

MARLANAS DRILLING, INC. ~~NOVI, MI~~

WELL DRILLING LOG

PROJECT: Earth Tech Exploratory Wells & Development**WELL NO:** Y-5A**LOCATION:** Lot No. 16-2, Tract 10416, Perez Acres, Yigo**DATE:** 12/28/99**COORDINATES:** Unknown**Ground Elevation :** 420.098 feet**Drilling Rig :** CP 650**Date Start:** 12/13/99**Total Depth :** 470 feet**Drilling Bit :** Tricone**Date Finish:** 23-Dec-99**Borehole Diameter :** 12 in dia.**Foam :** Baroid Quik Foam

Depth Feet	Penetration Rate Start	Stop	Time min	Log	Material Description/Remarks	EL	113
0-5	3:13	3:25	12		Light brown-white coralline limestone moderately hard to hard		
5-10	3:25	3:37	12				
10-15	3:37	3:47	10				
15-20	3:47	3:56	9				
20-25	4:24	4:37	13				
25-30	4:37	4:47	10				
30-35	4:47	4:58	11				
35-40	4:58	5:09	11				
40-45	10:36	10:49	13		Resumed drilling, 12/14/99		
45-50	10:49	11:00	11				
50-55	11:00	11:09	9				
55-60	11:09	11:18	9				
60-65	11:27	11:36	9		Rig broke down, removed drill head and brought to yard for repair		
65-70	11:06	1:15	9				
70-75	1:15	1:24	9				
75-80	1:24	1:31	7				
80-85	1:36	1:45	8		Resumed drilling @ 65 feet, 12/16/99		
85-90	1:45	2:18	33		Very hard from 85-100 feet		
90-95	2:18	3:12	54				
95-100	10:13	11:09	96		Resumed drilling, 12/17/99		
100-105	11:18	11:35	17		Lost drilling fluid circulation @ 105 feet		
105-110	11:35	11:42	7				
110-115	11:42	11:46	4				
115-120	11:46	11:51	5				
120-125	3:18	3:22	4				
125-130	3:22	3:30	8		Regained drilling fluid circulation @ 130 feet		
130-135	3:30	3:37	7				
135-140	3:37	3:42	5				
140-145	3:51	3:54	3		Lost drilling fluid circulation @ 140 feet		
145-150	3:54	3:58	4				
150-155	3:58	4:03	5				
155-160	4:03	4:11	8				
160-165	4:14	4:20	6				

WELL DRILLING LOG CONTINUED

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Depth Feet	Penetration Rate		Time min	Log	Material Description/Remarks
	Start	Stop			
165-170	4:20	4:31	9		
170-175	4:31	4:36	5		
175-180	4:36	4:41	5		
180-185	4:47	4:51	4		
185-190	4:51	4:59	8		
190-195	4:59	5:06	7		
195-200	5:06	5:17	11		
200-205	9:09	9:14	5		
205-210	9:14	9:19	5		
210-215	9:19	9:27	8		
215-220	9:27	9:32	5		Resumed drilling, 12/20/99
220-225	9:41	9:46	5		
225-230	9:46	9:52	6		
230-235	9:52	10:00	8		
235-240	10:00	10:12	12		
240-245	10:19	10:22	3		
245-250	10:22	10:26	4		
250-255	10:26	10:33	7		
255-260	10:33	10:39	6		
260-265	1:57	2:08	11		Regained drilling fluid circulation @ 265 feet
265-270	2:08	2:19	11		
270-275	2:19	2:26	7		
275-280	2:26	2:29	3		
280-285	2:46	2:54	8		
285-290	10:49	11:00	11		Resumed drilling, 12/21/99
290-295	11:00	11:06	6		
295-300	11:06	11:20	14		
300-305	11:34	11:39	5		
305-310	11:39	11:53	14		
310-315	11:53	12:01	8		
315-320	12:01	12:10	9		
320-325	2:41	2:49	8		
325-330	2:49	2:58	9		
330-335	2:58	3:04	6		
335-340	3:04	3:12	8		
340-345	3:21	3:29	8		
345-350	3:29	3:36	7		
350-355	3:36	3:41	5		
355-360	3:41	3:48	7		

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