Hole No. CP05-EAARS-CB-0272

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 8.7 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-61.5	70.2					-61.5	
							72
						-64.8	
			SAND: pale greenish grey, wet, very dense, uniform, fine grained, subrounded, quartzose with trace, angular, fine to medium grained calcitic sand		17	SPT	44, 50
							74
							76
							78
						-69.8	
			SAND: pale greenish grey, wet, well graded, fine to coarse grained angular, calcitic with some fine, subrounded quartzose sand and trace silt, dense		18	SPT; Calcitic sand predominates; Tamiami Formation	24, 22, 27
							80
							82
						-74.8	
			SAND: light greenish grey, wet, dense, as above		19	SPT	16, 20, 16
							84
							86
							88
						-79.8	

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0272

Hole No. CP05-EAARS-CB-0272

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 8.7 | Sheet 6 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-79.9	88.6					-79.9	
			SAND: as above but with a trace fine gravel and very dense		20	SPT	27, 27, 27
						-84.8	
			SAND: as above but subequal proportions of fine, uniform, subrounded, quartzose and fine to coarse, angular, calcitic		21	SPT	25, 19, 25
						-89.8	
			SAND: as above		22	SPT	15, 18, 19
-91.3	100.0						
			End of Boring at 100'				

90 92 94 96 98 100 102 104 106

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0272

Hole No. CP05-EAARS-CB-0273

DRILLING LOG	Division	Installation	Sheet 1 of 5 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750066.3, E762043.7 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0273		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/14/2005 Completed 7/14/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 12.4 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: N. Holst	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.4	0.0						
			Gravelly SAND and Peat: light brownish grey and black, dry to moist, medium dense, angular, calcitic sand and gravel, roadfill		1	12.4 SPT, All calcitic material noted below is at least partly shell fragments	13, 15, 7
						10.9	3
					2	SPT	5, 8
						9.4	6
					3	SPT	4, 8
7.9	4.5					7.9	
			LIMESTONE: caprock, tan to light brown, fine grained, fossiliferous, thinly bedded, vuggy, hard and strong to soft, weak and porous	54 (RQD 30%)	4 1	7.9 SPT HQ coring, UCS=3090psi	50/0"
3.9	8.5						
			Gravelly SAND: pale brownish grey, wet, very dense, well graded, fine to coarse grained, angular, calcitic			2.9	
					5	SPT; Set 10 ft casing	30, 50/3"
						-1.1	
			Gravelly SAND: as above but with some silt		6	SPT, Intermittent hard drilling to 18ft, then hard drilling to 19.5 ft	5, 4, 13

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05 EAARS-CB-0273

Hole No. CP05-EAARS-CB-0273

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.4 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.6	15.0					-2.6	
							16
							18
						-6.1	
					7	SPT	50/0"
							20
							22
-11.1	23.5					-11.1	
			SAND: pale brownish grey, wet, medium dense, uniform, fine grained, subrounded, quartzose, some gravel		8	SPT; Caloosahatchee Formation	21 10 7
							24
							26
							28
						-16.1	
			SAND: as above but loose and no gravel		9	SPT	4 3 3
							30
							32

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0273

Hole No. CP05-EAARS-CB-0273

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 12.4 | Sheet 3 of 5 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.0	33.4					-21.0	
-21.1	33.5		Only fine grained, calcareous sandstone fragments recovered, large fragments lodged in bits		10	-21.1 SPT	19, 5, 10
-26.1	38.5		SAND: as above but pale greenish grey		11	-26.1 SPT	5, 10, 9
-31.1	43.5		GRAVEL: medium grey, wet, loose, well graded, fine to medium grained, angular, calcareous sandstone gravel, fossiliferous, trace fine sand		12	-31.1 SPT; Hole caving	6, 5, 5
			GRAVEL: as above but medium dense		13	-36.1 SPT; Intermittent hard drilling 50.5 ft	6, 8, 8

34 36 38 40 42 44 46 48 50

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0273

Hole No. CP05-EAARS-CB-0273

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 12.4 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-39.4	51.8					-39.4	
-41.1	53.5					-41.1	
			Sandy Gravel: gravel as above but with fine subrounded quartzose and fine to coarse grained, angular, calcitic sand, trace silt		14	SPT	12, 11, 9
-46.1	58.5					-46.1	
			Silty SAND: pale greenish grey, medium dense, wet, well graded, subequal parts, fine to coarse, angular, calcitic and fine grained, subrounded, quartzose, some gravel		15	SPT	8, 6, 10
-51.1	63.5					-51.1	
			SAND: greenish grey, wet, dense, poorly graded, mostly fine grained, subrounded and quartzose with some fine to coarse grained angular and calcitic, trace silt		16	SPT	15, 17, 15
						-58.1	
			SAND: as above just slightly lighter greenish grey and no silt		17	SPT	16, 15, 14

52 54 56 58 60 62 64 66 68 70

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0273

Hole No. CP05-EAARS-CB-0273

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 12.4 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-57.8	70.2					-57.8	
							72
						-61.1	
			SAND: pale greenish grey, wet, very dense, uniform, fine grained, subrounded, quartzose, trace angular, fine to coarse, calcitic		18	SPT	22, 29, 30
							74, 76, 78
						-66.1	
			SAND: as above but dense and some silt		19	SPT	27, 21, 21
							80, 82
						-71.1	
			SAND: light grey, wet, dense, well graded, mostly fine to coarse grained, angular and calcitic, some fine, subrounded and quartzose, trace fine gravel		20	SPT: Calcitic sand predominates	22, 20, 12
							84, 86, 88
						-76.1	

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0273

Hole No. CP05-EAARS-CB-0273

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.4 | Sheet 6 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-76.2	88.6					-76.2	
			SAND: as above but medium dense		21	SPT	5, 7, 16
						-81.1	
			SAND: as above but pale greenish grey and very dense		22	SPT	29, 25, 28
						-86.1	
			SAND: as above but grey		23	SPT	21, 26, 32
-87.6	100.0						
			End of Boring at 100'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

Depth scale: 90, 92, 94, 96, 98, 100, 102, 104, 106

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0273

Hole No. CP05-EAARS-CB-0274

DRILLING LOG	Division:	Installation:	Sheet 1 of 6 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750059.5, E758708.6 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0274		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/11/2005 Completed 7/14/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 13.6 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: J. Petrie	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
13.6	0.0						
11.6	2.0		Gravelly Silty SAND, grey, dense, well graded, fine to coarse, subangular, dry, slightly organic, shelly fragments		1	13.6 SPT 11.6	6, 16, 15
5.6	8.0		Gravelly SAND, light grey, medium dense, well graded, fine to coarse, subangular, moist, slightly organic, shelly fragments		2	SPT 9.6	7, 14, 7
			Gravelly SAND, light grey, medium dense, well graded, fine to coarse, subangular, moist, shelly fragments		3	SPT 6.6	4, 13, 7
					4	5.6 SPT	50/1"
4.4	9.3		Gravelly sandy CLAY, light grey, firm, fine to coarse, subangular sand, moist, shelly. Cobble stopped penetration		5	SPT 4.4	6, 3, 50/1"
1.6	12.0		Cobble and gravel size, grey light brown, shelly LIMESTONE, moderately strong	30 (RQD 13%)	1	HQ coring, UCS=433psi 1.6	
-0.4	14.0		Gravelly silty SAND, light grey, medium dense, well graded, fine to coarse, subangular, wet, shelly fragments		6	SPT -0.4	7, 7, 20
			Gravelly SAND, light grey, loose, well graded, fine to coarse, subangular, wet, shelly		7	SPT	4, 1

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0274

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Hole No. CP05-EAARS-CB-0274

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 13.6 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-1.4	15.0					-1.4	
							8
							16
-4.4	18.0						
			Light grey shelly LIMESTONE, vuggy, angular fragments, moderately strong to strong. Softer seams - angular gravel size pieces recovered along			-4.9	18
						-5.4	
						cored 18 to 22 feet	
						lost circulation	20
-8.4	22.0					-8.4	
							22
						-10.4	
			Gravelly SAND, light grey, medium dense, well graded, fine to coarse, angular to subangular, damp, shelly, occasional quartz subangular medium sand		8	SPT	12 / 8 / 9
							24
							26
							28
						-15.4	
-16.4	30.0		Gravelly SAND, light grey, medium dense, fine to coarse, well graded angular to sub angular		9	SPT	39 / 16 / 5
			Silty SAND: light grey, medium dense, uniform, fine to medium, subangular to subrounded, wet, occasional subrounded gravel sized cemented sand				30
							32

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0274

Hole No. CP05-EAARS-CB-0274

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 13.6 | Sheet 3 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-19.8	33.4					-19.8	
			Silty SAND, light grey, medium dense, uniform, fine to medium, occasional subrounded gravel of cemented sand with shell fragments and occasional fine grained quartz sand		10	-20.4 SPT	3 7 4
			As above		11	-25.4 SPT	2 4 6
			thin cemented horizons in sequence				
-30.1	43.7		Sandy GRAVEL: light grey, medium dense, well graded, fine, some coarse angular to subangular pieces, cemented sand (fine to medium), some shell fragments		12	-30.4 SPT	4 8 8
			thin cemented horizons			-35.4	
			As above, with fine to coarse gravel sized calcareous (shells) subrounded included		13	SPT, hard band at 48 ft, circulation loss at 49 ft	5 9 10

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0274

Hole No. CP05-EAARS-CB-0274

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 13.6 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-38.2	51.8					-38.2	
							52
						-40.4	
			As above, except refusal on cemented horizon				54
					14	SPT	50
							56
							58
						-45.4	
			Sandy GRAVEL, light grey to grey, well graded, fine some coarse, angular to subangular calcareous cemented sand (fine to medium) sand (fine to medium size), hard, some shell fragments		15	SPT	13
							11
							9
							60
							62
-50.4	64.0					-50.4	
			SAND, with some gravel sized calcareous cemented sand, light grey, medium dense, well graded, fine to coarse subangular to subrounded, shelly fragments and some quartz		16	SPT	16
							12
							12
							64
							66
						-54.4	
							68
						-55.4 cemented gravelly horizon	
			As above except becoming dense				22
					17	SPT	19
							70

ENG FORM 1836 | PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0274

Hole No. CP05-EAARS-CB-0274

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 13.6 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-56.6	70.2					-56.6	13
						-58.4	72
						slightly harder drilling	
						-60.4	74
			SAND, with some gravel sized calcareous cemented sand, light grey, medium dense, well graded, fine to coarse, angular to subangular, wet, shelly fragments		18	SPT	11, 12, 11
							76
						-63.4	
						occasional gravelly cemented horizon	78
						-65.4	
			As above		19	SPT	6, 10, 12
							80
							82
						-70.4	
			As above, but with organic smell		20	SPT	11, 7, 10
							84
							86
						-73.4	
						Hole caving	88

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0274

Hole No. CP05-EAARS-CB-0274

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 13.6 | Sheet 5 of 5 Sheets

Project: EAA Reservoir A-1 | Installation:

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-75.0	88.6					-75.0	
			As above, not organic			-75.4	
					21	SPT	15, 14, 9
						-80.4	
			SAND, with some gravel sized calcareous cemented sand, light grey, medium dense, well graded, fine to coarse, angular to subangular, wet, shelly fragments		22	SPT	13, 11, 10
						-85.4	
			As above				13
-86.4	100.0				23	SPT	13, 14
			End of Boring at 100'				

Depth scale: 90, 92, 94, 96, 98, 100, 102, 104, 106

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0274

Hole No. CP05-EAARS-CB-0275

DRILLING LOG	Division:	Installation:	Sheet 1 of 8 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N756300.2, E758665.6 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0275		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/1/2005 Completed 7/5/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8.5 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: N. Holst	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.5	0.0						
8.0	0.5		Peat			8.5 8.0	50/5"
			LIMESTONE, caprock, tan to light brown, mostly fine grained with shells, thinly bedded, strong, hard, vuggy, locally porous	86 (RQD 24%)	1	SPT; loosing drilling water HQ coring; UCS=1676psi	
3.0	5.5					5.0	
			Sandy GRAVEL, pale brownish grey, wet, very dense, angular, calcitic with some silt, fine		2	SPT, SW-SM; Well graded sand with silt+gravel; Moisture=24%; Rotary wash 3.875" bit to 50 ft then 2.875" below	14 50/2"
1.0	7.5					1.0	
			SAND, as above but mostly well graded, fine to coarse, angular, calcitic sand, some gravel and silt, loose		3	SPT, SM; Silty sand with gravel; Moisture=25%	7 3 4
-5.0	13.5					-5.0	
			Sandy GRAVEL, as above. Gravel is shelly, vuggy limestone probably limestone lenses broken by spoon, drill chatters intermittent		4	SPT, SM; Silty sand with gravel; Moisture=18%; Air	6 4 50/3"

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0275

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Hole No. CP05-EAARS-CB-0275

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.5 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/0.5'
-6.5	15.0					-6.5	
-10.0	18.5					calcitic material is at least partly shell fragments -10.0	16 18
-15.0	23.5		Only LIMESTONE chips recovered		5	SPT -15.0	50/0" 20 22
-20.0	28.5		Sandy GRAVEL, pale brownish grey, wet, very dense, angular, limestone gravel, with subequal parts, fine to coarse grained, angular, calcitic and fine, quartzose sand, trace silt		6	SPT, SW-SM, Well graded sand with silt+gravel; Moistue=14%; Caloosahatchee Formation -20.0	7 5 50/1" 24 26 28
			Gravelly SAND, pale brownish grey, wet, loose, poorly graded, fine, subrounded, quartzose with fine, angular, limestone gravel and some fine to coarse, angular, calcitic sand, trace silt		7	SPT, SP-SM, Poorly graded sand with silt+gravel; Moisture=15%	6 4 7 30 32

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0275

Hole No. CP05-EAARS-CB-0275

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.5 | Sheet 3 of 5 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.9	33.4					-24.9	
-25.0	33.5		SAND, pale brownish grey, wet, medium dense, poorly graded, fine, mostly quartzose and subrounded, trace angular, calcitic		8	-25.0 SPT; SP-SM; Poorly graded sand with silt; Moisture=25%	7 5 11
			SAND: as above but with trace fine angular sandy limestone gravel		9	-30.0 SPT; SP; Poorly graded sand with gravel; Moisture=21%	8 8 11
			SAND: as above		10	-35.0 SPT	10 9 10
			SAND: pale greenish grey, wet, very dense, poorly graded, fine grained (uniform), subrounded, quartzose		11	-40.0 SPT; SP-SM; Poorly graded sand with silt+gravel; Moisture=21%	8 33 18

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0275

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Hole No. CP05-EAARS-CB-0275

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.5 | Sheet 4 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-43.3	51.8					-43.3	
-45.0	53.5					-45.0	
			Sandy GRAVEL, pale greenish grey, wet, medium dense, well graded, fine, angular, shelly, limestone gravel with sand as above		12	SPT; Intermittent hard drilling	16, 6, 9
-50.0	58.5					-50.0	
			Gravelly SAND: as above but less gravel and part of this is shell fragments, also some fine to coarse, angular, calcitic sand		13	SPT; SW-SM; Well graded sand with silt+gravel; Moisture=23%	7, 5, 5
-55.0	63.5					-55.0	
			Silty SAND: olive gery, wet, loose, uniform, fine, subrounded, quartzose with some calcitic, fine sand to fine gravel (angular shell fragments)		14	SPT; SW-SM; Well graded sand with silt+gravel; Moisture=28%	9, 5, 4
-60.0	66.5					-60.0	
			SAND: pale greenish grey, wet, very dense, uniform, fine grained, subrounded, quartzose with a trace fine angular, calcitic sand		15	SPT	23, 26, 24

52 54 56 58 60 62 64 66 68 70

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0275

Hole No. CP05-EAARS-CB-0275

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.5 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC. %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-61.7	70.2					-61.7	
							72
						-65.0	
			SAND: as above		16	SPT; SP-SM; Poorly graded sand with silt; Moisture=22%	25, 23, 28
							74, 76, 78
						-70.0	
			SAND: as above		17	SPT	30, 40, 50/5"
							80, 82
						-75.0	
			SAND: pale greenish grey, wet, medium dense, well graded, medium to coarse grained, angular, calcitic, with some silt and fine subrounded quartzose sand, trace fine gravel		18	SPT; SW-SM; Well graded sand with silt+gravel; Moisture=20%; Calcitic sand predominates	15, 12, 13
							84, 86, 88
						-80.0	

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0275

Hole No. CP05-EAARS-CB-0275

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.5 | Sheet 6 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-80.1	88.6					-80.1	
			SAND: as above but less (trace) silt and dense		19	SPT	17, 15, 16
							90, 92
						-85.0	
			SAND: as above		20	SPT; SW-SM; Well graded sand with silt; Moisture=18%	27, 20, 24
							94, 96, 98
						-90.0	
			SAND: as above		21	SPT	24, 22, 16
-91.5	100.0						
			End of Boring at 100'				100, 102, 104, 106

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0275

Hole No. CP05-EAARS-CB-0276

DRILLING LOG	Division:	Installation:	Sheet 1 of 6 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N764127.4, E758491.8 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0276		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 6/30/2005 Completed 6/30/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: E. Requejo	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.0	0.0						
			Muck			11.0	2
10.0	1.0				1	10.0 SPT	50/2"
			Caprock				
				21 (RQD 13%)	1	HQ coring	
6.5	4.5					6.5	
						5.0	
					2	SPT	4, 30, 50
						3.0	
			SAND: Pale, light brown fine to coarse grained, very dense, with cemented sands		3	SPT; SW-SM; Well graded sand with silt+gravel; Moisture=17%	7, 39, 7
			SAND: Tan color, well sorted, fine to coarse grained, dense				
						-7.5	
			SAND: Tan color, well sorted, coarser grains than above, very dense		4	SPT; SM; Silty sand with gravel; Moisture=25%	26, 21, 50/2"

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0276

Hole No. CP05-EAARS-CB-0276

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.0	15.0					-4.0	
							16
							18
						-7.5	
			SAND; Light brown, slightly SILTY, well sorted fine to medium grained, medium dense		5	SPT; SP-SM; Poorly graded sand with silt; Moisture=26%	10 9 6
							20
							22
						-12.5	
			SAND; Brownish, very fine, well sorted, medium dense		6	SPT; SP; Poorly graded sand; Moisture=25%	7 7 7
						-14.0	
						Caloosahatchee Formation	
							24
							26
							28
						-17.5	
			SAND; Brownish, very fine, well sorted, with some traces of SILT, medium dense		7	SPT; SP-SM; Poorly graded sand with silt; Moisture=27%	14 10 15
							30
							32

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0276

Hole No. CP05-EAARS-CB-0276

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole 11 | Sheet 3 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5	
-22.4	33.4					-22.4		
			SAND: Brownish, fine grained, well sorted, slightly SILTY with few broken shell fragments		8	-22.5 SPT; SP-SM; Poorly graded sand with silt; Moisture=27%	8 5 7	34
						-25.0		36
						All calcitic material noted below is at least partly shell fragments		38
			SAND: pale greenish grey, wet, medium dense, poorly graded, fine grained, subangular, quartzose, trace shells		9	-27.5 SPT	7 9 6	40 42
-32.5	43.5					-32.5		
			Sandy GRAVEL: pale greenish grey, wet, medium dense, poorly graded, fine angular, calcareous with shell fragments with fine quartz sand		10	SPT	5 7 5	44 46
						-37.5		48
			Sandy LIMESTONE gravel and Sandy GRAVEL: as above but very dense. Probably cemented layer broken by spoon		11	SPT	30 50	50

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0276

Hole No. CP05-EAARS-CB-0276

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC. %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-40.8	51.8					-40.8	
-42.5	53.5					-42.5	
			SAND: pale greenish grey, wet, poorly graded medium dense, subequal amounts of fine, subrounded, quartzose sand and fine to coarse grained, angular, calcitic sand, trace fine gravel, calcitic		12	SPT	12, 8, 6
						-47.5	
			SAND: as above but loose with some silt and trace fine, calcitic gravel		13	SPT	5, 3, 4
						-52.5	
			SAND: pale greenish grey, wet dense, mostly well graded, fine to coarse grained, angular, calcitic, with some fine, rounded, quartzose sand		14	SPT, Ochopee Limestone	7, 18, 15
						-57.5	
			SAND: as above but with some fine, angular, sandy limeston gravel, trace fine quartzose sand, some coarse sand is also sandy limestone		15	SPT	33, 22, 23

52 54 56 58 60 62 64 66 68 70

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0276

Hole No. CP05-EAARS-CB-0276

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-59.2	70.2					-59.2	
							72
						-62.5	
			SAND: as above but medium dense and with trace sandy limestone gravel, trace fine quartzose sand		16	SPT	13, 13, 14
							74
							76
							78
						-67.5	
			SAND: as above but light grey		17	SPT	12, 13, 16
							80
							82
-72.5	83.5					-72.5	
			Gravelly SAND: pale grey, wet, very dense, mostly fine to coarse, angular, calcitic sand with some fine, subrounded, quartzose sand		18	SPT	35, 26, 24
							84
							86
							88
-77.5	88.5					-77.5	

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0276

Hole No. CP05-EAARS-CB-0276

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11 | Sheet 6 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-77.6	88.6					-77.6	
			SAND: as above but dense and some (less) gravel		19	SPT	15, 18, 18
						-82.5	
			SAND: as above but with trace (less) fine gravel		20	SPT	26, 22, 20
						-87.5	
			SAND: as above		21	SPT	22, 20, 19
-89.0	100.0						
			End of Boring at 100'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0" splitspoon (1.3/8" I.D. x 2" O.D.)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0276

Hole No. CP05-EAARS-CB-0277

DRILLING LOG	Division:	Installation:	Sheet 1 of 6 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N781542.5, E760486.8 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0277		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 6/29/2005 Completed 6/29/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 9.2 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: E. Requejo	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.2	0.0						
			Muck			9.2	0
					1	SPT	2
						7.7	2
							0
					2	SPT	2
6.2	3.0					6.2	10
			Cap rock, pale yellowish, slightly bedded, calcitic with traces of shells	13 (RQD 0%)	1	HQ coring; Core run from 1.5 to 6.5 ft; 8" collected from total length of core; no individual pieces over 4"	
2.7	6.5					2.7	
						0.7	
			Pale yellowish sand with silts and shell fragments, lime rock with silts, very dense, wet		3	SPT	9 20 21
						-0.8	
					4	SPT	21 25 50/4"
						-4.3	
			Pale yellowish / brownish cemented sand with silts and few shell fragments very dense		5	SPT	50/6"

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0277

402

Hole No. CP05-EAARS-CB-0277

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 9.2 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.8	15.0					-5.8	
							16
							18
						-9.3	
			Pale brownish cemented sands with shell fragments, very dense		6	SPT	50/2"
							20
							22
						-14.3	
			Pale yellowish sand with few cemented sand pieces and broken shell fragments, slightly silty, loose, well sorted		7	SPT; SM; Silty sand; Moisture=25%; Ground 30% circulation loss	5 3 4
							24
							26
							28
						-19.3	
			Pale yellowish silty fine sand, medium dense		8	SPT; SM; Silty sand with gravel; Moisture=24%	4 13 7
							30
							32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0277

403

Hole No. CP05-EAARS-CB-0277

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.2 | Sheet 3 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.2	33.4					-24.2	
			Pale yellowish, slightly silty fine sand with shell fragments, loose			-24.3	
					9	SPT; SM; Silty sand; Moisture=30%	8, 6, 4
							34, 36, 38
			Grey cemented fine sand with broken shell fragments, medium dense			-29.3	
					10	SPT	12, 10, 10
							40, 42
			Yellowish / brownish fine sand with great abundance of broken shell fragments (around 85%), medium dense			-34.3	
					11	SPT	14, 8, 8
							44, 46, 48
			Brown fine sand with cemented sands and shell fragments, medium dense			-39.3	
					12	SPT; color darkens when compared to previous sample	11, 10, 14
							50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0277

Hole No. CP05-EAARS-CB-0277

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 9.2 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5
-42.6	51.8					-42.6	
			Light brown sand with cemented sand and shell fragments, medium dense		13	-44.3 SPT	14 11 14
			Grey and brownish fine sand with cemented sands and lots of broken shell fragments (around 90%), medium dense		14	-49.3 SPT	3 4 7
-54.3	63.5					-54.3	
			Dark grey, silty sand with few pieces of cemented sand and great abundance of shell fragments, loose		15	SPT; Large pieces of shell fragments were found throughout the sample. Strong change in color from the previous sample	4 2 3
			Dark grey / greenish silty fine sand with shell fragments slightly clayed, medium dense		16	-59.3 SPT	16 15 13

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0277

Hole No. CP05-EAARS-CB-0277

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.2 | Sheet 5 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-61.0	70.2					-61.0	
-64.3	73.5		light grey cemented sand with shell fragments, dense		17	-64.3 SPT; Color changed to a much lighter grey; clay, silt, shell present	15 17 17
			light grey cemented sand with shell fragments, dense		18	-69.3 SPT	18 24 20
			grey cemented sand with shell fragments, dense		19	-74.3 SPT; darker in color	17 18 19
						-79.3	

(CONTINUED)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0277

Hole No. CP05-EAARS-CB-0277

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.2 | Sheet 6 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-79.4	88.6					-79.4	
			same as above		20	SPT	20, 19, 17
						-84.3	
			Grey cemented sand with shell fragments, very dense		21	SPT	31, 23, 28
						-89.3	
			Grey sand, medium to coarse grains, with cemented sand and shell fragments, dense		22	SPT	16, 17, 16
-90.8	100.0						
			End of Boring at 100'				

90 92 94 96 98 100 102 104 106

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0277

Hole No. CP05-EAARS-CB-0278

DRILLING LOG	Division:	Installation:	Sheet 1 of 6 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N768835.2, E758022.2 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0278		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 6/24/2005 Completed 6/28/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 9.9 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: E. Requejo	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.9	0.0						
			Muck			9.9	2
					1	SPT	2
						8.4	2
							3
					2	SPT	3
							40
6.4	3.5					6.4	
			Cap rock: Pale yellowish for the first 1.5 ft, then darkens in color. Slightly bedded, calcitic with traces of shells	41 (RQD 7%)	1	HQ coring; Core run 3.5 to 8.5; set 5 ft of casing	
1.4	8.5					1.4	
			Lime silts with shell				13
					3	SPT	4
							4
						-3.5	
			Lime silts with shell				6
					4	SPT	6
							9

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0278

Hole No. CP05-EAARS-CB-0278

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.9 | Sheet 2 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.1	15.0					-5.1	
							16
							18
						-8.6	
			Lime silts with shell fragments, pale yellowish, very dense, wet		5	SPT; SM; Silty sand with gravel; Moisture=21%; Pale yellowish very dense, wet	18 18 50/6"
							20
							22
						-13.6	
			Lime silts with shell fragments Pale yellowish, dense, wet		6	SPT; SM; Silty sand with gravel; Moisture=24%	15 19 13
							24
							26
							28
-18.6	28.5					-18.6	
			Grey fine sand with cemented sands and shells, very dense		7	SPT; SW-SM; Well graded sand with silt+gravel; Moisture=12%	10 48 22
							30
							32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0278

Hole No. CP05-EAARS-CB-0278

DRILLING LOG (Cont. Sheet) | Elevation Top of Hole: 9.9 | Sheet 3 of 6 Sheets

Project: EAA Reservoir A-1 | Installation:

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.5	33.4					-23.5	
			Grey and brown fine sand, dense, wet, well sorted		8	-23.6 SPT; SP-SM; Poorly graded sand with silt; Moisture=24%	9 20 24
						-28.6	
			Grey and brown fine sand, slightly silty with shell fragments, medium dense, wet		9	SPT	3 3 8
-33.6	43.5					-33.6	
			Grey silty fine sand with cemented sand and shell fragments, loose, wet		10	SPT	5 3 3
-38.6	48.5					-38.6	
			Cemented sand with shell fragments, loose, wet		11	SPT	12 9 9

34 36 38 40 42 44 46 48 50

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0278

410

Hole No. CP05-EAARS-CB-0278

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.9 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-41.9	51.8					-41.9	
						-43.6	
			Grey cemented sand with shell fragments, dense, wet		12	SPT	6, 6, 7
						-48.6	
			Same as above, medium dense, wet		13	SPT	8, 15, 10
						-53.6	
			Grey cemented sand with shell fragments, dense		14	SPT	13, 30, 13
						-58.6	
			Grey fine sand with shell fragments, medium dense		15	SPT	6, 5, 10

(Continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0278

Hole No. CP05-EAARS-CB-0278

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.9 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-60.3	70.2					-60.3	
							72
						-63.6	
			Grey cemented sand with shell fragments, dense		16	SPT	17, 19, 14
							74, 76
						-68.6	
			Grey cemented sand with fragments of broken shells, dense		17	SPT	17, 21, 18
							78, 80, 82
						-73.6	
			Grey cemented sand with fragments of broken shells, medium dense		18	SPT	14, 15, 14
							84, 86, 88
						-78.6	

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0278

Hole No. CP05-EAARS-CB-0278

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 9.9 | Sheet 6 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-78.7	88.6					-78.7	
			Grey fine sand with cemented fragments and shell fragments, medium dense		19	SPT	12, 12, 12
						-83.6	
			Grey fine sand with cemented fragments and shell fragments, medium dense		20	SPT	16, 14, 15
						-88.6	
			Grey fine sand with cemented fragments and shell fragments, dense		21	SPT	20, 20, 17
-90.1	100.0						
			End of Boring at 100'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

90 92 94 96 98 100 102 104 106

ENG FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0278

413

Hole No. CP05-EAARS-CB-0279

DRILLING LOG	Division:	Installation:	Sheet 1 of 8 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit; Rotary Method	
2. Location: N772219.8, E757976.7 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0279		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 6/21/2005 Completed 6/21/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.3 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: P. Petrey	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.3	0.0		Rock fill (canal road)			11.3	18
					1	10.3 SPT; GP-GM; Poorly graded GRAVEL with silt and sand; Moisture=11%; Spoon 1.5 ft weight 140 lbs	36 / 9 / 5
9.3	2.0		Peat		2	SPT	
						8.3	9
7.8	3.5		Lime Rock		3	7.3 SPT	50
				35 (RQD 18%)	1	HQ coring; UCS=1870psi	
						2.3	50
1.8	9.5		soft		4	SPT	
-1.7	13.0		Limerock with limerock silt with shell			-2.2	21 / 28 / 20
					5	SPT: 11.5 to 13.5 ft soft	

(continued)

EAU FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0279

Hole No. CP05-EAARS-CB-0279

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.3 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.7	15.0					-3.7	
-7.2	18.5		Cemented SAND with limestone and shell		6	-7.2 SPT	7 7 31
			Brown fine sand with cemented sand with shell		7	-12.2 SPT; 21 to 22 ft hard limestone stringers	35 50
			change				

16 18 20 22 24 26 28 30 32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0279

Hole No. CP05-EAARS-CB-0279

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.3 | Sheet 3 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.1	33.4					-22.1	
			Light grey fine sand with shell			-22.2	
					8	SPT	7, 7, 10
						-27.2	
			Light grey fine sand with cemented sand with shell		9	SPT	6, 7, 8
						-32.2	
			Light grey fine sand with cemented sand with shell		10	SPT	5, 7, 7
						-37.2	
			Light grey brown, slightly silty, fine sand with cemented sand with shell		11	SPT	5, 7, 6

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0279

Hole No. CP05-EAARS-CB-0279

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.3 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-40.5	51.8					-40.5	
						-42.2	
			Light grey brown fine sand with cemented sand with shell		12	SPT	5, 7, 7
						-47.2	
			same		13	SPT	10, 3, 4
						-52.2	
			Light brown / grey fine sand with cemented sand with shell		14	SPT	20, 18, 11
						-57.2	
			Light grey / brown fine sand with cemented sand with shell		15	SPT	5, 9, 12

52 54 56 58 60 62 64 66 68 70

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0279

Hole No. CP05-EAARS-CB-0279

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.3 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-58.9	70.2					-58.9	
			Change			-62.2	
			Darker grey coarse sand with fragments of shell		16	SPT, color change at 73 ft	24, 24, 17
			(same)		17	SPT	23, 10, 13
			(same)		18	SPT	16, 15, 15
						-77.2	

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0279

Hole No. CP05-EAARS-CB-0279

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.3 | Sheet 8 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-77.3	88.6					-77.3	
			(same)		19	SPT	21 / 18 / 19
						-82.2	
			Dark grey sand with cemented sand with shells		20	SPT	13 / 16 / 10
			(same)				
-88.7	100.0						
			End of Boring at 100'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.).

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0279

Hole No. CP05-EAARS-CB-0280

DRILLING LOG	Division:	Installation:	Sheet 1 of 6 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N776150.9, E757940.8 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0280		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 6/22/2005 Completed 6/22/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8.7 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: P. Petrey	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.7	0.0						
			Peat			8.7	1
					1	7.7 SPT; PT; Moisture=184%; Organic Content=66%; spoon 1.5' weight 140 lbs	2
7.2	1.5						2
			Caprock		2	6.7	50
						SPT	
				22 (RQD 0%)	1	HQ coring	
1.7	7.0					1.7	
			Cemented SAND with shells and silts			GW; Well graded GRAVEL; Moisture=18%	
						-0.3	
					3	SPT	4, 5
-4.8	13.5					-4.8	
			Limerock with limerock silt				12
					4	SPT	7, 10

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0280

420

Hole No. CP05-EAARS-CB-0280

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 8.7 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.3	15.0					-6.3	
-9.3	18.0		Grey fine SAND with cemented sand and shell fragments			-9.8	
					5	SPT; 17.5 ft hard layer; shell fragments	25 50
-13.8	22.5		Very hard thin layers			-14.8	
					6	SPT; 22.5 ft very hard thin layers	50
-16.3	25.0		Light brown / grey fine SAND with cemented sand with shell			-19.8	
					7	SPT; GP-GM; Poorly graded GRAVEL with silt and sand; Moisture=13%	4 4 8

16 18 20 22 24 26 28 30 32

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0280

Hole No. CP05-EAARS-CB-0280

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.7 | Sheet 3 of 5 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.7	33.4					-24.7	
			Light brown / grey fine SAND with cemented sand with shell			-24.8	
					8	SPT; SM; Silty SAND; Moisture=28%	7, 7, 8
							34, 36, 38
			(same)			-29.8	
					9	SPT; SP-SM; Poorly graded SAND with silt; Moisture=24%	8, 8, 12
							40, 42
			(same)			-34.8	
					10	SPT; SP-SM; Poorly graded SAND with silt; Moisture=25%	7, 10, 13
							44, 46, 48
			(same)			-39.8	
					11	SPT; SW-SM; Well graded SAND with silt; Moisture=29%	5, 7, 8
							50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0280

422

Hole No. CP05-EAARS-CB-0280

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 8.7 | Sheet 4 of 5 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-43.1	51.8					-43.1	
						-44.8	
			(same)		12	SPT; SP-SM; Poorly graded SAND with silt; Moisture=23%	7, 10, 7
						-49.8	
			Light brown / grey fine SAND with cemented sand with fragments of shell		13	SPT	4, 50
						-54.8	
			Light brown / light grey fine SAND with cemented sands with shell		14	SPT	10, 7, 7
						-59.8	
			(same)		15	SPT; SP-SM; Poorly graded SAND; Moisture=23%	8, 13, 8

52 54 56 58 60 62 64 66 68 70

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0280

Hole No. CP05-EAARS-CB-0280

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.7 | Sheet 5 of 5 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5
-61.5	70.2					-61.5	
-64.3	73.0						
			Darker grey SAND with cemented sand with shell			-64.8	
					16	SPT; SM; Silty SAND with gravel; Moisture=26%; Color change at 73 ft	9, 9, 9
			Darker grey fine SAND with cemented sand with shell			-69.8	
					17	SPT; SP-SM; Poorly graded SAND with silt and gravel; Moisture=19%	12, 13, 15
			(same)			-74.8	
					18	SPT; SM; Silty SAND with gravel; Moisture=22%	12, 13, 15
						-79.8	

72, 74, 76, 78, 80, 82, 84, 86, 88

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0280

Hole No. CP05-EAARS-CB-0280

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.7 | Sheet 6 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-79.9	88.6					-79.9	
			(same)		19	SPT; SM; Silty SAND; Moisture=23%	11, 9, 9
						-84.8	
			Grey cemented SAND with shell		20	SPT; SM; Silty SAND; Moisture=24%	15, 20, 11
						-89.8	
			(same)		21	SPT; SP-SM; Poorly graded SAND with silt; Moisture=24%	11, 11, 11
-91.3	100.0						
			End of Boring at 100'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.).

