

COPY

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Environmental & Water Well Drillers
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YIELD AND DRAWDOWN TEST REPORT
AAFB MW-7A

Page 1-7

LOCATION: COORDINATES:	<u>N660982.6327</u>	STATIC WATER LEVEL	<u>365.50 feet</u>
	<u>E371762.4123</u>		
SURFACE ELEVATION:	<u>367.67 feet</u>	RATE OF PUMPING:	<u>380 GPM</u>
DEPTH OF WELL:	<u>407.60 feet</u>	SIZE OF WEIR(ORIFICE):	<u>4 inches</u>
PUMP SIZE AND MAKE:	<u>7-Stage</u>	SIZE OF EDUCATOR PIPE:	<u>4 inches</u>
DRIVER:	<u>75 HP</u>	METHOD OF MEASURING WATER LEVEL:	<u>Electronic Water Level Meter</u>
DATE PUMPING STARTED:	<u>8/29/2011</u>	AVERAGE DRAWDOWN:	<u>23.51 feet</u>
DATE PUMPING FINISHED:	<u>9/1/2011</u>	TIME FOR STABILIZATION:	<u>47.0 hours</u>
PUMP INTAKE SETTING:	<u>-27.0 feet</u>	TIME FOR 90% RECOVERY:	<u>2.0 minutes</u>
DEPTH TO TOP OF SCREEN:	<u>-0 feet</u>	TIME FOR 100% RECOVERY:	<u>4.0 minutes</u>
SIZE SCREEN OPENING(S):	<u>0.100-inch</u>		

REMARKS (SUCH AS QUALITY OF WATER MAXIMUM DRAWDOWN PERSONNEL):

AMOUNT OF SAND 1ST HR OF PUMPING _____
AMOUNT OF SAND 2ND HR OF PUMPING _____
NUMER AND LOCATION-OBSERVATION WELLS:

Water samples taken to WERI Laboratory for chloride and conductivity testing

CONTRACTOR MARIANAS DRILLING, INC.

TYPE OF TEST 72 hr. pump test

MEASURING POINT: Top of PVC sounding tube

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SEP 09 2011
Guam
Environmental
Protection Agency

YIELD AND DRAWDOWN TEST REPORT

AAFB MW-7A

Page 2 of 7

File: SWL 365.50 feet

Date: 8/29/2011

TIME (actual)	Time Since Pumping Start/Stop (min)	Water Level Reading (ft)	Drawdown/ Recovery (ft)	Pumping Rate (gpm)	Conducti- vity (μ S)	Chloride (mg/l)	Remarks
72 HOUR PUMP TEST							
10:00AM	0	365.50					
	1	376.16	10.66	280			
	2	376.55	11.05	280	542	41.8	Sample # 1
	3	376.80	11.30	280			
	4	376.62	11.12	280			
	5	376.68	11.18	280			
	6	376.74	11.24	280			
	7	376.76	11.26	280			
	8	376.81	11.31	280			
	9	376.83	11.33	280			
	10	376.84	11.34	280			
	12	376.87	11.37	280			
	14	376.95	11.45	280			
	16	376.99	11.49	280			
	18	376.97	11.47	280			
	20	376.94	11.44	280			
	22	376.93	11.43	280			
	24	376.94	11.44	280			
	26	376.95	11.45	280			
	28	376.95	11.45	280			
	30	376.93	11.43	280			
	40	376.98	11.48	280			
	50	377.02	11.52	280			
11:00AM	60	377.05	11.55	280	545	42.8	Sample # 2
12:00PM	120	377.22	11.72	280			
1:00PM	180	377.27	11.77	280	546	43.6	Sample # 3
2:00PM	240	377.43	11.93	280			
3:00PM	300	377.41	11.91	280	551	41.8	Sample # 4
4:00PM	360	377.38	11.88	280			
5:00PM	420	377.42	11.92	280	551	43.8	Sample # 5
6:00PM	480	377.56	12.06	280			
6:01PM	1	380.20	14.70				
	2	383.11	17.61		553	44.4	Sample # 6
	3	388.62	23.12				
	4	384.88	19.38	330			
	5	384.88	19.38	330			
	6	386.35	20.85	360			
	7	386.40	20.90	360			
	8	386.60	21.10	360			
	9	386.71	21.21	360			
	10	386.67	21.17	360			

