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AS-BUILT REPORT

Buckeye Site 1 Drain
Maricopa County, Arizona

Submitted to:

United States Department of Agriculture
Soil Conservation Service - State Office
Room 3008
Federal Building
Phoenix, AZ 85025

Submitted by:

*ERTEC, Inc., Consulting Engineers and Geologists
P.O. Box 14570; Suite 601
3116 W. Thomas Road
Phoenix, AZ 85063

ERTEC Project No. 80-200

SCS Contract No. 53-8A02-0-00113

March 29, 1981

* See following page for explanation

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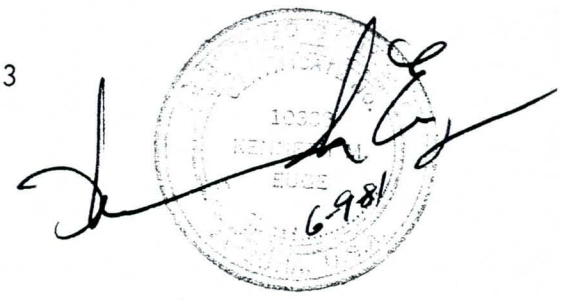


* See following page for explanation

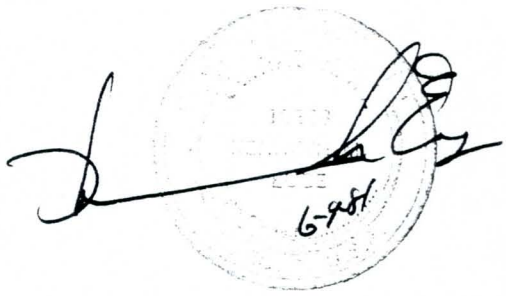
Architect-Engineer Services on the Buckeye Site 1 Drain project were provided by Fugro, Inc., under contract to the Soil Conservation Service. Prior to submittal of this report, Fugro, Inc., on March 26, 1981, changed it's corporate name to ERTEC, Inc.

March 29, 1981

Ertec

AS-BUILT REPORT

BUCKEYE NO. 1 FLOOD RETARDING STRUCTURE



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1. Average Gradation Results
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1.0 INTRODUCTION

1.1 General

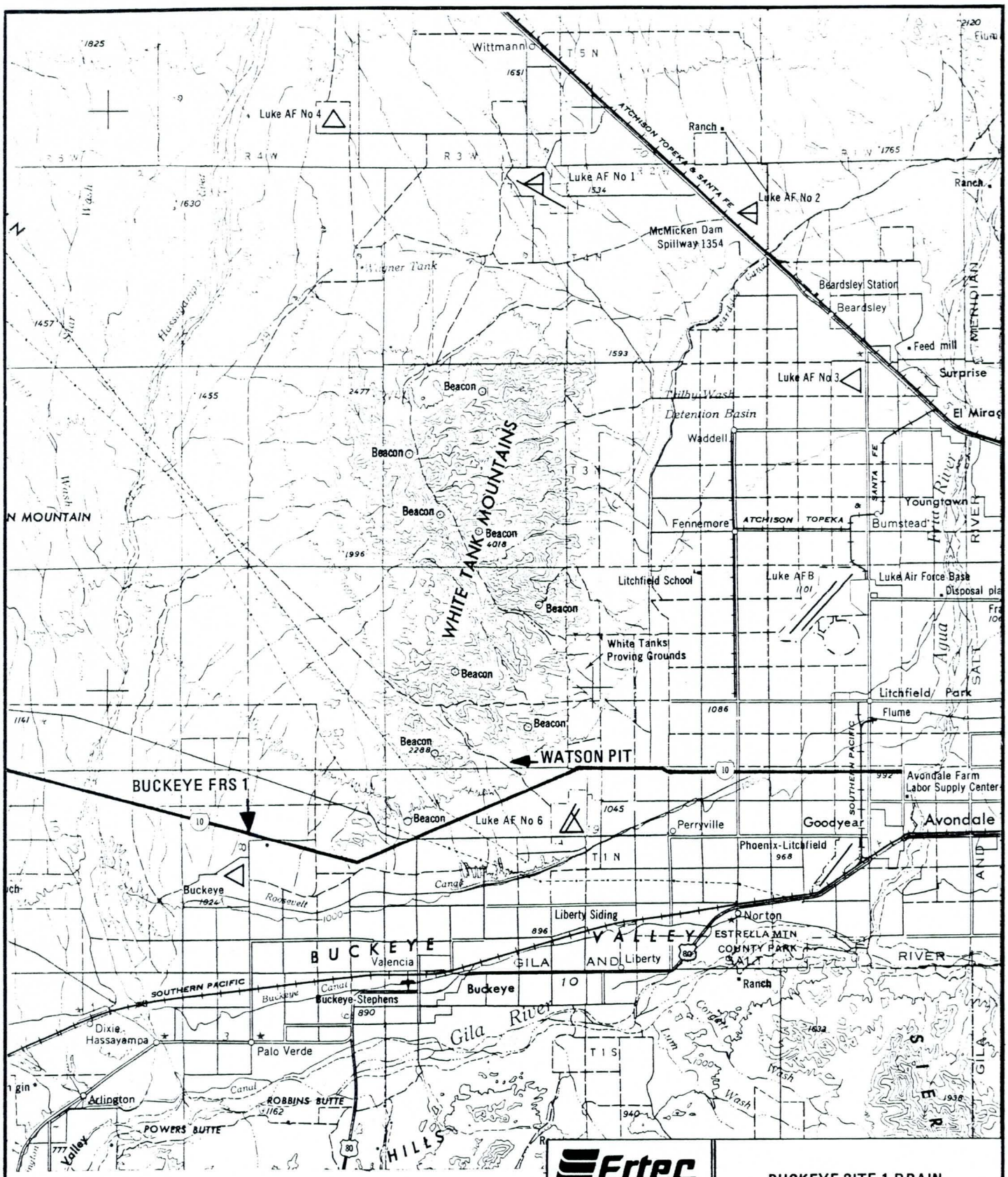
This as-built report presents the results of the geologic inspection, gradation testing, moisture testing, plasticity testing, contract administration and related activities performed during the construction of the Buckeye No. 1 Flood Retarding Structure (FRS) drain. The FRS is located approximately 10.5 miles north of Buckeye, Arizona within the Buckeye Watershed and trends parallel to and 200 feet north of Interstate I-10 (refer to Figure 1).

Construction was performed by Tierra West Contracting, Inc. under Soil Conservation Service (SCS) contract no. 50-8A02-00119. Inspection and testing services were provided by ERTEC, Inc. (formerly Fugro), Phoenix, Arizona with Mr. Kenneth M. Euge, R.G. acting as Project Engineer under SCS Architect-Engineer contract no. 53-8A02-0-00113.

Buckeye No. 1 FRS is 37,440 feet long, 14 feet wide at the crest and ranges from approximate 30 to 200 feet wide at the base. The elevation along the crest is 1089.5 feet (MSL) $\pm$ 0.1 feet and the structure ranges in height from 3 to 43 feet above the natural ground surface. The structure is asymmetric in profile with a 3 to 1 and 2 to 1 (horizontal to vertical) slope on the upstream and downstream sides, respectively.

Construction was performed to install 23,600 linear feet of interceptor drain along the FRS centerline. The centerline drain was 2.5 feet wide; it ranged from 4.4 to 19.5 feet (commonly 17 feet) deep and extended from station 565 + 00 to 801 + 00. Drain outlets were installed at various intervals along the downstream side of the structure (refer to plates 1 - 5).

A detailed inspection and logging of the interceptor trench was performed during construction activities. Soil moisture testing and limited collection of soil samples for classification were also carried out during construction activities. The inspections were performed during construction to verify the extent and degree of cracks and to ensure that the centerline drain intercepted the cracks. Determination of the cause of cracking was beyond the scope of this contract.



SCALE: 1:250,000

0 5 10
miles

Reference: Base map obtained from USGS topographic sheet Phoenix, Arizona, 2 degree series.

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BUCKEYE SITE 1 DRAIN

LOCATION MAP
Figure 1

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113

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1.2 Scope of A/E Services

The service performed by ERTEC, Inc. included activities designed to assure that the cracks were located and the cut-off trench intercepted the cracks as well as operations necessary to document and inspect the quality of construction. As defined in the Architect-Engineer contract, the items of work included:

- o Mobilization
- o Construction contract award assistance
- o Preconstruction preparation
- o Location, tracing and logging of cracks on the downstream face of the centerline trench
- o Surveys necessary to ensure that the construction met design criteria, and to document the material quantities
- o Inspection of the materials, workmanship and safety procedures utilized by the construction contractor
- o Administration of the construction contract

2.0 CONSTRUCTION ACTIVITIES

2.1 General

The 130-day construction performance time commenced on August 22, 1980. Mobilization began on August 22, 1980; actual construction started on September 8, 1980, and construction terminated on December 31, 1980.

Prior to the excavation of the centerline drain, the construction activities included: mobilization of the contractor's equipment, access road grading, and removal of vegetation and loose material from the dike crest and drainfill stockpile areas. Survey location of 100 feet stations was also performed before construction activities.

Equipment utilized by the construction contractor included the following:

- o Trencher - Parson 355
- o Crane - Bay City 65 ton
- o Pettibone 36 Multikrane
- o Side dump front end loader - Caterpillar 966C
- o Front end loader - Caterpillar 950
- o Grader - Caterpillar C12G
- o Excavator - Caterpillar C230
- o Excavator - Caterpillar C235
- o Grader - John Deere JD-570-A

- Water truck - Ford 8000, 4000 gallon capacity
- Bulldozer - Caterpillar D-8k
- Tractor - Caterpillar D-6
- and other equipment used for short duration

2.2 Centerline Trench Excavation

Excavation of the centerline drain was initiated at Station 565 + 00 and continued westward to it's termination at Station 801 + 00. The trench width was 2.5 feet and the depth ranged from 4.4 feet at Station 565 + 00 to a maximum depth of 19.5 feet at Station 709 + 50. Between Stations 565 + 00 and 650 + 00, the excavation floor sloped 0.0016 and deepened from 4.4 to 17.2 feet. From Station 650 + 00 to 801 + 00, the slope was 0.001 and the fall alternated from west to east with outlet drains located at intervals of 1000 feet, or at closer intervals determined by the Engineer (refer to plates 1 - 5).

The trenching task was accomplished using a Parson 355 trencher which provided vertical excavation walls with very little smearing of exposed embankment soils. Typically, 400 feet of trench was excavated daily.

Due to the configuration of the trencher's bucket teeth, approximately 3 inches of loose spoil was generated, which was removed by hand labor prior to backfilling. A mobile shoring box pulled by the trencher permitted laborers to remove excess spoil from the excavation. Spoil produced during trenching was spread uniformly on the structure's upstream slope.

The trench walls were very competent and no major cave-ins occurred. Minor spalling occurred where longitudinal cracks paralleled and daylighted in the trench face. Sloughing was also experienced where exploratory test trenches and backhoe pits were encountered.

2.3 Drainfill

The engineered drainfill was obtained from a borrow pit located two miles north of Interstate I-10 adjacent to Watson Road (refer to Figure 1). The material consisted primarily of alluvial sand and gravels derived from granitic and metamorphic bedrock. A crusher was used to obtain the desired gradation.

The drainfill was placed in two to three feet thick lifts using a 65 ton, Bay City 64U

crane along with a caterpillar 966C side dump front end loader. Bottom dump two and three cubic yard concrete buckets with various length tremmies were used to limit freefall of material to less than 5 feet, and prevent segregation. Four to eight thousand gallons of water were applied to the drainfill daily during the first 70% of the project to minimize segregation and for dust control. Commonly 300 - 400 feet of trench was backfilled with engineered drainfill daily.

2.4 Outlet Drains

Twenty-nine scheduled outlets and thirty-two auxiliary outlets were installed into the south side (downstream face) of the FRS. Scheduled outlets were located at 500 feet intervals between Station 565 + 00 and 650 + 00. From Station 650 + 00 to 800 + 00, scheduled outlets were located at 1000 feet intervals. Auxiliary outlets were generally constructed where cracks were located within three feet of the excavation floor or where open cracks 3/8" or wider, were encountered deeper than three feet from the top of the dike (refer to plates 1 - 7).

Auxiliary outlet drains were designed to remove wide open or deep cracks which would render the drainfill ineffective against piping. These outlets were spaced a minimum of 50 feet apart to ensure the integrity of the structure except at Station 592 + 10, 592 + 55, and 593 + 00 where a series of serious cracks necessitated a slightly closer spacing.

Scheduled outlets at stations 600 + 00, 620 + 00 and 700 + 00 were actually constructed at stations 599 + 61, 619 + 57 and 700 + 19 respectively. These field changes were made to intercept deep cracks. Trench bottom grades were adjusted to accomodate these outlets. An outlet at 592 + 55 was designed to intercept a group of deep cracks which were closely spaced.

The auxiliary outlet at station 695 + 39, was constructed to remove a wide, open crack. Outlets at stations 578 + 64, 707 + 95, and 710 + 53, intercepted cracks which were deep and open. The remainder of the auxiliary outlets intercepted deep cracks.

Prior to filling the centerline trench with drainfill, the contractor places 4' x 8' sheets of plywood on the downstream trench face where auxiliary outlets intersected the centerline trench to prevent wasting of drainfill during excavation of the drain outlet. This technique was partially successful. After backfilling the centerline trench, a C230 or C235 Caterpilla excavator performed the excavation of the outlet trench.

A two-feet thick lift of coarse aggregate material (refer to Appendix E) was installed one foot above each outlet excavation floor (refer to plate 7 for drain outlet design). Coarse aggregate was obtained from the Western Sand and Rock Borrow Pit located at Van Buren Street and the Agua Fria River crossing. In the outlets, the majority of the drainfill and coarse aggregate was placed using a Pettibone 36 Multikrane with a one cubic yard concrete bucket and tremmie, and a Caterpillar C950 front end loader. Near the completion of the project, the Bay City Crane and 966C front end loader were used to fill outlets.

2.5 Grading and Spoil Shaping

Grading consisted of all necessary activities required to grade, shape and smooth the top of the dike and road surfaces at Palo Verde and Johnson Roads to their original elevation and profile. These activities were performed as specified on the construction drawings.

Grading was primarily accomplished using a John Deere JD-570A grader, a Caterpillar C-12G grader and a Caterpillar D-8k bulldozer. Excess drainfill and embankment fill was used to reconstruct the required four-inch crown. Although no compaction was required, the crown was wheel-rolled.

Spoil shaping consisted of activities necessary to dispose of, level and shape spoil generated during excavation processes. All surplus excavation material was disposed of on-site, at locations specified on the construction drawings. Initially, a grader was used to push spoil from the top of the dike down the upstream face. Then a grader and bulldozer completed several horizontal passes, dragging a very large chain over the spoil to level it. A bulldozer leveled spoil removed from the drain outlet excavations to an average thickness of 0.5 feet at locations specified on the construction plans. Hand labor was also required to smooth spoil adjacent to drain outlets.

Several hundred feet of the upstream fence near the east end of the dike was removed to permit spoil leveling. The fence was later replaced.

2.6 Pavement Replacement

After trenching across Johnson and Palo Verde Roads, drainfill was installed to within one foot of the pavement surface. A temporary cold patch was placed on the roads. Later when excavation of the centerline trench was completed, a pavement saw and Case 680 backhoe were used to widen the pavement cuts in accordance with the specifications and remove the cold patch and excess drainfill material.

The concrete cappings were constructed and the pavement was replaced in accordance with the specifications except for a change in the size of the welded wire fabric. The construction plans specified that 6 x 6, W6 x W6 wire mesh was required as concrete reinforcement, because this size was unavailable in limited quantities, 4 x 4, W4 x W4 wire mesh was substituted. This change was approved in contract modification #5.

Four thousand-pound test concrete instead of the 3000 lb. test concrete required in the specifications was used. Two three-day test cylinders of the concrete were broken yielding results in excess of Maricopa County Minimum Requirements. This enabled the concrete to be covered with the ABC after 5½ days of curing.

3.0 GEOLOGIC INSPECTION

3.1 General

A detailed geologic inspection of the downstream face of the centerline drain was performed during construction activities in order to: 1) ensure that all cracks were successfully intercepted by the cut-off trench; 2) provide detailed records of the cracks; 3) provide general information about the embankment soil materials.

3.2 Crack Investigation

Continuous inspection and tracing of cracks on the downstream trench face was performed using the guidelines provided by the report of the SCS Crack Study Team (1977). The trench face was thoroughly cleaned and all cracks were probed and traced to their termination. All pertinent information regarding the cracks such as the type, length, width, probe depth, and general soil classification was recorded on field log sheets (refer to Appendix A). The approximate location and depth of individual cracks is shown on the as-graded plans (Plates 1 - 5).

The average density of cracks is eleven cracks per one-hundred linear feet of embankment. This average included many hairline cracks less than 2.0 feet in length, measured from the top of the embankment. The maximum crack density was present between Stations 690 + 00 and 691 + 00 where 39 cracks were encountered.

The greatest depth of cracking was 19.0 feet between Stations 710 + 57.5 and 710 + 53.5, where a transverse crack was present. Between Stations 687 + 00 and 718 + 00, twenty cracks, 16.0 feet or deeper were present. The widest feature encountered was a 0.8 feet wide pipe present within a transverse crack at Station 695 + ~~37~~ 39. Several features were probed in excess of 1.5 feet. The maximum probe depth was 2.7 feet, which was recorded at a transverse crack at Station 711 + 32.

Transverse cracks were the most frequent features encountered. These cracks were most commonly hairline with localized tensional spreading and erosional widening at the top.

Frequently crack in-filling and apparent "self-healing" had occurred. The transverse cracks were generally irregular, however, planar surfaces were encountered.

Longitudinal cracks were more common on the upstream face, closer to the actual center of the dike. These cracks often appeared to be more serious features becausing spreading occured when confinement was removed during excavation, which increased the crack width slightly. Well developed root systems were present within many of the cracks and the roots were especially distinct in the longitudinal cracks. A hairline to .005 feet wide longitudinal crack was present on the centerline trench floor between stations 688 + 32 and 688 + 53. The crack was probed to a depth of 0.4 feet below the trench floor. This feature began and terminated on the trench floor. Minor spalling (up to one cubic yard of wall material) occurred locally along the longitudinal cracks. Generally, trench sections with frequent longitudinal cracks had relatively few transverse and oblique cracks.

Oblique cracks were those probed at angles between 30 and 60 degrees to the trench face. Frequently, these cracks would originate near the surface as transverse or longitudinal cracks, then trend oblique prior to termination. These cracks were similar in morphology to transverse cracks. Pipes were relatively uncommon, but when present, usually occurred at the near surface of transverse or oblique cracks. The widest pipe was 0.8 feet wide, however, most of the pipes encountered were less than 0.4 feet wide.

The Degree of Cracking Map, (Figure A1) displays the relative severity of cracked intervals of the dike. Relatively continuous severely cracked intervals were present between Stations 590 + 00 to 621 + 00 and between Stations 687 + 00 to 718 + 00. Over these intervals, portions of the trench had to be deepend up to 3.0 feet beyond proposed grade in order to intercept the cracks (refer to plates 1 - 5).

Prior to acceptance of the trench for backfilling, a geologist thoroughly examined the downstream trench face to assess cracking. Auxiliary outlets were generally designated for cracks which terminated within 3.0 feet of the excavation floor, or that were open and greater than 3/8" wide deeper than 3.0 feet from the top of the dike.

OSHA trench safety requirements were initially met with hydraulic shoring jacks used to support the trench walls during the geologist's inspection. After the trench depth increased to ten feet, a mobile continuous sheet shoring box with inspection slots on the downstream face was utilized. This inspection box was pulled by a D-6 Caterpillar tractor.

3.3 Soil Descriptions

General soil columns were described at 100 feet intervals, using the Unified Soil Classification System. The descriptions were abbreviated in nature, however, they may be useful in correlating the crack intensities to the general soil types. Refer to Appendix B for the field soil columns.

4.0 LABORATORY TESTING

4.1 General

A temporary field testing laboratory was established near the construction site. Testing activities were performed to verify that the construction specifications were satisfied and to determine the moisture of embankment fill materials. The following items were tested:

(1) Drainfill
(2) Coarse Aggregate
(3) Untreated Base (ABC)
(4) Concrete for road caps
(5) Embankment moisture samples

The test procedures adhered to the following specficiations:

- ASTM C 136 Sieve or Screen Analysis of Fine and Coarse Aggregates
- ASTM C 117 Material Finer than #200 Sieve in Material Aggregate by Washing
- ASTM D 1556 Density of Soil in Place by the Sand-Cone Method
- ASTM D 2216 Laboratory Determination of Moisture Content of Soil
- ASTM D 2487 Classification of Soils for Engineering Purposes

4.2 Gradation Testing

Gradation testing was performed as necessary to verify the suitability of drainfill and coarse aggregate. A minimum of one test per 250 linear feet for drainfill and one test for every six drain outlets for coarse aggregate was performed.

In accordance with the contract specifications, drainfill tests were performed to verify that the material met the following gradation requirements.

Sieve Size	Percent by Weight Passing
1½"	100
1 "	80 - 100
3/4"	70 - 90

Sieve Size	Percent by Weight Passing
3/8"	50 - 60
No. 4	35 - 50
No. 8	25 - 40
No. 30	10 - 25
No. 200	0 - 6.5

The Coarse Aggregate requirements were in accordance with ASTM C33, Size No. 2.

Initial difficulty was encountered in crushing the drainfill to meet the specifications, and several stockpiles of drainfill were rejected. Generally, the failing gradation tests had too great a percentage of material passing the 3/8" sieve.

Coarse Aggregate gradation tests yielded no failing results. Refer to Appendices E and F for drainfill and coarse aggregate gradation results, respectively.

Sand-Cone in Place Density Tests were performed on untreated base (ABC) material at Palo Verde and Johnson Road crossings. The tests were performed in accordance to ASTM method D 1556 and yielded results ranging from 103% to 106% of the maximum dry density.

4.3 Concrete Testing

Concrete for the road caps at Palo Verde and Johnson Roads yielded a 3½ inch slump. The maximum allowable slump was 4 inches. Two 3-day test samples were collected. The test cylinders yielded results of 2865 p.s.i. and 2829 p.s.i. These exceeded Maricopa County requirements of 2400 p.s.i. for three-day test cylinders and enabled the contractor to place ABC over the road caps after 5½ days instead of the required 7 days curing time.

4.4 Moisture Testing

Soil moisture samples were collected at various intervals and depths from the embankment trench face. The samples were visually classified prior to testing. A limited number of moisture samples were collected in drain outlets commencing with Station 687 + 35. These samples were collected laterally outward from the dike centerline, approximately 0.5 feet above the outlet floor. Refer to Appendix C for moisture test results.

4.5 Drainfill Permeability Tests

Permeability tests were performed for the drainfill to ensure that the coefficient of

permeability did not exceed 250 feet per day. The tests were performed in accordance with ASTM D 2434 and yielded results of 67 feet per day and 62 feet per day maximum coefficient of permeability. Additional verification tests were performed using the falling head permeameter technique developed by Hamilton Gray and presented in ASTM Special Technical Publication No. 479. These tests yielded a maximum coefficient of permeability of 148 feet per day and 101 feet per day.

4.6 Plasticity Testing

Eighty-six embankment soil samples were tested to determine the liquid limit, plastic limit and plasticity index. The tests were performed in accordance with ASTM methods D 423 and D 424. No laboratory gradation tests were performed upon the plasticity samples. Final classifications of the samples were determined based upon the composite results of visual classification and the plasticity indices. Most of the tests indicated that the fine fraction (-#40 sieve) was CL or ML (Unified Soil Classification System).

The composite classifications were primarily clayey sand (SC) with some silty sand (SM). The clayey sands (SC) were approximately 30 - 40% fines (silts/Clays) and 60 - 70% coarse grains (sands/gravel). Refer to Appendix D for plasticity and soil classification information.

5.0 INSPECTION AND CONTRACT ADMINISTRATION

5.1 Inspection

ERTEC monitored all aspects of the following items to verify that the construction contractor acted in conformance with contract requirements:

- o Performance and Workmanship
- o Materials utilized
- o Health and Safety practices

Continuous inspection by a geologist and two technicians was necessary during construction activities to verify that the quality of construction processes and products met the construction requirements. Testing and approval of certification for all construction materials were conducted to ensure that the materials met the contract requirements.

Activities to verify that safety devices and practices and health standards were in accordance with OSHA and contract requirements were also performed by ERTEC.

5.2 Contract Administration

As the SCS representative, the Engineer evaluated the qualifications of the low bidder, participated in two pre-award walk throughs and attended the pre-construction conference. During and after the completion of construction activities, the Engineer's responsibilities included the following:

- Maintenance of construction records
- Providing the Contracting Officer with a summary of daily activities and site conditions
- Preparation of Payment Estimates
- Suspension of work for contract non-compliance with the approval of the SCS
- Notifying the Contracting Officer that conferences were necessary to make decisions about the contract
- Notifying the Contracting Officer of the need for contract modifications
- Notifying the Contracting Officer that construction was nearing completion
- Preparation for the final inspection
- Preparation of contract modifications

Contract modifications were necessary to adjust costs and contract time, eliminate or add contract requirements and change material specifications. Contract modifications were prepared for the following items.

(1) Modification #1 Addition of survey costs to bid item #1, Mobilization

(2) Modification #2 Addition of hand labor costs to bid item #3, Excavation

(3) Modification #3 Adjustment of Unit cost for quantity overrun in bid item #6, Coarse Aggregate Drain

(4) Modification #4 Elimination of bid item #2, Water from the contract

(5) Change in specification #5, for the size of welded wire fabric required in concrete caps from 6 x 6 - W6 x W6 to 4 x 4 - W4 x W4

(6) Additional equitable unit cost adjustment for Coarse Aggregate overrun

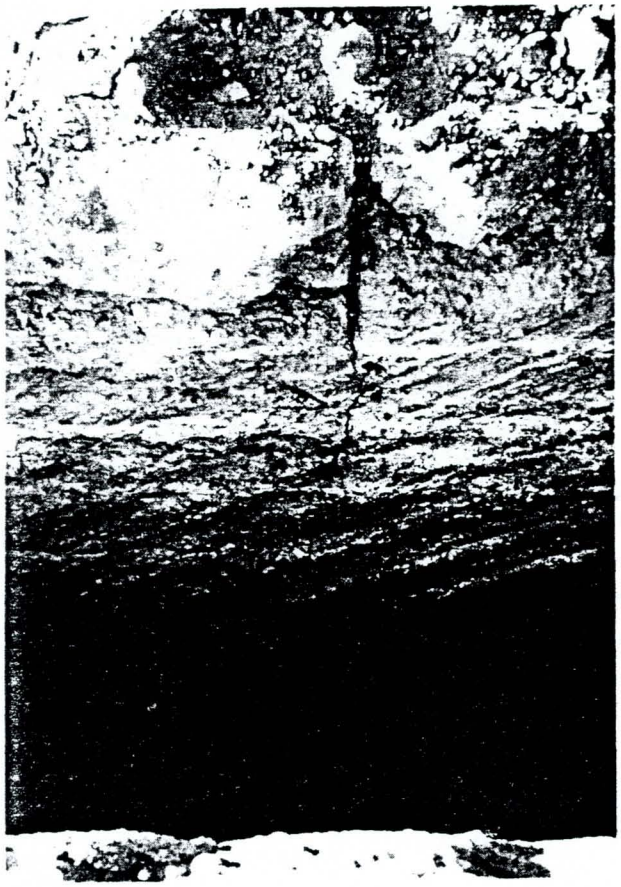
(7) Determination of an equitable cost award to the contractor to compensate for the elimination of bid item #2, Water

As-built plans and profiles and photographic records were also maintained during construction activities.

All pertinent maps, computation sheets, field notebooks, photographs and other records generated as a result of performance on the Buckeye Site 1 Drain Project, are considered part of this as-built report.

6.0 CONCLUSION

The Buckeye Site 1 Drain Project was constructed in accordance with the contract plans and specifications and subsequent modifications made to the specifications.



Transverse crack
Sta. 687+35
Depth = 16.6'
Outlet required

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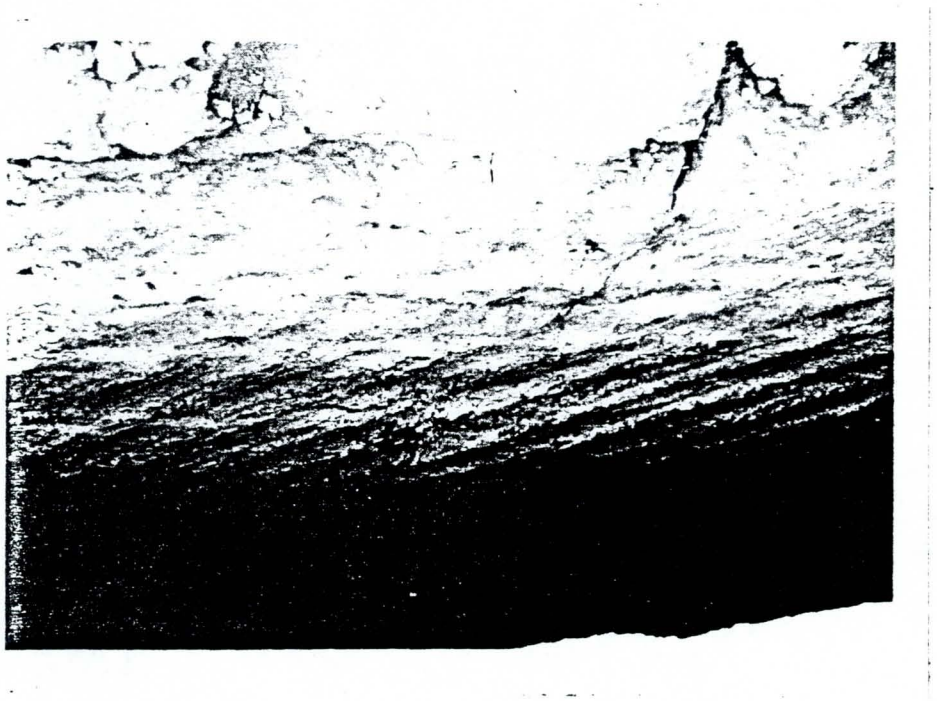
BUCKEYE SITE 1 DRAIN

Photo 1

Ertec (formerly Fugro) Project Number 80-200

SCS Contract Number 53-8A02-0-00113



Transverse crack
Sta. 687+35
Depth = 16.6'
Outlet required

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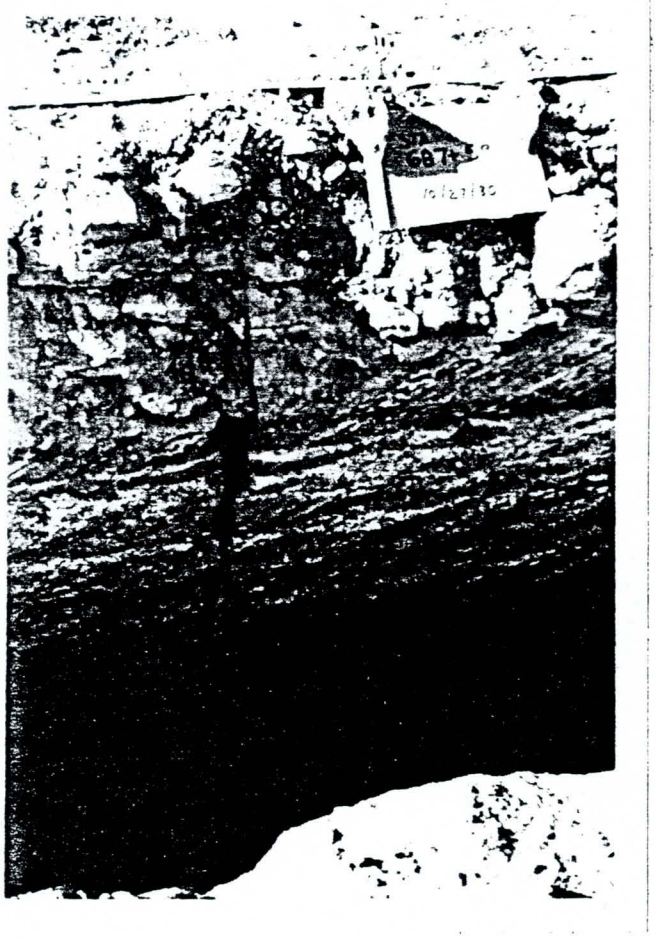
BUCKEYE SITE 1 DRAIN

Photo 2

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113



Transverse crack
Sta. 687+59
Depth = 16.3'

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BUCKEYE SITE 1 DRAIN

Photo 3

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113

Inspecting transverse crack
Sta. 696+83
Depth = 12.6'

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 4

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53 8A02-0-00113

Transverse crack and oblique dendritic associated cracks
Sta. 696+97
Depth = 11.8'

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The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 5

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113

Transverse crack
Sta. 697+34 to 697+35
Depth = 11. 6'

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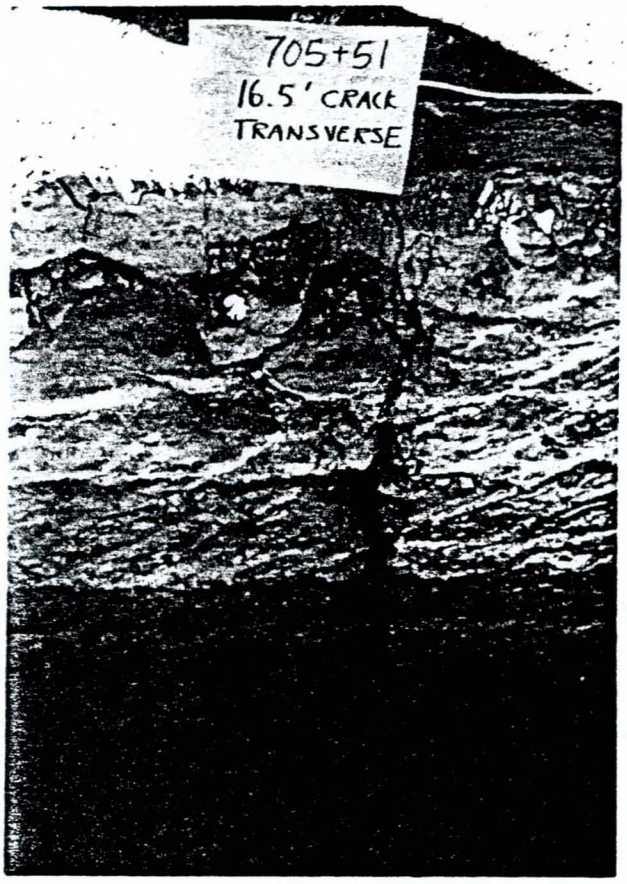
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 6

Ertec (formerly Fugro) Project Number 80-200

SCS Contract Number 52-8A02-0-00112



Transverse crack
Sta. 705+51
Depth = 16.5'
Outlet required

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 7

Ertec (formerly Fugro) Project Number 80-200

SCS Contract Number 53-8 A02 0 00113

Transverse crack and associated oblique cracks
Sta.710+52.5 to 710+53.5

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 8

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113

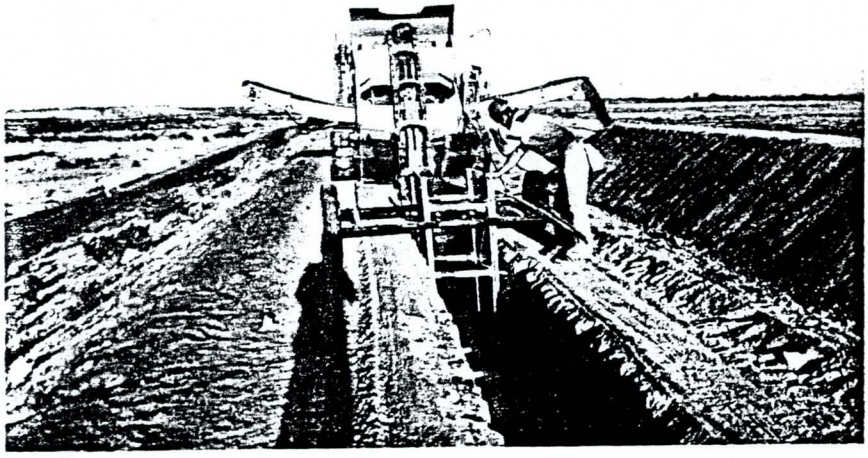
Transverse crack and associated oblique dendritic cracks
Sta. 710+52.5 to 710+53.5

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 9

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113



Operation : Trencher and trench box used to protect laborer

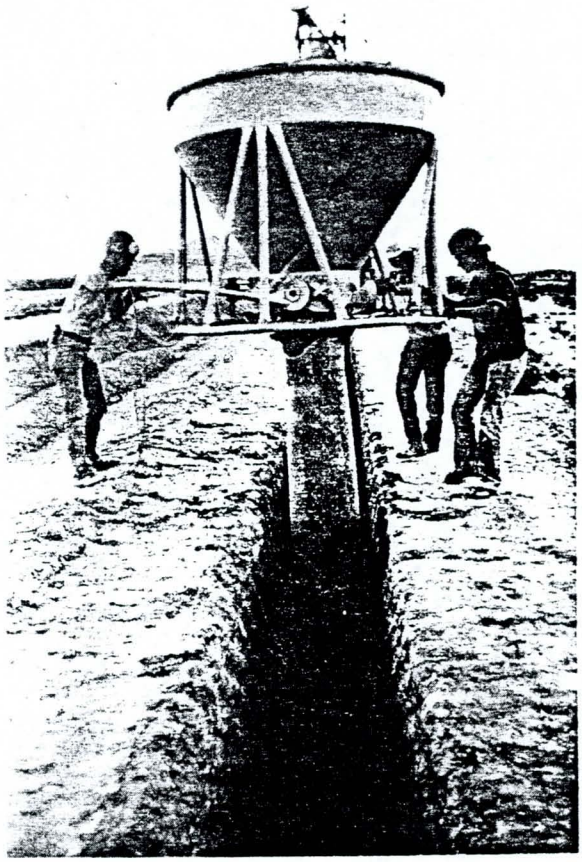
Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 10

Ertec (formerly Fugro) Project Number 80-200

SCS Contract Number 53-8A02 0-00113



Operation: installation of drain fill
6′ tremmie on 3 yd^3 bucket

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

Photo 11

Ertec (formerly Fugro) Project Number 80-200

SCS Contract Number 53-8A02-0-20113

APPENDIX A

EMBANKMENT CRACKS

CONTENTS:

1. FIELD LOG OF TRENCH INSPECTION
2. DEGREE OF CRACKING MAP

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
1	565+09	T	SM	0		2.1	2.1	H-0.01	0.5	roots, sand	
2	565+18	T	SM	0		2.0	2.0	H-0.01	0.4	roots, sand	
3	565+31	T	SM	0		1.5	1.5	H-0.01	0.1	roots, sand	
4	565+50	T	SM	0		1.9	1.9	H-0.01	0.2	roots, sand	
5	565+80	T	SM	0		2.0	2.0	H-0.01	0.2	roots	
6	565+95	T	SM	0		2.1	2.1	0.01	0.3	roots, sand	
7	566+28	T	SM	0		2.5	2.5	H	0.3	roots	
8	566+69	T	SM	0		2.3	2.3	0.01	1.0	roots, sand	
9	567+48	T	SM	1.5		1.9	0.4	H-0.05	0.5	roots, sand	pipe @ 1.5, w = 0.05
10	567+51	T	SM	1.5		2.0	0.5	0.01	0.5	roots, sand	
11	567+83	T	SM	0		2.2	2.2	0.01	0.5	roots, sand	
12	568+66	T	SM	1.3		1.9	0.6	H	0.1	roots	

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No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
13	577+42	pipe	SC	3.5		3.6	0.1	0.06	1.2	roots	
14	578+14	L	SM	0		1.4	1.4	11	0.3	sand	
15	578+24 to 518+32	L	SM-SC	0		5.2	5.2	0.01S	1.5+	abundant roots, sand	
16	518+33	pipe	SM-SC	6.1		6.1	0.1	0.1	1.2	roots, sand	pipe located on trench floor
17	518+34 to 578+29	L	SM-SC	1.1		6.1	5.0	0.1	1.5+	abundant roots, sand	last crack logged on upstream side
18	578+54	T	SM		0	4.1	4.1	H-0.01	0.4	roots, sand, caliche	
19	578+61	T	SM		0	1.9	1.9	H	0.1	roots, sand	poorly developed
20	518+63.5	T	SM		0	2.7	2.7	0.02	0.4	roots, sand	
21	578+64	pipe	SM		5.6	5.6	0.6	0.2	0.5	roots, sand	open pipe on trench floor AUXILIARY OUTLET
22	578+54	T	SM		0	2.6	2.6	H	0.1	roots	
23	578+74	T	SM		0	2.2	2.2	11	0.1	roots	poorly developed
24	577+02	T	SC		0	2.0	2.0	11-0.01	0.2	roots	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
25	579+05	T	SC		0	1.8	1.8	H-0.01	0.2	roots	
26	577+15	T	SC		0	1.9	1.9	H	0.2	roots	
27	579+21	T	SC		2.3	3.0	0.7	0.01	0.5	roots, sand	
28	579+47	T	SC		0	2.0	2.0	0.01	0.4	roots, sand	
29	579+62	T	SC		0	2.2	2.2	0.01	0.5	roots	
30	577+95	T	SC		0	1.5	1.5	0.01	0.4	roots, sand	
31	581+59	pipe	SC		1.9	2.0	0.1	0.1	1.5	roots, sand	circular pipe
32	581+59	T	SM		0	1.8	1.7	H	0.3	roots	
33	584+74	L	SM		0	1.3	1.3	0.01	0.3	roots	
34	583+03	T	SM		0	1.5	1.5	H	0.2	roots	
35	582+12	L	SM		0	1.5	1.5	0.01	0.1	roots	
36	585+21	L	SM		0	3.5	3.5	H-0.01	0.2	roots	

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No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
37	585+42	L	SM		0.7	1.3	0.6	H	0.1	roots	
38	586+32	L	SC		0	2.9	2.9	H	0	roots	poorly developed
39	586+51	T	SC		0	3.8	3.8	H-0.015	0.5	roots	
40	586+60	T	SC		0	4.4	4.4	0.01	1.2	roots, sand	well developed
41	586+85	L	SC		4.5	5.0	0.5	H	0	roots	
42	587+10	T	SC		0	4.5	4.5	0.01	0.5	roots, sand	
43	587+56	T + pipe	SC		0	7.8	7.8	H-0.1	0.6	roots, sand	open pipe @ 0.9-1.2, w = 0.1
44	587+60	T	SC		0	5.2	5.2	11	0	roots	discontinuous
45	587+95	T	SC		0	10.8	10.8	H-0.05	0.5	roots, sand	well developed AUXILIARY OUTLET
46	588+20	T	SC		0	6.9	6.9	H-0.03	0.6	roots, sand	
47	588+53	T	SC		0	5.0	5.0	0.015	0.3	roots, sand	
48	589+34	L	SC		0	6.0	6.0	H	0	roots	poorly developed

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No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
49	590+71	T	SC		0	11.0	11.0	0.02	1.1	roots, sand	well developed AUXILIARY OUTLET
50	590+84	T	SC		0	1.4	1.4	H	0	roots	
51	590+93	T	SC		0	1.6	1.6	H	0	roots	
52	590+98	T	SC		0	1.7	1.7	H	0	roots	
53	591+07	T	SC		0	7.0	7.0	H	0.1	roots	poorly developed
54	591+51	T	SC		0	4.5	4.5	0.01	0.3	roots	
55	591+81	T	SC		2.4	2.7	0.3	H	0	roots	
56	591+55	T	SC		0	3.2	3.2	0.01	0.1	roots, sand	
57	591+94	T	SC		0	2.8	2.8	0.01	0.2	roots	
58	592+10	T	SC		0	11.0	11.0	0.015	0.1	roots, sand	well developed AUXILIARY OUTLET
59	592+42	T	SC		0	9.9	9.9	0.02	1.2	roots, sand	
60	592+49	T	SC		0	4.0	4.0	H	0	roots	

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No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
01	592+55	T	SC		0	3.5	3.5	H	0	roots	AUXILIARY OUTLET
02	592+75	T	SC		0	3.1	3.1	0.01	0.1	roots	
03	593+00	T	SC		0	10.5+	10.5+	0.03	1.5	roots, sand	AUXILIARY OUTLET
04	593+08	L	SC		0	5.0	5.0	0.01	0.2	roots, sand	
05	593+13 to 593+18	L	SC		0	4.6	4.6	0.01	0.1	roots, sand	
06	593+21	L	SC		0	5.6	5.6	H	0.4	roots	
07	593+23 to 593+29	L	SC		0	3.2	3.2	H	0.2	roots	
08	593+31	L	SC		0	3.4	3.4	H	0	roots	
09	593+36	L	SC		0	4.0	4.0	H	0	roots	
10	594+49	T	SC		0	10+	10.0	0.01	0.3	roots, sand	
11	593+56	L	SC		0	7.6	7.6	0.01 H-0.01	0.1	roots	
12	593+58	L	SC		0	4.0	4.0	0.01	0.2	roots	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
13	594+11	T	SC		0	10.2	10.2	0.01	0.4	roots, sand	AUXILIARY OUTLET
14	594+65	L	SC		0	9.0	9.0	0.01	0.3	roots, sand	
15	594+70 to 594+72	L	SC		0	8.6	8.6	0.02	0.4	roots, sand	well developed
16	594+95	L	SC		0	8.1	8.0	0.01	0.3	roots, sand	
17	595+11	T	SC		0	11.5	11.5	0.02	1.5+	roots, sand	continues into trench floor AUXILIARY OUTLET
18	595+32	T	SC		0	11.5	11.5	0.02	1.2	roots, sand	continues into trench floor
19	595+43	T	SC		0	4.2	4.2	H - 0.01	0.2	roots & sand	
20	595+56	T	SC		0	6.7	6.7	H - 0.01	0.3	roots & sand	
21	595+61	T	SC		0	4.5	4.5	H - 0.01	0.4	roots, sand	
22	595+67	T	SC		0	5.6	5.6	H	0.3	roots	
23	595+72	T	SC		0	5.3	5.3	H	0	roots	
24	595+75	T	SC		0	6.7	6.7	H	0	roots	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
85	595+83	T	SC		0	5.4	5.4	H-0.01	0.4	roots, sand	
84	595+86	T	SC		0	3.3	3.3	H	0	roots	
87	595+93	T	SC		0	4.8	4.8	H	0.1	none	
88	596+20	T	SC		0	9.3	9.3	0.01-0.1	0.8	sand	1.5' open portion up to 0.1
81	596+25	T	SC		0	7.5	7.8	H-0.01	0.3	roots	
10	596+54	T	SC		0	9.8	9.8	H-0.01	0.8	roots, sand	AUXILIARY OUTLET
91	596+67	T	SC		0	7.8	7.8	0.01	0.5	roots, sand	
92	596+81	T	SC		0	9.2	9.2	0.01	0.8	sand, roots	
93	597+02	T	SC		0	3.9	3.9	H	0.3	roots	
94	597+17	T	SC		0	5.9	5.1	H-0.01	0.2	roots	
95	597+20	T	SC		8.2	8.7	0.5	001	0.1	roots	
96	597+25	T	SC		5.4	6.1	1.3	0.01	0.3	roots	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
97	597+36	T	SC		0	5.5	5.5	0.01	0	roots	discontinuous
98	597+49	T+L	SC		0	6.8	6.8	1+0.01	0.3	roots	
99	597+66	L	SC		0	4.2	4.2	1	0.1	none	
100	598+04	T	SC		0	4.4	4.4	1	0	none	
101	598+51	T	SC		0	7.4	7.4	2.2	0.3	roots	AUXILIARY OUTLET
102	598+51.5	T	SC		7.0	7.4	0.4	0.1	0.3	roots	
103	598+63	T	SC		0	5.2	5.2	1	0.2	roots	
104	598+65	T	SC		0	6.1	6.1	1+0.1	0.2	roots, sand	
105	598+77	T	SC		0	5.4	5.4	1+0.1	0.3	sand, roots	
106	599+01	T	SC		0	1.3	7.3	1+1.1	0.7	sand roots	with some type well developed
107	599+17	T	SC		0	6.0	6.0	1	0.1	roots	
108	599+24	T	SC		0	4.9	4.9	1+0.01	0.5	roots	

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No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
109	599+28	T	SC		0	7.1	7.1	0.01	0.8	sand, roots	
110	599+28	T	SC		8.5	9.5	1.0	0.01	0.8	sand, roots	
111	599+38	T	SC		0	8.0	8.0	0.02	0.5	sand, roots	well developed
112	599+44	T	SC		0	7.4	7.4	0.01	0.3	roots	discontinuous
113	599+45	L	SC		5.9	7.3	1.4	H	0.1	roots	
114	599+53	T	SC		0	4.9	4.9	0.01	0.3	roots, sand	
115	599+61	T	SC		0	12.0	12.0	0.02	0.6	roots, sand	moderately to well developed AUXILIARY OUTLET
116	599+76	T	SC		0	7.1	7.1	0.02	0.5	roots, sand	
117	599+82	T	SC		0	8.4	8.4	0.01-0.02	0.6	sand, roots	
118	600+04	T+L	SC		0	5.1	5.1	0.02	0.8	sand, roots	
119	600+16	T	SC		0	7.6	7.6	0.02	0.6	sand, roots	
120	600+21	T+L	SC		0	7.1	7.1	0.01	0.5	sand, roots	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
121	600+30	T	SC		0	6.5	6.5	0.01	0.4	sand, roots	
122	600+38	T	SC		0	8.0	8.0	0.025	0.5	sand, roots	well developed parallel fine cracks along side
123	600+42	T	SC		0	4.4	4.4	0.01	0.3	sand, roots	
124	600+48	T	SC		0	3.0	3.0	0.01	0.3	sand, roots	
125	600+67	T	SC		0	9.1	9.1	0.013	0.4	sand, roots	moderately well developed
126	600+75	L	SC		0	4.0	4.0	0.01	0.2	roots	
127	600+76	L	SC		0	4.0	4.0	0.01	0.3	roots	
128	600+78	T	SC		0	4.1	4.1	0.015	0.3	roots, sand	
129	600+82	T/L	SC		0	4.5	4.5	0.01	0.4	sand, roots	
130	600+84	T	SC		1	4.5	4.5	0.01	0.3	roots	
131	600+90	T	SC		0	4.5	4.5	0.01	0.3	roots	
132	600+93	T	SC		0	7.8	7.8	0.015	0.4	roots, some sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
135	60+95	T	SC		0	4.9	4.9	0.01	0.2	sand, roots	
134	60+00	L	SC		0	4.1	4.1	0.01	0.2	sand, roots	
135	60+04	T	SC		0	9.6	9.6	0.03	1.2	roots, sand	0-6.3 open excavations
136	60+51	T	SC		0	9.1	9.1	0.25	0.5	roots, sand	
137	60+58	T	SC		0	8.4	8.4	0.01	0.3	roots, sand	
138	60+68	T	SC		0	8.8	8.8	0.01	0.2	roots	
139	60+74	T	SC		0	4.1	4.1	H	0.01	roots	
140	60+84	L	SC		0	3.2	3.2	0.01	0.2	none	
141	60+85	T	SC		1.5	8.0	0.5	0.01	0.1	none	
142	60+96	T	SC		0	3.2	3.2	H	0.1	none	
143	61+88	L	SC		0	3.6	3.6	H	0.1	roots	
144	60+99	T	SC		0	8.5	8.5	0.01	0.3	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
145	602+00	T	SC		0	8.5	8.5	H	0	none	
146	602+12	L	SC		0	6.3	6.3	H	0.1	roots	
147	602+25	T	SC		0	9.5	9.5	0.02	0.5	sand, roots	well developed
148	602+37	T	SC		0	9.1	9.1	002	0.4	roots, sand	
149	602+41	L	SC		0	7.1	7.1	H	0.2	roots, sand	
150	602+59	T+L	SC		0	6.0	6.0	0.02	0.3	roots, sand	
151	602+66	T	SC		0	7.0	7.0	0.015	0.2	roots	
152	602+71	T	SC		0	8.9	8.9	0025	0.3	roots, sand	
153	602+79	T	SC		0	5.9	5.9	H	0	roots	Poorly developed
154	602+83	T	SC		0	4.4	4.4	0.015	0.3	roots	
155	602+85	T	SC		0	5.2	5.2	H	0	roots	
156	602+93	T	SC		0	5.4	5.4	0.01	0.3	sand, roots	well developed

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
157	603+13	T	SC		0	10.3	10.3	0.02+	0.4	sand, roots	
158	603+20	T	SC		0	8.1	8.1	0.01	0.1	roots	
159	603+42	T	SC		0	8.8	8.8	H-0.03	0.3	roots, sand	well developed
160	603+44	T	SC		0	6.5	6.5	H	0	sand	well developed
161	603+57	L	SC		0	2.9	2.9	H	0	roots	
162	603+63	T	SC		0	9.0	9.0	0.015	0.3	roots, sand	
163	603+80	T	SC		0	6.9	6.9	0.015	0.3	roots, sand	
164	604+13	T	SC		0	5.6	5.6	0.015	1.1	roots, sand	well developed
165	604+41	T	SC		0	6.1	6.1	0.015	0.3	sand, roots	
166	604+51	T	SC		0	7.8	7.8	0.015	0.6	roots, sand	
167	604+59	T	SC		0	8.5	8.5	H-001	0.2	roots, sand	
168	604+79	T	SC		0	6.1	6.1	0.015	0.3	roots, sand	AUXILIARY OUTLET

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
169	605+02	T	SC		0	7.1	7.1	H	0.1	roots	
170	605+23	T	SC		0	7.2	7.2	0.02	0.5	sand, roots	
171	605+45	T	SC		0	11.0	11.0	0.02	0.7	roots, sand	moderately developed
172	605+79	T+L	SC		0	11.0	11.0	0.015 – 0.05	1.5	roots, sand	
173	605+90	L	SC		0	6.0	6.0	0.01	0.1	roots	poorly developed
174	606+11	L+T	SC		0	6.1	6.1	H	0	roots	
175	606+24	T	SC		0	8.5	8.5	H – 0.01	0.5	roots, sand	
176	606+38	T	SM		0	2.5	2.5	0.01	0.2	roots, sand	
177	606+45	T	SC		0	5.2	5.2	11	0	roots	
178	606+53	T	SC		7.0	8.2	1.2	0.01	0.2	roots, sand	
179	606+65	T	SC		0	2.5	2.5	001	0.1	roots	
180	606+73	T	SC		0	7.8	7.8	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
181	606+74 to 606+80	L	SC		0	2.2	2.2	0.01	0.1	sand, roots	
182	607+00	T	SC		0	5.2	5.2	0.01	0.1	sand, roots	
183	607+12	T	SC		0	8.2	8.2	0015	0.2	sand	
184	607+28	T	SC		0	3.8	3.8	002	0.2	sand	
185	607+29	T	SC		0	4.9	4.9	0.01	0.1	roots, sand	
186	607+37	L	SC		0	3.1	3.1	0.015	0.1	roots, sand	
187	607+49	T	SC		0	3.0	3.0	0.015	0.1	roots	
188	607+52	T	SC		0	3.1	3.1	H	0	roots	Poorly developed
189	607+71	T	SC		0	3.7	3.7	0.01	0.1	roots	
190	607+75	T	SC		0	3.0	3.0	0.01	0.1	roots	
191	607+79	T	SC		0	8.1	8.1	0.02	0.3	roots, sand	
192	608+03	T	SC		0	7.1	7.1	0.015	0.3	roots	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
193	608+16	T	SC		0	7.7	7.7	0.02	0.4	roots, sand	
194	608+17	L	SC		7.5	9.6	2.2	0.015	0.1	open	
195	608+21	T	SC		0	6.0	6.0	H	0	roots, sand	
196	608+29	T	SC		0	4.5	4.5	0.01	0	roots, sand	
197	608+38	L	SC		7.0	9.8	2.8	0.02	0.2	roots	
198	608+39	T	SC		0	6.8	6.8	0.015	0.3	roots, sand	
199	608+50	T+L	SC		0	9.2	9.2	0.015	0.2	sand, roots	
200	608+62	T	SC		0	8.9	8.9	0.02	0.3	roots, sand	
201	608+61 to 608+75	L	SC		0	10.4	10.4	0.02	0.6	roots, open	lg. group of Longitudinal cracks AUXILIARY OUTLET @ 608+71
202	608+81	T	SC		0	6.2	6.2	0.02	0.3	sand, roots	
203	605+52	L	SC		0	7.1	7.1	0.015	0.1	roots	
204	608+84	T	SC		0	7.5	7.5	0.01-0.02	0.2	roots	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
205	608+91	T			0	6.4	6.4	0.015	0.4	roots	
206	608+94 to 608+97	L	SM-SC		0	6.1	6.1	0.025	1.0	roots	
207	609+00 to 609+18	L	SM		0	10.4	10.4	0.03	0.5	roots	
208	609+20	T	SC		0	7.8	7.8	0.015 0.03	1.0	roots, sand	
209	609+31	T	SC		0	2.0	2.0	H	0	roots, sand	
210	609+40	T	SC		0	12.0	12.0	0.05	1.0	sand, roots	well developed AUXILIARY OUTLET
211	609+57	T	SC		0	5.0	5.0	H	0	roots	
212	609+63	T/L	SC		0	7.0	7.0	H-0.015	0.1	roots, sand	
213	609+67	T	SM		0	2.9	2.9	0.01	0	roots, sand	
214	609+74	L	SC		0	11.0	11.0	0.04	1.5	roots	
215	609+80	T	SM-SC		0	2.9	2.9	0.01	0.15	sand, roots	
216	610+07	T	SC		0	11.1	11.1	H-0.4	1.5+	sand, roots	well developed

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
217	610+21 to 610+23	L	SC		0	12.0	12.0	0.02	0.6	roots, sand	well developed
218	610+33	L	SC		0	11.9	11.9	0.02	1.5	roots, sand	well developed
219	610+37	T	SC		0	7.7	7.7	0.015 – 0.05	1.0	sand	
220	610+37.5	L	SC		7.0	11.0	4.0	H	0	roots	
221	610+38	L	SC		5.5	8.0	2.5	0.015	0.3	roots	
222	610+60	T	SC		0	3.5	3.5	0.015	0.4	roots, sand	
223	610+70	T	SC		0	9.0	9.0	0.01 – 0.02	0.4	roots, sand	
224	610+73	T	SC		0	8.4	8.4	0.01	0.5	roots, sand	
225	610+81	T	SC		0	11.5	11.5	0.02 – 0.05	2.0	roots, sand	well developed AUXILIARY OUTLET
226	611+09	T	SC		0	9.9	9.9	H – 0.01	0	roots, sand	
227	611+13	T	SC		0	9.9	9.9	H	0	roots	
228	611+19	T	SC		0	11.6	11.6	0.015	0.3	roots, sand	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
229	611+34	L	SC		0	9.0	9.0	H	0.1	roots	
230	611+37	T+L	SC		0	10.1	10.1	0.015	0.3	roots, sand	
231	611+72	T	SC		0	9.7	9.7	0.015	0.4	roots, sand	
232	611+83	L	SC		0	1.5	1.5	H	0.1	roots	Poorly developed
233	611+85	L	SC		0	9.4	9.4	0.01	0.2	roots	
234	611+86	L	SC		0	4.2	4.2	H	0	roots	
235	612+01	L	SC		0	9.7	9.7	H-0.01	0.1	roots	
236	612+02	L	SC		0	9.8	9.8	H-0.01	0.1	roots	
237	612+07	T	SC		0	10.2	10.2	0.02	0.8	roots, sand	
238	612+7.5 to 612+14	L	SC		0	12.5	12.5	0.015	0.3	roots, sand	AUXILIARY OUTLET @ 612+12
239	612+13.5	L	SC		0	9.3	9.3	0.01	0	roots	
240	612+15	L	SC		0	8.4	8.4	0.01	0	roots	

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No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
241	612+47	T	SC		0	9.9	9.9	0.02	1.0	sand	
242	612+57	T	SC		0	6.8	6.8	0.015	1.0	sand	pipe @ 1.8-2.2, w=0.05
243	612+69	T	SC		0	10.0	10.0	0.015	1.5+	sand	open pipe @ 2.1-2.4, w=0.05
244	612+82 to 612+91	L	SC		0	1.3	1.3	0.05	0.3	sand	longitudinal crack horizontal to trench floor
245	612+97	T	SC		0	2.6	2.6	H	0	roots	
246	613+10	T	SC		0	3.1	3.1	H	0.1	roots, sand	
247	613+13	T	SC		0	9.5	9.5	0.015	0.4	roots, sand	
248	613+21 to 613+24	L	SC		0	9.8	9.8	0.02	0.2	roots, sand	
249	613+29 to 613+32	L	SC		0	12.0	12.0	0.02	0.3	roots, sand	
250	613+39	L	SC		0	11.5	11.5	0.02	0.2	roots, sand	
251	613+54	T	SC		0	11.2	11.2	0.02	0.2	roots, sand	
252	613+68	L	SC		0	11.2	11.2	0.025	0.4	roots, sand	caved area around crack AUXILIARY OUTLET

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
253	613+85	T	SC		0	12.0	12.0	0.01	0.2	roots, sand	
254	614+02	T	SC		0	10.6	10.6	0.015	0.9	roots, sand	
255	614+12	T	SC		0	5.1	5.1	H	0.1	roots, sand	
256	614+17	L	SC		0	9.7	9.7	0.01	0.1	roots	
257	614+28	T	SC		0	8.8	8.8	0.01 0.025	0.5	roots, sand	
258	614+50	T	SC		0	9.0	9.0	0.01 0.05	1.0+	roots, sand	
259	614+53 to 614+56	T	SC		7.3	11.8	4.5	0.015	0.1	roots, sand	
260	614+95	T	SC		0	13.5	13.5	0.01 0.025	0.7	roots, sand	well developed AUXILIARY OUTLET
261	615+11	T	SC		0	10.1	10.1	0.015	0.4	roots, sand	well developed
262	615+14	L	SC		0	12.1	12.1	0.02	1.1	roots, sand	
263	615+28	T	SC		0	10.2	10.2	0.02	0.4	roots, sand	
264	615+40	T	SC		0	10.2	10.2	0.01 0.1	0.4	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
265	615+47	T	SC		0	7.0	7.0	H - 0.01	0.1	roots	
266	615+55	T	SC		0	12.5	12.5	0.015	0.4	roots, sand	
267	615+60	T	SC		0	3.1	3.1	H - 0.015	0.1	roots, sand	
268	615+68 to 615+72	L	SC		0	12.6	12.6	0.015	1.0	roots, sand	AUXILIARY OUTLET @ 615+69.5
269	615+78	T	SC		0	6.5	6.5	H	0	roots	
270	615+79	L	SC		9.5	10.1	0.6	0.015	0.2	roots	
271	615+82	T	SC		0	11.0	11.0	0.015	0.1	roots, sand	poorly developed
272	615+92	T	SC		0	8.5	8.5	0.015 0.1 -	1.2+	roots, sand	
273	616+10	T	SC		0	9.9	9.9	0.01 0.03	0.4	roots, sand	
274	616+20	T	SC		0	6.5	6.5	H	0	root	
275	616+28	T	SC		0	10.4	10.4	0.01	0.1	roots	
276	616+36	T	SC		0	10.0	10.0	0.015	0.5	roots	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
277	616+42	T	SC		0	6.1	6.1	0.015	0.3	roots, sand	
278	616+53	T	SC		0	9.9	9.9	0.015	0.1	roots, sand	
279	616+60	T	SC		0	7.0	7.0	0.01	0	roots	
280	616+66	T	SC		0	10.9	10.9	0.015	0.1	roots	
251	616+69	T	SC		0	11.5	11.5	0.02	0.6	roots, sand	
252	616+80	T	SC		0	10.5	10.5	0.02	0.8	roots, sand	
253	616+85	T	SC		0	10.0	10.0	0.015	0.2	roots, sand	
254	616+87	T	SC		0	10.6	10.6	0.015	1.0	roots, sand	
255	616+91	T	SC		0	7.1	7.1	H-0.01	0	roots, sand	
256	617+01	T	SC		0	11.6	11.6	0.02	0.7	sand, roots	well developed
257	617+09	T	SC		0	9.0	9.0	0.01-0.1	0.8	sand, roots	
258	617+16	T	SC		0	10.1	10.1	0.02	1.0	roots, sand	well developed

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
289	617+23	T+L	SC		0	9.7	9.7	0.015	0.2	roots, sand	
290	617+33	T	SC		0	5.1	5.1	H	0	roots	
291	617+45	T	SC		0	7.6	7.6	0.015	0.2	roots	
292	617+48	T	SC		0	10.8	10.8	0.015	0.2	roots, sand	
293	617+49	L	SC		0	10.7	10.7	0.015	0.1	roots	
294	617+54	T	SC		0	9.9	9.9	0.01	0.1	roots, sand	
295	617+59	T	SC		0	2.8	2.8	H	0	roots	
296	617+66	T	SC		0	11.0	11.0	0.02	2.0	roots, sand	
297	617+81	T+L	SC		0	11.4	11.4	0.015	1.5+	roots, sand	
298	617+85	T	SC		0	2.0	2.0	H	0	roots	
299	617+89	T	SC		0	6.6	6.6	H-0.01	0	roots	
300	617+92	T	SC		0	6.2	6.2	H-0.01	0.4	roots, sand	

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No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
301	617+97	T	SC		0	10.0	10.0	0.01 0.02	0.3	roots, sand	
302	618+08	T+L	SC		0	10.9	10.9	0.015	0.2	roots, sand	
303	618+16	T	SC		0	5.1	5.1	H	0.1	roots, sand	
304	618+23	T	SC		0	9.9	9.9	H- 0.01	0.2	roots	
305	618+25	T	SC		0	4.6	4.6	H	0	roots	
306	618+34	T+L	SC		0	10.1	10.1	0.015	0.2	roots, sand	
311	618+45	L	SC		0	11.4	11.4	0.015 0.1-	0.6	roots, sand	
305	618+53	L	SC		0	12.3	12.3	0.025	0.5	sand, abundant roots	well developed, severe crack AUXILIARY OUTLET
307	618+57	T	SC		0	4.1	4.1	H	0	roots	
310	618+64	T	SC		9.1	11.3	2.2	0.01	0.4	roots, sand	
311	618+68 to 618+71	T+L	SC		0	13.7	13.7	0.02	1.0	roots, sand	
312	618+71	T	SC		0	11.8	11.8	H- 0.01	0.2	roots	

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No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
313	618+77	T	SC		0	12.3	12.3	H-0.01	0.4	roots, sand	
314	618+84	L	SC		0	12.3	12.3	0.01	0.2	roots, sand	
315	618+93	T	SC		0	6.0	6.0	H	0	roots	
316	618+96	T	SC		0	9.4	9.4	0.01	0.1	roots	
317	618+97	T	SC		0	9.1	9.1	H-0.01	0.1	roots	
318	618+99	T	SC		0	12.7	12.7	H-0.025	0.3	roots, sand	
319	619+11	T	SC		0	10.0	10.0	H	0.1	roots	
320	619+24	T	SC		0	12.5	12.5	0.01	0.2	roots, sand	
321	619+30	T	SC		0	12.0	12.0	H	0.2	roots	
322	619+57	T	SC		0	13.0	13.0	0.01	0.4	roots, sand	AUXILIARY OUTLET
323	619+63	T+L	SC		0	12.6	12.6	0.01	0.4	roots, sand	
324	619+71	T	SC		0	9.0	9.0	0.015	0.4	roots, sand	

