

Appendix 5.3.1 Result of Field Water Quality Measurement

Result of Field Water Quality Measurement (Sagaing Region-1)

Region	Township	Village's Tract	Villages	ID	Coordinate	Type	Drilled Depth(m)	Diameter (in)	S.W.L (m)	Yield (g/h)	Temperature (°C)	PH	EC (µs/cm)	Smell	Color	Mn (mg/l)	Fe (mg/l)	F (mg/l)	NO3-(mg/l)	NO2-(mg/l)	Coliforms	Detailed Analysis	Coliforms			
National Drinking Water Quality Standard													6.5 - 8.5	-	-	-	0.4	1.0	1.5	50.0	-	3				
S A G A I N G	Budalin	Htanaungkone	Yonedaw	SA2-01-1	X-721184, Y-2468685	Deep well	160	6	40	1200	30.2	7.95	1,230	Non	Non	<0.02	<0.2	1.5	20	<0.02	0		2			
				SA2-01-2	X-721013, Y-2468509	Deep well	122	2	30	800	31.2	8.13	1,425	Non	Non	<0.02	<0.2	0.2	<1	<0.02				8		
		Ngapayin	Nyaungpinthar	SA2-02-1	X-720877, Y-2486641	Deep well	82	2	36.5	800	31.5	7.84	1,475	Non	Non	<0.02	<0.2	0.4	15	<0.02					18	
				SA2-02-2	X-721015, Y-2486402	Dug well	6	1.0 m	5.7			29.2	7.58	2,470	Non	Non	<0.02	<0.2	0.4	45	0.1	Too much			Too much	
		Maunghtaung	Maunghtaung	SA2-03-1	X-712919, Y-2487787	Deep well	73	2	>30	2000	30.0	8.36	2,610	Non	Non	<0.02	<0.2	0.8	45<	<0.02					2	
				SA2-03-2	X-712889, Y-2488508	Deep well	122	2	37	800	30.3	7.95	620	Non	Non	<0.02	<0.2	0.2	<1	<0.02					Too much	
				SA2-03-3	X-713013, Y-2488345	Deep well	107	6	39	2000	30.7	7.77	1,141	Non	Non	<0.02	<0.2	0.6	2	<0.02					Too much	
		Ywarthit	Kantawthar	SA2-04-1	X-704411, Y-2487667	Deep well	122	2	39	1200	29.8	8.14	534	Non	Non	<0.02	<0.2	0.2	<1	<0.02						0
				SA2-04-2	X-704202, Y-2487722	Deep well	62	2	32	800	30.4	8.12	663	Non	Non	<0.02	<0.2	0.6	5	<0.02					Too much	
		Konethar	Mhonehtoo	SA2-05-1	X-729667, Y-2470736	Deep well	118	4	34		31.7	7.91	628	Sulfur smell	Non	<0.02	<0.2	0.6	<1	<0.02	0		0		0	
				SA2-05-2	X-729835, Y-2471196	Dug well	13	1.7 m	8.1		30.6	7.34	1,136	Non	Non	<0.02	<0.2	0.6	5	<0.02	0		0		0	
				SA2-05-3	X-729847, Y-2470770	Deep well	146	2	36	900																
				SA2-05-4	X-732022, Y-2470662	Deep well	115	4	28		31.1	7.53	1,700	Non	Non	<0.02	<0.2	0.6	<1	<0.02					0	
		Watluu-I	Watluu-I	SA2-06-1	X-700719, Y-2482574	Deep well	70	2	32	1000	30.3	7.94	949	Non	Non	<0.02	<0.2	0.8	30	<0.02					5	
				SA2-06-2	X-700290, Y-2482117	Dug well	9	1.4 m	8.7		28.6	7.04	633	Non	Non	<0.02	<0.2	0.4	4	<0.02	0		0		0	
		Chaungoo	Thanbinkan	SA2-07-1	X-742454, Y-2430600	Deep well	192	4	72.2		30.6	8.68	1,224	Non	Non	<0.02	<0.2	0.8	10	<0.02	0		0		Too much	
				SA2-07-2	X-742361, Y-2430401	Deep well	152	6	70	2500	36.7	7.50	1,245	Non	Non	<0.02	<0.2	0.8	10	<0.02					14	
			Natyaygan	Natyaygan	SA2-08-1	X-743872, Y-2426840	Deep well	173	6	60.9	2000	37.9	7.81	2,820	Non	Non	<0.02	<0.2	0.8	<1	<0.02	0		0		20
		SA2-08-2			X-743809, Y-2426699	Storage reservoir					36.5	8.80	311	Non	Shallow yellow	<0.02	0.2	0.2	<1	<0.02	60<		60<		60<	
		Ayadaw	Ngartowma	Sithar	SA2-09-1	X-742923, Y-2472596	Deep well	97	4	42	1000	30.7	7.66	1,302	Non	Non	<0.02	<0.2	0.6	2	<0.02					0
	SA2-09-2				X-742829, Y-2472777	Deep well	102	2		800	31.8	7.83	648	Non	Non	<0.02	<0.2	0.2	1	<0.02					0	
	Leinhla		Oakkan	SA2-10-1	X-747982, Y-2482474	Deep well	224	2	+3.0 m	350	31.3	7.05	861	Non	Non	<0.02	<0.2	0	<1	<0.02					Too much	
				SA2-10-2	X-748057, Y-2482660	Deep well	91	2	21	1200	29.9	8.13	1,014	Non	Non	<0.02	<0.2	0.2	5	<0.02					0	
	Warryaung		Warryaung	SA2-11-1	X-748212, Y-2458178	Deep well	244	2	55	1000	30.6	7.64	920	Non	Non	<0.02	<0.2	0	5	<0.02					0	
				SA2-11-2	X-748297, Y-2458027	Deep well	61	2	22	750	29.0	7.67	721	Non	Non	<0.02	<0.2	0	1	<0.02					0	
	Yechinn		Warrtangkalay	SA2-12-1	X-751008, Y-2470107	Deep well	97	6		7000	30.5	7.25	912	Non	Non	<0.02	<0.2	0	<1	<0.02					0	
				SA2-12-2	X-750726, Y-2470091	Deep well	305	2			30.9	8.61	1,155	Non	Non	<0.02	<0.2	1.0	<1	<0.02					0	
	Nyaungchayhtauk		Yathar	SA2-13-1	X-766191, Y-2449689	Deep well	182	2		1200	31.7	7.92	4,470	Non	Non	<0.02	<0.2	0.8	<1	<0.02					0	
				SA2-13-2	X-766062, Y-2449698	Deep well	61	2		600	31.7	8.48	1,253	Non	Non	<0.02	<0.2	0.6	2	<0.02					Too much	
	Warryaung	Zeepinlel	SA2-14-1	X-751681, Y-2457462	Deep well	115	2		>1000	29.6	7.50	731	Non	Non	<0.02	<0.2	0	<1	<0.02					0		
			SA2-14-2	X-751521, Y-2457542	Shallow well	30		7.6m<		28.7	7.04	954	Non	Non	<0.02	<0.2	0.2	5	<0.02	Too much			Too much			
	Sarlingyi	Yonebinyoe	Yonebinyoe	SA2-15-1	X-711426, Y-2428068	Deep well	91	4	19	1000	32.5	6.77	18,060	Non	Non	<0.02	<0.2	1.5	2	0.1					2	
				SA2-15-2	X-707989, Y-2428924	Shallow well	51	6	2	5000	30.5	7.50	1,188	Non	Non	<0.02	<0.2	0.6	<1	0.02	0				0	
		Yonebinyoe	Minntaw	SA2-16-1	X-713277, Y-2428462	Dug well	3	0.8 m	2.3		32.0	7.35	935	Non	Non	<0.02	<0.2	1.5	30	0.07	Too much			Too much		
				SA2-16-2	X-712670, Y-2428751	Dug well	8	1.1 m	5.9		31.6	7.60	1,337	Non	Non	<0.02	0.2	1.5	3	<0.02	0			0		
				SA2-16-3	X-712530, Y-2428495	Deep well	121	2			32.2	7.40	4,830	Non	Non	<0.02	1.5	0	1	<0.02					0	
	Moe Kyo Pyin	Kine	SA2-17-1	X-711613, Y-2437746	Storage reservoir					33.9	8.82	640	Non	Shallow yellow	<0.02	<0.2	1.5	2	0.1	2			2			
	Myinmu	Kalarpyan	Kalarpyan	SA2-18-1	X-749919, Y-2422162	Shallow well	55	4	21																	
				SA2-18-2	X-749919, Y-2422594	Deep well	167	4	36		32.2	8.24	3,600	Non	Non	<0.02	<0.2	1.5	<1	<0.02	0		0			
				SA2-18-3	X-750050, Y-2422676	Storage reservoir					37.9	9.13	244	Non	Non	<0.02	<0.2	0.2	<1	<0.02						
				SA2-18-4	X-750132, Y-2421633	Shallow well	40				31.3	7.98	2,190	Non	Non	<0.02	<0.2	0.8	5	0.05						
		Nyaungbinkan	Hlayookan	SA2-19-1	X-758105, Y-2439332	Deep well	152	2	115	450	30.9	8.20	1,050	Non	Non	<0.02	<0.2	1.5	1	0.02						
				SA2-19-2	X-757753, Y-2489582	Shallow well	7		3		29.7	7.35	1,178	Non	Non	<0.02	<0.2	0.6	20	<0.02						
				SA2-19-3	X-758776, Y-2438782	Shallow well					29.7	7.30	1,084	Non	Non	<0.02	<0.2	0.4	5	<0.02						
		Inma	Magyidaw	SA2-20-1	X-773591, Y-2437376	Shallow well	24			3000	31.6	7.31	676	Non	Non	<0.02	<0.2	0	<1	<0.02						
				SA2-20-2	X-773839, Y-2437211	Shallow well	24		10		30.4	6.86	3,800	Non	Non		<0.2	0	45<	0.1						
		Latpanyin	Watkya	SA2-21-1	X-745604, Y-2447822	Deep well	167	4	36																	
	SA2-21-2			X-745617, Y-2447824	Deep well	167	4	36		31.7	7.39	2,310	Non	Non	<0.02	<0.2	0.6	<1	<0.02							

Result of Field Water Quality Measurement (Sagaing Region-2)

Region	Township	Village's Tract	Villages	ID	Coordinate	Type	Drilled Depth(m)	Diameter (in)	S.W.L (m)	Yield (g/h)	Temperature (°C)	PH	EC (µs/cm)	Smell	Color	Mn (mg/l)	Fe (mg/l)	F (mg/l)	NO3- (mg/l)	NO2- (mg/l)	Coliforms	Detailed Analysis	Coliforms		
National Drinking Water Quality Standard													6.5 - 8.5	-	-	-	0.4	1.0	1.5	50.0	-	3			
SAGAING	Myinmu	Latpanyin	Thahtaykone (Ywarma)	SA2-22-1	X-747989, Y-2446283	Deep well	161	2	55	3000															
				SA2-22-2	X-747929, Y-2446231	Deep well	152	2	55	750	32.6	8.02	1,663	Non	Non	<0.02	<0.2	0.2	5	<0.02					
				SA2-22-3	X-747853, Y-2446360	Deep well	113	4		2000	32.1	7.26	1,582	Non	Non	<0.02	<0.2	0.2	10	<0.02					
		Inma	Magyidaw	SA2-23-1	X-774423, Y-2444502	Shallow well	15			29.8	7.60	1,601	Non	Non	<0.02	<0.2	0.8	20	0.2						
				SA2-23-2	X-774560, Y-2444437	Shallow well	24	4	3		31.9	7.58	1,838	Muddy smell	Shallow yellow	<0.02	<0.2	0.4	2	0.1					
				SA2-23-3	X-774727, Y-2444435	River					32.1	8.66	474	Non	Non	<0.02	<0.2	0.2	<1	<0.02		○			
	Kanbalu	Thindaw	Thindaw	SA2-24-1	X-773446, Y-2612929	Deep well	82	2		700	27.3	7.80	1,053	Non	Non	<0.02	<0.2	0.2	<1	<0.02				Little	
				SA2-24-2	X-773526, Y-2612915	Deep well	116	2			27.1	6.80	34,800	Salty smell	Non	0.02	<0.2	0.2	<1	<0.02				0	
		Thindaw	Lwingyi	SA2-25-1	X-772025, Y-2612947	Deep well	152	2	30	500	28.1	8.10	665	Non	Non	<0.02	<0.2	0.2	<1	<0.02				0	
				Koetaungboh	Koetaungboh (Kyunkone)	SA2-26-1	X-773469, Y-2620861	Deep well	152	2		400	27.0	7.60	1,113	Sulfur smell	Shallow yellow	0.01	<0.2	0.2	<1	<0.02		○	
		SA2-26-2	X-773675, Y-2620875			Deep well	85	2		650	27.1	7.30	1,450	Non	Non	<0.02	<0.2	0	45	<0.02				Little	
		Nyaungkanthar	Inngoteto	SA2-27-1	X-768435, Y-2598073	Deep well	61	2		250	27.7	7.30	796	Non	Non	<0.02	0.2	0.2	45<	<0.02		○		2	
				SA2-27-2	X-768370, Y-2598171	Shallow well	21	3	17.8		28.6	7.40	1,487	Non	Shallow white	<0.02	<0.2	3.0	<1	<0.02		0			0
		Myaythoo	Myaythoo	SA2-28-1	X-745074, Y-2565109	Deep well	82	2	67		29.0	7.10	681	Slightly certain smell	Shallow yellow	<0.02	0.2	0	<1	<0.02					
				SA2-28-2	X-745102, Y-2565190	Deep well	76	2	61		28.8	7.20	858	Non	Shallow white	<0.02	<0.2	0	<1	<0.02					
				SA2-28-3	X-744822, Y-2565124	Deep well	171	2	146.3		28.9	7.20	981	Non	Shallow yellow	<0.02	<0.2	0	1	<0.02					
				SA2-28-4	X-748784, Y-2565102	Shallow well	16	3	8																
		Khaowntar	Khaowntar	SA2-29-1	X-776703, Y-2551428	Deep well	116	2	30		28.7	7.30	947	Non	Non	<0.02	<0.2	0.8	<1	<0.02					0
				SA2-29-2	X-776612, Y-2551398	Deep well	110	2		1000	29.1	7.70	1,423	Non	Non	<0.02	<0.2	0	<1	<0.02					0
	Nyaungkanthar	Nyaungkanthar	SA2-30-1	X-770617, Y-2587691	Deep well	122	2		3	27.6	7.50	1,905	Non	Non	<0.02	<0.2	0	45	<0.02		○		0		
			SA2-30-2	X-770701, Y-2597767	Shallow well	45	2		1	28.1	8.20	691	Non	Non	<0.02	<0.2	0	<1	<0.02		0			0	
	Myaymon	Myaymon	SA2-31-1	X-785078, Y-2543981	Deep well	98	2		1000	29.3	8.20	1,210	Non	Non	<0.02	<0.2	0.2	1	<0.02					2	
			SA2-31-2	X-784990, Y-2544342	Deep well	73	2		300	29.1	8.10	3,210	Non	Non	<0.02	<0.2	1.5	45<	<0.02		○			0	
	Pazigyi	Laytwinzin	SA2-32-1	X-800278, Y-2549565	Dug well	2	1.5 m	1.5		28.5	7.40	880	Non	Shallow yellow	<0.02	<0.2	0	1	0.08	Too much				Too much	
	Paygone(S)	Chaungchar	SA2-33-1	X-762364, Y-2587378	Shallow well	38	2		350	29.4	7.90	657	Non	Non	<0.02	<0.2	0	<1	<0.02		0			0	
SA2-33-2			X-762527, Y-2587375	Shallow well	49	2	9	550	27.4	8.00	621	Non	Non	<0.02	<0.2	0.2	<1	<0.02		0			0		
Dabayin	Intimelay	Minyogone	SA2-34-1	X-732024, Y-2513022	Dug well	9	1.6m	4.3		29.7	6.95	477	Non	Non	<0.02	<0.2	0.2	<1	<0.02	Too much				Too much	
			SA2-34-2	X-732713, Y-2512110	Deep well	103	4	3.2	1500	30.1	7.90	1,224	Non	Non	<0.02	0.3	0.2	<1	<0.02					0	
	Mintelgone	Shandaw	SA2-35-1	X-725732, Y-2501505	Dug well					23.8	7.09	438	Muddy smell	Shallow milk white	<0.02	<0.2	0.2	1	<0.02	Too much				Too much	
			SA2-35-2	X-725913, Y-2500405	Shallow well					28.4	7.55	748	Non	Non	<0.02	<0.2	0.8	<1	<0.02	Too much				Too much	
			SA2-35-3	X-725341, Y-2501689	Deep well	247	2		2000	30.4	7.90	1,564	Non	Non	<0.02	<0.2	0.2	<1	<0.02					0	
Satpyarygin	Kyuntaw (S)	SA2-35-4	X-725889, Y-2500389	Deep well		2		1200	27.7	8.40	1,004	Non	Non	<0.02	<0.2	0.2	<1	<0.02					5		
		SA2-36-1	X-728635, Y-2505308	Dug well	5	1.1 m	3.6		27.6	6.90	896	Non	Non	0.02	<0.2	0.2	<1	<0.02							
SA2-36-2	X-728715, Y-2505233	Dug well	4	1.0 m	2.3			27.9	7.30	2,230	Non	Non	<0.02	<0.2	0.1	10	0.7								
Wetlet	Sharkwal	PalaeThwe (Ywarthit)	SA2-37-1	X-798855, Y-2492654	Deep well	109			750	31.4	8.10	924	Non	Non	<0.02	<0.2	0	<1	<0.02					0	
			SA2-38-1	X-796340, Y-2461884	Shallow well	41				29.2	7.50	1,388	Non	Non	<0.02	<0.2	1.5	2	<0.02		0			0	
	Poukkan	Poukkan	SA2-38-2	X-796371, Y-2461780	Dug well	13	1.1 m	2.3		28.2	7.50	595	Non	Non	<0.02	<0.2	0.8	20	<0.02	Too much				Too much	
			SA2-38-3	X-797690, Y-2462872	Shallow well	38	2		300	30.0	7.91	1,500	Non	Non	<0.02	<0.2	2.0	5	<0.02		0			0	
	Yonepingone	Shwentaungtaw	SA2-39-1	X-803376, Y-2470865	Dug well	11	1.2 m	4.4		29.0	7.91	809	Non	Non	<0.02	<0.2	0.8	30	<0.02		0			0	
	Khawtaw	Sabeidaw	SA2-40-1	X-786790, Y-2472040	Shallow well	11		1.5		27.4	7.84	764	Non	Non	<0.02	<0.2	0.6	10	<0.02		0			0	
SA2-40-2			X-786486, Y-2472202	Shallow well	11				28.3	8.03	2,130	Non	Non	<0.02	<0.2	3.0	5	<0.02	Too much				Too much		
SA2-40-3	X-786310, Y-2474369	Deep well	122	4	1.5	1500	29.0	8.14	1,204	Non	Non	<0.02	<0.2	3.0	<1	<0.02						0			