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0280

APPENDIX 2
SUPPLEMENTAL BORINGS AND PIEZOMETER INSTALLATION LOGS: 281-300

Hole No. CP05-EAARS-CB-0281

DRILLING LOG	Division:	Installation:	Sheet 1 of 6 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N779807, E757880.1 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0281		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 6/23/2005 Completed 6/23/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 9.2 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: P. Petrey	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.2	0.0						
			Muck (Peat)			9.2	3
					1	8.2 SPT; spoon 1.5 ft; weight 140 lbs	3
							4
					2	7.2 SPT	4
							2
					3	6.2 SPT	2
							2
					4	5.2 SPT	2
							2
					5	4.2 SPT	2
							3
					6	3.2 SPT	6
							6
2.2	7.0				7	2.2 SPT	7
			Limestone, hard then soft, hard layers of approx 2 inches, (no core recovered)				50
					8	1.2 SPT	
				0 (RQD 0%)	1	HQ coring	
-2.8	12.0					-2.8	
			Light grey SILT with shell fragments, Limerock			-4.3	9
					9	SPT	7
							8

ENG FORM 1836 PROJECT EAA Reservoir A-1 HOLE NUMBER CP05-EAARS-CB-0281

Hole No. CP05-EAARS-CB-0281

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.2 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.8	15.0					-5.8	
			Darker grey with brown fine sand, SILT with shell fragments		10	SPT	7, 7, 15
-14.3	23.5					-14.3	
			Slightly lighter grey / brown SAND with shell fragments		11	SPT	11, 10, 10
-19.3	28.5					-19.3	
			Hard layer, no recovery		12	SPT; Hard layer	50
-20.8	30.0						

16 18 20 22 24 26 28 30 32

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0281

Hole No. CP05-EAARS-CB-0281

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.2 | Sheet 3 of 5 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.2	33.4					-24.2	
			Light brown / grey fine SAND with cemented sand with shells			-24.3	
					13	SPT; CO3=34.7%	9, 7, 8
			(same) light brown / grey fine SAND with cemented sands / shells			-29.3	
					14	SPT	12, 20, 10
			(same)			-34.3	
					15	SPT	11, 6, 6
			(same)			-39.3	
					16	SPT	8, 9, 9

34 36 38 40 42 44 46 48 50

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0281

Hole No. CP05-EAARS-CB-0281

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.2 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-42.6	51.8					-42.6	
							52
						-44.3	
			(same)				9
					17	SPT	5 54
							5
							56
							58
						-49.3	
			(same)				8
					18	SPT	12
							10
							60
							62
						-54.3	
			Light brown / grey fine SAND with cemented sand, no shell				18
					19	SPT	27 64
							15
							66
							68
						-59.3	
			(same)				10
					20	SPT	11
							11
							70

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0281

Hole No. CP05-EAARS-CB-0281

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 9.2 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-61.0	70.2					-61.0	
-62.8	72.0		Light grey SAND (gravel), silt, cemented sand with shell				72
						-64.3	
					21	SPT; Color change at 72 ft	15, 14, 14
							74, 76, 78
						-69.3	
			(same)		22	SPT	15, 16, 15
							80, 82
						-74.3	
			(same)		23	SPT	19, 17, 19
							84, 86, 88
						-79.3	

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0281

Hole No. CP05-EAARS-CB-0281

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.2 | Sheet 6 of 8 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-79.4	88.6					-79.4	
			(same)		24	SPT	17 14 14
-84.3	93.5					-84.3	
			Light grey coarse SAND with cemented sands and shells		25	SPT	12 15 15
						-89.3	
			(same)		26	SPT	12 10 13
-90.8	100.0						
			End of Boring at 100'				

90 92 94 96 98 100 102 104 106

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

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PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0281

Hole No. CP05-EAARS-RB-0282

DRILLING LOG	Division:	Installation:	Sheet 1 of 14 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 5 inch
2. Location: N766993.2, E778264.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse (sub-contracted to Prosonic)	12. Manufacturer's Designation for Drill: SRO-109
4. Hole No: CP05-EAARS-RB-0282	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Fred Kruas	14. Total Number of Core Boxes: 23
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/29/2005 Completed 8/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.1 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 240 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC. %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.1	0.0						
8.9	1.2		ROADFILL: Gravelly SAND, tan brown, moderately graded, fine sand to coarse gravel, angular grains.			10.1 Road fill material from 0 to 1 foot	
7.4	2.7		PEAT: black, fine grained, mostly organic.				
6.6	3.5		Clayey SAND				
5.6	4.5		SAND: tan brown, poorly graded, fine to medium grained, subangular calcitic sand with Limestone chips.				
4.4	5.7		LIMESTONE: white, hard, flakey, quite porous, shelly (Caprock formation)			5.1	
3.4	6.7		Clayey SAND			GM, Silty gravel with sand; Moisture=6%; Caprock-4.5 to 5.7	
2.9	7.2		LIMESTONE: white, hard, flakey, quite porous, shelly				
-2.9	13.0		SAND: light gray, moderately graded, fine to medium grained, subangular calcitic sand with shells (Fort Thompson Formation)			0.1 SM, Silty SAND with gravel; Moisture=21%	
-3.3	13.4		LIMESTONE				
			SAND: light brown, poorly graded, fine to medium grained				

0 2 4 6 8 10 12 14

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PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 2 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.9	15.0		Grades to greenish gray fine grained calcitic sand.			-4.9	
-7.9	18.0		LIMESTONE: vuggy, moderately hard, shelly.				
-8.4	18.5		SAND: greenish gray, poorly graded, fine to coarse grained, angular calcitic sand with gravelly shells and trace silt.				
-17.9	28.0		LIMESTONE: dark gray, hard, vuggy, fossiliferous.			-17.9	
-18.4	28.5		SAND: light gray, moderately graded, fine to coarse grained subangular calcitic sand, subrounded gravelly quartz.			Caloosahatchee Formation or Pinecrest sand of Tamiami Formation	
						-19.9	
						SM: Silty sand with gravel; Moisture=8%	
			Grades to tan brown, fine grained predominantly rounded quartz.				

16 18 20 22 24 26 28 30 32

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PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 3 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.3	33.4					-23.3	
-24.9	35.0		SAND: light brown, poorly graded, fine to medium, grained, equal parts of of angular calcitic sand and subrounded quartz, shell fragments present.				
						-29.9	
			Grades to moderately graded, fine to coarse grained.			-34.9	
						SP; poorly graded sand with gravel; Moisture=14%	

34 36 38 40 42 44 46 48 50

(continued)

EM3 FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 4 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-41.7	51.8					-41.7	
						-44.9	
						SP-SM; poorly graded sand with silt and gravel; Moisture=10%; Mostly fine quartz sand	
			Grades to light gray, fine to medium grained, rounded quartz, pieces of moderately hard stone with shell, trace phosphate.				
			Grades to tan brown, moderately graded fine to coarse grained, predominantly angular calcitic sand , minor portion of rounded to subrounded quartz.				
			Grades to light gray, well graded, fine to medium grained, with equal parts of subangular calcitic sand and rounded quartz, with trace phosphate and few pelces of coarse gravel.				
-58.9	69.0					-58.9	
			Grades to poorly graded, fine to coarse grained, predominantly angular calcitic sand, small portion of rounded quartz,			-59.9 Ochopee Limestone	

52 54 56 58 60 62 64 66 68 70

(continued)

ENG FORM 1836

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-RB-0282

436

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.1 | Sheet 5 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-60.1	70.2		quite gravelly, coarse gravel peices - cemented angular calcitic sand and shell fragments.			-60.1 of Tamiami Formation GP-GM; poorly graded gravel with silt; Moisture=7%; Top Ochopee Limestone, Tamiami at 69 ft	
-64.2	74.3		SAND: greenish gray, moderately graded, fine to coarse grained, angular calcitic sand, coarse gravel peices mostly cemented sands with shells, quite vuggy, trace quartz				

72 74 76 78 80 82 84 86 88

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 5 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-78.5	88.6					-78.5	
			Grades to trace rounded quartz, the few gravel peices are weak to moderately hard and quite porous.			-84.9	
						SP-SM; poorly graded sand with silt; Moisture=22%	

90 92 94 96 98 100 102 104 106

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 7 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-96.9	107.0					-96.9	
-99.9	110.0		Silty SAND: greenish gray, moderately graded, fine to medium grained, small percentage of coarse sand, angular calcitic sand, trace quartz, trace clay.			-104.9	
						SM: silty sand with gravel; Moisture=20%	
						-109.9	
						SM: silty sand with gravel; Moisture=22%	
-111.9	122.0		SAND: dark greenish gray, mostly fine grained, subangular calcitic sand, trace fine rounded quartz.				

108 110 112 114 116 118 120 122 124

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 4 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-115.3	125.4					-115.3	
			Grades to greenish gray to tan brown, well graded, some medium grained sand to fine gravel.			-119.9 SM; silty sand; Moisture=21%	
			Grades to greenish gray, moderately graded, fine to coarse grained, angular calcitic sand, small percentage of rounded quartz, some silt, a few peices of fine to coarse gravel - mostly bedded calcitic sand and shells; trace phosphate.			-124.9 SM; silty sand with gravel; Moisture=21%	

126 128 130 132 134 136 138 140 142

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

440

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 9 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-133.7	143.8					-133.7	
			Silt grades out.			-134.9 SP-SM; Poorly graded sand with silt and gravel; Moisture=13%	

144
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162

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

441

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.1 | Sheet 10 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-152.1	162.2					-152.1	
			Grades to greenish gray to pale olive gray, fine to medium grained, small percentage ofr coarse sand to fine gravel, gravel peices weak to moderately hard and quite porous, rounded quartz and phosphate grades out			-154.9	
						GP-GM; Poorly graded Gravel with silt and sand; Moisture=14%	
-159.9	170.0						
			SAND: dark greenish gray, moderately graded, mostly fine grained, small percentage of medium grained sand to fine gravel with trace phosphate.			-161.9	
						Top unamed Sand Formation at 177 ft; grades to mostly fine quartzose sand	
						-169.9	

164 166 168 170 172 174 176 178 180

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.1 | Sheet 11 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-170.4	180.5					-170.4	
						SM; Silty SAND with gravel; Moisture=20%	

182
184
186
188
190
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198

(CONTINUED)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.1 | Sheet 12 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-188.8	198.9					-188.8	
-189.9	200.0		SAND: pale olive gray, well graded, very fine to fine grained, subangular calcitic sand, small percentage of fine subrounded quartz, trace phosphate.			-189.9 SM; silty sand; Moisture=20%; Top Peace River at 200 ft	200 202 204 206 208 210 212
-203.4	213.5		Grades to olive gray, moderately graded, trace fine rounded quartz, phosphate grades out.			-204.9 SM; silty sand; Moisture=28%.	214 216

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 13 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-207.2	217.3					-207.2	
-209.9	220.0		Clayey SAND: olive gray, moderately graded, very fine to fine grained, subangular calcitic sand, trace silt.				
						-214.9	
						ML; Inorganic silts and very fine sand; Moisture=38%	
						-219.9	
						NOTES: (1) All calcitic material is at least in part shells and shell fragments.	
						-222.9	
						(2) The sonic drill drives and vibrates a core barrel into the ground to obtain a sample. Hard, well cemented materials are generally	

218 220 222 224 226 228 230 232 234

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

445

Hole No. CP05-EAARS-RB-0282

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.1 | Sheet 14 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-225.6	235.7					-225.6	
						fractured by the drilling and weakly cemented granular materials tend to be disaggregated.	
-229.9	240.0						
			End of Boring at 240'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.	

236 238 240 242 244 246 248 250 252 254

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0282

Hole No. CP05-EAARS-RB-0283

DRILLING LOG	Division	Installation	Sheet 1 of 13 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 5 inch	
2. Location: N750067.1, E773030.9 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse (sub-contracted to Prosonic)		12. Manufacturer's Designation for Drill: SRO-109	
4. Hole No: CP05-EAARS-RB-0283		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Fred Kruas		14. Total Number of Core Boxes: 22	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/12/2005 Completed 8/14/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.9 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 220 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.9	0.0		Sandy GRAVEL, light to dark brown, well graded, fine to coarse grained, dry (fill)			10.9 26 23'49"N 80 38'35"W	
8.4	2.5		Silty Gravelly SAND with cobbles, pale brownish grey, well graded, fine to coarse grained, moist, angular, calcitic, thin cemented nodules and layers common			7.9 Fort Thompson Formation	
						5.9 CL-ML; Sandy silty clay with gravel; Moisture=10%	
			Grades wet at 10 ft			0.9 CL-ML; Sandy silty clay with gravel; Moisture=23%	

0 2 4 6 8 10 12 14

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ENG FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 2 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.1	15.0					-4.1	
-10.6	21.5						
-11.6	22.5		LIMESTONE, pale brownish grey, thinly bedded, coarse to very coarse (shells) grained (calcarenite), moderately hard and moderately strong, fossiliferous, porous (intergranular and moldic), grainstone			-12.1	
			Silty Gravelly SAND, as above but with a trace fine to very fine quartz sand			Fort Thompson Formation	
-15.6	26.5		SAND: pale brownish grey, wet, well graded, fine to coarse grained, mostly angular and calcitic, some fine subrounded quartz sand; gravelly (cemented sand aggregates down to 28 ft. Grades fine grained at 29 ft; subequal parts angular, calcitic and subrounded, quartz sands. Grades fine to medium grained at 31.5 ft. Grades fine to coarse grained with gravel (cemented aggregates) at 32.5 ft. Grades to gravelly (shells) SAND, 36 to 38 ft, with fine, subrounded quartz sand predominating. Below 38 ft primarily fine, uniform subrounded, quartz sand with some sand to fine gravel sized shell fragments			-15.6 Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	

16 18 20 22 24 26 28 30 32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

448

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.9 | Sheet 3 of 13 Sheets

Project: EAA Reservoir A-1 | Installation:

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.5	33.4					-22.5	
							34
							36
							38
						-29.1	40
						SP-SM; Poorly graded SAND with silt; Moisture=17%	42
							44
-34.1	45.0		Sandy GRAVEL, light brownish grey, well graded, fine to coarse, angular, sandy limestone gravel with sand as above				46
							48
-38.1	49.0		GRAVEL with small cobbles, light brownish grey, well graded, fine to coarse, angular, sandy limestone, fossiliferous, with moldic porosity, trace fine, subrounded, uniform, fine quartz sand				50

(continued)

ENG FORM 1836 PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.9 | Sheet 4 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-40.9	51.8					-40.9	
						-49.1	
-50.1	61.0		Silty SAND: pale brownish grey, wet, mostly uniform, fine, quartz sand with some angular, fine to coarse, calcitic sand, trace fine gravel (cemented aggregates of sand). Grades gravelly at 63.5 ft with trace cobbles. Grades light olive grey at 67.5 ft			SP-SM; Poorly graded sand with silt and gravel; Moisture=8%	
-57.6	68.5		SAND: olive grey, wet, mostly uniform, fine grained, subrounded and quartzose, some angular, calcitic (shells and fragments), fine sand to coarse gravel and cobbles, trace silt				

52 54 56 58 60 62 64 66 68 70

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 5 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-59.3	70.2					-59.3	
-63.1	74.0		SAND: light grey, well graded, fine to coarse grained, mostly well graded, fine to coarse, angular, calcitic, some uniform, fine, subrounded, quartzose, some fine to coarse, angular, calcitic gravel. Between 81 and 83 ft moist gravel sized shelly matter, grades out and some fine to coarse gravel sized, subrounded to subangular cemented aggregates of the sand grade in. Grades lighter grey 84 to 90 ft, very light grey.			-63.1 Ochopee Limestone Member of Tamiami Formation	
						-69.1 Calcitic material is shell and shell fragments	

72 74 76 78 80 82 84 86 88

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 8 of 13 Sheets

Project: EAA Reservoir A-1 | Installation:

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-77.7	88.6					-77.7	
							90
							92
							94
			95.5 ft to 113 ft no gravel, sand aggregates				96
							98
						-89.1	
			Grades back to light grey at 100 ft				100
						SP-SM; Poorly graded sand with silt; Moisture=11%; CO3=71.7%	
							102
							104
							106

(continued)

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.9 | Sheet 7 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-96.1	107.0					-96.1	
							108
						-99.1	
							110
						SM; Silty sand with gravel; Moisture=18%; CO3=75.5%	
							112
			At 113 ft gravel, larger shell fragments and sand aggregates grade back in				
							114
						-104.1	
			Grades to some gravel 115 ft to 117 ft				
						SW-SM; Well graded sand with silt and gravel; Moisture=16%; CO3=75.9%	116
							118
			120 ft to 121 ft grades light brownish grey with a trace silt. Some gravel (cemented sand aggregates grades in, mostly coarse (poorly graded), calcitic sand				120
							122
							124
						-114.1	

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 6 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-114.5	125.4					-114.5	
						SW-SM; Well graded sand with silt and gravel; Moisture=13%; CO3=77.7%	126
							128
							130
							132
							134
							136
							138
			139 ft, grades to mostly uniform, fine, subrounded quartzose sand with some fine to medium grained, angular calcitic sand, some coarse sand to coarse gravel sized aggregates of sand and shell fragments, no silt			-129.1	140
						SP-SM; Poorly graded sand with silt and gravel; Moisture=19%; CO3=53.0%	142

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 9 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5
-132.9	143.8					-132.9	
-139.1	150.0		Grades gravelly (aggregates of sand with shell molds) 150 ft to 161 ft			-139.1	
						SW-SM; Well graded sand with silt and gravel; Moisture=13%; CO3=68.3%	
-144.1	155.0		Grades yellow-grey at 155 ft				
						-149.1	
			Below 161 ft, most gravel is fine and angular, shell fragments. 163 ft to 165 ft: most shells and cement			SW-SM, Well graded sand with silt and gravel; Moisture=14%; CO3=67.2%	

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 10 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-151.3	162.2		(gravel) grade out			-151.3	
			SAND: yellow grey, uniform, fine grained, subrounded, quartzose, trace fine, angular, calcitic gravel (shell fragments), trace silt			-154.1 SM; Silty sand; Moisture=20%; CO3=41.2%; Unamed Sand Formation	
			Color grades pale olive grey at 174 ft			-169.1	

164 166 168 170 172 174 176 178 180

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ENG FORM 1836 PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 11 of 13 Sheets

Project: EAA Reservoir A-1 | Installation:

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-169.6	180.5					-169.6	
						SM; Silty sand; Moisture=20%; CO3=37.9%	182
			183.5 ft, some silt grades in				184
						-174.1	
						CL-ML; Silty sand with clay; Moisture=20%; CO3=53.6%	186
			Grades light olive grey at 187.5 ft, silt grades out				188
			Grades medium olive grey at 190 ft.				190
			Trace silt grades in at 192.5 ft				192
							194
						-184.1	
						SM. Silty sand with gravel; Moisture=17%; CO3=36.6%	196
-187.1	198.0						
			Grading more silty and darker olive grey below 198 ft				198

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

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Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 12 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-188.0	198.9					-188.0	
-189.1	200.0		Silty SAND: dark olive grey, uniform, fine grained, wet, subrounded, quartzose. Grades medium olive grey 200 ft to 205 ft. Grades dark olive grey at 205 ft			-189.1	
						SM; Silty sand; Moisture=25%; CO3=23.9%; Peace River Formation	
						-194.1	
						SM; Silty sand; Moisture=26%; CO3=30.5%, appears to be extremely fine grained quartz	
						-199.1	
						NOTES: (1) All calcitic material is at least in part shells and shell fragments.	
						-204.1	
						(2) The sonic drill drives and vibrates a core barrel into the ground to obtain a sample. Hard, well cemented materials.	

200 202 204 206 208 210 212 214 216

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-RB-0283

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 13 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

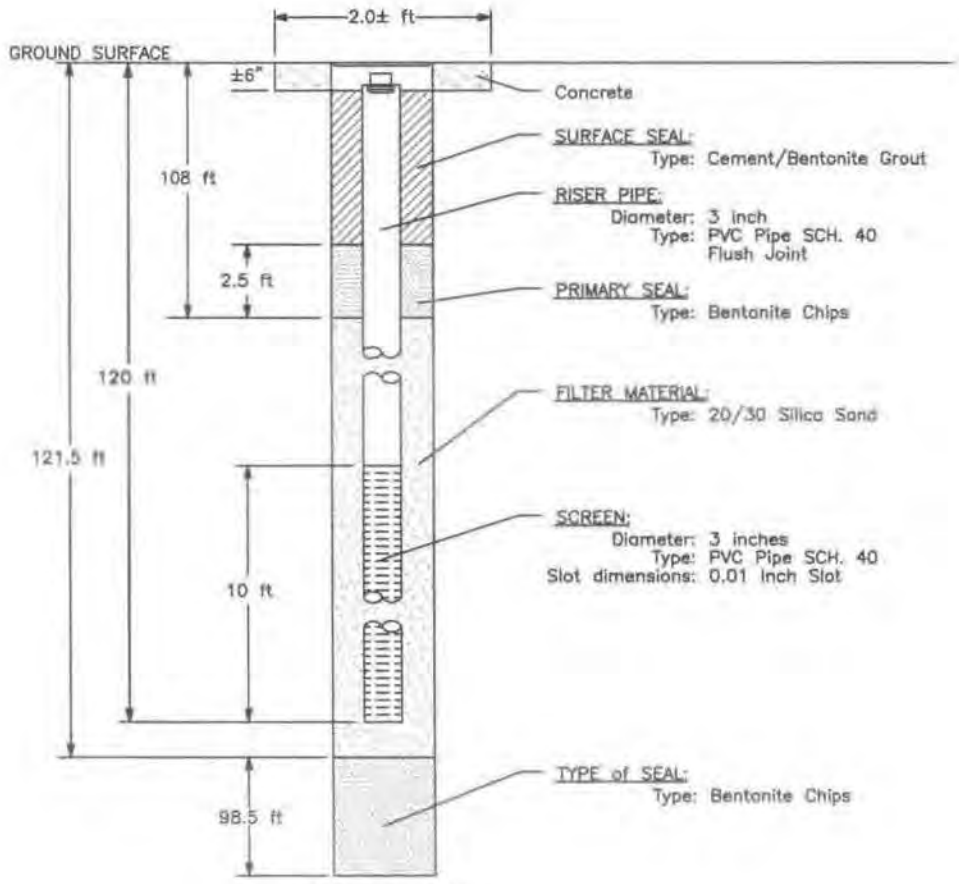
ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-206.4	217.3					-206.4	
						are generally fractured by the drilling and weakly cemented granular materials tend to be disaggregated.	
-209.1	220.0						
			End of Boring at 220'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.	

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0283

Hole No. CP05-EAARS-TW-0283

PIEZOMETER LOG	Division:	Installation:
1. Project EAA Reservoir A-1		8. Datum of Elevation Shown: NAD83
2. Location N 750072, E 773031		9. Manufacture's Designation for Drill: SRO-109
3. Drilling Agency: Prosonic		10. Elevation Groundwater:
4. Hole No. CP05-EAARS-TW-0283		11. Date Hole: Started 8-14-05 Completed 8-14-05
5. Name of Driller: Fred Kruass		12. Elevation Top of Riser: ±10'
6. Depth of Piezometer: 25 ft		
7. Size and type of bit: 6" bit, Rotary Method		13. Inspector: JP

FLUSH MOUNT



BORING DIAMETER
DAIMETER: 5 in

INSTALLATION METHOD: The boring was advanced to the required depth. The piezometer screen and riser were lowered to the bottom of the hole, and the sand pack was tremied into the hole to about 1 foot above the top of the screen. About 2 feet of fine sand was tremied on top, and cement/bentonite grout was tremied in to fill the rest of the hole. The riser was cut off about 1.5± feet above the ground surface, and the protective casing suspended over the riser into the ground until it set.

NOTES: Typical 25 foot Piezometer Installation

460

Hole No. CP05-EAARS-RB-0284

DRILLING LOG	Division:	Installation:	Sheet 1 of 14 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 5 inch	
2. Location: N764450.8, E758066.4 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse (sub-contracted to Prosonic)		12. Manufacturer's Designation for Drill: SRO-109	
4. Hole No: CP05-EAARS-RB-0284		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Fred Kruas		14. Total Number of Core Boxes: 23	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/9/2005 Completed 8/11/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.6 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 240 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.6	0.0						
10.1	0.5		ROADFILL				
			PEAT: brownish black, fine grained, non-plastic, organic silt				
5.6	5.0					5.6	
			Gravelly CLAY and Silty GRAVEL (Marl): gray, low plasticity Clay with subrounded limestone gravel to angular limestone with silt with depth. Lower part is weathered caprock.			Fort Thompson Formation	
4.1	6.5						
3.6	7.0		LIMESTONE (Caprock): tan, fine to coarse grained, thinly bedded, fossiliferous, hard and strong.				
			SAND: pale brownish gray, well graded, fine to coarse grained, angular, calcitic, some fine to coarse angular limestone gravel, trace to some silt, trace tabular cobbles (limestone layers to 2" thick.)				
						0.5	
						SM: silty sand with gravel; Moisture=18%	

0 2 4 6 8 10 12 14

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-RB-0284

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 2 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.4	15.0					-4.4	
			Fine uniform quartz sand grading in at 17.5'.				16, 18
-9.4	20.0		SAND: pale brownish gray, uniform, fine grained, subrounded, quartz, with a trace fine angular calcitic sand. Trace rounded to angular, fine to coarse gravel (cemented sand) grades in at 21'.			-9.4 SP; Poorly graded SAND; Moisture=26%; Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	20, 22, 24
-15.4	26.0		Gravelly SAND: as above but more gravel.				26
-17.4	28.0		Gravel grades out.				28
-19.4	30.0		SAND: pale brownish gray, uniform, fine grained, subrounded, quartz, trace angular, calcitic fine sand to fine gravel (shells and fragments)				30, 32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

462

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 3 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.8	33.4					-22.8	
-27.9	38.5		Grading trace silt				
			GRAVEL: light brownish gray, well graded, fine to coarse grained, angular, trace cobbles, clasts consist of cemented quartz and calcitic sand with shell fragments and have a porous open fabric.			-29.4	
			Grades with some silt and fine sand 38.5 to 41 ft.			GP; Poorly graded Gravel with sand; Moisture=2%	

34 36 38 40 42 44 46 48 50

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

463

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 4 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-41.2	51.8					-41.2	
-44.4	55.0		Grades to sandy gravel as above with trace silt.			-44.4	
-46.4	57.0		Gravelly SAND: pale brownish gray, well graded, mostly angular to subangular fine to coarse grained calcitic sand, some fine grained uniform subrounded quartz sand, trace silt grades out at 60 ft. Gravel clasts are angular, fine to coarse grained, cemented aggregates of sand and shell fragments.			SP-SM; Poorly graded sand with silt and gravel; Moisture=16%	
						-50.4	
						Grades to trace quartz sand below 60 ft	
-59.4	70.0					-59.4	

52 54 56 58 60 62 64 66 68 70

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 5 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-59.6	70.2		SAND (Ochopee Limestone member Tamiami): pale brownish gray, well graded, fine to coarse grained, angular to subrounded, calcitic with some gravel as above. Most coarse sand grains are aggregates of finer sand			-59.6 SP-SM; Poorly graded SAND with silt and sand; Moisture=9%; Most coarse sand grains are also aggregates of finer sands -64.4	72 74
			Grades medium gray with some quartz sand and trace gravel.			Top Ochopee Limestone Member Tamiami at 70 ft	76 78 80 82 84 86 88

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

465

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 6 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-78.0	88.6					-78.0	
			Some gravel 90 to 93 ft.			-79.4	90
						SP-SM; Poorly graded SAND with silt and gravel; Moisture=15%	92
							94
							96
							98
						-89.4	100
			Some gravel grades in at 100.5 ft, less (trace) quartz sand.			GP-GM; Poorly graded Gravel with silt and sand; Moisture=11%	102
							104
							106

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

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Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.8 | Sheet 7 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-96.4	107.0					-96.4	
							108
							110
							112
							114
							116
							118
						-109.4	120
			Grades trace silt 120 to 123 ft.			SM; Silty sand with gravel; Moisture=13%	
							122
							124
114.4	125.0		Gravelly SAND: light brownish gray, well			-114.4	

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

467

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 8 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-114.8	125.4					-114.8	
			graded, fine to coarse grained, mostly angular to sub rounded and calcitic, trace quartz sand, more gravel as above.			SP-SM; Poorly graded sand with silt and gravel; Moisture=10%	126, 128, 130, 132, 134, 136
-127.4	138.0						
			Grading sand as above, but with less (some) gravel				138
						-129.4	140
						SP-SM; Poorly graded SAND with silt and gravel; Moisture=9%	142

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

468

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 9 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-133.2	143.8					-133.2	
			Grades light gray with more (some) fine quartz sand.				144, 146, 148, 150, 152
-142.4	153.0					-142.4	
			SAND: pale yellow gray, poorly graded mostly uniform, fine subrounded quartz; some fine to coarse angular calcitic; some fine to coarse angular gravel (cemented aggregates of sand and shell fragments).			Unnamed Sand Formation at 153 ft	154
						-144.4	
						SP-SM; Poorly graded SAND with silt and gravel; Moisture=12%	156, 158
			Grades light yellow gray at 160 ft with no gravel. Some gravel grades back in at 162 ft.				160, 162

(continued)

ENG FORM 1836 | PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

469

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 10 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC. %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-151.6	162.2					-151.6	
-155.4	166.0		Gravelly SAND: as abovel but more gravel in it.				
-156.4	167.0		SAND: as above, but some gravel and trace silt.				
-160.9	171.5		SAND: light yellow gray, fine to coarse grained, well graded, subequal amounts of fine uniform quartz and fine to coarse calcitic sand.				
-162.4	173.0		SAND: light yellow gray, mostl;y uniform, fine fine grained subrounded quartz, trace fine to medium angular calcitic sand, some gravel as a bove, trace silt.				
						-164.4	
						SM: silty sand with gravel; Moisture=17%	
-169.4	180.0		GRAVEL: light gray, well graded: fine to				

164 166 168 170 172 174 176 178 180

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

470

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) Elevation Top of Hole: 10.6 Sheet 11 of 14 Sheets

Project: EAA Reservoir A-1 Installation:

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-169.9	180.5					-169.9	
-170.4	181.0		coarse; subangular to rounded, calcareous sandstone.				
			SAND: light yellow gray, uniform, fine grained quartz, some fine to medium angular calcitic sand, trace silt.				
			Between 183 and 187.5: grades pale yellow gray, very fine grained and silty. At 184.5: becomes uniform fine grained quartz sand. At 187.5: SAND: very fine grained quartz with trace silt.			-174.4	
						SM; silty sand; Moisture=15%	
			Grades to light olive gray at 198 ft (Peace River Formation)				

182 184 186 188 190 192 194 196 198

PROJECT: EAA Reservoir A-1 HOLE NUMBER: CP05-EAARS-RB-0284

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.8 | Sheet 12 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-188.3	198.9					-188.3	
						-189.4	
						Peace River Formation at 198 ft	
						-194.4	
						SM; silty sand; Moisture=23%	
						-199.4	
			Grades to medium olive gray at 210. More (some) silt.			SM; silty sand; Moisture=26%	

200 202 204 206 208 210 212 214 216

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

472

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 13 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-206.7	217.3					-206.7	
-209.4	220.0		Silty SAND: as above but more silty.				
-211.4	222.0		SILT: olive gray, non-plastic.				
						-214.4	
						ML: Inorganic silts and very fine sand; Moisture=75%	
						-216.4	
						NOTES: (1) All calcitic material is at least in part shells and shell fragments.	
						-219.4	
						(2) The sonic drill drives and vibrates a core barrel into the ground to obtain a sample. Hard, well cemented materials are generally fractured by the drilling and weakly cemented, granular materials tend to be disaggregated.	

218 220 222 224 226 228 230 232 234

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0284

473

Hole No. CP05-EAARS-RB-0284

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 14 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-225.1	235.7					-225.1	
-229.4	240.0						
			End of Boring at 240'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.	

236
238
240
242
244
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248
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252
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ENG FORM 1836

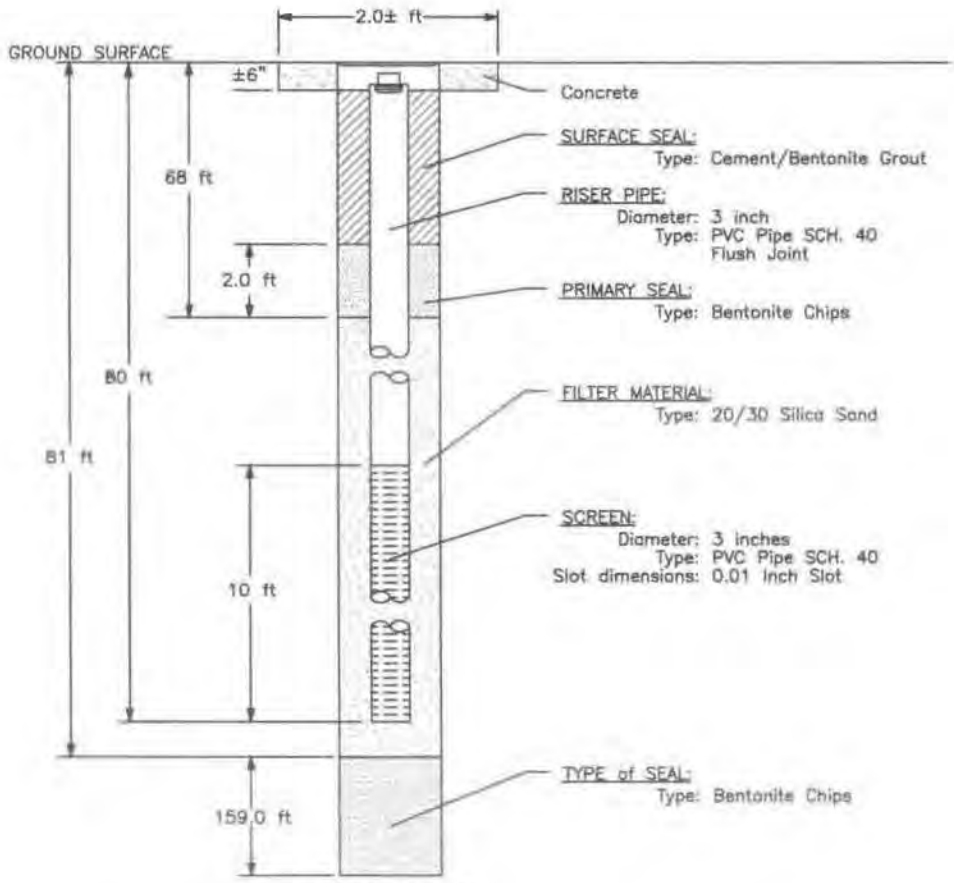
PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-RB-0284

474

Hole No. CP05-EAARS-TW-0284

PIEZOMETER LOG	Division:	Installation:
1. Project EAA Reservoir A-1		8. Datum of Elevation Shown: NAD83
2. Location N 764456, E 758050		9. Manufacture's Designation for Drill: SRO-109
3. Drilling Agency: Prosonic		10. Elevation Groundwater:
4. Hole No. CP05-EAARS-TW-0284		11. Date Hole: Started 8-11-05 Completed 8-11-05
5. Name of Driller: Fred Kruass		12. Elevation Top of Riser: ±10'
6. Depth of Piezometer: 25 ft		13. Inspector: JP
7. Size and type of bit: 6" bit, Rotary Method		

FLUSH MOUNT



BORING DIAMETER
DAIMETER: 5 in

INSTALLATION METHOD: The boring was advanced to the required depth. The piezometer screen and riser were lowered to the bottom of the hole, and the sand pack was tremied into the hole to about 1 foot above the top of the screen. About 2 feet of fine sand was tremied on top, and cement/bentonite grout was tremied in to fill the rest of the hole. The riser was cut off about 1.5± feet above the ground surface, and the protective casing suspended over the riser into the ground until it set.

