	1.42	silty sand to sandy silt	<40	30-32	7	UNDEFINED
13.25	43.47	94.66	0.66	0.70	1.44	sand to silty sand	50-60	38-40	23	UNDEFINED
13.50	44.29	187.68	1.37	0.73	1.46	sand	70-80	42-44	36	UNDEFINED
13.75	45.11	217.12	1.47	0.68	1.48	sand	80-90	42-44	42	UNDEFINED
14.00	45.93	239.86	2.31	0.96	1.50	sand	80-90	42-44	46	UNDEFINED
14.25	46.75	358.44	3.81	1.06	1.52	sand	>90	44-46	>50	UNDEFINED
14.50	47.57	299.36	3.34	1.12	1.55	sand	>90	42-44	>50	UNDEFINED
14.75	48.39	300.76	2.69	0.89	1.57	sand	>90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-10
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/05/00 8:40
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	11.56	0.06	0.48	0.02	sandy silt to clayey silt	UNDFND	UNDFD	4	1.1
0.50	1.64	61.12	0.43	0.70	0.07	sand to silty sand	>90	>48	15	UNDEFINED
0.75	2.46	85.34	0.69	0.81	0.12	sand to silty sand	>90	>48	20	UNDEFINED
1.00	3.28	90.14	0.52	0.57	0.17	sand to silty sand	80-90	>48	22	UNDEFINED
1.25	4.10	112.04	0.51	0.45	0.21	sand	>90	46-48	21	UNDEFINED
1.50	4.92	102.06	0.43	0.42	0.26	sand	80-90	46-48	20	UNDEFINED
1.75	5.74	93.98	0.44	0.47	0.31	sand to silty sand	80-90	44-46	23	UNDEFINED
2.00	6.56	85.28	0.43	0.51	0.35	sand to silty sand	70-80	44-46	20	UNDEFINED
2.25	7.38	77.56	0.39	0.50	0.40	sand to silty sand	70-80	42-44	19	UNDEFINED
2.50	8.20	69.90	0.35	0.51	0.45	sand to silty sand	60-70	42-44	17	UNDEFINED
2.75	9.02	59.94	0.37	0.61	0.50	sand to silty sand	60-70	40-42	14	UNDEFINED
3.00	9.84	52.80	0.35	0.66	0.54	sand to silty sand	50-60	40-42	13	UNDEFINED
3.25	10.66	52.50	0.32	0.61	0.58	sand to silty sand	50-60	40-42	13	UNDEFINED
3.50	11.48	51.00	0.32	0.63	0.60	sand to silty sand	50-60	40-42	12	UNDEFINED
3.75	12.30	48.30	0.37	0.77	0.62	silty sand to sandy silt	50-60	38-40	15	UNDEFINED
4.00	13.12	58.56	0.35	0.59	0.64	sand to silty sand	50-60	40-42	14	UNDEFINED
4.25	13.94	45.22	0.44	0.98	0.66	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.50	14.76	45.16	0.41	0.91	0.68	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.75	15.58	74.42	0.42	0.57	0.71	sand to silty sand	60-70	40-42	18	UNDEFINED
5.00	16.40	65.14	0.41	0.63	0.73	sand to silty sand	50-60	40-42	16	UNDEFINED
5.25	17.22	19.96	0.38	1.91	0.75	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
5.50	18.04	7.06	0.21	2.99	0.77	clay	UNDFND	UNDFD	7	.6
5.75	18.86	62.20	0.25	0.40	0.79	sand to silty sand	50-60	38-40	15	UNDEFINED
6.00	19.69	120.06	0.69	0.57	0.81	sand	70-80	42-44	23	UNDEFINED
6.25	20.51	68.00	0.38	0.56	0.84	sand to silty sand	50-60	40-42	16	UNDEFINED
6.50	21.33	7.96	0.01	0.08	0.86	sensitive fine grained	UNDFND	UNDFD	4	.6
6.75	22.15	7.68	0.04	0.55	0.88	sensitive fine grained	UNDFND	UNDFD	4	.6
7.00	22.97	10.38	0.10	0.94	0.90	clayey silt to silty clay	UNDFND	UNDFD	5	.9
7.25	23.79	5.32	0.06	1.09	0.92	sensitive fine grained	UNDFND	UNDFD	3	.3
7.50	24.61	4.92	0.04	0.75	0.94	sensitive fine grained	UNDFND	UNDFD	2	.3
7.75	25.43	5.04	0.06	1.12	0.96	sensitive fine grained	UNDFND	UNDFD	2	.3
8.00	26.25	6.52	0.09	1.32	0.99	sensitive fine grained	UNDFND	UNDFD	3	.5
8.25	27.07	5.74	0.07	1.30	1.01	sensitive fine grained	UNDFND	UNDFD	3	.4
8.50	27.89	5.08	0.06	1.11	1.03	sensitive fine grained	UNDFND	UNDFD	2	.3
8.75	28.71	5.52	0.06	1.08	1.05	sensitive fine grained	UNDFND	UNDFD	3	.3
9.00	29.53	5.96	0.07	1.15	1.07	sensitive fine grained	UNDFND	UNDFD	3	.4
9.25	30.35	8.78	0.07	0.85	1.09	clayey silt to silty clay	UNDFND	UNDFD	4	.7
9.50	31.17	6.06	0.05	0.78	1.12	sensitive fine grained	UNDFND	UNDFD	3	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) *

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-10 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	9.20	0.03	0.37	1.14	sensitive fine grained	UNDFND	UNDFD	4	.7
10.00	32.81	11.58	0.05	0.44	1.16	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
10.25	33.63	12.78	0.06	0.47	1.18	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
10.50	34.45	8.18	0.04	0.43	1.20	sensitive fine grained	UNDFND	UNDFD	4	.6
10.75	35.27	8.36	0.03	0.37	1.22	sensitive fine grained	UNDFND	UNDFD	4	.6
11.00	36.09	7.62	0.02	0.32	1.24	sensitive fine grained	UNDFND	UNDFD	4	.5
11.25	36.91	12.90	0.07	0.55	1.27	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
11.50	37.73	7.46	0.05	0.66	1.29	sensitive fine grained	UNDFND	UNDFD	4	.5
11.75	38.55	7.16	0.04	0.59	1.31	sensitive fine grained	UNDFND	UNDFD	3	.4
12.00	39.37	7.80	0.07	0.90	1.33	sensitive fine grained	UNDFND	UNDFD	4	.5
12.25	40.19	7.96	0.09	1.08	1.35	clayey silt to silty clay	UNDFND	UNDFD	4	.5
12.50	41.01	8.44	0.09	1.01	1.37	clayey silt to silty clay	UNDFND	UNDFD	4	.6
12.75	41.83	7.40	0.08	1.02	1.40	sensitive fine grained	UNDFND	UNDFD	4	.5
13.00	42.65	7.58	0.07	0.97	1.42	sensitive fine grained	UNDFND	UNDFD	4	.5
13.25	43.47	7.90	0.08	1.07	1.44	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.50	44.29	7.60	0.08	1.10	1.46	undefined	UNDFND	UNDFD	UDF	UNDEFINED
13.75	45.11	9.84	0.05	0.48	1.48	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
14.00	45.93	17.20	0.11	0.63	1.50	sandy silt to clayey silt	UNDFND	UNDFD	7	1.4
14.25	46.75	31.52	0.26	0.84	1.52	silty sand to sandy silt	<40	30-32	10	UNDEFINED
14.50	47.57	91.78	0.74	0.81	1.55	sand to silty sand	50-60	38-40	22	UNDEFINED
14.75	48.39	224.12	1.76	0.79	1.57	sand	80-90	42-44	43	UNDEFINED
15.00	49.21	294.38	2.75	0.94	1.59	sand	>90	42-44	>50	UNDEFINED
15.25	50.03	318.52	3.43	1.08	1.61	sand	>90	44-46	>50	UNDEFINED
15.50	50.85	301.88	3.10	1.03	1.63	sand	>90	42-44	>50	UNDEFINED
15.75	51.67	275.26	2.58	0.94	1.65	sand	80-90	42-44	>50	UNDEFINED
16.00	52.49	231.68	2.39	1.03	1.68	sand	80-90	42-44	44	UNDEFINED
16.25	53.31	241.88	2.19	0.90	1.70	sand	80-90	42-44	46	UNDEFINED
16.50	54.13	310.64	3.04	0.98	1.72	sand	>90	42-44	>50	UNDEFINED
16.75	54.95	305.62	3.09	1.01	1.74	sand	>90	42-44	>50	UNDEFINED
17.00	55.77	286.28	3.11	1.08	1.76	sand	80-90	42-44	>50	UNDEFINED
17.25	56.59	251.32	2.41	0.96	1.78	sand	80-90	42-44	48	UNDEFINED
17.50	57.41	229.16	1.58	0.69	1.80	sand	80-90	42-44	44	UNDEFINED
17.75	58.23	217.96	1.53	0.70	1.83	sand	80-90	40-42	42	UNDEFINED
18.00	59.06	194.52	1.58	0.81	1.85	sand	70-80	40-42	37	UNDEFINED
18.25	59.88	159.96	0.82	0.51	1.87	sand	70-80	40-42	31	UNDEFINED
18.50	60.70	165.84	0.72	0.44	1.89	sand	70-80	40-42	32	UNDEFINED
18.75	61.52	61.62	0.56	0.92	1.91	silty sand to sandy silt	40-50	34-36	20	UNDEFINED
19.00	62.34	62.16	0.58	0.93	1.93	silty sand to sandy silt	40-50	34-36	20	UNDEFINED
19.25	63.16	148.36	2.69	1.81	1.96	silty sand to sandy silt	60-70	38-40	47	UNDEFINED
19.50	63.98	90.80	4.28	4.72	1.98	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
19.75	64.80	81.66	4.57	5.60	2.00	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
20.00	65.62	85.92	4.80	5.58	2.02	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-10 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	180.72	4.18	2.32	2.04	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-1-11
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/28/94 6:40
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	66.06	0.49	0.74	0.02	sand to silty sand	>90	>48	16	UNDEFINED
0.50	1.64	121.70	0.76	0.63	0.07	sand	>90	>48	23	UNDEFINED
0.75	2.46	135.36	0.90	0.67	0.12	sand	>90	>48	26	UNDEFINED
1.00	3.28	119.38	0.55	0.46	0.17	sand	>90	>48	23	UNDEFINED
1.25	4.10	93.68	0.38	0.41	0.21	sand to silty sand	80-90	46-48	22	UNDEFINED
1.50	4.92	74.30	0.30	0.40	0.26	sand to silty sand	70-80	44-46	18	UNDEFINED
1.75	5.74	66.12	0.30	0.45	0.31	sand to silty sand	70-80	44-46	16	UNDEFINED
2.00	6.56	58.92	0.31	0.52	0.35	sand to silty sand	60-70	42-44	14	UNDEFINED
2.25	7.38	56.40	0.29	0.52	0.40	sand to silty sand	60-70	42-44	14	UNDEFINED
2.50	8.20	58.46	0.30	0.51	0.45	sand to silty sand	60-70	42-44	14	UNDEFINED
2.75	9.02	54.68	0.31	0.57	0.50	sand to silty sand	50-60	40-42	13	UNDEFINED
3.00	9.84	48.28	0.28	0.59	0.54	sand to silty sand	50-60	40-42	12	UNDEFINED
3.25	10.66	53.86	0.31	0.58	0.58	sand to silty sand	50-60	40-42	13	UNDEFINED
3.50	11.48	49.62	0.32	0.64	0.60	silty sand to sandy silt	50-60	40-42	16	UNDEFINED
3.75	12.30	57.34	0.33	0.58	0.62	sand to silty sand	50-60	40-42	14	UNDEFINED
4.00	13.12	71.48	0.39	0.54	0.64	sand to silty sand	60-70	40-42	17	UNDEFINED
4.25	13.94	44.78	0.26	0.59	0.66	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.50	14.76	45.12	0.23	0.52	0.68	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.75	15.58	21.72	0.20	0.90	0.71	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
5.00	16.40	7.20	0.18	2.51	0.73	silty clay to clay	UNDFND	UNDFD	5	.6
5.25	17.22	19.12	0.21	1.09	0.75	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
5.50	18.04	4.10	0.03	0.81	0.77	sensitive fine grained	UNDFND	UNDFD	2	.3
5.75	18.86	3.90	0.06	1.58	0.79	sensitive fine grained	UNDFND	UNDFD	2	.2
6.00	19.69	4.12	0.10	2.31	0.81	clay	UNDFND	UNDFD	4	.3
6.25	20.51	5.10	0.08	1.53	0.84	sensitive fine grained	UNDFND	UNDFD	2	.3
6.50	21.33	4.24	0.09	2.23	0.86	clay	UNDFND	UNDFD	4	.3
6.75	22.15	4.00	0.08	2.02	0.88	clay	UNDFND	UNDFD	4	.2
7.00	22.97	5.30	0.15	2.76	0.90	clay	UNDFND	UNDFD	5	.4
7.25	23.79	4.02	0.07	1.80	0.92	sensitive fine grained	UNDFND	UNDFD	2	.2
7.50	24.61	4.30	0.07	1.52	0.94	sensitive fine grained	UNDFND	UNDFD	2	.2
7.75	25.43	5.34	0.05	0.88	0.96	sensitive fine grained	UNDFND	UNDFD	3	.3
8.00	26.25	8.66	0.05	0.58	0.99	sensitive fine grained	UNDFND	UNDFD	4	.7
8.25	27.07	4.74	0.03	0.60	1.01	sensitive fine grained	UNDFND	UNDFD	2	.3
8.50	27.89	6.00	0.05	0.81	1.03	sensitive fine grained	UNDFND	UNDFD	3	.4
8.75	28.71	8.72	0.06	0.66	1.05	undefined	UNDFND	UNDFD	UDF	UNDEFINED
9.00	29.53	8.90	0.06	0.69	1.07	clayey silt to silty clay	UNDFND	UNDFD	4	.7
9.25	30.35	26.48	0.08	0.30	1.09	silty sand to sandy silt	<40	32-34	8	UNDEFINED
9.50	31.17	19.14	0.11	0.56	1.12	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-1-11 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	27.26	0.14	0.52	1.14	silty sand to sandy silt	<40	32-34	9	UNDEFINED
10.00	32.81	42.44	0.27	0.64	1.16	silty sand to sandy silt	<40	36-38	14	UNDEFINED
10.25	33.63	51.70	0.33	0.64	1.18	sand to silty sand	40-50	36-38	12	UNDEFINED
10.50	34.45	49.96	0.27	0.53	1.20	sand to silty sand	40-50	36-38	12	UNDEFINED
10.75	35.27	40.94	0.18	0.44	1.22	silty sand to sandy silt	<40	34-36	13	UNDEFINED
11.00	36.09	14.68	0.12	0.80	1.24	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
11.25	36.91	6.98	0.05	0.65	1.27	sensitive fine grained	UNDFND	UNDFD	3	.4
11.50	37.73	7.20	0.05	0.74	1.29	sensitive fine grained	UNDFND	UNDFD	3	.5
11.75	38.55	7.20	0.07	0.97	1.31	sensitive fine grained	UNDFND	UNDFD	3	.5
12.00	39.37	6.70	0.06	0.89	1.33	sensitive fine grained	UNDFND	UNDFD	3	.4
12.25	40.19	7.00	0.07	0.95	1.35	sensitive fine grained	UNDFND	UNDFD	3	.4
12.50	41.01	7.28	0.06	0.80	1.37	sensitive fine grained	UNDFND	UNDFD	3	.4
12.75	41.83	7.84	0.07	0.90	1.40	sensitive fine grained	UNDFND	UNDFD	4	.5
13.00	42.65	6.94	0.07	1.04	1.42	sensitive fine grained	UNDFND	UNDFD	3	.4
13.25	43.47	7.20	0.08	1.05	1.44	sensitive fine grained	UNDFND	UNDFD	3	.4
13.50	44.29	7.18	0.09	1.18	1.46	sensitive fine grained	UNDFND	UNDFD	3	.4
13.75	45.11	7.42	0.09	1.20	1.48	undefined	UNDFND	UNDFD	UDF	UNDEFINED
14.00	45.93	7.68	0.09	1.16	1.50	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.25	46.75	11.02	0.13	1.22	1.52	clayey silt to silty clay	UNDFND	UNDFD	5	.8
14.50	47.57	54.48	0.42	0.76	1.55	silty sand to sandy silt	40-50	34-36	17	UNDEFINED
14.75	48.39	266.84	2.01	0.75	1.57	sand	80-90	42-44	>50	UNDEFINED
15.00	49.21	308.34	2.83	0.92	1.59	sand	>90	42-44	>50	UNDEFINED
15.25	50.03	271.20	2.70	1.00	1.61	sand	80-90	42-44	>50	UNDEFINED
15.50	50.85	268.26	2.54	0.95	1.63	sand	80-90	42-44	>50	UNDEFINED
15.75	51.67	309.42	2.59	0.84	1.65	sand	>90	42-44	>50	UNDEFINED
16.00	52.49	317.72	2.68	0.84	1.68	sand	>90	42-44	>50	UNDEFINED
16.25	53.31	261.78	2.29	0.88	1.70	sand	80-90	42-44	>50	UNDEFINED
16.50	54.13	280.02	2.13	0.76	1.72	sand	80-90	42-44	>50	UNDEFINED
16.75	54.95	203.12	1.13	0.56	1.74	sand	70-80	40-42	39	UNDEFINED
17.00	55.77	128.88	0.70	0.54	1.76	sand	60-70	38-40	25	UNDEFINED
17.25	56.59	130.96	0.56	0.42	1.78	sand	60-70	38-40	25	UNDEFINED
17.50	57.41	131.82	0.61	0.46	1.80	sand	60-70	38-40	25	UNDEFINED
17.75	58.23	97.70	0.39	0.39	1.83	sand	50-60	36-38	19	UNDEFINED
18.00	59.06	95.26	0.56	0.59	1.85	sand to silty sand	50-60	36-38	23	UNDEFINED
18.25	59.88	141.82	0.66	0.47	1.87	sand	60-70	38-40	27	UNDEFINED
18.50	60.70	51.30	0.80	1.55	1.89	silty sand to sandy silt	<40	32-34	16	UNDEFINED
18.75	61.52	38.44	0.42	1.08	1.91	silty sand to sandy silt	<40	30-32	12	UNDEFINED
19.00	62.34	11.66	0.12	1.04	1.93	sandy silt to clayey silt	UNDFND	UNDFD	4	.8

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-1-12
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/05/94 8:16
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	64.40	0.32	0.50	0.02	sand to silty sand	>90	>48	15	UNDEFINED
0.50	1.64	160.02	0.71	0.44	0.07	sand	>90	>48	31	UNDEFINED
0.75	2.46	275.38	1.87	0.68	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	311.62	1.76	0.57	0.17	gravelly sand to sand	>90	>48	50	UNDEFINED
1.25	4.10	189.46	0.73	0.39	0.21	sand	>90	>48	36	UNDEFINED
1.50	4.92	85.12	0.47	0.55	0.26	sand to silty sand	80-90	46-48	20	UNDEFINED
1.75	5.74	50.24	0.20	0.41	0.31	sand to silty sand	60-70	42-44	12	UNDEFINED
2.00	6.56	26.66	0.28	1.05	0.35	sandy silt to clayey silt	UNDFND	UNDFD	10	2.6
2.25	7.38	36.94	0.19	0.52	0.40	silty sand to sandy silt	50-60	40-42	12	UNDEFINED
2.50	8.20	72.72	0.34	0.46	0.45	sand to silty sand	60-70	42-44	17	UNDEFINED
2.75	9.02	64.84	0.33	0.50	0.50	sand to silty sand	60-70	42-44	16	UNDEFINED
3.00	9.84	41.54	0.26	0.62	0.54	silty sand to sandy silt	50-60	38-40	13	UNDEFINED
3.25	10.66	26.80	0.19	0.72	0.58	silty sand to sandy silt	<40	36-38	9	UNDEFINED
3.50	11.48	21.60	0.17	0.79	0.60	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
3.75	12.30	7.62	0.10	1.28	0.62	clayey silt to silty clay	UNDFND	UNDFD	4	.6
4.00	13.12	3.04	0.08	2.77	0.64	clay	UNDFND	UNDFD	3	.2
4.25	13.94	1.92	0.05	2.48	0.66	clay	UNDFND	UNDFD	2	.1
4.50	14.76	9.92	0.07	0.75	0.68	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
4.75	15.58	4.40	0.05	1.06	0.71	sensitive fine grained	UNDFND	UNDFD	2	.3
5.00	16.40	8.76	0.05	0.62	0.73	sensitive fine grained	UNDFND	UNDFD	4	.7
5.25	17.22	5.40	0.09	1.62	0.75	sensitive fine grained	UNDFND	UNDFD	3	.4
5.50	18.04	11.56	0.05	0.39	0.77	sandy silt to clayey silt	UNDFND	UNDFD	4	1.0
5.75	18.86	10.92	0.06	0.53	0.79	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
6.00	19.69	12.08	0.04	0.35	0.81	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
6.25	20.51	9.48	0.12	1.24	0.84	clayey silt to silty clay	UNDFND	UNDFD	5	.8
6.50	21.33	24.16	0.42	1.74	0.86	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
6.75	22.15	34.64	0.28	0.81	0.88	silty sand to sandy silt	<40	36-38	11	UNDEFINED
7.00	22.97	76.40	0.34	0.45	0.90	sand to silty sand	60-70	40-42	18	UNDEFINED
7.25	23.79	104.00	0.55	0.53	0.92	sand to silty sand	60-70	40-42	25	UNDEFINED
7.50	24.61	97.42	0.49	0.50	0.94	sand to silty sand	60-70	40-42	23	UNDEFINED
7.75	25.43	106.96	0.52	0.48	0.96	sand	60-70	40-42	20	UNDEFINED
8.00	26.25	70.14	0.45	0.65	0.99	sand to silty sand	50-60	38-40	17	UNDEFINED
8.25	27.07	71.80	0.38	0.53	1.01	sand to silty sand	50-60	38-40	17	UNDEFINED
8.50	27.89	62.10	0.86	1.38	1.03	silty sand to sandy silt	50-60	38-40	20	UNDEFINED
8.75	28.71	21.96	0.25	1.15	1.05	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
9.00	29.53	11.06	0.16	1.48	1.07	clayey silt to silty clay	UNDFND	UNDFD	5	.9
9.25	30.35	18.46	0.31	1.69	1.09	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
9.50	31.17	52.28	0.29	0.56	1.12	sand to silty sand	40-50	36-38	13	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-1-12 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	144.52	0.46	0.32	1.14	sand	70-80	42-44	28	UNDEFINED
10.00	32.81	157.52	0.72	0.46	1.16	sand	70-80	42-44	30	UNDEFINED
10.25	33.63	161.98	0.68	0.42	1.18	sand	70-80	42-44	31	UNDEFINED
10.50	34.45	94.08	0.52	0.55	1.20	sand to silty sand	60-70	38-40	23	UNDEFINED
10.75	35.27	121.30	0.58	0.48	1.22	sand	60-70	40-42	23	UNDEFINED
11.00	36.09	163.08	0.79	0.49	1.24	sand	70-80	42-44	31	UNDEFINED
11.25	36.91	176.52	0.83	0.47	1.27	sand	70-80	42-44	34	UNDEFINED
11.50	37.73	115.90	0.49	0.42	1.29	sand	60-70	40-42	22	UNDEFINED
11.75	38.55	35.88	0.28	0.77	1.31	silty sand to sandy silt	<40	34-36	11	UNDEFINED
12.00	39.37	12.58	0.05	0.41	1.33	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
12.25	40.19	8.60	0.03	0.36	1.35	sensitive fine grained	UNDFND	UNDFD	4	.6
12.50	41.01	7.74	0.04	0.50	1.37	sensitive fine grained	UNDFND	UNDFD	4	.5
12.75	41.83	7.20	0.05	0.68	1.40	sensitive fine grained	UNDFND	UNDFD	3	.4
13.00	42.65	7.16	0.07	1.02	1.42	sensitive fine grained	UNDFND	UNDFD	3	.4
13.25	43.47	6.72	0.08	1.19	1.44	sensitive fine grained	UNDFND	UNDFD	3	.4
13.50	44.29	6.98	0.09	1.32	1.46	sensitive fine grained	UNDFND	UNDFD	3	.4
13.75	45.11	6.86	0.08	1.23	1.48	sensitive fine grained	UNDFND	UNDFD	3	.4
14.00	45.93	7.38	0.07	0.92	1.50	sensitive fine grained	UNDFND	UNDFD	4	.4
14.25	46.75	6.72	0.09	1.27	1.52	sensitive fine grained	UNDFND	UNDFD	3	.4
14.50	47.57	6.90	0.09	1.33	1.55	sensitive fine grained	UNDFND	UNDFD	3	.4
14.75	48.39	6.86	0.09	1.37	1.57	sensitive fine grained	UNDFND	UNDFD	3	.4
15.00	49.21	7.16	0.09	1.28	1.59	undefined	UNDFND	UNDFD	UDF	UNDEFINED
15.25	50.03	7.36	0.09	1.26	1.61	undefined	UNDFND	UNDFD	UDF	UNDEFINED
15.50	50.85	7.58	0.09	1.17	1.63	undefined	UNDFND	UNDFD	UDF	UNDEFINED
15.75	51.67	7.56	0.10	1.28	1.65	clayey silt to silty clay	UNDFND	UNDFD	4	.4
16.00	52.49	7.66	0.09	1.12	1.68	undefined	UNDFND	UNDFD	UDF	UNDEFINED
16.25	53.31	7.68	0.08	1.10	1.70	undefined	UNDFND	UNDFD	UDF	UNDEFINED
16.50	54.13	7.64	0.08	0.99	1.72	sensitive fine grained	UNDFND	UNDFD	4	.4
16.75	54.95	8.70	0.07	0.75	1.74	clayey silt to silty clay	UNDFND	UNDFD	4	.5
17.00	55.77	8.34	0.06	0.73	1.76	sensitive fine grained	UNDFND	UNDFD	4	.5
17.25	56.59	8.10	0.07	0.85	1.78	sensitive fine grained	UNDFND	UNDFD	4	.4
17.50	57.41	8.42	0.08	0.93	1.80	clayey silt to silty clay	UNDFND	UNDFD	4	.5
17.75	58.23	8.58	0.07	0.82	1.83	clayey silt to silty clay	UNDFND	UNDFD	4	.5
18.00	59.06	8.62	0.07	0.83	1.85	clayey silt to silty clay	UNDFND	UNDFD	4	.5
18.25	59.88	9.28	0.04	0.47	1.87	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
18.50	60.70	19.50	0.12	0.60	1.89	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
18.75	61.52	65.08	0.26	0.39	1.91	sand to silty sand	40-50	34-36	16	UNDEFINED
19.00	62.34	106.78	0.53	0.49	1.93	sand	50-60	38-40	20	UNDEFINED
19.25	63.16	27.18	0.35	1.29	1.96	sandy silt to clayey silt	UNDFND	UNDFD	10	2.3
19.50	63.98	10.04	0.04	0.40	1.98	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
19.75	64.80	10.22	0.06	0.59	2.00	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.00	65.62	9.64	0.07	0.73	2.02	sandy silt to clayey silt	UNDFND	UNDFD	4	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-1-12 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	9.50	0.09	0.91	2.04	clayey silt to silty clay	UNDFND	UNDFD	5	.5
20.50	67.26	9.80	0.10	0.97	2.06	clayey silt to silty clay	UNDFND	UNDFD	5	.5
20.75	68.08	10.34	0.10	0.96	2.09	clayey silt to silty clay	UNDFND	UNDFD	5	.6
21.00	68.90	16.52	0.16	0.99	2.11	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
21.25	69.72	84.56	0.79	0.93	2.13	sand to silty sand	50-60	36-38	20	UNDEFINED
21.50	70.54	60.78	1.00	1.65	2.15	silty sand to sandy silt	40-50	34-36	19	UNDEFINED
21.75	71.36	19.78	0.57	2.90	2.17	clayey silt to silty clay	UNDFND	UNDFD	9	1.5
22.00	72.18	11.02	0.13	1.18	2.19	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.25	73.00	10.16	0.12	1.21	2.21	clayey silt to silty clay	UNDFND	UNDFD	5	.5
22.50	73.82	10.28	0.11	1.08	2.24	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.75	74.64	10.38	0.11	1.07	2.26	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.00	75.46	10.20	0.12	1.15	2.28	clayey silt to silty clay	UNDFND	UNDFD	5	.5
23.25	76.28	15.88	0.10	0.61	2.30	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
23.50	77.10	53.46	0.27	0.50	2.32	sand to silty sand	<40	32-34	13	UNDEFINED
23.75	77.92	43.04	0.25	0.59	2.34	silty sand to sandy silt	<40	30-32	14	UNDEFINED
24.00	78.74	104.60	0.78	0.75	2.37	sand to silty sand	50-60	36-38	25	UNDEFINED
24.25	79.56	153.26	1.19	0.78	2.39	sand	60-70	38-40	29	UNDEFINED
24.50	80.38	19.32	0.43	2.21	2.41	clayey silt to silty clay	UNDFND	UNDFD	9	1.4
24.75	81.20	13.44	0.11	0.82	2.43	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
25.00	82.02	12.64	0.16	1.27	2.45	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.25	82.84	12.48	0.17	1.33	2.47	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.50	83.66	12.20	0.17	1.38	2.49	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.75	84.48	11.66	0.16	1.34	2.52	clayey silt to silty clay	UNDFND	UNDFD	6	.6
26.00	85.30	11.16	0.15	1.33	2.54	clayey silt to silty clay	UNDFND	UNDFD	5	.6
26.25	86.12	12.00	0.16	1.36	2.56	clayey silt to silty clay	UNDFND	UNDFD	6	.7
26.50	86.94	12.20	0.17	1.42	2.58	clayey silt to silty clay	UNDFND	UNDFD	6	.7
26.75	87.76	12.24	0.19	1.55	2.60	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.00	88.58	12.48	0.20	1.58	2.62	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.25	89.40	12.88	0.20	1.57	2.65	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.50	90.22	12.54	0.20	1.58	2.67	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.75	91.04	12.92	0.21	1.60	2.69	clayey silt to silty clay	UNDFND	UNDFD	6	.7
28.00	91.86	13.26	0.21	1.60	2.71	clayey silt to silty clay	UNDFND	UNDFD	6	.8
28.25	92.68	13.32	0.20	1.50	2.73	clayey silt to silty clay	UNDFND	UNDFD	6	.8
28.50	93.50	12.74	0.18	1.45	2.75	clayey silt to silty clay	UNDFND	UNDFD	6	.7
28.75	94.32	13.00	0.16	1.22	2.77	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
29.00	95.14	13.08	0.15	1.11	2.80	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
29.25	95.96	56.90	0.46	0.81	2.82	silty sand to sandy silt	<40	30-32	18	UNDEFINED
29.50	96.78	75.30	1.78	2.36	2.84	sandy silt to clayey silt	UNDFND	UNDFD	29	6.9
29.75	97.60	29.56	1.03	3.48	2.86	clayey silt to silty clay	UNDFND	UNDFD	14	2.3
30.00	98.43	76.22	1.74	2.28	2.88	silty sand to sandy silt	40-50	32-34	24	UNDEFINED
30.25	99.25	33.70	1.18	3.50	2.90	clayey silt to silty clay	UNDFND	UNDFD	16	2.8
30.50	100.07	30.80	1.02	3.31	2.93	clayey silt to silty clay	UNDFND	UNDFD	15	2.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-1-12 Page No. 4

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	34.54	1.16	3.37	2.95	clayey silt to silty clay	UNDFND	UNDFD	17	2.8
31.00	101.71	32.90	1.03	3.13	2.97	clayey silt to silty clay	UNDFND	UNDFD	16	2.7
31.25	102.53	29.80	0.70	2.35	2.99	sandy silt to clayey silt	UNDFND	UNDFD	11	2.3
31.50	103.35	28.98	0.62	2.14	3.01	sandy silt to clayey silt	UNDFND	UNDFD	11	2.3
31.75	104.17	26.62	0.45	1.71	3.03	sandy silt to clayey silt	UNDFND	UNDFD	10	2.0
32.00	104.99	23.00	0.39	1.71	3.05	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
32.25	105.81	20.52	0.30	1.48	3.08	sandy silt to clayey silt	UNDFND	UNDFD	8	1.4
32.50	106.63	21.00	0.23	1.10	3.10	sandy silt to clayey silt	UNDFND	UNDFD	8	1.4
32.75	107.45	22.60	0.30	1.34	3.12	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
33.00	108.27	23.98	0.40	1.65	3.14	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7
33.25	109.09	21.44	0.32	1.51	3.16	sandy silt to clayey silt	UNDFND	UNDFD	8	1.5
33.50	109.91	19.64	0.27	1.37	3.18	sandy silt to clayey silt	UNDFND	UNDFD	8	1.3
33.75	110.73	18.92	0.25	1.31	3.21	sandy silt to clayey silt	UNDFND	UNDFD	7	1.2
34.00	111.55	19.02	0.29	1.55	3.23	sandy silt to clayey silt	UNDFND	UNDFD	7	1.2
34.25	112.37	17.80	0.23	1.31	3.25	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
34.50	113.19	17.38	0.27	1.58	3.27	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
34.75	114.01	16.40	0.28	1.69	3.29	clayey silt to silty clay	UNDFND	UNDFD	8	.9
35.00	114.83	19.66	0.26	1.34	3.31	sandy silt to clayey silt	UNDFND	UNDFD	8	1.3
35.25	115.65	20.08	0.25	1.23	3.34	sandy silt to clayey silt	UNDFND	UNDFD	8	1.3
35.50	116.47	20.34	0.28	1.38	3.36	sandy silt to clayey silt	UNDFND	UNDFD	8	1.3
35.75	117.29	22.80	0.29	1.27	3.38	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
36.00	118.11	23.26	0.29	1.23	3.40	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
36.25	118.93	18.52	0.15	0.80	3.42	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.50	119.75	20.82	0.21	0.98	3.44	sandy silt to clayey silt	UNDFND	UNDFD	8	1.3
36.75	120.57	21.64	0.24	1.11	3.46	sandy silt to clayey silt	UNDFND	UNDFD	8	1.4
37.00	121.39	21.14	0.31	1.47	3.49	sandy silt to clayey silt	UNDFND	UNDFD	8	1.4
37.25	122.21	19.72	0.29	1.47	3.51	sandy silt to clayey silt	UNDFND	UNDFD	8	1.2
37.50	123.03	18.10	0.28	1.54	3.53	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
37.75	123.85	17.22	0.30	1.76	3.55	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
38.00	124.67	19.62	0.34	1.72	3.57	sandy silt to clayey silt	UNDFND	UNDFD	8	1.2
38.25	125.49	23.76	0.44	1.84	3.59	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
38.50	126.31	22.20	0.35	1.57	3.62	sandy silt to clayey silt	UNDFND	UNDFD	9	1.4
38.75	127.13	22.34	0.22	0.97	3.64	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

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TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-2-1A
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/08/94 11:29
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	92.72	0.86	0.92	0.02	sand to silty sand	>90	>48	22	UNDEFINED
0.50	1.64	254.86	1.64	0.65	0.07	sand	>90	>48	49	UNDEFINED
0.75	2.46	206.06	2.69	1.31	0.12	sand to silty sand	>90	>48	49	UNDEFINED
1.00	3.28	104.38	0.88	0.84	0.17	sand to silty sand	>90	>48	25	UNDEFINED
1.25	4.10	74.32	0.63	0.85	0.21	sand to silty sand	80-90	46-48	18	UNDEFINED
1.50	4.92	58.08	0.54	0.92	0.26	silty sand to sandy silt	70-80	44-46	19	UNDEFINED
1.75	5.74	40.32	0.57	1.42	0.31	silty sand to sandy silt	50-60	42-44	13	UNDEFINED
2.00	6.56	40.82	0.45	1.10	0.35	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
2.25	7.38	45.20	0.41	0.92	0.40	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.50	8.20	44.62	0.39	0.88	0.45	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.75	9.02	39.50	0.28	0.71	0.50	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
3.00	9.84	37.06	0.27	0.74	0.54	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.25	10.66	35.28	0.26	0.75	0.58	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.50	11.48	22.98	0.29	1.27	0.60	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
3.75	12.30	34.00	0.24	0.70	0.62	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
4.00	13.12	35.10	0.26	0.73	0.64	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
4.25	13.94	34.46	0.26	0.76	0.66	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
4.50	14.76	26.76	0.23	0.86	0.68	silty sand to sandy silt	<40	36-38	9	UNDEFINED
4.75	15.58	31.34	0.26	0.82	0.71	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.00	16.40	30.30	0.25	0.84	0.73	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.25	17.22	33.70	0.26	0.78	0.75	silty sand to sandy silt	<40	36-38	11	UNDEFINED
5.50	18.04	38.08	0.30	0.80	0.77	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
5.75	18.86	35.04	0.28	0.79	0.79	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.00	19.69	35.56	0.28	0.79	0.81	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.25	20.51	41.68	0.31	0.74	0.84	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
6.50	21.33	42.62	0.33	0.77	0.86	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
6.75	22.15	45.40	0.35	0.77	0.88	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.00	22.97	76.82	0.54	0.70	0.90	sand to silty sand	60-70	40-42	18	UNDEFINED
7.25	23.79	87.80	0.58	0.66	0.92	sand to silty sand	60-70	40-42	21	UNDEFINED
7.50	24.61	86.70	0.57	0.66	0.94	sand to silty sand	60-70	40-42	21	UNDEFINED
7.75	25.43	70.96	0.53	0.75	0.96	sand to silty sand	50-60	38-40	17	UNDEFINED
8.00	26.25	44.74	0.36	0.81	0.99	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
8.25	27.07	39.92	0.52	1.31	1.01	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
8.50	27.89	54.22	0.37	0.67	1.03	sand to silty sand	40-50	36-38	13	UNDEFINED
8.75	28.71	62.84	0.46	0.73	1.05	sand to silty sand	50-60	38-40	15	UNDEFINED
9.00	29.53	65.34	0.47	0.72	1.07	sand to silty sand	50-60	38-40	16	UNDEFINED
9.25	30.35	49.58	0.35	0.70	1.09	silty sand to sandy silt	40-50	36-38	16	UNDEFINED
9.50	31.17	55.10	0.54	0.97	1.12	silty sand to sandy silt	40-50	36-38	18	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-2-1A Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	66.96	0.55	0.83	1.14	sand to silty sand	50-60	38-40	16	UNDEFINED
10.00	32.81	82.72	0.61	0.74	1.16	sand to silty sand	50-60	38-40	20	UNDEFINED
10.25	33.63	83.70	0.64	0.76	1.18	sand to silty sand	50-60	38-40	20	UNDEFINED
10.50	34.45	74.14	0.57	0.77	1.20	sand to silty sand	50-60	38-40	18	UNDEFINED
10.75	35.27	85.36	0.63	0.73	1.22	sand to silty sand	50-60	38-40	20	UNDEFINED
11.00	36.09	55.98	0.55	0.97	1.24	silty sand to sandy silt	40-50	36-38	18	UNDEFINED
11.25	36.91	37.22	0.68	1.82	1.27	sandy silt to clayey silt	UNDFND	UNDFD	14	3.5
11.50	37.73	105.78	1.16	1.10	1.29	sand to silty sand	60-70	40-42	25	UNDEFINED
11.75	38.55	198.74	2.38	1.20	1.31	sand	80-90	42-44	38	UNDEFINED
12.00	39.37	146.96	1.51	1.03	1.33	sand to silty sand	70-80	40-42	35	UNDEFINED
12.25	40.19	98.54	0.80	0.82	1.35	sand to silty sand	60-70	38-40	24	UNDEFINED
12.50	41.01	91.76	0.69	0.75	1.37	sand to silty sand	50-60	38-40	22	UNDEFINED
12.75	41.83	131.60	1.19	0.90	1.40	sand to silty sand	60-70	40-42	32	UNDEFINED
13.00	42.65	148.48	1.41	0.95	1.42	sand to silty sand	70-80	40-42	36	UNDEFINED
13.25	43.47	145.60	1.30	0.89	1.44	sand	70-80	40-42	28	UNDEFINED
13.50	44.29	144.52	1.19	0.82	1.46	sand	70-80	40-42	28	UNDEFINED
13.75	45.11	111.18	1.31	1.18	1.48	sand to silty sand	60-70	38-40	27	UNDEFINED
14.00	45.93	116.76	3.21	2.75	1.50	sandy silt to clayey silt	UNDFND	UNDFD	45	11.4
14.25	46.75	93.42	6.23	6.66	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	68.52	3.93	5.73	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	124.98	7.53	6.03	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	184.08	6.95	3.77	1.59	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	104.66	6.19	5.92	1.61	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	174.60	7.69	4.41	1.63	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.75	51.67	324.58	9.52	2.93	1.65	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	287.76	9.56	3.32	1.68	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.25	53.31	225.88	6.42	2.84	1.70	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
16.50	54.13	234.14	4.54	1.94	1.72	sand to silty sand	80-90	42-44	>50	UNDEFINED
16.75	54.95	252.46	5.04	2.00	1.74	sand to silty sand	80-90	42-44	>50	UNDEFINED
17.00	55.77	271.54	5.06	1.86	1.76	sand to silty sand	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-2-2
Job No. :276-7221
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/12/94 7:55
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	152.68	2.16	1.41	0.02	sand to silty sand	>90	>48	37	UNDEFINED
0.50	1.64	156.14	2.87	1.84	0.07	silty sand to sandy silt	>90	>48	50	UNDEFINED
0.75	2.46	102.44	2.79	2.72	0.12	sandy silt to clayey silt	UNDFND	UNDFD	39	10.2
1.00	3.28	44.24	1.22	2.75	0.17	sandy silt to clayey silt	UNDFND	UNDFD	17	4.4
1.25	4.10	49.38	1.91	3.87	0.21	clayey silt to silty clay	UNDFND	UNDFD	24	4.9
1.50	4.92	54.52	2.01	3.69	0.26	clayey silt to silty clay	UNDFND	UNDFD	26	5.4
1.75	5.74	69.88	0.70	1.00	0.31	sand to silty sand	70-80	44-46	17	UNDEFINED
2.00	6.56	48.46	0.52	1.08	0.35	silty sand to sandy silt	60-70	42-44	15	UNDEFINED
2.25	7.38	72.16	0.68	0.94	0.40	sand to silty sand	70-80	42-44	17	UNDEFINED
2.50	8.20	80.52	0.50	0.62	0.45	sand to silty sand	70-80	42-44	19	UNDEFINED
2.75	9.02	65.30	0.40	0.62	0.50	sand to silty sand	60-70	42-44	16	UNDEFINED
3.00	9.84	51.54	0.33	0.63	0.54	sand to silty sand	50-60	40-42	12	UNDEFINED
3.25	10.66	51.84	0.32	0.62	0.58	sand to silty sand	50-60	40-42	12	UNDEFINED
3.50	11.48	48.52	0.30	0.62	0.60	silty sand to sandy silt	50-60	40-42	15	UNDEFINED
3.75	12.30	48.00	0.32	0.66	0.62	silty sand to sandy silt	50-60	38-40	15	UNDEFINED
4.00	13.12	40.48	0.28	0.68	0.64	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.25	13.94	16.50	0.26	1.58	0.66	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
4.50	14.76	10.68	0.21	1.95	0.68	clayey silt to silty clay	UNDFND	UNDFD	5	.9
4.75	15.58	11.66	0.32	2.76	0.71	silty clay to clay	UNDFND	UNDFD	7	1.0
5.00	16.40	3.16	0.13	4.07	0.73	clay	UNDFND	UNDFD	3	.2
5.25	17.22	2.14	0.08	3.51	0.75	clay	UNDFND	UNDFD	2	.1
5.50	18.04	7.20	0.12	1.68	0.77	silty clay to clay	UNDFND	UNDFD	5	.6
5.75	18.86	37.22	0.34	0.92	0.79	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
6.00	19.69	22.18	0.33	1.48	0.81	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
6.25	20.51	45.50	0.37	0.82	0.84	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
6.50	21.33	16.90	0.35	2.08	0.86	clayey silt to silty clay	UNDFND	UNDFD	8	1.5
6.75	22.15	14.14	0.14	0.99	0.88	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
7.00	22.97	18.80	0.28	1.51	0.90	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
7.25	23.79	17.70	0.27	1.50	0.92	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
7.50	24.61	11.72	0.22	1.88	0.94	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
7.75	25.43	11.66	0.26	2.23	0.96	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
8.00	26.25	7.12	0.14	1.98	0.99	silty clay to clay	UNDFND	UNDFD	5	.5
8.25	27.07	11.98	0.26	2.17	1.01	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
8.50	27.89	6.28	0.17	2.70	1.03	clay	UNDFND	UNDFD	6	.4
8.75	28.71	32.94	0.26	0.79	1.05	silty sand to sandy silt	<40	34-36	11	UNDEFINED
9.00	29.53	41.84	0.33	0.80	1.07	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
9.25	30.35	54.02	0.41	0.76	1.09	silty sand to sandy silt	40-50	36-38	17	UNDEFINED
9.50	31.17	83.52	0.58	0.70	1.12	sand to silty sand	50-60	38-40	20	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-2-2 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	69.76	0.48	0.69	1.14	sand to silty sand	50-60	38-40	17	UNDEFINED
10.00	32.81	56.68	0.46	0.81	1.16	silty sand to sandy silt	40-50	36-38	18	UNDEFINED
10.25	33.63	87.32	0.65	0.74	1.18	sand to silty sand	60-70	38-40	21	UNDEFINED
10.50	34.45	136.44	1.11	0.81	1.20	sand	70-80	40-42	26	UNDEFINED
10.75	35.27	143.38	1.26	0.88	1.22	sand to silty sand	70-80	40-42	34	UNDEFINED
11.00	36.09	158.04	1.27	0.81	1.24	sand	70-80	42-44	30	UNDEFINED
11.25	36.91	147.30	0.92	0.62	1.27	sand	70-80	40-42	28	UNDEFINED
11.50	37.73	81.74	0.41	0.51	1.29	sand to silty sand	50-60	38-40	20	UNDEFINED
11.75	38.55	54.60	0.35	0.64	1.31	sand to silty sand	40-50	36-38	13	UNDEFINED
12.00	39.37	58.66	0.39	0.67	1.33	sand to silty sand	40-50	36-38	14	UNDEFINED
12.25	40.19	83.50	0.37	0.44	1.35	sand to silty sand	50-60	38-40	20	UNDEFINED
12.50	41.01	81.50	0.37	0.45	1.37	sand to silty sand	50-60	38-40	20	UNDEFINED
12.75	41.83	59.72	0.35	0.58	1.40	sand to silty sand	40-50	36-38	14	UNDEFINED
13.00	42.65	68.94	0.52	0.75	1.42	sand to silty sand	50-60	36-38	17	UNDEFINED
13.25	43.47	90.66	1.26	1.38	1.44	sand to silty sand	50-60	38-40	22	UNDEFINED
13.50	44.29	86.64	4.42	5.11	1.46	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	101.32	4.16	4.11	1.48	clayey silt to silty clay	UNDFND	UNDFD	49	9.8
14.00	45.93	54.30	1.88	3.47	1.50	clayey silt to silty clay	UNDFND	UNDFD	26	5.1
14.25	46.75	60.18	2.41	4.01	1.52	clayey silt to silty clay	UNDFND	UNDFD	29	5.7
14.50	47.57	71.22	3.01	4.22	1.55	clayey silt to silty clay	UNDFND	UNDFD	34	6.8
14.75	48.39	71.16	3.40	4.77	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	127.28	6.11	4.80	1.59	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	235.58	4.63	1.97	1.61	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.50	50.85	250.92	5.79	2.31	1.63	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
15.75	51.67	215.20	8.47	3.94	1.65	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	217.06	5.40	2.49	1.68	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
16.25	53.31	337.78	5.09	1.51	1.70	sand to silty sand	>90	44-46	>50	UNDEFINED
16.50	54.13	410.12	5.41	1.32	1.72	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-2-3
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/30/94 11:25
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	32.80	0.26	0.80	0.02	silty sand to sandy silt	80-90	>48	10	UNDEFINED
0.50	1.64	104.26	1.06	1.02	0.07	sand to silty sand	>90	>48	25	UNDEFINED
0.75	2.46	112.86	1.09	0.97	0.12	sand to silty sand	>90	>48	27	UNDEFINED
1.00	3.28	58.00	1.04	1.79	0.17	silty sand to sandy silt	70-80	46-48	19	UNDEFINED
1.25	4.10	64.60	0.65	1.00	0.21	silty sand to sandy silt	70-80	44-46	21	UNDEFINED
1.50	4.92	48.46	0.50	1.03	0.26	silty sand to sandy silt	60-70	42-44	15	UNDEFINED
1.75	5.74	47.64	0.54	1.13	0.31	silty sand to sandy silt	60-70	42-44	15	UNDEFINED
2.00	6.56	60.40	0.68	1.13	0.35	silty sand to sandy silt	60-70	42-44	19	UNDEFINED
2.25	7.38	70.74	0.83	1.18	0.40	silty sand to sandy silt	60-70	42-44	23	UNDEFINED
2.50	8.20	77.40	0.66	0.85	0.45	sand to silty sand	70-80	42-44	19	UNDEFINED
2.75	9.02	65.54	0.40	0.61	0.50	sand to silty sand	60-70	42-44	16	UNDEFINED
3.00	9.84	41.22	0.31	0.74	0.54	silty sand to sandy silt	50-60	38-40	13	UNDEFINED
3.25	10.66	72.82	0.48	0.66	0.58	sand to silty sand	60-70	42-44	17	UNDEFINED
3.50	11.48	65.74	0.50	0.76	0.60	sand to silty sand	60-70	40-42	16	UNDEFINED
3.75	12.30	57.36	0.34	0.60	0.62	sand to silty sand	50-60	40-42	14	UNDEFINED
4.00	13.12	59.80	0.35	0.58	0.64	sand to silty sand	50-60	40-42	14	UNDEFINED
4.25	13.94	51.50	0.35	0.67	0.66	sand to silty sand	50-60	38-40	12	UNDEFINED
4.50	14.76	41.00	0.28	0.69	0.68	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.75	15.58	40.96	0.29	0.70	0.71	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
5.00	16.40	45.20	0.30	0.67	0.73	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
5.25	17.22	53.26	0.34	0.64	0.75	sand to silty sand	50-60	38-40	13	UNDEFINED
5.50	18.04	62.96	0.40	0.63	0.77	sand to silty sand	50-60	40-42	15	UNDEFINED
5.75	18.86	50.76	0.34	0.67	0.79	silty sand to sandy silt	50-60	38-40	16	UNDEFINED
6.00	19.69	47.92	0.31	0.64	0.81	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
6.25	20.51	51.94	0.34	0.66	0.84	sand to silty sand	50-60	38-40	12	UNDEFINED
6.50	21.33	49.36	0.37	0.75	0.86	silty sand to sandy silt	40-50	38-40	16	UNDEFINED
6.75	22.15	38.14	0.30	0.78	0.88	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
7.00	22.97	39.10	0.30	0.76	0.90	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
7.25	23.79	44.70	0.32	0.72	0.92	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.50	24.61	46.02	0.35	0.76	0.94	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
7.75	25.43	29.98	0.25	0.84	0.96	silty sand to sandy silt	<40	34-36	10	UNDEFINED
8.00	26.25	18.44	0.17	0.94	0.99	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
8.25	27.07	10.66	0.12	1.09	1.01	clayey silt to silty clay	UNDFND	UNDFD	5	.9
8.50	27.89	4.90	0.03	0.64	1.03	sensitive fine grained	UNDFND	UNDFD	2	.3
8.75	28.71	7.22	0.08	1.09	1.05	sensitive fine grained	UNDFND	UNDFD	3	.5
9.00	29.53	3.70	0.07	1.98	1.07	clay	UNDFND	UNDFD	4	.2
9.25	30.35	3.24	0.08	2.45	1.09	clay	UNDFND	UNDFD	3	.1
9.50	31.17	13.26	0.13	1.00	1.12	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-2-3 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	45.46	0.50	1.10	1.14	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
10.00	32.81	122.18	1.00	0.82	1.16	sand to silty sand	70-80	40-42	29	UNDEFINED
10.25	33.63	144.16	1.25	0.87	1.18	sand	70-80	40-42	28	UNDEFINED
10.50	34.45	168.86	1.45	0.86	1.20	sand	70-80	42-44	32	UNDEFINED
10.75	35.27	135.52	0.90	0.67	1.22	sand	70-80	40-42	26	UNDEFINED
11.00	36.09	64.20	0.41	0.64	1.24	sand to silty sand	50-60	36-38	15	UNDEFINED
11.25	36.91	37.98	0.31	0.82	1.27	silty sand to sandy silt	<40	34-36	12	UNDEFINED
11.50	37.73	26.84	0.57	2.13	1.29	sandy silt to clayey silt	UNDFND	UNDFD	10	2.4
11.75	38.55	82.84	0.42	0.51	1.31	sand to silty sand	50-60	38-40	20	UNDEFINED
12.00	39.37	43.56	0.35	0.81	1.33	silty sand to sandy silt	<40	34-36	14	UNDEFINED
12.25	40.19	18.58	0.22	1.19	1.35	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
12.50	41.01	65.84	1.10	1.67	1.37	silty sand to sandy silt	50-60	36-38	21	UNDEFINED
12.75	41.83	93.36	2.39	2.56	1.40	sandy silt to clayey silt	UNDFND	UNDFD	36	9.0
13.00	42.65	144.00	1.14	0.79	1.42	sand	70-80	40-42	28	UNDEFINED
13.25	43.47	131.68	2.06	1.56	1.44	sand to silty sand	60-70	40-42	32	UNDEFINED
13.50	44.29	91.66	3.03	3.31	1.46	sandy silt to clayey silt	UNDFND	UNDFD	35	8.9
13.75	45.11	89.54	2.81	3.14	1.48	sandy silt to clayey silt	UNDFND	UNDFD	34	8.6
14.00	45.93	73.78	2.93	3.97	1.50	clayey silt to silty clay	UNDFND	UNDFD	35	7.1

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-2-4 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	184.06	0.92	0.50	1.14	sand	80-90	42-44	35	UNDEFINED
10.00	32.81	186.94	0.80	0.43	1.16	sand	80-90	42-44	36	UNDEFINED
10.25	33.63	177.66	0.69	0.39	1.18	sand	80-90	42-44	34	UNDEFINED
10.50	34.45	148.08	0.51	0.34	1.20	sand	70-80	40-42	28	UNDEFINED
10.75	35.27	72.48	0.22	0.30	1.22	sand to silty sand	50-60	38-40	17	UNDEFINED
11.00	36.09	48.36	0.21	0.44	1.24	sand to silty sand	40-50	36-38	12	UNDEFINED
11.25	36.91	50.30	0.15	0.29	1.27	sand to silty sand	40-50	36-38	12	UNDEFINED
11.50	37.73	50.08	0.17	0.34	1.29	sand to silty sand	40-50	36-38	12	UNDEFINED
11.75	38.55	39.38	0.18	0.47	1.31	silty sand to sandy silt	<40	34-36	13	UNDEFINED
12.00	39.37	51.40	0.22	0.43	1.33	sand to silty sand	40-50	36-38	12	UNDEFINED
12.25	40.19	62.82	0.21	0.34	1.35	sand to silty sand	40-50	36-38	15	UNDEFINED
12.50	41.01	48.86	0.20	0.41	1.37	sand to silty sand	40-50	34-36	12	UNDEFINED
12.75	41.83	57.04	0.25	0.45	1.40	sand to silty sand	40-50	36-38	14	UNDEFINED
13.00	42.65	79.84	0.35	0.43	1.42	sand to silty sand	50-60	38-40	19	UNDEFINED
13.25	43.47	72.68	0.31	0.43	1.44	sand to silty sand	50-60	36-38	17	UNDEFINED
13.50	44.29	82.52	2.16	2.62	1.46	sandy silt to clayey silt	UNDFND	UNDFD	32	8.0
13.75	45.11	85.60	3.40	3.97	1.48	clayey silt to silty clay	UNDFND	UNDFD	41	8.3
14.00	45.93	102.94	3.72	3.62	1.50	sandy silt to clayey silt	UNDFND	UNDFD	39	10.0
14.25	46.75	103.78	4.35	4.19	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-2-4
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/30/94 8:10
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	14.78	0.12	0.81	0.02	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
0.50	1.64	78.90	0.47	0.59	0.07	sand to silty sand	>90	>48	19	UNDEFINED
0.75	2.46	150.54	0.84	0.56	0.12	sand	>90	>48	29	UNDEFINED
1.00	3.28	147.78	0.78	0.53	0.17	sand	>90	>48	28	UNDEFINED
1.25	4.10	113.00	0.57	0.50	0.21	sand	>90	46-48	22	UNDEFINED
1.50	4.92	81.88	0.29	0.35	0.26	sand to silty sand	80-90	44-46	20	UNDEFINED
1.75	5.74	64.82	0.26	0.40	0.31	sand to silty sand	70-80	44-46	16	UNDEFINED
2.00	6.56	53.88	0.25	0.46	0.35	sand to silty sand	60-70	42-44	13	UNDEFINED
2.25	7.38	43.66	0.22	0.50	0.40	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.50	8.20	38.40	0.20	0.53	0.45	silty sand to sandy silt	50-60	40-42	12	UNDEFINED
2.75	9.02	46.16	0.25	0.53	0.50	sand to silty sand	50-60	40-42	11	UNDEFINED
3.00	9.84	34.18	0.19	0.56	0.54	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.25	10.66	16.70	0.09	0.54	0.58	sandy silt to clayey silt	UNDFND	UNDFD	6	1.6
3.50	11.48	15.46	0.08	0.54	0.60	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
3.75	12.30	12.24	0.08	0.66	0.62	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
4.00	13.12	40.76	0.22	0.53	0.64	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.25	13.94	48.20	0.26	0.55	0.66	sand to silty sand	50-60	38-40	12	UNDEFINED
4.50	14.76	48.24	0.27	0.56	0.68	sand to silty sand	50-60	38-40	12	UNDEFINED
4.75	15.58	48.14	0.26	0.55	0.71	sand to silty sand	50-60	38-40	12	UNDEFINED
5.00	16.40	47.58	0.25	0.53	0.73	sand to silty sand	40-50	38-40	11	UNDEFINED
5.25	17.22	41.36	0.22	0.53	0.75	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
5.50	18.04	40.70	0.21	0.51	0.77	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
5.75	18.86	59.52	0.28	0.48	0.79	sand to silty sand	50-60	38-40	14	UNDEFINED
6.00	19.69	59.30	0.30	0.51	0.81	sand to silty sand	50-60	38-40	14	UNDEFINED
6.25	20.51	53.32	0.26	0.49	0.84	sand to silty sand	50-60	38-40	13	UNDEFINED
6.50	21.33	15.78	0.18	1.17	0.86	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
6.75	22.15	4.38	0.04	0.88	0.88	sensitive fine grained	UNDFND	UNDFD	2	.3
7.00	22.97	2.34	0.01	0.40	0.90	sensitive fine grained	UNDFND	UNDFD	1	.1
7.25	23.79	4.08	0.04	0.99	0.92	sensitive fine grained	UNDFND	UNDFD	2	.2
7.50	24.61	34.74	0.25	0.72	0.94	silty sand to sandy silt	<40	36-38	11	UNDEFINED
7.75	25.43	34.76	0.13	0.39	0.96	silty sand to sandy silt	<40	36-38	11	UNDEFINED
8.00	26.25	8.82	0.04	0.48	0.99	sensitive fine grained	UNDFND	UNDFD	4	.7
8.25	27.07	6.26	0.02	0.35	1.01	sensitive fine grained	UNDFND	UNDFD	3	.4
8.50	27.89	7.42	0.03	0.37	1.03	sensitive fine grained	UNDFND	UNDFD	4	.5
8.75	28.71	6.18	0.03	0.42	1.05	sensitive fine grained	UNDFND	UNDFD	3	.4
9.00	29.53	7.10	0.03	0.37	1.07	sensitive fine grained	UNDFND	UNDFD	3	.5
9.25	30.35	17.42	0.07	0.39	1.09	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
9.50	31.17	116.46	0.61	0.52	1.12	sand	60-70	40-42	22	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-2-5 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	22.70	0.10	0.44	1.14	silty sand to sandy silt	<40	30-32	7	UNDEFINED
10.00	32.81	19.56	0.12	0.59	1.16	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
10.25	33.63	30.50	0.19	0.61	1.18	silty sand to sandy silt	<40	32-34	10	UNDEFINED
10.50	34.45	64.80	0.41	0.63	1.20	sand to silty sand	50-60	38-40	16	UNDEFINED
10.75	35.27	41.96	0.32	0.75	1.22	silty sand to sandy silt	<40	34-36	13	UNDEFINED
11.00	36.09	30.56	0.21	0.70	1.24	silty sand to sandy silt	<40	32-34	10	UNDEFINED
11.25	36.91	20.42	0.21	1.03	1.27	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
11.50	37.73	18.66	0.17	0.94	1.29	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
11.75	38.55	23.26	0.17	0.73	1.31	silty sand to sandy silt	<40	30-32	7	UNDEFINED
12.00	39.37	10.04	0.10	0.99	1.33	clayey silt to silty clay	UNDFND	UNDFD	5	.7
12.25	40.19	8.78	0.10	1.09	1.35	clayey silt to silty clay	UNDFND	UNDFD	4	.6
12.50	41.01	7.94	0.09	1.13	1.37	clayey silt to silty clay	UNDFND	UNDFD	4	.5
12.75	41.83	8.24	0.10	1.26	1.40	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.00	42.65	7.52	0.11	1.49	1.42	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.25	43.47	8.76	0.11	1.29	1.44	clayey silt to silty clay	UNDFND	UNDFD	4	.6
13.50	44.29	7.88	0.12	1.51	1.46	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.75	45.11	7.76	0.10	1.33	1.48	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.00	45.93	8.04	0.12	1.49	1.50	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.25	46.75	7.84	0.12	1.47	1.52	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.50	47.57	7.54	0.11	1.44	1.55	clayey silt to silty clay	UNDFND	UNDFD	4	.4
14.75	48.39	7.98	0.12	1.53	1.57	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.00	49.21	7.74	0.12	1.57	1.59	clayey silt to silty clay	UNDFND	UNDFD	4	.4
15.25	50.03	8.12	0.09	1.12	1.61	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.50	50.85	10.52	0.08	0.72	1.63	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
15.75	51.67	21.20	0.09	0.42	1.65	silty sand to sandy silt	<40	<30	7	UNDEFINED
16.00	52.49	27.60	0.12	0.45	1.68	silty sand to sandy silt	<40	30-32	9	UNDEFINED
16.25	53.31	15.24	0.18	1.21	1.70	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
16.50	54.13	10.68	0.10	0.91	1.72	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
16.75	54.95	12.70	0.14	1.09	1.74	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
17.00	55.77	14.38	0.15	1.06	1.76	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
17.25	56.59	15.20	0.10	0.68	1.78	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
17.50	57.41	9.72	0.07	0.74	1.80	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
17.75	58.23	9.20	0.08	0.84	1.83	clayey silt to silty clay	UNDFND	UNDFD	4	.5
18.00	59.06	13.54	0.08	0.56	1.85	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
18.25	59.88	16.56	0.12	0.73	1.87	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
18.50	60.70	20.92	0.13	0.62	1.89	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
18.75	61.52	14.18	0.12	0.83	1.91	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
19.00	62.34	22.04	0.12	0.53	1.93	silty sand to sandy silt	<40	<30	7	UNDEFINED
19.25	63.16	16.44	0.09	0.55	1.96	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
19.50	63.98	37.68	0.18	0.49	1.98	silty sand to sandy silt	<40	30-32	12	UNDEFINED
19.75	64.80	10.52	0.11	1.02	2.00	clayey silt to silty clay	UNDFND	UNDFD	5	.6
20.00	65.62	10.56	0.12	1.13	2.02	clayey silt to silty clay	UNDFND	UNDFD	5	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

* Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-2-5
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/08/94 07:58
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	12.26	0.11	0.91	0.02	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
0.50	1.64	5.34	0.01	0.27	0.07	sensitive fine grained	UNDFND	UNDFD	3	.5
0.75	2.46	9.38	0.08	0.85	0.12	clayey silt to silty clay	UNDFND	UNDFD	4	.9
1.00	3.28	8.34	0.06	0.71	0.17	sensitive fine grained	UNDFND	UNDFD	4	.8
1.25	4.10	10.72	0.14	1.34	0.21	clayey silt to silty clay	UNDFND	UNDFD	5	1.0
1.50	4.92	3.14	0.05	1.65	0.26	sensitive fine grained	UNDFND	UNDFD	2	.2
1.75	5.74	2.76	0.05	1.78	0.31	sensitive fine grained	UNDFND	UNDFD	1	.2
2.00	6.56	20.68	0.21	0.99	0.35	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
2.25	7.38	68.68	0.42	0.60	0.40	sand to silty sand	60-70	42-44	16	UNDEFINED
2.50	8.20	148.40	0.75	0.51	0.45	sand	80-90	46-48	28	UNDEFINED
2.75	9.02	132.90	0.66	0.50	0.50	sand	80-90	44-46	25	UNDEFINED
3.00	9.84	114.48	0.52	0.45	0.54	sand	70-80	44-46	22	UNDEFINED
3.25	10.66	81.64	0.41	0.51	0.58	sand to silty sand	60-70	42-44	20	UNDEFINED
3.50	11.48	56.46	0.28	0.50	0.60	sand to silty sand	50-60	40-42	14	UNDEFINED
3.75	12.30	54.46	0.28	0.51	0.62	sand to silty sand	50-60	40-42	13	UNDEFINED
4.00	13.12	42.26	0.24	0.56	0.64	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.25	13.94	45.22	0.27	0.60	0.66	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.50	14.76	42.56	0.26	0.60	0.68	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.75	15.58	30.46	0.30	0.97	0.71	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.00	16.40	42.84	0.32	0.74	0.73	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
5.25	17.22	27.22	0.36	1.33	0.75	sandy silt to clayey silt	UNDFND	UNDFD	10	2.6
5.50	18.04	19.54	0.20	1.03	0.77	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
5.75	18.86	28.08	0.22	0.77	0.79	silty sand to sandy silt	<40	34-36	9	UNDEFINED
6.00	19.69	36.30	0.26	0.72	0.81	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
6.25	20.51	35.42	0.27	0.77	0.84	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.50	21.33	20.96	0.24	1.16	0.86	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
6.75	22.15	24.66	0.23	0.95	0.88	sandy silt to clayey silt	UNDFND	UNDFD	9	2.3
7.00	22.97	12.60	0.33	2.64	0.90	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
7.25	23.79	6.38	0.09	1.44	0.92	sensitive fine grained	UNDFND	UNDFD	3	.5
7.50	24.61	5.66	0.12	2.18	0.94	silty clay to clay	UNDFND	UNDFD	4	.4
7.75	25.43	5.28	0.10	1.94	0.96	silty clay to clay	UNDFND	UNDFD	3	.3
8.00	26.25	9.14	0.11	1.24	0.99	clayey silt to silty clay	UNDFND	UNDFD	4	.7
8.25	27.07	8.84	0.08	0.94	1.01	clayey silt to silty clay	UNDFND	UNDFD	4	.7
8.50	27.89	5.32	0.05	1.00	1.03	sensitive fine grained	UNDFND	UNDFD	3	.3
8.75	28.71	4.92	0.08	1.54	1.05	sensitive fine grained	UNDFND	UNDFD	2	.3
9.00	29.53	5.70	0.06	1.00	1.07	sensitive fine grained	UNDFND	UNDFD	3	.4
9.25	30.35	10.42	0.08	0.79	1.09	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
9.50	31.17	16.82	0.07	0.43	1.12	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-2-5 Page No. 4

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	15.34	0.18	1.19	2.95	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
31.00	101.71	15.58	0.20	1.30	2.97	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
31.25	102.53	15.62	0.23	1.44	2.99	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
31.50	103.35	15.28	0.25	1.62	3.01	clayey silt to silty clay	UNDFND	UNDFD	7	.9
31.75	104.17	15.26	0.26	1.67	3.03	clayey silt to silty clay	UNDFND	UNDFD	7	.9
32.00	104.99	15.50	0.25	1.59	3.05	clayey silt to silty clay	UNDFND	UNDFD	7	.9
32.25	105.81	15.04	0.24	1.57	3.08	clayey silt to silty clay	UNDFND	UNDFD	7	.8
32.50	106.63	15.56	0.25	1.58	3.10	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
32.75	107.45	15.90	0.22	1.41	3.12	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
33.00	108.27	15.70	0.22	1.43	3.14	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
33.25	109.09	15.46	0.22	1.44	3.16	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
33.50	109.91	16.04	0.24	1.48	3.18	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
33.75	110.73	16.22	0.24	1.46	3.21	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.00	111.55	16.26	0.25	1.55	3.23	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.25	112.37	16.26	0.26	1.60	3.25	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.50	113.19	16.46	0.27	1.62	3.27	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.75	114.01	16.82	0.25	1.48	3.29	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
35.00	114.83	16.62	0.26	1.57	3.31	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
35.25	115.65	17.28	0.27	1.58	3.34	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
35.50	116.47	17.24	0.26	1.51	3.36	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
35.75	117.29	16.98	0.26	1.55	3.38	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
36.00	118.11	17.94	0.28	1.59	3.40	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.25	118.93	17.84	0.29	1.62	3.42	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.50	119.75	18.26	0.29	1.58	3.44	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.75	120.57	18.38	0.29	1.56	3.46	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
37.00	121.39	18.72	0.30	1.60	3.49	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
37.25	122.21	21.40	0.39	1.84	3.51	sandy silt to clayey silt	UNDFND	UNDFD	8	1.4
37.50	123.03	25.28	0.52	2.05	3.53	sandy silt to clayey silt	UNDFND	UNDFD	10	1.8
37.75	123.85	27.96	0.75	2.69	3.55	clayey silt to silty clay	UNDFND	UNDFD	13	2.0
38.00	124.67	28.28	0.73	2.58	3.57	sandy silt to clayey silt	UNDFND	UNDFD	11	2.1
38.25	125.49	25.66	0.62	2.41	3.59	sandy silt to clayey silt	UNDFND	UNDFD	10	1.8
38.50	126.31	21.32	0.35	1.65	3.62	sandy silt to clayey silt	UNDFND	UNDFD	8	1.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-2-5 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	11.74	0.19	1.65	2.04	clayey silt to silty clay	UNDFND	UNDFD	6	.7
20.50	67.26	10.24	0.12	1.17	2.06	clayey silt to silty clay	UNDFND	UNDFD	5	.6
20.75	68.08	15.30	0.20	1.31	2.09	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
21.00	68.90	67.34	0.80	1.18	2.11	silty sand to sandy silt	40-50	34-36	22	UNDEFINED
21.25	69.72	40.06	0.81	2.01	2.13	sandy silt to clayey silt	UNDFND	UNDFD	15	3.6
21.50	70.54	70.82	0.54	0.76	2.15	sand to silty sand	40-50	34-36	17	UNDEFINED
21.75	71.36	92.80	0.61	0.66	2.17	sand to silty sand	50-60	36-38	22	UNDEFINED
22.00	72.18	42.38	0.34	0.80	2.19	silty sand to sandy silt	<40	30-32	14	UNDEFINED
22.25	73.00	13.98	0.14	1.03	2.21	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
22.50	73.82	13.30	0.20	1.49	2.24	clayey silt to silty clay	UNDFND	UNDFD	6	.9
22.75	74.64	12.64	0.18	1.46	2.26	clayey silt to silty clay	UNDFND	UNDFD	6	.8
23.00	75.46	13.46	0.13	0.96	2.28	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
23.25	76.28	12.44	0.21	1.67	2.30	clayey silt to silty clay	UNDFND	UNDFD	6	.8
23.50	77.10	27.46	0.38	1.38	2.32	sandy silt to clayey silt	UNDFND	UNDFD	11	2.3
23.75	77.92	12.22	0.12	1.02	2.34	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
24.00	78.74	48.54	0.52	1.07	2.37	silty sand to sandy silt	<40	30-32	15	UNDEFINED
24.25	79.56	19.74	0.27	1.34	2.39	sandy silt to clayey silt	UNDFND	UNDFD	8	1.5
24.50	80.38	12.14	0.17	1.38	2.41	clayey silt to silty clay	UNDFND	UNDFD	6	.7
24.75	81.20	12.62	0.19	1.48	2.43	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.00	82.02	13.10	0.19	1.41	2.45	clayey silt to silty clay	UNDFND	UNDFD	6	.8
25.25	82.84	60.56	0.80	1.33	2.47	silty sand to sandy silt	<40	32-34	19	UNDEFINED
25.50	83.66	109.96	2.21	2.01	2.49	silty sand to sandy silt	50-60	36-38	35	UNDEFINED
25.75	84.48	285.38	2.64	0.92	2.52	sand	80-90	40-42	>50	UNDEFINED
26.00	85.30	251.20	2.24	0.89	2.54	sand	70-80	40-42	48	UNDEFINED
26.25	86.12	110.62	1.59	1.44	2.56	sand to silty sand	50-60	36-38	26	UNDEFINED
26.50	86.94	104.32	1.85	1.77	2.58	silty sand to sandy silt	50-60	36-38	33	UNDEFINED
26.75	87.76	29.10	0.73	2.51	2.60	sandy silt to clayey silt	UNDFND	UNDFD	11	2.4
27.00	88.58	17.74	0.23	1.32	2.62	sandy silt to clayey silt	UNDFND	UNDFD	7	1.2
27.25	89.40	22.00	0.52	2.35	2.65	clayey silt to silty clay	UNDFND	UNDFD	11	1.6
27.50	90.22	23.42	0.61	2.61	2.67	clayey silt to silty clay	UNDFND	UNDFD	11	1.8
27.75	91.04	17.44	0.35	2.01	2.69	clayey silt to silty clay	UNDFND	UNDFD	8	1.2
28.00	91.86	15.60	0.28	1.83	2.71	clayey silt to silty clay	UNDFND	UNDFD	7	1.0
28.25	92.68	27.32	0.84	3.07	2.73	clayey silt to silty clay	UNDFND	UNDFD	13	2.2
28.50	93.50	30.34	0.93	3.08	2.75	clayey silt to silty clay	UNDFND	UNDFD	15	2.4
28.75	94.32	103.90	1.64	1.58	2.77	silty sand to sandy silt	50-60	36-38	33	UNDEFINED
29.00	95.14	33.64	0.89	2.65	2.80	sandy silt to clayey silt	UNDFND	UNDFD	13	2.8
29.25	95.96	73.28	0.92	1.25	2.82	silty sand to sandy silt	40-50	32-34	23	UNDEFINED
29.50	96.78	84.76	0.79	0.94	2.84	sand to silty sand	40-50	34-36	20	UNDEFINED
29.75	97.60	41.10	0.28	0.68	2.86	silty sand to sandy silt	<40	30-32	13	UNDEFINED
30.00	98.43	16.84	0.14	0.83	2.88	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
30.25	99.25	16.16	0.16	1.01	2.90	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
30.50	100.07	15.32	0.17	1.12	2.93	sandy silt to clayey silt	UNDFND	UNDFD	6	.9