Result of Field Water Quality Measurement (Mandalay Region)

Region	Township	Village's Tract	Villages	ID	Coordinate	Type	Drilled Depth(m)	Diameter (in)	S.W.L (m)	Yield (g/h)	Temperature (°C)	PH	EC (µs/cm)	Smell	Color	Mn (mg/l)	Fe (mg/l)	F (mg/l)	NO3- (mg/l)	NO2- (mg/l)	Coliforms	Detailed Analysis	Coliform s		
National Drinking Water Quality Standard													6.5 - 8.5	-	-	-	0.4	1.0	1.5	50.0	-	3			
M A N D A L A Y	Mahlaing	Yayhtwet	Htantawgyi	MA2-01-1	X-767026, Y-2338930	Dug well	15	1.5 m			30.3	7.43	2,310	Non	Non	<0.02	<0.2	0.4	10	<0.02	Too much		Too much		
				MA2-01-2	X-767009, Y-2339022	Dug well	15	1.5 m				30.8	7.82	3,560	Non	Non									
		Yaychobutar	Khinthar(S)	MA2-02-1	X-768727, Y-2328337	Dug well	6	1.5 m	1.8			27.5	7.48	1,472	Non	Non	<0.02	<0.2	0	<1	<0.02	Too much		Too much	
				MA2-03-1	X-781754, Y-2317206	Dug well	6	1.5 m	3.1			27.6	7.41	781	Non	Non	<0.02	<0.2	0	<1	<0.02	7		7	
	Myingyan	Chaysay	Chaysay	MA2-04-1	X-753208, Y-2369050	Deep well	91	4	30.4			31.1	8.06	2,880	Non	Non	<1	0.2	0	<1	<0.02		○		
				MA2-04-2	X-753114, Y-2369048	Shallow well	59	3	19.2			31.0	8.11	2,580	Non	Non	<1	<0.2	0	<1	<0.02				
		Pinlai	Talgyi	MA2-05-1	X-758959, Y-2405065	Deep well	72	2				30.9	8.27	1,303	Non	Turbidity	<1	<0.2	0.7	1	<0.02				
				MA2-05-2	X-758815, Y-2404938	Shallow well	46	3	8.2			30.5	8.44	1,783	Non	Non	<1	<0.2	1.0	4	<0.02				
		Kuywar	Kuywar	MA2-06-1	X-749780, Y-2369023	Shallow well	59	3	16.7			31.2	7.88	274	Non	Turbidity	<0.02	0.5	4.0	1	<0.02				
				MA2-06-2	X-749809, Y-2369054	Deep well	79	3	19.2			31.8	8.69	2,450	Non	Non	<1	<0.2	2.0	2	0.1		○		
		Yonehto	Yonehto	MA2-07-1	X-762463, Y-2384138	Deep well	98	3	46			31.0	7.73	7,960	Non	Non	<1	<0.2	0.4	45	0.05				
				MA2-07-2	X-762698, Y-2384434	Deep well	98	4				30.9	7.58	7,340	Non	Non	<1	<0.2	0	20	0.02				
		Phatpin-I	Phatpin-I	MA2-08-1	X-766089, Y-2399238	Deep well	61	2				30.3	8.24	6,160	Non	High turbidity	<1	<0.2	0	<1	<0.02				
	MA2-08-2			X-766347, Y-2399645	Deep well	107	3	500			30.6	8.46	1,930	Slightly certain smell	Slightly muddy	<1	<0.2	0.2	<1	<0.02					
	Ngazon	Konelel	Konelel	MA2-09-1	X-758753, Y-2410571	Dug well	11	1.0 m	9.4			29.1	8.33	6,020	Non	Non	<0.02	<0.2	5.0	10	<0.02				
				MA2-09-2	X-758200, Y-2410349	Deep well	61	2				30.8	7.93	6,360	Non	Non	<0.02	<0.2	0	45<	0.2				
		Magyigyat	Phaungkadaw	MA2-10-1	X-766115, Y-2416389	Shallow well	18	2	2.0			29.8	7.12	6,470	Non	Non	0.02	<0.2	0	<1	<0.02				
				MA2-11-1	X-765457, Y-2403617	Deep well	152	2				30.4	7.86	2,340	Non	Non	<0.02	<0.2	0.6	<1	<0.02				
		Kaungzin	Kaungzin	MA2-11-2	X-768899, Y-2402581	Shallow well	10	2																	
				MA2-12-1	X-768195, Y-2402362	Deep well	213	2	700			31.7	7.91	11,680	Non	Non	<0.02	<0.2	5.0	45<	1<				
	MA2-12-2	X-768899, Y-2402581	Dug well	6	1.4 m	3.1				27.8	7.28	3,340	Non	Non	0.05	<0.2	0.4	<1	<0.02						
	Natogyi	Kyaungnan	Kyaungnan	MA2-13-1	X-767771, Y-2376174	Shallow well	18	2	7			32.8	7.51	1,342	Slightly certain smell	Shallow yellow	<0.02	<0.2	0.4	<1	<0.02				
				MA2-13-2	X-767555, Y-2375350	Deep well	78	2	21			30.8	7.80	11,800	Non	Turbidity	<0.02	<0.2	2.0	3	<0.02				
		Myinni	Kyaungkan	MA2-14-1	X-757384, Y-2368882	Deep well	234	4	1800			31.2	7.58	6,540	Non	Shallow white	<0.02	<0.2	0.8	1	<0.02				
				MA2-14-2	X-757248, Y-2368842	Deep well	127	2	300			30.8	7.86	2,120	Non	Non	<0.02	<0.2	0.4	<1	<0.02				
		Nyaunggone	Nyaunggone	MA2-15-1	X-772147, Y-2368696	Deep well	91	2	30	750			34.4	8.48	2,800	Non	Non	<0.02	<0.2	1.5	1	<0.02		○	
	MA2-15-2			X-772036, Y-2368666	Deep well	61	2				30.6	7.86	1,192	Non	Shallow yellow	<0.02	<0.2	0.6	<1	<0.02					
	Taungthar	Obo	Chaungnar	MA2-16-1	X-751878, Y-2358123	Dug well	15	1.5 m	5			30.0	8.16	2,030	Slightly sour	Shallow brown	<0.02	<0.2	3-8	5-10	<0.02	Too much	○	Too much	
				MA2-16-2	X-751799, Y-2357810	Dug well	5	1.0 m				29.4	7.38	3,450	Non	Slightly turbidity	<0.02	<0.2	0.2	<1	<0.02	5		5	
		Zagyan	Chaungson(La)	MA2-17-1	X-735397, Y-2354670	Deep well	137	4	98	3600			34.7	7.33	1,483	Non	Non	<0.02	<0.2	0.2	<1	<0.02			
		Kyaunkkar	Kyaunkartaungkone	MA2-18-1	X-748843, Y-2341588	Dug well	6	1.0 m				31.0	8.02	794	Non	Non	<0.02	<0.2	0.2	5-10	<0.02	14		14	
				MA2-19-1	X-740016, Y-2346893	Deep well	259	4	153	800			38.0	7.38	1,609	Slightly sour	Non	<0.02	<0.2	0	<1	<0.02			
		Kanmyel		Kanaye	MA2-20-1	X-740499, Y-2349023	Deep well	244	4	105	700			34.5	7.33	1,516	Non	Non	<0.02	<0.2	0	<1	<0.02		
				MA2-21-1	X-745668, Y-2342355	Shallow well	36	2		800			29.8	8.41	4,440	Non	Non	<0.02	<0.2	1.5-3	45<	0.5-1	7	○	7
	Tharyarmaing	Tharyarmaing	MA2-21-2	X-745625, Y-2342444	Shallow well	54	2		800			29.1	8.15	3,460	Non	Non	<0.02	<0.2	1.5	45<	<0.02	Too much		Too much	
			MA2-22-1	X-826855, Y-2270738	Deep well	235	2	1000			35.1	8.18	635	Non	Non	<0.02	<0.2	0-0.4	<1	<0.02		○			
	Yamethin	Oakpo	Oakpo	MA2-22-2	X-826620, Y-2271085	Deep well	82	2				28.7	8.20	919	Non	Non	<0.02	<0.2	0-0.4	<1	<0.02				
				MA2-23-1	X-828635, Y-2246064	Shallow well	55	2	480			30.0	8.09	2,020	Non	Slightly muddy	<0.02	<0.2	0.8	<1	<0.02	5		5	
	Pyawbwe	Seitcho	Htanean	MA2-24-1	X-804392, Y-2275367	Deep well						30.1	8.36	4,140	Non	Non	<0.02	<0.2	0	<1	<0.02				
				MA2-25-1	X-804775, Y-2275467	Deep well	116	2	11	300			30.0	8.40	1,986	Non	Non	<0.02	<0.2	0	<1	<0.02			
	Nyaungoo	Pyon	Kanzauk	MA2-29-1	X-709762, Y-2328729	Deep well	200	6				35.7	7.06	1,036	Non	Non	<0.02	<0.2	0.1		<0.02				
				MA2-30-1	X-719325, Y-2332051	Deep well	280	4	219.4	800			36.3	6.77	1,239	Iron smell	Shallow white	<0.02	1.0	0.5		<0.02			
		Tawpyar	Mongyettaw	MA2-31-1	X-724266, Y-2337196	Dug well						27.5	8.05	500	Non	Non	<0.02	<0.2	0		<0.02				
				MA2-32-1	X-703729, Y-2334750	Deep well	152			36.5			31.6	7.33	1,043	Non	Non	<0.02	<0.2	0.7		<0.02			
Kudaw		Saingan-Tedite	MA2-34-1	X-725695, Y-2329987	Deep well	365						34.6	7.37	814	Iron smell	Non	<0.02	0.6	0.2		<0.02				
			MA2-35-1	X-724027, Y-2324767	Deep well	309	6	236.1	1800				7.61	908	Non	Non	<0.02	<0.2	0.1		<0.02				
Kyaukpadaung	Tangakan	Alelywar-2	MA2-36-1	X-718697, Y-2309611	Deep well	270					32.8	6.20	1,907	Iron smell	Non	3	10<	0.6		<0.02					
			MA2-36-2	X-718334, Y-2309805	Deep well	270	4	150	1500			34.7	6.00	1,343	Slightly iron	Non	1	3.0	0.2	<1	<0.02		○		
	Tangakan	Tangakan	MA2-37-1	X-719320, Y-2309491	Deep well						30.3	6.35	950	Slightly iron	Non	<1	10	0.8	<1	<0.02					
			MA2-37-2	X-719095, Y-2309562	Deep well						37.4	6.32	584	Iron smell	Non	<1	10	1.0	<1	<0.02					
	Lelgyi	Lelgyi	MA2-38-1	X-734592, Y-2325518	Deep well	300	4	51.5	2250			31.5	7.48	1,203	Sulfur smell	Slightly muddy	<0.02	5.0	0.6		<0.02		○		
			MA2-39-1	X-729384, Y-2325075	Deep well	300	4	225.5	600			32.8	7.11	947	Non	Non	<1	<0.2	0.2		<0.02				
Nakyatkhwai	Nakyatkhwai	MA2-40-1	X-719978, Y-2312255	Deep well	293	4	67	1500			32.7	7.07	791	Non	Non	<1	<0.2	0.2		<0.02					

Result of Field Water Quality Measurement (Magway Region)