NOTES: Typical 25 foot Piezometer Installation

475

Hole No. CP05-EAARS-RB-0285

DRILLING LOG	Division:	Installation:	Sheet 1 of 14 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 5 inch	
2. Location: N781917.3, E766194.9 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse (sub-contracted to Prosonic)		12. Manufacturer's Designation for Drill: SRO-109	
4. Hole No: CP05-EAARS-RB-0285		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Fred Kruas		14. Total Number of Core Boxes: 29	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/26/2005 Completed 7/28/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 12.5 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 250 ft		19. Inspector: N. Holst	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.5	0.0						
			ROADFILL (GRAVEL): tan, well graded, fine to coarse, angular, some sand, cobbles and boulders, trace silt.				
9.5	3.0						
			PEAT				
7.5	5.0						
			GRAVEL				
6.5	6.0						
			LIMESTONE (caprock): tan to light brown and gray, thinly bedded, fine to coarse grained, vuggy, strong and hard to porous, soft and weak.				
1.5	11.0						
			Silty SAND: as below but more silt				
0.5	12.0						
			SAND: pale brownish gray, well graded, fine to coarse grained, angular, calcitic, some fine gravel (cemented sand and shells), trace to some silt. Limestone layer from 15' to 15.2'				
						-2.5 (continued)	

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE (Sheet 1)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 12.5 | Sheet 2 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.5	15.0					-2.5	
						Limestone layer 15 to 15.2 ft	16, 18, 20, 22
-10.0	22.5		Gravelly SAND: light brownish gray sand as above but no silt, fine to coarse subangular gravel clasts are cemented sand.				24
-12.5	25.0		SAND: as above from 12 to 22.5 ft.				26, 28
-17.0	29.5		Sandy GRAVEL: pale brownish gray, subangular, well graded, fine to coarse, limestone interbedded with sand as above. Limestone layers from 31.6 to 32.1, 32.1 to 32.4, and 33 to 33.3 ft.				30, 32

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 3 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-20.9	33.4					-20.9	
-21.0	33.5		Sandy GRAVEL: as above but calcareous sandstone gravel with sand as below.			-21.0	
-23.0	35.5		SAND: pale brownish gray, poorly graded, mostly uniform, fine grained subrounded quartz, some fine to coarse grained angular calcite, some silt, some fine to coarse grained subangular calcerous sandstone gravel.			Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation at 33.5 ft.	
			Grade to trace gravel below 42 ft, mostly shell fragments.				
			Grades to larger portion of calcite versus quartz sand below 47 ft, subequal proportions.				

34 36 38 40 42 44 46 48 50

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

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Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 4 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-39.3	51.8					-39.3	
			Grades in more (some) gravel at 57 ft, mostly shell.				
			Grades to predominantly calcitic sand below 60 ft, becomes well graded.			-47.5	
						Ochopee Limestone Member Tamiami Formation at 70 ft	
-57.5	70.0						

52 54 56 58 60 62 64 66 68 70

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont Sheet) | Elevation Top of Hole. 12.5 | Sheet 5 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-57.7	70.2					-57.7	
			Gravelly SAND (Ochopee Limestone member, Tamiami Formation), pale brownish gray, well graded, fine to coarse grained, angular, calcitic sand with a trace fine quartz sand, some silt. Gravel (fine to coarse) consists of shell and porous cemented angular frameworks of shell and sand.				72 74 76 78
-67.5	80.0					-67.5	
			SAND: as above but grades light brownish gray, no silt and only trace fine gravel shells.			At 80 ft grades light brownish grey; gravel clasts; loose porosity	80
-69.5	82.0						
			Gravelly SAND: as above but gravel grades back in. Gravel clasts lose porosity.				82
-71.0	83.5						
			SAND: as above with less (some) gravel. Grades fine to medium grained with proportion of quartz sand increasing and predominating below 85 ft.				84 86
-75.5	88.0						
			Sandy GRAVEL: pale brownish gray, well graded, fine to coarse grained.				88

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

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Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 6 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-76.1	88.6					-76.1	
			angular and tabular, cemented aggregates of sand, shell and shell fragments subequal amonts of quartz and calcitic sand, trace silt.				
			Below 90 ft, fine quartz predominates in the sand fraction.				

90 92 94 96 98 100 102 104 106

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

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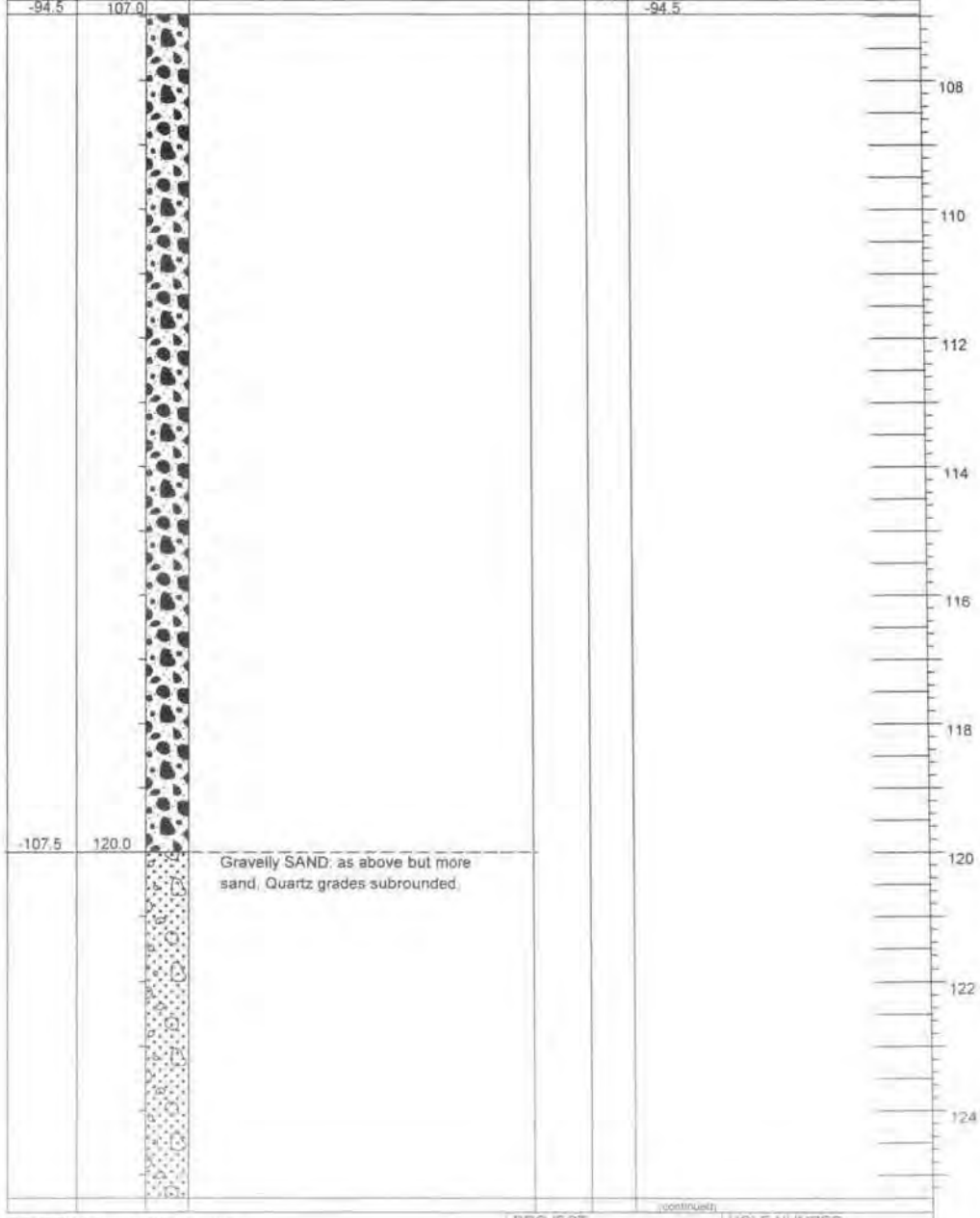
Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 7 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-94.5	107.0					-94.5	
-107.5	120.0		Gravelly SAND: as above but more sand. Quartz grades subrounded.				



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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

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Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 8 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-112.9	125.4					-112.9	
-118.5	131.0		Sandy GRAVEL: as above but more gravel				
-120.5	133.0		GRAVEL: as above, but less (some) sand and very shelly.				
-123.5	136.0		Sandy GRAVEL: as above. Grades tabular to platey, cemented aggregates of sand and shell fragments, with sand as above.				
			Grades yellow at 140 ft. Unnamed sand formation			-127.5 Grades yellow grey at 140 ft; Unamed Sand Formation	

126 128 130 132 134 136 138 140 142

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

483

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 9 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-131.3	143.8					-131.3	
			Below 150 ft, increasing proportion of quartz to calcitic sand fraction.				
-140.0	152.5		SAND: yellow gray, uniform, fine grained, subrounded, primarily quartzose, some calcitic some fine to coarse platey gravel (shells).				
-147.5	160.0		SAND: grades as above with less (trace) and angular gravel.				

144 146 148 150 152 154 156 158 160 162

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 12.5 | Sheet 10 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-149.7	162.2					-149.7	
-151.5	164.0		SAND: grades as above with more (some) gravel and trace medium grained angular calcitic sand.				
-157.5	170.0		SAND: grades as above with trace fine angular platey coarse sand to fine gravel.				

164 166 168 170 172 174 176 178 180

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 11 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-168.0	180.5					-168.0	
			All gravel grades out at 191 ft.				
-182.5	195.0		SAND: olive gray, uniform, fine grained, subrounded quartzose, trace silt (Peace River Formation)			-183.5	
						Peace River Formation at 196 ft	

182 184 186 188 190 192 194 196 198

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE (MAR 71)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 12 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-186.4	198.9					-186.4	
			Grades to some silt at 207 ft.				
-198.5	211.0		Silty SAND: olive gray, very fine grained, quartzose				
						-202.5	
						CL: Sandy lean clay; Moisture=43%	
-204.0	216.5		SILT: olive gray, slightly plastic				

200 202 204 206 208 210 212 214 216

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

487

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) Elevation Top of Hole: 12.5 Sheet 13 of 14 Sheets

Project: EAA Reservoir A-1 Installation:

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-204.8	217.3					-204.8	
						-207.5	
						CL; Sandy lean clay; Moisture=88%	
						-212.5	
						CH; Sandy fat clay; Moisture=148%; LL=127; PL=61; PI=66	
						-217.5	
						Notes (1) All calcitic material is at least in part shells and shell fragments	
						-222.5	

218 220 222 224 226 228 230 232 234

PROJECT: EAA Reservoir A-1 HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0285

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 14 of 14 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-223.2	235.7					-223.2	
						(2) The sonic drill drives and vibrates a core barrel into the ground to obtain a sample. Hard, well cemented materials are generally fractured by the drilling and weakly cemented, granular materials tend to be disaggregated	
-237.5	250.0						
			End of Boring at 250'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93	

236 238 240 242 244 246 248 250 252 254

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0285

Hole No. CP05-EAARS-RB-0286

DRILLING LOG	Division:	Installation:	Sheet 1 of 13 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 5 inch	
2. Location: N764302, E768597.5 – NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse (sub-contracted to Prosonic)		12. Manufacturer's Designation for Drill: SRO-109	
4. Hole No: CP05-EAARS-RB-0286		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Fred Kruas		14. Total Number of Core Boxes: 21	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/1/2005 Completed 8/8/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.1 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 220 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.1	0.0		SAND (Road Fill): pale brownish gray, well graded, fine to coarse grained, angular, calcitic, some fine to coarse gravel, few cobbles.				0
							2
8.1	3.0		SAND: as above with dark gray color and organic contents (Peat)				
7.3	3.8		SAND: as above from 0 to 3 ft.				4
						6.1	
						SM: silty sand with gravel, Moisture=14%	6
							8
1.1	10.0		Sample missing (placed in bucket for Proctor testing)				10
							12
-2.4	13.5		SAND: pale brownish gray, well graded fine to coarse, angular, calcitic, with trace silt.				14
-3.9	15.0					-3.9	

ENG FORM 1836 (CONTINUED)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-RB-0286

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 2 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.9	15.0					-3.9	
			SAND: as above with tan color and more (some) silt. Becomes gravelly below 17 ft.			SM: silty sand with gravel; Moisture=18%	16
-6.9	18.0						
			Gravelly SAND: as above with light brownish gray color				18
							20
							22
							24
-13.9	25.0					-13.9	
			Silty SAND: as above with tan color and less (some) gravel. Intermittent limestone layers 0.2 to 0.3 ft thick from 25.1 to 26.6.			Limestone layers 0.2 to 0.3 ft thick, 25.1 to 26.6 ft	26
-16.9	28.0					-16.9	
			Gravelly SAND: tan, poorly graded, mostly uniform, fine, subrounded and quartzose, some fine to coarse angular and calcitic, fine to coarse angular sandy limestone gravel.			Top of Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation at 28 ft	28
						-18.9	30
						SP-SM: poorly graded sand with silt and gravel; Moisture=18%	
-20.9	32.0						
			SAND: pale brownish gray, well graded, mostly fine to coarse, angular and calcitic, some fine, subrounded and quartzose, some fine to coarse				32

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

491

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.1 | Sheet 3 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.3	33.4					-22.3	
-23.9	35.0		SAND: pale brownish gray, uniform, fine grained, subrounded, quartzose, trace fine to coarse, angular calcitic sand.			-23.9 SP-SM; poorly graded sand with silt; Moisture=24%	

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

Hole No. CP05-EAARS-RB-028f

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 4 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-40.7	51.8					-40.7	
-45.4	56.5		Sandy GRAVEL: pale brownish gray, fine to coarse grained, angular, slightly sandy limestone gravel with a few cobbles. Sand is well graded, fine to coarse, angular and calcitic with some uniform fine quartzose sand. Trace silt.			-48.9	
						SP-SM: Poorly graded sand with silt and gravel; Moisture=14%	
						-53.9	
-54.9	66.0		Gravelly SAND: tan, poorly graded, mostly fine grained uniform subrounded quartzose, some fine to coarse angular calcitic, fine to coarse angular calcitic gravel (shells), trace silt.			SM: silty sand; Moisture=21%	

52 54 56 58 60 62 64 66 68 TD

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-028f

493

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 5 of 10 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-59.1	70.2					-59.1	
-59.9	71.0					-59.9	
			Sandy GRAVEL (Ochopee Limestone member of Tamiami formation): light brown to light gray, well graded, fine to coarse grained angular sandy limestone (cemented sand and shell) gravel with sand as below, trace silt.			Ochopee Limestone Member of Tamiami Formation at 71 ft	72
							74
						-63.9	
						SM; silty sand with gravel. Moisture=13%	76
							78
-68.9	80.0					-68.9	
			Gravelly SAND: light gray, well graded, mostly fine to coarse grained, angular to subangular and calcitic, some fine grained, uniform, subrounded and quartzose, trace silt. 80 to 81: Most gravel is shell fragments.			SP-SM, poorly graded sand with silt and gravel; Moisture=12%; 80 to 81 ft most gravel is shell fragments	80
							82
							84
							86
							88

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

494

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.1 | Sheet 8 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-77.5	88.6					-77.5	
							90
							92
							94
						-83.9	
						SP-SM; poorly graded sand with sand; Moisture=17%	96
-85.9	97.0						
			SAND: light gray, well graded, fine to medium grained, subrounded (mostly) to angular, subequal proportions of quartz and calcite, some fine to coarse gravel as below				98
							100
-90.9	102.0						
			Gravelly SAND: light gray, well grained, fine to coarse grained, mostly fine to coarse, subrounded to angular and calcitic, some fine subrounded and quartzose, fine to coarse, angular to subangular gravel (shell and cemented aggregates of shell and sand)				102
							104
						-93.9	
						SP-SM; poorly graded sand with silt and gravel; Moisture=14%	106

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.1 | Sheet 7 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-95.9	107.0					-95.9	
-98.4	109.5		Silty Gravelly SAND: light gray, well graded, fine to coarse grained, mostly fine to coarse, angular and calcitic, some uniform fine, subrounded and quartzose, fine to coarse, angular, platey gravel (shell).			-98.9 SM; silty sand with gravel; Moisture=20%	
-105.4	116.5		SAND: light gray, well graded, fine to coarse grained, angular to subrounded and calcitic, trace fine grained subrounded and quartzose, some fine to coarse angular gravel (shell and sand aggregates).				
-108.9	120.0		Grades to Gravelly SAND (fine shell fragments).				
-109.9	121.0		Grades to SAND: light brownish gray, some gravel (shell and aggregates), trace silt.				
-111.9	123.0		Gravelly SAND: light gray, well graded, fine to coarse grained, subrounded to angular, calcitic, trace fine quartzose sand, trace silt, fine to coarse angular gravel (cemented aggregates of shell and sand).			-113.9	

108 110 112 114 116 118 120 122 124

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.1

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC. %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-114.3	125.4					-114.3	
						SP-SM; poorly graded sand with silt and gravel; Moisture=17%	126
							128
							130
							132
							134
-125.4	136.5		Gravelly SAND: poorly graded, subequal proportions of uniform fine subrounded quartzose and fine to coarse angular calcitic sand, mostly fine angular gravel (shells and aggregates of shells and sand).				136
							138
						-128.9	140
-129.4	140.5		Gravelly SAND: light gray, well graded, fine to coarse grained, subrounded to angular, calcitic, trace fine uniform subrounded quartz sand, fie to coarse angular gravel as above.			SP-SM; poorly graded sand with silt and gravel; Moisture=15%	
							142

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 9 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-132.7	143.8					-132.7	
-137.4	148.5		SAND: pale brownish gray, mostly uniform, fine, subrounded quartzose, some fine to coarse angular and calcitic, some silt, trace fine angular gravel (shells).				
-138.9	150.0		Gravelly SAND: like that from 140.5 to 148.5				
-145.9	157.0		Sandy GRAVEL: pale brownish gray, well graded, fine to coarse, angular sandy limestone (cemented aggregates of shell and sand), with sand like that from 148.5 to 150.				
-148.9	160.0		Gravelly SAND and Sandy GRAVEL (unnamed sand formation): yellow gray, well graded fine sand to coarse gravel, fine, uniform, subrounded with some fine to coarse, angular, calcitic sand; fine sand cemented into aggregates			-148.9 SP-SM: poorly graded sand with silt and gravel; Moisture=20%; Unamed Sand	

144 146 148 150 152 154 156 158 160 162

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 10 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-151.1	162.2		with shells forming medium sand to gravel clasts, larger shell fragments with sand for coarse gravel, trace silt.			-151.1 Formation at 160 ft	
-161.9	173.0		SAND: yellow gray, uniform, fine grained, quartzose, trace fine to medium, angular, calcitic, some fine angular, platey calcitic gravel (shell), trace silt			-163.9 SM; silty sand with gravel; Moisture=18%	
			Grades to trace fine gravel and some			-168.9	

164 166 168 170 172 174 176 178 180

(continued)

ENG FORM 1836 | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-RB-0286

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 11 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-169.4	180.5		silt			-169.4	
						SM; silty sand; Moisture=21%	182
							184
							186
							188
							190
-179.9	191.0		SAND (Peace River Formation): pale olive gray, very fine grained, quartzose, some coarse non-plastic silt.			-179.9	
						Peace River Formation at 191 ft	192
							194
						-183.9	
						SM; silty sand; Moisture=19%	196
							198

(continued)

CAD FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

500

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 12 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5
-187.8	198.9					-187.8	
			SAND as above but grades light olive gray.				
			Grades olive gray, quartzose grades out.				
						-203.9	
						ML, inorganic silts and very fine sand. Moisture=25%	

200 202 204 206 208 210 212 214 216

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

501

Hole No. CP05-EAARS-RB-0286

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.1 | Sheet 13 of 13 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-206.2	217.3					-206.2	
-208.9	220.0						

End of Boring at 220'

Notes:
1. All calcitic material is at least in part shells and shell fragments.
2. The sonic drill drives aned vibrates a core barrel into the ground to obtain a sample. Hard well cemented materials are generally fractured by drilling and weakly cemented, granular materials tend to be dissaggregated.

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

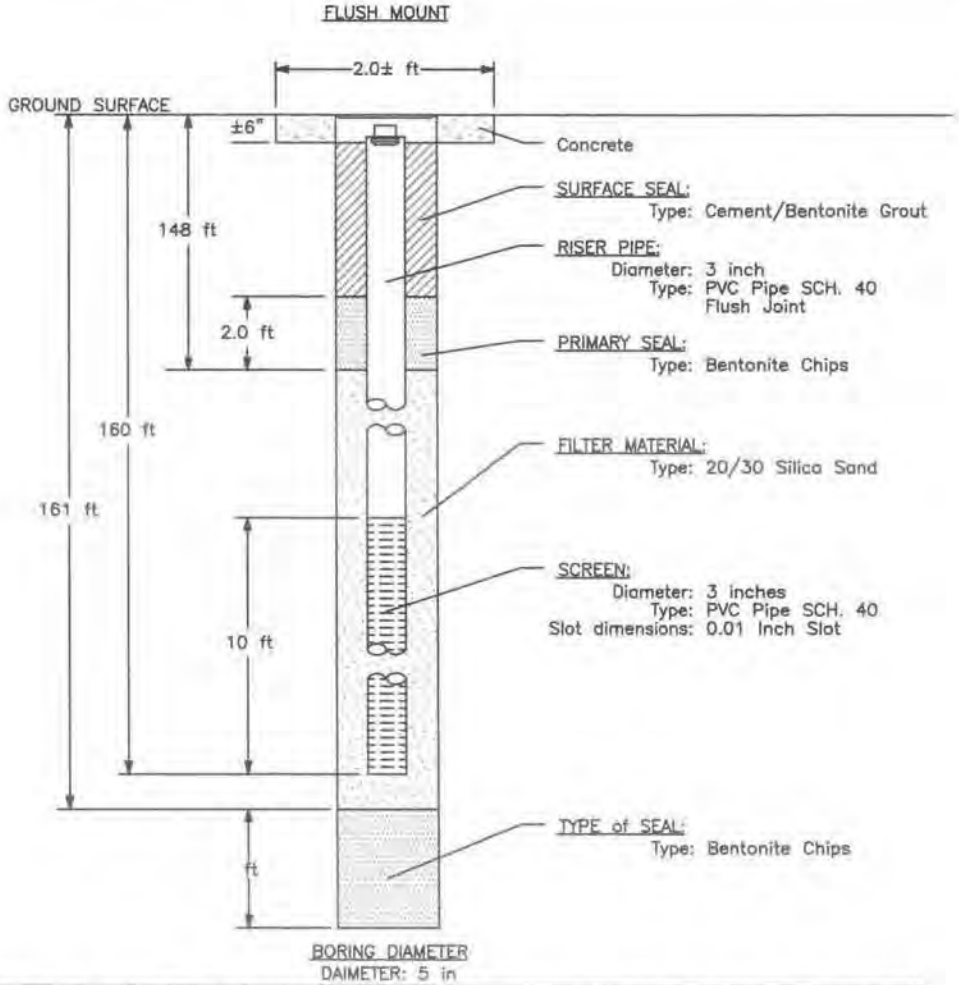
218 220 222 224 226 228 230 232 234

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-RB-0286

502

Hole No. CP05-EAARS-TW-0286

PIEZOMETER LOG	Division:	Installation:
1. Project EAA Reservoir A-1		8. Datum of Elevation Shown: NAD83
2. Location N 764359, E 768550		9. Manufacture's Designation for Drill: SRO-109
3. Drilling Agency: Prosonic		10. Elevation Groundwater:
4. Hole No. CP05-EAARS-TW-0286		11. Date Hole: Started 8-2-05 Completed 8-2-05
5. Name of Driller: Fred Kruass		12. Elevation Top of Riser: ±10'
6. Depth of Piezometer: 161 ft		
7. Size and type of bit: 6" bit, Rotary Method		13. Inspector: JP



INSTALLATION METHOD: The boring was advanced to the required depth. The piezometer screen and riser were lowered to the bottom of the hole, and the sand pack was tremied into the hole to about 1 foot above the top of the screen. About 2 feet of fine sand was tremied on top, and cement/bentonite grout was tremied in to fill the rest of the hole. The riser was cut off about 1.5± feet above the ground surface, and the protective casing suspended over the riser into the ground until it set.

NOTES: Typical 25 foot Piezometer Installation

503

Hole No. CP05-EAARS-CB-0287

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N783418.8, E760201 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0287		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Travis Williams		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/20/2005 Completed 7/20/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8.3 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 31.5 ft		19. Inspector: A.M. Noronha	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.3	0.0						
			PEAT: black, very loose, wet to dry, highly organic, limestone chips recovered on sample bottom			8.3	3
7.3	1.0				1	7.3 SPT	50/3"
			LIMESTONE: brownish white to white, very hard, quite porous, shell fragments, dry	36 (RQD 18%)	1	HQ coring; UCS=1105psi	
2.3	6.0					2.3	
			SAND: pale white, very dense, poorly graded, subangular calcitic sand, wet		2	SPT	7, 21, 33
						-0.2	
			SAND: white, very loose, poorly graded, subrounded calcitic sand, wet, fine sand present, trace silt, shell pieces recovered		3	SPT, quite silty	2, 1, 1
						-5.2	
			Same as above, but loose and less silty, no shells		4	SPT	4, 5, 4

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0287

Hole No. CP05-EAARS-CB-0287

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.3 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.7	15.0					-6.7	
			SAND: greenish grey, dense, poorly graded, angular, calcitic sand,wet, shell pieces recovered		5	SPT; Hard drilling from 17 to 18 ft	16 19 16
						-10.2	
			SAND: light grey, medium dense, poor to moderate gradation, subangular calcitic sand, wet		6	SPT	8 7 7
						-15.2	
			SAND: greenish grey, very dense, quite porous, shell fragments, cemented sand	62 (RQD 52%)	2	HQ coring; UCS=2400psi; Hard drilling at 25 ft; Casing: 0 to 25 ft	
						-16.7	
			SAND: greenish grey, medium dense, poorly graded, angular calcitic sand, wet		7	SPT	4 4 25
-23.2	31.5					-21.7	
			End of Boring at 31.5'				

NOTES:
1. Soils are field visually classified.

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0287

Hole No. CP05-EAARS-CB-0287

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.3 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-25.1	33.4					-25.1	
						in accordance with the ASTM Designation: D 2488-93. 2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

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ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0287

Hole No. CP05-EAARS-CB-0288

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N782018.1, E782205.5 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No. CP05-EAARS-CB-0288		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Travis Williams		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole: Started 7/19/2005 Completed 7/19/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30 ft		19. Inspector: A.M. Noronha	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.0	0.0						
			PEAT: black loose, clayey, mostly organic, dry to wet			8.0	3
7.0	1.0				1	7.0 SPT, Limestone chips recovered	50/5"
			LIMESTONE: pale white, very hard, quite porous, dry	52 (RQD 38%)	1	HQ coring; UCS=650psi	
2.0	6.0					2.0	
			SAND: light grey, medium dense, poorly graded, subangular calcitic sand, wet		2	SPT	10, 5, 6
						-0.5	
			SAND: pale white, loosely dense, poor to moderate gradation, angular calcitic sand, wet		3	SPT	2, 3, 7
-5.5	13.5					-6.5	
			Chips of limestone recovered		4	SPT spoon bouncing for a few blows. On drilling found no rock	50/5"
-7.0	15.0						

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0288

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Hole No. CP05-EAARS-CB-0288

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.0	15.0		SAND: light grey, very dense, moderately graded, angular calcitic sand, wet, trace phosphate, more gravelly			-7.0 so did not core this part	
						-10.5	
					5	SPT	24 42 40
			SAND: greenish grey, medium dense, poorly graded, subrounded calcitic sand, wet			-15.5	
					6	SPT	10 9 15
			Same as above, but very dense cemented sand, shells present			-20.5	
					7	SPT	35 50
-22.0	30.0						
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-90.
2. 1408 Hammer with 30" drop used for 2.0" splitspoon (1.38" I.D. x 2" O.D.)

16 18 20 22 24 26 28 30 32

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0288

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Hole No. CP05-EAARS-CB-0289

DRILLING LOG	Division	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N783462.3, E764334.1 – NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0289		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Travis Williams		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/21/2005 Completed 7/21/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 7.8 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30 ft		19. Inspector: A.M. Noronha	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.8	0.0						
7.3	0.5		PEAT: black, loose, mostly organic, dry			7.8 7.3	8
2.3	5.5		LIMESTONE: brownish white to pale white, hard, quite porous, dry, shells, cemented sand recovered between the top brownish limestone and the bottom pale white limestone layers	42 (RQD 6%)	1	SPT; few limestonw chips recovered; spoon bouncing HQ coring	50/2"
1.8	6.0		SAND: light grey, very dense, poorly graded subangular calcareous sand, wet			2.3 1.8	50/5"
-2.7	10.5		LIMESTONE: white, very hard, quite porous, dry	38 (RQD 26%)	2	HQ coring; 5 ft casing; spoon bouncing; couple of limestone chips recovered	
-5.7	13.5		SAND: white, medium dense, poorly graded, subangular calcitic sand, wet		3	-2.7 SPT	42 3 8
-7.2	15.0		SAND: greenish grey, very dense, poorly graded, subangular calcitic sand, wet, quite gravelly		4	-5.7 SPT	40 50/3"

(continued)

END FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0289

509

Hole No. CP05-EAARS-CB-0289

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole 7.8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.2	15.0					-7.2	
			Nothing recovered (core run)	0 (RQD 0%)	3	HQ coring	
-12.2	20.0					-12.2	
-12.7	20.5		One stone chip recovered and other smaller pieces of stone			-12.7	50/3"
			Cemented SAND: greenish grey, dense, porous, shells	14 (RQD 8%)	4	SPT; spoon bouncing HQ coring; some kind of cemented shells recovered	
						-17.7	
			SAND: greenish grey, medium dense, poorly graded, subangular calcareous sand, wet		6	SPT; quite gravelly	
-22.2	30.0		SAND: light grey, medium dense, poorly graded, subangular calcitic sand, wet, trace silt				
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation D 2488-93.
2. 140# hammer with 30" drop used on 2.5" splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0289

Hole No. CP05-EAARS-CB-0290

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N782438.7, E768971.5 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0290		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/10/2005 Completed 8/10/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.5 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 40.5 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.5	0.0						
			PEAT: brownish black, loose, fine grained, moist, organic with angular limestone gravel		1	10.5 SPT; All calcitic material noted below is at least partly shell fragments; Fill to 3.2 ft; Hit something questionable at 4 ft, moved the hole approx 2 ft east	5, 3, 4
					2	9.0	5, 4, 3
7.5	3.0					7.5 SPT; Spun in 10 ft of 4" casing	
			LIMESTONE: chips recovered, caprock, tan to light brown, thinly bedded, fine to coarse grained, fossiliferous, vuggy, moderately hard, moderately strong to weak and porous		3	6.5 SPT	50/5"
				60 (RQD 24%)	1	HQ coring	
						1.5	
				54 (RQD 24%)	2	1.3 SPT HQ coring; UCS=874psi	50/2"
-1.0	11.5						
			SAND: pale brown, medium dense, well graded, fine to medium grained, moist, angular, calcitic with some gravel			-2.5	
					5	SPT	7, 10

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0290

511

Hole No. CP05-EAARS-CB-0290

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.5 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.5	15.0					-4.5	19
			SAND: pale brownish grey, dense, well graded, fine to coarse grained, wet, angular, calcitic, some fine gravel, trace silt		6	-8.0 SPT	24 21 18
-13.0	23.5		Gravel: pale brownish grey, wet, very dense, well graded, fine grained, angular, cemented calcitic sand and shell fragments	0 (RQD 0%)	3	-13.0 -13.5 SPT HQ coring; UCS=2215psi; Ran casing to 23.5 ft	50/6"
-18.0	28.5		SAND: pale brownish grey, wet, dense, well graded, fine to coarse, angular, calcitic, some gravel as above, trace silt and very fine quartz sand		8	-18.0 SPT	13 26 17

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0290

512

Hole No. CP05-EAARS-CB-0290

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.5 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.9	33.4					-22.9	
-23.0	33.5		Sandy GRAVEL: pale brownish grey, wet, very dense, well graded, fine grained, angular, limestone, with sand as above	28 (RQD 14%)	4	-23.0 -23.5 SPT; Ran in casing to 34.5 ft HQ coring; Soft from 34 to 36 ft; then hard	43 50/1"
-25.5	36.0		LIMESTONE: tan to brownsh grey and light brown, fine to coarse grained, thinly bedded, fossiliferous, vuggy, moderately hard and moderately strong, ranges from wackestone to porous grainstone (coquina)				
-28.5	39.0		SAND: pale brownish grey, wet, loose, well graded, fine to coarse grained, angular, calcitic		10	-28.5 SPT	3 4 4
-30.0	40.5		End of Boring at 40.5'				

34 36 38 40 42 44 46 48 50

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0290

Hole No. CP05-EAARS-CB-0291

DRILLING LOG	Division	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N780906.2, E770045.4 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0291		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/11/2005 Completed 8/12/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.6 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 42.5 ft		19. Inspector: C. Brown	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.6	0.0						
			Silt, organic, black, soft, moist		1	10.6 SPT 9.1	3, 2, 2
			Same as above with Limestone cobble		2	SPT 7.6	4, 4, 4
			Silt, organic, black, firm, wet		3	SPT 6.1	3, 3, 3
					4	SPT	1, 23
5.1	5.5						
4.6	6.0		SAND: gravelly, silty, dense, fine to coarse subangular, wet			4.6	14
			LIMESTONE: grey, hard, fractured, fossiliferous, fine grained	60 (RQD 9%)	1	HQ coring 2.6	
			LIMESTONE: light grey, moderately hard, sandy, fine grained, subrounded, fossiliferous, grades more sandy			Approximately 80% drill fluid loss at 8 ft; set casing to 8.5 ft	
-0.4	11.0					-0.4	
			SAND: silty with inter-bedded Limestone, dense, fine to coarse, fossiliferous, poorly cemented - V. poor recovery	5 (RQD 0%)	2	HQ coring	