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-2-6-A Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	41.82	0.52	1.25	1.14	silty sand to sandy silt	<40	36-38	13	UNDEFINED
10.00	32.81	50.62	1.86	3.67	1.16	clayey silt to silty clay	UNDFND	UNDFD	24	4.8
10.25	33.63	27.88	0.21	0.76	1.18	silty sand to sandy silt	<40	32-34	9	UNDEFINED
10.50	34.45	16.32	0.12	0.75	1.20	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
10.75	35.27	7.90	0.03	0.40	1.22	sensitive fine grained	UNDFND	UNDFD	4	.5
11.00	36.09	6.82	0.03	0.47	1.24	sensitive fine grained	UNDFND	UNDFD	3	.4
11.25	36.91	7.82	0.05	0.70	1.27	sensitive fine grained	UNDFND	UNDFD	4	.5
11.50	37.73	7.76	0.05	0.62	1.29	sensitive fine grained	UNDFND	UNDFD	4	.5
11.75	38.55	7.74	0.05	0.60	1.31	sensitive fine grained	UNDFND	UNDFD	4	.5
12.00	39.37	7.74	0.04	0.57	1.33	sensitive fine grained	UNDFND	UNDFD	4	.5
12.25	40.19	7.68	0.04	0.52	1.35	sensitive fine grained	UNDFND	UNDFD	4	.5
12.50	41.01	7.40	0.03	0.43	1.37	sensitive fine grained	UNDFND	UNDFD	4	.5
12.75	41.83	7.58	0.04	0.55	1.40	sensitive fine grained	UNDFND	UNDFD	4	.5
13.00	42.65	7.82	0.03	0.40	1.42	sensitive fine grained	UNDFND	UNDFD	4	.5
13.25	43.47	7.86	0.05	0.58	1.44	sensitive fine grained	UNDFND	UNDFD	4	.5
13.50	44.29	7.96	0.04	0.55	1.46	sensitive fine grained	UNDFND	UNDFD	4	.5
13.75	45.11	8.44	0.05	0.64	1.48	sensitive fine grained	UNDFND	UNDFD	4	.5
14.00	45.93	8.46	0.06	0.72	1.50	sensitive fine grained	UNDFND	UNDFD	4	.5
14.25	46.75	9.00	0.08	0.91	1.52	clayey silt to silty clay	UNDFND	UNDFD	4	.6
14.50	47.57	8.66	0.06	0.66	1.55	sensitive fine grained	UNDFND	UNDFD	4	.5
14.75	48.39	8.46	0.05	0.60	1.57	sensitive fine grained	UNDFND	UNDFD	4	.5
15.00	49.21	8.82	0.05	0.51	1.59	sensitive fine grained	UNDFND	UNDFD	4	.6
15.25	50.03	8.82	0.04	0.49	1.61	sensitive fine grained	UNDFND	UNDFD	4	.5
15.50	50.85	8.50	0.04	0.46	1.63	sensitive fine grained	UNDFND	UNDFD	4	.5
15.75	51.67	8.92	0.04	0.47	1.65	sensitive fine grained	UNDFND	UNDFD	4	.5
16.00	52.49	8.90	0.04	0.43	1.68	sensitive fine grained	UNDFND	UNDFD	4	.5
16.25	53.31	9.04	0.04	0.46	1.70	sensitive fine grained	UNDFND	UNDFD	4	.5
16.50	54.13	8.98	0.04	0.48	1.72	sensitive fine grained	UNDFND	UNDFD	4	.5
16.75	54.95	9.04	0.04	0.44	1.74	sensitive fine grained	UNDFND	UNDFD	4	.5
17.00	55.77	9.16	0.05	0.50	1.76	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
17.25	56.59	9.20	0.05	0.51	1.78	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
17.50	57.41	9.50	0.05	0.54	1.80	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
17.75	58.23	9.62	0.06	0.58	1.83	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
18.00	59.06	9.60	0.05	0.49	1.85	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
18.25	59.88	9.72	0.04	0.44	1.87	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
18.50	60.70	9.72	0.05	0.52	1.89	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
18.75	61.52	9.32	0.04	0.45	1.91	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
19.00	62.34	10.10	0.04	0.43	1.93	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
19.25	63.16	10.02	0.04	0.44	1.96	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
19.50	63.98	10.38	0.05	0.52	1.98	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
19.75	64.80	10.26	0.05	0.46	2.00	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.00	65.62	10.20	0.04	0.41	2.02	sandy silt to clayey silt	UNDFND	UNDFD	4	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-2-6-A
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/12/94 1:00
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	41.68	0.95	2.29	0.02	sandy silt to clayey silt	UNDFND	UNDFD	16	4.1
0.50	1.64	70.38	1.19	1.69	0.07	silty sand to sandy silt	>90	>48	22	UNDEFINED
0.75	2.46	89.56	1.66	1.85	0.12	silty sand to sandy silt	>90	>48	29	UNDEFINED
1.00	3.28	150.06	0.96	0.64	0.17	sand	>90	>48	29	UNDEFINED
1.25	4.10	121.88	2.65	2.17	0.21	silty sand to sandy silt	>90	>48	39	UNDEFINED
1.50	4.92	67.80	2.66	3.92	0.26	clayey silt to silty clay	UNDFND	UNDFD	32	6.7
1.75	5.74	39.82	1.73	4.35	0.31	silty clay to clay	UNDFND	UNDFD	25	3.9
2.00	6.56	18.92	0.56	2.95	0.35	clayey silt to silty clay	UNDFND	UNDFD	9	1.8
2.25	7.38	24.04	0.48	2.00	0.40	sandy silt to clayey silt	UNDFND	UNDFD	9	2.3
2.50	8.20	24.60	0.74	3.01	0.45	clayey silt to silty clay	UNDFND	UNDFD	12	2.4
2.75	9.02	11.98	0.35	2.91	0.50	silty clay to clay	UNDFND	UNDFD	8	1.1
3.00	9.84	32.22	0.90	2.80	0.54	sandy silt to clayey silt	UNDFND	UNDFD	12	3.1
3.25	10.66	18.22	0.57	3.10	0.58	clayey silt to silty clay	UNDFND	UNDFD	9	1.7
3.50	11.48	19.70	1.09	5.52	0.60	clay	UNDFND	UNDFD	19	1.9
3.75	12.30	56.62	1.88	3.32	0.62	clayey silt to silty clay	UNDFND	UNDFD	27	5.5
4.00	13.12	59.62	2.14	3.59	0.64	clayey silt to silty clay	UNDFND	UNDFD	29	5.8
4.25	13.94	29.46	0.32	1.09	0.66	silty sand to sandy silt	<40	36-38	9	UNDEFINED
4.50	14.76	15.56	0.31	1.96	0.68	clayey silt to silty clay	UNDFND	UNDFD	7	1.4
4.75	15.58	79.06	0.47	0.59	0.71	sand to silty sand	60-70	40-42	19	UNDEFINED
5.00	16.40	85.08	0.37	0.44	0.73	sand to silty sand	60-70	40-42	20	UNDEFINED
5.25	17.22	31.88	0.08	0.26	0.75	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.50	18.04	22.22	0.02	0.08	0.77	silty sand to sandy silt	<40	34-36	7	UNDEFINED
5.75	18.86	8.14	0.02	0.20	0.79	sensitive fine grained	UNDFND	UNDFD	4	.7
6.00	19.69	12.82	0.03	0.24	0.81	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
6.25	20.51	38.32	0.07	0.19	0.84	sand to silty sand	40-50	36-38	9	UNDEFINED
6.50	21.33	21.82	0.06	0.27	0.86	silty sand to sandy silt	<40	32-34	7	UNDEFINED
6.75	22.15	38.72	0.07	0.18	0.88	sand to silty sand	40-50	36-38	9	UNDEFINED
7.00	22.97	17.68	0.04	0.21	0.90	silty sand to sandy silt	<40	30-32	6	UNDEFINED
7.25	23.79	6.72	0.05	0.69	0.92	sensitive fine grained	UNDFND	UNDFD	3	.5
7.50	24.61	4.82	0.02	0.50	0.94	sensitive fine grained	UNDFND	UNDFD	2	.3
7.75	25.43	5.80	0.04	0.73	0.96	sensitive fine grained	UNDFND	UNDFD	3	.4
8.00	26.25	4.72	0.03	0.61	0.99	sensitive fine grained	UNDFND	UNDFD	2	.3
8.25	27.07	4.84	0.04	0.75	1.01	sensitive fine grained	UNDFND	UNDFD	2	.3
8.50	27.89	5.00	0.06	1.27	1.03	sensitive fine grained	UNDFND	UNDFD	2	.3
8.75	28.71	5.08	0.09	1.74	1.05	sensitive fine grained	UNDFND	UNDFD	2	.3
9.00	29.53	5.32	0.10	1.86	1.07	silty clay to clay	UNDFND	UNDFD	3	.3
9.25	30.35	24.04	0.54	2.23	1.09	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
9.50	31.17	18.56	0.35	1.86	1.12	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-2-6-A Page No. 4

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	189.44	1.48	0.78	2.95	sand	60-70	38-40	36	UNDEFINED
31.00	101.71	189.12	1.66	0.88	2.97	sand	60-70	38-40	36	UNDEFINED
31.25	102.53	191.68	1.74	0.91	2.99	sand	60-70	38-40	37	UNDEFINED
31.50	103.35	155.02	1.19	0.77	3.01	sand	60-70	36-38	30	UNDEFINED
31.75	104.17	99.40	0.92	0.92	3.03	sand to silty sand	50-60	34-36	24	UNDEFINED
32.00	104.99	26.50	0.40	1.50	3.05	sandy silt to clayey silt	UNDFND	UNDFD	10	2.0
32.25	105.81	16.64	0.05	0.28	3.08	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
32.50	106.63	15.34	0.08	0.51	3.10	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
32.75	107.45	14.70	0.07	0.44	3.12	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
33.00	108.27	15.54	0.07	0.45	3.14	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
33.25	109.09	15.64	0.07	0.48	3.16	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
33.50	109.91	15.70	0.07	0.47	3.18	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
33.75	110.73	15.85	0.07	0.45	3.21	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.00	111.55	16.10	0.07	0.46	3.23	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.25	112.37	16.22	0.08	0.47	3.25	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.50	113.19	16.40	0.07	0.43	3.27	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
34.75	114.01	16.90	0.10	0.59	3.29	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
35.00	114.83	16.98	0.09	0.55	3.31	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
35.25	115.65	17.10	0.09	0.53	3.34	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
35.50	116.47	17.36	0.10	0.56	3.36	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
35.75	117.29	17.62	0.10	0.59	3.38	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
36.00	118.11	17.68	0.11	0.62	3.40	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
36.25	118.93	17.88	0.10	0.56	3.42	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.50	119.75	18.10	0.11	0.59	3.44	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.75	120.57	18.36	0.11	0.63	3.46	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
37.00	121.39	18.48	0.11	0.59	3.49	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
37.25	122.21	18.06	0.11	0.64	3.51	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
37.50	123.03	18.48	0.13	0.72	3.53	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
37.75	123.85	19.32	0.14	0.74	3.55	sandy silt to clayey silt	UNDFND	UNDFD	7	1.2
38.00	124.67	19.90	0.16	0.80	3.57	sandy silt to clayey silt	UNDFND	UNDFD	8	1.2
38.25	125.49	20.42	0.16	0.77	3.59	sandy silt to clayey silt	UNDFND	UNDFD	8	1.3
38.50	126.31	22.60	0.24	1.05	3.62	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5
38.75	127.13	29.88	0.63	2.11	3.64	sandy silt to clayey silt	UNDFND	UNDFD	11	2.2
39.00	127.95	28.24	0.60	2.13	3.66	sandy silt to clayey silt	UNDFND	UNDFD	11	2.0
39.25	128.77	23.08	0.38	1.67	3.68	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5
39.50	129.59	23.34	0.30	1.28	3.70	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5
39.75	130.41	28.14	0.60	2.12	3.72	sandy silt to clayey silt	UNDFND	UNDFD	11	2.0
40.00	131.23	24.10	0.27	1.13	3.74	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
40.25	132.05	24.64	0.47	1.90	3.77	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7
40.50	132.87	23.06	0.32	1.37	3.79	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-2-6-A Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	10.42	0.05	0.50	2.04	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.50	67.26	10.64	0.06	0.57	2.06	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.75	68.08	10.64	0.08	0.77	2.09	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.00	68.90	10.64	0.08	0.77	2.11	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.25	69.72	10.96	0.07	0.59	2.13	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.50	70.54	11.06	0.07	0.67	2.15	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
21.75	71.36	10.94	0.05	0.44	2.17	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.00	72.18	10.48	0.03	0.32	2.19	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.25	73.00	10.56	0.05	0.43	2.21	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.50	73.82	10.68	0.05	0.49	2.24	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.75	74.64	11.10	0.05	0.49	2.26	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.00	75.46	11.10	0.05	0.46	2.28	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.25	76.28	11.00	0.05	0.49	2.30	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.50	77.10	11.16	0.06	0.55	2.32	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.75	77.92	11.54	0.07	0.57	2.34	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
24.00	78.74	11.60	0.05	0.41	2.37	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
24.25	79.56	11.52	0.06	0.53	2.39	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
24.50	80.38	11.60	0.06	0.52	2.41	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
24.75	81.20	11.64	0.05	0.45	2.43	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
25.00	82.02	12.26	0.07	0.57	2.45	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
25.25	82.84	12.08	0.10	0.86	2.47	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
25.50	83.66	35.42	0.61	1.72	2.49	sandy silt to clayey silt	UNDFND	UNDFD	14	3.0
25.75	84.48	33.50	0.72	2.14	2.52	sandy silt to clayey silt	UNDFND	UNDFD	13	2.8
26.00	85.30	24.62	0.33	1.33	2.54	sandy silt to clayey silt	UNDFND	UNDFD	9	1.9
26.25	86.12	17.60	0.22	1.24	2.56	sandy silt to clayey silt	UNDFND	UNDFD	7	1.2
26.50	86.94	15.02	0.12	0.81	2.58	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
26.75	87.76	13.06	0.08	0.61	2.60	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
27.00	88.58	12.28	0.07	0.60	2.62	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
27.25	89.40	13.34	0.14	1.03	2.65	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
27.50	90.22	46.32	0.58	1.26	2.67	silty sand to sandy silt	<40	30-32	15	UNDEFINED
27.75	91.04	264.48	1.74	0.66	2.69	sand	80-90	40-42	>50	UNDEFINED
28.00	91.86	336.26	2.24	0.66	2.71	gravelly sand to sand	80-90	40-42	>50	UNDEFINED
28.25	92.68	298.46	1.98	0.66	2.73	sand	80-90	40-42	>50	UNDEFINED
28.50	93.50	247.82	1.46	0.59	2.75	sand	70-80	40-42	47	UNDEFINED
28.75	94.32	217.28	1.31	0.60	2.77	sand	70-80	38-40	42	UNDEFINED
29.00	95.14	212.64	1.34	0.63	2.80	sand	70-80	38-40	41	UNDEFINED
29.25	95.96	221.88	1.32	0.60	2.82	sand	70-80	38-40	43	UNDEFINED
29.50	96.78	220.50	1.59	0.72	2.84	sand	70-80	38-40	42	UNDEFINED
29.75	97.60	294.12	2.18	0.74	2.86	sand	80-90	40-42	>50	UNDEFINED
30.00	98.43	304.94	2.74	0.90	2.88	sand	80-90	40-42	>50	UNDEFINED
30.25	99.25	280.18	2.60	0.93	2.90	sand	80-90	40-42	>50	UNDEFINED
30.50	100.07	259.92	1.88	0.72	2.93	sand	70-80	40-42	50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-2-7 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	160.68	1.72	1.07	1.14	sand to silty sand	70-80	42-44	38	UNDEFINED
10.00	32.81	161.86	1.66	1.02	1.16	sand to silty sand	70-80	42-44	39	UNDEFINED
10.25	33.63	124.74	1.56	1.25	1.18	sand to silty sand	70-80	40-42	30	UNDEFINED
10.50	34.45	14.14	0.37	2.59	1.20	clayey silt to silty clay	UNDFND	UNDFD	7	1.2
10.75	35.27	9.00	0.17	1.90	1.22	clayey silt to silty clay	UNDFND	UNDFD	4	.6
11.00	36.09	6.20	0.15	2.40	1.24	silty clay to clay	UNDFND	UNDFD	4	.4
11.25	36.91	5.30	0.15	2.79	1.27	clay	UNDFND	UNDFD	5	.3
11.50	37.73	4.96	0.13	2.63	1.29	clay	UNDFND	UNDFD	5	.2
11.75	38.55	5.26	0.14	2.57	1.31	clay	UNDFND	UNDFD	5	.3
12.00	39.37	5.14	0.13	2.45	1.33	clay	UNDFND	UNDFD	5	.2
12.25	40.19	4.92	0.13	2.62	1.35	clay	UNDFND	UNDFD	5	.2
12.50	41.01	5.02	0.13	2.50	1.37	clay	UNDFND	UNDFD	5	.2
12.75	41.83	5.26	0.13	2.44	1.40	clay	UNDFND	UNDFD	5	.2
13.00	42.65	5.76	0.14	2.37	1.42	silty clay to clay	UNDFND	UNDFD	4	.3
13.25	43.47	5.24	0.13	2.43	1.44	clay	UNDFND	UNDFD	5	.2
13.50	44.29	5.52	0.12	2.12	1.46	silty clay to clay	UNDFND	UNDFD	4	.2
13.75	45.11	6.58	0.14	2.07	1.48	silty clay to clay	UNDFND	UNDFD	4	.4
14.00	45.93	6.44	0.12	1.86	1.50	silty clay to clay	UNDFND	UNDFD	4	.3
14.25	46.75	6.22	0.12	2.00	1.52	silty clay to clay	UNDFND	UNDFD	4	.3
14.50	47.57	6.14	0.12	2.01	1.55	silty clay to clay	UNDFND	UNDFD	4	.3
14.75	48.39	6.40	0.12	1.92	1.57	silty clay to clay	UNDFND	UNDFD	4	.3
15.00	49.21	6.64	0.14	2.14	1.59	silty clay to clay	UNDFND	UNDFD	4	.3
15.25	50.03	6.72	0.14	2.15	1.61	silty clay to clay	UNDFND	UNDFD	4	.3
15.50	50.85	6.90	0.14	2.06	1.63	silty clay to clay	UNDFND	UNDFD	4	.4
15.75	51.67	7.14	0.14	1.97	1.65	silty clay to clay	UNDFND	UNDFD	5	.4
16.00	52.49	6.78	0.13	1.89	1.68	silty clay to clay	UNDFND	UNDFD	4	.3
16.25	53.31	7.14	0.10	1.44	1.70	clayey silt to silty clay	UNDFND	UNDFD	3	.4
16.50	54.13	9.10	0.09	1.02	1.72	clayey silt to silty clay	UNDFND	UNDFD	4	.6
16.75	54.95	7.50	0.10	1.33	1.74	clayey silt to silty clay	UNDFND	UNDFD	4	.4
17.00	55.77	7.30	0.10	1.42	1.76	clayey silt to silty clay	UNDFND	UNDFD	3	.4
17.25	56.59	7.18	0.13	1.79	1.78	silty clay to clay	UNDFND	UNDFD	5	.3
17.50	57.41	7.78	0.16	2.02	1.80	silty clay to clay	UNDFND	UNDFD	5	.4
17.75	58.23	7.90	0.16	2.08	1.83	silty clay to clay	UNDFND	UNDFD	5	.4
18.00	59.06	8.08	0.17	2.11	1.85	silty clay to clay	UNDFND	UNDFD	5	.4
18.25	59.88	9.92	0.13	1.34	1.87	clayey silt to silty clay	UNDFND	UNDFD	5	.6
18.50	60.70	8.80	0.11	1.28	1.89	clayey silt to silty clay	UNDFND	UNDFD	4	.5
18.75	61.52	14.52	0.23	1.60	1.91	clayey silt to silty clay	UNDFND	UNDFD	7	1.1
19.00	62.34	52.94	0.52	0.99	1.93	silty sand to sandy silt	<40	32-34	17	UNDEFINED
19.25	63.16	17.24	0.26	1.48	1.96	sandy silt to clayey silt	UNDFND	UNDFD	7	1.3
19.50	63.98	8.98	0.13	1.43	1.98	clayey silt to silty clay	UNDFND	UNDFD	4	.5
19.75	64.80	9.26	0.14	1.48	2.00	clayey silt to silty clay	UNDFND	UNDFD	4	.5
20.00	65.62	8.60	0.12	1.34	2.02	clayey silt to silty clay	UNDFND	UNDFD	4	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-2-7
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/29/94 3:45
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	37.44	0.90	2.40	0.02	sandy silt to clayey silt	UNDFND	UNDFD	14	3.7
0.50	1.64	26.00	1.42	5.45	0.07	clay	UNDFND	UNDFD	25	2.5
0.75	2.46	6.04	0.54	8.91	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	10.52	0.72	6.85	0.17	clay	UNDFND	UNDFD	10	1.0
1.25	4.10	2.12	0.19	8.95	0.21	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.50	4.92	3.20	0.19	6.07	0.26	clay	UNDFND	UNDFD	3	.2
1.75	5.74	3.54	0.16	4.65	0.31	clay	UNDFND	UNDFD	3	.3
2.00	6.56	13.68	0.76	5.57	0.35	clay	UNDFND	UNDFD	13	1.3
2.25	7.38	9.04	0.63	6.96	0.40	clay	UNDFND	UNDFD	9	.8
2.50	8.20	23.28	0.89	3.84	0.45	silty clay to clay	UNDFND	UNDFD	15	2.2
2.75	9.02	58.28	2.00	3.43	0.50	clayey silt to silty clay	UNDFND	UNDFD	28	5.7
3.00	9.84	82.26	2.32	2.82	0.54	sandy silt to clayey silt	UNDFND	UNDFD	32	8.1
3.25	10.66	36.80	0.41	1.12	0.58	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.50	11.48	114.68	0.91	0.79	0.60	sand to silty sand	70-80	42-44	27	UNDEFINED
3.75	12.30	46.02	0.63	1.38	0.62	silty sand to sandy silt	50-60	38-40	15	UNDEFINED
4.00	13.12	3.16	0.11	3.49	0.64	clay	UNDFND	UNDFD	3	.2
4.25	13.94	2.30	0.09	4.06	0.66	clay	UNDFND	UNDFD	2	.1
4.50	14.76	5.28	0.15	2.89	0.68	clay	UNDFND	UNDFD	5	.4
4.75	15.58	2.16	0.10	4.70	0.71	clay	UNDFND	UNDFD	2	.1
5.00	16.40	2.76	0.10	3.55	0.73	clay	UNDFND	UNDFD	3	.1
5.25	17.22	40.06	0.39	0.98	0.75	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
5.50	18.04	124.92	1.18	0.94	0.77	sand to silty sand	70-80	42-44	30	UNDEFINED
5.75	18.86	46.20	0.89	1.92	0.79	sandy silt to clayey silt	UNDFND	UNDFD	18	4.5
6.00	19.69	32.28	0.42	1.30	0.81	sandy silt to clayey silt	UNDFND	UNDFD	12	3.1
6.25	20.51	61.90	0.67	1.07	0.84	silty sand to sandy silt	50-60	38-40	20	UNDEFINED
6.50	21.33	44.96	0.58	1.28	0.86	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
6.75	22.15	26.92	0.52	1.93	0.88	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
7.00	22.97	6.56	0.30	4.61	0.90	clay	UNDFND	UNDFD	6	.5
7.25	23.79	29.62	0.44	1.49	0.92	sandy silt to clayey silt	UNDFND	UNDFD	11	2.8
7.50	24.61	54.32	0.63	1.15	0.94	silty sand to sandy silt	50-60	38-40	17	UNDEFINED
7.75	25.43	59.94	0.78	1.30	0.96	silty sand to sandy silt	50-60	38-40	19	UNDEFINED
8.00	26.25	75.62	0.98	1.30	0.99	silty sand to sandy silt	50-60	38-40	24	UNDEFINED
8.25	27.07	110.60	1.12	1.01	1.01	sand to silty sand	60-70	40-42	26	UNDEFINED
8.50	27.89	123.00	1.23	1.00	1.03	sand to silty sand	70-80	40-42	29	UNDEFINED
8.75	28.71	124.60	1.24	1.00	1.05	sand to silty sand	70-80	40-42	30	UNDEFINED
9.00	29.53	130.66	1.22	0.93	1.07	sand to silty sand	70-80	40-42	31	UNDEFINED
9.25	30.35	167.18	1.81	1.08	1.09	sand to silty sand	80-90	42-44	40	UNDEFINED
9.50	31.17	153.36	1.65	1.07	1.12	sand to silty sand	70-80	42-44	37	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-RA-2
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/30/94 1:50
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	15.72	0.03	0.17	0.02	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
0.50	1.64	113.22	0.62	0.55	0.07	sand	>90	>48	22	UNDEFINED
0.75	2.46	174.14	0.99	0.57	0.12	sand	>90	>48	33	UNDEFINED
1.00	3.28	131.32	0.60	0.46	0.17	sand	>90	>48	25	UNDEFINED
1.25	4.10	107.92	0.40	0.37	0.21	sand	>90	46-48	21	UNDEFINED
1.50	4.92	81.78	0.27	0.33	0.26	sand to silty sand	80-90	44-46	20	UNDEFINED
1.75	5.74	73.34	0.24	0.33	0.31	sand to silty sand	70-80	44-46	18	UNDEFINED
2.00	6.56	60.32	0.21	0.35	0.35	sand to silty sand	60-70	42-44	14	UNDEFINED
2.25	7.38	62.44	0.22	0.35	0.40	sand to silty sand	60-70	42-44	15	UNDEFINED
2.50	8.20	63.52	0.24	0.38	0.45	sand to silty sand	60-70	42-44	15	UNDEFINED
2.75	9.02	60.76	0.30	0.49	0.50	sand to silty sand	60-70	40-42	15	UNDEFINED
3.00	9.84	41.74	0.31	0.74	0.54	silty sand to sandy silt	50-60	38-40	13	UNDEFINED
3.25	10.66	44.32	0.26	0.58	0.58	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
3.50	11.48	33.64	0.19	0.55	0.60	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.75	12.30	22.44	0.17	0.75	0.62	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
4.00	13.12	16.40	0.09	0.54	0.64	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
4.25	13.94	23.56	0.14	0.60	0.66	silty sand to sandy silt	<40	34-36	8	UNDEFINED
4.50	14.76	45.28	0.25	0.55	0.68	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.75	15.58	49.60	0.28	0.56	0.71	sand to silty sand	50-60	38-40	12	UNDEFINED
5.00	16.40	50.12	0.26	0.51	0.73	sand to silty sand	50-60	38-40	12	UNDEFINED
5.25	17.22	60.40	0.32	0.53	0.75	sand to silty sand	50-60	40-42	14	UNDEFINED
5.50	18.04	75.76	0.41	0.54	0.77	sand to silty sand	60-70	40-42	18	UNDEFINED
5.75	18.86	56.00	0.33	0.60	0.79	sand to silty sand	50-60	38-40	13	UNDEFINED
6.00	19.69	24.98	0.15	0.60	0.81	silty sand to sandy silt	<40	34-36	8	UNDEFINED
6.25	20.51	8.84	0.06	0.64	0.84	clayey silt to silty clay	UNDFND	UNDFD	4	.7
6.50	21.33	8.66	0.07	0.80	0.86	clayey silt to silty clay	UNDFND	UNDFD	4	.7
6.75	22.15	11.46	0.01	0.12	0.88	sandy silt to clayey silt	UNDFND	UNDFD	4	1.0
7.00	22.97	6.44	0.01	0.23	0.90	sensitive fine grained	UNDFND	UNDFD	3	.5
7.25	23.79	11.30	0.01	0.06	0.92	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
7.50	24.61	12.50	0.03	0.25	0.94	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
7.75	25.43	9.14	0.04	0.45	0.96	sensitive fine grained	UNDFND	UNDFD	4	.7
8.00	26.25	21.62	0.10	0.45	0.99	silty sand to sandy silt	<40	32-34	7	UNDEFINED
8.25	27.07	21.48	0.04	0.18	1.01	silty sand to sandy silt	<40	32-34	7	UNDEFINED
8.50	27.89	11.86	0.02	0.20	1.03	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
8.75	28.71	8.46	0.01	0.07	1.05	sensitive fine grained	UNDFND	UNDFD	4	.6
9.00	29.53	6.66	0.01	0.09	1.07	sensitive fine grained	UNDFND	UNDFD	3	.4
9.25	30.35	7.88	0.00	0.05	1.09	sensitive fine grained	UNDFND	UNDFD	4	.6
9.50	31.17	9.34	0.01	0.14	1.12	sensitive fine grained	UNDFND	UNDFD	4	.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-2-7 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	7.78	0.12	1.58	2.04	clayey silt to silty clay	UNDFND	UNDFD	4	.3
20.50	67.26	8.70	0.14	1.65	2.06	clayey silt to silty clay	UNDFND	UNDFD	4	.4
20.75	68.08	8.92	0.16	1.75	2.09	clayey silt to silty clay	UNDFND	UNDFD	4	.5
21.00	68.90	8.84	0.17	1.89	2.11	clayey silt to silty clay	UNDFND	UNDFD	4	.4
21.25	69.72	8.78	0.17	1.94	2.13	clayey silt to silty clay	UNDFND	UNDFD	4	.4
21.50	70.54	12.94	0.24	1.83	2.15	clayey silt to silty clay	UNDFND	UNDFD	6	.8
21.75	71.36	46.64	0.91	1.96	2.17	sandy silt to clayey silt	UNDFND	UNDFD	18	4.2
22.00	72.18	27.02	0.36	1.33	2.19	sandy silt to clayey silt	UNDFND	UNDFD	10	2.2
22.25	73.00	27.00	0.61	2.27	2.21	sandy silt to clayey silt	UNDFND	UNDFD	10	2.2
22.50	73.82	34.32	0.43	1.24	2.24	silty sand to sandy silt	<40	30-32	11	UNDEFINED
22.75	74.64	123.14	1.11	0.90	2.26	sand to silty sand	60-70	38-40	29	UNDEFINED
23.00	75.46	141.20	1.05	0.75	2.28	sand	60-70	38-40	27	UNDEFINED
23.25	76.28	148.92	0.98	0.66	2.30	sand	60-70	38-40	29	UNDEFINED
23.50	77.10	161.36	1.37	0.85	2.32	sand	60-70	38-40	31	UNDEFINED
23.75	77.92	175.92	1.31	0.74	2.34	sand	70-80	38-40	34	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	85.32	1.18	1.38	2.04	silty sand to sandy silt	50-60	36-38	27	UNDEFINED
20.50	67.26	147.58	0.80	0.54	2.06	sand	60-70	38-40	28	UNDEFINED
20.75	68.08	243.74	3.41	1.40	2.09	sand to silty sand	80-90	40-42	>50	UNDEFINED
21.00	68.90	309.50	4.05	1.31	2.11	sand	80-90	42-44	>50	UNDEFINED
21.25	69.72	292.30	3.91	1.34	2.13	sand	80-90	42-44	>50	UNDEFINED
21.50	70.54	265.00	3.18	1.20	2.15	sand	80-90	40-42	>50	UNDEFINED
21.75	71.36	128.20	2.80	2.19	2.17	silty sand to sandy silt	60-70	38-40	41	UNDEFINED
22.00	72.18	104.54	2.81	2.69	2.19	sandy silt to clayey silt	UNDFND	UNDFD	40	10.0
22.25	73.00	138.70	3.65	2.63	2.21	silty sand to sandy silt	60-70	38-40	44	UNDEFINED
22.50	73.82	243.76	4.28	1.75	2.24	sand to silty sand	80-90	40-42	>50	UNDEFINED
22.75	74.64	274.04	4.29	1.57	2.26	sand to silty sand	80-90	40-42	>50	UNDEFINED
23.00	75.46	197.94	3.84	1.94	2.28	sand to silty sand	70-80	40-42	47	UNDEFINED
23.25	76.28	143.24	3.36	2.34	2.30	silty sand to sandy silt	60-70	38-40	46	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-RA-2 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	64.84	0.35	0.54	1.14	sand to silty sand	50-60	38-40	16	UNDEFINED
10.00	32.81	100.70	0.51	0.51	1.16	sand to silty sand	60-70	40-42	24	UNDEFINED
10.25	33.63	34.72	0.14	0.42	1.18	silty sand to sandy silt	<40	34-36	11	UNDEFINED
10.50	34.45	15.72	0.11	0.70	1.20	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
10.75	35.27	10.48	0.03	0.31	1.22	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
11.00	36.09	9.18	0.02	0.17	1.24	sensitive fine grained	UNDFND	UNDFD	4	.7
11.25	36.91	10.30	0.01	0.12	1.27	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
11.50	37.73	10.20	0.03	0.31	1.29	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
11.75	38.55	8.50	0.02	0.19	1.31	sensitive fine grained	UNDFND	UNDFD	4	.6
12.00	39.37	11.30	0.07	0.64	1.33	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
12.25	40.19	49.38	0.37	0.75	1.35	silty sand to sandy silt	40-50	36-38	16	UNDEFINED
12.50	41.01	79.24	0.35	0.44	1.37	sand to silty sand	50-60	38-40	19	UNDEFINED
12.75	41.83	62.60	0.13	0.21	1.40	sand to silty sand	40-50	36-38	15	UNDEFINED
13.00	42.65	48.92	0.18	0.37	1.42	sand to silty sand	40-50	34-36	12	UNDEFINED
13.25	43.47	55.02	0.28	0.50	1.44	sand to silty sand	40-50	36-38	13	UNDEFINED
13.50	44.29	48.78	0.16	0.32	1.46	sand to silty sand	40-50	34-36	12	UNDEFINED
13.75	45.11	97.88	0.50	0.51	1.48	sand to silty sand	60-70	38-40	23	UNDEFINED
14.00	45.93	222.84	1.40	0.63	1.50	sand	80-90	42-44	43	UNDEFINED
14.25	46.75	203.22	1.20	0.59	1.52	sand	80-90	42-44	39	UNDEFINED
14.50	47.57	98.18	1.85	1.88	1.55	silty sand to sandy silt	50-60	38-40	31	UNDEFINED
14.75	48.39	121.16	2.44	2.02	1.57	silty sand to sandy silt	60-70	38-40	39	UNDEFINED
15.00	49.21	115.50	2.39	2.07	1.59	silty sand to sandy silt	60-70	38-40	37	UNDEFINED
15.25	50.03	178.06	3.79	2.13	1.61	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
15.50	50.85	293.72	3.08	1.05	1.63	sand	>90	42-44	>50	UNDEFINED
15.75	51.67	283.58	2.53	0.89	1.65	sand	80-90	42-44	>50	UNDEFINED
16.00	52.49	301.28	3.02	1.00	1.68	sand	>90	42-44	>50	UNDEFINED
16.25	53.31	352.22	3.93	1.12	1.70	sand	>90	44-46	>50	UNDEFINED
16.50	54.13	315.32	2.74	0.87	1.72	sand	>90	42-44	>50	UNDEFINED
16.75	54.95	123.86	1.07	0.87	1.74	sand to silty sand	60-70	38-40	30	UNDEFINED
17.00	55.77	217.50	2.60	1.20	1.76	sand	80-90	40-42	42	UNDEFINED
17.25	56.59	203.16	2.24	1.10	1.78	sand	70-80	40-42	39	UNDEFINED
17.50	57.41	99.58	3.68	3.70	1.80	sandy silt to clayey silt	UNDFND	UNDFD	38	9.6
17.75	58.23	68.72	1.83	2.67	1.83	sandy silt to clayey silt	UNDFND	UNDFD	26	6.5
18.00	59.06	18.86	0.35	1.87	1.85	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
18.25	59.88	15.88	0.27	1.71	1.87	clayey silt to silty clay	UNDFND	UNDFD	8	1.2
18.50	60.70	13.82	0.22	1.62	1.89	clayey silt to silty clay	UNDFND	UNDFD	7	1.0
18.75	61.52	23.18	0.52	2.25	1.91	sandy silt to clayey silt	UNDFND	UNDFD	9	1.9
19.00	62.34	29.98	0.84	2.79	1.93	clayey silt to silty clay	UNDFND	UNDFD	14	2.6
19.25	63.16	35.40	0.38	1.07	1.96	silty sand to sandy silt	<40	30-32	11	UNDEFINED
19.50	63.98	120.10	1.47	1.22	1.98	sand to silty sand	60-70	38-40	29	UNDEFINED
19.75	64.80	78.40	0.86	1.10	2.00	sand to silty sand	40-50	36-38	19	UNDEFINED
20.00	65.62	61.28	1.44	2.35	2.02	sandy silt to clayey silt	UNDFND	UNDFD	23	5.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPTRA-3 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	15.68	0.10	0.65	1.14	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
10.00	32.81	12.62	0.12	0.98	1.16	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
10.25	33.63	8.28	0.08	0.99	1.18	clayey silt to silty clay	UNDFND	UNDFD	4	.6
10.50	34.45	7.24	0.09	1.21	1.20	sensitive fine grained	UNDFND	UNDFD	3	.5
10.75	35.27	7.34	0.08	1.10	1.22	sensitive fine grained	UNDFND	UNDFD	4	.5
11.00	36.09	44.44	0.32	0.71	1.24	silty sand to sandy silt	40-50	34-36	14	UNDEFINED
11.25	36.91	125.70	0.86	0.68	1.27	sand	60-70	40-42	24	UNDEFINED
11.50	37.73	30.78	0.33	1.07	1.29	silty sand to sandy silt	<40	32-34	10	UNDEFINED
11.75	38.55	19.56	0.16	0.82	1.31	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
12.00	39.37	18.86	0.15	0.79	1.33	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
12.25	40.19	13.14	0.16	1.23	1.35	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
12.50	41.01	23.64	0.28	1.18	1.37	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
12.75	41.83	17.48	0.29	1.65	1.40	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
13.00	42.65	13.42	0.26	1.93	1.42	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
13.25	43.47	7.96	0.09	1.18	1.44	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.50	44.29	9.50	0.14	1.49	1.46	clayey silt to silty clay	UNDFND	UNDFD	5	.6
13.75	45.11	14.86	0.29	1.97	1.48	clayey silt to silty clay	UNDFND	UNDFD	7	1.2
14.00	45.93	113.72	0.86	0.76	1.50	sand to silty sand	60-70	38-40	27	UNDEFINED
14.25	46.75	106.56	0.54	0.51	1.52	sand	60-70	38-40	20	UNDEFINED
14.50	47.57	80.42	0.27	0.34	1.55	sand to silty sand	50-60	36-38	19	UNDEFINED
14.75	48.39	64.26	0.23	0.36	1.57	sand to silty sand	40-50	36-38	15	UNDEFINED
15.00	49.21	58.62	0.22	0.37	1.59	sand to silty sand	40-50	36-38	14	UNDEFINED
15.25	50.03	35.62	0.32	0.89	1.61	silty sand to sandy silt	<40	32-34	11	UNDEFINED
15.50	50.85	11.50	0.20	1.72	1.63	clayey silt to silty clay	UNDFND	UNDFD	6	.8
15.75	51.67	9.00	0.13	1.39	1.65	clayey silt to silty clay	UNDFND	UNDFD	4	.6
16.00	52.49	9.28	0.12	1.32	1.68	clayey silt to silty clay	UNDFND	UNDFD	4	.6
16.25	53.31	41.14	0.40	0.98	1.70	silty sand to sandy silt	<40	32-34	13	UNDEFINED
16.50	54.13	217.40	1.85	0.85	1.72	sand	80-90	42-44	42	UNDEFINED
16.75	54.95	103.68	1.05	1.01	1.74	sand to silty sand	50-60	38-40	25	UNDEFINED
17.00	55.77	118.84	0.74	0.62	1.76	sand	60-70	38-40	23	UNDEFINED
17.25	56.59	81.84	0.78	0.96	1.78	sand to silty sand	50-60	36-38	20	UNDEFINED
17.50	57.41	39.70	0.56	1.41	1.80	silty sand to sandy silt	<40	32-34	13	UNDEFINED
17.75	58.23	10.10	0.10	0.98	1.83	clayey silt to silty clay	UNDFND	UNDFD	5	.6
18.00	59.06	9.46	0.12	1.28	1.85	clayey silt to silty clay	UNDFND	UNDFD	5	.6
18.25	59.88	8.76	0.08	0.92	1.87	clayey silt to silty clay	UNDFND	UNDFD	4	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPTRA-3
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/27/94 12:14
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	103.82	0.60	0.58	0.02	sand to silty sand	>90	>48	25	UNDEFINED
0.50	1.64	289.70	2.02	0.70	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	202.42	1.88	0.93	0.12	sand	>90	>48	39	UNDEFINED
1.00	3.28	173.64	1.08	0.62	0.17	sand	>90	>48	33	UNDEFINED
1.25	4.10	114.06	1.68	1.47	0.21	sand to silty sand	>90	>48	27	UNDEFINED
1.50	4.92	124.22	1.01	0.82	0.26	sand to silty sand	>90	46-48	30	UNDEFINED
1.75	5.74	126.86	0.70	0.56	0.31	sand	>90	46-48	24	UNDEFINED
2.00	6.56	44.46	0.37	0.82	0.35	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.25	7.38	15.72	0.24	1.55	0.40	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
2.50	8.20	58.08	0.53	0.91	0.45	silty sand to sandy silt	60-70	42-44	19	UNDEFINED
2.75	9.02	56.68	0.52	0.92	0.50	silty sand to sandy silt	60-70	40-42	18	UNDEFINED
3.00	9.84	51.90	0.32	0.62	0.54	sand to silty sand	50-60	40-42	12	UNDEFINED
3.25	10.66	29.16	0.28	0.95	0.58	silty sand to sandy silt	<40	36-38	9	UNDEFINED
3.50	11.48	17.94	0.28	1.57	0.60	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
3.75	12.30	26.24	0.29	1.11	0.62	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
4.00	13.12	37.82	0.29	0.76	0.64	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.25	13.94	32.22	0.28	0.88	0.66	silty sand to sandy silt	40-50	36-38	10	UNDEFINED
4.50	14.76	45.12	0.33	0.74	0.68	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.75	15.58	15.06	0.27	1.76	0.71	clayey silt to silty clay	UNDFND	UNDFD	7	1.4
5.00	16.40	36.88	0.22	0.59	0.73	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
5.25	17.22	46.04	0.31	0.68	0.75	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
5.50	18.04	61.20	0.42	0.68	0.77	sand to silty sand	50-60	40-42	15	UNDEFINED
5.75	18.86	66.02	0.44	0.67	0.79	sand to silty sand	50-60	40-42	16	UNDEFINED
6.00	19.69	66.86	0.46	0.68	0.81	sand to silty sand	50-60	40-42	16	UNDEFINED
6.25	20.51	66.62	0.37	0.56	0.84	sand to silty sand	50-60	40-42	16	UNDEFINED
6.50	21.33	34.06	0.36	1.06	0.86	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.75	22.15	9.34	0.09	0.94	0.88	clayey silt to silty clay	UNDFND	UNDFD	4	.8
7.00	22.97	33.72	0.23	0.67	0.90	silty sand to sandy silt	<40	36-38	11	UNDEFINED
7.25	23.79	31.74	0.22	0.71	0.92	silty sand to sandy silt	<40	34-36	10	UNDEFINED
7.50	24.61	11.76	0.13	1.07	0.94	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
7.75	25.43	7.02	0.06	0.79	0.96	sensitive fine grained	UNDFND	UNDFD	3	.5
8.00	26.25	6.82	0.07	1.00	0.99	sensitive fine grained	UNDFND	UNDFD	3	.5
8.25	27.07	9.62	0.06	0.62	1.01	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
8.50	27.89	13.50	0.14	1.01	1.03	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
8.75	28.71	89.32	0.52	0.58	1.05	sand to silty sand	60-70	40-42	21	UNDEFINED
9.00	29.53	85.22	0.59	0.69	1.07	sand to silty sand	60-70	40-42	20	UNDEFINED
9.25	30.35	40.92	0.23	0.56	1.09	silty sand to sandy silt	<40	36-38	13	UNDEFINED
9.50	31.17	13.82	0.12	0.88	1.12	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-RA-4 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	9.24	0.02	0.23	1.14	sensitive fine grained	UNDFND	UNDFD	4	.7
10.00	32.81	19.08	0.12	0.63	1.16	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
10.25	33.63	9.34	0.07	0.73	1.18	clayey silt to silty clay	UNDFND	UNDFD	4	.7
10.50	34.45	8.12	0.02	0.29	1.20	sensitive fine grained	UNDFND	UNDFD	4	.6
10.75	35.27	6.50	0.01	0.12	1.22	sensitive fine grained	UNDFND	UNDFD	3	.4
11.00	36.09	7.26	0.02	0.22	1.24	sensitive fine grained	UNDFND	UNDFD	3	.5
11.25	36.91	11.64	0.05	0.46	1.27	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
11.50	37.73	13.48	0.03	0.20	1.29	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
11.75	38.55	26.88	0.14	0.53	1.31	silty sand to sandy silt	<40	30-32	9	UNDEFINED
12.00	39.37	54.16	0.36	0.67	1.33	sand to silty sand	40-50	36-38	13	UNDEFINED
12.25	40.19	45.28	0.24	0.53	1.35	silty sand to sandy silt	<40	34-36	14	UNDEFINED
12.50	41.01	10.98	0.02	0.14	1.37	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
12.75	41.83	15.24	0.13	0.88	1.40	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
13.00	42.65	20.64	0.31	1.52	1.42	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
13.25	43.47	52.20	0.45	0.86	1.44	silty sand to sandy silt	40-50	36-38	17	UNDEFINED
13.50	44.29	16.12	0.25	1.55	1.46	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
13.75	45.11	22.02	0.25	1.14	1.48	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
14.00	45.93	75.78	0.85	1.12	1.50	sand to silty sand	50-60	36-38	18	UNDEFINED
14.25	46.75	11.48	0.06	0.49	1.52	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
14.50	47.57	12.34	0.02	0.14	1.55	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
14.75	48.39	10.12	0.02	0.19	1.57	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
15.00	49.21	14.78	0.15	1.00	1.59	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
15.25	50.03	20.46	0.13	0.63	1.61	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
15.50	50.85	26.18	0.45	1.72	1.63	sandy silt to clayey silt	UNDFND	UNDFD	10	2.3
15.75	51.67	29.08	0.57	1.97	1.65	sandy silt to clayey silt	UNDFND	UNDFD	11	2.6
16.00	52.49	42.66	0.66	1.55	1.68	silty sand to sandy silt	<40	32-34	14	UNDEFINED
16.25	53.31	54.38	0.73	1.33	1.70	silty sand to sandy silt	40-50	34-36	17	UNDEFINED
16.50	54.13	48.34	0.79	1.64	1.72	silty sand to sandy silt	<40	34-36	15	UNDEFINED
16.75	54.95	53.56	2.13	3.98	1.74	clayey silt to silty clay	UNDFND	UNDFD	26	5.0
17.00	55.77	29.40	0.62	2.10	1.76	sandy silt to clayey silt	UNDFND	UNDFD	11	2.6
17.25	56.59	25.12	0.26	1.04	1.78	sandy silt to clayey silt	UNDFND	UNDFD	10	2.1
17.50	57.41	26.62	0.32	1.18	1.80	sandy silt to clayey silt	UNDFND	UNDFD	10	2.3
17.75	58.23	18.48	0.04	0.20	1.83	silty sand to sandy silt	<40	<30	6	UNDEFINED
18.00	59.06	16.38	0.01	0.09	1.85	silty sand to sandy silt	<40	<30	5	UNDEFINED
18.25	59.88	20.84	0.13	0.62	1.87	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
18.50	60.70	20.02	0.19	0.95	1.89	sandy silt to clayey silt	UNDFND	UNDFD	8	1.6
18.75	61.52	24.10	0.45	1.87	1.91	sandy silt to clayey silt	UNDFND	UNDFD	9	2.0
19.00	62.34	23.98	0.46	1.91	1.93	sandy silt to clayey silt	UNDFND	UNDFD	9	2.0
19.25	63.16	34.90	1.04	2.98	1.96	clayey silt to silty clay	UNDFND	UNDFD	17	3.1
19.50	63.98	86.74	1.12	1.29	1.98	sand to silty sand	50-60	36-38	21	UNDEFINED
19.75	64.80	160.28	2.02	1.26	2.00	sand to silty sand	70-80	40-42	38	UNDEFINED
20.00	65.62	181.70	1.22	0.67	2.02	sand	70-80	40-42	35	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-RA-4
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/30/94 4:00
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	25.28	0.24	0.97	0.02	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
0.50	1.64	220.36	2.91	1.32	0.07	sand	>90	>48	42	UNDEFINED
0.75	2.46	221.62	2.82	1.27	0.12	sand	>90	>48	42	UNDEFINED
1.00	3.28	192.30	2.46	1.28	0.17	sand to silty sand	>90	>48	46	UNDEFINED
1.25	4.10	112.08	1.41	1.26	0.21	sand to silty sand	>90	46-48	27	UNDEFINED
1.50	4.92	209.94	1.82	0.87	0.26	sand	>90	>48	40	UNDEFINED
1.75	5.74	145.72	1.42	0.97	0.31	sand to silty sand	>90	46-48	35	UNDEFINED
2.00	6.56	102.02	0.57	0.56	0.35	sand to silty sand	80-90	44-46	24	UNDEFINED
2.25	7.38	75.74	0.41	0.54	0.40	sand to silty sand	70-80	42-44	18	UNDEFINED
2.50	8.20	54.80	0.40	0.72	0.45	sand to silty sand	60-70	40-42	13	UNDEFINED
2.75	9.02	63.86	0.42	0.66	0.50	sand to silty sand	60-70	42-44	15	UNDEFINED
3.00	9.84	58.84	0.39	0.66	0.54	sand to silty sand	60-70	40-42	14	UNDEFINED
3.25	10.66	26.34	0.34	1.30	0.58	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
3.50	11.48	18.90	0.21	1.11	0.60	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
3.75	12.30	53.76	0.50	0.93	0.62	silty sand to sandy silt	50-60	40-42	17	UNDEFINED
4.00	13.12	55.78	0.34	0.60	0.64	sand to silty sand	50-60	40-42	13	UNDEFINED
4.25	13.94	29.04	0.31	1.07	0.66	silty sand to sandy silt	<40	36-38	9	UNDEFINED
4.50	14.76	18.20	0.17	0.95	0.68	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
4.75	15.58	19.04	0.20	1.04	0.71	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
5.00	16.40	14.00	0.09	0.68	0.73	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
5.25	17.22	4.64	0.02	0.47	0.75	sensitive fine grained	UNDFND	UNDFD	2	.3
5.50	18.04	4.14	0.02	0.42	0.77	sensitive fine grained	UNDFND	UNDFD	2	.3
5.75	18.86	6.14	0.02	0.39	0.79	sensitive fine grained	UNDFND	UNDFD	3	.5
6.00	19.69	6.82	0.02	0.22	0.81	sensitive fine grained	UNDFND	UNDFD	3	.5
6.25	20.51	6.76	0.03	0.37	0.84	sensitive fine grained	UNDFND	UNDFD	3	.5
6.50	21.33	4.74	0.01	0.19	0.86	sensitive fine grained	UNDFND	UNDFD	2	.3
6.75	22.15	8.00	0.06	0.75	0.88	sensitive fine grained	UNDFND	UNDFD	4	.6
7.00	22.97	15.16	0.11	0.71	0.90	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
7.25	23.79	10.62	0.09	0.82	0.92	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
7.50	24.61	30.26	0.10	0.33	0.94	silty sand to sandy silt	<40	34-36	10	UNDEFINED
7.75	25.43	26.22	0.13	0.49	0.96	silty sand to sandy silt	<40	32-34	8	UNDEFINED
8.00	26.25	17.58	0.10	0.57	0.99	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
8.25	27.07	11.70	0.13	1.12	1.01	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
8.50	27.89	9.44	0.04	0.38	1.03	sensitive fine grained	UNDFND	UNDFD	5	.7
8.75	28.71	6.36	0.02	0.35	1.05	sensitive fine grained	UNDFND	UNDFD	3	.4
9.00	29.53	7.04	0.03	0.43	1.07	sensitive fine grained	UNDFND	UNDFD	3	.5
9.25	30.35	25.96	0.27	1.05	1.09	sandy silt to clayey silt	UNDFND	UNDFD	10	2.4
9.50	31.17	12.28	0.06	0.50	1.12	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-RA-5
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/1/94 7:55
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	22.42	0.07	0.30	0.02	silty sand to sandy silt	70-80	>48	7	UNDEFINED
0.50	1.64	298.32	2.47	0.83	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	164.32	1.95	1.18	0.12	sand to silty sand	>90	>48	39	UNDEFINED
1.00	3.28	100.62	0.93	0.92	0.17	sand to silty sand	>90	>48	24	UNDEFINED
1.25	4.10	84.46	0.60	0.71	0.21	sand to silty sand	80-90	46-48	20	UNDEFINED
1.50	4.92	64.82	0.41	0.63	0.26	sand to silty sand	70-80	44-46	16	UNDEFINED
1.75	5.74	49.96	0.36	0.72	0.31	silty sand to sandy silt	60-70	42-44	16	UNDEFINED
2.00	6.56	45.08	0.33	0.74	0.35	silty sand to sandy silt	50-60	42-44	14	UNDEFINED
2.25	7.38	45.26	0.28	0.63	0.40	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.50	8.20	43.64	0.26	0.60	0.45	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.75	9.02	50.66	0.25	0.48	0.50	sand to silty sand	50-60	40-42	12	UNDEFINED
3.00	9.84	56.54	0.26	0.45	0.54	sand to silty sand	50-60	40-42	14	UNDEFINED
3.25	10.66	59.70	0.26	0.43	0.58	sand to silty sand	50-60	40-42	14	UNDEFINED
3.50	11.48	46.90	0.23	0.49	0.60	sand to silty sand	50-60	38-40	11	UNDEFINED
3.75	12.30	47.58	0.20	0.42	0.62	sand to silty sand	50-60	38-40	11	UNDEFINED
4.00	13.12	38.64	0.16	0.42	0.64	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.25	13.94	14.38	0.14	0.96	0.66	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
4.50	14.76	10.54	0.00	0.02	0.68	sensitive fine grained	UNDFND	UNDFD	5	.9
4.75	15.58	6.40	-0.01	-0.22	0.71	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.00	16.40	5.46	-0.02	-0.40	0.73	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.25	17.22	5.34	-0.02	-0.44	0.75	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.50	18.04	5.80	-0.03	-0.47	0.77	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.75	18.86	11.32	-0.01	-0.08	0.79	undefined	UNDFND	UNDFD	UDF	UNDEFINED
6.00	19.69	26.94	0.06	0.23	0.81	silty sand to sandy silt	<40	34-36	9	UNDEFINED
6.25	20.51	13.44	0.05	0.38	0.84	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
6.50	21.33	21.62	0.07	0.31	0.86	silty sand to sandy silt	<40	32-34	7	UNDEFINED
6.75	22.15	28.36	0.09	0.32	0.88	silty sand to sandy silt	<40	34-36	9	UNDEFINED
7.00	22.97	39.56	0.07	0.18	0.90	sand to silty sand	40-50	36-38	9	UNDEFINED
7.25	23.79	57.58	0.35	0.62	0.92	sand to silty sand	50-60	38-40	14	UNDEFINED
7.50	24.61	48.24	0.23	0.47	0.94	sand to silty sand	40-50	36-38	12	UNDEFINED
7.75	25.43	8.68	0.05	0.56	0.96	sensitive fine grained	UNDFND	UNDFD	4	.7
8.00	26.25	7.52	0.01	0.13	0.99	sensitive fine grained	UNDFND	UNDFD	4	.6
8.25	27.07	7.52	0.03	0.40	1.01	sensitive fine grained	UNDFND	UNDFD	4	.5
8.50	27.89	9.62	0.05	0.53	1.03	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
8.75	28.71	28.78	0.11	0.38	1.05	silty sand to sandy silt	<40	32-34	9	UNDEFINED
9.00	29.53	52.74	0.13	0.24	1.07	sand to silty sand	40-50	36-38	13	UNDEFINED
9.25	30.35	62.76	0.20	0.31	1.09	sand to silty sand	50-60	38-40	15	UNDEFINED
9.50	31.17	147.18	0.74	0.50	1.12	sand	70-80	42-44	28	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-RA-4 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-RA-5 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	272.38	1.96	0.72	1.14	sand	>90	44-46	>50	UNDEFINED
10.00	32.81	160.12	1.08	0.68	1.16	sand	70-80	42-44	31	UNDEFINED
10.25	33.63	16.14	0.36	2.25	1.18	clayey silt to silty clay	UNDFND	UNDFD	8	1.4
10.50	34.45	8.98	0.12	1.36	1.20	clayey silt to silty clay	UNDFND	UNDFD	4	.7
10.75	35.27	8.58	0.11	1.34	1.22	clayey silt to silty clay	UNDFND	UNDFD	4	.6
11.00	36.09	31.34	0.37	1.17	1.24	silty sand to sandy silt	<40	32-34	10	UNDEFINED
11.25	36.91	77.84	1.77	2.27	1.27	silty sand to sandy silt	50-60	38-40	25	UNDEFINED
11.50	37.73	55.42	1.54	2.79	1.29	sandy silt to clayey silt	UNDFND	UNDFD	21	5.3
11.75	38.55	48.92	2.16	4.41	1.31	silty clay to clay	UNDFND	UNDFD	31	4.6
12.00	39.37	123.94	5.46	4.41	1.33	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.25	40.19	233.74	8.41	3.60	1.35	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPTRA-6
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/05/00 03:55
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	7.78	0.11	1.46	0.02	clayey silt to silty clay	UNDFND	UNDFD	4	.7
0.50	1.64	7.18	0.13	1.84	0.07	silty clay to clay	UNDFND	UNDFD	5	.7
0.75	2.46	6.56	0.05	0.80	0.12	sensitive fine grained	UNDFND	UNDFD	3	.6
1.00	3.28	16.72	0.48	2.87	0.17	clayey silt to silty clay	UNDFND	UNDFD	8	1.6
1.25	4.10	10.00	0.31	3.14	0.21	silty clay to clay	UNDFND	UNDFD	6	.9
1.50	4.92	1.88	0.02	1.10	0.26	sensitive fine grained	UNDFND	UNDFD	1	.1
1.75	5.74	2.04	0.04	2.13	0.31	sensitive fine grained	UNDFND	UNDFD	1	.1
2.00	6.56	9.38	0.08	0.88	0.35	clayey silt to silty clay	UNDFND	UNDFD	4	.9
2.25	7.38	12.22	0.17	1.38	0.40	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
2.50	8.20	22.86	0.33	1.43	0.45	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
2.75	9.02	15.18	0.12	0.81	0.50	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
3.00	9.84	14.38	0.46	3.21	0.54	silty clay to clay	UNDFND	UNDFD	9	1.3
3.25	10.66	7.18	0.13	1.86	0.58	silty clay to clay	UNDFND	UNDFD	5	.6
3.50	11.48	9.40	0.17	1.81	0.60	clayey silt to silty clay	UNDFND	UNDFD	5	.8
3.75	12.30	26.22	0.20	0.76	0.62	silty sand to sandy silt	<40	36-38	8	UNDEFINED
4.00	13.12	8.16	0.14	1.77	0.64	clayey silt to silty clay	UNDFND	UNDFD	4	.7
4.25	13.94	9.92	0.20	1.99	0.66	clayey silt to silty clay	UNDFND	UNDFD	5	.9
4.50	14.76	4.68	0.08	1.65	0.68	sensitive fine grained	UNDFND	UNDFD	2	.3
4.75	15.58	3.68	0.07	1.77	0.71	sensitive fine grained	UNDFND	UNDFD	2	.2
5.00	16.40	11.46	0.14	1.18	0.73	clayey silt to silty clay	UNDFND	UNDFD	5	1.0
5.25	17.22	12.64	0.14	1.12	0.75	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
5.50	18.04	9.96	0.12	1.17	0.77	clayey silt to silty clay	UNDFND	UNDFD	5	.8
5.75	18.86	31.50	0.21	0.66	0.79	silty sand to sandy silt	<40	36-38	10	UNDEFINED
6.00	19.69	26.50	0.22	0.84	0.81	silty sand to sandy silt	<40	34-36	8	UNDEFINED
6.25	20.51	21.68	0.24	1.12	0.84	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
6.50	21.33	46.86	0.45	0.95	0.86	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
6.75	22.15	64.00	0.51	0.79	0.88	sand to silty sand	50-60	38-40	15	UNDEFINED
7.00	22.97	85.18	0.56	0.66	0.90	sand to silty sand	60-70	40-42	20	UNDEFINED
7.25	23.79	86.06	0.74	0.86	0.92	sand to silty sand	60-70	40-42	21	UNDEFINED
7.50	24.61	171.56	1.19	0.69	0.94	sand	80-90	42-44	33	UNDEFINED
7.75	25.43	203.64	1.54	0.76	0.96	sand	80-90	44-46	39	UNDEFINED
8.00	26.25	70.22	0.96	1.37	0.99	silty sand to sandy silt	50-60	38-40	22	UNDEFINED
8.25	27.07	40.50	0.42	1.03	1.01	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
8.50	27.89	42.46	0.56	1.32	1.03	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
8.75	28.71	7.60	0.13	1.70	1.05	clayey silt to silty clay	UNDFND	UNDFD	4	.5
9.00	29.53	6.12	0.15	2.46	1.07	silty clay to clay	UNDFND	UNDFD	4	.4
9.25	30.35	5.90	0.14	2.34	1.09	silty clay to clay	UNDFND	UNDFD	4	.4
9.50	31.17	5.56	0.13	2.38	1.12	silty clay to clay	UNDFND	UNDFD	4	.3

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPTRA-6 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	5.46	0.13	2.38	1.14	silty clay to clay	UNDFND	UNDFD	3	.3
10.00	32.81	5.58	0.13	2.25	1.16	silty clay to clay	UNDFND	UNDFD	4	.3
10.25	33.63	5.78	0.11	1.97	1.18	silty clay to clay	UNDFND	UNDFD	4	.3
10.50	34.45	9.66	0.12	1.20	1.20	clayey silt to silty clay	UNDFND	UNDFD	5	.7
10.75	35.27	32.16	0.17	0.53	1.22	silty sand to sandy silt	<40	32-34	10	UNDEFINED
11.00	36.09	18.48	0.09	0.49	1.24	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
11.25	36.91	52.98	1.48	2.80	1.27	sandy silt to clayey silt	UNDFND	UNDFD	20	5.0
11.50	37.73	83.34	2.61	3.13	1.29	sandy silt to clayey silt	UNDFND	UNDFD	32	8.1
11.75	38.55	157.30	5.38	3.42	1.31	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-RA-7
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :06/29/94 2:05
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	49.06	0.44	0.89	0.02	silty sand to sandy silt	>90	>48	16	UNDEFINED
0.50	1.64	99.06	1.13	1.14	0.07	sand to silty sand	>90	>48	24	UNDEFINED
0.75	2.46	93.00	0.98	1.05	0.12	sand to silty sand	>90	>48	22	UNDEFINED
1.00	3.28	63.46	0.49	0.77	0.17	sand to silty sand	70-80	46-48	15	UNDEFINED
1.25	4.10	87.50	0.68	0.78	0.21	sand to silty sand	80-90	46-48	21	UNDEFINED
1.50	4.92	214.88	1.65	0.77	0.26	sand	>90	>48	41	UNDEFINED
1.75	5.74	186.16	1.40	0.75	0.31	sand	>90	>48	36	UNDEFINED
2.00	6.56	138.22	0.87	0.63	0.35	sand	>90	46-48	26	UNDEFINED
2.25	7.38	103.36	0.58	0.56	0.40	sand to silty sand	80-90	44-46	25	UNDEFINED
2.50	8.20	71.12	0.42	0.59	0.45	sand to silty sand	60-70	42-44	17	UNDEFINED
2.75	9.02	60.14	0.35	0.59	0.50	sand to silty sand	60-70	40-42	14	UNDEFINED
3.00	9.84	80.86	0.41	0.51	0.54	sand to silty sand	60-70	42-44	19	UNDEFINED
3.25	10.66	93.74	0.44	0.47	0.58	sand to silty sand	70-80	42-44	22	UNDEFINED
3.50	11.48	52.40	0.41	0.78	0.60	silty sand to sandy silt	50-60	40-42	17	UNDEFINED
3.75	12.30	11.34	0.27	2.37	0.62	clayey silt to silty clay	UNDFND	UNDFD	5	1.0
4.00	13.12	20.14	0.33	1.64	0.64	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
4.25	13.94	14.46	0.17	1.14	0.66	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
4.50	14.76	33.30	0.28	0.85	0.68	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
4.75	15.58	43.78	0.35	0.80	0.71	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
5.00	16.40	45.54	0.41	0.89	0.73	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
5.25	17.22	61.16	0.44	0.72	0.75	sand to silty sand	50-60	40-42	15	UNDEFINED
5.50	18.04	54.88	0.41	0.75	0.77	sand to silty sand	50-60	38-40	13	UNDEFINED
5.75	18.86	45.08	0.34	0.75	0.79	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
6.00	19.69	28.28	0.21	0.75	0.81	silty sand to sandy silt	<40	34-36	9	UNDEFINED
6.25	20.51	21.70	0.16	0.74	0.84	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
6.50	21.33	7.00	0.10	1.39	0.86	undefined	UNDFND	UNDFD	UDF	UNDEFINED
6.75	22.15	4.74	0.05	0.95	0.88	sensitive fine grained	UNDFND	UNDFD	2	.3
7.00	22.97	5.00	0.04	0.80	0.90	sensitive fine grained	UNDFND	UNDFD	2	.3
7.25	23.79	4.20	0.04	0.90	0.92	sensitive fine grained	UNDFND	UNDFD	2	.2
7.50	24.61	26.78	0.15	0.55	0.94	silty sand to sandy silt	<40	34-36	9	UNDEFINED
7.75	25.43	14.18	0.12	0.87	0.96	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
8.00	26.25	15.94	0.15	0.95	0.99	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
8.25	27.07	29.60	0.29	0.99	1.01	silty sand to sandy silt	<40	34-36	9	UNDEFINED
8.50	27.89	16.60	0.08	0.48	1.03	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
8.75	28.71	14.88	0.18	1.22	1.05	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
9.00	29.53	10.18	0.08	0.76	1.07	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
9.25	30.35	6.66	0.06	0.83	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	6.26	0.04	0.70	1.12	sensitive fine grained	UNDFND	UNDFD	3	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-8
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/05/94 10:28
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	153.78	1.06	0.69	0.02	sand	>90	>48	29	UNDEFINED
0.50	1.64	266.48	2.32	0.87	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	288.72	2.03	0.70	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	209.98	0.99	0.47	0.17	sand	>90	>48	40	UNDEFINED
1.25	4.10	149.06	0.73	0.49	0.21	sand	>90	>48	29	UNDEFINED
1.50	4.92	105.58	0.57	0.54	0.26	sand to silty sand	80-90	46-48	25	UNDEFINED
1.75	5.74	53.98	0.32	0.60	0.31	sand to silty sand	60-70	42-44	13	UNDEFINED
2.00	6.56	25.12	0.40	1.60	0.35	sandy silt to clayey silt	UNDFND	UNDFD	10	2.4
2.25	7.38	17.06	0.37	2.18	0.40	clayey silt to silty clay	UNDFND	UNDFD	8	1.6
2.50	8.20	17.96	0.44	2.45	0.45	clayey silt to silty clay	UNDFND	UNDFD	9	1.7
2.75	9.02	50.02	0.31	0.62	0.50	sand to silty sand	50-60	40-42	12	UNDEFINED
3.00	9.84	50.14	0.29	0.58	0.54	sand to silty sand	50-60	40-42	12	UNDEFINED
3.25	10.66	38.62	0.66	1.71	0.58	sandy silt to clayey silt	UNDFND	UNDFD	15	3.8
3.50	11.48	74.36	0.62	0.83	0.60	sand to silty sand	60-70	40-42	18	UNDEFINED
3.75	12.30	87.74	0.65	0.74	0.62	sand to silty sand	60-70	42-44	21	UNDEFINED
4.00	13.12	107.12	0.54	0.51	0.64	sand	70-80	42-44	21	UNDEFINED
4.25	13.94	93.74	0.50	0.53	0.66	sand to silty sand	70-80	42-44	22	UNDEFINED
4.50	14.76	79.66	0.45	0.56	0.68	sand to silty sand	60-70	40-42	19	UNDEFINED
4.75	15.58	65.86	0.37	0.56	0.71	sand to silty sand	50-60	40-42	16	UNDEFINED
5.00	16.40	69.72	0.38	0.54	0.73	sand to silty sand	60-70	40-42	17	UNDEFINED
5.25	17.22	51.62	0.34	0.67	0.75	sand to silty sand	50-60	38-40	12	UNDEFINED
5.50	18.04	50.72	0.32	0.64	0.77	sand to silty sand	50-60	38-40	12	UNDEFINED
5.75	18.86	57.44	0.34	0.60	0.79	sand to silty sand	50-60	38-40	14	UNDEFINED
6.00	19.69	30.52	0.45	1.48	0.81	sandy silt to clayey silt	UNDFND	UNDFD	12	2.9
6.25	20.51	41.16	0.35	0.86	0.84	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
6.50	21.33	39.86	0.39	0.99	0.86	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
6.75	22.15	44.42	0.32	0.71	0.88	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.00	22.97	39.24	0.31	0.80	0.90	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
7.25	23.79	14.56	0.28	1.93	0.92	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
7.50	24.61	5.96	0.10	1.65	0.94	silty clay to clay	UNDFND	UNDFD	4	.4
7.75	25.43	6.98	0.11	1.60	0.96	silty clay to clay	UNDFND	UNDFD	4	.5
8.00	26.25	6.38	0.08	1.27	0.99	sensitive fine grained	UNDFND	UNDFD	3	.4
8.25	27.07	4.74	0.08	1.71	1.01	sensitive fine grained	UNDFND	UNDFD	2	.3
8.50	27.89	5.18	0.09	1.78	1.03	silty clay to clay	UNDFND	UNDFD	3	.3
8.75	28.71	8.68	0.10	1.10	1.05	clayey silt to silty clay	UNDFND	UNDFD	4	.7
9.00	29.53	7.06	0.07	0.96	1.07	sensitive fine grained	UNDFND	UNDFD	3	.5
9.25	30.35	5.96	0.08	1.32	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	7.42	0.07	0.94	1.12	sensitive fine grained	UNDFND	UNDFD	4	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-RA-7 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	6.06	0.07	1.13	1.14	sensitive fine grained	UNDFND	UNDFD	3	.4
10.00	32.81	7.38	0.06	0.77	1.16	sensitive fine grained	UNDFND	UNDFD	4	.5
10.25	33.63	13.64	0.08	0.55	1.18	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
10.50	34.45	12.92	0.06	0.44	1.20	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
10.75	35.27	7.26	0.07	0.96	1.22	sensitive fine grained	UNDFND	UNDFD	3	.5
11.00	36.09	6.60	0.06	0.97	1.24	sensitive fine grained	UNDFND	UNDFD	3	.4
11.25	36.91	9.88	0.06	0.61	1.27	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
11.50	37.73	27.06	0.35	1.29	1.29	sandy silt to clayey silt	UNDFND	UNDFD	10	2.4
11.75	38.55	74.74	0.62	0.83	1.31	sand to silty sand	50-60	38-40	18	UNDEFINED
12.00	39.37	74.14	0.60	0.81	1.33	sand to silty sand	50-60	38-40	18	UNDEFINED
12.25	40.19	15.66	0.09	0.57	1.35	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
12.50	41.01	8.52	0.04	0.50	1.37	sensitive fine grained	UNDFND	UNDFD	4	.6
12.75	41.83	8.86	0.05	0.51	1.40	sensitive fine grained	UNDFND	UNDFD	4	.6
13.00	42.65	7.90	0.05	0.62	1.42	sensitive fine grained	UNDFND	UNDFD	4	.5
13.25	43.47	9.30	0.05	0.54	1.44	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
13.50	44.29	40.54	0.13	0.31	1.46	sand to silty sand	<40	34-36	10	UNDEFINED
13.75	45.11	17.92	0.16	0.89	1.48	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
14.00	45.93	26.68	0.22	0.82	1.50	silty sand to sandy silt	<40	30-32	9	UNDEFINED
14.25	46.75	116.14	1.14	0.98	1.52	sand to silty sand	60-70	38-40	28	UNDEFINED
14.50	47.57	61.96	1.46	2.35	1.55	sandy silt to clayey silt	UNDFND	UNDFD	24	5.9
14.75	48.39	47.78	2.05	4.29	1.57	silty clay to clay	UNDFND	UNDFD	31	4.5
15.00	49.21	113.12	5.07	4.49	1.59	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	213.70	5.18	2.42	1.61	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-8 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	10.56	0.13	1.20	2.04	clayey silt to silty clay	UNDFND	UNDFD	5	.6
20.50	67.26	10.76	0.13	1.21	2.06	clayey silt to silty clay	UNDFND	UNDFD	5	.6
20.75	68.08	10.72	0.13	1.21	2.09	clayey silt to silty clay	UNDFND	UNDFD	5	.6
21.00	68.90	10.94	0.13	1.18	2.11	clayey silt to silty clay	UNDFND	UNDFD	5	.7
21.25	69.72	10.68	0.12	1.09	2.13	clayey silt to silty clay	UNDFND	UNDFD	5	.6
21.50	70.54	11.10	0.12	1.10	2.15	clayey silt to silty clay	UNDFND	UNDFD	5	.7
21.75	71.36	10.80	0.12	1.12	2.17	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.00	72.18	10.98	0.11	1.03	2.19	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.25	73.00	10.92	0.12	1.07	2.21	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.50	73.82	10.92	0.11	1.03	2.24	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.75	74.64	11.04	0.12	1.07	2.26	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.00	75.46	11.36	0.12	1.10	2.28	clayey silt to silty clay	UNDFND	UNDFD	5	.7
23.25	76.28	11.24	0.12	1.10	2.30	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.50	77.10	11.22	0.12	1.09	2.32	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.75	77.92	11.64	0.13	1.15	2.34	clayey silt to silty clay	UNDFND	UNDFD	6	.7
24.00	78.74	11.74	0.13	1.13	2.37	clayey silt to silty clay	UNDFND	UNDFD	6	.7
24.25	79.56	12.36	0.12	0.97	2.39	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
24.50	80.38	32.10	0.39	1.21	2.41	silty sand to sandy silt	<40	<30	10	UNDEFINED
24.75	81.20	32.66	0.65	1.99	2.43	sandy silt to clayey silt	UNDFND	UNDFD	13	2.8
25.00	82.02	15.80	0.11	0.72	2.45	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
25.25	82.84	16.22	0.12	0.72	2.47	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
25.50	83.66	12.60	0.13	1.01	2.49	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
25.75	84.48	12.88	0.20	1.53	2.52	clayey silt to silty clay	UNDFND	UNDFD	6	.8
26.00	85.30	13.12	0.22	1.68	2.54	clayey silt to silty clay	UNDFND	UNDFD	6	.8
26.25	86.12	12.48	0.19	1.53	2.56	clayey silt to silty clay	UNDFND	UNDFD	6	.7
26.50	86.94	12.60	0.19	1.49	2.58	clayey silt to silty clay	UNDFND	UNDFD	6	.7
26.75	87.76	12.66	0.18	1.40	2.60	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.00	88.58	12.88	0.18	1.40	2.62	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.25	89.40	12.14	0.15	1.21	2.65	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.50	90.22	12.44	0.16	1.31	2.67	clayey silt to silty clay	UNDFND	UNDFD	6	.7
27.75	91.04	12.34	0.14	1.17	2.69	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
28.00	91.86	12.12	0.15	1.26	2.71	clayey silt to silty clay	UNDFND	UNDFD	6	.6
28.25	92.68	12.16	0.15	1.23	2.73	clayey silt to silty clay	UNDFND	UNDFD	6	.6
28.50	93.50	12.26	0.15	1.23	2.75	clayey silt to silty clay	UNDFND	UNDFD	6	.6
28.75	94.32	12.14	0.14	1.19	2.77	clayey silt to silty clay	UNDFND	UNDFD	6	.6
29.00	95.14	12.16	0.15	1.20	2.80	clayey silt to silty clay	UNDFND	UNDFD	6	.6
29.25	95.96	12.26	0.15	1.21	2.82	clayey silt to silty clay	UNDFND	UNDFD	6	.6
29.50	96.78	12.26	0.14	1.15	2.84	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
29.75	97.60	12.36	0.15	1.21	2.86	clayey silt to silty clay	UNDFND	UNDFD	6	.6
30.00	98.43	12.50	0.15	1.20	2.88	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
30.25	99.25	12.58	0.15	1.19	2.90	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
30.50	100.07	12.46	0.15	1.20	2.93	clayey silt to silty clay	UNDFND	UNDFD	6	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-8 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	11.68	0.06	0.53	1.14	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
10.00	32.81	16.58	0.11	0.64	1.16	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
10.25	33.63	27.80	0.18	0.65	1.18	silty sand to sandy silt	<40	32-34	9	UNDEFINED
10.50	34.45	51.88	0.22	0.42	1.20	sand to silty sand	40-50	36-38	12	UNDEFINED
10.75	35.27	45.42	0.28	0.61	1.22	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
11.00	36.09	14.12	0.16	1.14	1.24	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
11.25	36.91	57.90	0.39	0.68	1.27	sand to silty sand	40-50	36-38	14	UNDEFINED
11.50	37.73	147.70	0.83	0.56	1.29	sand	70-80	40-42	28	UNDEFINED
11.75	38.55	77.96	0.49	0.63	1.31	sand to silty sand	50-60	38-40	19	UNDEFINED
12.00	39.37	52.06	0.38	0.72	1.33	silty sand to sandy silt	40-50	36-38	17	UNDEFINED
12.25	40.19	75.62	0.39	0.52	1.35	sand to silty sand	50-60	38-40	18	UNDEFINED
12.50	41.01	66.84	0.45	0.67	1.37	sand to silty sand	50-60	36-38	16	UNDEFINED
12.75	41.83	38.68	0.33	0.84	1.40	silty sand to sandy silt	<40	34-36	12	UNDEFINED
13.00	42.65	39.26	0.30	0.76	1.42	silty sand to sandy silt	<40	34-36	13	UNDEFINED
13.25	43.47	55.70	0.35	0.62	1.44	sand to silty sand	40-50	36-38	13	UNDEFINED
13.50	44.29	101.44	0.58	0.57	1.46	sand to silty sand	60-70	38-40	24	UNDEFINED
13.75	45.11	97.38	0.39	0.40	1.48	sand	60-70	38-40	19	UNDEFINED
14.00	45.93	73.48	0.26	0.35	1.50	sand to silty sand	50-60	36-38	18	UNDEFINED
14.25	46.75	19.08	0.15	0.77	1.52	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
14.50	47.57	10.88	0.09	0.78	1.55	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
14.75	48.39	9.72	0.08	0.87	1.57	clayey silt to silty clay	UNDFND	UNDFD	5	.6
15.00	49.21	9.72	0.11	1.17	1.59	clayey silt to silty clay	UNDFND	UNDFD	5	.6
15.25	50.03	9.34	0.11	1.21	1.61	clayey silt to silty clay	UNDFND	UNDFD	4	.6
15.50	50.85	10.04	0.08	0.84	1.63	clayey silt to silty clay	UNDFND	UNDFD	5	.7
15.75	51.67	8.86	0.10	1.14	1.65	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.00	52.49	8.54	0.11	1.32	1.68	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.25	53.31	8.14	0.08	0.98	1.70	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.50	54.13	12.32	0.09	0.70	1.72	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
16.75	54.95	14.80	0.09	0.60	1.74	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
17.00	55.77	23.86	0.15	0.63	1.76	silty sand to sandy silt	<40	<30	8	UNDEFINED
17.25	56.59	13.20	0.20	1.55	1.78	clayey silt to silty clay	UNDFND	UNDFD	6	.9
17.50	57.41	11.06	0.14	1.27	1.80	clayey silt to silty clay	UNDFND	UNDFD	5	.7
17.75	58.23	9.62	0.11	1.17	1.83	clayey silt to silty clay	UNDFND	UNDFD	5	.6
18.00	59.06	9.86	0.13	1.32	1.85	clayey silt to silty clay	UNDFND	UNDFD	5	.6
18.25	59.88	10.88	0.14	1.27	1.87	clayey silt to silty clay	UNDFND	UNDFD	5	.7
18.50	60.70	10.42	0.13	1.24	1.89	clayey silt to silty clay	UNDFND	UNDFD	5	.6
18.75	61.52	10.04	0.12	1.22	1.91	clayey silt to silty clay	UNDFND	UNDFD	5	.6
19.00	62.34	10.00	0.11	1.12	1.93	clayey silt to silty clay	UNDFND	UNDFD	5	.6
19.25	63.16	10.02	0.11	1.06	1.96	clayey silt to silty clay	UNDFND	UNDFD	5	.6
19.50	63.98	10.20	0.11	1.12	1.98	clayey silt to silty clay	UNDFND	UNDFD	5	.6
19.75	64.80	9.88	0.11	1.10	2.00	clayey silt to silty clay	UNDFND	UNDFD	5	.6
20.00	65.62	10.18	0.12	1.14	2.02	clayey silt to silty clay	UNDFND	UNDFD	5	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-8 Page No. 4