YIELD AND DRAWDOWN TEST REPORT
AAFB MW-7A

Page: 3 of 7
Date: 8/29-30/11

File: SWL 365.50 feet

TIME (actual)	Time Since Pumping Start/Stop (min)	Water Level Reading (ft)	Drawdown/ Recovery (ft)	Pumping Rate (gpm)	Conducti- vity (μ S)	Chloride (mg/l)	Remarks
	15	388.30	23.10	380			
	20	388.71	23.21	380			
	25	382.95	17.45	330			
	30	381.57	16.07	330			
	35	381.30	15.80	330			
	40	381.56	16.06	330			
	45	381.43	15.93	330			
	50	381.41	15.91	330			
	55	381.53	16.03	330			
7:00PM	60	381.64	16.14	330			
7:01PM	1	389.01	23.51	380			
	2	389.07	23.57	380	559	45.1	Sample # 7
	3	389.05	23.55	380			
	4	389.05	23.55	380			
	5	389.05	23.55	380			
	6	389.05	23.55	380			
	7	389.05	23.55	380			
	8	389.05	23.55	380			
	9	389.05	23.55	380			
	10	389.05	23.55	380			
	12	389.05	23.55	380			
	14	389.05	23.55	380			
	16	389.05	23.55	380			
	18	389.05	23.55	380			
	20	389.05	23.55	380			
	22	389.05	23.55	380			
	24	389.05	23.55	380			
	26	389.05	23.55	380			
	28	389.05	23.55	380			
	30	389.05	23.55	380			
	40	389.05	23.55	380			
	50	389.05	23.55	380			
8:00PM	60	389.05	23.55	380	559	45.6	Sample # 8
9:00PM	120	389.05	23.55	380			
10:00PM	180	389.05	23.55	380	561	44.7	Sample # 9
11:00PM	240	389.05	23.55	380			
12:00AM	300	389.05	23.55	380	559	44.8	Sample # 10
1:00AM	360	389.05	23.55	380			
2:00AM	420	389.05	23.55	380	562	46.2	Sample # 11
3:00AM	480	389.05	23.55	380			
3:01AM	1	388.97	23.47				
	2	388.90	23.40		564	45.9	Sample # 12
	3	388.89	23.39				

YIELD AND DRAWDOWN TEST REPORT
AAFB MW-7A

Page: 4 of 7
Date: 8/30/2011

File: SWL 365.50 feet

TIME (actual)	Time Since Pumping Start/Stop (min)	Water Level Reading (ft)	Drawdown/ Recovery (ft)	Pumping Rate (gpm)	Conductivity (μ S)	Chloride (mg/l)	Remarks
	4	388.13	23.63				
	5	386.53	21.03	330			
	6	386.17	20.67	330			
	7	385.68	20.18	330			
	8	385.60	20.10	330			
	9	385.12	19.62	330			
	10	384.88	19.38	330			
	15	384.26	18.76	330			
	20	384.33	18.83	330			
	25	384.14	18.64	330			
	30	384.20	18.70	330			
	35	384.22	18.72	330			
	40	384.25	18.75	330			
	45	384.25	18.75	330			
	50	384.29	18.79	330			
	55	384.35	18.85	330			
4:00AM	60	384.38	18.88	330			
4:01AM	1	377.90	12.40	280			
	2	377.58	12.08	280	563	47.8	Sample # 13
	3	377.58	12.08	280			
	4	377.45	11.95	280			
	5	377.45	11.95	280			
	6	377.45	11.95	280			
	7	377.46	11.96	280			
	8	377.47	11.97	280			
	9	377.48	11.98	280			
	10	377.49	11.99	280			
	12	377.59	12.09	280			
	14	377.54	12.04	280			
	16	377.60	12.10	280			
	18	377.62	12.12	280			
	20	377.60	12.10	280			
	22	377.60	12.10	280			
	24	377.60	12.10	280			
	26	377.60	12.10	280			
	28	377.60	12.10	280			
	30	377.60	12.10	280			
	40	377.60	12.10	280			
	50	377.60	12.10	280			
5:00AM	60	377.60	12.10	280			
6:00AM	120	377.60	12.10	280	563	46.9	Sample # 14
7:00AM	180	377.66	12.16	280			
8:00AM	240	377.60	12.10	280	564	44.8	Sample # 15
9:00AM	300	377.60	12.10	280			

