

8/18/98

TO: EARTH TECH

ATTN: TDDP

FR: DAN

**PILOT HOLE WELL DRILLING LOG**

**ETD - 1**

<b>PROJECT:</b> Earth Tech Exploratory Well and Development		<b>WELL NO:</b> <del>ETD-3</del>
<b>LOCATION:</b> Lot No. 10140-R19, Y-Seng Song Rd. Dededo, Guam		<b>DATE:</b> 07/30/98
<b>COORDINATES:</b> N 191.164.00 E 201.405.00		
<b>Ground Elevation :</b>	156.3 feet	<b>Drilling Rig :</b> CP 650
<b>Total Depth :</b>	505 feet	<b>Drilling Bit :</b> Tricone
<b>Borehole Diameter :</b>	12 in dia.	<b>Foam :</b> Baroid Quik Foam
		<b>Date Start:</b> 07/25/98
		<b>Date Finish:</b> 07/29/98

Depth Feet	Penetration Rate		Time min	Log	Material Description/Remarks	ELEV
	Start	Stop				
0-5	9:00	9:12	12		Light brown-white coralline limestone, moderately hard to very hard	
5-10	9:12	9:22	10			
10-15	9:22	9:31	9			
15-20	9:31	9:37	6			
20-25	9:37	9:49	12			
25-30	9:49	10:09	20			
30-35	10:09	10:16	7			
35-40	10:16	10:27	11			
40-45	10:27	10:39	12			
45-50	10:39	10:54	15			
50-55	10:54	11:04	10			
55-60	11:04	11:18	14			
60-65	11:18	11:28	10			
65-70	11:28	11:44	16			
70-75	11:44	11:53	9			
75-80	11:53	12:00	7			
80-85	12:00	12:09	9			
85-90	12:09	12:18	9			
90-95	1:53	2:03	10			
95-100	2:03	2:10	7			
100-105	2:10	2:19	9			
105-110	2:19	2:39	20			
110-115	2:39	2:46	7			
115-120	2:46	2:53	7			
120-125	2:53	2:57	4			
125-130	2:57	3:09	12			
130-135	3:09	3:16	7			
135-140	3:16	3:22	6			
140-145	3:22	3:29	7			
145-150	3:29	3:47	18			
150-155	3:47	3:59	12			
155-160	3:59	4:05	6			
160-165	4:05	4:11	6			

**PROJECT:** Earth Tech Exploratory Well and Development

**WELL NO:** [REDACTED]

**LOCATION:** Lot No. 10140-R19, Y-Seng Song Rd. Dededo, Guam

Depth Feet	Penetration Rate		Time min	Log	Material Description/Remarks
	Start	Stop			
165-170	4:11	4:26	15		
170-175	4:26	4:33	7		
175-180	4:33	4:41	8		
180-185	4:41	4:48	7		
185-190	4:48	5:08	20		
190-195	5:08	5:14	6		
195-200	5:14	5:21	7		
200-205	5:21	5:32	11		
205-210	8:34	8:39	5		Resumed drilling, 07/25/98
210-215	8:39	8:44	5		
215-220	8:44	8:52	8		
220-225	8:52	9:00	8		
225-230	9:00	9:18	18		
230-235	9:18	9:27	9		
235-240	9:27	9:35	8		
240-245	9:35	9:42	7		
245-250	9:42	9:54	12		
250-255	9:54	9:59	5		
255-260	9:59	10:06	6		
260-265	10:05	10:12	7		
265-270	10:12	10:27	15		
270-275	10:27	10:34	7		
275-280	10:34	10:39	5		
280-285	10:39	10:45	6		
285-290	10:45	11:01	16		
290-295	11:01	11:08	5		
295-300	11:08	11:15	9		
300-305	11:15	11:20	5		
305-310	11:20	3:30	10		
310-315	3:30	3:37	7		
315-320	3:37	3:43	6		
320-325	3:43	3:50	7		
325-330	3:50	4:00	10		
330-335	9:04	9:18	14		Resumed drilling, 07/27/98
335-340	9:18	9:25	7		
340-345	9:25	9:32	7		
345-350	9:32	9:52	20		
350-355	9:52	9:58	6		
355-360	9:58	10:08	10		



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# MARIANAS DRILLING, INC.

Water Well & Environmental Drilling Services

P.O. Box 8170 Tamuning, Guam 96931

Telephone: (671) 646-7710

Facsimile: (671) 646-6600

## LETTER OF TRANSMITTAL

To WERI  
Attn: Paul + Maureen

Date <u>1/21/99</u>	Job No.