0 2 4 6 8 10 12 14

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0291

514

Hole No. CP05-EAARS-CB-0291

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.4	15.0					-4.4	
			SAND: clayey, silty, light grey to tan, medium dense, wet, gravelly, fine to coarse, subrounded, calcareous, macrofossil (Mollushin) - Marl		5	-5.4 SPT	3 25 3
			Same as above, dense		6	-7.9 SPT	19 26 13
-11.9	22.5		Refusal - Limestone, dark grey to tan, very hard, sandy, silicious, brittle, quartz sand, fine grain, minor fossils			-12.9	
-13.9	24.5		LIMESTONE, dark grey, hard, fine to crystalline, silicious, fossiliferous, interbedded cobbles (23.5 ft to 24.5 ft)			-13.0	50/1"
			No core recover at 24.5' - 28.5'	15 (RQD 0%)	7 3	SPT HQ coring; Advanced casing to 23.5 ft	
-17.9	28.5					-17.9	
			SAND, gravelly clayey, light grey, medium dense, wet, calcareous, fine to coarse, subrounded, fossiliferous, marl		8	SPT	20 14 11

Depth scale: 16, 18, 20, 22, 24, 26, 28, 30, 32

ENG FORM 1836 (PREVIOUS EDITIONS ARE OBSOLETE)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0291

Hole No. CP05-EAARS-CB-0291

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.6 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.8	33.4					-22.8	
			SAND: gravelly, silty, light grey, very dense, wet, fine to coarse, subangular, calcareous with fine shell fragments - Marl (advanced casing to 34)		9	-22.9 SPT, Advanced casing to 34 ft	37 22 50/4"
-25.4	36.0					-25.4	
			LIMESTONE: grey, hard, sandy, fine to medium, subangular, fossiliferous	65 (RQD 17%)	4	HQ coring	
-29.4	40.0		LIMESTONE: grey to dark grey, moderately hard, coquindid, highly fossiliferous, high secondary porosity			-29.4	
			SAND: grey to tan, dense, fine to coarse, subrounded, silicious (quartz) with minor shell fragments			-30.4	
					10	SPT	29 26 22
-31.9	42.5						
			End of Boring at 42.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0291

Hole No. CP05-EAARS-CB-0292

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N779232.1, E771249.9 – NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0292		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/11/2005 Completed 8/12/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 12.1 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 42.5 ft		19. Inspector: N. Holst	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/0.5'
12.1	0.0						
			Gravelly SAND and PEAT: tan, dry, fill, loose, well graded, fine to coarse, with angular limestone, gravel and some peat, grading to Sandy GRAVEL		1	12.1 SPT; Automati hammer; All calcitic material is at least in part shell fragments 10.1	9, 6, 7
					2	SPT 8.1	3, 3, 1
			Grades wet		3	SPT 6.1	50/3"
5.6	6.5				4	5.1 SPT	12, 50/4"
			LIMESTONE: tan to light brownish grey, fine to coarse grained, fossiliferous, vuggy, hard and strong to soft, weak and porous	56 (RQD 19%)	1	HQ coring; Spun 4" casing to 7 ft	
2.1	10.0		Last two feet of coring is soft			0.1	
0.1	12.0		Gravelly SAND: pale brownish grey, medium dense, moist, well graded, medium to coarse grained, angular calcitic		5	SPT; Spun casing to 12 ft -1.9	3, 2, 8
-1.9	14.0		GRAVEL: pale brownish grey, medium dense, well graded, fine grained, wet, angular, calcitic		6	SPT; Hard drilling	30, 11

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0292

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Hole No. CP05-EAARS-CB-0292

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.1 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.9	15.0					-2.9	
						13.5 to 14 ft	7
-6.9	19.0					-6.9	
			Gravelly SAND: pale brownish grey, very dense, well graded, fine to coarse grained, angular, calcitic, with gravel as above and a trace silt		7	SPT	7 50/5"
-11.9	24.0					-11.9	
			Silty SAND: pale greenish grey, loose, wet, well graded, fine to medium grained, angular, calcitic, trace fine, angular gravel (shell fragments)		8	SPT	4 4 3
-16.9	29.0					-16.9	
			SAND: pale brownish grey, loose, wet, well graded, fine to coarse grained, angular, calcitic trace very fine quartz sand and silt		9	SPT	4 3 4

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0292

Hole No. CP05-EAARS-CB-0292

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.1 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.3	33.4					-21.3	
-21.9	34.0					-21.9	
			Silty SAND: pale greenish grey, loose, wet, well graded, fine to coarse grained, angular, calcitic		10	SPT	5, 3, 4
-26.9	39.0					-26.9	
			GRAVEL: pale brownish grey, very dense, wet, well graded, fine grained, angular, calcitic		11	SPT	50/1"
-28.9	41.0					-28.9	
			SAND: pale greenish grey, very dense, wet, uniform, fine grained, subrounded, quartzose with some fine to coarse, angular, calcitic sand, trace fine gravel		12	SPT; Caloosahatchee Formation	32, 23, 28
-30.4	42.5						
			End of Boring at 42.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0292

519

Hole No. CP05-EAARS-CB-0293

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N777644.3, E772351.9 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0293		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/10/2005 Completed 8/11/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.7 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 42 ft		19. Inspector: C. Brown	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.7	0.0						
			SILT: organics, black, firm, moist		1	11.7 SPT 9.7	2, 3, 3
			SILT: organics, black, firm, moist with interbedded limestone gravel		2	SPT 7.7	5, 2, 3
7.2	4.5				3	SPT 5.7	2, 8, 13
			Refusal - SAND: gravelly, silty, very dense, fine to coarse, subangular, wet				
6.2	5.5						
			LIMESTONE: light grey, hard, sandy, fine, subangular LIMESTONE: grey to light brown, hard, sandy, fine, subangular fractured fossiliferous, silicious seams	80 (RQD 35%)	1	HQ coring, Set casing to 6 ft 3.2	
			LIMESTONE: grey to light brown, moderately hard to soft, sandy, fine to medium, subangular to subrounded, poorly cemented, fossiliferous, porous	92 (RQD 55%)	2	HQ coring -1.8	
			LIMESTONE: light grey, hard, sandy, fine, subangular	30 (RQD 10%)	3	HQ coring	

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0293

520

Hole No. CP05-EAARS-CB-0293

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.7 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.3	15.0					-3.3	
-4.8	16.5		LIMESTONE: light grey, hard, sandy, fine to medium , subangular to subrounded, vertical seam 16.5 ft to 17 ft				
			SAND: gravelly, clayey, light grey, very loose, calcareous, wet, fine to coarse, subrounded, fossiliferous, with moderate shell fragments (Marl)		4	-5.8 SPT	1, 1, 2
			Same as above, loose with fine black heavy minerals		5	-12.3 SPT	4, 3, 4
			Same as above		6	-17.3 SPT	5, 5, 5

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0293

Hole No. CP05-EAARS-CB-0293

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.7 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.7	33.4					-21.7	
			SAND: clayey, grey, medium dense, fine to medium, subrounded, calcareous and fine quartz sand			-22.3	5
			SAND: grey to dark grey, medium dense, fine, cemented, subrounded, (fine grain heavy minerals)		7	SPT; Set casing to 36 ft	6, 18
-25.3	37.0					-25.3	
			LIMESTONE: grey to tan, moderately hard, sandy, fine to medium, subangular, fossiliferous, cemented shell	92 (RQD 47%)	4	HQ coring; UCS=1053psi	
			LIMESTONE: grey to dark grey, soft, highly fossiliferous, high secondary porosity, moldic			-29.3	
-30.3	42.0		LIMESTONE: grey, hard, fine grain, vuggy, infilled with cemented sand, quartz, fine grain			100% drill fluid loss at 41 ft	
			End of Boring at 42'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

END FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0293

Hole No. CP05-EAARS-CB-0294

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N776017.5, E773486.6 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No. CP05-EAARS-CB-0294		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Ralph Smith		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/10/2005 Completed 8/10/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.2 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 40 ft		19. Inspector: A.M. Noronha	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.2	0.0						
			PEAT: black, medium dense, poorly graded, fine grain, dry, mostly organic		1	11.2 SPT 9.7	4, 6, 20
			Same as above - one limestone chip recovered, except dense		2	SPT 8.2	12, 18, 22
7.5	3.8		Top part Peat. Bottom part of sample gravelly coarse sand, subangular, poorly graded, dry, light grey		3	SPT 6.7	3, 2, 1
5.7	5.5		Bottom part of sample gravelly coarse sand, subangular, poorly graded, dry, light grey. Few pieces of limestone recovered		4	SPT, spoon bouncing 5.2	1, 3, 50/5"
				54 (RQD 8%)	1	HQ coring	
0.2	11.0		LIMESTONE: pale white, hard fine gained, quite porous, shell present			0.2	
			SAND: greenish grey, very dense, moderately graded, fine to coarse grained, subangular, calcitic sand, wet, platty limestone flakes recovered, cemented sand		5	SPT; Around 6" of hard layer of cemented sand -1.3	33, 40, 50/4"
			SAND: pale white, medium dense, poorly graded, fine grained, wet, small chips of limestone recovered		6	SPT	3, 8, 7

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0294

523

Hole No. CP05-EAARS-CB-0294

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.2 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.8	15.0					-3.8	
-7.3	18.5		Silty SAND: greenish grey, very dense, poorly graded, fine to coarse grained, subangular calcitic sand, wet		7	-7.3 SPT; Top portion of sample was quite gravelly	11 50 18
-12.3	23.5		SAND: light grey, medium dense, moderately graded, fine to coarse grained, subangular calcitic sand, subrounded quartz, wet		8	-11.3 -12.3 Caloosahatchee Formation SPT	4 7 7
			SAND: greenish grey, medium dense, moderately graded, fine to medium grained, angular calcitic sand, wet		9	-17.3 SPT	10 16 14

16 18 20 22 24 26 28 30 32

ENG FORM 1836 | PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0294

Hole No. CP05-EAARS-CB-0294

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.2 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.2	33.4					-22.2	
			SAND: light grey, medium dense, moderately graded, fine to coarse grained, subangular calcitic sand, rounded quartz, wet		10	-22.3 SPT	13, 10, 8
			SAND: light grey to light brown, very dense, moderately graded, subangular calcitic sand, rounded quartz, wet		11	-27.3 SPT	43, 40, 49
-28.8	40.0						
			End of Boring at 40'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0294

525

Hole No. CP05-EAARS-CB-0295

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N774364.1, E774663.4 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0295		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
7. Thickness of Burden: N/A		16. Date Hole Started 8/9/2005 Completed 8/9/2005	
8. Thickness of cap rock: N/A		17. Elevation Top of Hole: 11.2 (ft)	
9. Depth of hole: 30.5 ft		18. Total Core Recovery for hole: N/A	
		19. Inspector: C. Brown	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.2	0.0						
			Silt, organics, black, firm, moist		1	SPT; Automatic hammer	3, 3, 3
			Silt, organics, black, soft, moist, with interbedded limestone gravel		2	SPT	1, 2, 2
5.7	5.5				3	SPT	1, 10, 50/3"
5.2	6.0		Refusal - SAND, gravelly, silty, very dense, fine to coarse, subangular, wet				
			LIMESTONE: light grey, hard, fine to crystalline, slightly silicious, vertical seams at 7.5 ft	80 (RQD 40%)	1	HQ coring: Set casing to 6 ft	
2.7	8.5						
			LIMESTONE: grey, soft, sandy, fine to coarse, subangular to subrounded, fossiliferous, grades softer, and poorly cemented with depth			Approx 25% drill fluid loss at 8 ft	
				60 (RQD 23%)	2	HQ coring	
-2.3	13.5						
			No recovery - sand or gravel lense				
-3.3	14.5						
			LIMESTONE: light grey, moderately				

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0295

Hole No. CP05-EAARS-CB-0295

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.2 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.8	15.0					-3.8	
-4.3	15.5		hard, sandy, fine to coarse, subangular, fossiliferous (single vug at 15 ft				
			SAND, gravelly, clayey, light grey, very loose, calcareous, wet, fine to coarse, subrounded, fossiliferous with moderate shell fragments (marl)		4	-4.8 SPT	2, 1, 1
			SAND, clayey, grey, gravelly, very dense, calcareous, wet, fine to coarse, subrounded, fossiliferous, with moderate shell fragments (marl)		5	-7.8 SPT	27, 58, 21
			Same as above, loose		6	-12.8 SPT	3, 3, 4
			SAND, clayey, gravelly, grey to light brown, medium dense, calcareous, wet, fine to coarse, subrounded, slightly fossiliferous, trace to minor fine quartz sand		7	-17.8 SPT	4, 6, 12
-19.3	30.5						
			End of Boring at 30.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0 splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0295

527

Hole No. CP05-EAARS-CB-0295

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.2 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC. %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.2	33.4					-22.2	
						± 2" O.D.)	

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36
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42
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ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0295

Hole No. CP05-EAARS-CB-0296

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N773015.7, E775589.6 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0296		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Travis Williams		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/28/2005 Completed 7/28/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.3 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30 ft		19. Inspector: A.M. Noronha	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.3	0.0						
			PEAT: black, medium dense, poorly graded, fine grained, dry, mostly organic		1	11.3 SPT 9.8	3, 4, 7
			Same as above, but wet		2	SPT 8.3	4, 4, 8
			Same as above		3	SPT 6.8	9, 8, 13
			Same as above		4	SPT 5.3	4, 16, 7
			Same as above and limestone chips recovered		5	4.3 SPT casing 0 to 5 ft	12, 50/4"
4.5	6.8		LIMESTONE: white hard, fine grained, quite porous, shelly	42 (RQD 8%)	1	HQ coring: core 7 to 12 ft 1.3	
						Casing: 5 to 10 ft	
-0.2	11.5					-0.2	
			SAND: light grey, dense, moderately graded, fine to coarse grained, subangular, wet		6	-0.7 SPT: quite gravelly	2, 6, 26

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0296

Hole No. CP05-EAARS-CB-0296

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.3 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.7	15.0					-3.7	
			SAND: greenish grey, medium dense, poorly graded, fine to medium grained, subangular, wet		7	-7.2 SPT: top part of sample was silty and bottom part was gravelly	20 14 5
-12.2	23.5		SAND: light grey, medium dense, poorly graded, fine grained, subrounded calcitic sand, wet, silty, shells recovered		8	-12.2 SPT	3 6 10
-17.2	28.5		SAND: greenish grey, dense, moderately graded, fine to medium, subangular, wet, gravelly		9	-17.2 SPT	12 13 22
-18.7	30.0		End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation D 2488-93.
2. 140# hammer with 30" drop used on 2.5" splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0296

Hole No. CP05-EAARS-CB-0297

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N771853.3, E776111.3 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0297		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/9/2005 Completed 8/9/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.3 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30.5 ft		19. Inspector: C. Brown	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.3	0.0						
			SAND: gravelly, silty, light grey, medium dense, fine to medium, subangular to sub rounded, moist		1	10.3 SPT; Automatic Hammer 8.3	16, 15, 2
7.8	2.5						2
			Organic, dark brown, silty, fibrous, sandy, soft, wet		2	SPT	2, 1
6.3	4.0					6.3	
			Refusal - LIMESTONE, gravel, grey, hard, subangular			5.8	50
			LIMESTONE, grey, hard, fine to crystalline, fossiliferous	80 (RQD 50%)	3 1	SPT; Set casing to 4 ft HQ coring	
			LIMESTONE, grey to light grey, very hard, fine to crysalline, silicious, fossiliferous				
			LIMESTONE, grey, hard, sandy, fine to medium, subangular to subrounded, fossiliferous, grades softer			0.8	
			LIMESTONE, light brown, soft sandy, poorly cemented, fine to coarse, fossiliferous (macro fossils) LIMESTONE, light grey, hard, fine, subangular, highly fossiliferous	66 (RQD 31%)	2	HQ coring	
-2.7	13.0					-2.7	
			No recovery - sandy				
-4.2	14.5					-4.2	
			SAND, light grey, silty, slightly gravelly				3

(continued)

ENG FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0297

Hole No. CP05-EAARS-CB-0297

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.3 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.7	15.0		medium dense, wet, fine to coarse, subangular, fossiliferous - fine shell fragments		4	-4.7 SPT	7, 4
			SAND, clayey silty, light grey, medium dense, wet, fine to coarse, subrounded, calcareous, fossiliferous (marl) - slightly gravelly		5	-8.7 SPT	7, 7, 9
			SAND, clayey, gravelly, light brown, medium dense, calcareous, wet, fine to coarse, subrounded, slightly fossiliferous, trace fine quartz sand		6	-13.7 SPT	5, 27, 14
-20.2	30.5		SAND, silty, slightly clayey, grey to light brown, medium dense, fine to medium, subrounded quartz (sand), minor fine heavy minerals (29.0 to 29.5 ft - LIMESTONE gravel lense)		7	-18.7 SPT, 29 to 29.5 ft Limestone gravel lense	95, 20, 4
			End of Boring at 30.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93
2. 140# hammer with 30" drop used on 2.0 spillspoon (1.38" I.D.)

(continued)

ENG FORM 1836 | PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0297

Hole No. CP05-EAARS-CB-0297

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.3 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.1	33.4					-23.1	
						x 2" O.D.	

34
36
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42
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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0297

Hole No. CP05-EAARS-CB-0298

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N769639.7, E777981 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No. CP05-EAARS-CB-0298		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/5/2005 Completed 8/8/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.6 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30.5 ft		19. Inspector: C. Brown	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.6	0.0						
			SAND, Silty, gravelly, dark brown to black, loose, moist, fine to coarse, subangular		1	11.6 SPT, Automatic hammer	3, 3, 4
						9.6	
			SAND, gravelly, silty, grey, loose, wet, fine to coarse, subangular		2	SPT	4, 6, 4
7.6	4.0					7.6	
			SAND, gravelly, grey, very dense, wet, fine to coarse, subangular to angular		3	SPT	13, 24, 50
6.1	5.5					6.1	
			LIMESTONE: grey, hard, sandy, subangular, silicious				
5.1	6.5			100 (RQD 38%)	1	5.1 HQ coring	
			CLAY, gravelly, sandy, dark grey, calcareous, fine to coarse, subrounded, fossiliferous (marl)				
4.1	7.5					4.1	
			Refusal - LIMESTONE, grey to tan, gravelly, slightly sandy, wet, hard, angular, fine grain to crystalline, platy			3.6 SPT, Advanced casing to 7.5 ft HQ coring	50/3"
				74 (RQD 46%)	2		
			LIMESTONE, grey to light brown, moderately hard, sandy, fine grain, fossiliferous, subangular with interbedded sand lense (9.5 to10.0 ft)				
						-1.4	
			Same as above, vertical seams (14.5 to 15.0 ft)	28 (RQD 15%)	3	HQ coring	
						-2.9	
-3.4	15.0						

(continued)

ENG FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0298

Hole No. CP05-EAARS-CB-0298

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.6 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.4	15.0					-3.4	
			No recovery			Vertical seams 14.5 to 15 ft	16
-5.4	17.0					-5.4	
			SAND, grey, clayey, silty, slightly gravelly, medium dense, wet, fine to coarse, subrounded, calcareous (marl)		5	SPT	4, 13, 13
							18, 20, 22
						-12.4	
			SAND, gravelly, silty, grey to brown, medium dense, wet, fine to coarse, subangular		6	SPT	4, 5, 17
							24, 26, 28
						-17.4	
			Same as above		7	SPT	25, 11, 19
-18.9	30.5						30
			End of Boring at 30.5'			NOTES: 1. Soils are field visually-classified in accordance with the ASTM Designation D 2488-93. 2. 140# hammer with 30" drop used on 2.0" splitspoon (1.38" I.D.)	32

(continued)

ENG FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0298

Hole No. CP05-EAARS-CB-0298

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 11.6 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.8	33.4					-21.8	
						x 2" O.D.)	

34
36
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40
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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0298

Hole No. CP05-EAARS-CB-0299

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N768147.7, E779025.3 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0299		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/5/2005 Completed 8/5/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.6 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30.5 ft		19. Inspector: C. Brown	

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.6	0.0						
11.1	0.5		Silty, organic, dark brown to black			11.6	3
			SAND, gravelly, slightly silty, grey, medium dense, fine to coarse, moist, subrounded with shell fragments		1	SPT, Automatic hammer	8 10
						9.6	
			same as above		2	SPT	7 7 6
						7.6	
			same as above, wet		3	SPT	4 15 12
						5.6	
			SAND, clayey, silty, gravelly, dark grey, very dense, fine to coarse, wet, subangular to angular		4	SPT	3 3 14
3.8	7.8					3.6	
			LIMESTONE, light grey, moderately hard to soft, sandy, fine to coarse, subrounded to subangular, fossiliferous, (macro fossils), grades softer with depth	62 (RQD 13%)	1	HQ coring. Top of rock at 7.8 ft. Set casing to 8 ft.	
-0.4	12.0						
						-1.4	
			Sandy, gravelly, silty, light grey, medium dense, wet, fine to coarse, subangular, calcareous		5	SPT	11 3 7

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0299

Hole No. CP05-EAARS-CB-0299

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole 11.8 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.4	15.0					-3.4	
							16
							18
						-7.4	
			Sandy, gravelly, silty, grey, medium dense, wet, fine to coarse, subangular to subrounded, calcareous with minor fine quartz sand		6	SPT	10, 19, 10
							20
							22
						-12.4	
			SAND, gravelly, silty, light grey, medium dense, wet, fine to coarse, subrounded, calcareous with moderate fine quartz sand, trace fine black heavy mineral		7	SPT	7, 9, 11
							24
							26
							28
						-17.4	
			SAND, slightly silty, grey, medium dense, wet, fine to medium, subrounded, silica (quartz) with abundant fine to medium shell fragments, moderate fine black heavy minerals		8	SPT	36, 5, 12
-18.9	30.5						
							30
			End of Boring at 30.5'				
							32

NOTES
1. Soils are field visually classified in accordance with the ASTM Designation D 2488-69
2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D.)

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0299

Hole No. CP05-EAARS-CB-0299

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.6 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.8	33.4					-21.8	

34

(2" O.D.)

36

38

40

42

44

46

48

50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0299

Hole No. CP05-EAARS-CB-0300

DRILLING LOG	Division:	Installation:	Sheet 1 of 5 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N766340.5, E780295.1 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0300		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/4/2005 Completed 8/4/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.8 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 100 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.8	0.0		PEAT: brownish black, loose, fine grained, dry, organic, with many roots		1	10.8 SPT, Fill 9.3	3, 3, 3
					2	SPT 7.8	3, 3, 2
			same as above, but wet		3	SPT 6.3	3, 4, 4
5.1	5.8				4	SPT 4.8	7, 12, 50/3"
			LIMESTONE: caprock, tan, thinly bedded, fine to coarse grained, fossiliferous, vuggy, strong and hard to soft and weak and porous, locally stained light brown	62 (RQD 24%)	1	HQ coring; Mudstone to grainstone	
0.1	10.7		SAND: pale brownish grey, loose, wet, well graded, fine to coarse, angular, calcitic, some silt		5	-0.2 SPT -2.7	7, 6, 2
-2.7	13.5		Silty SAND: as above but more silt and trace fine gravel		6	SPT	4, 4, 2

(continued)

ENG FORM 1836

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0300

540

Hole No. CP05-EAARS-CB-0300

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.8 | Sheet 2 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.2	15.0					-4.2	
							16
							18
			Silty SAND: as above			-7.7	
					7	SPT	33, 16, 9
							20
							22
-12.7	23.5					-12.7	
			SAND: pale brownish grey, very dense, wet, well graded, fine to coarse grained, angular, calcitic, some silt, some fine gravel		8	SPT	10, 50/5"
							24
							26
							28
						-17.7	
			SAND: as above but dense with some gravel and a trace silt		9	SPT	17, 32, 10
							30
							32

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0300

Hole No. CP05-EAARS-CB-0300

DRILLING LOG (Cont. Sheet) | Elevation Top of Hole: 10.8 | Sheet 3 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.6	33.4					-22.6	
-22.7	33.5		Silty SAND: light brownish grey, very dense, wet, well graded, fine to coarse, angular, calcitic		10	-22.7 SPT; Hard drilling from 34 to 37.5 ft	50/5"
-27.7	38.5		Gravelly SAND: pale brownish grey, medium dense, wet, mostly uniform, fine grained, subrounded and quartzose, with some fine to coarse, subangular and calcitic		11	-27.7 SPT; Caloosahatchee Formation	21 16 9
-32.7	43.5		SAND: as above but dense and only a trace gravel		12	-32.7 SPT	13 18 20
			SAND: as above but subequal portions fine subrounded, quartzose and fine to coarse, angular, calcitic sands, trace gravel		13	-37.7 SPT	15 15 18

34 36 38 40 42 44 46 48 50

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0300

542

Hole No. CP05-EAARS-CB-0300

DRILLING LOG (Cont. Sheet) | Elevation Top of Hole: 10.8 | Sheet 4 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-41.0	51.8					-41.0	
-42.7	53.5					-42.7	
			Sandy GRAVEL: pale brownish grey, very dense, wet, well graded, fine to coarse, angular, limestone gravel with mostly calcitic sand		14	SPT	14, 38, 16
-47.7	58.5					-47.7	
			SAND: pale brownish grey, medium dense, wet, mostly uniform, fine grained, subrounded and quartzose, trace calcitic sand		15	SPT	16, 15, 13
-52.7	63.5					-52.7	
			Only limestone fragments recovered, large one plugged end of spoon		16	SPT	12, 6, 6
-55.2	66.0						
			SAND: pale greenish grey, medium dense, wet, uniform, fine, quartzose with a trace fine to coarse, angular, calcitic sand				
						-57.7	
					17	SPT	6, 7, 12

52 54 56 58 60 62 64 66 68 70

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0300

Hole No. CP05-EAARS-CB-0300

DRILLING LOG (Cont Sheet) | Elevation Top of Hole: 10.8 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-59.4	70.2					-59.4	
-60.7	71.5		Gravelly SAND: pale brownish grey, dense, wet, well graded, fine to coarse, angular, calcitic with limestone gravel and some fine quartz sand			-60.7	
						Hard drilling from 71.5 to 73 ft	72
						-62.7	
					18	SPT	34
							14
							29
							74
							76
-67.7	78.5					-67.7	78
			Sandy GRAVEL: like that from 53.5 to 55 ft		19	SPT	25
							50
							80
							82
-72.7	83.5					-72.7	
			Gravelly SAND: light grey, dense, wet, well graded, fine to coarse, mostly fine to coarse, angular calcitic, some fine, subrounded quartzose, trace silt, limestone gravel		20	SPT	14
							14
							16
							84
							86
						-77.7	88

(continued)

ENG FORM 1836

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0300

APPENDIX 2
SUPPLEMENTAL BORINGS AND PIEZOMETER INSTALLATION LOGS: 301-320

Hole No. CP05-EAARS-CB-0301

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N764973.7, E781256.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0301	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/4/2005 Completed 8/4/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30.5 ft	19. Inspector: C. Brown

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.7	0.0						
11.2	0.5		Silty, organic, black			11.7	7
			SAND, gravelly, silty, grey, well graded, fine to coarse, loose, moist, subangular to angular		1	SPT	4 4
						9.7	
			Same as above, medium dense, wet		2	SPT	8 8 6
						7.7	
			Same as above		3	SPT	10 4 10
						5.7	
			Same as above, (limestone, green-grey, hard, fine grain at tip)		4	SPT	8 7 50/1"
4.6	7.1					3.7	
			LIMESTONE, grey to green, fine grain to crystalline, hard, minor porosity, fossiliferous, silicious	95 (RQD 85%)	1	HQ coring; partial loss of drilling fluid circulation at 7 ft	
			LIMESTONE, grey, hard, fine grain, highly fossiliferous and porous in lenses, silicious, grades softer				
						-0.3	
			LIMESTONE, grey to green, fine grain to crystalline, hard, fossiliferous, (maybe dolomitic)	34 (RQD 10%)	2	HQ coring	

(continued)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0301

Hole No. CP05-EAARS-CB-0301

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.7 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.3	15.0					-3.3	
-5.3	17.0		LIMESTONE, light grey, moderately hard, sandy, fine to medium, slightly fossiliferous, porous in lenses, grades softer			-5.3	
-12.3	24.0		SAND, gravelly, silty to clayey, grey, medium dense, fine to coarse, calcareous with moderate macro fossils, subangular - wet		5	SPT	3, 5, 12
-17.3	29.0		SAND, gravelly, slightly silty, grey, dense, wet, fine to coarse, subangular to subrounded, calcareous, with fine quartz sand, some shell fragments		6	SPT	5, 8, 13
-18.8	30.5		SAND, gravelly, silty, clayey, light grey, medium dense, wet, fine to coarse, subangular to subrounded, calcareous, (marl) with fine shell fragments		7	SPT	15, 11, 5
			End of Boring at 30.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0301

Hole No. CP05-EAARS-CB-0301

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.7 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.7	33.4					-21.7	
						x 2" O.D.)	

34
36
38
40
42
44
46
48
50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0301

Hole No. CP05-EAARS-CB-0302

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N763912, E781642 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0302	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/3/2005 Completed 8/3/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 12.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30.5 ft	19. Inspector: C. Brown

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.5	0.0						
12.0	0.5		Asphalt Pavement			12.0	
			SAND: gravelly, silty, grey, dense, well graded, dry, fine to coarse, angular to subangular (FILL)		1	SPT; Automatic hammer	24, 27, 24
			Same as above, moist		2	SPT	14, 23, 25
			Same as above - medium dense, wet		3	SPT	13, 16, 10
6.5	6.0					6.5	
6.0	6.5		Refusal cuttings			6.5	50/1"
			LIMESTONE: grey to light tan, hard, brittle, fine grained to crystalline, silicious, fossiliferous, vertical seams	46 (RQD 28%)	1	SPT Set casing to 6 ft	
						1.5	
			LIMESTONE: light grey, hard, brittle, crystalline to microcrystalline, silicious	48 (RQD 25%)	2	HQ coring; 100% drill fuid loss at 9 ft; Advanced casing to 11 ft	
-2.5	15.0		LIMESTONE, grey to light tan, hard, fine grain to crystalline, fossiliferous, slightly silicious				

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0302

Hole No. CP05-EAARS-CB-0302

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.5	15.0					-2.5	
			SAND: gravelly, slighty silt, light grey, very loose, well-graded, fine to coarse, wet, calcareous, angular to subangular with shell fragments		5	SPT; Advanced casing to 16 ft	5, 2, 1
						-3.5	
			SAND: gravelly, silty, slight clayey, grey, calcareous, medium dense, wet, subangular with abundant shell fragments		6	SPT	5, 10, 10
						-6.5	
-11.5	24.0					-11.5	
			SAND: slight silty, light brown to grey, fine to coarse, dense, wet, carbonate, with some silica (Quartz sand), partial cemented, subrounded, trace of fine black heavy minerals		7	SPT	5, 6, 34
-16.5	29.0					-16.5	
			SAND: silty, grey, fine to medium, dense, wet, subrounded, with trace of fine black heavy minerals		8	SPT	10, 18, 21
-18.0	30.5						
			End of Boring at 30.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0302

Hole No. CP05-EAARS-CB-0302

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-20.9	33.4					-20.9	
						x 2" O.D.)	

34
36
38
40
42
44
46
48
50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0302

Hole No. CP05-EAARS-CB-0303

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N761607.6, E783513.8 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0303	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/3/2005 Completed 8/3/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30.5 ft	19. Inspector: C. Brown

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.8	0.0						
			SAND: gravelly, silty, grey, medium dense, well graded, fine to course, day, angular, to subangular		1	11.8 SPT	12, 14, 10
			Same as above, moist - fill		2	9.8 SPT	8, 11, 9
			Refusal at 5', top of caprock		3	7.8 SPT	6, 12
6.8	5.0					6.8	
			LIMESTONE. gray, hard, fossiliferous, porous, fine grain	85 (RQD 78%)	1	HQ coring; set casing to 5 ft	50/0"
			LIMESTONE, grey, hard to very hard, silicious, fine to crystalline				
			LIMESTONE, grey, hard to moderately hard, vuggy, sandy, fine to coarse, subangular, highly fossiliferous and vuggy in lenses			1.8	
			LIMESTONE, light grey, hard, sandy, fine to crystallne, subangular, slightly silicious	65 (RQD 52%)	2	HQ coring; UCS=8389psi	
			LIMESTONE, grey, moderately hard, sandy, fossiliferous, porous, grades softer with depth with macro-fossils			-3.2	

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0303

Hole No. CP05-EAARS-CB-0303

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.8 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.2	15.0					-3.2	
-4.7	16.5		LIMESTONE, grey to light grey, hard brittle, fine to crystalline, fossiliferous, silicious, vertical seams	37 (RQD 28%)	3	HQ coring	
-11.2	23.0		SAND: gravelly, silty, light grey, dense, wet, well graded, fine to coarse, subangular to angular, calcareous, abundant shell fragments interbedded calcareous clay lenses - Marl			-6.2	
						-7.2	
					4	SPT	4, 31, 17
			SAND: silty, light grey, medium dense, wet, fine to medium, wet, subangular, with shell fragments and traces of black fine heavy minerals			-12.2	
					5	SPT	3, 4, 8
						-17.2	
-18.7	30.5		Same as above, loose with tin lenses of grey to brown, limestone, fine grain, (HARD), silicious		6	SPT	10, 5, 3
			End of Boring at 30.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0303

Hole No. CP05-EAARS-CB-0303

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.8 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.6	33.4					-21.6	
						x 2" O.D.)	