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	12.52	0.15	1.19	2.95	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
31.00	101.71	12.58	0.15	1.20	2.97	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
31.25	102.53	12.58	0.15	1.21	2.99	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
31.50	103.35	12.76	0.15	1.19	3.01	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
31.75	104.17	12.80	0.15	1.18	3.03	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
32.00	104.99	12.84	0.14	1.09	3.05	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
32.25	105.81	12.86	0.15	1.14	3.08	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
32.50	106.63	13.04	0.15	1.13	3.10	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
32.75	107.45	13.10	0.15	1.12	3.12	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
33.00	108.27	13.32	0.14	1.05	3.14	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.25	109.09	13.64	0.15	1.10	3.16	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.50	109.91	13.34	0.15	1.16	3.18	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.75	110.73	13.60	0.16	1.19	3.21	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.00	111.55	13.70	0.17	1.24	3.23	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.25	112.37	13.82	0.17	1.23	3.25	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.50	113.19	13.94	0.18	1.26	3.27	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.75	114.01	13.92	0.18	1.27	3.29	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
35.00	114.83	13.92	0.18	1.27	3.31	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
35.25	115.65	14.22	0.17	1.18	3.34	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
35.50	116.47	14.22	0.18	1.25	3.36	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
35.75	117.29	14.34	0.18	1.22	3.38	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
36.00	118.11	14.38	0.18	1.22	3.40	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
36.25	118.93	14.54	0.18	1.24	3.42	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
36.50	119.75	14.66	0.19	1.30	3.44	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
36.75	120.57	14.74	0.19	1.28	3.46	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
37.00	121.39	14.86	0.18	1.22	3.49	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
37.25	122.21	14.70	0.18	1.24	3.51	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
37.50	123.03	15.04	0.19	1.24	3.53	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
37.75	123.85	15.18	0.20	1.32	3.55	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
38.00	124.67	15.64	0.21	1.35	3.57	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
38.25	125.49	15.96	0.22	1.38	3.59	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
38.50	126.31	16.60	0.13	0.80	3.62	sandy silt to clayey silt	UNDFND	UNDFD	6	.9

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RW-9 RA-9
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/05/94 2:30
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	85.92	0.59	0.69	0.02	sand to silty sand	>90	>48	21	UNDEFINED
0.50	1.64	206.08	1.81	0.88	0.07	sand	>90	>48	39	UNDEFINED
0.75	2.46	234.32	1.84	0.78	0.12	sand	>90	>48	45	UNDEFINED
1.00	3.28	188.76	0.98	0.52	0.17	sand	>90	>48	36	UNDEFINED
1.25	4.10	158.16	0.79	0.50	0.21	sand	>90	>48	30	UNDEFINED
1.50	4.92	125.34	0.56	0.44	0.26	sand	>90	46-48	24	UNDEFINED
1.75	5.74	109.50	0.54	0.49	0.31	sand	80-90	46-48	21	UNDEFINED
2.00	6.56	94.70	0.43	0.46	0.35	sand to silty sand	70-80	44-46	23	UNDEFINED
2.25	7.38	86.56	0.45	0.52	0.40	sand to silty sand	70-80	44-46	21	UNDEFINED
2.50	8.20	71.68	0.41	0.57	0.45	sand to silty sand	60-70	42-44	17	UNDEFINED
2.75	9.02	69.10	0.38	0.56	0.50	sand to silty sand	60-70	42-44	17	UNDEFINED
3.00	9.84	62.26	0.36	0.58	0.54	sand to silty sand	60-70	40-42	15	UNDEFINED
3.25	10.66	44.46	0.36	0.81	0.58	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
3.50	11.48	12.40	0.27	2.16	0.60	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
3.75	12.30	31.34	0.18	0.57	0.62	silty sand to sandy silt	40-50	36-38	10	UNDEFINED
4.00	13.12	27.06	0.33	1.21	0.64	sandy silt to clayey silt	UNDFND	UNDFD	10	2.6
4.25	13.94	26.10	0.32	1.22	0.66	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
4.50	14.76	19.30	0.30	1.54	0.68	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
4.75	15.58	18.10	0.19	1.03	0.71	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
5.00	16.40	13.38	0.22	1.64	0.73	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
5.25	17.22	30.00	0.24	0.81	0.75	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.50	18.04	66.38	0.44	0.66	0.77	sand to silty sand	50-60	40-42	16	UNDEFINED
5.75	18.86	68.16	0.45	0.66	0.79	sand to silty sand	50-60	40-42	16	UNDEFINED
6.00	19.69	62.24	0.42	0.67	0.81	sand to silty sand	50-60	38-40	15	UNDEFINED
6.25	20.51	62.40	0.41	0.66	0.84	sand to silty sand	50-60	38-40	15	UNDEFINED
6.50	21.33	60.84	0.44	0.72	0.86	sand to silty sand	50-60	38-40	15	UNDEFINED
6.75	22.15	68.64	0.45	0.66	0.88	sand to silty sand	50-60	38-40	16	UNDEFINED
7.00	22.97	89.36	0.53	0.60	0.90	sand to silty sand	60-70	40-42	21	UNDEFINED
7.25	23.79	97.82	0.59	0.60	0.92	sand to silty sand	60-70	40-42	23	UNDEFINED
7.50	24.61	53.90	0.41	0.76	0.94	silty sand to sandy silt	40-50	38-40	17	UNDEFINED
7.75	25.43	24.34	0.16	0.65	0.96	silty sand to sandy silt	<40	32-34	8	UNDEFINED
8.00	26.25	25.30	0.14	0.56	0.99	silty sand to sandy silt	<40	32-34	8	UNDEFINED
8.25	27.07	6.78	0.02	0.32	1.01	sensitive fine grained	UNDFND	UNDFD	3	.5
8.50	27.89	8.04	0.04	0.50	1.03	sensitive fine grained	UNDFND	UNDFD	4	.6
8.75	28.71	10.90	0.07	0.60	1.05	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
9.00	29.53	6.56	0.08	1.17	1.07	sensitive fine grained	UNDFND	UNDFD	3	.4
9.25	30.35	6.48	0.09	1.38	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	32.84	0.09	0.28	1.12	silty sand to sandy silt	<40	34-36	10	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RM-9 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	12.50	0.04	0.35	2.04	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
20.50	67.26	10.32	0.05	0.51	2.06	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.75	68.08	35.66	0.24	0.66	2.09	silty sand to sandy silt	<40	30-32	11	UNDEFINED
21.00	68.90	27.22	0.28	1.03	2.11	sandy silt to clayey silt	UNDFND	UNDFD	10	2.3
21.25	69.72	11.06	0.08	0.74	2.13	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
21.50	70.54	11.60	0.14	1.25	2.15	clayey silt to silty clay	UNDFND	UNDFD	6	.7
21.75	71.36	10.76	0.15	1.35	2.17	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.00	72.18	10.50	0.15	1.46	2.19	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.25	73.00	10.54	0.16	1.57	2.21	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.50	73.82	10.50	0.16	1.55	2.24	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.75	74.64	10.52	0.16	1.52	2.26	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.00	75.46	10.64	0.16	1.48	2.28	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.25	76.28	10.70	0.15	1.44	2.30	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.50	77.10	10.96	0.16	1.45	2.32	clayey silt to silty clay	UNDFND	UNDFD	5	.6
23.75	77.92	10.96	0.16	1.43	2.34	clayey silt to silty clay	UNDFND	UNDFD	5	.6
24.00	78.74	10.98	0.15	1.38	2.37	clayey silt to silty clay	UNDFND	UNDFD	5	.6
24.25	79.56	10.98	0.16	1.47	2.39	clayey silt to silty clay	UNDFND	UNDFD	5	.6
24.50	80.38	11.16	0.16	1.39	2.41	clayey silt to silty clay	UNDFND	UNDFD	5	.6
24.75	81.20	11.32	0.15	1.33	2.43	clayey silt to silty clay	UNDFND	UNDFD	5	.6
25.00	82.02	11.28	0.15	1.30	2.45	clayey silt to silty clay	UNDFND	UNDFD	5	.6
25.25	82.84	11.66	0.16	1.40	2.47	clayey silt to silty clay	UNDFND	UNDFD	6	.6
25.50	83.66	12.12	0.08	0.65	2.49	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
25.75	84.48	13.06	0.17	1.29	2.52	clayey silt to silty clay	UNDFND	UNDFD	6	.8
26.00	85.30	158.04	0.88	0.56	2.54	sand	60-70	38-40	30	UNDEFINED
26.25	86.12	329.00	1.42	0.43	2.56	gravelly sand to sand	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RM-9 RA-9 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	16.86	0.16	0.97	1.14	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
10.00	32.81	60.90	0.29	0.48	1.16	sand to silty sand	50-60	36-38	15	UNDEFINED
10.25	33.63	18.12	0.19	1.02	1.18	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
10.50	34.45	8.18	0.05	0.57	1.20	sensitive fine grained	UNDFND	UNDFD	4	.6
10.75	35.27	8.98	0.08	0.84	1.22	clayey silt to silty clay	UNDFND	UNDFD	4	.6
11.00	36.09	26.82	0.20	0.73	1.24	silty sand to sandy silt	<40	32-34	9	UNDEFINED
11.25	36.91	7.84	0.09	1.21	1.27	clayey silt to silty clay	UNDFND	UNDFD	4	.5
11.50	37.73	7.40	0.05	0.64	1.29	sensitive fine grained	UNDFND	UNDFD	4	.5
11.75	38.55	21.38	0.17	0.78	1.31	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
12.00	39.37	41.92	0.16	0.39	1.33	sand to silty sand	<40	34-36	10	UNDEFINED
12.25	40.19	76.18	0.28	0.37	1.35	sand to silty sand	50-60	38-40	18	UNDEFINED
12.50	41.01	82.02	0.26	0.31	1.37	sand to silty sand	50-60	38-40	20	UNDEFINED
12.75	41.83	13.04	0.18	1.37	1.40	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
13.00	42.65	9.34	0.07	0.73	1.42	clayey silt to silty clay	UNDFND	UNDFD	4	.6
13.25	43.47	8.98	0.11	1.26	1.44	clayey silt to silty clay	UNDFND	UNDFD	4	.6
13.50	44.29	8.02	0.11	1.38	1.46	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.75	45.11	7.84	0.10	1.22	1.48	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.00	45.93	8.54	0.11	1.31	1.50	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.25	46.75	9.12	0.11	1.25	1.52	clayey silt to silty clay	UNDFND	UNDFD	4	.6
14.50	47.57	8.86	0.13	1.45	1.55	clayey silt to silty clay	UNDFND	UNDFD	4	.6
14.75	48.39	8.90	0.12	1.38	1.57	clayey silt to silty clay	UNDFND	UNDFD	4	.6
15.00	49.21	8.80	0.10	1.08	1.59	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.25	50.03	9.02	0.10	1.07	1.61	clayey silt to silty clay	UNDFND	UNDFD	4	.6
15.50	50.85	24.66	0.24	0.99	1.63	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
15.75	51.67	12.78	0.29	2.24	1.65	clayey silt to silty clay	UNDFND	UNDFD	6	.9
16.00	52.49	8.84	0.07	0.76	1.68	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.25	53.31	8.38	0.06	0.77	1.70	sensitive fine grained	UNDFND	UNDFD	4	.5
16.50	54.13	8.54	0.08	0.98	1.72	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.75	54.95	9.04	0.08	0.86	1.74	clayey silt to silty clay	UNDFND	UNDFD	4	.5
17.00	55.77	33.50	0.14	0.43	1.76	silty sand to sandy silt	<40	30-32	11	UNDEFINED
17.25	56.59	35.14	0.21	0.60	1.78	silty sand to sandy silt	<40	30-32	11	UNDEFINED
17.50	57.41	20.54	0.14	0.69	1.80	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
17.75	58.23	64.06	0.24	0.37	1.83	sand to silty sand	40-50	34-36	15	UNDEFINED
18.00	59.06	59.84	0.30	0.50	1.85	sand to silty sand	40-50	34-36	14	UNDEFINED
18.25	59.88	94.74	0.34	0.35	1.87	sand	50-60	36-38	18	UNDEFINED
18.50	60.70	84.40	0.24	0.29	1.89	sand to silty sand	50-60	36-38	20	UNDEFINED
18.75	61.52	97.18	0.33	0.34	1.91	sand	50-60	36-38	19	UNDEFINED
19.00	62.34	48.96	0.32	0.66	1.93	silty sand to sandy silt	<40	32-34	16	UNDEFINED
19.25	63.16	37.90	0.35	0.91	1.96	silty sand to sandy silt	<40	30-32	12	UNDEFINED
19.50	63.98	33.58	0.47	1.39	1.98	sandy silt to clayey silt	UNDFND	UNDFD	13	2.9
19.75	64.80	31.48	0.35	1.11	2.00	silty sand to sandy silt	<40	30-32	10	UNDEFINED
20.00	65.62	12.70	0.06	0.49	2.02	sandy silt to clayey silt	UNDFND	UNDFD	5	.8

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-10A
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/06/94 12:15
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	94.34	1.08	1.14	0.02	sand to silty sand	>90	>48	23	UNDEFINED
0.50	1.64	102.12	0.52	0.51	0.07	sand to silty sand	>90	>48	24	UNDEFINED
0.75	2.46	137.56	0.53	0.39	0.12	sand	>90	>48	26	UNDEFINED
1.00	3.28	116.14	0.38	0.33	0.17	sand	>90	>48	22	UNDEFINED
1.25	4.10	98.94	0.34	0.35	0.21	sand	80-90	46-48	19	UNDEFINED
1.50	4.92	91.40	0.38	0.41	0.26	sand to silty sand	80-90	46-48	22	UNDEFINED
1.75	5.74	86.90	0.36	0.42	0.31	sand to silty sand	70-80	44-46	21	UNDEFINED
2.00	6.56	91.12	0.38	0.42	0.35	sand to silty sand	70-80	44-46	22	UNDEFINED
2.25	7.38	92.16	0.39	0.43	0.40	sand to silty sand	70-80	44-46	22	UNDEFINED
2.50	8.20	83.18	0.37	0.45	0.45	sand to silty sand	70-80	42-44	20	UNDEFINED
2.75	9.02	84.94	0.37	0.43	0.50	sand to silty sand	70-80	42-44	20	UNDEFINED
3.00	9.84	72.80	0.35	0.48	0.54	sand to silty sand	60-70	42-44	17	UNDEFINED
3.25	10.66	57.38	0.31	0.54	0.58	sand to silty sand	50-60	40-42	14	UNDEFINED
3.50	11.48	41.90	0.29	0.70	0.60	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
3.75	12.30	18.78	0.28	1.49	0.62	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
4.00	13.12	2.94	0.16	5.54	0.64	clay	UNDFND	UNDFD	3	.2
4.25	13.94	2.02	0.11	5.35	0.66	organic material	UNDFND	UNDFD	2	.1
4.50	14.76	1.82	0.14	7.71	0.68	organic material	UNDFND	UNDFD	2	9.9
4.75	15.58	27.42	0.22	0.80	0.71	silty sand to sandy silt	<40	36-38	9	UNDEFINED
5.00	16.40	45.98	0.28	0.61	0.73	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
5.25	17.22	48.22	0.32	0.67	0.75	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
5.50	18.04	49.88	0.32	0.64	0.77	silty sand to sandy silt	50-60	38-40	16	UNDEFINED
5.75	18.86	65.06	0.41	0.64	0.79	sand to silty sand	50-60	40-42	16	UNDEFINED
6.00	19.69	55.90	0.32	0.57	0.81	sand to silty sand	50-60	38-40	13	UNDEFINED
6.25	20.51	31.82	0.23	0.71	0.84	silty sand to sandy silt	<40	36-38	10	UNDEFINED
6.50	21.33	8.36	0.17	1.99	0.86	silty clay to clay	UNDFND	UNDFD	5	.7
6.75	22.15	4.30	0.09	2.21	0.88	clay	UNDFND	UNDFD	4	.3
7.00	22.97	3.30	0.10	3.01	0.90	clay	UNDFND	UNDFD	3	.2
7.25	23.79	7.04	0.12	1.75	0.92	silty clay to clay	UNDFND	UNDFD	4	.5
7.50	24.61	5.98	0.12	1.94	0.94	silty clay to clay	UNDFND	UNDFD	4	.4
7.75	25.43	4.14	0.10	2.30	0.96	clay	UNDFND	UNDFD	4	.2
8.00	26.25	5.42	0.09	1.63	0.99	sensitive fine grained	UNDFND	UNDFD	3	.3
8.25	27.07	4.62	0.09	1.95	1.01	silty clay to clay	UNDFND	UNDFD	3	.3
8.50	27.89	14.44	0.08	0.56	1.03	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
8.75	28.71	21.58	0.21	0.99	1.05	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
9.00	29.53	36.80	0.17	0.47	1.07	silty sand to sandy silt	<40	34-36	12	UNDEFINED
9.25	30.35	6.84	0.15	2.17	1.09	silty clay to clay	UNDFND	UNDFD	4	.5
9.50	31.17	10.70	0.15	1.37	1.12	clayey silt to silty clay	UNDFND	UNDFD	5	.8

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-10
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/05/94 4:45
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	27.32	0.32	1.16	0.02	sandy silt to clayey silt	UNDFND	UNDFD	10	2.7
0.50	1.64	101.48	0.60	0.60	0.07	sand to silty sand	>90	>48	24	UNDEFINED
0.75	2.46	137.72	0.43	0.31	0.12	sand	>90	>48	26	UNDEFINED
1.00	3.28	123.40	0.46	0.38	0.17	sand	>90	>48	24	UNDEFINED
1.25	4.10	103.02	0.40	0.39	0.21	sand	80-90	46-48	20	UNDEFINED
1.50	4.92	86.36	0.37	0.43	0.26	sand to silty sand	80-90	46-48	21	UNDEFINED
1.75	5.74	76.30	0.34	0.45	0.31	sand to silty sand	70-80	44-46	18	UNDEFINED
2.00	6.56	74.34	0.35	0.47	0.35	sand to silty sand	70-80	44-46	18	UNDEFINED
2.25	7.38	68.34	0.37	0.54	0.40	sand to silty sand	60-70	42-44	16	UNDEFINED
2.50	8.20	53.88	0.33	0.61	0.45	sand to silty sand	60-70	40-42	13	UNDEFINED
2.75	9.02	46.54	0.26	0.56	0.50	silty sand to sandy silt	50-60	40-42	15	UNDEFINED
3.00	9.84	52.50	0.26	0.50	0.54	sand to silty sand	50-60	40-42	13	UNDEFINED
3.25	10.66	47.48	0.30	0.64	0.58	silty sand to sandy silt	50-60	40-42	15	UNDEFINED
3.50	11.48	48.46	0.33	0.69	0.60	silty sand to sandy silt	50-60	40-42	15	UNDEFINED
3.75	12.30	13.54	0.28	2.10	0.62	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
4.00	13.12	3.44	0.07	2.10	0.64	clay	UNDFND	UNDFD	3	.2
4.25	13.94	2.54	0.08	3.07	0.66	clay	UNDFND	UNDFD	2	.1
4.50	14.76	9.48	0.11	1.17	0.68	clayey silt to silty clay	UNDFND	UNDFD	5	.8
4.75	15.58	34.28	0.14	0.40	0.71	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
5.00	16.40	0.00	0.00	0.00	0.73	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.25	17.22	0.00	0.00	0.00	0.75	undefined	UNDFND	UNDFD	UDF	UNDEFINED
5.50	18.04	0.00	0.00	0.00	0.77	undefined	UNDFND	UNDFD	UDF	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

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E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-11
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/06/94 1:25
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	7.82	0.07	0.85	0.02	sensitive fine grained	UNDFND	UNDFD	4	.7
0.50	1.64	45.20	0.28	0.62	0.07	silty sand to sandy silt	80-90	>48	14	UNDEFINED
0.75	2.46	94.40	0.43	0.46	0.12	sand to silty sand	>90	>48	23	UNDEFINED
1.00	3.28	130.86	0.46	0.35	0.17	sand	>90	>48	25	UNDEFINED
1.25	4.10	112.86	0.41	0.36	0.21	sand	>90	46-48	22	UNDEFINED
1.50	4.92	94.70	0.35	0.37	0.26	sand	80-90	46-48	18	UNDEFINED
1.75	5.74	79.26	0.32	0.40	0.31	sand to silty sand	70-80	44-46	19	UNDEFINED
2.00	6.56	72.68	0.28	0.38	0.35	sand to silty sand	70-80	44-46	17	UNDEFINED
2.25	7.38	62.66	0.25	0.40	0.40	sand to silty sand	60-70	42-44	15	UNDEFINED
2.50	8.20	54.40	0.24	0.44	0.45	sand to silty sand	60-70	40-42	13	UNDEFINED
2.75	9.02	40.00	0.20	0.50	0.50	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
3.00	9.84	35.94	0.16	0.44	0.54	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.25	10.66	38.02	0.18	0.46	0.58	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.50	11.48	39.16	0.21	0.53	0.60	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
3.75	12.30	43.18	0.28	0.64	0.62	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.00	13.12	9.72	0.19	1.99	0.64	clayey silt to silty clay	UNDFND	UNDFD	5	.8
4.25	13.94	4.26	0.07	1.58	0.66	sensitive fine grained	UNDFND	UNDFD	2	.3
4.50	14.76	3.32	0.06	1.74	0.68	sensitive fine grained	UNDFND	UNDFD	2	.2
4.75	15.58	7.60	0.06	0.84	0.71	sensitive fine grained	UNDFND	UNDFD	4	.6
5.00	16.40	25.16	0.16	0.62	0.73	silty sand to sandy silt	<40	34-36	8	UNDEFINED
5.25	17.22	33.88	0.19	0.56	0.75	silty sand to sandy silt	<40	36-38	11	UNDEFINED
5.50	18.04	46.20	0.25	0.55	0.77	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
5.75	18.86	26.36	0.17	0.65	0.79	silty sand to sandy silt	<40	34-36	8	UNDEFINED
6.00	19.69	10.52	0.09	0.86	0.81	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
6.25	20.51	6.60	0.06	0.89	0.84	sensitive fine grained	UNDFND	UNDFD	3	.5
6.50	21.33	5.04	0.05	1.05	0.86	sensitive fine grained	UNDFND	UNDFD	2	.3
6.75	22.15	5.08	0.05	0.99	0.88	sensitive fine grained	UNDFND	UNDFD	2	.3
7.00	22.97	5.42	0.04	0.80	0.90	sensitive fine grained	UNDFND	UNDFD	3	.4
7.25	23.79	5.02	0.04	0.73	0.92	sensitive fine grained	UNDFND	UNDFD	2	.3
7.50	24.61	5.20	0.04	0.85	0.94	sensitive fine grained	UNDFND	UNDFD	2	.3
7.75	25.43	6.48	0.05	0.81	0.96	sensitive fine grained	UNDFND	UNDFD	3	.5
8.00	26.25	6.90	0.04	0.57	0.99	sensitive fine grained	UNDFND	UNDFD	3	.5
8.25	27.07	5.80	0.05	0.83	1.01	sensitive fine grained	UNDFND	UNDFD	3	.4
8.50	27.89	5.94	0.06	1.03	1.03	sensitive fine grained	UNDFND	UNDFD	3	.4
8.75	28.71	8.76	0.05	0.55	1.05	sensitive fine grained	UNDFND	UNDFD	4	.7
9.00	29.53	8.42	0.04	0.53	1.07	sensitive fine grained	UNDFND	UNDFD	4	.6
9.25	30.35	6.46	0.06	0.95	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	7.02	0.05	0.67	1.12	sensitive fine grained	UNDFND	UNDFD	3	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-10A Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	33.56	0.18	0.53	1.14	silty sand to sandy silt	<40	34-36	11	UNDEFINED
10.00	32.81	5.74	0.10	1.77	1.16	silty clay to clay	UNDFND	UNDFD	4	.3
10.25	33.63	5.08	0.09	1.74	1.18	sensitive fine grained	UNDFND	UNDFD	2	.3
10.50	34.45	5.54	0.09	1.68	1.20	sensitive fine grained	UNDFND	UNDFD	3	.3
10.75	35.27	5.80	0.11	1.88	1.22	silty clay to clay	UNDFND	UNDFD	4	.3
11.00	36.09	5.16	0.12	2.36	1.24	clay	UNDFND	UNDFD	5	.3
11.25	36.91	5.74	0.14	2.48	1.27	undefined	UNDFND	UNDFD	UDF	UNDEFINED
11.50	37.73	56.48	0.47	0.83	1.29	silty sand to sandy silt	40-50	36-38	18	UNDEFINED
11.75	38.55	71.48	0.31	0.43	1.31	sand to silty sand	50-60	38-40	17	UNDEFINED
12.00	39.37	43.66	0.22	0.51	1.33	silty sand to sandy silt	<40	34-36	14	UNDEFINED
12.25	40.19	38.38	0.25	0.65	1.35	silty sand to sandy silt	<40	34-36	12	UNDEFINED
12.50	41.01	48.30	0.46	0.95	1.37	silty sand to sandy silt	40-50	34-36	15	UNDEFINED
12.75	41.83	38.60	0.54	1.39	1.40	silty sand to sandy silt	<40	34-36	12	UNDEFINED
13.00	42.65	22.60	0.37	1.65	1.42	sandy silt to clayey silt	UNDFND	UNDFD	9	2.0
13.25	43.47	11.00	0.19	1.75	1.44	clayey silt to silty clay	UNDFND	UNDFD	5	.8
13.50	44.29	9.20	0.11	1.17	1.46	clayey silt to silty clay	UNDFND	UNDFD	4	.6
13.75	45.11	9.44	0.12	1.26	1.48	clayey silt to silty clay	UNDFND	UNDFD	5	.6
14.00	45.93	7.62	0.11	1.50	1.50	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.25	46.75	20.16	0.16	0.81	1.52	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
14.50	47.57	77.44	0.51	0.66	1.55	sand to silty sand	50-60	36-38	19	UNDEFINED
14.75	48.39	102.54	3.90	3.81	1.57	clayey silt to silty clay	UNDFND	UNDFD	49	9.9
15.00	49.21	68.52	3.36	4.91	1.59	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	82.48	3.79	4.60	1.61	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	224.50	1.82	0.81	1.63	sand	80-90	42-44	43	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	125.08	0.96	0.77	2.04	sand to silty sand	60-70	38-40	30	UNDEFINED
20.50	67.26	123.56	0.98	0.80	2.06	sand to silty sand	60-70	38-40	30	UNDEFINED
20.75	68.08	133.96	1.68	1.25	2.09	sand to silty sand	60-70	38-40	32	UNDEFINED
21.00	68.90	133.26	1.92	1.44	2.11	sand to silty sand	60-70	38-40	32	UNDEFINED
21.25	69.72	112.36	1.76	1.56	2.13	sand to silty sand	50-60	36-38	27	UNDEFINED
21.50	70.54	166.50	0.92	0.55	2.15	sand	70-80	38-40	32	UNDEFINED
21.75	71.36	175.90	0.84	0.48	2.17	sand	70-80	40-42	34	UNDEFINED
22.00	72.18	203.20	1.00	0.49	2.19	sand	70-80	40-42	39	UNDEFINED
22.25	73.00	225.44	1.58	0.70	2.21	sand	70-80	40-42	43	UNDEFINED
22.50	73.82	290.76	2.23	0.77	2.24	sand	80-90	42-44	>50	UNDEFINED
22.75	74.64	206.32	1.88	0.91	2.26	sand	70-80	40-42	40	UNDEFINED
23.00	75.46	109.06	1.67	1.53	2.28	sand to silty sand	50-60	36-38	26	UNDEFINED
23.25	76.28	62.80	3.18	5.06	2.30	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
23.50	77.10	79.86	3.24	4.06	2.32	clayey silt to silty clay	UNDFND	UNDFD	38	7.5
23.75	77.92	85.32	4.50	5.28	2.34	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
24.00	78.74	108.58	4.55	4.19	2.37	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
24.25	79.56	239.94	4.02	1.68	2.39	sand to silty sand	70-80	40-42	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-11 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	20.04	0.08	0.41	1.14	silty sand to sandy silt	<40	30-32	6	UNDEFINED
10.00	32.81	14.86	0.05	0.33	1.16	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
10.25	33.63	11.30	0.04	0.36	1.18	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
10.50	34.45	8.00	0.04	0.55	1.20	sensitive fine grained	UNDFND	UNDFD	4	.6
10.75	35.27	7.40	0.06	0.78	1.22	sensitive fine grained	UNDFND	UNDFD	4	.5
11.00	36.09	6.98	0.07	0.96	1.24	sensitive fine grained	UNDFND	UNDFD	3	.4
11.25	36.91	8.34	0.05	0.61	1.27	sensitive fine grained	UNDFND	UNDFD	4	.6
11.50	37.73	9.66	0.03	0.36	1.29	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
11.75	38.55	48.60	0.18	0.37	1.31	sand to silty sand	40-50	36-38	12	UNDEFINED
12.00	39.37	28.32	0.18	0.65	1.33	silty sand to sandy silt	<40	32-34	9	UNDEFINED
12.25	40.19	13.64	0.14	1.04	1.35	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
12.50	41.01	10.04	0.05	0.49	1.37	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
12.75	41.83	9.36	0.03	0.29	1.40	sensitive fine grained	UNDFND	UNDFD	4	.6
13.00	42.65	9.92	0.05	0.49	1.42	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
13.25	43.47	11.64	0.06	0.48	1.44	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
13.50	44.29	14.30	0.09	0.65	1.46	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
13.75	45.11	50.40	0.29	0.58	1.48	sand to silty sand	40-50	34-36	12	UNDEFINED
14.00	45.93	48.92	0.16	0.34	1.50	sand to silty sand	40-50	34-36	12	UNDEFINED
14.25	46.75	42.78	0.08	0.19	1.52	sand to silty sand	<40	34-36	10	UNDEFINED
14.50	47.57	45.16	0.11	0.25	1.55	sand to silty sand	<40	34-36	11	UNDEFINED
14.75	48.39	55.86	0.08	0.14	1.57	sand to silty sand	40-50	34-36	13	UNDEFINED
15.00	49.21	31.50	0.35	1.12	1.59	silty sand to sandy silt	<40	30-32	10	UNDEFINED
15.25	50.03	36.56	0.71	1.95	1.61	sandy silt to clayey silt	UNDFND	UNDFD	14	3.3
15.50	50.85	55.40	2.01	3.63	1.63	clayey silt to silty clay	UNDFND	UNDFD	27	5.2
15.75	51.67	45.36	2.18	4.81	1.65	silty clay to clay	UNDFND	UNDFD	29	4.2
16.00	52.49	64.10	1.82	2.84	1.68	sandy silt to clayey silt	UNDFND	UNDFD	25	6.1
16.25	53.31	83.12	1.76	2.12	1.70	silty sand to sandy silt	50-60	36-38	27	UNDEFINED
16.50	54.13	59.70	0.90	1.50	1.72	silty sand to sandy silt	40-50	34-36	19	UNDEFINED
16.75	54.95	72.70	1.46	2.01	1.74	silty sand to sandy silt	40-50	36-38	23	UNDEFINED
17.00	55.77	161.04	1.64	1.02	1.76	sand to silty sand	70-80	40-42	39	UNDEFINED
17.25	56.59	177.92	1.58	0.89	1.78	sand	70-80	40-42	34	UNDEFINED
17.50	57.41	172.58	1.43	0.83	1.80	sand	70-80	40-42	33	UNDEFINED
17.75	58.23	199.22	1.15	0.58	1.83	sand	70-80	40-42	38	UNDEFINED
18.00	59.06	168.58	1.42	0.84	1.85	sand	70-80	40-42	32	UNDEFINED
18.25	59.88	125.84	2.95	2.35	1.87	silty sand to sandy silt	60-70	38-40	40	UNDEFINED
18.50	60.70	105.12	2.57	2.45	1.89	silty sand to sandy silt	50-60	38-40	34	UNDEFINED
18.75	61.52	121.66	1.56	1.28	1.91	sand to silty sand	60-70	38-40	29	UNDEFINED
19.00	62.34	94.46	3.28	3.47	1.93	sandy silt to clayey silt	UNDFND	UNDFD	36	9.0
19.25	63.16	104.22	3.69	3.54	1.96	sandy silt to clayey silt	UNDFND	UNDFD	40	10.0
19.50	63.98	75.24	2.81	3.73	1.98	clayey silt to silty clay	UNDFND	UNDFD	36	7.1
19.75	64.80	106.68	2.33	2.18	2.00	silty sand to sandy silt	50-60	36-38	34	UNDEFINED
20.00	65.62	129.34	1.04	0.80	2.02	sand to silty sand	60-70	38-40	31	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-12 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	27.30	0.17	0.63	1.14	silty sand to sandy silt	<40	32-34	9	UNDEFINED
10.00	32.81	8.10	0.06	0.72	1.16	sensitive fine grained	UNDFND	UNDFD	4	.6
10.25	33.63	14.84	0.11	0.71	1.18	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
10.50	34.45	113.32	0.62	0.54	1.20	sand	60-70	40-42	22	UNDEFINED
10.75	35.27	201.88	1.08	0.53	1.22	sand	80-90	42-44	39	UNDEFINED
11.00	36.09	248.18	1.50	0.60	1.24	sand	80-90	44-46	48	UNDEFINED
11.25	36.91	201.26	0.91	0.45	1.27	sand	80-90	42-44	39	UNDEFINED
11.50	37.73	163.48	0.63	0.39	1.29	sand	70-80	42-44	31	UNDEFINED
11.75	38.55	153.22	0.62	0.40	1.31	sand	70-80	40-42	29	UNDEFINED
12.00	39.37	137.64	0.57	0.41	1.33	sand	70-80	40-42	26	UNDEFINED
12.25	40.19	80.36	0.60	0.75	1.35	sand to silty sand	50-60	38-40	19	UNDEFINED
12.50	41.01	79.24	0.35	0.44	1.37	sand to silty sand	50-60	38-40	19	UNDEFINED
12.75	41.83	30.92	0.20	0.65	1.40	silty sand to sandy silt	<40	32-34	10	UNDEFINED
13.00	42.65	18.50	0.11	0.62	1.42	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
13.25	43.47	10.44	0.11	1.01	1.44	clayey silt to silty clay	UNDFND	UNDFD	5	.7
13.50	44.29	18.84	0.16	0.83	1.46	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
13.75	45.11	37.52	0.41	1.10	1.48	silty sand to sandy silt	<40	32-34	12	UNDEFINED
14.00	45.93	65.92	0.58	0.88	1.50	sand to silty sand	40-50	36-38	16	UNDEFINED
14.25	46.75	115.90	0.38	0.33	1.52	sand	60-70	38-40	22	UNDEFINED
14.50	47.57	101.10	0.32	0.32	1.55	sand	60-70	38-40	19	UNDEFINED
14.75	48.39	54.28	0.24	0.45	1.57	sand to silty sand	40-50	34-36	13	UNDEFINED
15.00	49.21	17.28	0.16	0.91	1.59	sandy silt to clayey silt	UNDFND	UNDFD	7	1.4
15.25	50.03	10.34	0.09	0.88	1.61	clayey silt to silty clay	UNDFND	UNDFD	5	.7
15.50	50.85	8.20	0.06	0.71	1.63	sensitive fine grained	UNDFND	UNDFD	4	.5
15.75	51.67	8.16	0.09	1.05	1.65	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.00	52.49	8.22	0.07	0.87	1.68	undefined	UNDFND	UNDFD	UDF	UNDEFINED
16.25	53.31	8.72	0.11	1.24	1.70	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.50	54.13	8.88	0.10	1.17	1.72	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.75	54.95	8.70	0.09	1.05	1.74	clayey silt to silty clay	UNDFND	UNDFD	4	.5
17.00	55.77	8.46	0.07	0.78	1.76	clayey silt to silty clay	UNDFND	UNDFD	4	.5
17.25	56.59	9.48	0.08	0.85	1.78	clayey silt to silty clay	UNDFND	UNDFD	5	.6
17.50	57.41	34.36	0.40	1.17	1.80	silty sand to sandy silt	<40	30-32	11	UNDEFINED
17.75	58.23	16.04	0.30	1.88	1.83	clayey silt to silty clay	UNDFND	UNDFD	8	1.2
18.00	59.06	153.60	0.86	0.56	1.85	sand	70-80	40-42	29	UNDEFINED
18.25	59.88	114.46	1.11	0.97	1.87	sand to silty sand	60-70	38-40	27	UNDEFINED
18.50	60.70	201.60	1.19	0.59	1.89	sand	70-80	40-42	39	UNDEFINED
18.75	61.52	231.42	1.27	0.55	1.91	sand	80-90	40-42	44	UNDEFINED
19.00	62.34	111.60	0.50	0.45	1.93	sand	60-70	38-40	21	UNDEFINED
19.25	63.16	81.12	0.23	0.29	1.96	sand to silty sand	50-60	36-38	19	UNDEFINED
19.50	63.98	64.60	0.14	0.21	1.98	sand to silty sand	40-50	34-36	15	UNDEFINED
19.75	64.80	37.82	0.13	0.34	2.00	silty sand to sandy silt	<40	30-32	12	UNDEFINED
20.00	65.62	40.26	0.12	0.31	2.02	sand to silty sand	<40	30-32	10	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-12
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/08/94 8:25
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	414.12	3.89	0.94	0.02	sand	>90	UNDFD	>50	UNDEFINED
0.50	1.64	380.74	3.56	0.94	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	279.90	1.49	0.53	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	175.40	0.75	0.43	0.17	sand	>90	>48	34	UNDEFINED
1.25	4.10	89.68	0.52	0.58	0.21	sand to silty sand	80-90	46-48	21	UNDEFINED
1.50	4.92	145.22	0.59	0.40	0.26	sand	>90	>48	28	UNDEFINED
1.75	5.74	165.64	0.80	0.48	0.31	sand	>90	>48	32	UNDEFINED
2.00	6.56	173.76	0.73	0.42	0.35	sand	>90	46-48	33	UNDEFINED
2.25	7.38	158.24	0.67	0.42	0.40	sand	>90	46-48	30	UNDEFINED
2.50	8.20	137.40	0.59	0.43	0.45	sand	80-90	44-46	26	UNDEFINED
2.75	9.02	122.32	0.55	0.45	0.50	sand	80-90	44-46	23	UNDEFINED
3.00	9.84	111.46	0.52	0.47	0.54	sand	70-80	44-46	21	UNDEFINED
3.25	10.66	94.92	0.46	0.48	0.58	sand to silty sand	70-80	42-44	23	UNDEFINED
3.50	11.48	65.74	0.39	0.59	0.60	sand to silty sand	60-70	40-42	16	UNDEFINED
3.75	12.30	36.10	0.35	0.98	0.62	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.00	13.12	26.50	0.23	0.87	0.64	silty sand to sandy silt	<40	36-38	8	UNDEFINED
4.25	13.94	14.58	0.24	1.64	0.66	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
4.50	14.76	4.84	0.19	3.84	0.68	clay	UNDFND	UNDFD	5	.4
4.75	15.58	5.84	0.20	3.34	0.71	clay	UNDFND	UNDFD	6	.4
5.00	16.40	2.56	0.11	4.12	0.73	clay	UNDFND	UNDFD	2	.1
5.25	17.22	18.78	0.16	0.87	0.75	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
5.50	18.04	34.56	0.27	0.78	0.77	silty sand to sandy silt	<40	36-38	11	UNDEFINED
5.75	18.86	32.88	0.22	0.66	0.79	silty sand to sandy silt	<40	36-38	10	UNDEFINED
6.00	19.69	11.42	0.13	1.18	0.81	clayey silt to silty clay	UNDFND	UNDFD	5	1.0
6.25	20.51	8.34	0.08	1.01	0.84	clayey silt to silty clay	UNDFND	UNDFD	4	.7
6.50	21.33	4.98	0.06	1.27	0.86	sensitive fine grained	UNDFND	UNDFD	2	.3
6.75	22.15	3.98	0.06	1.52	0.88	sensitive fine grained	UNDFND	UNDFD	2	.2
7.00	22.97	4.92	0.06	1.27	0.90	sensitive fine grained	UNDFND	UNDFD	2	.3
7.25	23.79	7.28	0.08	1.15	0.92	sensitive fine grained	UNDFND	UNDFD	3	.5
7.50	24.61	11.46	0.11	0.95	0.94	sandy silt to clayey silt	UNDFND	UNDFD	4	1.0
7.75	25.43	5.98	0.08	1.40	0.96	sensitive fine grained	UNDFND	UNDFD	3	.4
8.00	26.25	5.20	0.08	1.50	0.99	sensitive fine grained	UNDFND	UNDFD	2	.3
8.25	27.07	5.40	0.08	1.47	1.01	sensitive fine grained	UNDFND	UNDFD	3	.3
8.50	27.89	5.46	0.08	1.45	1.03	sensitive fine grained	UNDFND	UNDFD	3	.3
8.75	28.71	5.92	0.09	1.46	1.05	sensitive fine grained	UNDFND	UNDFD	3	.4
9.00	29.53	6.02	0.07	1.25	1.07	sensitive fine grained	UNDFND	UNDFD	3	.4
9.25	30.35	6.02	0.08	1.31	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	18.68	0.09	0.48	1.12	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-12 Page No. 4

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	12.90	0.14	1.11	2.95	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
31.00	101.71	13.26	0.14	1.06	2.97	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
31.25	102.53	13.44	0.14	1.01	2.99	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
31.50	103.35	13.48	0.13	1.00	3.01	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
31.75	104.17	13.46	0.13	1.00	3.03	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
32.00	104.99	13.82	0.14	1.02	3.05	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
32.25	105.81	13.74	0.13	0.98	3.08	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
32.50	106.63	13.84	0.14	1.00	3.10	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
32.75	107.45	13.86	0.15	1.06	3.12	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.00	108.27	13.72	0.15	1.09	3.14	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.25	109.09	13.84	0.15	1.08	3.16	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.50	109.91	14.20	0.16	1.11	3.18	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.75	110.73	14.44	0.16	1.13	3.21	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
34.00	111.55	14.42	0.16	1.11	3.23	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
34.25	112.37	14.46	0.16	1.10	3.25	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
34.50	113.19	14.86	0.17	1.15	3.27	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
34.75	114.01	15.26	0.17	1.14	3.29	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
35.00	114.83	14.32	0.14	1.01	3.31	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
35.25	115.65	24.94	0.97	3.88	3.34	silty clay to clay	UNDFND	UNDFD	16	1.8
35.50	116.47	21.20	0.58	2.75	3.36	clayey silt to silty clay	UNDFND	UNDFD	10	1.4
35.75	117.29	18.48	0.34	1.81	3.38	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.00	118.11	19.72	0.37	1.88	3.40	sandy silt to clayey silt	UNDFND	UNDFD	8	1.2
36.25	118.93	17.86	0.21	1.18	3.42	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
36.50	119.75	17.46	0.22	1.24	3.44	sandy silt to clayey silt	UNDFND	UNDFD	7	1.0
36.75	120.57	52.98	0.39	0.73	3.46	silty sand to sandy silt	<40	30-32	17	UNDEFINED
37.00	121.39	154.38	1.92	1.24	3.49	sand to silty sand	60-70	36-38	37	UNDEFINED
37.25	122.21	78.46	4.01	5.11	3.51	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-12 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	27.16	0.17	0.64	2.04	silty sand to sandy silt	<40	<30	9	UNDEFINED
20.50	67.26	15.18	0.13	0.83	2.06	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
20.75	68.08	18.70	0.36	1.92	2.09	clayey silt to silty clay	UNDFND	UNDFD	9	1.4
21.00	68.90	16.76	0.27	1.59	2.11	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
21.25	69.72	11.30	0.14	1.20	2.13	clayey silt to silty clay	UNDFND	UNDFD	5	.7
21.50	70.54	10.86	0.13	1.20	2.15	clayey silt to silty clay	UNDFND	UNDFD	5	.6
21.75	71.36	11.32	0.16	1.38	2.17	clayey silt to silty clay	UNDFND	UNDFD	5	.7
22.00	72.18	11.38	0.17	1.52	2.19	clayey silt to silty clay	UNDFND	UNDFD	5	.7
22.25	73.00	11.54	0.18	1.58	2.21	clayey silt to silty clay	UNDFND	UNDFD	6	.7
22.50	73.82	11.56	0.18	1.58	2.24	clayey silt to silty clay	UNDFND	UNDFD	6	.7
22.75	74.64	11.44	0.18	1.58	2.26	clayey silt to silty clay	UNDFND	UNDFD	5	.7
23.00	75.46	11.40	0.18	1.54	2.28	clayey silt to silty clay	UNDFND	UNDFD	5	.7
23.25	76.28	11.44	0.16	1.39	2.30	clayey silt to silty clay	UNDFND	UNDFD	5	.7
23.50	77.10	11.74	0.18	1.50	2.32	clayey silt to silty clay	UNDFND	UNDFD	6	.7
23.75	77.92	11.78	0.15	1.29	2.34	clayey silt to silty clay	UNDFND	UNDFD	6	.7
24.00	78.74	10.96	0.18	1.64	2.37	clayey silt to silty clay	UNDFND	UNDFD	5	.6
24.25	79.56	11.46	0.17	1.46	2.39	clayey silt to silty clay	UNDFND	UNDFD	5	.6
24.50	80.38	11.28	0.14	1.27	2.41	clayey silt to silty clay	UNDFND	UNDFD	5	.6
24.75	81.20	11.88	0.17	1.41	2.43	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.00	82.02	12.18	0.16	1.34	2.45	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.25	82.84	11.94	0.15	1.28	2.47	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.50	83.66	11.70	0.14	1.20	2.49	clayey silt to silty clay	UNDFND	UNDFD	6	.6
25.75	84.48	12.06	0.17	1.39	2.52	clayey silt to silty clay	UNDFND	UNDFD	6	.7
26.00	85.30	11.92	0.16	1.33	2.54	clayey silt to silty clay	UNDFND	UNDFD	6	.7
26.25	86.12	11.94	0.15	1.28	2.56	clayey silt to silty clay	UNDFND	UNDFD	6	.7
26.50	86.94	11.90	0.14	1.21	2.58	clayey silt to silty clay	UNDFND	UNDFD	6	.6
26.75	87.76	12.10	0.13	1.08	2.60	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
27.00	88.58	12.06	0.13	1.06	2.62	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
27.25	89.40	12.26	0.13	1.08	2.65	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
27.50	90.22	12.16	0.13	1.09	2.67	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
27.75	91.04	12.18	0.11	0.88	2.69	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
28.00	91.86	11.90	0.15	1.29	2.71	clayey silt to silty clay	UNDFND	UNDFD	6	.6
28.25	92.68	13.70	0.19	1.39	2.73	clayey silt to silty clay	UNDFND	UNDFD	7	.8
28.50	93.50	13.24	0.17	1.28	2.75	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
28.75	94.32	13.24	0.18	1.32	2.77	clayey silt to silty clay	UNDFND	UNDFD	6	.7
29.00	95.14	12.74	0.16	1.24	2.80	clayey silt to silty clay	UNDFND	UNDFD	6	.7
29.25	95.96	12.80	0.16	1.27	2.82	clayey silt to silty clay	UNDFND	UNDFD	6	.7
29.50	96.78	12.52	0.16	1.25	2.84	clayey silt to silty clay	UNDFND	UNDFD	6	.6
29.75	97.60	12.76	0.15	1.19	2.86	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
30.00	98.43	12.84	0.14	1.11	2.88	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
30.25	99.25	12.88	0.14	1.09	2.90	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
30.50	100.07	13.04	0.15	1.12	2.93	sandy silt to clayey silt	UNDFND	UNDFD	5	.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	197.66	1.04	0.52	1.14	sand	80-90	42-44	38	UNDEFINED
10.00	32.81	115.64	0.39	0.33	1.16	sand	60-70	40-42	22	UNDEFINED
10.25	33.63	73.24	0.58	0.79	1.18	sand to silty sand	50-60	38-40	18	UNDEFINED
10.50	34.45	49.42	0.53	1.07	1.20	silty sand to sandy silt	40-50	36-38	16	UNDEFINED
10.75	35.27	50.72	0.52	1.03	1.22	silty sand to sandy silt	40-50	36-38	16	UNDEFINED
11.00	36.09	11.22	0.12	1.06	1.24	clayey silt to silty clay	UNDFND	UNDFD	5	.9
11.25	36.91	14.86	0.05	0.31	1.27	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
11.50	37.73	35.40	0.09	0.25	1.29	silty sand to sandy silt	<40	34-36	11	UNDEFINED
11.75	38.55	19.86	0.03	0.13	1.31	silty sand to sandy silt	<40	30-32	6	UNDEFINED
12.00	39.37	8.52	0.01	0.12	1.33	sensitive fine grained	UNDFND	UNDFD	4	.6
12.25	40.19	8.70	0.03	0.30	1.35	sensitive fine grained	UNDFND	UNDFD	4	.6
12.50	41.01	9.64	0.03	0.36	1.37	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
12.75	41.83	8.10	0.01	0.16	1.40	sensitive fine grained	UNDFND	UNDFD	4	.5
13.00	42.65	9.72	0.01	0.07	1.42	sensitive fine grained	UNDFND	UNDFD	5	.7
13.25	43.47	7.68	0.01	0.10	1.44	sensitive fine grained	UNDFND	UNDFD	4	.5
13.50	44.29	8.12	0.01	0.16	1.46	sensitive fine grained	UNDFND	UNDFD	4	.5
13.75	45.11	8.94	0.02	0.23	1.48	sensitive fine grained	UNDFND	UNDFD	4	.6
14.00	45.93	8.30	0.01	0.07	1.50	sensitive fine grained	UNDFND	UNDFD	4	.5
14.25	46.75	8.20	0.02	0.19	1.52	sensitive fine grained	UNDFND	UNDFD	4	.5
14.50	47.57	8.32	0.03	0.36	1.55	sensitive fine grained	UNDFND	UNDFD	4	.5
14.75	48.39	39.94	0.14	0.35	1.57	sand to silty sand	<40	32-34	10	UNDEFINED
15.00	49.21	62.74	0.42	0.67	1.59	sand to silty sand	40-50	36-38	15	UNDEFINED
15.25	50.03	189.22	1.01	0.53	1.61	sand	70-80	40-42	36	UNDEFINED
15.50	50.85	172.08	0.92	0.53	1.63	sand	70-80	40-42	33	UNDEFINED
15.75	51.67	104.16	0.39	0.37	1.65	sand	60-70	38-40	20	UNDEFINED
16.00	52.49	77.98	0.72	0.92	1.68	sand to silty sand	50-60	36-38	19	UNDEFINED
16.25	53.31	134.50	0.56	0.41	1.70	sand	60-70	40-42	26	UNDEFINED
16.50	54.13	92.20	0.75	0.81	1.72	sand to silty sand	50-60	36-38	22	UNDEFINED
16.75	54.95	186.96	1.03	0.55	1.74	sand	70-80	40-42	36	UNDEFINED
17.00	55.77	206.82	1.10	0.53	1.76	sand	70-80	40-42	40	UNDEFINED
17.25	56.59	114.66	0.45	0.39	1.78	sand	60-70	38-40	22	UNDEFINED
17.50	57.41	58.12	0.46	0.80	1.80	sand to silty sand	40-50	34-36	14	UNDEFINED
17.75	58.23	24.88	0.10	0.39	1.83	silty sand to sandy silt	<40	<30	8	UNDEFINED
18.00	59.06	11.22	0.02	0.18	1.85	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
18.25	59.88	11.00	0.01	0.08	1.87	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
18.50	60.70	11.00	0.02	0.16	1.89	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
18.75	61.52	10.34	0.01	0.11	1.91	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
19.00	62.34	10.26	0.01	0.09	1.93	sensitive fine grained	UNDFND	UNDFD	5	.6
19.25	63.16	10.56	0.02	0.20	1.96	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
19.50	63.98	10.28	0.02	0.19	1.98	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
19.75	64.80	10.28	0.02	0.16	2.00	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.00	65.62	10.50	0.02	0.14	2.02	sandy silt to clayey silt	UNDFND	UNDFD	4	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-13
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/08/94 10:55
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	8.24	0.04	0.47	0.02	sensitive fine grained	UNDFND	UNDFD	4	.8
0.50	1.64	9.34	0.06	0.65	0.07	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
0.75	2.46	11.46	0.02	0.14	0.12	sandy silt to clayey silt	UNDFND	UNDFD	4	1.1
1.00	3.28	28.38	0.10	0.37	0.17	silty sand to sandy silt	50-60	42-44	9	UNDEFINED
1.25	4.10	104.96	0.75	0.72	0.21	sand to silty sand	>90	46-48	25	UNDEFINED
1.50	4.92	180.48	0.66	0.36	0.26	sand	>90	>48	35	UNDEFINED
1.75	5.74	144.90	0.57	0.39	0.31	sand	>90	46-48	28	UNDEFINED
2.00	6.56	110.24	0.41	0.38	0.35	sand	80-90	44-46	21	UNDEFINED
2.25	7.38	83.34	0.33	0.39	0.40	sand to silty sand	70-80	44-46	20	UNDEFINED
2.50	8.20	45.46	0.33	0.74	0.45	silty sand to sandy silt	50-60	40-42	15	UNDEFINED
2.75	9.02	41.02	0.19	0.47	0.50	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
3.00	9.84	20.12	0.19	0.94	0.54	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
3.25	10.66	15.38	0.10	0.63	0.58	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
3.50	11.48	17.12	0.10	0.56	0.60	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
3.75	12.30	12.30	0.15	1.19	0.62	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
4.00	13.12	9.44	0.09	0.93	0.64	clayey silt to silty clay	UNDFND	UNDFD	5	.8
4.25	13.94	4.96	0.04	0.80	0.66	sensitive fine grained	UNDFND	UNDFD	2	.4
4.50	14.76	19.90	0.08	0.40	0.68	silty sand to sandy silt	<40	34-36	6	UNDEFINED
4.75	15.58	27.36	0.14	0.50	0.71	silty sand to sandy silt	<40	36-38	9	UNDEFINED
5.00	16.40	12.92	0.07	0.57	0.73	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
5.25	17.22	13.14	0.03	0.21	0.75	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
5.50	18.04	7.66	0.01	0.18	0.77	sensitive fine grained	UNDFND	UNDFD	4	.6
5.75	18.86	8.30	0.01	0.17	0.79	sensitive fine grained	UNDFND	UNDFD	4	.7
6.00	19.69	8.60	0.01	0.10	0.81	sensitive fine grained	UNDFND	UNDFD	4	.7
6.25	20.51	6.62	0.01	0.15	0.84	sensitive fine grained	UNDFND	UNDFD	3	.5
6.50	21.33	11.86	0.03	0.27	0.86	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
6.75	22.15	15.96	0.09	0.57	0.88	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
7.00	22.97	22.62	0.02	0.08	0.90	silty sand to sandy silt	<40	32-34	7	UNDEFINED
7.25	23.79	28.96	0.07	0.24	0.92	silty sand to sandy silt	<40	34-36	9	UNDEFINED
7.50	24.61	29.32	0.11	0.39	0.94	silty sand to sandy silt	<40	34-36	9	UNDEFINED
7.75	25.43	32.90	0.13	0.40	0.96	silty sand to sandy silt	<40	34-36	11	UNDEFINED
8.00	26.25	39.56	0.12	0.31	0.99	sand to silty sand	40-50	36-38	9	UNDEFINED
8.25	27.07	51.00	0.29	0.57	1.01	sand to silty sand	40-50	36-38	12	UNDEFINED
8.50	27.89	73.98	0.37	0.51	1.03	sand to silty sand	50-60	38-40	18	UNDEFINED
8.75	28.71	76.94	0.33	0.42	1.05	sand to silty sand	50-60	38-40	18	UNDEFINED
9.00	29.53	68.98	0.32	0.46	1.07	sand to silty sand	50-60	38-40	17	UNDEFINED
9.25	30.35	24.20	0.16	0.67	1.09	silty sand to sandy silt	<40	32-34	8	UNDEFINED
9.50	31.17	120.22	0.62	0.52	1.12	sand	70-80	40-42	23	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-13 Page No. 4

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	12.74	0.08	0.62	2.95	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
31.00	101.71	12.60	0.07	0.52	2.97	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
31.25	102.53	12.68	0.06	0.48	2.99	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
31.50	103.35	13.00	0.09	0.67	3.01	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
31.75	104.17	13.02	0.08	0.64	3.03	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
32.00	104.99	12.44	0.07	0.56	3.05	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
32.25	105.81	13.36	0.08	0.57	3.08	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
32.50	106.63	13.42	0.08	0.58	3.10	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
32.75	107.45	13.48	0.08	0.60	3.12	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.00	108.27	13.34	0.07	0.50	3.14	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.25	109.09	13.66	0.08	0.56	3.16	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.50	109.91	13.82	0.08	0.60	3.18	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
33.75	110.73	14.00	0.09	0.63	3.21	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.00	111.55	13.74	0.08	0.59	3.23	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.25	112.37	13.90	0.08	0.60	3.25	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.50	113.19	14.04	0.10	0.68	3.27	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
34.75	114.01	14.34	0.08	0.59	3.29	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
35.00	114.83	14.48	0.10	0.71	3.31	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
35.25	115.65	14.98	0.10	0.70	3.34	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
35.50	116.47	15.02	0.11	0.72	3.36	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
35.75	117.29	15.16	0.11	0.73	3.38	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
36.00	118.11	15.46	0.10	0.66	3.40	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
36.25	118.93	14.64	0.12	0.80	3.42	sandy silt to clayey silt	UNDFND	UNDFD	6	.7
36.50	119.75	15.64	0.13	0.82	3.44	sandy silt to clayey silt	UNDFND	UNDFD	6	.8
36.75	120.57	16.88	0.16	0.96	3.46	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
37.00	121.39	22.18	0.48	2.16	3.49	sandy silt to clayey silt	UNDFND	UNDFD	8	1.5
37.25	122.21	22.82	0.58	2.54	3.51	clayey silt to silty clay	UNDFND	UNDFD	11	1.5
37.50	123.03	19.90	0.43	2.18	3.53	clayey silt to silty clay	UNDFND	UNDFD	10	1.2
37.75	123.85	24.78	0.61	2.48	3.55	clayey silt to silty clay	UNDFND	UNDFD	12	1.7
38.00	124.67	26.08	0.49	1.86	3.57	sandy silt to clayey silt	UNDFND	UNDFD	10	1.8
38.25	125.49	23.44	0.67	2.84	3.59	clayey silt to silty clay	UNDFND	UNDFD	11	1.6
38.50	126.31	24.66	0.67	2.72	3.62	clayey silt to silty clay	UNDFND	UNDFD	12	1.7
38.75	127.13	43.12	0.95	2.21	3.64	sandy silt to clayey silt	UNDFND	UNDFD	17	3.5
39.00	127.95	25.72	0.25	0.97	3.66	sandy silt to clayey silt	UNDFND	UNDFD	10	1.8
39.25	128.77	37.36	0.74	1.98	3.68	sandy silt to clayey silt	UNDFND	UNDFD	14	2.9
39.50	129.59	30.52	0.17	0.55	3.70	silty sand to sandy silt	<40	<30	10	UNDEFINED
39.75	130.41	23.06	0.10	0.46	3.72	silty sand to sandy silt	<40	<30	7	UNDEFINED
40.00	131.23	24.72	0.17	0.70	3.74	silty sand to sandy silt	<40	<30	8	UNDEFINED
40.25	132.05	41.92	1.50	3.58	3.77	clayey silt to silty clay	UNDFND	UNDFD	20	3.4
40.50	132.87	54.90	2.58	4.71	3.79	silty clay to clay	UNDFND	UNDFD	35	4.7
40.75	133.69	72.46	3.71	5.12	3.81	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-13 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	10.68	0.03	0.25	2.04	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.50	67.26	10.48	0.02	0.22	2.06	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
20.75	68.08	10.44	0.02	0.20	2.09	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.00	68.90	10.54	0.04	0.33	2.11	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.25	69.72	10.38	0.04	0.35	2.13	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.50	70.54	10.62	0.05	0.50	2.15	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.75	71.36	11.52	0.13	1.09	2.17	clayey silt to silty clay	UNDFND	UNDFD	6	.7
22.00	72.18	11.04	0.12	1.05	2.19	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.25	73.00	10.90	0.09	0.87	2.21	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.50	73.82	11.16	0.10	0.88	2.24	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.75	74.64	11.30	0.09	0.75	2.26	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
23.00	75.46	11.04	0.08	0.69	2.28	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.25	76.28	11.34	0.08	0.71	2.30	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.50	77.10	11.52	0.09	0.79	2.32	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
23.75	77.92	11.60	0.09	0.79	2.34	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
24.00	78.74	11.44	0.09	0.83	2.37	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
24.25	79.56	12.18	0.09	0.76	2.39	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
24.50	80.38	11.26	0.07	0.62	2.41	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
24.75	81.20	11.10	0.07	0.63	2.43	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
25.00	82.02	10.82	0.06	0.55	2.45	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
25.25	82.84	10.80	0.07	0.63	2.47	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
25.50	83.66	10.70	0.06	0.52	2.49	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
25.75	84.48	10.92	0.06	0.52	2.52	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
26.00	85.30	11.14	0.05	0.44	2.54	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
26.25	86.12	11.14	0.06	0.50	2.56	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
26.50	86.94	11.26	0.05	0.46	2.58	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
26.75	87.76	11.30	0.03	0.30	2.60	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
27.00	88.58	10.38	0.05	0.44	2.62	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
27.25	89.40	11.22	0.05	0.48	2.65	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
27.50	90.22	11.40	0.05	0.46	2.67	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
27.75	91.04	11.78	0.06	0.53	2.69	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
28.00	91.86	11.82	0.05	0.45	2.71	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
28.25	92.68	11.94	0.06	0.49	2.73	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
28.50	93.50	12.18	0.06	0.49	2.75	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
28.75	94.32	12.28	0.06	0.50	2.77	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
29.00	95.14	11.50	0.06	0.56	2.80	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
29.25	95.96	12.36	0.06	0.48	2.82	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
29.50	96.78	12.48	0.07	0.60	2.84	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
29.75	97.60	12.48	0.06	0.52	2.86	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
30.00	98.43	11.64	0.05	0.45	2.88	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
30.25	99.25	12.44	0.06	0.48	2.90	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
30.50	100.07	12.68	0.07	0.54	2.93	sandy silt to clayey silt	UNDFND	UNDFD	5	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-14 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	6.42	0.02	0.27	1.14	sensitive fine grained	UNDFND	UNDFD	3	.4
10.00	32.81	6.02	0.01	0.18	1.16	sensitive fine grained	UNDFND	UNDFD	3	.4
10.25	33.63	6.70	0.01	0.18	1.18	sensitive fine grained	UNDFND	UNDFD	3	.4
10.50	34.45	6.66	0.01	0.20	1.20	sensitive fine grained	UNDFND	UNDFD	3	.4
10.75	35.27	7.50	0.01	0.15	1.22	sensitive fine grained	UNDFND	UNDFD	4	.5
11.00	36.09	6.68	0.01	0.15	1.24	sensitive fine grained	UNDFND	UNDFD	3	.4
11.25	36.91	6.80	0.01	0.13	1.27	sensitive fine grained	UNDFND	UNDFD	3	.4
11.50	37.73	7.00	0.01	0.13	1.29	sensitive fine grained	UNDFND	UNDFD	3	.4
11.75	38.55	9.02	0.01	0.14	1.31	sensitive fine grained	UNDFND	UNDFD	4	.6
12.00	39.37	6.62	0.01	0.15	1.33	sensitive fine grained	UNDFND	UNDFD	3	.4
12.25	40.19	6.42	0.01	0.19	1.35	sensitive fine grained	UNDFND	UNDFD	3	.4
12.50	41.01	13.76	0.04	0.32	1.37	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
12.75	41.83	16.40	0.29	1.76	1.40	clayey silt to silty clay	UNDFND	UNDFD	8	1.4
13.00	42.65	77.12	0.52	0.67	1.42	sand to silty sand	50-60	38-40	18	UNDEFINED
13.25	43.47	53.58	0.55	1.03	1.44	silty sand to sandy silt	40-50	36-38	17	UNDEFINED
13.50	44.29	45.92	0.45	0.98	1.46	silty sand to sandy silt	<40	34-36	15	UNDEFINED
13.75	45.11	32.10	0.32	0.99	1.48	silty sand to sandy silt	<40	32-34	10	UNDEFINED
14.00	45.93	53.66	0.36	0.68	1.50	sand to silty sand	40-50	34-36	13	UNDEFINED
14.25	46.75	9.00	0.07	0.72	1.52	clayey silt to silty clay	UNDFND	UNDFD	4	.6
14.50	47.57	99.06	0.51	0.52	1.55	sand to silty sand	60-70	38-40	24	UNDEFINED
14.75	48.39	184.92	0.80	0.43	1.57	sand	70-80	40-42	35	UNDEFINED
15.00	49.21	168.42	0.53	0.31	1.59	sand	70-80	40-42	32	UNDEFINED
15.25	50.03	156.88	0.45	0.29	1.61	sand	70-80	40-42	30	UNDEFINED
15.50	50.85	109.98	0.24	0.22	1.63	sand	60-70	38-40	21	UNDEFINED
15.75	51.67	87.62	0.40	0.45	1.65	sand to silty sand	50-60	36-38	21	UNDEFINED
16.00	52.49	66.94	0.30	0.44	1.68	sand to silty sand	40-50	36-38	16	UNDEFINED
16.25	53.31	104.60	0.25	0.24	1.70	sand	60-70	38-40	20	UNDEFINED
16.50	54.13	183.36	0.75	0.41	1.72	sand	70-80	40-42	35	UNDEFINED
16.75	54.95	150.04	0.73	0.49	1.74	sand	70-80	40-42	29	UNDEFINED
17.00	55.77	34.96	0.53	1.53	1.76	sandy silt to clayey silt	UNDFND	UNDFD	13	3.1
17.25	56.59	14.16	0.16	1.16	1.78	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
17.50	57.41	10.30	0.00	0.03	1.80	sensitive fine grained	UNDFND	UNDFD	5	.7
17.75	58.23	10.24	0.01	0.10	1.83	sensitive fine grained	UNDFND	UNDFD	5	.6
18.00	59.06	10.08	0.01	0.13	1.85	sensitive fine grained	UNDFND	UNDFD	5	.6
18.25	59.88	9.72	0.01	0.15	1.87	sensitive fine grained	UNDFND	UNDFD	5	.6
18.50	60.70	9.72	0.02	0.18	1.89	sensitive fine grained	UNDFND	UNDFD	5	.6
18.75	61.52	9.72	0.02	0.16	1.91	sensitive fine grained	UNDFND	UNDFD	5	.6
19.00	62.34	9.36	0.01	0.15	1.93	sensitive fine grained	UNDFND	UNDFD	4	.5
19.25	63.16	9.78	0.01	0.09	1.96	sensitive fine grained	UNDFND	UNDFD	5	.6
19.50	63.98	9.94	0.01	0.10	1.98	sensitive fine grained	UNDFND	UNDFD	5	.6
19.75	64.80	10.00	0.01	0.11	2.00	sensitive fine grained	UNDFND	UNDFD	5	.6
20.00	65.62	10.08	0.01	0.08	2.02	sensitive fine grained	UNDFND	UNDFD	5	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-14
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/08/94 2:30
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	2.50	-0.00	-0.03	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	2.36	-0.01	-0.54	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	2.68	-0.02	-0.60	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	8.44	0.12	1.46	0.17	clayey silt to silty clay	UNDFND	UNDFD	4	.8
1.25	4.10	25.60	0.20	0.78	0.21	silty sand to sandy silt	40-50	40-42	8	UNDEFINED
1.50	4.92	36.14	0.17	0.47	0.26	silty sand to sandy silt	50-60	42-44	12	UNDEFINED
1.75	5.74	57.22	0.43	0.75	0.31	sand to silty sand	60-70	42-44	14	UNDEFINED
2.00	6.56	75.28	0.27	0.36	0.35	sand to silty sand	70-80	44-46	18	UNDEFINED
2.25	7.38	79.28	0.31	0.39	0.40	sand to silty sand	70-80	44-46	19	UNDEFINED
2.50	8.20	80.68	0.31	0.38	0.45	sand to silty sand	70-80	42-44	19	UNDEFINED
2.75	9.02	76.60	0.31	0.41	0.50	sand to silty sand	60-70	42-44	18	UNDEFINED
3.00	9.84	66.16	0.24	0.36	0.54	sand to silty sand	60-70	40-42	16	UNDEFINED
3.25	10.66	53.70	0.23	0.43	0.58	sand to silty sand	50-60	40-42	13	UNDEFINED
3.50	11.48	13.32	0.25	1.84	0.60	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
3.75	12.30	20.54	0.12	0.60	0.62	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
4.00	13.12	46.74	0.21	0.45	0.64	sand to silty sand	50-60	38-40	11	UNDEFINED
4.25	13.94	56.52	0.36	0.64	0.66	sand to silty sand	50-60	40-42	14	UNDEFINED
4.50	14.76	9.14	0.15	1.66	0.68	clayey silt to silty clay	UNDFND	UNDFD	4	.8
4.75	15.58	8.48	0.12	1.46	0.71	clayey silt to silty clay	UNDFND	UNDFD	4	.7
5.00	16.40	4.32	0.02	0.50	0.73	sensitive fine grained	UNDFND	UNDFD	2	.3
5.25	17.22	51.62	0.33	0.64	0.75	sand to silty sand	50-60	38-40	12	UNDEFINED
5.50	18.04	34.86	0.16	0.45	0.77	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
5.75	18.86	26.10	0.09	0.36	0.79	silty sand to sandy silt	<40	34-36	8	UNDEFINED
6.00	19.69	12.74	0.06	0.50	0.81	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
6.25	20.51	9.92	0.02	0.23	0.84	sensitive fine grained	UNDFND	UNDFD	5	.8
6.50	21.33	6.68	0.02	0.36	0.86	sensitive fine grained	UNDFND	UNDFD	3	.5
6.75	22.15	6.82	0.03	0.42	0.88	sensitive fine grained	UNDFND	UNDFD	3	.5
7.00	22.97	5.26	0.02	0.41	0.90	sensitive fine grained	UNDFND	UNDFD	3	.3
7.25	23.79	13.68	0.02	0.18	0.92	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
7.50	24.61	8.62	0.03	0.29	0.94	sensitive fine grained	UNDFND	UNDFD	4	.7
7.75	25.43	4.36	0.02	0.55	0.96	sensitive fine grained	UNDFND	UNDFD	2	.2
8.00	26.25	9.78	0.02	0.20	0.99	sensitive fine grained	UNDFND	UNDFD	5	.8
8.25	27.07	7.78	0.03	0.38	1.01	sensitive fine grained	UNDFND	UNDFD	4	.6
8.50	27.89	58.36	0.29	0.49	1.03	sand to silty sand	50-60	38-40	14	UNDEFINED
8.75	28.71	59.60	0.38	0.64	1.05	sand to silty sand	50-60	38-40	14	UNDEFINED
9.00	29.53	20.08	0.14	0.72	1.07	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
9.25	30.35	6.72	0.01	0.20	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	6.42	0.02	0.26	1.12	sensitive fine grained	UNDFND	UNDFD	3	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-14 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	9.56	0.01	0.05	2.04	sensitive fine grained	UNDFND	UNDFD	5	.5
20.50	67.26	10.30	0.01	0.09	2.06	sensitive fine grained	UNDFND	UNDFD	5	.6
20.75	68.08	10.36	0.01	0.14	2.09	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.00	68.90	10.22	0.01	0.10	2.11	sensitive fine grained	UNDFND	UNDFD	5	.6
21.25	69.72	10.86	0.03	0.27	2.13	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
21.50	70.54	11.08	0.05	0.46	2.15	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
21.75	71.36	10.76	0.04	0.40	2.17	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.00	72.18	10.76	0.03	0.26	2.19	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.25	73.00	9.94	0.03	0.34	2.21	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
22.50	73.82	10.54	0.04	0.39	2.24	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
22.75	74.64	10.56	0.07	0.64	2.26	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.00	75.46	10.48	0.05	0.49	2.28	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.25	76.28	10.56	0.03	0.33	2.30	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.50	77.10	10.56	0.04	0.38	2.32	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
23.75	77.92	10.82	0.04	0.41	2.34	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
24.00	78.74	11.00	0.05	0.47	2.37	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
24.25	79.56	11.18	0.05	0.42	2.39	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
24.50	80.38	11.04	0.05	0.49	2.41	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
24.75	81.20	11.22	0.05	0.47	2.43	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
25.00	82.02	11.18	0.05	0.48	2.45	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
25.25	82.84	10.44	0.04	0.35	2.47	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
25.50	83.66	11.46	0.04	0.39	2.49	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
25.75	84.48	11.52	0.05	0.45	2.52	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
26.00	85.30	11.58	0.05	0.44	2.54	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
26.25	86.12	10.84	0.04	0.36	2.56	sandy silt to clayey silt	UNDFND	UNDFD	4	.5
26.50	86.94	11.76	0.05	0.42	2.58	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
26.75	87.76	11.88	0.06	0.47	2.60	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
27.00	88.58	12.06	0.07	0.55	2.62	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
27.25	89.40	11.36	0.05	0.48	2.65	sandy silt to clayey silt	UNDFND	UNDFD	4	.6
27.50	90.22	12.36	0.06	0.52	2.67	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
27.75	91.04	12.32	0.06	0.49	2.69	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
28.00	91.86	12.18	0.07	0.58	2.71	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
28.25	92.68	12.22	0.07	0.54	2.73	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
28.50	93.50	12.58	0.07	0.52	2.75	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
28.75	94.32	12.84	0.08	0.61	2.77	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
29.00	95.14	12.96	0.08	0.58	2.80	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
29.25	95.96	12.86	0.05	0.42	2.82	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
29.50	96.78	12.50	0.08	0.63	2.84	sandy silt to clayey silt	UNDFND	UNDFD	5	.6
29.75	97.60	13.26	0.07	0.51	2.86	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
30.00	98.43	13.50	0.08	0.56	2.88	sandy silt to clayey silt	UNDFND	UNDFD	5	.7
30.25	99.25	16.92	0.18	1.06	2.90	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
30.50	100.07	56.08	0.31	0.55	2.93	sand to silty sand	<40	30-32	13	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-15 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	39.58	0.18	0.46	1.14	silty sand to sandy silt	<40	34-36	13	UNDEFINED
10.00	32.81	22.24	0.08	0.34	1.16	silty sand to sandy silt	<40	30-32	7	UNDEFINED
10.25	33.63	6.62	0.01	0.14	1.18	sensitive fine grained	UNDFND	UNDFD	3	.4
10.50	34.45	10.90	0.02	0.19	1.20	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
10.75	35.27	42.54	0.30	0.71	1.22	silty sand to sandy silt	<40	34-36	14	UNDEFINED
11.00	36.09	83.34	0.57	0.68	1.24	sand to silty sand	50-60	38-40	20	UNDEFINED
11.25	36.91	29.46	0.18	0.60	1.27	silty sand to sandy silt	<40	32-34	9	UNDEFINED
11.50	37.73	16.66	0.09	0.55	1.29	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
11.75	38.55	23.28	0.08	0.35	1.31	silty sand to sandy silt	<40	30-32	7	UNDEFINED
12.00	39.37	22.58	0.04	0.16	1.33	silty sand to sandy silt	<40	30-32	7	UNDEFINED
12.25	40.19	16.74	0.02	0.15	1.35	silty sand to sandy silt	<40	<30	5	UNDEFINED
12.50	41.01	13.50	0.03	0.23	1.37	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
12.75	41.83	14.68	0.04	0.25	1.40	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
13.00	42.65	10.54	0.01	0.07	1.42	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
13.25	43.47	9.10	0.00	0.02	1.44	sensitive fine grained	UNDFND	UNDFD	4	.6
13.50	44.29	9.52	0.01	0.09	1.46	sensitive fine grained	UNDFND	UNDFD	5	.6
13.75	45.11	10.26	0.01	0.14	1.48	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
14.00	45.93	10.72	0.02	0.19	1.50	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
14.25	46.75	10.90	0.01	0.09	1.52	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
14.50	47.57	9.46	0.01	0.11	1.55	sensitive fine grained	UNDFND	UNDFD	5	.6
14.75	48.39	9.04	0.01	0.11	1.57	sensitive fine grained	UNDFND	UNDFD	4	.6
15.00	49.21	8.90	0.03	0.35	1.59	sensitive fine grained	UNDFND	UNDFD	4	.6
15.25	50.03	9.22	0.03	0.30	1.61	sensitive fine grained	UNDFND	UNDFD	4	.6
15.50	50.85	9.48	0.03	0.37	1.63	sensitive fine grained	UNDFND	UNDFD	5	.6
15.75	51.67	10.08	0.04	0.41	1.65	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
16.00	52.49	41.08	0.20	0.49	1.68	silty sand to sandy silt	<40	32-34	13	UNDEFINED
16.25	53.31	62.84	0.36	0.57	1.70	sand to silty sand	40-50	36-38	15	UNDEFINED
16.50	54.13	185.16	1.05	0.57	1.72	sand	70-80	40-42	35	UNDEFINED
16.75	54.95	204.80	0.98	0.48	1.74	sand	70-80	40-42	39	UNDEFINED
17.00	55.77	269.30	1.56	0.58	1.76	sand	80-90	42-44	>50	UNDEFINED
17.25	56.59	273.20	1.74	0.64	1.78	sand	80-90	42-44	>50	UNDEFINED
17.50	57.41	209.48	1.09	0.52	1.80	sand	70-80	40-42	40	UNDEFINED
17.75	58.23	179.26	0.81	0.45	1.83	sand	70-80	40-42	34	UNDEFINED
18.00	59.06	209.42	0.96	0.46	1.85	sand	70-80	40-42	40	UNDEFINED
18.25	59.88	136.94	0.51	0.37	1.87	sand	60-70	38-40	26	UNDEFINED
18.50	60.70	54.28	0.20	0.37	1.89	sand to silty sand	40-50	34-36	13	UNDEFINED
18.75	61.52	12.12	0.04	0.31	1.91	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
19.00	62.34	13.08	0.11	0.87	1.93	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
19.25	63.16	11.46	0.11	0.99	1.96	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
19.50	63.98	10.84	0.13	1.19	1.98	clayey silt to silty clay	UNDFND	UNDFD	5	.7
19.75	64.80	10.02	0.13	1.26	2.00	clayey silt to silty clay	UNDFND	UNDFD	5	.6
20.00	65.62	10.02	0.11	1.12	2.02	clayey silt to silty clay	UNDFND	UNDFD	5	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-15
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/06/94 3:10
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	-0.20	-0.00	2.30	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	2.94	0.05	1.59	0.07	sensitive fine grained	UNDFND	UNDFD	1	.2
0.75	2.46	50.96	0.53	1.03	0.12	silty sand to sandy silt	70-80	46-48	16	UNDEFINED
1.00	3.28	56.08	0.26	0.46	0.17	sand to silty sand	70-80	46-48	13	UNDEFINED
1.25	4.10	42.94	0.16	0.37	0.21	sand to silty sand	60-70	44-46	10	UNDEFINED
1.50	4.92	32.98	0.11	0.34	0.26	silty sand to sandy silt	50-60	42-44	11	UNDEFINED
1.75	5.74	22.96	0.08	0.36	0.31	silty sand to sandy silt	40-50	38-40	7	UNDEFINED
2.00	6.56	15.32	0.05	0.33	0.35	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
2.25	7.38	17.78	0.07	0.40	0.40	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
2.50	8.20	19.64	0.09	0.44	0.45	silty sand to sandy silt	<40	36-38	6	UNDEFINED
2.75	9.02	23.94	0.11	0.46	0.50	silty sand to sandy silt	<40	36-38	8	UNDEFINED
3.00	9.84	32.30	0.18	0.55	0.54	silty sand to sandy silt	40-50	38-40	10	UNDEFINED
3.25	10.66	49.52	0.28	0.56	0.58	sand to silty sand	50-60	40-42	12	UNDEFINED
3.50	11.48	51.08	0.24	0.48	0.60	sand to silty sand	50-60	40-42	12	UNDEFINED
3.75	12.30	48.42	0.22	0.45	0.62	sand to silty sand	50-60	38-40	12	UNDEFINED
4.00	13.12	47.82	0.23	0.48	0.64	sand to silty sand	50-60	38-40	11	UNDEFINED
4.25	13.94	62.38	0.31	0.49	0.66	sand to silty sand	50-60	40-42	15	UNDEFINED
4.50	14.76	68.64	0.34	0.50	0.68	sand to silty sand	60-70	40-42	16	UNDEFINED
4.75	15.58	30.44	0.25	0.83	0.71	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.00	16.40	7.38	0.08	1.11	0.73	sensitive fine grained	UNDFND	UNDFD	4	.6
5.25	17.22	4.64	0.04	0.90	0.75	sensitive fine grained	UNDFND	UNDFD	2	.3
5.50	18.04	5.18	0.07	1.39	0.77	sensitive fine grained	UNDFND	UNDFD	2	.4
5.75	18.86	25.66	0.15	0.58	0.79	silty sand to sandy silt	<40	34-36	8	UNDEFINED
6.00	19.69	39.38	0.21	0.54	0.81	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
6.25	20.51	44.22	0.24	0.55	0.84	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
6.50	21.33	46.26	0.29	0.62	0.86	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
6.75	22.15	45.64	0.27	0.59	0.88	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
7.00	22.97	14.76	0.11	0.75	0.90	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
7.25	23.79	7.02	0.01	0.17	0.92	sensitive fine grained	UNDFND	UNDFD	3	.5
7.50	24.61	7.22	0.02	0.25	0.94	sensitive fine grained	UNDFND	UNDFD	3	.5
7.75	25.43	6.22	0.03	0.50	0.96	sensitive fine grained	UNDFND	UNDFD	3	.4
8.00	26.25	7.78	0.03	0.38	0.99	sensitive fine grained	UNDFND	UNDFD	4	.6
8.25	27.07	6.16	0.01	0.10	1.01	sensitive fine grained	UNDFND	UNDFD	3	.4
8.50	27.89	5.32	0.01	0.18	1.03	sensitive fine grained	UNDFND	UNDFD	3	.3
8.75	28.71	10.24	0.03	0.33	1.05	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
9.00	29.53	5.32	0.01	0.24	1.07	sensitive fine grained	UNDFND	UNDFD	3	.3
9.25	30.35	21.92	0.14	0.66	1.09	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
9.50	31.17	37.94	0.25	0.65	1.12	silty sand to sandy silt	<40	34-36	12	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	15.76	0.17	1.09	2.95	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
31.00	101.71	15.92	0.17	1.10	2.97	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
31.25	102.53	16.02	0.17	1.09	2.99	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
31.50	103.35	16.18	0.19	1.15	3.01	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
31.75	104.17	17.08	0.26	1.54	3.03	sandy silt to clayey silt	UNDFND	UNDFD	7	1.1
32.00	104.99	183.44	1.22	0.67	3.05	sand	60-70	38-40	35	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-15 Page No. 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	10.86	0.14	1.27	2.04	clayey silt to silty clay	UNDFND	UNDFD	5	.7
20.50	67.26	79.54	0.74	0.93	2.06	sand to silty sand	40-50	36-38	19	UNDEFINED
20.75	68.08	49.72	0.38	0.77	2.09	silty sand to sandy silt	<40	32-34	16	UNDEFINED
21.00	68.90	20.56	0.14	0.69	2.11	sandy silt to clayey silt	UNDFND	UNDFD	8	1.6
21.25	69.72	55.12	0.37	0.66	2.13	sand to silty sand	<40	32-34	13	UNDEFINED
21.50	70.54	32.52	0.42	1.30	2.15	silty sand to sandy silt	<40	30-32	10	UNDEFINED
21.75	71.36	29.24	0.37	1.28	2.17	sandy silt to clayey silt	UNDFND	UNDFD	11	2.5
22.00	72.18	51.74	0.36	0.70	2.19	silty sand to sandy silt	<40	32-34	17	UNDEFINED
22.25	73.00	21.00	0.16	0.75	2.21	sandy silt to clayey silt	UNDFND	UNDFD	8	1.6
22.50	73.82	20.90	0.18	0.87	2.24	sandy silt to clayey silt	UNDFND	UNDFD	8	1.6
22.75	74.64	53.66	0.51	0.95	2.26	silty sand to sandy silt	<40	32-34	17	UNDEFINED
23.00	75.46	33.18	0.52	1.57	2.28	sandy silt to clayey silt	UNDFND	UNDFD	13	2.8
23.25	76.28	16.18	0.05	0.32	2.30	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
23.50	77.10	26.46	0.26	0.96	2.32	silty sand to sandy silt	<40	<30	8	UNDEFINED
23.75	77.92	22.66	0.32	1.43	2.34	sandy silt to clayey silt	UNDFND	UNDFD	9	1.8
24.00	78.74	36.22	0.40	1.11	2.37	silty sand to sandy silt	<40	30-32	12	UNDEFINED
24.25	79.56	50.80	0.62	1.21	2.39	silty sand to sandy silt	<40	32-34	16	UNDEFINED
24.50	80.38	78.22	0.44	0.56	2.41	sand to silty sand	40-50	34-36	19	UNDEFINED
24.75	81.20	20.78	0.19	0.90	2.43	sandy silt to clayey silt	UNDFND	UNDFD	8	1.6
25.00	82.02	15.24	0.07	0.48	2.45	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
25.25	82.84	15.00	0.09	0.59	2.47	sandy silt to clayey silt	UNDFND	UNDFD	6	1.0
25.50	83.66	14.60	0.11	0.78	2.49	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
25.75	84.48	14.54	0.13	0.87	2.52	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
26.00	85.30	14.02	0.14	0.96	2.54	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
26.25	86.12	14.02	0.15	1.04	2.56	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
26.50	86.94	13.88	0.15	1.07	2.58	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
26.75	87.76	14.44	0.16	1.09	2.60	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
27.00	88.58	14.24	0.15	1.07	2.62	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
27.25	89.40	14.18	0.15	1.06	2.65	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
27.50	90.22	14.56	0.15	1.02	2.67	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
27.75	91.04	14.76	0.17	1.15	2.69	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
28.00	91.86	15.20	0.17	1.11	2.71	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
28.25	92.68	15.22	0.16	1.06	2.73	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
28.50	93.50	14.72	0.17	1.13	2.75	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
28.75	94.32	14.78	0.16	1.11	2.77	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
29.00	95.14	15.28	0.17	1.09	2.80	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
29.25	95.96	15.14	0.16	1.06	2.82	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
29.50	96.78	15.32	0.16	1.07	2.84	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
29.75	97.60	15.56	0.18	1.13	2.86	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
30.00	98.43	15.20	0.18	1.19	2.88	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
30.25	99.25	15.38	0.17	1.10	2.90	sandy silt to clayey silt	UNDFND	UNDFD	6	.9
30.50	100.07	15.72	0.17	1.09	2.93	sandy silt to clayey silt	UNDFND	UNDFD	6	.9