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No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
325	619+76	T+L	SC		0	10.0	10.0	0.01	0.4	roots, sand	
326	619+94	T	SC		0	11.6	11.6	0.01	0.4	roots	
327	619+99	T	SC		0	9.1	9.1	H	0	none	
328	620+10	T	SC		0	8.5	8.5	H	0	roots	
329	620+12	T	SC		0	5.8	5.8	H – 0.01	0	roots	
330	620+23	T	SC		0	9.4	9.4	0.015	0.3	sand, roots	
331	620+32	T	SC		0	6.3	6.3	H	0	roots	
332	620+40	T	SC		0	9.8	9.8	0.015	0.3	sand, roots	
333	620+54	T	SC		0	8.6	8.6	H	0	none	
334	620+96	T	SC		0	4.1	4.1	H	0	none	
335	621+01	T	SC		0	7.5	7.5	H	0	roots	
336	621+07	T	SC		0	6.1	6.1	0.01	0	none	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
337	621+15	T	SC		0	6.0	6.0	H	0	none	
338	621+37	T	SC		0	6.0	6.0	H	0	sand	
339	622+29	T	SC		0	3.8	3.8	H	0	none	
340	622+37	T	SC		0	3.5	3.5	H	0	none	
341	622+38	T	SC		0	3.7	3.7	H	0	none	
342	622+55	L	SC		5.3	5.9	0.6	H	0	roots	
343	622+93	L	SC		0	1.9	1.9	0.01	0.2	roots	
344	623+40	L	SC		0	1.4	1.4	0.01	0.3	sand, roots	
345	623+43	T+L	SC		0	1.5	1.5	H	0	roots	
346	623+48	T	SC		0	1.8	1.8	0.01	0.1	roots	
347	624+46	L	SM		0	2.1	2.1	H	0	roots	
348	624+58	T	SM		0	5.8	5.8	H	0	roots, sand	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
349	624+62	L	SM		0	2.4	2.4	H	0	roots, sand	
350	624+65 to 624+67	L	SM		0	1.8	1.8	H-0.01	0.1	roots, sand	
351	625+01	T	SM		0	1.0	1.0	H	0	roots	
352	625+04	L	SM		0	5.0	5.0	0.02	0.5	roots, sand	SCHEDULED OUTLET SWITCHED FROM 625+00 TO 625+04
353	625+13	T	SM		0	2.3	2.3	0.01	0.2	roots, sand	
354	625+30	T	SM		0	6.0	6.0	0.01	0.3	roots, sand	
355	625+51	L	SM		0	4.8	4.8	H	0.1	sand	
356	625+55	T	SM		0	2.4	2.4	H	0		
357	625+64	T	SM		0	1.7	1.7	0.01	0.1	roots, sand	
358	625+69	L	SM		0	3.5	3.5	0.01	0.1	roots, sand	
359	625+81	L	SM		2.2	3.4	1.2	H	0	roots	
360	625+83 to 625+85	L	SM		0	3.9	3.9	0.01	0.4	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
361	625+88 to 625+91	L	SM		0	1.2	1.2	0.02	0.4	roots, sand	
362	625+94 to 626+02	L	SM		0	3.7	3.7	0.02	0.5	roots, sand	
363	626+01	T	SM		0	2.7	2.7	0.015	0.5	roots, sand	
364	626+18	T	SM		0	2.1	2.1	H	0	none	
365	626+30	L	SM		0	2.8	2.8	0.015	0.2	sand, abundant roots	
366	626+35	T	SM		0	2.9	2.9	0.01	0.2	sand, roots	
367	626+52	T	SM		0	2.1	2.1	H	0	trace of sand	
365	627+60 to 627+62	T+L	SM		0	1.2	1.2	0.015	0.4	open	
369	627+92	T	SM		0	2.1	2.1	H	0.1	none	
370	627+95	L	SM		0	0.9	0.9	0.015	0.2	open	
371	628+19	T	SM		0	2.0	2.0	H	0	none	
372	629+43	T	SM		0	1.1	1.1	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
373	629+49	T	SM		0	4.9	4.9	H	0.1	roots	
374	629+59	T	SM		0	3.8	3.8	H-0.01	0.2	roots, sand	
375	629+65	T	SM		0	3.2	3.2	H	0	none	
376	629+81 to 629+84	L	SM		0	0.9	0.9	0.01	0.1	sand, roots	
377	629+96	L	SM		4.5	5.5	1.0	0.01	0.1	roots	
378	629+98	L	SM		4.6	5.7	1.1	0.01	0.1	roots	
379	630+03	L	SM		0	4.1	4.1	0.015	0.3	roots, sand	
380	630+09	T	SM		0	4.2	4.2	0.01	0.3	roots, sand	
381	630+43	T	SM		0	5.3	5.3	0.01	0.2	roots, sand	
382	630+52	T	SM		0	5.5	5.5	H	0	roots, sand	
383	630+65	T	SM		0	4.2	4.2	0.01	0.2	sand	
384	630+74	T	SM		0	6.9	6.9	H-0.01	0	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
385	630+81	L	SM		9.0	9.5	0.5	0.01	0.1	none	
386	630+89	T	SM		0	2.0	2.0	H	0.3	sand	
387	630+99	O	SM-SC		0	7.0	7.0	0.015	0.3	roots, sand	
388	631+05	O	SM-SC		0	4.8	4.8	0.015	0.4	roots, sand	
389	631+12	L	SM		0	1.5	1.5	H	0.1	none	
390	631+41	L	SM		0	1.6	1.6	0.01	0.2	sand	
391	631+74	T	SM-SC		0	8.0	8.0	H-0.015	0.3	roots, sand	
392	631+78	T	SM		0	1.0	1.0	H	0	roots	
393	632+01	T	SM		0	5.1	5.1	H	0	roots	
394	632+29	T	SM		0	1.1	1.1	H	0	roots	
395	632+37	T	SM		0	4.1	4.1	H	0	roots	
396	632+60	L	SM		0	3.1	3.1	H	0.1	none	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
397	632+70	L	SM		0	3.2	3.2	H-0.01	0.1	sand	
398	632+82	T	SM		0	1.1	1.1	H	0	none	
399	633+20	L	SM-SC		0	2.3	2.3	H	0.1	none	
400	633+47	L	SM		0	3.1	3.1	0.01	0.1	sand	
401	634+37	L	SM		0	4.5	4.5	0.01	0.2	sand	
402	634+73	O	SM		0	3.1	3.1	0.01	0.2	sand	
403	634+91	L	SM		2.1	3.5	1.4	H	0.1	roots	
404	634+97	L	SM		0	3.0	3.0	H	0	roots, sand	
405	635+07	O	SM		0	4.6	4.6	0.01	0.1	sand	
406	635+10	O	SM		0	3.1	3.1	H	0	none	
407	635+16	T	SM		0	3.1	3.1	H-0.01	0.3	sand, roots	
408	635+20	L	SM		0	2.2	2.2	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
409	635+34	L	SM		0	2.5	2.5	H	0.3	sand	
410	635+46	L	SM		0	5.6	5.6	0.01	0.1	sand	
411	635+50	L	SC		8.0	9.1	1.1	0.01	0.1	roots	
412	635+55	L	SM		1.6	2.0	0.4	H	0.1	roots	
413	635+62	T	SM-SC		0	1.7	1.7	H-0.01	0.1	roots, sand	
414	635+74	T+L	SM-SC		0	12.0	12.0	H-0.015	0.6	roots, sand	poorly developed @ base
415	635+80	L	SC		5.7	7.4	1.7	H-0.01	0.2	roots	
416	635+85	O	SC		0	2.7	2.7	H	0.1	roots	
417	635+88	T	SC		0	4.2	4.2	H	0	sand	
418	636+08	T	SC		0	11.7	11.7	0.01	0.3	roots, sand	
419	636+28	O	SC		0	8.2	8.2	0.01	0.3	roots, sand	
420	636+32	L	SC		0	4.3	4.3	0.015	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
421	636+37 to 636+40	L	SC		0	10.1	10.1	0.015	1.0+	roots, sand	
422	636+47	0	SC		0	6.6	6.6	0.01	0.1	roots, sand	
423	636+50	0	SC		0	10.1	10.1	0.015	1.0+	roots, sand	
424	636+72	T	SC		0	4.3	4.3	H	0	none	
425	636+79	0	SC		0	10.0	10.0	0.015	0.9	sand	
426	636+90	0	SC		0	2.5	2.5	H	0.1	sand	
427	637+05	L	SC		0	4.0	4.0	H	0	roots	
428	637+07	L	SC		0	3.3	3.3	H-0.01	0.1	sand	
429	637+13	0	SC		0	5.6	5.6	0.01	0.1	sand	
430	637+22	T+L	SC-ML		0	8.4	8.4	0.01	0.1	sand	
431	637+31	L	SC-ML		0	10.2	10.2	0015	0.2	roots, sand	
432	637+33	L	SC		0	9.0	9.0	0.015	0.2	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
433	637+47	T	SC		0	3.7	3.7	H	0	none	
434	637+57	0	SC		0	10.5	10.5	0.01	0.3	roots, sand	
435	637+63	T	SC		0	2.7	2.7	H	0	none	
436	637+65	T	SC		0	4.6	4.6	H - 0.01	0.1	roots	
437	637+70	L	SC		0	2.0	2.0	0.01	0.1	roots, sand	
438	637+74	T+0	SC		0	11.0	11.0	0.01 0.05	0.5	roots, sand	
439	637+90 to 637+94	L	SC		0	12.0	12.0	0.015	0.3	roots, sand	
440	637+97	0	SC		0	2.7	2.7	0.015	0.1	roots, sand	
441	638+03	T	SC		0	2.1	2.1	11	0	none	
442	638+39	L	SC		0	3.4	3.4	11	0.1	roots	
443	638+49	L	SC		0	4.8	4.8	0.01	0.2	roots, sand	
444	638+72	0	SC		0	4.1	4.1	0.01	0.2	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
445	638+79	L	SC		0	2.8	2.8	0.015	0.1	roots, sand	
446	638+90	O	SC		0	6.5	6.5	0.01	0.1	sand	
447	638+98	L	SC		0	2.8	2.8	0.015	0.3	roots, sand	
448	639+06 to 639+12	L	SC		0	2.1	2.1	0.01	0.2	roots, sand	
449	639+32	T	SC		0	4.9	4.9	0.01 - 0.025	0.5	roots, sand	
450	639+35	T	SC		0	2.9	2.9	0.01	0.2	roots, sand	
451	639+36	T	SC		0	2.5	2.5	H - 0.01	0.1	roots, sand	
452	639+39	L	SC		0	5.0	5.0	0.01	0.2	roots, sand	
453	639+50	T	SC		0	4.1	4.1	0.015	0.4	roots, sand	
454	639+63	L	SC		0	6.8	6.8	0.01	0.1	sand	
455	639+83	T	SC		0	7.8	7.8	0.01	0.4	sand	
456	639+92	L	SC		0	6.3	6.3	H	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
457	639+94	T	SC		0	2.5	2.5	H	0.1	sand	
458	640+05	O	SC		0	6.8	6.8	0.02	0.3	sand	
459	640+17	L	SC		0	5.2	5.2	0.01	0.4	roots, sand	
460	640+19	L	SC		0	4.3	4.3	0.01	0.2	roots, sand	
461	640+21	L	SC		1.9	2.7	0.8	0.01	0.1	roots, sand	
462	640+24	L	SC		0	3.7	3.7	H	0.1	sand	
463	640+28	L	SC		0	5.2	5.2	0.01	0.4	sand	
464	640+31	O	SC		0	3.2	3.2	0.01	0.1	sand	
465	640+33	O	SC		0	1.2	1.2	0.02	0.2	sand	
466	640+43	T	SC		0	7.1	7.1	0.015	0.3	sand	
467	640+61	T	SC		0	1.5	1.5	0.01	0.1	sand	
468	640+74	T	SC		0	1.2	1.2	0.01	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
469	640+76	O	SC		0	7.9	7.9	0.015	0.4	sand	loose soil material around crack
470	641+00	T	SC		0	1.9	1.9	H	0.1	sand	
471	641+08	T	SC		0	3.9	3.9	H	0.1	sand	
472	641+65	L	SC		0	1.9	1.9	0.01	0.1	sand	
473	641+67	L	SC		0	1.2	1.2	0.015	0.3	sand	
474	641+82	L	SC		0	4.5	4.5	0.01	0.2	sand	
475	641+87	L	SC		0	2.9	2.9	H	0.1	none	
476	641+93	L	SM		0	3.1	3.1	H-0.01	0.1	sand	
477	641+95	O	SM		0	1.7	1.7	0.01	0.3	sand	
478	642+25	T	SM		0	1.8	1.8	H	0.1	none	
479	642+35	T	SM		0	4.5	4.5	H	0.1	none	
480	643+36	L	SC		0	3.4	3.4	H	0.1	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
481	643+46	T	SC		0	7.8	7.8	0.01 0.05	0.8	roots, sand	
482	643+55	L	SC		0	5.2	5.2	H	0	none	
483	643+91	L	SC		1.8	5.8	4.0	H	0	none	discontinuous, poorly developed
484	644+05	T	SC		0	0.9	0.9	H- 0.01	0.1	sand, roots	
485	644+18	T	SM		0	0.8	0.8	0.01	0.3	sand, roots	
486	644+29	L	SM		0	2.1	2.1	H- 0.01	0.4	sand, roots	
487	644+39	L	SM		0	2.0	2.0	0.015	0.1	roots	
488	644+49	L	SM		0	3.2	3.2	H	0.1	roots	
489	644+86	T	SM		0	1.3	1.3	0.01	0.3	roots, sand	
490	644+88	L	SM		0	2.4	2.4	11	0.1	roots	
491	644+95	L	SM-SC		0	2.7	2.7	H- 0.01	0.2	roots, sand	
492	645+42	O	SC		0	1.3	1.3	0.015	0.3	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
493	645+67 to 645+72	L	SM		0	4.8	4.8	0.015-0.02	1.0+	sand, roots	
494	645+79	L	SM		0	2.4	2.4	0.01	0.3	sand, roots	
495	645+81	O	SM		0	2.7	2.7	H	0.1	roots	
496	645+83	L	SM		0	3.3	3.3	0.01	0.2	roots, sand	
497	645+88	T	SM		0	2.2	2.2	H-0.01	0.1	roots, sand	
498	646+13 to 646+15	L	SM-SC		5.3	6.8	1.5	0.015	0.4	roots, sand	
499	646+90	L	SM		0	3.1	3.1	H	0.1	sand	
500	646+92	O	SM		0	2.3	2.3	H	0	none	
501	646+97	O	SM		0	3.5	3.5	H	0.1	sand	
502	647+56	T	SM		0	3.2	3.2	H-0.015	0.2	roots, sand	poorly developed
503	648+42	L	SM		0	2.9	2.9	H	0.1	roots	
504	648+62	T	SM		0	2.0	2.0	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
505	648+71	T	SM		0	1.7	1.7	0.01	0.3	roots, sand	
506	648+78	T+O	SM		0	4.9	4.9	H	0.1	sand	
507	648+90	L	SM		0	3.2	3.2	H	0	none	
508	649+26	O	SM		9.0	9.5	0.5	H	0.1	none	
509	649+37	T	SM		0	1.0	1.0	H-0.01	0.1	sand	
510	649+68	O	SM		0	0.9	0.9	0.015	0.4	sand	
511	649+94	T	SC		0	1.1	1.1	H-0.01	0.1	sand	
512	651+10	T+O	SM		0	3.0	3.0	0.01	0.2	sand	
513	651+12	O	SM		0	1.0	1.0	H	0.1	roots, sand	
514	651+26	L	SM		0	1.2	1.2	0.01	0.3	sand	
515	651+31	O	SM		0	1.5	1.5	0.01	0.1	sand	
516	651+44 to 651+45	O	SM		0	1.7	1.7	0.01	0.2	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
517	652+51	O	SM		0	1.3	1.3	0.01	0.2	sand	
518	652+95	O	SM		2.1	3.3	1.2	H	0.1	none	
519	653+06	O	SM		0	1.6	1.6	0.01	0.3	sand	
520	653+13	O	SM		0	2.9	2.9	0.01	0.2	sand	
521	653+87	L	SM		0	1.4	1.4	0.01	0.1	sand	
522	653+95	O	SM		0	2.1	2.1	H	0.1	sand	
523	654+00	O	SM		0	1.3	1.3	H	0.1	sand	
524	654+30	O	SM		0	1.7	1.7	0.01	0.1	roots, sand	
525	654+31	T	SM		0	1.8	1.8	0.01	0.1	roots, sand	
526	654+36	O	SM		0	1.2	1.2	0.01	0.1	roots, sand	
527	654+44	O	SM		0	1.3	1.3	0.01	0.1	sand	
528	654+46	T	SM		0	1.3	1.3	0.01	0.1	sand	

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No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
529	654+47	T	SM		0	$8.^2$	$8.^2$	H	0	roots	
530	654+55	T	SM		0	$1.^3$	$1.^3$	H	0	roots	
531	654+59	T	SM		0	$1.^2$	$1.^2$	H	0	none	
532	654+72	O	SM		0	$1.^1$	$1.^1$	$0.^{01}$	$0.^1$	sand	
533	655+25	L	SM		0	$7.^0$	$7.^0$	H - 0.01	$0.^1$	roots, sand	
534	655+71	T	SM		0	1.8	1.8	0.015	$0.^4$	roots, sand	
535	655+90	T	SM		0	$2.^2$	$2.^2$	$0.^{01}$	$0.^1$	roots, sand	
536	655+98	T	SM-SC		0	$2.^2$	$2.^2$	H - 0.01	$0.^1$	sand	
537	656+32	O	SM		0	$1.^2$	$1.^2$	H	0	sand	
538	656+34	T	SM		0	$2.^3$	$2.^3$	0.01	$0.^1$	sand	
539	656+45	O	SM-SC		0	$3.^5$	$3.^5$	0.01-0.025	$0.^3$	sand	
540	656+46	T	SM-SC		0	2.7	2.7	0.01-0.02	$0.^3$	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
541	656+54	O	SM		0	1.4	1.4	H	0	none	
542	656+68	T	SM-SC		0	3.2	3.2	H-0.025	0.5	roots, sand	
543	656+96 to 656+97	O	SM-SC		0	3.2	3.2	H	0.1	roots	
544	657+10	O	SM-SC		0	1.5	1.5	H	0.1	sand	
545	657+49	T	SM-SC		0	3.3	3.3	H	0.1	sand	
546	657+49.5	L	SC		10.0	11.0	1.0	H	0.1	roots	
547	657+65	O	SC		2.5	3.5	1.0	H	0.1	none	
548	657+87	T	SM		0	6.2	6.2	H-0.015	0.2	sand	
549	657+89	T+O	SM		0	2.2	2.2	0.015	0.3	roots, sand	
550	657+91	L	SM		0	2.2	2.2	0.01	0.3	roots, sand	
551	657+92	L	SM		0	3.1	3.1	0.01	0.2	roots, sand	
552	657+97	L	SM		0	4.6	4.6	11-0.01	0.2	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
553	657+99	L	SM		0	2.3	2.3	H	0.1	sand	poorly developed
554	658+11	T	SM		0	1.4	1.4	0.01	0.1	roots, sand	
555	658+16	T	SM		0	1.4	1.4	H	0	none	poorly developed
556	658+48	T	SM		0	4.8	4.8	H-0.015	0.2	roots, sand	
557	658+84	T	SM		0	6.6	6.6	0.015	0.6	roots, sand	2 parallel cracks 0.01' apart, soil wedge between
558	659+36	T	SM		0	1.1	1.1	0.01	0.2	roots, sand	nearly oblique
559	659+41	T	SM		0	1.5	1.5	H-0.01	0.2	sand	
560	659+44	O	SM		0	1.8	1.8	H	0.1	roots	poorly developed
561	659+58	T	SM		0	1.1	1.1	H	0.1	roots	
562	659+65	T	SM		0	2.4	2.4	H-0.01	0.3	roots, sand	
563	659+75	L	SM		0	1.1	1.1	H	0.1	roots	
564	659+90	O	SM		0	3.5	3.5	0.01	0.3	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
565	659+93	O	SM		0	0.9	0.9	H	0	none	
566	659+97	T	SM		0	1.1	1.1	H	0	roots	
567	660+01	T+L	SM		0	5.0	5.0	0.015	0.3	roots, sand	well developed
568	660+06	O	SM		0	2.2	2.2	H	0.1	roots	
569	660+10	O	SM		0	1.0	1.0	0.01	0.1	roots, sand	
570	660+18	T	SM		0	5.7	5.7	0.01-0.05	0.4	roots, sand	pipe @ 0.5, w= 0.05
571	660+28	O+L	SM		0	5.6	5.6	H-0.01	0.4	roots, sand	
572	660+32	O	SM		0	2.6	2.6	0.01	0.1	sand	
573	660+44	T	SM		0	1.2	1.2	11	0.1	sand	
574	660+46	L	SM		3.0	3.9	0.9	0.01	0.1	roots	
575	660+56	L	SM		0	3.5	3.5	H-0.01	0.1	roots	
576	660+62	L	SM		2.3	3.2	0.9	H	0.1	roots	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
577	660+66	T	SM		0	$10.^{3}$	$10.^{3}$	H-0.1	$1.^{5}+$	roots, sand	severe crack
578	660+71	T	SM		$0.^{9}$	$2.^{0}$	$1.^{1}$	0.01	$0.^{1}$	sand	
579	660+73	L	SM		0	$2.^{5}$	$2.^{5}$	0.01	$0.^{1}$	roots, sand	
580	660+78	T	SM		0	$6.^{6}$	$6.^{6}$	H-0.01	$0.^{3}$	roots, sand	
581	660+79	O	SM		$1.^{7}$	$3.^{2}$	$1.^{5}$	H	$0.^{1}$	roots, sand	
582	660+81	L	SM		$2.^{7}$	$3.^{7}$	$1.^{0}$	H	0	roots	
583	660+98	T	SM		0	$3.^{5}$	$3.^{5}$	0.01-0.05	0.4	roots, sand	
584	661+01	T	SM		0	$1.^{1}$	$1.^{1}$	H	$0.^{1}$	roots	poorly developed
585	661+03	T	SM		0	$1.^{0}$	$1.^{0}$	H	$0.^{1}$	roots	poorly developed
586	661+26	T	SM		0	$11.^{7}$	$11.^{7}$	H-0.02	$1.^{0}$	roots, sand, some gravel	pipe @ 2.8-2.9, w=0.05
587	661+34	L	SM		0	$1.^{7}$	$1.^{7}$	H	0	roots	
588	661+49	L	SM		0	$6.^{2}$	$6.^{2}$	0.01	$0.^{1}$	roots, sand	mostly poorly developed

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
589	661+63	O	SM		O	3.8	3.8	H	O	roots	
590	661+73	T	SM		O	4.1	4.1	0.01	0.3	roots, sand	
591	661+94	T	SM		O	1.8	1.8	0.01	0.3	roots, sand	
592	662+06	O	SM-SC		O	10.9	10.9	0.01-0.02	0.4	roots, sand	
593	662+07 to 662+15	L	SM		1.2	1.7	0.5	0.02	0.3	roots, sand	
594	662+21	T+L	SM-SC		O	10.4	10.4	H-0.05	0.9	roots, sand	sand filled pipe @ 7.4, w=0.025
595	662+29	L	SM		O	3.0	3.0	0.01	0.2	roots, sand	
596	662+31	O	SM		O	3.8	3.8	H-0.01	0.2	roots, sand	
597	662+34	T	SM		O	1.5	1.5	H	O	roots	
598	662+72	T	SM-SC		O	6.0	6.0	H-0.01	O	roots	poorly developed
599	662+76	T	SM-SC		O	11.4	11.4	0.015-0.02	0.8	roots, sand	moderately developed
600	662+82.5	L	SM-SC		O	4.2	4.2	0.01	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
601	662+83 to 662+87	L	SM-SC		0	5.5	5.5	0.01-0.04	1.0	roots, sand	
602	663+08	O	SM-SC		0	7.0	7.0	0.015	0.3	roots, sand	
603	663+10	O	SM		0	2.2	2.2	0.01	0.2	roots, sand	
604	663+18	L	SM		0	4.7	4.7	0.02	0.3	roots, sand	
605	663+20 to 663+25	L	SM-SC		0	5.2	5.2	0.02	0.5	roots, sand	
606	663+25.5	T	SM-SC		0	11.1	11.1	0.015	0.4	roots, sand	mostly well developed
607	663+28	O	SM-SC		0	7.0	7.0	H	0.1	roots	poorly developed
608	663+35	T	SM-SC		0	6.4	6.4	H	0.1	roots	
609	663+37	T	SM-SC		0	8.4	8.4	H-0.02	0.2	roots, sand	
610	663+46	T	SM-SC		0	5.0	5.0	H-0.025	0.1	sand	
611	663+54	T	SM-SC		0	9.4	9.4	H-0.015	0.2	roots, sand	
612	663+68.5	T	SM-SC		0	13.0	13.0	H-0.04	0.6	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
613	663+85	T	SM-SC		0	3.9	3.9	H	0.1	roots	
614	663+91	T	SM-SC		0	13.5	13.5	H-0.025	0.8	roots, sand	
615	664+01	T	SM		0	1.6	1.6	0.01	0.1	roots, sand	
616	664+14	T	SM-SC		0	12.1	12.1	H-0.015	0.3	sand	
617	664+22	T	SM-SC		0	4.3	4.3	H-0.01	0.1	roots	
618	664+32	O	SP-SM SM		0	1.4	1.4	H	0.1	roots, sand	
619	664+37	O	SM		0	3.3	3.3	0.01	0.1	none	
620	664+51	T+O	SM-SC		0	11.2	11.2	0.01-0.05	0.3	roots, sand	
621	664+59.5	T+O	SM-SC		0	7.6	7.6	H-0.015	0.3	roots, sand	
622	664+69	T	SM		0	2.2	2.2	0.015	0.1	roots, sand, some gravel	
623	664+73	T	SP-SM SM		0	2.2	2.2	0.035	0.4	roots, sand, gravel	
624	664+86	T	SM-SC		0	8.1	8.1	H-0.05	0.3	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
625	665+05	O	SC		0	2.7	2.7	H	0.1	none	poorly developed, discontinuous in small segments
626	665+21	T	SC		0	1.8	1.8	H	0.1	none	
627	665+25	T	SC		0	3.0	3.0	H	0.1	roots	
628	665+65	T	SM-SC		0	11.2	11.2	H-0.03	0.3	roots, sand	
629	665+71	O	SM-SC		0	9.3	9.3	0.015	0.2	roots, sand	
630	665+74	T	SC		0	1.0	1.0	0.01	0.1	sand	
631	665+95	T	SM		4.4	4.8	0.4	0.01	0	roots	
632	666+37 to 666+39	O	SP-SM SM-SC		0	4.9	4.9	H-0.01	0.1	roots, sand	
633	666+44	O	SM-SC		0	4.2	4.2	0.01	0.1	sand	
634	666+72 to 666+76	L	SM-SC		0	7.5	7.5	0.02	0.6	roots, sand	
635	667+08	T	SP-SM		0	1.7	1.7	0.01	0.1	sand, fine gravel	
636	667+12.5 to 667+14	O	SM-SC SP-SM		0	5.0	5.0	H	0	none	poorly developed

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
637	667+18	O	SM		2.1	3.0	0.9	0.01	0	none	poorly developed
638	667+87	T	SC		0	1.0	1.0	H	0	roots	poorly developed
639	668+27	T	SM		0	1.3	1.3	0.005	0.1	roots	
640	668+35	O	SC		1.7	2.5	0.8	H	0.1	none	poorly developed
641	668+42	T	SM		0	0.9	0.9	H	0.1	roots	
642	668+50	O	SM		0	1.0	1.0	H	0	none	
643	669+74	T+O	SM-SC		2.0	12.6	10.6	H-0.015	1.0	sand	
644	669+98	T	SM		0	0.9	0.9	0.01	0.2	sand	
645	669+99	T	SM		0	0.9	0.9	0.01	0.1	sand	
646	670+00	T	SM		0	1.1	1.1	0.01	0.1	sand	SCHEDULED OUTLET
647	670+01	T	SM		0	0.9	0.9	0.01	0.2	sand	
648	670+32	T	SM		0	1.1	1.1	0.01	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
649	670+34	T	SM		0	0.8	0.8	H	0	roots	poorly developed
650	670+35	T	SM		0	0.9	0.9	0.01	0.3	sand	
651	670+38	0	SM		0	1.7	1.7	0.015	0.2	sand	
652	670+56	0	SM		0	2.2	2.2	0.01	0.1	sand	
653	670+68	0	SM		0	0.8	0.8	0.02	0.3	none	
654	670+71	T	SM		0	2.5	2.5	H-0.01	0.2	roots, sand	
655	670+78	0	SM		0	1.0	1.0	0.005	0.1	silt	
656	670+79	T	SM		0	2.5	2.5	H	0	roots	poorly developed
657	670+80	T	SM-SC		0	7.4	7.4	H-0.02	0.4	roots, sand	
658	670+82	T	SM-SC		0	4.4	4.4	H-0.02	0.4	sand	
659	670+86	0	SM-SC		0	3.9	3.9	0.01	0.3	abundant roots, sand	
660	670+88	L	SM-SC		0	5.4	5.4	0.015	0.2	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
661	670+91 to 670+93	L	SM-SC		0	5.0	5.0	0.02-0.03	0.5	roots, sand	
662	671+01	T	SM-SC		0	4.1	4.1	0.01	0.1	roots, sand	
663	671+02	T	SM-SC		0	4.1	4.1	0.01-0.02	0.2	roots, sand	
664	671+05	T	SM-SC		0	2.0	2.0	0.015	0.3	open	
665	671+07	O	SM-SC		0	2.3	2.3	0.01	0.1	sand	
666	671+10 to 671+13	L	SM-SC		0	1.7	1.7	0.015	0.3	roots, sand	
667	671+13	T	SM		0	1.2	1.2	H	0.1	roots	
668	671+22	O	SM-SC		0	7.4	7.4	H-0.03	0.4	roots, sand	
669	671+25	T	SM		0	2.2	2.2	H-0.01	0.1	roots, sand	
670	671+30	T	SM-SC		0	4.1	4.1	0.03	0.3	sand, trace of gravel	
671	671+34	T	SM		0	1.8	1.8	11	0.1	roots	
672	671+36	T	SM		0	1.5	1.5	11	0.1	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
623	671+38	O	SM-SC		O	2.9	2.9	H-0.01	0.1	sand	discontinuous in segments
674	671+42	O	SM-SC		O	2.8	2.8	H-0.01	0.1	roots, sand	
675	671+44	T	SM-SC		O	2.2	2.2	H-0.01	0.1	roots, sand	
676	671+45	T	SM		O	1.8	1.8	0.01	0.1	roots, sand	
677	671+47	O	SM		O	3.3	3.3	0.01	0.2	fine sand	
678	671+50	O	SM		O	1.2	1.2	H	0	roots	
679	671+54	T	SM		O	1.2	1.2	0.01	0	roots, sand	
650	671+58	T	SM		O	2.7	2.7	H-0.01	0.2	roots, sand	
651	671+62	T	SM		O	3.1	3.1	0.01	0.15	roots, sand	
652	671+66	O	SM		O	1.7	1.7	0.03	0.2	open	
653	671+69	O	SM		O	5.9	5.9	0.02	0.25	roots, sand	
654	671+74	T	SM		O	1.1	1.1	H	0.1	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
685	671+76	T	SM		0	1.4	1.4	H	0.1	roots	
686	671+78	O	SM		0	0.9	0.9	H	0.1	none	
687	671+85	T	SM		0	1.4	1.4	H	0.1	roots	
688	671+86	T	SM		0	1.5	1.5	0.03	0.2	roots, sand	
689	671+89	T	SM		0	2.9	2.9	0.015	0.2	roots, sand	
690	671+91	T	SM		0	2.5	2.5	0.025	0.3	roots, sand	
691	671+95	T	SM		0	2.0	2.0	0.025	0.3	sand	partially open
692	671+96	T	SM		0	3.7	3.7	0.01	0.2	sand, roots	
693	672+02	T	SM		0	3.8	3.8	0.02	0.2	roots, sand	
694	672+11	T	SM-SC		0	5.6	5.6	0.01-0.1	1.3	roots, sand	
695	672+21	T	SM-SC		0	5.3	5.3	0.01-0.08	1.1	roots, sand	
696	672+42	T	SM-SC		0	3.4	3.4	0.02-0.05	0.7	roots, sand, gravel	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
697	672+52	T	SM-SC		0	3.9	3.9	0.01-0.02	0.2	roots, silt, sand	
698	672+54	O	SM-SC		2.8	6.0	3.2	0.01	0.2	roots, sand	
699	672+56	T	SM		0	1.2	1.2	H	0.1	roots	
700	672+59	T	SM		0	2.9	2.9	H	0.1	none	
701	672+64	T	SM		0	2.3	2.3	0.01	0.1	roots, sand	
702	672+69	T	SM		0	1.2	1.2	0.01	0.1	sand	
703	672+71	L	SC		3.0	8.2	5.2	0.015	0.3	roots, sand	
704	672+73	T	SM		0	1.0	1.0	0.005	0.1	sand	poorly developed
705	672+76	T	SM		0	1.0	1.0	H	0	none	poorly developed
706	672+77	T	SM		0	1.1	1.1	0.015	0.1	sand	
707	672+79	T	SM		0	1.1	1.1	H	0.1	none	poorly developed
708	672+93	T	SM-SC		0	8.7	8.7	0.01-0.2	1.5+	roots, sand, gravel	pipe @ 0-1.8, w=0.2

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
709	672+97	T	SM		0	1.3	1.3	0.01	0.3	sand	
710	672+98	O	SM		0	1.1	1.1	0.01	0.2	sand	
711	673+00	T	SM		0	0.9	0.9	H	0	roots	
712	673+01	T	SM		0	0.7	0.7	H	0	roots	
713	673+03	O	SM-SC		0	5.9	5.9	H-0.01	0	sand	
714	673+08	O	SM		0	1.3	1.3	0.01	0.1	sand	
715	673+11	T	SM		0	1.8	1.8	H-0.01	0.2	roots, sand	
716	673+15	T	SM-SC		0	10.0	10.0	0.01-0.1	1.5	roots, sand, gravel	pipes @ 0.9 & 1.5, w=0.1
717	673+23	T	SM		0	1.3	1.3	H	0	roots	
718	673+31	T	SM-SC		0	7.8	7.8	0.01-0.02	0.8	roots, sand	parallel crack 0.1 from 673+31 c/ soil wedge well developed
719	673+34	O	SM		0	1.1	1.1	0.01	0.2	sand	
720	673+41	T	SM		0	1.0	1.0	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
721	673+45	O	SM		0	0.9	0.9	0.015	0.2	sand	
722	673+47	O	SM		0	1.0	1.0	H	0	none	
723	673+52	T	SM-SC		0	13.1	13.1	0.01-0.1	2.0+	roots, sand, gravel	pipes @ 2.5, 5.1, w=0.1 poorly developed
724	673+56	T	SM		0	1.0	1.0	H	0	none	poorly developed
725	673+61	T	SM		0	0.7	0.7	0.01	0.1	sand	
726	673+63	O	SM		0	0.8	0.8	H	0	none	
727	673+67	O	SM		0	0.9	0.9	H	0	none	poorly developed
728	673+71 to 673+75	T+O	SM-SC		0	12.4	12.4	0.02-0.3	1.5+	roots, sand, gravel	open pipe @ 0.5-1.0, w=0.3
729	673+79	O	SC		3.0	10.4	7.4	0.01	0.1	roots, fine sand	
730	673+85 to 673+91	L	SC		0	7.2	7.2	0.02	0.9	roots, sand	
731	673+92	O	SM-SC		0	4.5	4.5	0.02	0.4	roots, sand	connected to Longitudinal crack @ base
732	673+93 to 673+98	L	SC		4.5	9.7	5.2	0.02	0.4	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
733	674+00 to 674+27	L	SM-SC		4.5	8.0	3.5	0.02	0.3	roots, sand	
734	674+03	T	SM-SC		0	4.5	4.5	0.015	0.2	roots, sand	
735	674+16	O	SC		0	3.7	3.7	0.015	0.1	roots, sand	
736	674+21	L	SC		0	2.6	2.6	0.02	0.2	roots, sand	
737	674+26 to 674+29	O+L	SM-SC		0	11.7	11.7	0.015	0.2	tree roots, sand	
738	674+39	O+L	SM-SC		0	11.7	11.7	0.015-0.4	1.5+	tree roots, sand	open pipe @ 2.3-2.7, W = 0.4 Probably animal burrow
739	674+49	T+O	SM-SC		0	10.5	10.5	H-0.02	0.3	roots, sand	
740	674+66	T	SM-SC		0	7.1	7.1	H-0.03	1.0	roots, sand	
741	674+68	L	SM-SC		0	9.1	9.1	0.015	0.2	roots, sand	
742	674+70	O	SM-SC		0	3.2	3.2	0.01	0.1	roots, sand	
743	674+87	O	SM-SC		0	7.4	7.4	0.03	0.1	loose sand	
744	675+06	O	SM-SC		0	9.5	9.5	0.005	0.1	sand tightly packed	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	MAX. Probe Depth	Fillings	Remarks
745	675+19	T	SM-SC		0	10.5	10.5	0.005-0.3	1.5	roots, sand	
746	675+37	T	SM-SC		0	8.0	8.0	H-0.015	0.2	roots, sand	
747	675+39	O	SM-SC		0	1.4	1.4	H	0	none	
748	675+55	T	SM-SC		0	5.5	5.5	0.01	0.1	roots, sand	
749	675+67	T	SM-SC		0	9.5	9.5	H-0.03	1.15	roots, sand	
750	675+88	T	SM-SC		0	12.1	12.1	H-0.2	1.5	roots, sand, some gravel	
751	675+95	O	SM-SC		0	2.3	2.3	H-0.005	0	fine sand	poorly developed
752	675+97	O	SM		0	1.1	1.1	0.01	0.1	fine sand	
753	676+00	T	SM		0	0.9	0.9	H	0	fine sand	
754	676+04	T	SM		0	0.8	0.8	H	0	fine sand	
755	676+06	T	SM		0	1.5	1.5	0.005	0.1	fine sand	
756	676+07	T	SM		0	1.1	1.1	H	0	fine sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
757	676+08	T	SM-SC		0	10.2	10.2	H-0.02	0.2	roots, sand	
758	676+27	0	SM-SC		0	2.9	2.9	H	0.1	fine sand	
759	676+32	0	SM		0	1.6	1.6	H	0.1	roots, fine sand	
760	676+34 to 676+35	L	SM-SC		0	3.2	3.2	0.01	0.2	roots, sand	
761	676+35	T	SM-SC		0	8.6	8.6	H-0.03	0.2	roots, sand, fine gravel	
762	676+41	0	SM-SC		0	7.9	7.9	H-0.03	0.5	roots, sand	
763	676+42	T	SM-SC		0	1.9	1.9	H	0	fine sand	
764	676+49	0	SC		0	3.2	3.2	H	0	roots	
765	676+52	0	SC		0	9.1	9.1	0.01	0.2	roots, sand	
766	676+59	T	SC		0	1.0	1.0	0.015	0.3	open	
767	676+62	T	SC		0	9.5	9.5	0.005-0.03	0.5	roots, sand	
768	676+67	0	SC		0	2.1	2.1	11	0	none	poorly developed

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
769	676+71	T	SC		0	1.0	1.0	0.005	0.1	fine sand	
770	676+73	0	SC		0	0.6	0.6	0.005	0.1	sand	
771	676+77	T+0	SC		0	5.0	5.0	H-0.01	0	fine sand	
772	676+78	T	SC		0	1.1	1.1	H	0	mostly roots, some fine sand	
773	676+84	T	SC		0	1.2	1.2	H	0	roots, fine sand	
774	676+85	T	SC		0	4.0	4.0	H-0.01	0.1	roots, sand	
775	676+89	T	SC		0	1.5	1.5	H	0	fine sand	poorly developed
776	676+90	0	SC		0	1.3	1.3	0.005	0	fine sand	
777	676+92	0	SC		0	1.7	1.7	H	0	none	poorly developed
778	676+94	T	SC		0	2.5	2.5	0.005	0.1	sand	
779	676+95	T	SC		0	1.1	1.1	0.01	0	open	
780	676+97	0	SC		0	1.5	1.5	H	0	none	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
781	676+98	O	SC		O	2.0	2.0	H	O	fine sand	
782	677+00	T	SC		O	3.4	3.4	H - 0.005	0.1	roots, fine sand	
783	677+03	T	SC		O	1.4	1.4	H	O	fine roots	Poorly developed
784	677+05	O	SC		O	1.5	1.5	H	O	fine roots, trace of sand	
785	677+07	O	SC		O	2.4	2.4	H	O	none	Poorly developed
786	677+10	O	SC		O	1.4	1.4	0.005	O	roots, fine sand	
787	677+11	T	SC		O	1.3	1.3	0.005	O	roots, fine sand	
788	677+21	T	SC		O	0.9	0.9	0.01	0.1	open c/ fine roots	
789	677+27	T	SC		O	0.6	0.6	H	O	fine roots	Poorly developed
790	677+39	T	SC		O	0.9	0.9	0.01	0.1	fine roots, sand	
791	678+21	T	SC		O	2.9	2.9	0.015	0.3	roots, sand	
792	678+23	O	SC		O	1.1	1.1	0.01	0.3	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
793	678+25	T	SC		0	1.1	1.1	H	0	roots	
794	678+28	T	SC		0	1.1	1.1	H	0.1	roots, fine sand	
795	678+31	0	SC		0	0.8	0.8	H	0	fine roots	
796	678+32	T	SC		0	1.2	1.2	H	0	fine roots	
797	678+34	T	SC		0	0.9	0.9	H	0	fine roots	
798	678+40	L	SC		0	2.6	2.6	0.01	0.1	roots, fine sand	
799	678+44	0	SC		0	1.0	1.0	0.005	0.1	roots, fine sand	
800	678+49	T	SC-SM		0	2.7	2.7	0.015	0.4	roots, sand	moderately developed
801	678+54	0	SC		6.8	7.4	0.6	0.005	0	roots	
802	678+71	T	SC		0	2.6	2.6	0.01	0.2	roots, fine sand	
803	678+72	T	SC		0	0.9	0.9	0.01	0.1	roots, sand	
804	678+73	T	SC		0	1.0	1.0	0.01	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8-A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
805	678+85	T	SC		0	0.5	0.5	0.015	0.1	roots, sand	
806	678+86	O	SC		0	0.7	0.7	0.01	0.2	roots, sand	
807	678+88	T	SC		0	0.7	0.7	0.01	0.1	roots, sand	
808	678+97	T	SC		0	1.0	1.0	H	0.1	roots, fine sand	
809	679+03	O	SC		0	0.9	0.9	0.005	0.1	fine sand	
810	679+12	T	SC		0	1.0	1.0	0.01	0.1	roots, sand	
811	679+18	T	SC		0	1.3	1.3	0.005	0	fine sand	
812	679+19	O	SC		0	1.7	1.7	0.005	0.1	fine sand	
813	679+22	O	SC		0	1.0	1.0	H	0	fine sand	
814	679+26	O	SC		0	1.5	1.5	0.005	0.1	fine sand	
815	679+43	O	SC		0	0.7	0.7	0.01	0.1	fine sand	
816	679+45	O	SC		0	1.3	1.3	0.015	0.2	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	MAX. Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
817	679+50	O	SC		0	0.8	0.8	H	0	fine roots	
818	679+52	O	SC		0	1.0	1.0	H	0	fine sand	
819	679+55	O	SC		0	1.2	1.2	H	0	none	irregular crack
820	679+57	O	SC		0	1.3	1.3	0.02	0.2	roots, sand	
821	679+59	T	SC		0	1.6	1.6	H	0	none	poorly developed
822	679+72	T	SC		0	1.3	1.3	0.01	0.1	roots, sand	
823	679+78	T	SC		0	1.1	1.1	0.01	0.2	roots, sand	
824	679+93	O	SC		4.7	5.5	0.8	0.005	0.1	fine sand	
825	680+01	O	SC		0	1.0	1.0	0.01	0.3	roots, sand	
826	680+03	O	SC		0	1.1	1.1	0.02	0.3	roots, sand	
827	680+09	T	SC		0	2.5	2.5	0.02	0.3	loose sand	
828	680+12	T	SC		0	1.7	1.1	0.005	0	fine sand	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
829	680+13	O	SC		0	1.7	1.7	0.005	0.1	sand	
830	680+16	T	SC		0	1.4	1.4	0.01	0.2	sand	
831	680+19	O	SC		0	1.3	1.3	H	0	silt	
832	680+21	O	SC		0	1.4	1.4	H	0	none	
833	680+23	O	SC		0	2.0	2.0	0.005	0.1	sand	
834	680+30	O	SC		0	1.9	1.9	H	0	sand	
835	680+36	O	SC		0	1.3	1.3	H	0	none	
836	680+42	O	SC		3.0	3.4	0.4	H	0	none	
837	680+43	O	SC		0	2.1	2.1	0.01	0.1	sand, partially open	
838	680+44	T	SC		0	1.8	1.8	0.01	0.1	sand, roots	
839	680+47	O	SC		0	1.2	1.2	0.025	0.3	open	
840	680+48	O	SC		0	1.1	1.1	0.01	0.1	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
841	680+52	T	SC		0	4.7	4.7	H-0.02	0.3	sand, roots	
842	680+56	O	SC		0	1.2	1.2	H	0.1	roots	
843	680+59	T	SC		0	1.6	1.6	H	0	none	
844	680+61	O	SC		0	1.3	1.3	0.005	0.1	sand	
845	680+64	O	SC		0	1.1	1.1	H	0	silt	
846	680+65	O	SC		0	1.0	1.0	H	0	silt	
847	680+66	T	SC		0	3.0	3.0	0.01	0.2	roots, sand	
848	680+68	T	SC		0	1.0	1.0	0.015	0.2	sand	
849	680+70	T	SC		0	1.8	1.8	0.025	0.4	open	
850	680+72	O	SC		0	1.2	1.2	H	0.1	roots	
851	650+74	T	SC		0	2.1	2.1	H	0.1	roots	
852	680+78	T	SC		0	5.5	5.5	H-0.005	0.1	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
853	680+82	O	SC		O	2.6	2.6	H	O	none	
854	680+86	T	SC		O	0.8	0.8	H	O	none	
855	680+92	T	SC		O	2.0	2.0	H	O	roots	
856	680+94	O	SC		O	1.2	1.2	H	O	none	poorly developed
857	680+97	O	SC		O	0.9	0.9	H	O	sand	
858	681+11	O	SC		O	0.9	0.9	0.005	0.1	sand	
859	681+17	O	SC		O	0.9	0.9	H	O	sand	
860	681+23	T	SC		O	1.9	1.9	H 0.01	0.1	sand	
861	681+27	O	SC		O	1.1	1.1	H	O	silt	
862	681+47	O	SC		O	1.1	1.1	0.01	0.2	sand, partially open	
863	681+50	O	SC		O	1.1	1.1	H	O	trace of sand	
864	681+60	T	SC		O	1.4	1.4	0.005	0.1	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
865	681+61	O	SC		O	0.7	0.7	0.01	0.1	sand	
866	681+69	T	SC		O	0.9	0.9	H	0.1	sand, partially open	
867	681+71	T	SC		O	0.4	0.4	H	O	none	
868	681+74	T	SC		O	0.5	0.5	H	O	none	
869	681+75	T	SC		O	3.5	3.5	0.005	0.1	sand, roots	
870	681+82	T	SC		O	0.2	0.2	H	O	none	
871	681+84	T	SC		O	0.3	0.3	H	O	none	
872	681+85	T	SC		O	0.9	0.9	H	O	sand	
873	681+97	T	SC		1.3	3.0	1.7	H	O	roots	discontinuous
874	682+01	T	SC		O	1.0	1.0	H	O	sand	
875	682+02	T	SC		O	1.2	1.2	H	O	sand	
876	682+03	T	SC		O	1.0	1.0	H	O	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
877	682+12	T	SC		0	1.3	1.3	H	0	sand	
878	682+25	T	SC		0	0.7	0.7	0.005	0.025	sand	
879	682+26	T	SC		0	0.7	0.7	H	0	sand	
880	682+37 to 682+38 TO	LT	SC		3.5	4.5	1.0	H	0	sand	
881	682+71.5	T	SC		2.75	3.25	1.5	H	0	roots, sand	
882	682+79	T+O	SC		0	3.0	3.0	H	0	sand, roots (trace)	
883	682+89	T+O	SC		0	6.7	6.7	H-0.015	0.3	sand, roots	discontinuous in parts
884	682+97	O	SC+SP-SM		0	1.0	1.0	0.005	0.1	sand	
885	683+15	O	SP-SM		0	0.6	0.6	0.01	0.1	sand	
886	683+25	T	SC		0	0.8	0.8	H-0.005	0.15	sand, roots	
887	683+32	T	SC		0	1.2	1.2	H	0	sand	
888	683+46	T	SC		0	1.0	1.0	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
889	683+60	O	SC		O	1.0	1.0	H	O	sand	
890	683+72	T	SC		O	7.6	7.6	H-0.001	0.2	sand, roots	
891	683+75	O	SC		O	1.3	1.3	H	O	none	
892	683+77	O	SC		O	1.2	1.2	H	O	sand, roots	
893	683+78	O	SC		O	1.2	1.2	H	O	sand	
894	683+80	O	SC		O	0.8	0.8	H	O	sand	
895	683+84	O	SC		O	3.7	3.7	H-0.005	0.1	sand	
896	683+85	T	SC		O	2.2	2.2	H	O	sand	
897	653+93	O	SC		3.6	4.0	0.4	H	O	sand	
898	653+94	O	SC		O	1.3	1.3	0.01	0.3	open	
899	683+97	T	SC		O	10.1	10.1	H-0.015	0.3	sand, roots	
900	684+03	O	SC		O	3.3	3.3	H	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
901	684+11	T	SC		0	2.3	2.3	H	0	sand	
902	684+12	T	SC		0	5.8	5.8	H	0.2	sand	
903	684+12.5	T	SC		0	7.4	7.4	H-0.015	0.4	sand, roots	
904	684+20 to 684+21	L	SC		1.1	3.5	2.4	0.005	0.1	none	set of longitudinal cracks
905	684+22	O	SC		0	2.2	2.2	H	0	none	irregular crack
906	684+23	O	SC		0	1.3	1.3	H	0	sand, roots	
907	684+25	T	SC		0	1.3	1.3	H	0	sand, roots	
908	684+27	T	SC		0	7.3	7.3	H-0.005	0.1	sand, roots	
909	684+29 to 684+30	T+O	SC		0	4.7	4.7	0.01	0.7	roots, sand	
910	684+31	T	SC		0	4.3	4.3	H	0.1	sand, roots	discontinuous
911	684+39	T	SC		0	1.4	1.4	H	0.3	sand, roots	
912	684+43	T+O	SC		0	6.1	6.1	H	0.1	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
913	684+46	T+O	SC		1.6	3.7	2.1	H	0	sand, roots	
914	684+49	O	SC		0	3.4	3.4	H	0.1	sand, roots	
915	684+51	O	SC		0	1.8	1.8	H	0	sand, roots	
916	684+58	T+O	SC		0	7.8	7.8	H	0	sand, roots	Poorly developed
917	684+61	O	SC		0	1.0	1.0	0.02	0.4	mostly open, some sand	
918	684+62.5	T	SC		0	7.2	7.2	H-0.025	0.3	sand, roots	
919	684+66	O	SC		0	1.2	1.2	H	0	none	
920	684+67	T	SC		0	3.3	3.3	H	0.1	sand, roots	
921	684+71	O	SC		0	1.2	1.2	0.01	0.2	sand	
922	684+74	T+O	SC		0	3.0	3.0	H	0	sand	
923	684+79	T+O	SC		0	6.2	6.2	H-0.05	1.1	sand, roots	open pipe @ 1.6-2.2, w=0.05
924	684+85	T+O	SC		0	5.3	5.3	H-0.015	0.4	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
925	684+90	O	SC		O	1.0	1.0	0.015	0.2	sand, roots	
926	684+92	T	SC		O	0.9	0.9	H	O	roots	
927	684+94 to 684+95	O	SC		O	3.2	3.2	0.01	0.2	roots, sand	
928	684+99	O	SC		O	0.9	0.9	0.005	0.2	roots, sand	
929	685+01	O	SC		O	2.9	2.9	H-0.01	0.2	roots, sand	
930	685+06	L	SC		O	4.0	4.0	H	0.1	sand, roots	
931	685+08	T	SC		O	3.1	3.1	H-0.02	0.3	sand, roots	
932	685+11	T	SC		O	1.3	1.3	H	O	none	
933	685+13	T	SC		O	6.5	6.5	H	O	sand	poorly developed
934	685+24 to 685+25	T+O	SC		O	3.6	3.6	H-0.02	0.7	sand, roots	
935	685+29	O	SC		O	2.0	2.0	H	O	none	
936	685+30	O	SC		O	1.0	1.0	H	O	none	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
937	685+35	O	SC		O	2.8	2.8	H-0.015	0.3	sand, roots	
938	685+37	T+O	SC		O	3.0	3.0	H-0.01	0.2	sand, roots	
939	685+40	O	SC		O	1.6	1.6	0.01	0.8	sand, roots	
940	685+41	T	SC		O	1.5	1.5	0.015	0.5	sand, roots	
941	685+42	O	SC		O	1.8	1.8	H	O	roots	
942	685+49	T	SC		O	1.4	1.4	0.005	0.1	roots, sand	
943	685+51	O	SC		O	2.3	2.3	H	0.1	sand	
944	685+59	O	SC		O	1.4	1.4	H	O	sand, roots	
945	685+60	O	SC		O	1.2	1.2	H	O	sand, roots	
946	685+70	T	SC		O	2.9	2.9	H	0.1	sand, roots	
947	685+73	T	SC		O	1.1	1.1	H+	0.1	sand, roots	irregular
948	685+77	T	SC		O	1.6	1.6	0.005	0.1	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
949	685+81	O	SC		O	0.9	0.9	H	O	roots	
950	685+83	T	SC		O	1.2	1.2	0.005	0.1	roots, sand	
951	685+84	O	SC		O	1.8	1.8	0.005	0.05	sand, roots	
952	685+87 to 685+88	O	SC		O	2.0	2.0	0.005	0.1	sand, roots	
953	685+91	T	SC		O	1.1	1.1	H	O	none	
954	685+97	O	SC		O	0.9	0.9	H	O	sand, roots	
955	685+99	O	SC		O	0.8	0.8	0.005	0.1	sand, roots, open in small segments	
956	686+00	O	SC		O	0.6	0.6	0.01	0.1	sand, roots	
957	686+03	O	SC		O	0.7	0.7	H	O	none	irregular
958	686+09	T	SC		O	0.9	0.9	H	0.1	sand, roots	
959	686+12	O	SC		O	1.0	1.0	H	O	sand, roots	
960	686+27	T	SC		O	1.7	1.7	H-0.005	0.1	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
961	686+34	T	SC		0	1.2	1.2	H	0	roots	
962	686+38	O	SC		3.2	3.5	0.3	H	0	none	
963	686+46	O	SC		0	4.1	4.1	H	0	sand	
964	686+50 to 686+51	O	SC		0	0.9	0.9	0.005	0.1	sand, roots	
965	686+56	T	SC		0	4.1	4.1	H-0.06	2.5+	sand, roots	open pipe @ 1.8-2.2, w=0.06
966	686+62	T	SC		0	1.4	1.4	H+	0.1	sand, roots	
967	686+65	O	SC		0	1.1	1.1	0.005	0.2	sand, roots	
968	686+66	O	SC		0	1.6	1.6	0.02	0.3	sand, roots partially open	
969	686+69	T	SC		0	1.2	1.2	0.01	0.2	sand, roots	
970	686+70	T	SC		0	1.4	1.4	0.005	0	sand, roots	
971	686+71	T	SC		0	0.6	0.6	0.03	0.7	open	well developed
972	686+74	T	SC		0	6.8	6.8	H-0.015	0.4	sand, roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 83-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
973	686+83	T	SC		0	6.1	6.1	H-0.02	0.8	roots, sand	
974	686+90	T	SC		0	1.4	1.4	H	0	sand, roots	
975	686+93	T	SC		0	1.0	1.0	0.01	0.1	sand, roots	
976	686+98	0	SC		0	1.0	1.0	0.005	0	sand, roots	
977	687+01	0	SC		0	1.1	1.1	H	0	roots	
978	687+02	T	SC		0	1.5	1.5	H	0	roots	
979	687+03	T	SC		0	1.4	1.4	0.01	0.2	roots, sand	
980	687+06	0	SC		0	1.3	1.3	H+	0	sand	
981	687+07	0	SC		9.2	12.5	3.3	H+	0.2	open c/ white fungus	
982	687+08	0	SC		0	1.3	1.3	0.005	0	sand	uncommon occurrance
983	687+08.5	0	SC		10.8	13.2	2.2	H+	0.2	open c/ white fungus	uncommon occurrance
984	687+12	0	SC		10.6	13.1	2.5	H+	0.2	open c/ white fungus	uncommon occurrance

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
155	687+16	T	SC		0	1.3	1.3	H-0.01	0.4	roots, sand	
156	687+18	T	SC		0	1.6	1.6	H-0.05	0.3	sand	
157	687+22	T	SC		0	1.2	1.2	H	0	none	
158	687+24	O	SC		0	1.8	1.8	H	0.1	sand	
159	687+27	O	SC		0	1.7	1.7	H	0	sand	
160	687+31	T	SC		0	2.1	2.1	H	0.1	sand, roots	
911	687+35 to 687+37	THL	SC		0	16.6	16.6	0.01-0.07	0.8	roots, sand	well developed AUXILIARY OUTLET (687+35)
162	687+54	O	SC		0	1.8	1.8	0.005	0.2	roots, sand	
913	687+59.5	T	SC		0	16.3	16.3	0.01-0.1	1.3	roots, sand, some gravel partially open	
164	687+63	T	SC		0	1.5	1.5	H	0	roots, sand	
165	687+65	O	SC		0	1.5	1.5	0.01	0.1	roots, sand	
914	687+68	T	SC		0	2.6	2.6	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
997	687+71	T	SC		0	1.3	1.3	H	0	roots, sand	
998	687+73	0	SC		0	1.2	1.2	0.005	0.1	roots, sand	
999	687+75	T	SC		0	1.2	1.2	H	0	roots, sand	
1000	687+77	0	SC		0	1.2	1.2	H	0	none	
1001	687+79	T	SC		0	0.9	0.9	H	0	roots, sand	
1002	687+81	T	SC		0	1.5	1.5	0.005	0.1	roots, sand	
1003	687+82	0	SC		0	1.3	1.3	H	0	none	irregular
1004	687+86	0	SC		0	1.5	1.5	H	0	roots	
1005	687+88	0	SC		0	1.3	1.3	H	0.1	roots, sand	
1006	687+91	0	SC		0	1.0	1.0	H - 0.005	0.1	roots, sand	
1007	687+93	T	SC		0	15.6	15.6	H - 0.01	0.4	sand, roots entire length	AUXILIARY OUTLET
1008	687+96	0	SC		0	1.8	1.8	0.005	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8a02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1009	687+99	O	SC		0	1.7	1.7	H – 0.01	0.2	roots, sand	
1010	688+01	O	SC		0	1.0	1.0	0.01	0.1	none	
1011	688+12	T	SC		0	14.2	14.2	H – 0.005	0.3	roots, sand	
1012	688+23.5	T	SC		0	14.2	14.2	H – 0.01	0.5	roots, sand	
1013	688+33	T	SC		0	3.0	3.0	H	0	none	
1014	685+34	O	SC		0	1.7	1.7	H	0.1	sand	
1015	685+36	T	SC		0	3.0	3.0	H	0	none	
1016	688+37	O	SC		0	1.7	1.7	H	0	sand	
1017	685+37	O	SC		0	1.8	1.8	11	0	sand	
1018	685+42	T	SC		0	13.3	13.3	H – 0.05	0.6	roots, sand	
1019	688+32 to 685+53	L	SC		16.8	16.8	21.0	0.005	0.4	sand	longitudinal crack on trench floor
1020	688+54	T	SC		0	3.2	3.2	11	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1021	688+60	T	SC		0	1.5	1.5	0.005	0.1	roots, sand	
1022	688+61	O	SC		0	1.7	1.7	H	0	sand	
1023	688+70	T	SC		0	1.2	1.2	H	0	sand	
1024	688+73	T	SC		0	1.6	1.6	H	0	sand	
1025	688+75	T	SC		0	1.7	1.7	0.005	0.1	sand	
1026	688+79	T	SC		0	13.6	13.6	H-0.01	0.2	roots, sand	
1027	688+83	T	SC		0	2.6	2.6	H	0	sand	
1028	688+84	T	SC		0	2.2	2.2	H	0	none	
1029	688+86	T	SC		0	1.9	1.9	H	0	sand	
1030	695+55	T	SC		0	11.9	11.9	H-0.005	0.3	roots, sand	
1031	688+96	O	SC		0	2.7	2.7	H	0.1	sand	
1032	689+00	T	SC		0	3.0	3.0	H	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113;

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler; DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
V33	689+01	T	SC		0	2.6	2.6	H	0.1	sand	
1034	689+03	T	SC		0	2.8	2.8	0.005	0.2	sand, roots	
V35	689+12	T	SC		0	8.4	8.4	0.02-0.05	0.5	sand, roots	
1036	689+14	O	SC		0	2.4	2.4	H	0.1	sand	
1037	689+17	O	SC		0	2.0	2.0	H	0.1	sand	
1038	689+27	T	SC		0	12.5	12.5	0.02 0.1	1.5	roots, sand	
1039	689+30	O	SC		6.0	6.8	0.8	H	0.1	roots	
1040	689+33	T	SC		0	2.5	2.5	H	0.1	sand	
1041	689+37	T	SC		0	4.5	4.5	0.005	0.1	sand	
1042	689+43	T	SC		0	1.8	1.8	H	0.1	sand	
1043	689+45	T	SC		1.6	2.4	0.8	H	0	roots	
1044	689+49	T	SC		0	2.4	2.4	H	0	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1045	689+51	T	SC		0	8.7	8.7	H-0.01	0.3	roots, sand	
1046	689+60	T	SC		0	13.4	13.4	0.01-0.05	1.0	sand, silt	
1047	689+67	T	SC		0	3.8	3.8	H	0.1	roots, sand	
1048	689+70	T	SC		0	1.3	1.3	H	0	roots	
1049	689+73	T	SC		0	2.1	2.1	H	0	roots	
1050	689+88	O	SC		0	1.8	1.8	H	0	none	
1051	689+90	T	SC		0	1.6	1.6	H	0	roots, sand	
1052	689+93	T	SC		0	12.6	12.6	H-0.03	0.5	roots, sand, silt	
1053	689+99	T	SC		0	4.2	4.2	H-0.005	0.1	roots, sand	
1054	690+04	T	SC		0	9.2	9.2	H-0.02	0.8	roots, sand	
1055	690+06	T	SC		0	1.3	1.3	H	0	roots	
1056	690+10	T	SC		0	3.2	3.2	H	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1057	690+12	T	SC		0	2.8	2.8	H	0	roots	
1058	690+18 to 690+20	0	SC		0	1.7	1.7	H	0.1	roots, sand	
1059	690+22	T	SC		0	2.7	2.7	0.01	0.3	roots, sand	
1060	690+23	T	SC		0	2.7	2.7	H	0	none	
1061	690+26	T	SC		0	2.1	2.1	H-0.005	0.1	roots	
1062	690+29	T	SC		0	1.6	1.6	H	0	roots, sand	
1063	690+31	0	SC		0	2.1	2.1	H	0	none	
1064	690+32	0	SC		0	7.1	7.1	0.01	0.2	roots, sand	
1065	690+37	0	SC		0	3.7	3.7	0.005	0.1	roots, sand	
1066	690+43	T	SC		0	2.4	2.4	0.005	0.1	roots, sand	
1067	690+45	T	SC		0	14.9	14.0	H-0.02	0.6	roots, sand	
1068	690+47	T	SC		0	1.6	1.6	H	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1069	690+49	T	SC		0	2.6	2.6	H	0.1	roots, sand	
1070	690+51	0	SC		0	1.9	1.9	H	0	roots, sand	
1071	690+53	0	SC		0	2.5	2.5	0.005	0.1	roots, sand	
1072	690+56	T	SC		0	1.6	1.6	H	0.1	sand	
1073	690+58	T	SC		0	9.0	9.0	H-0.015	0.5	roots, sand	
1074	690+65	T	SC		0	2.6	2.6	H	0.1	sand	
1075	690+68	T	SC		0	2.8	2.8	0.005 0.02	0.3	roots, sand	
1076	690+70	T	SC		0	1.7	1.7	0.005	0.1	sand	
1077	690+72.5	0	SC		0	2.0	2.0	H	0.1	sand	
1078	690+73	T	SC		0	2.0	2.0	H	0.1	sand	
1079	690+75 to 690+76	0	SC		0	1.9	1.9	H	0	sand	
1080	690+77	T	SC		0	2.3	2.3	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

H = HORIZONTAL

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1081	690+77 to 690+81	H	SC		0	1.1	4.0	H	0.1	none	
1082	690+77 to 690+81	H	SC		0	1.6	4.0	H	0.1	none	
1083	690+81	T	SC		0	9.8	9.8	H-0.03	0.4	sand	
1084	690+82	T	SC		0	8.8	8.8	H-0.005	1.0	sand	
1085	690+84 to 690+87	O	SC		0	1.7	1.7	H	0	none	
1086	690+57	T	SC		0	3.4	3.4	H-0.005	0	none	
1087	690+88 to 691+25	L	SC		17.2	17.2	37.0	0.005	0.2	none	crack located on trench floor
1088	690+91	O	SC		0	2.1	2.1	H	0	sand	
1089	690+93	O	SC		0	1.7	1.7	H	0	sand	
1090	690+96	O	SC		0	1.3	1.3	H	0	sand	
1091	690+97	O	SC		0	1.9	1.9	H	0	sand	
1092	690+99	T	SC		0	2.1	2.1	0.005	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

H = Horizontal

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1093	691+03	T	SC		0	1.8	1.8	H	0	sand	
1094	691+05	T	SC		0	1.7	1.7	H-0.005	0.1	sand	
1095	691+07	T	SC		0	1.4	1.4	H	0	none	
1096	691+08	T	SC		0	3.5	3.5	H-0.005	0.1	roots, sand	
1097	691+16	T	SC		0	4.0	4.0	0.005	0.1	sand	
1098	691+18	T	SC		0	8.8	8.8	H-0.005	0.1	roots, sand	
1099	691+23	O	SC		0	3.5	3.5	H	0.1	roots, sand	
1100	691+27	T	SC		0	13.0	13.0	H-0.1	1.0	roots, sand	(outlet here to drain L crack # 1087) AUXILIARY OUTLET
1101	691+33 to 691+40	O+H	SC		0	1.1	1.1	H	0	roots, sand	
1102	691+35	T	SC		0	0.6	0.6	H	0	roots	
1103	691+36	T	SC		0	0.5	0.5	H	0	roots	
1104	691+40	T	SC		0	1.0	1.0	H	0	roots	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

H = Horizontal

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1105	691+42	T	SC		0	9.4	9.4	H-0.025	1.0	roots, sand	
1106	691+50	T	SC		0	1.0	1.0	H	0.1	roots, sand	
1107	691+50 to 691+54	H	SC		1.0	1.0	4.0	H	0	roots	
1108	691+54	T	SC		0	3.5	3.5	H-0.005	0.1	roots, sand	
1109	691+60	T	SC		0	3.8	3.8	H	0.2	sand	
1110	691+66	T	SC		0	10.0	10.0	H-0.02	0.7	roots, sand	
1111	691+68	T	SC		0	1.1	1.1	H	0	sand	
1112	691+71	T	SC		0	1.1	1.1	H	0	sand	
1113	691+74	T	SC		0	0.7	0.7	0.015	0.2	open	
1114	691+90	0	SC		0	1.5	1.5	H	0.1	sand	
1115	691+92	T	SC		0	12.5	12.5	H-0.03	0.6	roots, sand	
1116	691+96	T	SC		0	1.2	1.2	H	0	none	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1117	691+98	T	SC		0	1.2	1.2	H	0	roots, sand	
1118	692+00	T	SC		0	1.8	1.8	H	0	roots, sand	
1119	692+08	T	SC		0	12.8	12.8	H-0.05	1.1	roots, sand, trace of gravel	
1120	692+14	T	SC		0	1.3	1.3	H	0	roots	
1121	692+16	T	SC		0	1.2	1.2	H	0	roots, sand	
1122	692+17	T	SC		0	1.2	1.2	H	0	roots, sand	
1123	692+24	T	SC		0	4.6	4.6	H-0.02	0.3	sand	
1124	692+27	T	SC		0	1.3	1.3	H	0	roots	
1125	692+29	T	SC		0	1.1	1.1	H	0	roots	
1126	692+33	0	SC		0	1.3	1.3	H	0	roots, sand	
1127	692+38	T	SC		0	5.5	5.5	0.07	0.3	sand	
1128	692+51	T	SC		0	2.9	2.9	H-0.1	0.5	sand, silt wedge	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1129	692+56	O	SC		0	3.2	3.2	H	0	sand, silt	
1130	692+61	T	SC		0	4.7	4.7	H-0.04	0.3	sand	
1131	692+65	O	SC		0	3.7	3.7	H	0	sand	
1132	692+70	O	SC		0	2.5	2.5	H	0	sand	
1133	692+74	T	SC		0	4.0	4.0	H	0	roots, sand	
1134	692+81	T	SC		0	8.1	8.1	H-0.05	0.2	roots, sand partially open	
1135	692+87	T	SC		0	1.9	1.9	H	0	none	
1136	692+91	T	SC		0	1.2	1.2	H	0	roots, sand	
1137	692+97	O	SC		0	8.9	8.9	H	0	roots, sand	
1138	693+00	O	SC		0	4.0	4.0	H	0	roots, sand	
1139	693+05	O	SC		0	4.5	4.5	H	0.1	sand	
1140	693+17	O	SC		0	7.3	7.3	H-0.01	0.3	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1141	693+29	T	SC		0	2.5	2.5	0.1	0.3	roots, sand	
1142	693+36	T	SC		0	0.8	0.8	0.01	0.1	sand	
1143	693+47	T	SC		0	5.3	5.3	0.025	0.4	sand	
1144	693+54	T	SC		0	3.6	3.6	H	0	roots, sand	
1145	693+63	T	SC		0	4.9	4.9	H-0.07	0.3	sand	
1146	693+72	T	SC		0	3.8	3.8	H	0	sand	
1147	693+80	T	SC		0	2.95	2.95	H-0.01	0.1	sand	
1148	693+95	T	SC		0	14.5	14.5	H	0	sand	
1149	694+08	T	SC		0	1.1	1.1	H	0	roots, sand	
1150	694+08.5	T	SC		0	0.9	0.9	H	0	sand	
1151	694+09	T	SC		0	10.2	10.2	H-0.06	0.9	roots, sand	
1152	694+09.5	T	SC		0	1.3	1.3	H	0	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1153	694+18	T	SC		0	3.2	3.2	H	0	roots, sand	discontinuous
1154	694+19	T	SC		0	12.5	12.5	H–0.03	0.8	roots, sand	discontinuous at base
1155	694+24	T+O	SC		0	2.1	2.1	H	0	roots, sand	
1156	694+34	T	SC		0	1.5	1.5	H	0	roots, sand	
1157	694+40	T	SC		0	13.6	13.6	0.07	0.7	sand, few roots	discontinuous, dendritic Pipe @ 2.6-2.9, w = 0.07
1158	694+50.5	T	SC		0	2.3	2.3	H	0	sand	
1159	694+57	T	SC		0	1.0	1.0	H	0	roots, sand	
1160	694+64	T+O	SC		0	13.7	13.7	0.09	1.6	roots, sand	well developed Pipe @ 1.0-1.6, w = 0.09
1161	694+72	O	SC		0	1.2	1.2	0.005	0.1	roots, sand	
1162	694+75	T	SC		0	1.4	1.4	H	0	roots, sand	
1163	694+79	T+O	SC		0	4.4	4.4	0.005	0.1	sand	discontinuous, dendritic
1164	694+86 to 694+87	T+O	SC		0	12.8	12.8	0.02	0.5	sand, silt	discontinuous

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1165	694+97	T	SC		0	1.5	1.5	0.05	0.2	roots, sand	
1166	694+99	T	SC		0	6.0	6.0	0.03	0.45	roots, sand	
1167	695+00	T	SC		1.0	7.2	6.2	0.005	0.1	sand	
1168	695+08	T	SC		0	1.9	1.9	H	0	sand	
1169	695+17	T	SC		0	12.1	12.1	H-0.4	0.75	roots, sand	dendritic, well developed pipe @ 1.6-2.2, w=0.4
1170	695+37	T	SC		0	2.2	2.2	H	0	sand	
1171	695+39	T	SC		0	13.9	13.9	H-0.8	2.2+	sand, silt partially open	very well developed pipe @ 0.9-1.6, w=0.8 AUXILIARY OUTLET
1172	695+46	T	SC		0	11.8	11.8	0.06	0.8	roots, sand	well developed
1173	695+65	T	SC		0	1.2	1.2	H	0	sand	
1174	695+73	T	SC		0	0.8	0.8	H	0	sand	
1175	695+78	T	SC		0	0.9	0.9	0.005	0.1	roots, sand	
1176	695+80	T	SC		0	3.1	3.1	0.01	0.25	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1177	695+90.5	T	SC		0	2.4	2.4	H	0	roots, sand	
1178	695+93	T	SC		0	10.9	10.9	0.005	0.2	sand	dendritic
1179	695+94	T	SC		0	8.0	8.0	0.04	0.95	roots, sand, silt	discontinuous
1180	696+02	T	SC		0	1.6	1.6	H	0	sand	
1181	696+03	0	SC		0	2.9	2.9	0.15	0.4	roots, sand	well developed
1182	696+11	T	SC		0	0.9	0.9	H	0	sand	
1183	696+14.5	T	SC		0	1.1	1.1	H	0	sand	
1184	696+17	T	SC		0	6.4	6.4	0.01	0.35	roots, sand	
1185	696+26	T	SC		0	7.1	7.1	0.015	0.5	roots, sand	
1186	696+31	T	SC		0	11.8	11.8	H – 0.025	0.7	sand	well developed pipe @ 3.8-4.2, w = 0.025
1187	696+32	T	SC		0	1.3	1.3	H	0	roots, sand	
1188	696+47	T	SC		0	7.2	7.2	0.01	0.35	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1189	696+52	T	SC		0	11.2	11.2	H – 0.035	0.7	sand	dendritic pipe @ 1.4-2.3, w = 0.15
1190	696+53	T	SC		0	1.0	1.0	H	0	roots, sand	
1191	696+65	T+L	SC		0	11.1	11.1	0.08	1.05	roots, sand	well developed
1192	696+75	T	SC		0	3.8	3.8	H	0	roots	
1193	696+53	T+O	SC		0	12.6	12.6	0.04	1.3	roots, sand	dendritic, discontinuous, well developed @ top pipe @ 1.0-1.4, w = 0.3
1194	696+93	T	SC		0	1.0	1.0	H	0	roots, sand	
1195	696+96 to 696+97	T+O	SC		0	11.8	11.8	0.025	0.75	roots, sand	dendritic, well developed
1196	697+05	O	SC		0	0.7	0.7	H	0	roots	
1197	697+07.5	O	SC		0	2.1	2.1	H	0	roots	
1198	697+08.5	T	SC		0	11.2	11.2	0.02	0.9	roots, sand	
1199	697+12	T	SC		0	3.7	3.7	H	0	roots	
1200	697+21	T	SC-SM		0	4.3	4.3	0.005	0.25	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1201	697+24	T	SC		0	1.8	1.8	H	0	roots, sand	
1202	697+34 to 697+35	T	SC		0	11.6	11.6	0.045	1.6	sand	well developed
1203	697+51	T+O	SC		0	10.2	10.2	0.035	1.2	roots, sand	dendritic, well developed
1204	697+55.5	T+L	SC		0	2.9	2.9	0.005	0.15	roots	
1205	697+61	T	SC		0	4.1	4.1	H	0	roots	
1206	697+67 to 697+68	T+O	SC		0	11.2	11.2	0.025	0.75	sand	dendritic, well developed
1207	697+67 to 697+73	L	SC		3.9	7.8	3.9	0.02	0.7	roots, sand	well developed
1208	697+73	O	SC		1.2	7.5	6.3	0.025	0.4	roots, sand	well developed
1209	697+74	T	SC		0	1.2	1.2	0.06	2.0+	roots, sand partially open	well developed
1210	697+75	O	SC		1.2	15.5	14.3	0.045	0.85	roots, sand	discontinuous near base, well developed AUXILIARY OUTLET
1211	697+95	T+O	SC		0	12.1	12.1	0.02	0.6	roots, sand, white fungus	dendritic, well developed
1212	698+11	O	SC		0	5.9	5.9	0.005	0.1	sand	discontinuous, poorly developed