YIELD AND DRAWDOWN TEST REPORT
AAFB MW-7A

Page: 5 of 7
Date: 8/30-31/11

File: SWL 365.50 feet

TIME (actual)	Time Since Pumping Start/Stop (min)	Water Level Reading (ft)	Drawdown/ Recovery (ft)	Pumping Rate (gpm)	Conducti- vity (μ S)	Chloride (mg/l)	Remarks
10:00AM	360	377.68	12.18	280	564	46.7	Sample # 16
11:00AM	420	377.60	12.10	280	565	46.2	Sample # 17
12:00PM	480	377.60	12.10	280			
12:01PM	1	389.13	23.63	390			
	2	389.12	23.62	390	567	47.8	Sample # 18
	3	389.12	23.62	390			
	4	389.12	23.62	390			
	5	389.07	23.57	390			
	6	389.01	23.51	390			
	7	389.01	23.51	390			
	8	389.01	23.51	390			
	9	389.01	23.51	390			
	10	389.01	23.51	390			
	12	389.01	23.51	390			
	14	389.01	23.51	390			
	16	389.01	23.51	390			
	18	389.01	23.51	390			
	20	389.01	23.51	390			
	22	389.01	23.51	390			
	24	389.01	23.51	390			
	26	389.01	23.51	390			
	28	389.01	23.51	390			
	30	389.01	23.51	390			
	40	389.01	23.51	390			
	50	389.01	23.51	390			
1:00PM	60	389.01	23.51	390			
2:00PM	120	389.01	23.51	390	570	47.6	Sample # 19
3:00PM	180	389.01	23.51	390			
4:00PM	240	389.01	23.51	390	570	48.6	Sample # 20
5:00PM	300	389.01	23.51	390			
6:00PM	360	389.01	23.51	390	570	48.1	Sample # 21
7:00PM	420	389.01	23.51	390			
8:00PM	480	389.01	23.51	390	570	49.6	Sample # 22
9:00PM	540	389.01	23.51	390			
10:00PM	600	389.01	23.51	390	580	48.7	Sample # 23
11:00PM	660	389.02	23.52	360			
12:00AM	720	389.01	23.51	370	572	47.5	Sample # 24
1:00AM	780	389.01	23.51	370			
2:00AM	840	389.01	23.51	370			
3:00AM	900	389.01	23.51	370			
4:00AM	960	389.01	23.51	370	574	47.5	Sample # 25
5:00AM	1020	389.01	23.51	370			
6:00AM	1080	389.01	23.51	370			
7:00AM	1140	389.01	23.51	370			