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-16 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	51.46	0.25	0.49	1.14	sand to silty sand	40-50	36-38	12	UNDEFINED
10.00	32.81	43.96	0.24	0.54	1.16	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
10.25	33.63	49.26	0.18	0.36	1.18	sand to silty sand	40-50	36-38	12	UNDEFINED
10.50	34.45	39.16	0.13	0.32	1.20	sand to silty sand	<40	34-36	9	UNDEFINED
10.75	35.27	31.04	0.09	0.29	1.22	silty sand to sandy silt	<40	32-34	10	UNDEFINED
11.00	36.09	14.18	0.10	0.73	1.24	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
11.25	36.91	11.34	0.07	0.65	1.27	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
11.50	37.73	10.28	0.05	0.49	1.29	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
11.75	38.55	13.06	0.07	0.57	1.31	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
12.00	39.37	13.50	0.08	0.57	1.33	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
12.25	40.19	10.12	0.06	0.58	1.35	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
12.50	41.01	9.82	0.05	0.50	1.37	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
12.75	41.83	9.72	0.07	0.69	1.40	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
13.00	42.65	11.66	0.09	0.78	1.42	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
13.25	43.47	22.00	0.11	0.50	1.44	silty sand to sandy silt	<40	30-32	7	UNDEFINED
13.50	44.29	16.02	0.12	0.75	1.46	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
13.75	45.11	10.90	0.06	0.57	1.48	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
14.00	45.93	12.68	0.07	0.54	1.50	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
14.25	46.75	13.06	0.07	0.55	1.52	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
14.50	47.57	14.06	0.07	0.50	1.55	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
14.75	48.39	22.10	0.09	0.43	1.57	silty sand to sandy silt	<40	<30	7	UNDEFINED
15.00	49.21	45.48	0.19	0.42	1.59	sand to silty sand	<40	34-36	11	UNDEFINED
15.25	50.03	46.16	0.15	0.32	1.61	sand to silty sand	<40	34-36	11	UNDEFINED
15.50	50.85	71.98	0.38	0.53	1.63	sand to silty sand	50-60	36-38	17	UNDEFINED
15.75	51.67	129.76	0.71	0.55	1.65	sand	60-70	38-40	25	UNDEFINED
16.00	52.49	192.74	1.30	0.67	1.68	sand	70-80	40-42	37	UNDEFINED
16.25	53.31	157.10	1.08	0.69	1.70	sand	70-80	40-42	30	UNDEFINED
16.50	54.13	149.38	0.98	0.66	1.72	sand	70-80	40-42	29	UNDEFINED
16.75	54.95	101.94	0.55	0.54	1.74	sand to silty sand	50-60	38-40	24	UNDEFINED
17.00	55.77	112.12	0.63	0.56	1.76	sand	60-70	38-40	21	UNDEFINED
17.25	56.59	137.14	0.74	0.54	1.78	sand	60-70	38-40	26	UNDEFINED
17.50	57.41	106.88	0.52	0.49	1.80	sand	60-70	38-40	20	UNDEFINED
17.75	58.23	83.62	0.45	0.54	1.83	sand to silty sand	50-60	36-38	20	UNDEFINED
18.00	59.06	48.42	0.28	0.58	1.85	sand to silty sand	<40	32-34	12	UNDEFINED
18.25	59.88	22.10	0.13	0.61	1.87	silty sand to sandy silt	<40	<30	7	UNDEFINED
18.50	60.70	12.08	0.10	0.84	1.89	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
18.75	61.52	15.28	0.07	0.44	1.91	sandy silt to clayey silt	UNDFND	UNDFD	6	1.1
19.00	62.34	16.48	0.11	0.70	1.93	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
19.25	63.16	27.48	0.20	0.72	1.96	silty sand to sandy silt	<40	<30	9	UNDEFINED
19.50	63.98	89.44	0.49	0.55	1.98	sand to silty sand	50-60	36-38	21	UNDEFINED
19.75	64.80	29.40	0.46	1.58	2.00	sandy silt to clayey silt	UNDFND	UNDFD	11	2.5
20.00	65.62	12.34	0.17	1.36	2.02	clayey silt to silty clay	UNDFND	UNDFD	6	.8

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-16
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 4:10
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	6.56	0.17	2.58	0.02	silty clay to clay	UNDFND	UNDFD	4	.6
0.50	1.64	11.90	0.18	1.50	0.07	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
0.75	2.46	13.84	0.15	1.09	0.12	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
1.00	3.28	26.60	0.21	0.80	0.17	silty sand to sandy silt	50-60	42-44	8	UNDEFINED
1.25	4.10	36.98	0.25	0.67	0.21	silty sand to sandy silt	60-70	42-44	12	UNDEFINED
1.50	4.92	77.50	0.39	0.51	0.26	sand to silty sand	70-80	44-46	19	UNDEFINED
1.75	5.74	97.18	0.39	0.41	0.31	sand	80-90	44-46	19	UNDEFINED
2.00	6.56	87.14	0.35	0.40	0.35	sand to silty sand	70-80	44-46	21	UNDEFINED
2.25	7.38	78.70	0.33	0.42	0.40	sand to silty sand	70-80	42-44	19	UNDEFINED
2.50	8.20	75.90	0.34	0.45	0.45	sand to silty sand	70-80	42-44	18	UNDEFINED
2.75	9.02	65.82	0.31	0.48	0.50	sand to silty sand	60-70	42-44	16	UNDEFINED
3.00	9.84	56.34	0.27	0.47	0.54	sand to silty sand	50-60	40-42	13	UNDEFINED
3.25	10.66	73.68	0.33	0.45	0.58	sand to silty sand	60-70	42-44	18	UNDEFINED
3.50	11.48	65.62	0.33	0.50	0.60	sand to silty sand	60-70	40-42	16	UNDEFINED
3.75	12.30	53.54	0.28	0.52	0.62	sand to silty sand	50-60	40-42	13	UNDEFINED
4.00	13.12	55.90	0.28	0.51	0.64	sand to silty sand	50-60	40-42	13	UNDEFINED
4.25	13.94	58.48	0.30	0.51	0.66	sand to silty sand	50-60	40-42	14	UNDEFINED
4.50	14.76	64.80	0.36	0.56	0.68	sand to silty sand	50-60	40-42	16	UNDEFINED
4.75	15.58	48.84	0.37	0.75	0.71	silty sand to sandy silt	50-60	38-40	16	UNDEFINED
5.00	16.40	21.76	0.35	1.60	0.73	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
5.25	17.22	9.78	0.16	1.65	0.75	clayey silt to silty clay	UNDFND	UNDFD	5	.8
5.50	18.04	6.04	0.11	1.85	0.77	silty clay to clay	UNDFND	UNDFD	4	.5
5.75	18.86	14.28	0.27	1.92	0.79	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
6.00	19.69	23.96	0.22	0.94	0.81	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
6.25	20.51	49.40	0.34	0.68	0.84	silty sand to sandy silt	40-50	38-40	16	UNDEFINED
6.50	21.33	57.86	0.36	0.61	0.86	sand to silty sand	50-60	38-40	14	UNDEFINED
6.75	22.15	53.42	0.42	0.79	0.88	silty sand to sandy silt	50-60	38-40	17	UNDEFINED
7.00	22.97	41.86	0.22	0.53	0.90	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
7.25	23.79	21.94	0.18	0.82	0.92	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
7.50	24.61	13.90	0.11	0.81	0.94	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
7.75	25.43	18.06	0.09	0.49	0.96	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
8.00	26.25	12.42	0.10	0.77	0.99	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
8.25	27.07	10.64	0.05	0.49	1.01	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
8.50	27.89	10.20	0.07	0.65	1.03	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
8.75	28.71	8.88	0.07	0.83	1.05	clayey silt to silty clay	UNDFND	UNDFD	4	.7
9.00	29.53	12.20	0.06	0.48	1.07	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
9.25	30.35	12.04	0.12	0.96	1.09	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
9.50	31.17	19.08	0.19	1.02	1.12	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-16 Page No. 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	11.78	0.17	1.48	2.04	clayey silt to silty clay	UNDFND	UNDFD	6	.7
20.50	67.26	11.40	0.20	1.73	2.06	clayey silt to silty clay	UNDFND	UNDFD	5	.7
20.75	68.08	11.50	0.19	1.67	2.09	clayey silt to silty clay	UNDFND	UNDFD	6	.7
21.00	68.90	11.42	0.15	1.35	2.11	clayey silt to silty clay	UNDFND	UNDFD	5	.7
21.25	69.72	11.56	0.19	1.63	2.13	clayey silt to silty clay	UNDFND	UNDFD	6	.7
21.50	70.54	12.94	0.29	2.26	2.15	clayey silt to silty clay	UNDFND	UNDFD	6	.8
21.75	71.36	12.44	0.24	1.95	2.17	clayey silt to silty clay	UNDFND	UNDFD	6	.8
22.00	72.18	10.92	0.15	1.38	2.19	clayey silt to silty clay	UNDFND	UNDFD	5	.6
22.25	73.00	11.40	0.18	1.54	2.21	clayey silt to silty clay	UNDFND	UNDFD	5	.7
22.50	73.82	11.62	0.17	1.50	2.24	clayey silt to silty clay	UNDFND	UNDFD	6	.7
22.75	74.64	11.58	0.16	1.36	2.26	clayey silt to silty clay	UNDFND	UNDFD	6	.7
23.00	75.46	11.60	0.15	1.32	2.28	clayey silt to silty clay	UNDFND	UNDFD	6	.7
23.25	76.28	11.52	0.15	1.28	2.30	clayey silt to silty clay	UNDFND	UNDFD	6	.7
23.50	77.10	11.70	0.16	1.33	2.32	clayey silt to silty clay	UNDFND	UNDFD	6	.7
23.75	77.92	11.68	0.14	1.22	2.34	clayey silt to silty clay	UNDFND	UNDFD	6	.7
24.00	78.74	11.88	0.14	1.22	2.37	clayey silt to silty clay	UNDFND	UNDFD	6	.7
24.25	79.56	11.96	0.14	1.20	2.39	clayey silt to silty clay	UNDFND	UNDFD	6	.7
24.50	80.38	12.60	0.16	1.26	2.41	clayey silt to silty clay	UNDFND	UNDFD	6	.8
24.75	81.20	12.60	0.16	1.29	2.43	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.00	82.02	12.46	0.16	1.29	2.45	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.25	82.84	12.50	0.16	1.25	2.47	clayey silt to silty clay	UNDFND	UNDFD	6	.7
25.50	83.66	13.54	0.18	1.35	2.49	clayey silt to silty clay	UNDFND	UNDFD	6	.8
25.75	84.48	15.34	0.28	1.83	2.52	clayey silt to silty clay	UNDFND	UNDFD	7	1.0
26.00	85.30	13.82	0.07	0.52	2.54	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
26.25	86.12	13.86	0.09	0.62	2.56	sandy silt to clayey silt	UNDFND	UNDFD	5	.8
26.50	86.94	14.26	0.22	1.56	2.58	clayey silt to silty clay	UNDFND	UNDFD	7	.9
26.75	87.76	52.22	0.58	1.10	2.60	silty sand to sandy silt	<40	30-32	17	UNDEFINED
27.00	88.58	21.26	0.61	2.86	2.62	clayey silt to silty clay	UNDFND	UNDFD	10	1.6
27.25	89.40	17.98	0.54	2.98	2.65	clayey silt to silty clay	UNDFND	UNDFD	9	1.2
27.50	90.22	16.46	0.37	2.26	2.67	clayey silt to silty clay	UNDFND	UNDFD	8	1.1
27.75	91.04	15.76	0.33	2.08	2.69	clayey silt to silty clay	UNDFND	UNDFD	8	1.0
28.00	91.86	18.08	0.44	2.45	2.71	clayey silt to silty clay	UNDFND	UNDFD	9	1.2
28.25	92.68	18.22	0.46	2.50	2.73	clayey silt to silty clay	UNDFND	UNDFD	9	1.2
28.50	93.50	17.50	0.43	2.44	2.75	clayey silt to silty clay	UNDFND	UNDFD	8	1.2
28.75	94.32	18.18	0.43	2.39	2.77	clayey silt to silty clay	UNDFND	UNDFD	9	1.2
29.00	95.14	18.00	0.35	1.94	2.80	clayey silt to silty clay	UNDFND	UNDFD	9	1.2
29.25	95.96	18.68	0.35	1.90	2.82	sandy silt to clayey silt	UNDFND	UNDFD	7	1.3
29.50	96.78	18.34	0.34	1.88	2.84	sandy silt to clayey silt	UNDFND	UNDFD	7	1.2
29.75	97.60	23.16	0.50	2.15	2.86	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7
30.00	98.43	30.00	0.99	3.29	2.88	clayey silt to silty clay	UNDFND	UNDFD	14	2.4
30.25	99.25	25.42	0.70	2.75	2.90	clayey silt to silty clay	UNDFND	UNDFD	12	1.9
30.50	100.07	22.96	0.51	2.20	2.93	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

* Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-16 Page No. 4

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
30.75	100.89	24.08	0.51	2.14	2.95	sandy silt to clayey silt	UNDFND	UNDFD	9	1.8
31.00	101.71	24.04	0.49	2.05	2.97	sandy silt to clayey silt	UNDFND	UNDFD	9	1.8
31.25	102.53	23.24	0.49	2.11	2.99	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7
31.50	103.35	22.90	0.43	1.89	3.01	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
31.75	104.17	23.76	0.44	1.85	3.03	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7
32.00	104.99	22.60	0.42	1.84	3.05	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
32.25	105.81	23.78	0.45	1.90	3.08	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7
32.50	106.63	22.98	0.37	1.60	3.10	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
32.75	107.45	27.24	0.46	1.68	3.12	sandy silt to clayey silt	UNDFND	UNDFD	10	2.1
33.00	108.27	25.80	0.43	1.65	3.14	sandy silt to clayey silt	UNDFND	UNDFD	10	1.9
33.25	109.09	27.22	0.54	1.97	3.16	sandy silt to clayey silt	UNDFND	UNDFD	10	2.0
33.50	109.91	25.26	0.45	1.78	3.18	sandy silt to clayey silt	UNDFND	UNDFD	10	1.8
33.75	110.73	23.78	0.40	1.66	3.21	sandy silt to clayey silt	UNDFND	UNDFD	9	1.7
34.00	111.55	24.82	0.47	1.88	3.23	sandy silt to clayey silt	UNDFND	UNDFD	10	1.8
34.25	112.37	28.44	0.61	2.16	3.25	sandy silt to clayey silt	UNDFND	UNDFD	11	2.2
34.50	113.19	28.84	0.55	1.92	3.27	sandy silt to clayey silt	UNDFND	UNDFD	11	2.2
34.75	114.01	29.64	0.54	1.81	3.29	sandy silt to clayey silt	UNDFND	UNDFD	11	2.3
35.00	114.83	26.16	0.47	1.81	3.31	sandy silt to clayey silt	UNDFND	UNDFD	10	1.9
35.25	115.65	23.32	0.39	1.67	3.34	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
35.50	116.47	23.00	0.34	1.49	3.36	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
35.75	117.29	23.20	0.39	1.68	3.38	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
36.00	118.11	22.90	0.37	1.62	3.40	sandy silt to clayey silt	UNDFND	UNDFD	9	1.
36.25	118.93	23.20	0.35	1.51	3.42	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
36.50	119.75	22.92	0.31	1.33	3.44	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
36.75	120.57	23.88	0.34	1.44	3.46	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
37.00	121.39	26.08	0.41	1.56	3.49	sandy silt to clayey silt	UNDFND	UNDFD	10	1.9
37.25	122.21	23.48	0.29	1.25	3.51	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
37.50	123.03	23.38	0.31	1.30	3.53	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
37.75	123.85	23.88	0.31	1.29	3.55	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
38.00	124.67	22.96	0.27	1.20	3.57	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5
38.25	125.49	23.14	0.25	1.08	3.59	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5
38.50	126.31	23.42	0.22	0.93	3.62	sandy silt to clayey silt	UNDFND	UNDFD	9	1.6
38.75	127.13	23.26	0.25	1.09	3.64	sandy silt to clayey silt	UNDFND	UNDFD	9	1.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-17
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/11/94 1:10
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	81.36	0.95	1.17	0.02	sand to silty sand	>90	>48	19	UNDEFINED
0.50	1.64	320.44	2.76	0.86	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	363.42	3.22	0.89	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	281.58	2.51	0.89	0.17	sand	>90	>48	>50	UNDEFINED
1.25	4.10	211.66	1.45	0.69	0.21	sand	>90	>48	41	UNDEFINED
1.50	4.92	170.88	1.01	0.59	0.26	sand	>90	>48	33	UNDEFINED
1.75	5.74	151.32	0.75	0.50	0.31	sand	>90	46-48	29	UNDEFINED
2.00	6.56	121.50	0.42	0.35	0.35	sand	80-90	46-48	23	UNDEFINED
2.25	7.38	105.20	0.32	0.31	0.40	sand	80-90	44-46	20	UNDEFINED
2.50	8.20	121.04	0.43	0.35	0.45	sand	80-90	44-46	23	UNDEFINED
2.75	9.02	124.04	0.47	0.38	0.50	sand	80-90	44-46	24	UNDEFINED
3.00	9.84	116.84	0.42	0.36	0.54	sand	70-80	44-46	22	UNDEFINED
3.25	10.66	104.94	0.48	0.45	0.58	sand	70-80	42-44	20	UNDEFINED
3.50	11.48	109.00	0.40	0.37	0.60	sand	70-80	42-44	21	UNDEFINED
3.75	12.30	108.02	0.40	0.37	0.62	sand	70-80	42-44	21	UNDEFINED
4.00	13.12	78.66	0.29	0.37	0.64	sand to silty sand	60-70	40-42	19	UNDEFINED
4.25	13.94	79.10	0.27	0.34	0.66	sand to silty sand	60-70	40-42	19	UNDEFINED
4.50	14.76	52.06	0.23	0.43	0.68	sand to silty sand	50-60	38-40	12	UNDEFINED
4.75	15.58	46.72	0.32	0.68	0.71	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
5.00	16.40	74.04	0.36	0.49	0.73	sand to silty sand	60-70	40-42	18	UNDEFINED
5.25	17.22	91.18	0.47	0.51	0.75	sand to silty sand	60-70	40-42	22	UNDEFINED
5.50	18.04	103.50	0.51	0.49	0.77	sand to silty sand	70-80	42-44	25	UNDEFINED
5.75	18.86	110.82	0.53	0.48	0.79	sand	70-80	42-44	21	UNDEFINED
6.00	19.69	99.56	0.42	0.43	0.81	sand	60-70	40-42	19	UNDEFINED
6.25	20.51	69.46	0.31	0.44	0.84	sand to silty sand	50-60	40-42	17	UNDEFINED
6.50	21.33	59.94	0.31	0.53	0.86	sand to silty sand	50-60	38-40	14	UNDEFINED
6.75	22.15	62.08	0.36	0.59	0.88	sand to silty sand	50-60	38-40	15	UNDEFINED
7.00	22.97	64.80	0.25	0.38	0.90	sand to silty sand	50-60	38-40	16	UNDEFINED
7.25	23.79	93.76	0.41	0.44	0.92	sand to silty sand	60-70	40-42	22	UNDEFINED
7.50	24.61	49.46	0.18	0.36	0.94	sand to silty sand	40-50	36-38	12	UNDEFINED
7.75	25.43	11.54	0.03	0.25	0.96	sandy silt to clayey silt	UNDFND	UNDFD	4	1.0
8.00	26.25	9.80	0.02	0.17	0.99	sensitive fine grained	UNDFND	UNDFD	5	.8
8.25	27.07	18.22	0.02	0.11	1.01	silty sand to sandy silt	<40	30-32	6	UNDEFINED
8.50	27.89	58.04	0.15	0.25	1.03	sand to silty sand	50-60	38-40	14	UNDEFINED
8.75	28.71	62.36	0.29	0.47	1.05	sand to silty sand	50-60	38-40	15	UNDEFINED
9.00	29.53	72.14	0.22	0.30	1.07	sand to silty sand	50-60	38-40	17	UNDEFINED
9.25	30.35	66.10	0.28	0.42	1.09	sand to silty sand	50-60	38-40	16	UNDEFINED
9.50	31.17	94.12	0.40	0.43	1.12	sand to silty sand	60-70	40-42	23	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-17 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	82.96	0.30	0.37	1.14	sand to silty sand	50-60	38-40	20	UNDEFINED
10.00	32.81	49.80	0.13	0.27	1.16	sand to silty sand	40-50	36-38	12	UNDEFINED
10.25	33.63	46.16	0.08	0.18	1.18	sand to silty sand	40-50	36-38	11	UNDEFINED
10.50	34.45	31.98	0.02	0.07	1.20	sand to silty sand	<40	32-34	8	UNDEFINED
10.75	35.27	21.48	0.03	0.16	1.22	silty sand to sandy silt	<40	30-32	7	UNDEFINED
11.00	36.09	25.80	0.05	0.20	1.24	silty sand to sandy silt	<40	30-32	8	UNDEFINED
11.25	36.91	76.76	0.14	0.18	1.27	sand to silty sand	50-60	38-40	18	UNDEFINED
11.50	37.73	54.68	0.48	0.88	1.29	silty sand to sandy silt	40-50	36-38	17	UNDEFINED
11.75	38.55	63.88	1.77	2.77	1.31	sandy silt to clayey silt	UNDFND	UNDFD	24	6.1
12.00	39.37	172.42	4.14	2.40	1.33	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
12.25	40.19	203.06	4.14	2.04	1.35	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
12.50	41.01	241.34	4.63	1.92	1.37	sand to silty sand	80-90	42-44	>50	UNDEFINED
12.75	41.83	106.40	3.82	3.59	1.40	sandy silt to clayey silt	UNDFND	UNDFD	41	10.4
13.00	42.65	128.08	2.53	1.97	1.42	silty sand to sandy silt	60-70	40-42	41	UNDEFINED
13.25	43.47	117.08	2.39	2.04	1.44	silty sand to sandy silt	60-70	40-42	37	UNDEFINED
13.50	44.29	65.66	1.00	1.53	1.46	silty sand to sandy silt	40-50	36-38	21	UNDEFINED
13.75	45.11	35.08	0.96	2.75	1.48	sandy silt to clayey silt	UNDFND	UNDFD	13	3.2
14.00	45.93	62.38	1.45	2.32	1.50	sandy silt to clayey silt	UNDFND	UNDFD	24	5.9
14.25	46.75	84.68	3.83	4.52	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	117.12	3.23	2.76	1.55	sandy silt to clayey silt	UNDFND	UNDFD	45	11.4
14.75	48.39	126.00	3.94	3.13	1.57	sandy silt to clayey silt	UNDFND	UNDFD	48	12.3
15.00	49.21	127.22	4.78	3.76	1.59	sandy silt to clayey silt	UNDFND	UNDFD	49	12.4
15.25	50.03	157.64	7.51	4.76	1.61	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	250.80	6.56	2.62	1.63	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
15.75	51.67	277.50	8.80	3.17	1.65	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	242.64	7.06	2.91	1.68	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
16.25	53.31	193.02	8.89	4.60	1.70	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
16.50	54.13	237.00	8.62	3.64	1.72	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.75	54.95	215.88	8.24	3.82	1.74	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
17.00	55.77	138.44	5.45	3.94	1.76	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
17.25	56.59	193.14	5.85	3.03	1.78	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
17.50	57.41	584.54	5.22	0.89	1.80	gravelly sand to sand	>90	46-48	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-18
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/11/94 10:40
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.08	0.01	8.00	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	0.00	0.01	0.00	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	2.84	0.07	2.39	0.12	clay	UNDFND	UNDFD	3	.2
1.00	3.28	162.62	1.52	0.93	0.17	sand	>90	>48	31	UNDEFINED
1.25	4.10	119.40	2.10	1.76	0.21	silty sand to sandy silt	>90	>48	38	UNDEFINED
1.50	4.92	93.62	0.33	0.35	0.26	sand	80-90	46-48	18	UNDEFINED
1.75	5.74	74.58	0.32	0.43	0.31	sand to silty sand	70-80	44-46	18	UNDEFINED
2.00	6.56	72.68	0.22	0.30	0.35	sand to silty sand	70-80	44-46	17	UNDEFINED
2.25	7.38	58.82	0.17	0.29	0.40	sand to silty sand	60-70	42-44	14	UNDEFINED
2.50	8.20	52.74	0.18	0.34	0.45	sand to silty sand	50-60	40-42	13	UNDEFINED
2.75	9.02	50.80	0.16	0.31	0.50	sand to silty sand	50-60	40-42	12	UNDEFINED
3.00	9.84	44.34	0.13	0.30	0.54	sand to silty sand	50-60	40-42	11	UNDEFINED
3.25	10.66	65.44	0.23	0.35	0.58	sand to silty sand	60-70	40-42	16	UNDEFINED
3.50	11.48	53.16	0.21	0.39	0.60	sand to silty sand	50-60	40-42	13	UNDEFINED
3.75	12.30	46.98	0.15	0.31	0.62	sand to silty sand	50-60	38-40	11	UNDEFINED
4.00	13.12	45.62	0.15	0.34	0.64	sand to silty sand	50-60	38-40	11	UNDEFINED
4.25	13.94	55.46	0.19	0.33	0.66	sand to silty sand	50-60	40-42	13	UNDEFINED
4.50	14.76	54.48	0.22	0.40	0.68	sand to silty sand	50-60	40-42	13	UNDEFINED
4.75	15.58	55.90	0.25	0.45	0.71	sand to silty sand	50-60	40-42	13	UNDEFINED
5.00	16.40	39.80	0.14	0.36	0.73	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
5.25	17.22	32.78	0.09	0.28	0.75	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.50	18.04	26.38	0.07	0.28	0.77	silty sand to sandy silt	<40	34-36	8	UNDEFINED
5.75	18.86	38.74	0.16	0.41	0.79	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
6.00	19.69	49.02	0.23	0.47	0.81	sand to silty sand	40-50	38-40	12	UNDEFINED
6.25	20.51	50.12	0.23	0.47	0.84	sand to silty sand	40-50	38-40	12	UNDEFINED
6.50	21.33	61.90	0.31	0.49	0.86	sand to silty sand	50-60	38-40	15	UNDEFINED
6.75	22.15	69.06	0.38	0.55	0.88	sand to silty sand	50-60	38-40	17	UNDEFINED
7.00	22.97	63.04	0.32	0.51	0.90	sand to silty sand	50-60	38-40	15	UNDEFINED
7.25	23.79	52.28	0.24	0.47	0.92	sand to silty sand	40-50	38-40	13	UNDEFINED
7.50	24.61	49.06	0.19	0.39	0.94	sand to silty sand	40-50	36-38	12	UNDEFINED
7.75	25.43	55.98	0.21	0.38	0.96	sand to silty sand	50-60	38-40	13	UNDEFINED
8.00	26.25	65.48	0.28	0.43	0.99	sand to silty sand	50-60	38-40	16	UNDEFINED
8.25	27.07	67.02	0.30	0.45	1.01	sand to silty sand	50-60	38-40	16	UNDEFINED
8.50	27.89	59.44	0.25	0.43	1.03	sand to silty sand	50-60	38-40	14	UNDEFINED
8.75	28.71	59.32	0.28	0.48	1.05	sand to silty sand	50-60	38-40	14	UNDEFINED
9.00	29.53	60.58	0.27	0.44	1.07	sand to silty sand	50-60	38-40	15	UNDEFINED
9.25	30.35	57.04	0.29	0.51	1.09	sand to silty sand	40-50	36-38	14	UNDEFINED
9.50	31.17	65.60	0.32	0.49	1.12	sand to silty sand	50-60	38-40	16	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

* Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-18 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	70.24	0.39	0.56	1.14	sand to silty sand	50-60	38-40	17	UNDEFINED
10.00	32.81	58.52	0.34	0.58	1.16	sand to silty sand	40-50	36-38	14	UNDEFINED
10.25	33.63	58.16	0.35	0.59	1.18	sand to silty sand	40-50	36-38	14	UNDEFINED
10.50	34.45	63.74	0.35	0.54	1.20	sand to silty sand	50-60	36-38	15	UNDEFINED
10.75	35.27	63.38	0.38	0.60	1.22	sand to silty sand	50-60	36-38	15	UNDEFINED
11.00	36.09	64.20	0.35	0.54	1.24	sand to silty sand	50-60	36-38	15	UNDEFINED
11.25	36.91	69.80	0.34	0.49	1.27	sand to silty sand	50-60	38-40	17	UNDEFINED
11.50	37.73	69.92	0.37	0.53	1.29	sand to silty sand	50-60	38-40	17	UNDEFINED
11.75	38.55	72.40	0.38	0.52	1.31	sand to silty sand	50-60	38-40	17	UNDEFINED
12.00	39.37	78.24	0.42	0.54	1.33	sand to silty sand	50-60	38-40	19	UNDEFINED
12.25	40.19	80.00	0.45	0.56	1.35	sand to silty sand	50-60	38-40	19	UNDEFINED
12.50	41.01	94.20	0.57	0.60	1.37	sand to silty sand	60-70	38-40	23	UNDEFINED
12.75	41.83	93.14	0.56	0.60	1.40	sand to silty sand	50-60	38-40	22	UNDEFINED
13.00	42.65	104.82	0.72	0.69	1.42	sand to silty sand	60-70	38-40	25	UNDEFINED
13.25	43.47	25.68	0.43	1.66	1.44	sandy silt to clayey silt	UNDFND	UNDFD	10	2.3
13.50	44.29	11.02	0.04	0.40	1.46	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
13.75	45.11	69.98	1.30	1.86	1.48	silty sand to sandy silt	50-60	36-38	22	UNDEFINED
14.00	45.93	248.20	6.18	2.49	1.50	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.25	46.75	179.52	5.98	3.33	1.52	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.6
14.50	47.57	169.48	8.02	4.73	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	198.64	6.01	3.03	1.57	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
15.00	49.21	202.02	6.97	3.45	1.59	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	197.64	5.77	2.92	1.61	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
15.50	50.85	201.94	8.94	4.43	1.63	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.75	51.67	126.94	7.02	5.53	1.65	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	160.10	8.16	5.10	1.68	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
16.25	53.31	137.22	6.84	4.99	1.70	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
16.50	54.13	215.38	6.45	2.99	1.72	silty sand to sandy silt	80-90	40-42	>50	UNDEFINED
16.75	54.95	368.74	4.10	1.11	1.74	sand	>90	44-46	>50	UNDEFINED
17.00	55.77	394.62	5.61	1.42	1.76	sand	>90	44-46	>50	UNDEFINED
17.25	56.59	295.52	6.04	2.04	1.78	sand to silty sand	80-90	42-44	>50	UNDEFINED
17.50	57.41	379.94	4.14	1.09	1.80	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-RA-19
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/08/94 14:44
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	40.28	0.26	0.64	0.02	silty sand to sandy silt	>90	>48	13	UNDEFINED
0.50	1.64	116.78	0.57	0.49	0.07	sand	>90	>48	22	UNDEFINED
0.75	2.46	90.74	0.50	0.55	0.12	sand to silty sand	>90	>48	22	UNDEFINED
1.00	3.28	30.12	0.06	0.20	0.17	silty sand to sandy silt	50-60	42-44	10	UNDEFINED
1.25	4.10	18.98	0.06	0.33	0.21	silty sand to sandy silt	40-50	40-42	6	UNDEFINED
1.50	4.92	37.64	0.24	0.63	0.26	silty sand to sandy silt	50-60	42-44	12	UNDEFINED
1.75	5.74	73.98	0.43	0.59	0.31	sand to silty sand	70-80	44-46	18	UNDEFINED
2.00	6.56	66.14	0.40	0.61	0.35	sand to silty sand	60-70	42-44	16	UNDEFINED
2.25	7.38	67.42	0.38	0.56	0.40	sand to silty sand	60-70	42-44	16	UNDEFINED
2.50	8.20	67.18	0.38	0.57	0.45	sand to silty sand	60-70	42-44	16	UNDEFINED
2.75	9.02	61.10	0.36	0.59	0.50	sand to silty sand	60-70	40-42	15	UNDEFINED
3.00	9.84	57.18	0.32	0.56	0.54	sand to silty sand	50-60	40-42	14	UNDEFINED
3.25	10.66	52.28	0.32	0.60	0.58	sand to silty sand	50-60	40-42	13	UNDEFINED
3.50	11.48	28.92	0.29	0.99	0.60	silty sand to sandy silt	<40	36-38	9	UNDEFINED
3.75	12.30	9.50	0.21	2.25	0.62	silty clay to clay	UNDFND	UNDFD	6	.8
4.00	13.12	8.64	0.14	1.65	0.64	clayey silt to silty clay	UNDFND	UNDFD	4	.7
4.25	13.94	12.96	0.08	0.64	0.66	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
4.50	14.76	13.92	0.23	1.68	0.68	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
4.75	15.58	7.52	0.10	1.30	0.71	clayey silt to silty clay	UNDFND	UNDFD	4	.6
5.00	16.40	46.74	0.33	0.71	0.73	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
5.25	17.22	42.94	0.35	0.81	0.75	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
5.50	18.04	38.64	0.29	0.75	0.77	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
5.75	18.86	51.68	0.38	0.74	0.79	silty sand to sandy silt	50-60	38-40	17	UNDEFINED
6.00	19.69	56.38	0.41	0.73	0.81	sand to silty sand	50-60	38-40	14	UNDEFINED
6.25	20.51	49.88	0.37	0.75	0.84	silty sand to sandy silt	40-50	38-40	16	UNDEFINED
6.50	21.33	32.66	0.24	0.72	0.86	silty sand to sandy silt	<40	36-38	10	UNDEFINED
6.75	22.15	18.92	0.08	0.45	0.88	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
7.00	22.97	15.94	0.07	0.42	0.90	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
7.25	23.79	14.68	0.05	0.34	0.92	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
7.50	24.61	13.40	0.02	0.17	0.94	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
7.75	25.43	18.70	0.06	0.33	0.96	silty sand to sandy silt	<40	30-32	6	UNDEFINED
8.00	26.25	17.26	0.10	0.60	0.99	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
8.25	27.07	26.04	0.06	0.22	1.01	silty sand to sandy silt	<40	32-34	8	UNDEFINED
8.50	27.89	12.64	0.04	0.35	1.03	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
8.75	28.71	10.54	0.08	0.76	1.05	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
9.00	29.53	10.26	0.06	0.61	1.07	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
9.25	30.35	10.76	0.06	0.58	1.09	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
9.50	31.17	14.30	0.09	0.65	1.12	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-RA-19 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	9.96	0.07	0.66	1.14	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
10.00	32.81	12.84	0.07	0.55	1.16	sandy silt to clayey silt	UNDFND	UNDFD	5	1.0
10.25	33.63	19.36	0.16	0.83	1.18	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
10.50	34.45	42.96	1.13	2.63	1.20	sandy silt to clayey silt	UNDFND	UNDFD	16	4.1
10.75	35.27	46.32	0.84	1.81	1.22	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
11.00	36.09	66.88	2.18	3.26	1.24	sandy silt to clayey silt	UNDFND	UNDFD	26	6.4
11.25	36.91	119.36	5.69	4.77	1.27	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
11.50	37.73	167.78	6.74	4.02	1.29	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
11.75	38.55	138.64	4.22	3.05	1.31	sandy silt to clayey silt	UNDFND	UNDFD	>50	13.6
12.00	39.37	113.54	5.59	4.93	1.33	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.25	40.19	55.34	2.56	4.62	1.35	silty clay to clay	UNDFND	UNDFD	35	5.3
12.50	41.01	55.46	1.58	2.84	1.37	sandy silt to clayey silt	UNDFND	UNDFD	21	5.3
12.75	41.83	86.10	2.15	2.50	1.40	sandy silt to clayey silt	UNDFND	UNDFD	33	8.3
13.00	42.65	47.36	0.54	1.14	1.42	silty sand to sandy silt	40-50	34-36	15	UNDEFINED
13.25	43.47	22.72	0.08	0.37	1.44	silty sand to sandy silt	<40	30-32	7	UNDEFINED
13.50	44.29	31.30	0.90	2.89	1.46	clayey silt to silty clay	UNDFND	UNDFD	15	2.8
13.75	45.11	50.80	2.40	4.72	1.48	silty clay to clay	UNDFND	UNDFD	32	4.8
14.00	45.93	77.50	3.49	4.51	1.50	clayey silt to silty clay	UNDFND	UNDFD	37	7.4
14.25	46.75	102.00	4.17	4.09	1.52	clayey silt to silty clay	UNDFND	UNDFD	49	9.9
14.50	47.57	144.88	7.29	5.03	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	196.56	10.88	5.54	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	268.56	10.45	3.89	1.59	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	237.24	9.00	3.79	1.61	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	218.76	7.49	3.42	1.63	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.75	51.67	262.82	8.29	3.15	1.65	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	260.26	7.12	2.73	1.68	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
16.25	53.31	279.04	8.13	2.91	1.70	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.50	54.13	323.70	6.35	1.96	1.72	sand to silty sand	>90	42-44	>50	UNDEFINED
16.75	54.95	327.90	4.49	1.37	1.74	sand	>90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-20
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07-07-94 11:45
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	15.50	0.18	1.18	0.02	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
0.50	1.64	21.92	0.09	0.40	0.07	silty sand to sandy silt	60-70	44-46	7	UNDEFINED
0.75	2.46	28.24	0.12	0.42	0.12	silty sand to sandy silt	60-70	44-46	9	UNDEFINED
1.00	3.28	26.50	0.15	0.55	0.17	silty sand to sandy silt	50-60	42-44	8	UNDEFINED
1.25	4.10	64.04	0.30	0.47	0.21	sand to silty sand	70-80	44-46	15	UNDEFINED
1.50	4.92	79.48	0.33	0.41	0.26	sand to silty sand	70-80	44-46	19	UNDEFINED
1.75	5.74	70.98	0.26	0.36	0.31	sand to silty sand	70-80	44-46	17	UNDEFINED
2.00	6.56	64.52	0.24	0.37	0.35	sand to silty sand	60-70	42-44	15	UNDEFINED
2.25	7.38	63.52	0.27	0.43	0.40	sand to silty sand	60-70	42-44	15	UNDEFINED
2.50	8.20	56.76	0.25	0.44	0.45	sand to silty sand	60-70	42-44	14	UNDEFINED
2.75	9.02	54.50	0.22	0.41	0.50	sand to silty sand	50-60	40-42	13	UNDEFINED
3.00	9.84	52.24	0.22	0.42	0.54	sand to silty sand	50-60	40-42	13	UNDEFINED
3.25	10.66	47.26	0.26	0.54	0.58	sand to silty sand	50-60	40-42	11	UNDEFINED
3.50	11.48	35.30	0.19	0.54	0.60	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.75	12.30	42.32	0.20	0.48	0.62	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.00	13.12	37.28	0.26	0.70	0.64	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.25	13.94	9.18	0.18	2.00	0.66	clayey silt to silty clay	UNDFND	UNDFD	4	.8
4.50	14.76	12.98	0.14	1.06	0.68	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
4.75	15.58	14.44	0.15	1.06	0.71	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
5.00	16.40	31.74	0.19	0.61	0.73	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.25	17.22	16.06	0.07	0.43	0.75	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
5.50	18.04	22.96	0.09	0.40	0.77	silty sand to sandy silt	<40	34-36	7	UNDEFINED
5.75	18.86	33.86	0.27	0.79	0.79	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.00	19.69	60.16	0.31	0.52	0.81	sand to silty sand	50-60	38-40	14	UNDEFINED
6.25	20.51	56.62	0.32	0.56	0.84	sand to silty sand	50-60	38-40	14	UNDEFINED
6.50	21.33	32.90	0.24	0.72	0.86	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.75	22.15	12.72	0.12	0.96	0.88	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
7.00	22.97	7.68	0.03	0.44	0.90	sensitive fine grained	UNDFND	UNDFD	4	.6
7.25	23.79	12.92	0.06	0.50	0.92	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
7.50	24.61	21.38	0.10	0.45	0.94	silty sand to sandy silt	<40	32-34	7	UNDEFINED
7.75	25.43	34.02	0.28	0.82	0.96	silty sand to sandy silt	<40	34-36	11	UNDEFINED
8.00	26.25	16.76	0.16	0.94	0.99	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
8.25	27.07	9.26	0.08	0.83	1.01	clayey silt to silty clay	UNDFND	UNDFD	4	.7
8.50	27.89	22.84	0.10	0.44	1.03	silty sand to sandy silt	<40	32-34	7	UNDEFINED
8.75	28.71	14.72	0.16	1.10	1.05	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
9.00	29.53	6.84	0.09	1.31	1.07	sensitive fine grained	UNDFND	UNDFD	3	.5
9.25	30.35	6.42	0.05	0.81	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	9.66	0.07	0.70	1.12	sandy silt to clayey silt	UNDFND	UNDFD	4	.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-20 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	54.68	0.37	0.68	1.14	sand to silty sand	40-50	36-38	13	UNDEFINED
10.00	32.81	132.36	0.77	0.58	1.16	sand	70-80	40-42	25	UNDEFINED
10.25	33.63	62.66	0.36	0.57	1.18	sand to silty sand	50-60	36-38	15	UNDEFINED
10.50	34.45	39.98	0.22	0.56	1.20	silty sand to sandy silt	<40	34-36	13	UNDEFINED
10.75	35.27	40.40	0.17	0.42	1.22	silty sand to sandy silt	<40	34-36	13	UNDEFINED
11.00	36.09	9.36	0.13	1.40	1.24	clayey silt to silty clay	UNDFND	UNDFD	4	.7
11.25	36.91	9.00	0.14	1.51	1.27	clayey silt to silty clay	UNDFND	UNDFD	4	.6
11.50	37.73	8.08	0.13	1.58	1.29	clayey silt to silty clay	UNDFND	UNDFD	4	.5
11.75	38.55	7.78	0.11	1.43	1.31	clayey silt to silty clay	UNDFND	UNDFD	4	.5
12.00	39.37	14.86	0.13	0.87	1.33	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
12.25	40.19	32.20	0.20	0.62	1.35	silty sand to sandy silt	<40	32-34	10	UNDEFINED
12.50	41.01	22.80	0.07	0.33	1.37	silty sand to sandy silt	<40	30-32	7	UNDEFINED
12.75	41.83	15.90	0.10	0.64	1.40	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
13.00	42.65	23.10	0.06	0.25	1.42	silty sand to sandy silt	<40	30-32	7	UNDEFINED
13.25	43.47	12.84	0.16	1.25	1.44	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
13.50	44.29	27.66	0.30	1.07	1.46	sandy silt to clayey silt	UNDFND	UNDFD	11	2.5
13.75	45.11	101.98	1.38	1.35	1.48	sand to silty sand	60-70	38-40	24	UNDEFINED
14.00	45.93	144.54	1.06	0.73	1.50	sand	70-80	40-42	28	UNDEFINED
14.25	46.75	86.82	0.62	0.72	1.52	sand to silty sand	50-60	38-40	21	UNDEFINED
14.50	47.57	92.92	0.58	0.63	1.55	sand to silty sand	50-60	38-40	22	UNDEFINED
14.75	48.39	49.76	1.65	3.32	1.57	clayey silt to silty clay	UNDFND	UNDFD	24	4.7
15.00	49.21	86.82	3.58	4.13	1.59	clayey silt to silty clay	UNDFND	UNDFD	42	8.4
15.25	50.03	84.60	3.88	4.59	1.61	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	63.50	2.83	4.45	1.63	clayey silt to silty clay	UNDFND	UNDFD	30	6.0
15.75	51.67	106.30	5.00	4.70	1.65	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	194.82	4.29	2.20	1.68	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
16.25	53.31	268.72	4.00	1.49	1.70	sand to silty sand	80-90	42-44	>50	UNDEFINED
16.50	54.13	330.70	3.41	1.03	1.72	sand	>90	42-44	>50	UNDEFINED
16.75	54.95	211.56	2.06	0.97	1.74	sand	80-90	40-42	41	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-21
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 8:25
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	146.82	1.11	0.75	0.02	sand	>90	>48	28	UNDEFINED
0.50	1.64	414.54	2.73	0.66	0.07	gravelly sand to sand	>90	>48	>50	UNDEFINED
0.75	2.46	354.58	1.41	0.40	0.12	gravelly sand to sand	>90	>48	>50	UNDEFINED
1.00	3.28	291.22	1.09	0.37	0.17	gravelly sand to sand	>90	>48	46	UNDEFINED
1.25	4.10	234.64	0.86	0.37	0.21	sand	>90	>48	45	UNDEFINED
1.50	4.92	206.34	0.80	0.39	0.26	sand	>90	>48	40	UNDEFINED
1.75	5.74	173.58	0.74	0.43	0.31	sand	>90	>48	33	UNDEFINED
2.00	6.56	159.70	0.71	0.45	0.35	sand	>90	46-48	31	UNDEFINED
2.25	7.38	141.54	0.64	0.46	0.40	sand	80-90	46-48	27	UNDEFINED
2.50	8.20	122.88	0.59	0.48	0.45	sand	80-90	44-46	24	UNDEFINED
2.75	9.02	109.66	0.51	0.47	0.50	sand	70-80	44-46	21	UNDEFINED
3.00	9.84	89.92	0.47	0.52	0.54	sand to silty sand	70-80	42-44	22	UNDEFINED
3.25	10.66	75.14	0.44	0.59	0.58	sand to silty sand	60-70	42-44	18	UNDEFINED
3.50	11.48	67.20	0.40	0.59	0.60	sand to silty sand	60-70	40-42	16	UNDEFINED
3.75	12.30	58.28	0.40	0.68	0.62	sand to silty sand	50-60	40-42	14	UNDEFINED
4.00	13.12	46.58	0.37	0.80	0.64	silty sand to sandy silt	50-60	38-40	15	UNDEFINED
4.25	13.94	24.68	0.43	1.73	0.66	sandy silt to clayey silt	UNDFND	UNDFD	9	2.3
4.50	14.76	38.86	0.53	1.37	0.68	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
4.75	15.58	16.38	0.31	1.92	0.71	clayey silt to silty clay	UNDFND	UNDFD	8	1.5
5.00	16.40	6.64	0.21	3.18	0.73	clay	UNDFND	UNDFD	6	.5
5.25	17.22	27.08	0.38	1.39	0.75	sandy silt to clayey silt	UNDFND	UNDFD	10	2.6
5.50	18.04	55.58	0.42	0.75	0.77	sand to silty sand	50-60	38-40	13	UNDEFINED
5.75	18.86	64.66	0.43	0.67	0.79	sand to silty sand	50-60	40-42	15	UNDEFINED
6.00	19.69	58.52	0.44	0.75	0.81	sand to silty sand	50-60	38-40	14	UNDEFINED
6.25	20.51	34.16	0.43	1.27	0.84	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.50	21.33	16.16	0.19	1.20	0.86	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
6.75	22.15	12.06	0.16	1.35	0.88	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
7.00	22.97	18.20	0.18	0.97	0.90	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
7.25	23.79	29.92	0.29	0.98	0.92	silty sand to sandy silt	<40	34-36	10	UNDEFINED
7.50	24.61	21.50	0.19	0.90	0.94	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
7.75	25.43	17.74	0.14	0.78	0.96	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
8.00	26.25	13.50	0.10	0.78	0.99	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
8.25	27.07	20.06	0.17	0.83	1.01	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
8.50	27.89	43.90	0.34	0.77	1.03	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
8.75	28.71	23.24	0.29	1.25	1.05	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
9.00	29.53	39.08	0.21	0.53	1.07	silty sand to sandy silt	<40	36-38	12	UNDEFINED
9.25	30.35	7.42	0.07	0.89	1.09	sensitive fine grained	UNDFND	UNDFD	4	.5
9.50	31.17	22.98	0.16	0.71	1.12	silty sand to sandy silt	<40	30-32	7	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-21 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	8.12	0.10	1.20	1.14	clayey silt to silty clay	UNDFND	UNDFD	4	.6
10.00	32.81	7.04	0.12	1.74	1.16	silty clay to clay	UNDFND	UNDFD	4	.5
10.25	33.63	6.64	0.14	2.13	1.18	silty clay to clay	UNDFND	UNDFD	4	.4
10.50	34.45	6.62	0.13	2.01	1.20	silty clay to clay	UNDFND	UNDFD	4	.4
10.75	35.27	6.68	0.13	1.96	1.22	silty clay to clay	UNDFND	UNDFD	4	.4
11.00	36.09	6.54	0.13	1.95	1.24	silty clay to clay	UNDFND	UNDFD	4	.4
11.25	36.91	6.72	0.13	1.94	1.27	silty clay to clay	UNDFND	UNDFD	4	.4
11.50	37.73	6.94	0.15	2.17	1.29	silty clay to clay	UNDFND	UNDFD	4	.4
11.75	38.55	9.32	0.25	2.65	1.31	silty clay to clay	UNDFND	UNDFD	6	.7
12.00	39.37	7.90	0.20	2.58	1.33	silty clay to clay	UNDFND	UNDFD	5	.5
12.25	40.19	8.26	0.21	2.58	1.35	silty clay to clay	UNDFND	UNDFD	5	.5
12.50	41.01	7.44	0.16	2.19	1.37	silty clay to clay	UNDFND	UNDFD	5	.5
12.75	41.83	7.12	0.14	1.95	1.40	silty clay to clay	UNDFND	UNDFD	5	.4
13.00	42.65	6.62	0.10	1.57	1.42	silty clay to clay	UNDFND	UNDFD	4	.4
13.25	43.47	6.88	0.11	1.56	1.44	silty clay to clay	UNDFND	UNDFD	4	.4
13.50	44.29	7.38	0.11	1.48	1.46	clayey silt to silty clay	UNDFND	UNDFD	4	.4
13.75	45.11	7.16	0.09	1.26	1.48	sensitive fine grained	UNDFND	UNDFD	3	.4
14.00	45.93	6.82	0.06	0.88	1.50	sensitive fine grained	UNDFND	UNDFD	3	.4
14.25	46.75	7.60	0.06	0.83	1.52	sensitive fine grained	UNDFND	UNDFD	4	.4
14.50	47.57	10.38	0.06	0.61	1.55	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
14.75	48.39	9.28	0.06	0.68	1.57	clayey silt to silty clay	UNDFND	UNDFD	4	.6
15.00	49.21	19.34	0.16	0.84	1.59	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
15.25	50.03	9.74	0.16	1.64	1.61	clayey silt to silty clay	UNDFND	UNDFD	5	.6
15.50	50.85	8.08	0.10	1.25	1.63	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.75	51.67	8.28	0.07	0.79	1.65	sensitive fine grained	UNDFND	UNDFD	4	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-22
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 9:55
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	6.48	0.04	0.65	0.02	sensitive fine grained	UNDFND	UNDFD	3	.6
0.50	1.64	9.38	0.02	0.26	0.07	sensitive fine grained	UNDFND	UNDFD	4	.9
0.75	2.46	7.46	0.03	0.36	0.12	sensitive fine grained	UNDFND	UNDFD	4	.7
1.00	3.28	13.70	0.04	0.33	0.17	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
1.25	4.10	22.28	0.11	0.47	0.21	silty sand to sandy silt	40-50	40-42	7	UNDEFINED
1.50	4.92	84.12	0.41	0.49	0.26	sand to silty sand	80-90	46-48	20	UNDEFINED
1.75	5.74	102.80	0.52	0.51	0.31	sand to silty sand	80-90	46-48	25	UNDEFINED
2.00	6.56	104.46	0.45	0.43	0.35	sand	80-90	44-46	20	UNDEFINED
2.25	7.38	99.52	0.46	0.46	0.40	sand to silty sand	70-80	44-46	24	UNDEFINED
2.50	8.20	85.20	0.46	0.54	0.45	sand to silty sand	70-80	42-44	20	UNDEFINED
2.75	9.02	72.66	0.36	0.50	0.50	sand to silty sand	60-70	42-44	17	UNDEFINED
3.00	9.84	82.08	0.39	0.48	0.54	sand to silty sand	60-70	42-44	20	UNDEFINED
3.25	10.66	77.20	0.40	0.51	0.58	sand to silty sand	60-70	42-44	18	UNDEFINED
3.50	11.48	74.76	0.41	0.54	0.60	sand to silty sand	60-70	40-42	18	UNDEFINED
3.75	12.30	76.10	0.40	0.53	0.62	sand to silty sand	60-70	40-42	18	UNDEFINED
4.00	13.12	76.54	0.37	0.49	0.64	sand to silty sand	60-70	40-42	18	UNDEFINED
4.25	13.94	71.78	0.40	0.56	0.66	sand to silty sand	60-70	40-42	17	UNDEFINED
4.50	14.76	62.76	0.33	0.52	0.68	sand to silty sand	50-60	40-42	15	UNDEFINED
4.75	15.58	35.02	0.42	1.20	0.71	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
5.00	16.40	6.08	0.10	1.72	0.73	silty clay to clay	UNDFND	UNDFD	4	.5
5.25	17.22	9.18	0.15	1.58	0.75	clayey silt to silty clay	UNDFND	UNDFD	4	.8
5.50	18.04	6.68	0.13	1.91	0.77	silty clay to clay	UNDFND	UNDFD	4	.5
5.75	18.86	6.42	0.12	1.84	0.79	silty clay to clay	UNDFND	UNDFD	4	.5
6.00	19.69	35.88	0.22	0.62	0.81	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
6.25	20.51	37.18	0.24	0.64	0.84	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
6.50	21.33	20.68	0.20	0.95	0.86	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
6.75	22.15	16.52	0.12	0.73	0.88	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
7.00	22.97	26.38	0.21	0.80	0.90	silty sand to sandy silt	<40	34-36	8	UNDEFINED
7.25	23.79	19.42	0.17	0.88	0.92	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
7.50	24.61	14.58	0.15	1.03	0.94	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
7.75	25.43	11.42	0.10	0.91	0.96	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
8.00	26.25	13.18	0.11	0.83	0.99	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
8.25	27.07	45.36	0.24	0.52	1.01	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
8.50	27.89	31.56	0.19	0.60	1.03	silty sand to sandy silt	<40	34-36	10	UNDEFINED
8.75	28.71	6.76	0.07	1.01	1.05	sensitive fine grained	UNDFND	UNDFD	3	.5
9.00	29.53	7.76	0.08	1.03	1.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
9.25	30.35	6.12	0.10	1.62	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	6.30	0.12	1.84	1.12	silty clay to clay	UNDFND	UNDFD	4	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-22 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	6.10	0.11	1.80	1.14	silty clay to clay	UNDFND	UNDFD	4	.4
10.00	32.81	5.96	0.10	1.60	1.16	sensitive fine grained	UNDFND	UNDFD	3	.4
10.25	33.63	6.28	0.11	1.80	1.18	silty clay to clay	UNDFND	UNDFD	4	.4
10.50	34.45	7.88	0.19	2.46	1.20	silty clay to clay	UNDFND	UNDFD	5	.5
10.75	35.27	8.02	0.19	2.36	1.22	silty clay to clay	UNDFND	UNDFD	5	.6
11.00	36.09	7.34	0.14	1.93	1.24	silty clay to clay	UNDFND	UNDFD	5	.5
11.25	36.91	7.48	0.15	1.98	1.27	silty clay to clay	UNDFND	UNDFD	5	.5
11.50	37.73	7.32	0.14	1.92	1.29	silty clay to clay	UNDFND	UNDFD	5	.5
11.75	38.55	7.14	0.12	1.74	1.31	silty clay to clay	UNDFND	UNDFD	5	.4
12.00	39.37	7.04	0.12	1.66	1.33	silty clay to clay	UNDFND	UNDFD	4	.4
12.25	40.19	6.98	0.09	1.29	1.35	sensitive fine grained	UNDFND	UNDFD	3	.4
12.50	41.01	6.76	0.09	1.28	1.37	sensitive fine grained	UNDFND	UNDFD	3	.4
12.75	41.83	6.76	0.07	1.04	1.40	sensitive fine grained	UNDFND	UNDFD	3	.4
13.00	42.65	6.98	0.08	1.13	1.42	sensitive fine grained	UNDFND	UNDFD	3	.4
13.25	43.47	8.34	0.15	1.85	1.44	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.50	44.29	7.86	0.12	1.50	1.46	clayey silt to silty clay	UNDFND	UNDFD	4	.5
13.75	45.11	7.86	0.12	1.47	1.48	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.00	45.93	8.18	0.11	1.33	1.50	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.25	46.75	7.68	0.10	1.29	1.52	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.50	47.57	7.92	0.10	1.31	1.55	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.75	48.39	7.88	0.09	1.20	1.57	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.00	49.21	8.02	0.10	1.21	1.59	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.25	50.03	8.22	0.11	1.35	1.61	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.50	50.85	7.98	0.11	1.36	1.63	clayey silt to silty clay	UNDFND	UNDFD	4	.5
15.75	51.67	8.78	0.16	1.87	1.65	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.00	52.49	8.00	0.09	1.18	1.68	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.25	53.31	8.20	0.10	1.26	1.70	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.50	54.13	8.34	0.11	1.27	1.72	clayey silt to silty clay	UNDFND	UNDFD	4	.5
16.75	54.95	8.68	0.11	1.26	1.74	clayey silt to silty clay	UNDFND	UNDFD	4	.5
17.00	55.77	8.88	0.08	0.93	1.76	clayey silt to silty clay	UNDFND	UNDFD	4	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-RA-23
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 1:30
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	7.50	0.05	0.70	0.02	sensitive fine grained	UNDFND	UNDFD	4	.7
0.50	1.64	6.62	0.03	0.38	0.07	sensitive fine grained	UNDFND	UNDFD	3	.6
0.75	2.46	5.88	0.01	0.16	0.12	sensitive fine grained	UNDFND	UNDFD	3	.5
1.00	3.28	16.86	0.17	1.02	0.17	sandy silt to clayey silt	UNDFND	UNDFD	6	1.6
1.25	4.10	61.92	0.33	0.54	0.21	sand to silty sand	70-80	44-46	15	UNDEFINED
1.50	4.92	135.88	0.60	0.44	0.26	sand	>90	46-48	26	UNDEFINED
1.75	5.74	129.36	0.53	0.41	0.31	sand	>90	46-48	25	UNDEFINED
2.00	6.56	110.68	0.44	0.40	0.35	sand	80-90	44-46	21	UNDEFINED
2.25	7.38	90.40	0.41	0.46	0.40	sand to silty sand	70-80	44-46	22	UNDEFINED
2.50	8.20	71.00	0.37	0.51	0.45	sand to silty sand	60-70	42-44	17	UNDEFINED
2.75	9.02	62.92	0.29	0.46	0.50	sand to silty sand	60-70	42-44	15	UNDEFINED
3.00	9.84	58.16	0.26	0.44	0.54	sand to silty sand	50-60	40-42	14	UNDEFINED
3.25	10.66	47.92	0.23	0.49	0.58	sand to silty sand	50-60	40-42	11	UNDEFINED
3.50	11.48	34.40	0.26	0.76	0.60	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.75	12.30	6.06	0.12	2.02	0.62	silty clay to clay	UNDFND	UNDFD	4	.5
4.00	13.12	21.08	0.17	0.79	0.64	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
4.25	13.94	76.82	0.40	0.52	0.66	sand to silty sand	60-70	40-42	18	UNDEFINED
4.50	14.76	47.58	0.46	0.96	0.68	silty sand to sandy silt	50-60	38-40	15	UNDEFINED
4.75	15.58	4.32	0.11	2.52	0.71	clay	UNDFND	UNDFD	4	.3
5.00	16.40	11.96	0.04	0.37	0.73	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
5.25	17.22	10.88	0.11	0.97	0.75	clayey silt to silty clay	UNDFND	UNDFD	5	.9
5.50	18.04	42.20	0.25	0.59	0.77	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
5.75	18.86	55.34	0.30	0.53	0.79	sand to silty sand	50-60	38-40	13	UNDEFINED
6.00	19.69	51.76	0.29	0.56	0.81	sand to silty sand	50-60	38-40	12	UNDEFINED
6.25	20.51	43.70	0.27	0.62	0.84	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
6.50	21.33	23.46	0.14	0.61	0.86	silty sand to sandy silt	<40	32-34	7	UNDEFINED
6.75	22.15	25.94	0.17	0.65	0.88	silty sand to sandy silt	<40	34-36	8	UNDEFINED
7.00	22.97	7.50	0.11	1.41	0.90	clayey silt to silty clay	UNDFND	UNDFD	4	.6
7.25	23.79	5.40	0.06	1.13	0.92	sensitive fine grained	UNDFND	UNDFD	3	.4
7.50	24.61	7.94	0.14	1.71	0.94	clayey silt to silty clay	UNDFND	UNDFD	4	.6
7.75	25.43	5.38	0.10	1.88	0.96	silty clay to clay	UNDFND	UNDFD	3	.3
8.00	26.25	6.82	0.22	3.19	0.99	clay	UNDFND	UNDFD	7	.5
8.25	27.07	5.88	0.16	2.79	1.01	clay	UNDFND	UNDFD	6	.4
8.50	27.89	4.66	0.13	2.71	1.03	clay	UNDFND	UNDFD	4	.3
8.75	28.71	4.58	0.10	2.14	1.05	clay	UNDFND	UNDFD	4	.2
9.00	29.53	4.50	0.09	1.96	1.07	silty clay to clay	UNDFND	UNDFD	3	.2
9.25	30.35	4.40	0.08	1.88	1.09	silty clay to clay	UNDFND	UNDFD	3	.2
9.50	31.17	4.76	0.08	1.66	1.12	sensitive fine grained	UNDFND	UNDFD	2	.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-RA-23 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	4.86	0.07	1.53	1.14	sensitive fine grained	UNDFND	UNDFD	2	.3
10.00	32.81	5.22	0.08	1.46	1.16	sensitive fine grained	UNDFND	UNDFD	3	.3
10.25	33.63	5.40	0.09	1.62	1.18	sensitive fine grained	UNDFND	UNDFD	3	.3
10.50	34.45	5.60	0.09	1.52	1.20	sensitive fine grained	UNDFND	UNDFD	3	.3
10.75	35.27	7.02	0.15	2.09	1.22	silty clay to clay	UNDFND	UNDFD	4	.5
11.00	36.09	7.02	0.16	2.21	1.24	silty clay to clay	UNDFND	UNDFD	4	.4
11.25	36.91	6.68	0.13	1.99	1.27	silty clay to clay	UNDFND	UNDFD	4	.4
11.50	37.73	10.22	0.35	3.43	1.29	clay	UNDFND	UNDFD	10	.8
11.75	38.55	7.20	0.09	1.27	1.31	undefined	UNDFND	UNDFD	UDF	UNDEFINED
12.00	39.37	8.10	0.04	0.50	1.33	sensitive fine grained	UNDFND	UNDFD	4	.5
12.25	40.19	17.22	0.09	0.50	1.35	sandy silt to clayey silt	UNDFND	UNDFD	7	1.4
12.50	41.01	19.64	0.06	0.31	1.37	silty sand to sandy silt	<40	<30	6	UNDEFINED
12.75	41.83	19.64	0.32	1.63	1.40	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
13.00	42.65	71.28	1.49	2.08	1.42	silty sand to sandy silt	50-60	36-38	23	UNDEFINED
13.25	43.47	82.76	2.67	3.22	1.44	sandy silt to clayey silt	UNDFND	UNDFD	32	8.0
13.50	44.29	65.12	2.23	3.43	1.46	clayey silt to silty clay	UNDFND	UNDFD	31	6.2
13.75	45.11	144.84	5.97	4.12	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	171.64	8.26	4.81	1.50	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.25	46.75	139.20	7.37	5.29	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	152.90	6.14	4.01	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	161.02	4.98	3.09	1.57	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.8
15.00	49.21	145.78	5.51	3.78	1.59	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	202.88	5.34	2.63	1.61	silty sand to sandy silt	80-90	40-42	>50	UNDEFINED
15.50	50.85	235.08	4.42	1.88	1.63	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.75	51.67	255.32	4.13	1.62	1.65	sand to silty sand	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S03-01
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/05/94 12:33
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.30	0.01	1.93	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	8.36	0.12	1.42	0.07	clayey silt to silty clay	UNDFND	UNDFD	4	.8
0.75	2.46	5.00	0.12	2.42	0.12	clay	UNDFND	UNDFD	5	.4
1.00	3.28	4.96	0.05	1.02	0.17	sensitive fine grained	UNDFND	UNDFD	2	.4
1.25	4.10	65.66	0.63	0.96	0.21	sand to silty sand	70-80	44-46	16	UNDEFINED
1.50	4.92	118.94	1.27	1.07	0.26	sand to silty sand	>90	46-48	28	UNDEFINED
1.75	5.74	102.48	1.00	0.98	0.31	sand to silty sand	80-90	46-48	25	UNDEFINED
2.00	6.56	63.02	0.57	0.91	0.35	sand to silty sand	60-70	42-44	15	UNDEFINED
2.25	7.38	23.88	0.19	0.80	0.40	silty sand to sandy silt	<40	38-40	8	UNDEFINED
2.50	8.20	9.84	0.21	2.10	0.45	clayey silt to silty clay	UNDFND	UNDFD	5	.9
2.75	9.02	4.42	0.06	1.37	0.50	sensitive fine grained	UNDFND	UNDFD	2	.3
3.00	9.84	3.36	0.06	1.75	0.54	sensitive fine grained	UNDFND	UNDFD	2	.2
3.25	10.66	3.16	0.05	1.65	0.58	sensitive fine grained	UNDFND	UNDFD	2	.2
3.50	11.48	8.38	0.13	1.56	0.60	clayey silt to silty clay	UNDFND	UNDFD	4	.7
3.75	12.30	31.18	0.21	0.69	0.62	silty sand to sandy silt	40-50	36-38	10	UNDEFINED
4.00	13.12	18.20	0.08	0.44	0.64	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
4.25	13.94	34.86	0.11	0.32	0.66	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
4.50	14.76	33.54	0.08	0.23	0.68	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
4.75	15.58	22.32	0.35	1.55	0.71	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
5.00	16.40	43.28	1.65	3.81	0.73	clayey silt to silty clay	UNDFND	UNDFD	21	4.2
5.25	17.22	53.90	1.48	2.75	0.75	sandy silt to clayey silt	UNDFND	UNDFD	21	5.2
5.50	18.04	121.82	3.48	2.86	0.77	sandy silt to clayey silt	UNDFND	UNDFD	47	12.0
5.75	18.86	132.34	3.64	2.75	0.79	silty sand to sandy silt	70-80	42-44	42	UNDEFINED
6.00	19.69	76.12	2.84	3.73	0.81	clayey silt to silty clay	UNDFND	UNDFD	36	7.5
6.25	20.51	77.76	3.06	3.94	0.84	clayey silt to silty clay	UNDFND	UNDFD	37	7.6
6.50	21.33	126.98	3.84	3.02	0.86	sandy silt to clayey silt	UNDFND	UNDFD	49	12.5
6.75	22.15	100.04	4.11	4.10	0.88	clayey silt to silty clay	UNDFND	UNDFD	48	9.8
7.00	22.97	137.34	5.99	4.36	0.90	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
7.25	23.79	189.52	4.69	2.47	0.92	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
7.50	24.61	212.56	2.61	1.23	0.94	sand	80-90	44-46	41	UNDEFINED
7.75	25.43	236.10	3.17	1.34	0.96	sand	>90	44-46	45	UNDEFINED
8.00	26.25	226.36	2.58	1.14	0.99	sand	>90	44-46	43	UNDEFINED
8.25	27.07	249.08	4.40	1.77	1.01	sand to silty sand	>90	44-46	>50	UNDEFINED
8.50	27.89	202.96	2.81	1.38	1.03	sand to silty sand	80-90	44-46	49	UNDEFINED
8.75	28.71	201.42	1.70	0.85	1.05	sand	80-90	42-44	39	UNDEFINED
9.00	29.53	162.74	2.62	1.61	1.07	sand to silty sand	70-80	42-44	39	UNDEFINED
9.25	30.35	193.36	2.54	1.31	1.09	sand to silty sand	80-90	42-44	46	UNDEFINED
9.50	31.17	270.26	4.00	1.48	1.12	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-S03-01

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	248.32	3.75	1.51	1.14	sand to silty sand	>90	44-46	>50	UNDEFINED
10.00	32.81	284.52	3.70	1.30	1.16	sand	>90	44-46	>50	UNDEFINED
10.25	33.63	247.22	3.66	1.48	1.18	sand to silty sand	>90	44-46	>50	UNDEFINED
10.50	34.45	332.62	6.81	2.05	1.20	sand to silty sand	>90	44-46	>50	UNDEFINED
10.75	35.27	350.56	6.53	1.86	1.22	sand to silty sand	>90	44-46	>50	UNDEFINED
11.00	36.09	235.24	4.88	2.07	1.24	sand to silty sand	80-90	42-44	>50	UNDEFINED
11.25	36.91	103.90	1.25	1.20	1.27	sand to silty sand	60-70	40-42	25	UNDEFINED
11.50	37.73	106.14	1.20	1.13	1.29	sand to silty sand	60-70	40-42	25	UNDEFINED
11.75	38.55	132.38	5.83	4.40	1.31	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.00	39.37	190.90	5.87	3.08	1.33	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
12.25	40.19	168.52	3.86	2.29	1.35	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
12.50	41.01	221.14	4.70	2.13	1.37	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
12.75	41.83	310.32	5.85	1.89	1.40	sand to silty sand	>90	44-46	>50	UNDEFINED
13.00	42.65	97.84	3.10	3.17	1.42	sandy silt to clayey silt	UNDFND	UNDFD	37	9.5
13.25	43.47	309.10	6.08	1.97	1.44	sand to silty sand	>90	44-46	>50	UNDEFINED
13.50	44.29	394.06	6.18	1.57	1.46	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

* Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S03-02
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/15/94 2:55
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.58	0.00	0.62	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	0.64	0.00	0.34	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	1.84	0.00	0.12	0.12	sensitive fine grained	UNDFND	UNDFD	1	.1
1.00	3.28	2.16	0.00	0.17	0.17	sensitive fine grained	UNDFND	UNDFD	1	.1
1.25	4.10	2.50	0.00	0.19	0.21	sensitive fine grained	UNDFND	UNDFD	1	.2
1.50	4.92	5.14	0.01	0.22	0.26	sensitive fine grained	UNDFND	UNDFD	2	.4
1.75	5.74	4.30	0.01	0.17	0.31	sensitive fine grained	UNDFND	UNDFD	2	.3
2.00	6.56	4.78	0.01	0.27	0.35	sensitive fine grained	UNDFND	UNDFD	2	.4
2.25	7.38	26.60	0.23	0.85	0.40	silty sand to sandy silt	40-50	38-40	8	UNDEFINED
2.50	8.20	4.82	0.05	1.10	0.45	sensitive fine grained	UNDFND	UNDFD	2	.4
2.75	9.02	2.56	0.00	0.13	0.50	sensitive fine grained	UNDFND	UNDFD	1	.2
3.00	9.84	8.94	0.00	0.05	0.54	sensitive fine grained	UNDFND	UNDFD	4	.8
3.25	10.66	13.68	0.01	0.05	0.58	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
3.50	11.48	7.60	0.00	0.03	0.60	sensitive fine grained	UNDFND	UNDFD	4	.6
3.75	12.30	19.68	0.00	0.02	0.62	silty sand to sandy silt	<40	34-36	6	UNDEFINED
4.00	13.12	42.00	0.11	0.27	0.64	sand to silty sand	40-50	38-40	10	UNDEFINED
4.25	13.94	36.02	0.08	0.22	0.66	sand to silty sand	40-50	38-40	9	UNDEFINED
4.50	14.76	14.62	0.03	0.17	0.68	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
4.75	15.58	76.86	2.23	2.90	0.71	sandy silt to clayey silt	UNDFND	UNDFD	29	7.5
5.00	16.40	153.28	4.73	3.09	0.73	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.2
5.25	17.22	180.14	5.27	2.93	0.75	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.50	18.04	174.32	5.44	3.12	0.77	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.3
5.75	18.86	125.80	4.61	3.66	0.79	sandy silt to clayey silt	UNDFND	UNDFD	48	12.4
6.00	19.69	67.46	3.50	5.19	0.81	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
6.25	20.51	85.98	4.03	4.68	0.84	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
6.50	21.33	84.40	3.45	4.09	0.86	clayey silt to silty clay	UNDFND	UNDFD	40	8.3
6.75	22.15	90.56	3.70	4.08	0.88	clayey silt to silty clay	UNDFND	UNDFD	43	8.9
7.00	22.97	107.78	5.36	4.97	0.90	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
7.25	23.79	182.78	5.12	2.80	0.92	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
7.50	24.61	241.84	4.94	2.04	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	255.20	4.48	1.76	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	251.56	5.05	2.01	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	254.08	4.73	1.86	1.01	sand to silty sand	>90	44-46	>50	UNDEFINED
8.50	27.89	238.28	5.05	2.12	1.03	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
8.75	28.71	273.98	4.95	1.81	1.05	sand to silty sand	>90	44-46	>50	UNDEFINED
9.00	29.53	272.76	5.78	2.12	1.07	sand to silty sand	>90	44-46	>50	UNDEFINED
9.25	30.35	223.48	3.76	1.68	1.09	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.50	31.17	252.08	3.99	1.58	1.12	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

Operator :MONTGOMERY WATSO On Site Loc:CPT-S03-02 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	302.96	5.28	1.74	1.14	sand to silty sand	>90	44-46	>50	UNDEFINED
10.00	32.81	261.90	6.22	2.38	1.16	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
10.25	33.63	208.10	5.30	2.55	1.18	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.50	34.45	139.20	2.44	1.75	1.20	silty sand to sandy silt	70-80	40-42	44	UNDEFINED
10.75	35.27	97.68	4.29	4.39	1.22	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
11.00	36.09	148.82	5.65	3.79	1.24	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
11.25	36.91	203.16	4.64	2.28	1.27	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
11.50	37.73	229.36	4.79	2.09	1.29	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
11.75	38.55	314.50	5.43	1.73	1.31	sand to silty sand	>90	44-46	>50	UNDEFINED
12.00	39.37	113.38	1.06	0.93	1.33	sand to silty sand	60-70	40-42	27	UNDEFINED
12.25	40.19	35.08	0.19	0.53	1.35	silty sand to sandy silt	<40	32-34	11	UNDEFINED
12.50	41.01	54.34	2.02	3.71	1.37	clayey silt to silty clay	UNDFND	UNDFD	26	5.2
12.75	41.83	92.44	4.10	4.44	1.40	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.00	42.65	154.22	4.83	3.13	1.42	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.1

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S03-03
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/16/94 12:33
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	1.64	0.05	2.84	0.02	clay	UNDFND	UNDFD	2	.1
0.50	1.64	0.22	0.01	4.82	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	0.54	0.01	1.41	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	1.34	0.02	1.54	0.17	sensitive fine grained	UNDFND	UNDFD	1	.1
1.25	4.10	2.14	0.04	1.67	0.21	sensitive fine grained	UNDFND	UNDFD	1	.1
1.50	4.92	3.18	0.05	1.67	0.26	sensitive fine grained	UNDFND	UNDFD	2	.2
1.75	5.74	4.12	0.07	1.67	0.31	sensitive fine grained	UNDFND	UNDFD	2	.3
2.00	6.56	3.34	0.08	2.34	0.35	clay	UNDFND	UNDFD	3	.2
2.25	7.38	4.52	0.09	2.00	0.40	silty clay to clay	UNDFND	UNDFD	3	.4
2.50	8.20	9.20	0.07	0.79	0.45	clayey silt to silty clay	UNDFND	UNDFD	4	.8
2.75	9.02	24.38	0.09	0.36	0.50	silty sand to sandy silt	<40	36-38	8	UNDEFINED
3.00	9.84	26.38	0.11	0.40	0.54	silty sand to sandy silt	<40	36-38	8	UNDEFINED
3.25	10.66	43.72	0.31	0.71	0.58	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
3.50	11.48	27.42	0.49	1.80	0.60	sandy silt to clayey silt	UNDFND	UNDFD	11	2.6
3.75	12.30	92.20	3.87	4.20	0.62	clayey silt to silty clay	UNDFND	UNDFD	44	9.1
4.00	13.12	227.28	6.59	2.90	0.64	silty sand to sandy silt	>90	46-48	>50	UNDEFINED
4.25	13.94	209.94	7.68	3.66	0.66	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
4.50	14.76	149.24	4.59	3.07	0.68	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.8
4.75	15.58	160.16	6.88	4.30	0.71	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
5.00	16.40	172.58	4.87	2.82	0.73	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.25	17.22	167.20	3.88	2.32	0.75	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.50	18.04	146.02	3.54	2.42	0.77	silty sand to sandy silt	80-90	42-44	47	UNDEFINED
5.75	18.86	143.46	3.28	2.29	0.79	silty sand to sandy silt	80-90	42-44	46	UNDEFINED
6.00	19.69	148.48	4.91	3.31	0.81	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.7
6.25	20.51	150.58	4.81	3.19	0.84	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.9
6.50	21.33	242.48	5.00	2.06	0.86	sand to silty sand	>90	44-46	>50	UNDEFINED
6.75	22.15	276.44	5.11	1.85	0.88	sand to silty sand	>90	44-46	>50	UNDEFINED
7.00	22.97	277.96	5.93	2.13	0.90	sand to silty sand	>90	44-46	>50	UNDEFINED
7.25	23.79	298.92	5.08	1.70	0.92	sand to silty sand	>90	46-48	>50	UNDEFINED
7.50	24.61	264.92	4.40	1.66	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	304.40	5.46	1.79	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	231.64	4.47	1.93	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	233.88	5.94	2.54	1.01	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
8.50	27.89	256.18	4.86	1.90	1.03	sand to silty sand	>90	44-46	>50	UNDEFINED
8.75	28.71	218.04	3.71	1.70	1.05	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.00	29.53	217.36	3.71	1.71	1.07	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.25	30.35	270.66	4.69	1.73	1.09	sand to silty sand	>90	44-46	>50	UNDEFINED
9.50	31.17	253.20	5.37	2.12	1.12	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	253.30	4.52	1.78	1.14	sand to silty sand	>90	44-46	>50	UNDEFINED
10.00	32.81	161.62	5.66	3.50	1.16	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.9
10.25	33.63	159.62	4.76	2.98	1.18	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.7
10.50	34.45	144.18	4.45	3.08	1.20	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.2
10.75	35.27	68.96	2.26	3.28	1.22	sandy silt to clayey silt	UNDFND	UNDFD	26	6.6
11.00	36.09	63.38	1.62	2.55	1.24	sandy silt to clayey silt	UNDFND	UNDFD	24	6.1
11.25	36.91	102.48	2.36	2.30	1.27	silty sand to sandy silt	60-70	40-42	33	UNDEFINED
11.50	37.73	177.76	3.17	1.78	1.29	sand to silty sand	70-80	42-44	43	UNDEFINED
11.75	38.55	128.02	3.63	2.83	1.31	sandy silt to clayey silt	UNDFND	UNDFD	49	12.5
12.00	39.37	106.56	4.04	3.79	1.33	clayey silt to silty clay	UNDFND	UNDFD	>50	10.4
12.25	40.19	100.84	3.34	3.31	1.35	sandy silt to clayey silt	UNDFND	UNDFD	39	9.8

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S3-04
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/16/94 4:15
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.30	0.00	0.47	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	1.26	0.01	0.49	0.07	sensitive fine grained	UNDFND	UNDFD	1	.1
0.75	2.46	1.80	0.01	0.33	0.12	sensitive fine grained	UNDFND	UNDFD	1	.1
1.00	3.28	1.62	0.01	0.74	0.17	sensitive fine grained	UNDFND	UNDFD	1	.1
1.25	4.10	4.74	0.09	1.92	0.21	silty clay to clay	UNDFND	UNDFD	3	.4
1.50	4.92	20.76	0.46	2.22	0.26	clayey silt to silty clay	UNDFND	UNDFD	10	2.0
1.75	5.74	47.00	0.58	1.23	0.31	silty sand to sandy silt	60-70	42-44	15	UNDEFINED
2.00	6.56	30.50	0.34	1.11	0.35	silty sand to sandy silt	40-50	40-42	10	UNDEFINED
2.25	7.38	6.26	0.17	2.65	0.40	clay	UNDFND	UNDFD	6	.5
2.50	8.20	5.86	0.10	1.65	0.45	sensitive fine grained	UNDFND	UNDFD	3	.5
2.75	9.02	15.50	0.04	0.29	0.50	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
3.00	9.84	25.36	0.11	0.45	0.54	silty sand to sandy silt	<40	36-38	8	UNDEFINED
3.25	10.66	27.72	0.09	0.32	0.58	silty sand to sandy silt	<40	36-38	9	UNDEFINED
3.50	11.48	29.20	0.09	0.32	0.60	silty sand to sandy silt	<40	36-38	9	UNDEFINED
3.75	12.30	26.58	0.07	0.27	0.62	silty sand to sandy silt	<40	36-38	8	UNDEFINED
4.00	13.12	19.90	0.03	0.17	0.64	silty sand to sandy silt	<40	34-36	6	UNDEFINED
4.25	13.94	61.36	2.48	4.05	0.66	clayey silt to silty clay	UNDFND	UNDFD	29	6.0
4.50	14.76	99.36	3.90	3.93	0.68	clayey silt to silty clay	UNDFND	UNDFD	48	9.8
4.75	15.58	190.60	6.33	3.32	0.71	sandy silt to clayey silt	UNDFND	UNDFD	>50	18.9
5.00	16.40	131.72	4.47	3.40	0.73	sandy silt to clayey silt	UNDFND	UNDFD	>50	13.0
5.25	17.22	135.94	5.04	3.70	0.75	sandy silt to clayey silt	UNDFND	UNDFD	>50	13.4
5.50	18.04	175.32	4.69	2.68	0.77	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.75	18.86	181.92	3.58	1.97	0.79	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.00	19.69	169.84	3.74	2.20	0.81	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.25	20.51	172.46	3.15	1.83	0.84	sand to silty sand	80-90	44-46	41	UNDEFINED
6.50	21.33	144.22	3.74	2.59	0.86	silty sand to sandy silt	70-80	42-44	46	UNDEFINED
6.75	22.15	152.68	4.32	2.83	0.88	silty sand to sandy silt	80-90	42-44	49	UNDEFINED
7.00	22.97	168.74	5.53	3.28	0.90	sandy silt to clayey silt	UNDFND	UNDFD	>50	16.7
7.25	23.79	167.26	3.83	2.29	0.92	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
7.50	24.61	197.56	4.16	2.11	0.94	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
7.75	25.43	233.54	4.17	1.78	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	228.88	3.66	1.60	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	240.78	4.07	1.69	1.01	sand to silty sand	>90	44-46	>50	UNDEFINED
8.50	27.89	289.78	5.37	1.85	1.03	sand to silty sand	>90	44-46	>50	UNDEFINED
8.75	28.71	256.62	4.31	1.68	1.05	sand to silty sand	>90	44-46	>50	UNDEFINED
9.00	29.53	265.10	5.69	2.15	1.07	sand to silty sand	>90	44-46	>50	UNDEFINED
9.25	30.35	250.26	5.08	2.03	1.09	sand to silty sand	>90	44-46	>50	UNDEFINED
9.50	31.17	289.48	4.63	1.60	1.12	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

* Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson
On Site Loc:CPT-S04-05
Job No. :27381402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/19/94 15:00
Cone Used :465
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	3.98	0.01	0.14	0.02	sensitive fine grained	UNDFND	UNDFD	2	.3
0.50	1.64	1.30	0.00	0.34	0.07	sensitive fine grained	UNDFND	UNDFD	1	.1
0.75	2.46	2.06	0.02	0.96	0.12	sensitive fine grained	UNDFND	UNDFD	1	.1
1.00	3.28	3.04	0.04	1.21	0.17	sensitive fine grained	UNDFND	UNDFD	1	.2
1.25	4.10	7.74	0.05	0.65	0.21	sensitive fine grained	UNDFND	UNDFD	4	.7
1.50	4.92	17.08	2.88	16.84	0.26	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.75	5.74	526.02	11.23	2.14	0.31	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
2.00	6.56	292.28	6.25	2.14	0.35	sand to silty sand	>90	>48	>50	UNDEFINED
2.25	7.38	334.14	3.85	1.15	0.40	sand	>90	>48	>50	UNDEFINED
2.50	8.20	69.68	-0.01	-0.01	0.45	undefined	UNDFND	UNDFD	UDF	UNDEFINED
2.75	9.02	44.66	0.82	1.84	0.50	sandy silt to clayey silt	UNDFND	UNDFD	17	4.4
3.00	9.84	77.92	1.76	2.26	0.54	silty sand to sandy silt	60-70	42-44	25	UNDEFINED
3.25	10.66	42.04	0.13	0.30	0.58	sand to silty sand	40-50	38-40	10	UNDEFINED
3.50	11.48	63.18	2.77	4.38	0.60	clayey silt to silty clay	UNDFND	UNDFD	30	6.2
3.75	12.30	76.44	5.62	7.35	0.62	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
4.00	13.12	195.06	12.19	6.25	0.64	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
4.25	13.94	155.82	9.41	6.04	0.66	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
4.50	14.76	138.38	7.82	5.65	0.68	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
4.75	15.58	163.68	8.89	5.43	0.71	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
5.00	16.40	173.00	8.93	5.16	0.73	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
5.25	17.22	157.86	10.26	6.50	0.75	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
5.50	18.04	191.34	8.89	4.64	0.77	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
5.75	18.86	171.64	8.02	4.67	0.79	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
6.00	19.69	204.38	6.78	3.32	0.81	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
6.25	20.51	227.02	5.47	2.41	0.84	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.50	21.33	239.64	5.82	2.43	0.86	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.75	22.15	227.84	3.80	1.67	0.88	sand to silty sand	>90	44-46	>50	UNDEFINED
7.00	22.97	248.62	7.52	3.02	0.90	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.25	23.79	306.62	10.78	3.51	0.92	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.50	24.61	297.86	7.51	2.52	0.94	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
7.75	25.43	188.66	6.08	3.22	0.96	sandy silt to clayey silt	UNDFND	UNDFD	>50	18.7
8.00	26.25	302.90	9.01	2.97	0.99	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
8.25	27.07	261.82	10.91	4.17	1.01	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
8.50	27.89	268.68	7.53	2.80	1.03	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
8.75	28.71	290.12	6.71	2.31	1.05	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
9.00	29.53	316.28	10.49	3.32	1.07	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
9.25	30.35	265.50	9.73	3.66	1.09	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
9.50	31.17	232.02	8.34	3.60	1.12	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson On Site Loc:CPT-S04-05 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	267.36	6.17	2.31	1.14	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
10.00	32.81	313.96	11.03	3.51	1.16	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
10.25	33.63	262.28	9.25	3.53	1.18	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
10.50	34.45	263.80	7.08	2.68	1.20	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
10.75	35.27	275.32	5.21	1.89	1.22	sand to silty sand	>90	44-46	>50	UNDEFINED
11.00	36.09	115.92	6.44	5.55	1.24	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
11.25	36.91	181.62	9.30	5.12	1.27	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
11.50	37.73	203.32	8.64	4.25	1.29	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
11.75	38.55	146.18	4.97	3.40	1.31	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.4
12.00	39.37	130.24	3.45	2.65	1.33	silty sand to sandy silt	70-80	40-42	42	UNDEFINED
12.25	40.19	58.42	0.77	1.32	1.35	silty sand to sandy silt	40-50	36-38	19	UNDEFINED
12.50	41.01	88.32	5.15	5.83	1.37	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.75	41.83	188.08	16.26	8.64	1.40	undefined	UNDFND	UNDFD	UDF	UNDEFINED
13.00	42.65	155.58	9.81	6.31	1.42	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.25	43.47	286.56	7.48	2.61	1.44	silty sand to sandy silt	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S05-08
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/04/94 15:23
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	8.64	-0.02	-0.23	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	23.84	0.18	0.75	0.07	silty sand to sandy silt	60-70	46-48	8	UNDEFINED
0.75	2.46	10.34	0.26	2.52	0.12	silty clay to clay	UNDFND	UNDFD	7	1.0
1.00	3.28	19.24	0.20	1.05	0.17	sandy silt to clayey silt	UNDFND	UNDFD	7	1.9
1.25	4.10	38.34	0.40	1.05	0.21	silty sand to sandy silt	60-70	42-44	12	UNDEFINED
1.50	4.92	52.42	0.85	1.62	0.26	silty sand to sandy silt	60-70	44-46	17	UNDEFINED
1.75	5.74	74.50	1.03	1.38	0.31	silty sand to sandy silt	70-80	44-46	24	UNDEFINED
2.00	6.56	155.16	1.07	0.69	0.35	sand	>90	46-48	30	UNDEFINED
2.25	7.38	140.62	0.87	0.62	0.40	sand	80-90	46-48	27	UNDEFINED
2.50	8.20	114.42	0.64	0.56	0.45	sand	80-90	44-46	22	UNDEFINED
2.75	9.02	113.90	0.64	0.56	0.50	sand	80-90	44-46	22	UNDEFINED
3.00	9.84	108.14	0.68	0.63	0.54	sand to silty sand	70-80	44-46	26	UNDEFINED
3.25	10.66	111.14	0.70	0.63	0.58	sand to silty sand	70-80	42-44	27	UNDEFINED
3.50	11.48	103.20	0.67	0.65	0.60	sand to silty sand	70-80	42-44	25	UNDEFINED
3.75	12.30	99.72	0.65	0.65	0.62	sand to silty sand	70-80	42-44	24	UNDEFINED
4.00	13.12	72.54	0.61	0.84	0.64	sand to silty sand	60-70	40-42	17	UNDEFINED
4.25	13.94	20.92	0.39	1.86	0.66	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
4.50	14.76	41.26	0.31	0.75	0.68	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.75	15.58	20.30	0.39	1.92	0.71	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
5.00	16.40	5.40	0.09	1.71	0.73	silty clay to clay	UNDFND	UNDFD	3	.4
5.25	17.22	5.12	0.08	1.62	0.75	sensitive fine grained	UNDFND	UNDFD	2	.4
5.50	18.04	30.52	0.27	0.88	0.77	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.75	18.86	32.64	0.28	0.85	0.79	silty sand to sandy silt	<40	36-38	10	UNDEFINED
6.00	19.69	33.62	0.26	0.79	0.81	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.25	20.51	30.24	0.16	0.54	0.84	silty sand to sandy silt	<40	36-38	10	UNDEFINED
6.50	21.33	35.38	0.24	0.68	0.86	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.75	22.15	45.30	0.35	0.77	0.88	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.00	22.97	45.26	0.45	0.98	0.90	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.25	23.79	34.24	0.53	1.54	0.92	sandy silt to clayey silt	UNDFND	UNDFD	13	3.2
7.50	24.61	64.28	0.55	0.85	0.94	sand to silty sand	50-60	38-40	15	UNDEFINED
7.75	25.43	15.70	0.17	1.11	0.96	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
8.00	26.25	6.58	0.07	1.04	0.99	sensitive fine grained	UNDFND	UNDFD	3	.5
8.25	27.07	6.14	0.04	0.60	1.01	sensitive fine grained	UNDFND	UNDFD	3	.4
8.50	27.89	5.36	0.04	0.70	1.03	sensitive fine grained	UNDFND	UNDFD	3	.3
8.75	28.71	5.12	0.03	0.61	1.05	sensitive fine grained	UNDFND	UNDFD	2	.3
9.00	29.53	5.06	0.05	0.92	1.07	sensitive fine grained	UNDFND	UNDFD	2	.3
9.25	30.35	5.54	0.08	1.36	1.09	sensitive fine grained	UNDFND	UNDFD	3	.3
9.50	31.17	5.14	0.09	1.71	1.12	sensitive fine grained	UNDFND	UNDFD	2	.3

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-S05-08 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	5.90	0.08	1.35	1.14	sensitive fine grained	UNDFND	UNDFD	3	.4
10.00	32.81	5.84	0.09	1.47	1.16	sensitive fine grained	UNDFND	UNDFD	3	.3
10.25	33.63	5.30	0.07	1.35	1.18	sensitive fine grained	UNDFND	UNDFD	3	.3
10.50	34.45	6.60	0.12	1.77	1.20	silty clay to clay	UNDFND	UNDFD	4	.4
10.75	35.27	6.96	0.11	1.55	1.22	clayey silt to silty clay	UNDFND	UNDFD	3	.4
11.00	36.09	8.06	0.20	2.52	1.24	silty clay to clay	UNDFND	UNDFD	5	.6
11.25	36.91	6.70	0.04	0.64	1.27	sensitive fine grained	UNDFND	UNDFD	3	.4
11.50	37.73	8.32	0.04	0.44	1.29	sensitive fine grained	UNDFND	UNDFD	4	.6
11.75	38.55	10.40	0.03	0.26	1.31	sandy silt to clayey silt	UNDFND	UNDFD	4	.8
12.00	39.37	6.76	0.05	0.78	1.33	sensitive fine grained	UNDFND	UNDFD	3	.4
12.25	40.19	6.34	0.06	0.87	1.35	sensitive fine grained	UNDFND	UNDFD	3	.4
12.50	41.01	10.48	0.12	1.17	1.37	clayey silt to silty clay	UNDFND	UNDFD	5	.8
12.75	41.83	12.34	0.10	0.82	1.40	sandy silt to clayey silt	UNDFND	UNDFD	5	.9
13.00	42.65	32.56	0.52	1.60	1.42	sandy silt to clayey silt	UNDFND	UNDFD	12	3.0
13.25	43.47	80.58	2.54	3.15	1.44	sandy silt to clayey silt	UNDFND	UNDFD	31	7.8
13.50	44.29	73.70	1.92	2.61	1.46	sandy silt to clayey silt	UNDFND	UNDFD	28	7.1
13.75	45.11	63.54	2.12	3.34	1.48	sandy silt to clayey silt	UNDFND	UNDFD	24	6.0
14.00	45.93	171.42	6.89	4.02	1.50	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.25	46.75	180.44	8.58	4.75	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	189.84	8.67	4.57	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	197.38	7.72	3.91	1.57	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	180.52	7.18	3.98	1.59	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	229.52	8.21	3.58	1.61	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	361.60	6.23	1.72	1.63	sand to silty sand	>90	44-46	>50	UNDEFINED
15.75	51.67	390.50	5.01	1.28	1.65	sand	>90	44-46	>50	UNDEFINED
16.00	52.49	361.74	3.87	1.07	1.68	sand	>90	44-46	>50	UNDEFINED
16.25	53.31	304.88	4.22	1.38	1.70	sand	>90	42-44	>50	UNDEFINED
16.50	54.13	303.78	5.64	1.86	1.72	sand to silty sand	>90	42-44	>50	UNDEFINED
16.75	54.95	304.28	4.01	1.32	1.74	sand	>90	42-44	>50	UNDEFINED
17.00	55.77	297.98	3.38	1.14	1.76	sand	80-90	42-44	>50	UNDEFINED
17.25	56.59	286.70	6.17	2.15	1.78	sand to silty sand	80-90	42-44	>50	UNDEFINED
17.50	57.41	290.32	3.48	1.20	1.80	sand	80-90	42-44	>50	UNDEFINED
17.75	58.23	250.24	3.21	1.28	1.83	sand	80-90	42-44	48	UNDEFINED
18.00	59.06	164.86	4.25	2.57	1.85	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
18.25	59.88	83.34	2.37	2.84	1.87	sandy silt to clayey silt	UNDFND	UNDFD	32	7.9
18.50	60.70	139.32	5.25	3.77	1.89	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
18.75	61.52	205.66	5.86	2.85	1.91	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
19.00	62.34	111.74	3.76	3.37	1.93	sandy silt to clayey silt	UNDFND	UNDFD	43	10.8
19.25	63.16	186.82	4.92	2.63	1.96	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
19.50	63.98	223.16	4.14	1.85	1.98	sand to silty sand	70-80	40-42	>50	UNDEFINED
19.75	64.80	168.66	6.29	3.73	2.00	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
20.00	65.62	194.06	5.47	2.82	2.02	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	220.68	3.71	1.68	2.04	sand to silty sand	70-80	40-42	>50	UNDEFINED
20.50	67.26	237.16	4.66	1.97	2.06	sand to silty sand	80-90	40-42	>50	UNDEFINED
20.75	68.08	133.90	6.69	4.99	2.09	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
21.00	68.90	140.70	6.99	4.97	2.11	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
21.25	69.72	184.56	8.29	4.49	2.13	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
21.50	70.54	89.26	2.81	3.14	2.15	sandy silt to clayey silt	UNDFND	UNDFD	34	8.5
21.75	71.36	125.28	5.48	4.37	2.17	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
22.00	72.18	189.58	5.11	2.69	2.19	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
22.25	73.00	238.20	3.30	1.38	2.21	sand to silty sand	80-90	40-42	>50	UNDEFINED
22.50	73.82	174.18	7.08	4.06	2.24	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
22.75	74.64	290.06	6.72	2.32	2.26	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
23.00	75.46	355.12	5.56	1.57	2.28	sand to silty sand	>90	42-44	>50	UNDEFINED
23.25	76.28	377.36	5.17	1.37	2.30	sand	>90	42-44	>50	UNDEFINED
23.50	77.10	386.16	5.82	1.51	2.32	sand to silty sand	>90	42-44	>50	UNDEFINED
23.75	77.92	376.88	3.63	0.96	2.34	sand	>90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S05-09
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/04/94 18:17
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	6.02	0.09	1.50	0.02	sensitive fine grained	UNDFND	UNDFD	3	.5
0.50	1.64	8.64	0.16	1.90	0.07	clayey silt to silty clay	UNDFND	UNDFD	4	.8
0.75	2.46	4.78	0.06	1.31	0.12	sensitive fine grained	UNDFND	UNDFD	2	.4
1.00	3.28	8.30	0.10	1.27	0.17	clayey silt to silty clay	UNDFND	UNDFD	4	.8
1.25	4.10	15.24	0.13	0.84	0.21	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
1.50	4.92	39.40	0.65	1.65	0.26	sandy silt to clayey silt	UNDFND	UNDFD	15	3.9
1.75	5.74	101.68	0.93	0.91	0.31	sand to silty sand	80-90	46-48	24	UNDEFINED
2.00	6.56	109.68	0.82	0.75	0.35	sand to silty sand	80-90	44-46	26	UNDEFINED
2.25	7.38	94.32	0.57	0.60	0.40	sand to silty sand	70-80	44-46	23	UNDEFINED
2.50	8.20	87.76	0.56	0.63	0.45	sand to silty sand	70-80	42-44	21	UNDEFINED
2.75	9.02	85.24	0.57	0.67	0.50	sand to silty sand	70-80	42-44	20	UNDEFINED
3.00	9.84	72.56	0.52	0.71	0.54	sand to silty sand	60-70	42-44	17	UNDEFINED
3.25	10.66	63.98	0.41	0.65	0.58	sand to silty sand	60-70	40-42	15	UNDEFINED
3.50	11.48	63.82	0.53	0.83	0.60	sand to silty sand	60-70	40-42	15	UNDEFINED
3.75	12.30	46.94	0.41	0.88	0.62	silty sand to sandy silt	50-60	38-40	15	UNDEFINED
4.00	13.12	14.30	0.41	2.90	0.64	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
4.25	13.94	42.36	0.44	1.03	0.66	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
4.50	14.76	6.38	0.21	3.22	0.68	clay	UNDFND	UNDFD	6	.5
4.75	15.58	3.60	0.05	1.41	0.71	sensitive fine grained	UNDFND	UNDFD	2	.2
5.00	16.40	3.78	0.08	2.06	0.73	clay	UNDFND	UNDFD	4	.2
5.25	17.22	26.64	0.26	0.99	0.75	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
5.50	18.04	33.06	0.27	0.81	0.77	silty sand to sandy silt	<40	36-38	11	UNDEFINED
5.75	18.86	25.42	0.18	0.70	0.79	silty sand to sandy silt	<40	34-36	8	UNDEFINED
6.00	19.69	34.18	0.31	0.91	0.81	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.25	20.51	42.16	0.43	1.02	0.84	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
6.50	21.33	38.82	0.40	1.03	0.86	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
6.75	22.15	44.82	0.52	1.16	0.88	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.00	22.97	69.84	0.74	1.06	0.90	silty sand to sandy silt	50-60	38-40	22	UNDEFINED
7.25	23.79	55.96	0.90	1.60	0.92	silty sand to sandy silt	50-60	38-40	18	UNDEFINED
7.50	24.61	29.22	0.69	2.35	0.94	sandy silt to clayey silt	UNDFND	UNDFD	11	2.7
7.75	25.43	72.46	0.81	1.12	0.96	silty sand to sandy silt	50-60	38-40	23	UNDEFINED
8.00	26.25	41.70	0.79	1.91	0.99	sandy silt to clayey silt	UNDFND	UNDFD	16	4.0
8.25	27.07	39.64	0.67	1.68	1.01	sandy silt to clayey silt	UNDFND	UNDFD	15	3.8
8.50	27.89	23.86	0.53	2.20	1.03	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
8.75	28.71	46.66	0.46	0.99	1.05	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
9.00	29.53	6.76	0.12	1.72	1.07	silty clay to clay	UNDFND	UNDFD	4	.5
9.25	30.35	6.12	0.07	1.12	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	5.72	0.07	1.23	1.12	sensitive fine grained	UNDFND	UNDFD	3	.3

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S05-11
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/04/94 11:29
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	2.24	-0.00	-0.20	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	15.32	0.10	0.65	0.07	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
0.75	2.46	5.66	0.03	0.50	0.12	sensitive fine grained	UNDFND	UNDFD	3	.5
1.00	3.28	6.20	0.01	0.24	0.17	sensitive fine grained	UNDFND	UNDFD	3	.6
1.25	4.10	6.10	0.04	0.60	0.21	sensitive fine grained	UNDFND	UNDFD	3	.5
1.50	4.92	17.36	0.14	0.80	0.26	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
1.75	5.74	15.46	0.09	0.58	0.31	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
2.00	6.56	14.42	0.07	0.48	0.35	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
2.25	7.38	10.10	0.04	0.37	0.40	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
2.50	8.20	13.78	0.14	1.02	0.45	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
2.75	9.02	27.86	0.15	0.56	0.50	silty sand to sandy silt	40-50	38-40	9	UNDEFINED
3.00	9.84	94.64	0.58	0.61	0.54	sand to silty sand	70-80	42-44	23	UNDEFINED
3.25	10.66	101.28	0.65	0.64	0.58	sand to silty sand	70-80	42-44	24	UNDEFINED
3.50	11.48	76.36	0.86	1.13	0.60	sand to silty sand	60-70	42-44	18	UNDEFINED
3.75	12.30	84.10	0.46	0.55	0.62	sand to silty sand	60-70	42-44	20	UNDEFINED
4.00	13.12	77.10	0.47	0.60	0.64	sand to silty sand	60-70	40-42	18	UNDEFINED
4.25	13.94	56.44	0.48	0.84	0.66	silty sand to sandy silt	50-60	40-42	18	UNDEFINED
4.50	14.76	41.40	0.54	1.31	0.68	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.75	15.58	12.34	0.30	2.44	0.71	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
5.00	16.40	6.88	0.12	1.71	0.73	silty clay to clay	UNDFND	UNDFD	4	.5
5.25	17.22	12.14	0.13	1.04	0.75	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
5.50	18.04	38.06	0.29	0.76	0.77	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
5.75	18.86	40.38	0.32	0.79	0.79	silty sand to sandy silt	40-50	36-38	13	UNDEFINED
6.00	19.69	25.76	0.19	0.73	0.81	silty sand to sandy silt	<40	34-36	8	UNDEFINED
6.25	20.51	22.26	0.11	0.50	0.84	silty sand to sandy silt	<40	32-34	7	UNDEFINED
6.50	21.33	20.70	0.18	0.88	0.86	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
6.75	22.15	5.72	0.06	0.97	0.88	sensitive fine grained	UNDFND	UNDFD	3	.4
7.00	22.97	5.12	0.04	0.73	0.90	sensitive fine grained	UNDFND	UNDFD	2	.3
7.25	23.79	5.50	0.06	1.12	0.92	sensitive fine grained	UNDFND	UNDFD	3	.4
7.50	24.61	5.08	0.06	1.16	0.94	sensitive fine grained	UNDFND	UNDFD	2	.3
7.75	25.43	17.20	0.10	0.60	0.96	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
8.00	26.25	24.90	0.18	0.73	0.99	silty sand to sandy silt	<40	32-34	8	UNDEFINED
8.25	27.07	13.04	0.19	1.46	1.01	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
8.50	27.89	9.60	0.20	2.12	1.03	clayey silt to silty clay	UNDFND	UNDFD	5	.8
8.75	28.71	11.80	0.21	1.82	1.05	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
9.00	29.53	8.44	0.15	1.75	1.07	clayey silt to silty clay	UNDFND	UNDFD	4	.6
9.25	30.35	8.16	0.16	1.92	1.09	silty clay to clay	UNDFND	UNDFD	5	.6
9.50	31.17	8.06	0.11	1.41	1.12	clayey silt to silty clay	UNDFND	UNDFD	4	.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-S05-09 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	5.66	0.07	1.30	1.14	sensitive fine grained	UNDFND	UNDFD	3	.3
10.00	32.81	8.20	0.21	2.54	1.16	silty clay to clay	UNDFND	UNDFD	5	.6
10.25	33.63	7.98	0.18	2.22	1.18	silty clay to clay	UNDFND	UNDFD	5	.6
10.50	34.45	5.80	0.01	0.18	1.20	sensitive fine grained	UNDFND	UNDFD	3	.3
10.75	35.27	9.82	0.05	0.54	1.22	sandy silt to clayey silt	UNDFND	UNDFD	4	.7
11.00	36.09	9.70	0.12	1.19	1.24	clayey silt to silty clay	UNDFND	UNDFD	5	.7
11.25	36.91	22.92	0.55	2.40	1.27	clayey silt to silty clay	UNDFND	UNDFD	11	2.0
11.50	37.73	35.50	0.90	2.53	1.29	sandy silt to clayey silt	UNDFND	UNDFD	14	3.3
11.75	38.55	36.36	0.82	2.26	1.31	sandy silt to clayey silt	UNDFND	UNDFD	14	3.4
12.00	39.37	37.84	0.71	1.87	1.33	sandy silt to clayey silt	UNDFND	UNDFD	14	3.5
12.25	40.19	72.56	2.61	3.60	1.35	clayey silt to silty clay	UNDFND	UNDFD	35	7.0
12.50	41.01	52.58	1.58	3.01	1.37	sandy silt to clayey silt	UNDFND	UNDFD	20	5.0
12.75	41.83	53.30	1.66	3.11	1.40	sandy silt to clayey silt	UNDFND	UNDFD	20	5.0
13.00	42.65	238.26	9.10	3.82	1.42	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.25	43.47	291.64	7.56	2.59	1.44	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
13.50	44.29	87.74	4.61	5.25	1.46	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	94.72	4.27	4.50	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	113.22	5.92	5.23	1.50	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.25	46.75	172.50	9.54	5.53	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	174.38	6.95	3.99	1.55	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	164.94	7.58	4.60	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	317.50	7.07	2.23	1.59	sand to silty sand	>90	44-46	>50	UNDEFINED
15.25	50.03	332.52	4.59	1.38	1.61	sand	>90	44-46	>50	UNDEFINED
15.50	50.85	408.56	6.13	1.50	1.63	sand	>90	44-46	>50	UNDEFINED
15.75	51.67	390.26	6.91	1.77	1.65	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S05-12
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/04/94 08:40
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	4.56	0.03	0.74	0.02	sensitive fine grained	UNDFND	UNDFD	2	.4
0.50	1.64	12.50	0.07	0.55	0.07	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
0.75	2.46	16.40	0.25	1.55	0.12	sandy silt to clayey silt	UNDFND	UNDFD	6	1.6
1.00	3.28	20.82	0.30	1.42	0.17	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
1.25	4.10	32.02	0.31	0.96	0.21	silty sand to sandy silt	50-60	42-44	10	UNDEFINED
1.50	4.92	24.62	0.13	0.52	0.26	silty sand to sandy silt	40-50	40-42	8	UNDEFINED
1.75	5.74	21.82	0.26	1.19	0.31	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
2.00	6.56	59.00	0.36	0.61	0.35	sand to silty sand	60-70	42-44	14	UNDEFINED
2.25	7.38	99.70	0.55	0.55	0.40	sand to silty sand	70-80	44-46	24	UNDEFINED
2.50	8.20	69.78	0.62	0.89	0.45	sand to silty sand	60-70	42-44	17	UNDEFINED
2.75	9.02	64.80	0.32	0.49	0.50	sand to silty sand	60-70	42-44	16	UNDEFINED
3.00	9.84	39.08	0.36	0.93	0.54	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.25	10.66	35.70	0.26	0.73	0.58	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.50	11.48	68.08	0.38	0.56	0.60	sand to silty sand	60-70	40-42	16	UNDEFINED
3.75	12.30	63.26	0.38	0.60	0.62	sand to silty sand	60-70	40-42	15	UNDEFINED
4.00	13.12	65.84	0.37	0.56	0.64	sand to silty sand	60-70	40-42	16	UNDEFINED
4.25	13.94	51.56	0.34	0.66	0.66	sand to silty sand	50-60	38-40	12	UNDEFINED
4.50	14.76	31.02	0.35	1.12	0.68	silty sand to sandy silt	<40	36-38	10	UNDEFINED
4.75	15.58	11.46	0.29	2.54	0.71	silty clay to clay	UNDFND	UNDFD	7	1.0
5.00	16.40	14.88	0.26	1.77	0.73	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
5.25	17.22	6.44	0.11	1.64	0.75	silty clay to clay	UNDFND	UNDFD	4	.5
5.50	18.04	8.54	0.11	1.31	0.77	clayey silt to silty clay	UNDFND	UNDFD	4	.7
5.75	18.86	37.10	0.28	0.76	0.79	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
6.00	19.69	36.06	0.29	0.80	0.81	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
6.25	20.51	29.54	0.20	0.68	0.84	silty sand to sandy silt	<40	34-36	9	UNDEFINED
6.50	21.33	15.54	0.13	0.82	0.86	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
6.75	22.15	11.74	0.13	1.15	0.88	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
7.00	22.97	9.08	0.14	1.53	0.90	clayey silt to silty clay	UNDFND	UNDFD	4	.7
7.25	23.79	12.84	0.18	1.38	0.92	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
7.50	24.61	7.56	0.16	2.14	0.94	silty clay to clay	UNDFND	UNDFD	5	.6
7.75	25.43	5.96	0.08	1.31	0.96	sensitive fine grained	UNDFND	UNDFD	3	.4
8.00	26.25	5.70	0.08	1.47	0.99	sensitive fine grained	UNDFND	UNDFD	3	.4
8.25	27.07	5.42	0.06	1.19	1.01	sensitive fine grained	UNDFND	UNDFD	3	.3
8.50	27.89	5.70	0.09	1.51	1.03	sensitive fine grained	UNDFND	UNDFD	3	.4
8.75	28.71	6.04	0.09	1.53	1.05	sensitive fine grained	UNDFND	UNDFD	3	.4
9.00	29.53	5.92	0.08	1.43	1.07	sensitive fine grained	UNDFND	UNDFD	3	.4
9.25	30.35	5.48	0.08	1.47	1.09	sensitive fine grained	UNDFND	UNDFD	3	.3
9.50	31.17	7.02	0.12	1.70	1.12	silty clay to clay	UNDFND	UNDFD	4	.5

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	24.60	0.33	1.33	1.14	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
10.00	32.81	33.94	0.57	1.68	1.16	sandy silt to clayey silt	UNDFND	UNDFD	13	3.2
10.25	33.63	10.84	0.11	1.02	1.18	clayey silt to silty clay	UNDFND	UNDFD	5	.8
10.50	34.45	7.26	0.04	0.62	1.20	sensitive fine grained	UNDFND	UNDFD	3	.5
10.75	35.27	7.12	0.05	0.72	1.22	sensitive fine grained	UNDFND	UNDFD	3	.5
11.00	36.09	7.46	0.09	1.18	1.24	undefined	UNDFND	UNDFD	UDF	UNDEFINED
11.25	36.91	31.60	0.32	1.00	1.27	silty sand to sandy silt	<40	32-34	10	UNDEFINED
11.50	37.73	7.36	0.07	0.93	1.29	sensitive fine grained	UNDFND	UNDFD	4	.5
11.75	38.55	6.88	0.08	1.19	1.31	sensitive fine grained	UNDFND	UNDFD	3	.4
12.00	39.37	6.88	0.09	1.31	1.33	sensitive fine grained	UNDFND	UNDFD	3	.4
12.25	40.19	7.74	0.09	1.23	1.35	clayey silt to silty clay	UNDFND	UNDFD	4	.5
12.50	41.01	29.12	0.52	1.80	1.37	sandy silt to clayey silt	UNDFND	UNDFD	11	2.6
12.75	41.83	38.40	0.64	1.66	1.40	sandy silt to clayey silt	UNDFND	UNDFD	15	3.6
13.00	42.65	35.70	1.05	2.93	1.42	clayey silt to silty clay	UNDFND	UNDFD	17	3.3
13.25	43.47	53.50	1.70	3.17	1.44	sandy silt to clayey silt	UNDFND	UNDFD	20	5.1
13.50	44.29	79.36	2.72	3.42	1.46	sandy silt to clayey silt	UNDFND	UNDFD	30	7.6
13.75	45.11	243.94	10.40	4.26	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	153.34	6.76	4.41	1.50	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.25	46.75	172.40	8.41	4.88	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	149.64	6.75	4.51	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	88.30	3.68	4.17	1.57	clayey silt to silty clay	UNDFND	UNDFD	42	8.5
15.00	49.21	100.82	4.13	4.10	1.59	clayey silt to silty clay	UNDFND	UNDFD	48	9.8
15.25	50.03	37.14	1.35	3.64	1.61	clayey silt to silty clay	UNDFND	UNDFD	18	3.4
15.50	50.85	92.94	3.97	4.27	1.63	clayey silt to silty clay	UNDFND	UNDFD	45	9.0
15.75	51.67	263.58	6.44	2.44	1.65	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
16.00	52.49	366.54	5.25	1.43	1.68	sand	>90	44-46	>50	UNDEFINED
16.25	53.31	384.32	4.88	1.27	1.70	sand	>90	44-46	>50	UNDEFINED
16.50	54.13	343.44	4.38	1.28	1.72	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S6-01
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/26/94 1:50
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.12	0.00	2.83	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	43.68	0.44	1.01	0.07	silty sand to sandy silt	80-90	>48	14	UNDEFINED
0.75	2.46	107.10	0.80	0.75	0.12	sand to silty sand	>90	>48	26	UNDEFINED
1.00	3.28	102.98	0.50	0.49	0.17	sand to silty sand	>90	>48	25	UNDEFINED
1.25	4.10	78.94	0.37	0.47	0.21	sand to silty sand	80-90	46-48	19	UNDEFINED
1.50	4.92	58.34	0.41	0.71	0.26	sand to silty sand	70-80	44-46	14	UNDEFINED
1.75	5.74	63.90	0.30	0.46	0.31	sand to silty sand	70-80	44-46	15	UNDEFINED
2.00	6.56	60.74	0.36	0.60	0.35	sand to silty sand	60-70	42-44	15	UNDEFINED
2.25	7.38	60.04	0.36	0.59	0.40	sand to silty sand	60-70	42-44	14	UNDEFINED
2.50	8.20	56.50	0.40	0.71	0.45	sand to silty sand	60-70	42-44	14	UNDEFINED
2.75	9.02	53.42	0.32	0.60	0.50	sand to silty sand	50-60	40-42	13	UNDEFINED
3.00	9.84	9.78	0.09	0.91	0.54	clayey silt to silty clay	UNDFND	UNDFD	5	.9
3.25	10.66	4.84	0.02	0.39	0.58	sensitive fine grained	UNDFND	UNDFD	2	.4
3.50	11.48	4.96	0.01	0.25	0.60	sensitive fine grained	UNDFND	UNDFD	2	.4
3.75	12.30	5.68	0.05	0.81	0.62	sensitive fine grained	UNDFND	UNDFD	3	.4
4.00	13.12	5.66	0.06	1.03	0.64	sensitive fine grained	UNDFND	UNDFD	3	.4
4.25	13.94	13.18	0.12	0.90	0.66	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
4.50	14.76	7.78	0.05	0.69	0.68	sensitive fine grained	UNDFND	UNDFD	4	.6
4.75	15.58	6.20	0.07	1.11	0.71	sensitive fine grained	UNDFND	UNDFD	3	.5
5.00	16.40	7.70	0.07	0.97	0.73	sensitive fine grained	UNDFND	UNDFD	4	.6
5.25	17.22	5.58	0.06	1.09	0.75	sensitive fine grained	UNDFND	UNDFD	3	.4
5.50	18.04	7.60	0.04	0.58	0.77	sensitive fine grained	UNDFND	UNDFD	4	.6
5.75	18.86	4.84	0.04	0.89	0.79	sensitive fine grained	UNDFND	UNDFD	2	.3
6.00	19.69	4.88	0.04	0.80	0.81	sensitive fine grained	UNDFND	UNDFD	2	.3
6.25	20.51	5.02	0.03	0.61	0.84	sensitive fine grained	UNDFND	UNDFD	2	.3
6.50	21.33	5.86	0.11	1.80	0.86	silty clay to clay	UNDFND	UNDFD	4	.4
6.75	22.15	64.66	0.71	1.10	0.88	silty sand to sandy silt	50-60	38-40	21	UNDEFINED
7.00	22.97	181.40	1.02	0.56	0.90	sand	80-90	44-46	35	UNDEFINED
7.25	23.79	151.04	0.80	0.53	0.92	sand	70-80	42-44	29	UNDEFINED
7.50	24.61	114.30	0.50	0.44	0.94	sand	70-80	40-42	22	UNDEFINED
7.75	25.43	42.38	0.41	0.96	0.96	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
8.00	26.25	43.10	0.32	0.75	0.99	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
8.25	27.07	46.66	0.37	0.79	1.01	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
8.50	27.89	43.44	0.44	1.02	1.03	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
8.75	28.71	48.44	0.56	1.17	1.05	silty sand to sandy silt	40-50	36-38	15	UNDEFINED
9.00	29.53	59.26	0.42	0.72	1.07	sand to silty sand	50-60	38-40	14	UNDEFINED
9.25	30.35	41.16	0.38	0.92	1.09	silty sand to sandy silt	<40	36-38	13	UNDEFINED
9.50	31.17	34.24	0.41	1.21	1.12	silty sand to sandy silt	<40	34-36	11	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

* Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-S05-12 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	9.98	0.18	1.78	1.14	clayey silt to silty clay	UNDFND	UNDFD	5	.8
10.00	32.81	12.38	0.17	1.41	1.16	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
10.25	33.63	6.90	0.09	1.26	1.18	sensitive fine grained	UNDFND	UNDFD	3	.4
10.50	34.45	6.42	0.08	1.32	1.20	sensitive fine grained	UNDFND	UNDFD	3	.4
10.75	35.27	6.62	0.08	1.20	1.22	sensitive fine grained	UNDFND	UNDFD	3	.4
11.00	36.09	7.00	0.08	1.21	1.24	sensitive fine grained	UNDFND	UNDFD	3	.4
11.25	36.91	7.26	0.09	1.26	1.27	undefined	UNDFND	UNDFD	UDF	UNDEFINED
11.50	37.73	7.68	0.11	1.40	1.29	clayey silt to silty clay	UNDFND	UNDFD	4	.5
11.75	38.55	7.36	0.10	1.30	1.31	clayey silt to silty clay	UNDFND	UNDFD	4	.5
12.00	39.37	9.12	0.14	1.51	1.33	clayey silt to silty clay	UNDFND	UNDFD	4	.6
12.25	40.19	6.98	0.08	1.20	1.35	sensitive fine grained	UNDFND	UNDFD	3	.4
12.50	41.01	6.92	0.09	1.36	1.37	sensitive fine grained	UNDFND	UNDFD	3	.4
12.75	41.83	20.46	0.17	0.85	1.40	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
13.00	42.65	21.70	0.35	1.62	1.42	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
13.25	43.47	8.64	0.09	0.99	1.44	clayey silt to silty clay	UNDFND	UNDFD	4	.6
13.50	44.29	9.28	0.03	0.36	1.46	sensitive fine grained	UNDFND	UNDFD	4	.6
13.75	45.11	19.54	0.16	0.81	1.48	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
14.00	45.93	20.28	0.24	1.17	1.50	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
14.25	46.75	107.92	2.60	2.41	1.52	silty sand to sandy silt	60-70	38-40	34	UNDEFINED
14.50	47.57	179.88	9.29	5.16	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	129.12	6.44	4.99	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	87.48	3.44	3.93	1.59	clayey silt to silty clay	UNDFND	UNDFD	42	8.4
15.25	50.03	95.94	3.48	3.63	1.61	sandy silt to clayey silt	UNDFND	UNDFD	37	9.3
15.50	50.85	59.24	2.06	3.47	1.63	clayey silt to silty clay	UNDFND	UNDFD	28	5.6
15.75	51.67	43.52	1.25	2.87	1.65	sandy silt to clayey silt	UNDFND	UNDFD	17	4.0
16.00	52.49	69.62	2.76	3.96	1.68	clayey silt to silty clay	UNDFND	UNDFD	33	6.6
16.25	53.31	314.46	9.11	2.90	1.70	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.50	54.13	438.92	9.43	2.15	1.72	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	35.98	0.53	1.48	1.14	silty sand to sandy silt	<40	34-36	11	UNDEFINED
10.00	32.81	63.70	0.91	1.42	1.16	silty sand to sandy silt	50-60	38-40	20	UNDEFINED
10.25	33.63	79.82	1.36	1.70	1.18	silty sand to sandy silt	50-60	38-40	25	UNDEFINED
10.50	34.45	27.46	0.40	1.47	1.20	sandy silt to clayey silt	UNDFND	UNDFD	11	2.5
10.75	35.27	28.34	0.47	1.67	1.22	sandy silt to clayey silt	UNDFND	UNDFD	11	2.6
11.00	36.09	28.20	0.46	1.65	1.24	sandy silt to clayey silt	UNDFND	UNDFD	11	2.6
11.25	36.91	22.64	0.42	1.85	1.27	sandy silt to clayey silt	UNDFND	UNDFD	9	2.0
11.50	37.73	23.14	0.50	2.17	1.29	sandy silt to clayey silt	UNDFND	UNDFD	9	2.0
11.75	38.55	22.94	0.39	1.71	1.31	sandy silt to clayey silt	UNDFND	UNDFD	9	2.0
12.00	39.37	24.02	0.38	1.57	1.33	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
12.25	40.19	38.40	0.67	1.74	1.35	sandy silt to clayey silt	UNDFND	UNDFD	15	3.6
12.50	41.01	73.40	0.96	1.30	1.37	silty sand to sandy silt	50-60	36-38	23	UNDEFINED
12.75	41.83	61.34	1.31	2.13	1.40	sandy silt to clayey silt	UNDFND	UNDFD	24	5.8
13.00	42.65	67.24	1.34	2.00	1.42	silty sand to sandy silt	50-60	36-38	21	UNDEFINED
13.25	43.47	145.46	3.67	2.52	1.44	silty sand to sandy silt	70-80	40-42	46	UNDEFINED
13.50	44.29	177.40	5.40	3.05	1.46	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
13.75	45.11	75.48	1.69	2.24	1.48	silty sand to sandy silt	50-60	36-38	24	UNDEFINED
14.00	45.93	113.90	3.12	2.74	1.50	sandy silt to clayey silt	UNDFND	UNDFD	44	11.1
14.25	46.75	219.32	6.85	3.12	1.52	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.50	47.57	251.34	3.86	1.54	1.55	sand to silty sand	80-90	42-44	>50	UNDEFINED
14.75	48.39	286.40	4.94	1.73	1.57	sand to silty sand	>90	42-44	>50	UNDEFINED
15.00	49.21	163.14	6.53	4.00	1.59	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	110.76	4.31	3.90	1.61	clayey silt to silty clay	UNDFND	UNDFD	>50	10.7
15.50	50.85	123.54	4.83	3.91	1.63	clayey silt to silty clay	UNDFND	UNDFD	>50	12.0
15.75	51.67	312.10	3.94	1.26	1.65	sand	>90	42-44	>50	UNDEFINED
16.00	52.49	366.64	1.52	0.41	1.68	gravelly sand to sand	>90	44-46	>50	UNDEFINED
16.25	53.31	419.34	3.86	0.92	1.70	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S06-02
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/26/94 3:50
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	3.98	0.15	3.70	0.02	clay	UNDFND	UNDFD	4	.3
0.50	1.64	132.96	1.06	0.80	0.07	sand to silty sand	>90	>48	32	UNDEFINED
0.75	2.46	128.66	0.91	0.71	0.12	sand	>90	>48	25	UNDEFINED
1.00	3.28	116.02	0.73	0.63	0.17	sand to silty sand	>90	>48	28	UNDEFINED
1.25	4.10	92.38	0.61	0.66	0.21	sand to silty sand	80-90	46-48	22	UNDEFINED
1.50	4.92	84.14	0.42	0.50	0.26	sand to silty sand	80-90	46-48	20	UNDEFINED
1.75	5.74	77.54	0.38	0.50	0.31	sand to silty sand	70-80	44-46	19	UNDEFINED
2.00	6.56	71.14	0.37	0.53	0.35	sand to silty sand	70-80	44-46	17	UNDEFINED
2.25	7.38	60.22	0.32	0.53	0.40	sand to silty sand	60-70	42-44	14	UNDEFINED
2.50	8.20	45.26	0.26	0.57	0.45	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.75	9.02	9.06	0.16	1.71	0.50	clayey silt to silty clay	UNDFND	UNDFD	4	.8
3.00	9.84	3.14	0.04	1.38	0.54	sensitive fine grained	UNDFND	UNDFD	2	.2
3.25	10.66	3.12	0.06	1.87	0.58	sensitive fine grained	UNDFND	UNDFD	1	.2
3.50	11.48	3.20	0.08	2.58	0.60	clay	UNDFND	UNDFD	3	.2
3.75	12.30	3.12	0.11	3.58	0.62	clay	UNDFND	UNDFD	3	.2
4.00	13.12	13.34	0.14	1.09	0.64	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
4.25	13.94	11.92	0.19	1.58	0.66	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
4.50	14.76	6.88	0.10	1.50	0.68	undefined	UNDFND	UNDFD	UDF	UNDEFINED
4.75	15.58	4.78	0.15	3.12	0.71	clay	UNDFND	UNDFD	5	.3
5.00	16.40	5.80	0.11	1.82	0.73	silty clay to clay	UNDFND	UNDFD	4	.4
5.25	17.22	3.38	0.08	2.36	0.75	clay	UNDFND	UNDFD	3	.2
5.50	18.04	3.44	0.08	2.40	0.77	clay	UNDFND	UNDFD	3	.2
5.75	18.86	3.82	0.09	2.32	0.79	clay	UNDFND	UNDFD	4	.2
6.00	19.69	3.72	0.08	2.13	0.81	clay	UNDFND	UNDFD	4	.2
6.25	20.51	4.04	0.08	2.03	0.84	clay	UNDFND	UNDFD	4	.2
6.50	21.33	4.40	0.09	2.13	0.86	clay	UNDFND	UNDFD	4	.3
6.75	22.15	5.44	0.13	2.47	0.88	clay	UNDFND	UNDFD	5	.4
7.00	22.97	49.82	0.73	1.46	0.90	silty sand to sandy silt	40-50	38-40	16	UNDEFINED
7.25	23.79	82.54	0.69	0.83	0.92	sand to silty sand	60-70	40-42	20	UNDEFINED
7.50	24.61	36.24	0.55	1.52	0.94	sandy silt to clayey silt	UNDFND	UNDFD	14	3.4
7.75	25.43	36.82	0.27	0.73	0.96	silty sand to sandy silt	<40	36-38	12	UNDEFINED
8.00	26.25	26.56	0.32	1.20	0.99	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
8.25	27.07	27.06	0.42	1.55	1.01	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
8.50	27.89	26.90	0.34	1.26	1.03	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
8.75	28.71	24.26	0.28	1.16	1.05	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
9.00	29.53	23.46	0.43	1.85	1.07	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
9.25	30.35	49.04	0.58	1.17	1.09	silty sand to sandy silt	40-50	36-38	16	UNDEFINED
9.50	31.17	38.86	0.71	1.83	1.12	sandy silt to clayey silt	UNDFND	UNDFD	15	3.7

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-S06-02 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	92.76	0.81	0.87	1.14	sand to silty sand	60-70	40-42	22	UNDEFINED
10.00	32.81	43.34	0.50	1.16	1.16	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
10.25	33.63	36.46	1.30	3.55	1.18	clayey silt to silty clay	UNDFND	UNDFD	17	3.4
10.50	34.45	47.10	1.41	3.00	1.20	sandy silt to clayey silt	UNDFND	UNDFD	18	4.5
10.75	35.27	38.18	0.84	2.20	1.22	sandy silt to clayey silt	UNDFND	UNDFD	15	3.6
11.00	36.09	38.72	0.76	1.96	1.24	sandy silt to clayey silt	UNDFND	UNDFD	15	3.6
11.25	36.91	21.30	0.29	1.36	1.27	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
11.50	37.73	17.80	0.25	1.39	1.29	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
11.75	38.55	18.04	0.27	1.51	1.31	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
12.00	39.37	20.22	0.31	1.51	1.33	sandy silt to clayey silt	UNDFND	UNDFD	8	1.7
12.25	40.19	30.94	0.70	2.25	1.35	sandy silt to clayey silt	UNDFND	UNDFD	12	2.8
12.50	41.01	42.38	1.15	2.72	1.37	sandy silt to clayey silt	UNDFND	UNDFD	16	4.0
12.75	41.83	62.66	2.39	3.82	1.40	clayey silt to silty clay	UNDFND	UNDFD	30	6.0
13.00	42.65	219.18	6.18	2.82	1.42	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
13.25	43.47	253.62	9.79	3.86	1.44	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.50	44.29	173.66	5.82	3.35	1.46	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.1
13.75	45.11	76.98	3.73	4.84	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	176.52	8.73	4.95	1.50	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.25	46.75	146.94	3.96	2.70	1.52	silty sand to sandy silt	70-80	40-42	47	UNDEFINED
14.50	47.57	211.18	7.93	3.76	1.55	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	220.72	5.22	2.36	1.57	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
15.00	49.21	130.02	4.02	3.09	1.59	sandy silt to clayey silt	UNDFND	UNDFD	50	12.7
15.25	50.03	72.56	3.43	4.73	1.61	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	52.38	2.47	4.72	1.63	silty clay to clay	UNDFND	UNDFD	33	4.9
15.75	51.67	132.98	2.07	1.56	1.65	sand to silty sand	60-70	40-42	32	UNDEFINED
16.00	52.49	389.72	3.09	0.79	1.68	gravelly sand to sand	>90	44-46	>50	UNDEFINED
16.25	53.31	439.38	3.98	0.90	1.70	gravelly sand to sand	>90	44-46	>50	UNDEFINED
16.50	54.13	478.12	2.63	0.55	1.72	gravelly sand to sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S6-03
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/27/94 8:15
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	126.24	1.97	1.56	0.02	sand to silty sand	>90	>48	30	UNDEFINED
0.50	1.64	212.74	1.78	0.84	0.07	sand	>90	>48	41	UNDEFINED
0.75	2.46	301.30	2.14	0.71	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	219.64	1.48	0.67	0.17	sand	>90	>48	42	UNDEFINED
1.25	4.10	153.50	0.95	0.62	0.21	sand	>90	>48	29	UNDEFINED
1.50	4.92	128.04	0.91	0.71	0.26	sand	>90	46-48	25	UNDEFINED
1.75	5.74	68.90	0.39	0.57	0.31	sand to silty sand	70-80	44-46	16	UNDEFINED
2.00	6.56	57.90	0.34	0.58	0.35	sand to silty sand	60-70	42-44	14	UNDEFINED
2.25	7.38	34.70	0.20	0.58	0.40	silty sand to sandy silt	40-50	40-42	11	UNDEFINED
2.50	8.20	27.16	0.25	0.93	0.45	silty sand to sandy silt	40-50	38-40	9	UNDEFINED
2.75	9.02	13.10	0.19	1.42	0.50	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
3.00	9.84	3.98	0.09	2.29	0.54	clay	UNDFND	UNDFD	4	.3
3.25	10.66	3.78	0.09	2.43	0.58	clay	UNDFND	UNDFD	4	.3
3.50	11.48	4.10	0.12	2.90	0.60	clay	UNDFND	UNDFD	4	.3
3.75	12.30	15.40	0.17	1.13	0.62	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
4.00	13.12	23.32	0.22	0.95	0.64	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
4.25	13.94	19.20	0.22	1.16	0.66	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
4.50	14.76	8.58	0.21	2.40	0.68	silty clay to clay	UNDFND	UNDFD	5	.7
4.75	15.58	5.62	0.14	2.41	0.71	silty clay to clay	UNDFND	UNDFD	4	.4
5.00	16.40	11.62	0.13	1.09	0.73	clayey silt to silty clay	UNDFND	UNDFD	6	1.0
5.25	17.22	32.06	0.24	0.74	0.75	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.50	18.04	42.06	0.20	0.47	0.77	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
5.75	18.86	51.42	0.28	0.55	0.79	sand to silty sand	50-60	38-40	12	UNDEFINED
6.00	19.69	53.02	0.42	0.80	0.81	silty sand to sandy silt	50-60	38-40	17	UNDEFINED
6.25	20.51	35.52	0.38	1.06	0.84	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.50	21.33	38.68	0.88	2.27	0.86	sandy silt to clayey silt	UNDFND	UNDFD	15	3.7
6.75	22.15	85.70	2.57	3.00	0.88	sandy silt to clayey silt	UNDFND	UNDFD	33	8.4
7.00	22.97	167.06	4.19	2.51	0.90	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
7.25	23.79	85.42	2.74	3.21	0.92	sandy silt to clayey silt	UNDFND	UNDFD	33	8.4
7.50	24.61	158.72	3.66	2.30	0.94	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
7.75	25.43	83.14	3.84	4.62	0.96	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
8.00	26.25	153.00	5.09	3.32	0.99	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.1
8.25	27.07	152.52	3.76	2.47	1.01	silty sand to sandy silt	70-80	42-44	49	UNDEFINED
8.50	27.89	151.12	2.92	1.93	1.03	silty sand to sandy silt	70-80	42-44	48	UNDEFINED
8.75	28.71	155.56	1.99	1.28	1.05	sand to silty sand	70-80	42-44	37	UNDEFINED
9.00	29.53	163.00	2.32	1.42	1.07	sand to silty sand	70-80	42-44	39	UNDEFINED
9.25	30.35	191.46	2.25	1.18	1.09	sand	80-90	42-44	37	UNDEFINED
9.50	31.17	182.84	3.29	1.80	1.12	sand to silty sand	80-90	42-44	44	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-S6-03 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	147.16	1.93	1.31	1.14	sand to silty sand	70-80	42-44	35	UNDEFINED
10.00	32.81	187.46	2.01	1.07	1.16	sand	80-90	42-44	36	UNDEFINED
10.25	33.63	182.40	1.54	0.85	1.18	sand	80-90	42-44	35	UNDEFINED
10.50	34.45	140.70	1.64	1.17	1.20	sand to silty sand	70-80	40-42	34	UNDEFINED
10.75	35.27	123.88	2.95	2.38	1.22	silty sand to sandy silt	60-70	40-42	40	UNDEFINED
11.00	36.09	93.28	1.97	2.11	1.24	silty sand to sandy silt	60-70	38-40	30	UNDEFINED
11.25	36.91	60.92	1.98	3.24	1.27	sandy silt to clayey silt	UNDFND	UNDFD	23	5.8
11.50	37.73	76.94	2.53	3.29	1.29	sandy silt to clayey silt	UNDFND	UNDFD	29	7.4
11.75	38.55	78.06	2.16	2.76	1.31	sandy silt to clayey silt	UNDFND	UNDFD	30	7.5
12.00	39.37	85.32	2.35	2.75	1.33	sandy silt to clayey silt	UNDFND	UNDFD	33	8.3
12.25	40.19	95.96	1.80	1.87	1.35	silty sand to sandy silt	60-70	38-40	31	UNDEFINED
12.50	41.01	79.98	4.25	5.31	1.37	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.75	41.83	131.00	5.19	3.96	1.40	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.00	42.65	297.02	5.39	1.82	1.42	sand to silty sand	>90	44-46	>50	UNDEFINED
13.25	43.47	430.20	3.04	0.71	1.44	gravelly sand to sand	>90	44-46	>50	UNDEFINED
13.50	44.29	422.48	5.05	1.20	1.46	sand	>90	44-46	>50	UNDEFINED
13.75	45.11	337.92	6.50	1.92	1.48	sand to silty sand	>90	44-46	>50	UNDEFINED
14.00	45.93	170.58	6.24	3.66	1.50	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.25	46.75	85.04	3.60	4.24	1.52	clayey silt to silty clay	UNDFND	UNDFD	41	8.2
14.50	47.57	126.66	4.50	3.55	1.55	sandy silt to clayey silt	UNDFND	UNDFD	49	12.3
14.75	48.39	211.52	6.65	3.14	1.57	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
15.00	49.21	264.50	4.62	1.75	1.59	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.25	50.03	243.38	4.48	1.84	1.61	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.50	50.85	68.66	3.73	5.43	1.63	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.75	51.67	99.80	4.58	4.59	1.65	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
16.00	52.49	225.16	3.20	1.42	1.68	sand to silty sand	80-90	42-44	>50	UNDEFINED
16.25	53.31	319.82	3.20	1.00	1.70	sand	>90	42-44	>50	UNDEFINED
16.50	54.13	428.88	3.72	0.87	1.72	gravelly sand to sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S06-04
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/29/94 10:47
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.44	0.00	1.05	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	0.62	0.01	1.29	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	0.44	0.00	1.00	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	3.48	0.02	0.52	0.17	sensitive fine grained	UNDFND	UNDFD	2	.3
1.25	4.10	9.86	0.08	0.77	0.21	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
1.50	4.92	174.88	4.39	2.51	0.26	silty sand to sandy silt	>90	>48	>50	UNDEFINED
1.75	5.74	1.70	1.73	101.72	0.31	undefined	UNDFND	UNDFD	UDF	UNDEFINED
2.00	6.56	49.56	0.12	0.24	0.35	sand to silty sand	60-70	42-44	12	UNDEFINED
2.25	7.38	120.46	2.33	1.93	0.40	silty sand to sandy silt	80-90	44-46	38	UNDEFINED
2.50	8.20	44.70	0.31	0.70	0.45	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.75	9.02	51.38	0.29	0.57	0.50	sand to silty sand	50-60	40-42	12	UNDEFINED
3.00	9.84	21.48	0.20	0.95	0.54	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
3.25	10.66	3.54	0.02	0.49	0.58	sensitive fine grained	UNDFND	UNDFD	2	.2
3.50	11.48	3.10	0.02	0.59	0.60	sensitive fine grained	UNDFND	UNDFD	1	.2
3.75	12.30	3.12	0.04	1.26	0.62	sensitive fine grained	UNDFND	UNDFD	1	.2
4.00	13.12	12.44	0.10	0.81	0.64	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
4.25	13.94	12.02	0.10	0.80	0.66	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
4.50	14.76	5.00	0.04	0.86	0.68	sensitive fine grained	UNDFND	UNDFD	2	.4
4.75	15.58	7.14	0.05	0.69	0.71	sensitive fine grained	UNDFND	UNDFD	3	.6
5.00	16.40	4.84	0.09	1.93	0.73	silty clay to clay	UNDFND	UNDFD	3	.3
5.25	17.22	7.34	0.03	0.43	0.75	sensitive fine grained	UNDFND	UNDFD	4	.6
5.50	18.04	24.60	0.06	0.25	0.77	silty sand to sandy silt	<40	34-36	8	UNDEFINED
5.75	18.86	44.04	0.09	0.21	0.79	sand to silty sand	40-50	38-40	11	UNDEFINED
6.00	19.69	62.22	0.25	0.40	0.81	sand to silty sand	50-60	38-40	15	UNDEFINED
6.25	20.51	98.76	0.52	0.52	0.84	sand to silty sand	60-70	40-42	24	UNDEFINED
6.50	21.33	67.28	0.31	0.47	0.86	sand to silty sand	50-60	38-40	16	UNDEFINED
6.75	22.15	55.32	0.29	0.52	0.88	sand to silty sand	50-60	38-40	13	UNDEFINED
7.00	22.97	62.34	0.43	0.69	0.90	sand to silty sand	50-60	38-40	15	UNDEFINED
7.25	23.79	97.30	1.60	1.65	0.92	silty sand to sandy silt	60-70	40-42	31	UNDEFINED
7.50	24.61	79.98	1.99	2.48	0.94	sandy silt to clayey silt	UNDFND	UNDFD	31	7.8
7.75	25.43	179.96	4.43	2.46	0.96	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
8.00	26.25	226.22	4.17	1.85	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	199.16	4.06	2.04	1.01	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
8.50	27.89	161.72	2.86	1.77	1.03	sand to silty sand	80-90	42-44	39	UNDEFINED
8.75	28.71	168.76	3.17	1.88	1.05	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
9.00	29.53	169.10	3.36	1.99	1.07	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
9.25	30.35	217.36	2.52	1.16	1.09	sand	80-90	44-46	42	UNDEFINED
9.50	31.17	224.30	1.81	0.81	1.12	sand	80-90	44-46	43	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	155.96	1.42	0.91	1.14	sand	70-80	42-44	30	UNDEFINED
10.00	32.81	144.16	1.65	1.14	1.16	sand to silty sand	70-80	40-42	35	UNDEFINED
10.25	33.63	152.72	1.26	0.82	1.18	sand	70-80	42-44	29	UNDEFINED
10.50	34.45	168.86	2.15	1.27	1.20	sand to silty sand	70-80	42-44	40	UNDEFINED
10.75	35.27	161.68	3.91	2.42	1.22	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
11.00	36.09	141.36	4.27	3.02	1.24	sandy silt to clayey silt	UNDFND	UNDFD	>50	13.9
11.25	36.91	110.38	3.03	2.75	1.27	sandy silt to clayey silt	UNDFND	UNDFD	42	10.8
11.50	37.73	101.02	1.94	1.92	1.29	silty sand to sandy silt	60-70	38-40	32	UNDEFINED
11.75	38.55	112.70	1.36	1.21	1.31	sand to silty sand	60-70	40-42	27	UNDEFINED
12.00	39.37	108.96	3.08	2.82	1.33	sandy silt to clayey silt	UNDFND	UNDFD	42	10.6
12.25	40.19	61.28	1.12	1.83	1.35	silty sand to sandy silt	40-50	36-38	20	UNDEFINED
12.50	41.01	90.60	3.84	4.24	1.37	clayey silt to silty clay	UNDFND	UNDFD	43	8.8
12.75	41.83	102.48	4.16	4.06	1.40	clayey silt to silty clay	UNDFND	UNDFD	49	10.0
13.00	42.65	152.14	6.65	4.37	1.42	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.25	43.47	398.74	9.11	2.28	1.44	sand to silty sand	>90	44-46	>50	UNDEFINED
13.50	44.29	217.68	8.28	3.80	1.46	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	161.46	6.87	4.26	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	113.92	2.97	2.61	1.50	silty sand to sandy silt	60-70	38-40	36	UNDEFINED
14.25	46.75	181.50	6.76	3.73	1.52	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	357.08	9.47	2.65	1.55	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	341.70	7.48	2.19	1.57	sand to silty sand	>90	44-46	>50	UNDEFINED
15.00	49.21	167.84	7.41	4.42	1.59	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	102.46	5.02	4.90	1.61	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.50	50.85	120.66	5.76	4.77	1.63	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.75	51.67	191.28	5.40	2.82	1.65	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
16.00	52.49	232.52	9.70	4.17	1.68	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S6-04
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/27/94 10:35
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.18	0.03	14.78	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	115.92	0.92	0.80	0.07	sand to silty sand	>90	>48	28	UNDEFINED
0.75	2.46	252.38	1.56	0.62	0.12	sand	>90	>48	48	UNDEFINED
1.00	3.28	199.70	1.25	0.63	0.17	sand	>90	>48	38	UNDEFINED
1.25	4.10	119.84	0.65	0.54	0.21	sand	>90	>48	23	UNDEFINED
1.50	4.92	118.28	0.36	0.30	0.26	sand	>90	46-48	23	UNDEFINED
1.75	5.74	4.24	0.02	0.50	0.31	sensitive fine grained	UNDFND	UNDFD	2	.3
2.00	6.56	1.94	0.02	0.86	0.35	sensitive fine grained	UNDFND	UNDFD	1	.1
2.25	7.38	2.14	0.02	0.86	0.40	sensitive fine grained	UNDFND	UNDFD	1	.1

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-7A-01
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/13/94 1:37
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.54	0.30	55.96	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	158.08	2.34	1.48	0.07	sand to silty sand	>90	>48	38	UNDEFINED
0.75	2.46	234.96	1.73	0.74	0.12	sand	>90	>48	45	UNDEFINED
1.00	3.28	122.36	0.71	0.58	0.17	sand	>90	>48	23	UNDEFINED
1.25	4.10	93.20	0.55	0.59	0.21	sand to silty sand	80-90	46-48	22	UNDEFINED
1.50	4.92	41.54	0.18	0.44	0.26	silty sand to sandy silt	60-70	42-44	13	UNDEFINED
1.75	5.74	12.20	0.14	1.13	0.31	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
2.00	6.56	8.50	0.22	2.57	0.35	silty clay to clay	UNDFND	UNDFD	5	.8
2.25	7.38	6.28	0.13	2.12	0.40	silty clay to clay	UNDFND	UNDFD	4	.5
2.50	8.20	5.24	0.08	1.45	0.45	sensitive fine grained	UNDFND	UNDFD	3	.4
2.75	9.02	5.40	0.08	1.53	0.50	sensitive fine grained	UNDFND	UNDFD	3	.4
3.00	9.84	4.08	0.06	1.44	0.54	sensitive fine grained	UNDFND	UNDFD	2	.3
3.25	10.66	4.16	0.07	1.72	0.58	sensitive fine grained	UNDFND	UNDFD	2	.3
3.50	11.48	3.88	0.07	1.72	0.60	sensitive fine grained	UNDFND	UNDFD	2	.3
3.75	12.30	3.74	0.07	1.98	0.62	clay	UNDFND	UNDFD	4	.3
4.00	13.12	3.42	0.05	1.46	0.64	sensitive fine grained	UNDFND	UNDFD	2	.2
4.25	13.94	3.22	0.04	1.34	0.66	sensitive fine grained	UNDFND	UNDFD	2	.2
4.50	14.76	3.04	0.04	1.20	0.68	sensitive fine grained	UNDFND	UNDFD	1	.2
4.75	15.58	2.66	0.03	1.21	0.71	sensitive fine grained	UNDFND	UNDFD	1	.1
5.00	16.40	3.00	0.03	1.14	0.73	sensitive fine grained	UNDFND	UNDFD	1	.2
5.25	17.22	3.08	0.03	0.98	0.75	sensitive fine grained	UNDFND	UNDFD	1	.2
5.50	18.04	3.14	0.03	0.94	0.77	sensitive fine grained	UNDFND	UNDFD	2	.2
5.75	18.86	3.18	0.02	0.74	0.79	sensitive fine grained	UNDFND	UNDFD	2	.2
6.00	19.69	2.96	0.02	0.66	0.81	sensitive fine grained	UNDFND	UNDFD	1	.1
6.25	20.51	3.20	0.02	0.63	0.84	sensitive fine grained	UNDFND	UNDFD	2	.2
6.50	21.33	3.70	0.02	0.50	0.86	sensitive fine grained	UNDFND	UNDFD	2	.2
6.75	22.15	3.76	0.02	0.56	0.88	sensitive fine grained	UNDFND	UNDFD	2	.2
7.00	22.97	3.72	0.02	0.54	0.90	sensitive fine grained	UNDFND	UNDFD	2	.2
7.25	23.79	3.88	0.02	0.40	0.92	sensitive fine grained	UNDFND	UNDFD	2	.2
7.50	24.61	3.92	0.02	0.45	0.94	sensitive fine grained	UNDFND	UNDFD	2	.2
7.75	25.43	4.28	0.02	0.37	0.96	sensitive fine grained	UNDFND	UNDFD	2	.2
8.00	26.25	4.38	0.02	0.52	0.99	sensitive fine grained	UNDFND	UNDFD	2	.2
8.25	27.07	4.56	0.02	0.51	1.01	sensitive fine grained	UNDFND	UNDFD	2	.3
8.50	27.89	4.70	0.02	0.49	1.03	sensitive fine grained	UNDFND	UNDFD	2	.3
8.75	28.71	4.96	0.03	0.59	1.05	sensitive fine grained	UNDFND	UNDFD	2	.3
9.00	29.53	5.16	0.03	0.60	1.07	sensitive fine grained	UNDFND	UNDFD	2	.3
9.25	30.35	5.30	0.03	0.57	1.09	sensitive fine grained	UNDFND	UNDFD	3	.3
9.50	31.17	5.30	0.02	0.42	1.12	sensitive fine grained	UNDFND	UNDFD	3	.3