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1213	698+20	O	SC		O	9.7	9.7	0.07	1.1	roots, sand	dendritic, well developed pipe @ 3.7-3.9, w=0.18
1214	698+32 to 698+34	O	SC		O	11.9	11.9	0.04	1.5	roots, sand	well developed
1215	698+41	O	SC		O	2.9	2.9	0.005	0.05	roots	
1216	698+48 to 698+50	T+O	SC		O	12.3	12.3	0.03	1.1	roots, sand, silt	dendritic, discontinuous near base well developed
1217	698+67	O	SC		O	2.2	2.2	H	0	roots, sand	
1218	698+68	T	SC		O	2.0	2.0	0.005	0.05	roots, sand	
1219	698+71.5	T	SC		O	2.5	2.5	H	0.1	roots, sand	
1220	698+79	T	SC		O	2.1	2.1	H	0.2	roots, sand	
1221	698+88 to 698+91	T	SC		O	14.2	14.2	H-0.05	0.6	roots, sand	AUXILIARY OUTLET (698+91)
1222	699+12	T	SC		O	11.5	11.5	H-0.03	0.4	roots, sand	
1223	699+25	T+O	SC		O	9.9	9.9	H-0.01	0.05	roots, sand	
1224	699+30.5 to 699+31.5	O	SC		2.3	3.0	0.7	H	0.1	none	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1225	699+35	T	SC		0	0.7	0.7	0.01	0.1	roots, sand	
1226	699+39	T	SC		0	1.7	1.7	H-0.01	0.15	sand	
1227	699+46	T+O	SC		0	1.5	1.5	H	0	none	
1228	699+53	T	SC		0	11.5	11.5	H-0.06	0.8	roots, sand	
1229	699+57	T	SC		0	1.6	1.6	H-0.005	0.15	roots, sand	
1230	699+60	T	SC		0	2.1	2.1	H-0.005	0.05	roots, sand	
1231	699+64	T+O	SC		0	4.8	4.8	0.01	0.2	roots, sand	
1232	699+67.5 to 699+68.5	T+O	SC		0	1.3	1.3	0.01	0.1	roots, sand	
1233	699+72 to 699+73	T+O	SC		0	3.0	3.0	H-0.065	0.9	roots, sand	
1234	699+76	T	SC		0	1.6	1.6	0.01	0.4	roots, sand	dendritic
1235	699+80	T	SC		0	2.9	2.9	0.01	0.3	roots, sand	
1236	699+85	O	SC		0	2.4	2.4	0.005	0.15	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1237	699+86	T	SC		0	12.7	12.7	0.025	0.7	roots, sand	well developed top, discontinuous bottom half
1235	699+93	T	SC		0	2.1	2.1	H	0	roots, sand	
1237	699+95	T	SC		0	2.1	2.1	0.005	0.1	sand	
1240	700+02	T	SC		0	8.3	8.3	0.01	0.35	roots, sand	discontinuous
1241	700+05	T	SC		0	1.1	1.1	H	0	sand	
1242	700+10	T	SC		0	1.4	1.4	H	0	roots, sand	
1243	700+13.5	T	SC		0	1.6	1.6	0.005	0.05	roots, sand	
1244	700+19	T+O	SC		0	16.9	16.9	0.035	0.95	roots, sand, silt	dendritic, well developed @ top, discontinuous bottom part SCHEDULED OUTLET (changed to 700+19)
1245	700+25	T	SC		0	1.7	1.7	H	0	roots	
1246	700+28.5	T	SC		0	0.8	0.8	H	0	roots, sand	
1247	700+29	T	SC		0	2.3	2.3	H	0.05	roots, sand, silt	
1248	700+30	T	SC		0	1.2	1.2	H	0	roots, sand, silt	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1249	700+32.5	T	SC		0	1.0	1.0	0.01	0.05	roots, sand	
1250	700+33	T	SC		0	0.9	0.9	H	0.05	silt	
1251	700+35	T	SC		0	0.8	0.8	0.005	0.05	roots, sand	
1252	700+38	T	SC		0	1.4	1.4	H	0	roots	irregular, dendritic
1253	700+45	T	SC		0	1.6	1.6	H-0.005	0.05	roots, sand	
1254	700+48	T	SC		0	3.8	3.8	H-0.15	0.2	sand	
1255	700+56	T	SC		0	16.5	16.5	H-0.2	1.3	roots, sand	pipe @ 1.0-1.6, w=0.2
1256	700+61	O	SC		0	1.8	1.8	H	0	roots, silt	
1257	700+62	O	SC		0	1.0	1.0	H	0	roots, silt	
1258	700+65	T	SC		0	1.0	1.0	H+	0	roots, sand	
1259	700+70	T	SC		0	1.5	1.5	H+	0	roots, silt	
1260	700+76	T	SC		0	1.8	1.8	H	0	roots, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1261	700+78	T	SC		0	1.4	1.4	H+	0.05	roots, silt	
1262	700+80	T	SC		0	1.3	1.3	H	0	roots, silt	
1263	700+83	T	SC		0	2.0	2.0	H	0	silt	
1264	700+86	T	SC		0	2.3	2.3	H	0	silt	
1265	700+90	O	SC		0	2.1	2.1	0.005	0.1	roots, sand	
1266	700+92	O	SC		0	2.8	2.8	H	0	roots, sand	
1267	700+94	O	SC		0	2.5	2.5	0.005	0.2	roots, sand	
1268	701+08	O	SC		0	5.7	5.7	0.005	0.1	roots, sand	dendritic
1269	701+16	O	SC		0	1.8	1.8	H	0.05	roots, sand	
1270	701+21	T	SC		0	0.8	0.8	H	0	silt	irregular
1271	701+23	T	SC		0	8.8	8.8	H+	0	roots, sand, silt	
1272	701+27	T	SC		0	1.2	1.2	H	0	silt	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1273	701+28	T	SC		0	1.1	1.1	H	0	silt	
1274	701+36	T	SC		0	12.5	12.5	0.06	0.6	roots, sand	
1275	701+54	T	SC		0	4.3	4.3	H	0	roots	
1276	702+08	T	SC		0	7.2	7.2	H - 0.005	0.2	roots, sand	
1277	702+14	L	SC-SM		0	8.2	8.2	0.005	0.3	roots, sand	
1215	702+22	O	SC		0	0.9	0.9	H	0	silt	
1270	702+25	O	SP-SM		0	1.1	1.1	0.005	0.1	roots, sand	
1278	702+46	O	SM		0	1.3	1.3	H	0.05	sand	
1251	702+96	T	SM+ SP-SM		0	3.3	3.3	H	0	roots, silt	dendritic
1252	703+09	T	SM+ SP-SM+ SC		0	5.1	5.1	H - 0.005	0.05	roots, sand	
1253	703+25	I+O	SM+ SC		0	8.8	8.8	H - 0.02	0.15	roots, sand	well developed longitudinal cracks start on opposite wall
1254	703+37 to 703+38	O	SM+ SC		0	6.7	6.7	H - 0.005	0.2	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1285	703+44	O	SM		O	0.7	0.7	H	O	silt	
1286	703+55	O	SM+SC		O	6.6	6.6	H+	O	roots, sand	discontinuous
1287	703+60	O	SM		O	1.3	1.3	H-0.005	0.05	roots, sand	
1288	703+65	O	SM		O	1.3	1.3	H	O	silt	
1289	703+82	T	SM		O	1.1	1.1	H	O	roots, silt	
1290	703+89	T	SM+SC		O	10.9	10.9	H-0.035	0.8	roots, sand	
1291	704+08	T	SM+SC		O	7.9	7.9	H-0.005	0.2	roots, sand	
1292	704+21	T	SM		O	0.9	0.9	H+	O	roots, sand	
1293	704+26	T	SM		O	0.7	0.7	H	O	sand, silt	
1294	704+27	T	SM		O	0.8	0.8	H	O	roots, silt	
1295	704+28	T	SM		O	0.7	0.7	H	O	roots, sand	
1296	704+29	T	SM		O	0.5	0.5	H	O	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1297	704+32	T	SM		0	4.1	4.1	H-0.015	0.3	roots, sand	
1298	704+33	T	SM		0	0.7	0.7	H	0.05	roots, silt	
1299	704+38	T	SM		0	0.7	0.7	H	0	roots, sand	
1300	704+44	T	SM		0	3.0	3.0	H	0	roots, silt	discontinuous
1301	704+49	T	SM+SC		0	5.3	5.3	H-0.01	0.2	roots, sand	
1302	704+55.5	T	SM+SC		0	16.2	16.2	0.005-0.06	0.5	roots, sand	well developed AUXILIARY OUTLET
1303	704+77	T	SM		0	0.5	0.5	H	0	silt	
1304	704+86	O	SM		0	2.5	2.5	H-0.01	0.2	roots, sand	
1305	704+90	T	SM		0	1.1	1.1	H	0	roots, silt	
1306	704+92	T	SM		0	1.1	1.1	H+	0	roots, sand	
1307	704+94	T	SM		0	1.1	1.1	H	0	roots, silt	
1308	704+97.5	T	SM		0	16.3	16.3	H-0.035	0.9	roots, sand	well developed

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1309	705+02	T	SM		0	1.1	1.1	H	0.05	roots, sand, silt	
1310	705+04	O	SM		0	0.9	0.9	0.01	0.1	sand, mostly open	
1311	705+05	O	SM		0	1.0	1.0	0.01	0.1	mostly open	
1312	705+10	T	SM+SC		0	7.8	7.8	H-0.1	1.3	roots, sand	
1313	705+13	T	SM		0	1.1	1.1	H	0	roots, silt	
1314	705+14	T	SM		0	1.0	1.0	H	0	roots, silt	
1315	705+16	T	SM		0	2.3	2.3	H	0	roots, silt	
1316	705+20	O	SM		0	1.2	1.2	H	0.05	sand	
1317	705+22	T	SM		0	1.4	1.4	H+	0.05	sand	
1318	705+26	T	SM		0	2.1	2.1	H+	0	roots, sand	
1319	705+29.5	T	SM+SC		0	14.4	14.4	H-0.07	1.5+	roots, sand, partially open	discontinuous, open pipe @ 0.8-1.1, w=0.3
1320	705+36	T	SM		0	1.2	1.2	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1321	705+44	T	SM+SC		0	5.9	5.9	H-0.01	0.3	roots, sand	
1322	705+51	T	SM+SC		0	16.5	16.5	H-0.11	1.2+	roots, sand	well developed AUXILIARY OUTLET
1323	705+55	T	SM		0	0.8	0.8	H	0	none	
1324	705+58	O	SM		0	0.6	0.6	H	0	silt	
1325	705+71.5	O	SM		0	0.8	0.8	H	0	silt	
1326	705+76.5	T	SC		0	14.9	14.9	0.02	0.65	sand	dendritic, moderately developed
1327	705+76.5 to 706+09	L	SC		16.6	16.6	35.0	0.01	0.1	none	discontinuous, located on trench floor
1328	705+53 to 705+84	T	SC		0	16.6	16.6	0.025	1.5	roots, sand	dendritic, discontinuous, well developed
1329	705+94	T	SC		0	0.7	0.7	H	0	roots, sand	
1330	705+98	T+O	SC		0	16.6	16.6	0.02	0.6	roots, sand	dendritic, discontinuous, moderately to well developed
1331	706+11	T	SC		0	16.6	16.6	0.025	0.8	roots, sand	discontinuous, moderately to well developed
1332	706+26 to 706+27	T+O	SC		0	16.6	16.6	0.035	1.5	abundant roots, sand	dendritic, discontinuous, very well developed AUXILIARY OUTLET (706+27)

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1333	706+26 to 706+27	L+O	SC		0.7	1.3	0.6	H	0	roots, sand	
1334	706+39	T	SC		0	3.8	3.8	0.005	0.1	roots, sand	
1335	706+42	T	SC		0	0.8	0.8	H	0.05	sand	
1336	706+43	T+O	SC		0	4.2	4.2	H - 0.05	0.5	roots, sand	
1337	706+48	T	SC		0	1.7	1.7	0.005	0.1	roots, sand	
1338	706+50	T	SC		0	1.2	1.2	H	0.05	roots, sand	
1339	706+52	T	SC		0	4.4	4.4	H - 0.025	0.5	roots, sand	
1340	706+59	T	SC		0	1.8	1.8	0.005	0.2	roots, sand	
1341	706+62	T+O	SC		0	7.4	7.4	0.01 - 0.025	1.0	roots, sand	
342	706+71	T+O	SC		0	8.4	8.4	.04	1.0+	roots, sand	pipes @ 1.9-2.2, 2.7-3.3, bothw = 0.1 well developed
1343	706+80	T+O	SC		0	6.9	6.9	0.02	0.4	roots, sand	discontinuous
1344	706+91	T	SC		0	0.9	0.9	H	0	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1345	706+95	T+O	SC		0	12.5	12.5	0.035	1.0+	roots, sand	dendritic, discontinuous, well developed
1346	707+00	T	SC		0	1.8	1.8	H	0	roots	
1347	707+03	T+O	SC		0	12.6	12.6	0.01	0.3	roots, sand	discontinuous
1348	707+07	T	SC		0	1.7	1.7	H	0	roots	
1349	707+14.5	T	SC		0	1.8	1.8	H	0	roots, sand	
1350	707+16	T+O	SC		0	13.3	13.3	0.01	0.2	roots, sand	discontinuous
1351	707+23	T	SC		0	3.4	3.4	0.005	0.1	roots, sand	
1352	707+35	T	SC		0	3.7	3.7	0.005	0.15	sand	
1353	707+43	T+O	SC		0	16.2	16.2	0.02	0.3	roots, sand	dendritic, discontinuous pipe @ 1.1-1.2, w = 0.15
1354	707+51	O	SC+GT		0	16.0	16.0	H-0.015	0.4	roots, sand	discontinuous
1355	707+55	T	SC		0	1.1	1.1	H	0.05	roots, sand	
1356	707+57	T+O	SC		0	5.0	5.0	H-0.015	0.5	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1357	707+61	O	SC		0	1.1	1.1	H	0.05	roots	
1358	707+63	T+O	SC		0	4.0	4.0	H-0.005	0.1	roots, sand	
1359	707+65	O	SC		0	1.2	1.2	H	0.05	roots, sand	
1360	707+68	T	SC+SM		0	5.4	5.4	0.015-0.035	1.0	roots, sand	well developed
1361	707+71	T	SC		0	1.4	1.4	H	0.05	roots, silt	
1362	707+73	O	SC		0	1.2	1.2	H+	0.05	roots, sand	
1363	707+76	L	SC		0	1.1	1.1	H	0.1	roots	
1364	707+77	L	SC		0	0.9	0.9	H	0.1	roots	
1365	707+81	T	SC		0	12.1	12.1	0.025-0.1	1.5+	roots, sand	well developed
1366	707+83	T	SC		0	1.0	1.0	H	0.05	roots, silt	
1367	707+89	O	SC		0	4.0	4.0	H	0	roots, sand	
1368	707+95	T	SC		0	14.0	14.0	H-0.12	2.0+	roots, sand, partially open	AUXILIARY OUTLET

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

H = Horizontal

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1369	708+04	O	SC		O	5.1	5.1	H	O	silt	
1370	708+07	T	SC		O	1.4	1.4	H	O	roots, silt	
1371	708+11	O	SC		O	5.2	5.2	H - 0.005	O	roots, sand	discontinuous, undulatory
1372	708+15	O	SC		O	0.8	0.8	H	O	silt	
1373	708+18	O	SC		O	1.8	1.8	H	O	roots, silt	
1374	708+20	O	SC		O	4.1	4.1	H - 0.01	0.1	roots, sand	
1375	708+21	T	SC		O	0.8	0.8	H	O	none	
1376	705+25	T	SC		O	0.6	0.6	H	O	none	
1377	708+32	T	SC		O	1.0	1.0	H	O	silt	
1378	708+33 to 708+35	I/O	SC		O	0.9	0.9	H - 0.005	0.1	none	
1379	708+35	T	SC		O	12.0	12.0	H - 0.01	0.4	roots, sand	
1380	708+37	T	SC		O	0.9	0.9	H	O	roots, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1381	708+40.5	T	SC		0	0.7	0.7	H	0	roots, silt	
1382	708+42	T	SC		0	1.0	1.0	H+	0.05	roots, sand	
1383	708+55	T	SC		0	14.2	14.2	H-0.035	1.2	roots, sand	
1384	708+60	T	SC		0	1.8	1.8	H	0	roots, sand	
1385	708+67.5 to 708+65.5	T+L	SC		0	16.1	16.1	H-0.1	1.5+	roots, sand	
1386	708+72.5	T	SC		0	1.5	1.5	H+	0.1	roots, sand	
1387	708+77	T	SC		0	6.6	6.6	H-0.2	1.0	roots, sand	open pipe @ 1.0-1.2, w=0.2
1388	708+77 to 708+82	L	SC		1.0	1.6	0.6	0.005	0.6	roots, sand	
1389	708+83	T	SC		0	1.6	1.6	0.005	0.1	roots, sand	
1390	708+92	T	SC		0	9.2	9.2	H-0.04	0.8	roots, sand, partially open	
1391	708+94	O	SC		1.0	1.5	0.5	H	0.05	none	
1392	708+99	T	SC		0	8.5	8.5	H-0.1	1.2	roots, sand	open pipe @ 1.4-1.5, w=0.1

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1313	709+11	O	SC		O	4.7	4.7	H	O	roots, silt	discontinuous
1394	709+16	O	SC		O	1.7	1.7	H	O	roots	poorly developed
1395	709+24	T	SC		O	16.3	16.3	H-0.03	1.0	roots, sand, partially open	
1396	709+32	T	SC		O	2.3	2.3	0.015	0.4	roots, sand	
1397	709+39	T	SC		O	1.1	1.1	H+	0.05	roots, sand	
1398	709+40	T	SC		O	1.2	1.2	H+	0.05	roots, sand	
1399	709+44	T	SC		O	4.0	4.0	H-0.01	0.4	roots, sand	
1400	709+50.5	O	SC		O	1.4	1.4	H	O	roots, silt	
1401	709+54	T	SC		O	1.0	1.0	H	O	roots, silt	
1402	709+57	O	SC		O	1.1	1.1	H	O	roots, silt	
1403	709+58	T	SC		O	1.1	1.1	0.015	0.4	roots, sand	
1404	709+58.4	T	SC		O	0.9	0.9	H	O	silt	

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TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1405	709+68	T	SC		0	9.7	9.7	0.01-0.03	0.6	roots, sand	
1406	709+76	T	SC		0	1.3	1.3	H+	0	roots, sand	
1407	709+85	T	SC		0	1.1	1.1	0.005	0.05	roots, sand	
1408	709+88	T	SC		0	14.5	14.5	H-0.3	1.9	roots, sand, fine gravel	open pipe @ 0-2.8, w=0.3
1409	709+99	O	SC		13.2	15.5	3.3	H-0.005	0.7	none	
1410	709+99.5	O	SC		0	1.8	1.8	H	0	none	
1411	710+02	O	SC		0	0.9	0.9	H	0	roots	
1412	710+07	T	SC		0	4.4	4.4	H-0.025	0.6	roots, sand	
1413	710+09	O	SC		0	0.8	0.8	H	0	roots, silt	
1414	710+11	O	SC		0	1.9	1.9	H	0	silt	
1415	710+14	T	SC		0	9.0	9.0	0.01-0.025	0.9	roots, sand	
1416	710+23	O	SC		0	0.8	0.8	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1417	710+33	T+O	SC		0	9.0	9.0	H - 0.02	0.9	roots, sand	
1418	710+52.5 to 710+53.5	T	SC		0	19.0	19.0	H - 0.15	1.5+	roots, sand, partially open	AUXILIARY OUTLET (710+53)
1419	710+56	T	SC		0	1.4	1.4	H	0.05	roots, silt	
1420	710+59	T	SC		0	1.9	1.9	H	0	roots, silt	
1421	710+63	O	SC		0	4.0	4.0	H	0	silt	
1422	710+67	T+O	SC		0	10.0	10.0	H - 0.01	0.5	roots, sand	
1423	710+80 to 710+51.5	T	SC		0	13.8	13.8	H - 0.05	2.0	roots, sand	
1424	710+91	O	SC		0	2.4	2.4	H	0	silt	
1425	710+98	O	SC		0	3.0	3.0	H	0	silt	
1426	711+11	T+O	SC		0	13.3	13.3	H 0.02	0.4	roots, sand	
1427	711+14	O	SC		0	1.0	1.0	H	0	silt	
1428	711+20	O	SC		0	1.9	1.9	0.005	0.05	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1429	711+32	T	SC		0	14.2	14.2	H-0.1	2.7	roots, sand, trace of gravel	
1430	711+36	O	SC		0	2.0	2.0	H-0.005	0.3	roots, sand	
1431	711+38	T	SC		0	1.2	1.2	H	0	roots, silt	
1432	711+43	T	SC		0	2.1	2.1	H	0	sand	
1433	711+46	T	SC		0	3.0	3.0	0.02	0.9	roots, sand	
1434	711+48	O	SC		0	1.1	1.1	0.005	0.1	open	
1435	711+50	T	SC		0	1.6	1.6	H	0.05	roots, sand	
1436	711+55	T	SC		0	3.2	3.2	H-0.1	1.1	roots, sand	
1437	711+68	T	SC		0	1.0	1.0	H	0	silt	
1438	711+73	O	SC		0	4.1	4.1	H-0.005	0.8	roots, sand	
1439	711+76	T	SC		0	1.8	1.8	H	0.05	roots, silt	
1440	711+78	T	SC		0	4.9	4.9	0.01	0.4	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1441	711+80	T	SC		0	0.5	0.5	H	0.05	roots, sand	
1442	711+82	T	SC		0	1.8	1.8	H	0	roots, sand	
1443	711+85	T	SC		0	1.4	1.4	H	0.1	roots, sand	
1444	711+87	T	SC+SM		0	7.2	7.2	H-0.005	0.1	roots, sand	
1445	711+90	T	SM		0	1.8	1.8	H-0.02	0.2	roots, sand	
1446	711+94	T	SM		0	1.7	1.7	H	0.05	roots, sand	
1447	711+96	T	SC+SM		0	6.0	6.0	0.01	0.3	roots, sand	
1448	712+00	T	SM		0	1.0	1.0	H	0	roots	
1449	712+04	T	SM		0	0.9	0.9	H	0	roots	
1450	712+08	T	SM		0	8.0	8.0	H-004	2.0	roots, sand	
1451	712+11	O	SC+SM		3.0	9.9	6.9	H	0.05	sand, silt	
1452	712+17	T	SM		0	1.8	1.8	H	0	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1453	712+23	O	SC+SM		0	10.6	10.6	H-0.005	0.15	roots, sand	
1454	712+39	O	SC+SM		0	7.7	7.7	0.005	0.3	roots, sand	
1455	712+54	T	SC+SM		0	7.6	7.6	0.005-0.1	1.5	roots, sand	
1456	712+69	T	SC+SM		0	6.5	6.5	H-0.015	0.5	roots, sand	
1457	712+89	T	SM		0	0.6	0.6	0.005	0.05	roots, sand	
1458	712+92.5	T	SM+SC		0	6.3	6.3	H	0.25	roots, silt	
1459	712+93	T	SM+SC		0	3.6	3.6	H-0.02	0.1	roots, sand	
1460	712+98	T	SM		0	1.0	1.0	H-0.005	0.05	roots, sand	
1461	713+00	T	SM		0	1.1	1.1	H	0	silt, roots	irregular
1462	713+02.5	O	SM		0	0.9	0.9	H	0	silt	
1463	713+03	O	SM		0	0.9	0.9	H	0	silt	
1464	713+07	T	SM		0	1.2	1.2	H+	0.05	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53 8A02 0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1465	713+08	O	SM		0	1.0	1.0	H	0	silt	
1466	713+12.5 to 713+13	O	SM		0	1.0	1.0	H	0	silt	
1467	713+13	T	SM		0	1.2	1.2	0.005	0.1	roots, sand	
1468	713+19.5	T	SM SC		0	10.8	10.8	H-0.05	1.0	roots, sand	well developed
1469	713+22.5	T	SM		0	0.9	0.9	H+	0.15	silt	
1470	713+26.5 to 713+27.5	T+O	SM+ SC		0	12.9	12.9	H-0.1	1.1	roots, sand	
1471	713+29.5	O	SM		0	0.8	0.8	H	0	silt	
1472	713+31	O	SM		0	0.5	0.5	H	0	silt	
1473	713+32.5	T	SM		0	0.4	0.4	H	0.1	silt	
1474	713+34	O	SM		0	1.2	1.2	H	0.3	silt	
1475	713+35	O	SC+ SM		0	6.7	6.7	0.005-0.01	0.2	sand	
1476	713+41	T	SM		0	0.8	0.8	0.01	0.2	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1477	713+43	O	SC+SM		3.2	3.7	0.5	0.005	0.1	roots	
1478	713+44	O	SC+SM		3.2	4.8	1.6	0.005	0.1	roots	
1479	713+48	T+O	SC+Sil		0	4.9	4.9	0.005	0.1	roots, sand	
1480	713+53	O	SC+SM		0	6.0	6.0	0.01	0.2	roots, sand	
1481	713+55	O	SC		0	3.5	3.5	0.01	0.05	roots, sand	
1482	713+57	O	SC+SM		0	4.0	4.0	0.01	0.2	roots, sand	
1483	713+58	O	SC+SM		0	5.6	5.6	0.005	0.1	roots, sand	
1484	713+60	O	SM		0	1.2	1.2	H	0.05	silt	
1485	713+63	O	SM		0	2.6	2.6	0.005	0.05	sand	
1486	713+64	T	SM		0	2.5	2.5	0.005-0.01	0.2	roots, sand	
1487	713+69	T	SM		0	2.2	2.2	0.015	0.3	roots, sand	
1488	713+70	T	SM		0	1.2	1.2	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
69TH	713+72	O	SM		0	3.6	3.6	0.005	0.1	roots, sand	
70TH	713+74	T	SM		0	3.6	3.6	0.005	0.1	roots, sand	
71ST	713+77	T	SM		0	1.7	1.7	0.005	0.1	roots, sand	
72ND	713+79	T	SM		0	2.1	2.1	0.03	0.45	roots, sand	
73RD	713+81	T	SM		0	2.5	2.5	0.02	0.7	roots, sand	
74TH	713+86	T	SM		0	2.1	2.1	0.025	0.4	sand, partially open	
75TH	713+89	T	SM		0	1.7	1.7	H	0	roots, sand	
76TH	713+97	T	SM		0	1.7	1.7	0.005	0.1	roots, sand	
77TH	714+00	T	SM		0	1.7	1.7	0.005	0.1	sand	
78TH	714+02.5	T	SM		0	1.5	1.5	0.005	0.1	sand, silt	
79TH	714+05	T	SM		0	2.6	2.6	0.02	0.5	sand	
80TH	714+07	T	SM		0	1.6	1.6	H	0.05	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1501	714+09	O	SM		0	1.3	1.3	0.015	0.15	sand	
1502	714+12	O	SM		0	1.6	1.6	H	0.05	roots, silt	
1503	714+15	T	SM		0	1.6	1.6	0.005	0.05	roots, sand	
1504	714+16	T	SM		0	2.1	2.1	0.005	0.05	roots, sand	
1505	714+18	T	SM		0	1.6	1.6	H	0.05	roots, silt	
1506	714+19	O	SM		0	1.5	1.5	H	0.05	roots, silt	
1507	714+21	T	SM		0	1.4	1.4	H+	0.1	sand	
1508	714+22	T	SM		0	1.3	1.3	H+	0.05	sand	
1509	714+25	O	SM		0	1.3	1.3	H+	0.05	silt	
1510	714+30	T	SM		0	1.5	1.5	0.005	0.1	roots, sand	
1511	714+32	O	SM		0	1.8	1.8	H+	0.05	roots, silt	
1512	714+37	O	SM		0	1.3	1.3	H+	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0 00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1513	714+38	T	SM		0	1.3	1.3	0.005	0.1	roots, sand	
1514	714+41	T	SM		0	1.1	1.1	0.01	0.1	roots, sand	
1515	714+46	0	SM		0	1.0	1.0	H	0	silt	
1516	714+49	0	SM+SC		0	3.9	3.9	0.005	0.1	roots, sand	
1517	714+56	0	SC+SM		0	16.6	16.6	H-0.05	1.0	roots, sand	AUXILIARY OUTLET
1518	714+61	T	SM		0	1.0	1.0	H	0	silt	
1519	714+63	T	SM		0	1.6	1.6	0.005	0.05	roots, sand	
1520	714+66	T	SM		0	1.3	1.3	0.015	0.1	roots, sand	
1521	714+71	0	SM		0	0.9	0.9	0.005	0.1	roots, sand	
1522	714+73	0	SM		0	1.5	1.5	0.005	0.05	sand	
1523	714+79	T	SM		0	1.1	1.1	H	0	silt	
1524	714+81	T	SM		0	1.8	1.8	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1525	714+87	T	SM		0	0.7	0.7	H	0	none	
1526	714+92	T	SM		0	1.7	1.7	H	0	none	
1527	715+02	T	SM		0	1.1	1.1	H	0	none	
1528	715+06	T	SM		0	0.8	0.8	H	0	roots, silt	
1529	715+33	T	SM		0	0.8	0.8	H	0	roots, silt	
1530	715+39	O	SM		0	0.7	0.7	H	0	silt	
531, 531	715+45	T	SM/SC		0	10.5	10.5	H-0.05	0.9	roots, sand	
532	715+46	T	SM		0	0.7	0.7	H	0	silt	
1533	715+62	O	SM		0	0.5	0.5	0.005	0.05	silt	
534	715+66	T	SM		0	0.8	0.8	H-0.05	0.1	sand	
1535	715+74	T+O	SM/SC		0	8.3	8.3	H-0.03	0.4	roots, sand	
1536	715+74 to 715+80	T+O	SM/SC		0	9.5	9.8	H-0.025	0.2	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top right	Top left	Bottom					
1537	715+91	T	SC+ SM-SC		0	$3.^{0}$	$3.^{0}$	H - 0.005	$0.^{2}$	roots, sand	
1535	715+98	O	SC+ SM		0	$2.^{3}$	$2.^{3}$	0.005	$0.^{2}$	roots, sand	
1531	715+99.5	T	SC+ SM		0	$7.^{3}$	$7.^{3}$	H - 0.015	$0.^{3}$	roots, sand	
1510	716+14	O	SC		0	$2.^{1}$	$2.^{1}$	H	0	silt	
1541	716+31	O	SC		0	$0.^{7}$	$0.^{7}$	H	0	silt	
1542	716+32	T	SC		0	$6.^{2}$	$6.^{2}$	0.01	$0.^{2}$	roots, sand	
1543	716+48	T+O	SC		0	$16.^{4}$	$16.^{4}$	0.035	1.0+	sand, silt	dendritic, discontinuous, well developed AUXILIARY OUTLET
1544	716+58	T+O	SC		0	$15.^{3}$	$15.^{3}$	0.01	$0.^{3}$	sand, silt	discontinuous
1545	716+71	T	SC-SM		0	$10.^{1}$	$10.^{1}$	H - 0.01	0.15	sand	
1546	716+81	O	SC-SM		0	$1.^{3}$	$1.^{3}$	H	0	silt	
1547	716+82	O	SC-SM		0	$0.^{9}$	$0.^{9}$	H	0	roots	
1548	716+93.5	T	SC-SM		0	$4.^{0}$	$4.^{0}$	H - 0.005	$0.^{05}$	roots, sand, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1549	716+49	T	SC		0	1.0	1.0	H	0	silt	
1550	717+00	T	SC		0	1.3	1.3	H	0.05	silt	
1551	717+06	T	SC		0	0.8	0.8	H	0	roots, silt	
1552	717+13 to 717+14	T	SC-SM		0	17.9	17.9	H-0.035	1.25	roots, sand	well developed AUXILIARY OUTLET
1553	717+21	O	SC		0	1.1	1.1	H	0	silt	
1554	717+35	O	SC-SM		0	13.3	13.3	H-0.02	0.45	roots, sand	
1555	717+45	T	SC		0	1.0	1.0	H+	0	roots	
1556	717+50	O	SC		0	0.9	0.9	H	0	silt	
1557	717+61	O	SC-SM		0	15.1	15.1	H-0.035	0.45	roots, sand	
1558	717+63 to 717+68	L	SC		0	1.3	1.3	0.12	0.4	roots, sand	
1559	717+72	O	SC		0	0.8	0.8	0.005	0.05	roots, sand	
1560	717+73	T	SC		0	1.1	1.1	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1561	717+79	T	SC		0	1.1	1.1	H	0	silt	
1562	717+90	0	SM+SC		3.2	4.9	1.7	0.005	0.1	roots	
1563	717+93	0	SC		0	1.1	1.1	H	0	silt	
1564	717+96	0	SC+SM		0	10.1	10.1	0.015	0.35	sand, partially open	
1565	717+99	T+0	SC		0	3.4	3.4	H	0	silt	
1566	718+02	T	SC		0	1.3	1.3	H	0	roots, silt	
1567	718+08.5	0	SC		0	1.1	1.1	0.025	0.3	roots, partially open	
1568	715+16	T	SC		0	0.9	0.9	H	0	roots	
1569	718+17	T	SC		0	1.0	1.0	H	0	roots, silt	
1570	718+19	0	SC-SM		3.9	7.2	3.3	H	0	none	
1571	718+20	T	SC		0	0.6	0.6	H	0	roots, silt	
1572	718+23.5	T	SC		0	0.7	0.7	H	0	roots, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1573	718+24.5	T	SC		0	0.7	0.7	H	0	roots, silt	
1574	718+40	T	SC		0	0.8	0.8	0.015	0.35	sand, partially open	
1575	718+55	T	SC		0	0.5	0.5	H	0	roots, silt	
1576	718+56.5	T	SC		0	0.9	0.9	H	0	roots, silt	
1577	718+58	0	SC		0	0.9	0.9	H	0	roots, silt	
1578	718+60	T	SC		0	0.7	0.7	H	0	silt	
1579	718+62	T	SC		0	1.0	1.0	H	0	silt	
1580	718+63	T	SC		0	0.9	0.9	H	0	roots, silt	
1581	718+64	T	SC		0	1.0	1.0	H	0	roots, silt	
1582	718+81	T	SC		0	2.3	2.3	0.015	0.3	roots, sand	
1583	718+83	T	SC-SM		0	6.7	6.7	0.02-0.15	1.15	roots, sand	
1584	718+87	T	SC-SM		0	1.7	1.7	H-0.01	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1585	718+88	O	SC-SM		O	4.1	4.1	H	0.05	roots, silt	
1586	718+95	T	SC		O	1.0	1.0	H	O	roots, silt	
1587	718+96	O	SC-SM		2.7	3.8	1.1	H	O	silt	
1588	718+97	T	SC		O	1.8	1.8	H+	O	sand	
1589	719+00	O	SC		O	2.1	2.1	H	O	roots	
1590	719+02	T	SC		O	2.1	2.1	H	O	roots, silt	
1591	719+04	T	SC		O	1.7	1.7	H	O	roots, silt	
1592	719+06	T	SC		O	1.5	1.5	H+	O	roots, sand	
1593	719+10	T	SC		O	1.6	1.6	0.005	0.05	roots, sand	
1594	719+13	O	SC-SM		O	4.1	4.1	H+	0.05	silt	
1595	719+15	O	SC-SM		O	4.2	4.2	H+	0.05	roots, silt	
1596	719+17	T	SC-SM		O	2.1	2.1	0.01	0.1	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1597	719+19	T	SC-SM		0	4.0	4.0	0.005-0.15	1.0	roots, sand partially open	
1598	719+30 to 719+32	O	SC		0	0.9	0.9	0.005	0.1	silt	
1599	719+42	O	SC-SM		2.0	4.5	2.5	H-0.005	0.1	roots, silt	
1600	719+50 to 719+51	O	SC-SM		0	3.0	3.0	0.025	0.35	roots, sand	
1601	719+54	O	SC-SM		0	6.2	6.2	0.01	0.3	sand	
1602	719+58	O	SC		0	1.2	1.2	0.005	0	sand	
1603	719+69	O	SC		0	1.1	1.1	0.005	0.05	sand	
1604	719+87	T	SC		0	0.8	0.8	H	0	roots, silt	
1605	719+91	T	SC		0	1.3	1.3	H+	0	roots, sand	
1606	719+95	T	SC-SM		0	4.1	4.7	H-0.03	0.4	roots, sand	
1607	719+99	T	SC		0	1.3	1.3	0.005	0.1	roots, sand	
1608	720+05	T	SC		0	1.6	1.6	0.01	0.1	roots, sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1609	720+17	T	SC		0	1.4	1.4	0.005	0.25	roots	
1610	720+20	T	SC		0	3.7	3.7	0.01	0.1	roots, silt	
1611	720+21	0	SC		0	6.4	6.4	H-0.02	0.2	silt	
1612	720+46.5	T	SC		0	4.0	4.0	0.01	0.2	roots, sand	
1613	720+70.5	T	SM-SC		0	3.5	3.5	H+	0.05	roots, silt	
1614	720+79	0	SM		0	4.2	4.2	H	0.05	silt	
1615	720+81	T	SC-SM		0	1.6	1.6	H	0	roots, sand	
1616	720+88	T	SC-SM		0	1.4	1.4	H	0.05	silt	
1617	720+94	0	SC-SM		0	1.2	1.2	H	0	roots, sand	
1618	720+95	T	SC-SM		0	6.7	6.7	0.01-0.02	0.4	roots, silt	
1619	720+99	0	SC		0	1.1	1.1	H	0.05	roots, sand	
1620	721+03	0	SC		0	1.4	1.4	H	0	roots, sand, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1621	721+09	T	SC		0	1.3	1.3	H	0	roots	
1622	721+11	T	SC		0	1.6	1.6	H	0.05	roots, silt	
1623	721+14	T	SC		0	1.1	1.1	H	0.05	silt	
1624	721+22	T	SC-SM		0	15.9	15.9	H-0.015	1.4	roots, sand	
1625	721+31	T	SC		0	2.5	2.5	H-0.005	0.05	roots, silt	
1626	721+36	O	SC-SM		0	2.1	2.1	0.005	0.1	silt	
1627	721+38	T	SC-SM		0	4.1	4.1	0.005-0.01	0.15	roots, sand	
1628	721+42	O	SC		0	1.1	1.1	H	0	silt	
1629	721+45	TO	SC-SM		0	4.1	4.1	H-0.015	0.1	roots, sand	
1630	721+48	O	SC-SM		0	1.8	1.8	0.015	0.5	roots, silt	
1631	721+48.5 to 721+50	L	SC-SM		0	2.8	2.8	0.01	0.4	roots, sand	
1632	721+52.5	T	SC-SM		0	2.1	2.1	0.01	0.1	roots, sand, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

H=HORIZONTAL

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1633	721+55	T	SC-SM		0	4.2	4.2	H-0.02	0.2	roots, sand	
1634	721+57	O	SC		0	1.4	1.4	H	0	silt	
1635	721+62	T	SC		0	1.8	1.8	H	0	silt	
1636	721+67	T	SC		0	0.8	0.8	H	0	roots, silt	
1637	721+69	O	SC		0	1.2	1.2	H	0	roots	
1638	721+71 to 721+74	T+H	SC		0	1.1	1.1	H-0.05	0	roots, silt	
1639	721+79	T	SC		0	1.1	1.1	H+	0	roots, sand	
1640	721+82	T	SC		0	1.2	1.2	0.01	0.1	roots, sand	
1641	721+84	T	SC		0	1.6	1.6	H	0	roots	
1642	721+85	T	SC		0	1.8	1.8	H	0	roots, silt	
1643	721+87	T	SC		0	1.1	1.1	H	0	silt	
1644	721+88	T	SC		0	1.1	1.1	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1645	721+90	T	SC		0	1.1	1.1	H	0	silt	
1646	721+94	0	SC		0	0.9	0.9	H	0	silt	
1647	721+99	0	SC		0	2.1	2.1	H	0	silt	
1648	722+00	0	SC		0	1.0	1.0	H	0	silt	
1649	722+06	0	SC-SM		0	4.4	4.4	0.01	0.4	roots, sand	
1650	722+11	0	SC-SM		0	1.4	1.4	0.005	0.15	roots, sand	
1651	722+12	T	SC		0	0.9	0.9	H+	0.05	silt	
1652	722+15	T	SC-SM		0	6.6	6.6	0.005 0.02	0.4	roots, sand	
1653	722+18	T	SC		0	0.7	0.7	H	0	silt	
1654	722+22	T	SC		0	0.8	0.8	H	0	silt	
1655	722+23	T	SC		0	0.9	0.9	0.005	0.05	silt	
1656	722+24	T	SC		0	0.1	0.9	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
257	722+26	T	SC		0	1.1	1.1	H	0	silt	
258	722+41	O	SC		0	10.0	10.0	H-0.01	0.4	roots, sand, silt	
1659	722+63	T	SC		0	1.1	1.1	H	0	roots	
1660	722+68	T+O+L	SC-SM		0	11.0	11.0	0.005-0.03	0.7	roots, silt	
1661	722+72	O	SC		0	1.1	1.1	H	0.05	silt	
1662	722+78	T	SC		0	1.0	1.0	H+	0	roots, sand, silt	
1663	722+79	O	SC		0	0.9	0.9	H-1	0	roots, silt	
1664	722+82	T	SC		0	0.9	0.9	0.002	0.05	roots, silt	
1665	723+00	T	SC-SM		0	6.7	6.7	H-0.005	0.2	roots, sand	
1666	723+02	T	SM		0	0.6	0.6	H	0	silt	
1667	723+10	T	SM		0	0.9	0.9	H	0	silt	
1668	723+11	T	SM		0	2.2	2.2	0.01	0.2	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1669	723+17	O	SM		O	9.4	9.4	H-0.01	0.3	roots, sand	
1670	723+25	O	SM		O	0.7	0.7	H	0	silt	
1671	723+28	O	SM		O	0.9	0.9	H	O	silt	
1672	723+37	O	SM		O	8.7	8.7	0.01-0.03	0.4	roots, sand	
1673	723+51	T-O	SM		O	0.7	0.7	H	O	silt	dendritic
1674	723+56.5	O	SM		O	8.4	8.4	0.015	0.3	roots, sand	
1675	723+77	O	SM-SC		O	6.0	6.0	0.02	0.3	roots, silt partially open	
1676	723+83	O	SM		O	4.5	4.5	H	O	roots, silt	
1677	723+99	T	SM		O	3.3	3.3	H	O	roots, silt	
1678	724+06	T	SM		O	1.1	1.1	H	O	roots, silt	
1679	724+11	O	SM		O	3.4	3.4	H	O	roots	
1680	724+20	O	SM		O	6.1	6.1	H-0.005	0.1	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1681	724+32 TO 724+33	O	SM		0	6.9	6.9	H - 0.005	0.1	roots, sand	
1682	724+37.5	T	SM		0	0.6	0.6	H	0	silt	
1683	724+38	T	SM		0	0.6	0.6	H	0	silt	
1684	724+44	T	SM		0	0.7	0.7	H	0.05	roots, silt	
1685	724+52	O	SM-SC		0	5.0	5.0	H - 0.005	0.1	roots, sand	
1686	724+60	T	SM-SC		0	0.9	0.9	H	0	roots, silt	
1687	724+64	T	SM-SC		0	3.9	3.9	H - 0.02	0.2	roots, sand	
1688	724+80	O	SM-SC		0	0.6	0.6	H	0	silt	
1689	725+02	T	SC-SM		0	3.1	3.1	H	0.05	roots, sand, silt	
1690	725+18	T	SC-SM		0	9.8	9.8	H - 0.015	0.25	roots, sand	
1691	725+25	T	SC-SM		0	3.2	3.2	H - 0.014	0.3	roots, sand	
1692	725+38	T	SC-SM		0	6.7	6.7	H - 0.01	0.1	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0 00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

H = HORIZONTAL

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1623	725+52	T	SC-SM		0	7.0	7.0	0.05-0.07	0.75	roots, sand	
1624/1625	725+54 To 725+55	T+H	SC-SM		0	1.0	1.0	0.005	0.1	roots, sand	
1626	725+57	T	SC-SM		0	0.7	0.7	0.005	0.05	roots, sand	
1627/1628	725+62	T	SC-SM		0	2.4	2.4	H-0.005	0.05	roots, sand	
[illegible]	725+65	T	SC-SM		0	1.9	1.9	0.02	0.1	roots, sand	
1629	725+67	T	SC-SM		0	6.9	6.9	H-0.05	1.3	roots, sand	
1630	725+73	O	SC-SM		0	1.6	1.6	H	0	roots, silt	
[illegible]	725+75	T	SC-SM		0	0.9	0.9	H+	0.05	roots, sand	
[illegible]	725+79	T	SC-SM		0	2.2	2.2	0.02-0.05	0.1	roots, sand	
[illegible]	725+83	T	SC-SM		0	7.7	7.7	0.01-0.05	1.2	roots, sand, silt	
1703	726+06	T	SC-SM		0	2.2	2.2	0.005	0.05	roots, sand	
1704	726+09	T	SC-SM		0	1.4	1.4	H	0	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1205	726+12	T	SC-SM		0	2.5	2.5	H-0.005	0.25	roots, sand	
1206	726+15	T	SC-SM		0	3.5	3.5	H-0.005	0.1	roots, silt	
1207	726+19	0	SC-SM		0	0.9	0.9	H	0	roots, silt	
1208	726+20	T+C	SC-SM		0	2.1	2.1	0.01	0.15	roots, sand	
1209	726+21.5 TC 726+22	T+O	SC-SM		0	1.2	1.2	H	0.05	roots	
1210	726+24.5	T	SC-SM		0	1.1	1.1	H	0	roots, silt	
1211	726+26	0	SC-SM		0	1.9	1.9	0.01	0.3	roots, silt	
1212	726+29	0	SC-SM		0	3.1	3.1	0.01	0.1	roots, sand	
1213	726+30	0	SC-SM		0	1.1	1.1	0.01	0.1	roots, sand	
1214	726+33 TC 726+34	0	SC-SM		0	3.8	3.8	H-0.02	0.3	roots, sand	
1215	726+38	T	SC-SM		0	1.6	1.6	H	0	roots, silt	
1216	726+40	T	SC-SM		0	1.5	1.5	0.02	0.25	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53 8A02 0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1717	726+42	T	SC-SM		0	2.0	2.0	H	0	roots, silt	
1718	726+45	T	SC-SM		0	1.3	1.3	0.005	0.05	roots, silt	
1719	726+46	T	SC-SM		0	1.8	1.8	0.005	0.1	roots, sand	
1720	726+47 To 726+48.5	T	SC-SM		0	6.5	6.5	H-0.05	0.8	roots, sand	
1721	726+54	0	SC-SM		0	1.8	1.8	11-0.005	0.05	roots, sand	
1722	726+61	0	SC-SM		0	1.2	1.2	H+	0	roots, silt	
1723	726+62	0	SC-SM		0	1.7	1.7	H+	0	roots, silt	
1724	726+65	T	SC-SM		0	1.6	1.6	H	0	roots, silt	
1725	726+67	T	SC-SM		0	0.7	0.7	H	0	roots, silt	
1726	726+71	0	SC-SM		0	2.3	2.3	H	0	roots, silt	
1727	726+76	0	SC-SM		0	1.5	1.5	H+	0	roots, silt	
1728	726+79	T	SC-SM		0	1.3	1.3	H+	0	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1729	726+82	O	SC-SM		O	1.8	1.8	H+	O	roots, silt	
1730	726+85	T	SC-SM		O	11.9	11.9	H-0.035	0.4	roots, sand	
1731	726+86.5	T	SC-SM		O	0.7	0.7	H	O	roots, silt	
1732	726+94	O	SC-SM		O	1.9	1.9	H+	O	roots, silt	
1733	726+97	O	SC-SM		O	1.1	1.1	H	O	roots, silt	
1734	727+05	T	SC-SM		O	2.4	2.4	H+	O	roots, sand	
1735	727+07	T	SC-SM		O	1.0	1.0	H+	O	roots, silt	
1736	727+16	O	SC-SM		O	7.0	7.0	H-0.01	0.1	roots, sand	
1737	727+26	T	SM		O	3.7	3.7	H	O	roots, silt	
1738	727+28	T	SM		O	1.1	1.1	H	O	roots, silt	
1739	727+31	T	SM		O	1.4	1.4	H	O	silt	
1740	727+38	O	SM-SC		O	6.8	6.8	H-0.01	0.15	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1741	727+42	T	SM		0	1.1	1.1	0.01	0.1	roots, sand	
1742	727+46	O	SM		0	4.6	4.6	H+	0	roots, silt	
1743	727+50	T	SM		0	0.7	0.7	H	0	silt	
1744	727+53	T	SM		0	2.0	2.0	0.005	0.05	roots, sand, silt	
1745	727+62	O	SM-SC		0	5.5	5.5	H-0.01	0.1	roots, sand	
1746	727+94	L+O	SC+SM+CL		0	11.1	11.1	0.01	0.3	roots, sand	
1747	728+20	O	SM		0	2.2	2.2	H	0	silt	dendritic
1748	728+52 TO 728+53	O	SM		0	1.0	1.0	0.015	0.4	roots, sand	
1749	728+92	O	SM		0	2.1	2.1	H	0	roots, silt	
1750	728+96	O	SM		0	1.8	1.8	0.005	0.4	roots, sand	
1751	729+31	O	SM		0	0.7	0.7	0.01	0.2	roots, sand	
1752	729+43	O	SM		0	0.7	0.7	H+	0	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1753	729+50	T	SM		0	0.9	0.9	H	0	roots, silt	
1754	729+77	O	SM		0	1.1	1.1	H	0	silt	
1755	729+79	T	SM		0	1.2	1.2	0.005	0.05	roots, silt	
1756	730+30	O	SM		0	0.9	0.9	H	0	roots, silt	
1757	730+48	T	SM		0	0.8	0.8	H	0	roots, silt	
1758	730+50.5 to 730+51.5	O	SM		0	1.0	1.0	0.01	0.3	roots, sand	
1759	730+52	T	SM		0	1.9	1.9	H	0	roots, silt	
1760	730+57	T	SM		0	2.9	2.9	H-0.005	0.1	roots, sand, silt	
1761	730+60	T	SM		0	1.3	1.3	H	0	roots, silt	
1762	730+66	O	SM		0	1.2	1.2	H	0	silt	
1763	730+68	T	SM		0	1.1	1.1	H+	0	roots, silt	
1764	730+71	O	SM		0	1.6	1.6	H	0	roots, silt	

FIELD LOGGING OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
SOIL 1165	730+77	T	SM		0	1.4	1.4	H+	0.05	roots, silt	
1166	730+81	T	SC-SM		0	0.9	0.9	H+	0	roots, silt	
1167	730+84.5	T	SC-SM		0	0.9	0.9	H+	0	silt	
1168	730+85	T	SC-SM		0	0.8	0.8	0.005	0.05	roots, silt	
1169	730+92.5	T	SC-SM		0	1.8	1.8	0.01	0.1	roots, sand	
1170	730+93	O	SC-SM		0	0.6	0.6	H+	0	silt	
1171	730+96	T	SC-SM		0	0.9	0.9	H	0	silt	
1172	730+98	T	SC-SM		0	1.1	1.1	H	0	silt	
1173	731+01	T	SC-SM		0	1.6	1.6	0.015	0.25	roots, sand	
1174	731+08	T	SC-SM		0	1.2	1.2	H	0	silt	
1175	731+21	T	SC-SM		0	0.8	0.8	H	0	silt	
1176	731+35	O	SC-SM		0	0.9	0.9	0.01	0.2	open	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface: Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1131	731+47	T	SL-SM		0	1.1	1.1	0.02	0.2	sand	
1132	732+04	O	SM		0	0.8	0.8	H	0	silt	
1133	732+41	T	SM		0	1.1	1.1	H	0	silt	dendritic
1134	732+50	O	SM		0	1.1	1.1	H	0	silt	
1135	732+55	O	SM		0	0.8	0.8	H	0	silt	
1136	732+68	O	SM		0	0.8	0.8	H-0.005	0	silt	
1137	732+80	T+O	SM		0	1.9	1.9	H+	0	roots, silt	
1138	732+96	T	SM		0	1.2	1.2	H	0	roots, silt	
1139	732+99	O	SM		0	0.7	0.7	H	0	roots, silt	
1140	733+19	T	SM		0	3.8	3.8	H+	0.05	roots, silt	
1141	733+25	O	SM		0	0.9	0.9	H	0	silt	
1142	733+63	T	SM		0	1.1	1.1	H-0.005	0.05	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1781	733+55	T	SM		0	1.0	1.0	H-0.005	0.05	roots, silt	
1780	733+74	T	SM		0	2.3	2.3	H-0.01	0.1	roots, sand	
1791	733+79	T	SM		0	1.5	1.5	0.04	0.65	roots, sand	
1792	733+85	T	SM		0	2.5	2.5	0.005	0.15	roots, sand	
1793	733+91	T	SM		0	2.8	2.8	0.015	0.2	roots, sand	
1794	734+00.5	T	SM		0	2.7	2.7	H-0.005	0.15	roots, sand	
1795	734+17	T	SM		0	2.7	2.7	H-0.01	0.4	roots, sand	
1796	734+22	O	SM		0	2.2	2.2	H+	0.05	roots, silt	
1797	734+27	O	SM		0	1.0	1.0	11	0	silt	
1798	734+29	T	SM		0	0.6	0.6	11	0	roots, silt	
1799	734+31	T	SM		0	1.2	1.2	0.005	0.05	roots, silt	
1800	734+37	O	SM		0	1.0	1.0	0.01	0.15	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1801	734+43	T	SM		0	0.8	0.8	H	0	silt	
1802	734+61	T	SM		0	4.7	4.7	H-0.03	0.25	roots, sand	
1803	734+73	T+O	SM		0	0.8	0.8	0.005	0.05	silt	
1804	734+80	T	SM		0	6.2	6.2	0.005-0.025	0.45	roots, sand, silt	
1805	734+89	T	SM		0	4.8	4.8	0.005	0.2	roots, sand	
1806	734+95	O	SM		0	1.5	1.5	H	0	silt	
1807	735+02	T	SM		0	2.8	2.8	0.02	0.3	roots, sand	
1808	735+16.5	T	SM		0	1.2	1.2	H	0	roots, silt	
1809	735+26	T+O	SM		0	3.5	3.5	H-0.005	0.25	roots, sand	
1810	735+36	O	SM		0	1.0	1.0	H	0	roots, silt	
1811	735+50	O	SM		0	0.7	0.7	H	0	silt	
1812	735+55	O	SM		0	1.0	1.0	H+	0	roots, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0 00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1813	735+77	T	SM		0	1.7	1.7	H	0	roots, silt	
1814	735+84	O	SM		0	0.6	0.6	0.005	0.05	roots	
1815	735+84.5	T	SM		0	1.2	1.2	0.005	0.1	roots, sand	
1816	735+85	T	SM		0	1.0	1.0	H+	0.05	silt	
1817	735+89.5	T	SM		0	1.0	1.0	H	0	silt	
1818	735+90	T	SM		0	1.0	1.0	0.005	0.1	roots, sand	
1819	735+98	T	SM		0	1.1	1.1	H-0.005	0.1	roots, silt	
1820	736+00	T	SM		0	0.8	0.8	0.005	0.05	roots, silt	
1821	736+08	T	SM		0	1.1	1.1	0.005	0.05	sand	
1822	736+12.5 to 736+13	T+O	SM		0	1.6	1.6	H	0	silt	
1823	736+17	T	SM		0	0.9	0.9	H	0	silt	
1824	736+27	O	SM		0	1.0	1.0	H+	0	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1825	736+36	O	SM		O	1.0	1.0	0.005	0.1	sand	
1826	736+45	T	SM		O	1.7	1.7	H-0.005	0.1	sand	
1827	736+49	T	SM		O	1.2	1.2	H-1	O	silt	
1828	736+53	T	SM		O	1.2	1.2	H-0.02	0.25	silt	
1829	736+56	T	SM		O	0.9	0.9	H	O	silt	
1830	736+61	T	SM		O	1.2	1.2	0.02	0.1	roots, sand	
1831	736+65	T	SM		O	1.0	1.0	H	O	silt	
1832	736+70	T	SM		O	0.5	0.8	H	O	silt	
1833	736+75	T	SM		O	3.2	3.2	H-1	0.05	sand, silt	
1834	736+81	T	SM		O	0.8	0.8	H	O	silt	
1835	736+86	T	SM		O	1.1	1.1	0.005	0.05	roots, sand	
1836	736+89	T	SM		O	0.9	0.9	H-1	O	roots, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1837	736+95	T	SM		0	2.7	2.7	H-0.05	0.35	roots, sand	
1838	736+99	O	SM		0	0.9	0.9	H+	0	silt	
1839	737+03	O	SM		0	1.2	1.2	H	0	silt	
1840	737+05	T	SM		0	3.0	3.0	H-0.01	0.25	roots, sand	
1841	737+07	O	SM		0	1.0	1.0	H	0.1	silt	
1842	737+10	T	SM-SC		0	4.7	4.7	0.005	0.1	roots, sand	
1843	737+14	T	SM-SC		0	3.4	3.4	H-0.005	0.1	sand	
1844	737+18	T	SM		0	2.8	2.8	H-0.005	0.05	roots, silt	
1845	737+27	O	SM		0	1.0	1.0	H	0	roots	
1846	737+45 TC 737+47	O	SM-SC		0	4.0	4.0	H-0.005	0.1	roots, silt	
1847	737+65	O	SM		1.3	2.4	1.1	H	0	silt	
1848	737+84	T	SM		0	1.2	1.2	0.02	0.2	sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1849	737+91	T	SM		0	1.6	1.6	0.01	0.1	sand, silt	
1850	737+98	T	SM-SC		0	3.7	3.7	H-0.01	0.15	roots, sand, silt	
1851	738+02	T	SM-SC		0	3.4	3.4	H-0.005	0.1	roots, sand	
1852	738+07	T	SM		0	1.2	1.2	H	0	silt	
1853	735+11	T	SM		0	1.1	1.1	H+	0	roots, silt	
1854	738+13	T	SM		0	1.2	1.2	H	0	silt	
1855	738+15	T+O	SM		0	3.0	3.0	H-0.02	0.35	roots, sand	
1856	738+20	T	SM		0	1.5	1.5	H	0	roots, silt	
1857	738+23	T	SM		0	1.3	1.3	H	0	roots	
1858	738+29	T	SM		0	1.5	1.5	H	0	roots, silt	
1859	738+32	O	SM		0	1.6	1.6	H	0	roots, silt	
1860	738+41.5	O	SM		0	1.0	1.0	H	0	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1861	738+42	O	SM		O	1.0	1.0	H	O	silt	
1862	738+47	O	SM		O	1.0	1.0	H	O	silt	
1863	738+48	O	SM		O	0.9	0.9	H	O	silt	
1864	738+55	T-O	SM		O	1.0	1.0	H	O	silt	
1865	738+59	T	SM		O	1.0	1.0	H	O	silt	
1866	7381 63	T	SM		O	1.1	1.1	H	O	silt	
1867	738+66	T	SC-SM		O	1.4	1.4	H	O	silt	
1868	738+73	O	SC-SM		O	0.8	0.8	H	O	silt	
1869	738+75	T	SM		O	1.0	1.0	H	0.1	roots, silt	
1870	738+84	T	SM		O	1.5	1.5	0.01	0.1	roots, sand	
1871	738+95	T	SC-SM		O	1.6	1.6	0.005	0.05	roots, silt	
1872	739+03	T	SC-SM		O	2.6	2.6	0.01-0.03	0.6	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1372	739+19	T	SM		0	1.8	1.8	0.005	0.05	roots, silt	
1374	739+22	T	SM		0	1.6	1.6	0.005	0.1	roots, sand	
1375	739+25	T	SM		0	1.7	1.7	0.005	0.05	roots, silt	
1376	739+34	T	SM		0	2.1	2.1	0.01-0.035	0.35	roots, sand	
1377	739+53	T	SM		0	1.3	1.3	H	0	silt	
1378	739+64	O	SM		0	0.7	0.7	0.005	0.05	silt	
1379	739+68	O	SC+ SP-SM		0	3.3	3.3	0.005	0.1	roots, sand	
1380	739+72	O	SM		0	1.6	1.6	H+	0	silt	
1381	739+79	T	SM		0	1.2	1.2	H	0	silt	
1382	739+95	T	SM		0	1.4	1.4	H	0.05	roots, silt	
1383	739+98.5 739+99.5 TP	O	SM-SC		0	2.0	2.0	0.005	0.05	roots, silt	
1384	740+00	T	SM-SC		0	1.3	1.3	0.02	0.15	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1881	740+04 TO 740+14	L+O	SM-SC		6.3	10.7	10.0	0.01-0.02	0.15	few roots, sand	well developed
1882	740+25	L	SM-SC		10.0	12.0	2.0	0.01	0.1	roots, silt	poorly developed
1883	740+35 TO 740+42	L+O	SM-SC		7.0	12.6	7.0	H-0.02	0.9	roots, sand, silt	well developed
1884	740+51	T	SP-SM		0	0.7	0.7	H	0	none	
1885	740+59	T	SP-SM		0	1.1	1.1	H	0	roots	
1886	740+70	O	SP-SM		0.6	1.2	0.6	H-0.005	0	none	
1887	741+01	T	SP-SM		0	0.7	0.7	0.005	0	sand	
1888	741+21	T+O	SP-SM		0	6.5	6.5	0.01	0.3	roots, sand	discontinuous, poorly developed
1889	741+37	T+O	SC		0	11.1	11.1	0.02	0.7	roots, sand	dendritic, discontinuous
1890	741+55.5	T	[illegible] SC		0	6.9	6.9	0.01-0.04	1.8	roots, sand	
1891	741+66 TO 741+67.5	T	SM-SC		0	6.6	6.6	0.01-0.035	0.7	roots, sand	
1892	741+72	O	[illegible] SC		0	1.9	1.9	0.005	0.1	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1877	741+77	O	SC-SM		O	4.0	4.0	H-0.01	0.3	roots, sand	
1878	741+80.5	O	SM		O	0.8	0.8	0.015	0.1	sand	
1879	741+88	T	SM-SC		O	6.8	6.8	0.01-0.025	0.5	roots, sand	
1900	741+92 To 741+96	T+L	SM-SC		O	11.9	11.9	0.02-0.03	0.7	roots, sand	
1901	741+98	O	SM		O	1.8	1.8	0.005	0.05	sand	
1902	742+02	O	SM		O	2.8	2.8	0.005	0.1	sand	
1903	742+04	T	SM		O	4.0	4.0	0.015	0.2	sand	
1904	742+13	O	SM		O	2.5	2.5	0.005	0.1	sand	
1905	742+18	T+O	SM-SC		O	9.5	9.5	0.01	0.15	sand	
1906	742+22	O	SM-SC		O	10.9	10.9	0.01	0.2	roots, sand	
1907	742+27	O	SM-SC		O	5.2	5.2	0.01	0.2	roots, sand	
1908	742+34	O	SM-SC		O	4.6	4.6	0.015	0.2	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
1909	742+40	T	SM		0	2.1	2.1	0.005	0.1	roots, sand	
1910	742+44	T	SM		0	3.1	3.1	H	0	roots, silt	
1911	742+50	T	SM		0	3.8	3.8	0.03	0.35	roots, sand	
1912	742+54	O	SM		0	1.4	1.4	0.005	0.1	sand	
1913	742+59	O	SM		0	1.0	1.0	H	0	silt	
1914	742+62	O	SM		0	2.0	2.0	H	0.05	silt	
1915	742+65	T	SM		0	3.7	3.7	0.01	0.15	roots, sand	
1916	742+76	O	SM		0	3.0	3.0	H	0	silt	
1917	742+87	T	SM		0	3.7	3.7	0.01	0.25	roots, sand	
1918	742+91	O	SM		0	2.0	2.0	H	0	silt	
1919	742+97	O	SM		0	2.9	2.9	H	0	roots, silt	
1920	742+91.5	O	SM		0	2.7	2.7	0.01	0.15	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
921	743+03	T+O	SM		O	1.7	1.7	H-0.005	0.1	roots, sand	
922	743+08 TO 743+11	T+O	SM		O	4.6	4.6	0.025	0.3	roots, sand	
923	743+17	T	SM		O	3.5	3.5	0.03-0.1	0.9	roots, sand	open pipe @ 1.6-1.7, w=0.1
924	743+20	T	SM-SC		O	2.4	2.4	0.005	0.1	roots, sand	
925	743+27.5	O	SM		O	2.0	2.0	H	0	roots, silt	
926	743+31	O	SM		O	4.4	4.4	0.01-0.07	0.55	roots, sand	
927	743+36 TO 743+38	L	SM		O	1.4	1.4	0.005	0.1	roots, sand	
928	743+38.5	T	SM		O	1.0	1.0	0.02	0.3	roots, sand	
929	743+40.5	O	SM		O	1.4	1.4	H+	0	silt	
930	743+42	T	SM		O	1.2	1.2	0.01	0.15	sand, silt	
931	743+45.5	O	SM		O	1.7	1.7	0.005	0.1	roots, sand	
932	743+46	O	SM		O	2.1	2.1	0.015	0.35	roots, sand	