YIELD AND DRAWDOWN TEST REPORT
AAFB MW-7A

Page: 6 of 7
Date: 8/31-9/1/11

File: SWL 365.50 feet

TIME (actual)	Time Since Pumping Start/Stop (min)	Water Level Reading (ft)	Drawdown/ Recovery (ft)	Pumping Rate (gpm)	Conducti- vity (μ S)	Chloride (mg/l)	Remarks
8:00AM	1200	389.01	23.51	370	574	50.1	Sample # 26
9:00AM	1260	389.01	23.51	370			
10:00AM	1320	389.01	23.51	370			
11:00AM	1380	389.01	23.51	370			
12:00PM	1440	389.01	23.51	370	575	48.5	Sample # 27
1:00PM	1500	389.01	23.51	370			
2:00PM	1560	389.01	23.51	370			
3:00PM	1620	389.01	23.51	370			
4:00PM	1680	389.01	23.51	370	577	49.0	Sample # 28
5:00PM	1740	389.01	23.51	380			
6:00PM	1800	389.01	23.51	380			
7:00PM	1860	389.01	23.51	380			
8:00PM	1920	389.01	23.51	380	577	50.2	Sample # 29
9:00PM	1980	389.01	23.51	380			
10:00PM	2040	389.01	23.51	380			
11:00PM	2100	389.01	23.51	380			
12:00AM	2160	389.01	23.51	380	578	52.2	Sample # 30
1:00AM	2220	389.01	23.51	380			
2:00AM	2280	389.01	23.51	380			
3:00AM	2340	389.01	23.51	380			
4:00AM	2400	389.01	23.51	380	579	51.3	Sample # 31
5:00AM	2460	389.01	23.51	380			
6:00AM	2520	389.01	23.51	380			
7:00AM	2580	389.01	23.51	380			
8:00AM	2640	389.01	23.51	380	579	49.5	Sample # 32
9:00AM	2700	389.01	23.51	380			
10:00AM	2760	389.01	23.51	380	579	51.1	Sample # 33
	RECOVERY						
	0						
10:01AM	1		362.08				
	2		365.86				
	3		365.58				
	4		365.50				
	5		365.50				
	6		365.50				
	7		365.50				
	8		365.37				
	9		365.38				
	10		365.46				
	15		365.50				
	20		365.50				
	25		365.50				
	30		365.50				



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Water and Environmental Research Institute
of the Western Pacific

September 6, 2011

Marianas Drilling, Inc.
136 Tun Felix Camacho St.
Tamuning, Guam 96913

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Fax: 646 - 6600

Thirty-three samples were delivered to the WERI lab on 2 Sept. 2011.

Samples were from AAFB Well MW-7A, Marbo Wells, Yigo.

Comments: 72 hr. pump test.

Sample Location ID	Date Collected	Time Collected	Chloride mg/L	Conductivity µS
Sample #1	8/29/2011	10:02 AM	41.8	542
Sample #2	8/29/2011	11:02 AM	42.8	545
Sample #3	8/29/2011	1:02 PM	43.6	546
Sample #4	8/29/2011	3:02 PM	41.8	551
Sample #5	8/29/2011	5:02 PM	43.8	551
Sample #6	8/29/2011	6:02 PM	44.4	553
Sample #7	8/29/2011	7:02 PM	45.1	559
Sample #8	8/29/2011	8:02 PM	45.6	559
Sample #9	8/29/2011	10:02 PM	44.7	561
Sample #10	8/30/2011	12:02 AM	44.8	559
Sample #11	8/30/2011	2:02 AM	46.2	562
Sample #12	8/30/2011	3:02 AM	45.9	564

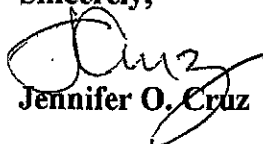


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Sample Location ID	Date Collected	Time Collected	Chloride mg/L	Conductivity µS
Sample #13	8/30/2011	4:02 AM	47.8	563
Sample #14	8/30/2011	6:02 AM	46.9	563
Sample #15	8/30/2011	8:02 AM	44.8	564
Sample #16	8/30/2011	10:02 AM	46.7	564
Sample #17	8/30/2011	11:02 AM	46.2	565
Sample #18	8/30/2011	12:02 PM	47.8	567
Sample #19	8/30/2011	2:02 PM	47.6	570
Sample #20	8/30/2011	4:02 PM	48.6	570
Sample #21	8/30/2011	6:02 PM	48.1	570
Sample #22	8/30/2011	8:02 PM	49.6	570
Sample #23	8/30/2011	10:02 PM	48.7	580
Sample #24	8/31/2011	12:02 AM	47.5	572
Sample #25	8/31/2011	4:02 AM	47.5	574
Sample #26	8/31/2011	8:02 AM	50.1	574
Sample #27	8/31/2011	12:02 PM	48.5	575
Sample #28	8/31/2011	4:02 PM	49	577
Sample #29	8/31/2011	8:02 PM	50.2	577
Sample #30	9/1/2011	12:02 AM	52.2	578
Sample #31	9/1/2011	4:02 AM	51.3	579
Sample #32	9/1/2011	8:02 AM	49.5	579
Sample #33	9/1/2011	10:02 AM	51.1	579

Sincerely,


Jennifer O. Cruz

Page 2 of 2