GENTLEMEN:

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items.

COPIES	DATE	NO.	DESCRIPTION
<u>1</u>	<u>1/21/99</u>		<u>Soil Samples + Well Logging Log ETD-1A</u>

THESE ARE TRANSMITTED as checked below:

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> For approval | <input type="checkbox"/> Approved as submitted    | <input type="checkbox"/> Resubmit _____ copies for approval   |
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REMARKS: \_\_\_\_\_  
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COPY TO \_\_\_\_\_  
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SIGNED \_\_\_\_\_  
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*If enclosures are not as noted kindly notify us at once.*

## PILOT HOLE WELL DRILLING LOG

<b>PROJECT:</b> Earth Tech Exploratory Well and Development		<b>WELL NO:</b> ETD-1A
<b>LOCATION:</b> Swamp Road, Dededo Guam		<b>DATE:</b> 20 Jan. 1999
<b>COORDINATES:</b> Unknown		
Ground Elevation :	421.86	Drilling Rig : CP 650
Total Depth :	472 feet	Drilling Bit : Tricone
Borehole Diameter :	12 in dia.	Foam : Baroid Quik Foam
		Date Start: 1/06/99
		Date Finish: 1/19/99

Depth Feet	Penetration Rate Start	Penetration Rate Stop	Time min	Log	Material Description/Remarks	ELEV
0-5	10:25	10:35	10		Light Brown-white coralline limestone moderate hard to hard	
5-10	10:35	10:42	7			
10-15	10:42	10:49	7			
15-20	10:49	11:51	2			
20-25	11:51	11:58	7			
25-30	11:58	12:02	3			
30-35	12:02	12:09	7			
35-40	12:09	12:17	8			
40-45	12:17	12:37	10			
45-50	12:37	12:42	5			
50-55	12:42	12:47	5			
55-60	12:47	12:57	10			
60-65	1:02	1:13	11			
65-70	1:13	1:36	23			
70-75	1:36	1:47	11			
75-80	1:47	1:56	9			
80-85	1:56	2:04	8			
85-90	2:04	2:10	6		Hydraulic hose busted, fixed	
90-95	4:55	5:01	6			
95-100	5:01	5:13	12			
100-105	5:13	5:24	11			
105-110	5:24	5:34	10			
110-115	5:34	5:44	10			
115-120	10:00	10:10	10		Resumed drilling, 1/7/99	
120-125	10:10	10:19	9			
125-130	10:19	10:35	16			
130-135	10:35	10:48	13			
135-140	10:48	10:56	8			
140-145	11:00	11:16	16			
145-150	11:16	11:28	12			
150-155	11:28	11:39	11			
155-160	11:45	11:53	8			
160-165	11:53	12:12	19			

**PROJECT:** Earth Tech Exploratory Well and Development

**WELL NO:** ETD-1A

**LOCATION:** Swamp Road Dededo, Guam

Depth Feet	Penetration Rate		Time min	Log	Material Description/Remarks
	Start	Stop			
165-170	12:12	12:23	11		
170-175	12:23	12:34	11		
175-180	12:34	12:42	8		
180-185	12:42	12:51	9		
185-190	12:51	1:04	13		
190-195	4:00	4:07	7		
195-200	4:07	4:15	8		
200-205	4:15	4:23	8		
205-210	4:23	4:31	8		
210-215	4:31	4:39	8		
215-220	4:49	4:54	5		
220-225	4:54	5:01	7		
225-230	5:01	5:09	8		
230-235	5:09	5:17	8		
235-240	5:17	5:24	7		Breakdown on drilling rig
240-245	10:30	10:40	10		Resumed Drilling, 1/08/99
245-250	10:40	10:49	9		
250-255	10:49	10:56	7		
255-260	10:56	11:05	9		
260-265	11:05	11:13	8		
265-270	11:23	11:31	8		
270-275	11:31	11:43	12		
275-280	11:43	12:15	32		Very hard from 275-280 feet
280-285	12:15	12:25	10		
285-290	12:25	12:34	9		
290-295	12:45	12:52	7		
295-300	12:52	1:01	9		
300-305	1:01	1:14	13		
305-310	1:14	1:25	11		
310-315	1:25	1:36	11		
315-320	1:46	1:53	7		
320-325	1:53	2:02	9		
325-330	2:02	2:09	7		
330-335	2:09	2:15	6		
335-340	2:15	2:27	12		
340-345	3:31	3:22	11		
345-350	3:22	3:46	24		
350-355	3:46	3:56	10		
355-360	3:56	4:03	7		