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	5.34	0.03	0.48	1.14	sensitive fine grained	UNDFND	UNDFD	3	.3
10.00	32.81	5.36	0.02	0.42	1.16	sensitive fine grained	UNDFND	UNDFD	3	.3
10.25	33.63	5.60	0.02	0.36	1.18	sensitive fine grained	UNDFND	UNDFD	3	.3
10.50	34.45	5.66	0.02	0.41	1.20	sensitive fine grained	UNDFND	UNDFD	3	.3
10.75	35.27	5.86	0.03	0.55	1.22	sensitive fine grained	UNDFND	UNDFD	3	.3
11.00	36.09	6.26	0.03	0.48	1.24	sensitive fine grained	UNDFND	UNDFD	3	.4
11.25	36.91	7.28	0.08	1.14	1.27	sensitive fine grained	UNDFND	UNDFD	3	.5
11.50	37.73	20.74	0.21	1.00	1.29	sandy silt to clayey silt	UNDFND	UNDFD	8	1.8
11.75	38.55	15.76	0.12	0.76	1.31	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
12.00	39.37	26.64	0.16	0.59	1.33	silty sand to sandy silt	<40	30-32	9	UNDEFINED
12.25	40.19	50.16	1.24	2.47	1.35	sandy silt to clayey silt	UNDFND	UNDFD	19	4.7
12.50	41.01	63.04	1.59	2.53	1.37	sandy silt to clayey silt	UNDFND	UNDFD	24	6.0
12.75	41.83	113.72	4.46	3.92	1.40	clayey silt to silty clay	UNDFND	UNDFD	>50	11.1
13.00	42.65	139.90	4.43	3.17	1.42	sandy silt to clayey silt	UNDFND	UNDFD	>50	13.7
13.25	43.47	103.14	2.82	2.73	1.44	sandy silt to clayey silt	UNDFND	UNDFD	40	10.0
13.50	44.29	69.22	1.31	1.89	1.46	silty sand to sandy silt	50-60	36-38	22	UNDEFINED
13.75	45.11	32.48	0.50	1.53	1.48	sandy silt to clayey silt	UNDFND	UNDFD	12	2.9
14.00	45.93	31.06	0.42	1.35	1.50	sandy silt to clayey silt	UNDFND	UNDFD	12	2.8
14.25	46.75	31.28	0.39	1.25	1.52	silty sand to sandy silt	<40	30-32	10	UNDEFINED
14.50	47.57	39.84	1.14	2.85	1.55	sandy silt to clayey silt	UNDFND	UNDFD	15	3.7
14.75	48.39	26.56	0.26	0.99	1.57	sandy silt to clayey silt	UNDFND	UNDFD	10	2.3
15.00	49.21	107.44	1.56	1.45	1.59	sand to silty sand	60-70	38-40	26	UNDEFINED
15.25	50.03	207.78	2.87	1.38	1.61	sand to silty sand	80-90	42-44	50	UNDEFINED
15.50	50.85	311.56	4.02	1.29	1.63	sand	>90	42-44	>50	UNDEFINED
15.75	51.67	366.76	4.75	1.29	1.65	sand	>90	44-46	>50	UNDEFINED
16.00	52.49	264.70	2.95	1.11	1.68	sand	80-90	42-44	>50	UNDEFINED
16.25	53.31	299.18	3.76	1.26	1.70	sand	>90	42-44	>50	UNDEFINED
16.50	54.13	327.42	4.00	1.22	1.72	sand	>90	42-44	>50	UNDEFINED
16.75	54.95	316.46	2.94	0.93	1.74	sand	>90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07-A-02
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/13/94 8:18
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	6.92	0.24	3.48	0.02	clay	UNDFND	UNDFD	7	.6
0.50	1.64	119.16	2.28	1.91	0.07	silty sand to sandy silt	>90	>48	38	UNDEFINED
0.75	2.46	179.64	3.05	1.70	0.12	sand to silty sand	>90	>48	43	UNDEFINED
1.00	3.28	169.60	1.79	1.06	0.17	sand	>90	>48	32	UNDEFINED
1.25	4.10	75.46	0.69	0.92	0.21	sand to silty sand	80-90	46-48	18	UNDEFINED
1.50	4.92	11.34	0.05	0.44	0.26	sandy silt to clayey silt	UNDFND	UNDFD	4	1.1
1.75	5.74	11.02	0.11	0.97	0.31	sandy silt to clayey silt	UNDFND	UNDFD	4	1.0
2.00	6.56	7.84	0.08	1.08	0.35	clayey silt to silty clay	UNDFND	UNDFD	4	.7
2.25	7.38	5.46	0.04	0.81	0.40	sensitive fine grained	UNDFND	UNDFD	3	.5
2.50	8.20	5.22	0.07	1.33	0.45	sensitive fine grained	UNDFND	UNDFD	3	.4
2.75	9.02	4.66	0.08	1.73	0.50	sensitive fine grained	UNDFND	UNDFD	2	.4
3.00	9.84	3.56	0.07	1.84	0.54	sensitive fine grained	UNDFND	UNDFD	2	.3
3.25	10.66	3.40	0.07	2.02	0.58	clay	UNDFND	UNDFD	3	.2
3.50	11.48	3.10	0.06	1.86	0.60	sensitive fine grained	UNDFND	UNDFD	1	.2
3.75	12.30	2.70	0.04	1.56	0.62	sensitive fine grained	UNDFND	UNDFD	1	.2
4.00	13.12	2.46	0.03	1.31	0.64	sensitive fine grained	UNDFND	UNDFD	1	.1
4.25	13.94	2.68	0.03	1.10	0.66	sensitive fine grained	UNDFND	UNDFD	1	.1
4.50	14.76	2.50	0.03	1.34	0.68	sensitive fine grained	UNDFND	UNDFD	1	.1
4.75	15.58	2.50	0.03	1.26	0.71	sensitive fine grained	UNDFND	UNDFD	1	.1
5.00	16.40	2.56	0.03	1.01	0.73	sensitive fine grained	UNDFND	UNDFD	1	.1
5.25	17.22	2.76	0.03	0.95	0.75	sensitive fine grained	UNDFND	UNDFD	1	.1
5.50	18.04	2.64	0.02	0.92	0.77	sensitive fine grained	UNDFND	UNDFD	1	.1
5.75	18.86	2.82	0.02	0.81	0.79	sensitive fine grained	UNDFND	UNDFD	1	.1
6.00	19.69	2.94	0.02	0.74	0.81	sensitive fine grained	UNDFND	UNDFD	1	.1
6.25	20.51	3.16	0.02	0.56	0.84	sensitive fine grained	UNDFND	UNDFD	2	.2
6.50	21.33	3.36	0.02	0.65	0.86	sensitive fine grained	UNDFND	UNDFD	2	.2
6.75	22.15	3.28	0.02	0.66	0.88	sensitive fine grained	UNDFND	UNDFD	2	.2
7.00	22.97	3.44	0.02	0.67	0.90	sensitive fine grained	UNDFND	UNDFD	2	.2
7.25	23.79	3.58	0.02	0.54	0.92	sensitive fine grained	UNDFND	UNDFD	2	.2
7.50	24.61	3.70	0.02	0.65	0.94	sensitive fine grained	UNDFND	UNDFD	2	.2
7.75	25.43	3.84	0.03	0.66	0.96	sensitive fine grained	UNDFND	UNDFD	2	.2
8.00	26.25	3.72	0.02	0.60	0.99	sensitive fine grained	UNDFND	UNDFD	2	.2
8.25	27.07	3.98	0.03	0.65	1.01	sensitive fine grained	UNDFND	UNDFD	2	.2
8.50	27.89	4.16	0.03	0.67	1.03	sensitive fine grained	UNDFND	UNDFD	2	.2
8.75	28.71	4.34	0.03	0.58	1.05	sensitive fine grained	UNDFND	UNDFD	2	.2
9.00	29.53	4.52	0.01	0.30	1.07	sensitive fine grained	UNDFND	UNDFD	2	.2
9.25	30.35	4.40	0.02	0.36	1.09	sensitive fine grained	UNDFND	UNDFD	2	.2
9.50	31.17	4.68	0.02	0.51	1.12	sensitive fine grained	UNDFND	UNDFD	2	.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-07-A-02 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	4.82	0.02	0.50	1.14	sensitive fine grained	UNDFND	UNDFD	2	.3
10.00	32.81	4.94	0.02	0.45	1.16	sensitive fine grained	UNDFND	UNDFD	2	.3
10.25	33.63	5.06	0.02	0.38	1.18	sensitive fine grained	UNDFND	UNDFD	2	.3
10.50	34.45	5.20	0.02	0.36	1.20	sensitive fine grained	UNDFND	UNDFD	2	.3
10.75	35.27	5.24	0.02	0.43	1.22	sensitive fine grained	UNDFND	UNDFD	3	.3
11.00	36.09	5.32	0.02	0.33	1.24	sensitive fine grained	UNDFND	UNDFD	3	.3
11.25	36.91	5.38	0.02	0.42	1.27	sensitive fine grained	UNDFND	UNDFD	3	.3
11.50	37.73	5.74	0.03	0.44	1.29	sensitive fine grained	UNDFND	UNDFD	3	.3
11.75	38.55	5.54	0.02	0.33	1.31	sensitive fine grained	UNDFND	UNDFD	3	.3
12.00	39.37	5.90	0.02	0.27	1.33	sensitive fine grained	UNDFND	UNDFD	3	.3
12.25	40.19	5.74	0.02	0.29	1.35	sensitive fine grained	UNDFND	UNDFD	3	.3
12.50	41.01	6.00	0.02	0.41	1.37	sensitive fine grained	UNDFND	UNDFD	3	.3
12.75	41.83	6.22	0.03	0.49	1.40	sensitive fine grained	UNDFND	UNDFD	3	.3
13.00	42.65	6.28	0.02	0.35	1.42	sensitive fine grained	UNDFND	UNDFD	3	.3
13.25	43.47	6.68	0.04	0.53	1.44	sensitive fine grained	UNDFND	UNDFD	3	.4
13.50	44.29	6.82	0.07	1.10	1.46	sensitive fine grained	UNDFND	UNDFD	3	.4
13.75	45.11	16.26	0.36	2.21	1.48	clayey silt to silty clay	UNDFND	UNDFD	8	1.3
14.00	45.93	7.66	0.10	1.31	1.50	clayey silt to silty clay	UNDFND	UNDFD	4	.5
14.25	46.75	6.58	0.06	0.87	1.52	sensitive fine grained	UNDFND	UNDFD	3	.3
14.50	47.57	6.86	0.08	1.14	1.55	sensitive fine grained	UNDFND	UNDFD	3	.4
14.75	48.39	6.86	0.09	1.24	1.57	sensitive fine grained	UNDFND	UNDFD	3	.4
15.00	49.21	6.82	0.08	1.11	1.59	sensitive fine grained	UNDFND	UNDFD	3	.4
15.25	50.03	6.88	0.07	1.04	1.61	sensitive fine grained	UNDFND	UNDFD	3	.4
15.50	50.85	7.32	0.11	1.46	1.63	clayey silt to silty clay	UNDFND	UNDFD	4	.4
15.75	51.67	7.12	0.09	1.33	1.65	undefined	UNDFND	UNDFD	UDF	UNDEFINED
16.00	52.49	7.44	0.09	1.15	1.68	undefined	UNDFND	UNDFD	UDF	UNDEFINED
16.25	53.31	7.50	0.11	1.41	1.70	clayey silt to silty clay	UNDFND	UNDFD	4	.4
16.50	54.13	8.76	0.23	2.68	1.72	silty clay to clay	UNDFND	UNDFD	6	.5
16.75	54.95	8.68	0.11	1.26	1.74	clayey silt to silty clay	UNDFND	UNDFD	4	.5
17.00	55.77	16.04	0.16	1.02	1.76	sandy silt to clayey silt	UNDFND	UNDFD	6	1.2
17.25	56.59	16.28	0.14	0.84	1.78	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
17.50	57.41	17.20	0.14	0.82	1.80	sandy silt to clayey silt	UNDFND	UNDFD	7	1.3
17.75	58.23	36.40	0.34	0.94	1.83	silty sand to sandy silt	<40	30-32	12	UNDEFINED
18.00	59.06	60.64	0.44	0.72	1.85	sand to silty sand	40-50	34-36	15	UNDEFINED
18.25	59.88	54.74	0.54	0.99	1.87	silty sand to sandy silt	40-50	34-36	17	UNDEFINED
18.50	60.70	44.20	0.46	1.04	1.89	silty sand to sandy silt	<40	32-34	14	UNDEFINED
18.75	61.52	29.94	0.32	1.08	1.91	silty sand to sandy silt	<40	30-32	10	UNDEFINED
19.00	62.34	31.82	0.53	1.67	1.93	sandy silt to clayey silt	UNDFND	UNDFD	12	2.8
19.25	63.16	62.90	1.19	1.90	1.96	silty sand to sandy silt	40-50	34-36	20	UNDEFINED
19.50	63.98	63.12	1.16	1.84	1.98	silty sand to sandy silt	40-50	34-36	20	UNDEFINED
19.75	64.80	79.48	1.57	1.97	2.00	silty sand to sandy silt	50-60	36-38	25	UNDEFINED
20.00	65.62	154.90	2.00	1.29	2.02	sand to silty sand	60-70	38-40	37	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07A-03
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/13/94 10:00
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	95.16	1.20	1.26	0.02	sand to silty sand	>90	>48	23	UNDEFINED
0.50	1.64	167.96	1.77	1.06	0.07	sand	>90	>48	32	UNDEFINED
0.75	2.46	85.02	0.60	0.70	0.12	sand to silty sand	>90	>48	20	UNDEFINED
1.00	3.28	15.28	0.07	0.46	0.17	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
1.25	4.10	8.32	0.04	0.53	0.21	sensitive fine grained	UNDFND	UNDFD	4	.8
1.50	4.92	8.62	0.23	2.69	0.26	silty clay to clay	UNDFND	UNDFD	6	.8
1.75	5.74	8.66	0.30	3.41	0.31	clay	UNDFND	UNDFD	8	.8
2.00	6.56	7.54	0.29	3.85	0.35	clay	UNDFND	UNDFD	7	.7
2.25	7.38	6.20	0.22	3.48	0.40	clay	UNDFND	UNDFD	6	.5
2.50	8.20	4.08	0.14	3.45	0.45	clay	UNDFND	UNDFD	4	.3
2.75	9.02	3.36	0.11	3.27	0.50	clay	UNDFND	UNDFD	3	.2
3.00	9.84	3.82	0.13	3.43	0.54	clay	UNDFND	UNDFD	4	.3
3.25	10.66	2.82	0.10	3.49	0.58	clay	UNDFND	UNDFD	3	.2
3.50	11.48	3.24	0.12	3.62	0.60	clay	UNDFND	UNDFD	3	.2
3.75	12.30	3.82	0.13	3.52	0.62	clay	UNDFND	UNDFD	4	.3
4.00	13.12	3.12	0.08	2.72	0.64	clay	UNDFND	UNDFD	3	.2
4.25	13.94	2.92	0.09	2.95	0.66	clay	UNDFND	UNDFD	3	.2
4.50	14.76	2.54	0.06	2.43	0.68	clay	UNDFND	UNDFD	2	.1
4.75	15.58	2.76	0.05	1.97	0.71	sensitive fine grained	UNDFND	UNDFD	1	.1
5.00	16.40	2.78	0.06	2.03	0.73	sensitive fine grained	UNDFND	UNDFD	1	.1
5.25	17.22	2.98	0.05	1.80	0.75	sensitive fine grained	UNDFND	UNDFD	1	.2
5.50	18.04	2.90	0.05	1.72	0.77	sensitive fine grained	UNDFND	UNDFD	1	.1
5.75	18.86	3.14	0.05	1.48	0.79	sensitive fine grained	UNDFND	UNDFD	2	.2
6.00	19.69	3.22	0.04	1.39	0.81	sensitive fine grained	UNDFND	UNDFD	2	.2
6.25	20.51	3.42	0.05	1.36	0.84	sensitive fine grained	UNDFND	UNDFD	2	.2
6.50	21.33	3.56	0.05	1.38	0.86	sensitive fine grained	UNDFND	UNDFD	2	.2
6.75	22.15	3.76	0.04	1.17	0.88	sensitive fine grained	UNDFND	UNDFD	2	.2
7.00	22.97	3.82	0.04	1.16	0.90	sensitive fine grained	UNDFND	UNDFD	2	.2
7.25	23.79	4.04	0.05	1.24	0.92	sensitive fine grained	UNDFND	UNDFD	2	.2
7.50	24.61	4.16	0.05	1.26	0.94	sensitive fine grained	UNDFND	UNDFD	2	.2
7.75	25.43	4.44	0.06	1.42	0.96	sensitive fine grained	UNDFND	UNDFD	2	.3
8.00	26.25	5.98	0.07	1.09	0.99	sensitive fine grained	UNDFND	UNDFD	3	.4
8.25	27.07	4.82	0.05	1.08	1.01	sensitive fine grained	UNDFND	UNDFD	2	.3
8.50	27.89	5.18	0.05	0.99	1.03	sensitive fine grained	UNDFND	UNDFD	2	.3
8.75	28.71	4.74	0.05	0.97	1.05	sensitive fine grained	UNDFND	UNDFD	2	.3
9.00	29.53	4.94	0.05	1.07	1.07	sensitive fine grained	UNDFND	UNDFD	2	.3
9.25	30.35	6.24	0.07	1.17	1.09	sensitive fine grained	UNDFND	UNDFD	3	.4
9.50	31.17	6.04	0.10	1.73	1.12	silty clay to clay	UNDFND	UNDFD	4	.4

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	134.92	1.84	1.36	2.04	sand to silty sand	60-70	38-40	32	UNDEFINED
20.50	67.26	91.88	2.77	3.01	2.06	sandy silt to clayey silt	UNDFND	UNDFD	35	8.8
20.75	68.08	103.16	1.33	1.29	2.09	sand to silty sand	50-60	36-38	25	UNDEFINED
21.00	68.90	200.24	1.76	0.88	2.11	sand	70-80	40-42	38	UNDEFINED
21.25	69.72	70.66	1.23	1.75	2.13	silty sand to sandy silt	40-50	34-36	23	UNDEFINED
21.50	70.54	17.14	0.24	1.42	2.15	sandy silt to clayey silt	UNDFND	UNDFD	7	1.3
21.75	71.36	78.42	1.15	1.47	2.17	silty sand to sandy silt	40-50	36-38	25	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	7.62	0.10	1.36	1.14	clayey silt to silty clay	UNDFND	UNDFD	4	.5
10.00	32.81	5.66	0.06	1.04	1.16	sensitive fine grained	UNDFND	UNDFD	3	.3
10.25	33.63	5.62	0.06	1.09	1.18	sensitive fine grained	UNDFND	UNDFD	3	.3
10.50	34.45	5.78	0.06	1.04	1.20	sensitive fine grained	UNDFND	UNDFD	3	.3
10.75	35.27	5.72	0.06	1.07	1.22	sensitive fine grained	UNDFND	UNDFD	3	.3
11.00	36.09	5.90	0.07	1.16	1.24	sensitive fine grained	UNDFND	UNDFD	3	.3
11.25	36.91	6.14	0.07	1.10	1.27	sensitive fine grained	UNDFND	UNDFD	3	.4
11.50	37.73	11.96	0.29	2.41	1.29	clayey silt to silty clay	UNDFND	UNDFD	6	.9
11.75	38.55	131.68	3.80	2.88	1.31	sandy silt to clayey silt	UNDFND	UNDFD	>50	12.9
12.00	39.37	326.74	6.17	1.89	1.33	sand to silty sand	>90	44-46	>50	UNDEFINED
12.25	40.19	384.52	6.78	1.76	1.35	sand to silty sand	>90	44-46	>50	UNDEFINED
12.50	41.01	300.62	4.88	1.62	1.37	sand to silty sand	>90	44-46	>50	UNDEFINED
12.75	41.83	150.16	5.93	3.95	1.40	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.00	42.65	170.62	4.28	2.51	1.42	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
13.25	43.47	241.78	3.58	1.48	1.44	sand to silty sand	80-90	42-44	>50	UNDEFINED
13.50	44.29	232.74	4.58	1.97	1.46	sand to silty sand	80-90	42-44	>50	UNDEFINED
13.75	45.11	216.52	5.78	2.67	1.48	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.00	45.93	305.58	5.66	1.85	1.50	sand to silty sand	>90	44-46	>50	UNDEFINED
14.25	46.75	104.96	3.83	3.65	1.52	sandy silt to clayey silt	UNDFND	UNDFD	40	10.2
14.50	47.57	62.42	3.06	4.91	1.55	silty clay to clay	UNDFND	UNDFD	40	5.9
14.75	48.39	106.00	4.99	4.71	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-7A-04
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/13/94 11:18
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	39.12	1.06	2.71	0.02	sandy silt to clayey silt	UNDFND	UNDFD	15	3.9
0.50	1.64	43.84	1.64	3.75	0.07	clayey silt to silty clay	UNDFND	UNDFD	21	4.3
0.75	2.46	136.42	0.89	0.65	0.12	sand	>90	>48	26	UNDEFINED
1.00	3.28	62.64	1.71	2.73	0.17	sandy silt to clayey silt	UNDFND	UNDFD	24	6.2
1.25	4.10	9.36	0.44	4.67	0.21	clay	UNDFND	UNDFD	9	.9
1.50	4.92	6.68	0.37	5.53	0.26	clay	UNDFND	UNDFD	6	.6
1.75	5.74	10.86	0.39	3.62	0.31	clay	UNDFND	UNDFD	10	1.0
2.00	6.56	6.26	0.39	6.29	0.35	clay	UNDFND	UNDFD	6	.5
2.25	7.38	4.44	0.31	6.88	0.40	clay	UNDFND	UNDFD	4	.4
2.50	8.20	3.26	0.25	7.59	0.45	organic material	UNDFND	UNDFD	3	.2
2.75	9.02	2.92	0.23	7.76	0.50	organic material	UNDFND	UNDFD	3	.2
3.00	9.84	2.54	0.18	7.08	0.54	organic material	UNDFND	UNDFD	2	.1
3.25	10.66	2.06	0.15	7.30	0.58	organic material	UNDFND	UNDFD	2	.1
3.50	11.48	2.90	0.19	6.63	0.60	organic material	UNDFND	UNDFD	3	.2
3.75	12.30	2.76	0.19	6.81	0.62	organic material	UNDFND	UNDFD	3	.2
4.00	13.12	2.10	0.15	7.16	0.64	organic material	UNDFND	UNDFD	2	.1
4.25	13.94	1.98	0.14	7.27	0.66	organic material	UNDFND	UNDFD	2	.1
4.50	14.76	2.12	0.14	6.69	0.68	organic material	UNDFND	UNDFD	2	.1
4.75	15.58	2.04	0.14	6.76	0.71	organic material	UNDFND	UNDFD	2	.1
5.00	16.40	1.82	0.13	7.00	0.73	organic material	UNDFND	UNDFD	2	9.0
5.25	17.22	2.08	0.13	6.30	0.75	organic material	UNDFND	UNDFD	2	.1
5.50	18.04	2.06	0.13	6.51	0.77	organic material	UNDFND	UNDFD	2	.1
5.75	18.86	2.12	0.13	6.31	0.79	organic material	UNDFND	UNDFD	2	.1
6.00	19.69	2.42	0.13	5.43	0.81	clay	UNDFND	UNDFD	2	.1
6.25	20.51	2.54	0.13	5.28	0.84	clay	UNDFND	UNDFD	2	.1
6.50	21.33	2.38	0.13	5.54	0.86	clay	UNDFND	UNDFD	2	.1
6.75	22.15	2.48	0.13	5.35	0.88	clay	UNDFND	UNDFD	2	.1
7.00	22.97	2.56	0.13	5.23	0.90	clay	UNDFND	UNDFD	2	.1
7.25	23.79	2.74	0.14	5.23	0.92	clay	UNDFND	UNDFD	3	.1
7.50	24.61	2.92	0.14	4.93	0.94	clay	UNDFND	UNDFD	3	.1
7.75	25.43	2.84	0.14	4.99	0.96	clay	UNDFND	UNDFD	3	.1
8.00	26.25	2.94	0.14	4.74	0.99	clay	UNDFND	UNDFD	3	.1
8.25	27.07	3.12	0.14	4.65	1.01	clay	UNDFND	UNDFD	3	.1
8.50	27.89	3.36	0.15	4.40	1.03	clay	UNDFND	UNDFD	3	.1
8.75	28.71	3.58	0.15	4.25	1.05	clay	UNDFND	UNDFD	3	.1
9.00	29.53	3.68	0.16	4.24	1.07	clay	UNDFND	UNDFD	4	.2
9.25	30.35	3.72	0.15	4.13	1.09	clay	UNDFND	UNDFD	4	.1
9.50	31.17	4.04	0.16	3.99	1.12	clay	UNDFND	UNDFD	4	.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	3.78	0.16	4.15	1.14	clay	UNDFND	UNDFD	4	.1
10.00	32.81	3.98	0.15	3.81	1.16	clay	UNDFND	UNDFD	4	.2
10.25	33.63	4.20	0.16	3.79	1.18	clay	UNDFND	UNDFD	4	.2
10.50	34.45	4.20	0.16	3.75	1.20	clay	UNDFND	UNDFD	4	.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07A-05
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/94 11:53
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	241.20	4.09	1.70	0.02	sand to silty sand	>90	UNDFD	>50	UNDEFINED
0.50	1.64	218.56	1.96	0.90	0.07	sand	>90	>48	42	UNDEFINED
0.75	2.46	123.02	0.49	0.40	0.12	sand	>90	>48	24	UNDEFINED
1.00	3.28	84.76	0.29	0.34	0.17	sand to silty sand	80-90	46-48	20	UNDEFINED
1.25	4.10	81.16	0.30	0.37	0.21	sand to silty sand	80-90	46-48	19	UNDEFINED
1.50	4.92	25.80	0.19	0.74	0.26	silty sand to sandy silt	40-50	40-42	8	UNDEFINED
1.75	5.74	8.92	0.11	1.24	0.31	clayey silt to silty clay	UNDFND	UNDFD	4	.8
2.00	6.56	4.84	0.06	1.31	0.35	sensitive fine grained	UNDFND	UNDFD	2	.4
2.25	7.38	4.48	0.09	1.96	0.40	silty clay to clay	UNDFND	UNDFD	3	.4
2.50	8.20	3.62	0.07	2.02	0.45	clay	UNDFND	UNDFD	3	.3
2.75	9.02	2.84	0.08	2.82	0.50	clay	UNDFND	UNDFD	3	.2
3.00	9.84	3.00	0.12	3.87	0.54	clay	UNDFND	UNDFD	3	.2
3.25	10.66	2.60	0.10	3.83	0.58	clay	UNDFND	UNDFD	2	.2
3.50	11.48	2.30	0.08	3.65	0.60	clay	UNDFND	UNDFD	2	.1
3.75	12.30	1.96	0.07	3.39	0.62	clay	UNDFND	UNDFD	2	.1
4.00	13.12	2.02	0.06	2.97	0.64	clay	UNDFND	UNDFD	2	.1
4.25	13.94	2.12	0.07	3.27	0.66	clay	UNDFND	UNDFD	2	.1
4.50	14.76	2.04	0.07	3.31	0.68	clay	UNDFND	UNDFD	2	.1
4.75	15.58	2.18	0.06	2.68	0.71	clay	UNDFND	UNDFD	2	.1
5.00	16.40	2.30	0.03	1.40	0.73	sensitive fine grained	UNDFND	UNDFD	1	.1

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07A-06
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/94 8:10
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	112.92	0.93	0.82	0.02	sand to silty sand	>90	>48	27	UNDEFINED
0.50	1.64	201.74	1.73	0.86	0.07	sand	>90	>48	39	UNDEFINED
0.75	2.46	162.56	1.10	0.67	0.12	sand	>90	>48	31	UNDEFINED
1.00	3.28	97.46	0.58	0.60	0.17	sand to silty sand	>90	>48	23	UNDEFINED
1.25	4.10	61.82	0.32	0.51	0.21	sand to silty sand	70-80	44-46	15	UNDEFINED
1.50	4.92	33.28	0.19	0.58	0.26	silty sand to sandy silt	50-60	42-44	11	UNDEFINED
1.75	5.74	22.32	0.22	0.97	0.31	sandy silt to clayey silt	UNDFND	UNDFD	9	2.2
2.00	6.56	14.68	0.23	1.55	0.35	clayey silt to silty clay	UNDFND	UNDFD	7	1.4
2.25	7.38	4.36	0.09	2.17	0.40	clay	UNDFND	UNDFD	4	.3
2.50	8.20	3.66	0.13	3.67	0.45	clay	UNDFND	UNDFD	4	.3
2.75	9.02	3.30	0.14	4.33	0.50	clay	UNDFND	UNDFD	3	.2
3.00	9.84	2.54	0.15	6.07	0.54	organic material	UNDFND	UNDFD	2	.1
3.25	10.66	2.10	0.12	5.63	0.58	organic material	UNDFND	UNDFD	2	.1
3.50	11.48	2.40	0.15	6.08	0.60	organic material	UNDFND	UNDFD	2	.1
3.75	12.30	2.36	0.15	6.34	0.62	organic material	UNDFND	UNDFD	2	.1
4.00	13.12	2.18	0.14	6.55	0.64	organic material	UNDFND	UNDFD	2	.1
4.25	13.94	2.14	0.13	6.14	0.66	organic material	UNDFND	UNDFD	2	.1
4.50	14.76	2.00	0.13	6.55	0.68	organic material	UNDFND	UNDFD	2	.1
4.75	15.58	2.12	0.14	6.38	0.71	organic material	UNDFND	UNDFD	2	.1
5.00	16.40	2.40	0.11	4.68	0.73	clay	UNDFND	UNDFD	2	.1

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07A-07
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/13/94 4:00
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	1.04	0.01	0.50	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	8.48	0.47	5.54	0.07	clay	UNDFND	UNDFD	8	.8
0.75	2.46	20.46	0.62	3.04	0.12	clayey silt to silty clay	UNDFND	UNDFD	10	2.0
1.00	3.28	7.42	0.11	1.51	0.17	clayey silt to silty clay	UNDFND	UNDFD	4	.7
1.25	4.10	9.74	0.16	1.67	0.21	clayey silt to silty clay	UNDFND	UNDFD	5	.9
1.50	4.92	6.32	0.05	0.79	0.26	sensitive fine grained	UNDFND	UNDFD	3	.6
1.75	5.74	4.84	0.08	1.74	0.31	sensitive fine grained	UNDFND	UNDFD	2	.4
2.00	6.56	4.46	0.07	1.54	0.35	sensitive fine grained	UNDFND	UNDFD	2	.4
2.25	7.38	3.92	0.07	1.70	0.40	sensitive fine grained	UNDFND	UNDFD	2	.3
2.50	8.20	3.94	0.08	1.97	0.45	clay	UNDFND	UNDFD	4	.3
2.75	9.02	3.14	0.06	1.78	0.50	sensitive fine grained	UNDFND	UNDFD	2	.2
3.00	9.84	3.26	0.07	2.04	0.54	clay	UNDFND	UNDFD	3	.2
3.25	10.66	3.64	0.08	2.10	0.58	clay	UNDFND	UNDFD	3	.3
3.50	11.48	3.24	0.05	1.68	0.60	sensitive fine grained	UNDFND	UNDFD	2	.2
3.75	12.30	2.70	0.05	1.85	0.62	sensitive fine grained	UNDFND	UNDFD	1	.2
4.00	13.12	2.92	0.05	1.73	0.64	sensitive fine grained	UNDFND	UNDFD	1	.2
4.25	13.94	2.92	0.05	1.65	0.66	sensitive fine grained	UNDFND	UNDFD	1	.2
4.50	14.76	3.04	0.05	1.75	0.68	sensitive fine grained	UNDFND	UNDFD	1	.2
4.75	15.58	3.74	0.08	2.14	0.71	clay	UNDFND	UNDFD	4	.2
5.00	16.40	3.60	0.03	0.77	0.73	sensitive fine grained	UNDFND	UNDFD	2	.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery
On Site Loc:CPT-S7A-08
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/94 10:30
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	5.40	0.38	7.04	0.02	clay	UNDFND	UNDFD	5	.5
0.50	1.64	417.20	4.22	1.01	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	304.60	3.39	1.11	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	202.00	1.11	0.55	0.17	sand	>90	>48	39	UNDEFINED
1.25	4.10	214.40	1.04	0.49	0.21	sand	>90	>48	41	UNDEFINED
1.50	4.92	180.60	0.86	0.48	0.26	sand	>90	>48	35	UNDEFINED
1.75	5.74	93.20	0.46	0.49	0.31	sand to silty sand	80-90	44-46	22	UNDEFINED
2.00	6.56	11.40	0.19	1.63	0.35	clayey silt to silty clay	UNDFND	UNDFD	5	1.1
2.25	7.38	6.20	0.10	1.61	0.40	sensitive fine grained	UNDFND	UNDFD	3	.5
2.50	8.20	4.20	0.08	1.81	0.45	sensitive fine grained	UNDFND	UNDFD	2	.3
2.75	9.02	3.80	0.08	2.21	0.50	clay	UNDFND	UNDFD	4	.3
3.00	9.84	3.20	0.13	4.13	0.54	clay	UNDFND	UNDFD	3	.2
3.25	10.66	2.60	0.09	3.54	0.58	clay	UNDFND	UNDFD	2	.2
3.50	11.48	2.00	0.08	4.20	0.60	clay	UNDFND	UNDFD	2	.1
3.75	12.30	1.80	0.07	4.00	0.62	clay	UNDFND	UNDFD	2	.1
4.00	13.12	1.20	0.07	5.83	0.64	organic material	UNDFND	UNDFD	1	4.6
4.25	13.94	1.80	0.07	3.78	0.66	clay	UNDFND	UNDFD	2	.1
4.50	14.76	1.20	0.06	5.17	0.68	organic material	UNDFND	UNDFD	1	3.7
4.75	15.58	1.20	0.05	4.50	0.71	organic material	UNDFND	UNDFD	1	3.2
5.00	16.40	1.40	0.02	1.71	0.73	sensitive fine grained	UNDFND	UNDFD	1	4.8

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07A-09
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/94 9:05
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	27.60	0.52	1.89	0.02	sandy silt to clayey silt	UNDFND	UNDFD	11	2.7
0.50	1.64	109.08	1.39	1.27	0.07	sand to silty sand	>90	>48	26	UNDEFINED
0.75	2.46	52.52	0.98	1.87	0.12	silty sand to sandy silt	70-80	46-48	17	UNDEFINED
1.00	3.28	10.16	0.24	2.32	0.17	silty clay to clay	UNDFND	UNDFD	6	.9
1.25	4.10	6.88	0.10	1.50	0.21	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.50	4.92	5.88	0.09	1.55	0.26	sensitive fine grained	UNDFND	UNDFD	3	.5
1.75	5.74	4.32	0.06	1.40	0.31	sensitive fine grained	UNDFND	UNDFD	2	.4
2.00	6.56	3.92	0.08	2.01	0.35	clay	UNDFND	UNDFD	4	.3
2.25	7.38	3.44	0.09	2.67	0.40	clay	UNDFND	UNDFD	3	.3
2.50	8.20	3.56	0.12	3.39	0.45	clay	UNDFND	UNDFD	3	.3
2.75	9.02	3.10	0.11	3.48	0.50	clay	UNDFND	UNDFD	3	.2
3.00	9.84	2.36	0.09	3.62	0.54	clay	UNDFND	UNDFD	2	.1
3.25	10.66	2.08	0.09	4.09	0.58	clay	UNDFND	UNDFD	2	.1
3.50	11.48	2.28	0.09	4.10	0.60	clay	UNDFND	UNDFD	2	.1
3.75	12.30	2.16	0.09	3.94	0.62	clay	UNDFND	UNDFD	2	.1
4.00	13.12	1.78	0.07	4.13	0.64	clay	UNDFND	UNDFD	2	.1
4.25	13.94	2.04	0.08	4.12	0.66	clay	UNDFND	UNDFD	2	.1
4.50	14.76	2.38	0.10	4.34	0.68	clay	UNDFND	UNDFD	2	.1
4.75	15.58	2.08	0.07	3.33	0.71	clay	UNDFND	UNDFD	2	.1
5.00	16.40	2.20	0.06	2.57	0.73	clay	UNDFND	UNDFD	2	.1
5.25	17.22	2.44	0.05	2.16	0.75	sensitive fine grained	UNDFND	UNDFD	1	.1
5.50	18.04	2.40	0.05	1.98	0.77	sensitive fine grained	UNDFND	UNDFD	1	.1
5.75	18.86	2.64	0.04	1.66	0.79	sensitive fine grained	UNDFND	UNDFD	1	.1
6.00	19.69	2.80	0.05	1.70	0.81	sensitive fine grained	UNDFND	UNDFD	1	.1
6.25	20.51	2.74	0.05	2.00	0.84	sensitive fine grained	UNDFND	UNDFD	1	.1
6.50	21.33	2.92	0.05	1.71	0.86	sensitive fine grained	UNDFND	UNDFD	1	.1
6.75	22.15	3.02	0.05	1.72	0.88	sensitive fine grained	UNDFND	UNDFD	1	.1
7.00	22.97	3.20	0.06	1.86	0.90	sensitive fine grained	UNDFND	UNDFD	2	.1
7.25	23.79	3.26	0.06	1.88	0.92	sensitive fine grained	UNDFND	UNDFD	2	.1
7.50	24.61	3.52	0.07	1.90	0.94	sensitive fine grained	UNDFND	UNDFD	2	.2
7.75	25.43	3.58	0.07	1.90	0.96	sensitive fine grained	UNDFND	UNDFD	2	.2
8.00	26.25	3.66	0.07	1.84	0.99	sensitive fine grained	UNDFND	UNDFD	2	.2
8.25	27.07	3.76	0.07	1.76	1.01	sensitive fine grained	UNDFND	UNDFD	2	.2
8.50	27.89	3.78	0.07	1.89	1.03	sensitive fine grained	UNDFND	UNDFD	2	.2
8.75	28.71	3.96	0.07	1.89	1.05	sensitive fine grained	UNDFND	UNDFD	2	.2
9.00	29.53	4.06	0.07	1.78	1.07	sensitive fine grained	UNDFND	UNDFD	2	.2
9.25	30.35	4.14	0.07	1.75	1.09	sensitive fine grained	UNDFND	UNDFD	2	.2
9.50	31.17	4.36	0.08	1.83	1.12	sensitive fine grained	UNDFND	UNDFD	2	.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-07A-09 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	4.52	0.08	1.78	1.14	sensitive fine grained	UNDFND	UNDFD	2	.2
10.00	32.81	4.54	0.08	1.73	1.16	sensitive fine grained	UNDFND	UNDFD	2	.2
10.25	33.63	4.76	0.07	1.48	1.18	sensitive fine grained	UNDFND	UNDFD	2	.2
10.50	34.45	4.74	0.08	1.66	1.20	sensitive fine grained	UNDFND	UNDFD	2	.2
10.75	35.27	4.88	0.08	1.65	1.22	sensitive fine grained	UNDFND	UNDFD	2	.2
11.00	36.09	5.74	0.15	2.55	1.24	clay	UNDFND	UNDFD	5	.3
11.25	36.91	92.38	0.40	0.44	1.27	sand to silty sand	60-70	38-40	22	UNDEFINED
11.50	37.73	40.44	0.42	1.05	1.29	silty sand to sandy silt	<40	34-36	13	UNDEFINED
11.75	38.55	40.42	0.85	2.11	1.31	sandy silt to clayey silt	UNDFND	UNDFD	15	3.8
12.00	39.37	48.94	1.03	2.11	1.33	sandy silt to clayey silt	UNDFND	UNDFD	19	4.6
12.25	40.19	18.20	0.27	1.48	1.35	sandy silt to clayey silt	UNDFND	UNDFD	7	1.5
12.50	41.01	32.32	0.89	2.76	1.37	sandy silt to clayey silt	UNDFND	UNDFD	12	2.9
12.75	41.83	47.64	1.00	2.09	1.40	sandy silt to clayey silt	UNDFND	UNDFD	18	4.5
13.00	42.65	37.50	0.77	2.04	1.42	sandy silt to clayey silt	UNDFND	UNDFD	14	3.5
13.25	43.47	39.80	0.82	2.07	1.44	sandy silt to clayey silt	UNDFND	UNDFD	15	3.7
13.50	44.29	135.42	3.12	2.31	1.46	silty sand to sandy silt	60-70	40-42	43	UNDEFINED
13.75	45.11	191.48	2.24	1.17	1.48	sand	70-80	42-44	37	UNDEFINED
14.00	45.93	173.14	1.19	0.68	1.50	sand	70-80	40-42	33	UNDEFINED
14.25	46.75	156.76	1.16	0.74	1.52	sand	70-80	40-42	30	UNDEFINED
14.50	47.57	176.84	1.30	0.73	1.55	sand	70-80	40-42	34	UNDEFINED
14.75	48.39	276.98	2.37	0.86	1.57	sand	80-90	42-44	>50	UNDEFINED
15.00	49.21	268.02	2.64	0.98	1.59	sand	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07A-10
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/94 1:40
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	3.02	0.37	12.32	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	11.86	0.54	4.53	0.07	clay	UNDFND	UNDFD	11	1.1
0.75	2.46	3.40	0.04	1.10	0.12	sensitive fine grained	UNDFND	UNDFD	2	.3
1.00	3.28	24.92	0.43	1.73	0.17	sandy silt to clayey silt	UNDFND	UNDFD	10	2.4
1.25	4.10	25.10	0.30	1.19	0.21	sandy silt to clayey silt	UNDFND	UNDFD	10	2.4
1.50	4.92	4.80	0.09	1.87	0.26	silty clay to clay	UNDFND	UNDFD	3	.4
1.75	5.74	6.28	0.12	1.88	0.31	silty clay to clay	UNDFND	UNDFD	4	.5
2.00	6.56	3.68	0.06	1.66	0.35	sensitive fine grained	UNDFND	UNDFD	2	.3
2.25	7.38	3.04	0.05	1.63	0.40	sensitive fine grained	UNDFND	UNDFD	1	.2
2.50	8.20	2.98	0.06	1.94	0.45	sensitive fine grained	UNDFND	UNDFD	1	.2
2.75	9.02	2.84	0.09	3.07	0.50	clay	UNDFND	UNDFD	3	.2
3.00	9.84	3.98	0.22	5.43	0.54	clay	UNDFND	UNDFD	4	.3
3.25	10.66	1.92	0.11	5.76	0.58	organic material	UNDFND	UNDFD	2	.1
3.50	11.48	2.30	0.11	4.74	0.60	clay	UNDFND	UNDFD	2	.1
3.75	12.30	2.22	0.11	4.74	0.62	clay	UNDFND	UNDFD	2	.1
4.00	13.12	2.14	0.09	4.20	0.64	clay	UNDFND	UNDFD	2	.1
4.25	13.94	2.22	0.10	4.41	0.66	clay	UNDFND	UNDFD	2	.1
4.50	14.76	1.96	0.09	4.69	0.68	clay	UNDFND	UNDFD	2	.1
4.75	15.58	2.16	0.09	4.27	0.71	clay	UNDFND	UNDFD	2	.1
5.00	16.40	2.50	0.05	2.12	0.73	sensitive fine grained	UNDFND	UNDFD	1	.1