Region	Township	Village's Tract	Villages	ID	Coordinate	Type	Drilled Depth(m)	Diameter (in)	S.W.L (m)	Yield (g/h)	Temperature (°C)	PH	EC (µs/cm)	Smell	Color	Mn (mg/l)	Fe (mg/l)	F (mg/l)	NO3-(mg/l)	NO2-(mg/l)	Coliforms	Detailed Analysis	Coliforms	
National Drinking Water Quality Standard												6.5 - 8.5	-	-	-	0.4	1.0	1.5	50.0	-	3			
M A G W A Y	Magway	Natkan	Natkan	MG2-01-1	X-706494, Y-2234069	Deep well	174	4	73.1	1100	31.4	7.16	988	Non	Non	<0.02	0.4	0.4		<0.02				
		Sharzaungkan	Thanbo (Ywarhit)	MG2-02-1	X-776115, Y-2216165	Deep well	120	4	83.8			32.0	7.16	1,494	Non	Non	<1	<0.2	0.6	3	0.1			
		Kyarkan	Nyaungbinthar	MG2-03-1	X-736944, Y-2243982	Deep well	120	4	154	1400		32.6	7.30	1,067	Non	Non	<1	<0.2	0.1		<0.02			
		Nyaungbinthar	Konegyi	MG2-04-1	X-718611, Y-2237657	Deep well	220	6	134	2000		33.0	7.11	1,010	Slightly iron	Non	<1	0.3	0.3	<1	<0.02			
		Paypisan	Sainggya	MG2-05-1	X-725131, Y-2213520	Deep well	200	4	153	1200		33.4	7.23	1,460	Slightly iron	Non	<1	0.7	0.3	<1	<0.02			
		Thapyaysan	Thapyaysan(S)	MG2-06-1	X-712184, Y-2227130	Deep well	189	6	97	2000		33.5	7.32	1,108	Slightly iron	Non	<1	0.2	0.5	2	<0.02			
		Supyitsan	Shwekyaw	MG2-07-1	X-733928, Y-2207547	Deep well	198	4	82.2	1500		33.7	7.57	1,352	Non	Non	<1	0.2	0.6	<1	<0.02			
		Nyaungkan	Leikkan	MG2-08-1	X-726925, Y-2239707	Deep well	114	6		1300		31.8	7.00	872	Slightly iron	Non	<1	0.3	0.2		<0.02			
	Nyaungkan	Ywarthitgyi	MG2-09-1	X-722084, Y-2237682	Deep well	177		103.6	1500		32.2	7.04	805	Non	Non	<1	<0.2	0.1	<1	<0.02				
	Chauk	Thanbo	Kanyaygyi	MG2-10-1	X-702708, Y-2281908	Deep well	327	4	209.6	900		29.4	7.37	1,013	Iron smell	Non	<1	2.0	0.8	<1	<0.02		○	
		Myaysoon	Myaysoon(W)	MG2-11-1	X-699118, Y-2278070	Deep well	259			1500		31.6	7.42	1,109	Iron smell	Non	<1	3.0	1.2	<1	<0.02		○	
		Zeebwar	Zeebwar	MG2-12-1	X-711611, Y-2298972	Deep well	152	4		1600		28.2	7.86	1,409	Non	Non	<1	<0.2	2.0	1	<0.02		○	
		Chaugtat	Yarpyay	MG2-13-1	X-690042, Y-2301200	Deep well	148	6		1000		31.8	7.42	2,150	Iron smell	Non	<1	0.5	0.1	<1	<0.02			
		Pakhange	Kyatesu(N)	MG2-14-1	X-665497, Y-2292703	Deep well	67	2		750		37.8	8.15	3,090	Non	Non	<1	<0.2	0	1	<0.02			
		Salintaung	Winkabar	MG2-15-1	X-684440, Y-2287209	Deep well	110	4	30.4	900		30.5	8.37	703	Non	Non	<1	<0.2	0.2	2	0.1		○	
		Magyikone	Kyatkan	MG2-16-1	X-690394, Y-2296166	Deep well	171			300		40.2	8.50	1,571	Oily smell	Non	<1	<0.2	0.3	<1	<0.02			
	Yenangyaung	Indaw	Lelgyinyoe	MG2-19-1	X-724077, Y-2266805	Deep well	278	4	134.1	1440		30.9	6.82	1,410	Non	Non	<1	<0.2	0.3	2	<0.02			
			Teipyinsakan	MG2-19-2	X-724896, Y-2268094	Deep well	248	6	142	2250		31.1	6.50	2,370	Iron smell	Non	<1	1.5	1.0	<1	<0.02		○	
	Myothit	Laytinesin	Laytinesin	MG2-20-1	X-732910, Y-2235168	Deep well	200	6	109.7	3500		31.6	7.18	705	Slightly iron	Non	<0.02	0.3	0.2		<0.02			
		Laytinesin	Tharmyar	MG2-21-1	X-736194, Y-2241244	Deep well	198		118.8	54000		32.1	6.91	666	Non	Non	<0.02	<0.2	0.1		<0.02			
		Laytinesin	Aungmyinthar	MG2-22-1	X-733075, Y-2231654	Deep well	104	4	55.1	700		36.6	7.87	993	Non	Non	<0.02	<0.2	0.3		<0.02			
		Wargyini	Ngwelay	MG2-23-1	X-738864, Y-2222537	Deep well	116	4	51.8	1500		38.5	7.51	863	Non	Non	<0.02	<0.2	0.3		<0.02			
		Htauksharkan	Indaw(N)	MG2-24-1	X-742446, Y-2229548	Deep well	110	2		800		41.5	8.13	928	Non	High turbidity	<0.02	<0.2	0.1		<0.02			
		Dantdalunbin	Htanaungkwin	MG2-25-1	X-770840, Y-2225170	Shallow well	11	2	9.7			29.4	7.34	1,085	Non	Non	<0.02	<0.2	0.1		<0.02		○	
	Manawtkone	Manawtkone	MG2-26-1	X-732002, Y-2222325	Deep well	128	6	24	2300		32.0	8.31	662	Non	Non	<0.02	<0.2	0.1		<0.02		○		
	Natmauk	Htonepoutchine	Htonepoutchine	MG2-28-1	X-730959, Y-2255652	Dug well						31.3	7.58	868	Non	Non	<0.02	<0.2	0.6		0.05	35		35
		Sakyattaung	Sakyattaung	MG2-28-2	X-731705, Y-2255329	Deep well	107	2				33.3	8.21	701	Non	Non	<0.02	0.7	0		<0.02			
		Padaukngote	Padaukngote	MG2-29-1	X-737425, Y-2248858	Deep well	219			800		35.2	6.93	2,950	Iron smell	Non	<0.02	3.0	0.8		<0.02			
		Sellel	Sellel	MG2-30-1	X-783632, Y-2259197	Deep well						33.9	8.68	935	Non	Non	<1	0.2	0.2		<0.02			
Tegy		Ywartharlay	MG2-32-1	X-731373, Y-2275351	Deep well	177	2	67	750		33.5	7.29	3,840	Iron smell	Non	2	1.0	0.2		0.04		○		
Wayonegone		Wayonegone	MG2-33-1	X-736518, Y-2267323	Deep well						33.6	7.35	5,330	Slightly iron	Non	<0.02	8.0	0.8		<0.02				
Taungdwingyi	Pantwinlay	Kokkohla	MG2-36-1	X-765957, Y-2218608	Dug well	15					28.9	7.04	1,335	Non	Non	<1	<0.2	0.3	20	<0.02				
		Kokkohla	MG2-36-2	X-766919, Y-2218218	Deep well	116	4	18.2	700		29.7	8.67	1,587	Muddy smell	Shallow yellow	<1	<0.2	2.0	<1	<0.02		○		
	Payatkyal	Kangyigone	MG2-37-1	X-762556, Y-2192933	Deep well	183		164.5	50		29.3	8.82	4,520	Non	High turbidity	<1	<0.2	3.0	<1	0.02		○		
		Payatkyal	MG2-37-2	X-757586, Y-2193879	Deep well	183	2	2.1			30.1	8.77	722	Non	Non	<1	<0.2	0.2	<1	<0.02				
	Warthonepyu	Htaukkyantgwin	MG2-38-1	X-772150, Y-2184875	Shallow well	15					28.7	7.48	1,615	Non	Non	<1	<0.2	0.6	3	<0.02				
	Hlebwegyi	Hlebwegyi	MG2-39-1	X-747939, Y-2200787	Dug well	5						30.5	8.00	845	Non	Slightly turbidity	<1	<0.2	0.1	4	<0.02			
		Yayhtwetgyi	MG2-40-1	X-743090, Y-2197425	Dug well							29.5	7.93	678	Non	Turbidity	<1	<0.2	0.2	1	<0.02			

Appendix 5.3.2 Village Wise Data of Field Water Quality Measurement

(1) Sagaing Region

Region	SAGAING		Date	2015/5/7
Township	Budalin		Reported by	YORITATE Toru
Village / ID	Yonedaw	SA2-1	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well		X	721184
	Shallow Well		Y	2468685
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	160	Sample ID	SA2-1-1
	Diameter (in)	6	Temperature (°C)	30.2
	S.W.L (m)	40	pH	7.95
	D.W.L (m)		EC (µs/cm)	1,230
	Yield (m³/hour)	5.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Submergible pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
At the beginning of the operation Mono pump was used. However, submergible pump has installed now. Flat alluvial plane.		F (mg/l)	1.5	
		NO3- (mg/l)	20.0	
		NO2- (mg/l)	<0.02	
		Coliforms		

Information of Existing Water Source - 2				
Type	o Deep Well		X	721013
	Shallow Well		Y	2468509
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	122	Sample ID	SA2-1-2
	Diameter (in)	2	Temperature (°C)	31.2
	S.W.L (m)	30	pH	8.13
	D.W.L (m)		EC (µs/cm)	1,425
	Yield (m³/hour)	3.6	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Airlift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Constructed at 2007. Air lift pipe length 90m		F (mg/l)	0.2	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Region	SAGAING		Date	2015/5/7
Township	Budalin		Reported by	YORITATE Toru
Village / ID	Nyaungpinthar	SA2-2	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	○ Deep Well	Coordinate	X	720877
	Shallow Well		Y	2486641
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	82	Sample ID	SA2-2-1
	Diameter (in)	2	Temperature (°C)	31.5
	S.W.L (m)	37	pH	7.84
	D.W.L (m)		EC (µs/cm)	1,475
	Yield (m ³ /hour)	3.6	Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Fe (mg/l)	<0.2
		F (mg/l)	0.4	
		NO ₃ - (mg/l)	15.0	
		NO ₂ - (mg/l)	<0.02	
		Coliforms		

Photo



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	721015
	Shallow Well		Y	2486402
	Storage reservoir			
	○ Others Dug Well			
Hydrogeological Information	Drilled Depth (m)	6.0	Sample ID	SA2-2-2
	Diameter (in)	1.0m	Temperature (°C)	29.2
	S.W.L (m)	5.7	pH	7.58
	D.W.L (m)		EC (µs/cm)	2,470
	Yield (m ³ /hour)		Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Fe (mg/l)	<0.2
SWL in rainy season is 2.7m Target : 7200885/2486381		F (mg/l)	0.4	
		NO ₃ - (mg/l)	45.0	
		NO ₂ - (mg/l)	0.1	
		Coliforms	Too much	

Photo



Region	SAGAING		Date	2015/5/7
Township	Budalin		Reported by	YORITATE Toru
Village / ID	Maunghtaung	SA2-3	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	712929
	Shallow Well		Y	2487787
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	73	Sample ID	SA2-3-1
	Diameter (in)	2	Temperature (°C)	30.0
	S.W.L (m)	>30	pH	8.36
	D.W.L (m)		EC (µs/cm)	2,610
	Yield (m ³ /hour)	9.1	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Airlift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Irawagi Formation	F (mg/l)			0.8
Private Well	NO3- (mg/l)			45<
280 TW exist 5-6 hour one well	NO2- (mg/l)			<0.02
	Coliforms			2.0

Information of Existing Water Source - 2				
Type	o Deep Well	Coordinate	X	712889
	Shallow Well		Y	2488508
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	122	Sample ID	SA2-3-2
	Diameter (in)	2	Temperature (°C)	30.3
	S.W.L (m)	37	pH	7.95
	D.W.L (m)		EC (µs/cm)	620
	Yield (m ³ /hour)	3.6	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Airlift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
No electricity when we visited, therefore we could not get fresh water. The sample got from resouivre tank.	F (mg/l)			0.2
	NO3- (mg/l)			<1
	NO2- (mg/l)			<0.02
	Coliforms			



Photo



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Region	SAGAING		Date	2015/5/8
Township	Budalin		Reported by	YORITATE Toru
Village / ID	Kantawthar	SA2-4	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	○ Deep Well		Coordinate	X	704411	Type	○ Deep Well		Coordinate	X	704202
	Shallow Well			Y	2487667		Shallow Well			Y	2487722
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	122	Results of Simplified Water Quality Test	Sample ID	SA2-4-1	Hydrogeological Information	Drilled Depth (m)	62.0	Results of Simplified Water Quality Test	Sample ID	SA2-4-2
	Diameter (in)	2		Temperature (°C)	29.8		Diameter (in)	2		Temperature (°C)	30.4
	S.W.L (m)	39		pH	8.14		S.W.L (m)	32		pH	8.12
	D.W.L (m)			EC (µs/cm)	534		D.W.L (m)			EC (µs/cm)	663
	Yield (m³/hour)	5.5		Smell	Non		Yield (m³/hour)	3.6		Smell	Non
	No. of users (person/day)			Color	Non		No. of users (person/day)			Color	Non
	Supply facilities	Air lift		Mn (mg/l)	<0.02		Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)			Fe (mg/l)	<0.2		Remarks (Lithology, etc.)			Fe (mg/l)	<0.2
Constructed in 2005 Public well		F (mg/l)	0.2	Constructed in 2013 Enough for drinking water, however total amount is not enough. 10 private TW(61 m ave)		F (mg/l)	0.6				
		NO3- (mg/l)	<1			NO3- (mg/l)	5.0				
		NO2- (mg/l)	<0.02			NO2- (mg/l)	<0.02				
		Coliforms				Coliforms					
Photo					Photo						
											

Region	SAGAING		Date	2015/5/8
Township	Budalin		Reported by	YORITATE Toru
Village / ID	Mhonehtoo	SA2-5	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	○ Deep Well		X	729667
	Shallow Well		Y	2470736
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	118	Sample ID	SA2-5-1
	Diameter (in)	4	Temperature (°C)	31.7
	S.W.L (m)	34	pH	7.91
	D.W.L (m)		EC (µs/cm)	628
	Yield (m ³ /hour)		Smell	Sulfur smell
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
They could not drink. Target : 729874/2471014		F (mg/l)	0.6	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well		X	729835
	Shallow Well		Y	2471196
	Storage reservoir			
	○ Others <i>Dug Well</i>			
Hydrogeological Information	Drilled Depth (m)	12.5	Sample ID	SA2-5-2
	Diameter (in)	1.7m	Temperature (°C)	30.6
	S.W.L (m)	8.1	pH	7.34
	D.W.L (m)		EC (µs/cm)	1,136
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
		F (mg/l)	0.6	
		NO3- (mg/l)	5.0	
		NO2- (mg/l)	<0.02	
		Coliforms	0	



Region	SAGAING		Date	2015/5/7
Township	Budalin		Reported by	YORITATE Toru
Village / ID	Mhonehtoo	SA2-5	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	729847	
	<input type="radio"/> Shallow Well		Y	2470770	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	146	Results of Simplified Water Quality Test	Sample ID	SA2-5-3
	Diameter (in)	2		Temperature (°C)	
	S.W.L (m)	36		pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)	4.1		Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)	DRD constructed. More salty Cannot operate now.		Fe (mg/l)	
			F (mg/l)		
			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		

Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	732022	
	<input type="radio"/> Shallow Well		Y	2470662	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	115	Results of Simplified Water Quality Test	Sample ID	SA2-5-4
	Diameter (in)	4		Temperature (°C)	31.1
	S.W.L (m)	28		pH	7.53
	D.W.L (m)			EC (µs/cm)	1,700
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Airlift		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Twegi village's well. Almost top of the hill. In the monestry compound.		Fe (mg/l)	<0.2
			F (mg/l)	0.6	
			NO3- (mg/l)	<1	
			NO2- (mg/l)	<0.02	
			Coliforms		



Region	SAGAING		Date	2015/5/8
Township	Budalin		Reported by	YORITATE Toru
Village / ID	Watluu-I	SA2-6	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	○ Deep Well		X	700719
	Shallow Well		Y	2482574
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	70	Sample ID	SA2-6-1
	Diameter (in)	2	Temperature (°C)	30.3
	S.W.L (m)	32	pH	7.94
	D.W.L (m)		EC (µs/cm)	949
	Yield (m³/hour)	4.5	Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Fe (mg/l)	<0.2
Private well 20 Airlift well (private) in this 3 years		F (mg/l)	0.8	
		NO3- (mg/l)	30.0	
		NO2- (mg/l)	<0.02	
		Coliforms		
		Results of Simplified Water Quality Test		

Information of Existing Water Source - 2				
Type	Deep Well		X	700290
	Shallow Well		Y	2482117
	Storage reservoir			
	○ Others <i>Dug Well</i>			
Hydrogeological Information	Drilled Depth (m)	9.1	Sample ID	SA2-6-2
	Diameter (in)	1.4m	Temperature (°C)	28.6
	S.W.L (m)	8.7	pH	7.04
	D.W.L (m)		EC (µs/cm)	663
	Yield (m³/hour)		Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Fe (mg/l)	<0.2
Use for drinking.		F (mg/l)	0.4	
		NO3- (mg/l)	4.0	
		NO2- (mg/l)	<0.02	
		Coliforms	Too much	
		Results of Simplified Water Quality Test		



Region	SAGAING		Date	2015/5/6
Township	Chaungoo		Reported by	YORITATE Toru
Village / ID	Thanbinkan	SA2-07	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	742454	
	<input type="radio"/> Shallow Well		Y	2430600	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	192	Results of Simplified Water Quality Test	Sample ID	SA2-07-1
	Diameter (in)	4		Temperature (°C)	30.6
	S.W.L (m)	72.2		pH	8.68
	D.W.L (m)			EC (µs/cm)	1,224
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
				Fe (mg/l)	<0.2
Remarks (Lithology , etc.)				F (mg/l)	0.8
<ul style="list-style-type: none"> - Solar pump system (80W x 30 panels) - Grundfos SQL pump - Pmpup has broken for a week. Water was taken from remaining water in the tank. - It was constructed in 1979. -Water get from water tank. 				NO3- (mg/l)	10.0
				NO2- (mg/l)	< 0.02
				Coliforms	



Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	742361	
	<input type="radio"/> Shallow Well		Y	2430401	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	152	Results of Simplified Water Quality Test	Sample ID	SA2-07-2
	Diameter (in)	6		Temperature (°C)	36.7
	S.W.L (m)	70		pH	7.52
	D.W.L (m)			EC (µs/cm)	1,245
	Yield (m³/hour)	11.4		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
				Fe (mg/l)	<0.2
Remarks (Lithology , etc.)				F (mg/l)	0.8
<ul style="list-style-type: none"> - 9 hours opelation. - Mono pump system. - Constructed in 1979. - Water is sufficient now however, they need repair Grundfos pump ASAP. -Meter system for each hour (0-54m : Yellow sand and clay,ss 54-91m: Sand stone / 91m- Blue stone.) 				NO3- (mg/l)	10.0
				NO2- (mg/l)	<0.02
				Coliforms	



Region	SAGAING		Date	2015/5/6	
Township	Chaungoo		Reported by	YORITATE Toru	
Village / ID	Natyaygan	SA2-08	Coordinate (WGS84 UTM)	X	743883
			Y	2426853	

Information of Existing Water Source - 1						
Type	○ Deep Well		Coordinate	X	743872	
	Shallow Well			Y	2426840	
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	173	Results of Simplified Water Quality Test	Sample ID	SA2-08-1	
	Diameter (in)	6		Temperature (°C)	37.9	
	S.W.L (m)	61		pH	7.81	
	D.W.L (m)			EC (µs/cm)	2,820	
	Yield (m³/hour)	9.1		Smell	Non	
	No.of users (person/day)			Color	Non	
	Supply facilities			Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2	
- Mono Pump system - They have another well. Unfortunately,solar pump system (80W x 30 panels) which is using Grundfos SQL pump has broken for a week. However, water amount is still no problem. -116m TW donated UNICEF in 2012, cannot operate cause of moter pump trouble			F (mg/l)	0.8		
			NO3- (mg/l)	<1		
			NO2- (mg/l)	< 0.02		
			Coliforms			



Information of Existing Water Source - 2						
Type	Deep Well		Coordinate	X	743809	
	Shallow Well			Y	2426699	
	○ Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	SA2-08-2	
	Diameter (in)			Temperature (°C)	36.5	
	S.W.L (m)			pH	8.80	
	D.W.L (m)			EC (µs/cm)	311	
	Yield (m³/hour)			Smell	Non	
	No.of users (person/day)			Color	Shallow Yellow	
	Supply facilities			Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)			Fe (mg/l)	0.2	
Water taste is better than well, therefore many people use pond water for drinking. Target : 743821- 2426594			F (mg/l)	0.2		
			NO3- (mg/l)	<1		
			NO2- (mg/l)	<0.02		
			Coliforms	60<		



Region	SAGAING		Date	2015/5/21
Township	Ayadaw		Reported by	YORITATE Toru
Village / ID	Sithar	SA2-9	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	742923
	Shallow Well		Y	2472596
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	97	Sample ID	SA2-9-1
	Diameter (in)	4	Temperature (°C)	30.7
	S.W.L (m)	42	pH	7.66
	D.W.L (m)		EC (µs/cm)	1,302
	Yield (m ³ /hour)	4.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Submersible pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Public well. 34 years ago it was constructed.		F (mg/l)	0.6	
		NO3- (mg/l)	2.0	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	o Deep Well	Coordinate	X	742829
	Shallow Well		Y	2472777
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	102	Sample ID	SA2-9-2
	Diameter (in)	2	Temperature (°C)	31.8
	S.W.L (m)		pH	7.83
	D.W.L (m)		EC (µs/cm)	648
	Yield (m ³ /hour)	4.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Target : 742840 / 2472680 Private Well (picture) Monastery well (96m)		F (mg/l)	0.2	
		NO3- (mg/l)	1.0	
		NO2- (mg/l)	<0.02	
		Coliforms		



Region	SAGAING		Date	2015/5/21
Township	Ayadaw		Reported by	YORITATE Toru
Village / ID	Oakkan	SA2-10	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	747982
	Shallow Well		Y	2482474
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	224	Sample ID	SA2-10-1
	Diameter (in)	2	Temperature (°C)	31.3
	S.W.L (m)	+3m	pH	7.05
	D.W.L (m)		EC (µs/cm)	861.0
	Yield (m ³ /hour)	350g/h	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Artesian	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Water supplied to 100HH from this surface tank. 2 public well - 224m 2 private well - 91m (2015 constructed)s		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	o Deep Well	Coordinate	X	748057
	Shallow Well		Y	2482660
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	91	Sample ID	SA2-10-2
	Diameter (in)	2	Temperature (°C)	29.9
	S.W.L (m)	21	pH	8.13
	D.W.L (m)		EC (µs/cm)	1014.0
	Yield (m ³ /hour)	1200g/h	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Target : 747838 / 2482552 0-61 m Fine sand 61m ~ Brown fine sand.		Fe (mg/l)	<0.2	
		F (mg/l)	0.2	
		NO3- (mg/l)	5.0	
		NO2- (mg/l)	<0.02	
		Coliforms		



Region	SAGAING		Date	2015/5/20
Township	Ayadaw		Reported by	YORITATE Toru
Village / ID	Warryaung	SA2-11	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	○ Deep Well		Coordinate	X	748212	Type	○ Deep Well		Coordinate	X	748297
	Shallow Well			Y	2458178		Shallow Well			Y	2458027
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	244	Results of Simplified Water Quality Test	Sample ID	SA2-11-1	Hydrogeological Information	Drilled Depth (m)	61	Results of Simplified Water Quality Test	Sample ID	SA2-11-2
	Diameter (in)	2		Temperature (°C)	30.6		Diameter (in)	2		Temperature (°C)	29.0
	S.W.L (m)	55		pH	7.64		S.W.L (m)	22		pH	7.67
	D.W.L (m)			EC (µs/cm)	920		D.W.L (m)			EC (µs/cm)	721
	Yield (m ³ /hour)	4.5		Smell	Non		Yield (m ³ /hour)	3.4		Smell	Non
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	Non
	Supply facilities	Air lift		Mn (mg/l)	<0.02		Supply facilities	Air lift		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2		Remarks (Lithology , etc.)			Fe (mg/l)	<0.2
Donated by NGA		F (mg/l)	0.0	Private well		F (mg/l)	0.0				
MONO pump TW(1980) had broken		NO3- (mg/l)	5.0	Target : 748283/2458130		NO3- (mg/l)	1.0				
		NO2- (mg/l)	<0.02			NO2- (mg/l)	<0.02				
		Coliforms				Coliforms					

Photo



Photo



Region	SAGAING		Date	2015/5/21
Township	Ayadaw		Reported by	YORITATE Toru
Village / ID	Warrtannkalay	SA2-12	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	751008
	Shallow Well		Y	2470107
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	97	Sample ID	SA2-12-1
	Diameter (in)	6	Temperature (°C)	30.5
	S.W.L (m)		pH	7.25
	D.W.L (m)		EC (µs/cm)	912
	Yield (m ³ /hour)	31.8	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Mono Pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Irrawaddi formation. 1 Mono pump well 97m 3 Airlift Well -305m : public - 97m :Monastery -97m : Private		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	o Deep Well	Coordinate	X	750726
	Shallow Well		Y	2470091
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	305	Sample ID	SA2-12-2
	Diameter (in)	2	Temperature (°C)	30.9
	S.W.L (m)		pH	8.61
	D.W.L (m)		EC (µs/cm)	1,155
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Constructed in 2003. They hoped to get artesian well, however couldn't reach. Target : 750823 / 2470044		Fe (mg/l)	<0.2	
		F (mg/l)	1.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Region	SAGAING		Date	2015/5/21
Township	Ayadaw		Reported by	YORITATE Toru
Village / ID	Yathar	SA2-13	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	<input type="radio"/> Deep Well	Coordinate	X	766191
	<input type="radio"/> Shallow Well		Y	2449689
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	182	Sample ID	SA2-13-1
	Diameter (in)	2	Temperature (°C)	31.7
	S.W.L (m)		pH	7.92
	D.W.L (m)		EC (µs/cm)	4,470
	Yield (m ³ /hour)	5.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Q2 area. 107m TW (PDA)Cannot drink 60m-182m Private TW (total 28TWs) Shallow well's water quality is better than deep one.		F (mg/l)	0.8	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		
		Results of Simplified Water Quality Test		



Information of Existing Water Source - 2				
Type	<input type="radio"/> Deep Well	Coordinate	X	766062
	<input type="radio"/> Shallow Well		Y	2449698
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	61	Sample ID	SA2-13-2
	Diameter (in)	2	Temperature (°C)	31.7
	S.W.L (m)		pH	8.48
	D.W.L (m)		EC (µs/cm)	1,253
	Yield (m ³ /hour)	2.7	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Private Well Target- 766166/2449638		F (mg/l)	0.6	
		NO3- (mg/l)	2.0	
		NO2- (mg/l)	<0.02	
		Coliforms		
		Results of Simplified Water Quality Test		



Region	SAGAING		Date	2015/5/20
Township	Ayadaw		Reported by	YORITATE Toru
Village / ID	Zeepinlel	SA2-14	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	751681
	Shallow Well		Y	2457462
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	115	Sample ID	SA2-14-1
	Diameter (in)	2	Temperature (°C)	29.6
	S.W.L (m)		pH	7.50
	D.W.L (m)		EC (µs/cm)	731
	Yield (m ³ /hour)	>4.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Irrawaddi formation. Mostly sandy soil. Private 6 TW (107-137m) Shallow 28 well (All private)		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	751521
	o Shallow Well		Y	2457542
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	30	Sample ID	SA2-14-2
	Diameter (in)		Temperature (°C)	28.7
	S.W.L (m)	7.6m<	pH	7.04
	D.W.L (m)		EC (µs/cm)	954
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Suction pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Coner of the school area Target : 751516/ 2457534		Fe (mg/l)	<0.2	
		F (mg/l)	0.2	
		NO3- (mg/l)	5.0	
		NO2- (mg/l)	<0.02	
		Coliforms	Too much	



Region	SAGAING		Date	2015/5/5	
Township	Sarlingyi		Reported by	YORITATE Toru	
Village / ID	Minntaw	SA2-16	Coordinate (WGS84 UTM)	Zone X	46Q Y

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	9506514		
	Shallow Well		Y	2194759		
	Storage reservoir					
	○ Others(Dug well)					
Hydrogeological Information	Drilled Depth (m)	3	Sample ID	SA2-16-1		
	Diameter (in)	0.8	Temperature (°C)	32.0		
	S.W.L (m)	2.3	pH	7.35		
	D.W.L (m)		EC (µs/cm)	935		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities		Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)	<0.2	
In the morning, water level is back to the ground level.	F (mg/l)			1.5		
	NO3- (mg/l)			30.0		
	NO2- (mg/l)			<0.07		
	Coliforms					

Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	9506526		
	Shallow Well		Y	2194751		
	Storage reservoir					
	○ Others(Dug well)					
Hydrogeological Information	Drilled Depth (m)	3.8	Sample ID			
	Diameter (in)	1.45	Temperature (°C)			
	S.W.L (m)	3.8	pH			
	D.W.L (m)	0.6	EC (µs/cm)			
	Yield (m ³ /hour)		Smell			
	No.of users (person/day)		Color			
	Supply facilities		Mn (mg/l)			
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)		
	F (mg/l)					
	NO3- (mg/l)					
	NO2- (mg/l)					
	Coliforms					



Region	SAGAING		Date	2015/5/5	
Township	Sarlingyi		Reported by	YORITATE Toru	
Village / ID	Minntaw	SA2-16	Coordinate (WGS84 UTM)	Zone	X
				46Q	Y

Information of Existing Water Source - 3						
Type	Deep Well	Coordinate	X	712670		
	Shallow Well		Y	2428751		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	8	Sample ID	SA2-16-2		
	Diameter (in)	1.1	Temperature (°C)	31.6		
	S.W.L (m)	5.9	pH	7.56		
	D.W.L (m)		EC (µs/cm)	1,337		
	Yield (m ³ /hour)		Smell			
	No. of users (person/day)		Color			
	Supply facilities		Mn (mg/l)	<0.02		
			Fe (mg/l)	0.2		
Remarks (Lithology, etc.) - 2" riser pipe, Air lift. Small water. - High salinity. Can not drink.			F (mg/l)	1.5		
			NO3- (mg/l)	3.0		
			NO2- (mg/l)	<0.02		
			Coliforms	0		
			Results of Simplified Water Quality Test			

Information of Existing Water Source -						
Type	Deep Well	Coordinate	X	9505791		
	Shallow Well		Y	2105791		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	121	Sample ID	SA2-16-3		
	Diameter (in)	2	Temperature (°C)	32.2		
	S.W.L (m)		pH	7.42		
	D.W.L (m)		EC (µs/cm)	4,830		
	Yield (m ³ /hour)		Smell	No		
	No. of users (person/day)		Color	No		
	Supply facilities		Mn (mg/l)	<0.02		
			Fe (mg/l)	1.5		
Remarks (Lithology, etc.) 2"riser pipe, Air lift. Small water. High salinity. Can not drink.			F (mg/l)	<0.2		
			NO3- (mg/l)	1.0		
			NO2- (mg/l)	<0.02		
			Coliforms			
			Results of Simplified Water Quality Test			



Region	SAGAING		Date	2015/5/5	
Township	Sarlingyi		Reported by	YORITATE Toru	
Village / ID	Kine	SA2-17	Coordinate (WGS84 UTM)	Zone X	711531
				46Q Y	2437798

Information of Existing Water Source - 1								
Type	Deep Well	Coordinate	X	711613				
	Shallow Well		Y	2437746				
	○ Storage reservoir							
	Others							
Hydrogeological Information	Drilled Depth (m)	91	Sample ID	SA2-17-1				
	Diameter (in)	4	Temperature (°C)	33.9				
	S.W.L (m)	19	pH	8.82				
	D.W.L (m)		EC (µs/cm)	640				
	Yield (m ³ /hour)	4.5	Smell	Non				
	No.of users (person/day)	305	Color	Shallow Yellow				
	Supply facilities		Mn (mg/l)	<0.02				
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test						
Pond is only one source of water. Lower Peg formation. Edge of pond crop up sand and silt stone alternation. Hardly weathered.								
	Fe (mg/l)						<0.2	
	F (mg/l)						1.5	
	NO3-(mg/l)						2.0	
	NO2-(mg/l)						0.1	
	Coliforms	2						



Information of Existing Water Source - 2								
Type	Deep Well	Coordinate	X					
	Shallow Well		Y					
	Storage reservoir							
	Others							
Hydrogeological Information	Drilled Depth (m)		Sample ID					
	Diameter (in)		Temperature (°C)					
	S.W.L (m)		pH					
	D.W.L (m)		EC (µs/cm)					
	Yield (m ³ /hour)		Smell					
	No.of users (person/day)		Color					
	Supply facilities		Mn (mg/l)					
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test						
Target: 711640 / 2437561								
	Fe (mg/l)							
	F (mg/l)							
	NO3-(mg/l)							
	NO2-(mg/l)							
	Coliforms							



Region	SAGAING		Date	2015/5/10	
Township	Myinmu		Reported by	YORITATE Toru	
Village / ID	Kalarpyan	SA2-18	Coordinate (WGS84 UTM)	X	749917
				Y	2421805

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	749919		
	Shallow Well		Y	2422162		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	55	Sample ID	SA2-18-1		
	Diameter (in)	4	Temperature (°C)			
	S.W.L (m)	21	pH			
	D.W.L (m)		EC (µs/cm)			
	Yield (m ³ /hour)		Smell			
	No. of users (person/day)		Color			
	Supply facilities	Mono		Mn (mg/l)		
	Remarks (Lithology, etc.) Irrawaddi formation area. Drive shaft has broken. Well also too old, can not reuse. Constructed by RUD			Fe (mg/l)		
F (mg/l)						
NO3- (mg/l)						
NO2- (mg/l)						
Coliforms						
Results of Simplified Water Quality Test						