34
36
38
40
42
44
46
48
50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0303

Hole No. CP05-EAARS-CB-0304

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N758275.1, E785955.4 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0304	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/2/2005 Completed 8/2/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 34.5 ft	19. Inspector: C. Brown

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.7	0.0						
			Silt, organic, black, moist		1	10.7 SPT; Automatic hammer 8.7	1, 1, 3
			Same as above, firm, moist		2	SPT 6.7	2, 3, 2
					3	SPT 4.7	1, 2, 8
5.2	5.5						
4.7	6.0		SAND: gravelly, light grey, fine to coarse, subangular, wet. silt, organic, black, wet				
4.2	6.5		SILT, organic, black, wet		4	SPT 2.7	3, 26, 14
			LIMESTONE: grey, gravel, weathered, hard, (Marl) fine to coarse, subangular, wet				
			LIMESTONE: grey, hard, fine grain, silicious, slightly vuggy	67 (RQD 24%)	1	HQ coring 1.2	
				60 (RQD 43%)	2	HQ coring; UCS=3195psi	
			LIMESTONE, grey, moderately hard, sandy, fine to coarse grain, fossiliferous (shell fragments) with interbedded calcareous clay lenses			-3.8	

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0304

Hole No. CP05-EAARS-CB-0304

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.7 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.3	15.0					-4.3	
			Same as above, softer at 17.5	36 (RQD 12%)	3	HQ coring; advanced casing to 14.5 ft	16, 18
						-8.8	
			LIMESTONE: grey, soft, sandy, fine to coarse grain, fossiliferous, porous	15 (RQD 0%)	4	HQ coring	20
-10.3	21.0						
			SAND: gravelly, silty, light grey, loose, well graded, fine to coarse, wet, angular to subangular, calcareous, some shell fragments				22
						-12.8	
						-13.3	
					5	SPT; approx 50% drill fluid loss	24: 1, 3, 2; 26
-17.3	28.0						
			SAND: silty, light grey, dense, fine to medium, subangular, with shell fragments, traces of heavy minerals				28
						-18.3	
					6	SPT	27, 30, 14; 30, 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0304

Hole No. CP05-EAARS-CB-0304

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.7 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.7	33.4					-22.7	
-23.8	34.5		Refusal - No Recovery			-23.3	50/0.5"
					7	SPT	
			End of Boring at 34.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0304

Hole No. CP05-EAARS-CB-0305

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N778651.2, E757998.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0305	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/16/2005 Completed 8/16/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 10 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.7	0.0						
8.4	0.3		Rock First 4" rock, then 1.0 ft of peat followed by around 2.5' of limestone	22 (RQD 0%)	1	8.7 HQ coring; Bottom half of sample recovered had weathered limestone pieces	
7.4	1.3		Peat				
4.9	3.8		LIMESTONE: pale white, hard, fine grained, quite porous, shells present			3.7	
0.7	8.0			8 (RQD 0%)	2	HQ coring; Hard coring from 8 to 9 ft	
-0.3	9.0		LIMESTONE: brownish white, hard, fine grained, quite porous				
-1.3	10.0		No recovery				
			End of Boring at 10'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0305

Hole No. CP05-EAARS-CB-0306

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N755049.5, E788243.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0306	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/1/2005 Completed 8/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 12.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30.5 ft	19. Inspector: C. Brown

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.5	0.0						
12.3	0.3		SILT: organic, dark brown			12.5	3
			SAND: gravelly, silty, grey, medium dense, well graded, fine to coarse, subangular, subrounded, dry, trace shell fragments		1	SPT; automatic hammer	7, 14
						10.5	
			SAND: gravelly, silty, grey, dense, well graded, fine to coarse, subangular, platy chert (cobble), moist		2	SPT	15, 21, 24
						8.5	
			SAND: gravelly, grey, loose, well graded, fine to coarse, subangular, moist, (Black organic silt at 5.5')		3	SPT	8, 6, 4
6.5	6.0					6.5	
			LIMESTONE: grey to light tan, hard, fossiliferous, vuggy, fine grained	98 (RQD 82%)	1	HQ coring	
			Same as above, grades Sandy, moderately hard with calcareous clay in lenses			4.2	
				93 (RQD 63%)	2	HQ coring; UCS=8080psi	
			LIMESTONE: light grey to brown, very fine grain to crystalline, fossiliferous, silicious			1.5	
			LIMESTONE: grey, very sandy, highly fossiliferous, poorly cemented, grades softer to calcareous Sandy Clay - Marl	64 (RQD 27%)	3	HQ coring; Set casing to 11 ft	
						-1.3	
-2.5	15.0			39	4	HQ coring	

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0306

Hole No. CP05-EAARS-CB-0306

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.5	15.0					-2.5	
-4.5	17.0		SAND: lense - No recovery	(RQD 28%)		-4.5	16
-10.5	23.0		SAND: gravelly, light grey, dense, well graded, wet, fine to coarse, angular to subangular, calcareous, trace to some shell fragments		4	SPT -10.5	7, 26, 7, 18, 20, 22
-16.5	29.0		SAND: silty, light grey, medium dense, fine to medium, wet, subrounded to subangular, calcareous, trace to some gravel		5	SPT -16.5	12, 10, 11, 24, 26, 28
-18.0	30.5		SAND: slighty silty, grey, medium dense, fine to medium, angular to subangular, silicious (quartzose) some shell fragments		6	SPT	4, 24, 18, 30
			End of Boring at 30.5'				32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0306

Hole No. CP05-EAARS-CB-0306

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.5 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-20.9	33.4					-20.9	
						x 2" O.D.)	

34
36
38
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42
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46
48
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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0306

Hole No. CP05-EAARS-CB-0307

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N753807.6, E789116.6 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0307	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/29/2005 Completed 7/29/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30.5 ft	19. Inspector: J. Petrie

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.8	0.0						
			PEAT, black, firm to stiff SILT		1	11.8 SPT 9.8	1, 2, 3
			PEAT, black, firm SILT		2	SPT 7.8	2, 2, 3
			PEAT, black, soft to firm CLAY		3	SPT 6.3	2, 2, 50/1"
6.3	5.5		light creamy grey to grey mottled, medium bedded, moderately strong to strong, fine grained LIMESTONE with trace of shells and irregualr voids (coarse sand, fine gravel size)	90 RQD 68%)	1	HQ coring; 3 pieces > 0.4 ft long	
			light creamy grey occasional yellowish brown mottled, medium bedded, strong fine grained LIMESTONE with trace fine to medium sized voids, shelly horizon at base				
			Creamy grey to light grey, moderately strong to strong, fine grained LIMESTONE with laminations (silty) and shelly horizons			1.3	
			Creamy white, medium bedded moderately strong to strong fine grained shelly LIMESTONE	78 (RQD 42%)	2	HQ coring; 3 pieces > 0.4 ft long	
			Creamy grey, medium bedded, moderately strong to strong fine grained LIMESTONE				
			Creamy grey, soft to firm silts, sandy gravel, shelly fragments				
			Creamy grey, medium bedded, moderately strong to strong, fine grained LIMESTONE with some fine				

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0307

Hole No. CP05-EAARS-CB-0307

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 11.8	Sheet 2 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.2	15.0					-3.2	
-3.7	15.5		sand, occasionally coarse sand sized voids			-3.7	
			Gravelly SAND: creamy grey, loose, fine to coarse, well graded, subangular with cemented (fine gravel size) sand and shells		4	-4.2 SPT	13, 2, 5
-7.2	19.0					-7.2	
			Silty SAND: light grey, loose, fine to coarse, subangular, occasional gravel (fine size) of cemented sand		5	SPT	1, 2, 2
						-12.2	
			Silty SAND: light greenish grey, loose, fine to coarse, subangular with fine gravel sized shell fragments		6	SPT	1, 3, 3
-17.2	29.0					-17.2	
			SAND: light brown, medium dense, fine to coarse, subangular, mostly shells		7	SPT	11, 8, 9
-18.7	30.5						
			End of Boring at 30.5'				

16 18 20 22 24 26 28 30 32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0307

Hole No. CP05-EAARS-CB-0307

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.8 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.6	33.4					-21.6	
						x 2" O.D.)	

34
36
38
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42
44
46
48
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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0307

Hole No. CP05-EAARS-CB-0308

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N751544.6, E790701.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0308	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/28/2005 Completed 7/28/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30.5 ft	19. Inspector: J. Petrie

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.7	0.0						
			PEAT: black, sandy silt, firm, with subangular fine gravel.		1	11.7 SPT 9.7	2, 4, 4
			Grades firm to stiff, gravel grades out.		2	SPT 7.7	3, 4, 2
7.5	4.2						
			Gravelly SAND: Creamy gray, medium dense, well graded, fine to coarse, subangular, fine gravel size peices of limestone.		3	SPT 5.7	5, 8, 30
5.7	6.0						
			LIMESTONE: light creamy gray with greenish gray mottling, moderately strong to strong, medium bedded, fine grained with trace shells and voids (coarse sand and fine gravel size).	45 (RQD 30%)	1	5.5 HQ coring; 2 pieces > 0.4 ft long 1.7	50/3"
			Grades to light creamy brown			1.5	6
			Grades to light creamy gray	46 (RQD 8%)	2	HQ coring; 1 piece > 0.4 ft long -3.3	50/3"

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0308

Hole No. CP05-EAARS-CB-0308

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 11.7	Sheet 2 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.3	15.0					-3.3	
-4.8	16.5		Silty SAND: light gray to light greenish brown, fine to coarse, loose, subangular, trace gravel with shells.			-7.3	
					6	SPT	3, 1, 4
			Gravel grades out, light greenish brown mottling grades out.			-12.3	
					7	SPT	4, 2, 2
			Grades occasional subangular to subrounded fine gravel aggregates of hard cemented sand.			-17.3	
-17.7	29.4		CLAY: gray brown, firm with some shell fragments.		8	SPT	11, 2, 11
-18.2	29.9		Silty SAND with some gravel and shell fragments.				
-18.8	30.5		End of Boring at 30.5'				

16 18 20 22 24 26 28 30 32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0308

Hole No. CP05-EAARS-CB-0308

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.7 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.7	33.4					-21.7	
						x 2" O.D.)	

34
36
38
40
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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0308

Hole No. CP05-EAARS-CB-0309

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750755, E790531.8 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0309		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/20/2005 Completed 7/20/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.3 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.3	0.0						
9.8	1.5		Gravelly SAND: tan to light brown, dry, dense, well graded, road fill		1	11.3 SPT; Note: all calcitic material noted below is at least partly shell fragments 9.8	24, 16, 21
6.3	5.0		PEAT		2	SPT 8.3	5, 2, 2
					3	SPT 6.8	2, 2, 3
1.3	10.0		LIMESTONE: caprock, tan to light brown, fine grained, thinly bedded, fossiliferous, vuggy, hard and strong to soft, weak, porous	58 (RQD 32%)	4	6.3 SPT	50/5"
					1	HQ coring; UCS=5200psi; 4" casing to 5 ft 1.3	
0.6	10.7		Gravelly SAND: pale brownish grey				32
			LIMESTONE: tan, fine grained, thinly bedded, fossiliferous, vuggy to porous, moderately hard, moderately strong, high core loss is probably poorly cemented sand		5	0.3 SPT; hard drilling 10 to 11 ft; Spun in 5 more feet of casing	50/2"
				22 (RQD 0%)	2	HQ coring	

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0309

Hole No. CP05-EAARS-CB-0309

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.3 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.7	15.0					-3.7	
-4.7	16.0					-4.7	
			SAND: pale brownish grey, wet, loose, well graded, fine to coarse grained, angular,calcitic		6	SPT	10, 5, 2
						-7.2	
			Trace silt and fine gravel at 18.5 ft and medium dense		7	SPT	14, 4, 8
						-12.2	
			SAND: as above but pale greenish grey, loose, and trace fine, subrounded, quartzose sand		8	SPT; Caloosahatchee Formation	5, 5, 4
-17.2	28 5					-17.2	
			Sandy GRAVEL: pale greenish grey, wet, dense, poorly graded, fine grained, angular, calcareous with sand as above		9	SPT	21, 18, 16
-18.7	30.0						
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0309

Hole No. CP05-EAARS-CB-0310

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750243.3, E788786.4 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0310		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/20/2005 Completed 7/20/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.0	0.0		Gravelly SAND: tan, dry, dense, angular, well graded, fine to coarse grained, calcitic limestone gravel		1	10.0 SPT; All calcitic material noted below is at least partly shell fragments 8.5	44, 24, 18, 31
7.0	3.0				2	SPT 7.0	15, 6
5.5	4.5		Grades to Sandy GRAVEL at 3 ft		3	SPT 5.5	9, 9, 35
			LIMESTONE: caprock, tan to light brown, fine grained, thinly bedded, fossiliferous, vuggy, hard and strong to soft, weak, porous	50 (RQD 0%)	4 1	5.3 SPT HQ coring; Hard drilling from 0 to 4.5 ft; Spoon bouncing 1.5	50/3"
0.5	9.5			100 (RQD 0%)	2	0.5 HQ coring	
			SAND: pale grey, wet, very dense, well graded, fine to coarse grained, angular, calcitic, some limestone gravel, with limestone layers up to 0.7 ft thick	20 (RQD 14%)	5 3	0.0 SPT; Soft from 9.5 to 10 ft HQ coring; UCS=2710psi; Spun in 10 ft of 4" casing -5.0	6, 50/1"

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0310

Hole No. CP05-EAARS-CB-0310

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.0	15.0					-5.0	
			SAND: paly grey, wet, medium dense, well graded, fine to coarse grained, angular, calcitic, trace fine gravel, some silt, trace very fine, subrounded quartzose sand		6	SPT; Intermittent hard drilling	6, 8, 4
						-8.5	
					7	SPT	10, 10, 8
-13.5	23.5					-13.5	
			Gravelly SAND: light grey, wet, very dense, poorly graded, fine to coarse sandy limestone gravel with sand as above, but no quartzose sand and trace silt		8	SPT; Intermittent hard drilling	29, 18, 50/1"
						-18.5	
			Gravelly SAND: grades light brownish grey		9	SPT	26, 29, 47
-20.0	30.0					-20.0	
			Sandy LIMESTONE: tan to medium, fine to coarse grained, thinly bedded,very vuggy, very fossiliferous, moderately hard and moderately strong to soft, weak and porous	24 (RQD 56%)		HQ coring; UCS=5920psi; Spun in 20 ft more casing	

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0310

Hole No. CP05-EAARS-CB-0310

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.4	33.4					-23.4	
-25.0	35.0		End of Boring at 35'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93. 2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0310

Hole No. CP05-EAARS-CB-0311

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750237.4, E786933.7 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0311	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/22/2005 Completed 7/22/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.9	0.0						
			Sandy GRAVEL and Gravelly SAND: tan, gray and light brown, dry, well graded, fine to coarse, angular, calcitic with angular, fine to coarse limestone gravel, also cobbles and boulders		1	9.9 SPT; All calcitic material noted below is at least partly shell fragments; Road fill	50/4"
						8.4	8
					2	SPT; Hard drilling from 2.1 to 3.5 ft	3
						6.9	50/3"
						6.4	50/3"
					3	SPT	
				28 (RQD 0%)	1	HQ coring; Spoon bouncing	
4.4	5.5						
			LIMESTONE: caprock, tan to light brown, fine grained, thinly bedded, fossiliferous, vuggy, hard and strong to soft, weak and porous				
1.4	8.5					1.4	
			Sandy GRAVEL: as above Pale white, hard, fine grained, quite porous				18
					4	0.7 SPT	50/3"
				14 (RQD 10%)	2	HQ coring; 4" casing to 8.5 ft; Hard at 5.7 ft; last 0.3 ft soft	
						-3.6	
-4.1	14.0		Fine Sandy Gravel. Casing set at 13.5 ' for Core Run #3			-4.1	50/5"
			Fractured Limestone, tan, brown dolomite limestone to soft tan vuggy		5	SPT	
-5.1	15.0			10	3	HQ coring; 1st 0.5 to	

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0311

Hole No. CP05-EAARS-CB-0311

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 9.9	Sheet 2 of 2 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.1	15.0		limestone			-5.1	
			Light tan, fine sand/gravel with small cement shell/sand fragments	(RQD 0%)		1 foot cored slow, then faster; sandy returns	
						-8.6	
					6	SPT	5 5 10
			22' Small hard layers 4" - 6"				
-13.6	23.5					-13.6	
			23.5' 50/0" Cemented sand/shell. Casing set to 23.5'	72 (RQD 18.4%)	7 4	-13.6 SPT HQ coring	50/0"
-17.1	27.0		Very hard cemented sand/gravel and shells. Darker after 26'				
			50/0" Hard			-18.6	
					8	SPT	50/0"
-20.1	30.0						
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

16 18 20 22 24 26 28 30 32

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0311

Hole No. CP05-EAARS-CB-0312

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750228, E785146.2 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0312	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/26/2005 Completed 7/26/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 12.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 36.5 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.4	0.0						
			Sandy GRAVEL: tan to light brown, dry dense to very dense, well graded, fine to coarse, limestone with well graded, angular fine to coarse, calcitic sand, cobbles and boulders		1	12.4 SPT; All calcitic material noted below is at least partly shell fragments; Road fill	19, 37, 25, 23
					2	10.9 SPT; Grades to gravelly sand	19, 19
					3	9.4 SPT; wet at 3 ft; Peat at bottom of SPT 3	22, 26, 4
7.9	4.5					7.9	
			LIMESTONE: caprock, tan to light brown, thinly bedded, fine grained, fossiliferous, vuggy, hard and strong to soft, weak and porous	38 (RQD 0%)	1	HQ coring; cased to 4.5 ft	
						3.9	
				8 (RQD 0%)	2	3.9 SPT HQ coring; ran casing to 8.5 ft	50/0"
0.9	11.5					0.9	
			Sandy GRAVEL: as above (0 to 5 ft) but pale brownish grey, wet, poorly graded, fine to coarse grained, angular limestone with fine to coarse, angular, calcitic sand			soft drilling at 11.5 ft	
						-1.1	
					5	SPT; Intermittent hard drilling to 18.5 ft; then soft drilling to	1, 28, 50/5"

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0312

Hole No. CP05-EAARS-CB-0312

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.4 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.6	15.0					-2.6	
-6.1	18.5					23.5 ft -6.1	16 18
-11.1	23.5		SAND: pale brownish grey, wet, well graded, fine to coarse grained, angular, calcitic, some silt, trace very fine, subrounded, quartz sand		6	SPT -11.1	5 3 3 20 22
-19.1	31.5		LIMESTONE: tan to light brownish grey, thinly bedded, medium to coarse grained, fossiliferous, vuggy and porous, moderately strong to soft, weak and friable	40 (RQD 0%)	3	-11.3 SPT HQ coring; ran in casing to 28.5 ft -16.1	50/2" 24 26 28
				66 (RQD 14%)	4	HQ coring	30
			Solution voids infilled with younger material. Last 4 ft of Run 4 slow drilling. Grades sandy(quartz) with layers of coquina in th last (35) run.				32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0312

Hole No. CP05-EAARS-CB-0312

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.4 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.0	33.4					-21.0	
-24.1	36.5			33 (RQD 0%)	5	-21.1 HQ coring; ran in casing to 33.5 ft; Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	
			End of Boring at 36.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0312

Hole No. CP05-EAARS-CB-0313

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750184.9, E782576 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0313		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/27/2005 Completed 7/27/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.5 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.5	0.0						
			Gravelly SAND: tan to light brown, wet, dense, angular, well graded, fine to coarse grained, calcitic with limestone gravel, cobbles and boulders at 1 ft. Circulation turned black briefly.			11.5	10
					1	10.5 SPT; All calcitic material noted below is at least partly shell fragments; Road fill	16
							50/3"
				26 (RQD 0%)	1	HQ coring; Ranges from wackestone to grainstone, some coquina; 4" casing to 5 ft	
7.5	4.0						
			LIMESTONE: caprock, tan to light brown, fine to coarse grained, thinly bedded, fossiliferous, vuggy, strong and hard to soft, weak, and porous				
						5.5	
						5.5	50/0"
				24 (RQD 0%)	2	SPT HQ coring	
2.5	9.0						
			Silty SAND: greyish white, wet, very dense, well graded, fine to coarse grained, angular, calcitic				
						0.5	
					3	SPT	3 1 50/5"
-2.0	13.5					-2.0	
			Grades pale brownish grey with less (trace) silt SAND: as above but light brownish grey		4	SPT; grades pale brownish grey with less (trace) silt	3 27 8

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0313

Hole No. CP05-EAARS-CB-0313

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 11.5	Sheet 2 of 2 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.5	15.0		with some clay (plastic fines)			-3.5	
			SAND: pale brownish grey, wet, very dense, well graded, fine to coarse grained, mostly angular and calcitic, trace very fine quartz sand, some silt, some fine gravel		5	-7.0 SPT; Intermittent hard drilling to 23.5 ft	9, 29, 28
-12.0	23.5		Sandy LIMESTONE/Calcareous SAND: light to medium grey, fine to coarse grained, very vuggy, porous, fossiliferous, thinly to medium bedded, moderately hard and moderately strong		6	-12.0 SPT; Caloosahatchee Formation	20, 28, 50/2"
				68 (RQD 52%)	3	-13.5 HQ coring	
-18.5	30.0		End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0313

Hole No. CP05-EAARS-CB-0314

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750202.1, E781140 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0314	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/15/2005 Completed 8/16/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.9	0.0						
			Gravelly SAND: light brownish grey, well graded, fine to coarse, angular, calcitic with limestone gravel, cobble and boulders		1	10.9 SPT; All calcitic material noted below is at least partly shell fragments; Bore hole on boulders, moved 3 ft; Fill	38
						9.4	18
					2	SPT	5
						7.9	8
							5
6.9	4.0				3	6.9 SPT	20
			LIMESTONE: caprock, tan to light brown, fine to coarse grained, thinly bedded, vuggy and fossiliferous, strong and hard to soft, weak and porous	22 (RQD 0%)	1	HQ coring	50/1"
						5.4	
						Lost all circulation at 5.5 ft	
						2.4	
1.4	9.5						
			SILT: pale greenish grey, stiff, moist, non-plastic, trace sand, some gravel	12 (RQD 0%)	2	HQ coring; Installed 4" casing to 8.5 ft	
						-2.6	
					4	SPT; Advanced casing to 13.5 ft	8
							6
							7

(continued)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0314

Hole No. CP05-EAARS-CB-0314

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 10.9	Sheet 2 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.1	15.0					-4.1	
-7.6	18.5		Sandy GRAVEL: pale greenish, very dense, wet, well graded, fine to coarse, angular, shell and limestone, with angular calcitic sand and a trace silt		5	-7.6 SPT; Hard drilling 19 to 23.5 ft	23 35 30
-12.6	23.5		Gravelly SAND: pale brownish grey, very dense, wet, well graded, fine to coarse, angular, calcitic with gravel as above		6	-12.6 SPT	18 32 50/5"
-14.1	25.0		25.0 to 31.5 ft, LIMESTONE: light brownish grey to medium grey, coarse grained, medium bedded, vuggy, porous, fossiliferous, moderately hard and moderately strong to soft, weak and friable, calcarenite grainstone, trace quartz sand	60 (RQD 48%)	3	-14.1 HQ coring; UCS=2979psi; Advanced casing to 25 ft; core for testing:25.5 to 26.1 ft, 26.1 to 27 ft and 27 to 27.8 ft	
-20.6	31.5			96 (RQD 64%)	4	-19.1 HQ coring; UCS=4916psi; Core for testing:30.5 to 30.9 ft, 32.4 to 32.9 ft, 32.9 to 34.1 ft; Advanced casing to 30 ft	
			31.5 to 35.0 ft, Sandy LIMESTONE: light brownish to medium grey, fine to coarse grained,thinly to medium bedded, fossiliferous, vuggy to porous, moderately strong and moderately hard to soft and weak, porosity in			-20.6 Caloosahatchee Formation or Pinecrest Sand of	

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0314

Hole No. CP05-EAARS-CB-0314

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.5	33.4					-22.5	
-24.1	35.0		intergranular and moldic			Tamiami Formation at 31.5 ft	
			End of Boring at 35'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93. 2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0314

Hole No. CP05-EAARS-CB-0315

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750186.2, E779486.1 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0315		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/23/2005 Completed 8/23/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.6 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35.5 ft		19. Inspector: B. Levesque	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.6	0.0						
8.9	2.7		GRAVEL: light brown, dense, fine to coarse grained, dry, andgular to subangular, little fine to coarse sand, subangular, calcitic, little silt		1	11.6 SPT 10.1	23, 48, 16
					2	SPT 8.6	8, 8, 5
8.1	3.5		PEAT: black, soft, moist, medium dense				
6.6	5.0		GRAVEL: brown to black, moist, fine to coarse grained, subangular, little fine to coarse sand, subangular, calcitic, little to some silt, trace organic		3	SPT 6.6	2, 50/3"
1.6	10.0		LIMESTONE: fine grained, hard, slightly vuggy, strong, fossiliferous, brown to grey, thin bedded LIMESTONE: brown to grey brown, fine to coarse grained, weak to moderately strong, thinly bedded, vuggy		1	HQ coring 1.6	
			SAND: grey to white, fine to coarse grain, calcitic, some fine gravel, little silt, moist, moderately dense		4	SPT -2.4	25, 9, 8
			same as above		5	SPT (continued)	7, 9

0 2 4 6 8 10 12 14

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0315

Hole No. CP05-EAARS-CB-0315

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.6 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.4	15.0					-3.4	
							8
							16
						-6.4	
							18
						-7.4 Approx strata change at 18 ft	
			SAND: white, fine to medium grain, calcitic, loose, little to some silt				2
					6	SPT	3
							1
							20
							22
						-12.4	
			same as above, trace quartz sand (fine sand)				17
-12.9	24.5					-12.9	24
			spoon refusal below this depth - maybe cemented sand and limestone			SPT	50
						Change at 24.5 ft	
							26
-15.4	27.0						
							28
						-17.4	
			no recovery in spoon				25/0"
-17.9	29.5				8	SPT	
							30
							32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0315

Hole No. CP05-EAARS-CB-0315

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.6 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.8	33.4					-21.8	
-22.4	34.0					-22.4	
-23.9	35.5		GRAVEL: white to grey, angular, little fine to coarse sand, trace silt		9	SPT	7 50
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0315

Hole No. CP05-EAARS-CB-0316

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750172.7, E777661 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0316	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/23/2005 Completed 8/23/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: B. Levesque

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.6	0.0						
			GRAVEL: light brown, medium dense, well graded, fine to coarse grained, sub angular, some to little sand, little silt		1	10.6 SPT 9.1	21, 14, 13
			GRAVEL: grey brown black, fine to coarse grain, little fine sand, organic (peat), little silt		2	SPT 7.6	3, 4, 4
					3	SPT	4, 7, 50/3"
6.1	4.5		LIMESTONE: grey to brown			5.6	
				38 (RQD 30%)	1	HQ coring; Casing down to 5 ft	
0.6	10.0					0.6	
			SAND: white, fine to medium grained, calcitic, subrounded to sub angular, some to little silt, moderately dense, wet		4	SPT -3.4	6, 7, 4
			SAND: white, fine to medium grained, calcitic, subrounded, some silt, fossilliferous (shell), trace gravel		5	SPT	0, 2

(continued)

ENG 1836, 1 JUN 1976 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0316

Hole No. CP05-EAARS-CB-0316

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.4	15.0					-4.4	
			SAND: white, weakly cemented, fine to medium grained, subrounded to subangular, little to some silt, some fine grained gravel, angular to subangular			-8.4	4, 16, 18
-9.9	20.5				6	SPT; Drove casing to 20 ft -9.9	6, 13, 50, 20
			LIMESTONE: grey to white, medium to coarse grained, cemented sand, thinly bedded, vuggy, fossiliferous, weak, porous, friable	56 (RQD 28%)	2	HQ coring	22
			LIMESTONE: white, fine to medium graded cemented sand, thin bedded, vuggy, fossiliferous			-14.4	24
			LIMESTONE: white, fine grained, thinly to medium bedded, vuggy, fossiliferous, hard, strong	76 (RQD 49%)	3	HQ coring -19.4	26, 28
			Similar to above	65 (RQD 15%)	4	HQ coring	30, 32

(continued)

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0316

Hole No. CP05-EAARS-CB-0316

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.8	33.4					-22.8	
-24.9	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0316

Hole No. CP05-EAARS-CB-0317

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750154.8, E775119.2 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0317		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/22/2005 Completed 8/22/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 12.1 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35.5 ft		19. Inspector: B. Levesque	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.1	0.0						
			GRAVEL: light brown, medium dense, well graded, fine to coarse grained, sub angular, little to some fine sand, little silt (Fill)		1	12.1 SPT; slight organic odour 10.1	13, 15, 10
			GRAVEL: light brown to black-grey, medium dense, fine to coarse grained, subangular, little fine to coarse sand, trace organic (peat)		2	SPT 8.6	4, 10, 14
			GRAVEL: tan, dense, fine to medium grained, shells		3	SPT 6.6	36, 37, 50
6.6	5.5						
			LIMESTONE: pink-brown, coarse-grained, thinnly bedded, vuggy, soft, weak, friable	70 (RQD 8%)	1	HQ coring 5.1	
			LIMESTONE: fine to coarse cemented sand, thinly bedded, soft, weak, friable	60 (RQD 50%)	2	HQ coring	
			LIMESTONE: white, fine grained, thinly bedded, fossiliferouss				
0.1	12.0					0.1	
			SAND: white, medium dense, subrounded, moist, calcitic, fine to medium, some to little silt			-1.9	
					4	SPT; ML; Inorganic	34, 13

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0317

Hole No. CP05-EAARS-CB-0317

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.1 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.9	15.0					-2.9	
						silts and very fine sand; Moisture=23%	5
-5.9	18.0					-5.9	
			GRAVEL: light grey, dense, lightly weathered, subangular, little fine to medium sand, little silt			-6.9 Spoon alternating hard/soft	
					5	SPT	13, 33, 22
-10.9	23.0					-10.9	
			SAND: brown to grey, medium dense, moist, subrounded, porous, bedded, fine to medium			-11.9 Possible strata change at 23 ft	
-12.4	24.5					-12.5	11
			GRAVEL: white, very dense, subangular, little to some silt, little fine to medium sand, quartz bearing		6	SPT	34, 20
						Possible strata change at 24.6 ft -13.9	
						26 ft drilling becomes less difficult -16.9	
					7	SPT	50/5"
-19.9	32.0					-19.9	
			SAND: white, loose, wet, subrounded, quartz bearing, fine to medium, with silt			Possible strata change at 32 ft	

(continued)

ENG FORM 1836, 1 DEC 69 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0317

Hole No. CP05-EAARS-CB-0317

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.1 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.3	33.4					-21.3	
						-21.9	
					8	SPT; SP-SM; poorly graded sand with silt; Moisture=25%	4 4 4
-23.4	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0317

Hole No. CP05-EAARS-CB-0318

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750133.1, E771124.2 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0318	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/18/2005 Completed 8/18/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: P. Petrey

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.6	0.0						
8.6	2.0		Road fill material (broke Limestone)		1	10.6 SPT 8.6	26, 28, 18
6.1	4.5		Peat (muck layer)		2	6.6 SPT	3, 2, 3
			Dark grey with Limestone fragments and some Clay (Marl)		3	5.6 SPT	12, 50/5"
0.6	10.0		Hard Limestone	51 (RQD 32%)	1	HQ coring 0.6	
-3.4	14.0		Light grey, coarse sand with cemented sand and shell fragments		4	SPT -3.4	2, 6, 29
			Grey, fine sand and silt		5	SPT	3, 7

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0318

Hole No. CP05-EAARS-CB-0318

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.6 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.4	15.0					-4.4	
-8.4	19.0					-8.4	4
			Grey fine sand with large shell fragments			-8.7	50/4"
				100 (RQD 64%)	2	SPT HQ coring; UCS=960psi	
-13.4	24.0						
			Grey fine sand and shells, darker grey			-14.4	
				100 (RQD 89%)	3	HQ coring; UCS=3095psi	
-19.4	30.0						
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

16 18 20 22 24 26 28 30 32

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0318

Hole No. CP05-EAARS-CB-0319

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750098.3, E767140.5 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0319		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/18/2005 Completed 8/18/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.1 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30.5 ft		19. Inspector: P. Petrey	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.1	0.0						
			Road fill material		1	10.1 SPT 8.1	10, 12, 9
					2	SPT 6.6	25, 15, 50/2"
7.1	3.0						
			Hard LIMESTONE - some soft limestone layers	45 (RQD 22%)	1	HQ coring 1.6	
				48 (RQD 0%)	2	HQ coring -3.4	
-1.9	12.0						
			Grey soft SAND / shell with shell fragments, silt		3	SPT	6, 4, 4

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0319

Hole No. CP05-EAARS-CB-0319

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.9	15.0					-4.9	
-6.9	17.0		Hard - no recovery			-8.9	
-11.4	21.5				4	SPT	50/1"
			Dark grey SAND with large black shell fragments			-13.9	
					5	SPT	4, 4, 4
			Grey fine SAND - cemented with shell fragments			-18.9	
-20.4	30.5				6	SPT	4, 4, 7
			End of Boring at 30.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0319

Hole No. CP05-EAARS-CB-0319

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.1 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.3	33.4					-23.3	
						x 2" O.D.)	

34
36
38
40
42
44
46
48
50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0319

Hole No. CP05-EAARS-CB-0320

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750089, E764793 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0320		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/17/2005 Completed 8/17/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.8 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30 ft		19. Inspector: P. Petrey	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.8	0.0						
10.3	1.5		Road fill material		1	11.8 SPT 9.8	19, 21, 18
6.8	5.0		soft road fill, Peat (muck layer)		2	9.8 SPT 7.8	8, 10, 2
					3	7.8 SPT 6.8	3, 50/4"
-2.2	14.0		LIMESTONE - caprock	45 (RQD 17%)	1	HQ coring 1.8	
					2	HQ coring -2.2	
			Soft grey limestone and shell fragments some fine sand		4	-3.2 SPT (continued)	4, 4

0 2 4 6 8 10 12 14

Hole No. CP05-EAARS-CB-0320

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.8 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.2	15.0					-3.2	
-8.2	20.0			90 (RQD 38%)	3	HQ coring; UCS=1481psi	50/1"
			Grey cemented SAND with shells and shell fragments		5	SPT	4, 15, 12
			Grey cemented SAND with some shell fragments		6	SPT; grey cemented sand in small skew segments	48, 48, 36
						Change at 27 ft	
-18.7	30.5		Soft fine grey SAND only		7	SPT	5, 7, 9
			End of Boring at 30.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0" splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0320

Hole No. CP05-EAARS-CB-0320

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.8 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.6	33.4					-21.6	
						x 2" O.D.)	