FIELD LOGGING OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02 0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1933	743+56	T	SC-SM		0	3.9	3.9	0.01-0.02	0.3	roots, sand	
1934	743+59	T	SM		0	0.9	0.9	0.005	0.05	sand	
1935	743+63	0	SM		0	0.9	0.9	H+	0	roots, silt	
1936	743+65 TO 743+66	T+0	SM		0	4.1	4.1	H-0.02	0.4	roots, sand	
1937	743+69	T	SM		0	1.0	1.0	H+	0	silt	
1938	743+72	T	SM		0	1.0	1.0	H+	0	roots, silt	
1939	743+76 to 743+78	T+L	SM-SC		0	6.9	6.9	0.005-0.015	0.2	roots, sand	
1940	743+81 to 743+83	L	SC		5.0	5.6	0.6	0.01	0.1	roots	
1941	743+88	0	SM-SC		0	3.2	3.2	0.005	0.1	silt	
1942	743+88.5 to 743+90	L	SM-SC		0	6.9	6.9	0.01	0.2	roots, sand	
1943	743+99	T	SM-SC		0	9.1	9.1	H-0.01	0.15	roots, sand	
1944	744+10.5	T	SM-SC		0	4.7	4.7	H-0.005	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02 0 00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1945	744+14	T	SM		0	1.1	1.1	H+	0	silt	
1946	744+20	T	SM-SC		0	5.4	5.4	H-0.005	0.05	silt	
1947	744+32	0	SM-SC		0	3.6	3.6	0.01	0.15	sand	
1948	744+37	T	SM		0	0.7	0.7	H	0	silt	
1949	744+40	T	SM-SC		0	7.2	7.2	0.005 0.035	1.95	roots, sand	
1950	744+45	0	SM-SC		0	3.2	3.2	H+	0.05	silt	
1951	744+48	0	SM-SC		0	3.1	3.1	0.005	0.1	sand, silt	
1952	744+52	0	SC		0	0.8	0.8	H	0	silt	
1953	744+53	L+0	SC		0	3.7	3.7	0.005	0.1	roots, sand	
1954	744+57	T	SC-SM		0	7.6	7.6	H-0.07	0.9	roots, sand	
1955	744+60 To 744+62	T+L	SM-SC		0	3.2	3.2	0.01	0.3	roots, sand	
1956	744+65	T	SM-SC		0	7.9	7.9	H-0.03	0.65	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
1957	744+70	L	SM-SC		0	2.3	2.3	0.015	0.3	roots, sand	
1958	744+73	O	SM-SC		0	7.6	7.6	0.01-0.03	0.45	roots, sand	
1959	744+76 to 744+79	L	SM-SC		0	3.5	3.5	0.015	0.35	roots, sand	
1960	744+81	O	SM-SC		0	3.1	3.1	0.01	0.2	roots, sand	
1961	744+82	O	SM-SC		0	2.7	2.7	0.01	0.2	roots, sand	
1962	744+87	O	SM-SC		0	4.0	4.0	0.01	0.3	roots, sand	
1963	744+91	O	SM-SC		0	4.4	4.4	0.015	0.3	roots, sand	
1964	744+93	T	SM-SC		0	2.7	2.7	0.015	0.25	roots, sand	
1965	744+96	T	SC		0	2.6	2.6	0.005	0.1	sand	
1966	745+02	T	SC		0	2.8	2.8	0.01	0.2	roots, sand	
1967	745+06	T	SC		0	2.9	2.9	0.01	0.2	roots, sand	
1968	745+12.5	O	SC		0	3.6	3.6	0.01	0.15	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02 0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1969	745+18	O	SC		O	2.5	2.5	0.01	0.2	roots, sand	
1970	745+21	T	SC		O	1.0	1.0	0.005	0.1	roots, sand	
1971	745+28	T	SC		O	3.1	3.1	0.02	0.3	roots, sand	
1972	745+33	T	SC		O	1.3	1.3	H	0	silt	
1973	745+39	T	SC		O	3.9	3.9	0.005	0.1	roots, sand	
1974	745+45	O	SC		O	2.5	2.5	H	0	roots, silt	
1975	745+46	T	SC		O	1.0	1.0	H	0	roots, sand	
1976	745+50	O	SC		O	3.0	3.0	H+	0.05	roots, silt	
1977	745+60	O	SC		O	2.1	2.1	H+	0.05	roots, silt	
1978	745+67	T	SC		O	2.3	2.3	0025	0.3	roots, sand	
1979	745+78	T	SC		O	4.5	4.5	H-0.03	0.3	roots, sand	
1980	745+83	O	SC		O	1.5	1.5	0.005	0.1	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1981	745+89	O	SC		O	1.5	1.5	H	O	silt	
1982	745+95	O	SC		O	1.4	1.4	H	O	silt	
1983	745+96	T	SC		O	2.5	2.5	0.01	0.2	roots, sand	
1984	746+02	O	SC		O	2.4	2.4	0.01	0.2	roots, sand	
1985	746+09	O	SC		O	1.3	1.3	H	O	silt	
1986	746+11	O	SC		O	1.2	1.2	H	O	silt	
1987	746+13	O	SC		O	1.8	1.8	0.005	0.1	sand	
1988	746+16	O	SC		O	1.0	1.0	H	O	silt	
1989	746+24	T	SC-SM		O	4.2	4.2	0.025	0.4	roots, sand	
1990	746+25	T	SC		O	1.0	1.0	H	O	silt	
1991	746+28	T	SC		O	1.1	1.1	H	O	roots, silt	
1992	746+36	O	SC		O	1.3	1.3	H-0.01	0.1	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
1993	746+37	T	SC		0	3.0	3.0	0.01-0.02	0.45	roots, sand	
1994	746+40	T	SC		0	1.1	1.1	H	0	roots, silt	
1995	746+44	T	SC		0	1.7	1.7	0.005	0.1	roots, sand	
1996	746+47.5	T	SC		0	1.8	1.8	0.015	0.2	roots, sand	
1997	746+49	0	SC		0	1.2	1.2	0.005	0.1	sand	
1998	746+53	0	SC		0	1.0	1.0	H	0	roots, silt	
1999	746+54	T	SC		0	1.3	1.3	0.005	0.1	roots, sand	
2000	746+58	T	SC		0	1.6	1.6	0.01	0.2	roots, sand	
2001	746+60	T	SC		0	1.0	1.0	0.01	0.15	roots, sand	
2002	746+65	T	SC		0	1.1	1.1	0.01	0.15	sand	
2003	746+67	T	SC		0	1.3	1.3	H-0.01	0.1	sand	
2004	746+72	T	SC-SM		0	3.4	3.4	0.01	0.2	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53 8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2005	746+88	T	SC		0	1.0	1.0	0.005	0.05	roots, sand	
2006	746+98	T	SC		0	0.8	0.8	0.005	0.1	roots, silt	
2007	747+07	T	SC		0	1.0	1.0	H	0	silt	
2008	747+12	T	SC		0	1.1	1.1	0.005	0.1	roots, sand	
2009	747+14	T	SC		0	1.3	1.3	0.01	0.15	roots, sand	
2010	747+20	T	SC		0	2.1	2.1	H-0.01	0.1	roots, sand	
2011	747+22	T	SC		0	0.7	0.7	H	0	roots	
2012	747+31	O	SC		0	1.6	1.6	0.005	0.1	roots, sand	
2013	747+32	T	SC-SM		0	5.0	5.0	0.015	0.25	roots, sand	
2014	747+42	T	SC		0	1.1	1.1	H	0.05	roots, silt	
2015	747+45	O	SC		0	1.0	1.0	0.005	0.2	sand	
2016	747+52	T	SC		0	1.2	1.2	0.06	0.45	sand, partially open	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2017	747+62	T	SC		0	0.9	0.9	H	0	roots, silt	
2018	747+67	T+O	SC-SM		0	5.5	5.5	11-0.02	0.3	roots, sand	
2019	747+78	T	SC		0	1.2	1.2	H	0	silt	
2020	747+82	T	SM		0	1.2	1.2	0.03	0.4	sand	
2021	747+89	T	SM		0	1.2	1.2	0.005	0.1	silt	
2022	747+92	T	SM		0	1.1	1.1	H	0	silt	
2023	747+95	T	SM		0	1.0	1.0	0.01	0.1	sand	
2024	747+99	T	SM		0	2.0	2.0	H+	0.1	roots, silt	
2025	748+05	T	SM		0	1.5	1.5	H+	0.05	roots, silt	
2026	748+10	O	SM		0	1.5	1.5	0.005	0.1	sand	
2027	748+14	L	SM		0	1.6	1.6	0.01	0.2	sand	
2028	748+15	T	SM		0	0.7	0.7	H+	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2029	748+17	T	SM		0	1.6	1.6	H+	0.05	silt	
2030	748+22	T	SM		0	0.8	0.8	0.005	0.05	silt	
2031	748+25	T	SM		0	1.4	1.4	0.005	0.05	silt	
2032	748+33	L	SM		0	2.1	2.1	H	0	roots	
2033	748+35	T	SM		0	3.5	3.5	H-0.05	0.45	roots, sand	
2034	748+38 to 748+39	T	SM		0	1.2	1.2	0.01	0.2	roots, sand	
2035	748+44	T	SM		0	1.7	1.7	H-0.01	0.1	roots, sand	
2036	748+49	T	SM		0	1.6	1.6	0.005	0.1	roots, sand	
[illegible]	748+53	T	SM		0	1.2	1.2	H+	0.05	roots, silt	
2038	748+58	THO	SM		0	3.3	3.3	0.01	0.3	roots, sand	
2039	748+65	O	SM		0	1.3	1.3	0.01	0.1	roots, sand	
2040	745+72	T	SM		0	1.4	1.4	0.01	0.1	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2041	748+76	T	SM		0	1.4	1.4	0.005	0.05	roots, sand	
2042	748+85	T	SM		0	1.4	1.4	H-0.025	0.3	roots, sand	
2043	748+88	T	SM		0	1.0	1.0	H	0	roots, silt	
2044	749+02	T	SM		0	1.9	1.9	H	0	roots, silt	
2045	749+15	T	SC		0	1.9	1.9	H-0.015	0.05	roots, sand	
2046	749+19	T	SC		0	3.1	3.1	H-0.01	0.25	roots, sand	
2047	749+39	T	SC+ SM+ ML		0	4.3	4.3	0.005-0.02	0.75	roots, sand	
2048	749+45	T	SC		0	0.7	0.7	0.01	0.2	roots, sand	
2049	749+50	T	SC		0	0.9	0.9	H	0	roots, sand	
2050	749+63.5	T	SC		0	1.2	1.2	0.01	0.2	sand, silt	
2051	749+69	T	SC		0	2.3	2.3	0.015	0.55	roots, sand, silt	
2052	749+79 To 749+80	T+O	SC+ SP-SM+ ML		0	3.7	3.7	0.01	0.3	roots, sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2053	749+86	O	SM		O	1.0	1.0	H+	O	silt	
2054	749+92 TO 749+92.5	T+O	SC, SM, ML		O	3.9	3.9	0.005-0.03	0.35	roots, sand silt	
2055	749+95	T	SC		O	1.6	1.6	H	O	roots, silt	
2056	750+00	T	SC-SM		O	3.9	3.9	0.005-0.01	0.25	roots, sand	
2057	750+13	T	SC-SM SP-SM ML		O	3.5	3.5	0.01	0.25	roots, sand	
2058	750+14	O	SC, SP-SM		O	2.0	2.0	H	O	roots, silt	
2059	750+15	T	SC-SM		O	1.7	1.7	0.005	0.1	roots, sand	
2060	750+17	T	SC, SM SP-SM		O	1.8	1.8	H	O	roots, silt	
[illegible]	750+20	T	SC, SP-SM, ML		O	4.9	4.9	0.005-0.01	0.2	abundant roots, sand, silt	
[illegible]	750+30.5	T	SC-SP-SM		O	2.9	2.9	0.005-0.02	0.15	roots, sand	
1063	750+33	O	SC		O	0.8	0.8	H	O	silt	
1064	750+37	T	SC		O	1.7	1.7	0.005	0.1	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02 0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2065	750+42	O	SC		O	1.8	1.8	H+	O	silt	
2066	750+43	T	SC, SP-SM ML		O	4.2	4.2	0.01-0.03	0.9	roots, sand	
2067	750+50	T	SC-SM		O	2.5	2.5	0.005-0.02	0.3	roots, sand	
2068	750+53	O	SM		O	1.3	1.3	H+	O	silt	
2069	750+55	T	SM		O	0.8	0.8	H+	O	roots, silt	
2070	750+60	T+O	SM		O	1.3	1.3	H+	O	roots, silt	
2071	750+65	T	SM		O	1.6	1.6	0.02	0.3	roots, sand	
2072	750+83	T	SM		O	0.8	0.8	H	O	silt	
2073	750+89	T+O	SM		O	1.4	1.4	0.005	0.05	roots, sand	
2074	751+02	T+O	SM		O	4.1	4.1	0.015	0.4	roots, sand	discontinuous
2075	751+07	T	SM		O	1.3	1.3	H	O	silt	
2076	751+08.5	T	SM		O	1.6	1.6	0.01	0.1	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2077	751+14	T	SM		0	1.6	1.6	0.015	0.3	roots, sand	
2078	751+20	T	SM		0	1.2	1.2	0.01	0.2	sand	
2079	751+35	T	SM		0	0.6	0.6	H	0	silt	
2080	751+36	T	SM		0	1.1	1.1	0.005	0.1	sand, silt	
2081	751+44	LT	SP SM ML		1.2	5.7	4.5	0.01	0.2	roots, abundant sand & silt	discontinuous
2082	751+45	T	SM		0	1.8	1.8	0.005	0.1	roots, sand	
2083	751+55.5	T	SM		0	1.6	1.6	H	0	sand, silt, fine gravel	
2084	751+58	T L	SP SM ML		1.9	4.9	3.0	0.005	0.15	roots, sand, silt	
2085	751+51	T	SM		0	1.0	1.0	H	0	silt	
2086	751+60	T O	SM		0	2.3	2.3	0.005	0.1	roots, sand	dendritic
2087	751+70	T	SM		0	0.7	0.7	H	0	none	
2088	751+76	T	SM		0	0.9	0.9	H	0	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2089	751+81 to 751+82	O	SM		0	1.2	1.2	0.005	0.05	roots, sand	
2090	751+85	L	SM		0	2.5	2.5	H	0	abundant roots	
2091	751+86	L	SM		0	1.0	1.0	0.005	0	open	
2092	751+89	T+O	SM		0	1.4	1.4	H	0	roots, sand, silt	
2093	751+92	T+O	SM		0	1.4	1.4	0.02	0.5	roots, sand, fine gravel	
2094	752+00	T+O	SP-SM		0	2.6	2.6	0.015	0.2	roots, sand, silt, fine gravel	
2095	752+06	T+O	SM		0	2.2	2.2	H	0	sand, silt	
2096	752+09	O	SM		0	1.2	1.2	H	0	sand, silt	
2097	752+09.5	O	SM		0	2.1	2.1	0.01	0.1	roots, sand	
2098	752+13	T+O	SP-SM		0	2.7	2.7	0.005	0.1	roots, sand	dendritic
2099	752+19	T	SM		0	1.6	1.6	0.005	0.1	roots, sand	dendritic
2100	752+21	T	SM		0	1.0	1.0	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2101	752+25	T	SM		0	1.8	1.8	0.01	0.15	roots, sand	
2102	752+32	T+O	SM, ML		0	1.5	1.5	H-0.01	0.15	roots, sand, silt	
2103	752+36	O	SM		0	1.7	1.7	0.005	0.1	roots, sand	
2104	752+37.5	T+L	SM, ML		0	2.9	2.9	0.005	0.1	roots, sand, silt	
2105	752+41	T	SM, ML		0	2.9	2.9	0.01-0.03	0.4	roots, sand, silt	
2106	752+45	O	ML		0	2.2	2.2	0.01	0.2	roots, silt	dendritic
2107	752+47	T	ML		0	3.8	3.8	0.01-0.025	0.3	roots, silt	
2108	752+51	T	ML		0	1.2	1.2	0.015	0.2	roots, silt	
2109	752+58	T	ML		0	1.0	1.0	H	0	roots, silt	
2110	752+63	T	ML		0	2.3	2.3	H-0.01	0.1	roots, silt	
2111	752+68	O	ML		0	1.6	1.6	H-0.005	0.05	roots, silt	
2112	752+69	T	ML		0	1.2	1.2	0.005	0.1	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2113	752+70	T	ML		0	1.3	1.3	H-0.01	0.2	roots, silt	
2114	752+74	T	ML		0	1.4	1.4	0.005	0.1	roots, silt	
2115	752+83	O	ML		0	2.2	2.2	0.005	0.1	roots, silt	dendritic
2116	752+87	O	ML		0	1.5	1.5	0.005	0.1	roots, silt	
2117	752+88	T	ML		0	1.6	1.6	0.005	0.1	roots, silt	dendritic
2118	752+93	O	SM, ML		0	1.6	1.6	H	0.05	silt	
2119	752+96	T+O	ML		0	2.3	2.3	H-0.02	0.3	roots, silt	
2120	753+01	O	ML		0	0.8	0.8	H+	0	roots, silt	
2121	753+03	T+O	ML		0	1.8	1.8	H-0.01	0.2	roots, silt	
2122	753+05	O	ML		0	1.9	1.9	0.005	0.1	silt	dendritic
2123	753+09	O	ML		0	3.2	3.2	0.02	0.4	roots, silt	dendritic
124	753+11	L	ML		0	0.8	0.8	0.005	0.2	roots	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2125	753+14	O	ML		O	1.1	1.1	0.005	0.1	roots	
2126	753+20 TO 753+21	T+L	ML		O	1.6	1.6	0.005	0.2	abundant roots, silt	
2127	753+24	L	ML		O	2.7	2.7	0.005	0.15	roots, silt	
2128	753+27	L	ML		O	1.9	1.9	0.005	0.1	abundant roots, silt	
2129	753+32 TO 753+39	T	SM, ML		O	3.0	3.0	0.01	0.3	roots, silt	
2130	753+47	T	SM		O	1.1	1.1	0.01	0.1	roots, sand	dendritic
2131	753+50	T	SM		O	0.9	0.9	0.01	0.15	roots, sand	
2132	753+55	T	SM		O	1.0	1.0	0.005	0.1	sand	
2133	753+64	T	SM		O	2.4	2.4	0015	0.2	roots, sand	dendritic
2134	753+72	O	SM, ML		O	2.9	2.9	0.005	0.1	roots, sand, silt	
2135	753+81	T	SM		O	0.9	0.9	0.005	0.05	roots, silt	
2136	753+86	T	SM		O	1.3	1.3	0.005	0.05	roots, silt	dendritic

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2137	753+91	T	SM		0	1.7	1.7	H+	0.05	roots, silt	
2138	753+96	T+L	SC		0	2.3	2.3	0.005	0.15	roots, sand	
2139	753+98	0	SC		0	1.6	1.6	H+	0.05	roots, silt	
2140	754+00	T	SC		0	1.9	1.9	H+	0.05	silt	
2141	754+03	0	SC		0	2.1	2.1	H+	0.05	roots, silt	
2142	754+07	0	SC		0	1.2	1.2	H	0	roots, silt	
2143	754+08	0	SC		0	1.6	1.6	0.005	0.05	roots, silt	
2144	754+10	T+0	SC		0	2.1	2.1	0.01	0.15	roots, sand	
2145	754+11	T	SC		0	1.5	1.5	0.005-0.01	0.1	roots, sand	
2146	754+13	0	SC, ML		0	3.0	3.0	0.005	0.1	roots, silt	discontinuous
2147	754+17	0	SC, ML		0	1.7	1.7	H+	0.05	roots, silt	
2148	754+19.5 TO 754+22	T	SC, SM, ML		0	8.0	8.0	0.01-0.015	0.4	roots, sand	discontinuous

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2149	754+32	T+O	SC, SM, ML		0	4.3	4.3	0.005	0.15	roots, sand, silt	
2150	754+38	O	SC, SM		0	1.1	1.1	H	0	silt	
2151	754+41	O	SM		0	0.7	0.7	0.005	0.1	roots, sand	
2152	754+43	O	SC, ML		0	2.1	2.1	H	0	silt	
2153	754+64	O	SM		0	1.1	1.1	0.005	0.1	sand	
2154	754+70	O	SM		0	1.1	1.1	H+	0.05	sand	
2155	754+71	T+O	SC, SM, ML		0	5.1	5.1	H-0.015	0.2	roots, sand	discontinuous
2156	754+75	O	SC, SM		0	1.5	1.5	H+	0.05	silt	
	754+76	T	SC, SM		0	1.6	1.6	H-0.005	0.05	roots, sand	
	754+93	T	SC-SM		0	3.6	3.6	0.01	0.4	roots, sand	
2157	755+02	T+O	SC-SM		0	3.8	3.8	0.015	0.5	roots, sand	
	755+12	T	SM		0	2.0	2.0	H-0.005	0.05	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02 0 00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2161	755+18	T	SC, SM		0	2.7	2.7	H - 0.015	0.35	roots, sand	
2162	755+24	T	SC-SM		0	2.3	2.3	0.03	0.45	roots, sand	dendritic
2163	755+33	T	SC-SM		0	1.6	1.6	0.02	0.3	roots, sand	
2164	755+38	0	SC SM		0	2.3	2.3	0.005 0.015	0.3	roots, sand	
2165	755+43	0	SM, ML		0	0.9	0.9	0.005	0.05	silt	dendritic
2166	755+45	0	SC-SM		0	1.9	1.9	0.01	0.3	roots, silt	dendritic
2167	755+50	0	SC, SM		0	2.3	2.3	0.005	0.1	roots, sand, silt	poorly developed
2168	755+68	0	SC-SM		0	1.7	1.7	H	0	roots, sand, fine gravel	
2169	755+69	0	SC SM		0	1.0	1.0	H	0	roots, sand, fine gravel	
2170	755+75.5	T	SC SM		0	2.2	2.2	0.015	0.7	roots, abundant sand & silt	well developed
2171	755+82	0	SC-SM		0	1.2	1.2	0.005	0.15	roots, sand	
2172	755+97	0	SC-SM		0	1.6	1.6	H	0	sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2173	756+09	T	SC SM		0	1.6	1.6	0.005	0.2	roots, sand	
2174	756+30	T	SC-SM		0	0.9	0.9	H	0	open	
2175	756+34	0	SC-SM		0	1.3	1.3	H	0	open	
2176	756+50	T	SC-SM		0	1.2	1.2	H	0	roots	
2177	756+55.5	T	SC-SM		0	1.1	1.1	H	0	roots	
2178	756+67	T	SC-SM		0	1.1	1.1	H	0	sand	
2179	756+80	0	SC-SM		0	1.0	1.0	H	0	abundant roots, sand	
2180	756+82	T	SC		0	0.9	0.9	H	0	sand, silt	
2181	756+86	T	SC		0	0.9	0.9	0.005	0.05	roots, sand, silt	
2182	756+90	T	SC		0	0.8	0.8	0.005	0.05	roots, silt	
2183	757+12	T	SC		0	1.2	1.2	0.005	0.05	roots, silt	
2184	757+15	T	SM		0	1.1	1.1	0.02	0.2	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2185	757+20	T	SM		0	0.9	0.9	0.005	0.05	roots, sand	
2186	757+27	O	SM		0	0.9	0.9	0.005	0.05	roots, silt	
2187	757+29	T	SM		0	1.1	1.1	0.015	0.25	abundant roots, sand	
2188	757+35	O	SM		0	1.2	1.2	0.005	0.05	roots, sand	
2189	757+36	T	SM		0	1.3	1.3	0.02	0.3	roots, sand	
2190	757+41	O	SM		0	0.8	0.8	0.01	0.1	roots, sand, silt	
2191	757+45	T	SM		0	1.0	1.0	0.015	0.2	roots, sand	
2192	757+50	O	SM		0	1.0	1.0	H	0	silt	
2193	757+53	O	SM		0	0.9	0.9	H	0	silt	
2194	757+59	O	SM		0	0.9	0.9	H	0	roots, silt	
2195	757+60	T	SM		0	1.0	1.0	H+	0.05	roots, silt	
2196	758+01	T	SP-SM SM ML		0	1.7	1.7	0.015	0.25	roots, sand, silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0 00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2197	758+19	T	SM, ML		0	4.0	4.0	H-0.02	0.3	roots, sand	
2198	758+30	0	SM, ML		0	2.3	2.3	H	0	open	
2199	758+36	0	SM		0	0.8	0.8	H	0	roots	
2200	758+47	T	SM, ML		0	2.9	2.9	H-0.015	0.4	roots, sand, silt	
2201	758+54	T+0	SM		0	1.4	1.4	H-0.01	0.1	roots, silt	
2202	758+60	0	SM		0	1.2	1.2	H+	0.05	roots, silt	
2203	758+61	0	SM		0	1.4	1.4	H+	0.05	roots, silt	
2204	758+82	T	SM ML		0	4.2	4.2	0.01-0.02	0.35	roots, sand	
2205	758+99	0	SM ML		0	2.7	2.7	0.005	0.1	roots, silt	
2206	759+09	0	SM		0	1.7	1.7	H-0.005	0.05	roots, sand, silt	
2207	759+15	T	SM		0	1.0	1.0	0.005	0.1	roots, sand	
2208	759+21	T	SM ML		0	3.0	3.0	H-0.01	0.1	sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2209	759+22	T	SM		0	0.8	0.8	0.005	0.1	sand	
2210	759+29	O	SM ML		0	3.1	3.1	H+	0.05	roots, silt	
2211	759+37	T	SM		0	1.2	1.2	H	0	roots, silt	
2212	759+41	T	SM		0	0.8	0.8	H+	0.05	roots, silt	
2213	759+44	T	SM		0	0.8	0.8	H+	0.05	roots, silt	
2214	759+46	O	SM		0	1.0	1.0	0.005	0.05	roots, silt	
2215	759+50	T	SC-SM		0	1.1	1.1	0.01	0.1	roots, sand, silt	
2216	759+61	T	SC-SM		0	1.5	1.5	0.015	0.45	roots, sand	
2217	759+69	T	SC-SM		0	1.4	1.4	0.005	0.05	silt	
2218	759+71	T	SC-SM		0	0.9	0.9	H+	0	roots, silt	
2219	759+72	T	SC-SM		0	0.7	0.7	H	0	roots, silt	
2220	759+73	T	SC-SM		0	1.2	1.2	H+	0	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2221	759+78	T	SC SM		0	1.4	1.4	0.005 0.01	0.3	roots, sand	
2222	759+82	T+O	SM. ML		0	3.3	3.3	0.01-0.02	0.5	roots, sand	
2223	759+85	O	SM ML		0	1.2	1.2	H	0.05	roots, silt	dendritic
2224	759+90	T	SM		0	0.9	0.9	H	0.05	silt	dendritic
2225	759+92	T	SM		0	1.0	1.0	0.005	0.1	roots, sand, silt	
2226	759+99	T	SM		0	0.9	0.9	H	0	silt	
2227	760+02	T	SM		0	1.0	1.0	H	0	silt	
2228	760+09	T	SM		0	0.9	0.9	H	0	roots, silt	
2229	760 +10	T	SM		0	1.4	1.4	H-0.005	0.1	roots, sand	
2230	760+15	O	SM		0	1.4	1.4	H+	0	silt	
2231	760+18	T	SM ML		0	1.5	1.5	H-0.01	0.2	roots, sand	
2232	760+19	T	SM ML		0	1.6	1.6	H-0.01	0.2	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2233	760+22	T	SM ML		0	1.6	1.6	H-0.005	0.1	roots, sand	
2234	760+26	T	SM ML		0	1.3	1.3	0.005	0.1	roots, sand	
2235	760+31	O	SM ML		0	1.4	1.4	H+	0.05	roots, silt	
2236	760+36	T	SM		0	1.8	1.8	0.015	0.35	roots, sand	
2237	760+47	T	SM		0	1.2	1.2	0.01	0.15	roots, sand	
2238	760+60	T	SM ML		0	3.2	3.2	H-0.02	0.45	sand	
2239	760+66	T	SM		0	1.8	1.8	0.02	0.3	roots, sand	
2240	760+72	T	SM		0	1.8	1.8	0.005	0.05	roots, sand	dendritic
2241	760+77	O	SM		0	0.8	0.8	H	0	silt	
2242	760+81	O	SM		0	1.3	1.3	0.005	0.05	silt	
2243	761+05	O	SM		0	1.1	1.1	0.005	0.05	silt	dendritic
2244	761+09	T	SM		0	1.1	1.1	0.015	0.3	roots, sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2245	761+19	O	SM		0	1.5	1.5	H+	0.05	silt	
2246	761+34	O	SM		0	2.6	2.6	H+	0.05	silt	
2247	761+34.5	T	SM ML		0	3.4	3.4	H-0.02	0.4	roots, sand	
2248	761+39	T	SM		0	1.0	1.0	H	0	silt	
2249	761+41	O	SM		0	1.2	1.2	H+	0.05	silt	
2250	761+53	T	SM ML		0	4.4	4.4	0.01 0.02	0.3	roots, sand	
2251	761+65	T	SM		0	1.8	1.8	0.005	0.05	roots, sand, silt	
2252	761+82	T	SM		0	2.2	2.2	H-0.005	0.05	sand, silt	
2253	761+83	T	SM		0	1.0	1.0	0.005	0.1	sand	
2254	761+89	O	SM		0	1.2	1.2	0.01	0.25	sand, partially open	
2255	762+16	O	SM		0	2.9	2.9	H+	0.05	silt	
2256	762+27	T	SC SM ML		0	9.6	9.6	H-0.025	0.5	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53 8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

H = Horizontal

No.	Station	Type	Material	Distance Below Surface: Top right	Distance Below Surface: Top left	Distance Below Surface: Bottom	Length	Width	Probe Depth	Fillings	Remarks
2257	762+56 TO 762+57	H+O	SM		1.0	1.2	0.2	0.01	0.2	silt	
2258	762+66	T	SM		0	0.8	0.8	0.005	0.1	sand, silt	
2259	762+69	T	SM		0	2.5	2.5	0.005	0.1	roots, sand	
2260	762+88 TO 762+89	T	SM		0	1.5	1.5	0.005	0.1	silt	
2261	762+97	T	SM		0	1.4	1.4	0.005	0.1	roots, sand, silt	
2262	763+14	T	SP-SM		0	1.1	1.1	H+	0.05	roots, silt	
2263	763+26	T	SP-SM		0	0.9	0.9	0.005	0.05	roots, silt	
2264	763+67 to 763+70	L	SC, SM		1.0	7.0	6.0	0.01	0.3	roots, sand	
2265	763+83	O	SC SM		0	5.7	5.7	0.01	0.25	roots, sand	
2266	763+96 TO 763+97	O	SC SM		0	5.5	5.5	0.005	0.15	roots, sand	
2267	764+05	T	SM		0	0.9	0.9	H	0	roots, silt	
2268	764+13	O	SM		0	1.3	1.3	0.005	0.1	sand	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams, Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2269	764+18	O	SM		O	1.1	1.1	0.01	0.2	roots, sand	
2270	764+20	O	SM		O	2.1	2.1	H	0.05	silt	discontinuous
2271	764+25	O	SM		O	1.8	1.8	0.015	0.3	roots, sand	
2272	764+34	O	SM		O	2.1	2.1	0.005	0.1	roots, sand	
2273	764+45	O	SM		O	2.4	2.4	H-0.005	0.1	roots, silt	
2274	764+56	O	SM		O	2.6	2.6	0.005	0.1	roots, silt	
2275	764+59	O	SM		O	1.0	1.0	0.005	0.1	sand, silt	
2276	764+72	O	SM		O	1.7	1.7	H-0.01	0.25	roots, sand	
2277	764+76	O	SM		O	3.6	3.6	H-0.01	0.2	roots, sand	
2278	764+86	T	SM		O	0.9	0.9	H	0	roots, silt	
2279	764+95	O	SM		O	0.9	0.9	0.005	0.1	sand	
2280	765+06	O	SM		O	0.9	0.9	H+	0	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface: Top right	Distance Below Surface: Top left	Distance Below Surface: Bottom	Length	Width	Probe Depth	Fillings	Remarks
22227	765+13	O	SM		O	3.4	3.4	H-0.01	0.2	roots, sand	
22228	765+16	T	SM		O	1.4	1.4	0.015	0.25	roots, sand	
22229	765+21	T	SM		O	1.6	1.6	0.01	0.15	roots, sand	
22230	765+25	T	SM		O	1.0	1.0	0.005	0.1	sand	
22231	765+27	T	SM		O	2.2	2.2	H-0.015	0.25	roots, sand	
22232	765+28	T	SM		O	1.8	1.8	0.01	0.15	roots, sand	
22233	765+32	O	SM		O	1.3	1.3	0.005	0.1	roots, sand	
22234	765+34	T	SM		O	1.2	1.2	0.01	0.15	roots, sand	
22235	765+39	T	SM		O	1.4	1.4	0.015	0.3	roots, sand	
22236	765+40	O	SM		O	1.1	1.1	H+	0	silt	
22237	765+41	O	SM		O	1.1	1.1	H+	0	silt	
22238	765+45	O	SM		O	1.1	1.1	H+	0	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2293	765+46	T	SM		0	1.2	1.2	0.01	0.2	roots, sand	
2294	765+50	T	SM		0	1.3	1.3	0.005	0.15	roots, sand, silt	
2295	765+53	O	SM		0	1.2	1.2	0.02	0.3	roots, sand	
2296	765+56 TO 765+57	L	SM		0	2.1	2.1	0.005	0.1	roots, sand	
2297	765+61	O	SM		0	1.3	1.3	0.005	0.1	roots, sand	
2298	765+61 to 765+62	L	SM		0	4.3	4.3	0.01	0.2	abundant roots, sand	
2299	765+64	O	SM		0	1.5	1.5	0.01	0.1	roots, sand	
2300	765+65	T	SM		0	1.6	1.6	0.01	0.1	roots, sand	
2301	765+67	T	SM		0	1.3	1.3	0.015	0.3	roots, sand	
2302	765+70	O	SM		0	1.1	1.1	0.005	0.1	sand	
2303	765+74	T	SM		0	1.1	1.1	0.005	0.1	sand	
2304	765+75	O	SM		0	2.6	2.6	H-0.01	0.1	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2305	765+79	O	SM		0	1.0	1.0	0.01	0.2	roots, sand	
2306	765+83 to 765+85	L	SM		0	1.7	1.7	0.015	0.4	roots, sand	
2307	765+93	T	SM		0	2.0	2.0	0.01	0.15	roots, sand	
2308	765+97	O	SM		0	1.8	1.8	0.01	0.15	roots, sand	
2309	766+11	L	SM		0	1.9	1.9	0.02	0.3	roots, sand	
2310	766+14	T	SM		0	2.7	2.7	0.01	0.2	roots, sand	
2311	766+30	O	SC SM		0	5.6	5.6	0.01	0.1	roots, sand	
2312	766+51	T	SM		0	1.6	1.6	0.005	0.1	sand	
2313	766+58	O	SM		0	1.7	1.7	0.005	0.05	sand	
2314	766+77	O	SM		0	1.4	1.4	0.005	0.05	roots, sand	
2315	766+88	O	SM		0	1.0	1.0	0.005	0.05	sand	
2316	766+92	O	SM		0	3.5	3.5	0.005	0.1	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2317	766+98	O	SM		O	1.1	1.1	H+	0.05	roots, silt	
2318	767+00	O	SM		O	1.2	1.2	0.005	0.05	sand, silt	
2319	767+05 TO 767+08	L	SM		O	2.7	2.7	0.01	0.3	roots, sand	
2320	767+09 TO 767+10	L	SM		O	3.0	3.0	0.01	0.2	roots, sand	
2321	767+16 to 767+18	O+L	SM		O	2.0	2.0	0.01	0.2	roots, sand	
2322	767+30	O	SM		O	2.7	2.7	0.01	0.15	roots, sand	
2323	767+41	L	SM		O	2.3	2.3	0.02	0.3	roots, sand	
2324	767+43 TO 767+46	L	SM		O	2.2	2.2	0.015	0.15	roots, sand	
2325	767+54	O	SM		O	2.0	2.0	0.005	0.1	roots, sand	
2326	767+63	O	SM		O	1.2	1.2	0.005	0.1	roots, sand	
2327	767+68	O	SM		O	1.5	1.5	0.005	0.1	sand, silt	
2328	767+71	O	SM		O	1.3	1.3	0.005	0.05	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2329	767+77	O	SM		O	1.7	1.7	H+	0	silt	
2330	767+79	T	SM		O	3.7	3.7	H-0.005	0.2	roots, sand	
2331	767+83	O	SM		O	1.0	1.0	0.01	0.25	roots, sand	
2332	767+93	L	SM		O	1.5	1.5	0.01	0.2	roots, sand	
2333	767+96	O	SC-SM		O	4.0	4.0	H-0.005	0.1	sand, silt	
2334	768+05	O	SM		O	3.6	3.6	H+	0	silt	
2335	768+15	O	SM		O	0.9	0.9	H+	0	silt	
2336	768+17	T	SM		O	1.6	1.6	0.005	0.1	sand	
2337	768+29	O	SM		O	1.1	1.1	H+	0	silt	dendritic
2338	768+46	L	SM		O	2.0	2.0	0.01	0.2	roots, sand	
2239	768+50	L	SM		O	2.1	2.1	0.01	0.3	roots, sand	
2240	768+53 Tc 768+56	L	SM		O	2.4	2.4	0.01	0.25	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2341	768+59	L	SM		0	2.8	2.8	0.01	0.3	roots, sand	
2342	768+62	L	SM		0	2.8	2.8	0.01	0.2	roots, sand	
2343	768+69	L	SM		0	2.2	2.2	0.01	0.2	roots, sand	
2344	768+78	O	SM		0	2.5	2.5	0.005	0.1	roots, sand	
2345	768+89	L	SM		0	1.4	1.4	0.01	0.15	roots, sand	
2346	768+97	L	SM		0	1.9	1.9	0.01	0.3	roots, sand	
2347	769+05	O	SM		0	1.7	1.7	0.015	0.2	sand	
2348	769+11	O	SM		0	1.3	1.3	0.005	0.1	roots, sand	
2349	769+12	O	SM		0	1.1	1.1	0.005	0.1	roots, sand	
2350	769+14	T	SM		0	2.3	2.3	0.005 0.015	0.3	sand	
2351	769+26	T	SM		0	3.0	3.0	0.01	0.3	roots, sand	
2352	769+32	T	SM		0	1.8	1.8	H- 0.01	0.3	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2353	769+37	T	SP-SM SM		0	2.8	2.8	H - 0.01	0.1	roots, sand	
2354	769+39	O	SP-SM SM		0	3.4	3.4	H - 0.01	0.2	roots, sand	
2355	769+45	T	SP-SM SM		0	2.2	2.2	H - 0.02	0.35	roots, sand	
2356	769+51	O	SM		0	1.7	1.7	H	0	roots, silt	
2357	769+52	O	SM		0	1.7	1.7	H	0	roots, silt	
2358	769+54	O	SM		0	1.1	1.1	0.005	0.1	sand, silt	dendritic
2359	769+57	T	SM		0	2.7	2.7	H - 0.02	0.3	roots, sand, silt	
2360	769+62	O	SP-SM SM		0	2.7	2.7	H - 0.01	0.15	sand, silt	
2361	769+65	T	SP-SM SM		0	1.7	1.7	0.01	0.25	sand	
2362	769+69	T	SP-SM SM		0	5.9	5.9	H - 0.01	0.3	sand	
2363	769+72	T	SM		0	1.5	1.5	H	0	silt	
2364	769+78	T	SP-SM SM		0	3.4	3.4	H - 0.01	0.1	roots, sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2365	769+84	T	SM		0	1.0	1.0	H	0.05	silt	
2366	769+86	T	SM		0	1.0	1.0	H	0.05	silt	
2367	769+89	0	SM		0	1.3	1.3	H	0.05	roots, silt	
2368	770+00	T	SM		0	1.0	1.0	H	0.05	roots, silt	
2369	770+02	0	SM		0	1.1	1.1	H	0.05	roots, silt	
2370	770+23	0	SM		0	1.0	1.0	H	0	silt	
2371	770+30	T	SM		0	0.6	0.6	H	0	silt	
2372	771+53	0	SM		0	1.0	1.0	0.01	0.15	sand	
2373	771+57	0	SM		0	0.9	0.9	0.005	0.1	roots, sand	
2374	771+61	0	SM		0	1.0	1.0	0.005	0.1	roots, sand	
2375	771+72	0	SM		0	0.7	0.7	H	0	silt	
2376	771+89	0	SM		0	1.0	1.0	H	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface: Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2377	771+99	L	SM		0	2.6	2.6	0.005	0.1	roots, silt	
2378	772+03	O	SM		0	3.2	3.2	0.005	0.1	abundant roots, silt	
2379	772+11	T	SM		0	1.7	1.7	0.005	0.1	roots, sand	
2380	772+18	O	SM		0	1.3	1.3	H	0.05	roots, silt	dendritic
2381	772+21	O	SM		0	1.1	1.1	H	0.05	roots, silt	
2382	772+24	O	SM		0	1.8	1.8	H	0.05	silt	dendritic
2383	772+33	O	SM		0	1.9	1.9	H	0	silt	
2384	772+40	O	SM		0	1.5	1.5	H	0	open	dendritic
2385	772+46	T	SM		0	1.6	1.6	H	0.05	roots, silt	
2386	772+50	O+L	SM		0	2.6	2.6	0.005	0.1	roots, sand, silt	
2387	772+53	L	SM		0	2.3	2.3	0.005	0.15	roots, sand	
2388	772+64	T	SM		0	1.7	1.7	0.01	0.1	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2389	772+75	O	SM		0	1.1	1.1	0.005	0.1	roots, sand	
2390	772+81	O	SM		0	1.4	1.4	H+	0.05	roots, sand	dendritic
2391	772+84	O	SM		0	1.1	1.1	H+	0.05	roots, silt	dendritic
2392	772+86	O	SM		0	1.4	1.4	H+	0.05	roots, silt	dendritic
2393	772+98	T	SM		0	1.7	1.7	H-0.01	0.1	roots, sand	
2394	773+03	T	SM		0	1.4	1.4	0.01	0.2	roots, sand	
2395	773+18	O	SM		0	0.9	0.9	H	0	silt	
2396	773+20	O	SM		0	1.2	1.2	H+	0.05	silt	dendritic
2397	773+24	O	SM		0	1.2	1.2	H+	0.05	roots, silt	
2398	773+46	O	SM		0	0.8	0.8	H+	0.05	silt	
2399	773+48	O	SM		0	1.2	1.2	0.005	0.1	sand	
2400	773+91	T	SM		0	2.1	2.1	0.005	0.1	sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2401	774+02	T	SM		0	1.0	1.0	H+	0.05	silt	
2402	774+04	T	SM		0	1.2	1.2	0.005	0.1	sand	
2403	774+09	O	SM		0	1.1	1.1	H+	0	silt	dendritic
2404	774+22	O	SM		0	1.0	1.0	H-0.005	0.05	roots, sand, silt	
2405	774+27	O	SM		0	0.7	0.7	H	0	roots, silt	
2406	774+37	T	SM		0	1.8	1.8	H-0.005	0.05	roots, sand, silt	
2407	774+39	O	SM		0	1.0	1.0	0.005	0.05	roots, sand, silt	dendritic
2408	774+46	O	SM		0	0.9	0.9	0.005	0.1	roots, sand	
2409	774+48	T	SM		0	1.0	1.0	0.005	0.1	roots, sand	
2410	774+52	O	SM		0	0.8	0.8	H+	0	silt	dendritic
2411	774+74	O	SM		0	1.0	1.0	0.005	0.05	silt	
2412	774+75	T	SM		0	1.6	1.6	0.005	0.15	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2413	774+79	T	SM		0	3.1	3.1	H-0.01	0.2	sand, silt	
2414	774+86	T	SM		0	1.8	1.8	0.01	0.35	sand	
2415	774+88	T	SM		0	1.5	1.5	0.005	0.1	roots, sand	
2416	774+93	T	SM		0	1.3	1.3	0.005	0.1	sand	
2417	774+99	T	SM		0	2.0	2.0	0.01	0.25	roots, sand	
2418	775+00	O	SM		0	0.9	0.9	H+	0.05	silt	
2419	775+12	T	SM		0	2.1	2.1	H-0.005	0.05	roots, sand	
2420	775+15	T	SM		0	0.9	0.9	H	0.05	silt	
2421	775+20	O	SM		0	1.1	1.1	H+	0.05	silt	
2422	775+22	T	SM		0	1.0	1.0	0.005	0.1	sand	
2423	775+39	T	SM		0	2.0	2.0	H	0.05	silt	
2424	775+43	O	SM		0	1.0	1.0	H+	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2425	775+45	T	SM		0	1.4	1.4	0.005	0.1	roots, sand	dendritic
2426	775+50	O	SM		0	1.0	1.0	0.005	0.1	roots, sand	
2427	775+55	T	SM		0	1.4	1.4	H+	0.05	roots, silt	dendritic
2428	775+60	O	SM		0	1.5	1.5	0.005	0.15	roots, sand	
2429	775+66	O	SM		0	1.8	1.8	0.005	0.15	roots, silt	
2430	775+73	T	SM		0	1.0	1.0	0.01	0.15	roots, sand	dendritic
2431	775+78	T	SM		0	1.4	1.4	0.01	0.2	roots, sand	dendritic
2432	775+85	T	SM		0	2.5	2.5	0.01	0.2	roots, sand	
2433	775+90	T	SM		0	1.3	1.3	0.005	0.05	roots, silt	
2434	775+95	O	SM		0	1.0	1.0	0.005	0.05	roots, silt	
2435	775+98	T	SM		0	1.3	1.3	0.005	0.1	roots, sand	
2436	776+11	O	SM		0	1.1	1.1	0.005	0.05	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2437	776+13	O	SM		O	1.0	1.0	0.005	0.05	roots, sand	
2438	776+17	T	SM		O	1.1	1.1	H+	0.05	roots, silt	
2439	776+20	T	SM		O	1.1	1.1	0.01	0.15	roots, sand	
2440	776+28	O	SM		O	2.0	2.0	H+	0.05	roots, silt	
2441	776+37	O	SM		O	1.1	1.1	H+	0.05	roots, silt	
2442	776+44	T	SM		O	2.1	2.1	0.015	0.3	roots, sand	
2443	776+63	O	SM		O	1.0	1.0	0.005	0.1	roots, sand	
2444	776+64	O	SM		O	1.2	1.2	0.005	0.1	roots, sand	
2445	776+69	O	SM		O	1.8	1.8	H	0	silt	
2446	776+77	O	SM		O	2.9	2.9	H-0.015	0.3	roots, sand	
2447	776+87	O	SM		O	1.7	1.7	H	0.05	roots, silt	
2448	777+02	T	SM		O	1.4	1.4	0.005	0.05	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2449	777+03	T	SC SM		0	3.0	3.0	H-0.01	0.25	sand	
2450	777+10	T	SM		0	1.0	1.0	H	0	silt	
2451	777+16	T	SM		0	0.8	0.8	H	0	silt	
2452	777+18	O	SM		0	1.0	1.0	H	0	roots, silt	
2453	777+22	T	SM		0	0.9	0.9	H	0	silt	
2454	777+25	T	SM		0	2.0	2.0	0.01	0.25	roots, sand	
2455	777+29	O	SM		0	2.6	2.6	H	0	silt	
2456	777+42	T	SM		0	1.0	1.0	0.005	0.05	roots, silt	
2457	777+44	T	SM		0	1.0	1.0	H	0	roots, silt	
2458	777+51	O	SM		0	1.3	1.3	H	0	roots, silt	
2459	777+57	O	SM		0	1.1	1.1	H	0	roots, silt	
2460	777+59	O	SM		0	1.1	1.1	H	0	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2461	777+66	T+O	SC SM		0	7.0	7.0	H - 0.02	0.4	roots, sand	
2462	777+82	T	SM		0	1.5	1.5	0.01	0.2	roots, sand	
2463	777+90	T	SM		0	1.0	1.0	H	0	silt	
2464	777+91	T+O	SM		0	1.5	1.5	0.005	0.1	roots, sand	
2465	778+06	T	SM		0	1.0	1.0	H+	0.05	roots, sand	
2466	778+08	T	SM		0	1.4	1.4	H+	0.05	roots, sand, silt	
2467	778+10	T	SM		0	1.2	1.2	0.005	0.1	roots, sand	
2468	778+21	O	SM		0	1.8	1.8	H+	0.05	silt	
2469	778+23	O	SM		0	1.8	1.8	0.005	0.05	sand	
2470	778+27	O	SM		0	1.5	1.5	H+	0.05	silt	
2471	778+29	T	SM		0	1.7	1.7	H+	0.05	roots, silt	
2472	778+32	O	SM		0	0.9	0.9	H+	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2473	778+37	O	SM		O	0.9	0.9	H+	0.05	silt	
2474	778+43	O	SM		O	0.7	0.7	H+	0.05	sand	
2475	778+74	T	SM		O	1.4	1.4	0.005	0.05	roots, silt	
2476	778+86	O	SM		O	1.2	1.2	0.005	0.05	roots, sand, silt	
2477	778+94	T	SM		O	2.4	2.4	0.005 0.025	0.4	roots, sand	
2478	779+03	T	SM		O	1.3	1.3	H+	0.05	roots, silt	
2479	779+17	O	SM		O	2.5	2.5	H+	0.05	roots, silt	discontinuous
2480	779+34	T	SM		O	0.9	0.9	H+	0	roots, silt	
2481	779+75	O	SM		O	0.8	0.8	H+	0.05	roots, silt	
2482	779+98	T	SM		O	0.9	0.9	H	0	roots, silt	
2483	780+02	T	SM		O	1.3	1.3	0.01	0.15	sand	
2484	780+04	T	SM		O	1.1	1.1	H	0	silt	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2485	780+18	T	SM		0	2.8	2.8	0.01	0.2	roots	
2486	780+49	T	SM		0	1.1	1.1	H	0	roots, silt	
2487	780+50	T	SM		0	0.8	0.8	H	0	roots	
2488	780+61	O	SM		0	1.2	1.2	H	0	roots, silt	
2489	780+65	T	SM		0	3.2	3.2	0.015	0.3	roots, sand	
2490	780+78	T+O	SM		0	0.9	0.9	H	0	roots, silt	dendritic
2491	780+82	T	SM		0	1.0	1.0	H	0	silt	
2492	780+85	T	SM		0	1.5	1.5	0.01	0.1	sand	
2493	780+92	O	SM		0	1.4	1.4	H+	0.05	sand, silt	
2494	780+94	L	SM		0	1.3	1.3	0.01	0.2	roots, sand	
2495	781+31	L	SM		0	1.4	1.4	H+	0.05	roots, silt	
2496	781+32	O	SM		0	2.0	2.0	H-0.01	0.2	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2497	781+43	O	SM		O	0.8	0.8	H+	0.05	roots, silt	
2498	781+48	T	SM		O	2.2	2.2	0.015	0.3	roots, sand	dendritic
2499	781+58	T	SM		O	1.6	1.6	H-0.005	0.1	roots, sand	
2500	781+79	O	SM		O	1.4	1.4	0.01	0.2	roots, sand	
2501	781+90	O	SM		O	1.4	1.4	0.005	0.1	roots, sand	
2502	781+93	T	SM		O	1.3	1.3	H+	0.05	roots, silt	
2503	781+97	O	SM		O	1.5	1.5	0.005	0.1	roots, sand	
2504	782+05	T	SM		O	1.0	1.0	0.005	0.15	sand	
2505	782+41	T	SM		O	1.2	1.2	0.005-0.01	0.15	roots, sand	
2506	782+43	O	SM		O	1.0	1.0	0.005	0.1	roots, sand	
2507	782+49	O	SM		O	0.8	0.8	H+	0.05	silt	
2508	782+51	T	SM		O	1.4	1.4	0.01	0.2	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2509	782+57.5	O	SM		O	2.4	2.4	0.005	0.1	roots, sand	
2510	782+58.5	O	SM		O	1.5	1.5	0.005	0.1	roots, sand	
2511	782+63	O	SM		O	1.2	1.2	0.005	0.15	sand	
2512	782+71	O	SM		O	1.0	1.0	H+	0.05	roots, silt	
2513	782+81	O	SM		O	1.3	1.3	H+	0.05	roots, silt	
2514	782+89	O	SM		O	1.8	1.8	0.005	0.1	roots, sand	
2515	783+00	O	SM		O	1.2	1.2	0.005	0.1	sand	
2516	783+02	O	SM		O	1.2	1.2	0.005	0.1	roots, sand	
2517	783+27	O	SM		O	1.1	1.1	H+	0.05	silt	
2518	783+44	O	SM		O	1.4	1.4	0.005	0.1	roots, sand	
2519	783+70	T	SM		O	1.0	1.0	H-0.005	0.1	roots, sand	
2520	783+92	O	SM		O	1.3	1.3	0.005	0.1	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2521	784+04	O	SM		O	1.0	1.0	0.005	0.1	roots, sand, silt	
2522	784+08	O	SM		O	1.2	1.2	0.01	0.15	sand	
2523	784+10	O	SM		O	0.8	0.8	0.01	0.15	sand	
2524	784+17	O	SM		O	1.5	1.5	0.005	0.1	sand	
2525	784+21	O	SM		O	1.0	1.0	0.01	0.15	sand	
2526	784+45	O	SM		O	0.9	0.9	0.005	0.1	sand	
2527	784+67	O	SM		O	0.8	0.8	H+	0.05	silt	
2528	784+68	O	SM SP-SM		O	1.5	1.5	0.005	0.05	sand	
2529	785+10	T	SM		O	1.0	1.0	H+	0.05	silt	
2530	785+11	T	SM		O	1.0	1.0	H+	0.05	silt	
2531	785+15	O	SM		O	0.9	0.9	H+	0.05	silt	
2532	785+16	O	SM		O	0.8	0.8	H+	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2533	785+21	O	SM		0	1.0	1.0	0.005	0.05	sand	
2534	785+23	O	SM		0	1.3	1.3	0.005	0.1	none	
2535	785+44	T	SM		0	1.0	1.0	H+	0	silt	
2536	785+46	T	SM		0	1.2	1.2	H+	0	silt	
2537	785+61	O	SM		0	1.4	1.4	0.005	0.1	open	
2538	785+66	T	SP SM		0	1.5	1.5	0.005	0.1	sand	
2539	785+76	O	SP-SM		0	0.6	0.6	H+	0.05	silt	
2540	785+78	O	SP-SM		0	1.3	1.3	H+	0.05	roots, silt	
2541	785+80	O	SP-SM		0	1.1	1.1	H+	0.05	roots, silt	
2542	785+97	T	SM		0	1.0	1.0	H	0.05	silt	
2543	786+02	T	SM		0	1.2	1.2	H+	0.05	silt	
2544	786+16	T	SM SP-SM		0	1.2	1.2	H+	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2545	786+62	O	SM SP-SM		0	5.8	5.8	H-0.005	0.1	sand, silt	
2546	787+13	O	SM		0	0.9	0.9	0.005	0.15	sand	
2547	787+18.5	O	SM		0	1.2	1.2	0.01	0.15	sand	
2548	787+26	O	SM		0	1.0	1.0	0.005	0.1	roots, sand	
2549	787+27	O	SM		0	1.0	1.0	0.005	0.1	sand	
2550	788+12	O+L	SM SC		0	4.8	4.8	0.015	0.3	roots, sand	
2551	788+16	O	SM SC		0	4.1	4.1	0.005 0.01	0.2	roots, sand	
2552	788+26	O	SM SC		0	4.2	4.2	H-0.01	0.1	roots, sand	
2553	788+32	O	SM		0	1.2	1.2	0.01	0.15	roots, sand	
2554	788+38	T	SM		0	2.2	2.2	0.01	0.2	roots, sand	
2555	768+42	O	SM		0	2.7	2.7	0.01	0.25	roots, sand	
2556	788+48	O	SM		0	1.2	1.2	0.01	0.2	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2557	788+49	O	SM		0	2.2	2.2	H+	0.05	silt	
2558	788+51	O	SM		0	3.2	3.2	H-0.01	0.2	roots, sand	
2559	788+58	T	SP-SM SC-SM		0	1.6	1.6	0.005	0.1	roots, sand, silt	
2560	788+61	O	SP-SM SC-SM		0	5.3	5.3	0.005	0.2	roots, sand	
2561	788+65	L	SM		1.4	1.8	0.4	H+	0.1	roots	discontinuous
2562	788+72 TO 788+74	T	SM-SC		0	3.6	3.6	0.005-0.02	0.35	roots, sand	
2563	788+77	T	SM-SC		0	3.0	3.0	0.015	0.25	roots, sand	
2564	788+84	T	SM-SC		0	3.1	3.1	0.015	0.3	roots, sand	
2565	788+87	T	SM-SC		0	3.2	3.2	0.01-0.02	0.35	roots, sand	
2566	788+89	T	SM		0	1.5	1.5	H	0	none	
2567	788+91	T	SM-SC		0	3.6	3.6	0.005	0.1	roots, sand	
2568	789+00	T	SM		0	1.2	1.2	0.005	0.15	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2569	789+02	T	SM		0	1.2	1.2	0.005	0.15	roots, sand	
2570	789+04	O	SM		0	2.1	2.1	0.005	0.1	sand	
2571	789+14	O	SM		0	2.3	2.3	H+	0.05	silt	
2572	789+17	O	SM		0	1.6	1.6	0.005	0.1	silt	
2573	789+19	T	SM SC		0	2.4	2.4	0.01	0.2	roots, sand	
2574	789+21	O	SM		0	1.4	1.4	H+	0.05	roots, sand	
2575	789+23	L	SM		0	2.2	2.2	0.01	0.25	roots, sand	
2576	789+30	O	SM		0	2.6	2.6	0.01	0.15	roots, sand	
2577	789+31	T	SM		0	1.1	1.1	0.005	0.1	sand	
2578	789+34	T	SM		0	2.3	2.3	0.01-0.02	0.3	sand	
2579	789+37	O	SM		0	2.0	2.0	0.005	0.2	sand	
2580	789+38	L	SM		0	2.3	2.3	0.01	0.2	roots, sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2581	789+41	O	SM		0	2.1	2.1	0.01	0.2	roots, sand	
2582	789+41.5	T	SM		0	2.4	2.4	0.01	0.2	sand	
2583	789+50 TO 789+51	L+O	SM		0	1.8	1.8	0.005	0.15	sand	
2584	789+51.5	T	SM		0	1.8	1.8	0.01	0.2	roots, sand	
2585	789+53	T	SM		0	2.1	2.1	0.01	0.2	sand	
2586	789+59	T	SM		0	1.5	1.5	0.01	0.2	sand	
2587	789+61	O	SM		0	1.4	1.4	0.005	0.1	sand	
2588	789+63	T	SM		0	1.4	1.4	0.005	0.1	roots, sand	
2589	789+64	O	SM		0	3.0	3.0	0.005-0.015	0.3	roots, sand	
2590	789+65	O	SM		0	1.4	1.4	0.01	0.2	sand	
2591	789+69	T	SM		0	1.0	1.0	0.005	0.1	roots, sand	
2592	789+77	T	SM		0	1.3	1.3	H+	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface: Top right	Top left	Bottom	Length	Width	Probe Depth	Fillings	Remarks
2593	789+79	O	SM		O	1.2	1.2	0.005	0.1	roots, silt	
2594	789+90	O	SM		O	1.4	1.4	H+	0.05	silt	dendritic
2595	789+94	T	SM		O	1.6	1.6	0.005	0.05	roots, silt	
2596	789+96 TO 789+97	T+O	SM		O	1.0	1.0	0.005	0.1	silt	
2597	790+02	T	SM		O	1.9	1.9	0.005	0.1	roots, sand	
2598	790+10	T	SM		O	2.1	2.1	H-0.01	0.1	roots, sand	
2599	790+13	T	SM		O	1.3	1.3	0.01	0.2	roots, sand	
2600	790+18.5	T	SM		O	1.1	1.1	H+	0.05	silt	
2601	790+19	T	SM		O	1.4	1.4	H+	0.05	silt	
2602	790+56	O	SP-SM SC		O	3.7	3.7	H	0	silt	discontinuous
2603	790+58	L	SP-SM SC		O	4.2	4.2	0.005	0.15	roots, sand	discontinuous
2604	790+71	T	SP-SM		O	1.4	1.4	H+	0.05	sand	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface: Top right	Distance Below Surface: Top left	Distance Below Surface: Bottom	Length	Width	Probe Depth	Fillings	Remarks
2605	790+79	O	SP-SM SM		0	2.7	2.7	H	0	silt	
2606	790+85	O	SP-SM SM		0	2.4	2.4	H+	0.05	silt	
2607	790+96	T	SP-SM		0	1.0	1.0	H+	0.05	sand	
2608	791+16	O	SP-SM SM		0	2.0	2.0	0.005	0.1	sand	
2609	791+27	O	SP-SM SC		0	2.1	2.1	0.005	0.1	silt	discontinuous
2610	791+32	O	SC		4.0	5.4	1.4	0.005	0.2	none	
2611	791+38	O	SP-SM SM		0	1.3	1.3	H+	0	silt	
2612	791+94	O	SP-SM		0	1.5	1.5	0.005	0.1	roots, sand	
2613	792+63	T	SP-SM		0	0.7	0.7	0.005	0.1	sand	
2614	792+77	O	SP-SM		0	0.6	0.6	111	0.05	silt	
2615	792+91	O	SM		2.3	6.0	3.7	111	0.05	none	
2616	793+00	O	SP-SM SM		0	4.5	4.5	H+	0.05	silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface: Top right	Distance Below Surface: Top left	Distance Below Surface: Bottom	Length	Width	Probe Depth	Fillings	Remarks
2617	793+11	O	SP-SM SC		0	5.8	5.8	H+	0.05	silt	discontinuous
2615	793+14	O	SP-SM SM		0	3.2	3.2	H+	0.05	silt	discontinuous
2619	793+16	O	SP-SM		0	3.0	3.0	H+	0.05	silt	discontinuous
2620	793+35	O	SM		2.0	5.8	3.8	H	0	silt	discontinuous, poorly developed
2621	793+48	O	SP-SM SM		0	1.5	1.5	H+	0.05	silt	
2622	794+11	O	SP-SM		0	1.2	1.2	H+	0.05	silt	poorly developed
2623	794+63	O	SP-SM SM		0	1.3	1.3	0.005	0.1	sand	poorly developed
2624	795+51	T	SM		0	0.7	0.7	H	0	silt	
2625	795+60	O	SM		0	0.8	0.8	H	0	silt	
2626	795+73 TO 795+75	O+L	SM		0	0.8	0.8	0.01	0.15	sand, silt	
2627	795+89	T	SM		0	1.0	1.0	H	0	silt	
2628	795+95	T	SM		0	0.9	0.9	H	0	open	

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface Top right	Distance Below Surface Top left	Distance Below Surface Bottom	Length	Width	Probe Depth	Fillings	Remarks
2629	795+99 to 796+00	L	SM		0	1.1	1.1	0.005	0.1	roots, sand	
2630	796+11	O	SM		0	0.6	0.6	0.005	0.05	roots	
2631	796+12	O	SM		0	0.8	0.8	H	0	sand, silt	
2632	796+28	O	SM		0	0.8	0.8	H	0	silt	
2633	796+37	O	SM		0	1.2	1.2	0.005	0.1	roots, sand	dendritic
2634	796+46	O	SC		3.0	3.9	0.9	0.005	0.1	open	
2635	796+57 to 796+58	L	SM		0	1.1	1.1	0.01	0.3	open	
2636	796+83	T	SM		0	0.6	0.6	0.01	0.25	sand, silt, partially open	
2637	797+03	T	SC-SM		0	0.5	0.5	0.01	0.1	open	
2638	797+21	L	SC-SM		0	1.6	1.6	H	0	silt	dendritic
2639	797+43	L+O	SC-SM		0	1.6	1.6	H	0	silt	discontinuous
2640	797+49	O	SC-SM		0.9	1.6	0.7	0.005	0	roots, sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2641	797+71 TO 797+72	O+L	SC-SM		1.0	1.8	0.8	H	0	silt	
2642	797+82	O	SC-SM		0	0.7	0.7	H	0	roots	
2643	797+92	O	SC-SM		0	0.8	0.8	H	0	silt	
2644	798+22	T	SC-SM		0	0.9	0.7	H	0	silt	
2645	798+32	O	SC-SM		0	0.8	0.8	H	0	silt	dendritic
2646	798+53	O	SC-SM		0	0.8	0.8	H	0	silt	
2647	798+75	O	SP-SM		0.8	1.4	0.6	H	0	open	
2648	798+80	O	SC-SM		0	0.8	0.8	H	0	sand, silt	
2649	798+91	O	SC-SM		1.1	1.6	0.5	0.005	0	open	
2650	799+16 to 799+17	L	SP-SM		0	0.9	0.9	0.01	0.2	sand	
2651	799+30.5	O	SP-SM		0	0.8	0.8	H	0	silt	
2652	799+44	O	SP-SM		0.4	0.7	0.5	H	0	sand, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

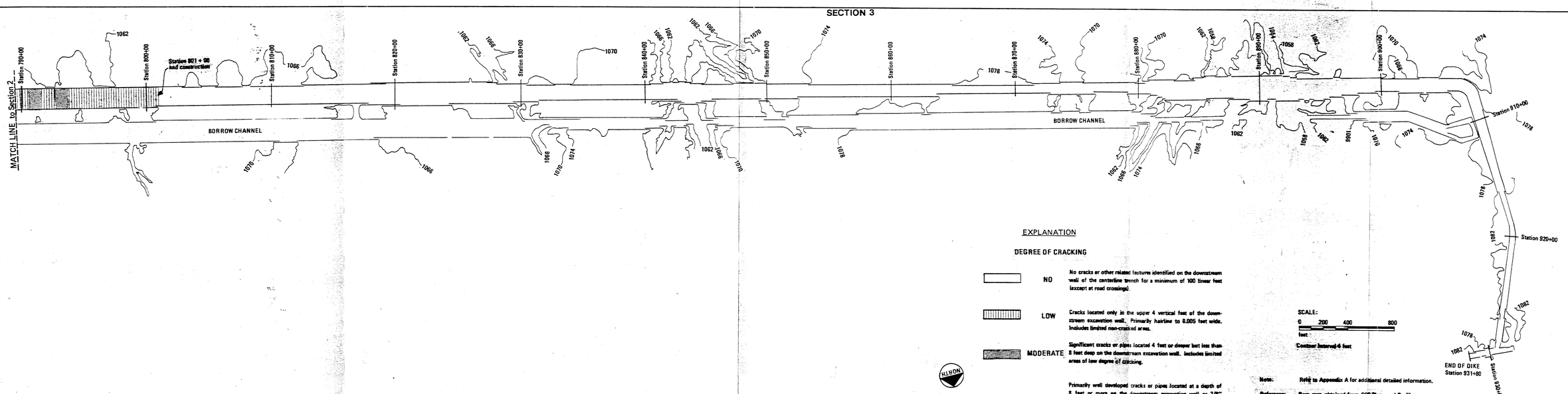
No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2653	799+66	O	SP-SM		0	0.6	0.6	H	0	open	
2654	799+74	O	SC-SM		0.7	1.4	0.7	0.01	0	roots, sand, silt	
2655	799+83	O	SC-SM		0	0.7	0.7	H	0	silt	
2656	799+90	T	SC-SM		0	0.8	0.8	H	0	silt	
2657	800+07	O	SC-SM		0	0.7	0.7	H	0	roots, silt	
2658	800+10	O	SC-SM		0	0.7	0.7	H	0	roots, silt	
2659	800+11	O	SC-SM		0	0.7	0.7	H	0	roots, silt	
2660	800+15	T	SC-SM		0	0.8	0.8	0.005	0	silt	
2661	800+28	O	SC-SM		0	0.7	0.7	H	0	silt	
2662	800+31	O	SC-SM		0	1.9	1.9	0.005	0.1	roots, sand	dendritic
2663	800+46	T	SC-SM		0	0.7	0.7	H	0	silt	
2664	800+58	O	SC-SM		0	1.2	1.2	0.105	0	roots, silt	

FIELD LOG OF TRENCH INSPECTION

LOCATION Buckeye Site 1 Drain JOB NO. 80-200 CLIENT Soil Conservation Service CONTRACT NO. 53-8A02-0-00113

TRENCH SEGMENT INSPECTED Stations as noted below INSPECTOR Camilla Williams; Ron Whitler DATE

No.	Station	Type	Material	Distance Below Surface			Length	Width	Probe Depth	Fillings	Remarks
				Top		Bottom					
				right	left						
2665	800+71	T	SC-SM		0	0.8	0.8	H	0	roots, silt	
2666	800+74	O	SC-SM		0	1.0	1.0	H	0	roots, sand, silt	


SECTION 3
MATCH LINE to Section 2
Station 790+00
Station 800+00
Station 801 + 00
end construction
Station 810+00
Station 820+00
Station 830+00
Station 840+00
Station 850+00
Station 860+00
Station 870+00
Station 880+00
Station 890+00
Station 900+00
Station 910+00
Station 920+00
Station 930+00
BORROW CHANNEL
BORROW CHANNEL
END OF DIKE
Station 931+80
EXPLANATION
DEGREE OF CRACKING
NO
No cracks or other related features identified on the downstream wall of the centerline trench for a minimum of 100 linear feet (except at road crossings).
LOW
Cracks located only in the upper 4 vertical feet of the downstream excavation wall. Primarily hairline to 0.005 feet wide. Includes limited non-cracked areas.
MODERATE
Significant cracks or pipes located 4 feet or deeper but less than 8 feet deep on the downstream excavation wall. Includes limited areas of low degree of cracking.
SEVERE
Primarily well developed cracks or pipes located at a depth of 8 feet or more on the downstream excavation wall or 3/8" open cracks deeper than 3 feet. West of station 570 + 00 cracks within 3 feet of the trench floor are in this category. Includes limited areas of moderate degree of cracking.
NORTH
SCALE:
0 200 400 800
feet
Contour Interval 4 feet
Note: Refer to Appendix A for additional detailed information.
Reference: Base map obtained from SCS Plan and Profile Buckeye F-RS Number 1.
Ertec
BUCKEYE SITE 1 DRAIN
DEGREE OF CRACKING MAP
Sheet 2 of 2
Figure A-1
Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 68-8A07-0-00112

EXPLANATION

DEGREE OF CRACKING

(blank box)	NO	No cracks or other related features identified on the downstream wall of the centerline trench for a minimum of 100 linear feet (except at road crossings).
(vertical lines)	LOW	Cracks located only in the upper 4 vertical feet of the downstream excavation wall. Primarily hairline to 0.005 feet wide. Includes limited non-cracked areas.
(stippled)	MODERATE	Significant cracks or pipes located 4 feet or deeper but less than 8 feet deep on the downstream excavation wall. Includes limited areas of low degree of cracking.
(solid black)	SEVERE	Primarily well developed cracks or pipes located at a depth of 8 feet or more on the downstream excavation wall or 3/8" open cracks deeper than 3 feet. West of station 570 + 00 cracks within 3 feet of the trench floor are in this category. Includes limited areas of moderate degree of cracking.

SCALE:

0 200 400 800

feet

Contour Interval 4 feet.

Note: Refer to Appendix A for additional detailed information.

Reference: Base map obtained from SCS Plan and Profile Buckeye FRS Number 1.