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-07A-~~6~~ 11
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/94 2:35
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.56	0.01	2.25	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	3.74	0.05	1.34	0.07	sensitive fine grained	UNDFND	UNDFD	2	.3
0.75	2.46	14.36	0.36	2.50	0.12	clayey silt to silty clay	UNDFND	UNDFD	7	1.4
1.00	3.28	11.56	0.20	1.75	0.17	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
1.25	4.10	6.66	0.02	0.32	0.21	sensitive fine grained	UNDFND	UNDFD	3	.6
1.50	4.92	6.72	0.00	0.03	0.26	sensitive fine grained	UNDFND	UNDFD	3	.6
1.75	5.74	7.58	0.02	0.22	0.31	sensitive fine grained	UNDFND	UNDFD	4	.7
2.00	6.56	5.28	0.01	0.25	0.35	sensitive fine grained	UNDFND	UNDFD	3	.4
2.25	7.38	4.32	0.03	0.68	0.40	sensitive fine grained	UNDFND	UNDFD	2	.3
2.50	8.20	4.20	0.01	0.35	0.45	sensitive fine grained	UNDFND	UNDFD	2	.3
2.75	9.02	4.14	0.01	0.21	0.50	sensitive fine grained	UNDFND	UNDFD	2	.3
3.00	9.84	4.14	0.01	0.21	0.54	sensitive fine grained	UNDFND	UNDFD	2	.3
3.25	10.66	3.60	0.01	0.23	0.58	sensitive fine grained	UNDFND	UNDFD	2	.3
3.50	11.48	3.46	0.01	0.30	0.60	sensitive fine grained	UNDFND	UNDFD	2	.2
3.75	12.30	3.14	0.01	0.29	0.62	sensitive fine grained	UNDFND	UNDFD	2	.2
4.00	13.12	3.24	0.01	0.31	0.64	sensitive fine grained	UNDFND	UNDFD	2	.2
4.25	13.94	3.18	0.01	0.29	0.66	sensitive fine grained	UNDFND	UNDFD	2	.2
4.50	14.76	3.12	0.01	0.26	0.68	sensitive fine grained	UNDFND	UNDFD	1	.2
4.75	15.58	3.26	0.01	0.18	0.71	sensitive fine grained	UNDFND	UNDFD	2	.2
5.00	16.40	3.64	0.00	0.10	0.73	sensitive fine grained	UNDFND	UNDFD	2	.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watsn
On Site Loc:CPT-S7B-01
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/96 15:54
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	17.62	0.32	1.83	0.02	clayey silt to silty clay	UNDFND	UNDFD	8	1.7
0.50	1.64	81.16	0.90	1.11	0.07	sand to silty sand	>90	>48	19	UNDEFINED
0.75	2.46	90.98	1.29	1.42	0.12	silty sand to sandy silt	>90	>48	29	UNDEFINED
1.00	3.28	86.76	1.15	1.33	0.17	sand to silty sand	80-90	46-48	21	UNDEFINED
1.25	4.10	63.50	0.73	1.15	0.21	silty sand to sandy silt	70-80	44-46	20	UNDEFINED
1.50	4.92	31.30	0.33	1.05	0.26	silty sand to sandy silt	50-60	40-42	10	UNDEFINED
1.75	5.74	37.92	0.25	0.65	0.31	silty sand to sandy silt	50-60	40-42	12	UNDEFINED
2.00	6.56	21.96	0.30	1.35	0.35	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
2.25	7.38	3.96	0.03	0.69	0.40	sensitive fine grained	UNDFND	UNDFD	2	.3
2.50	8.20	4.86	0.09	1.91	0.45	silty clay to clay	UNDFND	UNDFD	3	.4
2.75	9.02	10.28	0.10	0.99	0.50	clayey silt to silty clay	UNDFND	UNDFD	5	.9
3.00	9.84	47.86	1.35	2.82	0.54	sandy silt to clayey silt	UNDFND	UNDFD	18	4.7
3.25	10.66	77.62	2.81	3.62	0.58	clayey silt to silty clay	UNDFND	UNDFD	37	7.7
3.50	11.48	151.80	4.89	3.22	0.60	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.1
3.75	12.30	168.60	4.16	2.47	0.62	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
4.00	13.12	83.64	2.43	2.90	0.64	sandy silt to clayey silt	UNDFND	UNDFD	32	8.2
4.25	13.94	121.92	3.68	3.02	0.66	sandy silt to clayey silt	UNDFND	UNDFD	47	12.1
4.50	14.76	101.52	3.59	3.54	0.68	sandy silt to clayey silt	UNDFND	UNDFD	39	10.0
4.75	15.58	111.28	3.97	3.57	0.71	sandy silt to clayey silt	UNDFND	UNDFD	43	11.0
5.00	16.40	139.26	3.83	2.75	0.73	silty sand to sandy silt	80-90	42-44	44	UNDEFINED
5.25	17.22	106.94	2.50	2.34	0.75	silty sand to sandy silt	70-80	42-44	34	UNDEFINED
5.50	18.04	155.86	3.98	2.55	0.77	silty sand to sandy silt	80-90	44-46	50	UNDEFINED
5.75	18.86	207.20	3.07	1.48	0.79	sand to silty sand	>90	44-46	50	UNDEFINED
6.00	19.69	194.06	2.57	1.33	0.81	sand to silty sand	80-90	44-46	46	UNDEFINED
6.25	20.51	232.72	2.38	1.02	0.84	sand	>90	44-46	45	UNDEFINED
6.50	21.33	212.20	3.04	1.43	0.86	sand to silty sand	>90	44-46	>50	UNDEFINED
6.75	22.15	249.16	3.52	1.41	0.88	sand to silty sand	>90	44-46	>50	UNDEFINED
7.00	22.97	258.08	4.36	1.69	0.90	sand to silty sand	>90	44-46	>50	UNDEFINED
7.25	23.79	226.44	4.05	1.79	0.92	sand to silty sand	>90	44-46	>50	UNDEFINED
7.50	24.61	194.76	2.81	1.44	0.94	sand to silty sand	80-90	44-46	47	UNDEFINED
7.75	25.43	245.92	4.95	2.01	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	247.16	4.67	1.89	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	228.82	3.08	1.35	1.01	sand to silty sand	>90	44-46	>50	UNDEFINED
8.50	27.89	227.40	3.14	1.38	1.03	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.75	28.71	184.64	3.10	1.68	1.05	sand to silty sand	80-90	42-44	44	UNDEFINED
9.00	29.53	201.84	2.25	1.12	1.07	sand	80-90	42-44	39	UNDEFINED
9.25	30.35	190.52	1.98	1.04	1.09	sand	80-90	42-44	36	UNDEFINED
9.50	31.17	159.08	2.70	1.70	1.12	sand to silty sand	70-80	42-44	38	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	196.62	3.67	1.86	1.14	sand to silty sand	80-90	42-44	47	UNDEFINED
10.00	32.81	182.02	1.79	0.98	1.16	sand	80-90	42-44	35	UNDEFINED
10.25	33.63	186.02	4.20	2.26	1.18	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.50	34.45	248.40	2.52	1.02	1.20	sand	>90	44-46	48	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S7B-02
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/94 3:45
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.50	0.01	2.76	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	3.30	0.06	1.73	0.07	sensitive fine grained	UNDFND	UNDFD	2	.3
0.75	2.46	4.78	0.11	2.38	0.12	clay	UNDFND	UNDFD	5	.4
1.00	3.28	6.30	0.08	1.23	0.17	sensitive fine grained	UNDFND	UNDFD	3	.6
1.25	4.10	10.18	0.33	3.26	0.21	silty clay to clay	UNDFND	UNDFD	7	.9
1.50	4.92	51.04	0.92	1.79	0.26	silty sand to sandy silt	60-70	42-44	16	UNDEFINED
1.75	5.74	58.02	0.61	1.04	0.31	silty sand to sandy silt	60-70	42-44	19	UNDEFINED
2.00	6.56	45.88	0.25	0.55	0.35	silty sand to sandy silt	50-60	42-44	15	UNDEFINED
2.25	7.38	18.62	0.21	1.13	0.40	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
2.50	8.20	4.84	0.01	0.11	0.45	sensitive fine grained	UNDFND	UNDFD	2	.4
2.75	9.02	4.36	0.02	0.46	0.50	sensitive fine grained	UNDFND	UNDFD	2	.3
3.00	9.84	3.96	0.03	0.64	0.54	sensitive fine grained	UNDFND	UNDFD	2	.3
3.25	10.66	19.14	0.13	0.68	0.58	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
3.50	11.48	28.12	0.13	0.47	0.60	silty sand to sandy silt	<40	36-38	9	UNDEFINED
3.75	12.30	44.52	1.44	3.23	0.62	clayey silt to silty clay	UNDFND	UNDFD	21	4.3
4.00	13.12	92.62	3.19	3.44	0.64	sandy silt to clayey silt	UNDFND	UNDFD	35	9.1
4.25	13.94	131.72	4.11	3.12	0.66	sandy silt to clayey silt	UNDFND	UNDFD	>50	13.0
4.50	14.76	96.74	3.09	3.19	0.68	sandy silt to clayey silt	UNDFND	UNDFD	37	9.5
4.75	15.58	78.40	2.05	2.61	0.71	sandy silt to clayey silt	UNDFND	UNDFD	30	7.7
5.00	16.40	63.22	1.64	2.59	0.73	sandy silt to clayey silt	UNDFND	UNDFD	24	6.2
5.25	17.22	106.84	3.24	3.03	0.75	sandy silt to clayey silt	UNDFND	UNDFD	41	10.5
5.50	18.04	121.50	4.58	3.77	0.77	sandy silt to clayey silt	UNDFND	UNDFD	47	12.0
5.75	18.86	126.64	4.26	3.37	0.79	sandy silt to clayey silt	UNDFND	UNDFD	49	12.5
6.00	19.69	163.68	5.32	3.25	0.81	sandy silt to clayey silt	UNDFND	UNDFD	>50	16.2
6.25	20.51	233.12	5.17	2.22	0.84	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.50	21.33	233.12	3.91	1.68	0.86	sand to silty sand	>90	44-46	>50	UNDEFINED
6.75	22.15	175.62	2.54	1.45	0.88	sand to silty sand	80-90	44-46	42	UNDEFINED
7.00	22.97	167.62	2.28	1.36	0.90	sand to silty sand	80-90	42-44	40	UNDEFINED
7.25	23.79	197.30	2.31	1.17	0.92	sand	80-90	44-46	38	UNDEFINED
7.50	24.61	232.94	4.53	1.94	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	179.24	2.94	1.64	0.96	sand to silty sand	80-90	42-44	43	UNDEFINED
8.00	26.25	205.52	3.78	1.84	0.99	sand to silty sand	80-90	44-46	49	UNDEFINED
8.25	27.07	247.16	4.92	1.99	1.01	sand to silty sand	>90	44-46	>50	UNDEFINED
8.50	27.89	264.24	5.85	2.22	1.03	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
8.75	28.71	215.38	3.10	1.44	1.05	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.00	29.53	225.56	3.25	1.44	1.07	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.25	30.35	208.00	3.56	1.71	1.09	sand to silty sand	80-90	42-44	50	UNDEFINED
9.50	31.17	166.96	2.26	1.36	1.12	sand to silty sand	70-80	42-44	40	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-S7B-02 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	179.32	2.57	1.43	1.14	sand to silty sand	80-90	42-44	43	UNDEFINED
10.00	32.81	262.32	5.62	2.14	1.16	sand to silty sand	>90	44-46	>50	UNDEFINED
10.25	33.63	325.48	8.46	2.60	1.18	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
10.50	34.45	219.36	5.36	2.44	1.20	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.75	35.27	202.78	4.16	2.05	1.22	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
11.00	36.09	104.18	1.15	1.10	1.24	sand to silty sand	60-70	40-42	25	UNDEFINED
11.25	36.91	78.96	2.19	2.77	1.27	sandy silt to clayey silt	UNDFND	UNDFD	30	7.6
11.50	37.73	125.74	4.15	3.30	1.29	sandy silt to clayey silt	UNDFND	UNDFD	48	12.3
11.75	38.55	169.38	4.93	2.91	1.31	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
12.00	39.37	51.70	1.25	2.41	1.33	sandy silt to clayey silt	UNDFND	UNDFD	20	4.9
12.25	40.19	73.22	2.25	3.07	1.35	sandy silt to clayey silt	UNDFND	UNDFD	28	7.0
12.50	41.01	125.80	5.78	4.59	1.37	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.75	41.83	250.58	1.98	0.79	1.40	sand	80-90	42-44	48	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S11-02
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/96 08:40
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	172.80	1.91	1.11	0.02	sand to silty sand	>90	>48	41	UNDEFINED
0.50	1.64	304.28	3.58	1.18	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	237.12	1.95	0.82	0.12	sand	>90	>48	45	UNDEFINED
1.00	3.28	155.40	1.15	0.74	0.17	sand	>90	>48	30	UNDEFINED
1.25	4.10	107.46	0.72	0.67	0.21	sand to silty sand	>90	46-48	26	UNDEFINED
1.50	4.92	77.30	0.54	0.70	0.26	sand to silty sand	70-80	44-46	19	UNDEFINED
1.75	5.74	17.06	0.55	3.22	0.31	clayey silt to silty clay	UNDFND	UNDFD	8	1.6
2.00	6.56	13.64	0.58	4.28	0.35	clay	UNDFND	UNDFD	13	1.3
2.25	7.38	6.28	0.40	6.29	0.40	clay	UNDFND	UNDFD	6	.5
2.50	8.20	13.90	0.38	2.76	0.45	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
2.75	9.02	11.78	0.33	2.80	0.50	silty clay to clay	UNDFND	UNDFD	8	1.1
3.00	9.84	11.46	0.29	2.51	0.54	clayey silt to silty clay	UNDFND	UNDFD	5	1.0
3.25	10.66	18.02	0.08	0.47	0.58	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
3.50	11.48	13.56	0.29	2.16	0.60	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
3.75	12.30	89.14	1.68	1.88	0.62	silty sand to sandy silt	70-80	42-44	28	UNDEFINED
4.00	13.12	92.94	2.38	2.56	0.64	sandy silt to clayey silt	UNDFND	UNDFD	36	9.2
4.25	13.94	115.36	3.52	3.05	0.66	sandy silt to clayey silt	UNDFND	UNDFD	44	11.4
4.50	14.76	83.62	2.30	2.75	0.68	sandy silt to clayey silt	UNDFND	UNDFD	32	8.2
4.75	15.58	105.60	3.04	2.88	0.71	sandy silt to clayey silt	UNDFND	UNDFD	40	10.4
5.00	16.40	141.26	3.17	2.24	0.73	silty sand to sandy silt	80-90	42-44	45	UNDEFINED
5.25	17.22	178.72	5.08	2.84	0.75	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.50	18.04	158.34	4.75	3.00	0.77	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.7
5.75	18.86	220.14	5.34	2.43	0.79	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.00	19.69	228.72	4.13	1.81	0.81	sand to silty sand	>90	44-46	>50	UNDEFINED
6.25	20.51	255.80	3.89	1.52	0.84	sand to silty sand	>90	44-46	>50	UNDEFINED
6.50	21.33	239.40	4.01	1.67	0.86	sand to silty sand	>90	44-46	>50	UNDEFINED
6.75	22.15	290.20	4.53	1.56	0.88	sand to silty sand	>90	46-48	>50	UNDEFINED
7.00	22.97	254.50	3.59	1.41	0.90	sand to silty sand	>90	44-46	>50	UNDEFINED
7.25	23.79	276.02	5.50	1.99	0.92	sand to silty sand	>90	44-46	>50	UNDEFINED
7.50	24.61	238.50	4.89	2.05	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	189.46	3.51	1.85	0.96	sand to silty sand	80-90	42-44	45	UNDEFINED
8.00	26.25	218.26	2.68	1.23	0.99	sand	80-90	44-46	42	UNDEFINED
8.25	27.07	218.26	4.02	1.84	1.01	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.50	27.89	238.88	3.51	1.47	1.03	sand to silty sand	>90	44-46	>50	UNDEFINED
8.75	28.71	220.44	2.09	0.95	1.05	sand	80-90	44-46	42	UNDEFINED
9.00	29.53	222.32	2.64	1.19	1.07	sand	80-90	44-46	43	UNDEFINED
9.25	30.35	210.58	3.60	1.71	1.09	sand to silty sand	80-90	42-44	>50	UNDEFINED
9.50	31.17	215.08	4.17	1.94	1.12	sand to silty sand	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	200.96	4.04	2.01	1.14	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.00	32.81	242.32	3.96	1.63	1.16	sand to silty sand	80-90	44-46	>50	UNDEFINED
10.25	33.63	277.60	4.01	1.44	1.18	sand to silty sand	>90	44-46	>50	UNDEFINED
10.50	34.45	220.44	4.19	1.90	1.20	sand to silty sand	80-90	42-44	>50	UNDEFINED
10.75	35.27	219.54	2.78	1.26	1.22	sand	80-90	42-44	42	UNDEFINED
11.00	36.09	83.96	2.77	3.30	1.24	sandy silt to clayey silt	UNDFND	UNDFD	32	8.1
11.25	36.91	172.04	4.56	2.65	1.27	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
11.50	37.73	225.18	4.36	1.93	1.29	sand to silty sand	80-90	42-44	>50	UNDEFINED
11.75	38.55	208.28	2.84	1.36	1.31	sand to silty sand	80-90	42-44	50	UNDEFINED
12.00	39.37	167.94	2.09	1.24	1.33	sand to silty sand	70-80	42-44	40	UNDEFINED
12.25	40.19	111.98	2.12	1.89	1.35	silty sand to sandy silt	60-70	40-42	36	UNDEFINED
12.50	41.01	72.58	2.66	3.67	1.37	clayey silt to silty clay	UNDFND	UNDFD	35	7.0
12.75	41.83	102.80	3.84	3.74	1.40	sandy silt to clayey silt	UNDFND	UNDFD	39	10.0
13.00	42.65	107.56	4.49	4.18	1.42	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S7C-01
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/08/94 11:24
Cone Used :962
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	71.42	0.27	0.38	0.02	sand to silty sand	>90	>48	17	UNDEFINED
0.50	1.64	209.72	1.55	0.74	0.07	sand	>90	>48	40	UNDEFINED
0.75	2.46	171.14	1.53	0.89	0.12	sand	>90	>48	33	UNDEFINED
1.00	3.28	110.44	0.89	0.81	0.17	sand to silty sand	>90	>48	26	UNDEFINED
1.25	4.10	37.44	0.23	0.62	0.21	silty sand to sandy silt	60-70	42-44	12	UNDEFINED
1.50	4.92	19.76	0.04	0.19	0.26	silty sand to sandy silt	<40	38-40	6	UNDEFINED
1.75	5.74	14.30	0.05	0.33	0.31	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
2.00	6.56	13.64	0.03	0.25	0.35	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
2.25	7.38	18.90	0.03	0.18	0.40	silty sand to sandy silt	<40	36-38	6	UNDEFINED
2.50	8.20	20.78	0.04	0.17	0.45	silty sand to sandy silt	<40	36-38	7	UNDEFINED
2.75	9.02	25.84	0.48	1.87	0.50	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
3.00	9.84	47.18	1.10	2.34	0.54	sandy silt to clayey silt	UNDFND	UNDFD	18	4.6
3.25	10.66	135.88	2.29	1.69	0.58	sand to silty sand	80-90	44-46	33	UNDEFINED
3.50	11.48	71.16	2.28	3.21	0.60	sandy silt to clayey silt	UNDFND	UNDFD	27	7.0
3.75	12.30	129.34	3.69	2.86	0.62	sandy silt to clayey silt	UNDFND	UNDFD	50	12.8
4.00	13.12	116.24	3.21	2.76	0.64	sandy silt to clayey silt	UNDFND	UNDFD	45	11.5
4.25	13.94	141.90	2.96	2.09	0.66	silty sand to sandy silt	80-90	44-46	45	UNDEFINED
4.50	14.76	171.76	2.67	1.55	0.68	sand to silty sand	80-90	44-46	41	UNDEFINED
4.75	15.58	203.72	2.61	1.28	0.71	sand	>90	44-46	39	UNDEFINED
5.00	16.40	225.96	2.66	1.18	0.73	sand	>90	44-46	43	UNDEFINED
5.25	17.22	193.68	2.42	1.25	0.75	sand to silty sand	80-90	44-46	46	UNDEFINED
5.50	18.04	165.52	2.14	1.30	0.77	sand to silty sand	80-90	44-46	40	UNDEFINED
5.75	18.86	164.44	3.02	1.84	0.79	sand to silty sand	80-90	44-46	39	UNDEFINED
6.00	19.69	174.64	3.21	1.84	0.81	sand to silty sand	80-90	44-46	42	UNDEFINED
6.25	20.51	275.16	1.86	0.67	0.84	sand	>90	46-48	>50	UNDEFINED
6.50	21.33	273.40	1.87	0.68	0.86	sand	>90	44-46	>50	UNDEFINED
6.75	22.15	316.48	3.50	1.11	0.88	sand	>90	46-48	>50	UNDEFINED
7.00	22.97	293.42	1.96	0.67	0.90	sand	>90	46-48	>50	UNDEFINED
7.25	23.79	284.58	2.44	0.86	0.92	sand	>90	44-46	>50	UNDEFINED
7.50	24.61	253.84	1.47	0.58	0.94	sand	>90	44-46	49	UNDEFINED
7.75	25.43	294.54	3.10	1.05	0.96	sand	>90	44-46	>50	UNDEFINED
8.00	26.25	254.46	3.76	1.48	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	215.98	3.55	1.64	1.01	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.50	27.89	220.46	2.04	0.92	1.03	sand	80-90	44-46	42	UNDEFINED
8.75	28.71	248.82	2.11	0.85	1.05	sand	>90	44-46	48	UNDEFINED
9.00	29.53	237.86	2.21	0.93	1.07	sand	>90	44-46	46	UNDEFINED
9.25	30.35	214.86	3.54	1.65	1.09	sand to silty sand	80-90	42-44	>50	UNDEFINED
9.50	31.17	263.70	2.42	0.92	1.12	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	265.04	1.74	0.66	1.14	sand	>90	44-46	>50	UNDEFINED
10.00	32.81	292.92	2.16	0.74	1.16	sand	>90	44-46	>50	UNDEFINED
10.25	33.63	273.60	2.85	1.04	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	223.16	2.95	1.32	1.20	sand	80-90	42-44	43	UNDEFINED
10.75	35.27	276.12	2.66	0.97	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	300.14	2.74	0.91	1.24	sand	>90	44-46	>50	UNDEFINED
11.25	36.91	237.66	1.83	0.77	1.27	sand	80-90	42-44	46	UNDEFINED
11.50	37.73	245.72	1.86	0.76	1.29	sand	80-90	42-44	47	UNDEFINED
11.75	38.55	108.08	0.56	0.52	1.31	sand	60-70	40-42	21	UNDEFINED
12.00	39.37	73.78	1.61	2.19	1.33	silty sand to sandy silt	50-60	38-40	24	UNDEFINED
12.25	40.19	122.42	2.84	2.32	1.35	silty sand to sandy silt	60-70	40-42	39	UNDEFINED
12.50	41.01	109.38	2.16	1.98	1.37	silty sand to sandy silt	60-70	40-42	35	UNDEFINED
12.75	41.83	99.90	1.61	1.61	1.40	silty sand to sandy silt	60-70	38-40	32	UNDEFINED
13.00	42.65	57.24	1.69	2.95	1.42	sandy silt to clayey silt	UNDFND	UNDFD	22	5.4
13.25	43.47	102.16	3.13	3.06	1.44	sandy silt to clayey silt	UNDFND	UNDFD	39	9.9
13.50	44.29	241.38	9.64	3.99	1.46	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	155.72	6.93	4.45	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	260.20	6.90	2.65	1.50	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.25	46.75	418.56	2.88	0.69	1.52	gravelly sand to sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S7C-03
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/08/94 13:51
Cone Used :962
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	62.20	0.40	0.65	0.02	sand to silty sand	>90	>48	15	UNDEFINED
0.50	1.64	67.98	0.45	0.67	0.07	sand to silty sand	>90	>48	16	UNDEFINED
0.75	2.46	33.26	0.25	0.75	0.12	silty sand to sandy silt	60-70	44-46	11	UNDEFINED
1.00	3.28	19.56	0.17	0.89	0.17	sandy silt to clayey silt	UNDFND	UNDFD	7	1.9
1.25	4.10	16.46	0.17	1.05	0.21	sandy silt to clayey silt	UNDFND	UNDFD	6	1.6
1.50	4.92	10.24	0.17	1.63	0.26	clayey silt to silty clay	UNDFND	UNDFD	5	.9
1.75	5.74	17.98	0.05	0.28	0.31	silty sand to sandy silt	<40	38-40	6	UNDEFINED
2.00	6.56	15.24	0.01	0.06	0.35	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
2.25	7.38	19.72	0.07	0.34	0.40	silty sand to sandy silt	<40	36-38	6	UNDEFINED
2.50	8.20	48.78	0.23	0.47	0.45	sand to silty sand	50-60	40-42	12	UNDEFINED
2.75	9.02	51.04	0.09	0.18	0.50	sand to silty sand	50-60	40-42	12	UNDEFINED
3.00	9.84	21.60	0.00	0.02	0.54	silty sand to sandy silt	<40	36-38	7	UNDEFINED
3.25	10.66	13.64	0.37	2.69	0.58	clayey silt to silty clay	UNDFND	UNDFD	7	1.3
3.50	11.48	63.58	1.58	2.48	0.60	sandy silt to clayey silt	UNDFND	UNDFD	24	6.2
3.75	12.30	22.32	0.54	2.40	0.62	clayey silt to silty clay	UNDFND	UNDFD	11	2.1
4.00	13.12	61.32	1.69	2.76	0.64	sandy silt to clayey silt	UNDFND	UNDFD	23	6.0
4.25	13.94	90.72	1.92	2.12	0.66	silty sand to sandy silt	60-70	42-44	29	UNDEFINED
4.50	14.76	167.80	4.39	2.62	0.68	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
4.75	15.58	213.16	3.71	1.74	0.71	sand to silty sand	>90	44-46	>50	UNDEFINED
5.00	16.40	192.00	3.32	1.73	0.73	sand to silty sand	80-90	44-46	46	UNDEFINED
5.25	17.22	183.22	4.98	2.72	0.75	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.50	18.04	219.58	5.17	2.35	0.77	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
5.75	18.86	211.44	3.98	1.88	0.79	sand to silty sand	>90	44-46	>50	UNDEFINED
6.00	19.69	209.60	4.54	2.17	0.81	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.25	20.51	289.02	2.92	1.01	0.84	sand	>90	46-48	>50	UNDEFINED
6.50	21.33	258.38	2.50	0.97	0.86	sand	>90	44-46	49	UNDEFINED
6.75	22.15	292.34	3.36	1.15	0.88	sand	>90	46-48	>50	UNDEFINED
7.00	22.97	256.80	2.08	0.81	0.90	sand	>90	44-46	49	UNDEFINED
7.25	23.79	284.20	4.16	1.46	0.92	sand to silty sand	>90	44-46	>50	UNDEFINED
7.50	24.61	248.98	3.84	1.54	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	157.70	3.74	2.37	0.96	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
8.00	26.25	160.40	2.78	1.73	0.99	sand to silty sand	80-90	42-44	38	UNDEFINED
8.25	27.07	232.80	3.65	1.57	1.01	sand to silty sand	>90	44-46	>50	UNDEFINED
8.50	27.89	223.36	2.14	0.96	1.03	sand	80-90	44-46	43	UNDEFINED
8.75	28.71	246.30	3.09	1.26	1.05	sand	>90	44-46	47	UNDEFINED
9.00	29.53	223.78	3.03	1.35	1.07	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.25	30.35	225.18	1.89	0.84	1.09	sand	80-90	44-46	43	UNDEFINED
9.50	31.17	200.90	1.89	0.94	1.12	sand	80-90	42-44	38	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-S7C-03 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	212.54	2.29	1.08	1.14	sand	80-90	42-44	41	UNDEFINED
10.00	32.81	262.74	3.42	1.30	1.16	sand	>90	44-46	>50	UNDEFINED
10.25	33.63	268.44	3.41	1.27	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	200.90	2.89	1.44	1.20	sand to silty sand	80-90	42-44	48	UNDEFINED
10.75	35.27	225.00	2.56	1.14	1.22	sand	80-90	42-44	43	UNDEFINED
11.00	36.09	297.14	4.73	1.59	1.24	sand to silty sand	>90	44-46	>50	UNDEFINED
11.25	36.91	299.12	4.60	1.54	1.27	sand to silty sand	>90	44-46	>50	UNDEFINED
11.50	37.73	211.94	2.17	1.02	1.29	sand	80-90	42-44	41	UNDEFINED
11.75	38.55	118.56	0.85	0.72	1.31	sand to silty sand	60-70	40-42	28	UNDEFINED
12.00	39.37	92.88	1.49	1.60	1.33	silty sand to sandy silt	60-70	38-40	30	UNDEFINED
12.25	40.19	212.68	3.82	1.79	1.35	sand to silty sand	80-90	42-44	>50	UNDEFINED
12.50	41.01	167.50	3.51	2.10	1.37	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
12.75	41.83	45.48	0.72	1.58	1.40	silty sand to sandy silt	<40	34-36	15	UNDEFINED
13.00	42.65	125.96	4.82	3.82	1.42	sandy silt to clayey silt	UNDFND	UNDFD	48	12.3
13.25	43.47	193.84	6.29	3.25	1.44	sandy silt to clayey silt	UNDFND	UNDFD	>50	19.1
13.50	44.29	109.64	4.36	3.97	1.46	clayey silt to silty clay	UNDFND	UNDFD	>50	10.7
13.75	45.11	133.70	5.59	4.18	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	244.84	6.63	2.71	1.50	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.25	46.75	332.26	7.05	2.12	1.52	sand to silty sand	>90	44-46	>50	UNDEFINED
14.50	47.57	346.14	4.10	1.19	1.55	sand	>90	44-46	>50	UNDEFINED
14.75	48.39	281.38	4.27	1.52	1.57	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.00	49.21	230.04	4.68	2.04	1.59	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.25	50.03	326.04	2.96	0.91	1.61	sand	>90	44-46	>50	UNDEFINED
15.50	50.85	404.78	4.79	1.18	1.63	sand	>90	44-46	>50	UNDEFINED
15.75	51.67	404.56	3.87	0.96	1.65	sand	>90	44-46	>50	UNDEFINED
16.00	52.49	283.14	3.27	1.16	1.68	sand	80-90	42-44	>50	UNDEFINED
16.25	53.31	397.12	2.31	0.58	1.70	gravelly sand to sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S7C-04
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/08/94 9:11
Cone Used :962
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	21.74	0.20	0.94	0.02	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
0.50	1.64	147.16	1.27	0.86	0.07	sand	>90	>48	28	UNDEFINED
0.75	2.46	101.74	1.36	1.34	0.12	sand to silty sand	>90	>48	24	UNDEFINED
1.00	3.28	47.08	0.43	0.92	0.17	silty sand to sandy silt	70-80	44-46	15	UNDEFINED
1.25	4.10	53.14	1.12	2.11	0.21	sandy silt to clayey silt	UNDFND	UNDFD	20	5.2
1.50	4.92	24.56	0.31	1.26	0.26	sandy silt to clayey silt	UNDFND	UNDFD	9	2.4
1.75	5.74	14.34	0.08	0.53	0.31	sandy silt to clayey silt	UNDFND	UNDFD	5	1.4
2.00	6.56	19.16	0.17	0.87	0.35	sandy silt to clayey silt	UNDFND	UNDFD	7	1.8
2.25	7.38	35.96	0.28	0.78	0.40	silty sand to sandy silt	50-60	40-42	11	UNDEFINED
2.50	8.20	43.38	0.32	0.73	0.45	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
2.75	9.02	39.32	0.19	0.48	0.50	silty sand to sandy silt	40-50	40-42	13	UNDEFINED
3.00	9.84	20.60	0.53	2.57	0.54	clayey silt to silty clay	UNDFND	UNDFD	10	2.0
3.25	10.66	62.32	1.80	2.90	0.58	sandy silt to clayey silt	UNDFND	UNDFD	24	6.1
3.50	11.48	77.68	2.50	3.21	0.60	sandy silt to clayey silt	UNDFND	UNDFD	30	7.7
3.75	12.30	79.32	1.77	2.23	0.62	silty sand to sandy silt	60-70	42-44	25	UNDEFINED
4.00	13.12	118.44	4.04	3.41	0.64	sandy silt to clayey silt	UNDFND	UNDFD	45	11.7
4.25	13.94	155.82	4.32	2.77	0.66	silty sand to sandy silt	80-90	44-46	50	UNDEFINED
4.50	14.76	199.36	3.56	1.79	0.68	sand to silty sand	>90	44-46	48	UNDEFINED
4.75	15.58	189.26	2.89	1.53	0.71	sand to silty sand	80-90	44-46	45	UNDEFINED
5.00	16.40	155.70	5.08	3.26	0.73	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.4
5.25	17.22	196.68	6.00	3.05	0.75	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
5.50	18.04	272.70	4.64	1.70	0.77	sand to silty sand	>90	46-48	>50	UNDEFINED
5.75	18.86	293.54	4.34	1.48	0.79	sand to silty sand	>90	46-48	>50	UNDEFINED
6.00	19.69	322.02	3.57	1.11	0.81	sand	>90	46-48	>50	UNDEFINED
6.25	20.51	303.86	3.26	1.07	0.84	sand	>90	46-48	>50	UNDEFINED
6.50	21.33	230.16	1.96	0.85	0.86	sand	>90	44-46	44	UNDEFINED
6.75	22.15	251.74	2.12	0.84	0.88	sand	>90	44-46	48	UNDEFINED
7.00	22.97	293.20	3.65	1.25	0.90	sand	>90	46-48	>50	UNDEFINED
7.25	23.79	265.34	3.39	1.28	0.92	sand	>90	44-46	>50	UNDEFINED
7.50	24.61	241.60	3.40	1.41	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	223.66	3.94	1.76	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	240.02	3.81	1.59	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	332.48	5.16	1.55	1.01	sand to silty sand	>90	46-48	>50	UNDEFINED
8.50	27.89	303.14	3.36	1.11	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	249.30	3.39	1.36	1.05	sand	>90	44-46	48	UNDEFINED
9.00	29.53	303.10	4.85	1.60	1.07	sand to silty sand	>90	44-46	>50	UNDEFINED
9.25	30.35	287.86	3.25	1.13	1.09	sand	>90	44-46	>50	UNDEFINED
9.50	31.17	235.56	2.42	1.03	1.12	sand	80-90	44-46	45	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	273.26	4.97	1.82	1.14	sand to silty sand	>90	44-46	>50	UNDEFINED
10.00	32.81	304.64	3.85	1.27	1.16	sand	>90	44-46	>50	UNDEFINED
10.25	33.63	299.50	3.43	1.15	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	289.94	2.78	0.96	1.20	sand	>90	44-46	>50	UNDEFINED
10.75	35.27	279.62	3.62	1.29	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	143.24	2.53	1.77	1.24	silty sand to sandy silt	70-80	40-42	46	UNDEFINED
11.25	36.91	71.56	1.57	2.19	1.27	silty sand to sandy silt	50-60	38-40	23	UNDEFINED
11.50	37.73	124.56	2.28	1.83	1.29	silty sand to sandy silt	60-70	40-42	40	UNDEFINED
11.75	38.55	140.88	3.01	2.14	1.31	silty sand to sandy silt	70-80	40-42	45	UNDEFINED
12.00	39.37	148.44	3.04	2.05	1.33	silty sand to sandy silt	70-80	40-42	47	UNDEFINED
12.25	40.19	114.56	1.53	1.34	1.35	sand to silty sand	60-70	40-42	27	UNDEFINED
12.50	41.01	53.52	1.74	3.26	1.37	clayey silt to silty clay	UNDFND	UNDFD	26	5.1
12.75	41.83	75.60	3.32	4.39	1.40	clayey silt to silty clay	UNDFND	UNDFD	36	7.3
13.00	42.65	145.26	4.91	3.38	1.42	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.2
13.25	43.47	120.32	2.96	2.46	1.44	silty sand to sandy silt	60-70	40-42	38	UNDEFINED
13.50	44.29	240.46	8.27	3.44	1.46	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	293.48	5.28	1.80	1.48	sand to silty sand	>90	44-46	>50	UNDEFINED
14.00	45.93	352.18	6.12	1.74	1.50	sand to silty sand	>90	44-46	>50	UNDEFINED
14.25	46.75	388.86	3.29	0.85	1.52	sand	>90	44-46	>50	UNDEFINED
14.50	47.57	321.82	5.99	1.86	1.55	sand to silty sand	>90	44-46	>50	UNDEFINED
14.75	48.39	359.64	3.18	0.88	1.57	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery
On Site Loc:CPT-S09-01
Job No. :2738.1236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/13/94 11:15
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.40	-0.05	-13.00	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	13.60	0.03	0.24	0.07	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
0.75	2.46	26.80	0.16	0.58	0.12	silty sand to sandy silt	50-60	44-46	9	UNDEFINED
1.00	3.28	46.20	0.28	0.60	0.17	silty sand to sandy silt	70-80	44-46	15	UNDEFINED
1.25	4.10	53.20	0.31	0.58	0.21	sand to silty sand	70-80	44-46	13	UNDEFINED
1.50	4.92	54.00	0.31	0.58	0.26	sand to silty sand	60-70	44-46	13	UNDEFINED
1.75	5.74	66.20	0.40	0.60	0.31	sand to silty sand	70-80	44-46	16	UNDEFINED
2.00	6.56	70.60	0.42	0.60	0.35	sand to silty sand	70-80	44-46	17	UNDEFINED
2.25	7.38	70.80	0.42	0.59	0.40	sand to silty sand	60-70	42-44	17	UNDEFINED
2.50	8.20	62.40	0.41	0.65	0.45	sand to silty sand	60-70	42-44	15	UNDEFINED
2.75	9.02	38.80	0.31	0.80	0.50	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.00	9.84	18.00	0.31	1.73	0.54	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
3.25	10.66	4.60	-0.03	-0.65	0.58	undefined	UNDFND	UNDFD	UDF	UNDEFINED
3.50	11.48	9.60	0.10	1.02	0.60	clayey silt to silty clay	UNDFND	UNDFD	5	.8
3.75	12.30	17.80	0.15	0.87	0.62	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
4.00	13.12	28.20	0.21	0.74	0.64	silty sand to sandy silt	<40	36-38	9	UNDEFINED
4.25	13.94	72.20	0.60	0.84	0.66	sand to silty sand	60-70	40-42	17	UNDEFINED
4.50	14.76	173.00	2.08	1.20	0.68	sand to silty sand	80-90	44-46	41	UNDEFINED
4.75	15.58	47.80	0.28	0.58	0.71	sand to silty sand	50-60	38-40	11	UNDEFINED
5.00	16.40	133.00	1.79	1.34	0.73	sand to silty sand	70-80	42-44	32	UNDEFINED
5.25	17.22	144.00	3.70	2.57	0.75	silty sand to sandy silt	80-90	42-44	46	UNDEFINED
5.50	18.04	168.60	4.60	2.73	0.77	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.75	18.86	194.20	3.88	2.00	0.79	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.00	19.69	220.20	2.70	1.23	0.81	sand	>90	44-46	42	UNDEFINED
6.25	20.51	267.80	2.93	1.09	0.84	sand	>90	44-46	>50	UNDEFINED
6.50	21.33	265.40	3.10	1.17	0.86	sand	>90	44-46	>50	UNDEFINED
6.75	22.15	250.00	2.90	1.16	0.88	sand	>90	44-46	48	UNDEFINED
7.00	22.97	292.60	3.47	1.19	0.90	sand	>90	46-48	>50	UNDEFINED
7.25	23.79	279.20	2.14	0.77	0.92	sand	>90	44-46	>50	UNDEFINED
7.50	24.61	353.20	2.72	0.77	0.94	sand	>90	46-48	>50	UNDEFINED
7.75	25.43	322.20	4.25	1.32	0.96	sand	>90	46-48	>50	UNDEFINED
8.00	26.25	304.20	4.90	1.61	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	325.00	4.92	1.51	1.01	sand to silty sand	>90	44-46	>50	UNDEFINED
8.50	27.89	260.60	3.96	1.52	1.03	sand to silty sand	>90	44-46	>50	UNDEFINED
8.75	28.71	249.00	3.34	1.34	1.05	sand	>90	44-46	48	UNDEFINED
9.00	29.53	211.60	1.99	0.94	1.07	sand	80-90	44-46	41	UNDEFINED
9.25	30.35	206.40	2.07	1.00	1.09	sand	80-90	42-44	40	UNDEFINED
9.50	31.17	209.80	2.18	1.04	1.12	sand	80-90	42-44	40	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery On Site Loc:CPT-S09-01 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	250.00	2.67	1.07	1.14	sand	>90	44-46	48	UNDEFINED
10.00	32.81	244.80	3.71	1.51	1.16	sand to silty sand	>90	44-46	>50	UNDEFINED
10.25	33.63	311.60	4.05	1.30	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	310.80	5.39	1.74	1.20	sand to silty sand	>90	44-46	>50	UNDEFINED
10.75	35.27	350.60	5.18	1.48	1.22	sand to silty sand	>90	44-46	>50	UNDEFINED
11.00	36.09	300.00	3.41	1.14	1.24	sand	>90	44-46	>50	UNDEFINED
11.25	36.91	307.20	2.98	0.97	1.27	sand	>90	44-46	>50	UNDEFINED
11.50	37.73	286.80	3.31	1.15	1.29	sand	>90	44-46	>50	UNDEFINED
11.75	38.55	282.40	3.40	1.20	1.31	sand	>90	44-46	>50	UNDEFINED
12.00	39.37	82.20	2.57	3.13	1.33	sandy silt to clayey silt	UNDFND	UNDFD	31	7.9
12.25	40.19	157.20	3.82	2.43	1.35	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
12.50	41.01	163.20	4.01	2.46	1.37	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
12.75	41.83	73.80	0.99	1.34	1.40	silty sand to sandy silt	50-60	36-38	24	UNDEFINED
13.00	42.65	83.00	4.66	5.61	1.42	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.25	43.47	176.00	7.39	4.20	1.44	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.50	44.29	210.20	7.95	3.78	1.46	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watsn
On Site Loc:CPT-S09-02
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/96 14:18
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	1.44	0.03	2.10	0.02	sensitive fine grained	UNDFND	UNDFD	1	.1
0.50	1.64	1.82	0.02	1.21	0.07	sensitive fine grained	UNDFND	UNDFD	1	.1
0.75	2.46	7.54	0.03	0.44	0.12	sensitive fine grained	UNDFND	UNDFD	4	.7
1.00	3.28	17.48	0.07	0.39	0.17	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
1.25	4.10	55.98	0.53	0.94	0.21	silty sand to sandy silt	70-80	44-46	18	UNDEFINED
1.50	4.92	126.66	0.78	0.62	0.26	sand	>90	46-48	24	UNDEFINED
1.75	5.74	131.98	0.62	0.47	0.31	sand	>90	46-48	25	UNDEFINED
2.00	6.56	124.60	0.62	0.50	0.35	sand	80-90	46-48	24	UNDEFINED
2.25	7.38	123.76	0.61	0.50	0.40	sand	80-90	44-46	24	UNDEFINED
2.50	8.20	118.96	0.65	0.55	0.45	sand	80-90	44-46	23	UNDEFINED
2.75	9.02	119.06	0.66	0.56	0.50	sand	80-90	44-46	23	UNDEFINED
3.00	9.84	125.56	0.66	0.53	0.54	sand	80-90	44-46	24	UNDEFINED
3.25	10.66	124.70	0.73	0.59	0.58	sand	80-90	44-46	24	UNDEFINED
3.50	11.48	104.82	0.63	0.60	0.60	sand to silty sand	70-80	42-44	25	UNDEFINED
3.75	12.30	116.60	0.70	0.60	0.62	sand	70-80	42-44	22	UNDEFINED
4.00	13.12	112.54	0.71	0.63	0.64	sand to silty sand	70-80	42-44	27	UNDEFINED
4.25	13.94	40.96	0.40	0.99	0.66	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.50	14.76	52.58	0.38	0.72	0.68	silty sand to sandy silt	50-60	38-40	17	UNDEFINED
4.75	15.58	26.66	0.27	1.02	0.71	sandy silt to clayey silt	UNDFND	UNDFD	10	2.5
5.00	16.40	25.54	0.42	1.63	0.73	sandy silt to clayey silt	UNDFND	UNDFD	10	2.4
5.25	17.22	35.88	0.18	0.50	0.75	silty sand to sandy silt	40-50	36-38	11	UNDEFINED
5.50	18.04	51.20	0.26	0.50	0.77	sand to silty sand	50-60	38-40	12	UNDEFINED
5.75	18.86	66.00	0.24	0.36	0.79	sand to silty sand	50-60	40-42	16	UNDEFINED
6.00	19.69	89.20	0.43	0.48	0.81	sand to silty sand	60-70	40-42	21	UNDEFINED
6.25	20.51	117.88	0.55	0.47	0.84	sand	70-80	42-44	23	UNDEFINED
6.50	21.33	141.72	1.71	1.20	0.86	sand to silty sand	70-80	42-44	34	UNDEFINED
6.75	22.15	169.34	3.07	1.81	0.88	sand to silty sand	80-90	42-44	41	UNDEFINED
7.00	22.97	236.54	3.79	1.60	0.90	sand to silty sand	>90	44-46	>50	UNDEFINED
7.25	23.79	294.78	5.35	1.81	0.92	sand to silty sand	>90	44-46	>50	UNDEFINED
7.50	24.61	342.12	7.89	2.31	0.94	sand to silty sand	>90	46-48	>50	UNDEFINED
7.75	25.43	347.50	6.21	1.79	0.96	sand to silty sand	>90	46-48	>50	UNDEFINED
8.00	26.25	294.80	4.44	1.51	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	211.16	4.15	1.97	1.01	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.50	27.89	197.84	2.96	1.49	1.03	sand to silty sand	80-90	42-44	47	UNDEFINED
8.75	28.71	208.54	3.98	1.91	1.05	sand to silty sand	80-90	44-46	50	UNDEFINED
9.00	29.53	266.44	5.34	2.01	1.07	sand to silty sand	>90	44-46	>50	UNDEFINED
9.25	30.35	250.76	5.25	2.09	1.09	sand to silty sand	>90	44-46	>50	UNDEFINED
9.50	31.17	266.28	5.70	2.14	1.12	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watsn On Site Loc:CPT-S09-02 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	309.20	3.74	1.21	1.14	sand	>90	44-46	>50	UNDEFINED
10.00	32.81	272.10	4.32	1.59	1.16	sand to silty sand	>90	44-46	>50	UNDEFINED
10.25	33.63	208.46	2.48	1.19	1.18	sand	80-90	42-44	40	UNDEFINED
10.50	34.45	289.20	4.29	1.48	1.20	sand to silty sand	>90	44-46	>50	UNDEFINED
10.75	35.27	207.30	2.08	1.01	1.22	sand	80-90	42-44	40	UNDEFINED
11.00	36.09	282.28	3.98	1.41	1.24	sand to silty sand	>90	44-46	>50	UNDEFINED
11.25	36.91	305.98	4.81	1.57	1.27	sand to silty sand	>90	44-46	>50	UNDEFINED
11.50	37.73	297.00	3.96	1.33	1.29	sand	>90	44-46	>50	UNDEFINED
11.75	38.55	288.94	4.27	1.48	1.31	sand to silty sand	>90	44-46	>50	UNDEFINED
12.00	39.37	248.26	2.81	1.13	1.33	sand	80-90	42-44	48	UNDEFINED
12.25	40.19	255.52	3.29	1.29	1.35	sand	80-90	42-44	49	UNDEFINED
12.50	41.01	279.98	4.37	1.56	1.37	sand to silty sand	>90	44-46	>50	UNDEFINED
12.75	41.83	311.98	4.32	1.38	1.40	sand	>90	44-46	>50	UNDEFINED
13.00	42.65	283.38	3.49	1.23	1.42	sand	>90	44-46	>50	UNDEFINED
13.25	43.47	215.18	2.85	1.32	1.44	sand to silty sand	80-90	42-44	>50	UNDEFINED
13.50	44.29	181.02	4.64	2.56	1.46	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
13.75	45.11	206.92	4.42	2.14	1.48	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.00	45.93	202.82	3.86	1.90	1.50	sand to silty sand	80-90	42-44	49	UNDEFINED
14.25	46.75	105.40	2.05	1.95	1.52	silty sand to sandy silt	60-70	38-40	34	UNDEFINED
14.50	47.57	50.18	1.11	2.22	1.55	sandy silt to clayey silt	UNDFND	UNDFD	19	4.7
14.75	48.39	197.44	3.07	1.56	1.57	sand to silty sand	70-80	40-42	47	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson
On Site Loc:CPT-S09-04
Job No. :27381402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/19/94 13:30
Cone Used :465
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	6.16	0.00	0.05	0.02	sensitive fine grained	UNDFND	UNDFD	3	.6
0.50	1.64	2.34	0.01	0.27	0.07	sensitive fine grained	UNDFND	UNDFD	1	.2
0.75	2.46	2.58	-0.01	-0.40	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	10.08	-0.03	-0.30	0.17	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.25	4.10	21.54	0.05	0.22	0.21	silty sand to sandy silt	40-50	40-42	7	UNDEFINED
1.50	4.92	66.44	0.40	0.60	0.26	sand to silty sand	70-80	44-46	16	UNDEFINED
1.75	5.74	95.00	0.46	0.49	0.31	sand to silty sand	80-90	44-46	23	UNDEFINED
2.00	6.56	90.26	0.49	0.54	0.35	sand to silty sand	70-80	44-46	22	UNDEFINED
2.25	7.38	85.50	0.47	0.55	0.40	sand to silty sand	70-80	44-46	20	UNDEFINED
2.50	8.20	75.64	0.41	0.54	0.45	sand to silty sand	70-80	42-44	18	UNDEFINED
2.75	9.02	65.04	0.36	0.55	0.50	sand to silty sand	60-70	42-44	16	UNDEFINED
3.00	9.84	54.84	0.29	0.53	0.54	sand to silty sand	50-60	40-42	13	UNDEFINED
3.25	10.66	47.42	0.28	0.59	0.58	silty sand to sandy silt	50-60	40-42	15	UNDEFINED
3.50	11.48	35.80	0.33	0.93	0.60	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.75	12.30	44.72	0.12	0.26	0.62	sand to silty sand	50-60	38-40	11	UNDEFINED
4.00	13.12	35.88	0.16	0.45	0.64	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
4.25	13.94	13.76	0.22	1.56	0.66	clayey silt to silty clay	UNDFND	UNDFD	7	1.2
4.50	14.76	8.90	0.04	0.50	0.68	sensitive fine grained	UNDFND	UNDFD	4	.8
4.75	15.58	12.46	0.04	0.33	0.71	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
5.00	16.40	20.66	0.01	0.05	0.73	silty sand to sandy silt	<40	34-36	7	UNDEFINED
5.25	17.22	37.98	0.47	1.24	0.75	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
5.50	18.04	129.12	2.53	1.96	0.77	silty sand to sandy silt	70-80	42-44	41	UNDEFINED
5.75	18.86	171.80	5.29	3.08	0.79	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.0
6.00	19.69	214.06	4.97	2.32	0.81	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.25	20.51	229.22	6.20	2.70	0.84	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.50	21.33	174.26	7.52	4.32	0.86	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
6.75	22.15	197.74	11.83	5.98	0.88	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
7.00	22.97	317.10	10.68	3.37	0.90	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.25	23.79	360.78	10.97	3.04	0.92	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.50	24.61	374.48	10.14	2.71	0.94	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.75	25.43	348.10	8.98	2.58	0.96	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
8.00	26.25	282.88	5.82	2.06	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	279.64	7.55	2.70	1.01	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
8.50	27.89	268.88	5.41	2.01	1.03	sand to silty sand	>90	44-46	>50	UNDEFINED
8.75	28.71	272.58	5.48	2.01	1.05	sand to silty sand	>90	44-46	>50	UNDEFINED
9.00	29.53	232.82	5.51	2.37	1.07	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
9.25	30.35	291.28	8.10	2.78	1.09	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
9.50	31.17	230.40	7.54	3.27	1.12	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson On Site Loc:CPT-S09-04 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	196.32	7.31	3.72	1.14	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
10.00	32.81	150.10	5.13	3.42	1.16	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.8
10.25	33.63	217.38	6.51	3.00	1.18	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.50	34.45	240.48	6.85	2.85	1.20	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
10.75	35.27	209.94	3.37	1.60	1.22	sand to silty sand	80-90	42-44	>50	UNDEFINED
11.00	36.09	125.44	2.36	1.88	1.24	silty sand to sandy silt	70-80	40-42	40	UNDEFINED
11.25	36.91	177.80	5.67	3.19	1.27	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.5
11.50	37.73	262.76	8.78	3.34	1.29	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
11.75	38.55	239.04	11.09	4.64	1.31	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.00	39.37	279.32	7.41	2.65	1.33	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
12.25	40.19	288.32	8.09	2.81	1.35	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
12.50	41.01	374.80	8.97	2.39	1.37	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
12.75	41.83	387.12	9.48	2.45	1.40	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.00	42.65	299.36	5.66	1.89	1.42	sand to silty sand	>90	44-46	>50	UNDEFINED
13.25	43.47	445.26	9.16	2.06	1.44	sand to silty sand	>90	44-46	>50	UNDEFINED
13.50	44.29	147.28	10.00	6.79	1.46	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	201.52	10.10	5.01	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	276.98	7.04	2.54	1.50	silty sand to sandy silt	>90	42-44	>50	UNDEFINED
14.25	46.75	268.60	5.43	2.02	1.52	sand to silty sand	80-90	42-44	>50	UNDEFINED
14.50	47.57	86.22	1.76	2.04	1.55	silty sand to sandy silt	50-60	38-40	28	UNDEFINED
14.75	48.39	92.16	5.51	5.97	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	213.82	19.18	8.97	1.59	undefined	UNDFND	UNDFD	UDF	UNDEFINED
15.25	50.03	198.96	9.78	4.91	1.61	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson
On Site Loc:CPT-S09-05
Job No. :27381402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/19/94 11:30
Cone Used :465
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	1.06	-0.01	-0.60	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	1.38	-0.02	-1.41	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	2.84	-0.02	-0.82	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	3.86	-0.02	-0.62	0.17	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.25	4.10	3.46	-0.01	-0.35	0.21	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.50	4.92	3.22	-0.02	-0.54	0.26	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.75	5.74	10.00	0.03	0.27	0.31	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
2.00	6.56	6.94	0.03	0.43	0.35	sensitive fine grained	UNDFND	UNDFD	3	.6
2.25	7.38	6.04	0.03	0.47	0.40	sensitive fine grained	UNDFND	UNDFD	3	.5
2.50	8.20	4.20	0.02	0.36	0.45	sensitive fine grained	UNDFND	UNDFD	2	.3
2.75	9.02	4.22	0.01	0.20	0.50	sensitive fine grained	UNDFND	UNDFD	2	.3
3.00	9.84	4.80	0.01	0.24	0.54	sensitive fine grained	UNDFND	UNDFD	2	.4
3.25	10.66	4.40	-0.01	-0.13	0.58	undefined	UNDFND	UNDFD	UDF	UNDEFINED
3.50	11.48	12.00	0.00	0.04	0.60	sandy silt to clayey silt	UNDFND	UNDFD	5	1.1
3.75	12.30	5.52	-0.00	-0.04	0.62	undefined	UNDFND	UNDFD	UDF	UNDEFINED
4.00	13.12	4.16	0.00	0.10	0.64	sensitive fine grained	UNDFND	UNDFD	2	.3
4.25	13.94	17.16	0.00	0.02	0.66	silty sand to sandy silt	<40	32-34	5	UNDEFINED
4.50	14.76	10.58	0.01	0.11	0.68	sandy silt to clayey silt	UNDFND	UNDFD	4	.9
4.75	15.58	30.64	0.04	0.13	0.71	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.00	16.40	56.78	0.16	0.28	0.73	sand to silty sand	50-60	38-40	14	UNDEFINED
5.25	17.22	140.20	1.35	0.96	0.75	sand to silty sand	80-90	42-44	34	UNDEFINED
5.50	18.04	134.50	1.43	1.07	0.77	sand to silty sand	70-80	42-44	32	UNDEFINED
5.75	18.86	123.44	1.66	1.34	0.79	sand to silty sand	70-80	42-44	30	UNDEFINED
6.00	19.69	217.64	2.65	1.22	0.81	sand	>90	44-46	42	UNDEFINED
6.25	20.51	172.30	4.64	2.69	0.84	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.50	21.33	180.54	3.85	2.13	0.86	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.75	22.15	273.68	4.79	1.75	0.88	sand to silty sand	>90	44-46	>50	UNDEFINED
7.00	22.97	344.68	5.26	1.53	0.90	sand to silty sand	>90	46-48	>50	UNDEFINED
7.25	23.79	342.96	6.11	1.78	0.92	sand to silty sand	>90	46-48	>50	UNDEFINED
7.50	24.61	310.30	2.97	0.96	0.94	sand	>90	46-48	>50	UNDEFINED
7.75	25.43	332.96	2.94	0.88	0.96	sand	>90	46-48	>50	UNDEFINED
8.00	26.25	262.64	2.60	0.99	0.99	sand	>90	44-46	>50	UNDEFINED
8.25	27.07	242.02	2.36	0.98	1.01	sand	>90	44-46	46	UNDEFINED
8.50	27.89	205.38	1.82	0.89	1.03	sand	80-90	44-46	39	UNDEFINED
8.75	28.71	224.54	3.33	1.48	1.05	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.00	29.53	281.14	3.10	1.10	1.07	sand	>90	44-46	>50	UNDEFINED
9.25	30.35	374.06	3.68	0.98	1.09	sand	>90	46-48	>50	UNDEFINED
9.50	31.17	329.16	4.22	1.28	1.12	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	321.08	2.89	0.90	1.14	sand	>90	44-46	>50	UNDEFINED
10.00	32.81	315.24	2.93	0.93	1.16	sand	>90	44-46	>50	UNDEFINED
10.25	33.63	262.08	3.00	1.15	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	133.24	1.93	1.45	1.20	sand to silty sand	70-80	40-42	32	UNDEFINED
10.75	35.27	133.78	1.53	1.14	1.22	sand to silty sand	70-80	40-42	32	UNDEFINED
11.00	36.09	185.84	2.77	1.49	1.24	sand to silty sand	80-90	42-44	45	UNDEFINED
11.25	36.91	288.54	5.32	1.84	1.27	sand to silty sand	>90	44-46	>50	UNDEFINED
11.50	37.73	249.48	2.31	0.93	1.29	sand	80-90	42-44	48	UNDEFINED
11.75	38.55	214.78	2.44	1.13	1.31	sand	80-90	42-44	41	UNDEFINED
12.00	39.37	216.40	2.41	1.12	1.33	sand	80-90	42-44	41	UNDEFINED
12.25	40.19	287.30	2.77	0.96	1.35	sand	>90	44-46	>50	UNDEFINED
12.50	41.01	303.12	2.40	0.79	1.37	sand	>90	44-46	>50	UNDEFINED
12.75	41.83	199.56	1.80	0.90	1.40	sand	80-90	42-44	38	UNDEFINED
13.00	42.65	164.88	3.87	2.35	1.42	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
13.25	43.47	139.60	3.51	2.51	1.44	silty sand to sandy silt	70-80	40-42	45	UNDEFINED
13.50	44.29	214.52	4.19	1.95	1.46	sand to silty sand	80-90	42-44	>50	UNDEFINED
13.75	45.11	260.06	2.49	0.96	1.48	sand	80-90	42-44	50	UNDEFINED
14.00	45.93	96.50	2.32	2.41	1.50	silty sand to sandy silt	50-60	38-40	31	UNDEFINED
14.25	46.75	187.36	9.36	4.99	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	211.96	8.71	4.11	1.55	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.75	48.39	126.24	5.80	4.59	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	183.40	7.92	4.32	1.59	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	265.22	3.93	1.48	1.61	sand to silty sand	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson
On Site Loc:CPT-SO9-11
Job No. :McCLELLAN
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/19/94 9:25
Cone Used :465
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	2.72	0.02	0.69	0.02	sensitive fine grained	UNDFND	UNDFD	1	.2
0.50	1.64	2.44	0.03	1.36	0.07	sensitive fine grained	UNDFND	UNDFD	1	.2
0.75	2.46	3.80	0.04	1.01	0.12	sensitive fine grained	UNDFND	UNDFD	2	.3
1.00	3.28	6.66	0.17	2.51	0.17	silty clay to clay	UNDFND	UNDFD	4	.6
1.25	4.10	27.22	0.71	2.61	0.21	clayey silt to silty clay	UNDFND	UNDFD	13	2.7
1.50	4.92	37.52	0.81	2.16	0.26	sandy silt to clayey silt	UNDFND	UNDFD	14	3.7
1.75	5.74	12.48	0.44	3.57	0.31	silty clay to clay	UNDFND	UNDFD	8	1.2
2.00	6.56	20.14	0.48	2.38	0.35	clayey silt to silty clay	UNDFND	UNDFD	10	1.9
2.25	7.38	26.66	1.10	4.12	0.40	silty clay to clay	UNDFND	UNDFD	17	2.6
2.50	8.20	25.78	0.71	2.77	0.45	clayey silt to silty clay	UNDFND	UNDFD	12	2.5
2.75	9.02	7.34	0.24	3.26	0.50	clay	UNDFND	UNDFD	7	.6
3.00	9.84	4.90	0.13	2.56	0.54	clay	UNDFND	UNDFD	5	.4
3.25	10.66	4.10	0.14	3.30	0.58	clay	UNDFND	UNDFD	4	.3
3.50	11.48	6.58	0.17	2.61	0.60	silty clay to clay	UNDFND	UNDFD	4	.5
3.75	12.30	5.20	0.08	1.45	0.62	sensitive fine grained	UNDFND	UNDFD	2	.4
4.00	13.12	10.16	0.60	5.94	0.64	clay	UNDFND	UNDFD	10	.9
4.25	13.94	62.06	1.47	2.37	0.66	sandy silt to clayey silt	UNDFND	UNDFD	24	6.1
4.50	14.76	70.66	1.32	1.87	0.68	silty sand to sandy silt	60-70	40-42	23	UNDEFINED
4.75	15.58	53.78	1.08	2.00	0.71	sandy silt to clayey silt	UNDFND	UNDFD	21	5.2
5.00	16.40	104.76	1.32	1.26	0.73	sand to silty sand	70-80	42-44	25	UNDEFINED
5.25	17.22	181.20	2.52	1.39	0.75	sand to silty sand	80-90	44-46	43	UNDEFINED
5.50	18.04	233.88	3.94	1.68	0.77	sand to silty sand	>90	44-46	>50	UNDEFINED
5.75	18.86	285.16	7.97	2.79	0.79	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
6.00	19.69	223.24	10.60	4.75	0.81	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
6.25	20.51	269.74	8.40	3.11	0.84	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
6.50	21.33	349.66	9.98	2.86	0.86	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
6.75	22.15	351.42	6.85	1.95	0.88	sand to silty sand	>90	46-48	>50	UNDEFINED
7.00	22.97	309.76	11.28	3.64	0.90	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.25	23.79	234.14	4.28	1.83	0.92	sand to silty sand	>90	44-46	>50	UNDEFINED
7.50	24.61	332.58	7.43	2.23	0.94	sand to silty sand	>90	46-48	>50	UNDEFINED
7.75	25.43	270.44	5.78	2.14	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	217.32	4.58	2.11	0.99	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
8.25	27.07	253.22	8.29	3.27	1.01	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
8.50	27.89	339.64	9.54	2.81	1.03	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
8.75	28.71	257.86	10.99	4.26	1.05	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
9.00	29.53	232.28	6.71	2.89	1.07	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
9.25	30.35	244.52	6.45	2.64	1.09	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
9.50	31.17	281.64	5.45	1.94	1.12	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson On Site Loc:CPT-S09-11 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	288.94	6.74	2.33	1.14	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
10.00	32.81	190.10	4.70	2.47	1.16	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.25	33.63	197.62	4.02	2.03	1.18	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.50	34.45	169.74	5.61	3.30	1.20	sandy silt to clayey silt	UNDFND	UNDFD	>50	16.7
10.75	35.27	243.16	7.22	2.97	1.22	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
11.00	36.09	269.38	9.32	3.46	1.24	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
11.25	36.91	244.94	5.51	2.25	1.27	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
11.50	37.73	254.46	5.85	2.30	1.29	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
11.75	38.55	283.34	7.74	2.73	1.31	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
12.00	39.37	301.06	6.11	2.03	1.33	sand to silty sand	>90	44-46	>50	UNDEFINED
12.25	40.19	328.18	5.01	1.53	1.35	sand to silty sand	>90	44-46	>50	UNDEFINED
12.50	41.01	124.52	3.47	2.79	1.37	sandy silt to clayey silt	UNDFND	UNDFD	48	12.2
12.75	41.83	156.70	9.19	5.87	1.40	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.00	42.65	305.92	8.62	2.82	1.42	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.25	43.47	288.32	7.30	2.53	1.44	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
13.50	44.29	76.62	2.26	2.95	1.46	sandy silt to clayey silt	UNDFND	UNDFD	29	7.4
13.75	45.11	80.44	4.69	5.83	1.48	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	165.18	16.04	9.71	1.50	undefined	UNDFND	UNDFD	UDF	UNDEFINED
14.25	46.75	205.98	11.72	5.69	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	270.38	14.58	5.39	1.55	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al, 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson
On Site Loc:CPT-S09-12
Job No. :27381402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/19/94 10:40
Cone Used :465
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	2.30	-0.01	-0.40	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	3.78	-0.10	-2.60	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	25.38	-0.21	-0.81	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	18.76	-0.01	-0.04	0.17	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.25	4.10	5.18	-0.05	-1.00	0.21	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.50	4.92	23.36	0.46	1.97	0.26	sandy silt to clayey silt	UNDFND	UNDFD	9	2.3
1.75	5.74	31.72	0.67	2.10	0.31	sandy silt to clayey silt	UNDFND	UNDFD	12	3.1
2.00	6.56	34.20	0.48	1.39	0.35	silty sand to sandy silt	50-60	40-42	11	UNDEFINED
2.25	7.38	7.30	0.05	0.74	0.40	sensitive fine grained	UNDFND	UNDFD	3	.6
2.50	8.20	7.16	0.05	0.66	0.45	sensitive fine grained	UNDFND	UNDFD	3	.6
2.75	9.02	11.16	0.07	0.60	0.50	sandy silt to clayey silt	UNDFND	UNDFD	4	1.0
3.00	9.84	17.02	0.05	0.27	0.54	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
3.25	10.66	27.48	0.37	1.35	0.58	sandy silt to clayey silt	UNDFND	UNDFD	11	2.6
3.50	11.48	20.36	0.20	1.00	0.60	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
3.75	12.30	31.60	0.12	0.38	0.62	silty sand to sandy silt	40-50	36-38	10	UNDEFINED
4.00	13.12	30.88	0.26	0.83	0.64	silty sand to sandy silt	<40	36-38	10	UNDEFINED
4.25	13.94	17.98	0.22	1.21	0.66	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
4.50	14.76	8.42	0.07	0.84	0.68	clayey silt to silty clay	UNDFND	UNDFD	4	.7
4.75	15.58	30.96	0.02	0.05	0.71	silty sand to sandy silt	<40	36-38	10	UNDEFINED
5.00	16.40	42.08	0.12	0.29	0.73	sand to silty sand	40-50	38-40	10	UNDEFINED
5.25	17.22	44.40	0.39	0.88	0.75	silty sand to sandy silt	40-50	38-40	14	UNDEFINED
5.50	18.04	77.80	0.68	0.87	0.77	sand to silty sand	60-70	40-42	19	UNDEFINED
5.75	18.86	137.84	1.37	1.00	0.79	sand to silty sand	70-80	42-44	33	UNDEFINED
6.00	19.69	158.50	3.51	2.22	0.81	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
6.25	20.51	193.26	2.43	1.26	0.84	sand to silty sand	80-90	44-46	46	UNDEFINED
6.50	21.33	184.50	5.64	3.05	0.86	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.75	22.15	185.38	7.69	4.15	0.88	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
7.00	22.97	290.52	8.33	2.87	0.90	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.25	23.79	293.78	7.18	2.44	0.92	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
7.50	24.61	281.92	8.23	2.92	0.94	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
7.75	25.43	282.46	5.77	2.04	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	303.00	6.82	2.25	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	345.10	7.42	2.15	1.01	sand to silty sand	>90	46-48	>50	UNDEFINED
8.50	27.89	260.70	5.98	2.30	1.03	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
8.75	28.71	212.80	3.39	1.59	1.05	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.00	29.53	316.18	8.15	2.58	1.07	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
9.25	30.35	291.52	7.67	2.63	1.09	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
9.50	31.17	242.32	8.81	3.64	1.12	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgmry Watson On Site Loc:CPT-S09-12 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Ps (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	212.74	5.34	2.51	1.14	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
10.00	32.81	282.32	5.34	1.89	1.16	sand to silty sand	>90	44-46	>50	UNDEFINED
10.25	33.63	287.66	4.91	1.71	1.18	sand to silty sand	>90	44-46	>50	UNDEFINED
10.50	34.45	325.92	6.95	2.13	1.20	sand to silty sand	>90	44-46	>50	UNDEFINED
10.75	35.27	221.78	6.49	2.93	1.22	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
11.00	36.09	204.12	4.96	2.43	1.24	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
11.25	36.91	201.40	7.16	3.56	1.27	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
11.50	37.73	298.14	8.89	2.98	1.29	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
11.75	38.55	350.64	6.22	1.77	1.31	sand to silty sand	>90	44-46	>50	UNDEFINED
12.00	39.37	331.66	5.46	1.65	1.33	sand to silty sand	>90	44-46	>50	UNDEFINED
12.25	40.19	351.14	8.07	2.30	1.35	sand to silty sand	>90	44-46	>50	UNDEFINED
12.50	41.01	421.22	9.70	2.30	1.37	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
12.75	41.83	263.40	4.34	1.65	1.40	sand to silty sand	80-90	42-44	>50	UNDEFINED
13.00	42.65	280.68	3.93	1.40	1.42	sand to silty sand	>90	44-46	>50	UNDEFINED
13.25	43.47	137.18	8.53	6.21	1.44	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.50	44.29	177.04	9.96	5.63	1.46	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	335.00	7.64	2.28	1.48	sand to silty sand	>90	44-46	>50	UNDEFINED
14.00	45.93	296.94	6.65	2.24	1.50	sand to silty sand	>90	44-46	>50	UNDEFINED
14.25	46.75	103.08	2.96	2.87	1.52	sandy silt to clayey silt	UNDFND	UNDFD	39	10.0
14.50	47.57	91.64	8.77	9.57	1.55	undefined	UNDFND	UNDFD	UDF	UNDEFINED
14.75	48.39	254.00	20.29	7.99	1.57	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	204.38	15.08	7.38	1.59	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watso
On Site Loc:CPT-S10B-01
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/05/94 10:45
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	0.42	18.88	4495.62	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	4.12	2.55	61.84	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	7.56	1.14	15.06	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	10.20	0.72	7.04	0.17	clay	UNDFND	UNDFD	10	1.0
1.25	4.10	11.56	0.37	3.23	0.21	silty clay to clay	UNDFND	UNDFD	7	1.1
1.50	4.92	12.50	0.40	3.19	0.26	silty clay to clay	UNDFND	UNDFD	8	1.2
1.75	5.74	15.08	0.17	1.12	0.31	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
2.00	6.56	41.78	0.26	0.62	0.35	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
2.25	7.38	58.58	0.39	0.66	0.40	sand to silty sand	60-70	42-44	14	UNDEFINED
2.50	8.20	55.20	0.37	0.67	0.45	sand to silty sand	60-70	40-42	13	UNDEFINED
2.75	9.02	44.28	0.37	0.83	0.50	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
3.00	9.84	41.96	0.39	0.94	0.54	silty sand to sandy silt	50-60	38-40	13	UNDEFINED
3.25	10.66	32.86	0.32	0.97	0.58	silty sand to sandy silt	40-50	38-40	10	UNDEFINED
3.50	11.48	61.08	0.35	0.57	0.60	sand to silty sand	50-60	40-42	15	UNDEFINED
3.75	12.30	34.60	1.87	5.40	0.62	clay	UNDFND	UNDFD	33	3.3
4.00	13.12	6.22	0.20	3.18	0.64	clay	UNDFND	UNDFD	6	.5
4.25	13.94	25.66	0.67	2.62	0.66	clayey silt to silty clay	UNDFND	UNDFD	12	2.4
4.50	14.76	110.48	0.78	0.71	0.68	sand to silty sand	70-80	42-44	26	UNDEFINED
4.75	15.58	139.26	1.85	1.33	0.71	sand to silty sand	80-90	44-46	33	UNDEFINED
5.00	16.40	190.18	0.91	0.48	0.73	sand	80-90	44-46	36	UNDEFINED
5.25	17.22	202.62	0.80	0.39	0.75	sand	>90	44-46	39	UNDEFINED
5.50	18.04	179.72	1.60	0.89	0.77	sand	80-90	44-46	34	UNDEFINED
5.75	18.86	137.18	2.90	2.11	0.79	silty sand to sandy silt	70-80	42-44	44	UNDEFINED
6.00	19.69	160.92	1.76	1.10	0.81	sand to silty sand	80-90	44-46	39	UNDEFINED
6.25	20.51	172.96	1.42	0.82	0.84	sand	80-90	44-46	33	UNDEFINED
6.50	21.33	226.44	0.97	0.43	0.86	sand	>90	44-46	43	UNDEFINED
6.75	22.15	253.78	0.96	0.38	0.88	gravelly sand to sand	>90	44-46	41	UNDEFINED
7.00	22.97	220.30	0.84	0.38	0.90	sand	>90	44-46	42	UNDEFINED
7.25	23.79	235.14	0.88	0.37	0.92	sand	>90	44-46	45	UNDEFINED
7.50	24.61	216.96	0.91	0.42	0.94	sand	80-90	44-46	42	UNDEFINED
7.75	25.43	218.38	0.82	0.37	0.96	sand	80-90	44-46	42	UNDEFINED
8.00	26.25	229.18	0.78	0.34	0.99	sand	>90	44-46	44	UNDEFINED
8.25	27.07	269.68	0.93	0.34	1.01	gravelly sand to sand	>90	44-46	43	UNDEFINED
8.50	27.89	273.22	0.63	0.23	1.03	gravelly sand to sand	>90	44-46	44	UNDEFINED
8.75	28.71	246.36	1.06	0.43	1.05	sand	>90	44-46	47	UNDEFINED
9.00	29.53	300.88	0.69	0.23	1.07	gravelly sand to sand	>90	44-46	48	UNDEFINED
9.25	30.35	294.58	0.72	0.24	1.09	gravelly sand to sand	>90	44-46	47	UNDEFINED
9.50	31.17	142.36	1.37	0.96	1.12	sand to silty sand	70-80	42-44	34	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONME..TAL DRILLING

Operator :Montgomery Watso On Site Loc:CPT-S10B-01 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	67.30	1.81	2.69	1.14	sandy silt to clayey silt	UNDFND	UNDFD	26	6.5
10.00	32.81	130.28	1.64	1.26	1.16	sand to silty sand	70-80	40-42	31	UNDEFINED
10.25	33.63	156.38	1.88	1.20	1.18	sand to silty sand	70-80	42-44	37	UNDEFINED
10.50	34.45	217.86	1.62	0.74	1.20	sand	80-90	42-44	42	UNDEFINED
10.75	35.27	250.98	1.61	0.64	1.22	sand	>90	44-46	48	UNDEFINED
11.00	36.09	215.74	1.34	0.62	1.24	sand	80-90	42-44	41	UNDEFINED
11.25	36.91	233.58	1.25	0.53	1.27	sand	80-90	42-44	45	UNDEFINED
11.50	37.73	231.12	1.25	0.54	1.29	sand	80-90	42-44	44	UNDEFINED
11.75	38.55	300.64	1.24	0.41	1.31	gravelly sand to sand	>90	44-46	48	UNDEFINED
12.00	39.37	285.84	1.16	0.41	1.33	gravelly sand to sand	>90	44-46	46	UNDEFINED
12.25	40.19	274.16	8.47	3.09	1.35	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON
On Site Loc:CPT-S10B-2
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :7-1-94 9:25
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	100.10	1.28	1.28	0.02	sand to silty sand	>90	>48	24	UNDEFINED
0.50	1.64	361.18	5.09	1.41	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	210.74	3.10	1.47	0.12	sand to silty sand	>90	>48	>50	UNDEFINED
1.00	3.28	73.36	0.93	1.27	0.17	silty sand to sandy silt	80-90	46-48	23	UNDEFINED
1.25	4.10	58.12	0.87	1.50	0.21	silty sand to sandy silt	70-80	44-46	19	UNDEFINED
1.50	4.92	47.64	0.85	1.79	0.26	silty sand to sandy silt	60-70	42-44	15	UNDEFINED
1.75	5.74	71.24	2.68	3.77	0.31	clayey silt to silty clay	UNDFND	UNDFD	34	7.0
2.00	6.56	371.92	4.18	1.12	0.35	sand	>90	>48	>50	UNDEFINED
2.25	7.38	16.66	1.02	6.15	0.40	clay	UNDFND	UNDFD	16	1.6
2.50	8.20	21.26	0.28	1.32	0.45	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
2.75	9.02	22.22	0.34	1.52	0.50	sandy silt to clayey silt	UNDFND	UNDFD	9	2.1
3.00	9.84	28.70	0.47	1.65	0.54	sandy silt to clayey silt	UNDFND	UNDFD	11	2.8
3.25	10.66	36.92	0.49	1.34	0.58	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.50	11.48	55.50	0.88	1.58	0.60	silty sand to sandy silt	50-60	40-42	18	UNDEFINED
3.75	12.30	39.86	0.42	1.05	0.62	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
4.00	13.12	128.94	1.38	1.07	0.64	sand to silty sand	80-90	44-46	31	UNDEFINED
4.25	13.94	141.96	1.38	0.97	0.66	sand to silty sand	80-90	44-46	34	UNDEFINED
4.50	14.76	120.26	0.97	0.81	0.68	sand to silty sand	70-80	42-44	29	UNDEFINED
4.75	15.58	166.94	2.07	1.24	0.71	sand to silty sand	80-90	44-46	40	UNDEFINED
5.00	16.40	176.00	2.43	1.38	0.73	sand to silty sand	80-90	44-46	42	UNDEFINED
5.25	17.22	217.38	4.13	1.90	0.75	sand to silty sand	>90	44-46	>50	UNDEFINED
5.50	18.04	177.32	3.41	1.92	0.77	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.75	18.86	162.08	5.90	3.64	0.79	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
6.00	19.69	261.86	4.90	1.87	0.81	sand to silty sand	>90	44-46	>50	UNDEFINED
6.25	20.51	328.98	5.45	1.66	0.84	sand to silty sand	>90	46-48	>50	UNDEFINED
6.50	21.33	351.80	6.13	1.74	0.86	sand to silty sand	>90	46-48	>50	UNDEFINED
6.75	22.15	236.14	3.33	1.41	0.88	sand to silty sand	>90	44-46	>50	UNDEFINED
7.00	22.97	187.86	2.28	1.22	0.90	sand to silty sand	80-90	44-46	45	UNDEFINED
7.25	23.79	202.56	2.43	1.20	0.92	sand	80-90	44-46	39	UNDEFINED
7.50	24.61	219.44	2.52	1.15	0.94	sand	>90	44-46	42	UNDEFINED
7.75	25.43	243.56	3.30	1.36	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	209.60	3.38	1.61	0.99	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.25	27.07	159.62	3.29	2.06	1.01	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
8.50	27.89	227.24	4.72	2.08	1.03	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.75	28.71	216.04	3.04	1.41	1.05	sand to silty sand	80-90	44-46	>50	UNDEFINED
9.00	29.53	226.68	2.90	1.28	1.07	sand	80-90	44-46	43	UNDEFINED
9.25	30.35	322.86	6.05	1.87	1.09	sand to silty sand	>90	44-46	>50	UNDEFINED
9.50	31.17	157.48	3.46	2.20	1.12	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOM. WATSON On Site Loc:CPT-S10B-2 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	272.96	6.52	2.39	1.14	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
10.00	32.81	207.30	3.21	1.55	1.16	sand to silty sand	80-90	42-44	50	UNDEFINED
10.25	33.63	233.26	3.40	1.46	1.18	sand to silty sand	80-90	44-46	>50	UNDEFINED
10.50	34.45	245.74	3.14	1.28	1.20	sand	80-90	44-46	47	UNDEFINED
10.75	35.27	284.38	5.93	2.08	1.22	sand to silty sand	>90	44-46	>50	UNDEFINED
11.00	36.09	247.14	4.43	1.79	1.24	sand to silty sand	80-90	44-46	>50	UNDEFINED
11.25	36.91	289.30	4.93	1.70	1.27	sand to silty sand	>90	44-46	>50	UNDEFINED
11.50	37.73	308.52	5.05	1.64	1.29	sand to silty sand	>90	44-46	>50	UNDEFINED
11.75	38.55	328.12	6.51	1.98	1.31	sand to silty sand	>90	44-46	>50	UNDEFINED
12.00	39.37	338.36	5.67	1.68	1.33	sand to silty sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watso
On Site Loc:CPT-S10B-03
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/05/94 12:45
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	7.80	1.16	14.93	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	7.62	0.96	12.62	0.07	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.75	2.46	8.36	0.66	7.95	0.12	clay	UNDFND	UNDFD	8	.8
1.00	3.28	7.38	0.47	6.39	0.17	clay	UNDFND	UNDFD	7	.7
1.25	4.10	28.18	0.84	2.98	0.21	clayey silt to silty clay	UNDFND	UNDFD	13	2.7
1.50	4.92	119.46	0.63	0.53	0.26	sand	>90	46-48	23	UNDEFINED
1.75	5.74	192.42	0.66	0.34	0.31	sand	>90	>48	37	UNDEFINED
2.00	6.56	133.66	0.36	0.27	0.35	sand	80-90	46-48	26	UNDEFINED
2.25	7.38	106.38	0.90	0.85	0.40	sand to silty sand	80-90	44-46	25	UNDEFINED
2.50	8.20	99.22	0.57	0.57	0.45	sand to silty sand	70-80	44-46	24	UNDEFINED
2.75	9.02	91.06	0.58	0.63	0.50	sand to silty sand	70-80	42-44	22	UNDEFINED
3.00	9.84	53.92	0.59	1.09	0.54	silty sand to sandy silt	50-60	40-42	17	UNDEFINED
3.25	10.66	44.76	0.57	1.26	0.58	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
3.50	11.48	14.98	2.58	17.21	0.60	undefined	UNDFND	UNDFD	UDF	UNDEFINED
3.75	12.30	5.82	1.13	19.47	0.62	undefined	UNDFND	UNDFD	UDF	UNDEFINED
4.00	13.12	5.64	1.15	20.32	0.64	undefined	UNDFND	UNDFD	UDF	UNDEFINED
4.25	13.94	16.76	0.93	5.57	0.66	clay	UNDFND	UNDFD	16	1.5
4.50	14.76	62.76	0.72	1.15	0.68	silty sand to sandy silt	50-60	40-42	20	UNDEFINED
4.75	15.58	128.66	0.56	0.43	0.71	sand	70-80	42-44	25	UNDEFINED
5.00	16.40	128.30	0.62	0.48	0.73	sand	70-80	42-44	25	UNDEFINED
5.25	17.22	195.94	1.22	0.62	0.75	sand	>90	44-46	38	UNDEFINED
5.50	18.04	144.42	0.42	0.29	0.77	sand	80-90	42-44	28	UNDEFINED
5.75	18.86	114.42	0.61	0.53	0.79	sand	70-80	42-44	22	UNDEFINED
6.00	19.69	153.68	0.48	0.32	0.81	sand	80-90	42-44	29	UNDEFINED
6.25	20.51	161.00	1.65	1.03	0.84	sand to silty sand	80-90	42-44	39	UNDEFINED
6.50	21.33	187.52	2.79	1.49	0.86	sand to silty sand	80-90	44-46	45	UNDEFINED
6.75	22.15	197.32	1.79	0.90	0.88	sand	80-90	44-46	38	UNDEFINED
7.00	22.97	259.74	0.88	0.34	0.90	gravelly sand to sand	>90	44-46	41	UNDEFINED
7.25	23.79	240.70	0.86	0.36	0.92	sand	>90	44-46	46	UNDEFINED
7.50	24.61	295.68	1.16	0.39	0.94	gravelly sand to sand	>90	44-46	47	UNDEFINED
7.75	25.43	238.98	1.00	0.42	0.96	sand	>90	44-46	46	UNDEFINED
8.00	26.25	207.84	0.65	0.31	0.99	sand	80-90	44-46	40	UNDEFINED
8.25	27.07	207.10	0.59	0.29	1.01	sand	80-90	44-46	40	UNDEFINED
8.50	27.89	193.64	0.97	0.50	1.03	sand	80-90	42-44	37	UNDEFINED
8.75	28.71	300.86	1.13	0.37	1.05	gravelly sand to sand	>90	44-46	48	UNDEFINED
9.00	29.53	271.88	1.25	0.46	1.07	sand	>90	44-46	>50	UNDEFINED
9.25	30.35	263.88	1.25	0.48	1.09	sand	>90	44-46	>50	UNDEFINED
9.50	31.17	260.56	1.22	0.47	1.12	sand	>90	44-46	50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONME..TAL DRILLING

Operator :Montgomery Watso On Site Loc:CPT-S10B-03 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	259.60	0.90	0.35	1.14	gravelly sand to sand	>90	44-46	41	UNDEFINED
10.00	32.81	227.44	1.07	0.47	1.16	sand	80-90	42-44	44	UNDEFINED
10.25	33.63	238.12	0.86	0.36	1.18	sand	80-90	44-46	46	UNDEFINED
10.50	34.45	221.88	0.75	0.34	1.20	sand	80-90	42-44	43	UNDEFINED
10.75	35.27	195.72	0.94	0.48	1.22	sand	80-90	42-44	37	UNDEFINED
11.00	36.09	222.06	0.74	0.33	1.24	sand	80-90	42-44	43	UNDEFINED
11.25	36.91	190.46	1.19	0.63	1.27	sand	80-90	42-44	36	UNDEFINED
11.50	37.73	215.78	1.76	0.82	1.29	sand	80-90	42-44	41	UNDEFINED
11.75	38.55	229.32	1.47	0.64	1.31	sand	80-90	42-44	44	UNDEFINED
12.00	39.37	196.72	1.03	0.52	1.33	sand	80-90	42-44	38	UNDEFINED
12.25	40.19	214.86	0.95	0.44	1.35	sand	80-90	42-44	41	UNDEFINED
12.50	41.01	183.68	1.43	0.78	1.37	sand	70-80	42-44	35	UNDEFINED
12.75	41.83	115.00	1.75	1.52	1.40	sand to silty sand	60-70	40-42	28	UNDEFINED
13.00	42.65	197.08	1.92	0.97	1.42	sand	80-90	42-44	38	UNDEFINED
13.25	43.47	111.14	3.03	2.73	1.44	sandy silt to clayey silt	UNDFND	UNDFD	43	10.8
13.50	44.29	164.74	2.02	1.23	1.46	sand to silty sand	70-80	40-42	39	UNDEFINED
13.75	45.11	311.30	0.94	0.30	1.48	gravelly sand to sand	>90	44-46	50	UNDEFINED
14.00	45.93	369.62	1.91	0.52	1.50	gravelly sand to sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S10B-04
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/01/94 1:17
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	1.40	0.02	1.50	0.02	sensitive fine grained	UNDFND	UNDFD	1	.1
0.50	1.64	3.48	0.04	1.09	0.07	sensitive fine grained	UNDFND	UNDFD	2	.3
0.75	2.46	7.92	0.05	0.59	0.12	sensitive fine grained	UNDFND	UNDFD	4	.7
1.00	3.28	23.74	0.18	0.77	0.17	silty sand to sandy silt	50-60	42-44	8	UNDEFINED
1.25	4.10	34.14	0.15	0.43	0.21	silty sand to sandy silt	50-60	42-44	11	UNDEFINED
1.50	4.92	35.66	0.22	0.60	0.26	silty sand to sandy silt	50-60	42-44	11	UNDEFINED
1.75	5.74	124.36	0.84	0.67	0.31	sand	80-90	46-48	24	UNDEFINED
2.00	6.56	225.96	1.07	0.47	0.35	sand	>90	>48	43	UNDEFINED
2.25	7.38	268.66	1.53	0.57	0.40	sand	>90	>48	>50	UNDEFINED
2.50	8.20	288.96	1.36	0.47	0.45	gravelly sand to sand	>90	>48	46	UNDEFINED
2.75	9.02	253.40	1.38	0.54	0.50	sand	>90	46-48	49	UNDEFINED
3.00	9.84	188.44	1.06	0.56	0.54	sand	>90	46-48	36	UNDEFINED
3.25	10.66	137.20	0.82	0.60	0.58	sand	80-90	44-46	26	UNDEFINED
3.50	11.48	121.48	0.48	0.39	0.60	sand	70-80	44-46	23	UNDEFINED
3.75	12.30	75.88	0.41	0.54	0.62	sand to silty sand	60-70	40-42	18	UNDEFINED
4.00	13.12	48.74	0.41	0.85	0.64	silty sand to sandy silt	50-60	38-40	16	UNDEFINED
4.25	13.94	33.76	0.50	1.47	0.66	sandy silt to clayey silt	UNDFND	UNDFD	13	3.2
4.50	14.76	24.90	0.20	0.81	0.68	silty sand to sandy silt	<40	36-38	8	UNDEFINED
4.75	15.58	37.78	0.29	0.76	0.71	silty sand to sandy silt	40-50	36-38	12	UNDEFINED
5.00	16.40	76.64	0.61	0.79	0.73	sand to silty sand	60-70	40-42	18	UNDEFINED
5.25	17.22	103.52	1.22	1.18	0.75	sand to silty sand	70-80	42-44	25	UNDEFINED
5.50	18.04	206.94	2.61	1.26	0.77	sand	>90	44-46	40	UNDEFINED
5.75	18.86	192.80	2.59	1.35	0.79	sand to silty sand	80-90	44-46	46	UNDEFINED
6.00	19.69	280.98	2.47	0.88	0.81	sand	>90	46-48	>50	UNDEFINED
6.25	20.51	228.24	1.92	0.84	0.84	sand	>90	44-46	44	UNDEFINED
6.50	21.33	207.24	1.88	0.91	0.86	sand	80-90	44-46	40	UNDEFINED
6.75	22.15	194.74	5.20	2.67	0.88	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
7.00	22.97	322.62	5.84	1.81	0.90	sand to silty sand	>90	46-48	>50	UNDEFINED
7.25	23.79	367.22	5.83	1.59	0.92	sand to silty sand	>90	46-48	>50	UNDEFINED
7.50	24.61	331.32	5.45	1.64	0.94	sand to silty sand	>90	46-48	>50	UNDEFINED
7.75	25.43	340.16	2.66	0.78	0.96	sand	>90	46-48	>50	UNDEFINED
8.00	26.25	265.36	2.57	0.97	0.99	sand	>90	44-46	>50	UNDEFINED
8.25	27.07	332.84	3.73	1.12	1.01	sand	>90	46-48	>50	UNDEFINED
8.50	27.89	297.54	2.43	0.82	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	252.78	1.61	0.64	1.05	sand	>90	44-46	48	UNDEFINED
9.00	29.53	279.48	2.04	0.73	1.07	sand	>90	44-46	>50	UNDEFINED
9.25	30.35	257.70	2.90	1.13	1.09	sand	>90	44-46	49	UNDEFINED
9.50	31.17	191.04	2.49	1.30	1.12	sand to silty sand	80-90	42-44	46	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ***

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-S10B-04 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	219.30	2.82	1.29	1.14	sand	80-90	42-44	42	UNDEFINED
10.00	32.81	153.86	2.02	1.31	1.16	sand to silty sand	70-80	42-44	37	UNDEFINED
10.25	33.63	209.36	3.98	1.90	1.18	sand to silty sand	80-90	42-44	>50	UNDEFINED
10.50	34.45	235.34	3.92	1.67	1.20	sand to silty sand	80-90	42-44	>50	UNDEFINED
10.75	35.27	132.82	2.41	1.82	1.22	silty sand to sandy silt	70-80	40-42	42	UNDEFINED
11.00	36.09	99.16	2.42	2.44	1.24	silty sand to sandy silt	60-70	40-42	32	UNDEFINED
11.25	36.91	83.40	1.33	1.59	1.27	silty sand to sandy silt	50-60	38-40	27	UNDEFINED
11.50	37.73	105.16	2.58	2.46	1.29	silty sand to sandy silt	60-70	40-42	34	UNDEFINED
11.75	38.55	202.86	3.32	1.64	1.31	sand to silty sand	80-90	42-44	49	UNDEFINED
12.00	39.37	195.34	3.40	1.74	1.33	sand to silty sand	80-90	42-44	47	UNDEFINED
12.25	40.19	332.60	5.37	1.62	1.35	sand to silty sand	>90	44-46	>50	UNDEFINED
12.50	41.01	340.48	3.43	1.01	1.37	sand	>90	44-46	>50	UNDEFINED
12.75	41.83	321.18	3.11	0.97	1.40	sand	>90	44-46	>50	UNDEFINED
13.00	42.65	184.44	1.97	1.07	1.42	sand	70-80	42-44	35	UNDEFINED
13.25	43.47	218.86	1.89	0.86	1.44	sand	80-90	42-44	42	UNDEFINED
13.50	44.29	365.90	4.91	1.34	1.46	sand	>90	44-46	>50	UNDEFINED
13.75	45.11	322.66	5.80	1.80	1.48	sand to silty sand	>90	44-46	>50	UNDEFINED
14.00	45.93	217.58	2.12	0.98	1.50	sand	80-90	42-44	42	UNDEFINED
14.25	46.75	255.74	5.49	2.15	1.52	sand to silty sand	80-90	42-44	>50	UNDEFINED
14.50	47.57	227.08	6.93	3.05	1.55	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.75	48.39	162.80	6.44	3.95	1.57	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
15.00	49.21	256.42	4.14	1.61	1.59	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.25	50.03	255.70	3.16	1.24	1.61	sand	80-90	42-44	49	UNDEFINED
15.50	50.85	228.66	2.25	0.99	1.63	sand	80-90	42-44	44	UNDEFINED
15.75	51.67	195.46	5.99	3.06	1.65	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
16.00	52.49	337.16	6.88	2.04	1.68	sand to silty sand	>90	44-46	>50	UNDEFINED
16.25	53.31	365.70	6.29	1.72	1.70	sand to silty sand	>90	44-46	>50	UNDEFINED
16.50	54.13	317.58	3.17	1.00	1.72	sand	>90	42-44	>50	UNDEFINED
16.75	54.95	252.00	2.52	1.00	1.74	sand	80-90	42-44	48	UNDEFINED
17.00	55.77	45.02	1.24	2.75	1.76	sandy silt to clayey silt	UNDFND	UNDFD	17	4.1
17.25	56.59	162.42	1.55	0.95	1.78	sand	70-80	40-42	31	UNDEFINED
17.50	57.41	163.90	2.39	1.46	1.80	sand to silty sand	70-80	40-42	39	UNDEFINED
17.75	58.23	84.22	2.56	3.04	1.83	sandy silt to clayey silt	UNDFND	UNDFD	32	8.0
18.00	59.06	100.66	2.01	2.00	1.85	silty sand to sandy silt	50-60	38-40	32	UNDEFINED
18.25	59.88	201.12	3.07	1.53	1.87	sand to silty sand	70-80	40-42	48	UNDEFINED
18.50	60.70	285.48	2.25	0.79	1.89	sand	80-90	42-44	>50	UNDEFINED
18.75	61.52	206.78	2.09	1.01	1.91	sand	70-80	40-42	40	UNDEFINED
19.00	62.34	213.60	1.27	0.59	1.93	sand	70-80	40-42	41	UNDEFINED
19.25	63.16	112.18	1.37	1.23	1.96	sand to silty sand	60-70	38-40	27	UNDEFINED
19.50	63.98	288.36	2.76	0.96	1.98	sand	80-90	42-44	>50	UNDEFINED
19.75	64.80	262.60	3.88	1.48	2.00	sand to silty sand	80-90	42-44	>50	UNDEFINED
20.00	65.62	359.02	4.01	1.12	2.02	sand	>90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
20.25	66.44	448.56	5.50	1.23	2.04	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S10B-05
Job No. : 2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/05/94 09:05
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	5.00	0.08	1.64	0.02	sensitive fine grained	UNDFND	UNDFD	2	.4
0.50	1.64	4.00	0.06	1.55	0.07	sensitive fine grained	UNDFND	UNDFD	2	.3
0.75	2.46	8.00	0.04	0.45	0.12	sensitive fine grained	UNDFND	UNDFD	4	.7
1.00	3.28	9.00	-0.01	-0.07	0.17	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.25	4.10	12.20	-0.00	-0.02	0.21	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.50	4.92	13.80	0.05	0.38	0.26	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
1.75	5.74	30.20	0.15	0.51	0.31	silty sand to sandy silt	40-50	40-42	10	UNDEFINED
2.00	6.56	54.20	0.31	0.56	0.35	sand to silty sand	60-70	42-44	13	UNDEFINED
2.25	7.38	96.40	0.72	0.75	0.40	sand to silty sand	70-80	44-46	23	UNDEFINED
2.50	8.20	69.80	0.38	0.55	0.45	sand to silty sand	60-70	42-44	17	UNDEFINED
2.75	9.02	61.60	0.35	0.56	0.50	sand to silty sand	60-70	40-42	15	UNDEFINED
3.00	9.84	82.40	0.46	0.56	0.54	sand to silty sand	60-70	42-44	20	UNDEFINED
3.25	10.66	81.40	0.43	0.53	0.58	sand to silty sand	60-70	42-44	19	UNDEFINED
3.50	11.48	49.20	0.42	0.86	0.60	silty sand to sandy silt	50-60	40-42	16	UNDEFINED
3.75	12.30	18.00	0.29	1.62	0.62	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
4.00	13.12	7.20	0.10	1.42	0.64	clayey silt to silty clay	UNDFND	UNDFD	3	.6
4.25	13.94	5.00	0.10	1.92	0.66	silty clay to clay	UNDFND	UNDFD	3	.4
4.50	14.76	24.40	0.23	0.93	0.68	sandy silt to clayey silt	UNDFND	UNDFD	9	2.3
4.75	15.58	75.80	0.79	1.04	0.71	sand to silty sand	60-70	40-42	18	UNDEFINED
5.00	16.40	170.20	2.47	1.45	0.73	sand to silty sand	80-90	44-46	41	UNDEFINED
5.25	17.22	155.80	2.03	1.30	0.75	sand to silty sand	80-90	44-46	37	UNDEFINED
5.50	18.04	135.60	0.96	0.71	0.77	sand	70-80	42-44	26	UNDEFINED
5.75	18.86	217.80	2.21	1.02	0.79	sand	>90	44-46	42	UNDEFINED
6.00	19.69	301.80	2.35	0.78	0.81	sand	>90	46-48	>50	UNDEFINED
6.25	20.51	196.60	4.90	2.49	0.84	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.50	21.33	190.80	4.87	2.55	0.86	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.75	22.15	269.40	2.84	1.05	0.88	sand	>90	44-46	>50	UNDEFINED
7.00	22.97	238.40	1.32	0.55	0.90	sand	>90	44-46	46	UNDEFINED
7.25	23.79	206.40	2.04	0.99	0.92	sand	80-90	44-46	40	UNDEFINED
7.50	24.61	298.40	2.78	0.93	0.94	sand	>90	44-46	>50	UNDEFINED
7.75	25.43	292.80	2.71	0.93	0.96	sand	>90	44-46	>50	UNDEFINED
8.00	26.25	278.00	2.03	0.73	0.99	sand	>90	44-46	>50	UNDEFINED
8.25	27.07	216.60	2.47	1.14	1.01	sand	80-90	44-46	41	UNDEFINED
8.50	27.89	249.60	3.46	1.39	1.03	sand to silty sand	>90	44-46	>50	UNDEFINED
8.75	28.71	324.20	3.37	1.04	1.05	sand	>90	44-46	>50	UNDEFINED
9.00	29.53	350.20	3.81	1.09	1.07	sand	>90	46-48	>50	UNDEFINED
9.25	30.35	288.40	2.94	1.02	1.09	sand	>90	44-46	>50	UNDEFINED
9.50	31.17	227.60	2.81	1.23	1.12	sand	80-90	44-46	44	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson On Site Loc:CPT-S10B-05 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	182.40	2.84	1.56	1.14	sand to silty sand	80-90	42-44	44	UNDEFINED
10.00	32.81	215.40	3.47	1.61	1.16	sand to silty sand	80-90	42-44	>50	UNDEFINED
10.25	33.63	241.40	2.13	0.88	1.18	sand	80-90	44-46	46	UNDEFINED
10.50	34.45	244.80	2.08	0.85	1.20	sand	80-90	44-46	47	UNDEFINED
10.75	35.27	274.40	2.63	0.96	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	336.00	4.67	1.39	1.24	sand	>90	44-46	>50	UNDEFINED
11.25	36.91	272.20	4.20	1.54	1.27	sand to silty sand	>90	44-46	>50	UNDEFINED
11.50	37.73	256.20	3.71	1.45	1.29	sand to silty sand	>90	44-46	>50	UNDEFINED
11.75	38.55	283.00	2.81	0.99	1.31	sand	>90	44-46	>50	UNDEFINED
12.00	39.37	291.40	2.85	0.98	1.33	sand	>90	44-46	>50	UNDEFINED
12.25	40.19	257.80	2.25	0.87	1.35	sand	80-90	42-44	49	UNDEFINED
12.50	41.01	247.00	2.64	1.07	1.37	sand	80-90	42-44	47	UNDEFINED
12.75	41.83	361.40	2.70	0.75	1.40	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S10B-06
Job No. : 2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/01/94 03:36
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	2.80	0.10	3.57	0.02	clay	UNDFND	UNDFD	3	.2
0.50	1.64	4.00	0.08	2.00	0.07	clay	UNDFND	UNDFD	4	.3
0.75	2.46	4.80	0.02	0.38	0.12	sensitive fine grained	UNDFND	UNDFD	2	.4
1.00	3.28	8.80	0.04	0.41	0.17	sensitive fine grained	UNDFND	UNDFD	4	.8
1.25	4.10	29.20	0.06	0.20	0.21	silty sand to sandy silt	50-60	42-44	9	UNDEFINED
1.50	4.92	55.60	0.08	0.14	0.26	sand to silty sand	60-70	44-46	13	UNDEFINED
1.75	5.74	168.80	0.62	0.37	0.31	sand	>90	>48	32	UNDEFINED
2.00	6.56	299.00	1.16	0.39	0.35	gravelly sand to sand	>90	>48	48	UNDEFINED
2.25	7.38	312.80	1.19	0.38	0.40	gravelly sand to sand	>90	>48	50	UNDEFINED
2.50	8.20	259.60	1.13	0.44	0.45	sand	>90	>48	50	UNDEFINED
2.75	9.02	219.80	0.97	0.44	0.50	sand	>90	46-48	42	UNDEFINED
3.00	9.84	151.80	0.76	0.50	0.54	sand	80-90	44-46	29	UNDEFINED
3.25	10.66	97.80	0.37	0.38	0.58	sand	70-80	42-44	19	UNDEFINED
3.50	11.48	100.60	0.66	0.65	0.60	sand to silty sand	70-80	42-44	24	UNDEFINED
3.75	12.30	56.20	0.51	0.91	0.62	silty sand to sandy silt	50-60	40-42	18	UNDEFINED
4.00	13.12	12.40	0.32	2.60	0.64	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
4.25	13.94	3.20	0.03	0.81	0.66	sensitive fine grained	UNDFND	UNDFD	2	.2
4.50	14.76	15.20	0.15	1.00	0.68	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
4.75	15.58	101.20	0.86	0.85	0.71	sand to silty sand	70-80	42-44	24	UNDEFINED
5.00	16.40	217.60	3.61	1.66	0.73	sand to silty sand	>90	44-46	>50	UNDEFINED
5.25	17.22	217.20	4.04	1.86	0.75	sand to silty sand	>90	44-46	>50	UNDEFINED
5.50	18.04	198.00	2.78	1.41	0.77	sand to silty sand	80-90	44-46	47	UNDEFINED
5.75	18.86	204.40	1.85	0.91	0.79	sand	>90	44-46	39	UNDEFINED
6.00	19.69	198.60	0.99	0.50	0.81	sand	80-90	44-46	38	UNDEFINED
6.25	20.51	190.40	2.70	1.42	0.84	sand to silty sand	80-90	44-46	46	UNDEFINED
6.50	21.33	202.60	4.93	2.43	0.86	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.75	22.15	237.60	4.15	1.75	0.88	sand to silty sand	>90	44-46	>50	UNDEFINED
7.00	22.97	279.80	3.91	1.40	0.90	sand to silty sand	>90	44-46	>50	UNDEFINED
7.25	23.79	410.40	5.41	1.32	0.92	sand	>90	46-48	>50	UNDEFINED
7.50	24.61	357.20	3.37	0.94	0.94	sand	>90	46-48	>50	UNDEFINED
7.75	25.43	257.40	2.53	0.98	0.96	sand	>90	44-46	49	UNDEFINED
8.00	26.25	271.80	48.03	17.67	0.99	undefined	UNDFND	UNDFD	UDF	UNDEFINED
8.25	27.07	227.40	1.87	0.82	1.01	sand	>90	44-46	44	UNDEFINED
8.50	27.89	357.00	4.28	1.20	1.03	sand	>90	46-48	>50	UNDEFINED
8.75	28.71	293.80	3.67	1.25	1.05	sand	>90	44-46	>50	UNDEFINED
9.00	29.53	324.60	3.48	1.07	1.07	sand	>90	44-46	>50	UNDEFINED
9.25	30.35	266.00	2.80	1.05	1.09	sand	>90	44-46	>50	UNDEFINED
9.50	31.17	146.40	2.05	1.40	1.12	sand to silty sand	70-80	42-44	35	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson On Site Loc:CPT-S10B-06 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	197.40	2.60	1.32	1.14	sand to silty sand	80-90	42-44	47	UNDEFINED
10.00	32.81	236.20	2.52	1.07	1.16	sand	80-90	44-46	45	UNDEFINED
10.25	33.63	287.40	2.15	0.75	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	290.80	2.23	0.77	1.20	sand	>90	44-46	>50	UNDEFINED
10.75	35.27	273.00	1.99	0.73	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	235.80	1.86	0.79	1.24	sand	80-90	42-44	45	UNDEFINED
11.25	36.91	217.20	2.69	1.24	1.27	sand	80-90	42-44	42	UNDEFINED
11.50	37.73	241.00	2.34	0.97	1.29	sand	80-90	42-44	46	UNDEFINED
11.75	38.55	319.40	2.81	0.88	1.31	sand	>90	44-46	>50	UNDEFINED
12.00	39.37	330.60	3.38	1.02	1.33	sand	>90	44-46	>50	UNDEFINED
12.25	40.19	365.00	3.35	0.92	1.35	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S13-02
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/96 10:12
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	16.92	-0.06	-0.33	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	17.00	0.06	0.34	0.07	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
0.75	2.46	26.32	0.14	0.52	0.12	silty sand to sandy silt	50-60	44-46	8	UNDEFINED
1.00	3.28	45.24	0.26	0.57	0.17	silty sand to sandy silt	60-70	44-46	14	UNDEFINED
1.25	4.10	22.00	0.24	1.07	0.21	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
1.50	4.92	51.50	0.33	0.64	0.26	sand to silty sand	60-70	44-46	12	UNDEFINED
1.75	5.74	79.48	0.61	0.76	0.31	sand to silty sand	70-80	44-46	19	UNDEFINED
2.00	6.56	100.14	0.72	0.72	0.35	sand to silty sand	80-90	44-46	24	UNDEFINED
2.25	7.38	87.30	0.71	0.81	0.40	sand to silty sand	70-80	44-46	21	UNDEFINED
2.50	8.20	39.94	0.57	1.43	0.45	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
2.75	9.02	77.06	1.76	2.29	0.50	silty sand to sandy silt	60-70	42-44	25	UNDEFINED
3.00	9.84	61.90	0.85	1.38	0.54	silty sand to sandy silt	60-70	40-42	20	UNDEFINED
3.25	10.66	97.18	2.88	2.97	0.58	sandy silt to clayey silt	UNDFND	UNDFD	37	9.6
3.50	11.48	156.16	4.83	3.09	0.60	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.5
3.75	12.30	175.26	4.33	2.47	0.62	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
4.00	13.12	148.28	4.98	3.36	0.64	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.7
4.25	13.94	198.26	3.40	1.71	0.66	sand to silty sand	>90	44-46	47	UNDEFINED
4.50	14.76	242.52	3.39	1.40	0.68	sand to silty sand	>90	46-48	>50	UNDEFINED
4.75	15.58	193.26	3.40	1.76	0.71	sand to silty sand	>90	44-46	46	UNDEFINED
5.00	16.40	150.00	5.19	3.46	0.73	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.9
5.25	17.22	127.06	3.55	2.79	0.75	sandy silt to clayey silt	UNDFND	UNDFD	49	12.6
5.50	18.04	224.92	3.67	1.63	0.77	sand to silty sand	>90	44-46	>50	UNDEFINED
5.75	18.86	312.12	3.83	1.23	0.79	sand	>90	46-48	>50	UNDEFINED
6.00	19.69	274.72	3.59	1.31	0.81	sand	>90	46-48	>50	UNDEFINED
6.25	20.51	307.66	4.09	1.33	0.84	sand	>90	46-48	>50	UNDEFINED
6.50	21.33	254.40	3.10	1.22	0.86	sand	>90	44-46	49	UNDEFINED
6.75	22.15	224.18	2.27	1.01	0.88	sand	>90	44-46	43	UNDEFINED
7.00	22.97	283.96	2.70	0.95	0.90	sand	>90	44-46	>50	UNDEFINED
7.25	23.79	281.94	4.00	1.42	0.92	sand to silty sand	>90	44-46	>50	UNDEFINED
7.50	24.61	262.06	2.41	0.92	0.94	sand	>90	44-46	>50	UNDEFINED
7.75	25.43	176.14	2.85	1.62	0.96	sand to silty sand	80-90	42-44	42	UNDEFINED
8.00	26.25	285.12	4.36	1.53	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	322.16	4.53	1.41	1.01	sand	>90	44-46	>50	UNDEFINED
8.50	27.89	293.06	2.67	0.91	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	211.04	2.54	1.20	1.05	sand	80-90	44-46	40	UNDEFINED
9.00	29.53	205.30	2.84	1.38	1.07	sand to silty sand	80-90	42-44	49	UNDEFINED
9.25	30.35	299.12	3.08	1.03	1.09	sand	>90	44-46	>50	UNDEFINED
9.50	31.17	286.90	3.26	1.14	1.12	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	269.76	3.99	1.48	1.14	sand to silty sand	>90	44-46	>50	UNDEFINED
10.00	32.81	295.60	3.45	1.17	1.16	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watsn
On Site Loc:CPT-S13-03
Job No. :27381236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	69.30	0.35	0.50	0.02	sand to silty sand	>90	>48	17	UNDEFINED
0.50	1.64	36.50	0.43	1.19	0.07	silty sand to sandy silt	70-80	46-48	12	UNDEFINED
0.75	2.46	6.28	0.25	3.92	0.12	clay	UNDFND	UNDFD	6	.6
1.00	3.28	4.82	0.04	0.85	0.17	sensitive fine grained	UNDFND	UNDFD	2	.4
1.25	4.10	3.64	0.04	1.01	0.21	sensitive fine grained	UNDFND	UNDFD	2	.3
1.50	4.92	1.98	0.03	1.45	0.26	sensitive fine grained	UNDFND	UNDFD	1	.1
1.75	5.74	10.06	0.02	0.18	0.31	sensitive fine grained	UNDFND	UNDFD	5	.9
2.00	6.56	23.34	0.11	0.45	0.35	silty sand to sandy silt	<40	38-40	7	UNDEFINED
2.25	7.38	50.42	0.26	0.52	0.40	sand to silty sand	60-70	40-42	12	UNDEFINED
2.50	8.20	41.82	0.23	0.55	0.45	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
2.75	9.02	14.26	0.09	0.63	0.50	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
3.00	9.84	26.82	0.87	3.25	0.54	clayey silt to silty clay	UNDFND	UNDFD	13	2.6
3.25	10.66	70.20	2.48	3.54	0.58	clayey silt to silty clay	UNDFND	UNDFD	34	6.9
3.50	11.48	172.88	6.09	3.52	0.60	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
3.75	12.30	177.90	5.71	3.21	0.62	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.7
4.00	13.12	188.10	4.72	2.51	0.64	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
4.25	13.94	134.58	3.23	2.40	0.66	silty sand to sandy silt	80-90	44-46	43	UNDEFINED
4.50	14.76	158.62	3.97	2.50	0.68	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
4.75	15.58	158.14	5.09	3.22	0.71	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.7
5.00	16.40	176.52	5.15	2.92	0.73	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.25	17.22	219.88	3.43	1.56	0.75	sand to silty sand	>90	44-46	>50	UNDEFINED
5.50	18.04	238.98	4.45	1.86	0.77	sand to silty sand	>90	44-46	>50	UNDEFINED
5.75	18.86	260.56	3.27	1.25	0.79	sand	>90	46-48	50	UNDEFINED
6.00	19.69	302.08	3.59	1.19	0.81	sand	>90	46-48	>50	UNDEFINED
6.25	20.51	246.84	3.19	1.29	0.84	sand	>90	44-46	47	UNDEFINED
6.50	21.33	326.38	2.87	0.88	0.86	sand	>90	46-48	>50	UNDEFINED
6.75	22.15	343.56	2.32	0.68	0.88	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.00	22.97	392.52	4.13	1.05	0.90	sand	>90	46-48	>50	UNDEFINED
7.25	23.79	371.20	5.61	1.51	0.92	sand to silty sand	>90	46-48	>50	UNDEFINED
7.50	24.61	368.76	3.46	0.94	0.94	sand	>90	46-48	>50	UNDEFINED
7.75	25.43	399.18	3.10	0.78	0.96	gravelly sand to sand	>90	46-48	>50	UNDEFINED
8.00	26.25	309.02	3.55	1.15	0.99	sand	>90	44-46	>50	UNDEFINED
8.25	27.07	334.08	4.70	1.41	1.01	sand	>90	46-48	>50	UNDEFINED
8.50	27.89	375.40	5.46	1.45	1.03	sand	>90	46-48	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S13-04
Job No. :2738.1236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	20.60	0.66	3.20	0.02	clayey silt to silty clay	UNDFND	UNDFD	10	2.0
0.50	1.64	148.80	1.24	0.83	0.07	sand	>90	>48	29	UNDEFINED
0.75	2.46	67.80	0.38	0.56	0.12	sand to silty sand	80-90	>48	16	UNDEFINED
1.00	3.28	75.00	0.30	0.39	0.17	sand to silty sand	80-90	46-48	18	UNDEFINED
1.25	4.10	81.80	0.37	0.45	0.21	sand to silty sand	80-90	46-48	20	UNDEFINED
1.50	4.92	42.80	0.83	1.95	0.26	sandy silt to clayey silt	UNDFND	UNDFD	16	4.2
1.75	5.74	90.00	2.70	3.00	0.31	sandy silt to clayey silt	UNDFND	UNDFD	34	8.9
2.00	6.56	117.40	3.66	3.12	0.35	sandy silt to clayey silt	UNDFND	UNDFD	45	11.7
2.25	7.38	113.60	4.03	3.54	0.40	sandy silt to clayey silt	UNDFND	UNDFD	44	11.3
2.50	8.20	68.60	2.45	3.57	0.45	clayey silt to silty clay	UNDFND	UNDFD	33	6.8
2.75	9.02	47.20	1.34	2.84	0.50	sandy silt to clayey silt	UNDFND	UNDFD	18	4.6
3.00	9.84	66.80	1.72	2.58	0.54	sandy silt to clayey silt	UNDFND	UNDFD	26	6.6
3.25	10.66	57.00	1.18	2.07	0.58	sandy silt to clayey silt	UNDFND	UNDFD	22	5.6
3.50	11.48	178.00	3.69	2.08	0.60	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
3.75	12.30	220.80	3.28	1.49	0.62	sand to silty sand	>90	46-48	>50	UNDEFINED
4.00	13.12	96.00	1.90	1.98	0.64	silty sand to sandy silt	70-80	42-44	31	UNDEFINED
4.25	13.94	194.60	2.78	1.43	0.66	sand to silty sand	>90	44-46	47	UNDEFINED
4.50	14.76	250.00	3.52	1.41	0.68	sand to silty sand	>90	46-48	>50	UNDEFINED
4.75	15.58	284.80	3.67	1.29	0.71	sand	>90	46-48	>50	UNDEFINED
5.00	16.40	188.00	4.06	2.16	0.73	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.25	17.22	218.40	5.10	2.34	0.75	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
5.50	18.04	211.20	4.24	2.01	0.77	sand to silty sand	>90	44-46	>50	UNDEFINED
5.75	18.86	301.00	3.81	1.27	0.79	sand	>90	46-48	>50	UNDEFINED
6.00	19.69	337.60	3.82	1.13	0.81	sand	>90	46-48	>50	UNDEFINED
6.25	20.51	224.80	3.22	1.43	0.84	sand to silty sand	>90	44-46	>50	UNDEFINED
6.50	21.33	261.40	2.74	1.05	0.86	sand	>90	44-46	>50	UNDEFINED
6.75	22.15	248.60	2.71	1.09	0.88	sand	>90	44-46	48	UNDEFINED
7.00	22.97	240.40	2.64	1.10	0.90	sand	>90	44-46	46	UNDEFINED
7.25	23.79	190.40	3.96	2.08	0.92	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
7.50	24.61	219.60	4.47	2.03	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	190.80	3.40	1.78	0.96	sand to silty sand	80-90	44-46	46	UNDEFINED
8.00	26.25	178.40	3.84	2.15	0.99	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
8.25	27.07	181.40	2.31	1.27	1.01	sand to silty sand	80-90	42-44	43	UNDEFINED
8.50	27.89	267.20	2.94	1.10	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	310.20	3.60	1.16	1.05	sand	>90	44-46	>50	UNDEFINED
9.00	29.53	284.20	4.03	1.42	1.07	sand to silty sand	>90	44-46	>50	UNDEFINED
9.25	30.35	158.20	1.27	0.80	1.09	sand	70-80	42-44	30	UNDEFINED
9.50	31.17	280.00	3.20	1.14	1.12	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	262.80	3.15	1.20	1.14	sand	>90	44-46	>50	UNDEFINED
10.00	32.81	338.80	3.79	1.12	1.16	sand	>90	44-46	>50	UNDEFINED
10.25	33.63	386.00	3.68	0.95	1.18	sand	>90	46-48	>50	UNDEFINED
10.50	34.45	251.40	5.37	2.14	1.20	sand to silty sand	>90	44-46	>50	UNDEFINED
10.75	35.27	291.80	2.96	1.02	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	372.00	4.17	1.12	1.24	sand	>90	44-46	>50	UNDEFINED
11.25	36.91	327.60	3.27	1.00	1.27	sand	>90	44-46	>50	UNDEFINED
11.50	37.73	272.80	3.18	1.16	1.29	sand	>90	44-46	>50	UNDEFINED
11.75	38.55	298.00	1.89	0.63	1.31	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S13-05
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/14/96 12:27
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	53.54	0.27	0.50	0.02	sand to silty sand	>90	>48	13	UNDEFINED
0.50	1.64	15.62	0.42	2.69	0.07	clayey silt to silty clay	UNDFND	UNDFD	7	1.5
0.75	2.46	40.36	1.29	3.19	0.12	clayey silt to silty clay	UNDFND	UNDFD	19	4.0
1.00	3.28	109.42	2.97	2.71	0.17	sandy silt to clayey silt	UNDFND	UNDFD	42	10.9
1.25	4.10	235.98	4.93	2.09	0.21	sand to silty sand	>90	>48	>50	UNDEFINED
1.50	4.92	269.80	4.46	1.65	0.26	sand to silty sand	>90	>48	>50	UNDEFINED
1.75	5.74	91.66	0.98	1.07	0.31	sand to silty sand	80-90	44-46	22	UNDEFINED
2.00	6.56	96.84	2.30	2.37	0.35	silty sand to sandy silt	80-90	44-46	31	UNDEFINED
2.25	7.38	121.64	2.53	2.08	0.40	silty sand to sandy silt	80-90	44-46	39	UNDEFINED
2.50	8.20	188.30	4.16	2.21	0.45	silty sand to sandy silt	>90	46-48	>50	UNDEFINED
2.75	9.02	174.14	2.03	1.17	0.50	sand to silty sand	>90	46-48	42	UNDEFINED
3.00	9.84	136.38	3.06	2.24	0.54	silty sand to sandy silt	80-90	44-46	44	UNDEFINED
3.25	10.66	227.58	5.11	2.24	0.58	silty sand to sandy silt	>90	46-48	>50	UNDEFINED
3.50	11.48	268.14	3.54	1.32	0.60	sand	>90	46-48	>50	UNDEFINED
3.75	12.30	281.08	2.93	1.04	0.62	sand	>90	46-48	>50	UNDEFINED
4.00	13.12	217.34	3.27	1.50	0.64	sand to silty sand	>90	46-48	>50	UNDEFINED
4.25	13.94	146.62	3.11	2.12	0.66	silty sand to sandy silt	80-90	44-46	47	UNDEFINED
4.50	14.76	187.82	3.76	2.00	0.68	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
4.75	15.58	286.92	4.67	1.63	0.71	sand to silty sand	>90	46-48	>50	UNDEFINED
5.00	16.40	306.02	3.86	1.26	0.73	sand	>90	46-48	>50	UNDEFINED
5.25	17.22	293.90	4.64	1.58	0.75	sand to silty sand	>90	46-48	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	33.94	0.71	2.10	1.14	sandy silt to clayey silt	UNDFND	UNDFD	13	3.2
10.00	32.81	30.86	0.55	1.79	1.16	sandy silt to clayey silt	UNDFND	UNDFD	12	2.9
10.25	33.63	32.92	0.61	1.85	1.18	sandy silt to clayey silt	UNDFND	UNDFD	13	3.1
10.50	34.45	50.60	1.00	1.97	1.20	sandy silt to clayey silt	UNDFND	UNDFD	19	4.8
10.75	35.27	75.00	2.44	3.26	1.22	sandy silt to clayey silt	UNDFND	UNDFD	29	7.3
11.00	36.09	74.06	1.91	2.58	1.24	sandy silt to clayey silt	UNDFND	UNDFD	28	7.2
11.25	36.91	40.54	1.59	3.91	1.27	clayey silt to silty clay	UNDFND	UNDFD	19	3.8
11.50	37.73	78.86	3.55	4.50	1.29	clayey silt to silty clay	UNDFND	UNDFD	38	7.6
11.75	38.55	167.88	8.05	4.79	1.31	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.00	39.37	294.92	5.97	2.02	1.33	sand to silty sand	>90	44-46	>50	UNDEFINED
12.25	40.19	186.88	8.69	4.65	1.35	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.50	41.01	117.64	5.68	4.83	1.37	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
12.75	41.83	44.38	1.36	3.07	1.40	sandy silt to clayey silt	UNDFND	UNDFD	17	4.2
13.00	42.65	70.34	2.10	2.98	1.42	sandy silt to clayey silt	UNDFND	UNDFD	27	6.7
13.25	43.47	180.82	6.69	3.70	1.44	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
13.50	44.29	315.94	3.85	1.22	1.46	sand	>90	44-46	>50	UNDEFINED
13.75	45.11	317.62	4.24	1.34	1.48	sand	>90	44-46	>50	UNDEFINED
14.00	45.93	289.00	4.87	1.68	1.50	sand to silty sand	>90	42-44	>50	UNDEFINED
14.25	46.75	369.78	4.73	1.28	1.52	sand	>90	44-46	>50	UNDEFINED
14.50	47.57	389.44	3.91	1.00	1.55	sand	>90	44-46	>50	UNDEFINED
14.75	48.39	343.18	5.01	1.46	1.57	sand to silty sand	>90	44-46	>50	UNDEFINED
15.00	49.21	367.06	4.12	1.12	1.59	sand	>90	44-46	>50	UNDEFINED
15.25	50.03	387.68	4.74	1.22	1.61	sand	>90	44-46	>50	UNDEFINED
15.50	50.85	406.88	5.09	1.25	1.63	sand	>90	44-46	>50	UNDEFINED
15.75	51.67	351.56	3.40	0.97	1.65	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S-15-01
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/12/94 3:45
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	1.50	0.10	6.88	0.02	organic material	UNDFND	UNDFD	1	.1
0.50	1.64	145.00	1.48	1.02	0.07	sand to silty sand	>90	>48	35	UNDEFINED
0.75	2.46	145.90	2.82	1.93	0.12	silty sand to sandy silt	>90	>48	47	UNDEFINED
1.00	3.28	80.12	0.51	0.64	0.17	sand to silty sand	80-90	46-48	19	UNDEFINED
1.25	4.10	79.78	0.41	0.52	0.21	sand to silty sand	80-90	46-48	19	UNDEFINED
1.50	4.92	18.16	0.18	0.99	0.26	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
1.75	5.74	7.86	0.05	0.69	0.31	sensitive fine grained	UNDFND	UNDFD	4	.7
2.00	6.56	53.56	0.30	0.55	0.35	sand to silty sand	60-70	42-44	13	UNDEFINED
2.25	7.38	29.16	0.32	1.08	0.40	silty sand to sandy silt	40-50	38-40	9	UNDEFINED
2.50	8.20	5.74	0.04	0.67	0.45	sensitive fine grained	UNDFND	UNDFD	3	.5
2.75	9.02	52.76	0.39	0.73	0.50	silty sand to sandy silt	50-60	40-42	17	UNDEFINED
3.00	9.84	58.34	0.40	0.68	0.54	sand to silty sand	50-60	40-42	14	UNDEFINED
3.25	10.66	52.74	0.45	0.84	0.58	silty sand to sandy silt	50-60	40-42	17	UNDEFINED
3.50	11.48	9.44	0.21	2.18	0.60	silty clay to clay	UNDFND	UNDFD	6	.8
3.75	12.30	15.56	0.16	1.04	0.62	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
4.00	13.12	32.00	0.34	1.05	0.64	silty sand to sandy silt	40-50	36-38	10	UNDEFINED
4.25	13.94	7.18	0.22	3.01	0.66	clay	UNDFND	UNDFD	7	.6
4.50	14.76	8.56	0.13	1.56	0.68	clayey silt to silty clay	UNDFND	UNDFD	4	.7
4.75	15.58	4.68	0.09	1.99	0.71	silty clay to clay	UNDFND	UNDFD	3	.3
5.00	16.40	4.24	0.08	1.81	0.73	sensitive fine grained	UNDFND	UNDFD	2	.3
5.25	17.22	3.92	0.07	1.71	0.75	sensitive fine grained	UNDFND	UNDFD	2	.2
5.50	18.04	9.14	0.10	1.09	0.77	clayey silt to silty clay	UNDFND	UNDFD	4	.8
5.75	18.86	12.20	0.14	1.18	0.79	clayey silt to silty clay	UNDFND	UNDFD	6	1.1
6.00	19.69	16.48	0.17	1.05	0.81	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
6.25	20.51	34.36	0.30	0.87	0.84	silty sand to sandy silt	<40	36-38	11	UNDEFINED
6.50	21.33	24.28	0.28	1.17	0.86	sandy silt to clayey silt	UNDFND	UNDFD	9	2.3
6.75	22.15	47.68	0.34	0.71	0.88	silty sand to sandy silt	40-50	38-40	15	UNDEFINED
7.00	22.97	116.36	0.75	0.65	0.90	sand to silty sand	70-80	42-44	28	UNDEFINED
7.25	23.79	135.14	0.97	0.72	0.92	sand	70-80	42-44	26	UNDEFINED
7.50	24.61	118.50	0.71	0.60	0.94	sand	70-80	40-42	23	UNDEFINED
7.75	25.43	55.46	0.44	0.80	0.96	silty sand to sandy silt	50-60	38-40	18	UNDEFINED
8.00	26.25	16.80	0.21	1.27	0.99	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
8.25	27.07	16.82	0.15	0.87	1.01	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
8.50	27.89	83.16	0.87	1.04	1.03	sand to silty sand	60-70	40-42	20	UNDEFINED
8.75	28.71	173.12	1.89	1.09	1.05	sand	80-90	42-44	33	UNDEFINED
9.00	29.53	53.96	0.53	0.98	1.07	silty sand to sandy silt	40-50	36-38	17	UNDEFINED
9.25	30.35	59.80	0.95	1.58	1.09	silty sand to sandy silt	50-60	38-40	19	UNDEFINED
9.50	31.17	41.62	1.14	2.75	1.12	sandy silt to clayey silt	UNDFND	UNDFD	16	3.9