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	749919		
	Shallow Well		Y	2422594		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	167	Sample ID	SA2-18-2		
	Diameter (in)	4	Temperature (°C)	32.2		
	S.W.L (m)	36	pH	8.24		
	D.W.L (m)		EC (µs/cm)	3,600		
	Yield (m ³ /hour)		Smell	Non		
	No. of users (person/day)		Color	Non		
	Supply facilities	Air lift		Mn (mg/l)	<0.02	
	Remarks (Lithology, etc.) Target : 749957/2422670			Fe (mg/l)	<0.2	
F (mg/l)				1.5		
NO3- (mg/l)				<1		
NO2- (mg/l)				<0.02		
Coliforms						
Results of Simplified Water Quality Test						



Region	SAGAING		Date	2015/5/10	
Township	Myinmu		Reported by	YORITATE Toru	
Village / ID	Kalarpyan	SA2-18	Coordinate (WGS84 UTM)	X	749917
			Y	2421805	

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	750050		
	Shallow Well		Y	2422676		
	○ Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	SA2-18-3		
	Diameter (in)		Temperature (°C)	37.9		
	S.W.L (m)		pH	9.13		
	D.W.L (m)		EC (µs/cm)	244		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities		Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2		
Retention pond.	F (mg/l)	0.2				
	NO3- (mg/l)	<1				
	NO2- (mg/l)	<0.02				
	Coliforms					



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	750132		
	○ Shallow Well		Y	2421633		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	SA2-18-4		
	Diameter (in)		Temperature (°C)	31.3		
	S.W.L (m)		pH	7.98		
	D.W.L (m)		EC (µs/cm)	2190		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities		Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2		
	F (mg/l)	0.8				
	NO3- (mg/l)	5.0				
	NO2- (mg/l)	0.05				
Coliforms						



Region	SAGAING		Date	2015/5/10
Township	Myinmu		Reported by	YORITATE Toru
Village / ID	Hlayookan	SA2-19	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	○ Deep Well	Coordinate	X	758105
	Shallow Well		Y	2439332
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	152	Sample ID	SA2-19-1
	Diameter (in)	2	Temperature (°C)	30.9
	S.W.L (m)	115	pH	8.2
	D.W.L (m)		EC (µs/cm)	1,050
	Yield (m ³ /hour)	2.0	Smell	Non
	No.of users (person/day)	580	Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Alluvial plane Target place is X=758109, Y=2439343 0.47m : Clay sand 49-55m : Sticky clay (yellow) 55-61m : Clay sand 61-152m : Blue sand -Irawadi formation 67-69, 98-101 : Hard rock		F (mg/l)	1.5	
		NO3- (mg/l)	1.0	
		NO2- (mg/l)	0.02	
		Coliforms		
		Results of Simplified Water Quality Test		

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	757753
	○ Shallow Well		Y	2489582
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	7	Sample ID	SA2-19-2
	Diameter (in)		Temperature (°C)	29.7
	S.W.L (m)	3	pH	7.35
	D.W.L (m)		EC (µs/cm)	1,178
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Handpump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
		F (mg/l)	0.6	
		NO3- (mg/l)	20.0	
		NO2- (mg/l)	<0.02	
		Coliforms		
		Results of Simplified Water Quality Test		



Region	SAGAING 3		Date	2015/5/10
Township	Myinmu		Reported by	YORITATE Toru
Village / ID	Hlayookan	SA2-19	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1					
Type	Deep Well	Coordinate	X	758776	
	Shallow Well		Y	2438782	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	SA2-19-3	
	Diameter (in)		Temperature (°C)	29.7	
	S.W.L (m)		pH	7.3	
	D.W.L (m)		EC (µs/cm)	1084	
	Yield (m ³ /hour)		Smell	Non	
	No.of users (person/day)		Color	Non	
	Supply facilities		Handpump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2	
	F (mg/l)	0.4			
	NO3- (mg/l)	5.0			
	NO2- (mg/l)	<0.02			
	Coliforms				

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	SA2-19
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			



Region	SAGAIN		Date	2015/5/11
Township	Myinmu		Reported by	YORITATE Toru
Village / ID	Makyeekan	SA2-20	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	773591		
	○ Shallow Well		Y	2437376		
	Storage reservoir					
	Others (River)					
Hydrogeological Information	Drilled Depth (m)	24	Sample ID	SA2-20-1		
	Diameter (in)		Temperature (°C)	31.6		
	S.W.L (m)		pH	7.31		
	D.W.L (m)		EC (µs/cm)	676		
	Yield (m ³ /hour)	13.6	Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities		Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test				
Q2. 2 shallow wells combine with suction pump system. Water is sent to the over head tank and distributed to each house. This system constructed last year and water amount is enough. 105 houses are connect this system and pay 300 kyats/m ³ .						
	Fe (mg/l)					<0.2
	F (mg/l)					0.0
	NO3- (mg/l)					<1
	NO2- (mg/l)					<0.02
	Coliforms					



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	773839		
	○ Shallow Well		Y	2437211		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	24	Sample ID	SA2-20-2		
	Diameter (in)		Temperature (°C)	30.4		
	S.W.L (m)	10	pH	6.86		
	D.W.L (m)		EC (µs/cm)	3,800		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities	Hand Pump	Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test				
More than 100 household have like this shallow well. However every shallow well can not use for drinking cause of salty water.						
	Fe (mg/l)					<0.2
	F (mg/l)					0.0
	NO3- (mg/l)					45<
	NO2- (mg/l)					0.1
	Coliforms					



Region	SAGAIN		Date	2015/5/11
Township	Myinmu		Reported by	YORITATE Toru
Village / ID	Makyeekan	SA2-20	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	773945
	○ Shallow Well		Y	2437327
	Storage reservoir			
	Others (River)			
Hydrogeological Information	Drilled Depth (m)	8	Sample ID	SA2-20-3
	Diameter (in)	1.1 m	Temperature (°C)	
	S.W.L (m)	7.3	pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	Fe (mg/l)
Dry season can not use. In the rainy season water comes up and they use it for other things (can not use for drinking)		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		
Photo				

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	SA2-20
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities	Hand Pump	Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	Fe (mg/l)
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		
Photo				

Region	SAGAING		Date	2015/5/10
Township	Myinmu		Reported by	YORITATE Toru
Village / ID	Watkya	SA2-21	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	745604
	Shallow Well		Y	2447822
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	167	Sample ID	SA2-21-1
	Diameter (in)	4	Temperature (°C)	
	S.W.L (m)	36	pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities	Submergible	Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Water supply system 2 wells - SA2-21-1 and 2 used for the system. (Solar+Generator, Hiblid and Grundfos DC pump) 800m ³ / month suppling. 300 kyats/m ³ .		Fe (mg/l)		
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		

Information of Existing Water Source - 2				
Type	o Deep Well	Coordinate	X	745617
	Shallow Well		Y	2447824
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	167	Sample ID	SA2-21-2
	Diameter (in)	4	Temperature (°C)	31.7
	S.W.L (m)	36	pH	7.39
	D.W.L (m)		EC (µs/cm)	2,310
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Submergible pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
AC pump Target : 745592/ 2447		Fe (mg/l)	<0.2	
		F (mg/l)	0.6	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Region	SAGAING 3		Date	2015/5/10	
Township	Myinmu		Reported by	YORITATE Toru	
Village / ID	Thahtaykone	SA2-22	Coordinate (WGS84 UTM)	X	747889
			Y	2446223	

Information of Existing Water Source - 1				Information of Existing Water Source - 2							
Type	<input type="radio"/> Deep Well	Coordinate	X	747989	Type	<input type="radio"/> Deep Well	Coordinate	X	747929		
	<input type="radio"/> Shallow Well		Y	2446283		<input type="radio"/> Shallow Well		Y	2446231		
	<input type="radio"/> Storage reservoir					<input type="radio"/> Storage reservoir					
	<input type="radio"/> Others					<input type="radio"/> Others					
Hydrogeological Information	Drilled Depth (m)	161	Results of Simplified Water Quality Test	Sample ID	SA2-22-1	Hydrogeological Information	Drilled Depth (m)	152	Results of Simplified Water Quality Test	Sample ID	SA2-22-2
	Diameter (in)	2		Temperature (°C)			Diameter (in)	2		Temperature (°C)	32.6
	S.W.L (m)	55		pH			S.W.L (m)	55		pH	8.02
	D.W.L (m)			EC (µs/cm)			D.W.L (m)			EC (µs/cm)	1,663
	Yield (m³/hour)	13.6		Smell			Yield (m³/hour)	3.4		Smell	Non
	No.of users (person/day)			Color			No.of users (person/day)			Color	Non
	Supply facilities	Mono		Mn (mg/l)			Supply facilities	Handpump		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Constructed in 1986. Pump trable. Can not operate.		Fe (mg/l)			Remarks (Lithology , etc.)	0-30 sand and clay 30-90 mad 90 ~ Hard stone		Fe (mg/l)	<0.2
			F (mg/l)				F (mg/l)	0.2			
			NO3- (mg/l)				NO3- (mg/l)	5.0			
			NO2- (mg/l)				NO2- (mg/l)	<0.02			
			Coliforms				Coliforms				

Photo



Photo




Region	SAGAING 3		Date	2015/5/10	
Township	Myinmu		Reported by	YORITATE Toru	
Village / ID	Thahtaykone	SA2-22	Coordinate (WGS84 UTM)	X	747889
			Y	2446223	

Information of Existing Water Source - 1					
Type	o Deep Well		Coordinate	X	747853
	Shallow Well			Y	2446360
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	113	Results of Simplified Water Quality Test	Sample ID	SA2-22-3
	Diameter (in)	4		Temperature (°C)	32.1
	S.W.L (m)			pH	7.26
	D.W.L (m)			EC (µs/cm)	1,582
	Yield (m³/hour)	9.1		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Submergible		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Pump installed in 48m. Static Water Level is estimated around 30m.		Fe (mg/l)	<0.2
			F (mg/l)	0.2	
			NO3- (mg/l)	10.0	
			NO2- (mg/l)	<0.02	
			Coliforms		

Information of Existing Water Source - 2					
Type	Deep Well		Coordinate	X	747673
	Shallow Well			Y	2446221
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)	Target X=747673, Y=2446441		Fe (mg/l)	
			F (mg/l)		
			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		



Region	SAGAING		Date	2015/5/11	
Township	Myinmu		Reported by	YORITATE Toru	
Village / ID	Magyidaw	SA2-23	Coordinate (WGS84 UTM)	X	774428
			Y	2444493	

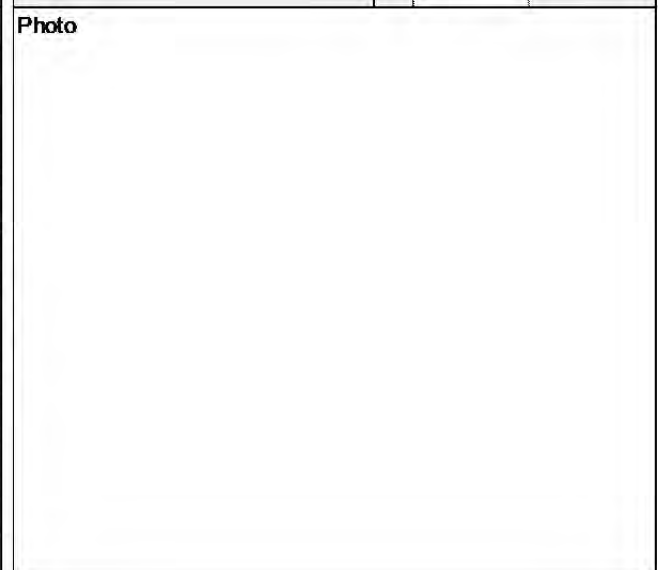
Information of Existing Water Source - 1						Information of Existing Water Source - 2					
Type	Deep Well		Coordinate	X	774423	Type	Deep Well		Coordinate	X	774560
	○ Shallow Well			Y	2444502		○ Shallow Well			Y	2444437
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	15	Results of Simplified Water Quality Test	Sample ID	SA2-23-1	Hydrogeological Information	Drilled Depth (m)	24	Results of Simplified Water Quality Test	Sample ID	SA2-23-2
	Diameter (in)			Temperature (°C)	29.8		Diameter (in)	4		Temperature (°C)	31.9
	S.W.L (m)			pH	7.60		S.W.L (m)	3		pH	7.58
	D.W.L (m)			EC (µs/cm)	1,601		D.W.L (m)			EC (µs/cm)	1,838
	Yield (m ³ /hour)			Smell	Non		Yield (m ³ /hour)			Smell	Muddy smell
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	Shallow Yellow
	Supply facilities	Hand Pump		Mn (mg/l)	<0.02		Supply facilities	Suction		Mn (mg/l)	<0.02
				Fe (mg/l)	<0.2					Fe (mg/l)	<0.2
Remarks (Lithology , etc.) Q2 area. Many house have such as shallow well. However they can not use for drinking cause of high salinity.			F (mg/l)	0.8	Remarks (Lithology , etc.) 5 well convine system. 10 system are operating in this area. It is mainly use for agriculture. 0-6m : silty clay 6m : Sand private well for agriculture			F (mg/l)	0.4		
			NO3- (mg/l)	20.0				NO3- (mg/l)	1.5		
			NO2- (mg/l)	0.2				NO2- (mg/l)	0.1		
			Coliforms					Coliforms			
Photo											

Region	SAGAING		Date	2015/5/11	
Township	Myinmu		Reported by	YORITATE Toru	
Village / ID	Magyidaw	SA2-23	Coordinate (WGS84 UTM)	X	774428
			Y	2444493	

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	774727		
	Shallow Well		Y	2444435		
	Storage reservoir					
	○ Others (River)					
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	SA2-23-3		
	Diameter (in)		Temperature (°C)	32.1		
	S.W.L (m)		pH	8.66		
	D.W.L (m)		EC (µs/cm)	474		
	Yield (m³/hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities		Mn (mg/l)			
	Remarks (Lithology , etc.)		Fe (mg/l)	< 0.2		
Muu River water. Use it for drinking.	F (mg/l)	0.2				
	NO3- (mg/l)	<1				
	NO2- (mg/l)	<0.02				
	Coliforms					



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	750132		
	Shallow Well		Y	2421633		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID			
	Diameter (in)		Temperature (°C)			
	S.W.L (m)		pH			
	D.W.L (m)		EC (µs/cm)			
	Yield (m³/hour)		Smell			
	No.of users (person/day)		Color			
	Supply facilities		Mn (mg/l)			
	Remarks (Lithology , etc.)		Fe (mg/l)			
	F (mg/l)					
	NO3- (mg/l)					
	NO2- (mg/l)					
	Coliforms					



Region	SAGAING		Date	2015/5/16
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Thindaw	SA2-24	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	773446	
	<input type="radio"/> Shallow Well		Y	2612929	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	82	Results of Simplified Water Quality Test	Sample ID	SA2-24-1
	Diameter (in)	2		Temperature (°C)	27.3
	S.W.L (m)			pH	7.84
	D.W.L (m)			EC (µs/cm)	1,053
	Yield (m³/hour)	3.2		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Constructed in 2005.		Fe (mg/l)	<0.2
			F (mg/l)	0.2	
			NO3-(mg/l)	<1	
			NO2-(mg/l)	<0.02	
			Coliforms		

Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	773526	
	<input type="radio"/> Shallow Well		Y	2612915	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	116	Results of Simplified Water Quality Test	Sample ID	SA2-24-2
	Diameter (in)	2		Temperature (°C)	27.1
	S.W.L (m)			pH	6.77
	D.W.L (m)			EC (µs/cm)	34,800
	Yield (m³/hour)			Smell	Salty smell
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	0.02
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2
			F (mg/l)	0.2	
			NO3-(mg/l)	<1	
			NO2-(mg/l)	<0.02	
			Coliforms		



Region	SAGAING		Date	2015/5/16
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Lwingyi	SA2-25	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	o Deep Well	Coordinate	X	772025	
	Shallow Well		Y	2612947	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	152	Results of Simplified Water Quality Test	Sample ID	SA2-25-1
	Diameter (in)	2		Temperature (°C)	28.1
	S.W.L (m)	30		pH	8.08
	D.W.L (m)			EC (µs/cm)	665
	Yield (m³/hour)	2.3		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Botton of 12m in Screen. 7 Dug wells and 7 Shallow wells 6 Tube Wells(3 public and 3 private)		Fe (mg/l)	<0.2
			F (mg/l)	0.2	
			NO3-(mg/l)	<1	
			NO2-(mg/l)	<0.02	
			Coliforms	0	

Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X	772013	
	Shallow Well		Y	2612839	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	SA2-25
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)	Target : 772013 / 2612839		Fe (mg/l)	
			F (mg/l)		
			NO3-(mg/l)		
			NO2-(mg/l)		
			Coliforms		



Region	SAGAING		Date	2015/5/16
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Koetaungboh(Kyunkone)	SA2-26	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				Information of Existing Water Source - 2					
Type	o Deep Well		X	773469	Type	o Deep Well		X	773675
	Shallow Well		Y	2620861		Shallow Well		Y	2620875
	Storage reservoir					Storage reservoir			
	Others								
Hydrogeological Information	Drilled Depth (m)	152	Sample ID	SA2-26-1	Hydrogeological Information	Drilled Depth (m)	85	Sample ID	SA2-26-2
	Diameter (in)	2	Temperature (°C)	27.0		Diameter (in)	2	Temperature (°C)	27.1
	S.W.L (m)		pH	7.60		S.W.L (m)		pH	7.27
	D.W.L (m)		EC (µs/cm)	1,113		D.W.L (m)		EC (µs/cm)	1,450
	Yield (m ³ /hour)	1.8	Smell	Sulfer smell		Yield (m ³ /hour)	3.0	Smell	Non
	No.of users (person/day)		Color	Shallow yellow		No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	0.01		Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2		Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
73 Shallow wells with rope 20 Tubewells(1 public, 19 private) They don't like tube well water. They use pond water for drinking. Bottom of 18m in screen.		F (mg/l)	0.2	Target 2 : 773590 / 2620729 Target 1 is low priority. Bottom of 10m in screen.		F (mg/l)	0.0		
		NO3- (mg/l)	<1			NO3- (mg/l)	45.0		
		NO2- (mg/l)	<0.02			NO2- (mg/l)	<0.02		
		Coliforms				Coliforms			
		Results of Simplified Water Quality Test	Results of Simplified Water Quality Test						

Photo



Photo Target place



Region	SAGAING		Date	2015/5/16
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Inngoteto	SA2-27	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	768435
	Shallow Well		Y	2598073
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	61	Sample ID	SA2-27-1
	Diameter (in)	2	Temperature (°C)	27.7
	S.W.L (m)		pH	7.31
	D.W.L (m)		EC (µs/cm)	796
	Yield (m ³ /hour)	1.1	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Very low yield in Monastery	F (mg/l)			0.2
2 Tube wells (1 damaged, 1 monastery)	NO3- (mg/l)			45<
16 Shallow wells	NO2- (mg/l)			<0.02
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	768370
	o Shallow Well		Y	2598171
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	21	Sample ID	SA2-27-2
	Diameter (in)	3	Temperature (°C)	28.6
	S.W.L (m)	17.8	pH	7.37
	D.W.L (m)		EC (µs/cm)	1,487
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Shallow white
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Private well	F (mg/l)			3.0
Target : 768388 / 2598038 (Monestry)	NO3- (mg/l)			<1
	NO2- (mg/l)			<0.02
	Coliforms			



Region	SAGAING		Date	2015/5/15
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Myayhtoo	SA2-28	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	<input type="radio"/> Deep Well	Coordinate	X	745074
	<input type="radio"/> Shallow Well		Y	2565109
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	82	Sample ID	SA2-28-1
	Diameter (in)	2	Temperature (°C)	29.0
	S.W.L (m)	67	pH	7.05
	D.W.L (m)		EC (µs/cm)	681
	Yield (m³/hour)		Smell	Slightly certain smell
	No.of users (person/day)		Color	Shallow yellow
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.) Operating by power, however target area does not have water. 17 Air lift TW (70m) Below 91 m can get good water.		Fe (mg/l)	0.2
F (mg/l)			0.0	
NO3- (mg/l)			<1	
NO2- (mg/l)			<0.02	
Coliforms				

Information of Existing Water Source - 2				
Type	<input type="radio"/> Deep Well	Coordinate	X	745102
	<input type="radio"/> Shallow Well		Y	2565190
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	76	Sample ID	SA2-28-2
	Diameter (in)	2	Temperature (°C)	28.8
	S.W.L (m)	61	pH	7.19
	D.W.L (m)		EC (µs/cm)	858
	Yield (m³/hour)		Smell	Non
	No.of users (person/day)		Color	Shallow white
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.) Sands came up with water.		Fe (mg/l)	<0.2
F (mg/l)			0.0	
NO3- (mg/l)			<1	
NO2- (mg/l)			<0.02	
Coliforms				



Region	SAGAING		Date	2015/5/15
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Myayhtoo	SA2-28	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	744822
	Shallow Well		Y	2565124
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	171	Sample ID	SA2-28-3
	Diameter (in)	2	Temperature (°C)	28.9
	S.W.L (m)	146.3	pH	7.24
	D.W.L (m)		EC (µs/cm)	981
	Yield (m ³ /hour)		Smell	Non
	No. of users (person/day)		Color	Shallow yellow
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Results of Simplified Water Quality Test	
		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	1.0	
		NO2- (mg/l)	<0.02	
		Coliforms		

Information of Existing Water Source - 2				
Type	o Deep Well	Coordinate	X	748784
	Shallow Well		Y	2565102
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	16	Sample ID	SA2-28-4
	Diameter (in)	3	Temperature (°C)	
	S.W.L (m)	8	pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No. of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology, etc.)		Results of Simplified Water Quality Test	
Target : 745839/ 2565464		Fe (mg/l)		
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		



Region	SAGAING		Date	2015/5/17
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Khaowntar	SA2-29	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	776703
	Shallow Well		Y	2551428
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	116	Sample ID	SA2-29-1
	Diameter (in)	2	Temperature (°C)	28.7
	S.W.L (m)	30	pH	7.26
	D.W.L (m)		EC (µs/cm)	947
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Private tubewell 30 Tube wells(29 privates) Half of them can drink.		Results of Simplified Water Quality Test		
		F (mg/l)	0.8	
		NO3-(mg/l)	<1	
		NO2-(mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	o Deep Well	Coordinate	X	776612
	Shallow Well		Y	2551398
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	110	Sample ID	SA2-29-2
	Diameter (in)	2	Temperature (°C)	29.1
	S.W.L (m)		pH	7.74
	D.W.L (m)		EC (µs/cm)	1,423
	Yield (m ³ /hour)	4.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Target : 776585 / 2551429 (In the monastery). Corner of the monastery.		Results of Simplified Water Quality Test		
		F (mg/l)	0.0	
		NO3-(mg/l)	<1	
		NO2-(mg/l)	<0.02	
		Coliforms		



Region	SAGAING		Date	2015/5/18
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Nyaungkanthar	SA2-30	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	770617
	Shallow Well		Y	2587691
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	122	Sample ID	SA2-30-1
	Diameter (in)	2	Temperature (°C)	27.6
	S.W.L (m)		pH	7.53
	D.W.L (m)		EC (µs/cm)	1,905
	Yield (m ³ /hour)	75g/day	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Public tube well. 3 tube well - can use for drinking. 2 public : 122m 1 private : 45m Very small yield , almost unsuccessful well		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	45.0	
		NO2- (mg/l)	<0.02	
		Coliforms		

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	770701
	o Shallow Well		Y	2597767
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	45	Sample ID	SA2-30-2
	Diameter (in)	2	Temperature (°C)	28.1
	S.W.L (m)		pH	8.19
	D.W.L (m)		EC (µs/cm)	691
	Yield (m ³ /hour)	28g/day	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Private Well. Target : 779771 / 2597741		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms	0	



Region	SAGAING		Date	2015/5/17
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Myaymon	SA2-31	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	785078	
	<input type="radio"/> Shallow Well		Y	2543981	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	98	Results of Simplified Water Quality Test	Sample ID	SA2-31-1
	Diameter (in)	2		Temperature (°C)	29.3
	S.W.L (m)			pH	8.16
	D.W.L (m)			EC (µs/cm)	1,210
	Yield (m³/hour)	4.5		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	South part of village. Overhead is already too old , cannot use. 44 Tube well - 1 is public in school.		Fe (mg/l)	<0.2
		F (mg/l)	0.2		
		NO3- (mg/l)	1.0		
		NO2- (mg/l)	<0.02		
		Coliforms			

Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	784990	
	<input type="radio"/> Shallow Well		Y	2544342	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	73	Results of Simplified Water Quality Test	Sample ID	SA2-31-2
	Diameter (in)	2		Temperature (°C)	29.1
	S.W.L (m)			pH	8.14
	D.W.L (m)			EC (µs/cm)	3,210
	Yield (m³/hour)	1.4		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	North part of village. Target 2 785110 / 2544263 Water quality is south part is better than north part. North wells are salt.		Fe (mg/l)	<0.2
		F (mg/l)	1.5		
		NO3- (mg/l)	45<		
		NO2- (mg/l)	<0.02		
		Coliforms			



Region	SAGAING		Date	2015/5/17
Township	kanbalu		Reported by	YORITATE Toru
Village / ID	Layytwinzin	SA2-32	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	800278
	Shallow Well		Y	2549565
	Storage reservoir			
	○ Others <i>Dug Well</i>			
Hydrogeological Information	Drilled Depth (m)	2.4	Sample ID	SA2-32-1
	Diameter (in)	1.5m	Temperature (°C)	28.5
	S.W.L (m)	1.5	pH	7.40
	D.W.L (m)		EC (µs/cm)	880
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Shallow yellow
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		
Dug well constructed low area. This area will be below flow water in the rainy season. Therefore every year after rainy season they have to clean up the well to remove sand.		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	1.0	
		NO2- (mg/l)	<0.08	
		Coliforms	Too much	



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	○ Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		
Target : 800148 / 2549708 They have two test experience. 1. 116m (Dry well) (Target point) 2. 146m (small water 50g/h)		Fe (mg/l)		
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		



Region	SAGAING		Date	2015/5/16
Township	Kanbalu		Reported by	YORITATE Toru
Village / ID	Chaungchar	SA2-33	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	762364
	○ Shallow Well		Y	2587378
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	38	Sample ID	SA2-33-1
	Diameter (in)	2	Temperature (°C)	29.4
	S.W.L (m)		pH	7.87
	D.W.L (m)		EC (µs/cm)	657
	Yield (m ³ /hour)	1.6	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Air lift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
2 Tube wells -1 public, 1 monastery 27 Shallow wells with hand pump.		Fe (mg/l)	<0.2	
		F (mg/l)	0.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms	0	

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	762527
	○ Shallow Well		Y	2587375
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	49	Sample ID	SA2-33-2
	Diameter (in)	2	Temperature (°C)	27.4
	S.W.L (m)	9	pH	8.03
	D.W.L (m)		EC (µs/cm)	621
	Yield (m ³ /hour)	2.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Monastery Operation cost : 1000 kyats -fuel/hour		Fe (mg/l)	<0.2	
		F (mg/l)	0.2	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms	0	



Region	SAGAING		Date	2015/5/9
Township	Dabayin		Reported by	YORITATE Toru
Village / ID	Minyogone	SA2-34	Coordinate (WGS84 UTM)	X
			Y	

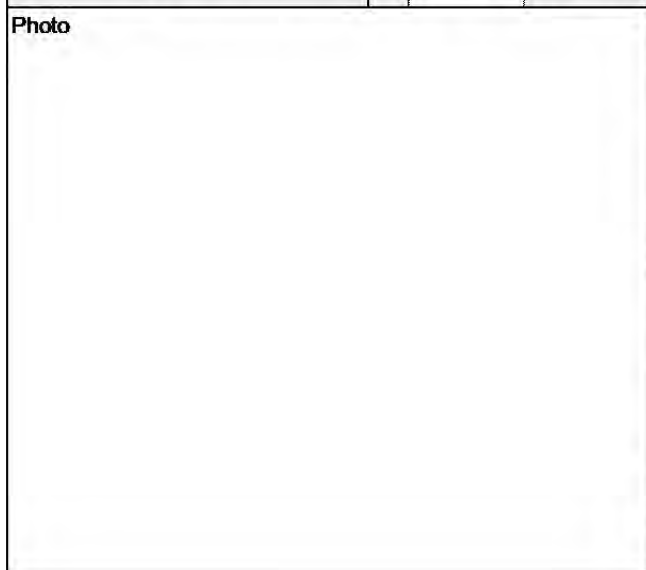
Information of Existing Water Source - 1					
Type	Deep Well	Coordinate	X	732024	
	Shallow Well		Y	2513022	
	Storage reservoir				
	○ Others <i>Dug Well</i>				
Hydrogeological Information	Drilled Depth (m)	8.9	Results of Simplified Water Quality Test	Sample ID	SA2-34-1
	Diameter (in)	1.6 m		Temperature (°C)	29.7
	S.W.L (m)	4.3		pH	6.95
	D.W.L (m)			EC (µs/cm)	477
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Only one dug well is water source in this village. Target : 731866/ 2513234 (Next to the abandoned dug well)		Fe (mg/l)	<0.2
		F (mg/l)	0.2		
		NO3- (mg/l)	<1		
		NO2- (mg/l)	<0.02		
		Coliforms	Too much		

Information of Existing Water Source - 2					
Type	○ Deep Well	Coordinate	X	732713	
	Shallow Well		Y	2512110	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	103	Results of Simplified Water Quality Test	Sample ID	SA2-34-2
	Diameter (in)	4		Temperature (°C)	30.1
	S.W.L (m)	3.2		pH	7.9
	D.W.L (m)			EC (µs/cm)	1,224
	Yield (m³/hour)	6.8		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Next village 1 km from Minyogone village constructed in 1982.		Fe (mg/l)	0.3
		F (mg/l)	0.2		
		NO3- (mg/l)	<1		
		NO2- (mg/l)	<0.02		
		Coliforms			



Region	SAGAING		Date	2015/5/9
Township	Dabayin		Reported by	YORITATE Toru
Village / ID	Shandaw	SA2-35	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	725732
	Shallow Well		Y	2501505
	Storage reservoir			
	Others (dug in canal)			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	SA2-35-1
	Diameter (in)		Temperature (°C)	23.8
	S.W.L (m)		pH	7.09
	D.W.L (m)		EC (µs/cm)	438
	Yield (m³/hour)		Smell	muddy smell
	No.of users (person/day)		Color	Shallow milk yellow
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
People digging bottom of the canal and get the water for all useage. 2 tube wells 1.Constructed in 2005, 82m .Water amount reduced and stopped using in 2009. 2.Constructed in 1975 already useless. In the next village 247m artesian well exit.	F (mg/l)	0.2		
	NO3- (mg/l)	1.0		
	NO2- (mg/l)	<0.02		
	Coliforms	Too much		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	725913
	Shallow Well		Y	2500405
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	SA2-35-2
	Diameter (in)		Temperature (°C)	28.4
	S.W.L (m)		pH	7.55
	D.W.L (m)		EC (µs/cm)	748
	Yield (m³/hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Dug well with foot pump. Monestry between neighbor village.	F (mg/l)	0.8		
	NO3- (mg/l)	<1		
	NO2- (mg/l)	<0.02		
	Coliforms	Too much		



Region	SAGAING		Date	2015/5/9
Township	Dabayin		Reported by	YORITATE Toru
Village / ID	Shandaw	SA2-35	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	<input type="radio"/> Deep Well	Coordinate	X	728341
	<input type="radio"/> Shallow Well		Y	2501689
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	247	Sample ID	SA2-35-3
	Diameter (in)	2	Temperature (°C)	30.4
	S.W.L (m)		pH	7.87
	D.W.L (m)		EC (µs/cm)	1,564
	Yield (m ³ /hour)	9.1	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Artesian	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Artesian well.		Fe (mg/l)	<0.2	
		F (mg/l)	0.2	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		