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

DEGREE OF CRACKING MAP
Sheet 1 of 2
Figure A-1

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113

APPENDIX B

TABLE OF EMBANKMENT SOIL COLUMNS

TABLE OF EMBANKMENT SOIL SECTIONS

BUCKEYE 1 FRS

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
565 + 00	0.0 - 0.2	SM, ML	fine silty sand and sandy silt
	0.2 - 0.8	SM	fine silty sand
	0.8 - 4.3	SM	medium silty sand with gravel
566 + 00	0.0 - 0.6	SM, ML	fine silty sand and sandy silt
	0.6 - 2.0	SM	silty sand with scattered gravel
	2.0 - 4.5	SM, SC	silty sand and clayey sand with gravel
567 + 00	0.0 - 1.5	SM	silty sand with gravel, calcareous
	1.5 - 2.5	ML	sandy silt, moist, massive
	2.5 - 4.6	SM	silty sand with gravel
568 + 00	0.0 - 1.6	SM	silty sand with fine gravel, calcareous
	1.6 - 2.6	ML-SM	sandy silt to silty sand, moist
	2.6 - 4.5	SM	silty sand with high % silt and scattered gravel
569 + 00	0.0 - 1.0	SM	silty sand with fine gravel, calcareous
	1.0 - 2.1	ML-SM	sandy silt to silty sand, moist
	2.1 - 5.0	SM	silty sand with gravel
570 + 00	0.0 - 1.3	SM	silty sand with gravel
	1.3 - 3.0	SM	silty sand with high % silt
	3.0 - 5.5	SM	silty sand with gravel
571 + 00	0.0 - 5.6	SM	medium silty sand with gravel
572 + 00	0.0 - 2.3	SM	silty sand, dry
	2.3 - 3.5	SM	silty sand with gravel, moisture increase
	3.5 - 5.7	SC	clayey sand with gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
573 + 00	0.0 - 1.2	SM	silty sand, dry
	1.2 - 3.1	SM	silty sand with gravel
	3.1 - 4.4	SC	clayey sand with gravel, moist
	4.4 - 5.7	SM	fine silty sand, moist
574 + 00	0.0 - 1.1	SM	silty sand, loose, dry
	1.1 - 2.5	SM	silty sand with gravel
	2.5 - 3.5	SM	silty sand with gravel, loose
	3.5 - 6.1	SM-ML	fine silty sand to sandy silt
575 + 00	0.0 - 1.4	SM	silty sand, dry, loose
	1.4 - 2.3	SP-SM	loose sand to silty sand with gravel
	2.3 - 6.1	SM, SC	interlayered silty sand and clayey sand, calcareous
576 + 00	0.0 - 1.0	SM	silty sand, dry, loose
	1.0 - 2.9	SM, SC	silty sand and clayey sand with gravel
	2.9 - 5.9	SC, SM	moist, very dense
577 + 00	0.0 - 1.9	SM	silty sand, loose, dry
	1.9 - 3.3	SM	silty sand, very dense
	3.3 - 3.5	SP-SM	sand to silty sand, loose, dry
	3.5 - 6.0	SC	fine clayey sand, high % silt
578 + 00	0.0 - 1.6	SM	silty sand, dry, loose
	1.6 - 6.0	SC, SM	clayey sand and silty sand, dense, slightly moist
579 + 00	0.0 - 6.1	SC	fine clayey sand with appreciable silt
580 + 00	0.0 - 6.6	SC	fine clayey sand with appreciable silt
581 + 00	0.0 - 4.1	SC	fine clayey sand
	4.1 - 5.3	SM	silty sand with gravel
	5.3 - 5.5	SP-SM	loose sand with silt
	5.5 - 7.0	SM	medium silty sand

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
582 + 00	0.0 - 2.4	SM	medium silty sand
	2.4 - 4.5	SM	silty sand with gravel and sand stringers
	4.5 - 7.0	SC	fine clayey sand
583 + 00	0.0 - 0.9	SM	medium silty sand
	0.9 - 1.5	SM, SP	interlayered silty sand and sand
	1.5 - 5.0	SM	silty sand with gravel
	5.0 - 7.3	SC	medium clayey sand, moist
584 + 00	0.0 - 1.5	SM	fine silty sand
	1.5 - 2.6	SM	coarse silty sand with gravel
	2.6 - 3.6	SM, SC	interlayered silty sand and clayey sand
	3.6 - 7.5	SC	medium clayey sand, moist
585 + 00	0.0 - 2.3	SM	medium clayey sand, calcareous
	2.3 - 6.1	CL	sandy clay
	6.1 - 7.6	SM	medium silty sand
586 + 00	0.0 - 2.5	SC	medium clayey sand
	2.5 - 2.8	SM	silty sand with gravel
	2.8 - 7.5	SC	medium clayey sand
587 + 00	0.0 - 7.8	SC	clayey sand with scattered gravel
588 + 00	0.0 - 7.9	SC	clayey sand with a trace of gravel
588 + 60	0.0 - 2.6	SC	clayey sand
	2.6 - 5.2	CL	sandy clay
	5.2 - 8.0	SC	clayey sand with scattered gravel
589 + 00	0.0 - 4.3	SC	fine clayey sand
	4.3 - 4.7	ML	sandy silt
	4.7 - 7.0	CL	sandy clay with silt
	7.0 - 8.3	SC	fine clayey sand
590 + 00	0.0 - 8.2	SC	clayey sand with appreciable silt and occasional gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
591 + 00	0.0 - 1.6	SM	silty sand, dry, dense
	1.6 - 2.9	SC	fine clayey sand
	2.9 - 3.5	SM	silty sand, dry, medium dense
	3.5 - 4.0	SC	fine clayey sand with gravel
	4.0 - 5.0	CL	sandy clay
	5.0 - 8.6	SC	fine clayey sand
592 + 00	0.0 - 5.1	SC	medium clayey sand
	5.1 - 6.3	CL	sandy clay
	6.3 - 8.5	SC	medium clayey sand
593 + 00	0.0 - 2.0	SM	medium silty sand
	2.0 - 3.6	CL	sandy clay
	3.6 - 10.4	SC	fine clayey sand
594 + 00	0.0 - 1.9	ML	sandy silt with gravel
	1.9 - 6.5	SC	fine clayey sand
	6.5 - 7.4	ML	sandy silt
	7.4 - 10.2	SC	clayey sand with appreciable silt
595 + 00	0.0 - 3.5	SM	silty sand, calcareous with a trace of gravel
	3.5 - 10.5	SC	fine clayey sand with appreciable silt
596 + 00	0.0 - 2.1	SM	silty sand, calcareous
	2.1 - 11.5	SM	silty sand with occasional gravel
597 + 00	0.0 - 2.9	SM	silty sand with gravel, calcareous
	2.9 - 11.6	SC	clayey sand with clay layers
598 + 00	0.0 - 2.4	SM	silty sand, calcareous, dry
	2.4 - 6.5	SC	clayey sand with scattered gravel
	6.5 - 7.2	CL	sandy clay
	7.2 - 11.6	SC	fine clayey sand with appreciable silt

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
599 + 00	0.0 - 3.2	SM	silty sand, calcareous
	3.2 - 6.5	SC	medium clayey sand
	6.5 - 7.5	CL	silty clay with fine sand
	7.5 - 11.8	SC	fine clayey sand
600 + 00	0.0 - 11.7	SC	fine clayey sand with scattered gravel and appreciable silt
601 + 00	0.0 - 2.3	ML	sandy silt with clay, calcareous
	2.3 - 12.3	SC	clayey sand with appreciable silt
602 + 00	0.0 - 1.4	SM	medium silty sand, calcareous
	1.4 - 12.2	SC	fine clayey sand with appreciable silt
603 + 00	0.0 - 3.2	SM	silty sand with sandy silt stringers, calcareous
	3.2 - 12.6	SC	medium clayey sand
604 + 00	0.0 - 3.1	SM	medium silty sand, calcareous
	3.1 - 13.5	SC	clayey sand with appreciable silt
604 + 50	0.0 - 2.6	SM	medium silty sand, calcareous
	2.6 - 5.9	SC	medium clayey sand
	5.9 - 13.0	CL	sandy clay
605 + 00	0.0 - 2.8	SM	medium silty sand, calcareous
	2.8 - 7.3	SC	fine clayey sand
	7.3 - 11.3	CL	sandy clay
606 + 00	0.0 - 3.1	SM	medium silty sand, calcareous
	3.1 - 6.0	SC	fine clayey sand
	6.0 - 11.4	CL	sandy clay
607 + 00	0.0 - 1.9	SM	silty sand, calcareous
	1.9 - 11.6	SC	clayey sand
608 + 00	0.0 - 2.1	SM	medium silty sand, calcareous
	2.1 - 11.5	SC	medium clayey sand

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
609 + 00	0.0 - 1.9	SM	fine silty sand with appreciable clay
	1.9 - 12.1	SC	medium clayey sand
610 + 00	0.0 - 2.8	SM	fine silty sand with appreciable clay
	2.8 - 12.4	SC	medium clayey sand
611 + 00	0.0 - 13.4	SC	medium clayey sand with appreciable silt
612 + 00	0.0 - 13.7	SC	medium clayey sand with appreciable silt
613 + 00	0.0 - 2.7	SC	clayey sand with appreciable silt, calcareous
	2.7 - 14.0	SC	fine clayey sand
614 + 00	0.0 - 2.8	SC	clayey sand with appreciable silt
	2.8 - 14.1	SC	medium clayey sand
615 + 00	0.0 - 14.3	SC	medium clayey sand with appreciable silt and scattered gravel
616 + 00	0.0 - 2.0	SC	medium clayey sand
	2.0 - 14.3	SC	medium clayey sand with a trace of gravel
617 + 00	0.0 - 11.5	SC	medium clayey sand
	11.5 - 14.3	SC,CL	fine clayey sand interlayed with sandy clay
618 + 00	0.0 - 14.2	SC	medium clayey sand with appreciable silt
619 + 00	0.0 - 2.9	SM	silty sand, calcareous
	2.9 - 14.2	SC	clayey sand with clay interlayers
620 + 00	0.0 - 2.0	SM	silty sand with appreciable clay
	2.0 - 8.0	SC	fine clayey sand with appreciable silt
	8.0 - 8.9	SM	medium silty sand
	8.9 - 14.6	SC	medium clayey sand

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
621 + 00	0.0 - 3.6	SM	silty sand, calcareous
	3.6 - 9.0	SC	clayey sand
	9.0 - 14.8	ML,SC	interlayered sandy silt and clayey sand
622 + 00	0.0 - 9.0	SM	silty sand, calcareous
	9.0 - 11.9	SC	clayey sand
	11.9 - 13.0	CL,SC	interlayered sandy clay and clayey sand
	13.0 - 15.1	SC	fine clayey sand
623 + 00	0.0 - 1.5	SM	medium silty sand
	1.5 - 2.0	SP - SM	sand with gravel and silt
	2.0 - 4.1	SM	fine silty sand
	4.1 - 14.6	SM	silty sand with appreciable clay
624 + 00	0.0 - 1.6	SM	medium silty sand with gravel
	1.6 - 15.1	SM	fine silty sand with appreciable clay
625 + 00	0.0 - 1.6	SM	medium silty sand with gravel
	1.6 - 15.3	SM	fine silty sand with appreciable clay
626 + 00	0.0 - 1.5	SM	medium silty sand with gravel
	1.5 - 5.4	SM	medium silty sand
	5.4 - 15.5	SC	clayey sand with appreciable silt
627 + 00	0.0 - 2.6	SM	silty sand with occasional gravel, calcareous
	2.6 - 4.8	SM	medium silty sand
	4.8 - 15.6	SC	medium clayey sand
628 + 00	0.0 - 2.8	SM	silty sand with occasional gravel, calcareous, dry
	2.8 - 9.5	SM	medium silty sand
	9.5 - 16.0	SC	fine clayey sand, moist
629 + 00	0.0 - 12.2	SM	medium silty sand
	12.2 - 16.2	SC	medium clayey sand
630 + 00	0.0 - 12.0	SM	medium silty sand with fine gravel
	12.0 - 16.7	SM,SC	interlayered medium silty sand and clayey sand

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
631 + 00	0.0 - 2.5	SM	medium silty sand with gravel, calcareous
	2.5 - 6.0	SM	fine-medium silty sand
	6.0 - 16.4	SC	clayey sand with thin silty sand interlayers
632 + 00	0.0 - 2.5	SM	medium silty sand, with medium gravel, calcareous
	2.5 - 5.5	SM	fine-medium silty sand
	5.5 - 16.5	SC	clayey sand with thin silty sand interlayers
633 + 00	0.0 - 5.5	SM	medium silty sand with fine gravel, calcareous
	5.5 - 16.8	SC	clayey sand with thin silty sand interlayers
634 + 00	0.0 - 3.9	SM	silty sand with gravel, calcareous
	3.9 - 5.0	SM,SC	interlayered medium silty sand and clayey sand
	5.0 - 5.4	SP,SM	medium sand with silt
	5.4 - 17.2	SC	fine clayey sand, moist
635 + 00	0.0 - 8.1	SC,SM	interlayered clayey sand and silty sand with occasional gravel
	8.1 - 9.2	CL	sandy clay, moist
	9.2 - 15.2	SC	fine clayey sand
636 + 00	0.0 - 12.5	SM	medium silty sand with fine gravel
	12.5 - 15.3	SC	medium to coarse clayey sand with gravel
637 + 00	0.0 - 2.1	SC	medium clayey sand, trace of gravel, calcareous
	2.1 - 4.6	SM	medium silty sand
	4.6 - 15.5	ML	sandy silt to clayey silt
638 + 00	0.0 - 2.1	SC	medium clayey sand with gravel, calcareous
	2.1 - 4.3	SM	medium silty sand
	4.3 - 15.7	SC	fine clayey sand with appreciable silt
639 + 00	0.0 - 2.5	SC	medium clayey sand with appreciable silt
	2.5 - 16.0	SC	fine-medium clayey sand with occasional gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
640 + 00	0.0 - 3.0	SM	silty sand with gravel, calcareous
	3.0 - 8.3	SC	fine clayey sand
	8.3 - 10.4	CL	sandy clay
	10.4 - 16.0	ML	clayey silt and sandy silt
641 + 00	0.0 - 3.0	SM	medium silty sand with gravel
	3.0 - 16.3	SC	medium clayey sand with appreciable silt and occasional gravel
642 + 00	0.0 - 0.5	SM	medium silty sand with gravel, calcareous
	0.5 - 1.1	SP - SM	gravelly sand with silt, medium dense
	1.1 - 2.8	SM	medium silty sand
	2.8 - 16.3	SC	medium clayey sand, moist
643 + 00	0.0 - 1.5	SM	fine silty sand, high % silt, with gravel
	1.5 - 3.1	SM	medium silty sand with appreciable clay
	3.1 - 6.0	SM	medium silty sand with gravel, calcareous
	6.0 - 16.6	SM	fine-medium silty sand with thin clayey sand interlayers
644 + 00	0.0 - 1.3	SM	fine silty sand, high % silt
	1.3 - 1.6	SM	silty sand with caliche
	1.6 - 2.8	SM	silty sand with appreciable clay, occasional gravel
	2.8 - 3.1	SM	fine silty sand, calcareous
	3.1 - 5.4	SM	silty sand with appreciable clay, calcareous
	5.4 - 6.1	SM	silty sand with gravel, calcareous
	6.1 - 16.4	SM	silty sand with thin clayey sand and clay interlayers
645 + 00	0.0 - 4.4	SM	medium silty sand
	4.4 - 13.1	SC	medium clayey sand with gravel
	13.1 - 16.4	SM	medium silty sand with gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
646 + 00	0.0 - 1.4	SM	medium silty sand, occasional gravel, calcareous
	1.4 - 4.8	SM	fine silty sand with appreciable clay
	4.8 - 12.2	SM	fine silty sand
	12.2 - 13.3	CL	sandy clay
	13.3 - 16.4	SM,SC	silty sand with clayey sand interlayers
647 + 00	0.0 - 5.4	SM	medium silty sand, occasional gravel, calcareous, dry
	5.4 - 6.1	SC	medium clayey sand
	6.1 - 16.7	SM	silty sand with thin clayey sand interlayers, moist
648 + 00	0.0 - 5.5	SM	medium silty sand with occasional gravel
	5.5 - 10.7	SC	medium clayey sand with appreciable silt
	10.7 - 17.2	SM	medium silty sand with thin clayey sand interlayers
649 + 00	0.0 - 4.3	SM	silty sand with occasional gravel, calcareous
	4.3 - 11.1	SC	fine clayey sand
	11.1 - 17.4	SM	medium silty sand
650 + 00	0.0 - 5.1	SM	medium silty sand, occasional gravel, calcareous
	5.1 - 10.5	SC	fine-medium clayey sand with appreciable silt
	10.5 - 17.2	SM	fine-medium silty sand
651 + 00	0.0 - 6.0	SM	medium silty sand, occasional gravel, calcareous
	6.0 - 8.0	SC	fine-medium clayey sand
	8.0 - 17.6	SM	fine-medium silty sand
652 + 00	0.0 - 7.2	SM	medium silty sand, occasional gravel, calcareous
	7.2 - 8.2	SC	fine clayey sand
	8.2 - 17.3	SM	fine-medium silty sand
653 + 00	0.0 - 1.2	SM	medium silty sand with gravel, calcareous
	1.2 - 2.4	SC	fine clayey sand, calcareous
	2.4 - 9.7	SM	fine-medium silty sand
	9.7 - 17.2	SM	silty sand with intermixed clayey sand portions

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
654 + 00	0.0 - 1.4	SM	medium silty sand with gravel, calcareous
	1.4 - 17.3	SC	medium clayey sand with appreciable silt
655 + 00	0.0 - 2.1	SM	medium silty sand with gravel, calcareous
	2.1 - 8.5	SC	medium clayey sand with appreciable silt
	8.5 - 17.3	SM	medium silty sand
656 + 00	0.0 - 2.2	SM	medium silty sand with gravel, calcareous
	2.2 - 8.0	SC	medium clayey sand with appreciable silt
	8.0 - 17.1	SM	fine-medium silty sand
657 + 00	0.0 - 2.1	SM	fine-medium silty sand with gravel, calcareous
	2.1 - 8.2	SC	medium clayey sand
	8.2 - 17.1	SM	medium silty sand
658 + 00	0.0 - 5.9	SM	medium silty sand, occasional gravel, calcareous
	5.9 - 17.6	SC	clayey sand with fine to coarse gravel
659 + 00	0.0 - 10.5	SM	fine-medium silty sand, occasional gravel
	10.5 - 17.7	SC	medium clayey sand with appreciable silt
660 + 00	0.0 - 17.1	SM	fine-medium silty sand with thin clayey sand interlayers and scattered fine gravel
661 + 00	0.0 - 17.5	SM	fine-medium silty sand with thin clayey sand interlayers and scattered fine gravel
662 + 00	0.0 - 6.2	SM	medium silty sand
	6.2 - 10.0	SC	medium clayey sand
	10.0 - 10.4	SP-SM	medium gravelly sand with fine gravel and silt
	10.4 - 11.8	SM	medium silty sand
	11.8 - 13.3	SC	fine-coarse clayey sand
	13.3 - 13.5	SP-SM	gravelly sand with silt
	13.5 - 17.5	SC	medium clayey sand with fine gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
663 + 00	0.0 - 2.5	SM	medium silty sand, calcareous
	2.5 - 3.1	SC	fine clayey sand, calcareous
	3.1 - 4.0	SM	fine-medium silty sand
	4.0 - 5.0	SC	medium clayey sand
	5.0 - 5.2	SP-SM	gravelly sand with silt
	5.2 - 17.3	SC	medium clayey sand
664 + 00	0.0 - 2.5	SM	medium silty sand, clacareous
	2.5 - 6.0	SM	fine silty sand with thin SC interlayers
	6.0 - 17.3	SC	medium clayey sand with appreciable silt
665 + 00	0.0 - 1.4	SC	clayey sand with gravel
	1.4 - 1.9	SP-SM	gravelly sand with silt
	1.9 - 3.1	SC	fine clayey sand with gravel
	3.1 - 6.2	SM	medium silty sand
	6.2 - 16.0	SC	medium clayey sand
666 + 00	0.0 - 7.0	SM	fine-medium silty sand with gravel
	7.0 - 16.5	SC	medium clayey sand with thin silty sand interlayers
667 + 00	0.0 - 4.5	SM	medium silty sand
	4.5 - 16.9	SC,SM	interlayered medium clayey sand and silty sand
668 + 00	0.0 - 1.5	SM	gravelly sand, appreciable gravel and silt
	1.5 - 2.9	SC	clayey sand, trace of gravel, calcareous
	2.9 - 3.2	SP-SM	gravelly sand with silt
	3.2 - 3.8	CL	sandy clay, slight plasticity
	3.8 - 5.4	SC	fine clayey sand
	5.4 - 5.6	SP-SM	gravelly sand with silt
	5.6 - 9.2	SM	fine silty sand, high % silt
	9.2 - 16.9	SC	medium clayey sand, moist

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
669 + 00	0.0 - 1.2	SM	silty sand with fine gravel, dry
	1.2 - 2.1	SC	fine-coarse clayey sand, dry
	2.1 - 2.4	SC	medium clayey sand with caliche
	2.4 - 4.5	SC	medium clayey sand
	4.5 - 6.1	SC,CL	clayey sand with sandy clay portions
	6.1 - 12.6	SC	medium clayey sand
	12.6 - 16.9	SM	fine silty sand, high % silt, some clay
670 + 00	0.0 - 2.5	SM	silty sand with gravel, calcareous
	2.5 - 5.2	SC	medium clayey sand
	5.2 - 5.6	SC	clayey sand with gravel
	5.6 - 12.7	SC	fine clayey sand
	12.7 - 17.5	SM	fine silty sand, high % silt
671 + 00	0.0 - 2.5	SM	silty sand with clay and gravel, calcareous
	2.5 - 12.2	SC	medium clayey sand
	12.2 - 17.2	SM	fine silty sand, high % silt
672 + 00	0.0 - 5.9	SM	medium silty sand with gravel and clayey sand layers
	5.9 - 7.0	SP-SM	gravelly sand with silt, loose
	7.0 - 17.2	SM	fine-medium silty sand
673 + 00	0.0 - 2.0	SM	medium silty sand with gravel
	2.0 - 4.5	SC	medium clayey sand
	4.5 - 10.1	SM	medium silty sand with scattered gravel
	10.1 - 13.0	SC	medium clayey sand
	13.0 - 17.1	SM	medium silty sand with appreciable clay
674 + 00	0.0 - 1.8	SM	medium silty sand with gravel and clay
	1.8 - 17.0	SC	fine-medium clayey sand with scattered gravel
675 + 00	0.0 - 2.0	SM	fine-medium silty sand with gravel, calcareous
	2.0 - 16.7	SC	clayey sand with appreciable silt

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
676 + 00	0.0 - 2.3	SC	medium clayey sand with gravel, calcareous
	2.3 - 16.8	SC	fine-medium clayey sand
677 + 00	0.0 - 2.3	SC	medium clayey sand with gravel, calcareous
	2.3 - 17.4	SC	medium clayey sand with appreciable silt
678 + 00 (Palo Verde Rd)	0.0 - 0.4		Asphaltic Concrete
	0.4 - 1.0	SP	ABC
	1.0 - 19.2	SC	medium clayey sand with appreciable silt, moist
679 + 00	0.0 - 3.4	SC	fine clayey sand, dry
	3.4 - 3.7	SP-SM	gravelly sand with silt, medium dense
	3.7 - 7.3	SC	medium clayey sand, scattered gravel, dry
	7.3 - 17.1	SC	fine clayey sand, moist
680 + 00	0.0 - 3.5	SC	fine clayey sand, dry
	3.5 - 4.0	SP-SM	gravelly sand with silt, medium dense
	4.0 - 18.0	SC	medium clayey sand with scattered gravel
681 + 00	0.0 - 1.2	SC	fine-coarse clayey sand, very calcareous
	1.2 - 17.1	SC	fine clayey sand, high % clay
682 + 00	0.0 - 0.7	SC	fine clayey sand, calcareous
	0.7 - 1.1	SP-SM	medium sand with silt, medium dense
	1.1 - 17.2	SC	medium clayey sand
683 + 00	0.0 - 1.1	SC	fine-medium clayey sand with gravel, calcareous
	1.1 - 16.7	SC	medium clayey sand with appreciable silt
684 + 00	0.0 - 16.8	SC	medium clayey sand with appreciable and scattered gravel
685 + 00	0.0 - 16.4	SC,SM	medium clayey sand interlayered with silty sand and scattered gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
686 + 00	0.0 - 1.1	SC	medium clayey sand, calcareous
	1.1 - 16.7	SC	fine-medium clayey sand with appreciable silt
687 + 00	0.0 - 17.0	SC	medium clayey sand with appreciable silt and scattered fine gravel
688 + 00	0.0 - 17.0	SC	medium clayey sand with appreciable silt and scattered fine gravel
689 + 00	0.0 - 3.0	SC	fine clayey sand, blocky, crumbly, dry
	3.0 - 17.2	SC	medium clayey sand with thin silty sand interlayers
690 + 00	0.0 - 2.2	SC	fine clayey sand with gravel
	2.2 - 14.3	SM	medium silty sand
	14.3 - 17.1	SC	medium clayey sand with appreciable silt
691 + 00	0.0 - 2.1	SC	medium clayey sand with gravel
	2.1 - 16.8	SM	medium silty sand with occasional gravel and appreciable clay
692 + 00	0.0 - 1.5	SM	fine silty sand, calcareous
	1.5 - 12.0	SM	fine silty sand with gravel and appreciable clay
	12.0 - 16.6	SM	fine silty sand, moist
693 + 00	0.0 - 16.6	SC	medium clayey sand with appreciable silt and scattered gravel
695 + 00	0.0 - 1.6	SC	medium clayey sand with appreciable silt and scattered gravel
	1.6 - 16.2	SM	medium silty sand with appreciable clay
696 + 00	0.0 - 1.6	SC	medium clayey sand with appreciable silt and scattered gravel
	1.6 - 16.8	SM	medium silty sand with appreciable clay

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
697 + 00	0.0 - 1.6	SC	medium clayey sand
	1.6 - 1.9	SP-SM	gravelly sand with silt
	1.9 - 6.0	SC	clayey sand
	6.0 - 6.6	SM	silty sand
	6.6 - 17.2	SC	clayey sand with appreciable silt
698 + 00	0.0 - 17.4	SC	medium clayey sand with scattered gravel
699 + 00	0.0 - 16.9	SC	medium clayey sand with scattered gravel
700 + 00	0.0 - 14.5	SC	medium clayey sand with scattered gravel
	14.5 - 17.0	SM	medium silty sand
701 + 00	0.0 - 14.4	SC	medium clayey sand with scattered gravel
	14.4 - 16.9	SM	medium silty sand
702 + 00	0.0 - 0.6	SM	fine silty sand, dry
	0.6 - 1.1	SP-SM	gravelly sand with silt
	1.1 - 2.9	SM	fine-coarse silty sand with fine gravel, dry
	2.9 - 14.1	SC	fine-medium clayey sand
	14.1 - 16.8	SM	fine silty sand, organic
703 + 00	0.0 - 0.5	SM	fine silty sand, dry
	0.5 - 1.5	SP-SM	gravelly sand with silt
	1.5 - 3.0	SM	medium silty sand with gravel, dry
	3.0 - 15.7	SC	fine-medium clayey sand
	15.7 - 16.8	SM	fine silty sand, high % silt, organic
704 + 00	0.0 - 3.3	SM	fine silty sand
	3.3 - 16.8	SC	fine-medium clayey sand
705 + 00	0.0 - 3.2	SM	fine silty sand
	3.2 - 4.6	SC	fine clayey sand, calcareous
	4.6 - 4.9	SP-SM	gravelly sand with silt
	4.9 - 16.3	SC	medium clayey sand with scattered gravel
706 + 00	0.0 - 1.9	SM	fine silty sand, dry
	1.9 - 4.0	SC	medium to coarse clayey sand with appreciable silt
	4.0 - 16.5	SC	fine clayey sand

STATION	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
707 + 00	0.0 - 15.8	SC	fine clayey sand
	15.8 - 19.2	SM	silty sand, organic, moist
708 + 00	0.0 - 16.0	SC	fine clayey sand
	16.0 - 19.2	SM	silty sand, organic, moist
709 + 00	0.0 - 16.3	SC	medium clayey sand with scattered gravel and appreciable silt
	16.3 - 19.2	SM	fine silty sand
710 + 00	0.0 - 16.2	SC	medium clayey sand with scattered gravel and appreciable silt
	16.2 - 19.2	SM	fine silty sand.
711 + 00	0.0 - 2.5	SM	fine-medium silty sand , dry
	2.5 - 18.8	SC	fine clayey sand with gravel
712 + 00	0.0 - 1.8	SM	medium silty sand, dry, loose
	1.8 - 2.9	SM	fine silty sand
	2.9 - 19.0	SC	fine clayey sand with gravel
713 + 00	0.0 - 2.6	SM	fine silty sand, calcareous , dry
	2.6 - 18.8	SC,SM	interlayered fine clayey sand and silty sand
714 + 00	0.0 - 2.2	SM	fine silty sand with a trace of gravel and clay
	2.2 - 4.2	SM	fine-medium silty sand with appreciable clay
	4.2 - 18.8	SC	fine clayey sand with appreciable silt, moist
715 + 00	0.0 - 2.0	SM	fine silty sand with scattered gravel
	2.0 - 18.8	SC	fine clayey sand with appreciable silt
716 + 00	0.0 - 1.7	SC	medium clayey sand with gravel
	1.7 - 5.3	SC	fine-medium clayey sand
	5.3 - 18.8	SC	fine clayey sand with appreciable silt

STATION	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
717 + 00	0.0 - 2.0	SC	fine clayey sand with gravel
	2.0 - 18.8	SC	medium clayey sand with appreciable silt
718 + 00	0.0 - 0.9	SC	fine clayey sand with gravel
	0.9 - 2.0	SP-SM	gravelly sand with silt
	2.0 - 4.9	SM	fine silty sand with a trace of clay
	4.9 - 19.4	SC,SM	intermixed clayey sand and silty sand
719 + 00	0.0 - 1.2	SM	fine silty sand, dry
	1.2 - 2.0	SP-SM	gravelly sand with silt
	2.0 - 4.5	SM	fine silty sand with a trace of clay
	4.5 - 19.2	SC	medium clayey sand with appreciable silt
720 + 00	0.0 - 2.1	SM	fine silty sand with gravel, calcareous
	2.1 - 2.8	SP-SM	gravelly sand with silt, dense
	2.8 - 9.5	SM	fine silty sand
	9.5 - 19.2	SC	fine clayey sand with appreciable silt
721 + 00	0.0 - 2.1	SM	fine silty sand with gravel, calcareous
	2.1 - 2.5	SP-SM	gravelly sand with silt
	2.5 - 8.5	SM	fine silty sand
	8.5 - 19.1	SC	fine clayey sand with appreciable silt
722 + 00	0.0 - 1.5	SM	fine silty sand with gravel
	1.5 - 16.8	SC	medium clayey sand
723 + 00	0.0 - 2.2	SC	clayey sand with appreciable silt
	2.2 - 16.8	SM	silty sand with thin clayey sand interlayers
724 + 00	0.0 - 2.0	SC,SM	interlayered clayey sand and silty sand
	2.0 - 5.0	SM	medium silty sand with scattered gravel
	5.0 - 16.6	SC	clayey sand with appreciable silt
725 + 00	0.0 - 2.7	SM	fine silty sand with gravel, calcareous
	2.7 - 4.0	SC	fine clayey sand with appreciable silt
	4.0 - 10.1	SM	fine silty sand with minor amounts of clay and gravel
	10.1 - 16.2	SC	fine clayey sand with appreciable silt

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
726 + 00	0.0 - 3.2	SM	fine silty sand with gravel
	3.2 - 12.8	SC	fine clayey sand with appreciable silt
	12.8 - 16.5	SM	medium silty sand
727 + 00	0.0 - 3.5	SM	fine-coarse silty sand
	3.5 - 12.4	SC	fine clayey sand with thin silty sand interlayers
	12.4 - 16.4	SM	medium silty sand
728 + 00	0.0 - 1.2	SM	fine-coarse silty sand with gravel
	1.2 - 1.8	SC	fine clayey sand
	1.8 - 2.8	SM	fine-medium silty sand
	2.8 - 5.1	SM	fine silty sand with a trace of clay
	5.1 - 13.7	SC	fine clayey sand with occasional gravel
	13.7 - 16.8	CL	sandy clay and silty clay
729 + 00	0.0 - 1.2	SC	fine-medium clayey sand with gravel and appreciable silt
	1.2 - 2.2	SM	silty sand with gravel
	2.2 - 6.6	SC	fine-medium clayey sand with gravel and appreciable silt
	6.6 - 14.6	SM	fine silty sand
	14.6 - 15.5	ML	sandy silt
	15.5 - 16.6	SM	fine silty sand, high % silt
730 + 00	0.0 - 0.8	SP-SM	gravelly sand with silt
	0.8 - 3.9	SM	medium silty sand with occasional gravel, trace of clay
	3.9 - 7.7	SC	fine clayey sand with occasional gravel
	7.7 - 16.6	SC,CL	interlayered clayey sand and sandy clay, appreciable silt
732 + 00	0.0 - 1.0	SM	gravelly sand with appreciable silt
	1.0 - 4.1	SM	fine-coarse silty sand with a trace of clay
	4.1 - 16.5	SC	fine-medium clayey sand with gravel and appreciable silt
733 + 00	0.0 - 1.5	SM	silty sand with gravel
	1.5 - 16.5	SC	clayey sand with appreciable silt

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
734 + 00	0.0 - 1.7	SM	silty sand with a trace of clay
	1.7 - 16.3	SC	clayey sand with appreciable silt
735 + 00	0.0 - 0.6	SC	fine clayey sand
	0.6 - 3.0	SM	silty sand
	3.0 - 16.2	SC	medium clayey sand with appreciable silt
736 + 00	0.0 - 0.8	SC	fine clayey sand
	0.8 - 1.2	SM	gravelly sand with appreciable silt
	1.2 - 3.5	SC	fine clayey sand with gravel
	3.5 - 4.0	SM	gravelly sand with appreciable silt
	4.0 - 5.7	SC	fine clayey sand
	5.7 - 6.3	SP-SM	gravelly sand
	6.3 - 16.6	SC	clayey sand with appreciable silt
737 + 00	0.0 - 3.4	SC	clayey sand with gravel
	3.4 - 7.2	SM	fine-medium silty sand with scattered gravel
	7.2 - 16.8	SC	fine clayey sand with appreciable silt
738 + 00	0.0 - 0.7	SM	silty sand with gravel
	0.7 - 11.8	SC	fine-medium clayey sand
	11.8 - 14.1	ML	sandy silt and clayey silt
	14.1 - 16.9	SC	fine-coarse clayey sand
739 + 00	0.0 - 2.2	SM	silty sand
	2.2 - 16.7	SC	clayey sand with appreciable silt
740 + 00	0.0 - 2.2	SM	fine silty sand
	2.2 - 16.8	SC	clayey sand with appreciable silt
741 + 00	0.0 - 0.5	SM	medium silty sand with gravel
	0.5 - 2.0	SC	medium clayey sand with gravel
	2.0 - 16.9	SC,SM	interlayered clayey sand and silty sand

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
742 + 00	0.0 - 4.0	SM	silty sand with gravel stringers
	4.0 - 16.6	SC,SM	interlayered clayey sand and silty sand
743 + 00	0.0 - 4.6	SM	medium silty sand
	4.6 - 12.0	SC	clayey sand with appreciable silt
	12.0 - 16.5	SM	fine-medium silty sand
744 + 00	0.0 - 2.4	SC	medium clayey sand, dry
	2.4 - 10.1	SC	clayey sand with gravel
	10.1 - 16.5	SM	fine-medium silty sand
745 + 00	0.0 - 2.7	SC	clayey sand, blocky, dry
	2.7 - 5.1	SM	silty sand with gravel, dry
	5.1 - 11.9	SC	fine clayey sand with gravel
	11.9 - 16.9	SC	fine clayey sand
746 + 00	0.0 - 2.2	SC	fine-coarse clayey sand with gravel
	2.2 - 5.6	SM	gravelly sand with appreciable silt
	5.6 - 16.4	SC	fine clayey sand
747 + 00	0.0 - 2.4	SC	fine-coarse clayey sand with gravel
	2.4 - 4.3	SM	silty sand with gravel
	4.3 - 16.9	SC	clayey sand with scattered gravel
748 + 00	0.0 - 4.4	SM	silty sand with gravel
	4.4 - 6.4	SC	clayey sand with gravel
	6.4 - 17.2	SC	fine clayey sand
749 + 00	0.0 - 2.1	SM	silty sand with gravel
	2.1 - 2.3	SP-SM	gravelly sand
	2.3 - 3.6	ML	sandy silt
	3.6 - 4.1	SM	silty sand with gravel
	4.1 - 17.3	SC	fine-medium clayey sand with gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
750 + 00	0.0 - 1.4	SM	fine-coarse silty sand with gravel
	1.4 - 1.8	SP-SM	gravelly sand with silt
	1.8 - 3.0	SC	fine-coarse clayey sand
	3.0 - 4.7	ML	sandy silt
	4.7 - 17.3	SC	clayey sand
751 + 00	0.0 - 2.2	SM	fine silty sand with gravel
	2.2 - 3.5	ML	sandy silt
	3.5 - 5.1	SM	fine-coarse silty sand
	5.1 - 17.3	SC	fine clayey sand with gravel
752 + 00	0.0 - 1.7	SM	fine silty sand with gravel
	1.7 - 2.0	SM	silty sand with caliche
	2.0 - 3.5	ML	sandy silt
	3.5 - 4.5	SM	fine-coarse silty sand
	4.5 - 17.3	SC	fine clayey sand with gravel
753 + 00	0.0 - 0.8	ML	sandy silt
	0.8 - 1.4	ML	sandy silt with caliche
	1.4 - 4.6	ML	sandy silt
	4.6 - 5.5	SM	fine-coarse silty sand with gravel
	5.5 - 7.2	SP-SM	gravelly sand with silt
	7.2 - 9.2	ML	clayey silt with fine sand
	9.2 - 16.9	SC	fine clayey sand with gravel
754 + 00	0.0 - 1.6	SC	fine clayey sand
	1.6 - 3.1	ML	fine sandy silt
	3.1 - 4.0	SM	gravelly sand with appreciable silt
	4.0 - 5.5	SM	fine silty sand
	5.5 - 17.1	SC	fine clayey sand with gravel
755 + 00	0.0 - 1.8	SC	fine clayey sand
	1.8 - 3.8	SP-SM	gravelly sand with silt
	3.8 - 6.0	SM	fine silty sand
	6.0 - 16.7	SC	fine clayey sand with gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
756 + 00	0.0 - 0.7	SC	fine clayey sand
	0.7 - 1.6	SP-SM	gravelly sand with silt
	1.6 - 3.7	SM	fine silty sand
	3.7 - 5.2	SM,ML	interlayered silty sand and sandy silt
	5.2 - 16.9	SC	fine-medium clayey sand
757 + 00	0.0 - 0.8	SC	clayey sand
	0.8 - 1.5	SP-SM	gravelly sand with silt
	1.5 - 2.1	SM	fine silty sand
	2.1 - 2.8	ML	sandy silt
	2.8 - 3.5	SM	fine silty sand
	3.5 - 5.3	ML	sandy silt
	5.3 - 17.2	SC	fine-medium clayey sand
758 + 00	0.0 - 1.1	SM	gravelly sand with appreciable silt
	1.1 - 3.8	ML	sandy silt
	3.8 - 5.6	SM	fine silty sand
	5.6 - 10.3	SM	fine-coarse silty sand
	10.3 - 13.8	SC,ML	interlayered clayey sand and sandy silt, organic
	13.8 - 17.3	SC	fine clayey sand
759 + 00	0.0 - 1.2	SM	fine silty sand with gravel
	1.2 - 2.0	SC	fine clayey sand
	2.0 - 3.5	ML	sandy silt
	3.5 - 4.8	SM	fine silty sand, high % silt
	4.8 - 6.0	ML	sandy silt
	6.0 - 7.2	SM	fine-coarse silty sand
	7.2 - 10.9	SC	fine-coarse clayey sand
	10.9 - 17.4	SM	fine silty sand, organic
760 + 00	0.0 - 1.5	SM	fine silty sand
	1.5 - 3.5	ML	sandy silt
	3.5 - 4.6	SM	fine silty sand
	4.6 - 7.8	SM	fine-coarse silty sand
	7.8 - 11.5	SC	fine-coarse clayey sand with gravel
	11.5 - 17.5	SM	fine silty sand, organic

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
761 + 00	0.0 - 4.1	SM	fine-coarse silty sand with gravel
	4.1 - 5.4	ML	sandy silt
	5.4 - 8.5	SM	fine-coarse silty sand
	8.5 - 14.1	SC	fine clayey sand
	14.1 - 17.2	SM	fine silty sand, organic
762 + 00	0.0 - 1.1	SP-SM	gravelly sand with silt
	1.1 - 3.2	SM	fine-coarse silty sand
	3.2 - 6.2	SM	fine silty sand
	6.2 - 7.1	ML	sandy silt
	7.1 - 13.2	SC	fine-medium clayey sand
	13.2 - 16.8	SM	fine silty sand, organic
763 + 00	0.0 - 4.6	SM	fine-medium silty sand
	4.6 - 15.1	SC	fine-medium clayey sand with scattered gravel
	15.1 - 16.4	SM	medium-coarse silty sand with clay
764 + 00	0.0 - 1.7	SP-SM	gravelly sand with silt, dry, loose
	1.7 - 2.8	SM	fine silty sand
	2.8 - 3.2	SP-SM	gravelly sand with silt
	3.2 - 5.0	SM	fine silty sand
	5.0 - 5.4	SP-SM	loose gravelly sand with silt
	5.4 - 7.2	SC	fine-coarse clayey sand
	7.2 - 9.0	ML	sandy silt
	9.0 - 13.8	SC	fine-medium clayey sand with gravel
	13.8 - 17.1	SM	fine silty sand, organic
765 + 00	0.0 - 3.7	SM	fine-medium silty sand
	3.7 - 10.6	SC	fine clayey sand with gravel
	10.6 - 16.9	SM	fine silty sand with thin clayey sand interlayers
766 + 00	0.0 - 1.3	SM	fine silty sand
	1.3 - 1.6	SP-SM	sand with silt
	1.6 - 5.0	SM	fine-coarse silty sand
	5.0 - 17.0	SC	fine-medium clayey sand

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
767 + 00	0.0 - 5.0	SM	fine-medium silty sand with gravel
	5.0 - 8.5	SM	fine silty sand with thin clayey sand interlayers
	8.5 - 15.2	SC	fine-medium clayey sand with gravel
	15.2 - 17.2	SM	medium silty sand
768 + 00	0.0 - 9.0	SM	fine-coarse silty sand with gravel
	9.0 - 15.0	SC	fine-medium clayey sand with gravel
	15.0 - 17.5	SM	medium-coarse silty sand with gravel
769 + 00	0.0 - 1.5	SM	fine-medium silty sand with gravel
	1.5 - 2.6	SC	fine-medium clayey sand
	2.6 - 5.3	SM	gravelly sand with appreciable silt
	5.3 - 17.8	SC	fine clayey sand with scattered gravel
770 + 00	0.0 - 5.6	SM	fine-medium silty sand with gravel
	5.6 - 17.8	SC	fine clayey sand with scattered gravel
771 + 00	0.0 - 1.1	SM	fine silty sand
	1.1 - 6.1	SC	fine clayey sand
	6.1 - 17.9	SM	fine silty sand, high % silt, with thin silt layers
772 + 00	0.0 - 3.5	SM	fine-medium silty sand
	3.5 - 17.5	SC	clayey sand with appreciable silt
773 + 00	0.0 - 3.5	SM	fine-medium silty sand
	3.5 - 13.6	SC	fine-medium clayey sand
	13.6 - 17.8	SM	medium silty sand with scattered gravel
774 + 00	0.0 - 3.7	SM	fine-coarse silty sand with gravel and thin clayey sand layers
	3.7 - 17.3	SC	fine-medium clayey sand with gravel and appreciable silt
775 + 00	0.0 - 2.8	SM	fine-medium silty sand with gravel
	2.8 - 17.3	SC	clayey sand with gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
776 + 00	0.0 - 2.5	SM	fine-medium silty sand with gravel
	2.5 - 17.3	SC	clayey sand with gravel
777 + 00	0.0 - 2.0	SM	fine-medium silty sand with gravel
	2.0 - 2.7	SC	fine clayey sand
	2.7 - 3.0	SP-SM	gravelly sand with silt
	3.0 - 17.4	SC	fine-medium clayey sand with appreciable silt
778 + 00	0.0 - 2.9	SM	fine-medium silty sand with gravel
	2.9 - 16.5	SC	fine-medium clayey sand with gravel and appreciable silt
	16.5 - 17.4	SM	medium-coarse silty sand with gravel
779 + 00	0.0 - 2.9	SM	fine-medium silty sand with gravel
	2.9 - 17.5	SC	fine-medium clayey sand with gravel
780 + 00	0.0 - 2.5	SC	clayey sand with scattered fine gravel
	2.5 - 3.2	SP-SM	gravelly sand with silt
	3.2 - 5.2	SC	clayey sand with gravel and sand stringers
	5.2 - 10.3	SC	clayey sand
	10.3 - 10.7	SC	clayey sand with gravel and sand stringers
	10.7 - 17.4	SC	fine clayey sand
781 + 00	0.0 - 1.5	SM	fine silty sand with gravel
	1.5 - 3.1	ML	sandy silt with gravel
	3.1 - 4.2	SP-SM	gravelly sand with silt
	4.2 - 5.4	SM	silty sand with gravel
	5.4 - 6.8	SC	fine-medium clayey sand
	6.8 - 15.4	SM	fine-coarse silty sand with gravel and clay
	15.4 - 17.7	SC	fine-medium clayey sand with gravel
782 + 00	0.0 - 1.6	SM	fine-medium silty sand
	1.6 - 2.2	ML	sandy silt
	2.2 - 5.5	SM	silty sand with gravel
	5.5 - 7.2	SC	clayey sand with gravel
	7.2 - 11.1	SM	silty sand
	11.1 - 17.2	SC	clayey sand with gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
783 + 00	0.0 - 2.1	SC	fine clayey sand with appreciable silt
	2.1 - 9.5	SM	silty sand with thin silt layers
	9.5 - 12.0	SC	fine clayey sand with appreciable silt
	12.0 - 17.1	SM	fine silty sand, high % silt, organic
784 + 00	0.0 - 2.3	SM	silty sand with gravel
	2.3 - 2.9	SP-SM	gravelly sand with silt
	2.9 - 3.9	SM	silty sand
	3.9 - 9.9	SC	fine-medium clayey sand
	9.9 - 15.0	SM	fine-coarse silty sand
	15.0 - 17.1	ML-SM	interlayered organic silt and fine silty sand
785 + 00	0.0 - 1.6	SP-SM	gravelly sand with silt
	1.6 - 4.0	SM	medium silty sand
	4.0 - 10.2	SC	fine-medium clayey sand
	10.2 - 14.1	SM	silty sand
	14.1 - 17.6	SM	fine silty sand, high % silt, organic
786 + 00	0.0 - 1.3	SP-SM	gravelly sand with silt
	1.3 - 3.0	SC	fine-medium clayey sand
	3.0 - 7.1	SM	fine-medium silty sand
	7.1 - 9.2	SP-SM	gravelly sand with silt
	9.2 - 10.2	SC	clayey sand
	10.2 - 12.8	SM	silty sand with gravel
	12.8 - 13.8	SP-SM	gravelly sand with silt
	13.8 - 18.0	SM	fine silty sand with clay, organic
787 + 00	0.0 - 1.2	SP-SM	gravelly sand with silt
	1.2 - 4.7	SC	fine-medium clayey sand
	4.7 - 5.0	SP-SM	gravelly sand with silt
	5.0 - 7.4	SC	fine clayey sand
	7.4 - 8.0	SP-SM	gravelly sand with silt
	8.0 - 13.5	SC	clayey sand
	13.5 - 18.1	SM	fine silty sand, organic

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)		SOIL DESCRIPTION FROM FIELD LOG
787 + 82 (Johnson Road)	0.0 - 0.4		Asphaltic Concrete
	0.4 - 1.1	SP	ABC
	1.1 - 12.1	SC	fine-medium clayey sand
	12.1 - 19.1	SM	fine-medium silty sand with scattered gravel
789 + 00	0.0 - 4.5	SM	fine silty sand
	4.5 - 12.1	SC	clayey sand with appreciable silt
	12.1 - 17.6	SM	silty sand
790 + 00	0.0 - 1.9	SM	fine silty sand
	1.9 - 3.2	SP-SM	gravelly sand with silt
	3.2 - 12.1	SC	clayey sand with appreciable silt
	12.1 - 17.3	SM	silty sand with clay
791 + 00	0.0 - 1.1	SM	fine silty sand
	1.1 - 3.4	SP-SM	gravelly sand with silt
	3.4 - 12.0	SC	clayey sand with thin silty sand interlayers
	12.0 - 15.6	SM	fine silty sand with gravel
	15.6 - 17.6	SC	fine-medium clayey sand
792 + 00	0.0 - 2.5	SP-SM	gravelly sand with silt
	2.5 - 11.0	SC	fine clayey sand with appreciable silt
	11.0 - 15.0	SM	silty sand
	15.0 - 17.6	SC	clayey sand
793 + 00	0.0 - 2.2	SP-SM	gravelly sand with silt
	2.2 - 4.6	SM	fine silty sand
	4.6 - 10.7	SC	fine-medium clayey sand with gravel
	10.7 - 13.3	SM	silty sand with gravel
	13.3 - 17.3	SC	fine clayey sand with gravel and appreciable silt
794 + 00	0.0 - 2.2	SP-SM	gravelly sand with silt
	2.2 - 5.0	SM	fine silty sand
	5.0 - 10.5	SC	fine clayey sand
	10.5 - 14.0	SM	silty sand with gravel
	14.0 - 17.9	SC	clayey sand with gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
795 + 00	0.0 - 2.9	SP-SM	gravelly sand with silt
	2.9 - 4.9	SM	fine silty sand
	4.9 - 5.3	SP-SM	gravelly sand with silt
	5.3 - 7.8	SC	fine-medium clayey sand
	7.8 - 9.3	SP-SM	gravelly sand with silt
	9.3 - 13.7	SM	silty sand with gravel
	13.7 - 17.5	SC	fine clayey sand
796 + 00	0.0 - 1.3	SM	fine silty sand
	1.3 - 2.2	SP-SM	gravelly sand with silt
	2.2 - 2.6	SC	clayey sand
	2.6 - 2.7	SM	silty sand
	2.7 - 3.4	SC	clayey sand with gravel
	3.4 - 4.8	SP-SM	gravelly sand with silt
	4.8 - 7.1	SC	clayey sand
	7.1 - 8.6	SM	silty sand with gravel
	8.6 - 9.9	SC	clayey sand
	9.9 - 10.9	SM	silty sand with gravel
	10.9 - 17.6	SC	clayey sand
797 + 00	0.0 - 1.7	SM,SC	interlayered silty sand and clayey sand
	1.7 - 3.0	SC	clayey sand
	3.0 - 4.3	SP-SM	gravelly sand with silt
	4.3 - 5.1	SC	clayey sand with gravel
	5.1 - 6.6	SM,SC	interlayered silty sand and clayey sand with gravel
	6.6 - 7.3	SC	clayey sand
	7.3 - 7.6	SM	silty sand
	7.6 - 10.6	SC	clayey sand
	10.6 - 12.0	SP-SM	gravelly sand with silt
	12.0 - 17.6	SC	clayey sand with scattered gravel

STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
798 + 00	0.0 - 1.6	SC,SM	interlayered clayey sand and silty sand
	1.6 - 1.8	SP-SM	sand with silt
	1.8 - 4.5	SC	clayey sand with gravel
	4.5 - 5.2	SM	silty sand
	5.2 - 5.9	SC	clayey sand with gravel
	5.9 - 6.0	SP-SM	sand with silt
	6.0 - 6.5	SC	clayey sand
	6.5 - 6.6	SP-SM	sand with silt
	6.6 - 8.9	SC	clayey sand with gravel
	8.9 - 9.0	SM	silty sand
	9.0 - 17.7	SC	clayey sand with gravel
799 + 00	0.0 - 1.0	SP-SM	sand with silt
	1.0 - 1.5	SC	clayey sand
	1.5 - 1.9	SM	silty sand
	1.9 - 4.1	SC	clayey sand
	4.1 - 4.5	SM	silty sand
	4.5 - 6.7	SC	clayey sand with scattered gravel
	6.7 - 7.1	SM	silty sand
	7.1 - 8.5	SC	clayey sand with scattered gravel
	8.5 - 9.1	SM	silty sand
	9.1 - 10.6	SC	clayey sand
	10.6 - 10.8	SP-SM	sand with silt
	10.8 - 17.8	SC	clayey sand with gravel
800 + 00	0.0 - 2.6	SC	clayey sand with gravel and appreciable silt
	2.6 - 4.1	SC	clayey sand with scattered gravel
	4.1 - 4.7	SP-SM	sand with silt
	4.7 - 5.0	SC	clayey sand
	5.0 - 5.3	SM	silty sand
	5.3 - 6.8	SC	clayey sand
	6.8 - 7.1	SM	silty sand
	7.1 - 9.3	SC	clayey sand
	9.3 - 9.7	SM	silty sand
	9.7 - 13.1	SC	clayey sand with scattered gravel
	13.1 - 13.5	SM	silty sand
	13.5 - 17.4	SC	clayey sand with scattered gravel

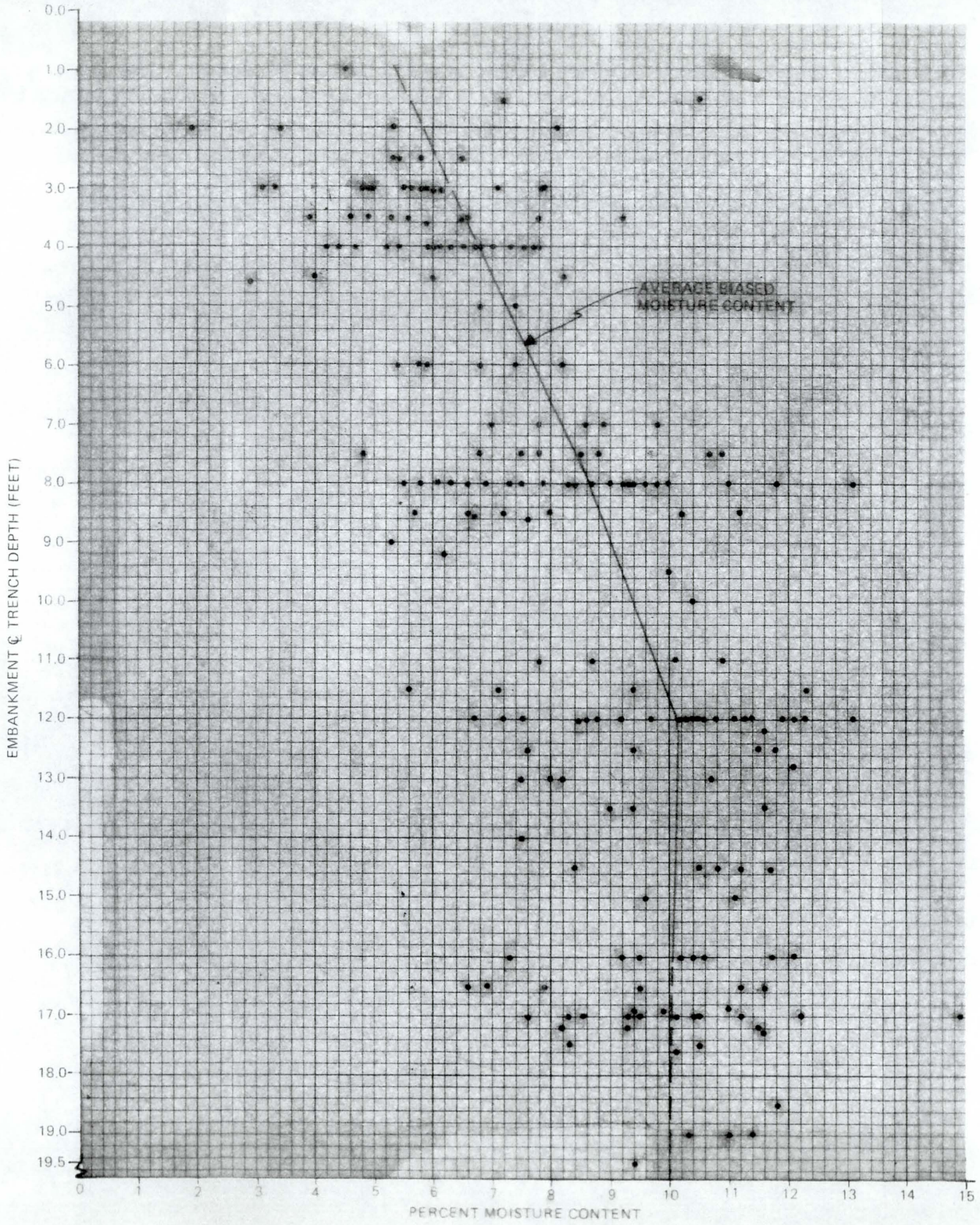
STATION NO.	DEPTH INTERVAL BELOW TOP OF CUT (FT)	SOIL DESCRIPTION FROM FIELD LOG	
801 + 00	0.0 - 1.1	SC	clayey sand with gravel
	1.1 - 5.5	SC	clayey sand with scattered gravel
	5.5 - 6.5	SM	silty sand
	6.5 - 17.2	SC	clayey sand with scattered gravel and thin silty sand interlayers

APPENDIX C

MOISTURE PROFILES

CONTENTS:

1. SCATTER DIAGRAM OF MOISTURE VS. DEPTH
2. TABLE OF EMBANKMENT MOISTURE CONTENT
3. TABLE OF DRAIN OUTLET MOISTURE CONTENT
4. EMBANKMENT MOISTURE PROFILE



EXPLANATION

- Moisture content determined by ASTM method D-2216

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

EMBANKMENT MOISTURE VS. DEPTH

Figure C-1

Ertec (formerly Fugro) Project Number 80 200

SCS Contract Number 53 8A02 0 00113

TABLE OF EMBANKMENT MOISTURE CONTENT

BUCKEYE #1 F.R.S.

STATION		DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)
565 + 00	FT	2.0	4.0	—	—	—
	%	3.4	4.2	—	—	—
567 + 00	FT	1.0	2.0	4.5	—	—
	%	4.5	8.1	8.2	—	—
575 + 00	FT	1.5	5.0	—	—	—
	%	7.2	7.4	—	—	—
580 + 00	FT	2.0	6.0	—	—	—
	%	5.3	7.4	—	—	—
584 + 43	FT	3.0	7.0	—	—	—
	%	7.1	8.9	—	—	—
589 + 00	FT	3.0	7.0	—	—	—
	%	5.9	9.8	—	—	—
594 + 00	FT	3.0	6.0	10.0	—	—
	%	5.5	8.2	10.4	—	—
599 + 00	FT	3.0	6.0	11.0	—	—
	%	5.0	6.8	7.8	—	—
600 + 00	FT	3.0	7.0	11.5	—	—
	%	5.8	7.8	9.4	—	—

STATION	DEPTH (FT) MOISTURE (%)		DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)
603 + 60	FT	4.0	8.0	12.0	—	—
	%	7.8	8.3	9.2	—	—
606 + 00	FT	4.0	8.0	11.0	—	—
	%	6.8	11.0	10.1	—	—
610 + 50	FT	4.0	8.0	12.0	—	—
	%	6.1	7.9	10.5	—	—
613 + 70	FT	4.0	8.5	13.5	—	—
	%	6.0	7.2	9.0	—	—
617 + 50	FT	4.0	8.0	11.0	14.0	—
	%	4.7	6.6	8.7	7.5	—
620 + 50	FT	3.0	7.5	11.5	14.5	—
	%	3.1	4.8	5.6	8.4	—
628 + 50	FT	3.0	8.0	12.0	16.0	—
	%	4.9	9.4	10.6	11.7	—
635 + 50	FT	4.0	8.0	12.0	15.0	—
	%	4.4	8.4	10.4	9.6	—
639 + 00	FT	3.5	7.5	11.0	15.0	—
	%	4.9	10.9	10.9	11.1	—
644 + 90	FT	4.0	8.0	12.0	16.0	—
	%	6.7	8.7	11.4	9.5	—

STATION		DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)
647 + 25	FT	4.0	8.0	12.0	16.0	—
	%	6.3	9.0	10.2	10.4	—
652 + 75	FT	4.0	8.0	12.0	17.5	—
	%	6.5	6.1	7.5	8.3	—
658 + 50	FT	4.0	8.0	12.0	17.0	—
	%	7.7	6.3	9.7	10.5	—
662 + 00	FT	4.5	9.0	13.0	17.0	—
	%	4.0	5.3	7.5	9.5	—
667 + 69	FT	3.5	8.0	12.0	17.0	—
	%	3.9	10.0	11.1	8.5	—
672 + 85	FT	4.0	8.0	12.5	17.0	—
	%	5.2	5.8	7.6	10.4	—
677 + 30	FT	4.0	8.0	12.5	17.0	—
	%	7.5	11.8	11.8	10.1	—
677 + 90	FT	1.5	3.5	8.5	13.5	17.3
	%	10.5	9.2	11.2	11.6	11.6
683 + 75	FT	3.5	7.5	12.0	16.9	—
	%	6.6	8.5	7.2	9.9	—
687 + 58	FT	4.6	8.5	13.0	17.2	—
	%	2.9	6.6	8.2	9.3	—

STATION		DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)
687 + 12	FT	11.5	—	—	—	—
(CRACK)	%	12.3	—	—	—	—
692 + 00	FT	3.6	9.2	12.2	16.9	—
	%	5.9	6.2	11.6	11.0	—
693 + 75	FT	4.5	8.5	12.5	17.0	—
	%	6.0	5.7	9.4	8.3	—
698 + 00	FT	3.5	7.0	12.8	17.2	—
	%	4.6	7.0	12.1	8.2	—
698 + 75	FT	3.0	8.6	13.0	17.6	—
	%	5.8	7.6	8.0	10.1	—
701 + 36	FT	6.0	—	—	—	—
(CRACK)	%	5.4	—	—	—	—
701 + 38	FT	6.0	—	—	—	—
(CRACK)	%	5.9	—	—	—	—
701 + 46	FT	3.0	7.5	13.0	16.9	—
	%	7.9	8.8	10.7	9.4	—
708 + 45	FT	4.0	9.5	14.5	19.5	—
	%	7.0	10.0	11.7	9.4	—
708 + 69	FT	5.0	—	—	—	—
(CRACK)	%	6.8	—	—	-	

STATION		DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)
708 + 72	FT	5.0	—	—	—	—
(CRACK)	%	7.4	—	—	—	—
709 + 88	FT	3.5	7.5	14.5	19.0	—
	%	7.8	7.8	10.8	11.0	—
714 + 00	FT	3.5	7.5	14.5	18.5	—
	%	5.6	6.8	10.5	11.8	—
720 + 70	FT	3.0	8.5	14.5	19.0	—
	%	5.6	6.7	11.2	11.4	—
723 + 00	FT	2.5	6.0	11.5	16.5	—
	%	5.3	5.8	7.1	6.9	—
724 + 85	FT	4.0	7.0	12.0	16.0	—
	%	5.9	8.6	8.6	10.2	—
727 + 28	FT	3.0	7.5	12.0	16.5	—
	%	6.0	10.7	8.8	9.5	—
732 + 80	FT	4.0	8.0	12.0	16.0	—
	%	7.5	9.8	10.8	12.1	—
735 + 84	FT	3.0	7.5	12.0	16.0	—
	%	4.9	7.5	12.3	10.6	—
744 + 52	FT	2.5	8.0	12.5	16.0	—
	%	5.4	10.0	11.5	7.3	—

STATION		DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)
748 + 00	FT	3.5	8.0	12.0	16.5	—
	%	5.3	7.3	13.1	11.6	—
750 + 67	FT	4.0	8.0	12.0	17.0	—
	%	7.8	8.4	9.2	10.5	—
753 + 78	FT	3.0	8.0	12.0	16.5	—
	%	4.9	9.3	10.3	7.9	—
758 + 00	FT	3.0	8.0	12.0	16.5	—
	%	4.8	9.3	12.1	11.2	—
761 + 78	FT	3.5	8.0	12.0	16.5	—
	%	6.5	9.6	11.4	6.6	—
767 + 80	FT	3.5	8.0	12.0	16.0	—
	%	5.3	6.9	11.9	9.5	—
769 + 10	FT	4.0	8.0	12.0	16.0	—
	%	5.4	7.5	11.3	9.2	—
771 + 78	FT	3.0	8.0	12.0	17.5	—
	%	6.1	13.1	12.3	10.5	—
774 + 65	FT	4.0	8.0	12.0	17.0	—
	%	7.3	5.5	7.5	9.3	—
778 + 00	FT	2.5	8.0	12.0	17.0	—
	%	5.8	9.2	11.1	7.6	—

STATION		DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)	DEPTH (FT) MOISTURE (%)
783 + 78	FT	2.5	8.0	12.0	17.0	—
	%	VOID	9.4	8.5	14.9	—
787 + 82	FT	2.5	8.5	13.5	19.0	—
	%	6.5	10.2	9.4	10.3	—
792 + 77	FT	2.0	8.0	12.0	17.0	—
	%	1.9	8.7	6.7	12.2	—
796 + 75	FT	3.0	8.5	12.0	17.2	—
	%	3.3	8.0	10.8	11.5	—

TABLE OF DRAIN OUTLET MOISTURE CONTENT

BUCKEYE #1 F.R.S.

STATION		DISTANCE FROM ℄ DIKE (FT) [1] MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)
687 + 35	FT	7.5	18.0	30.0	43.0	58.0
	%	10.5	10.3	9.6	9.8	4.8
690 + 00	FT	9.5	22.0	32.0	42.0	55.0
	%	11.6	7.5	8.2	5.4	5.6
695 + 39	FT	9.0	19.0	29.0	39.0	49.0
	%	9.5	8.0	7.1	9.5	5.1
698 + 91	FT	9.0	19.0	29.0	39.0	49.0
	%	9.6	8.3	8.0	5.8	3.5
704 + 55.5	FT	8.0	18.0	28.0	38.0	48.0
	%	8.0	7.8	6.0	5.7	6.4
706 + 27	FT	10.0	20.0	30.0	40.0	50.0
	%	6.8	8.1	4.9	7.3	2.9
714 + 56	FT	8.5	18.0	28.0	38.0	48.0
	%	9.7	9.7	8.6	7.2	6.4
717 + 13.5	FT	13.5	18.0	28.0	38.0	48.0
	%	10.9	6.0	6.6	5.8	4.8

STATION		DISTANCE FROM ℄ DIKE (FT) [1] MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)	DISTANCE FROM ℄ DIKE (FT) MOISTURE (%)
729 + 93	FT	6.5	16.0	26.0	36.0	46.0
	%	11.2	8.2	6.8	9.5	7.4
740 + 00	FT	5.0	15.0	25.0	35.0	45.0
	%	10.7	11.6	7.3	9.2	8.6
750 + 00	FT	8.0	16.0	26.0	36.0	46.0
	%	10.0	10.5	9.3	6.8	8.6
760 + 00	FT	—	—	25.0	35.0	45.0
	%	—	—	9.1	9.4	7.5
770 + 00	FT	—	—	25.0	35.0	45.0
	%	—	—	9.3	9.3	8.5
780 + 00	FT	6.0	16.0	26.0	36.0	46.0
	%	10.8	10.8	11.5	6.7	9.6
790 + 00	FT	8.0	18.0	28.0	38.0	48.0
	%	10.6	10.8	9.7	11.2	7.0
800 + 00	FT	7.0	17.0	27.0	37.0	47.0
	%	8.8	10.0	9.4	10.0	7.0

[1] Samples were collected 0.5 feet above the floor of drain outlet excavations.

DEPTH (feet)	STATION NUMBER																															DEPTH (feet)
	698 + 00	698 + 75	701 + 36 [2] (crack)	701 + 38 [3] (crack)	701 + 46	708 + 45	708 + 69 [2] (crack)	708 + 72 [3] (crack)	709 + 88	714 + 00	720 + 70	723 + 00	724 + 85	727 + 28	732 + 80	735 + 84	744 + 52	748 + 00	750 + 67	753 + 78	758 + 00	761 + 78	767 + 80	769 + 10	771 + 78	774 + 65	778 + 00	783 + 78	787 + 82 [4]	792 + 77	796 + 75	
1.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.0
2.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.0	–		2.0
3.0	–	5.8	–	–	7.9	–	–	–	–	–	5.6	5.3*	–	6.0	–	4.9	5.4*	–	–	4.9	4.8	–	–	–	6.1	–	5.8*	void*	6.5*	–	–	3.3	3.0
4.0	4.6*	–	–	–	–	7.0	–	–	7.8*	5.6*	–	–	5.9	–	7.5	–	–	5.3*	7.8	–	–	6.5*	5.3*	5.4	–	7.3	–	–	–	–	–		4.0
5.0	–	–	–	–	–	–	6.8	7.4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		5.0
6.0	–	–	5.4	5.9	–	–	–	–	–	–	–	5.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		6.0
7.0	7.0	–	–	–	–	–	–	–	–	–	–	–	8.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		7.0
8.0	–	–	–	–	8.8*	–	–	–	7.8*	6.8*	–	–	–	10.7*	9.8	7.5*	10.0	7.3	8.4	9.3	9.3	9.6	6.9	7.5	13.1	5.5	0.2	9.4	–	8.7	–		8.0
9.0	–	7.6*	–	–	–	–	–	–	–	–	6.7*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10.2*	–	8.0*		9.0
10.0	–	–	–	–	–	10.0*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		10.0
11.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		11.0
12.0	–	–	–	–	–	–	–	–	–	–	–	7.1*	8.6	8.8	10.8	12.3	–	13.1	9.2	10.3	12.1	11.4	11.9	11.3	12.3	7.5	11.1	8.5	–	6.7	10.8		12.0
13.0	12.1*	8.0	–	–	10.7	–	–	–	–	–	–	–	–	–	–	–	11.5*	–	–	–	–	–	–	–	–	–	–	–	–	–	–		13.0
14.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9.4*	–	–		14.0
15.0	–	–	–	–	–	11.7*	–	–	10.8*	10.5*	11.2*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		15.0
16.0	–	–	–	–	–	–	–	–	–	–	–	–	10.2	–	12.1	10.6	7.3	–	–	–	–	–	9.5	9.2	–	–	–	–	–	–	–		16.0
17.0	8.2*	–	–	–	9.4*	–	–	–	–	–	–	6.9*	–	9.5*	–	–	–	11.6*	10.5	7.9*	11.2*	6.6*	–	–	–	9.3	7.6	14.9	–	12.2	11.5*		17.0
18.0	–	10.1*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10.5*	–	–	–	–	–	–		18.0
19.0	–	–	–	–	–	–	–	–	11.0	11.8*	11.4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10.3	–	–		19.0
20.0	–	–	–	–	–	9.4*	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		20.0

NOTES

2 Sampled adjacent to crack

3 Sampled 2 to 3 feet from crack

4 Johnson Road

• Sample depth rounded to nearest foot

Ertec
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BUCKEYE SITE 1 DRAIN

PROFILE OF EMBANKMENT
MOISTURE CONTENT

Sheet 2 of 2
Figure C-2

Ertec Property Fund Project Number 88-200
SCS Contract Number 53-82AS-8-00113

DEPTH (feet)	STATION NUMBER																																DEPTH (feet)
	565 + 00	567 + 00	575 + 00	580 + 00	584 + 43	589 + 00	594 + 00	599 + 00	600 + 00	603 + 60	606 + 00	610 + 50	613 + 70	617 + 50	620 + 50	628 + 50	635 + 50	639 + 00	644 + 90	647 + 25	652 + 75	658 + 50	662 + 00	667 + 69	672 + 85	677 + 30	677 + 90 1/	683 + 75	687 + 12 (crack)	687 + 58	692 + 00	693 + 75	
1.0	–	4.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.0
2.0	3.4	8.1	7.2*	5.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10.5*	–	–	–	–	–	2.0
3.0	–	–	–	–	7.1	5.9	5.5	5.0	5.8	–	–	–	–	–	3.1	4.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3.0
4.0	4.2	–	–	–	–	–	–	–	–	7.8	6.8	6.1	6.0	4.7	–	–	4.4	4.9*	6.7	6.3	6.5	7.7	–	3.9*	5.2	7.5	9.2*	6.6*	–	–	5.9*	–	4.0
5.0	–	8.2*	7.4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4.0*	–	–	–	–	–	–	2.9*	–	6.0*	5.0
6.0	–	–	–	7.4	–	–	8.2	6.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6.0
7.0	–	–	–	–	8.9	9.8	–	–	7.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	7.0
8.0	–	–	–	–	–	–	–	–	–	8.3	11.0	7.9	–	6.6	4.8*	9.4	8.4	10.9*	8.7	9.0	6.1	6.3	–	10.0	5.8	11.8	–	8.5*	–	–	–	–	8.0
9.0	–	–	–	–	–	–	–	–	–	–	–	–	7.2*	–	–	–	–	–	–	–	–	–	5.3	–	–	–	11.2*	–	–	6.6*	6.2*	5.7*	9.0
10.0	–	–	–	–	–	–	10.4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10.0
11.0	–	–	–	–	–	–	–	7.8	–	–	10.1	–	–	8.7	–	–	–	10.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	11.0
12.0	–	–	–	–	–	–	–	–	9.4*	9.2	–	10.5	–	–	5.6*	10.6	10.4	–	11.4	10.2	7.5	9.7	–	11.1	–	–	–	7.2	12.3*	–	11.6*	–	12.0
13.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	7.5	–	7.6*	11.8*	–	–	–	8.2	–	9.4*	13.0
14.0	–	–	–	–	–	–	–	–	–	–	–	–	9.0*	7.5	–	–	–	–	–	–	–	–	–	–	–	–	11.6*	–	–	–	–	–	14.0
15.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8.4*	–	9.6	11.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	15.0
16.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	11.7	–	–	9.5	10.4	–	–	–	–	–	–	–	–	–	–	–	–	16.0
17.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	10.5	9.5	8.5	10.4	10.1	11.6*	9.9*	–	9.3*	11.0*	8.3	17.0
18.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8.3*	–	–	–	–	–	–	–	–	–	–	–	18.0
19.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	19.0
20.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20.0

NOTES

1 Palo Verde Road

* Sample depth rounded to nearest foot

Ertec (formerly Fugro) Project Number 89-200
SCS Contract Number 53-8A02-0-00113

Ertec — The Earth Technology Corporation

BUCKEYE NUMBER 1 F.R.S.

