

COPY

MARIANAS DRILLING, INC.
Environmental & Water Well Drillers
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YIELD AND DRAWDOWN TEST REPORT
AAFB MW-5A

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LOCATION: COORDINATES:	Unknown	STATIC WATER LEVEL	415.40 feet
	Unknown		
SURFACE ELEVATION:	Unknown	RATE OF PUMPING:	200 GPM
DEPTH OF WELL:	454.0 feet	SIZE OF WEIR(ORIFICE):	4 inches
PUMP SIZE AND MAKE:	10-Stage	SIZE OF EDUCATOR PIPE:	4 inches
DRIVER:	50 HP	METHOD OF MEASURING WATER LEVEL:	
DATE PUMPING STARTED:	2/15/2010	Electronic Water Level Meter	
DATE PUMPING FINISHED	2/16/2010	AVERAGE DRAWDOWN:	0.90 feet
PUMP INTAKE SETTING:	-11.10 feet	TIME FOR STABILIZATION:	6.0 hours
DEPTH TO TOP OF SCREEN:	n/a	TIME FOR 90% RECOVERY:	1.0 minute
SIZE SCREEN OPENING(S):	n/a	TIME FOR 100% RECOVERY:	9.0 minutes
		REMARKS (SUCH AS QUALITY OF	
		WATER MAXIMUM DRAWDOWN	
		PERSONNEL):	
AMOUNT OF SAND 1ST HR OF PUMPING		Water samples taken to WERI Laboratory for	
AMOUNT OF SAND 2ND HR OF PUMPING		chloride and conductivity testing	
NUMER AND LOCATION-OBSERVATION WELLS:			

CONTRACTOR MARIANAS DRILLING, INC.

TYPE OF TEST 24 hr. pump test
MEASURING POINT: Top of PVC sounding tube

RECEIVED
FEB 19 2010

HRJG
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Date: 2/15/2010

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
4-hr. Step-Drawdown Test							
1:00 PM	0	415.40			155.2	39.9	Sample # 1
	1	418.18	2.78				Adjust gate valve
	2	417.15	1.75				to 50 gpm
	3	416.26	0.86	50			
	4	416.14	0.74	50			
	5	416.15	0.75	50			
	6	415.89	0.49	50			
	7	415.82	0.42	50			
	8	415.72	0.32	50			
	9	415.63	0.23	50			
	10	415.62	0.22	50			
	15	415.66	0.26	50			
	20	416.65	0.25	50			
	25	415.65	0.25	50			
	30	416.65	0.25	50			
	35	415.64	0.24	50			
	40	415.62	0.22	50			
	45	415.62	0.22	50			
	50	415.62	0.22	50			
	55	415.62	0.22	50			
2:00 PM	1 HR	415.62	0.22	50	150.0	40.3	Sample # 2
	1	416.24	0.84				Adjust gate valve
	2	415.78	0.38	100			to 100 gpm
	3	415.78	0.38	100			
	4	415.72	0.32	100			
	5	415.89	0.49	100			
	6	415.88	0.48	100			
	7	415.87	0.47	100			
	8	415.87	0.47	100			
	9	415.86	0.46	100			
	10	415.87	0.47	100			
	15	415.85	0.45	100			
	20	415.85	0.45	100			
	25	415.84	0.44	100			
	30	415.84	0.44	100			
	35	415.81	0.41	100			
	40	415.79	0.39	100			
	45	415.77	0.37	100			
	50	415.76	0.36	100			
	55	415.76	0.36	100			
3:00 PM	2 HR	415.76	0.36	100	155.1	40.6	Sample # 3
	1	415.15	0.25				Adjust gate valve
	2	415.95	0.55	150			to 150 gpm

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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
	3	416.38	0.98	150			
	4	415.86	0.46	150			
	5	416.13	0.73	150			
	6	416.12	0.72	150			
	7	416.11	0.71	150			
	8	416.05	0.65	150			
	9	416.04	0.64	150			
	10	416.03	0.63	150			
	15	416.02	0.62	150			
	20	416.01	0.61	150			
	25	415.99	0.59	150			
	30	415.98	0.58	150			
	35	415.97	0.57	150			
	40	415.96	0.56	150			
	45	415.94	0.54	150			
	50	415.92	0.52	150			
	55	415.92	0.52	150			
4:00 PM	3 HR	415.92	0.52	150	152.9	40.3	Sample # 4
	1	416.95	1.55				Adjust gate valve
	2	416.60	1.20				to 200 gpm
	3	416.43	1.03				
	4	416.42	1.02				
	5	416.38	0.98	200			
	6	416.37	0.97	200			
	7	416.38	0.98	200			
	8	416.37	0.97	200			
	9	416.37	0.97	200			
	10	416.36	0.96	200			
	15	416.34	0.94	200			
	20	416.33	0.93	200			
	25	416.36	0.96	200			
	30	416.37	0.97	200			
	35	416.36	0.96	200			
	40	416.36	0.96	200			
	45	416.36	0.96	200			
	50	416.34	0.94	200			
	55	416.34	0.94	200			
5:00 PM	4 HR	416.33	0.93	200			