34
36
38
40
42
44
46
48
50

ENG FORM 1836, 1 DEC 68 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0320

APPENDIX 2
SUPPLEMENTAL BORINGS AND PIEZOMETER INSTALLATION LOGS: 321-340

Hole No. CP05-EAARS-CB-0321

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N750076.6, E763011.9 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0321		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/16/2005 Completed 8/16/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.4 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35.5 ft		19. Inspector: P. Petrey	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.4	0.0						
			Road fill material		1	11.4 SPT 9.4	8, 9, 9
					2	SPT 7.4	50/2"
					3	SPT 5.9	34, 50/1"
5.9	5.5		LIMESTONE: caprock	8 (RQD 8%)	1	HQ coring 0.9	
-0.1	11.5						
			Grey cement SAND with shells			-2.6	
					4	SPT (continued)	4, 48

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0321

Hole No. CP05-EAARS-CB-0321

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.4 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.6	15.0					-3.6	
							20
							16
							18
						-7.6	
			Grey cemented SAND, fragments of shells and rock (chert)		5	SPT	11
							45
							50/5"
							20
							22
						-12.6	
			Grey SAND/shell, some shell fragments, some cemented sands		6	SPT	7
							5
							4
							24
							26
							28
						-17.6	
					7	SPT	7
							5
							4
							30
							32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0321

Hole No. CP05-EAARS-CB-0321

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.4 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.0	33.4					-22.0	
			Grey fine SAND with cemented sands			-22.6	
					8	SPT	3 / 3 / 4
-24.1	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0321

Hole No. CP05-EAARS-CB-0322

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750065.2, E761081.7 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0322	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/15/2005 Completed 8/15/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 12.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: E. Requejo

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.9	0.0						
			SAND: top fill, medium to fine grained, sand, dark gray color, with traces of limestone		1	12.9 SPT 10.9	21, 18, 17
					2	SPT	30, 19, 15
8.9	4.0					8.9	
			Muck: dark black color, very light, organic		3	SPT; Less compacted	6, 4, 10
6.9	6.0					6.9	
			SAND: light brown, slightly silty, fine grained, with some limestone fragments and traces of shell calcitic		4	SPT; water table encountered at 6 ft; Lost circulation	6, 5, 12
4.9	8.0					4.9	
			Core recovered 2'4"	36 (RQD 17%)	1	HQ coring	
-0.1	13.0					-0.1	
			SAND: pale gray, coarse grained sand, angular, with cemented sand, and traces of shell		5	SPT	3, 3, 2

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0322

Hole No. CP05-EAARS-CB-0322

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.9 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.1	15.0					-2.1	
-3.6	16.5					-3.6	16
-5.1	18.0		Hard layer			No circulation -5.1	
-10.1	23.0		Core: 18 ft to 23 ft Hard Soft Moderately hard soft soft		2	HQ coring -10.1	18 20 22
			Gray and gray brown sand and cemented sand, some small shells		6	SPT -16.1	11 7 8 24 26 28
			Gray fine sand		7	SPT; soft	4 3 4 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0322

Hole No. CP05-EAARS-CB-0322

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.9 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-20.5	33.4					-20.5	
			Grey fine sand with large pieces of cemented sand			-21.1	
					8	SPT	5 / 7 / 9
-22.6	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0322

Hole No. CP05-EAARS-CB-0323

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N749972.4, E759265.6 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0323	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/27/2005 Completed 7/27/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: J. Petrie

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.5	0.0						
10.0	1.5		Sandy GRAVEL: light creamy white with light brown and black mottling, fine and occasionally coarse, dense, subangular, dry (FILL)		1	11.5 SPT	13, 26, 14
8.0	3.5		Silty SAND: light creamy gray, fine to coarse, well graded, subangular to subrounded, dry, medium dense (Fill)		2	9.5 SPT	14, 12, 6
7.5	4.0		PEAT			7.5	
-2.5	14.0		LIMESTONE: Creamy white with yellowish brown stains, moderately strong to strong, medium bedded, fine grained, with some shells and irregular shaped voids (burrows, roots). LIMESTONE: Creamy white with yellowish brown stains, moderately strong to strong, medium bedded, fine grained, with some shells and irregular shaped voids (burrows, roots).	60 (RQD 38%)	1	HQ coring; 6" peat above rock at 4 ft; 2.5	
			Grades light gray and thinly bedded. Grades light creamy brown, medium bedded.	28 (RQD 20%)	2	HQ coring; -2.5	
			Silty SAND: light gray, fine to coarse grained, subangular, wet, shelly, medium dense, with some subangular		3	SPT	8, 5

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0323

Hole No. CP05-EAARS-CB-0323

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.5 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.5	15.0					-3.5	
			fine gravel that are aggregates of cemented hard sand.				5
						-4.5	
				74 (RQD 40%)	3	HQ coring	16
-6.2	17.7						
			LIMESTONE: light gray with light yellowish brown mottling, moderately strong to strong, medium bedded, shelly, with large shell fragments (coarse gravel size).				18
							20
-9.5	21.0					-9.5	
			SANDSTONE: light gray, moderately strong to strong, fine to medium grained, with cemented shell fragments in sand.	40 (RQD 0%)	4	HQ coring	22
						-12.3	
			Grades greenish graywith occasional voids (fine gravel size).	8 (RQD 0%)	5	HQ coring	24
							26
-17.0	28.5					-17.0	28
			SAND: light gray, fine to medium grained, subangular, medium dense, wet, some subangular to subrounded fine gravel aggregates of hard cemented sand, mainly quartz, occasional black minerals and shells.		4	SPT	4 5 5
							30
							32
			Grades to dark gray and cemented sand grades fine grained.				

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0323

Hole No. CP05-EAARS-CB-0323

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.5 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.9	33.4					-21.9	
						-22.5	
					5	SPT	5 / 4 / 6
-24.0	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0323

Hole No. CP05-EAARS-CB-0324

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N751804.4, E758607.9 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0324		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 7/26/2005 Completed 7/27/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 10.7 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35.5 ft		19. Inspector: J. Petrie	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.7	0.0						
8.7	2.0		Silty SAND: light gray with creamy gray and black mottling, fine to coarse grained, well graded, subangular, dense, with fine and coarse gravel, dry (FILL)		1	10.7 SPT 8.7	15, 43, 50/2"
6.7	4.0		Sandy GRAVEL: creamy gray, fine to coarse grained, well graded, dense, sand is fine to coarse grained, with some silt and shell fragments (fill).		2	SPT 6.7	6, 24, 13
6.0	4.8		GRAVEL: light brown, fine to coarse grained, angular, dense, some silty sand.		3	6.0 SPT	8, 50/4"
			LIMESTONE: creamy white with tan mottling, moderately strong to strong, medium bedded, fine grained, with some shells and irregular shaped voids. Grades some coarse sand sized voids. Grades gray, very shelly, thinly bedded, moderately strong Grades light creamy gray with tan mottling, medium bedded with thin partings of silty/sandy material.	70 (RQD 44%)	1	HQ coring 0.9	
-4.3	15.0		Grades to thinly bedded. Thin partings grade out.	10 (RQD 0%)	2	HQ coring -4.1 -4.3	

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0324

Hole No. CP05-EAARS-CB-0324

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 10.7	Sheet 2 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.3	15.0					-4.3	
-5.3	16.0		GRAVEL: light gray, fine gravel fragments of cemented sand, fine to coarse, very dense.		4	-5.3 SPT	1 50/3"
-9.2	19.9		LIMESTONE: light gray to gray, moderately strong to strong, fine grained, shelly, medium bedded, with some irregular voids (creamy gray color).	82 (RQD 56%)	3	HQ coring	
-11.1	21.8		LIMESTONE: light brownish gray with tan and light gray mottling, moderately strong to strong, medium bedded, fine grained, honeycombed aggregates of fine gravel sized cemented peices in yellow brown matrix, trace shells.			-10.3	
-16.8	27.5		LIMESTONE: light gray, moderately strong to strong, medium bedded.	32 (RQD 8%)	4	HQ coring -15.3	
-21.8	32.5		Sandy GRAVEL: light gray, loose, fine subangular, cemented sand.			-18.3	
					5	SPT	3 3 3
			SAND: light greenish gray, fine to coarse, well graded, loose.				

16 18 20 22 24 26 28 30 32

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0324

Hole No. CP05-EAARS-CB-0324

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.7 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.7	33.4					-22.7	
						-23.3	
					6	SPT	1 / 3 / 2
-24.8	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0324

Hole No. CP05-EAARS-CB-0325

DRILLING LOG	Division:	Installation:	Sheet 1 of 6 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N753486, E758570.4 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0325	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/20/2005 Completed 7/22/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 12.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 100 ft	19. Inspector: J. Petrie

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.8	0.0						
			Silty SAND, brown and creamy white, medium dense, fine to coarse, well graded, dry with gravel and cobble size light creamy grey angular / subangular limestone (fill)		1	12.8 SPT 10.8	7, 37, 28
			Silty SAND, light creamy grey, medium dense, well graded fine to coarse, dry , with angular fine and coarse gravel size limestone fragments (fill)		2	SPT 8.8	3, 7, 8
8.8	4.0						
			PEAT, dark brown to black, soft, damp becoming organic clayey SILT		3	SPT 7.1	4, 2, 3
7.1	5.8						
			0.8' light creamy grey with dark grey inclusions, thinly to medium bedded, moderately strong to strong, fine grained LIMESTONE with some irregular inclusions of dark grey limestone, occasional vugs 0.8' to 2.2' light grey occasional yellowish brown staining, medium bedded, moderately strong to strong, fine grained LIMESTONE with trace shells 2.2' to 3.4' light grey, medium bedded, moderately strong to strong, fine grained LIMESTONE with some vugs 3.4' to 4.8' as above but with more vugs of medium sand size	96 (RQD 36%)	1	HQ coring 2.1	
2.1	10.8						
			Silty SAND, light grey to white, loose, fine to coarse, well graded, wet, some angular, subangular gravel size cemented sand, trace shell fragments			0.8	
						12 to 13 ft cemented -1.2	
					4	SPT; occasional	6, 6

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0325

Hole No. CP05-EAARS-CB-0325

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 12.8	Sheet 2 of 6 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.2	15.0					-2.2	
						gravelly drilling 6" thick	2
-6.2	19.0		Gravelly SAND, light brown and light creamy grey, medium dense, fine to coarse, well graded with some cemented fine gravel cemented sand, organic smell, shell fragments		5	-6.2 SPT	39 19 50/2"
						-7.7 Hard drilling 10" band	
-11.2	24.0		Sandy GRAVEL, light grey, loose, fine, some coarse, subangular, cemented, shell fragments		6	-11.2 SPT; 6" to 9" thick harder strata from 18 to 24 ft	11 4 4
-16.2	29.0		SAND, light grey, medium dense, fine to medium, well graded, wet, subangular subrounded, shelly, some quartz		7	-16.2 SPT	4 5 6

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0325

Hole No. CP05-EAARS-CB-0325

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.8 | Sheet 3 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-20.6	33.4					-20.6	
			SAND, light grey, loose, well graded, fine and medium, subangular to subrounded, wet, quartz, sone shelly fragments		8	-21.2 SPT	4 4 4
-26.2	39.0					-26.2	
			Gravelly SAND, light grey, loose, well graded, fine to medium, subangular to subrounded, wet, fine and coarse, hard cemented sand, gravel (subangular), grey colored, quite sandy		9	SPT -29.2	4 4 5
-31.2	44.0					gravelly drilling -31.2	
			GRAVEL, grey, medium dense, well graded, fine, occasional coarse, subangular, hard cemented sand (fine to medium), some sand and shell fragments		10	SPT	7 5 11
-36.2	49.0					-36.2	
			Sandy GRAVEL, light grey, medium dense, well graded, fine to coarse, subangular, hard cemented gravel of fine to medium sand		11	SPT; gravelly drilling, no flush return	8 8 12

34 36 38 40 42 44 46 48 50

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0325

Hole No. CP05-EAARS-CB-0325

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 12.8	Sheet 4 of 6 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-39.0	51.8					-39.0	
			As above		12	-41.2 SPT	12, 36, 26
			As above		13	-46.2 SPT	6, 7, 4
-51.2	64.0		SAND, light grey, medium dense, well graded, fine to coarse, subangular to subrounded, wet, quartz, trace shells and black mineral		14	-51.2 SPT	9, 8, 10
			As above, with shell fragments, weakly cemented, fine gravel size, shells / quartz (50/50)		15	-56.2 SPT	9, 13

52 54 56 58 60 62 64 66 68 70

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0325

Hole No. CP05-EAARS-CB-0325

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.8 | Sheet 5 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-57.4	70.2					-57.4	
							11
							72
						-61.2	
			SAND, light greenish grey, medium dense, well graded, fine to medium, subangular to subrounded with angular shell fragments (fine gravel size), mainly quartz, some shells and black subrounded fine to medium size mineral		16	SPT	10
							12
							11
							74
							76
							78
						-66.2	
			SAND, light creamy grey, medium dense, well graded, fine to coarse, subangular with angular shell fragments, mainly shelly grains, some quartz, fine gravel sized hard cemented fine to medium sand		17	SPT	11
							10
							11
							80
							82
						-71.2	
			As above		18	SPT	14
							20
							16
							84
							86
							88

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0325

Hole No. CP05-EAARS-CB-0325

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.8 | Sheet 6 of 6 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-75.8	88.6					-75.8	
						-76.2	
			As above		19	SPT	14, 10, 13
						-81.2	
			SAND, grey, medium dense, well graded, fine to coarse, subangular to subrounded (quartz / shell, 50/50)		20	SPT	13, 15, 21
-86.2	99.0					-86.2	
			Gravelly SAND, grey, medium dense, well graded, fine to coarse, subangular to subrounded (quartz / shell, 50/50)		21	SPT	16, 11, 12
-87.7	100.5						
			End of Boring at 100.5'				

90 92 94 96 98 100 102 104 106

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0325

Hole No. CP05-EAARS-CB-0326

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N755746.4, E758530.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0326	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/22/2005 Completed 7/25/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: J. Petrie

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.6	0.0						
			Silty SAND and GRAVEL: light brown, fine to coarse sand, well graded, fine gravel, angular to subangular, medium dense, dry (FILL).		1	11.6 SPT 9.6	9, 4, 10
					2	SPT 7.6	5, 9, 5
			Grades creamy gray and yellow brown		3	SPT; GP; Poorly graded Gravel with sand; Moisture=5% 5.6	7, 11, 8
5.6	6.0						
			LIMESTONE: light gray with some yellow brown staining, medium bedded, fine grained, moderately strong to strong, with trace of shell fragments and fine to medium sand, some medium sized voids.	48 (RQD 34%)	1	5.1 SPT; HQ coring; Lost circulation 6.5 to 7.5 ft 0.1	50/5"
			Grades to creamy gray				
			Grades to gray, thinly bedded, with thin bands of tan color.	36 (RQD 0%)	2	HQ coring -2.4	
-2.4	14.0						
			SAND: Creamy white, fine to coarse grained, well graded, subangular, medium dense, wet, mainly shelly		5	SPT; SP-SM; Poorly	13, 13
-3.4	15.0						

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0326

Hole No. CP05-EAARS-CB-0326

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.6 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.4	15.0					-3.4	
			fragments. Silty SAND: as above, fine to medium grained, loose.			graded sand with silt and gravel; Moisture=23%	4 16
						-5.9	
-6.4	18.0						
			LIMESTONE: light gray with gray mottling, moderately strong to strong, medium to thickly bedded, fine grained, shelly, with some corals and occasional thin laminations of fine limestone.	80 (RQD 52%)	3	HQ coring	18 20 22
						-10.9	
			Grades to cream tan mottling, weak, medium bedded, with some coarse sand to fine gravel sized vugs.	36 (RQD 0%)	4	HQ coring	24 26
						-15.9	
-16.4	28.0					-16.4	
			SAND: light gray, medium dense, fine to coarse grained, well graded, subangular to subrounded, with some gravel sized cemented sand (fines to medium with some shells and shelly fragments, with quartz and black minerals.		6	SPT	23 19 10 28
						-18.4	
						Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	30 32
-20.9	32.5						
			GRAVEL: light gray, loose, fine and some coarse, well graded, angular to				

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0326

Hole No. CP05-EAARS-CB-0326

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 11.6	Sheet 3 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.8	33.4					-21.8	
			subangular peices of hard cemented sand (subequal proportions of quartz and shells) and shell fragments.			-22.4	
					7	SPT	3 4 3
-23.9	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0326

Hole No. CP05-EAARS-CB-0327

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N759759.6, E758445.2 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0327	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/25/2005 Completed 7/26/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: J. Petrie

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.9	0.0						
9.4	1.5		Sandy GRAVEL: light gray with yellowish brown and black mottling, medium dense, fine and occasionally coarsegrained, subangular tyo angular, dry. Sand is fine to coarse grained ~~(Fill)~~.		1	10.9 SPT	13, 16, 12
6.9	4.0		Gravel fragments of creamy grey limestone		2	8.9 SPT 6.9	50/5"
-1.1	12.0		LIMESTONE: light creamy gray with some yellowish brown staining, medium bedded, moderately strong to strong, fine grained, voids filled with black peat and fine gravel to 5.8. Grades empty voids (coarse sand sized) and occasional fissures.	78 (RQD 56%)	1	HQ coring 1.9	
			Grades gray and shelly	26 (RQD 0%)	2	HQ coring -1.1	
			Silty SAND: light creamy gray, loose, fine to coarse grained, well graded, subangular, wet, some hard cemented fine to coarse sand as fine gravel, shell fragments.			-3.1	
					3	SPT	2, 4

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0327

Hole No. CP05-EAARS-CB-0327

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.1	15.0					-4.1	
-7.1	18.0					-7.1	3, 16
			LIMESTONE: light gray with creamy gray and light brown mottling, medium bedded, moderately strong to strong, shelly with some coarse sand sized vugs.	78 (RQD 28%)	3	HQ coring	18, 20
			Grades light brown.			-12.1	22
			Grades light creamy gray, with some triangular shaped vugs (coarse sand to fine gravel size). Grades to very shelly with many vugs.	44 (RQD 16%)	4	HQ coring	24, 26
-17.1	28.0					-17.1	
			SAND: light gray, loose, fine to coarse grained, well graded, subangular, some fine gravel sized angular hard cemented sand (fine to coarse) with subequal parts of quartz and shell.			-18.1	28
					4	SPT	3, 4, 5, 30
						-21.1	32
			Grades fine to medium grained.			Gravelly drilling	

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0327

Hole No. CP05-EAARS-CB-0327

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.5	33.4					-22.5	
						-23.1	
					5	SPT	4 / 6 / 8
-24.6	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

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PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0327

Hole No. CP05-EAARS-CB-0328

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N765178.1, E758078.3 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0328		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Ralph Smith		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/11/2005 Completed 8/11/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 9.9 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35 ft		19. Inspector: A.M. Noronha	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.9	0.0						
			PEAT: black, loose, poorly graded, fine grained, dry, mostly organic		1	9.9 SPT 8.4	2, 3, 3
			Same as above, except dry to wet and dense		2	SPT; 2 limestone chips recovered 6.9	5, 26, 21
			Same as above, except wet, medium dense		3	SPT 5.4	11, 8, 8
			Same as above, quite gravelly		4	SPT 3.9	5, 10, 13
3.9	6.0						
			SAND: greenish grey, medium dense, moderately graded, fine to coarse grained, angular		5	SPT; one small limestone piece recovered 1.9	6, 11, 15
			SAND: light grey, dense, moderately graded, fine to medium grained, angular, wet, shelly		6	SPT -0.1	10, 19, 14
			SAND: white, very loose, poorly graded, fine calcitic sand, subangular, wet		7	SPT -3.6	3, 2, 2
-3.6	13.5						
			Gravelly SAND: greenish grey, dense, moderately graded, fine to coarse grained, subangular calcitic sand, wet, shelly		8	SPT	30, 16, 21

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0328

Hole No. CP05-EAARS-CB-0328

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.9 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.1	15.0					-5.1	
-8.6	18.5					-8.6	
			SAND: greenish grey, dense, moderately graded, fine to coarse grained, subangular calcitic sand, subrounded quartz, cemented sand, wet, trace shell fragments		9	SPT	16, 33, 8
						-13.6	
			SAND: greenish grey, dense, poorly graded, fine to medium grained, subangular, calcitic sand, subrounded quartz, wet		10	SPT	6, 19, 23
						-18.6	
			Same as above - except dense fragments of shells present		11	SPT	7, 11, 17

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0328

Hole No. CP05-EAARS-CB-0328

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.9 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.5	33.4					-23.5	
-25.1	35.0		SAND: greenish grey, medium dense, moderately graded, subangular calcetic sand, rounded quartz, wet		12	-23.6 SPT	5 8 8
			End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0328

Hole No. CP05-EAARS-CB-0329

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N766153.8, E758070.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0329	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/10/2005 Completed 8/11/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.9	0.0						
			PEAT: black, very loose, poorly graded, fine grained, dry, mostly organic		1	9.9 SPT	3, 2, 2
			Same as above			8.4	50/5"
7.9	2.0					7.9	
			LIMESTONE: light brown to pale white, hard, fine grained, quite porous, shells present	46 (RQD 12%)	1	SPT; spoon bouncing; HQ coring; UCS=1867psi	
2.9	7.0					2.9	
			SAND: light grey, medium dense, moderately graded, fine to medium grained, subangular calcitic sand, wet		3	SPT	11, 7, 6
			Same as above, except dense		4	1.4 SPT; SM; Silty sand with gravel; Moisture=17%	4, 25, 17
			SAND: light grey, medium dense, moderately graded, fine to medium grained, angular calcitic sand, wet, shell fragments present		5	-3.6 SPT; SM; Silty sand; Moisture=22%	15, 18, 17

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0329

Hole No. CP05-EAARS-CB-0329

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.9 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.1	15.0					-5.1	
							16
							18
						-8.6	
			SAND: light grey, dense, moderately graded, fine to coarse grained, subangular calcitic sand, wet		6	SPT; SP-SM; Poorly graded sand with silt and gravel; Moisture=13%	10, 26, 17
							20
							22
						-12.6	
						-13.6 Caloosahatchee Formation at 22.5 ft	
			SAND: greenish grey, medium dense, poorly graded, fine to medium grained, subangular calcitic sand, rounded quartz		7	SPT; SP-SM; Poorly graded sand with silt; Moisture=6%	5, 7, 10
							24
							26
							28
						-18.6	
			Same as above		8	SPT	5, 7, 10
							30
							32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PROJECT | HOLE NUMBER

EAA Reservoir A-1 | CP05-EAARS-CB-0329

Hole No. CP05-EAARS-CB-0329

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.9 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.5	33.4					-23.5	
-25.1	35.0		SAND: greenish grey, medium dense, moderately graded, fine to coarse grained, subangular calcitic sand, rounded quartz, cemented sand wet		9	-23.6 SPT; SP-SM; Poorly graded fine sand with silt and gravel; Moisture=8%	6 5 6
			End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0329

Hole No. CP05-EAARS-CB-0330

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N767986.5, E758277.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0330	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Travis Williams	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/27/2005 Completed 7/27/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.3 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.3	0.0						
7.3	1.0		PEAT: black, very loose, poorly graded, fine grained, dry, mostly organic		1	8.3 / 7.3 SPT	2 / 50/4"
3.3	5.0		LIMESTONE: white, hard, fine grained, porous, shelly	54 (RQD 7%)	1	HQ coring	
-1.5	9.8		SAND: greenish grey, medium dense, poorly graded, fine to medium grained, sub angular, wet		2	2.3 Caprock ends at 5 ft; SPT; -0.2	8 / 12 / 16
			SAND: light grey, very ense, moderately graded, fine to coarse grained, angular, wet		3	SPT; shells present; advanced 10 ft of casing; -1.7	10 / 42 / 50/3"
-6.7	15.0		Chips of limestone and pieces of cemented sand with shells recovered	12 (RQD 0%)	2	HQ coring; -6.7	

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0330

Hole No. CP05-EAARS-CB-0330

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.3 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.7	15.0					-6.7	
			SAND: light grey, loose, poorly graded, fine grained, subangular, calcitic sand, wet		4	SPT; shells present	2, 3, 5
-10.2	18.5					-10.2	
-10.7	19.0		Pieces of stone and shells recovered			-10.7	50/4"
			Cemented SAND: greenish grey, hard, poorly graded, medium grained, shelly	34 (RQD 0%)	3	SPT; advanced casing from 10 ft to 20 ft; spoon bouncing Few limestone chips recovered	
						-15.7	
			SAND: greenish grey, medium dense, moderately graded, medium to coarse grained, subangular, wet		6	SPT	2, 3, 12
						-20.2	
			SAND: greenish grey, dense, poorly graded, fine grained, subrounded, wet		7	SPT	7, 12, 21
-21.7	30.0						
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0330

Hole No. CP05-EAARS-CB-0331

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N770127.1, E758453.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0331	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Travis Williams	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/27/2005 Completed 7/27/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.3 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.3	0.0						
			PEAT: black, very loose, poorly graded, fine grained, dry bottom 0.3' of peat, wet		1	9.3 SPT 7.8	1 2 2
7.5	1.8						14
6.8	2.5		SAND: brownish grey, very dense, poorly graded, medium grained, subangular, wet		2	6.8 SPT	50/5"
			Part LIMESTONE: white, hard, fine grained, quite porous Part Cemented SAND: greenish grey, hard, fine to medium grained, shelly porous	70 (RQD 15%)	1	HQ coring; Layered core sample recovered	
1.8	7.5					1.8	
1.3	8.0		SAND: greenish grey, very dense, poorly graded, medium grained, angular, wet			1.3	50/3"
			LIMESTONE: white, hard, fine to medium grained, porous, shelly	6 (RQD 0%)	2	SPT HQ coring	
0.0	9.3					-0.2	
			SAND: light grey, dense, poorly graded, fine to medium grained, wet, quite silty, shells present			Caprock ends at around 9.5 ft; advanced 5 ft of casing	
						-3.7	
					4	SPT; quite silty, shells present	35 20 20

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0331

Hole No. CP05-EAARS-CB-0331

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.3 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.7	15.0					-5.7	
			SAND: greenish grey, dense, poorly graded, medium grained, subangular, wet		5	SPT	8, 13, 21
						-9.2	
			Same as above		6	SPT; hard drilling from 25.5 to 26 ft	10, 24, 13
						-14.2	
			SAND: greenish grey, dense, poorly graded, medium to coarse grained, subangular, wet		7	SPT	45, 20, 15
-20.7	30.0					-19.2	
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0331

Hole No. CP05-EAARS-CB-0332

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N775270.8, E757918.8 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0332	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Travis Williams	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/26/2005 Completed 7/26/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.5	0.0						
8.0	1.5		PEAT: black, loose, poorly graded, fine grained, dry, mostly organic		1	9.5 SPT 8.0	2, 3, 3
6.8	2.8		SAND: brownish grey, very dense, poorly graded, fine grained, angular, dry		2	SPT; limestone chips recovered 6.5	10, 18, 50/3"
1.8	7.8		LIMESTONE: greenish grey to pale white, very hard, fine grained, shelly	36 (RQD 0%)	1	HQ coring 1.5	
-4.0	13.5		SAND: pale white, dense, fine to medium well graded, subangular, wet		3	SPT; caprock ends at around 7.75 ft -4.0	3, 15, 26
-5.5	15.0		SAND: light grey, very dense, fine to medium grained size, well graded, subangular calcitic sand, wet, silty		4	SPT; casing down to 15 ft -5.5	7, 10, 50/5"

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0332

Hole No. CP05-EAARS-CB-0332

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.5 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.5	15.0					-5.5	
			Cemented SAND: greenish grey, very dense, moderately graded, medium to coarse grained, shelly	24 (RQD 0%)	2	3 pieces of limestone chips recovered	16, 18
						-10.5	
			SAND: light brown, medium dense, moderately graded, medium to coarse grain size, subangular, wet, quite gravelly		5	SPT; hard drilling at 23 ft; advanced casing till 25 ft	2, 3, 9; 20, 22
						-14.0	
			SAND: greenish grey, medium hard, moderately graded, fine to coarse grained, moderately cemented, shelly, very porous	48 (RQD 12%)	3		24, 26, 28
						-19.0	
			SAND: greenish grey, loose, poorly graded, fine to medium grained size, subangular, wet, quite gravelly		6	SPT	2, 4, 5
-20.5	30.0						
			End of Boring at 30'				30, 32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0332

Hole No. CP05-EAARS-CB-0333

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N777626.2, E757886.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0333	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Travis Williams	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 7/26/2005 Completed 7/26/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.6	0.0						
			PEAT: black, very loose, poorly graded, fine grained, dry, mostly organic		1	9.6 SPT 8.1	1, 2, 2
			Same as above - except loose, dry to wet		2	SPT 6.6	3, 3, 3
6.4	3.2		One piece of limestone recovered ~~and~~ some peat			6.1	50/2"
			LIMESTONE: light brown to white, hard, fine grained, shelly, porous	20 (RQD 0%)	3 1	SPT HQ coring	
2.1	7.5					2.1	
			SAND: pale white, medium dense, moderately graded, fine to medium grains, wet, silty and gravelly, subangular		4	1.1 Caprock ended at around 7.5 ft SPT; SM; Silty sand with gravel; Moisture=24%	2, 2, 28
-3.9	13.5					-3.9	
			SAND: white, loose, poorly graded, fine grained, subrounded, calcitic sand, wet, silty		5	SPT	5, 5, 5

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0333

Hole No. CP05-EAARS-CB-0333

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.6 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.4	15.0					-5.4	
-8.9	18.5					-8.9	
			SAND: light grey, medium dense, poorly graded, medium grained, subangular, wet		6	SPT	9, 12, 9
						-12.4	
			SAND: light grey, hard, moderately graded, fine to medium grained, cemented, shelly, porous	10 (RQD 6%)	2	HQ coring; Hard drilling at 22 ft; advanced 20 ft of casing	
						-17.4	
			SAND: light grey, medium dense, poorly graded, fine to coarse, subangular, wet		7	SPT; Top half gravelly, bottom half silty, separated by stone chips	4, 8, 10
						-18.9	
-20.4	30.0		SAND: light grey,medium dense, poorly graded, fine grained, subrounded, calcitic sand, wet		8	SPT	20, 14, 12
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0333

Hole No. CP05-EAARS-CB-0334

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N754292.8, E763213.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0334	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Travis Williams	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/2/2005 Completed 9/2/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.8	0.0						
6.6	2.3		PEAT: Not sampled			6.6	
4.1	4.8		LIMESTONE: tan to light brown, fine to coarse grained, thinly bedded, vuggy, hard and strong to moderately hard and moderately strong, fossiliferous.	20 (RQD 0%)	1	HQ coring; Intermittent hard and soft drilling to 4.75 ft	
			SAND: pale brownish gray, well graded, fine to coarse, angular, calcitic, some fine gravel (shells and limestone).			1.6	
						1.3	
-2.2	11.0				1	SPT	47, 42, 8
-4.7	13.5		Silty SAND: as above but silty, loose and with a trace of fine gravel.		2	SPT; Very soft drilling to 11 ft; spoon bouncing at 12 ft	7, 2, 50/5"
			SAND: as above but very dense and only a trace of silt and fine gravel.		3	SPT; Hard drilling 13.5 to 16.5 ft	25, 50/2"

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0334

Hole No. CP05-EAARS-CB-0334

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.2	15.0					-6.2	
-9.7	18.5					-9.7	
-11.7	20.5		Gravelly SAND: as above but very dense with fine angular limestone gravel and a trace silt.		4	-11.7	26, 33, 26
-14.7			SAND (Caloosahatchee Formation): pale brownish gray, medium dense, uniform, fine grained, subrouded, quartzose, trace fine to coarse, angular calcitic sand.			Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	
-19.7					5	SPT; Soft below 23.5 ft	4, 5, 6
-21.2	30.0		Grades as above with some fine angular limestone gravel.		6		5, 5, 5
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0334

Hole No. CP05-EAARS-CB-0335

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N752370.8, E769865.5 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0335		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/31/2005 Completed 8/31/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8.4 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 5.9 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.4	0.0						
7.5	0.9		PEAT: 0 ft to 0.9 ft, not sampled			7.4	
4.0	4.4		LIMESTONE: caprock, tan to light brown, fine to coarse grained, thinly bedded, vuggy; Fossiliferous, ranges from hard to strong (wackestone and packstone to moderately hard, moderately strong and porous grainstone)	40 (RQD 0%)	1	HQ coring; soft at 4.4 ft	
2.5	5.9						
			End of Boring at 5.9'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

0 2 4 6 8 10 12 14

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0335

Hole No. CP05-EAARS-CB-0336

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N752408.8, E777773.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0336	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/30/2005 Completed 8/30/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.7	0.0						
6.8	0.9		PEAT to 0.9 ft: not sampled			6.8	
2.8	4.9		LIMESTONE: tan to light brown and grey, fine to coarse grained, vuggy, fossiliferous, hard and strong, angular to rounded pieces	30 (RQD 0%)	1	HQ coring; mostly fine to coarse gravel; soft at 4.9 ft	
						1.7	
			SAND: pale brown, medium dense, well graded, fine to coarse, angular, moist, calcitic, some fine gravel, gravelly (shells and limestone)		1	SPT	5, 6, 12
						-0.8	
-5.8	13.5		SAND: pale brownish grey, well graded, fine to coarse, angular, calcitic, wet, silty in the upper half of sample		2	SPT	2, 16, 11
						-5.8	
			Silty SAND: pale brownish grey, medium dense, well graded, fine to medium grained, angular, calcitic, wet, trace fine, angular gravel (shells)		3	SPT	4, 4, 7

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0336

Hole No. CP05-EAARS-CB-0336

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.7 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.3	15.0					-7.3	
-10.8	18.5					-10.8	
-15.8	23.5		SAND: light brownish grey, very dense, well graded, fine to coarse, moist, angular, calcitic, trace fine gravel (shell)		4	SPT; Intermittent hard drilling below 19 ft	15 29 50/2"
			no recovery		5	SPT	50/0"
						-20.8	
			no recovery		6	SPT	50/0"
-22.3	30.0						
			End of Boring at 30'				

16 18 20 22 24 26 28 30 32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0336

Hole No. CP05-EAARS-CB-0337

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N752253.4, E784339.2 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0337		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/17/2005 Completed 8/17/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8.6 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.6	0.0						
			PEAT: black, moist, fine grained, organic		1	8.6 SPT; All calcitic material noted below is at least in part shell fragments	4, 7, 50/5"
7.1	1.5					7.1	
			LIMESTONE: light to medium grey and light brown, fine to coarse grained, thinly bedded, fossiliferous, vuggy, hard and strong, caprock	52 (RQD 0%)	1	HQ coring; Ranges from calcilutite to calcarenite; softer 5 to 7.5 ft, then hard 7.5 to 9.5 ft, then soft again below 9.5 ft	
			LIMESTONE: pale brownish grey, thinly bedded, fossiliferous, some very fine grained (calcilutite), slightly vuggy to dense, hard and strong, mostly medium to medium to coarse (calcarenite) porous, moderately hard and moderately strong	26 (RQD 0%)	2	2.1 1.9 SPT HQ coring	50/3"
						-2.9	
-3.4	12.0						
			SAND: pale brownish grey, very dense, well graded, fine to coarse grained, angular, wet, calcitic, with some gravel (angular limestone chips and shells), trace silt		3	SPT	9, 50/4"
						-4.9	
					4	SPT	50/3"

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PAGE 2

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0337

Hole No. CP05-EAARS-CB-0337

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.6 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.4	15.0					-6.4	
-9.9	18.5					-9.9	
-14.9	23.5		Grades to Gravelly SAND: more gravel		5	SPT	25, 33, 40
-19.9	28.5		SAND: pale brownish grey, very dense, well graded, fine to coarse grained, angular, wet, calcitic, with a trace fine gravel and trace very fine quartz sand		6	SPT; Intermittent hard drilling from 21 to 23 ft	15, 12, 50/2"
-23.9	32.5		Only chips of Sandy LIMESTONE recovered		7	SPT; Intermittent hard drilling from 28.5 to 33.5 ft	50/2"
			SAND: pale brownish grey, very dense, poorly graded, mostly uniform, fine				5, 14

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0337

Hole No. CP05-EAARS-CB-0337

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 8.6	Sheet 3 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.8	33.4					-24.8	
-26.4	35.0		grained, subrounded and quartzose, some fine to medium grained, angular and calcitic, trace fine gravel		8	SPT; Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	50/4"
			End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0337

Hole No. CP05-EAARS-CB-0338

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N754257.9, E760698.6 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0338	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 7.5 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.9	0.0						
6.4	2.5		PEAT: not sampled			6.4	
3.4	5.5		LIMESTONE: tan to light brown and grey, thinly bedded, fine to coarse grained, vuggy, Fossiliferous, hard and strong to moderately hard, moderately strong and porous	46 (RQD 8%)	1	HQ coring; Intermittent soft drilling from 3.5 to 4.5 ft, soft at 5.5 ft	
1.4	7.5		No recovery				
			End of Boring at 7.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0338

Hole No. CP05-EAARS-CB-0339

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N754349.7, E769822.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0339	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.1 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 6.3 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.1	0.0						
6.8	1.3		Did not sample. Just drilled down to caprock.			6.8	
3.1	5.0		LIMESTONE: caprock, tan to light brown, thinly bedded, fine to coarse grained, vuggy, fossiliferous, hard and strong, ranges mudstone to pachstone	18 (RQD 7%)	1	HQ coring; soft from 2.3 ft to 3.9 ft	
1.8	6.3		No recovery for this depth interval				
			End of Boring at 6.3'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0339