PROFILE OF EMBANKMENT
MOISTURE CONTENT
Sheet 1 of 2
Figure C-2

APPENDIX D

PLASTICITY TESTS

CONTENTS:

1. TABLE OF LIQUID LIMIT, PLASTIC LIMIT, PLASTICITY INDEX AND SOIL CLASSIFICATION

2. SCATTER DIAGRAM OF PLASTICITY VS. LIQUID LIMIT

TABLE OF LIQUID LIMIT, PLASTIC LIMIT, PLASTICITY INDEX AND SOIL CLASSIFICATION [1]

BUCKEYE #1 F.R.S.

STATION	DEPTH (FT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL [2] CLASSIFICATION
693 + 75	4.6	28	20	8	SC
	8.6	NP	NP	NP	SM
	12.6	32	20	12	SC
	17.0	31	20	11	SC
698 + 00	3.5	36	22	14	SC
	7.0	36	22	14	SC
	12.6	39	24	15	SC
	17.0	28	23	5	SM
698 + 91 [3] (OUTLET)	9.0 From ℄ of Dike	25	23	2	SM
701 + 36 (CRACK)	6.0	34	21	13	SC
701 + 38 (CRACK)	6.0	34	21	13	SC
704 + 55.5 (OUTLET)	8.0 From ℄ of Dike	27	20	7	SC-SM
706 + 27 (OUTLET)	10.0 From ℄ of Dike	25	21	4	SC-SM
708 + 69 (CRACK)	5.0	35	20	15	SC
708 + 72 (CRACK)	5.0	41	23	18	SC
709 + 88	3.5	38	20	18	SC
	7.5	34	19	15	SC
	14.5	35	18	17	SC
	19.0	35	20	15	SC

STATION	DEPTH (FT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL CLASSIFICATION
710 + 53 (OUTLET)	9.0 From ℄ of dike	25	20	5	SC-SM
714 + 56 (OUTLET)	8.5 From ℄ of dike	32	20	12	SC
717 + 13.5 (OUTLET)	8.5 From ℄ of dike	34	22	12	SC
720 + 70	3.0	32	21	11	SC
	8.5	27	19	8	SC
	14.5	36	24	12	SC
	19.0	35	22	12	SC
724 + 85	4.0	32	22	10	SC
	7.0	25	19	6	SC-SM
	12.0	28	19	9	SC
	16.0	34	21	13	SC
729 + 93 (OUTLET)	6.5 From ℄ of dike	37	23	14	SC
732 + 80	4.0	33	22	11	SC
	8.0	37	22	15	SC
	12.0	40	23	17	SC
	16.0	33	24	9	SM
735 + 84	3.0	33	21	12	SC
	7.5	34	22	12	SC
	12.0	36	20	16	SC
	16.0	36	24	12	SC
740 + 00 (OUTLET)	5.0 From ℄ of dike	34	20	14	SC

STATION	DEPTH (FT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL CLASSIFICATION
744 + 52	2.5	35	22	13	SC
	8.0	41	24	17	SC
	12.5	39	23	16	SC
	16.0	39	24	15	SC
750 + 00 (OUTLET)	8.0 From ℄ of dike	33	21	12	SC
750 + 67	4.0	28	20	8	SC
	8.0	28	18	10	SC
	12.0	35	24	11	SM
	17.0	35	21	14	SC
753 + 78	3.0	26	22	4	ML
	8.0	26	22	4	ML
	12.0	41	25	16	SC
	16.5	28	22	6	SC-SM
758 + 00	3.0	NP	NP	NP	ML
	8.0	44	21	23	SC
	12.0	29	22	7	SC-SM
	16.5	42	22	20	SC
760 + 00 (OUTLET)	25.0 From ℄ of dike	29	20	9	SC
769 + 00	4.0	42	26	16	SM
	8.0	31	21	10	SC
	12.0	40	21	19	SC
	16.0	36	23	13	SC
770 + 00 (OUTLET)	25.0 From ℄ of dike	26	19	7	SC-SM

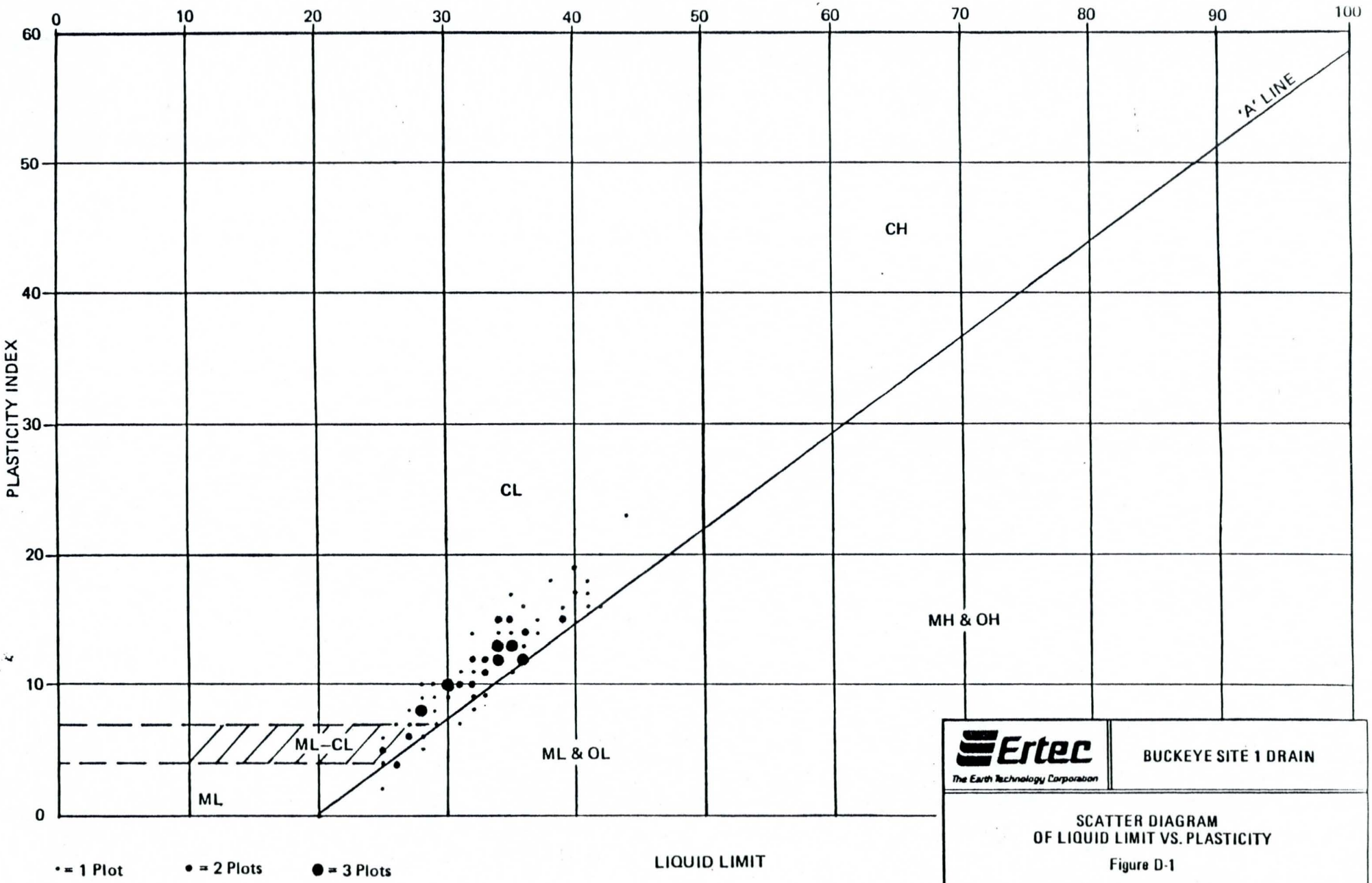
STATION	DEPTH (FT)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL CLASSIFICATION
774 + 65	4.0	29	19	10	SC
	8.0	25	20	5	SC-SM
	12.0	27	21	6	SC-SM
	17.0	30	20	10	SC
780 + 00 (OUTLET)	6.0 From ℄ of dike	32	20	12	SC
783 + 78	2.5	30	20	10	SC
	8.0	27	21	6	SC-SM
	12.0	32	18	14	SC
	17.0	29	21	8	SC
787 + 82	2.5	34	19	15	SC
	8.5	33	22	11	SC
	13.5	34	22	12	SC
	19.0	28	20	8	SC
790 + 00 (OUTLET)	8.0 From ℄ of dike	35	22	13	SC
792 + 77	2.0	NP	NP	NP	SP-SM
	8.0	30	20	10	SC
	12.0	36	24	12	SC
	17.0	32	23	9	SC
796 + 75	3.0	32	24	8	SM
	8.5	30	21	9	SC
	12.0	NP	NP	NP	SM
	17.2	31	24	7	SM
800 + 00 (OUTLET)	7.0 From ℄ of dike	31	21	10	SC

[1] Plasticity and liquid limits were determined by ASTM methods D423 and D424.

[2] The listed classification is a composite of both the field classification and laboratory plasticity tests. No laboratory gradation tests were performed on the samples.

[3] Samples were collected 0.5 feet above the outlet excavation floor.

SCATTER DIAGRAM OF LIQUID LIMIT VS. PLASTICITY INDEX
BUCKEYE NO. 1 F.R.S.



Ertec
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BUCKEYE SITE 1 DRAIN

SCATTER DIAGRAM
OF LIQUID LIMIT VS. PLASTICITY

Figure D-1

Ertec (formerly Fugro) Project Number 80-200

APPENDIX E

DRAINFILL BID ITEM #5 SIEVE ANALYSIS

CONTENTS:

1. AVERAGE GRADATION RESULTS
2. AVERAGE GRADATION CURVE
3. GRADATION CURVES

SIEVE ANALYSIS

Location Buckeye FRS, Site 1 Drain — Site No. #1 Drain

Watershed Buckeye — Subwatershed

Contract No. 53-8A02-0-00113 — Contractor Tierra West Contracting, Inc.

Tested By L.L. Crain — Date — Checked By

Source of Material Watson Pit — Sampled Depth — to

Number of tests performed: 135

MATERIALS TESTED: Concrete Aggregate — Drain Fill — Filter

BID ITEM NO. #5 Drainfill (Average) — REFERENCE CONTRACT SPEC. 24

A. COARSE AGGREGATE

Weight Container and dry sample

Weight of Container

Weight of total dry sample W

Sieve Size (in.)	Weight Sieve Plus Retained Material (1)	Weight Sieve (2)	Weight Retained (1)-(2) (3)	Percent Retained (Total Sample) $\left[\frac{(3)}{W}\right]$ 100 (4)	CUMULATIVE Percent Retained Subtotal (4) (5)	CUMULATIVE Percent Passing 100% - (5) (6)	Specification Limits (Passing)
4							
3 1/2							
3							
2 1/2							
2							
1 1/2							100
1					8.6	91.4	80-100
3/4					20.3	79.7	70-90
1/2							
3/8					44.4	55.6	50-60
No. 4					58.2	41.8	35-50
Pan							

This form is based on form SCS-ENG-535 with minor changes.

FUGRO

B. FINE AGGREGATES

Percent passing No. 4 (from part A on reverse side) P _____

Weight of pan and dry sample _____

Weight of pan _____

Weight of dry fine aggregate sample Wr _____

Sieve Size (in.)	Weight Sieve Plus Retained Material (1)	Weight Sieve (2)	Weight Retained (1)-(2) (3)	Percent Retained (Total Sample) $\left[\frac{(3)}{W_f}\right] P$ (4)	CUMULATIVE Percent Retained Subtotal (4) (5)	CUMULATIVE Percent Passing 100% - (5) (6)	Specification Limits (Passing)
					58.2	41.8	
No. 8					68.0	32.0	25-40
No. 16							
No. 30					85.9	14.1	10-25
No. 100							
No. 200					97.7	2.3	0-6.5
Pan							

MATERIALS FINER THAN 200 SIEVE BY WASHING

1. Weight of pan plus moist sample _____ grams

2. Weight of pan plus dry sample _____ grams

3. Weight of pan _____ grams

4. Weight of dry sample (original) (2)-(3) _____ grams

5. Weight of pan plus dry sample (after washing) _____ grams

6. Weight of pan _____ grams

7. Weight of dry sample (after washing) (5)-(6) _____ grams

8. Percent of material finer than No. 200 sieve

   [(4)-(7)/(4)] 100 _____ %

1/ Exclude percent retained on 200 sieve and material in pan.

FIGRO

This form is based on form SCS-ENG-535 with minor changes.

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Average

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 565+00
FIELD SAMPLE NO.: 1	DEPTH:	GEOLOGIC ORIGIN:	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 9/8/80
SYMBOL:	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{10} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 566+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
2		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/9/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

GPO : 1971 O - 450-747

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 567+50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
3		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/9/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain

SAMPLE LOCATION: Watson Pit Sta. 570+00

FIELD SAMPLE NO: 4

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

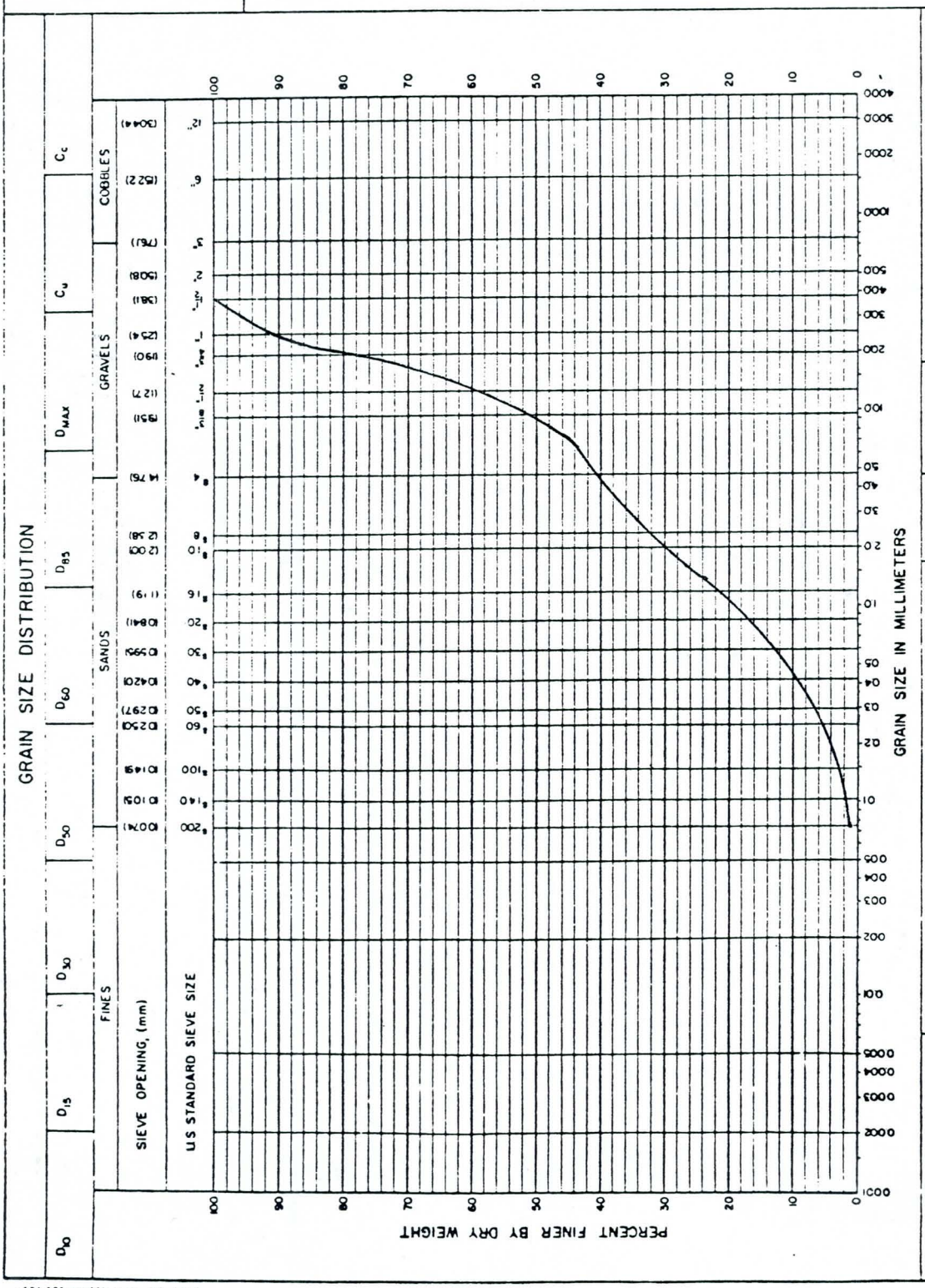
TESTED AT: Site

APPROVED BY:

DATE: 9/10/80

SYMBOL:

DESCRIPTION: Drain Fill



SCS–ENG–353A
Rev. 11–71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit
Sta. 570+00-590+71 Drain Outlets

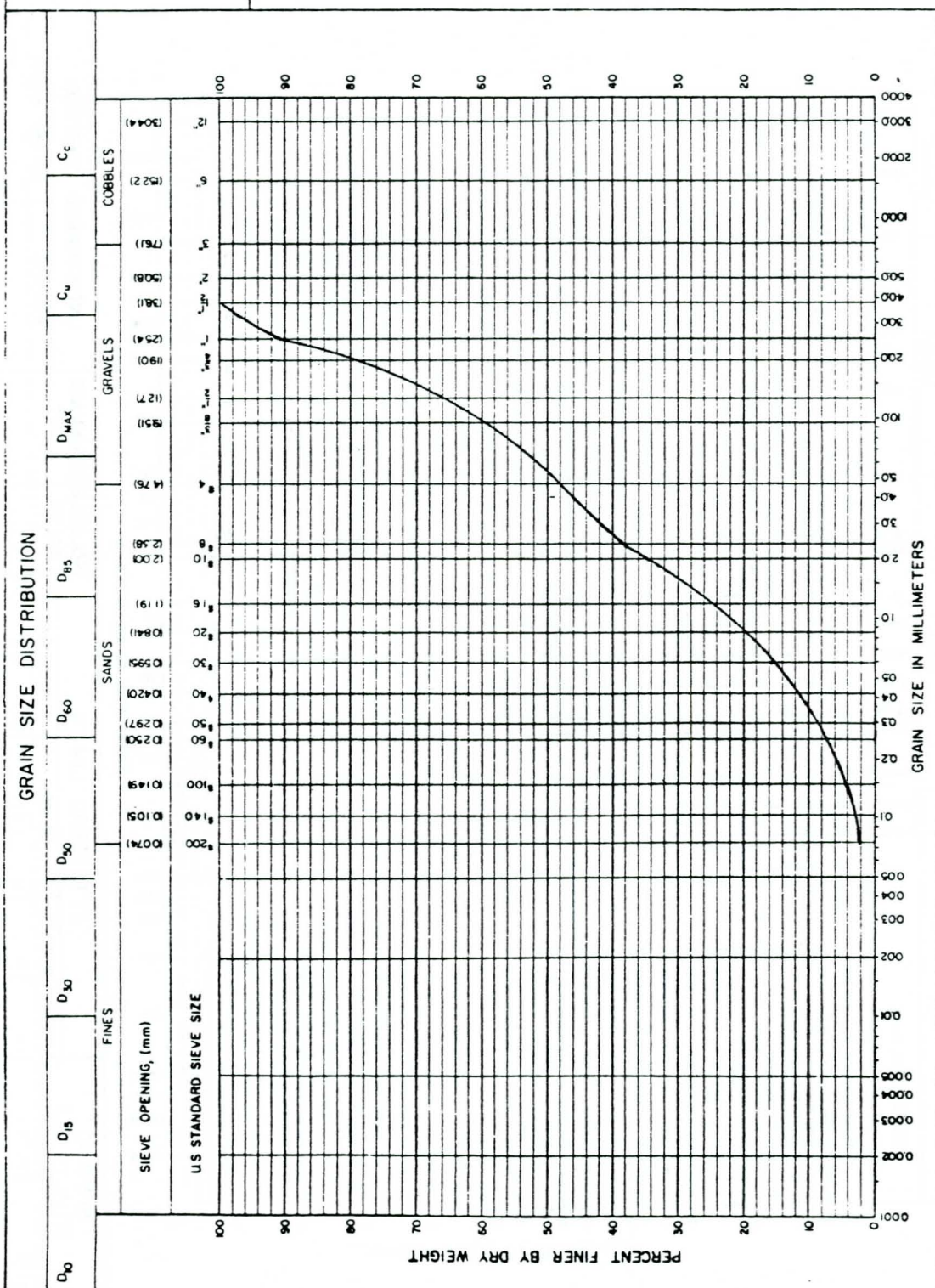
FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
5		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/24/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION
MOISTURE %
DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS
NATURAL MOISTURE LL PI
AIR DRY LL PI
OVEN DRY LL PI

SPECIFIC GRAVITY (G_s)
(+) #4
(-) #4

REMARKS:

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Rev. 11-71

MATERIALS TESTING REPORT

U. S. DEPARTMENT of AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION

LABORATORY NO. ____

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Sta. 572+50 Watson Pit

FIELD SAMPLE NO: 6

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

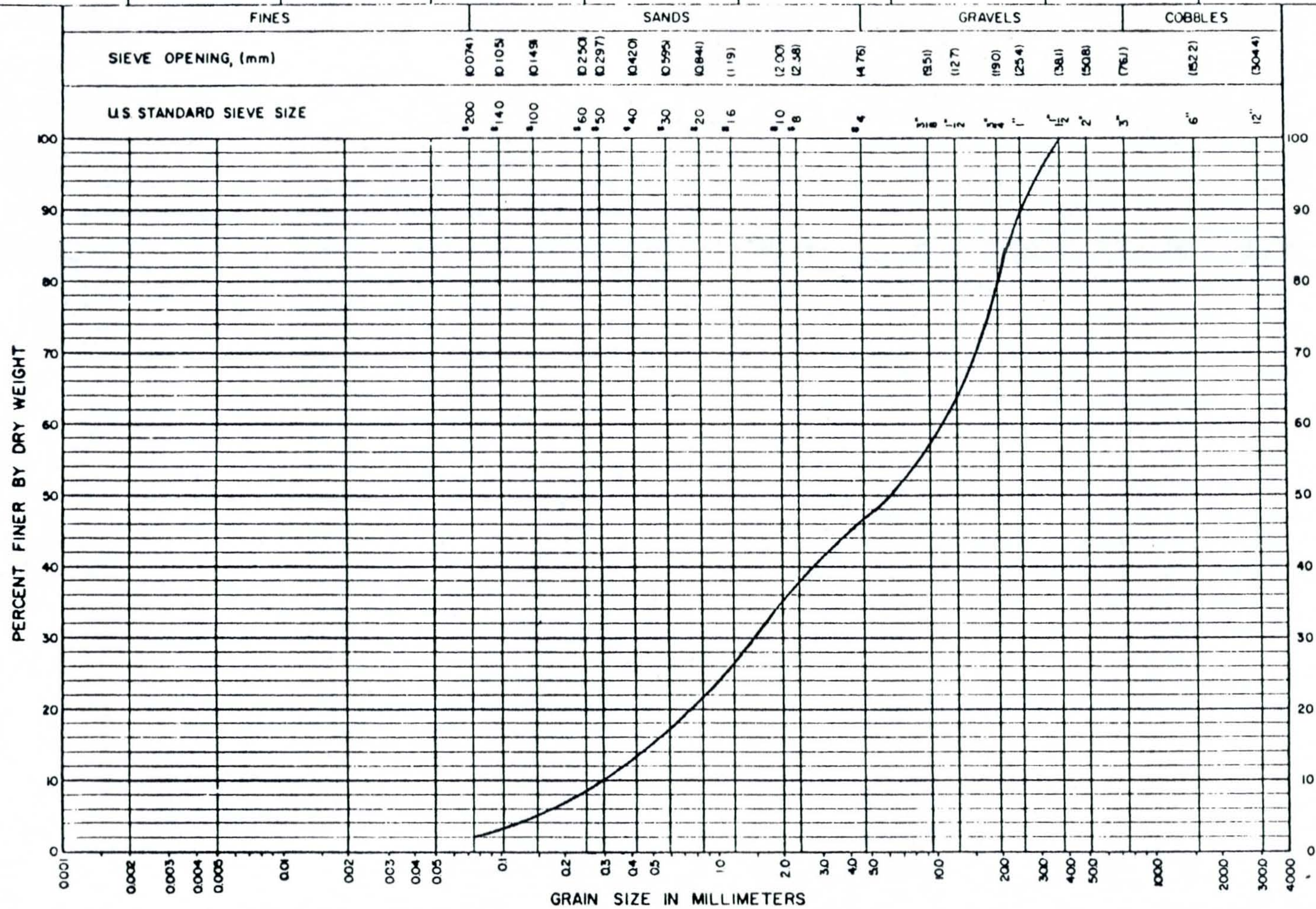
DATE: 9/12/80

SYMBOL:

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10}	D_{15}	D_{30}	D_{50}	D_{60}	D_{85}	D_{MAX}	C_u	C_c



SPECIFIC GRAVITY (G_s)		ATTERBERG LIMITS						SOLUBLE SALTS	SHRINKAGE LIMIT	UNDISTURBED CONDITION	
		NATURAL MOISTURE		AIR DRY		OVEN DRY				MOISTURE	DRY UNIT WEIGHT
(-) #4	(+) #4	LL	PI	LL	PI	LL	PI	%	%	%	g/cc pcf

REMARKS:

GPO : 1971 O - 450-344

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain

SAMPLE LOCATION: Watson Pit Sta. 575+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
7		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/15/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{95} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

GPO : 1971 O - 455-424

SCS–ENG–353A
Rev. 11–71

LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 577+50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
8			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 9/16/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{10} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION			SOLUBLE SALTS %	SHRINKAGE LIMIT %
MOISTURE %	DRY UNIT WEIGHT g/cc	pcf		

ATTERBERG LIMITS	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4 | (+) #4

REMARKS:

USDA SCS HYATTSVILLE MD 1980

GPO : 1971 O - 450-349

SCS–ENG–353A
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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 580+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
9			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		9/16/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) 0.595 0.420 0.297 0.250 0.149 0.105 (0.074)

U.S. STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

GRAIN SIZE IN MILLIMETERS: 100 90 80 70 60 50 40 30 20 10 0 — 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 005 004 003 200 100 0005 0004 0003 0002 1000

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION: MOISTURE % | DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI | AIR DRY LL, PI | OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4 | (−) #4

REMARKS:

GPO : 1971 O - 450-344

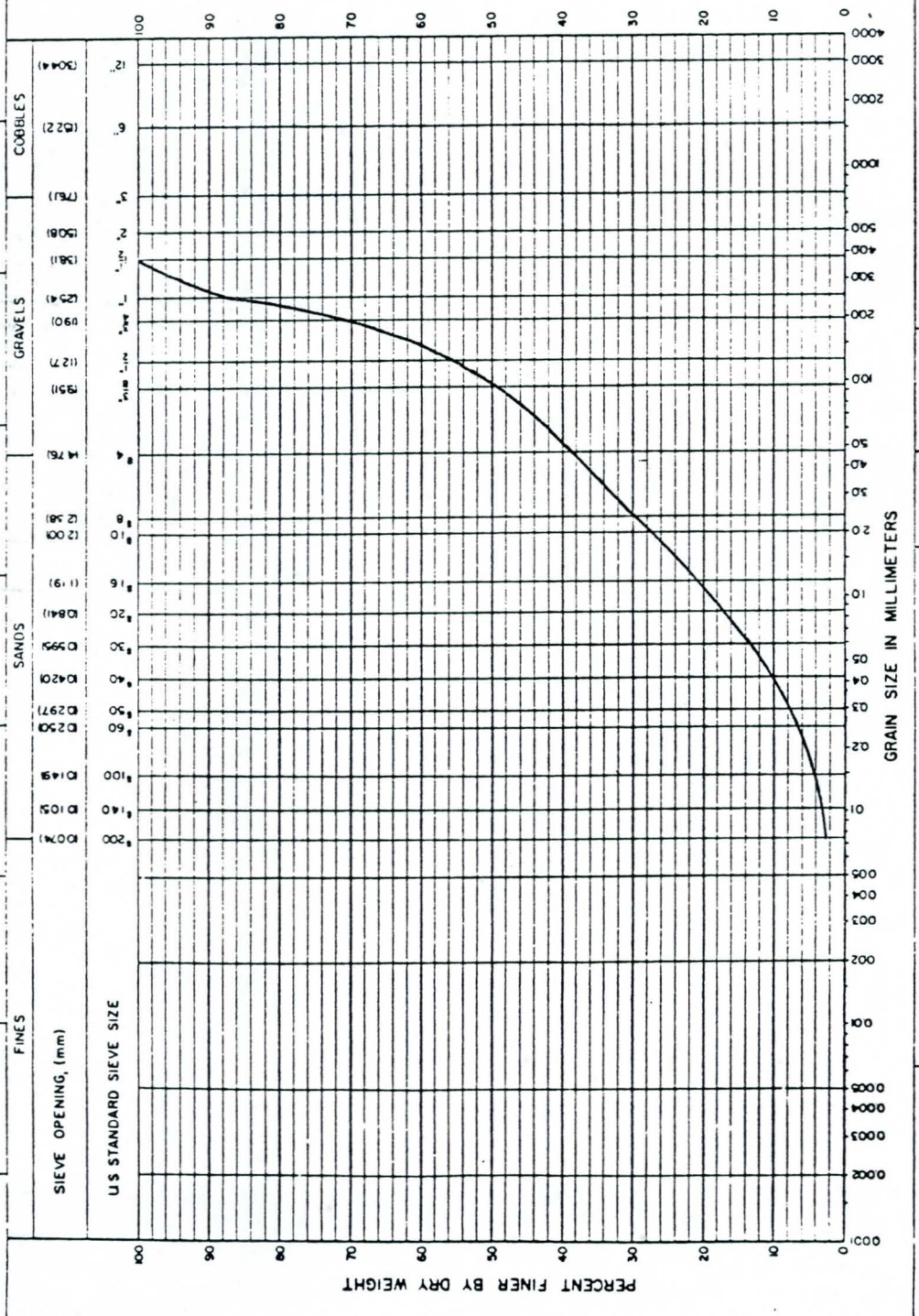
SCS–ENG–353A
Rev. 11–71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Sta. 582+50 Watson Pit	
FIELD SAMPLE NO: 10	DEPTH:	GEOLOGIC ORIGIN:	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 9/18/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4; (−)#4

REMARKS:

GPO : 1971 O - 450-24

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain

SAMPLE LOCATION: Watson Pit Sta. 585+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
11		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/18/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

GPO 1971 O - 450-34

SCS-ENG-353A
Rev. 11-71

LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 587+50

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
12			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/18/80

SYMBOL

DESCRIPTION: Drain Fill

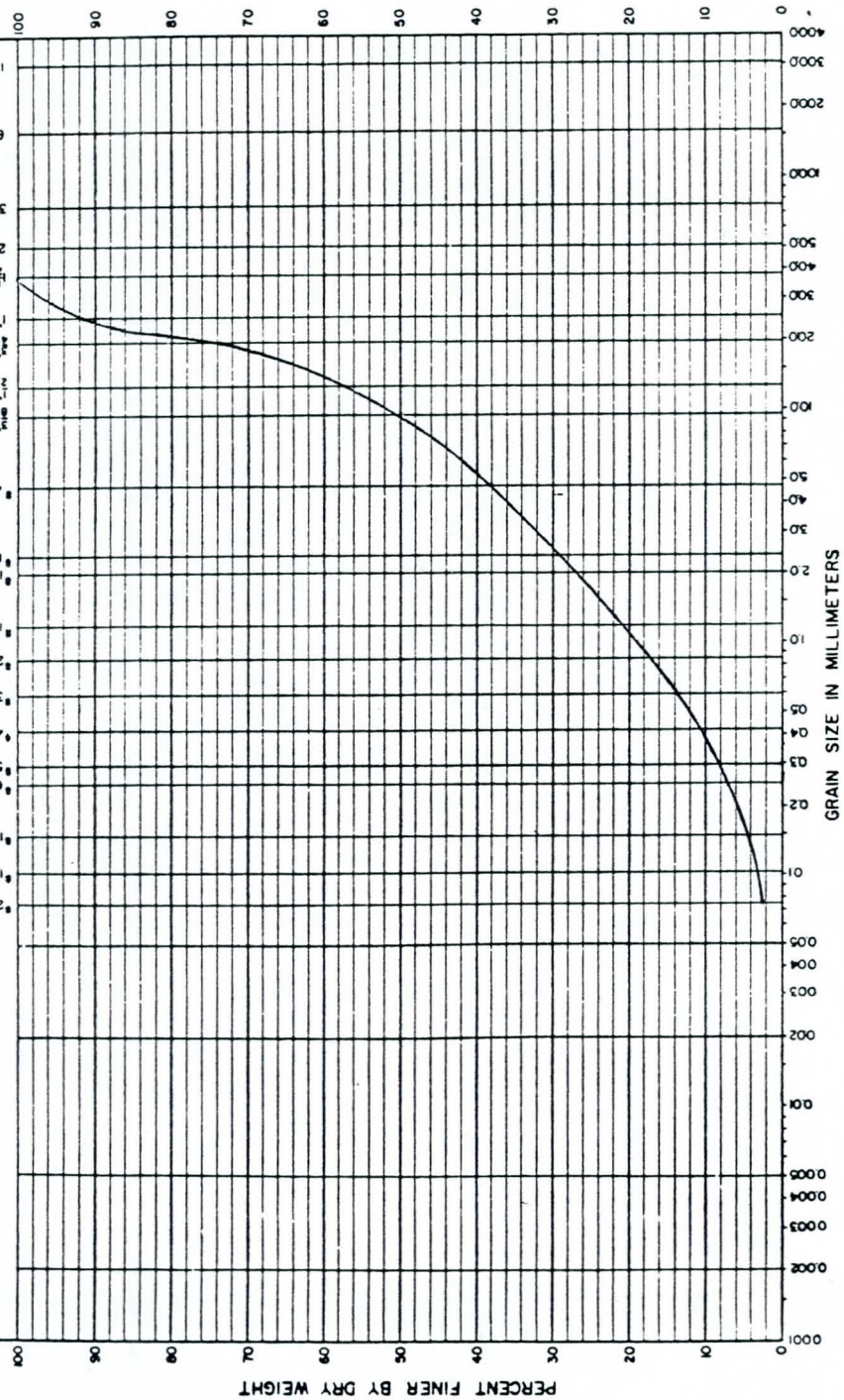
GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 590+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
13		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/18/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

GPO 1971 O - 455-241

SCS-ENG-353A
Rev. 11-71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit
Sta. 592+10-596+54 (Drain Outlets)

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
14			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/19/80
SYMBOL	DESCRIPTION: Drain Fill		

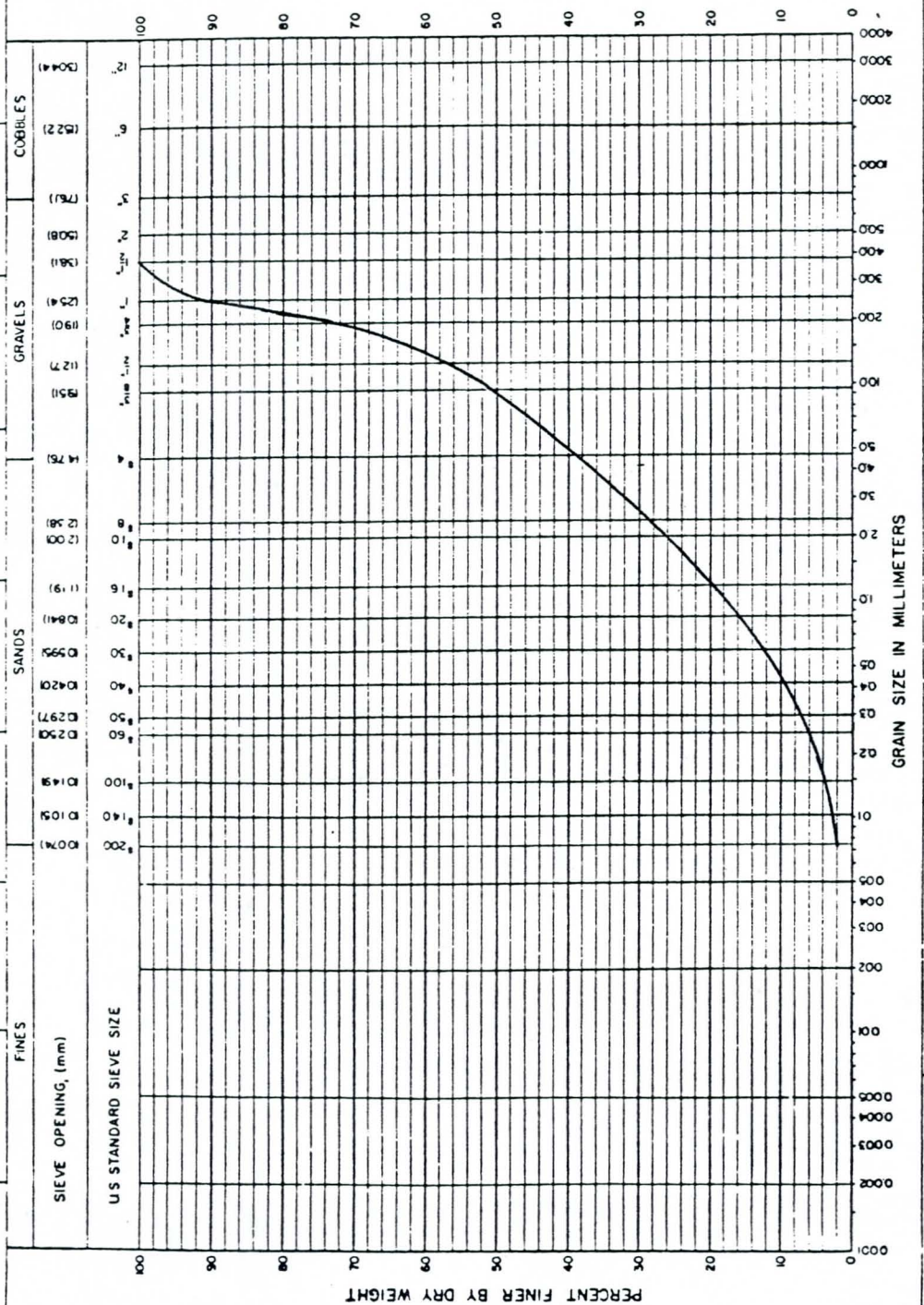
GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{50} | D_{30} | D_{60} | D_{95} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-)#4, (+)#4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain		SAMPLE LOCATION: Watson Pit, Sta. 592+50, 593+75, 594+00	
FIELD SAMPLE NO: 15	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Trench	APPROVED BY	DATE: 9/22/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) (0.599) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 005 004 003 002 001 0005 0004 0003 0002 0001

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION: MOISTURE (%); DRY UNIT WEIGHT (g/cc, pcf)

SOLUBLE SALTS (%) | SHRINKAGE LIMIT (%)

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

GPO : 1971 O - 450-34

SCS—ENG—353A
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LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 595+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
16	--		
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 9/19/80

SYMBOL | DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain			SAMPLE LOCATION: Watson Pit Sta. 597+50
FIELD SAMPLE NO: 17	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/19/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm): (0074) (0149) (0297) (0420) (0595) (0841) (1.19) (2.00) (2.38) (4.76) (9.51) (12.7) (19.0) (25.4) (38.1) (50.8) (76.1) (152) (304.4)

US STANDARD SIEVE SIZE: #200 #140 #100 #60 #50 #40 #30 #20 #16 #10 #8 #4 3/8" 1/2" 1" 2" 3" 6" 12"

GRAIN SIZE IN MILLIMETERS: 005 004 003 002 .100 .0005 .0004 .0003 .0002 .1000

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 .100 .0005 .0004 .0003 .0002 .1000

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 598+51-609+40 (Drain Outlets)

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
18			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/8/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-) #4; (+) #4

REMARKS:

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LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 600+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
19			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/20/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

12" (304.4) | 6" (152.2) | 3" (76.1) | 2" (50.8) | 1½" (38.1) | 1" (25.4) | ¾" (19.0) | ½" (12.7) | ⅜" (9.51) | #4 (4.76) | #8 (2.38) | #10 (2.00) | #16 (1.19) | #20 (.0841) | #30 (.0595) | #40 (.0420) | #50 (.0297) | #60 (.0250) | #100 (.0149) | #140 (.0105) | #200 (.0074)

GRAIN SIZE IN MILLIMETERS

100 90 80 70 60 50 40 30 20 10 0

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 200 300 400 500 1000 2000 3000 4000 5000 6000 8000 10000

PERCENT FINER BY DRY WEIGHT

100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

USDA SCS HYATTSVILLE, MD. 1968

GPO : 1971 O - 450-34

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 602+50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
20		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/22/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 605+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
21			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/22/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

GPO : 1971 O - 450-344

SCS–ENG–353A
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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 607+50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
22			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/23/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_C | C_U | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (−) #4

REMARKS:

FORM SCS MYATTSVILLE MD. 1964

GPO : 1971 O - 450-349

SCS-ENG-353A
Rev. 11-71

LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 610+00
FIELD SAMPLE NO.: 23	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/23/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{95} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

12" (304.4) | 6" (152.2) | 3" (76.1) | 2" (50.8) | 1½" (38.1) | 1" (25.4) | ¾" (19.0) | ½" (12.7) | ⅜" (9.51) | #4 (4.76) | #8 (2.38) | #10 (2.00) | #16 (1.19) | #20 (0.841) | #30 (0.595) | #40 (0.420) | #50 (0.297) | #60 (0.250) | #100 (0.149) | #140 (0.105) | #200 (0.074)

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 01 005 004 003 002 001 0005 0004 0003 0002 0001

UNDISTURBED CONDITION: MOISTURE (%) | DRY UNIT WEIGHT (g/cc, pcf)

SHRINKAGE LIMIT (%)

SOLUBLE SALTS (%)

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI) | AIR DRY (LL, PI) | OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4 | (-)#4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 610+00-615+69.5(Drain Outlets)

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
24			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/23/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{95} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) (0.595) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001 .0005 .0004 .0003 .0002 .0001

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 612+50

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
25			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		9/23/80
SYMBOL	**DESCRIPTION** Drain Fill		

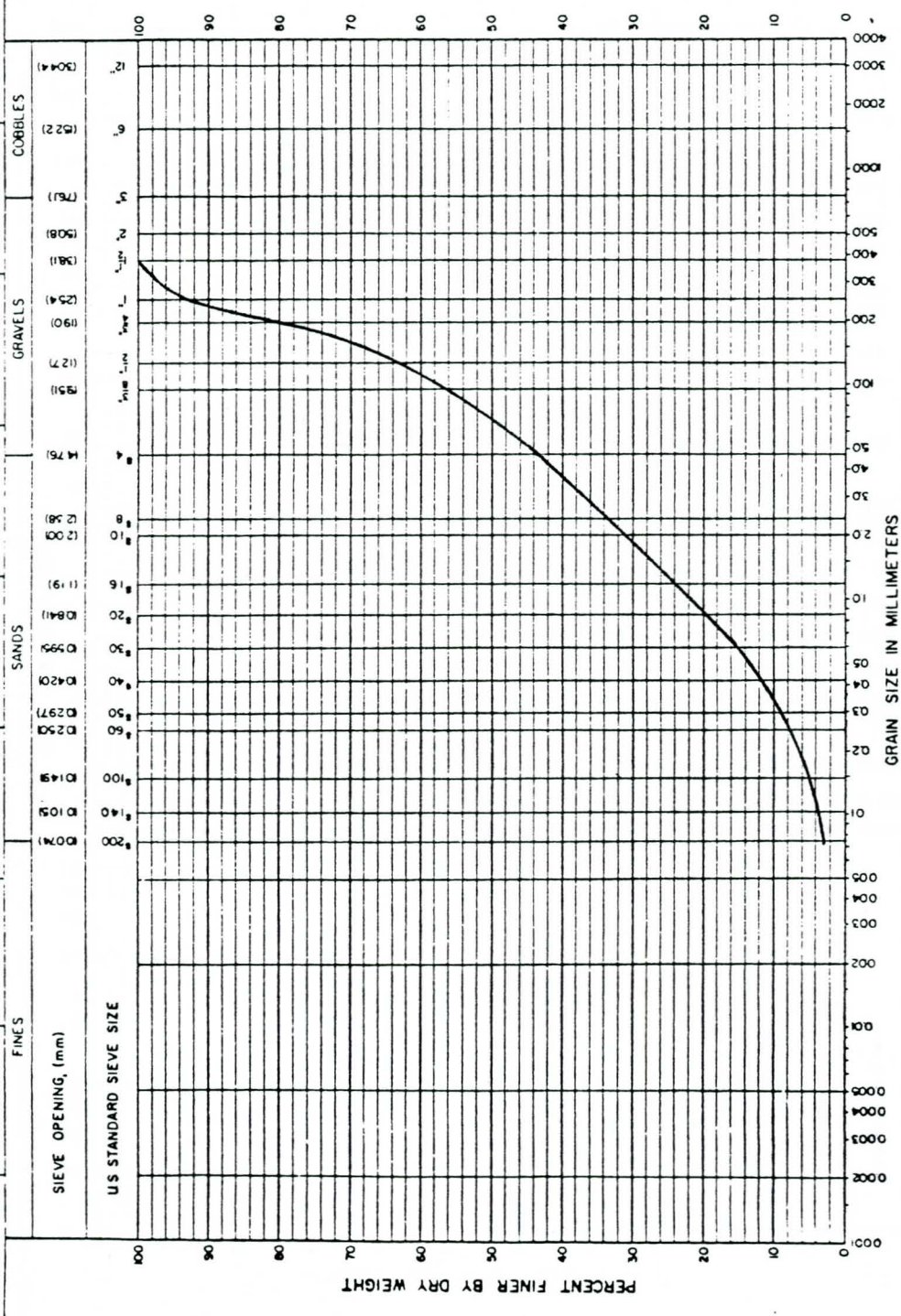
GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-) #4; (+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 615+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
26			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/24/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s): (+)#4; (-)#4

REMARKS:

GPO 1971 O - 450-347

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 617+50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
27		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/24/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(0074) #200 (0.105) #140 (0.149) #100 (0.250) #60 (0.297) #50 (0.420) #40 (0.595) #30 (0.841) #20 (1.19) #16 (2.00) #10 (4.76) #4 (9.51) 3/8" (12.7) 1/2" (19.0) 3/4" (25.4) 1" (38.1) 1 1/2" (50.8) 2" (76.1) 3" (152.2) 6" (304.4) 12"

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001 .0005 .0004 .0003 .0002 .0001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

USDA SCS HYATTSVILLE, MD. 1968

GPO : 1971 O - 450-34-

SCS–ENG–353A
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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 518+53-640+00 (Drain Outlets)

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
28			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/25/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (−) #4

REMARKS:

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LABORATORY NO. _____

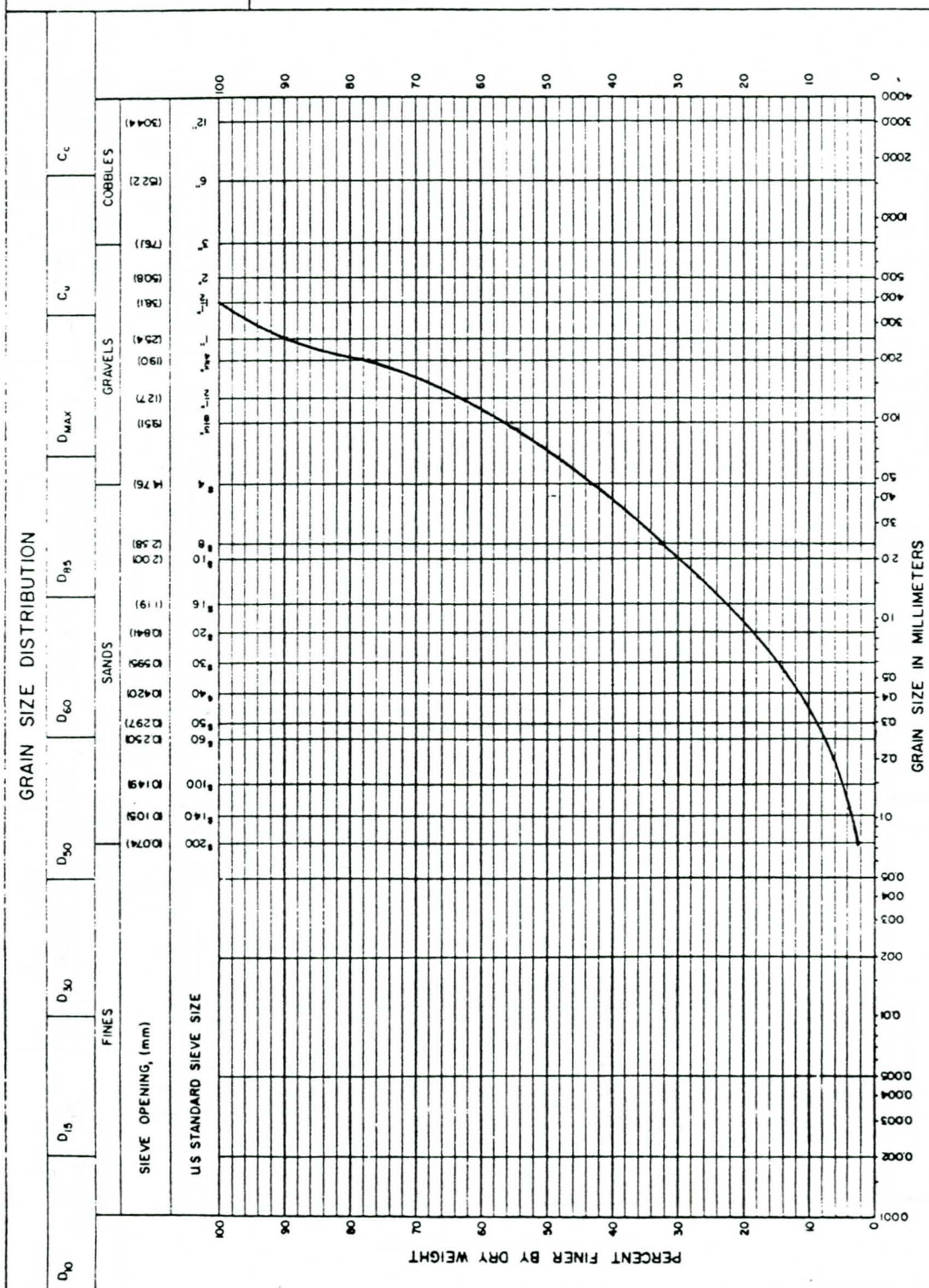
MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain , Arizona

SAMPLE LOCATION: Watson Pit Sta. 620+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
29			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		9/24/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT: %

SOLUBLE SALTS: %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 622+50

FIELD SAMPLE NO.: 30

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

DATE: 9/25/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{95} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

(0074) #200 (0.149) #100 (0.105) #140 (0.297) #50 (0.250) #60 (0.420) #40 (0.595) #30 (0.841) #20 (1.19) #16 (2.38) #8 (4.76) #4 (9.51) 3/8" (12.7) 1/2" (19.0) 3/4" (25.4) 1" (38.1) 1 1/2" (50.8) 2" (76.1) 3" (152) 6" (304) 12"

GRAIN SIZE IN MILLIMETERS

0.005 0.01 0.02 0.04 0.1 0.2 0.3 0.4 1 2 3 4 10 20 30 40 100 200 300 400 1000 2000 3000 4000

PERCENT FINER BY DRY WEIGHT

100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION			
MOISTURE	%	DRY UNIT WEIGHT	g/cc
			pcf
SOLUBLE SALTS	%	SHRINKAGE LIMIT	%

ATTERBERG LIMITS	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)	(+) #4	(-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 625+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
31		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/26/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

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Rev. 11-71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Watson Pit Sta. 627+50

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
32			
TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		9/26/80
SYMBOL	DESCRIPTION	Drain Fill	

GRAIN SIZE DISTRIBUTION

D_{90} D_{10} D_{30} D_{30} D_{60} D_{15} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

GPO 1971 O - 450-[illegible]

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LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 630+00

FIELD SAMPLE NO.: 33

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

DATE: 9/29/80

SYMBOL:

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

GPO : 1971 O - 450-

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LABORATORY NO _____

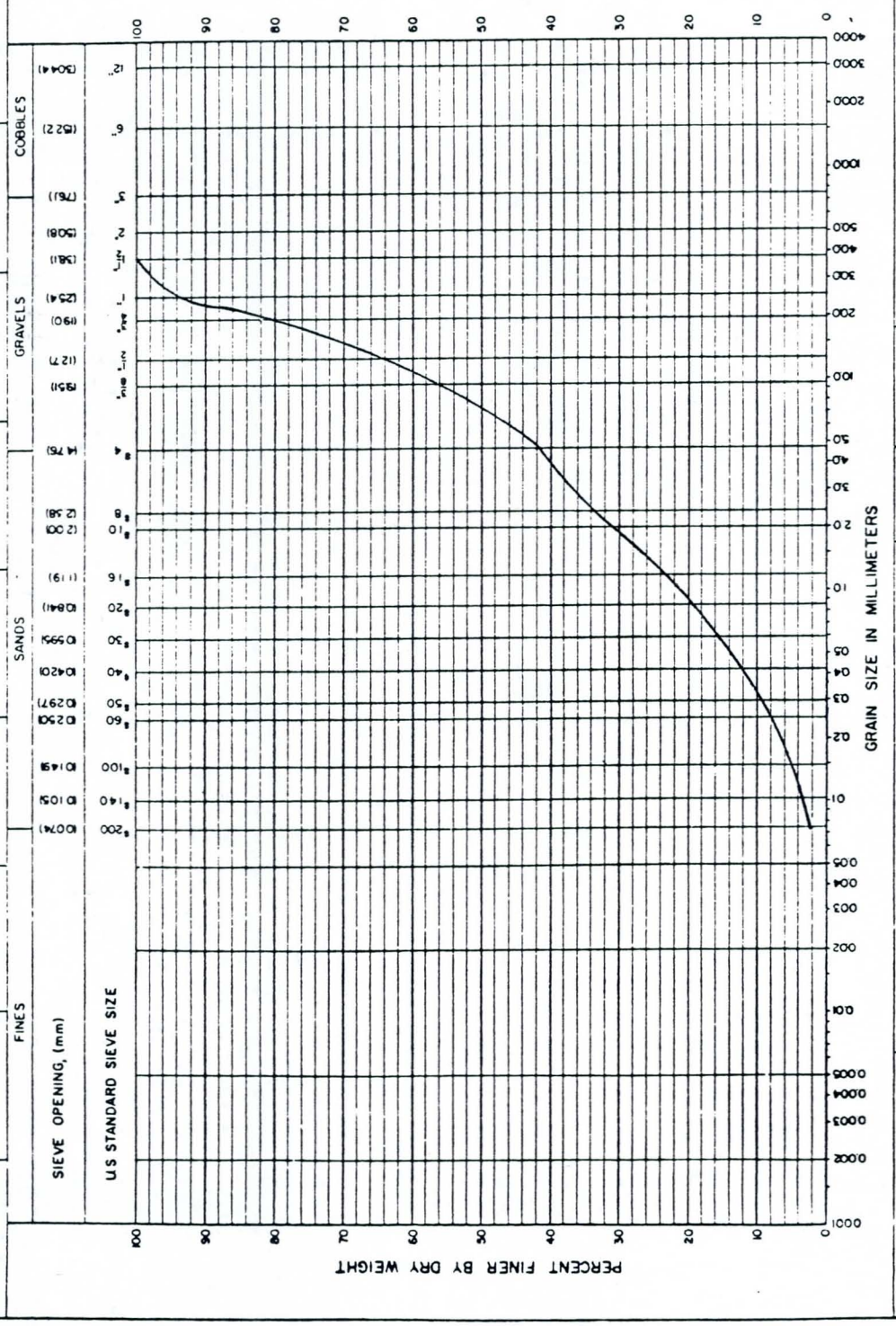
MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 632+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
34			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/29/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION



C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (–) #4

REMARKS:

USDA SCS HYATTSVILLE MD 1968

GPO : 1971 O - 450-34

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit, Sta. 634+00
FIELD SAMPLE NO: 35	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/29/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_C | C_U | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

12" (304.4) | 6" (152.2) | 3" (76.1) | 2" (50.8) | 1½" (38.1) | 1" (25.4) | ¾" (19.0) | ½" (12.7) | ⅜" (9.51) | #4 (4.76) | #8 (2.38) | #10 (2.00) | #16 (1.19) | #20 (.841) | #30 (.595) | #40 (.420) | #50 (.297) | #60 (.250) | #100 (.149) | #140 (.105) | #200 (.0074)

100 90 80 70 60 50 40 30 20 10 0

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 01 005 004 003 002 001 0005 0004 0003 0002 0001

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (−) #4

REMARKS:

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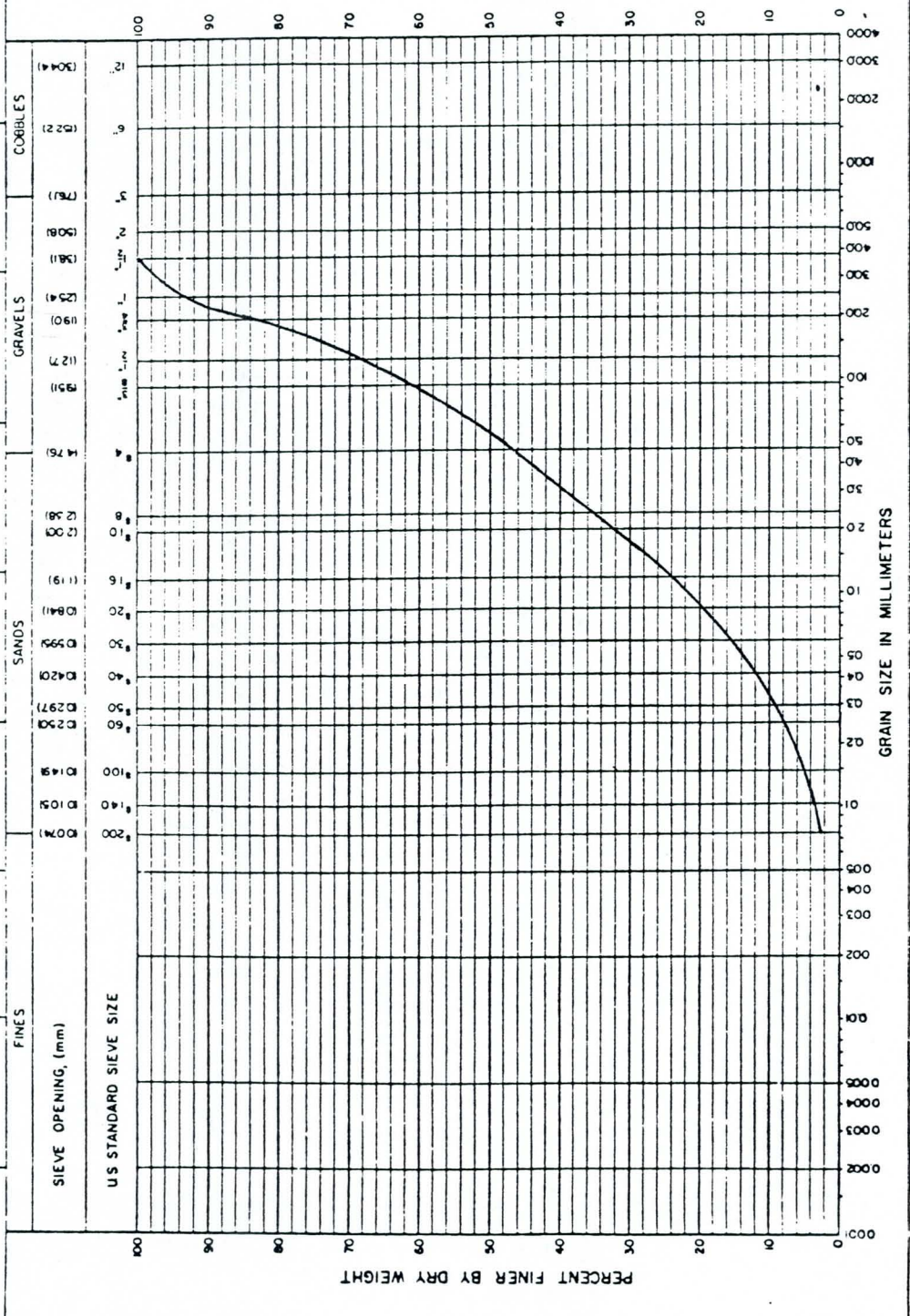
LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Watson Pit, Sta. 636+00	
FIELD SAMPLE NO: 36	DEPTH: --	GEOLOGIC ORIGIN:	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 9/30/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

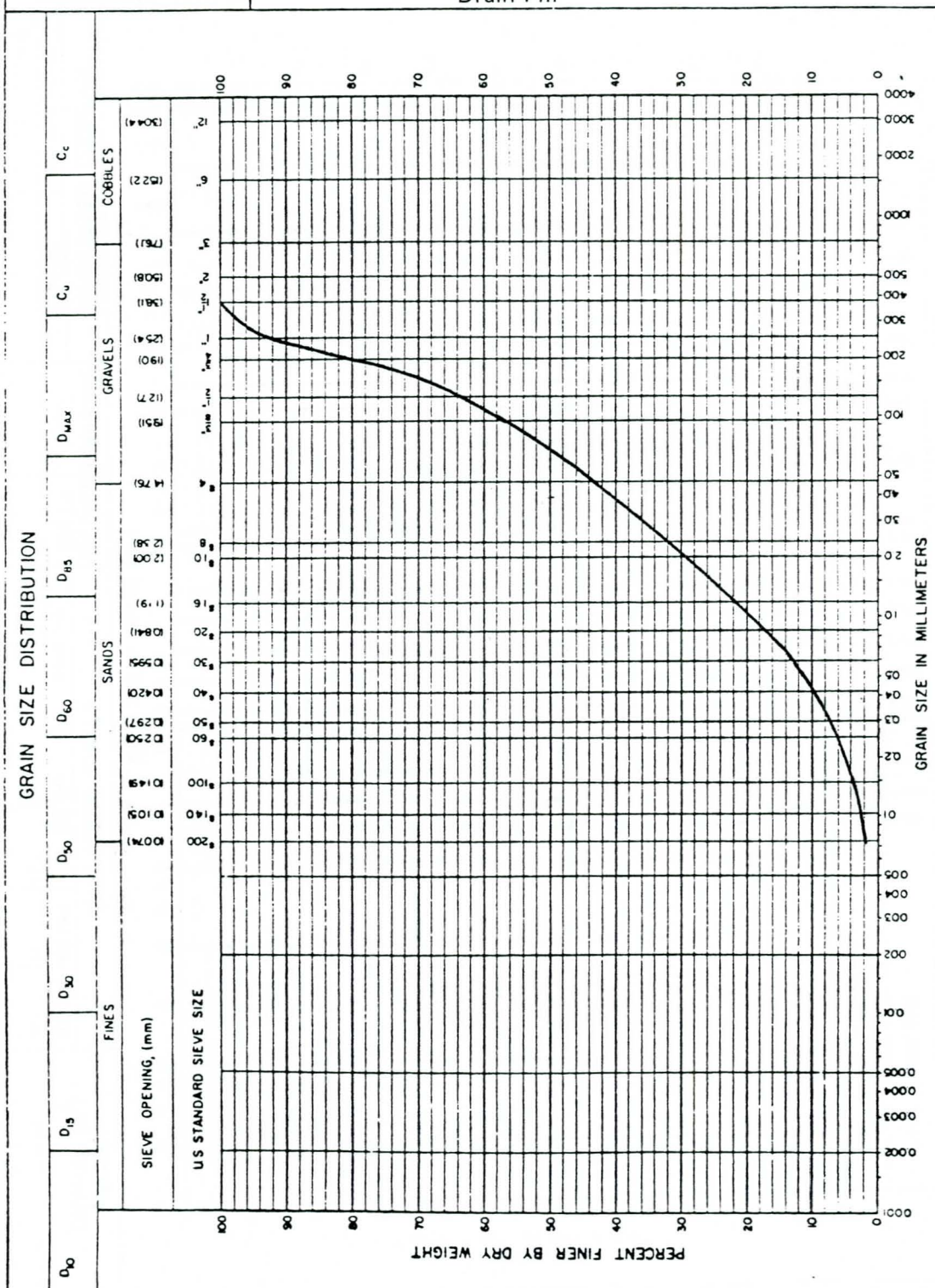
MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 638+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
37			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		9/30/80
SYMBOL	**DESCRIPTION**	Drain Fill	

GRAIN SIZE DISTRIBUTION



C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

UNDISTURBED CONDITION			
MOISTURE	%	DRY UNIT WEIGHT	g/cc
			pcf

SHRINKAGE LIMIT	%
SOLUBLE SALTS	%

ATTERBERG LIMITS	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)	(+) #4	
	(-) #4	

REMARKS:

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LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 640+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
38			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/1/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 642+ 50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
39			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/1/80
SYMBOL	**DESCRIPTION** Drain Fill		

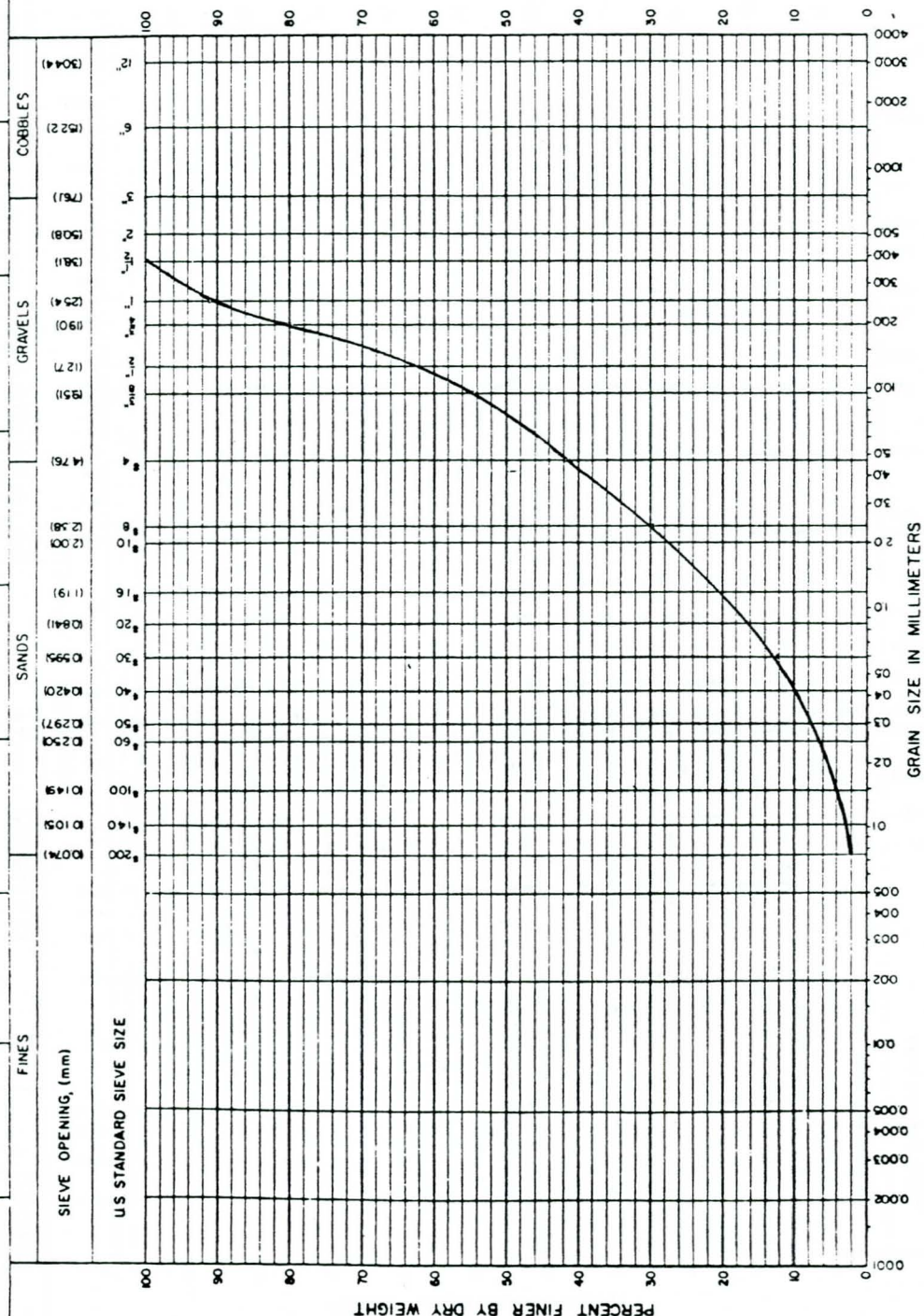
GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 645+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
40			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/2/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(+) #4	(-) #4

REMARKS:

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Rev. 11-71

LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 545+00-670+00 (Drain Outlets

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
41			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/6/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{85} | D_{60} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

SCS–ENG–353A
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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 647+50

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
42	-		
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/6/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4; (-)#4

REMARKS:

GPO : 1971 O - 450-34-

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 650+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
43			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/7/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{50} | D_{10} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

12"	(304.4)	
6"	(152.2)	
3"	(76.1)	
2"	(50.8)	
1½"	(38.1)	
1"	(25.4)	
¾"	(19.0)	
½"	(12.7)	
⅜"	(9.51)	
#4	(4.76)	
#8	(2.38)	
#10	(2.00)	
#16	(1.19)	
#20	(0.841)	
#30	(0.595)	
#40	(0.420)	
#50	(0.297)	
#60	(0.250)	
#100	(0.149)	
#140	(0.105)	
#200	(0.074)	

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION		
MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SHRINKAGE LIMIT	SOLUBLE SALTS
%	%

ATTERBERG LIMITS								
NATURAL MOISTURE		PI	AIR DRY		PI	OVEN DRY		PI
LL			LL			LL		

SPECIFIC GRAVITY (G_s)	
(+) #4	(-) #4

REMARKS:

GPO : 1971 O - 450-34

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 652+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
44			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/7/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(.0074) #200 | (.0105) #140 | (.0149) #100 | (.0297) #50 | (.0420) #40 | (.0595) #30 | (.0841) #20 | (.119) #16 | (.200) #10 | (.250) #8 | (.476) #4 | (.951) 3/8" | (1.27) 1/2" | (1.90) 3/4" | (2.54) 1" | (3.81) 1 1/2" | (5.08) 2" | (7.62) 3" | (15.2) 6" | (30.4) 12"

PERCENT FINER BY DRY WEIGHT

100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 005 004 003 002 001 0005 0004 0003 0002 0001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(+) #4	(-) #4

REMARKS:

GPO 1971 O - 450-347

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 654+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
45			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/7/80
SYMBOL	**DESCRIPTION**	Drain Fill	

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{50} | D_{10} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Watson Pit Sta. 656+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
46			
TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		16/8/80
SYMBOL	DESCRIPTION Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION — MOISTURE % — DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS — NATURAL MOISTURE LL, PI — AIR DRY LL, PI — OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s) (+) #4 (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 658+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
47			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/8/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.00) (1.19) (0.841) (0.595) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 005 004 003 002 001 000