Information of Existing Water Source - 2				
Type	<input type="radio"/> Deep Well	Coordinate	X	725889
	<input type="radio"/> Shallow Well		Y	2500389
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	SA2-35-4
	Diameter (in)	2	Temperature (°C)	27.7
	S.W.L (m)		pH	8.38
	D.W.L (m)		EC (µs/cm)	1,004
	Yield (m ³ /hour)	5.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Airlift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Same monetry with SA2-35-2. Donated in 2013.		Fe (mg/l)	<0.2	
		F (mg/l)	0.2	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Region	SAGAING		Date	2015/5/9
Township	Dabayin		Reported by	YORITATE Toru
Village / ID	Kyuntaw (S)	SA2-36	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	728635
	Shallow Well		Y	2505308
	Storage reservoir			
	○ Others <i>Dug Well</i>			
Hydrogeological Information	Drilled Depth (m)	4.8	Sample ID	SA2-36-1
	Diameter (in)	1.1m	Temperature (°C)	27.6
	S.W.L (m)	3.6	pH	6.94
	D.W.L (m)		EC (µs/cm)	896
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	0.02
	Remarks (Lithology , etc.)	MONO pump tube well -100m damaged in 1995 (728646/2505196) Test well -61m does not have water.		
Results of Simplified Water Quality Test		Fe (mg/l)	<0.2	
		F (mg/l)	0.2	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	728715
	Shallow Well		Y	2505233
	Storage reservoir			
	○ Others <i>Dug Well</i>			
Hydrogeological Information	Drilled Depth (m)	4.3	Sample ID	SA2-36-2
	Diameter (in)	1.0m	Temperature (°C)	27.9
	S.W.L (m)	2.3	pH	7.30
	D.W.L (m)		EC (µs/cm)	2,230
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Targey: 728632 / 2505189		
Results of Simplified Water Quality Test		Fe (mg/l)	<0.02	
		F (mg/l)	0.1	
		NO3- (mg/l)	10.0	
		NO2- (mg/l)	0.7	
		Coliforms		



Region	SAGAING		Date	2015/5/19
Township	Wetlet		Reported by	YORITATE Toru
Village / ID	Palae Thwe(Ywarhit)	SA2-37	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	798855
	Shallow Well		Y	2492654
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	109	Sample ID	SA2-37-1
	Diameter (in)		Temperature (°C)	31.4
	S.W.L (m)		pH	8.06
	D.W.L (m)		EC (µs/cm)	924
	Yield (m ³ /hour)	3.4	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
F (mg/l)				0.0
NO3- (mg/l)				<1
NO2- (mg/l)				<0.02
Coliforms				0



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
F (mg/l)				
NO3- (mg/l)				
NO2- (mg/l)				
Coliforms				



Region	SAGAING		Date	2015/5/
Township	Wetlet		Reported by	YORITATE Toru
Village / ID	Poukkan	SA2-38	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	796340
	○ Shallow Well		Y	2461884
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	41	Sample ID	SA2-38-1
	Diameter (in)		Temperature (°C)	29.2
	S.W.L (m)		pH	7.5
	D.W.L (m)		EC (µs/cm)	1388.0
	Yield (m ³ /hour)		Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities	Hand pump	Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Results of Simplified Water Quality Test	
Alluvial plane. People get drinking water from dugwell.		Fe (mg/l)	<0.2	
		F (mg/l)	1.5	
		NO3- (mg/l)	2.0	
		NO2- (mg/l)	<0.02	
		Coliforms	0	

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	796371
	○ Shallow Well		Y	2461780
	Storage reservoir			
	○ Others (Dug well)			
Hydrogeological Information	Drilled Depth (m)	13.4	Sample ID	SA2-38-2
	Diameter (in)	1.1	Temperature (°C)	28.2
	S.W.L (m)	2.3	pH	7.5
	D.W.L (m)		EC (µs/cm)	595.0
	Yield (m ³ /hour)		Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Results of Simplified Water Quality Test	
Constructed in 1994. Artesian well locating 2 to 3 km far from the village.		Fe (mg/l)	<0.2	
		F (mg/l)	0.8	
		NO3- (mg/l)	20.0	
		NO2- (mg/l)	<0.02	
		Coliforms	uncounted	



Region	SAGAING		Date	2015/5/19
Township	Wetlet		Reported by	YORITATE Toru
Village / ID	Poukkan	SA2-38	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	797690
	Shallow Well		Y	2462872
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	38	Sample ID	SA2-38-3
	Diameter (in)	2	Temperature (°C)	30.0
	S.W.L (m)		pH	7.9
	D.W.L (m)		EC (µs/cm)	1,500
	Yield (m ³ /hour)	1.4	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Artesian	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
F (mg/l)			2.0	
NO3- (mg/l)			5.0	
NO2- (mg/l)			<0.02	
Coliforms			0	



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
F (mg/l)				
NO3- (mg/l)				
NO2- (mg/l)				
Coliforms				



Region	SAGAING		Date	2015/5/19
Township	Wetlet		Reported by	YORITATE Toru
Village / ID	Shwenyaunglaw	SA2-39	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	803376
	Shallow Well		Y	2470865
	Storage reservoir			
	○ Others <i>Dug Well</i>			
Hydrogeological Information	Drilled Depth (m)	11.5	Sample ID	SA2-39-1
	Diameter (in)	1.2m	Temperature (°C)	29.0
	S.W.L (m)	5.10 - 0.70	pH	7.91
	D.W.L (m)		EC (µs/cm)	809
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
		Results of Simplified Water Quality Test	F (mg/l)	0.8
			NO3- (mg/l)	30.0
			NO2- (mg/l)	<0.02
			Coliforms	Too much



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	○ Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
		Results of Simplified Water Quality Test	F (mg/l)	
			NO3- (mg/l)	
			NO2- (mg/l)	
			Coliforms	



Region	SAGAING		Date	2015/5/19
Township	Wetlet		Reported by	YORITATE Toru
Village / ID	Sabeidaw	SA2-40	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	786790
	Shallow Well		Y	2472040
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	10.6	Sample ID	SA2-40-1
	Diameter (in)		Temperature (°C)	27.4
	S.W.L (m)	1.5	pH	7.84
	D.W.L (m)		EC (µs/cm)	764
	Yield (m ³ /hour)		Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Fe (mg/l)	<0.2
Results of Simplified Water Quality Test			F (mg/l)	0.6
			NO3- (mg/l)	10.0
			NO2- (mg/l)	<0.02
			Coliforms	0



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	786486
	Shallow Well		Y	2472202
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	10.6	Sample ID	SA2-40-2
	Diameter (in)		Temperature (°C)	28.3
	S.W.L (m)		pH	8.03
	D.W.L (m)		EC (µs/cm)	2,130
	Yield (m ³ /hour)		Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Fe (mg/l)	<0.2
Results of Simplified Water Quality Test			F (mg/l)	3.0
			NO3- (mg/l)	5.0
			NO2- (mg/l)	<0.02
			Coliforms	Too much



Region	SAGAING		Date	2015/5/19
Township	Wetlet		Reported by	YORITATE Toru
Village / ID	Sabeidaw	SA2-40	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	786311
	Shallow Well		Y	2474369
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	122	Sample ID	SA2-40-3
	Diameter (in)	4	Temperature (°C)	29.0
	S.W.L (m)	1.5	pH	8.14
	D.W.L (m)		EC (µs/cm)	1,204
	Yield (m ³ /hour)	6.8	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Artesian	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Locating 2km out side of the village.		Fe (mg/l)	<0.2	
		F (mg/l)	3.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	SA2-40
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
		Fe (mg/l)		
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		



(2) Mandalay Region

Region	Mandalay		Date	2015.5.24	
Township	Mahlaing		Reported by	Sasaki	
Village / ID	Htantawgyi	MA2-01	Coordinate (WGS84 UTM)	X	766932
			Y	2339178	

Information of Existing Water Sauce - 1						
Type	Deep Well	Coordinate	X	767026		
	Shallow Well		Y	2338930		
	Storage reservoir					
	○ Others <i>Dug Well</i>					
Hydrogeological Information	Drilled Depth (m)	15	Sample ID	MA2-01-1		
	Diameter (in)	1.5m	Temperature (°C)	30.3		
	S.W.L (m)	no data	pH	7.43		
	D.W.L (m)		EC (µs/cm)	2,310		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)	480	Color	Non		
	Supply facilities		Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)	<0.2	
There are 4 shallow well in the village. But 3 of shallow well be come salty and villager can use only 1 well for drinking. That well is located near the irrigation channel. SWL is around GL-10m. And this village have another tube well (180 feet) to use some village event.	F (mg/l)			0.4		
	NO3- (mg/l)			10		
	NO2- (mg/l)			<0.02		
	Coliforms			Too much		



Information of Existing Water Sauce - 2						
Type	Deep Well	Coordinate	X	767009		
	Shallow Well		Y	2339022		
	Storage reservoir					
	○ Others <i>Dug Well</i>					
Hydrogeological Information	Drilled Depth (m)	15	Sample ID	MA2-01-2		
	Diameter (in)	1.5m	Temperature (°C)	30.8		
	S.W.L (m)		pH	7.82		
	D.W.L (m)		EC (µs/cm)	3,560		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities		Mn (mg/l)			
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)		
Salty well. They don't use for drinking water. To use for laundry and bathing.	F (mg/l)					
	NO3- (mg/l)					
	NO2- (mg/l)					
	Coliforms					

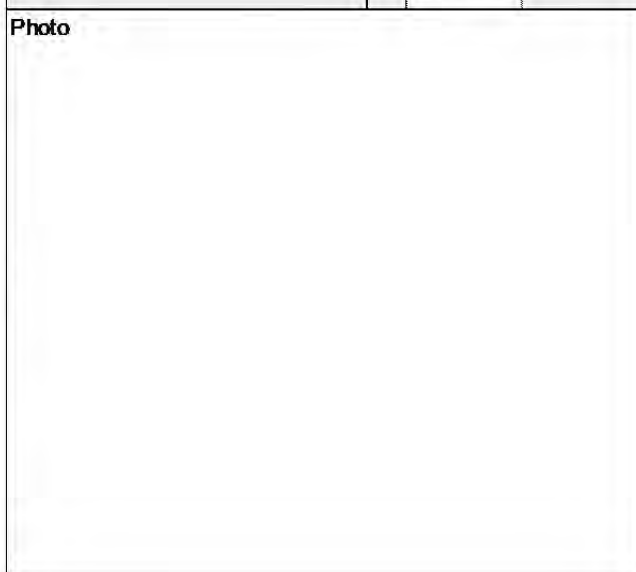


Region	Mandalay		Date	2015.5.19	
Township	Mahlaing		Reported by	Yamasaki	
Village / ID	Asone	MA2-02	Coordinate (WGS84 UTM)	X	769179
				Y	2329028

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	768727		
	Shallow Well		Y	2328337		
	Storage reservoir					
	○ Others <i>Dug Well</i>					
Hydrogeological Information	Drilled Depth (m)	6.1	Results of Simplified Water Quality Test	Sample ID	MA2-02-1	
	Diameter (in)	1.5m		Temperature (°C)	27.5	
	S.W.L (m)	1.8		pH	7.48	
	D.W.L (m)			EC (µs/cm)	1,472	
	Yield (m ³ /hour)			Smell	Non	
	No.of users (person/day)	650		Color	Non	
	Supply facilities			Mn (mg/l)	<0.02	
				Fe (mg/l)	<0.02	
Remarks (Lithology , etc.) Electrical pole have already installed. But only some house can use electricity. This well is located around 1km from center of village. This village has some dug well. when they boil rice use these water, rice will become yellow. There are no deep well near this village.			F (mg/l)	0		
			NO3- (mg/l)	<1		
			NO2- (mg/l)	<0.02		
			Coliforms	Too much		



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X			
	Shallow Well		Y			
	Storage reservoir					
	○ Others					
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID		
	Diameter (in)			Temperature (°C)		
	S.W.L (m)			pH		
	D.W.L (m)			EC (µs/cm)		
	Yield (m ³ /hour)			Smell		
	No.of users (person/day)			Color		
	Supply facilities			Mn (mg/l)		
				Fe (mg/l)		
Remarks (Lithology , etc.)			F (mg/l)			
			NO3- (mg/l)			
			NO2- (mg/l)			
			Coliforms			

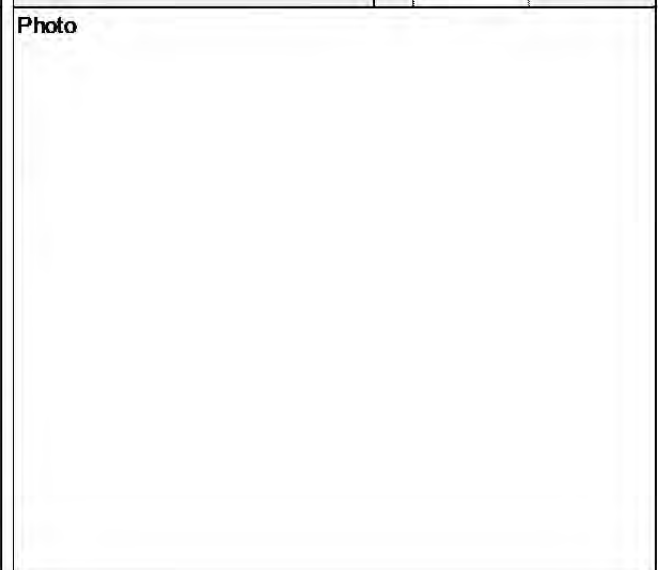


Region	Mandalay		Date	2015.5.19	
Township	Mahlaing		Reported by	Yamasaki	
Village / ID	Khinthar(S)	MA2-03	Coordinate (WGS84 UTM)	X	782188
			Y	2317148	

Information of Existing Water Source - 1								
Type	Deep Well	Coordinate	X	781754				
	Shallow Well		Y	2317206				
	Storage reservoir							
	○ Others <i>Dug Well</i>							
Hydrogeological Information	Drilled Depth (m)	6.1	Sample ID	MA2-03-1				
	Diameter (in)		Temperature (°C)	27.6				
	S.W.L (m)	3.1	pH	7.41				
	D.W.L (m)		EC (µs/cm)	781				
	Yield (m ³ /hour)		Smell	Non				
	No. of users (person/day)	480	Color	Non				
	Supply facilities		Mn (mg/l)	<0.02				
	Remarks (Lithology , etc.)	This village is shared pond water with neighbor village in rainy season.						
	Fe (mg/l)						<0.2	
	F (mg/l)						0	
	NO3- (mg/l)						<1	
	NO2- (mg/l)						<0.02	
	Coliforms						7	



Information of Existing Water Source - 2								
Type	Deep Well	Coordinate	X					
	Shallow Well		Y					
	Storage reservoir							
	○ Others							
Hydrogeological Information	Drilled Depth (m)		Sample ID					
	Diameter (in)		Temperature (°C)					
	S.W.L (m)		pH					
	D.W.L (m)		EC (µs/cm)					
	Yield (m ³ /hour)		Smell					
	No. of users (person/day)		Color					
	Supply facilities		Mn (mg/l)					
	Remarks (Lithology , etc.)							
	Fe (mg/l)							
	F (mg/l)							
	NO3- (mg/l)							
	NO2- (mg/l)							
	Coliforms							



Region	Mandalay		Date	2015/5/24
Township	Myingyan		Reported by	Maruo
Village / ID	Chaysay	MA2-04	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	○ Deep Well		Coordinate	X	753208	Type	Deep Well		Coordinate	X	753114
	Shallow Well			Y	2369050		○ Shallow Well			Y	2369048
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	91.4	Results of Simplified Water Quality Test	Sample ID	MA2-4-1	Hydrogeological Information	Drilled Depth (m)	59.4	Results of Simplified Water Quality Test	Sample ID	MA2-4-2
	Diameter (in)	1		Temperature (°C)	31.1		Diameter (in)	3		Temperature (°C)	31.0
	S.W.L (m)	30.4		pH	8.06		S.W.L (m)	19.2		pH	8.11
	D.W.L (m)			EC (µs/cm)	2,880		D.W.L (m)			EC (µs/cm)	2,580
	Yield (m³/hour)			Smell	Non		Yield (m³/hour)			Smell	Non
	No. of users (person/day)			Color	Non		No. of users (person/day)			Color	Non
	Supply facilities	Compressor		Mn (mg/l)	<1		Supply facilities	Compressor		Mn (mg/l)	<1
	Remarks (Lithology, etc.)	DDA well 2013- inside the school compound.		Fe (mg/l)	0.2		Remarks (Lithology, etc.)	Another tube well in the clinic, drilled by DDA in 2000 X 2369051.62mN Y 753117.55mE		Fe (mg/l)	<0.2
			F (mg/l)	0				F (mg/l)	0		
			NO3- (mg/l)	<1				NO3- (mg/l)	<1		
			NO2- (mg/l)	<0.02				NO2- (mg/l)	<0.02		
			Coliforms					Coliforms			