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO On Site Loc:CPT-S-15-03 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	7.14	0.10	1.37	1.14	undefined	UNDFND	UNDFD	UDF	UNDEFINED
10.00	32.81	7.00	0.09	1.35	1.16	undefined	UNDFND	UNDFD	UDF	UNDEFINED
10.25	33.63	6.58	0.08	1.20	1.18	sensitive fine grained	UNDFND	UNDFD	3	.4
10.50	34.45	6.96	0.10	1.37	1.20	undefined	UNDFND	UNDFD	UDF	UNDEFINED
10.75	35.27	19.56	0.22	1.15	1.22	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
11.00	36.09	54.24	0.86	1.58	1.24	silty sand to sandy silt	40-50	36-38	17	UNDEFINED
11.25	36.91	61.00	2.05	3.35	1.27	clayey silt to silty clay	UNDFND	UNDFD	29	5.8
11.50	37.73	84.66	3.67	4.33	1.29	clayey silt to silty clay	UNDFND	UNDFD	41	8.2
11.75	38.55	97.30	3.61	3.71	1.31	clayey silt to silty clay	UNDFND	UNDFD	47	9.5
12.00	39.37	271.76	8.85	3.25	1.33	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
12.25	40.19	345.40	10.37	3.00	1.35	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
12.50	41.01	85.30	3.71	4.35	1.37	clayey silt to silty clay	UNDFND	UNDFD	41	8.2
12.75	41.83	45.42	1.65	3.64	1.40	clayey silt to silty clay	UNDFND	UNDFD	22	4.3
13.00	42.65	25.32	0.78	3.06	1.42	clayey silt to silty clay	UNDFND	UNDFD	12	2.2
13.25	43.47	60.74	2.75	4.52	1.44	silty clay to clay	UNDFND	UNDFD	39	5.8
13.50	44.29	183.70	8.22	4.47	1.46	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.75	45.11	210.90	8.07	3.83	1.48	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
14.00	45.93	279.42	4.26	1.52	1.50	sand to silty sand	>90	42-44	>50	UNDEFINED
14.25	46.75	290.18	2.39	0.82	1.52	sand	>90	42-44	>50	UNDEFINED
14.50	47.57	372.88	2.63	0.70	1.55	gravelly sand to sand	>90	44-46	>50	UNDEFINED
14.75	48.39	455.72	5.31	1.17	1.57	sand	>90	44-46	>50	UNDEFINED
15.00	49.21	413.92	4.10	0.99	1.59	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY WATSO
On Site Loc:CPT-S-15-03
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :01/11/94 2:50
Cone Used :407
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	56.28	1.02	1.81	0.02	silty sand to sandy silt	>90	>48	18	UNDEFINED
0.50	1.64	153.64	1.11	0.72	0.07	sand	>90	>48	29	UNDEFINED
0.75	2.46	107.96	0.71	0.66	0.12	sand to silty sand	>90	>48	26	UNDEFINED
1.00	3.28	78.30	0.43	0.55	0.17	sand to silty sand	80-90	46-48	19	UNDEFINED
1.25	4.10	66.82	0.29	0.44	0.21	sand to silty sand	70-80	44-46	16	UNDEFINED
1.50	4.92	72.00	0.31	0.43	0.26	sand to silty sand	70-80	44-46	17	UNDEFINED
1.75	5.74	61.76	0.36	0.58	0.31	sand to silty sand	60-70	44-46	15	UNDEFINED
2.00	6.56	49.36	0.23	0.46	0.35	sand to silty sand	60-70	42-44	12	UNDEFINED
2.25	7.38	60.30	0.33	0.55	0.40	sand to silty sand	60-70	42-44	14	UNDEFINED
2.50	8.20	52.48	0.27	0.51	0.45	sand to silty sand	50-60	40-42	13	UNDEFINED
2.75	9.02	36.94	0.20	0.55	0.50	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.00	9.84	38.18	0.25	0.64	0.54	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.25	10.66	39.28	0.25	0.63	0.58	silty sand to sandy silt	40-50	38-40	13	UNDEFINED
3.50	11.48	52.84	0.25	0.48	0.60	sand to silty sand	50-60	40-42	13	UNDEFINED
3.75	12.30	35.18	0.30	0.85	0.62	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
4.00	13.12	18.32	0.25	1.39	0.64	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
4.25	13.94	6.14	0.07	1.15	0.66	sensitive fine grained	UNDFND	UNDFD	3	.5
4.50	14.76	7.04	0.09	1.28	0.68	sensitive fine grained	UNDFND	UNDFD	3	.6
4.75	15.58	4.80	0.09	1.89	0.71	silty clay to clay	UNDFND	UNDFD	3	.3
5.00	16.40	4.44	0.08	1.81	0.73	sensitive fine grained	UNDFND	UNDFD	2	.3
5.25	17.22	8.48	0.07	0.81	0.75	clayey silt to silty clay	UNDFND	UNDFD	4	.7
5.50	18.04	7.62	0.10	1.25	0.77	clayey silt to silty clay	UNDFND	UNDFD	4	.6
5.75	18.86	14.98	0.11	0.76	0.79	sandy silt to clayey silt	UNDFND	UNDFD	6	1.3
6.00	19.69	17.84	0.15	0.82	0.81	sandy silt to clayey silt	UNDFND	UNDFD	7	1.6
6.25	20.51	20.28	0.18	0.90	0.84	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
6.50	21.33	30.66	0.22	0.73	0.86	silty sand to sandy silt	<40	34-36	10	UNDEFINED
6.75	22.15	35.52	0.44	1.25	0.88	silty sand to sandy silt	<40	36-38	11	UNDEFINED
7.00	22.97	42.40	0.34	0.81	0.90	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.25	23.79	78.14	0.42	0.54	0.92	sand to silty sand	60-70	40-42	19	UNDEFINED
7.50	24.61	43.64	0.38	0.87	0.94	silty sand to sandy silt	40-50	36-38	14	UNDEFINED
7.75	25.43	33.14	0.29	0.89	0.96	silty sand to sandy silt	<40	34-36	11	UNDEFINED
8.00	26.25	93.60	0.46	0.49	0.99	sand to silty sand	60-70	40-42	22	UNDEFINED
8.25	27.07	130.58	0.63	0.49	1.01	sand	70-80	42-44	25	UNDEFINED
8.50	27.89	65.16	0.56	0.86	1.03	sand to silty sand	50-60	38-40	16	UNDEFINED
8.75	28.71	56.22	0.19	0.33	1.05	sand to silty sand	40-50	36-38	13	UNDEFINED
9.00	29.53	22.20	0.16	0.74	1.07	sandy silt to clayey silt	UNDFND	UNDFD	9	2.0
9.25	30.35	7.82	0.10	1.26	1.09	clayey silt to silty clay	UNDFND	UNDFD	4	.6
9.50	31.17	7.34	0.09	1.23	1.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S16-01
Job No. :2738.1236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	12.20	-0.03	-0.25	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	9.20	0.03	0.37	0.07	sensitive fine grained	UNDFND	UNDFD	4	.9
0.75	2.46	12.80	0.04	0.28	0.12	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
1.00	3.28	9.40	-0.00	-0.02	0.17	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.25	4.10	6.20	-0.03	-0.52	0.21	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.50	4.92	7.80	0.06	0.82	0.26	sensitive fine grained	UNDFND	UNDFD	4	.7
1.75	5.74	56.40	0.29	0.51	0.31	sand to silty sand	60-70	42-44	14	UNDEFINED
2.00	6.56	74.40	0.38	0.51	0.35	sand to silty sand	70-80	44-46	18	UNDEFINED
2.25	7.38	106.80	0.50	0.46	0.40	sand	80-90	44-46	20	UNDEFINED
2.50	8.20	111.40	0.53	0.48	0.45	sand	80-90	44-46	21	UNDEFINED
2.75	9.02	112.20	0.56	0.50	0.50	sand	80-90	44-46	21	UNDEFINED
3.00	9.84	92.60	0.43	0.46	0.54	sand to silty sand	70-80	42-44	22	UNDEFINED
3.25	10.66	62.20	0.28	0.44	0.58	sand to silty sand	60-70	40-42	15	UNDEFINED
3.50	11.48	35.00	0.16	0.46	0.60	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
3.75	12.30	30.40	0.22	0.74	0.62	silty sand to sandy silt	<40	36-38	10	UNDEFINED
4.00	13.12	19.80	0.09	0.44	0.64	silty sand to sandy silt	<40	34-36	6	UNDEFINED
4.25	13.94	21.40	0.10	0.45	0.66	silty sand to sandy silt	<40	34-36	7	UNDEFINED
4.50	14.76	61.60	0.46	0.74	0.68	sand to silty sand	50-60	40-42	15	UNDEFINED
4.75	15.58	201.60	3.33	1.65	0.71	sand to silty sand	>90	44-46	48	UNDEFINED
5.00	16.40	237.80	3.16	1.33	0.73	sand	>90	46-48	46	UNDEFINED
5.25	17.22	192.20	2.23	1.16	0.75	sand	80-90	44-46	37	UNDEFINED
5.50	18.04	259.00	3.82	1.48	0.77	sand to silty sand	>90	46-48	>50	UNDEFINED
5.75	18.86	254.80	2.21	0.87	0.79	sand	>90	44-46	49	UNDEFINED
6.00	19.69	186.80	1.59	0.85	0.81	sand	80-90	44-46	36	UNDEFINED
6.25	20.51	242.40	4.89	2.02	0.84	sand to silty sand	>90	44-46	>50	UNDEFINED
6.50	21.33	259.80	5.44	2.09	0.86	sand to silty sand	>90	44-46	>50	UNDEFINED
6.75	22.15	201.80	3.60	1.78	0.88	sand to silty sand	80-90	44-46	48	UNDEFINED
7.00	22.97	189.80	1.96	1.03	0.90	sand	80-90	44-46	36	UNDEFINED
7.25	23.79	244.40	2.17	0.89	0.92	sand	>90	44-46	47	UNDEFINED
7.50	24.61	229.20	3.62	1.58	0.94	sand to silty sand	>90	44-46	>50	UNDEFINED
7.75	25.43	285.80	3.66	1.28	0.96	sand	>90	44-46	>50	UNDEFINED
8.00	26.25	273.80	2.51	0.92	0.99	sand	>90	44-46	>50	UNDEFINED
8.25	27.07	255.20	1.94	0.76	1.01	sand	>90	44-46	49	UNDEFINED
8.50	27.89	204.20	3.38	1.65	1.03	sand to silty sand	80-90	44-46	49	UNDEFINED
8.75	28.71	261.20	3.86	1.48	1.05	sand to silty sand	>90	44-46	>50	UNDEFINED
9.00	29.53	218.60	2.17	0.99	1.07	sand	80-90	44-46	42	UNDEFINED
9.25	30.35	192.00	1.86	0.97	1.09	sand	80-90	42-44	37	UNDEFINED
9.50	31.17	129.20	1.94	1.50	1.12	sand to silty sand	70-80	40-42	31	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson On Site Loc:CPT-S16-01 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	185.40	2.83	1.53	1.14	sand to silty sand	80-90	42-44	44	UNDEFINED
10.00	32.81	218.80	3.18	1.45	1.16	sand to silty sand	80-90	42-44	>50	UNDEFINED
10.25	33.63	253.60	4.48	1.76	1.18	sand to silty sand	>90	44-46	>50	UNDEFINED
10.50	34.45	276.40	2.83	1.02	1.20	sand	>90	44-46	>50	UNDEFINED
10.75	35.27	215.60	2.08	0.96	1.22	sand	80-90	42-44	41	UNDEFINED
11.00	36.09	225.80	2.13	0.94	1.24	sand	80-90	42-44	43	UNDEFINED
11.25	36.91	241.20	2.74	1.13	1.27	sand	80-90	42-44	46	UNDEFINED
11.50	37.73	211.60	3.64	1.72	1.29	sand to silty sand	80-90	42-44	>50	UNDEFINED
11.75	38.55	251.00	5.31	2.12	1.31	sand to silty sand	80-90	42-44	>50	UNDEFINED
12.00	39.37	329.00	4.51	1.37	1.33	sand	>90	44-46	>50	UNDEFINED
12.25	40.19	322.40	3.82	1.19	1.35	sand	>90	44-46	>50	UNDEFINED
12.50	41.01	189.40	2.06	1.09	1.37	sand	80-90	42-44	36	UNDEFINED
12.75	41.83	230.00	2.60	1.13	1.40	sand	80-90	42-44	44	UNDEFINED
13.00	42.65	207.60	2.75	1.33	1.42	sand to silty sand	80-90	42-44	50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S16-02
Job No. :2738.1236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	5.40	-0.00	-0.00	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	2.40	0.02	1.00	0.07	sensitive fine grained	UNDFND	UNDFD	1	.2
0.75	2.46	5.20	-0.05	-0.88	0.12	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.00	3.28	5.80	-0.00	-0.03	0.17	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.25	4.10	47.00	0.32	0.68	0.21	silty sand to sandy silt	60-70	44-46	15	UNDEFINED
1.50	4.92	91.20	0.48	0.53	0.26	sand to silty sand	80-90	46-48	22	UNDEFINED
1.75	5.74	94.60	0.45	0.48	0.31	sand to silty sand	80-90	44-46	23	UNDEFINED
2.00	6.56	77.20	0.36	0.47	0.35	sand to silty sand	70-80	44-46	18	UNDEFINED
2.25	7.38	65.80	0.31	0.47	0.40	sand to silty sand	60-70	42-44	16	UNDEFINED
2.50	8.20	66.00	0.30	0.46	0.45	sand to silty sand	60-70	42-44	16	UNDEFINED
2.75	9.02	59.20	0.28	0.47	0.50	sand to silty sand	60-70	40-42	14	UNDEFINED
3.00	9.84	42.60	0.26	0.62	0.54	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
3.25	10.66	49.20	0.28	0.57	0.58	sand to silty sand	50-60	40-42	12	UNDEFINED
3.50	11.48	64.20	0.34	0.53	0.60	sand to silty sand	60-70	40-42	15	UNDEFINED
3.75	12.30	49.80	0.25	0.51	0.62	sand to silty sand	50-60	40-42	12	UNDEFINED
4.00	13.12	30.80	0.19	0.61	0.64	silty sand to sandy silt	<40	36-38	10	UNDEFINED
4.25	13.94	15.40	0.15	1.00	0.66	sandy silt to clayey silt	UNDFND	UNDFD	6	1.4
4.50	14.76	7.80	0.05	0.59	0.68	sensitive fine grained	UNDFND	UNDFD	4	.6
4.75	15.58	19.80	0.08	0.42	0.71	silty sand to sandy silt	<40	34-36	6	UNDEFINED
5.00	16.40	21.40	0.19	0.88	0.73	sandy silt to clayey silt	UNDFND	UNDFD	8	2.0
5.25	17.22	28.20	0.56	1.99	0.75	sandy silt to clayey silt	UNDFND	UNDFD	11	2.7
5.50	18.04	106.80	2.20	2.06	0.77	silty sand to sandy silt	70-80	42-44	34	UNDEFINED
5.75	18.86	202.80	3.77	1.86	0.79	sand to silty sand	>90	44-46	49	UNDEFINED
6.00	19.69	229.60	4.23	1.84	0.81	sand to silty sand	>90	44-46	>50	UNDEFINED
6.25	20.51	209.20	1.91	0.91	0.84	sand	>90	44-46	40	UNDEFINED
6.50	21.33	147.20	2.23	1.51	0.86	sand to silty sand	70-80	42-44	35	UNDEFINED
6.75	22.15	192.20	1.76	0.92	0.88	sand	80-90	44-46	37	UNDEFINED
7.00	22.97	216.20	1.88	0.87	0.90	sand	>90	44-46	41	UNDEFINED
7.25	23.79	202.80	2.76	1.36	0.92	sand to silty sand	80-90	44-46	49	UNDEFINED
7.50	24.61	168.00	2.57	1.53	0.94	sand to silty sand	80-90	42-44	40	UNDEFINED
7.75	25.43	246.20	6.10	2.48	0.96	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
8.00	26.25	329.00	5.32	1.62	0.99	sand to silty sand	>90	46-48	>50	UNDEFINED
8.25	27.07	308.20	4.26	1.38	1.01	sand	>90	44-46	>50	UNDEFINED
8.50	27.89	272.60	2.77	1.01	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	278.60	3.50	1.25	1.05	sand	>90	44-46	>50	UNDEFINED
9.00	29.53	375.60	5.35	1.42	1.07	sand	>90	46-48	>50	UNDEFINED
9.25	30.35	319.40	3.44	1.08	1.09	sand	>90	44-46	>50	UNDEFINED
9.50	31.17	239.00	2.82	1.18	1.12	sand	>90	44-46	46	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	243.60	2.51	1.03	1.14	sand	>90	44-46	47	UNDEFINED
10.00	32.81	186.80	3.36	1.80	1.16	sand to silty sand	80-90	42-44	45	UNDEFINED
10.25	33.63	160.00	2.95	1.84	1.18	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
10.50	34.45	210.80	3.82	1.81	1.20	sand to silty sand	80-90	42-44	>50	UNDEFINED
10.75	35.27	274.00	3.69	1.35	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	249.00	4.02	1.61	1.24	sand to silty sand	80-90	44-46	>50	UNDEFINED
11.25	36.91	245.00	3.17	1.29	1.27	sand	80-90	42-44	47	UNDEFINED
11.50	37.73	247.00	3.87	1.57	1.29	sand to silty sand	80-90	42-44	>50	UNDEFINED
11.75	38.55	199.00	4.39	2.21	1.31	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
12.00	39.37	202.60	3.14	1.55	1.33	sand to silty sand	80-90	42-44	49	UNDEFINED
12.25	40.19	193.00	2.61	1.35	1.35	sand to silty sand	80-90	42-44	46	UNDEFINED
12.50	41.01	183.60	2.42	1.32	1.37	sand to silty sand	70-80	42-44	44	UNDEFINED
12.75	41.83	104.60	2.38	2.28	1.40	silty sand to sandy silt	60-70	38-40	33	UNDEFINED
13.00	42.65	141.60	2.40	1.70	1.42	sand to silty sand	70-80	40-42	34	UNDEFINED
13.25	43.47	157.40	2.61	1.66	1.44	sand to silty sand	70-80	40-42	38	UNDEFINED
13.50	44.29	219.00	3.82	1.75	1.46	sand to silty sand	80-90	42-44	>50	UNDEFINED
13.75	45.11	247.00	4.30	1.74	1.48	sand to silty sand	80-90	42-44	>50	UNDEFINED
14.00	45.93	254.80	5.74	2.25	1.50	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
14.25	46.75	278.00	4.56	1.64	1.52	sand to silty sand	80-90	42-44	>50	UNDEFINED
14.50	47.57	305.60	3.91	1.28	1.55	sand	>90	44-46	>50	UNDEFINED
14.75	48.39	252.20	3.53	1.40	1.57	sand to silty sand	80-90	42-44	>50	UNDEFINED
15.00	49.21	241.40	2.84	1.18	1.59	sand	80-90	42-44	46	UNDEFINED
15.25	50.03	193.40	4.28	2.21	1.61	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
15.50	50.85	156.00	3.20	2.05	1.63	silty sand to sandy silt	70-80	40-42	50	UNDEFINED
15.75	51.67	156.60	1.95	1.24	1.65	sand to silty sand	70-80	40-42	38	UNDEFINED
16.00	52.49	133.00	2.43	1.83	1.68	silty sand to sandy silt	60-70	40-42	42	UNDEFINED
16.25	53.31	160.20	5.53	3.45	1.70	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.7
16.50	54.13	186.00	4.40	2.36	1.72	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
16.75	54.95	263.20	3.33	1.27	1.74	sand	80-90	42-44	>50	UNDEFINED
17.00	55.77	243.20	3.76	1.54	1.76	sand to silty sand	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S16-03
Job No. :2738.1236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	6.60	0.35	5.24	0.02	clay	UNDFND	UNDFD	6	.6
0.50	1.64	6.80	0.27	3.97	0.07	clay	UNDFND	UNDFD	7	.6
0.75	2.46	4.60	0.27	5.83	0.12	clay	UNDFND	UNDFD	4	.4
1.00	3.28	3.20	0.54	16.94	0.17	undefined	UNDFND	UNDFD	UDF	UNDEFINED
1.25	4.10	6.60	0.25	3.79	0.21	clay	UNDFND	UNDFD	6	.6
1.50	4.92	10.80	0.34	3.17	0.26	silty clay to clay	UNDFND	UNDFD	7	1.0
1.75	5.74	3.20	0.44	13.69	0.31	undefined	UNDFND	UNDFD	UDF	UNDEFINED
2.00	6.56	4.20	0.47	11.10	0.35	undefined	UNDFND	UNDFD	UDF	UNDEFINED
2.25	7.38	1.60	0.53	32.88	0.40	undefined	UNDFND	UNDFD	UDF	UNDEFINED
2.50	8.20	1.40	0.55	39.43	0.45	undefined	UNDFND	UNDFD	UDF	UNDEFINED
2.75	9.02	2.00	0.54	26.80	0.50	undefined	UNDFND	UNDFD	UDF	UNDEFINED
3.00	9.84	10.20	0.41	3.98	0.54	clay	UNDFND	UNDFD	10	.9
3.25	10.66	13.40	0.31	2.30	0.58	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
3.50	11.48	4.60	0.45	9.78	0.60	undefined	UNDFND	UNDFD	UDF	UNDEFINED
3.75	12.30	9.20	0.46	5.00	0.62	clay	UNDFND	UNDFD	9	.8
4.00	13.12	13.60	0.42	3.12	0.64	silty clay to clay	UNDFND	UNDFD	9	1.2
4.25	13.94	13.20	0.20	1.53	0.66	clayey silt to silty clay	UNDFND	UNDFD	6	1.2
4.50	14.76	13.00	0.43	3.34	0.68	silty clay to clay	UNDFND	UNDFD	8	1.2
4.75	15.58	41.80	1.81	4.33	0.71	silty clay to clay	UNDFND	UNDFD	27	4.0
5.00	16.40	76.40	1.87	2.44	0.73	sandy silt to clayey silt	UNDFND	UNDFD	29	7.5
5.25	17.22	108.00	3.04	2.81	0.75	sandy silt to clayey silt	UNDFND	UNDFD	41	10.7
5.50	18.04	91.60	4.22	4.61	0.77	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
5.75	18.86	91.00	3.50	3.84	0.79	clayey silt to silty clay	UNDFND	UNDFD	44	8.9
6.00	19.69	93.40	2.76	2.96	0.81	sandy silt to clayey silt	UNDFND	UNDFD	36	9.2
6.25	20.51	104.40	1.68	1.61	0.84	silty sand to sandy silt	70-80	40-42	33	UNDEFINED
6.50	21.33	176.20	3.70	2.10	0.86	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.75	22.15	124.40	1.86	1.49	0.88	sand to silty sand	70-80	42-44	30	UNDEFINED
7.00	22.97	101.80	3.38	3.32	0.90	sandy silt to clayey silt	UNDFND	UNDFD	39	10.0
7.25	23.79	83.60	2.65	3.17	0.92	sandy silt to clayey silt	UNDFND	UNDFD	32	8.2
7.50	24.61	80.40	3.74	4.65	0.94	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
7.75	25.43	83.00	3.67	4.43	0.96	clayey silt to silty clay	UNDFND	UNDFD	40	8.1
8.00	26.25	158.00	5.41	3.42	0.99	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.6
8.25	27.07	158.00	4.09	2.59	1.01	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
8.50	27.89	197.80	3.80	1.92	1.03	sand to silty sand	80-90	42-44	47	UNDEFINED
8.75	28.71	207.80	2.36	1.14	1.05	sand	80-90	44-46	40	UNDEFINED
9.00	29.53	130.60	3.12	2.39	1.07	silty sand to sandy silt	70-80	40-42	42	UNDEFINED
9.25	30.35	167.80	2.77	1.65	1.09	sand to silty sand	80-90	42-44	40	UNDEFINED
9.50	31.17	161.60	2.36	1.46	1.12	sand to silty sand	70-80	42-44	39	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson On Site Loc:CPT-S16-03 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	166.40	2.30	1.38	1.14	sand to silty sand	70-80	42-44	40	UNDEFINED
10.00	32.81	87.00	1.33	1.53	1.16	silty sand to sandy silt	60-70	38-40	28	UNDEFINED
10.25	33.63	130.40	1.69	1.30	1.18	sand to silty sand	70-80	40-42	31	UNDEFINED
10.50	34.45	130.00	1.67	1.28	1.20	sand to silty sand	70-80	40-42	31	UNDEFINED
10.75	35.27	153.80	3.09	2.01	1.22	silty sand to sandy silt	70-80	40-42	49	UNDEFINED
11.00	36.09	161.20	1.79	1.11	1.24	sand to silty sand	70-80	42-44	39	UNDEFINED
11.25	36.91	134.00	2.02	1.50	1.27	sand to silty sand	70-80	40-42	32	UNDEFINED
11.50	37.73	144.20	1.73	1.20	1.29	sand to silty sand	70-80	40-42	35	UNDEFINED
11.75	38.55	131.40	1.93	1.47	1.31	sand to silty sand	70-80	40-42	31	UNDEFINED
12.00	39.37	130.40	1.31	1.00	1.33	sand to silty sand	70-80	40-42	31	UNDEFINED
12.25	40.19	120.40	1.45	1.20	1.35	sand to silty sand	60-70	40-42	29	UNDEFINED
12.50	41.01	164.00	2.19	1.33	1.37	sand to silty sand	70-80	40-42	39	UNDEFINED
12.75	41.83	166.00	2.38	1.44	1.40	sand to silty sand	70-80	40-42	40	UNDEFINED
13.00	42.65	182.40	2.07	1.13	1.42	sand	70-80	42-44	35	UNDEFINED
13.25	43.47	147.40	1.25	0.85	1.44	sand	70-80	40-42	28	UNDEFINED
13.50	44.29	172.20	2.52	1.46	1.46	sand to silty sand	70-80	40-42	41	UNDEFINED
13.75	45.11	114.80	2.14	1.86	1.48	silty sand to sandy silt	60-70	38-40	37	UNDEFINED
14.00	45.93	177.60	3.12	1.75	1.50	sand to silty sand	70-80	40-42	43	UNDEFINED
14.25	46.75	135.80	2.09	1.54	1.52	sand to silty sand	60-70	40-42	33	UNDEFINED
14.50	47.57	149.40	2.15	1.44	1.55	sand to silty sand	70-80	40-42	36	UNDEFINED
14.75	48.39	147.40	1.54	1.04	1.57	sand to silty sand	70-80	40-42	35	UNDEFINED
15.00	49.21	181.20	2.10	1.16	1.59	sand to silty sand	70-80	40-42	43	UNDEFINED
15.25	50.03	202.20	1.02	0.50	1.61	sand	80-90	40-42	39	UNDEFINED
15.50	50.85	143.00	1.75	1.23	1.63	sand to silty sand	60-70	40-42	34	UNDEFINED
15.75	51.67	128.60	0.81	0.63	1.65	sand	60-70	38-40	25	UNDEFINED
16.00	52.49	142.60	0.95	0.67	1.68	sand	60-70	40-42	27	UNDEFINED
16.25	53.31	136.40	1.19	0.87	1.70	sand to silty sand	60-70	40-42	33	UNDEFINED
16.50	54.13	137.40	1.60	1.16	1.72	sand to silty sand	60-70	40-42	33	UNDEFINED
16.75	54.95	158.40	2.17	1.37	1.74	sand to silty sand	70-80	40-42	38	UNDEFINED
17.00	55.77	159.00	1.93	1.21	1.76	sand to silty sand	70-80	40-42	38	UNDEFINED
17.25	56.59	146.40	0.51	0.35	1.78	sand	60-70	40-42	28	UNDEFINED
17.50	57.41	109.20	0.10	0.09	1.80	sand	60-70	38-40	21	UNDEFINED
17.75	58.23	105.00	1.47	1.40	1.83	sand to silty sand	50-60	38-40	25	UNDEFINED
18.00	59.06	112.20	2.53	2.26	1.85	silty sand to sandy silt	60-70	38-40	36	UNDEFINED
18.25	59.88	159.40	4.46	2.80	1.87	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
18.50	60.70	199.00	3.18	1.60	1.89	sand to silty sand	70-80	40-42	48	UNDEFINED
18.75	61.52	212.40	5.62	2.65	1.91	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
19.00	62.34	223.00	5.24	2.35	1.93	silty sand to sandy silt	80-90	40-42	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S16-04
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/27/94 08:40
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Ps (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	19.60	0.25	1.26	0.02	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
0.50	1.64	21.40	0.17	0.81	0.07	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
0.75	2.46	17.20	0.10	0.58	0.12	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
1.00	3.28	23.20	0.04	0.16	0.17	silty sand to sandy silt	50-60	42-44	7	UNDEFINED
1.25	4.10	34.00	0.12	0.35	0.21	silty sand to sandy silt	50-60	42-44	11	UNDEFINED
1.50	4.92	68.40	0.39	0.58	0.26	sand to silty sand	70-80	44-46	16	UNDEFINED
1.75	5.74	137.40	0.65	0.47	0.31	sand	>90	46-48	26	UNDEFINED
2.00	6.56	140.40	0.84	0.60	0.35	sand	>90	46-48	27	UNDEFINED
2.25	7.38	51.60	0.79	1.54	0.40	silty sand to sandy silt	60-70	42-44	16	UNDEFINED
2.50	8.20	125.00	1.08	0.86	0.45	sand to silty sand	80-90	44-46	30	UNDEFINED
2.75	9.02	125.80	0.71	0.56	0.50	sand	80-90	44-46	24	UNDEFINED
3.00	9.84	91.20	0.65	0.71	0.54	sand to silty sand	70-80	42-44	22	UNDEFINED
3.25	10.66	26.80	0.33	1.22	0.58	sandy silt to clayey silt	UNDFND	UNDFD	10	2.6
3.50	11.48	60.60	0.25	0.41	0.60	sand to silty sand	50-60	40-42	15	UNDEFINED
3.75	12.30	50.00	0.24	0.47	0.62	sand to silty sand	50-60	40-42	12	UNDEFINED
4.00	13.12	30.80	0.31	1.01	0.64	silty sand to sandy silt	<40	36-38	10	UNDEFINED
4.25	13.94	7.00	0.10	1.43	0.66	undefined	UNDFND	UNDFD	UDF	UNDEFINED
4.50	14.76	24.00	0.12	0.51	0.68	silty sand to sandy silt	<40	34-36	8	UNDEFINED
4.75	15.58	21.80	0.08	0.37	0.71	silty sand to sandy silt	<40	34-36	7	UNDEFINED
5.00	16.40	23.20	0.12	0.52	0.73	silty sand to sandy silt	<40	34-36	7	UNDEFINED
5.25	17.22	123.60	0.50	0.40	0.75	sand	70-80	42-44	24	UNDEFINED
5.50	18.04	144.00	1.95	1.35	0.77	sand to silty sand	80-90	42-44	34	UNDEFINED
5.75	18.86	212.60	2.94	1.38	0.79	sand to silty sand	>90	44-46	>50	UNDEFINED
6.00	19.69	245.40	2.17	0.88	0.81	sand	>90	44-46	47	UNDEFINED
6.25	20.51	245.40	2.05	0.84	0.84	sand	>90	44-46	47	UNDEFINED
6.50	21.33	183.60	0.74	0.40	0.86	sand	80-90	44-46	35	UNDEFINED
6.75	22.15	220.40	1.67	0.76	0.88	sand	>90	44-46	42	UNDEFINED
7.00	22.97	195.80	3.87	1.97	0.90	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
7.25	23.79	210.80	3.45	1.64	0.92	sand to silty sand	80-90	44-46	>50	UNDEFINED
7.50	24.61	245.40	2.79	1.14	0.94	sand	>90	44-46	47	UNDEFINED
7.75	25.43	305.40	5.35	1.75	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	341.60	4.21	1.23	0.99	sand	>90	46-48	>50	UNDEFINED
8.25	27.07	352.00	5.12	1.46	1.01	sand	>90	46-48	>50	UNDEFINED
8.50	27.89	310.60	2.93	0.94	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	297.20	3.16	1.06	1.05	sand	>90	44-46	>50	UNDEFINED
9.00	29.53	237.20	2.47	1.04	1.07	sand	>90	44-46	45	UNDEFINED
9.25	30.35	160.40	2.00	1.25	1.09	sand to silty sand	70-80	42-44	38	UNDEFINED
9.50	31.17	187.80	1.44	0.76	1.12	sand	80-90	42-44	36	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson On Site Loc:CPT-S16-04 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	189.40	2.02	1.07	1.14	sand	80-90	42-44	36	UNDEFINED
10.00	32.81	195.60	2.29	1.17	1.16	sand	80-90	42-44	37	UNDEFINED
10.25	33.63	221.40	2.15	0.97	1.18	sand	80-90	42-44	42	UNDEFINED
10.50	34.45	209.60	1.85	0.88	1.20	sand	80-90	42-44	40	UNDEFINED
10.75	35.27	217.20	2.12	0.98	1.22	sand	80-90	42-44	42	UNDEFINED
11.00	36.09	249.00	4.65	1.87	1.24	sand to silty sand	80-90	44-46	>50	UNDEFINED
11.25	36.91	261.60	3.63	1.39	1.27	sand to silty sand	>90	44-46	>50	UNDEFINED
11.50	37.73	198.20	2.74	1.38	1.29	sand to silty sand	80-90	42-44	47	UNDEFINED
11.75	38.55	169.80	3.53	2.08	1.31	silty sand to sandy silt	70-80	42-44	>50	UNDEFINED
12.00	39.37	251.40	3.87	1.54	1.33	sand to silty sand	80-90	42-44	>50	UNDEFINED
12.25	40.19	212.20	2.75	1.29	1.35	sand	80-90	42-44	41	UNDEFINED
12.50	41.01	257.00	3.20	1.24	1.37	sand	80-90	42-44	49	UNDEFINED
12.75	41.83	319.80	4.88	1.53	1.40	sand to silty sand	>90	44-46	>50	UNDEFINED
13.00	42.65	331.40	4.76	1.44	1.42	sand	>90	44-46	>50	UNDEFINED
13.25	43.47	225.00	2.27	1.01	1.44	sand	80-90	42-44	43	UNDEFINED
13.50	44.29	266.20	2.52	0.95	1.46	sand	80-90	42-44	>50	UNDEFINED
13.75	45.11	155.00	1.97	1.27	1.48	sand to silty sand	70-80	40-42	37	UNDEFINED
14.00	45.93	92.20	0.81	0.88	1.50	sand to silty sand	50-60	38-40	22	UNDEFINED
14.25	46.75	177.40	1.92	1.08	1.52	sand	70-80	40-42	34	UNDEFINED
14.50	47.57	280.80	3.61	1.29	1.55	sand	>90	42-44	>50	UNDEFINED
14.75	48.39	189.20	4.08	2.16	1.57	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
15.00	49.21	125.60	4.93	3.93	1.59	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
15.25	50.03	238.80	5.84	2.45	1.61	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
15.50	50.85	252.40	5.69	2.26	1.63	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED
15.75	51.67	152.80	3.60	2.36	1.65	silty sand to sandy silt	70-80	40-42	49	UNDEFINED
16.00	52.49	94.40	2.82	2.99	1.68	sandy silt to clayey silt	UNDFND	UNDFD	36	9.1
16.25	53.31	207.60	7.69	3.70	1.70	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
16.50	54.13	384.80	8.85	2.30	1.72	sand to silty sand	>90	44-46	>50	UNDEFINED
16.75	54.95	320.80	5.00	1.56	1.74	sand to silty sand	>90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watsn
On Site Loc:CPT-S19-01
Job No. :CPT-S19-01
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	179.92	1.12	0.62	0.02	sand	>90	>48	34	UNDEFINED
0.50	1.64	265.36	2.47	0.93	0.07	sand	>90	>48	>50	UNDEFINED
0.75	2.46	266.30	3.22	1.21	0.12	sand	>90	>48	>50	UNDEFINED
1.00	3.28	202.32	1.91	0.95	0.17	sand	>90	>48	39	UNDEFINED
1.25	4.10	80.58	1.15	1.43	0.21	silty sand to sandy silt	80-90	46-48	26	UNDEFINED
1.50	4.92	28.66	0.30	1.05	0.26	silty sand to sandy silt	50-60	40-42	9	UNDEFINED
1.75	5.74	14.10	0.05	0.35	0.31	sandy silt to clayey silt	UNDFND	UNDFD	5	1.3
2.00	6.56	16.28	0.05	0.28	0.35	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
2.25	7.38	23.26	0.05	0.22	0.40	silty sand to sandy silt	<40	38-40	7	UNDEFINED
2.50	8.20	21.00	0.06	0.30	0.45	silty sand to sandy silt	<40	36-38	7	UNDEFINED
2.75	9.02	21.12	0.11	0.52	0.50	silty sand to sandy silt	<40	36-38	7	UNDEFINED
3.00	9.84	29.68	0.10	0.32	0.54	silty sand to sandy silt	40-50	38-40	9	UNDEFINED
3.25	10.66	31.66	0.55	1.74	0.58	sandy silt to clayey silt	UNDFND	UNDFD	12	3.1
3.50	11.48	20.60	0.15	0.74	0.60	sandy silt to clayey silt	UNDFND	UNDFD	8	1.9
3.75	12.30	49.96	1.45	2.91	0.62	sandy silt to clayey silt	UNDFND	UNDFD	19	4.9
4.00	13.12	87.06	1.81	2.08	0.64	silty sand to sandy silt	60-70	42-44	28	UNDEFINED
4.25	13.94	101.08	4.89	4.84	0.66	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
4.50	14.76	92.58	3.25	3.51	0.68	sandy silt to clayey silt	UNDFND	UNDFD	35	9.1
4.75	15.58	124.00	4.19	3.38	0.71	sandy silt to clayey silt	UNDFND	UNDFD	48	12.3
5.00	16.40	165.76	4.56	2.75	0.73	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.25	17.22	209.00	3.56	1.70	0.75	sand to silty sand	>90	44-46	>50	UNDEFINED
5.50	18.04	236.18	3.00	1.27	0.77	sand	>90	44-46	45	UNDEFINED
5.75	18.86	193.02	4.58	2.37	0.79	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
6.00	19.69	257.14	7.13	2.77	0.81	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
6.25	20.51	218.64	2.27	1.04	0.84	sand	>90	44-46	42	UNDEFINED
6.50	21.33	282.00	3.01	1.07	0.86	sand	>90	46-48	>50	UNDEFINED
6.75	22.15	256.58	2.84	1.11	0.88	sand	>90	44-46	49	UNDEFINED
7.00	22.97	270.42	2.95	1.09	0.90	sand	>90	44-46	>50	UNDEFINED
7.25	23.79	240.90	1.96	0.81	0.92	sand	>90	44-46	46	UNDEFINED
7.50	24.61	274.08	2.91	1.06	0.94	sand	>90	44-46	>50	UNDEFINED
7.75	25.43	307.12	3.90	1.27	0.96	sand	>90	44-46	>50	UNDEFINED
8.00	26.25	391.86	4.54	1.16	0.99	sand	>90	46-48	>50	UNDEFINED
8.25	27.07	294.40	3.52	1.19	1.01	sand	>90	44-46	>50	UNDEFINED
8.50	27.89	246.72	4.18	1.69	1.03	sand to silty sand	>90	44-46	>50	UNDEFINED
8.75	28.71	311.76	4.51	1.45	1.05	sand to silty sand	>90	44-46	>50	UNDEFINED
9.00	29.53	232.30	2.93	1.26	1.07	sand	80-90	44-46	45	UNDEFINED
9.25	30.35	237.22	2.07	0.87	1.09	sand	>90	44-46	45	UNDEFINED
9.50	31.17	222.70	2.08	0.93	1.12	sand	80-90	44-46	43	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	243.14	3.33	1.37	1.14	sand to silty sand	>90	44-46	>50	UNDEFINED
10.00	32.81	265.62	2.85	1.07	1.16	sand	>90	44-46	>50	UNDEFINED
10.25	33.63	313.02	3.36	1.07	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	265.28	2.58	0.97	1.20	sand	>90	44-46	>50	UNDEFINED
10.75	35.27	270.56	3.28	1.21	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	223.18	2.65	1.19	1.24	sand	80-90	42-44	43	UNDEFINED
11.25	36.91	295.14	3.34	1.13	1.27	sand	>90	44-46	>50	UNDEFINED
11.50	37.73	263.18	2.24	0.85	1.29	sand	>90	44-46	>50	UNDEFINED
11.75	38.55	294.28	2.86	0.97	1.31	sand	>90	44-46	>50	UNDEFINED
12.00	39.37	286.90	3.44	1.20	1.33	sand	>90	44-46	>50	UNDEFINED
12.25	40.19	155.46	2.83	1.82	1.35	silty sand to sandy silt	70-80	40-42	50	UNDEFINED
12.50	41.01	156.78	1.73	1.10	1.37	sand to silty sand	70-80	40-42	38	UNDEFINED
12.75	41.83	109.46	2.01	1.84	1.40	silty sand to sandy silt	60-70	38-40	35	UNDEFINED
13.00	42.65	142.60	2.81	1.97	1.42	silty sand to sandy silt	70-80	40-42	46	UNDEFINED
13.25	43.47	84.06	2.09	2.48	1.44	sandy silt to clayey silt	UNDFND	UNDFD	32	8.1
13.50	44.29	38.10	0.76	2.00	1.46	sandy silt to clayey silt	UNDFND	UNDFD	15	3.5
13.75	45.11	44.58	1.43	3.21	1.48	clayey silt to silty clay	UNDFND	UNDFD	21	4.2
14.00	45.93	107.52	6.33	5.88	1.50	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.25	46.75	174.16	8.67	4.98	1.52	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
14.50	47.57	211.70	6.64	3.14	1.55	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al, 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson
On Site Loc:CPT-S19-02
Job No. :2738.1236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/92 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	3.20	0.00	0.00	0.02	undefined	UNDFND	UNDFD	UDF	UNDEFINED
0.50	1.64	6.40	0.13	2.06	0.07	silty clay to clay	UNDFND	UNDFD	4	.6
0.75	2.46	140.80	1.96	1.39	0.12	sand to silty sand	>90	>48	34	UNDEFINED
1.00	3.28	216.00	3.52	1.63	0.17	sand to silty sand	>90	>48	>50	UNDEFINED
1.25	4.10	222.40	1.64	0.74	0.21	sand	>90	>48	43	UNDEFINED
1.50	4.92	247.20	1.54	0.62	0.26	sand	>90	>48	47	UNDEFINED
1.75	5.74	257.60	1.32	0.51	0.31	sand	>90	>48	49	UNDEFINED
2.00	6.56	201.40	1.66	0.82	0.35	sand	>90	>48	39	UNDEFINED
2.25	7.38	144.80	1.08	0.74	0.40	sand	>90	46-48	28	UNDEFINED
2.50	8.20	122.40	0.64	0.52	0.45	sand	80-90	44-46	23	UNDEFINED
2.75	9.02	34.60	0.50	1.46	0.50	sandy silt to clayey silt	UNDFND	UNDFD	13	3.4
3.00	9.84	9.00	0.33	3.67	0.54	clay	UNDFND	UNDFD	9	.8
3.25	10.66	3.40	0.21	6.29	0.58	clay	UNDFND	UNDFD	3	.2
3.50	11.48	114.00	2.42	2.12	0.60	silty sand to sandy silt	70-80	42-44	36	UNDEFINED
3.75	12.30	139.20	2.99	2.15	0.62	silty sand to sandy silt	80-90	44-46	44	UNDEFINED
4.00	13.12	164.60	3.42	2.08	0.64	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
4.25	13.94	151.60	4.01	2.65	0.66	silty sand to sandy silt	80-90	44-46	48	UNDEFINED
4.50	14.76	147.20	3.37	2.29	0.68	silty sand to sandy silt	80-90	44-46	47	UNDEFINED
4.75	15.58	181.20	2.49	1.38	0.71	sand to silty sand	80-90	44-46	43	UNDEFINED
5.00	16.40	157.60	2.43	1.54	0.73	sand to silty sand	80-90	44-46	38	UNDEFINED
5.25	17.22	162.40	4.05	2.49	0.75	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.50	18.04	240.60	4.88	2.03	0.77	sand to silty sand	>90	44-46	>50	UNDEFINED
5.75	18.86	293.80	4.34	1.48	0.79	sand to silty sand	>90	46-48	>50	UNDEFINED
6.00	19.69	225.60	1.87	0.83	0.81	sand	>90	44-46	43	UNDEFINED
6.25	20.51	231.80	1.74	0.75	0.84	sand	>90	44-46	44	UNDEFINED
6.50	21.33	282.20	2.18	0.77	0.86	sand	>90	46-48	>50	UNDEFINED
6.75	22.15	299.20	3.43	1.15	0.88	sand	>90	46-48	>50	UNDEFINED
7.00	22.97	278.60	2.10	0.76	0.90	sand	>90	44-46	>50	UNDEFINED
7.25	23.79	248.80	2.53	1.02	0.92	sand	>90	44-46	48	UNDEFINED
7.50	24.61	204.40	3.25	1.59	0.94	sand to silty sand	80-90	44-46	49	UNDEFINED
7.75	25.43	260.00	3.15	1.21	0.96	sand	>90	44-46	50	UNDEFINED
8.00	26.25	290.00	3.28	1.13	0.99	sand	>90	44-46	>50	UNDEFINED
8.25	27.07	279.40	2.54	0.91	1.01	sand	>90	44-46	>50	UNDEFINED
8.50	27.89	264.60	3.03	1.15	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	310.80	2.65	0.85	1.05	sand	>90	44-46	>50	UNDEFINED
9.00	29.53	221.40	2.34	1.06	1.07	sand	80-90	44-46	42	UNDEFINED
9.25	30.35	224.00	2.20	0.98	1.09	sand	80-90	44-46	43	UNDEFINED
9.50	31.17	217.00	1.45	0.67	1.12	sand	80-90	42-44	42	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MontgomeryWatson On Site Loc:CPT-S19-02 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	231.00	1.58	0.68	1.14	sand	80-90	44-46	44	UNDEFINED
10.00	32.81	256.20	3.17	1.24	1.16	sand	>90	44-46	49	UNDEFINED
10.25	33.63	271.60	3.49	1.29	1.18	sand	>90	44-46	>50	UNDEFINED
10.50	34.45	301.60	3.62	1.20	1.20	sand	>90	44-46	>50	UNDEFINED
10.75	35.27	265.80	2.29	0.86	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	219.20	2.13	0.97	1.24	sand	80-90	42-44	42	UNDEFINED
11.25	36.91	163.20	2.19	1.34	1.27	sand to silty sand	70-80	42-44	39	UNDEFINED
11.50	37.73	213.40	2.77	1.30	1.29	sand	80-90	42-44	41	UNDEFINED
11.75	38.55	140.00	2.02	1.44	1.31	sand to silty sand	70-80	40-42	34	UNDEFINED
12.00	39.37	126.00	3.12	2.47	1.33	silty sand to sandy silt	60-70	40-42	40	UNDEFINED
12.25	40.19	67.00	1.26	1.88	1.35	silty sand to sandy silt	50-60	36-38	21	UNDEFINED
12.50	41.01	90.20	3.91	4.33	1.37	clayey silt to silty clay	UNDFND	UNDFD	43	8.7
12.75	41.83	201.20	5.72	2.84	1.40	silty sand to sandy silt	80-90	42-44	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :Montgomery Watsn
On Site Loc:CPT-S19-03
Job No. :27381236
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :07/07/94 08:52
Cone Used :462
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	151.80	1.55	1.02	0.02	sand to silty sand	>90	>48	36	UNDEFINED
0.50	1.64	165.30	1.46	0.88	0.07	sand	>90	>48	32	UNDEFINED
0.75	2.46	100.90	0.75	0.74	0.12	sand to silty sand	>90	>48	24	UNDEFINED
1.00	3.28	96.14	0.72	0.75	0.17	sand to silty sand	>90	>48	23	UNDEFINED
1.25	4.10	77.70	0.46	0.59	0.21	sand to silty sand	80-90	46-48	19	UNDEFINED
1.50	4.92	47.32	0.38	0.81	0.26	silty sand to sandy silt	60-70	42-44	15	UNDEFINED
1.75	5.74	28.86	0.31	1.07	0.31	silty sand to sandy silt	40-50	40-42	9	UNDEFINED
2.00	6.56	41.72	0.33	0.78	0.35	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
2.25	7.38	17.54	0.16	0.94	0.40	sandy silt to clayey silt	UNDFND	UNDFD	7	1.7
2.50	8.20	2.86	0.04	1.56	0.45	sensitive fine grained	UNDFND	UNDFD	1	.2
2.75	9.02	31.90	0.33	1.03	0.50	silty sand to sandy silt	40-50	38-40	10	UNDEFINED
3.00	9.84	31.30	0.39	1.25	0.54	sandy silt to clayey silt	UNDFND	UNDFD	12	3.0
3.25	10.66	2.56	0.11	4.20	0.58	clay	UNDFND	UNDFD	2	.1
3.50	11.48	92.30	1.68	1.82	0.60	silty sand to sandy silt	70-80	42-44	29	UNDEFINED
3.75	12.30	121.88	2.64	2.16	0.62	silty sand to sandy silt	70-80	42-44	39	UNDEFINED
4.00	13.12	124.82	3.61	2.89	0.64	sandy silt to clayey silt	UNDFND	UNDFD	48	12.4
4.25	13.94	147.12	2.89	1.96	0.66	silty sand to sandy silt	80-90	44-46	47	UNDEFINED
4.50	14.76	144.88	3.28	2.26	0.68	silty sand to sandy silt	80-90	44-46	46	UNDEFINED
4.75	15.58	150.74	2.88	1.91	0.71	silty sand to sandy silt	80-90	44-46	48	UNDEFINED
5.00	16.40	145.36	1.95	1.34	0.73	sand to silty sand	80-90	44-46	35	UNDEFINED
5.25	17.22	148.68	1.80	1.21	0.75	sand to silty sand	80-90	44-46	36	UNDEFINED
5.50	18.04	140.88	3.48	2.47	0.77	silty sand to sandy silt	80-90	42-44	45	UNDEFINED
5.75	18.86	200.06	3.28	1.64	0.79	sand to silty sand	80-90	44-46	48	UNDEFINED
6.00	19.69	247.78	2.34	0.94	0.81	sand	>90	44-46	47	UNDEFINED
6.25	20.51	272.66	2.53	0.93	0.84	sand	>90	46-48	>50	UNDEFINED
6.50	21.33	264.86	2.26	0.85	0.86	sand	>90	44-46	>50	UNDEFINED
6.75	22.15	270.98	3.11	1.15	0.88	sand	>90	44-46	>50	UNDEFINED
7.00	22.97	258.58	2.37	0.92	0.90	sand	>90	44-46	50	UNDEFINED
7.25	23.79	278.72	3.03	1.09	0.92	sand	>90	44-46	>50	UNDEFINED
7.50	24.61	233.92	5.51	2.36	0.94	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
7.75	25.43	219.48	2.96	1.35	0.96	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.00	26.25	196.68	1.85	0.94	0.99	sand	80-90	44-46	38	UNDEFINED
8.25	27.07	215.50	2.96	1.37	1.01	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.50	27.89	286.28	3.32	1.16	1.03	sand	>90	44-46	>50	UNDEFINED
8.75	28.71	310.38	3.01	0.97	1.05	sand	>90	44-46	>50	UNDEFINED
9.00	29.53	275.64	3.31	1.20	1.07	sand	>90	44-46	>50	UNDEFINED
9.25	30.35	117.74	1.44	1.22	1.09	sand to silty sand	70-80	40-42	28	UNDEFINED
9.50	31.17	107.58	1.64	1.52	1.12	sand to silty sand	60-70	40-42	26	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONME..TAL DRILLING

Operator :Montgomery Watsn On Site Loc:CPT-S19-03 Page No. 2

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	68.92	1.82	2.64	1.14	sandy silt to clayey silt	UNDFND	UNDFD	26	6.7
10.00	32.81	144.02	3.36	2.33	1.16	silty sand to sandy silt	70-80	40-42	46	UNDEFINED
10.25	33.63	173.58	2.66	1.53	1.18	sand to silty sand	80-90	42-44	42	UNDEFINED
10.50	34.45	253.40	3.85	1.52	1.20	sand to silty sand	>90	44-46	>50	UNDEFINED
10.75	35.27	307.20	3.86	1.26	1.22	sand	>90	44-46	>50	UNDEFINED
11.00	36.09	357.26	4.91	1.37	1.24	sand	>90	44-46	>50	UNDEFINED
11.25	36.91	335.80	2.35	0.70	1.27	sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S19-04A
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/05/94 08:46
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	7.54	0.04	0.51	0.02	sensitive fine grained	UNDFND	UNDFD	4	.7
0.50	1.64	5.62	0.00	0.04	0.07	sensitive fine grained	UNDFND	UNDFD	3	.5
0.75	2.46	3.18	0.03	0.81	0.12	sensitive fine grained	UNDFND	UNDFD	2	.3
1.00	3.28	9.32	0.07	0.79	0.17	clayey silt to silty clay	UNDFND	UNDFD	4	.9
1.25	4.10	133.60	1.00	0.75	0.21	sand	>90	>48	26	UNDEFINED
1.50	4.92	155.52	1.13	0.73	0.26	sand	>90	>48	30	UNDEFINED
1.75	5.74	96.38	0.43	0.44	0.31	sand to silty sand	80-90	44-46	23	UNDEFINED
2.00	6.56	81.12	0.38	0.47	0.35	sand to silty sand	70-80	44-46	19	UNDEFINED
2.25	7.38	89.74	0.44	0.49	0.40	sand to silty sand	70-80	44-46	21	UNDEFINED
2.50	8.20	33.32	0.29	0.87	0.45	silty sand to sandy silt	40-50	38-40	11	UNDEFINED
2.75	9.02	13.46	0.16	1.21	0.50	sandy silt to clayey silt	UNDFND	UNDFD	5	1.2
3.00	9.84	31.86	0.51	1.59	0.54	sandy silt to clayey silt	UNDFND	UNDFD	12	3.1
3.25	10.66	100.12	1.00	1.00	0.58	sand to silty sand	70-80	42-44	24	UNDEFINED
3.50	11.48	67.68	0.50	0.73	0.60	sand to silty sand	60-70	40-42	16	UNDEFINED
3.75	12.30	104.44	2.62	2.51	0.62	silty sand to sandy silt	70-80	42-44	33	UNDEFINED
4.00	13.12	184.00	5.08	2.76	0.64	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
4.25	13.94	267.46	5.18	1.94	0.66	sand to silty sand	>90	46-48	>50	UNDEFINED
4.50	14.76	202.58	5.80	2.86	0.68	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
4.75	15.58	203.34	4.89	2.41	0.71	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
5.00	16.40	214.94	3.66	1.70	0.73	sand to silty sand	>90	44-46	>50	UNDEFINED
5.25	17.22	206.48	4.19	2.03	0.75	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
5.50	18.04	213.22	5.26	2.46	0.77	silty sand to sandy silt	>90	44-46	>50	UNDEFINED
5.75	18.86	214.84	3.88	1.81	0.79	sand to silty sand	>90	44-46	>50	UNDEFINED
6.00	19.69	242.36	3.81	1.57	0.81	sand to silty sand	>90	44-46	>50	UNDEFINED
6.25	20.51	224.98	2.30	1.02	0.84	sand	>90	44-46	43	UNDEFINED
6.50	21.33	240.56	3.36	1.40	0.86	sand to silty sand	>90	44-46	>50	UNDEFINED
6.75	22.15	233.22	3.26	1.40	0.88	sand to silty sand	>90	44-46	>50	UNDEFINED
7.00	22.97	260.76	3.61	1.39	0.90	sand to silty sand	>90	44-46	>50	UNDEFINED
7.25	23.79	247.38	4.73	1.91	0.92	sand to silty sand	>90	44-46	>50	UNDEFINED
7.50	24.61	306.76	4.99	1.63	0.94	sand to silty sand	>90	46-48	>50	UNDEFINED
7.75	25.43	253.90	3.49	1.37	0.96	sand to silty sand	>90	44-46	>50	UNDEFINED
8.00	26.25	224.54	3.75	1.67	0.99	sand to silty sand	>90	44-46	>50	UNDEFINED
8.25	27.07	258.02	3.16	1.23	1.01	sand	>90	44-46	49	UNDEFINED
8.50	27.89	226.32	4.40	1.94	1.03	sand to silty sand	80-90	44-46	>50	UNDEFINED
8.75	28.71	204.24	3.05	1.49	1.05	sand to silty sand	80-90	42-44	49	UNDEFINED
9.00	29.53	203.10	2.73	1.35	1.07	sand to silty sand	80-90	42-44	49	UNDEFINED
9.25	30.35	170.86	2.00	1.17	1.09	sand to silty sand	80-90	42-44	41	UNDEFINED
9.50	31.17	201.60	2.52	1.25	1.12	sand	80-90	42-44	39	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

E TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY On Site Loc:CPT-S19-04A Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
9.75	31.99	268.60	4.61	1.71	1.14	sand to silty sand	>90	44-46	>50	UNDEFINED
10.00	32.81	303.78	4.97	1.64	1.16	sand to silty sand	>90	44-46	>50	UNDEFINED
10.25	33.63	275.14	4.11	1.50	1.18	sand to silty sand	>90	44-46	>50	UNDEFINED
10.50	34.45	309.02	4.43	1.44	1.20	sand to silty sand	>90	44-46	>50	UNDEFINED
10.75	35.27	332.40	5.07	1.53	1.22	sand to silty sand	>90	44-46	>50	UNDEFINED
11.00	36.09	290.64	4.04	1.39	1.24	sand	>90	44-46	>50	UNDEFINED
11.25	36.91	137.74	2.40	1.74	1.27	silty sand to sandy silt	70-80	40-42	44	UNDEFINED
11.50	37.73	133.66	3.35	2.51	1.29	silty sand to sandy silt	70-80	40-42	43	UNDEFINED
11.75	38.55	186.48	3.54	1.90	1.31	sand to silty sand	80-90	42-44	45	UNDEFINED
12.00	39.37	156.98	5.26	3.35	1.33	sandy silt to clayey silt	UNDFND	UNDFD	>50	15.4
12.25	40.19	166.44	3.44	2.07	1.35	silty sand to sandy silt	70-80	40-42	>50	UNDEFINED
12.50	41.01	89.46	2.64	2.96	1.37	sandy silt to clayey silt	UNDFND	UNDFD	34	8.7
12.75	41.83	65.98	1.57	2.39	1.40	sandy silt to clayey silt	UNDFND	UNDFD	25	6.3
13.00	42.65	178.42	8.09	4.53	1.42	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.25	43.47	221.26	10.45	4.72	1.44	very stiff fine grained (*)	UNDFND	UNDFD	>50	UNDEFINED
13.50	44.29	200.66	7.60	3.79	1.46	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

TONTO ENVIRONMENTAL DRILLING

Operator :MONTGOMERY
On Site Loc:CPT-S19-05
Job No. :2738.1402
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :08/05/94 10:33
Cone Used :492
Water table (meters) : 3

DEPTH (meters)	DEPTH (feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	2.22	0.01	0.38	0.02	sensitive fine grained	UNDFND	UNDFD	1	.2
0.50	1.64	2.08	0.01	0.53	0.07	sensitive fine grained	UNDFND	UNDFD	1	.2
0.75	2.46	3.06	0.00	0.03	0.12	sensitive fine grained	UNDFND	UNDFD	1	.2
1.00	3.28	3.70	0.01	0.39	0.17	sensitive fine grained	UNDFND	UNDFD	2	.3
1.25	4.10	4.12	0.04	1.04	0.21	sensitive fine grained	UNDFND	UNDFD	2	.3
1.50	4.92	15.40	0.13	0.84	0.26	sandy silt to clayey silt	UNDFND	UNDFD	6	1.5
1.75	5.74	16.42	0.27	1.66	0.31	sandy silt to clayey silt	UNDFND	UNDFD	6	1.6
2.00	6.56	58.02	0.41	0.71	0.35	sand to silty sand	60-70	42-44	14	UNDEFINED
2.25	7.38	62.48	0.48	0.77	0.40	sand to silty sand	60-70	42-44	15	UNDEFINED
2.50	8.20	41.66	0.32	0.77	0.45	silty sand to sandy silt	50-60	40-42	13	UNDEFINED
2.75	9.02	21.68	0.41	1.90	0.50	sandy silt to clayey silt	UNDFND	UNDFD	8	2.1
3.00	9.84	63.88	0.55	0.87	0.54	sand to silty sand	60-70	40-42	15	UNDEFINED
3.25	10.66	43.92	0.76	1.72	0.58	silty sand to sandy silt	50-60	38-40	14	UNDEFINED
3.50	11.48	140.22	3.17	2.26	0.60	silty sand to sandy silt	80-90	44-46	45	UNDEFINED
3.75	12.30	142.56	5.63	3.95	0.62	sand to clayey sand (*)	UNDFND	UNDFD	>50	UNDEFINED
4.00	13.12	148.40	4.45	3.00	0.64	sandy silt to clayey silt	UNDFND	UNDFD	>50	14.7
4.25	13.94	130.22	4.92	3.78	0.66	sandy silt to clayey silt	UNDFND	UNDFD	50	12.9
4.50	14.76	182.90	4.38	2.39	0.68	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
4.75	15.58	216.78	3.71	1.71	0.71	sand to silty sand	>90	44-46	>50	UNDEFINED
5.00	16.40	179.12	4.16	2.32	0.73	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.25	17.22	183.74	4.52	2.46	0.75	silty sand to sandy silt	80-90	44-46	>50	UNDEFINED
5.50	18.04	174.82	5.34	3.06	0.77	sandy silt to clayey silt	UNDFND	UNDFD	>50	17.3
5.75	18.86	284.72	7.35	2.58	0.79	silty sand to sandy silt	>90	46-48	>50	UNDEFINED
6.00	19.69	328.32	6.51	1.98	0.81	sand to silty sand	>90	46-48	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 10

(*) overconsolidated or cemented

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****