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS

NATURAL MOISTURE		AIR DRY		OVEN DRY	
LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 660+50

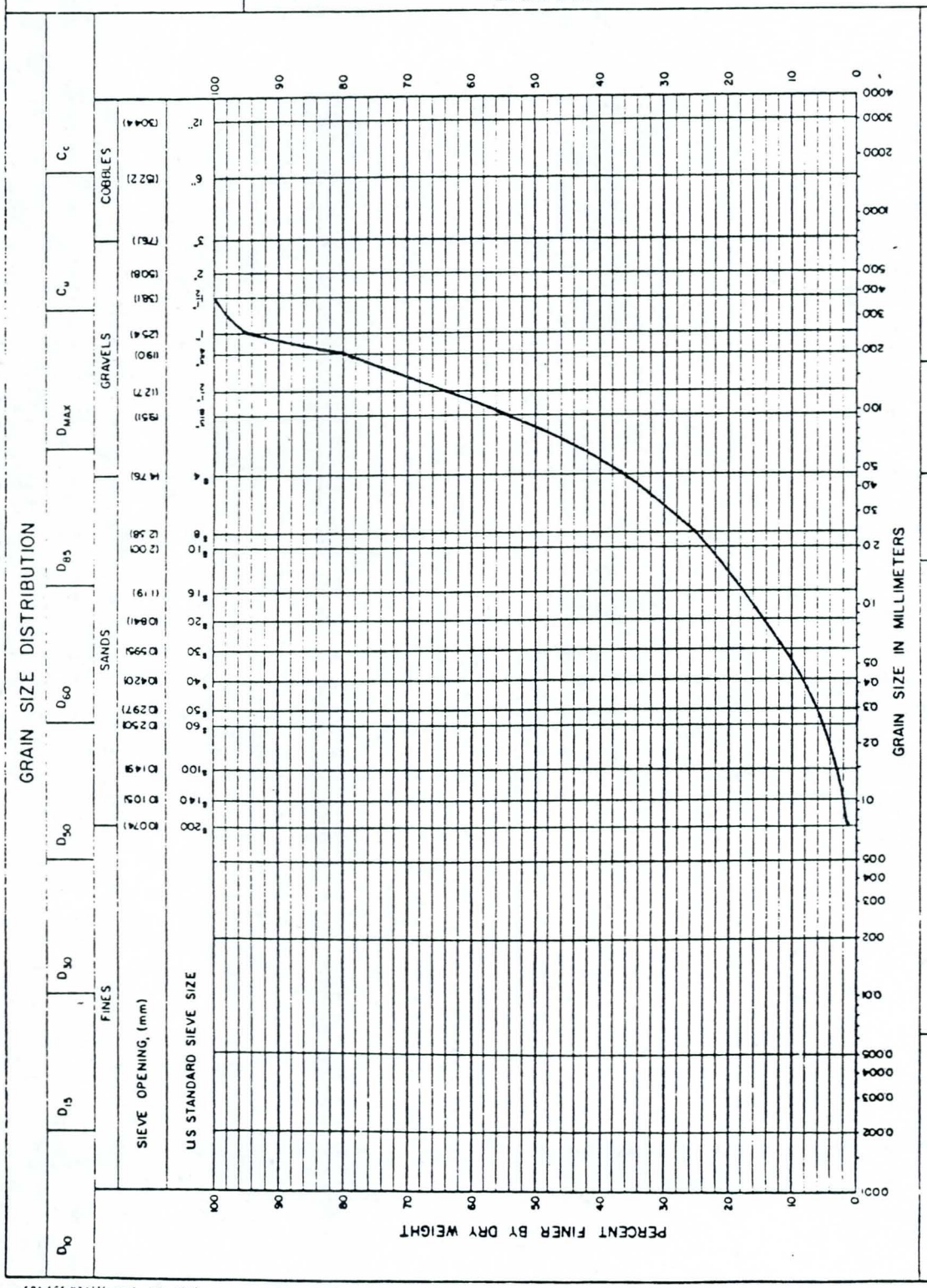
FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	APPROVED BY	DATE
48				10/9/80

TYPE OF SAMPLE: Random

TESTED AT: Site

SYMBOL

DESCRIPTION: Drain Fill



UNDISTURBED CONDITION			SOLUBLE SALTS	SHRINKAGE LIMIT	ATTERBERG LIMITS								SPECIFIC GRAVITY (G_s)	
MOISTURE	DRY UNIT WEIGHT				NATURAL MOISTURE		AIR DRY		OVEN DRY					
%	g/cc	pcf	%	%	LL	PI	LL	PI	LL	PI			(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 663+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
49			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/9/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 665+50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
50			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/9/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U S STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

SPECIFIC GRAVITY (G_s)		ATTERBERG LIMITS								UNDISTURBED CONDITION			SHRINKAGE LIMIT	SOLUBLE SALTS
		NATURAL MOISTURE		AIR DRY		OVEN DRY				MOISTURE	DRY UNIT WEIGHT			
(-) #4	(+) #4	LL	PI	LL	PI	LL	PI			%	g/cc	pcf	%	%

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 668+00
FIELD SAMPLE NO: 51	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/9/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.000) (1.19) (0.841) (0.599) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

U.S STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

100 90 80 70 60 50 40 30 20 10 0

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 01 005 004 003 002 001 0005 0004 0003 0002 0001

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 670+00

FIELD SAMPLE NO: 52

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

DATE: 10/10/80

SYMBOL:

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(3044) 12" | (1522) 6" | (762) 3" | (508) 2" | (381) 1½" | (254) 1" | (1092) ¾" | (127) ½" | (851) ⅜" | 4.76 #4 | (2.38) #8 | (2.00) #10 | (1.19) #16 | (1084) #20 | (0.595) #30 | (0.420) #40 | (0.297) #50 | (0.250) #60 | (0.149) #100 | (0.105) #140 | (0.074) #200

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 | 3000 | 2000 | 1000 | 500 | 400 | 300 | 200 | 100 | 50 | 40 | 30 | 20 | 10 | 5 | 4 | 3 | 2 | 1 | .5 | .4 | .3 | .2 | .1 | .05 | .04 | .03 | .02 | .01 | .005 | .004 | .003 | .002 | .001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 672+50

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
53			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/10/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 675+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
54			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/10/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(+) #4	(-) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 677+50

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
55		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		10/11/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

12" (304.4) 6" (152.2) 3" (76.1) 2" (50.8) 1½" (38.1) 1" (25.4) ¾" (19.0) ½" (12.7) ⅜" (9.51) #4 (4.76) #8 (2.38) #10 (2.00) #16 (1.19) #20 (0.841) #30 (0.595) #40 (0.420) #50 (0.297) #60 (0.250) #100 (0.149) #140 (0.105) #200 (0.074)

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 1 0.5 0.4 0.3 0.2 0.1 0.05 0.02 0.01 0.005 0.004 0.003 0.002 0.001 0.0005 0.0004 0.0003 0.0002 0.0001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 680+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
56			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/11/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_U | C_c

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 680+00-691+27 (Drain Outlets)

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
57		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/3/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Sta. 682+00 Watson Pit

FIELD SAMPLE NO: 58

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

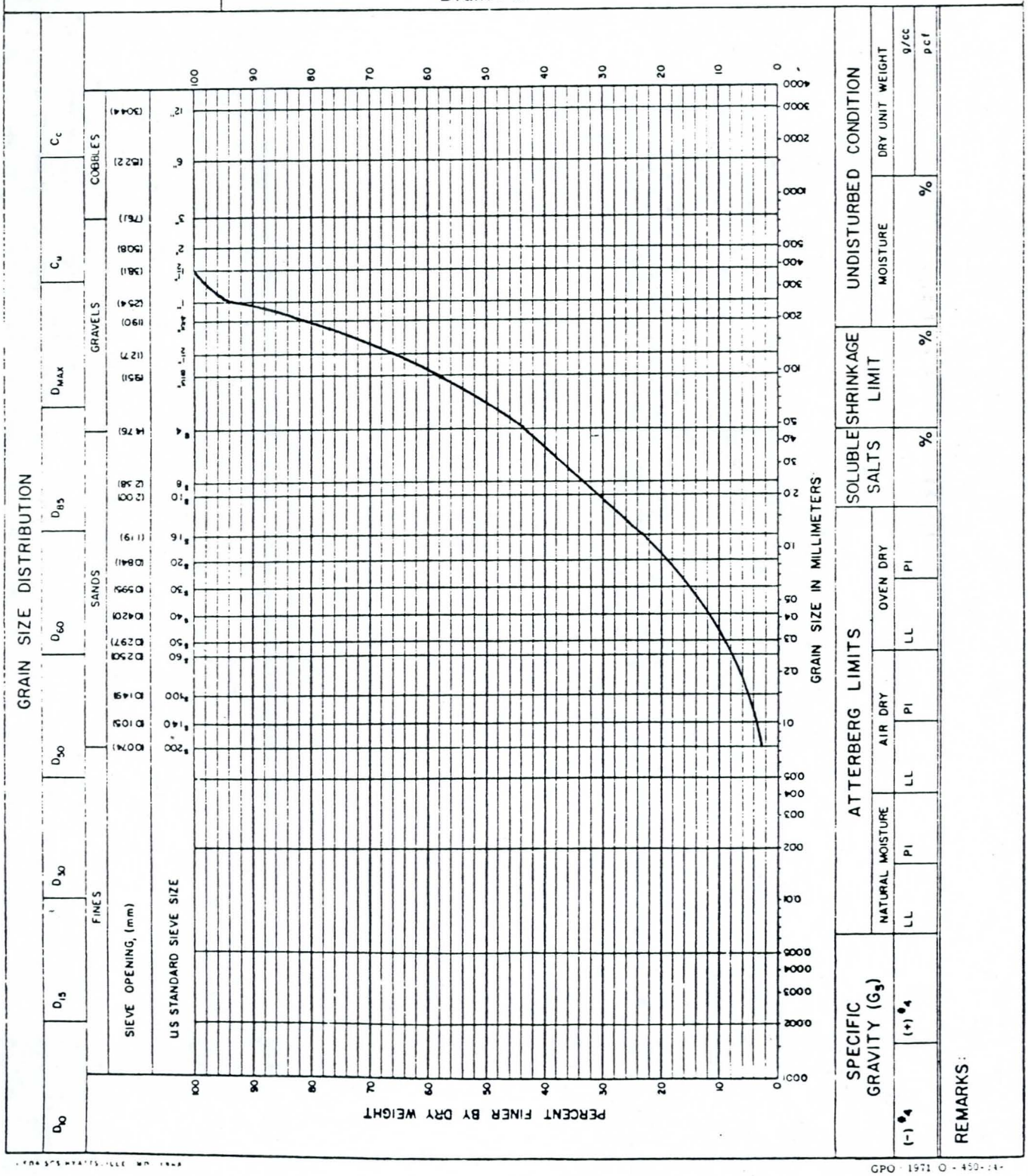
TESTED AT: Site

APPROVED BY:

DATE: 10/13/80

SYMBOL:

DESCRIPTION: Drain Fill



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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Watson Pit Sta. 684+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
59		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		10/13/80

SYMBOL	DESCRIPTION
	Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

12" (304.4) | 6" (152.2) | 3" (76.1) | 2" (50.8) | 1½" (38.1) | 1" (25.4) | ¾" (19.0) | ½" (12.7) | ⅜" (9.51) | #4 (4.76) | #8 (2.38) | #10 (2.00) | #16 (1.19) | #20 (0.841) | #30 (0.595) | #40 (0.420) | #50 (0.297) | #60 (0.250) | #100 (0.149) | #140 (0.105) | #200 (0.074)

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .02 .01 .005 .004 .003 .002 .001

UNDISTURBED CONDITION — MOISTURE % — DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS — NATURAL MOISTURE: LL, PI — AIR DRY: LL, PI — OVEN DRY: LL, PI

SPECIFIC GRAVITY (G_s) — (-) #4 — (+) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 686+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
60			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/13/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 688+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
61			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/15/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) (0.595) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 0.5 0.4 0.3 0.2 0.1 0.05 0.04 0.03 0.02 0.01 0.005 0.004 0.003 0.002 0.001 0.0005 0.0004 0.0003 0.0002 0.0001

UNDISTURBED CONDITION: MOISTURE (%); DRY UNIT WEIGHT (g/cc, pcf)

SHRINKAGE LIMIT (%)

SOLUBLE SALTS (%)

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 690+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
62			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/15/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{10} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(12") (6") (3") (2½") (2") (1½") (1") (¾") (½") (⅜") (#4) (#8) (#10) (#16) (#20) (#30) (#40) (#50) (#60) (#100) (#140) (#200)

(304.4) (152.2) (76.1) (63.5) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) (0.590) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE		SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona		Watson Pit Sta. 692+00
FIELD SAMPLE NO: 63	DEPTH	GEOLOGIC ORIGIN
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY
DATE: 10/16/80		
SYMBOL	DESCRIPTION: Drain Fill	

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s): (+) #4; (−) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 694+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
64			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/17/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(.0074) #200 | (.0105) #140 | (.0149) #100 | (.0297) #50 | (.0420) #40 | (.0595) #30 | (.0841) #20 | (.119) #16 | (2.00) #10 | (2.38) #8 | (4.76) #4 | (9.51) 3/8" | (12.7) 1/2" | (25.4) 1" | (38.1) 1 1/2" | (50.8) 2" | (75.) 3" | (152) 6" | (304.4) 12"

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5.0 4.0 3.0 2.0 1.0 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001 .0008 .0004 .0003 .0002 .0001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 695+39-700+19 (Drain Outlets

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
65		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/15/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s) (+)#4 (-)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 696+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
66			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/16/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) #4 (4.76) (2.38) (2.00) (1.19) #16 (1.084) #30 (0.595) #40 (0.420) #50 (0.297) #60 (0.250) #100 (0.149) #140 (0.105) #200 (0.074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 1.0 005 004 003 002 001 0005 0004 0003 0002 0001

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (−) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 698+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
67			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/16/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

12" (304.4) | 6" (152.2) | 3" (76.1) | 2" (50.8) | 1½" (38.1) | 1" (25.4) | ¾" (19.0) | ½" (12.7) | ⅜" (9.51) | #4 (4.76) | #8 (2.38) | #10 (2.00) | #16 (1.19) | #20 (.841) | #30 (.595) | #40 (.420) | #50 (.297) | #60 (.250) | #100 (.149) | #140 (.105) | #200 (.0074)

PERCENT FINER BY DRY WEIGHT

100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001 .0005 .0004 .0003 .0002 .0001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 700+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
68			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/17/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL.	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit, Sta. 702+00
FIELD SAMPLE NO.: 69	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/18/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) (0.599) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 0.5 0.4 0.3 0.2 0.1 0.05 0.04 0.03 0.02 0.01 0.005 0.004 0.003 0.002 0.001 0.0005 0.0004 0.0003 0.0002 0.0001

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION
MOISTURE: %
DRY UNIT WEIGHT: g/cc, pcf

SHRINKAGE LIMIT: %

SOLUBLE SALTS: %

ATTERBERG LIMITS
NATURAL MOISTURE: LL, PI
AIR DRY: LL, PI
OVEN DRY: LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 704+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
70			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/21/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(304.4) 12" | (152.2) 6" | (76.1) 3" | (38.1) 1½" | (25.4) 1" | (19.0) ¾" | (12.7) ½" | (9.51) ⅜" | (4.76) #4 | (2.00) #10 | (1.19) #16 | (0.841) #20 | (0.595) #30 | (0.420) #40 | (0.297) #50 | (0.250) #60 | (0.149) #100 | (0.105) #140 | (0.074) #200

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE		SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona		Watson Pit Sta. 704+55.5-709+50(Drain outlets
FIELD SAMPLE NO 71	DEPTH	GEOLOGIC ORIGIN
TYPE OF SAMPLE Random	TESTED AT Site	APPROVED BY
		DATE 11/16/80
SYMBOL	DESCRIPTION Drain Fill	

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Watson Pit, Sta. 706+00	
FIELD SAMPLE NO: 72	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/21/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE		SAMPLE LOCATION	
Buckeye FRS Site 1 Drain, Arizona		Sta. 707+00 Watson Pit	
FIELD SAMPLE NO. 73	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE Random	TESTED AT Site	APPROVED BY	DATE 10/21/80
SYMBOL	DESCRIPTION Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

(304.8) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (.1084) (.0995) (.0420) (.0297) (.0250) (.0149) (.0105) (.0074)

U.S STANDARD SIEVE SIZE

12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

100 90 80 70 60 50 40 30 20 10 0

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 005 004 003 002 100 0005 0004 0003 0002 1000

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION			SOLUBLE SALTS	SHRINKAGE LIMIT	ATTERBERG LIMITS						SPECIFIC GRAVITY (G_s)	
MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf	%	%	NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI	(+) #4	(-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 708+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
74			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/4/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(0074) #200 | (0104) #140 | (0147) #100 | (0210) #70 | (0297) #50 | (0420) #40 | (0595) #30 | (0841) #20 | (1.19) #16 | (2.38) #8 | (4.76) #4 | (9.51) 3/8" | (12.7) 1/2" | (19.0) 3/4" | (25.4) 1" | (38.1) 1 1/2" | (50.8) 2" | (75.1) 3" | (152) 6" | (304) 12"

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona	SAMPLE LOCATION: Watson Pit, Sta. 709+00
FIELD SAMPLE NO: 75	DEPTH:	GEOLOGIC ORIGIN:
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/22/80
SYMBOL:	DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

SCS–ENG–353A
Rev. 11–71

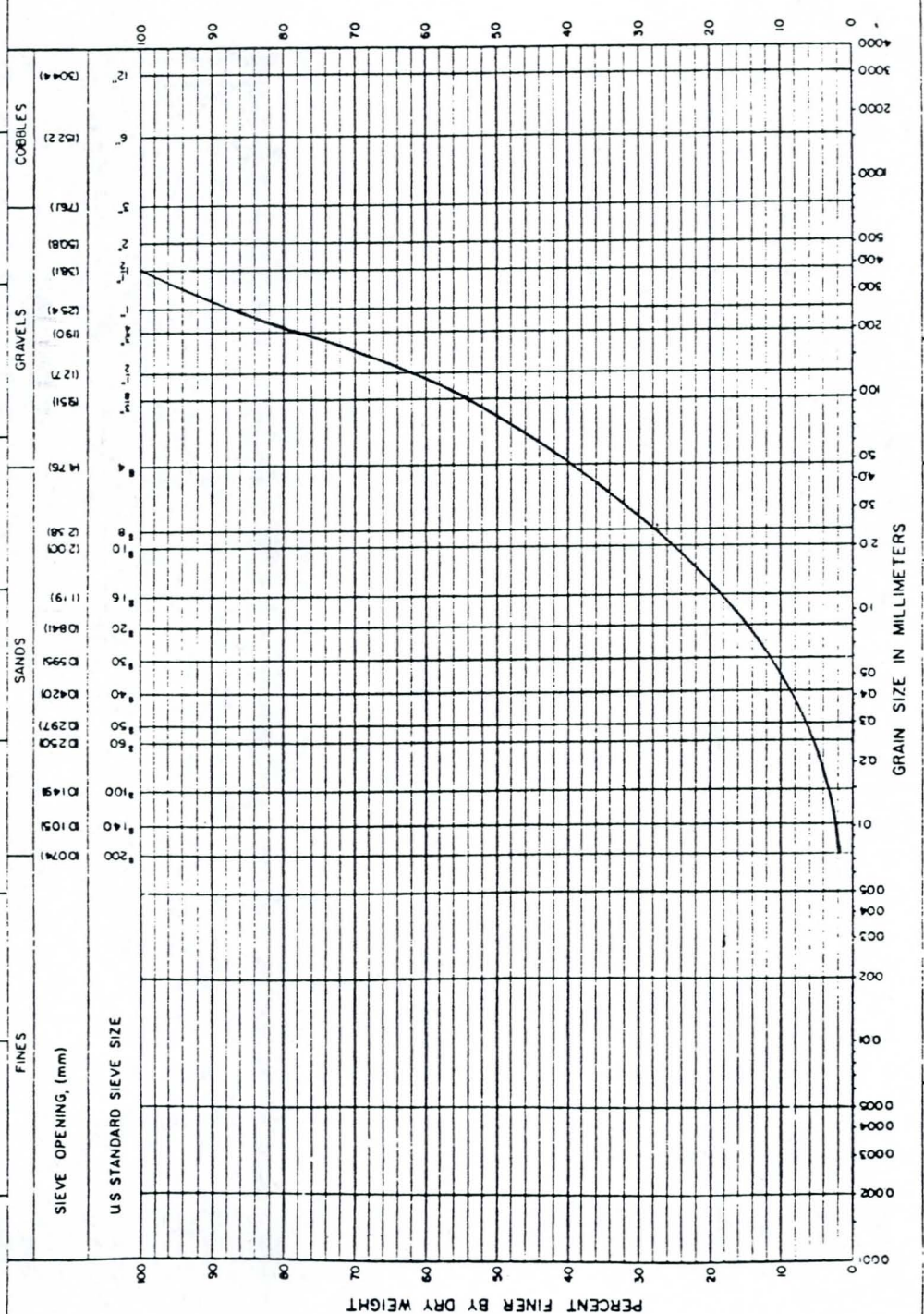
LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Watson Pit Sta. 710+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
76			
TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/4/80
SYMBOL	DESCRIPTION Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION — MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS — NATURAL MOISTURE: LL, PI; AIR DRY: LL, PI; OVEN DRY: LL, PI

SPECIFIC GRAVITY (G_s) (-)#4, (+)#4

REMARKS:

GPO 1971 O-455-4

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE		SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona		Watson Pit Sta. 710+53-720+00 (Drain Outlets
FIELD SAMPLE NO 77	DEPTH	GEOLOGIC ORIGIN
TYPE OF SAMPLE	TESTED AT Site	APPROVED BY
		DATE 11/16/80
SYMBOL	DESCRIPTION Drain Fill	

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION
MOISTURE % | DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS
NATURAL MOISTURE LL PI | AIR DRY LL PI | OVEN DRY LL PI

SPECIFIC GRAVITY (G_s)
(+) #4 | (-) #4

REMARKS:

GPO 1971 O - 455-343

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 711+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
78			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/22/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 712+00
FIELD SAMPLE NO: 79	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/5/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304) (152) (76) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) 4.76 2.38 (2.00) 1.19 0.841 0.599 0.420 0.297 0.250 0.149 0.105 0.074

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 0.5 0.4 0.3 0.2 0.1 0.05 0.04 0.03 0.02 0.01 0.005 0.004 0.003 0.002 0.001

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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Rev. 11–71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona
SAMPLE LOCATION: Watson Pit, Sta. 714+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
80		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		10/22/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 716+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
81			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		10/23/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{95} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-) #4; (+) #4

REMARKS:

SCS—ENG—353A
Rev. 11—71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 718+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
82			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/23/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{10} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION			SOLUBLE SALTS	SHRINKAGE LIMIT
MOISTURE %	DRY UNIT WEIGHT g/cc	pcf	%	%

ATTERBERG LIMITS	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)	(+) #4	(-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 720+00
FIELD SAMPLE NO.: 83	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/23/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.000) (1.19) (.1084) (.0599) (.0420) (.0297) (.0250) (.0149) (.0105) (.0074)

U.S STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 005 004 003 002 100 000 5000 4000 3000 2000 1000

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO. _____

MATERIALS TESTING REPORT

U. S. DEPARTMENT of AGRICULTURE
SOIL CONSERVATION SERVICE

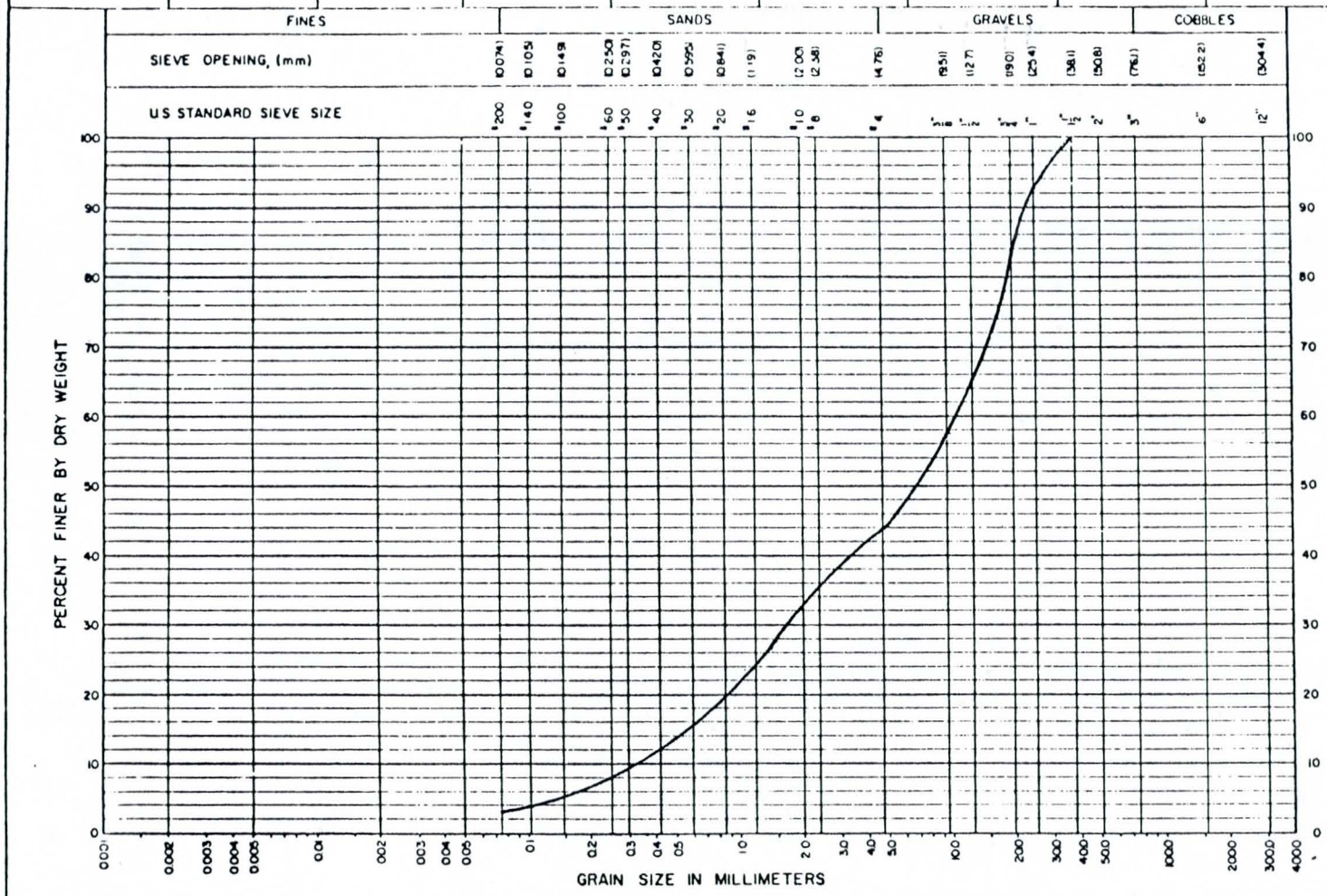
SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona
SAMPLE LOCATION: Watson Pit Sta. 722+00
FIELD SAMPLE NO: 84
DEPTH:
GEOLOGIC ORIGIN:
TYPE OF SAMPLE: Random
TESTED AT: Site
APPROVED BY:
DATE: 10/23/80

SYMBOL
DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10}	D_{15}	D_{30}	D_{50}	D_{60}	D_{85}	D_{MAX}	C_u	C_c



SPECIFIC GRAVITY (G_s)		ATTERBERG LIMITS						SOLUBLE SALTS	SHRINKAGE LIMIT	UNDISTURBED CONDITION	
		NATURAL MOISTURE		AIR DRY		OVEN DRY				MOISTURE	DRY UNIT WEIGHT
(-) #4	(+) #4	LL	PI	LL	PI	LL	PI	%	%	%	g/cc pcf

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit, Sta. 724+00
FIELD SAMPLE NO: E5	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/24/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 726+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
86			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/24/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.8) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) (0.595) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

U.S STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

100 90 80 70 60 50 40 30 20 10 0

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 01 005 004 003 002 001 0005 0004 0003 0002 0001

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (−)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 728+00
FIELD SAMPLE NO: 87	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/27/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

(304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) #4 (4.76) (2.38) #10 (2.00) #16 (1.19) #20 (.0841) #30 (.0595) #40 (.0420) #50 (.0297) #60 (.0250) #100 (.0149) #140 (.0105) #200 (.0074)

U.S STANDARD SIEVE SIZE

12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001 .0005 .0004 .0003 .0002 .0001

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

SCS–ENG–353A
Rev. 11–71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Rock Sta. 729+93 -760+00 (Drain Outlets)

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
88	-		
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 12/16/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{50} | D_{30} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4; (+) #4

REMARKS:

GPO : 1971 O - 450-34-

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Sta. 730+00 Watson Pit
FIELD SAMPLE NO: 89	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/27/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

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LABORATORY NO. _____

MATERIALS TESTING REPORT — U.S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Sta. 732+00 Watson Pit

FIELD SAMPLE NO: 90

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

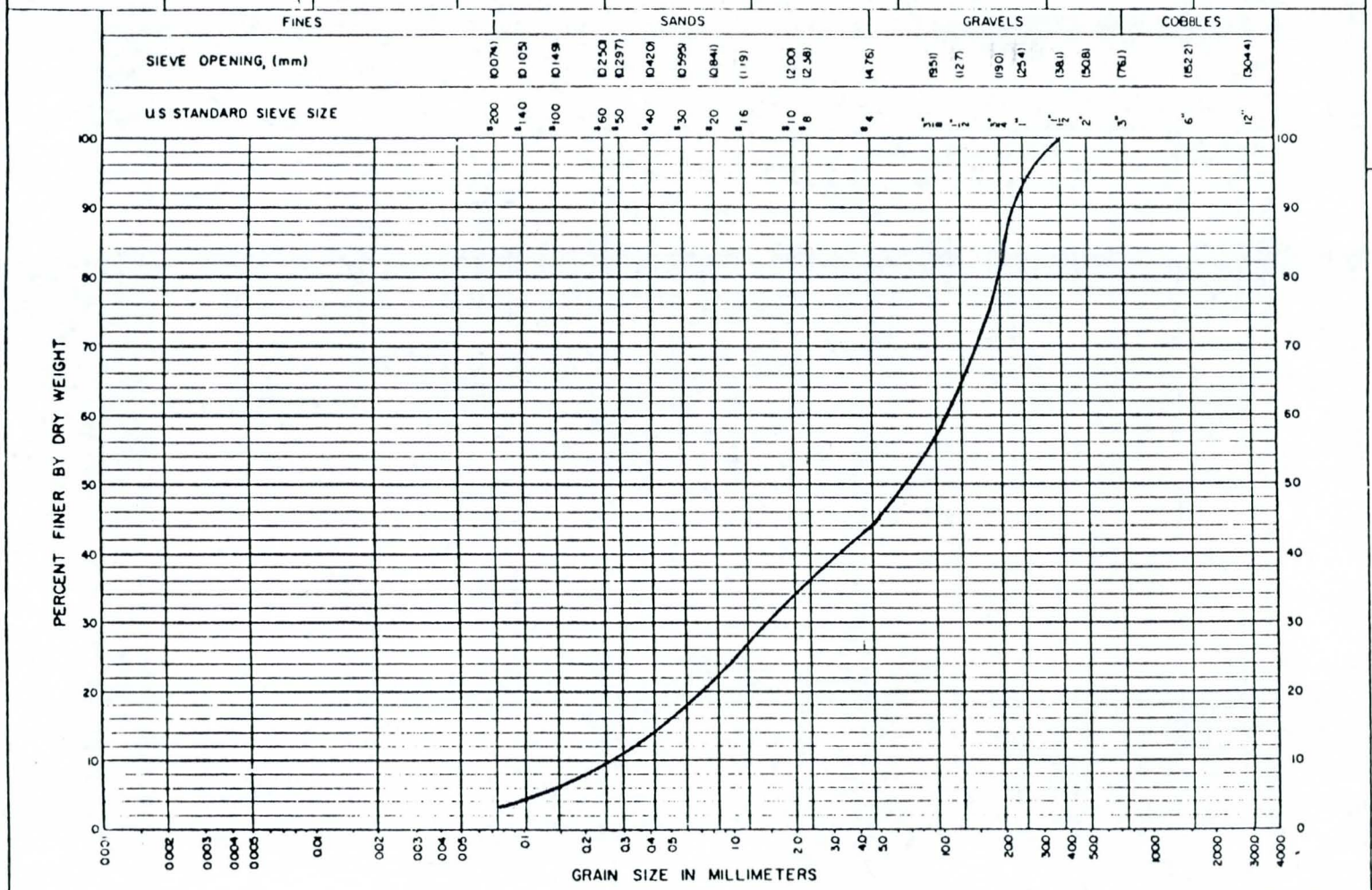
DATE: 10/28/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10}	D_{15}	D_{30}	D_{50}	D_{60}	D_{85}	D_{MAX}	C_u	C_c



SPECIFIC GRAVITY (G_s)		ATTERBERG LIMITS						SOLUBLE SALTS	SHRINKAGE LIMIT	UNDISTURBED CONDITION	
		NATURAL MOISTURE		AIR DRY		OVEN DRY				MOISTURE	DRY UNIT WEIGHT
(-) #4	(+) #4	LL	PI	LL	PI	LL	PI	%	%	%	g/cc pcf

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Sta. 734+00 Watson Pit	
FIELD SAMPLE NO: 91	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/28/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

(304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.000) (1.19) (.1084) (.0599) (.0420) (.0297) (.0250) (.0149) (.0105) (.0074)

U.S STANDARD SIEVE SIZE

12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001 .0005 .0004 .0003 .0002 .0001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

SCS–ENG–353A
Rev. 11–71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 736+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
92	--		
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/29/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 738+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
93		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		10/29/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

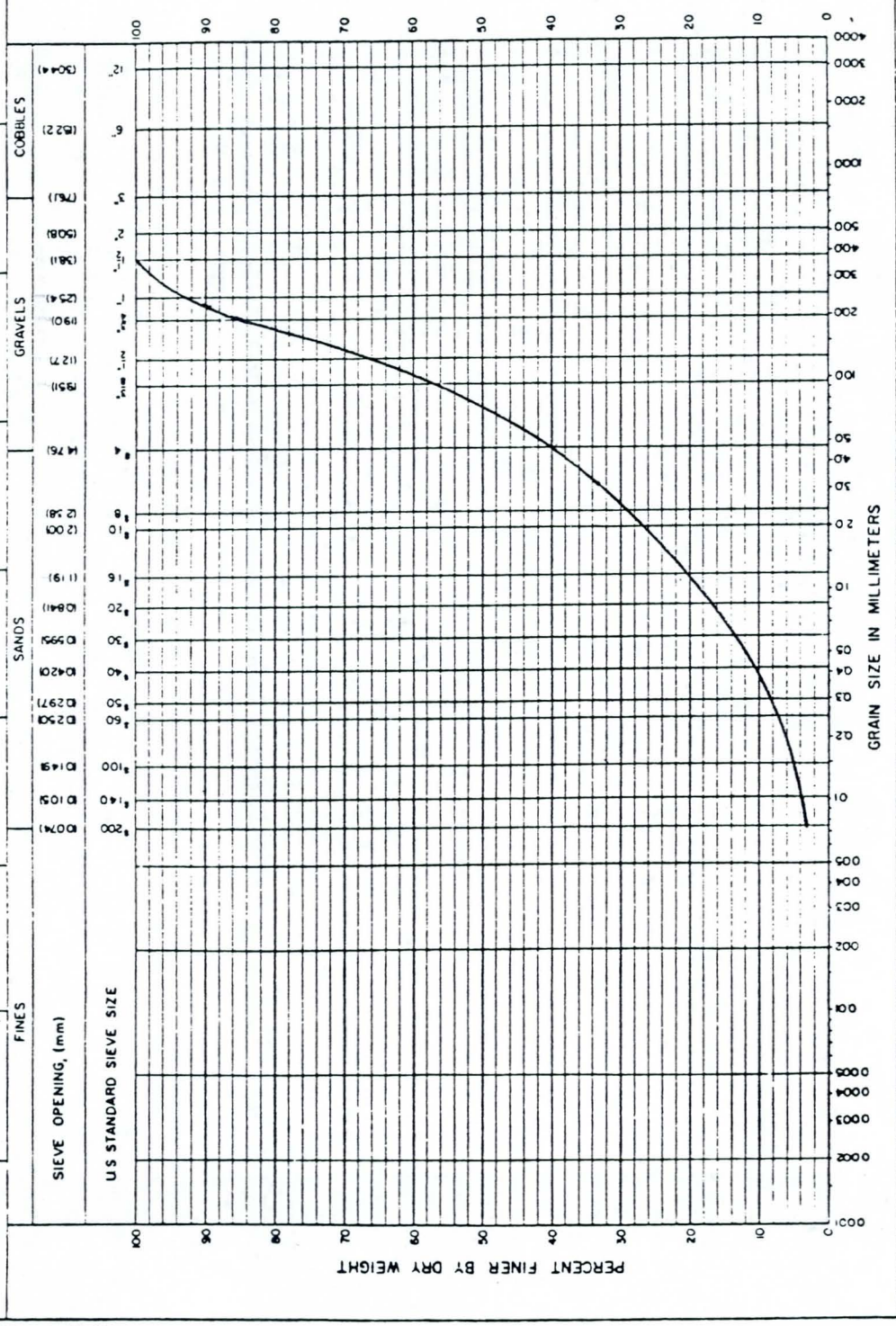
SCS–ENG–353A
Rev. 11–71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Watson Pit Sta. 740+00	
FIELD SAMPLE NO: -94	DEPTH:	GEOLOGIC ORIGIN:	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/29/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

SCS-ENG-353A
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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 742+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
95		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		10/30/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 744+00

FIELD SAMPLE NO.: 96

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

DATE: 10/30/80

SYMBOL:

DESCRIPTION: Drain Fill

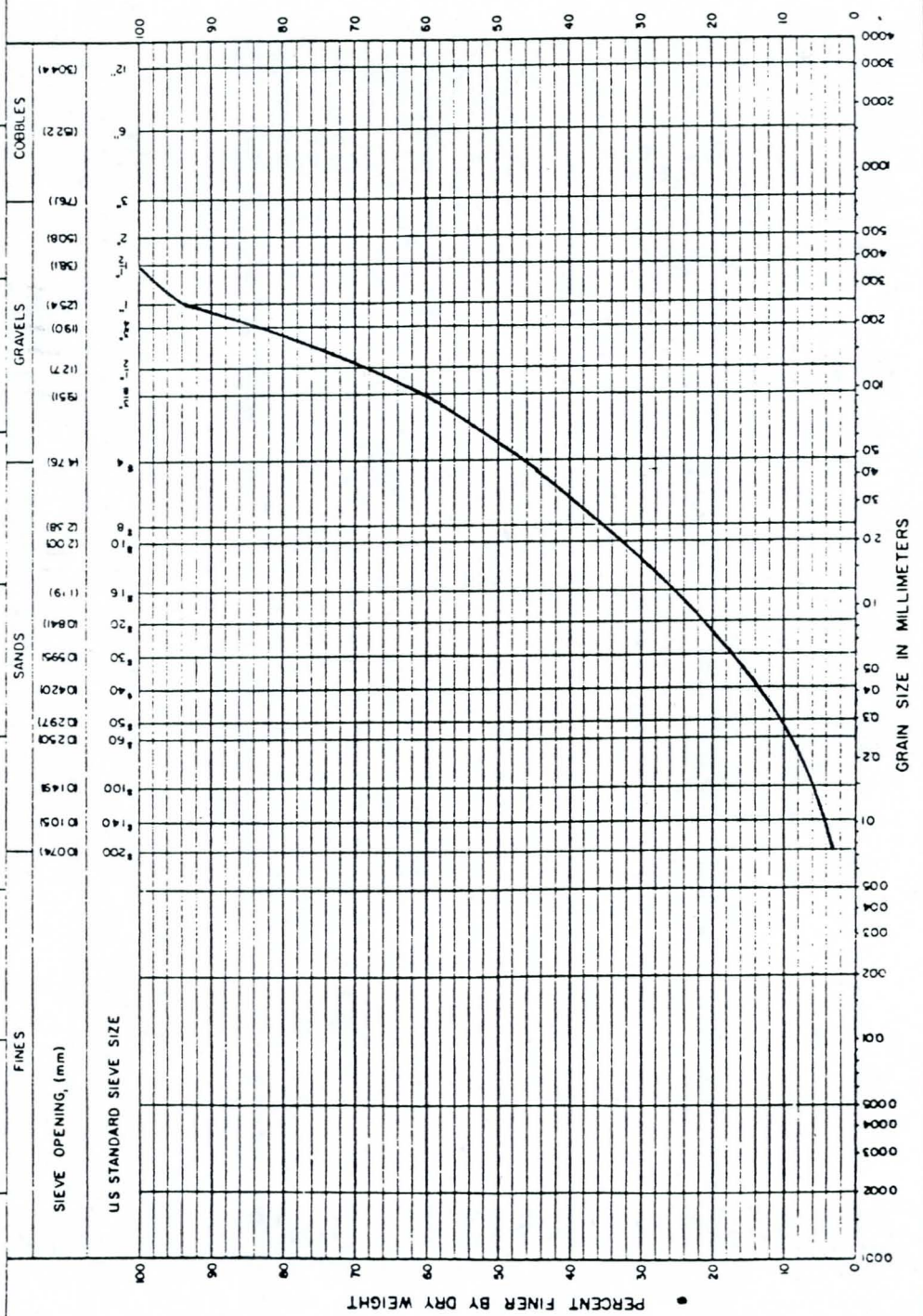
GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 745+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
97			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		11/17/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE; AIR DRY; OVEN DRY — LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 746+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
98			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/30/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 748+00
FIELD SAMPLE NO: 99	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/30/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-) #4; (+) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona
SAMPLE LOCATION: Sta. 750+00 Watson Pit
FIELD SAMPLE NO: 100
DEPTH:
GEOLOGIC ORIGIN:
TYPE OF SAMPLE: Random
TESTED AT: Site
APPROVED BY:
DATE: 10/31/80
SYMBOL:
DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION
MOISTURE %
DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS
NATURAL MOISTURE LL PI
AIR DRY LL PI
OVEN DRY LL PI

SPECIFIC GRAVITY (G_s)
(+) #4
(-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Watson Pit Sta. 751+00	
FIELD SAMPLE NO: 101	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/5/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT: %

SOLUBLE SALTS: %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 752+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
102			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/31/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION

MOISTURE %

DRY UNIT WEIGHT g/cc pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS

NATURAL MOISTURE: LL, PI

AIR DRY: LL, PI

OVEN DRY: LL, PI

SPECIFIC GRAVITY (G_s)

(-) #4 (+) #4

REMARKS

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Rev. 11-71

LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 753+ 00

FIELD SAMPLE NO.: 103

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

DATE: 11/20/80

SYMBOL:

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{15} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

GPO : 1971 O - 450-944

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LABORATORY NO

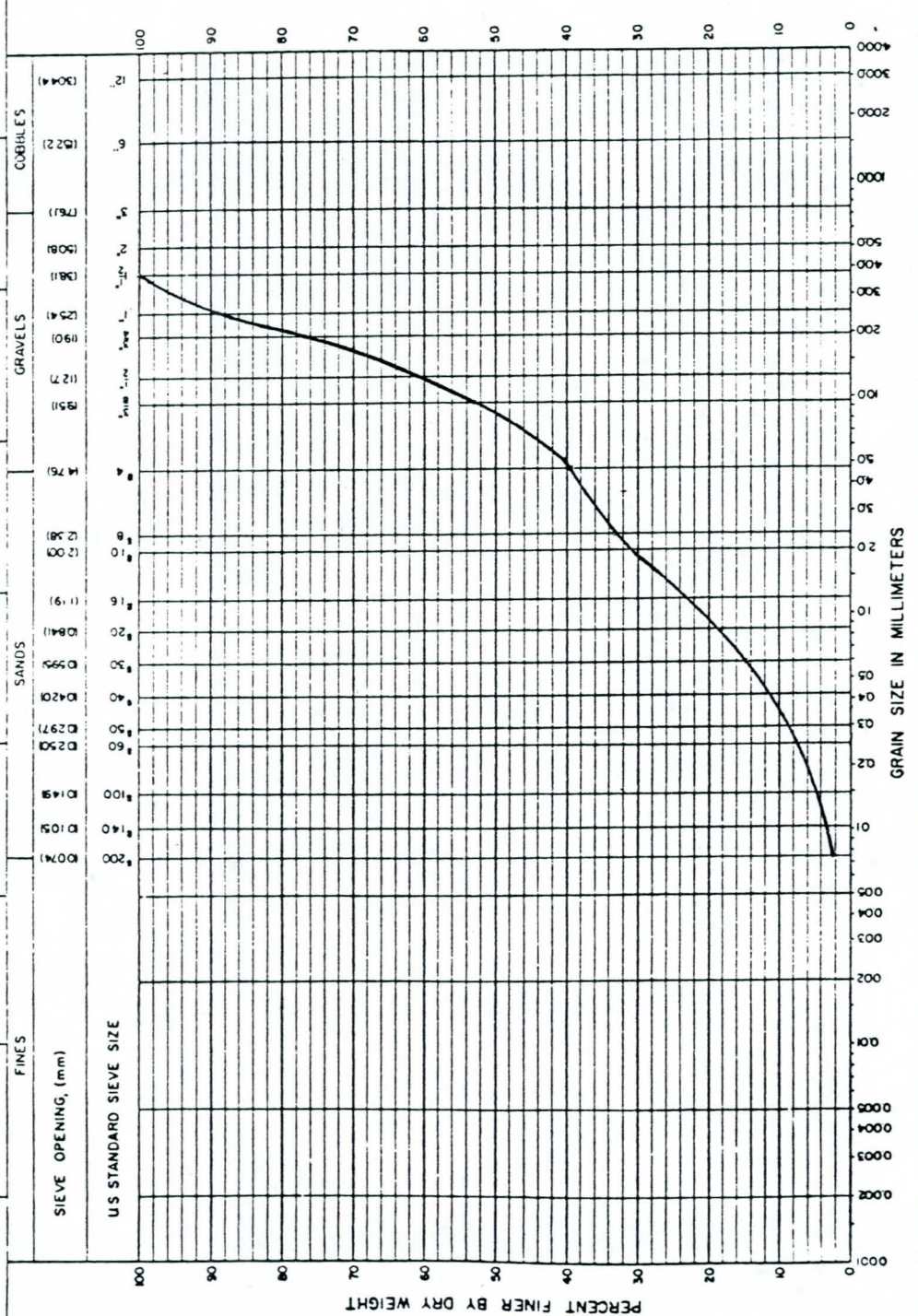
MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 754+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
104			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/31/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 755+00
FIELD SAMPLE NO: 105	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/1/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION
MOISTURE %
DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS
NATURAL MOISTURE: LL, PI
AIR DRY: LL, PI
OVEN DRY: LL, PI

SPECIFIC GRAVITY (G_s)
(+) #4
(-) #4

REMARKS:

SCS-ENG-353A
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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 756+00

FIELD SAMPLE NO: 105

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

DATE: 11/5/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

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LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 757+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
107		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/24/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

GPO : 1971 O - 450-34

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 758+00

FIELD SAMPLE NO: 108

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

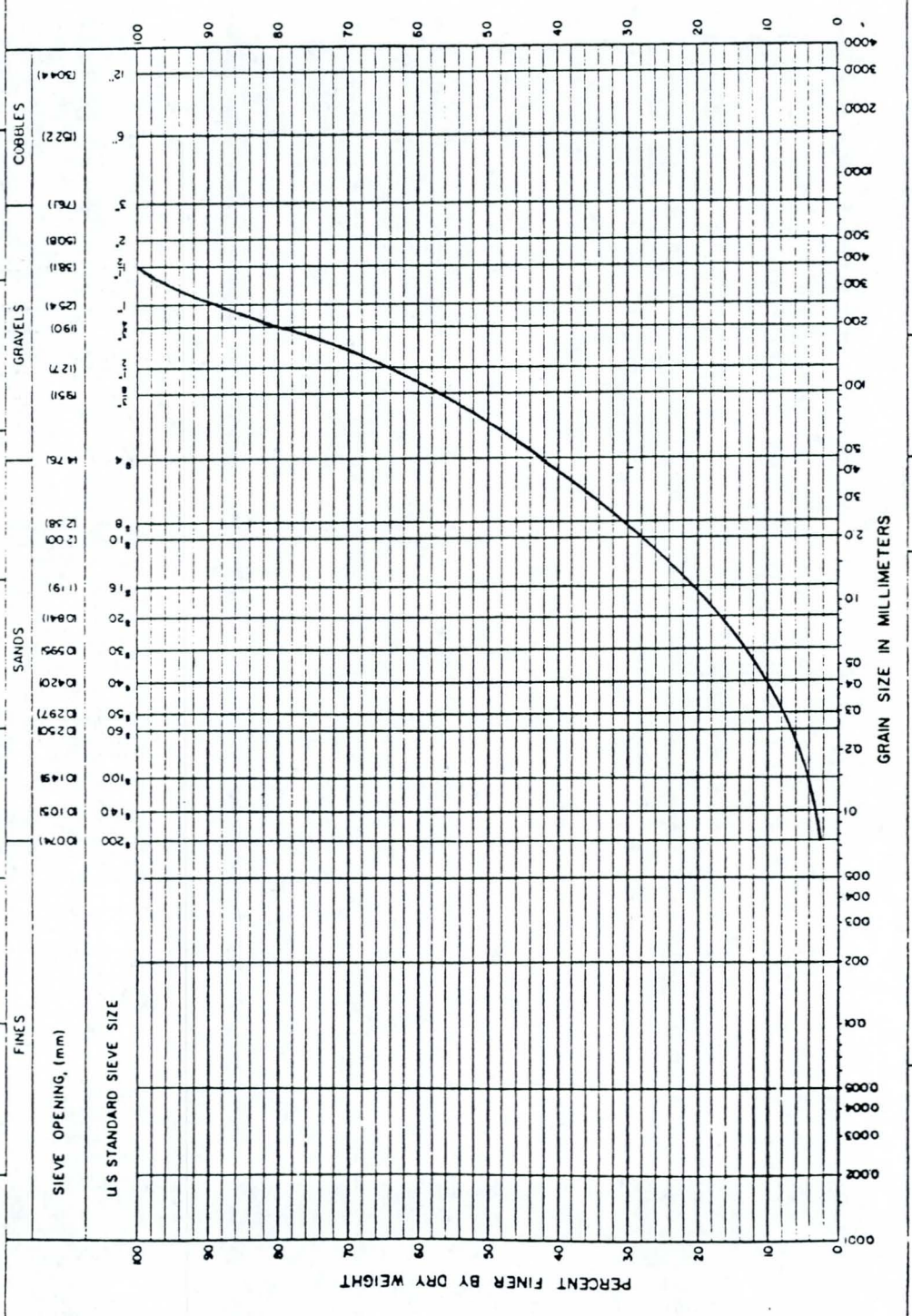
APPROVED BY:

DATE: 11/6/80

SYMBOL:

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4; (-)#4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Sta. 760+00 Watson Pit

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
109			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		11/6/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{30} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION — MOISTURE % — DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS — NATURAL MOISTURE: LL, PI — AIR DRY: LL, PI — OVEN DRY: LL, PI

SPECIFIC GRAVITY (G_s) (-) #4 (+) #4

REMARKS:

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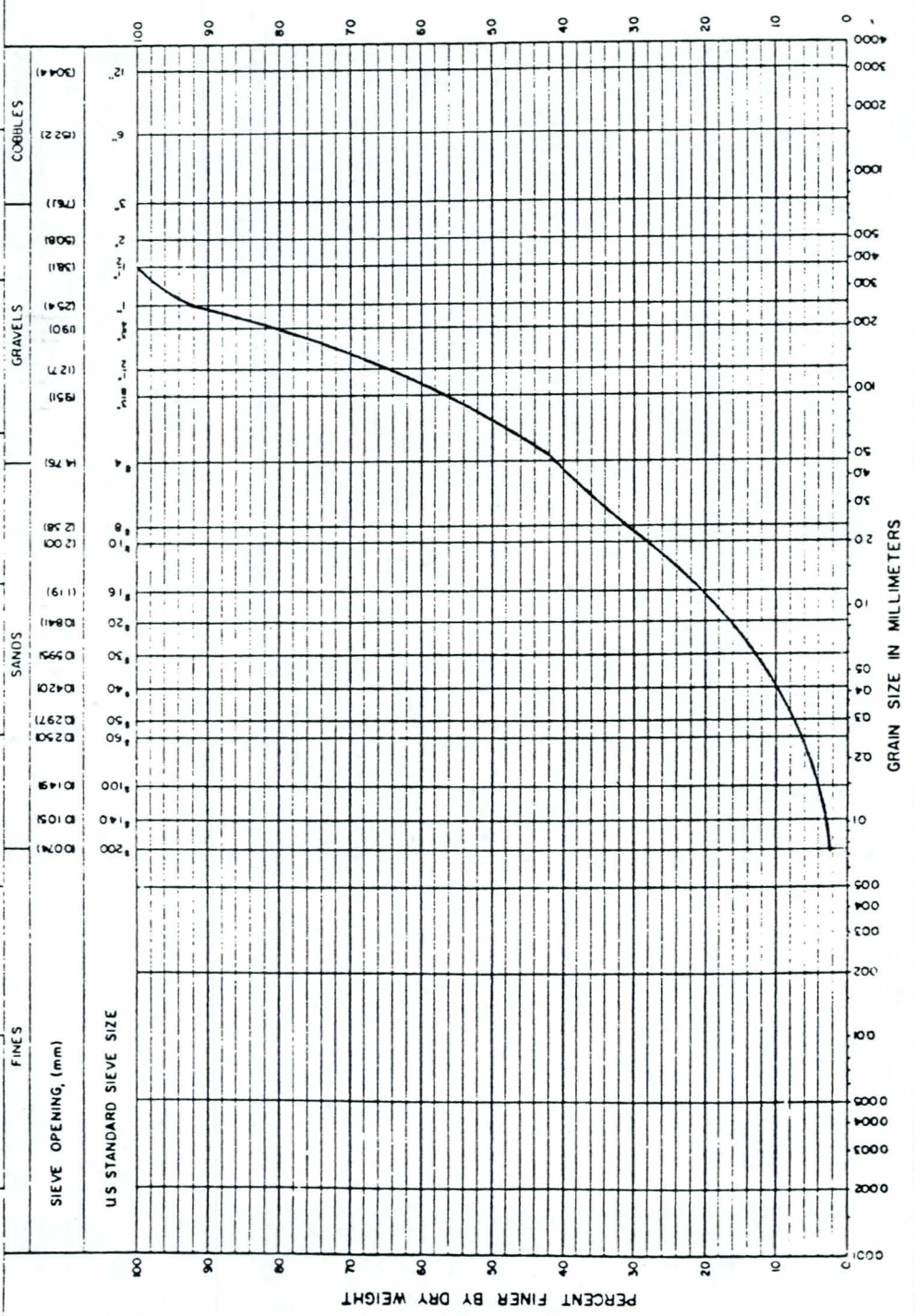
LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Watson Pit Sta. 762+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
110			
TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/10/80
SYMBOL	DESCRIPTION	Drain Fill	

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %	SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s) (-) #4	SPECIFIC GRAVITY (G_s) (+) #4

REMARKS:

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LABORATORY NO _____

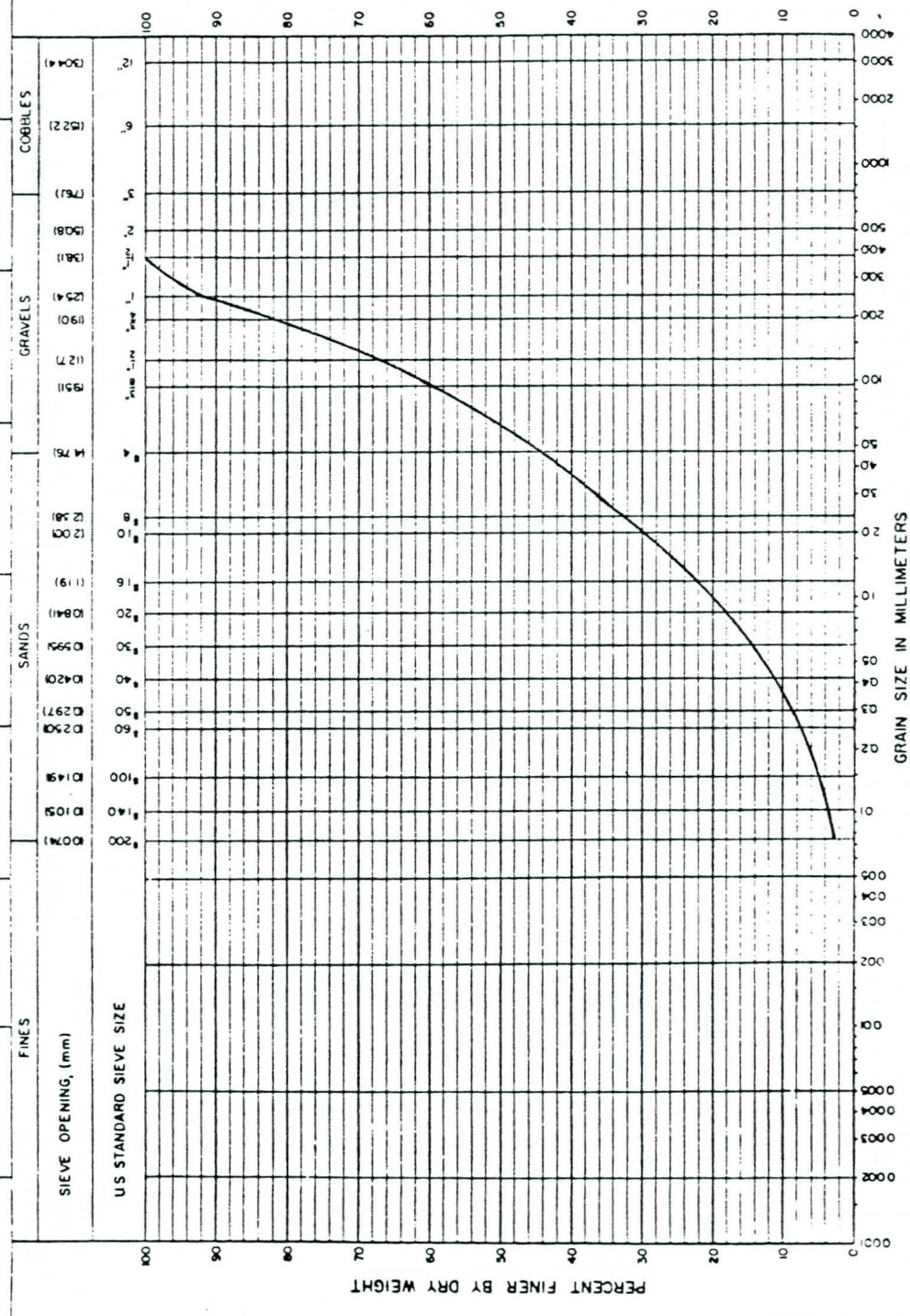
MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona
SAMPLE LOCATION: Sta. 764+00 Watson Pit

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
111			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/10/80

SYMBOL | DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION



C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 766+00

FIELD SAMPLE NO: 112

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

TESTED AT: Site

APPROVED BY:

DATE: 11/11/80

SYMBOL:

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} D_{10} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

GPO : 1971 O - 450-349

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 768+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
113			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		11/11/80
SYMBOL	**DESCRIPTION**	Drain Fill	

GRAIN SIZE DISTRIBUTION

D_{10} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s) (-) #4 (+) #4

REMARKS

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 770+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
114			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/12/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(304.8) 12" | (152.2) 6" | (76.1) 3" | (38.1) 1½" | (25.4) 1" | (19.0) ¾" | (12.7) ½" | (9.51) ⅜" | (4.76) #4 | (2.38) #8 | (1.19) #16 | (0.841) #20 | (0.590) #30 | (0.420) #40 | (0.297) #50 | (0.250) #60 | (0.149) #100 | (0.105) #140 | (0.074) #200

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 0.5 0.4 0.3 0.2 0.1 0.05 0.04 0.03 0.02 0.01 0.005 0.004 0.003 0.002 0.001

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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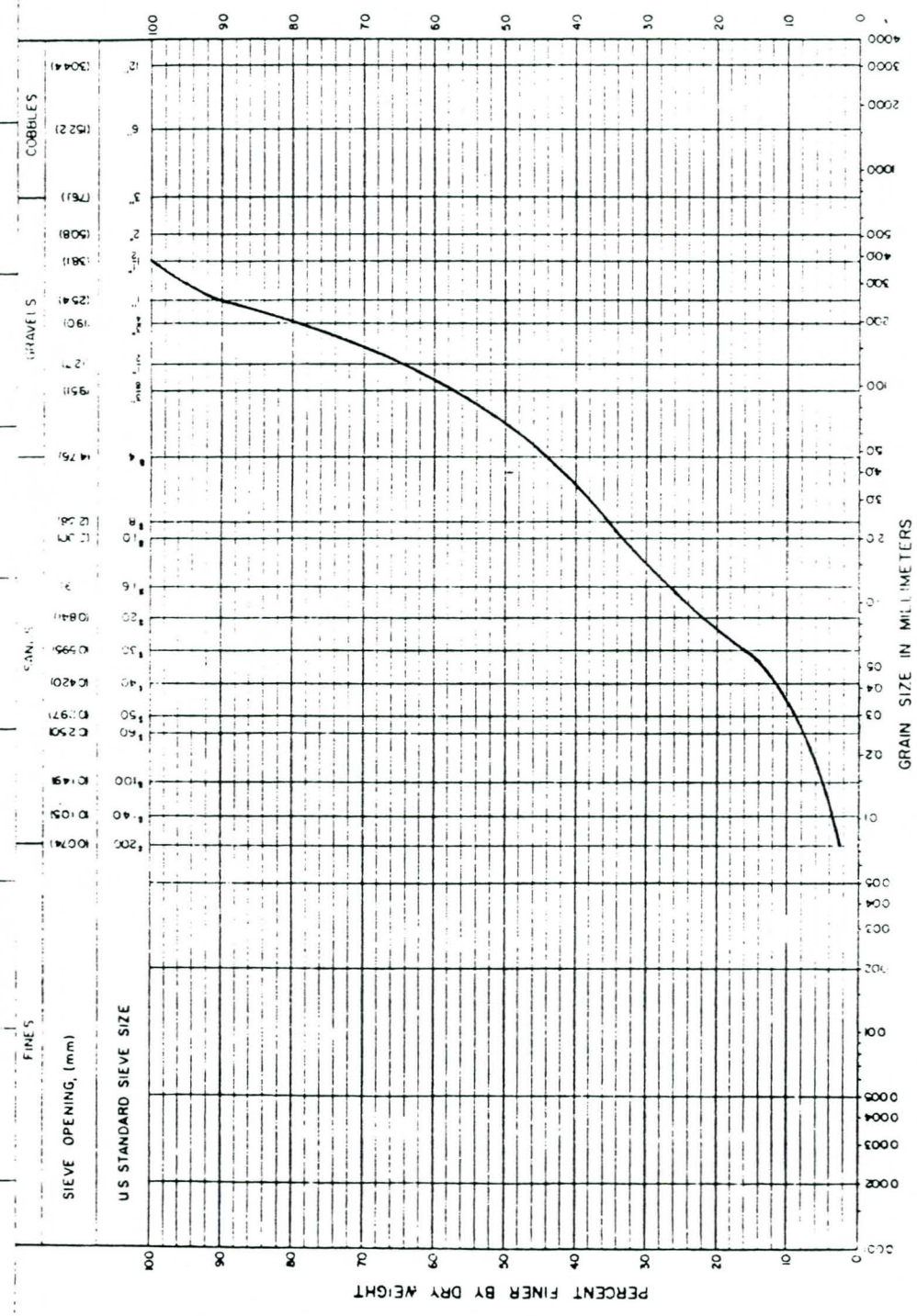
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE			SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona			Watson Pit Sta. 770+00-800+00 (Drain Outlet
FIELD SAMPLE NO. 115	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE Random	TESTED AT Site	APPROVED BY	DATE 12/15/80
SYMBOL	DESCRIPTION Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION
MOISTURE %
DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS
NATURAL MOISTURE LL PI
AIR DRY LL PI
OVEN DRY LL PI

SPECIFIC GRAVITY (G_s)
(+) #4
(-) #4

REMARKS

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 772 +00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
116			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/13/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm) (304.8) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76)

US STANDARD SIEVE SIZE 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

GRAIN SIZE IN MILLIMETERS 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001

PERCENT FINER BY DRY WEIGHT 100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Watson Pit, Sta. 774+00	
FIELD SAMPLE NO: 117	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/13/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona
SAMPLE LOCATION: Watson Pit, Sta. 776+00
FIELD SAMPLE NO: 118
DEPTH:
GEOLOGIC ORIGIN:
TYPE OF SAMPLE: Random
TESTED AT: Site
APPROVED BY:
DATE: 11/14/80
SYMBOL:
DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

12" (304.4) | 6" (152.2) | 3" (76.1) | 2" (50.8) | 1½" (38.1) | 1" (25.4) | ¾" (19.0) | ½" (12.7) | ⅜" (9.51) | #4 (4.76) | #8 (2.38) | #10 (2.00) | #16 (1.19) | #20 (0.841) | #30 (0.590) | #40 (0.420) | #50 (0.297) | #60 (0.250) | #100 (0.149) | #140 (0.105) | #200 (0.074)

PERCENT FINER BY DRY WEIGHT

100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 0.5 0.4 0.3 0.2 0.1 0.05 0.02 0.01 0.005 0.002 0.001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Sta. 778+00 Watson Pit

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
119		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/14/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

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LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 779+00

FIELD SAMPLE NO: 120

DEPTH:

GEOLOGIC ORIGIN:

TYPE OF SAMPLE: Random

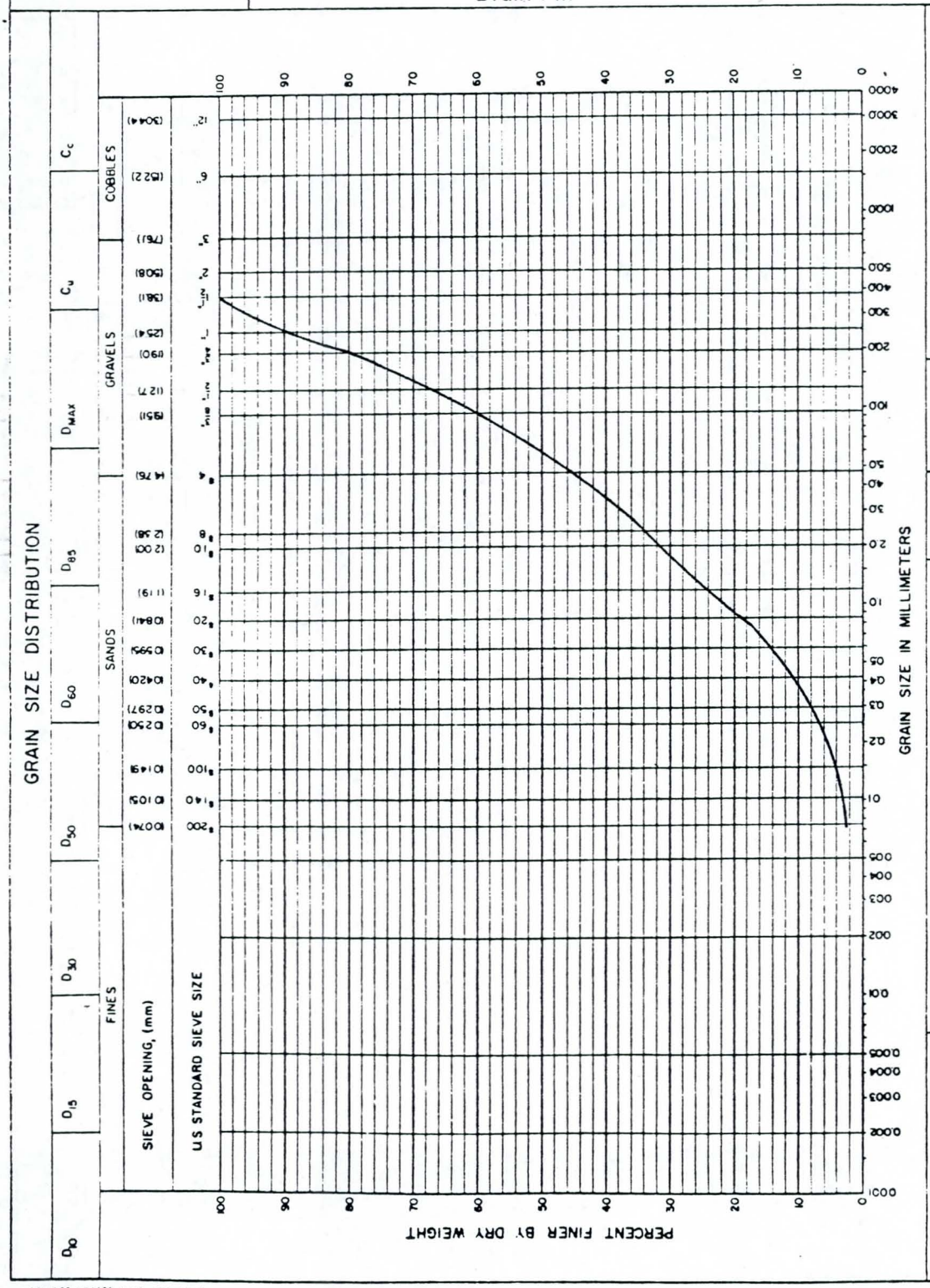
TESTED AT: Site

APPROVED BY:

DATE: 12/1/80

SYMBOL:

DESCRIPTION: Drain Fill



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4; (-)#4

REMARKS:

E-124

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Watson Pit Sta. 780+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
121			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		11/17/80
SYMBOL	**DESCRIPTION** Drain Fill		