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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
RECOVERY							
5:00 PM	0						
	1	415.83					
	2	415.39					
	3	415.51					
	4	415.58					
	5	415.59					
	6	415.58					
	7	415.58					
	8	415.58					
	9	415.58					
	10	415.58					
	15	415.58					
	20	415.58					
	25	415.58					
5:30 PM	30	415.58					
	35						
	40						
	45						
	50						
	55						
	60						
Start 24-hr. Pump Test							
5:30 PM	0				156.0	40.9	Sample # 5
	1	416.48	1.08				Adjust gate valve
	2	416.22	0.82				to 200 gpm
	3	415.92	0.52				
	4	417.18	2.40				
	5	417.15	1.75				
	6	416.38	0.98	200			
	7	416.33	0.93	200			
	8	416.32	0.92	200			
	9	416.32	0.92	200			
	10	416.32	0.92	200			
	15	416.28	0.88	200			
	20	416.30	0.90	200			
	25	416.30	0.90	200			
	30	416.30	0.90	200			
	35	416.30	0.90	200			
	40	416.28	0.88	200			
	45	416.26	0.86	200			

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File:

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
	50	416.26	0.86	200			
	55	416.26	0.86	200			
6:30 PM	60	416.25	0.95	200	150.0	41.0	Sample # 6
	90	416.23	0.93	200			
7:30 PM	120	416.23	0.93	200	367.0	42.7	Sample # 7
	150	416.23	0.93	200			
8:30 PM	180	416.23	0.93	200	157.3	41.4	Sample # 8
	210	416.05	0.65	200			
9:30 PM	240	416.05	0.65	200	152.1	42.2	Sample # 9
	270	416.08	0.68	200			
10:30 PM	300	416.07	0.67	200	147.3	40.6	Sample # 10
	330	416.07	0.67	200			
11:30 PM	360	416.06	0.66	200	157.4	41.1	Sample # 11
	390	416.07	0.67	200			
12:30 AM	420	416.02	0.62	200	386.0	41.0	Sample # 12
	450	416.01	0.61	200			
1:30 AM	480	415.98	0.58	200	476.0	41.5	Sample # 13
	510	416.28	0.88	200			
2:30 AM	540	416.27	0.87	200	193.0	40.9	Sample # 14
	570	416.27	0.87	200			
3:30 AM	600	416.27	0.87	200	156.0	40.8	Sample # 15
	630	416.27	0.87	200			
4:30 AM	660	416.28	0.88	200	178.1	41.8	Sample # 16
	690	416.28	0.88	200			
5:30 AM	720	416.28	0.88	200	159.3	41.6	Sample # 17
	750	416.28	0.88	200			
6:30 AM	780	416.29	0.89	200			
	810	416.30	0.90	200			
7:30 AM	840	416.30	0.90	200	490.0	41.5	Sample # 18
	870	416.30	0.90	200			
8:30 AM	900	416.30	0.90	200			
	930	416.30	0.90	200			
9:30 AM	960	416.31	0.91	200	160.0	42.3	Sample # 19
	990	416.31	0.91	200			
10:30 AM	1020	416.31	0.91	200			
	1050	416.31	0.91	200			
11:30 AM	1080	416.30	0.90	200	160.4	43.0	Sample # 20
	1110	416.30	0.90	200			
12:30 PM	1140	416.30	0.90	200			
	1170	416.30	0.90	200			
1:30 PM	1200	416.35	0.95	200	159.4	43.3	Sample # 21
	1230	416.34	0.94	200			
2:30 PM	1260	416.33	0.93	200			
	1290	416.33	0.93	200			

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Water and Environmental Research Institute
 of the Western Pacific

February 18, 2010

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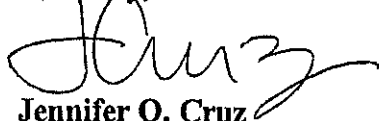
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Twenty-three samples were delivered to the WERI lab on 17 Feb 2010.
 Samples were from MW-5A, AAFB.

Sample Location ID	Chloride mg/L	Conductivity µS
Sample #1	39.9	155.2
Sample #2	40.3	150
Sample #3	40.6	155.1
Sample #4	40.3	152.9
Sample #5	40.9	156
Sample #6	41.0	150
Sample #7	42.7	367
Sample #8	41.4	157.3
Sample #9	42.2	152.1
Sample #10	40.6	147.3
Sample #11	41.1	157.4
Sample #12	41.0	386

Sample Location ID	Chloride mg/L	Conductivity µS
Sample #13	41.5	476
Sample #14	40.9	193
Sample #15	40.8	156
Sample #16	41.8	178.1
Sample #17	41.6	159.3
Sample #18	41.5	490
Sample #19	42.3	160
Sample #20	43.0	160.4
Sample #21	43.3	159.4
Sample #22	44.0	291
Sample #23	41.9	159.8
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Sincerely,


 Jennifer O. Cruz