Hole No. CP05-EAARS-CB-0340

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N754381.6, E777736 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0340	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/30/2005 Completed 8/30/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.3 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.3	0.0						
6.2	1.1		1.1 ft of PEAT: not sampled			6.2	
1.3	6.0		LIMESTONE: tan to light brown, thinly bedded, fine to coarse grained, fossiliferous, vuggy to porous, moderately hard and moderately strong	24 (RQD 0%)	1	HQ coring; soft from 1.6 to 2.1 ft and 4.1 to 5.1 ft	
-3.2	10.5		Sandy GRAVEL: tan, poorly graded, fine grained, subangular, limestone with angular, fine to coarse, calcitic sand, trace silt, medium dense, wet		1	SPT	4, 6, 8
-6.2	13.5		SAND: pale brownish grey, medium, dense, well graded, fine to coarse, angular, calcitic, some fine gravel (shells), trace silt, wet		2	SPT	15, 9, 9
			Silty SAND: as above but silty with trace gravel (shells)		3	SPT	4, 6, 8

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0340

Hole No. CP05-EAARS-CB-0340

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.3 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.7	15.0					-7.7	
-11.2	18.5					-11.2	
-16.2	23.5		Silty SAND: as above but very dense, some gravel (limestone)		4	SPT; hard layers below 17.5 ft, intermittent	8, 50/5"
-21.2	28.5		Sandy GRAVEL: pale brownish grey, well graded, fine to coarse, very dense, subangular, limestone, with calcitic, angular sand, some silt		5	SPT	28, 47, 12
-22.7	30.0		SAND: pale brownish grey, medium dense, wet, uniform, fine, subrounded, quartzose, some calcitic, angular, fine sand to fine gravel, trace silt		6	SPT; Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	31, 16, 7
			End of Boring at 30'				

16 18 20 22 24 26 28 30 32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0340

APPENDIX 2
SUPPLEMENTAL BORINGS AND PIEZOMETER INSTALLATION LOGS: 341-360

Hole No. CP05-EAARS-CB-0341

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N754254.6, E784321.7 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0341	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/17/2005 Completed 8/18/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 36.5 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.9	0.0						
7.4	1.5		PEAT: brownish black, fine, loose, moist, non-plastic, organic		1	8.9 SPT 7.4	2, 2, 6
2.4	6.5		LIMESTONE: tan to light grey and light brown, very fine to coarse grained, thinly bedded, fossiliferous, ranges from very fine (calcilutite), dense but vuggy, strong and hard to medium and coarse grained (Calcarenite), porous, moderately hard and moderately strong.	46 (RQD 14%)	2 1	7.4 SPT HQ coring 2.4	50/2"
-2.6	11.5		1.2 ft of tan, vuggy, hard, and strong calcilutite recovered in Run # 2.	24 (RQD 18%)	2	HQ coring; Ranges from mudstone to grainstone -2.6	
			0.3 in of the same recovered at the top of Run # 3.	6 (RQD 0%)	3	HQ coring; Soft drilling from 9 to 11.2 ft; soft drilling from 11.8 to 23 ft	

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0341

Hole No. CP05-EAARS-CB-0341

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.9 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.1	15.0					-6.1	
-7.6	16.5					-7.6	16
-12.6	21.5		No core recovery	0 (RQD 0%)	4	HQ coring -12.6	18, 20
-17.6	26.5		Calcarinite and shells: Light brownish grey, fine to coarse grained, porous, moderately hard and moderately strong to soft and weak grain stone recovered in Run # 5.	26 (RQD 0%)	5	HQ coring; Short sections of firm drilling at middle and end of run # 5 -17.6	22, 24, 26
-22.6	31.5		Calcarinite and shells: light brownish grey to light and medium grey, porous, moderately hard and moderately strong to soft, weak and friable grain stone with a trace of quartz sand, also hard and strong pack stone with some fine quartz sand with apparent solution voids infilled with the grainstone in Run # 6.	42 (RQD 8%)	6	HQ coring; Intermittent firm drilling in run # 6 -22.6	28, 30
			Light to medium grained, shelly, dense, hard and strong to porous, moderately hard and moderately hard packstone recovered in Run # 7. For most part, core is only half cylinder (possible solution cavity?).	40 (RQD 0%)	7	HQ coring; Complete circulation loss in run # 7; 4" casing down to 30 ft	32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0341

Hole No. CP05-EAARS-CB-0341

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.9 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.5	33.4					-24.5	
-27.6	36.5		Note: Fossil include pelecypod, gastropod and coral.				
			End of Boring at 36.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0341

Hole No. CP05-EAARS-CB-0342

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N754260.6, E784321.2 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0342		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/18/2005 Completed 8/19/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11.4 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.4	0.0						
			Peat: black, loose, fine grained, non-plastic, moist, organic		1	11.4 SPT; All calcitic material noted below is at least in part shell fragments. 9.9	4, 3, 3
9.4	2.0					9.4	50/6"
			LIMESTONE: tan to brownish grey and light brown, fine to coarse grained, thinly to medium bedded, vuggy, fossiliferous, strong and hard	46 (RQD 22%)	1	SPT HQ coring; Caprock from 2 to 8 ft; soft from 4 to 4.9 ft; Core pieces for testing: 2.3 to 4 ft and 4 to 4.4 ft	
5.2	6.2						
			Only uniform fine, angular, limestone gravel: looks like drill cuttings		3	4.4 SPT	50/2"
2.9	8.5					2.9	
			SAND: pale brownish grey, loose, wet, well graded, fine to coarse, angular, calcitic, some silt, trace gravel		4	SPT 0.4	3, 3, 2
			Grades to some gravel		5	SPT	10, 4, 3
-2.1	13.5					-2.1	
			Grades to Gravelly SAND (as above) with some silt, medium dense		6	SPT	3, 7, 18

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE (MAR 71)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0342

Hole No. CP05-EAARS-CB-0342

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.4 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.6	15.0					-3.6	
-4.6	16.0					-4.6	
-7.1	18.5		Grades to SAND: as above but no gravel, trace silt, medium dense		7	SPT	19, 10, 7
-9.6	21.0		Grades to Silty SAND (as above) but pale greenish grey, loose, and silty		8	SPT	6, 4, 4
-12.1			Grades to Gravelly SAND: like that at 13.5 but very dense, pale brownish grey		9	SPT	50/6"
-14.6	26.0		Gravelly SAND as above, but a race very fine, subrounded quartz		10	SPT	24, 50/5"
-17.1			SAND (as above), with some gravel and silt, trace very fine quartz		11	SPT	15, 12, 50
-19.6	31.0		No recovery		12	SPT; Hard drilling from 28.5 to 31 ft	50/0"
			Sandy GRAVEL: pale brownish grey, very dense, well graded, fine to coarse, angular, limestone (trace very fine quartz sand with sand as above		13	SPT; Hard drilling from 31 to 33. 5 ft	22, 39, 50/2"

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0342

Hole No. CP05-EAARS-CB-0342

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 11.4	Sheet 3 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.0	33.4					-22.0	
-23.6	35.0				14	-22.1 SPT	50/2"
			End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0342

Hole No. CP05-EAARS-CB-0343

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N753259.7, E786969.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0343	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/16/2005 Completed 8/16/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.6	0.0						
			Peat: brownish black, loose, fine grained, non-plastic, organic, moist		1	8.6 SPT 7.1	4, 2, 2
					2	SPT 5.6	2, 2, 2
5.1	3.5		Wet at 3 ft		3	4.6 SPT	3, 50/3"
			LIMESTONE: caprock, tan to light brown, mostly fine grained, vuggy, and fossiliferous, thinly bedded, strong and hard	32 (RQD 0%)	1	HQ coring -0.4	
1.1	7.5						
			SAND: pale brownish gray, loose, well graded, fine to coarse, angular, calcitic, trace gravel, some silt			-4.9	
					4	SPT	4, 2, 4

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0343

Hole No. CP05-EAARS-CB-0343

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.6 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.4	15.0					-6.4	
							16
							18
						-9.9	
			Grades pale greenish grey with trace silt		5	SPT	7 8 6
							20
							22
						-14.9	
			Grades pale brownish grey with some very fine, subrounded, quartz sand, trace silt		6	SPT	10 11 21
							24
							26
							28
						-19.9	
			Grades very dense		7	SPT; Hard drilling from 29 to 32 ft	50/5"
							30
							32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0343

Hole No. CP05-EAARS-CB-0343

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.6 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.8	33.4					-24.8	
-24.9	33.5		Sandy GRAVEL: pale greenish grey, very dense, gap graded, fine to coarse, subangular, sandy limestone, with angular, calcitic sand		8	-24.9 SPT	15 / 50/3"
-26.4	35.0						

End of Boring at 35'

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0343

Hole No. CP05-EAARS-CB-0344

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N758906.8, E761991.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0344	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/7/2005 Completed 9/7/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 5.8 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.4	0.0						
7.6	0.8		PEAT: Not Sampled			7.6	
3.2	5.2		LIMESTONE: tan to light brown and gray, fine to coarse grained, thinly bedded, fossiliferous, vuggy to porous, hard and strong to moderately hard to moderately strong.	34 (RQD 0%)	1	HQ coring; Loosing water in caprock; Very hard to 3 ft, soft at 5.2 ft	
2.6	5.8		No recovery				
			End of Boring at 5.8'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE PAGE 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0344

Hole No. CP05-EAARS-CB-0345

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N759006.3, E768486.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0345	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/7/2005 Completed 9/7/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: K. Jones

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.5	0.0						
8.0	2.5		ROADFILL: Not sampled.				
6.5	4.0		PEAT: Not sampled.			6.5	
			LIMESTONE: pale yellowish brown to tan, granular, very hard to medium soft, dense, fractured with fractures filled with calcerous silt becoming weathered and softer at bottom. A 1 ft void in the core from 6.0 to 7.0	70 (RQD 20%)	1	HQ coring 1.5	
			Grades to tan, soft, granular, calcareous, silty, with some cemented shell.	10 (RQD 0%)	2	HQ coring; only recovered bottom 6" of core -3.5	
-3.5	14.0		Sandy GRAVEL: gray to tan, medium dense, calcareous, subangular, fine to coarse grained, well graded, some gray		1	SPT	4 4

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0345

Hole No. CP05-EAARS-CB-0345

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.5 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.5	15.0					-4.5	
			silt.				7
							16
-7.0	17.5						
			Gravelly SAND: grades as above.				18
						-8.5	
					2	SPT	2
							2
							12
							20
							22
						-13.5	
			A layer of Limeston from 24 to 24.75.		3	SPT	50/1"
							24
							26
-16.5	27.0						
			Sandy GRAVEL (Caloosahatchee Formation): gray to tan, very dense, siliceous, calcereous, subangular, well graded, some silt.			-17.0	
							28
						Top of Caloosahatchee Formation -18.5	
					4	SPT; cemented quartz sand	14
							25
							27
							30
							32
-22.0	32.5						
			SAND: gray, dense, uniform consistency, subangular, trace of black				

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0345

Hole No. CP05-EAARS-CB-0345

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.5 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.9	33.4					-22.9	
			phosphorite and tan calcerous sand.			-23.5	
					5	SPT	9 / 14 / 15
-25.0	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0345

Hole No. CP05-EAARS-CB-0346

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N758929.4, E773763.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0346	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/8/2005 Completed 9/8/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 11.5 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.0	0.0						
5.4	4.6		ROADFILL: Limestone gravel and cobbles recovered.	12 (RQD 0%)	1	10.0 HQ coring; Hard 0.1 to 0.6 ft; soft to 4.3 ft; then hard from 4.3 to 4.6 ft; hard from 4.8 to 7.3 ft; soft from 7.3 to 9.1 ft; hard from 9.1 to 9.6 ft and then soft	
0.4	9.6		LIMESTONE (Caprock): tan to light brown, fine to coarse grained, thinly bedded, fossiliferous, vuggy, hard and strong.	40 (RQD 24%)	2	5.0 HQ coring; UCS=5010psi; core samples for testing: 5.0 to 5.6 ft and 5.9 to 6.5 ft	
-1.5	11.5		SAND: pale brownish gray, medium dense, well graded, fine to coarse grained, angular, calcitic, some fine angular Limsestone gravel, trace silt.		1	0.0 SPT; SP-SM; poorly graded sand with silt and gravel; Moisture=10%	7, 6, 6
			End of Boring at 11.5'				

0 2 4 6 8 10 12 14

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0346

Hole No. CP05-EAARS-CB-0347

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N759062.5, E780380.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0347	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/8/2005 Completed 9/8/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 12.5 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.7	0.0						
			PEAT: Not sampled				
5.7	2.0					5.7	
			LIMESTONE (Caprock): tan to light brown, thinly bedded, fine to coarse grained, fossiliferous, vuggy, strong and hard to porous, soft and weak.	88 (RQD 43%)	1	HQ coring; soft from 3.2 to 3.5 ft and 3.6 to 5.8 ft; Intermittent hard drilling from 5.8 to 8.5 ft; then soft below 8.5 ft	
						1.7	
				42 (RQD 10%)	2	HQ coring; Core samples for testing: 2.4 to 3 f, 3.0 to 3.7 ft and 6.0 to 6.5 ft	
-0.8	8.5						
			Gravelly SAND: pale brownish gray, well graded, fine to coarse grained, loose, wet, angular, calcitic, fine subrounded gravel.				
						-3.3	
					1	SPT	2 2 2
-4.8	12.5						
			End of Boring at 12.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0347

Hole No. CP05-EAARS-CB-0347

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.7 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.3	15.0					-7.3	
						2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

16 18 20 22 24 26 28 30 32

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0347

Hole No. CP05-EAARS-CB-0348

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N761552.5, E761984.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0348	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/7/2005 Completed 9/7/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 8.5 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.4	0.0						
7.3	1.1		PEAT: Not sampled.			7.4	
3.8	4.6		LIMESTONE (Caprock)	40 (RQD 0%)	1	HQ coring; soft from 2.1 to 3.8 ft and at 4.6 ft	
-0.1	8.5		SAND: pale brownish gray, dense, well graded, fine to coarse grained, angular, calcitic, moist, with some fine angular, limestone gravel.		1	2.4 1.4 SPT	26 23 25
			End of Boring at 8.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0348

Hole No. CP05-EAARS-CB-0349

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N761596.4, E768469.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0349	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/7/2005 Completed 9/7/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: K. Jones

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.0	0.0						
6.0	4.0		ROADFILL: Not sampled.			6.0	
2.5	7.5		LIMESTONE (Caprock): dark brown to gray, hard and brittle to medium soft, weathered, and porous.	40 (RQD 22%)	1	HQ coring	
-3.0	13.0		Gravelly SAND: gray to tan, calcereous, very loose, well graded, subangular, some tan calcereous silt.		1	1.0 SPT; very soft at 7.5 ft during coring	5 2 1
			Sandy SILT: gray, stiff, calcereous, well graded, interbedded with gray tan shells and shell fragments.		2	-4.0 SPT	5 4

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0349

Hole No. CP05-EAARS-CB-0349

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.0	15.0					-5.0	
-8.5	18.5		LIMESTONE: dark brown, very hard, brittle, silicified, fossiliferous, sandy.			-9.0	
-12.5	22.5		SAND: gray, dense, calcereous, well graded.		3	SPT; this is only a limestone stringer becoming softer	50/3"
-15.0	25.0		LIMESTONE: dark gray, hard, brittle, moldic, angular, fossiliferous.		4	-14.0 SPT	13, 24, 50/2"
-20.0	30.0		LIMESTONE (Caloosahatchee Formation): dark gray, hard, sandy (quartz), fossiliferous, some gray quartz sand.		5	-18.5 -19.0 Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation SPT	50/4"
			SAND: gray, loose, uniform consistency, subangular quartz, some tan shell fragments.				

16 18 20 22 24 26 28 30 32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0349

Hole No. CP05-EAARS-CB-0349

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.4	33.4					-23.4	
						-24.0	
							6
					6	SPT	6
-25.5	35.5						5
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0349

Hole No. CP05-EAARS-CB-0350

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N761606.5, E773832.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0350	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/13/2005 Completed 9/13/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 12.5 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.7	0.0						
6.2	2.5		PEAT: Not sampled.			6.2	
5.2	3.5		Silty SAND: greenish gray, soft, fine grained, angular calcitic sand.	34 (RQD 12%)	1	HQ coring; 0.6 ft piece of Silty SAND recovered; 1.1 ft of limestone piece recovered	
			LIMESTONE (Caprock): tan brown to light gray, hard, fine to medium grained, shelly.			1.2	
-0.3	9.0		Grades white and porous.	8 (RQD 8%)	2	HQ coring; one piece of 0.4 ft	
-3.8	12.5		No recovery				
			End of Boring at 12.5'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.	

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0350

Hole No. CP05-EAARS-CB-0350

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.7 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.3	15.0					-6.3	
						2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

16 18 20 22 24 26 28 30 32

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0350

Hole No. CP05-EAARS-CB-0351

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N761648.4, E779503.9 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-45B	
4. Hole No: CP05-EAARS-CB-0351		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Ralph Smith		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 9/12/2005 Completed 9/12/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 7.9 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 12 ft		19. Inspector: A.M. Noronha	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.9	0.0						
			PEAT: Not sampled.				
5.9	2.0					5.9	
			LIMESTONE (Caprock): light gray, hard, fine to medium grained, porous.	20 (RQD 0%)	1	HQ coring	
						0.9	
-0.1	8.0			22 (RQD 8%)	2	HQ coring; one piece of 0.4 ft recovered	
			Grades to moderately hard, vuggy, fossiliferous, shelly. Alternate layers of cemented sand, not much limestone.				
-4.1	12.0						
			End of Boring at 12'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.
2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0351

Hole No. CP05-EAARS-CB-0351

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.9 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.1	15.0					-7.1	
						x 2" O.D.)	

16
18
20
22
24
26
28
30
32

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0351

Hole No. CP05-EAARS-CB-0352

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N759734.9, E781678.1 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-55	
4. Hole No: CP05-EAARS-CB-0352		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Robert DeAngelis		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 8/25/2005 Completed 8/25/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 11 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 35 ft		19. Inspector: B. Levesque	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.0	0.0						
9.0	2.0		GRAVEL: brown to grey, medium dense, dry, fine to coarse graded, subangular to subrounded, some fine to medium sand, subangular to subrounded, little silt, trace organics		1	11.0 SPT 9.0	15, 16, 4
5.5	5.5		PEAT: black, very loose, fibrous, moist, little to trace fine to medium sand, little silt		2	SPT 7.0	
					3	SPT 5.5	9, 12, 50/4"
0.5	10.5		LIMESTONE: white to grey, fine grained to whackestone, hard and strong, slightly porous, slightly vuggy to vuggy, thinly bedded, fossiliferous	56 (RQD 35%)	1	HQ coring 0.5	
			SAND: white, calcitic, fine to medium grained, little to some fine to coarse gravel, subangular and subrounded, little silt, very loose, moist, poorly graded		4	SPT; broke through the cap at 10.5 ft -3.0	7, 1, 2
			SAND: white, calcitic, fine to medium grained, little silt, fossiliferous, very loose		5	SPT	2, 2

(continued)

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Hole No. CP05-EAARS-CB-0352

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.0	15.0					-4.0	
							2
							16
							18
						-8.0	
			same as above, silty, dense		6	SPT	3
							5
							4
							20
							22
						-13.0	
			same as above, medium dense state		7	SPT; slightly hard drilling at 23 ft	5
							10
							7
							24
							26
							28
						-18.0	
					8	SPT	7
							7
							8
							30
							32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0352

Hole No. CP05-EAARS-CB-0352

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.4	33.4					-22.4	
-24.0	35.0		SAND: white to grey, fine to coarse, calcitic, trace fine to medium quartz, trace fine gravel, little silt		9	-23.0 SPT	64/4" 10/0"
			End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0352

Hole No. CP05-EAARS-CB-0353

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N766803.5, E760673.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0353	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.6	0.0						
			PEAT: black, loose, poorly graded, fine grained, dry		1	9.6 SPT 8.1	2, 3, 3
			same as above - except wet		2	SPT; couple of limestone chips at sample bottom 6.6	3, 50/5"
7.1	2.5		LIMESTONE: tan brown, hard, fine to coarse grained, quite porous, shelly	56 (RQD 34%)	1	HQ coring; 2 pieces each of 0.45 ft and 0.4 ft 2.1	
3.6	6.0		SAND: greenish grey, loose, moderately graded, fine to medium grained, wet, subangular, calcetic sand		3	SPT -3.9	8, 7, 3
			SAND: light grey, very dense, moderately graded, fine to medium grained, sub angular, calcetic sand, wet		4	SPT; 3" of hard layer	3, 38, 50/4"

(continued)

PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0353

Hole No. CP05-EAARS-CB-0353

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.6 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.4	15.0					-5.4	
			same as above - except dense, quite silty			-8.9	
					5	SPT	28, 31, 6
-13.9	23.5					-13.9	
			Gravelly SAND: olive grey, dense, poorly graded, fine to coarse grained, sub angular calcetic sand, wet, trace phosphate		6	SPT	10, 17, 18
-16.4	26.0					-16.4	
			SAND: olive grey, poorly graded, very fine to fine grained, rounded quartz, wet			Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	
						-18.9	
					7	SPT	10, 17, 18
-20.4	30.0						
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0353

Hole No. CP05-EAARS-CB-0354

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N766938.9, E765962.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0354	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 9 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.8	0.0						
6.3	2.5		Rotary wash from 0.0 ft to 2.5 ft. Not sampled.			6.3	
3.3	5.5		LIMESTONE: tan brown to white, hard, vuggy, shelly, fine to medium grained	30 (RQD 10%)	1	HQ coring; one piece 0.5 ft long	
-0.2	9.0		SAND: light grey, very dense, poorly graded fine to coarse grained, wet, shelly		1	1.3 SPT	7 44 13
			End of Boring at 9'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

0 2 4 6 8 10 12 14

MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0354

Hole No. CP05-EAARS-CB-0355

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N766734.9, E771197 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0355	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/31/2005 Completed 8/31/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.7	0.0						
			Peat: dark brown to black, loose, poorly graded, fine grained, moist		1	8.7 SPT 7.2	3, 2, 4
			same as above - black color		2	SPT 5.7	3, 7, 14
5.2	3.5				3	SPT; couple of limestone chips recovered 4.2	12, 50/0"
			Gravelly SAND: olive grey, very dense, poorly graded, fine to coarse grained, wet	32 (RQD 12%)	1	HQ coring; Caprock 2.5 ft; 1 piece of 0.6 ft	
2.7	6.0						
			LIMESTONE: tan brown to white, hard, fine to medium grained, shelly, a little porous			0.2	
			No recovery		4	SPT -4.8	7, 2, 1
-4.8	13.5						
			SAND: light grey, medium dense, moderately graded, fine to medium grained, sub angular calcetic sand, wet, shells present, silty, trace phosphate		5	SPT	17, 14, 11

(continued)

PREVIOUS EDITIONS ARE OBSOLETE MAR 71	PROJECT EAA Reservoir A-1	HOLE NUMBER CP05-EAARS-CB-0355

Hole No. CP05-EAARS-CB-0355

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.7 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.3	15.0					-6.3	
							16
							18
						-9.8	
			same as above - except very dense		6	SPT	23
							31
							24
							20
							22
-14.8	23.5					-14.8	
			few shells and stone pieces recovered				50/5"
-15.8	24.5				7	SPT; less than a foot of hard layer	24
			SAND: light grey, medium dense, moderately graded, fine to medium grained, sub angular calcetic sand, rounded quartz, wet, shells present, silty, trace phosphate				26
						-17.8	
						Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	28
						-19.8	
					8	SPT	12
							12
-21.3	30.0						14
							30
			End of Boring at 30'				
							32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0355

Hole No. CP05-EAARS-CB-0356

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N766664.2, E776454.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0356	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/2/2005 Completed 9/2/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.3 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 13.5 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.3	0.0						
7.3	1.0		Not sampled			7.3	
3.3	5.0		LIMESTONE: light grey, hard, fine to medium grained, porous, shelly	94 (RQD 42%)	1	HQ coring; 1 piece each of 0.9 ft, 0.35 ft, 0.5 ft and 0.35 ft	
1.3	7.0		Cemented SAND: greenish grey, very dense, poorly graded, fine to coarse grained, sub angular calcetic sand, wet			2.3	
						1.8	11
					1	1.3 SPT	50/3"
					2	SPT	
-0.2	8.5		LIMESTONE: light grey, hard, fine to medium grained, quite porous	30 (RQD 15%)	2	HQ coring; 1 piece of 0.35 ft and 0.4 ft	
-5.2	13.5		SAND: light grey, loose, moderately graded, fine to medium grained, sub angular calcetic sand, wet			-3.7	
					3	SPT	3, 2, 5
			End of Boring at 13.5'				

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0356

Hole No. CP05-EAARS-CB-0356

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 8.3	Sheet 2 of 2 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.7	15.0					-6.7	

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

16 18 20 22 24 26 28 30 32

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0356

Hole No. CP05-EAARS-CB-0357

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N769494.6, E760664.8 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0357	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 8 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.4	0.0						
6.9	1.5		Rotary wash drilling from 0.0 ft to 1.5 ft. Not sampled.			6.9	
2.9	5.5		LIMESTONE: tan brown to pale white, moderately hard, fine to coarse grained, vuggy, shelly	35 (RQD 8%)	1	HQ coring; 1 piece of 0.4 ft; Caprock - 4 ft	
0.4	8.0		SAND: greenish grey, medium dense, poorly graded, fine to coarse grained, angular calcetic sand, wet, lots of shells, quite gravelly		1	1.9 SPT	3 6 14
			End of Boring at 8'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

0 2 4 6 8 10 12 14

ENGINEER FORM 1836, 1 OCT 74 PREVIOUS EDITIONS ARE OBSOLETE	PROJECT EAA Reservoir A-1	HOLE NUMBER CP05-EAARS-CB-0357

Hole No. CP05-EAARS-CB-0358

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N769579.6, E765913.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0358	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.2 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 14.5 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.2	0.0						
			Rotary wash drilling from 0.0 ft to 2.0 ft. Not sampled.				
7.2	2.0					7.2	
			LIMESTONE: light grey to tan brown, hard, fine to coarse grained, quite porous, shells present. Staggered limestone and cemented sand layers	64 (RQD 45%)	1	HQ coring; 1 piece each of 0.4 ft, 0.4 ft, 0.35 ft, 0.45 ft and 0.65 ft	
2.2	7.0					2.2	
			SAND: light grey, very dense, poorly graded, fine to coarse grained, sub angular calcetic sand, limestone chips, wet		1	SPT; spoon bouncing	7 50/1"
1.2	8.0					0.7	
			LIMESTONE: pale white, hard, fine to medium grained, porous	30 (RQD 22%)	2	HQ coring; UCS=2500psi; 1 piece each of 0.6 ft and 0.5 ft	
-3.8	13.0					-3.8	
			SAND: light grey to greenish grey, very dense, moderately graded, fine to coarse grained, wet		2	SPT; SM; silty sand with gravel; Moisture=21%	8 44 16
-5.3	14.5						

0 2 4 6 8 10 12 14

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0358

Hole No. CP05-EAARS-CB-0358

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 9.2	Sheet 2 of 2 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.8	15.0					-5.8	
			End of Boring at 14.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

16 18 20 22 24 26 28 30 32

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0358

Hole No. CP05-EAARS-CB-0359

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N769432.1, E770696.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0359	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/24/2005 Completed 8/24/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.8	0.0						
6.3	1.5		PEAT: black, medium dense, fine grained, moist, organic		1	7.8 SPT 6.3	1, 6, 6
4.3	3.5		Gravelly SAND mixed with peat, wet, limestone chips recovered		2	4.3 SPT	12, 36, 36
0.8	7.0		a few limestone chips recovered LIMESTONE: grey to pale white, hard, fine to medium grained, quite porous, shelly	36 (RQD 10%)	3 1	4.3 SPT HQ coring; 1 piece of 0.5 ft	50/2"
			SAND: light grey, medium dense, moderately graded, fine to coarse grained, angular calcetic sand, wet, trace silty, shells present		4	-0.7 SPT -5.7	3, 3, 14
			same as above		5	SPT	14, 10, 12

(continued)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0359

Hole No. CP05-EAARS-CB-0359

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.8 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.2	15.0					-7.2	
							16
							18
						-10.7	
			SAND: light grey, dense, moderately graded, fine to medium grained, sub angular calcetic sand, wet, silty, trace phosphate		6	SPT; couple of limestone chips recovered	10
							17
							16
							20
							22
						-15.7	
			same as above				20
					7	SPT; flaky chips of stone recovered	20
							10
							24
							26
-18.7	26.5					-18.7	
			Gravelly SAND: greenish grey, dense, moderately graded, fine to coarse grained, sub angular calcetic sand, rounded quartz, wet			Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	
							28
						-20.7	
					8	SPT	20
							20
							25
							30
							32

(continued)

MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0359

Hole No. CP05-EAARS-CB-0359

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.8 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-25.6	33.4					-25.6	
			SAND: greenish grey, medium dense, moderately graded, fine to coarse grained, sub angular calcetic sand, rounded quartz, wet		9	-25.7 SPT; 2 chips of limestone recovered	13 / 7 / 5
-26.7	34.5						
-27.2	35.0						

End of Boring at 35'

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0359

Hole No. CP05-EAARS-CB-0360

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N774647.1, E768471.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0360	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/12/2005 Completed 9/12/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.2 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: K. Jones

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.2	0.0						
8.2	2.0		ROADFILL: Not sampled.				
6.7	3.5		PEAT: Not sampled.			6.7	
2.7	7.5		LIMESTONE (Caprock): tan, very hard, microcrystalline, dense. Grades to light to dark brown, fractured, fossiliferous, medium hard, porous, soft voids are filled with silt.	35 (RQD 9%)	1	HQ coring 2.7	
-2.3	12.5		Sandy GRAVEL: tan, very dense, calcereous, well sorted, subangular, calcitic shell hash.		1	1.7 Become soft at 7.5 ft; SPT; GP-GM; Poorly graded gravel with silt and sand; Moisture=26%	15, 21, 30
			CLAY: cream color, Some silt and sand, firm, calcereous, with trace fine gravel.		2	-3.3 SPT; SM; silty sand with gravel; Moisture=31%	2, 3, 4

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0360

Hole No. CP05-EAARS-CB-0360

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.2 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.8	15.0					-4.8	
-7.3	17.5		Silty SAND: tan, loose, calcereous.			-8.3	
					3	SPT; SM; silty sand ; Moisture=24%	6, 5, 5
						-11.3	
-12.3	22.5		Sandy GRAVEL (Caloosahatchee Formation): Tan to gray, dense, calcereous, some fine grained quartz sand.			Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation -13.3	
					4	SPT; SM; Silty sand with gravel; Moisture=22%	6, 12, 21
-17.3	27.5		LIMESTONE: brown to dark gray, moderately hard, sandy, fossiliferous.			-18.3	
					5	SPT	50/2"
-19.8	30.0		Sandy GRAVEL: tan to gray, dense, well sorted, quartz sand with calcereous cement.				