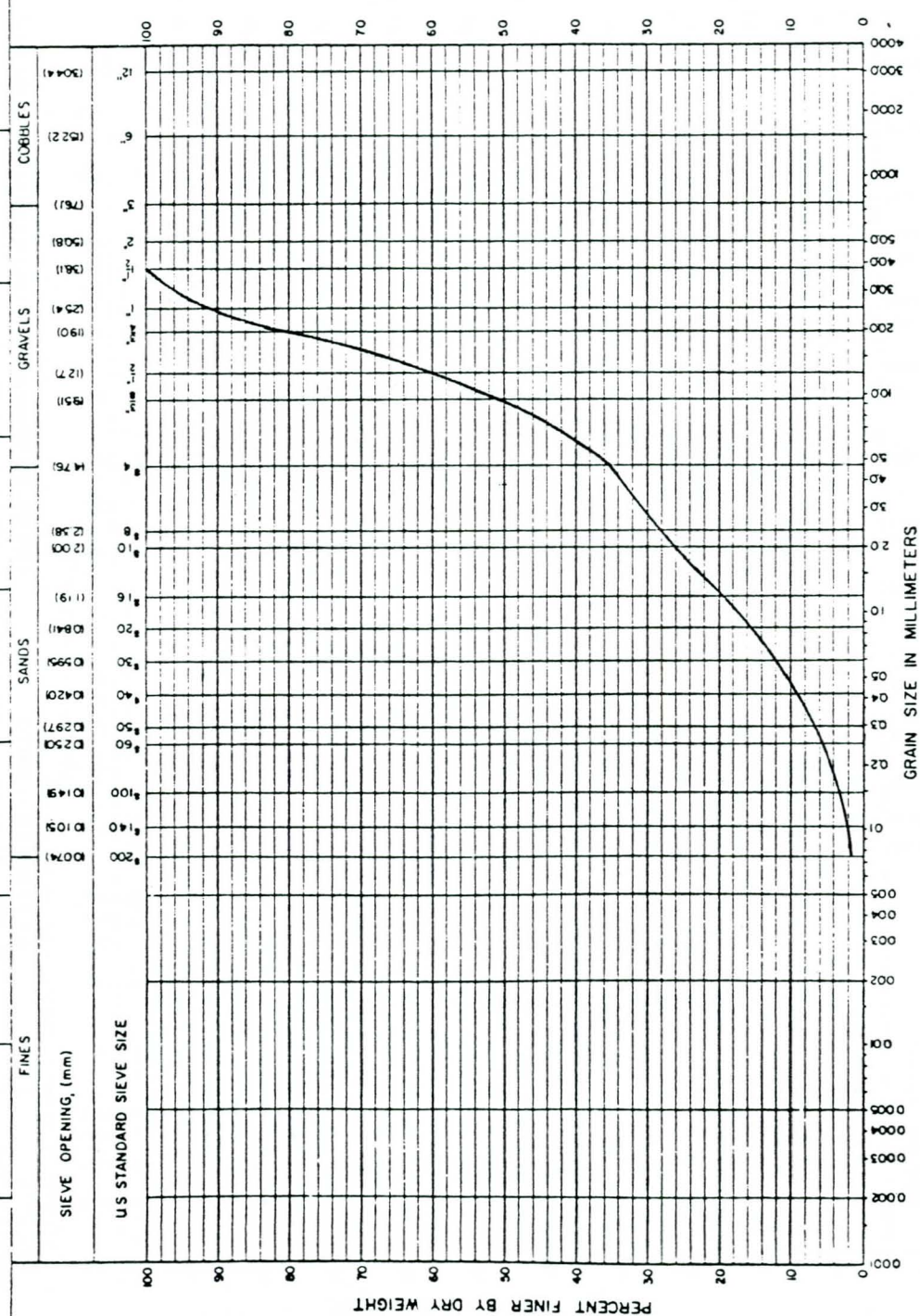
GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{50} | D_{30} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE



UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(+) #4	(-) #4

REMARKS:

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LABORATORY NO

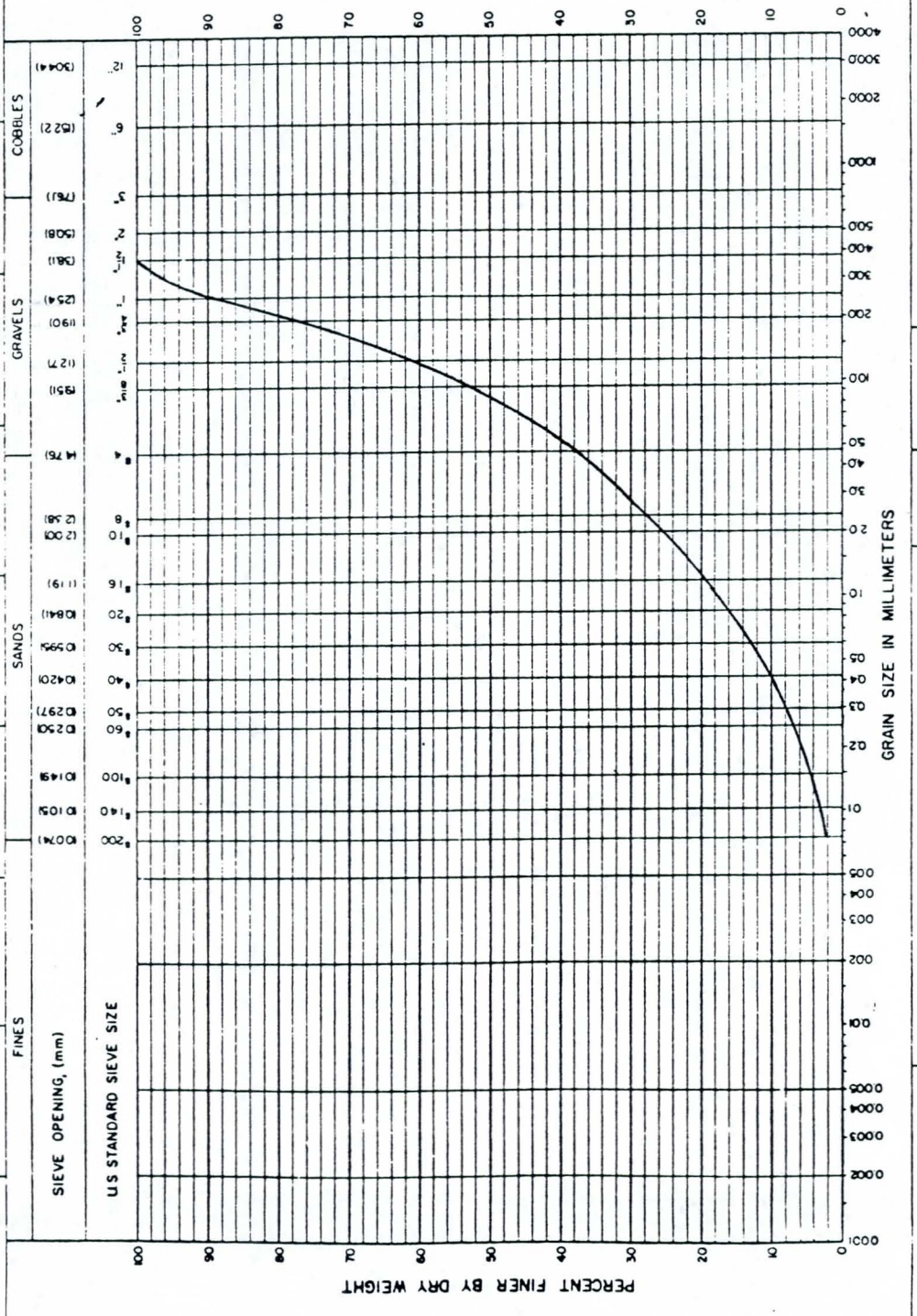
MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit, Sta. 781+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
122			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/27/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

GPO : 1971 O - 450-344

SCS-ENG-353A
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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 782+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
123			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		11/18/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.000) (1.19) (0.841) (0.595) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

U.S STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 01 005 004 003 002 001 0005 0004 0003 0002 0001

UNDISTURBED CONDITION: MOISTURE % | DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI) | AIR DRY (LL, PI) | OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-) #4 | (+) #4

REMARKS:

USDA SCS HYATTSVILLE MD 1980

GPO 1971 O - 450-334

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 784+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
124	--		
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 11/18/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

C_C | C_U | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (0.841) (0.595) (0.420) (0.297) (0.250) (0.149) (0.105) (0.074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS

NATURAL MOISTURE LL	NATURAL MOISTURE PI	AIR DRY LL	AIR DRY PI	OVEN DRY LL	OVEN DRY PI

SPECIFIC GRAVITY (G_s)

(+) #4	(-) #4

REMARKS:

GPO : 1971 O - 450-

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit, Sta. 786+00
FIELD SAMPLE NO: 125	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/19/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

12" (304.8) 6" (152.2) 3" (76.1) 2" (50.8) 1½" (38.1) 1" (25.4) ¾" (19.01) ½" (12.7) ⅜" (9.51) #4 (4.76) #8 (2.38) #10 (2.00) #16 (1.19) #20 (0.841) #30 (0.595) #40 (0.420) #50 (0.297) #60 (0.250) #100 (0.149) #140 (0.105) #200 (0.074)

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Sta. 788+00 Watson Pit

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
126			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/19/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{60} D_{85} D_{MAX} C_U C_C

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

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LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit, Sta. 790+00
FIELD SAMPLE NO: 127	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 11/24/80
SYMBOL	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{60} D_{30} D_{15} D_{10} C_c C_u D_{MAX} D_{85} D_{60} D_{50} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304) (152) (76) (50.8) (38.1) (25.4) (19.0) (12.7) (9.51) (4.76) (2.38) (2.00) (1.19) (.0841) (.0599) (.0420) (.0297) (.0250) (.0149) (.0105) (.0074)

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 10 005 004 003 200 100 0005 0004 0003 0002 0001

UNDISTURBED CONDITION: MOISTURE (%); DRY UNIT WEIGHT (g/cc, pcf)

SHRINKAGE LIMIT: %

SOLUBLE SALTS: %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-) #4 (LL); (+) #4 (PI)

REMARKS:

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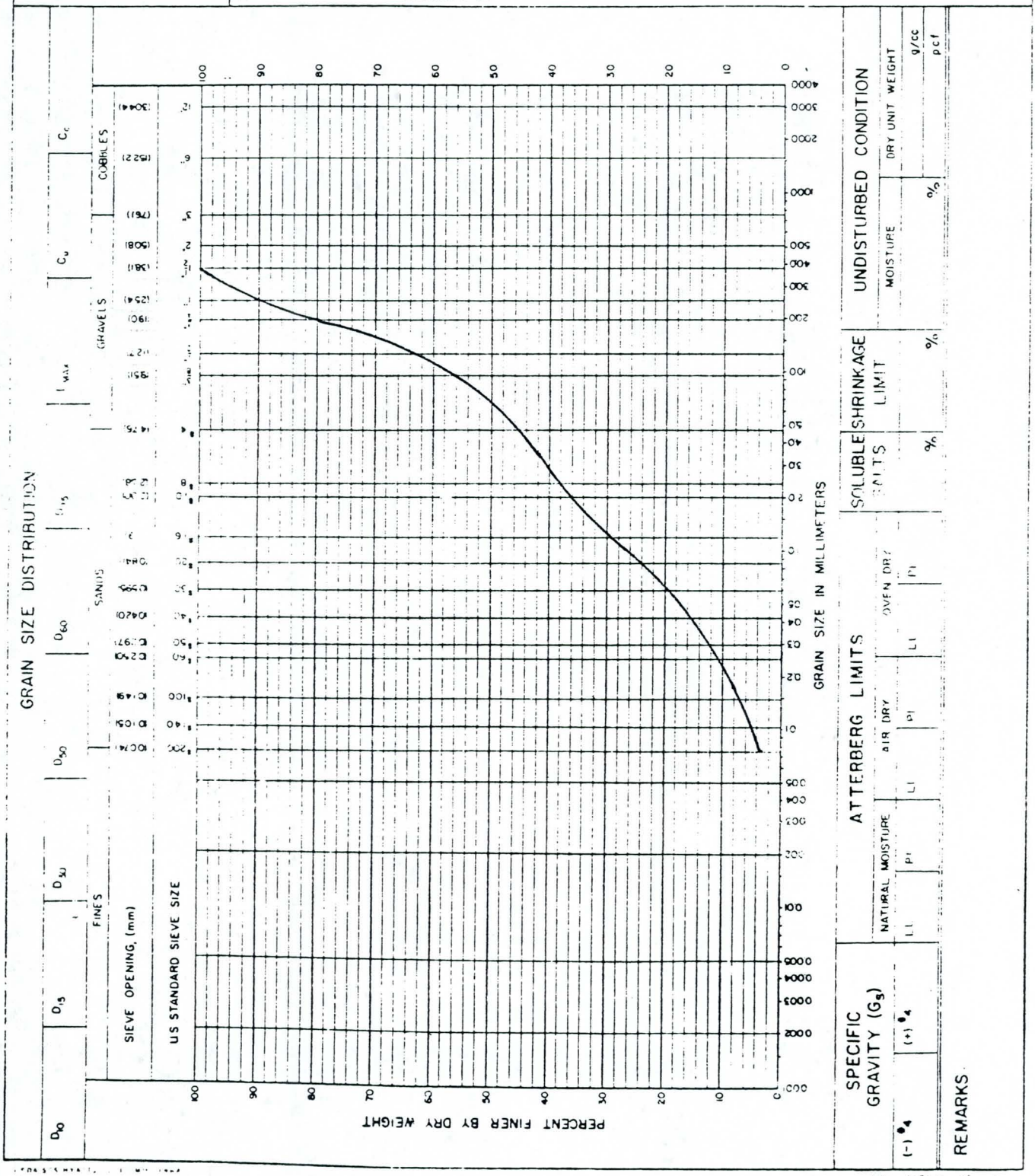
LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona		SAMPLE LOCATION: Sta. 791+50 Watson Pit	
FIELD SAMPLE NO: 128	DEPTH: --	GEOLOGIC ORIGIN:	
TYPE OF SAMPLE: Random	TESTED AT: Trench	APPROVED BY:	DATE: 12/15/80
SYMBOL	DESCRIPTION: Drain Fill		



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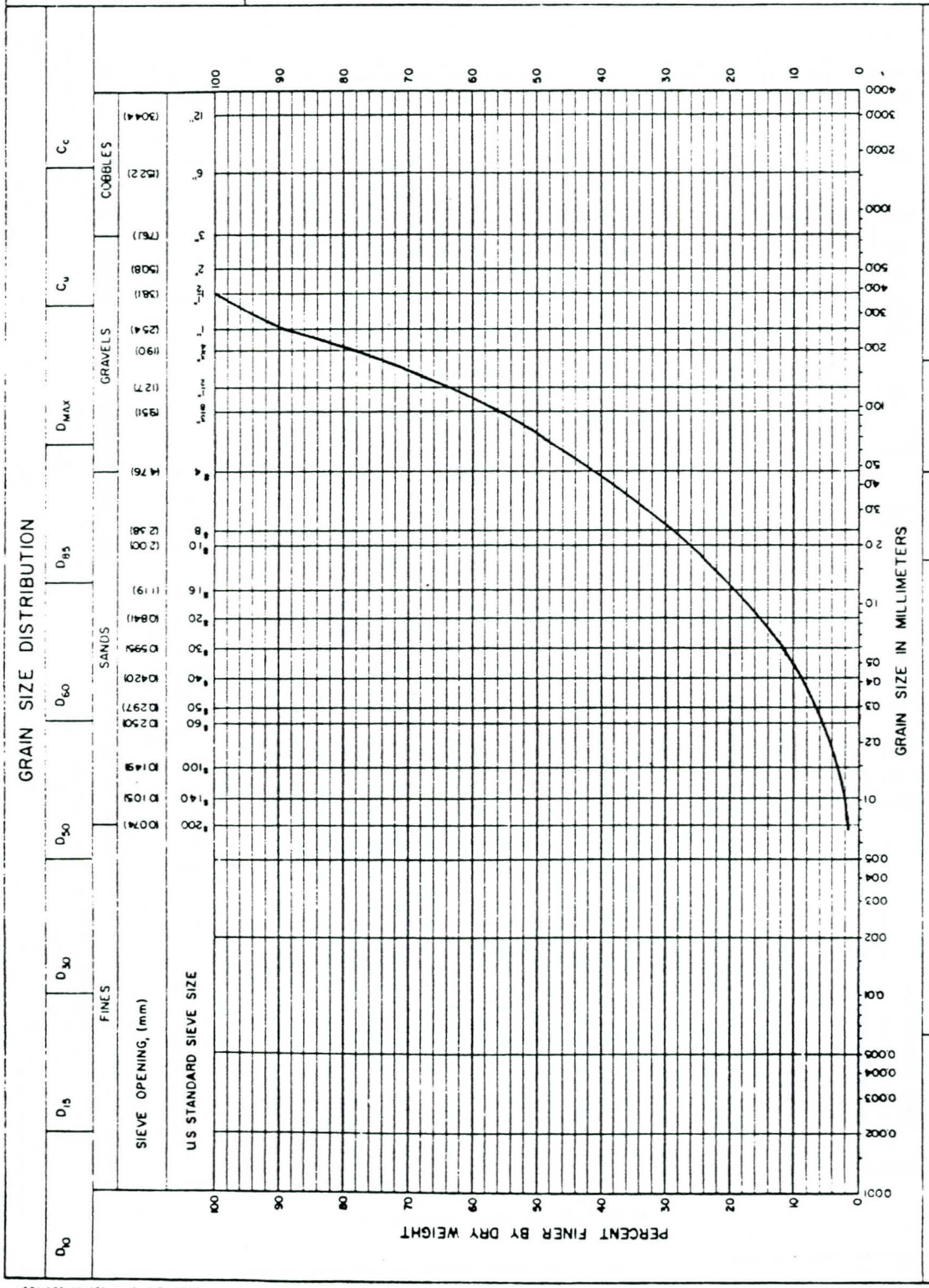
LABORATORY NO. _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit, Sta. 792+00
FIELD SAMPLE NO.: 129	DEPTH:	GEOLOGIC ORIGIN:	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 11/24/80
SYMBOL:	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION



UNDISTURBED CONDITION		
	DRY UNIT WEIGHT	g/cc
MOISTURE %		pcf

SOLUBLE SALTS %	SHRINKAGE LIMIT %

ATTERBERG LIMITS	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)	(+) #4	(-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona			SAMPLE LOCATION: Watson Pit Sta. 794+00
FIELD SAMPLE NO: 130	DEPTH:	GEOLOGIC ORIGIN:	
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 11/25/80
SYMBOL:	DESCRIPTION: Drain Fill		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (-) #4, (+) #4

REMARKS:

GPO : 1971 O - 450-34

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE	SAMPLE LOCATION
Buckeye FRS Site 1 Drain, Arizona	Watson Pit Sta. 796+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
131			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		11/25/80
SYMBOL	**DESCRIPTION** Drain Fill		

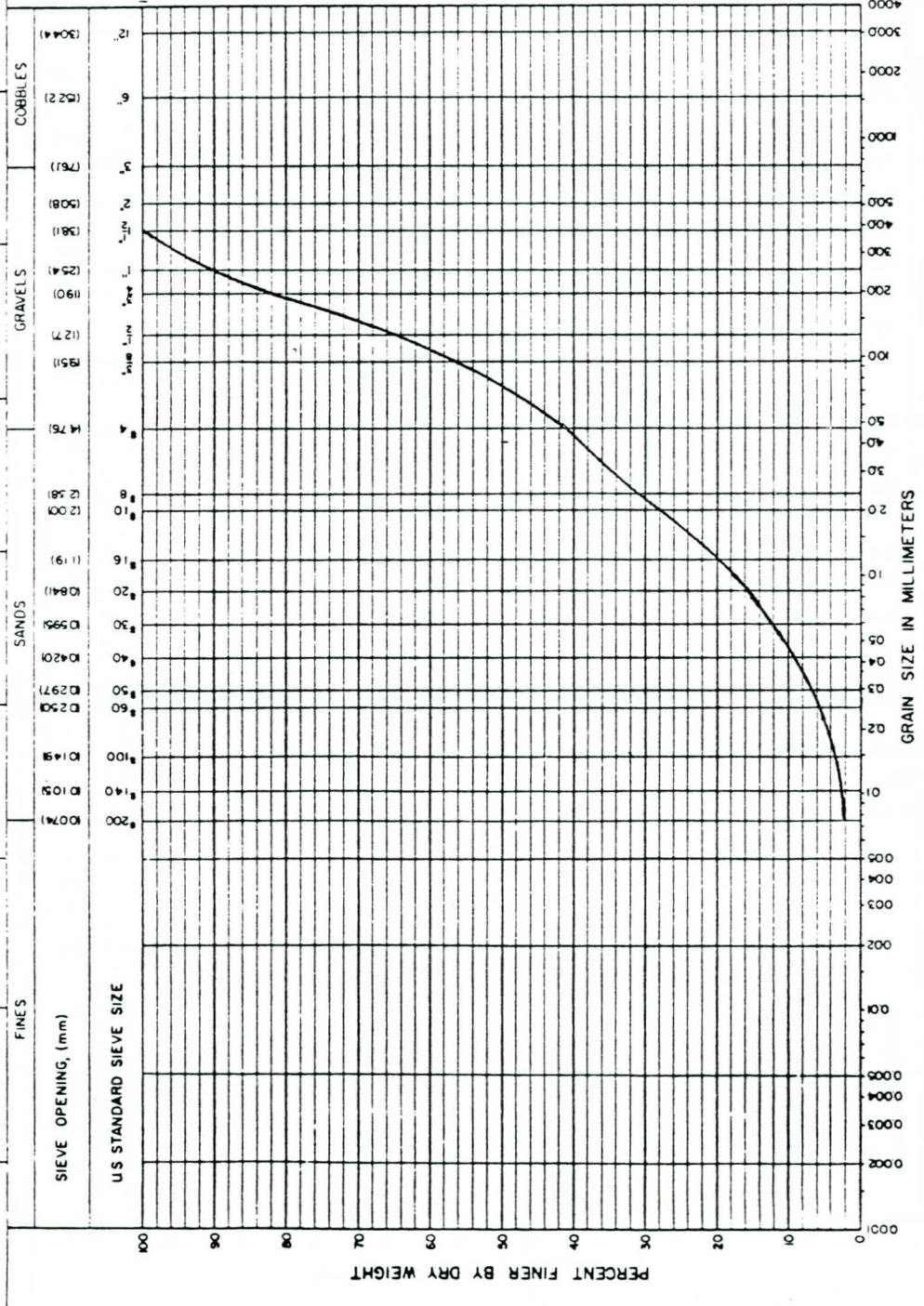
GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE



UNDISTURBED CONDITION
MOISTURE %
DRY UNIT WEIGHT g/cc pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS
NATURAL MOISTURE LL PI
AIR DRY LL PI
OVEN DRY LL PI

SPECIFIC GRAVITY (G_s)
(+) #4
(-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 798+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
132			
TYPE OF SAMPLE	**TESTED AT**	**APPROVED BY**	**DATE**
Random	Site		11/25/80
SYMBOL	**DESCRIPTION** Drain Fill		

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

USDA SCS HYATTSVILLE MD 1968

GPO : 1971 O - 450-344

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE		SAMPLE LOCATION	
Buckeye FRS Site 1 Drain, Arizona		Sta. 800+00	Watson Pit
FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
133			
TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/26/80
SYMBOL	DESCRIPTION	Drain Fill	

GRAIN SIZE DISTRIBUTION

C_c C_u D_{max} D_{85} D_{60} D_{30} D_{15} D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION			SOLUBLE SALTS %	SHRINKAGE LIMIT %
MOISTURE %	DRY UNIT WEIGHT g/cc	pcf		

ATTERBERG LIMITS	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)	(-) #4	(+) #4

REMARKS:

GPO : 1971 O - 459-344

SCS—ENG—353A
Rev. 11—71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona
SAMPLE LOCATION: Watson Pit — Sta. 800+ 50
FIELD SAMPLE NO: 134
DEPTH:
GEOLOGIC ORIGIN:
TYPE OF SAMPLE: Random
TESTED AT: Site
APPROVED BY:
DATE: 12/1/80
SYMBOL:
DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{50} | D_{10} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (−) #4

REMARKS:

GPO : 1971 O - 450-34

SCS–ENG–353A
Rev. 11–71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Watson Pit Sta. 801+00

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN
135		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		12/1/80

SYMBOL

DESCRIPTION: Drain Fill

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:

APPENDIX F

COARSE AGGREGATE BID ITEM #6 SIEVE ANALYSIS

CONTENTS:

1. AVERAGE GRADATION RESULTS
2. AVERAGE GRADATION CURVE
3. GRADATION CURVES

SIEVE ANALYSIS

Location Buckeye FRS, Site 1 Drain — Site No. #1 Drain

Watershed Buckeye — Subwatershed

Contract No. 53-8A02-0-00113 — Contractor Tierra West Contracting, Inc.

Tested By L.L. Crain — Date — Checked By

Source of Material Western Sand & Rock — Sampled Depth — to

Number of tests performed: 7

MATERIALS TESTED: Concrete Aggregate — Drain Fill — Filter

BID ITEM NO #6 Coarse Aggregate (Average) — REFERENCE CONTRACT SPEC. 24

A. COARSE AGGREGATE

Weight Container and dry sample

Weight of Container

Weight of total dry sample W

Sieve Size (in.)	Weight Sieve Plus Retained Material (1)	Weight Sieve (2)	Weight Retained (1)-(2) (3)	Percent Retained (Total Sample) $\left[\frac{(3)}{W}\right]$ 100 (4)	CUMULATIVE Percent Retained Subtotal (4) (5)	CUMULATIVE Percent Passing 100% - (5) (6)	Specification Limits (Passing)
4							
3 1/2							
3						100	100
2 1/2					1.8	98.2	90-100
2					41.0	59.0	35-70
1 1/2					91.2	8.8	0-15
1							
3/4					99.9	0.1	0-5
1/2							
3/8							
No. 4							
Pan							

This form is based on form SCS-ENG-535 with minor changes.

FUGRO

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & R[illegible] Average

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE

SYMBOL

DESCRIPTION: Coarse Aggregate Drain

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Roc
Sta. 570+00-592+55 (Drain Outle

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
1			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 9/30/80

SYMBOL

DESCRIPTION: Coarse Aggregate Drain

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

(.074) #200 (.105) #140 (.149) #100 (.250) #60 (.297) #50 (.420) #40 (.595) #30 (.841) #20 (1.19) #16 (2.00) #10 (2.38) #8 (4.76) #4 (9.51) 3/8" (12.7) 1/2" (19.0) 3/4" (25.4) 1" (38.1) 1 1/2" (50.8) 2" (76.1) 3" (152) 6" (304.4) 12"

GRAIN SIZE IN MILLIMETERS

100 90 80 70 60 50 40 30 20 10 0

4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 05 04 03 02 1.0 005 004 003 002 001 0005 0004 0003 0002 0001

PERCENT FINER BY DRY WEIGHT

100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION

MOISTURE %	DRY UNIT WEIGHT g/cc	DRY UNIT WEIGHT pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS

	NATURAL MOISTURE		AIR DRY		OVEN DRY	
	LL	PI	LL	PI	LL	PI

SPECIFIC GRAVITY (G_s)

(-) #4	(+) #4

REMARKS:

GPO : 1971 O - 435-[illegible]

SCS-ENG-353A
Rev. 11-71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Rock Sta. 593+00-605+79 (Drain Outlets)

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
2			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/2/80

SYMBOL

DESCRIPTION: Coarse Aggregate Drain

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI); AIR DRY (LL, PI); OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

SCS–ENG–353A
Rev. 11–71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Rock Sta. 608+71-618+53 (Drain Outlet

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
3			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 10/8/80

SYMBOL

DESCRIPTION: Coarse Aggregate Drain

GRAIN SIZE DISTRIBUTION

D_{90} | D_{15} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U.S STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4; (–) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Rock Sta. 619+57-670+00

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN	
4			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY:	DATE: 10/10/80

SYMBOL

DESCRIPTION: Coarse Aggregate Drain

GRAIN SIZE DISTRIBUTION

D_{90} D_{15} D_{30} D_{50} D_{60} D_{85} D_{MAX} C_u C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

US STANDARD SIEVE SIZE

GRAIN SIZE IN MILLIMETERS

PERCENT FINER BY DRY WEIGHT

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

SHRINKAGE LIMIT %

SOLUBLE SALTS %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+) #4, (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Rock Sta. 680+00--700+19 (Drain Outlets

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
5		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		11/3/80

SYMBOL

DESCRIPTION: Coarse Aggregate Drain

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{85} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304) (152) (76) (50) (38) (25.4) (19.0) (12.7) (9.51) 4.76 2.38 2.00 1.19 .841 .595 .420 .297 .250 .149 .105 .074

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

100 90 80 70 60 50 40 30 20 10 0

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT pcf g/cc

SOLUBLE SALTS %

SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL PI; AIR DRY LL PI; OVEN DRY LL PI

SPECIFIC GRAVITY (G_s): (+) #4; (-) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Rock Sta. 704+55.5-717+13.5 (Drain Outlets)

FIELD SAMPLE NO	DEPTH	GEOLOGIC ORIGIN
6		

TYPE OF SAMPLE	TESTED AT	APPROVED BY	DATE
Random	Site		12/4/80

SYMBOL

DESCRIPTION: Coarse Aggregate Drain

GRAIN SIZE DISTRIBUTION

D_{90} | D_{10} | D_{30} | D_{50} | D_{60} | D_{85} | D_{MAX} | C_u | C_c

FINES | SANDS | GRAVELS | COBBLES

SIEVE OPENING, (mm)

U S STANDARD SIEVE SIZE

PERCENT FINER BY DRY WEIGHT

GRAIN SIZE IN MILLIMETERS

UNDISTURBED CONDITION: MOISTURE (%) | DRY UNIT WEIGHT (g/cc, pcf)

SOLUBLE SALTS (%)

SHRINKAGE LIMIT (%)

ATTERBERG LIMITS: NATURAL MOISTURE (LL, PI) | AIR DRY (LL, PI) | OVEN DRY (LL, PI)

SPECIFIC GRAVITY (G_s): (-) #4 | (+) #4

REMARKS:

SCS-ENG-353A
Rev. 11-71

LABORATORY NO _____

MATERIALS TESTING REPORT	U. S. DEPARTMENT of AGRICULTURE SOIL CONSERVATION SERVICE	SOIL CLASSIFICATION

PROJECT and STATE: Buckeye FRS Site 1 Drain, Arizona

SAMPLE LOCATION: Western Sand & Rock Sta.720+00--800+00 (Drain Outlets

FIELD SAMPLE NO.	DEPTH	GEOLOGIC ORIGIN	
7			
TYPE OF SAMPLE: Random	TESTED AT: Site	APPROVED BY	DATE: 12/6/80
SYMBOL	DESCRIPTION: Coarse Aggregate Drain		

GRAIN SIZE DISTRIBUTION

C_c | C_u | D_{MAX} | D_{95} | D_{60} | D_{50} | D_{30} | D_{15} | D_{10}

COBBLES | GRAVELS | SANDS | FINES

SIEVE OPENING, (mm): (304.4) (152.2) (76.1) (50.8) (38.1) (25.4) 19.0 (12.7) 9.51 4.76 2.38 2.00 1.19 0.841 0.595 0.420 0.297 0.250 0.149 0.105 0.074

US STANDARD SIEVE SIZE: 12" 6" 3" 2" 1½" 1" ¾" ½" ⅜" #4 #8 #10 #16 #20 #30 #40 #50 #60 #100 #140 #200

GRAIN SIZE IN MILLIMETERS: 4000 3000 2000 1000 500 400 300 200 100 50 40 30 20 10 5 4 3 2 1 .5 .4 .3 .2 .1 .05 .04 .03 .02 .01 .005 .004 .003 .002 .001

PERCENT FINER BY DRY WEIGHT: 100 90 80 70 60 50 40 30 20 10 0

UNDISTURBED CONDITION: MOISTURE %; DRY UNIT WEIGHT g/cc, pcf

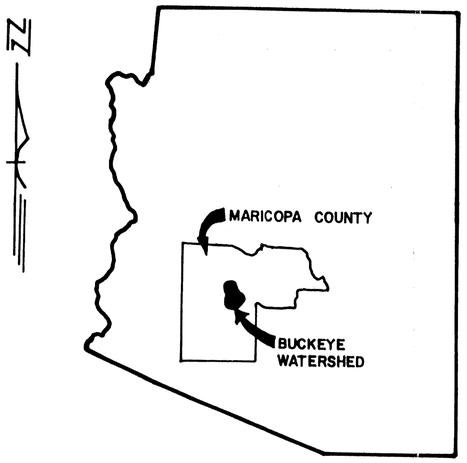
SOLUBLE SALTS %

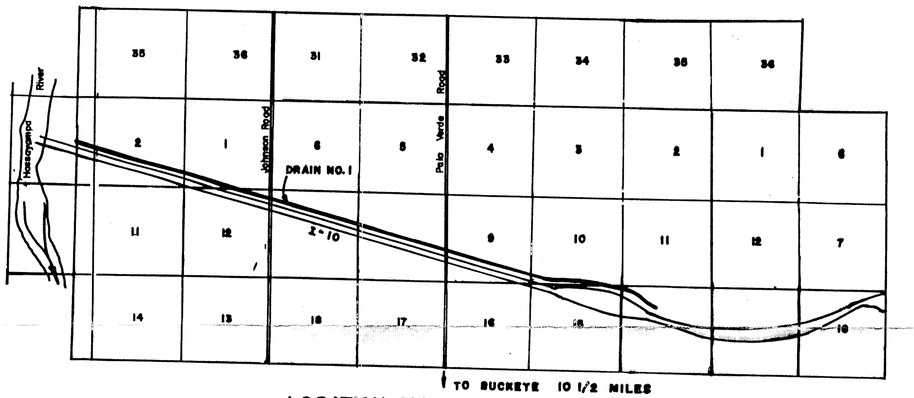
SHRINKAGE LIMIT %

ATTERBERG LIMITS: NATURAL MOISTURE LL, PI; AIR DRY LL, PI; OVEN DRY LL, PI

SPECIFIC GRAVITY (G_s): (+)#4, (-)#4

REMARKS:





LOCATION MAP

BUCKEYE WATERSHED PROTECTION AND FLOOD PREVENTION PROJECT

MARICOPA COUNTY, ARIZONA

Ertec (formerly Fugro) Project Number 80 200
SCS Contract Number 53 8A02 0 00113

Ertec The Earth Technology Corporation | BUCKEYE SITE 1 DRAIN
AS-BUILT PLAN AND PROFILE
PLATE 1

REGISTERED GEOLOGIST CERTIFICATE 10339 KENNETH EUGE 6-24-81

PLANS FOR THE CONSTRUCTION OF

BUCKEYE SITE 1 DRAIN

PREPARED FOR THE FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY
BY
SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

INDEX OF DRAWINGS

DRWG. NO.	SHT. NO.	TITLE
	1.	INDEX OF DRAWINGS
	2-6.	PLAN & PROFILE
	7.	DETAILS OF EMBANKMENT DRAIN & EMBANKMENT DRAIN OUTLET

GENERAL NOTES

1. Elevations are in feet above mean sea level U.S.G.S. datum.
2. All stationing refers to centerline of construction and is the measured horizontal distance.
3. All bearings are referenced to True North.

INDEX OF DRAWINGS
BUCKEYE SITE 1 DRAIN
BUCKEYE W.P.P.
MARICOPA COUNTY, ARIZONA

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

	Date
Designed WEP	5-79
Drawn JAM	5-79
Traced	
Checked PJM	9-79

Approved by Ralph M. Arico
Title State Conservation Engineer
Date 4/25/00
Title ASST. STATE CONSERVATIONIST - WFO

Sheet No. 1 of 7
Drawing No. 79018-AZ-B

SCS-ENG-315c (REV. 8-78)

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

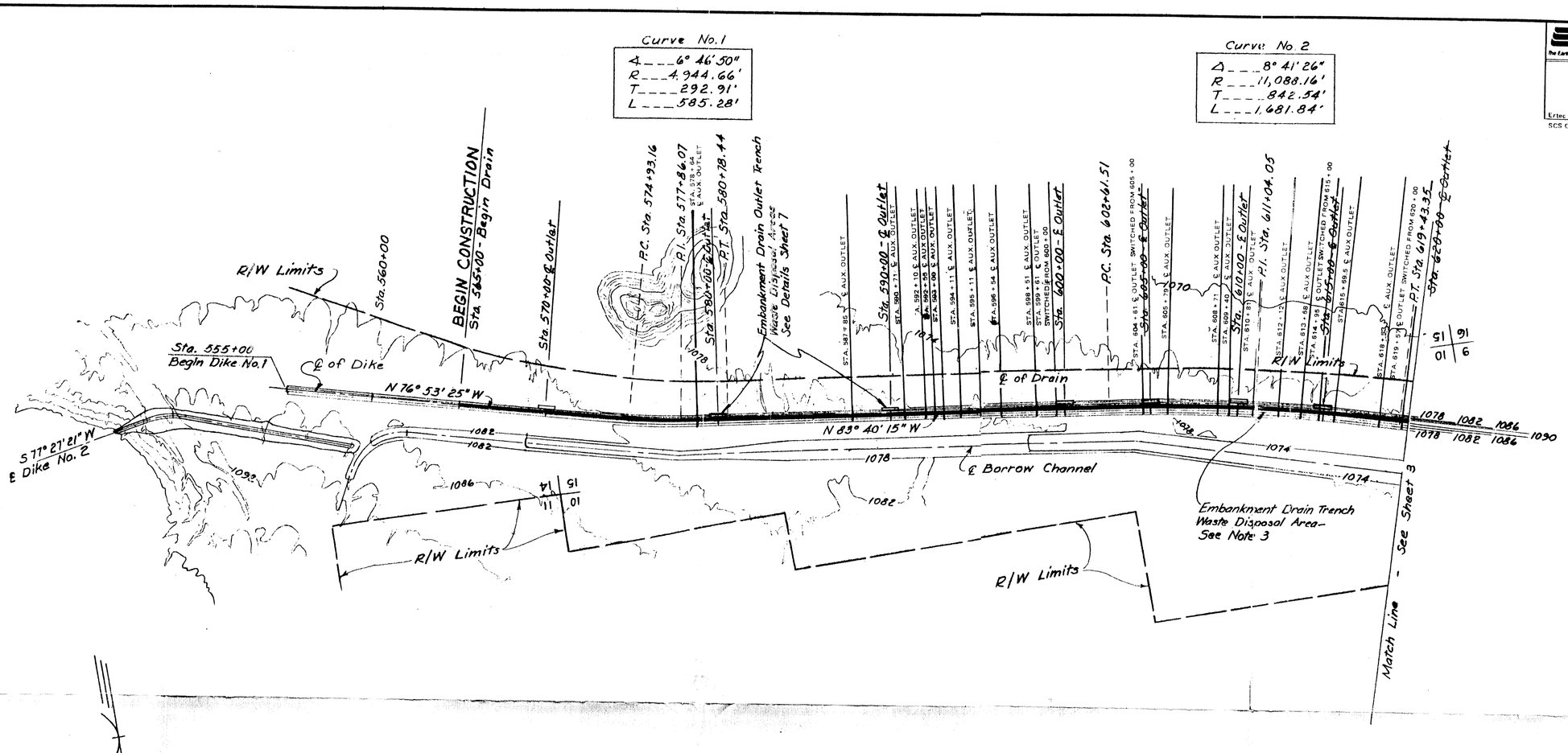
AS-BUILT PLAN AND PROFILE
PLATE 2

Ertec (formerly Fugro) Project Number 80 200
SCS Contract Number 53 8A02 0 00113

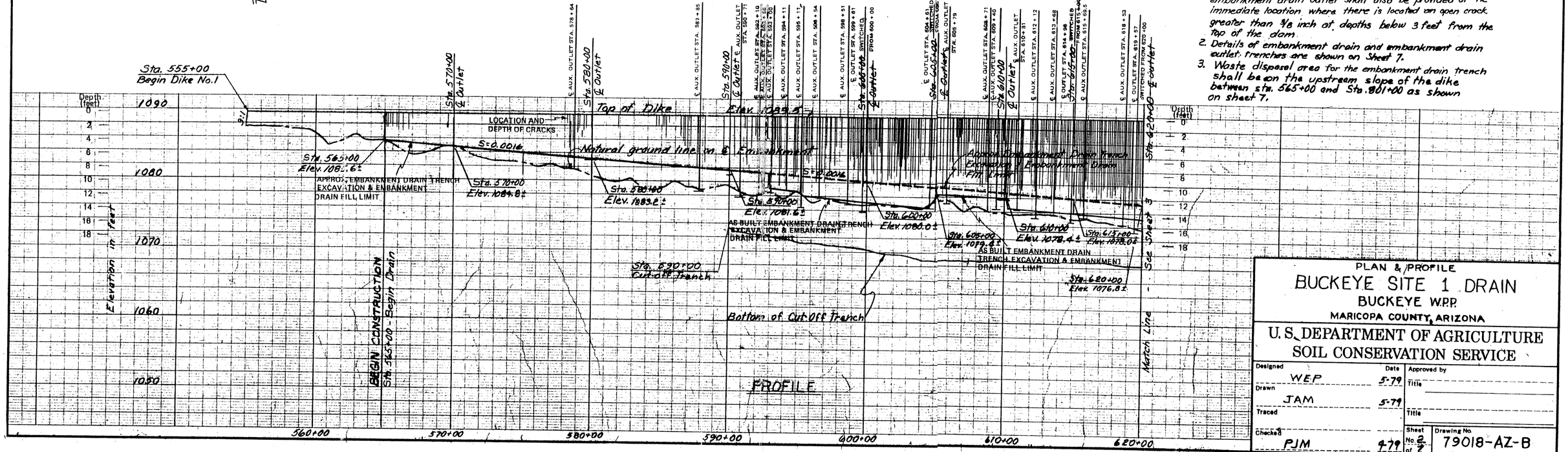
REGISTERED GEOLOGIST
CERTIFICATE NO.
10338
KENNETH M.
EUGE
6-9-81

Curve No. 1
Δ ___ 6° 46' 50"
R ___ 4,944.66'
T ___ 292.91'
L ___ 585.28'

Curve No. 2
Δ ___ 8° 41' 26"
R ___ 11,088.16'
T ___ 842.54'
L ___ 1,681.84'



PLAN
0 400 800
SCALE IN FEET



Notes:
1. All cracks in the upstream face of the embankment drain trench that extend below the trench excavation limit shown on the drawings shall be intercepted by an auxiliary embankment drain outlet trench shown on Sheet 7 and as directed by the Engineer. An auxiliary embankment drain outlet shall also be provided at the immediate location where there is located an open crack greater than 1/8 inch at depths below 3 feet from the top of the dam.
2. Details of embankment drain and embankment drain outlet trenches are shown on Sheet 7.
3. Waste disposal area for the embankment drain trench shall be on the upstream slope of the dike between sta. 565+00 and Sta. 801+00 as shown on sheet 7.

PLAN & PROFILE
BUCKEYE SITE 1 DRAIN
BUCKEYE W.P.P.
MARICOPA COUNTY, ARIZONA

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed	Date	Approved by
W.E.P.	5-79	Title
Drawn		
JAM	5-79	Title
Traced		
Checked		
PJM	4-79	Sheet No. 2 of 7
		Drawing No. 79018-AZ-B

U.S. GOVERNMENT PRINTING OFFICE: 1961 O - 599988

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

AS-BUILT PLAN AND PROFILE

PLATE 3

Ertec (formerly Fuge) Project Number 80-200

SCS Contract Number 53-8A02-0-00113

REGISTERED GEOLOGIST
CERTIFICATE NO.
10779
KENNETH E.
EUGE
6-7-81

PLAN

SCALE 0 400 800 IN FEET

PROFILE

Sta. 620+00 - ℄ Outlet

Sta. 625+00 - ℄ Outlet
STA. 625 + 04 ℄ OUTLET SWITCHED FROM ℄ OUTLET STA. 625 + 00

Sta. 630+00 - ℄ Outlet
STA. 630 + 07 ℄ OUTLET SWITCHED FROM ℄ OUTLET STA. 630 + 00

Sta. 635+00 - ℄ Outlet
STA. 634 + 00 ℄ OUTLET SWITCHED FROM 635 + 00

Sta. 640+00 - ℄ Outlet

Sta. 645+00 - ℄ Outlet

Sta. 650+00 - ℄ Outlet

Embankment Drain Outlet Trench
Waste Disposal Areas
See Detail Sheet 7

Sta. 660+00 - ℄ Outlet

Sta. 670+00 - ℄ Outlet

Sta. 680+00 - ℄ Outlet

Sta. 690+00 - ℄ Outlet

Sta. 700+00 - ℄ Outlet

STA. 687 + 35 ℄ AUX. OUTLET
STA. 687 + 93 ℄ AUX OUTLET
STA. 691 + 27 ℄ AUX. OUTLET
STA. 695 + 39 ℄ AUX OUTLET
STA. 697 + 75 ℄ AUX OUTLET
STA. 698 + 91 ℄ AUX OUTLET

R/W Limits

N 74°58' 49" W

℄ of Drain
℄ Dike

See Sheet 2

See Sheet 4

Match Line

Embankment Drain Trench
Waste Disposal Area
See Note 3

Palo Verde Road

Van Buren Street

Sta. 677+93.83 ℄ Dike
Sta. 25+58.29 ℄ Palo Verde Rd.

Notes: 1. All cracks in the upstream face of the embankment drain trench that extend below the trench excavation limit shown on the drawings shall be intercepted by an auxiliary embankment drain outlet trench shown on Sheet 7 and as directed by the Engineer. An auxiliary embankment drain outlet shall also be provided at the immediate location where there is located an open crack greater than 1/8 inch at depths below 3 feet from the top of the dam.
2. Details of embankment drain and embankment drain outlet trenches are shown on Sheet 7.
3. Waste disposal area for the embankment drain trench shall be on the upstream slope of the dike between Sta. 625+00 and Sta. 801+00 as shown on sheet 7.

LOCATION AND DEPTH OF CRACKS

Top of Dike Elev. 1089.5

Approx. Embankment Drain Trench Excavation & Embankment Drain Fill Limit

Natural ground line on ℄ Embankment

AS BUILT EMBANKMENT DRAIN TRENCH EXCAVATION & EMBANKMENT DRAIN FILL LIMIT

Bottom of Cut-off Trench

Elevation in feet

Depth (feet)

PLAN & PROFILE
BUCKEYE SITE 1 DRAIN
BUCKEYE W.P.P.
MARICOPA COUNTY, ARIZONA
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed WEP	Date 5-79	Approved by	
Drawn JAM	5-79	Title	
Traced		Title	
Checked RJM	9-79	Sheet No 3 of 7	Drawing No 79018-AZ-B

Form SCS-318 (Nov. 1975)

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

AS-BUILT PLAN AND PROFILE
PLATE 4

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53 8A02 0 00113

REGISTERED GEOLOGIST
CERTIFICATE NO.
10333
KENNETH E. EUGE
STATE OF ARIZONA

Sta. 700+00 - ℄ Outlet
℄ OUTLET STA. 700 + 19 SWITCHED FROM ℄ OUTLET STA. 700 + 00
℄ AUX. OUTLET STA. 704 + 55.5
℄ AUX. OUTLET STA. 705 + 51
℄ AUX. OUTLET STA. 706 + 27
℄ AUX. OUTLET STA. 707 + 95
℄ OUTLET STA. 709 + 80 SWITCHED FROM ℄ OUTLET STA. 710 + 00
Sta. 710+00 - ℄ Outlet
℄ AUX. OUTLET STA. 710 + 53
℄ AUX. OUTLET STA. 714 + 56
℄ AUX. OUTLET STA. 716 + 48
℄ AUX. OUTLET STA. 717 + 13.5
Sta. 720+00 - ℄ Outlet
Embankment Drain Outlet Trench
Waste Disposal Areas
See detail Sheet 7
℄ OUTLET STA. 729 + 93 SWITCHED FROM ℄ OUTLET STA. 730 + 00
Sta. 730+00 - ℄ Outlet
Sta. 740+00 - ℄ Outlet
Sta. 750+00 - ℄ Outlet
Sta. 760+00 - ℄ Outlet
Sta. 770+00 - ℄ Outlet
Sta. 780+00 - ℄ Outlet

R/W Limits
℄ of Drain
N 74° 58' 49" W
℄ Dike
℄ Borrow Channel
Embankment Drain Trench
Waste Disposal Area
See Note 3
Match Line - See Sheet 3
Match Line - See Sheet 6
R/W Limits
Van Buren Street
R/W Limits
N

PLAN
0 400 800
SCALE IN FEET

Top of Dike - Elev. 1089.5
Approx. Embankment Drain Trench Excavation & Embankment Drain Fill Limit
LOCATION AND DEPTH OF CRACKS
Sta. 700+00 Elev. 1072.0±
Sta. 705+00 Elev. 1072.5±
Sta. 710+00 Elev. 1072.0±
Sta. 715+00 Elev. 1072.5±
Sta. 720+00 Elev. 1072.0±
Sta. 725+00 Elev. 1072.5±
Sta. 730+00 Elev. 1072.0±
Sta. 735+00 Elev. 1072.5±
Sta. 740+00 Elev. 1072.0±
Sta. 745+00 Elev. 1072.5±
Sta. 750+00 Elev. 1072.0±
Sta. 755+00 Elev. 1072.5±
Sta. 760+00 Elev. 1072.0±
Sta. 765+00 Elev. 1072.5±
Sta. 770+00 Elev. 1072.0±
Sta. 775+00 Elev. 1072.5±
Sta. 780+00 Elev. 1072.0±
S=0.001
Sta. 705+00 Change of Grade
Sta. 715+00 Change of Grade
Sta. 725+00 Change of Grade
Sta. 735+00 Change of Grade
Sta. 745+00 Change of Grade
Sta. 755+00 Change of Grade
Sta. 765+00 Change of Grade
Sta. 775+00 Change of Grade
AS BUILT EMBANKMENT DRAIN TRENCH EXCAVATION & EMBANKMENT DRAIN FILL LIMIT
NATURAL GROUND LINE ON ℄ EMBANKMENT
Bottom of Cut-off Trench
PROFILE

Elevation in feet
1090
1080
1070
1060
1050
Depth (feet) 0 2 4 6 8 10 12 14 16 18 20
700+00 710+00 720+00 730+00 740+00 750+00 760+00 770+00 780+00

Notes: 1. All cracks in the upstream face of the embankment drain trench that extend below the trench excavation limit shown on the drawings shall be intercepted by an auxiliary embankment drain outlet trench shown on Sheet 7 and as directed by the Engineer. An auxiliary embankment drain outlet shall also be provided at the immediate location where there is located an open crack greater than 3/8 inch at depths below 3 feet from the top of the dam.
2. Details of embankment drain and embankment drain outlet trenches are shown on Sheet 7.
3. Waste disposed area for the embankment drain trench shall be on the upstream slope of the dike between Sta. 565+00 and Sta. 801+00 as shown on Sheet 7.

PLAN & PROFILE
BUCKEYE SITE 1 DRAIN
BUCKEYE W.P.P.
MARICOPA COUNTY, ARIZONA
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed WEP	Date 5-79	Approved by	
Drawn JAM	5-79	Title	
Traced		Title	
Checked PJM	9-79	Sheet No. 4 of 7	Drawing No. 79018-AZ-B

Form SCS-318 (November 1955)

Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A03-9-00113

BUCKEYE SITE 1 DRAIN

AS-BUILT PLAN AND PROFILE
PLATE 5

REGISTERED ENGINEER
CERTIFICATE NO.
10333
KENNETH M. EUGE
6-81

PLAN

0 400 800
SCALE IN FEET

Sta. 780+00 - ℄ Outlet
Sta. 790+00 - ℄ Outlet
Sta. 800+00 - ℄ Outlet
Sta. 801+00
END CONSTRUCTION
End Drain
Sta. 810+00
Sta. 820+00
Sta. 830+00
Sta. 840+00
Sta. 850+00
Sta. 860+00
R/W Limits
℄ Drain
Embankment Drain Trench Waste Disposal Areas See Sheet 7
N 74° 58' 49" W
℄ Dike
℄ Borrow Channel
Embankment Drain Trench Waste Disposal Area See Note 3
Gated Outlet Sta. 817+00 50' wide entrance Channel
℄ Johnson Road
Match Line - See Sheet 4
Match Line - See Sheet 6

Notes:
1. All cracks in the upstream face of the embankment drain trench that extend below the trench excavation limit shown on the drawings shall be intercepted by an auxiliary embankment drain outlet trench shown on Sheet 7 and as directed by the Engineer. An auxiliary embankment drain outlet shall also be provided at the immediate location where there is located an open crack greater than 3/8 inch at depths below 3 feet from the top of the dam.
2. Details of embankment drain and embankment drain outlet trenches are shown on Sheet 7.
3. Waste disposal area for the embankment drain trench shall be on the upstream slope of the dike between Sta. 565+00 and Sta. 801+00 as shown on Sheet 7.

Sta. 787+81.82 ℄ Dike No.1 =
Sta. 25+59.44 ℄ Johnson Road

R-4-W | R-5-W
T-1-N

Top of Dike - Elev. 1089.5

LOCATION AND DEPTH OF CRACKS

Approx. Embankment Drain Trench Excavation and Embankment Drain Fill Limit

Sta. 780+00 Elev. 1072.0±
Sta. 785+00 Elev. 1072.5±
Sta. 790+00 Elev. 1072.0±
Sta. 795+00 Elev. 1072.3±
Sta. 800+00 Elev. 1072.0±
Sta. 810+00 Elev. 1072.1±
S=0.001

Change of Grade
Bottom of Cut-off Trench
PROFILE

Elevation in feet
Depth (feet)

780+00 790+00 800+00 810+00 820+00 830+00 840+00 850+00 860+00

PLAN & PROFILE
BUCKEYE SITE 1 DRAIN
BUCKEYE W.P.P.
MARICOPA COUNTY, ARIZONA

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed WEP	Date 5-79	Approved by	
Drawn JAM	5-79	Title	
Traced		Title	
Checked PJM	9-79	Sheet No. 5 of 7	Drawing No. 79018-AZ-B

Form SCS-318 (November 1955)

Ertec
The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

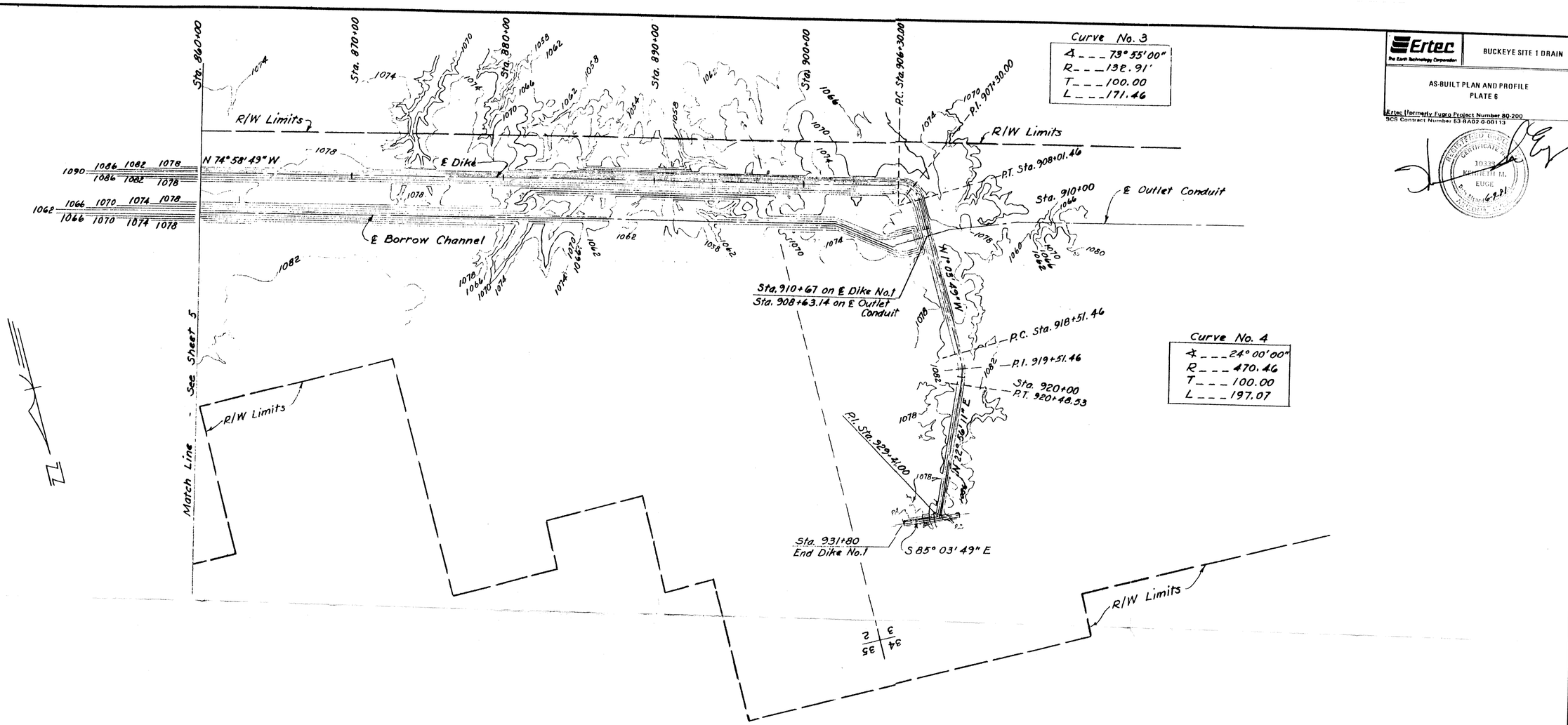
AS-BUILT PLAN AND PLOT
PLATE 6

Ertec (formerly Fugro Project Number 80-200
SCS Contract Number 53-8A02-0-00113

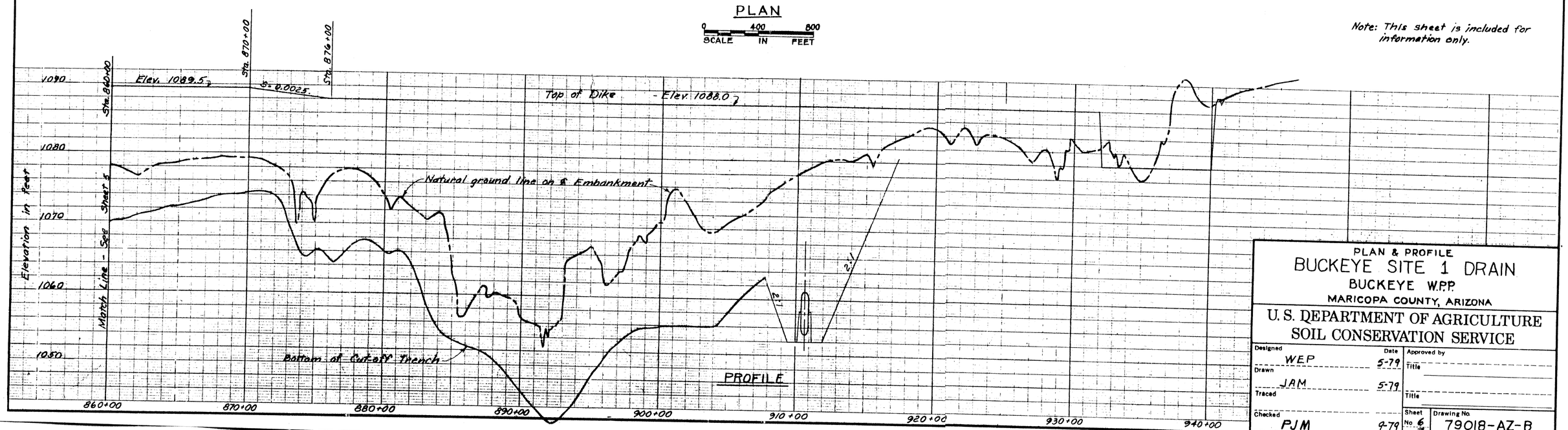
REGISTERED CIVIL ENGINEER
CERTIFICATE NO.
10339
KENNETH M.
EUGE
6-7-79
ARIZONA

Curve No. 3
Δ - - - 79° 55' 00"
R - - - 132.91'
T - - - 100.00
L - - - 171.46

Curve No. 4
Δ - - - 24° 00' 00"
R - - - 470.46
T - - - 100.00
L - - - 197.07



Note: This sheet is included for information only.



PLAN & PROFILE
BUCKEYE SITE 1 DRAIN
BUCKEYE W.P.P.
MARICOPA COUNTY, ARIZONA

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed WEP	Date 5-79	Approved by	
Drawn JAM	5-79	Title	
Traced		Title	
Checked PJM	9-79	Sheet No 6 of 7	Drawing No. 79018-AZ-B

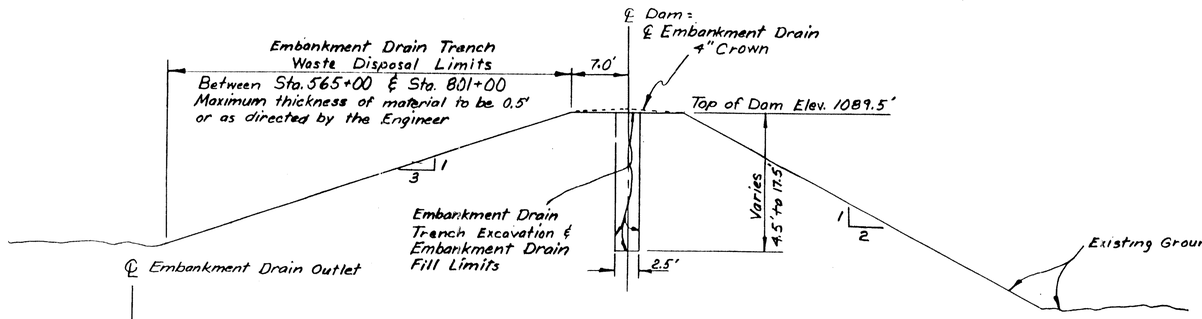
Ertec — The Earth Technology Corporation

BUCKEYE SITE 1 DRAIN

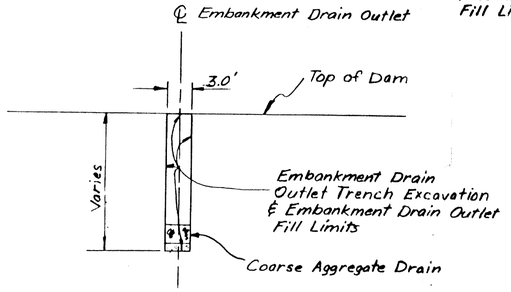
AS-BUILT PLAN AND PROFILE

PLATE 7

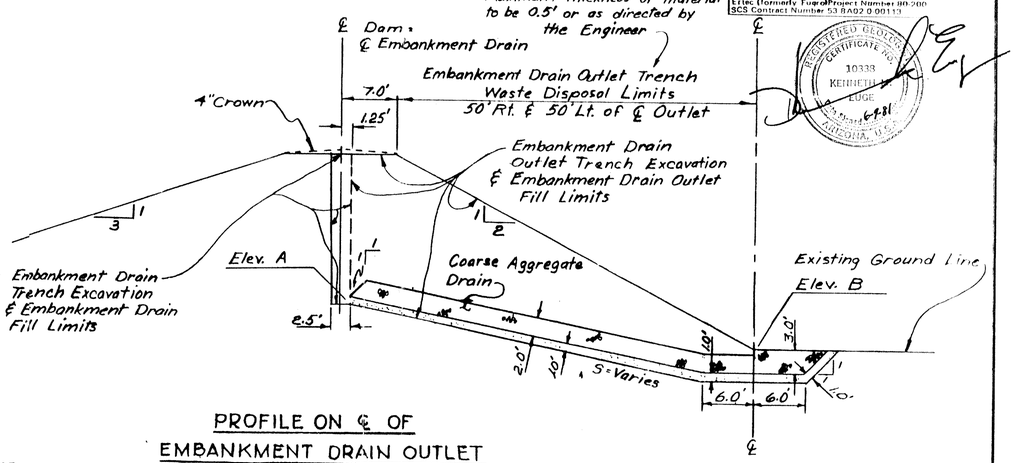
Ertec (formerly Fugro) Project Number 80-200
SCS Contract Number 53-8A02-0-00113



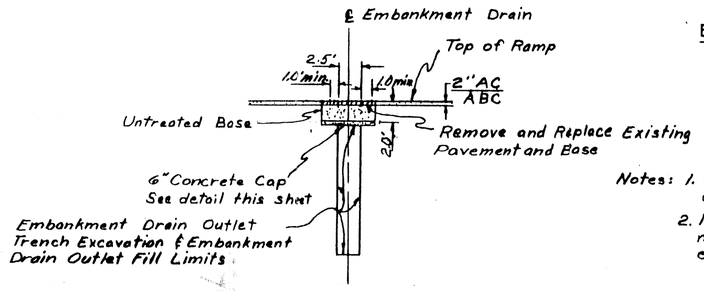
TYPICAL CROSS SECTION
EMBANKMENT DRAIN



TYPICAL CROSS SECTION
EMBANKMENT DRAIN OUTLET



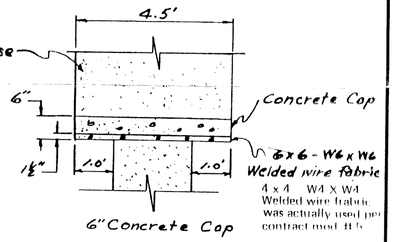
PROFILE ON ℄ OF
EMBANKMENT DRAIN OUTLET



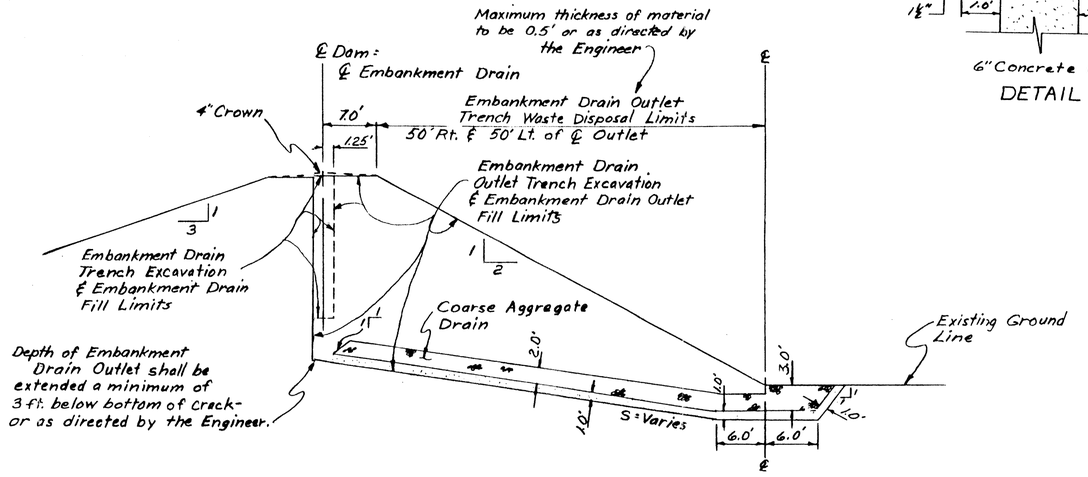
TYPICAL CROSS SECTION
PALO VERDE AND JOHNSON
ROAD RAMPS

Notes: 1. Extend Untreated Base and concrete cap 9' on each side of the edge of the pavement.

2. Minimum thickness of aggregate base course material shall equal the thickness of the existing material.



DETAIL



PROFILE ON ℄ OF AUXILIARY
EMBANKMENT DRAIN OUTLET

SCHEDULE OF EMBANKMENT DRAIN OUTLETS

Station	Elevation A	Elevation B
570+00	1084.8±	1084.8±
580+00	1083.2±	1080.6 ±
590+00	1081.6±	1079.4 ±
600+00	1080.0 ±	1076.8 ±
605+00	1079.4 ±	1077.4 ±
610 +00	1078.4 ±	1075.8 ±
615 +00	1078.0 ±	1075.0 ±
620 +00	1076.8 ±	1073.6 ±
625+00	1076.0 ±	1072.8 ±
630+00	1075.2 ±	1071.8 ±
635+00	1074.4 ±	1072.6 ±
640+00	1073.6 ±	1072.4 ±
645+00	1072.8 ±	1072.8 ±
650+00	1072.0 ±	1072.0 ±
660+00	1072.0 ±	1070.4 ±
670+00	1072.0 ±	1068.0 ±
680+00	1072.0 ±	1067.2 ±
690+00	1072.0 ±	1067.8 ±
700+00	1072.0 ±	1066.8 ±
710+00	1072.0 ±	1066.4 ±
720+00	1072.0 ±	1065.6 ±
730+00	1072.0 ±	1065.6 ±
740+00	1072.0 ±	1065.0 ±
750+00	1072.0 ±	1065.2 ±
760+00	1072.0 ±	1062.2 ±
770+00	1072.0 ±	1061.8 ±
780+00	1072.0 ±	1062.8 ±
790+00	1072.0 ±	1062.2 ±
800+00	1072.0 ±	1064.6 ±

Note: Auxiliary Embankment Drain Outlet Elevations shall be as directed by the Engineer.

Embankment Drain Outlets and the Palo Verde[1] and Johnson Road caps were constructed with no significant variations from the plans.

AS-BUILT SCHEDULE OF EMBANKMENT DRAIN OUTLETS

STATION	TYPE OUTLET	REMARKS[1]	STATION	TYPE OUTLET	REMARKS
570 + 00	S	-	650 + 00	S	-
578 + 64	A	O,D	660 + 00	S	-
580 + 00	S	-	670 + 00	S	-
587 + 85	A	D	680 + 00	S	-
590 + 00	S	-	687 + 35	A	D
590 + 71	A	D	687 + 93	A	D
592 + 10	A	D	690 + 00	S	-
592 + 55	A	G	691 + 27	A	D
593 + 00	A	D	695 + 39	A	D
594 + 11	A	D	697 + 75	A	D
595 + 11	A	D	698 + 91	A	D
596 + 54	A	D	700 + 19	Field change from 700 + 00,A	D
598 + 51	A	D	704 + 55.5	A	D
599 + 61	Field change from 600 + 00,A	D	705 + 51	A	D
604 + 61	Field change from 605 + 00	-	706 + 27	A	D
605 + 79	A	D	707 + 95	A	O,D
608 + 71	A	D	709 + 50	Field change from 710 + 00	-
609 + 40	A	D	710 + 53	A	O,D
610 + 00	S	-	714 + 56	A	D
610 + 81	A	D	716 + 48	A	D
612 + 12	A	D	717 + 13.5	A	D
613 + 68	A	D	720 + 00	S	-
614 + 95	Field change from 615 + 00	-	729 + 93	Field change from 730 + 00	-
615 + 60.5	A	D	740 + 00	S	-
618 + 53	A	D	750 + 00	S	-
619 + 57	Field change from 620 + 00,A	D	760 + 00	S	-
625 + 04	Field change from 625 + 00	-	770 + 00	S	-
630 + 07	Field change from 630 + 00	-	780 + 00	S	-
634 + 00	Field change from 635 + 00	-	790 +00	S	-
640 + 00	S	-	800 + 00	S	-
645 + 00	S	-			

S = SCHEDULED OUTLET
A = AUXILIARY OUTLET
O = AUXILIARY OUTLET REQUIRED FOR OPEN CRACK
D = AUXILIARY OUTLET REQUIRED FOR DEEP CRACK
G = AUXILIARY OUTLET TO DRAIN A GROUP OF CLOSELY SPACED DEEP CRACKS

1/ REMARKS COLUMN IS FOR AUXILIARY OUTLETS ONLY.

DETAILS OF EMBANKMENT DRAIN & EMBANKMENT DRAIN OUTLET

BUCKEYE SITE 1 DRAIN

BUCKEYE W.P.P.
MARICOPA COUNTY, ARIZONA

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed WEP	Date 5-79	Approved by	
Drawn JAM	5-79	Title	
Traced		Title	
Checked RJM	9-79	Sheet No 7 of 7	Drawing No. 79018-AZ-E

SCS-ENG-313C (REV. 6-78)