16 18 20 22 24 26 28 30 32

(continued)

MAR 71 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0360

Hole No. CP05-EAARS-CB-0360

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.2 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-23.2	33.4					-23.2	
						-23.3	20
					6	SPT	16
-24.8	35.0						20
			End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0360

APPENDIX 2
SUPPLEMENTAL BORINGS AND PIEZOMETER INSTALLATION LOGS: 361-380

Hole No. CP05-EAARS-CB-0361

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N778258.4, E768445.3 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0361	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/23/2005 Completed 8/23/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector:

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.5	0.0						
7.2	1.3		PEAT: black, loose, poorly graded, fine grained, organic, dry		1	8.5 SPT 7.0	2, 2, 50
2.0	6.5		small pieces of limestone caprock LIMESTONE: light grey to pale white, hard, fine to medium grained, quite porous	50 (RQD 16%)	1	HQ coring 2.0	
			SAND: greenish grey, very dense, moderately graded, fine to coarse grained, sub angular calcetic sand, cemented, wet		2	SPT 0.0	27, 27, 50
			SAND: light brown, medium dense, moderately graded, fine to medium grained, sub angular calcetic sand, wet		3	SPT -5.0	2, 5, 6
			SAND: light grey, loose, well graded, fine to coarse grained, sub angular calcetic sand, wet, shells present, quite silty		4	SPT	2, 6, 2

0 2 4 6 8 10 12 14

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0361

Hole No. CP05-EAARS-CB-0361

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.5 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.5	15.0					-6.5	
							16
							18
						-10.0	
			same as above		5	SPT	5, 4, 6
							20
							22
						-15.0	
			SAND: greenish grey, medium dense, moderately graded, fine to medium grained, sub angular calcetic sand, wet, shelly		6	SPT	8, 9, 7
							24
							26
							28
						-20.0	
			same as above - except dense		7	SPT	2, 5, 33
							30
							32

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0361

Hole No. CP05-EAARS-CB-0361

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.5 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-24.9	33.4					-24.9	
-26.5	35.0		small chips of cemented sand with shells recovered		8	-25.0 SPT	50
			End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836, 1 DEC 68 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0361

Hole No. CP05-EAARS-CB-0362

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N781742.1, E760429 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0362	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/8/2005 Completed 9/8/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.8	0.0						
			PEAT: black, very loose, poorly graded, fine to medium grained, moist, mostly organic.		1	8.8 SPT 7.3	2, 2, 2
6.8	2.0				2	SPT 5.8	1, 50/1"
			LIMESTONE (Caprock): tan brown, hard, fine to medium grained, shells present.				
4.8	4.0			12 (RQD 0%)	1	HQ coring; Caprock - 1.5 ft 1.3	
			SAND: Light gray, medium dense, moderately graded, fineto coarse grained, subangular calcitic sand, wet.		3	SPT -4.7	12, 11, 10
-4.7	13.5						
			SAND (Caloosahatchee Formation): light gray, loose, moderately graded, fine to medium grained, subangular calcitic sand, wet, quite silty,		4	SPT -6.2	6, 6, 4

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0362

Hole No. CP05-EAARS-CB-0362

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.2	15.0					-6.2	
			subrounded quartz.			Caloosahatchee Formation	16
			Grades to greenish gray and dense, with trace phosphate.			-9.7	18
					5	SPT	15, 16, 10
			Grades to medium dense, poorly graded, fine to coarse grained, rounded quartz, shells present.			-14.7	20, 22
					6	SPT	9, 7, 6
-19.7	28.5					-19.7	24, 26, 28
			LIMESTONE		7	SPT; Spoon bouncing	50/3"
-21.2	30.0						30
			End of Boring at 30'				32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0362

Hole No. CP05-EAARS-CB-0363

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N777276.3, E771077.2 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0363	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/7/2005 Completed 9/7/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 13 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.4	0.0						
			Not Sampled				0, 2
6.4	3.0					6.4	
			LIMESTONE (Caprock): light gray to white, hard, fine to medium grained, quite porous, shelly.	68 (RQD 34%)	1	HQ coring; 1 piece each of 0.9 ft, 0.35 ft and 0.45 ft; Caprock - 5.5 ft	4, 6
						1.4	
			Grades to white, shells grade out.	14 (RQD 9%)	2	HQ coring; 1 piece of 0.45 ft	8
0.2	9.2						
			No recovery				10, 12
-3.6	13.0						
			End of Boring at 13'				14

NOTES:
1. Soils are field visually classified

(continued)

PREVIOUS EDITIONS ARE OBSOLETE MAR 71

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0363

Hole No. CP05-EAARS-CB-0363

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.4 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.6	15.0					-5.6	
						in accordance with the ASTM Designation: D 2488-93. 2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

16
18
20
22
24
26
28
30
32

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0363

Hole No. CP05-EAARS-CB-0364

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N774274.5, E771159.4 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0364	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/7/2005 Completed 9/7/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 14 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.4	0.0						
			Not sampled.				
6.9	1.5					6.9	
			LIMESTONE (Caprock): tan brown to pale white, hard, fine to medium grained, shelly.	42 (RQD 8%)	1	HQ coring; 1 piece of 0.4 ft	
4.4	4.0						
			SAND: light gray, very dense, moderately graded, fine to medium grained sub angular calcitic sand, wet, some silt, shells present.				
						1.9	
1.2	7.3				1	SPT	50 / 50/3"
			LIMESTONE: white, moderately hard, fine to medium grained, vuggy, shells present.			0.4	
-1.6	10.0			42 (RQD 21%)	2	HQ coring; 1 piece each of 0.5 ft and 0.55 ft	
			SAND: greenish gray, medium dense, moderately graded, fine to medium grained subangular calcitic sand, wet, with some limestone peices.				
						-4.1	
-5.6	14.0				2	SPT	10 / 8 / 8

0 2 4 6 8 10 12 14

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0364

Hole No. CP05-EAARS-CB-0364

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.4 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.6	15.0					-6.6	
			End of Boring at 14'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

16 18 20 22 24 26 28 30 32

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0364

Hole No. CP05-EAARS-CB-0365

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N776581.1, E765893.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0365	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/23/2005 Completed 8/23/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 12.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
12.4	0.0						
			SAND: light to tan brown, dense, moderately graded, fine to medium grained, sub angular calcetic sand, dry		1	12.4 SPT; SM; silty sand with gravel; Moisture=10% 10.9	17, 26, 20
			SAND: light grey, dense, poorly graded, fine to coarse grained, sub angular calceetic sand, dry to wet		2	SPT; SM; silty sand with gravel; Moisture=13% 8.9	17, 21, 21
8.9	3.5		PEAT: black, fine grained, organic, dry		3	SPT; SP-SM; poorly graded sand with silt and gravel; Moisture=88% 7.4	3, 2, 6
7.9	4.5		Gravelly SAND: greenish grey, cemented				
			Gravelly SAND: greenish grey, very dense, moderately graded, fine to coarse grained, sub angular, cemented, wet		4	SPT; SP-SM; Poorly graded sand with silt and gravel; Moisture=13% 5.9	21, 27, 50/3"
5.9	6.5		LIMESTONE: kight grey to white, very hard, fine to medium grained	68 (RQD 50%)	1	HQ coring; UCS=1500psi; 1 piece each of 1.1 ft, 0.8 ft and 0.5 ft; Very hard coring; 5 ft took 70 minutes 0.9	
0.9	11.5		SAND: light grey, medium dense, moderately graded, fine to coarse grained, sub angular calcetic sand, wet, silt present		5	SPT; SM; silty sand with gravel; Moisture=29%	5, 3, 22

(continued)

ENG FORM 1836, 1 OCT 72 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0365

Hole No. CP05-EAARS-CB-0365

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.4 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-2.6	15.0					-2.6	
							16
							18
						-6.1	
			SAND: same as above, shells present		6	SPT; SM; silty sand; Moisture=23%	15, 12, 10
							20
							22
						-11.1	
			SAND: greenish grey, medium dense, poorly graded, fine to medium grained, sub angular calcetic sand, wet, silty, shelly		7	SPT; silty sand; Moisture=23%	7, 10, 12
							24
							26
							28
						-16.1	
			SAND: light grey, medium dense, moderately graded, fine to medium grained, sub angular calcetic sand, rounded quartz, wet, silty, trace phosphate		8	SPT; SM; silty sand; Moisture=21%; Caloosahatchee Formation	7, 11, 9
							30
							32

(continued)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0365

Hole No. CP05-EAARS-CB-0365

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 12.4 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.0	33.4					-21.0	
-21.1	33.5		Gravelly SAND: greenish grey, very dense, moderately graded, fine to coarse grained, sub angular calcetic sand, rounded quartz, cemented, wet		9	-21.1 SPT; SP-SM; poorly graded sand with silt and gravel; Moisture=13%	10 / 28 / 50/5"
-22.6	35.0		End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0365

Hole No. CP05-EAARS-CB-0366

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N752271.1, E760713.6 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0366	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 14 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.4	0.0						
5.4	4.0		PEAT: not sampled			5.4	
3.9	5.5		LIMESTONE: caprock, tan to light brown, thinly bedded, fine to coarse grained, vuggy to porous, fossiliferous, hard and strong to moderately hard and strong	52 (RQD 26%)	1	HQ coring; Soft from 5.5 ft to 7.5 ft, then firm	
-0.1	9.5		LIMESTONE: pale to light brownish grey, fine to coarse grained, thinly bedded, porous, fossiliferous, moderately hard, and moderately strong			0.4	
-4.6	14.0		soft below 9.5 ft. No recovery.	10 (RQD 9%)	2	HQ coring; soft below 9.5 ft	

0 2 4 6 8 10 12 14

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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0366

Hole No. CP05-EAARS-CB-0366

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 9.4 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-5.6	15.0					-5.6	
			End of Boring at 14'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

16 18 20 22 24 26 28 30 32

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0366

Hole No. CP05-EAARS-CB-0367

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N752287.5, E763220.4 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: Diedrich D-50	
4. Hole No: CP05-EAARS-CB-0367		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Erik Bluemke		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 9/7/2005 Completed 9/7/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8.1 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 30 ft		19. Inspector: N. Holst	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.1	0.0						
6.1	2.0		PEAT: Not sampled.			6.1	
3.9	4.2		LIMESTONE (Caprock): tan, fine to coarse grained, thinly bedded, vuggy to porous, fossiliferous, hard and strong to moderately hard and moderately strong.	22 (RQD 7%)	1	HQ coring; soft below 4.2 ft	
1.1	7.0		Sandy GRAVEL: pale brownish gray, very dense, well graded, fine grained, angular limestone.			1.1	
-0.2	8.3		LIMESTONE: tan to light gray, fine to coarse grained, thinly bedded, fossiliferous mostly soft and weak. (First 0.2 ft is hard.)	22 (RQD 0%)	2	HQ coring; hard at 7 ft; spoon bouncing; many loose shells in the core	
			Sandy GRAVEL: As above, but with trace silt.			-3.9	
						-5.4	
					1	SPT	50/3"

0 2 4 6 8 10 12 14

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Hole No. CP05-EAARS-CB-0367

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8.1 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-6.9	15.0					-6.9	
-9.4	17.5		Gravelly SAND: pale brown to gray, medium dense, uniform, fine grained, subrounded, quartzose, trace fine to coarse angular calcitic sand, with sandy limestone gravel.			-10.4	
					2	SPT	11, 13, 12
-14.4	22.5		SAND: pale brownish gray, medium dense uniform, fine grained, subrounded, moist, quartzose, trace fine to medium angular calcitic sand.			-15.4	
					3	SPT	9, 9, 10
			Grades as above, but with some fine angular calcereous sandstone gravel.			-20.4	
					4	SPT	1, 14, 13
-21.9	30.0						
			End of Boring at 30'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0367

Hole No. CP05-EAARS-CB-0368

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N753662.4, E767510 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0368	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.0	0.0						
7.8	0.3		PEAT			7.8	
2.8	5.3		LIMESTONE: caprock, pale brownish grey to light brown, thinly bedded, fine to coarse grained, vuggy, fossiliferous, hard and strong, weakly cemented sand below	36 (RQD 10%)	1	HQ coring; Good core piece for testing 0.25 to 0.75 ft; Soft drilling at 1.25 ft	
-0.5	8.5		Gravelly SAND: pale brownish grey, dense, well graded, fine to coarse, angular, calcitic, trace silt		1	SPT	5, 16, 18
-2.0	10.0		Only LIMESTONE chips recovered		2	SPT; Hard drilling from 8.3 to 8.7 ft	50/2"
			Silty SAND: pale brownish grey, very dense to loose, well graded, fine to coarse, wet, angular, calcitic, trace fine gravel			-5.5	
					3	SPT; Hard drilling from 12.5 to 13.0 ft; Intermittent hard	2, 3, 50/2"

0 2 4 6 8 10 12 14

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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0368

Hole No. CP05-EAARS-CB-0368

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.0	15.0					-7.0	
-10.5	18.5					drilling from 13.5 to 18.5 ft -10.5	
-12.0	20.0		No recovery		4	SPT; Hard drilling from 18.5 to 21.5 -15.5	50/3"
-22.0	30.0		SAND: pale brownish grey, medium dense, wet, mostly uniform, fine grained, sub rounded and quartzose, trace calcitic, some fine gravel		5	SPT; Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation -20.5	20, 13, 11
			SAND: as above, buut some silt and fine gravel		6	SPT	10, 9, 11
			End of Boring at 30'				

16 18 20 22 24 26 28 30 32

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0368

Hole No. CP05-EAARS-CB-0369

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N753677, E772160.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0369	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/31/2005 Completed 8/31/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 30 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.0	0.0						
6.0	2.0		PEAT: not sampled			6.0	
2.0	6.0		LIMESTONE: caprock: tan to light brown, fine to coarse grained, fossiliferous, vuggy, hard and strong, very closely fractured	28 (RQD 0%)	1	HQ coring; Soft from 3.5 to 4.5 ft; Packstone, soft at 6 ft	
-3.0	11.0		Sandy GRAVEL: tan, loose, wet, subangular, weakly cemented limestone, poorly graded, fine to coarse		1	1.0 SPT -3.0	5 4 5
-5.5	13.5		Silty SAND: pale greenish grey, very dense, well graded, fine to coarse, angular, calcitic, some fine gravel (shells)		2	SPT -5.5	28 13 50/5"
			SAND: pale greenish grey, loose, well graded, fine to medium grained, subangular, calcitic, some silt		3	SPT	7 5 3

0 2 4 6 8 10 12 14

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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0369

Hole No. CP05-EAARS-CB-0369

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.0	15.0					-7.0	
-10.5	18.5					-10.5	
-15.5	23.5		GRAVEL: tan, very dense, poorly graded, fine, subangular, limestone, some calcitic sand		4	SPT; Hard drilling from 20 to 23.5 ft	50/4"
-20.5	28.5		Gravelly SAND: pale brownish grey, very dense, well graded, fine to coarse, angular, calcitic, wet, with limestone gravel		5	SPT; Intermittent hard drilling from 23.5 to 28.5 ft	47 50/4"
-22.0	30.0		SAND: pale greenish grey, medium dense, mostly uniform, fine grained and quartzose, some fine to medium, angular, calcitic, trace sandy limestone gravel		6	SPT; Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	18 11 17

16 18 20 22 24 26 28 30 32

End of Boring at 30'

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0369

Hole No. CP05-EAARS-CB-0370

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N753743.1, E775375.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0370	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/30/2005 Completed 8/30/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 10.6 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.9	0.0						
7.0	0.9		PEAT: not sampled			6.9	
-0.1	8.0		LIMESTONE: tan to light brown, fine to coarse grained, thinly bedded, fossiliferous, vuggy to porous, hard and strong to moderately hard and moderately strong, most recovery in gravel sized rounded to angular	7 (RQD 0%)	1	HQ coring; Soft from 1.5 to 4.4 ft 2.4	
				24 (RQD 10%)	2	HQ coring; Soft at 8 ft	
-2.7	10.6		soft at 8 ft. No recovery.				
			End of Boring at 10.6'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0370

Hole No. CP05-EAARS-CB-0371

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N753716.1, E780372.6 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0371	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Erik Bluemke	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/23/2005 Completed 8/23/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.8	0.0						
6.6	1.3		PEAT		1	7.8 SPT 6.5	4, 2, 50/4"
0.8	7.0		LIMESTONE: caprock: tan to light brown, grades from strong, hard, vuggy mudstone and wackestone to soft, weak, porous grainstone Had to redrill core run to remove debris	42 (RQD 12%)	1	HQ coring; Core piece for testing:3.9 to 4.5 ft; Becomes soft from 4.7 to 5 ft 1.5	
-5.7	13.5		Silty SAND: pale brownish grey, medium dense, wet, well graded, fine to coarse grained, angular, calcitic, with some fine angular, limestone gravel Grades loose with no gravel		2	0.8 SPT -0.7	6, 9, 13
					3	SPT -5.7	2, 1, 7
					4	SPT	6, 9, 10

0 2 4 6 8 10 12 14

(continued)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0371

Hole No. CP05-EAARS-CB-0371

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 7.8	Sheet 2 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.2	15.0					-7.2	
			SAND: pale brownish grey, medium dense, well graded, fine to coarse, wet, angular, calcitic, trace very fine quartz sand		5	-10.7 SPT	15 11 12
-15.7	23.5		SAND: as above but medium dense, no gravel and some silt		6	-15.7 SPT; Hard drilling from 21 to 27.5 ft	50/1"
-20.7	28.5		Gravelly SAND: pale brownish grey, loose, well graded, fine to coarse, mostly angular and calcitic, some fine to medium subrounded quartz, angular limestone gravel		7	-20.7 SPT	9 2 4
						-22.2 Caloosahatchee Formation or Pinecrest Sand of Tamiami Formation	

16 18 20 22 24 26 28 30 32

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0371

Hole No. CP05-EAARS-CB-0371

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.8 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-25.6	33.4					-25.6	
-25.7	33.5		SAND: light brownish grey, medium dense, moist, mostly uniform, fine grained, subrounded and quartzose, some calcitic, angular, fine to coarse sand and fine gravel at 33.5 ft		8	-25.7 SPT	6 8 8
-27.2	35.0		End of Boring at 35'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0371

Hole No. CP05-EAARS-CB-0372

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N757932.6, E776407.6 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0372	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/30/2005 Completed 8/30/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: B. Levesque

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.0	0.0						
9.0	2.0		SAND: light brown, moderately dense, fine to medium gradation, some coarse to fine gravel, angular to subangular		1	11.0 SPT 9.0	7, 7, 7
7.0	4.0		PEAT: black, moist, fibrous, trace fine to medium calcitic sand, shells		2	SPT 7.3	4, 2, 1
2.0	9.0		LIMESTONE: white to light tan-grey, fine to medium graded, non porous to slightly porous, fossiliferous, slightly vuggy, hard, moderately strong to strong	65 (RQD45%)	3 1	7.0 SPT HQ coring; UCS=3570psi 2.0	50/0"
1.0	10.0		SAND: white, fine to medium gradation, subangular, shelly, little silt		4	1.0 SPT	3, 5
-3.0	14.0		LIMESTONE: white, fine to coarse grained, fractured, porous to slightly porous, slightly vuggy, hard, weak, thinly bedded	20 (RQD 0%)	1	HQ coring; UCS=1570psi; Broke through about 13.5 ft -3.0	50/2"
			SAND: light grey to tan, medium graded, some shells, trace fine sand, calcitic, angular to subangular, loose,		5	-3.5 SPT (continued)	3, 6

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0372

Hole No. CP05-EAARS-CB-0372

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.0	15.0					-4.0	
			moist			ML; Inorganic silts and very fine sand; Moisture=19%	4 16 18
						-8.0	
			SAND: tan-grey to white, calcitic, fine to medium grained, little silt, little fine to coarse gravel, subangular		6	SPT	6 2 4 20 22
						-13.0	
			No recovery. Very hard drilling, spoon refusal - probably limestone		7	SPT; white and white grey fragments of limestone in drilling mud	25/0" 24 26 28
						-18.0	
			No recovery. Possibly similar to above		8	SPT	25/0" 30 32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0372

Hole No. CP05-EAARS-CB-0372

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.4	33.4					-22.4	
						-23.0	
			SAND: white, medium dense, calcitic, fine to medium gradation, little silt, little fine gravel, angular to subangular, little fine quartz sand, subangular to subrounded		9	SPT; drill advanced with less difficulty till 33.5 ft	28 12 10
-24.5	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0372

Hole No. CP05-EAARS-CB-0373

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N758092.4, E771124.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0373	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/30/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.7 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: B. Levesque

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.7	0.0						
9.7	2.0		SAND: grey-brown, fine to medium gradation, moderately dense, calcitic, little fine to coarse gravel, angular to subangular, little silt, organic (peat, silt) (FILL)		1	11.7 SPT 9.7	7, 11, 7
7.7	4.0		PEAT: black, moist, loose, fibrous, fine to coarse calcitic sand, shell fragments		2	7.7 SPT	7, 2, 3
7.2	4.5		GRAVEL: light tan, coarse grained, little trace silt, fine sand, calcitic, angular, dense		3	7.2 SPT	4, 50/4"
			LIMESTONE: grey to white, very vuggy to vuggy, finr to coarse to fine to medium gravel, porous, slightly porous, moderately strong and hard, fossiliferous	80 (RQD 54%)	1	HQ coring; UCS=1000psi 2.2	
-2.8	14.5		LIMESTONE: white, fine to coarse grained, vuggy and porous, weak to moderately strong, friable, moderately hard, fossiliferous	26 (RQD 17%)	2	HQ coring; UCS=4430psi; bottom of caprock at 14.5 ft -2.8	
			SAND: white, moderately dense, fine to				6

(continued)

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0373

Hole No. CP05-EAARS-CB-0373

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.7 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.3	15.0					-3.3	
			medium grained, trace to little coarse sand, trace gravel, little to some silt, subangularm, moist, calcitic		4	SPT	11, 7, 16, 18
						-7.3	
			Same as above		5	SPT; SM; silty sand with gravel; Moisture=25%	4, 3, 3, 20, 22
						-12.3	
			SAND: grey to white, fine to coarse grained, calcitic, little to trace quartz fine grained sand, some fine to coarse calcitic gravel, little silt, angular to subangular/subrounded		6	SPT; Intermittent hard and soft drilling from 18 to 28 ft	50/4", 24, 26, 28
						-17.3	
			same as above		7	SPT; SM; silty sand with gravel; Moisture=22%	50/3", 30, 32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0373

Hole No. CP05-EAARS-CB-0373

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.7 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-21.7	33.4					-21.7	
						-22.3	
			SAND: white, fine grained, calcitic and quartz, little silt, trace fine gravel, odor (sulphides), medium dense		8	SPT; SP; poorly graded sand; Moisture=26%; Drill bit chattering from 30 to 34 ft; then relatively easy drilling	11 8 8
-23.8	35.5		End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836, 1 OCT 72 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0373

Hole No. CP05-EAARS-CB-0374

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N758239.4, E765844.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0374	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/1/2005 Completed 9/1/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: B. Levesque

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.4	0.0						
			SAND: brown grey, fine to medium gradation, little silt, little fine to coarse gravel, subangular, dry, medium dense (FILL)		1	11.4 SPT 9.4	8, 7, 14
			same as above		2	SPT 7.4	11, 6, 5
			SAND: grey brown, fine to medium gradation, little gravel, clay in seams, shells, moderately dense, moist		3	SPT 5.9	3, 14, 30
5.9	5.5						
			LIMESTONE: light tan-grey with rust staining, hard, moderately strong, fine to coarse grained, fossiliferous, slightly porous	53 (RQD 26%)	1	HQ coring 0.9	
			LIMESTONE: grey to white, medium to coarse grained, fossiliferous, very vuggy, moderately hard to soft, moderately strong to weak, very porous to porous				
				10 (RQD 0%)	2	HQ coring; weakly cemented sand and gravel	

0 2 4 6 8 10 12 14

(continued)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0374

Hole No. CP05-EAARS-CB-0374

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.4 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.6	15.0					-3.6	
-4.1	15.5					-4.1	
			SAND: white to grey, calcitic, fine to coarse grained, little silt, little to some fine grade, subangular to subrounded, loose		4	SPT	3, 5, 4 (16, 18)
						-7.6	
			SAND: grey to white, calcitic, fine to coarse grained, little fine gravel, little fine quartz sand, dense, subrounded to subangular		5	SPT	20, 18, 18 (20, 22)
						-12.6	
					6	SPT	25/0" (24, 26, 28)
						-17.6	
			SAND: grey to white, calcitic, fine to medium graded, trace fine gravel, little fine quartz sand, subangular to subrounded, little shells, little to trace silt, loose, moist and wet, loose to medium dense		7	SPT; much easier drilling below 27 ft	16, 5, 5 (30, 32)

(continued)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0374

Hole No. CP05-EAARS-CB-0374

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.4 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.0	33.4					-22.0	
			Same as above			-22.6	
					8	SPT	3
							5
-24.1	35.5						7
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0374

Hole No. CP05-EAARS-CB-0375

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N762103.3, E763178.5 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0375	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/6/2005 Completed 9/6/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.2 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: N. Holst

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.2	0.0						
7.7	3.5		ROADFILL: Not sampled.				
6.7	4.5		PEAT: Not sampled.			6.7	
2.7	8.5		LIMESTONE (Caprock): tan to light gray, granular, grading hard to medium soft from top to bottom of the layer, fractured, moldic, vuggy, some fractures filled with calcereous sand.	58 (RQD 28%)	1	HQ coring	
			SAND: light gray, loose, fineto coarse grained, well graded, angular, trace of limestone gravel.			1.7	
					1	SPT	13, 5, 3
			Grades more (some) calcereous gravel.			-2.8	
					2	SPT	5, 6

(continued)

0 2 4 6 8 10 12 14

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0375

Hole No. CP05-EAARS-CB-0375

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.2 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.8	15.0					-3.8	
			Grades to very dense.				4, 16, 18
						-7.8	
					3	SPT	10, 10, 41, 20, 22
-12.3	23.5						
			Grades more gravel, medium dense.			-12.8	
					4	SPT	15, 10, 10, 24, 26, 28
-17.3	28.5					-17.3	
			SAND (Caloosahatchee Formation): gray, medium dense, poorly graded, fine grained, quartz, trace tan shell.			-17.8	
					5	Caloosahatchee Formation SPT	5, 6, 7, 30
			Grades more (some) tan shell - medium grained, subangular.				32

(continued)

MAR 71 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0375

Hole No. CP05-EAARS-CB-0375

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.2 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.2	33.4					-22.2	
						-22.8	
					6	SPT	8 / 8 / 8
-24.3	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0375

Hole No. CP05-EAARS-CB-0376

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N758795.1, E760203.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0376	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/2/2005 Completed 9/2/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: B. Levesque

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.5	0.0						
6.0	1.5		Black to light		1	7.5 SPT 5.5	8, 8, 5
3.0	4.5		SAND: grey-white, calcitic, fine to medium grained, subangular to subrounded, little to trace fine gravel, trace to little silt, clay, medium dense, moist		2	3.5 SPT 3.0	14, 7, 7
-1.5	9.0		LIMESTONE: white, medium to coarse grained, porous, moderately hard, moderately strong, thinly bonded, vuggy, fossileferous	73 (RQD 73%)	1	SPT; refusal at 4.5 ft- top of caprock HQ coring	4, 50/4"
			SAND: white, fine to medium grained, little fine gravel, calcitic, shelly, subangular to subrounded, moist, medium dense		4	-2.0 SPT -6.5	2, 4, 7
			Same as above, except trace fine quartz sand, very dense		5	SPT; Hard drilling, bit	16, 50/6"

(continued)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0376

Hole No. CP05-EAARS-CB-0376

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.5 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.5	15.0					-7.5	
						chattering from 16 ft to 22 ft	16
							18
						-11.5	
			Same as above				50/6"
					6	SPT	20
-14.5	22.0						
			GRAVEL: grey, fine to coarse gradation, calcitic, angular to subangular, little fine to medium sand, little silt, trace fine quartz, sand at the top of the spoon				22
						-16.5	
							23
					7	SPT	33
							15
							24
							26
-19.5	27.0					-19.5	
			SAND: light grey to brown, fine graded, quartzetic, little to trace shells, trace silt, medium to dense, moist				
						Strata change at 27 ft	28
						-21.5	
							4
					8	SPT	7
							12
							30
							32

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0376

Hole No. CP05-EAARS-CB-0376

DRILLING LOG (Cont.Sheet)	Elevation Top of Hole: 7.5	Sheet 3 of 3 Sheets
Project: EAA Reservoir A-1	Installation	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-25.9	33.4					-25.9	
						-26.5	
					9	SPT	8 13 10
-28.0	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0376

Hole No. CP05-EAARS-CB-0377

DRILLING LOG	Division:	Installation:	Sheet 1 of 3 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N756371, E773911.6 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0377	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/6/2005 Completed 9/6/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.4 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 35.5 ft	19. Inspector: K. Jones

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.4	0.0						
7.9	3.5		ROADFILL: Not sampled.				
5.9	5.5		PEAT: Not sampled				
			LIMESTONE (Caprock): tan to light orange, hard, fractured, dense, granular, vuggy, fractures filled with gray silt, becomes softer with increasing depth.	60 (RQD 40%)	1	HQ coring; UCS=3880psi	
			Grades tan to gray, hard, less fractured and vuggy.	40 (RQD 20%)	2	HQ coring; UCS=2250psi	
-3.1	14.5		Gravelly SAND: gray, medium dense.				

(continued)

PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0377

Hole No. CP05-EAARS-CB-0377

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.4 | Sheet 2 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.6	15.0					-3.6	
			well graded, angular, calcereous, some shell and silt.			-4.1	
					1	SPT; SM; silty sand with gravel; Moisture=18%	4, 1, 23
-7.1	18.5		SAND: same as above but grades light gray and loose. Gravel grades out.			-7.6	
					2	SPT; SM; silty sand; Moisture=26%	6, 3, 3
-11.1	22.5		Grades same as Gravelly Sand above, but with less (trace) silt.			-12.6	
					3	SPT; SM; silty sand with gravel; Moisture=19%	44, 16, 12
-16.1	27.5		Grades same as Sand above, but gray and very dense.			-17.6	
					4	SPT; SM; silty sand; Moisture=15%	21, 17, 50/0"
-21.1	32.5		Sandy GRAVEL (Caloosahatchee Formation): gray to dark gray, very			-21.1	

(continued)

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0377

Hole No. CP05-EAARS-CB-0377

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.4 | Sheet 3 of 3 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-22.0	33.4					-22.0	
			dense, well graded, angular, calcereous, some shell and quartz sand.			-22.6 Caloosahatchee Formation	50/6"
					5	SPT	
-24.1	35.5						
			End of Boring at 35.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

34 36 38 40 42 44 46 48 50

ENG FORM 1836, 1 OCT 85 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0377

Hole No. CP05-EAARS-CB-0378

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N758504.9, E760564.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0378	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/9/2005 Completed 9/9/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 10.9 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 12.5 ft	19. Inspector: K. Jones

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
10.9	0.0						
7.4	3.5		FILL: Not sampled.				
4.9	6.0		PEAT: Not sampled.			4.9	
1.4	9.5		LIMESTONE (Caprock): brown to gray, medium hard, fractured, fossiliferous, crystalline. Grades light brown, medium soft, oolitic, granular.	64 (RQD 35%)	1	HQ coring; soft coring at 9.5 ft	
-1.6	12.5		Gravelly SAND: gray to tan, very loose, well graded, calcereous, subangular, with some silt.		1	-0.1 SPT	1 1 1
			End of Boring at 12.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0378

Hole No. CP05-EAARS-CB-0378

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 10.9 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-4.1	15.0					-4.1	
						2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

16 18 20 22 24 26 28 30 32

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0378

Hole No. CP05-EAARS-CB-0379

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets
1. Project: EAA Reservoir A-1		10. Size and type of bit: 3" bit, Rotary Method	
2. Location: N769312.2, E775409.1 - NAD 1983		11. Datum for Elevation Shown: NAVD 1988	
3. Drilling Agency: Nodarse & Associates, Inc.		12. Manufacturer's Designation for Drill: CME-45B	
4. Hole No: CP05-EAARS-CB-0379		13. Total Number of Overburden Samples Taken: N/A	
5. Name of Driller: Ralph Smith		14. Total Number of Core Boxes: 1	
6. Direction of Hole ☒ Vertical ☐ Inclined		15. Elevation Ground Water: Not measured	
		16. Date Hole Started 9/7/2005 Completed 9/7/2005	
7. Thickness of Burden: N/A		17. Elevation Top of Hole: 8 (ft)	
8. Thickness of cap rock: N/A		18. Total Core Recovery for hole: N/A	
9. Depth of hole: 13.5 ft		19. Inspector: A.M. Noronha	

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.0	0.0						
6.5	1.5		Not Sampled.			6.5	
			LIMESTONE (Caprock): light gray to pale white, hard, fine to medium grained, quite porous, shelly.	16 (RQD 0%)	1	HQ coring	
						1.5	
					1	SPT	18 50/1"
			Grades moderately hard. Intermittant cemented sand layers.			0.0	
-1.5	9.5			54 (RQD 8%)	2	HQ coring; Caprock has cemented sand layers; One piece - 0.4 ft	
			SAND: greenish gray, medium dense, poorly graded, medium to coarse grained angular calcitic sand, wet.			-4.0	
					2	SPT	4 6 21
-5.5	13.5						
			End of Boring at 13.5'				

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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0379

Hole No. CP05-EAARS-CB-0379

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.0	15.0					-7.0	

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0379

Hole No. CP05-EAARS-CB-0380

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750090.8, E763879.1 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0380	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/17/2005 Completed 8/17/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 11.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 12 ft	19. Inspector: P. Petrey

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
11.6	0.0						
9.6	2.0		Road fill material		1	11.6 SPT 9.6	7, 3, 6
7.6	4.0		Peat (muck layer)		2	7.6 SPT	2, 2, 2
3.6	8.0		Broken Limestone - Top caprock		3	6.1 SPT	2, 11, 8
1.6	10.0		Soft 8 to 10 ft	88 (RQD 20%)	1	1.6 HQ coring; 5.5 ft-top of caprock	
-0.4	12.0		Hit hard layer again, 10 ft to 12 ft	88 (RQD 50%)	2	HQ coring	
			End of Boring at 12'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0380

Hole No. CP05-EAARS-CB-0380

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 11.6 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-3.4	15.0					-3.4	
						x 2" O.D.)	

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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0380

APPENDIX 2
SUPPLEMENTAL BORINGS AND PIEZOMETER INSTALLATION LOGS: 381-419

Hole No. CP05-EAARS-CB-0381

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N773961, E760078.9 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0381	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/11/2005 Completed 8/11/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.5 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 10 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.5	0.0						
2.5	5.0		LIMESTONE: light brown to white, hard, fine to medium grained, quite porous, shelly	38 (RQD 0%)	1	7.5 / 2.5	
-2.5	10.0		Cemented SAND: light grey, fine to medium grained, shells present	1 (RQD 0%)	2		
			End of Boring at 10'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93. 2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

0 2 4 6 8 10 12 14

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0381

Hole No. CP05-EAARS-CB-0382

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N750597.1, E783999.8 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-55
4. Hole No: CP05-EAARS-CB-0382	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Robert DeAngelis	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/24/2005 Completed 8/24/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 8 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 15 ft	19. Inspector: B. Levesque

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
8.0	0.0						
6.5	1.5		GRAVEL: tan gray, dense, fine to coarse grained, dense, subangular, trace silt, trace fine to coarse sand, well graded, subangular to subrounded.		1	8.0 SPT 6.0	20, 28, 23
4.5	3.5		PEAT: black, fibrous, moist, trace fine to medium calcitic sand.		2	SPT 4.0	6, 5, 3
2.5	5.5		GRAVEL: Grades as Gravel above, but angular to subangular.		3	SPT 2.5	10, 16, 30
0.0	8.0		GRAVEL (Caprock): grades as above.	5 (RQD 0%)	1	HQ coring; 5.5 ft- top of Caprock -2.0	
-7.0	15.0		LIMESTONE: tan white to white, soft to moderately hard, fine to medium grained, slightly porous, fossiliferous, weathered.	30 (RQD 26%)	2	HQ coring; broke through at 15 ft, softer soil below caprock	

0 2 4 6 8 10 12 14

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ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0382

Hole No. CP05-EAARS-CB-0382

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 8 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.0	15.0					-7.0	
			End of Boring at 15'			NOTES: 1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93. 2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)	

16 18 20 22 24 26 28 30 32

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE | PROJECT EAA Reservoir A-1 | HOLE NUMBER CP05-EAARS-CB-0382

Hole No. CP05-EAARS-CB-0383

DRILLING LOG	Division:	Installation:	Sheet 1 of 1 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N773629.4, E757955 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: Diedrich D-50
4. Hole No: CP05-EAARS-CB-0383	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 8/16/2005 Completed 8/16/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 9.1 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 11.5 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
9.1	0.0						
7.6	1.5		Peat, black, organic			7.6	
2.6	6.5		LIMESTONE: pale white to light grey, hard, fine grained, porous, shelly	38 (RQD 20%)	1	HQ coring; easy coring all the way	
-2.4	11.5		No recovery	0 (RQD 0%)	2	HQ coring	
			End of Boring at 11.5'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D. x 2" O.D.)

ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0383

Hole No. CP05-EAARS-CB-0384

DRILLING LOG	Division:	Installation:	Sheet 1 of 2 Sheets

1. Project: EAA Reservoir A-1	10. Size and type of bit: 3" bit, Rotary Method
2. Location: N757724.6, E783603.8 - NAD 1983	11. Datum for Elevation Shown: NAVD 1988
3. Drilling Agency: Nodarse & Associates, Inc.	12. Manufacturer's Designation for Drill: CME-45B
4. Hole No: CP05-EAARS-CB-0384	13. Total Number of Overburden Samples Taken: N/A
5. Name of Driller: Ralph Smith	14. Total Number of Core Boxes: 1
6. Direction of Hole ☒ Vertical ☐ Inclined	15. Elevation Ground Water: Not measured
	16. Date Hole Started 9/13/2005 Completed 9/13/2005
7. Thickness of Burden: N/A	17. Elevation Top of Hole: 7.6 (ft)
8. Thickness of cap rock: N/A	18. Total Core Recovery for hole: N/A
9. Depth of hole: 12 ft	19. Inspector: A.M. Noronha

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
7.6	0.0						
5.6	2.0		PEAT: Not sampled.			5.6	
-0.9	8.5		LIMESTONE (Caprock): light gray, hard, fine to medium grained, quite porous, fossiliferous, shelly.	24 (RQD 10%)	1	HQ coring; 1 piece - 0.5 ft 0.6	
-4.4	12.0		No recovery	24 (RQD 0%)	2	HQ coring	
			End of Boring at 12'				

NOTES:
1. Soils are field visually classified in accordance with the ASTM Designation: D 2488-93.

2. 140# hammer with 30" drop used on 2.0' splitspoon (1 3/8" I.D.

(continued)

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE

PROJECT	HOLE NUMBER
EAA Reservoir A-1	CP05-EAARS-CB-0384

Hole No. CP05-EAARS-CB-0384

DRILLING LOG (Cont.Sheet) | Elevation Top of Hole: 7.6 | Sheet 2 of 2 Sheets

Project: EAA Reservoir A-1 | Installation

ELEV. (ft)	DEPTH (ft)	LEGEND	CLASSIFICATION OF MATERIALS	CORE REC %	SAMPLE NUMBER	REMARKS	BLOWS/ 0.5'
-7.4	15.0					-7.4	
						x 2" O.D.)	

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22
24
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ENG FORM 1836, PREVIOUS EDITIONS ARE OBSOLETE

PROJECT: EAA Reservoir A-1 | HOLE NUMBER: CP05-EAARS-CB-0384