Photo



Photo



Region	Mandalay		Date	2015/5/25
Township	Myingyan		Reported by	Maruo
Village / ID	Talgyi	MA2-05	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	758959	
	<input type="radio"/> Shallow Well		Y	2405065	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	71.6	Results of Simplified Water Quality Test	Sample ID	MA2-5-1
	Diameter (in)	2		Temperature (°C)	30.9
	S.W.L (m)			pH	8.27
	D.W.L (m)			EC (µs/cm)	1,303
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Turbidity
	Supply facilities	compressor		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Monastery well - water contain sand, Ayarwaddy river.		Fe (mg/l)	<0.2
			F (mg/l)	0.7	
			NO3- (mg/l)	1	
			NO2- (mg/l)	<0.02	
			Coliforms		



Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	758815	
	<input type="radio"/> Shallow Well		Y	2404938	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	45.7	Results of Simplified Water Quality Test	Sample ID	MA2-5-2
	Diameter (in)	3		Temperature (°C)	30.5
	S.W.L (m)	8.2		pH	8.44
	D.W.L (m)			EC (µs/cm)	1,783
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Compressor		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Private tube well in the village. This house has a tractor and telephone. Family use the water for drilling.		Fe (mg/l)	<0.2
			F (mg/l)	1	
			NO3- (mg/l)	4	
			NO2- (mg/l)	<0.02	
			Coliforms		



Region	Mandalay		Date	2015/5/24
Township	Myingyan		Reported by	Maruo
Village / ID	Kuywar	MA2-06	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	Deep Well	Coordinate	X	749780	
	Shallow Well		Y	2369023	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	59	Results of Simplified Water Quality Test	Sample ID	MA2-6-1
	Diameter (in)	3		Temperature (°C)	31.2
	S.W.L (m)	16.7		pH	7.88
	D.W.L (m)			EC (µs/cm)	274
	Yield (m³/hour)			Smell	Non
	No. of users (person/day)			Color	Turbidity
	Supply facilities	Compressor		Mn (mg/l)	0
	Remarks (Lithology , etc.)	Private well - near DDA well, very salty . Possibly deeper could be better quality, 2008 drilled. X : 2369023.86mN Y : 749780.33mE		Fe (mg/l)	0.5
		F (mg/l)	4		
		NO3- (mg/l)	1		
		NO2- (mg/l)	<0.02		
		Coliforms			



Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X	749809	
	Shallow Well		Y	2369054	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	79	Results of Simplified Water Quality Test	Sample ID	MA2-6-2
	Diameter (in)	3		Temperature (°C)	31.8
	S.W.L (m)	19.2		pH	8.69
	D.W.L (m)			EC (µs/cm)	2,450
	Yield (m³/hour)			Smell	Non
	No. of users (person/day)			Color	Non
	Supply facilities	Compressor		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	300m from frist private well. Drill deeper quality may be better. Drilled in 2015- private well. X : 2369053.90mN Y : 749809.86mE		Fe (mg/l)	<0.2
		F (mg/l)	2		
		NO3- (mg/l)	1.5		
		NO2- (mg/l)	0.1		
		Coliforms			



Region	Mandalay		Date	5/24/2015
Township	Myingyan		Reported by	Maruo
Village / ID	Yonehto	MA2-07	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	762463	
	<input type="radio"/> Shallow Well		Y	2384138	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	98	Results of Simplified Water Quality Test	Sample ID	MA2-7-1
	Diameter (in)	3		Temperature (°C)	31.0
	S.W.L (m)	46		pH	7.73
	D.W.L (m)			EC (µs/cm)	7,960
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Compressor		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Inside clinic compound behind monastery, drilled in 2014 by Gov Health Organization.		Fe (mg/l)	<0.2
		F (mg/l)	0		
		NO3- (mg/l)	45		
		NO2- (mg/l)	0		
		Coliforms			

Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	762698	
	<input type="radio"/> Shallow Well		Y	2384434	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	98	Results of Simplified Water Quality Test	Sample ID	MA2-7-2
	Diameter (in)	4		Temperature (°C)	30.9
	S.W.L (m)			pH	7.58
	D.W.L (m)			EC (µs/cm)	7,340
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Compressor		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Private tube well Taste Slightly salty X : 2384434.60mN Y : 762698.30mE		Fe (mg/l)	<0.2
		F (mg/l)	0		
		NO3- (mg/l)	20		
		NO2- (mg/l)	0.02		
		Coliforms			

Photo



Photo



Region	Mandalay		Date	2015/5/25
Township	Myingyan		Reported by	Maruo
Village / ID	Phatpin-I	MA2-08	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1														
Type	<input type="radio"/> Deep Well	Coordinate	X	766089										
	<input type="radio"/> Shallow Well		Y	2399238										
	<input type="radio"/> Storage reservoir													
	<input type="radio"/> Others													
Hydrogeological Information	Drilled Depth (m)	61	Sample ID	MA2-8-1										
	Diameter (in)	2	Temperature (°C)	30.3										
	S.W.L (m)		pH	8.24										
	D.W.L (m)		EC (µs/cm)	6,160										
	Yield (m³/hour)		Smell	Non										
	No.of users (person/day)		Color	High turbidity										
	Supply facilities	Compressor	Mn (mg/l)	<1										
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test											
Private well. Water certain yellow sand and silt. Taste is salty and they use this water for animals. X : 2399238.43mN Y : 766089.93mE Nyaungwin village is next to the target village.		<table border="1"> <tr><td>Fe (mg/l)</td><td><0.2</td></tr> <tr><td>F (mg/l)</td><td>0</td></tr> <tr><td>NO3- (mg/l)</td><td><1</td></tr> <tr><td>NO2- (mg/l)</td><td><0.02</td></tr> <tr><td>Coliforms</td><td></td></tr> </table>			Fe (mg/l)	<0.2	F (mg/l)	0	NO3- (mg/l)	<1	NO2- (mg/l)	<0.02	Coliforms	
Fe (mg/l)	<0.2													
F (mg/l)	0													
NO3- (mg/l)	<1													
NO2- (mg/l)	<0.02													
Coliforms														



Information of Existing Water Source - 2														
Type	<input type="radio"/> Deep Well	Coordinate	X	766347										
	<input type="radio"/> Shallow Well		Y	2399645										
	<input type="radio"/> Storage reservoir													
	<input type="radio"/> Others													
Hydrogeological Information	Drilled Depth (m)	107	Sample ID	MA2-8-2										
	Diameter (in)	3	Temperature (°C)	30.6										
	S.W.L (m)		pH	8.46										
	D.W.L (m)		EC (µs/cm)	1,930										
	Yield (m³/hour)	500g/h	Smell	Slightly certain smell										
	No.of users (person/day)		Color	Slightly muddy										
	Supply facilities		Mn (mg/l)	<1										
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test											
Monastery well - slightly salty X : 2399645.31mN Y : 766347.70mE		<table border="1"> <tr><td>Fe (mg/l)</td><td><0.2</td></tr> <tr><td>F (mg/l)</td><td>0.2</td></tr> <tr><td>NO3- (mg/l)</td><td><1</td></tr> <tr><td>NO2- (mg/l)</td><td><0.02</td></tr> <tr><td>Coliforms</td><td></td></tr> </table>			Fe (mg/l)	<0.2	F (mg/l)	0.2	NO3- (mg/l)	<1	NO2- (mg/l)	<0.02	Coliforms	
Fe (mg/l)	<0.2													
F (mg/l)	0.2													
NO3- (mg/l)	<1													
NO2- (mg/l)	<0.02													
Coliforms														





Region	MANDALAY		Date	2015/5/25
Township	Ngazon		Reported by	YORITATE Toru
Village / ID	Konelel	MA2-9	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	Deep Well	Coordinate	X	758753	
	Shallow Well		Y	2410571	
	Storage reservoir				
	○ Others <i>Dug Well</i>				
Hydrogeological Information	Drilled Depth (m)	11	Results of Simplified Water Quality Test	Sample ID	MA2-9 -1
	Diameter (in)	1.0m		Temperature (°C)	29.1
	S.W.L (m)	9.4		pH	8.33
	D.W.L (m)			EC (µs/cm)	6,020
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Dug well. Can not drink water. Other 11 dugwells are also high salinity water can not drink. Monestry TW (189m) and DDA drilled TW (128m) are also high salinity therefore, now not under the operation. Pego Formation area.		Fe (mg/l)	<0.2
		F (mg/l)	5.0		
		NO3- (mg/l)	8.0		
		NO2- (mg/l)	<0.02		
		Coliforms			

Information of Existing Water Source - 2					
Type	○ Deep Well	Coordinate	X	758200	
	Shallow Well		Y	2410349	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	61	Results of Simplified Water Quality Test	Sample ID	MA2-9 -2
	Diameter (in)	2		Temperature (°C)	30.8
	S.W.L (m)			pH	7.93
	D.W.L (m)			EC (µs/cm)	6,360
	Yield (m³/hour)	4.1		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Private well. Can not drink water. Target : 758855 / 2410492		Fe (mg/l)	<0.2
		F (mg/l)	0.0		
		NO3- (mg/l)	45<		
		NO2- (mg/l)	0.2		
		Coliforms			



Region	MANDALAY		Date	2015/5/25
Township	Ngazon		Reported by	YORITATE Toru
Village / ID	Phaungkadaw	MA2-10	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	Deep Well		Coordinate	X	766115	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2416389		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	○ Others <i>Dug Well</i>						Others				
Hydrogeological Information	Drilled Depth (m)	18m×3	Results of Simplified Water Quality Test	Sample ID	MA2-10-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	MA2-10-2
	Diameter (in)	2		Temperature (°C)	29.8		Diameter (in)			Temperature (°C)	
	S.W.L (m)	2.0		pH	7.12		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	6,470		D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	Non		Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	
	Supply facilities	Suction Pump		Mn (mg/l)	0.02		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)	Upper Pego Formation.N45W,60S 3 shallow well (18m×3) combination system for suction pump. While pumping, close (10m distance) dug well's water also draw down.		Fe (mg/l)	<0.2		Remarks (Lithology , etc.)	Target : 766378 / 2416431 Pond water is using for drinking.		Fe (mg/l)	
			F (mg/l)	0.0				F (mg/l)			
			NO3- (mg/l)	8.0				NO3- (mg/l)			
			NO2- (mg/l)	<0.02				NO2- (mg/l)			
			Coliforms					Coliforms			
Photo					Photo						
											

Region	MANDALAY		Date	2015/5/25
Township	Ngazon		Reported by	YORITATE Toru
Village / ID	Kaungzin	MA2-11	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	765457
	Shallow Well		Y	2403617
	Storage reservoir			
	Others <i>Dug Well</i>			
Hydrogeological Information	Drilled Depth (m)	152	Sample ID	MA2-11 -1
	Diameter (in)	2	Temperature (°C)	30.4
	S.W.L (m)	unknown	pH	7.86
	D.W.L (m)		EC (µs/cm)	2,340
	Yield (m ³ /hour)	3.2	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Airlift	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Private well belong to the Monestry. Upper Peg formation Sand Silt rock alternation. N10E, 60 ~ 90N		F (mg/l)	0.6	
		NO3- (mg/l)	8.0	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	768899
	o Shallow Well		Y	2402581
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	10	Sample ID	MA2-11 -2
	Diameter (in)	2	Temperature (°C)	pump broken
	S.W.L (m)		pH	can not get water
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
Private well.(3 well conivation) but now pump does not work. Can not get water anyway. water can not drink. Target : 764970 / 2403461 Now stopin sxc		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		



Region	MANDALAY		Date	2015/5/25
Township	Ngazon		Reported by	YORITATE Toru
Village / ID	Ywarsite	MA2-12	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1			
Type	<input type="radio"/> Deep Well	Coordinate	X 768195
	<input type="checkbox"/> Shallow Well		Y 2402362
	<input type="checkbox"/> Storage reservoir		
	<input type="checkbox"/> Others Dug Well		
Hydrogeological Information	Drilled Depth (m)	213	Results of Simplified Water Quality Test
	Diameter (in)	2	
	S.W.L (m)		
	D.W.L (m)		
	Yield (m³/hour)	3.2	
	No.of users (person/day)		
	Supply facilities	Airlift	
	Sample ID	MA2-12-1	
Remarks (Lithology , etc.)			
Private well. Upper Peg formation Sand Silt rock alternation. N10E, 60 ~ 90N			
		Temperature (°C)	31.7
		pH	7.91
		EC (µs/cm)	11,680
		Smell	Non
		Color	Non
		Mn (mg/l)	<0.02
		Fe (mg/l)	<0.2
		F (mg/l)	5.0
		NO3- (mg/l)	8.0
		NO2- (mg/l)	1<
		Coliforms	

Information of Existing Water Source - 2			
Type	<input type="radio"/> Deep Well	Coordinate	X 768899
	<input type="checkbox"/> Shallow Well		Y 2402581
	<input type="checkbox"/> Storage reservoir		
	<input type="checkbox"/> Others Dug Well		
Hydrogeological Information	Drilled Depth (m)	6	Results of Simplified Water Quality Test
	Diameter (in)	1.4 m	
	S.W.L (m)	3.1	
	D.W.L (m)		
	Yield (m³/hour)		
	No.of users (person/day)		
	Supply facilities		
	Sample ID	MA2-12-2	
Remarks (Lithology , etc.)			
Public dug well Target : 768301 / 2402220			
		Temperature (°C)	27.8
		pH	7.28
		EC (µs/cm)	3,340
		Smell	Non
		Color	Non
		Mn (mg/l)	0.05
		Fe (mg/l)	<0.2
		F (mg/l)	0.4
		NO3- (mg/l)	<1
		NO2- (mg/l)	<0.02
		Coliforms	

Photo



Photo



Region	MANDALAY		Date	2015/5/24
Township	Natogyi		Reported by	YORITATE Toru
Village / ID	Kyaungnan	MA2-13	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	767771
	Shallow Well		Y	2376174
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	18m x 4	Sample ID	MA2-13-1
	Diameter (in)	2	Temperature (°C)	32.8
	S.W.L (m)	7	pH	7.51
	D.W.L (m)		EC (µs/cm)	1,342
	Yield (m ³ /hour)		Smell	Slightly certain smell
	No. of users (person/day)		Color	Shallow Yellow
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)	UNICEF Donation. This system will covered several villages.		
Results of Simplified Water Quality Test		Fe (mg/l)	<0.2	
		F (mg/l)	0.4	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	767555
	Shallow Well		Y	2375350
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	78	Sample ID	MA2-13-2
	Diameter (in)	2	Temperature (°C)	30.8
	S.W.L (m)	21	pH	7.8
	D.W.L (m)		EC (µs/cm)	11,800
	Yield (m ³ /hour)		Smell	Non
	No. of users (person/day)		Color	Turbidity
	Supply facilities	Airlift	Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)	Target: 767494 / 2375884		
Results of Simplified Water Quality Test		Fe (mg/l)	<0.2	
		F (mg/l)	2.0	
		NO3- (mg/l)	3.0	
		NO2- (mg/l)	<0.02	
		Coliforms		



Region	MANDALAY		Date	2015/5/6	
Township	Natogyi		Reported by	YORITATE Toru	
Village / ID	Kyaungkan	MA2-14	Coordinate (WGS84 UTM)	X	743883
				Y	2426853

Information of Existing Water Source - 1						
Type	o Deep Well		Coordinate	X	757384	
	Shallow Well			Y	2368882	
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	234	Results of Simplified Water Quality Test	Sample ID	MA2-14-1	
	Diameter (in)	4		Temperature (°C)	31.2	
	S.W.L (m)			pH	7.58	
	D.W.L (m)			EC (µs/cm)	6,540	
	Yield (m³/hour)	8.2		Smell	Non	
	No.of users (person/day)			Color	Shallow White	
	Supply facilities			Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)	Constructed by DRD in 2015.2		Fe (mg/l)	<0.2	
			F (mg/l)	0.8		
			NO3- (mg/l)	1.0		
			NO2- (mg/l)	<0.01		
			Coliforms			



Information of Existing Water Source - 2						
Type	o Deep Well		Coordinate	X	757248	
	Shallow Well			Y	2368842	
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	127	Results of Simplified Water Quality Test	Sample ID	MA2-14-2	
	Diameter (in)	2		Temperature (°C)	30.8	
	S.W.L (m)			pH	7.86	
	D.W.L (m)			EC (µs/cm)	2,120	
	Yield (m³/hour)	1.4		Smell	Non	
	No.of users (person/day)			Color	Non	
	Supply facilities			Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)	Private well Target : 757400 / 2368579		Fe (mg/l)	<0.2	
			F (mg/l)	0.4		
			NO3- (mg/l)	<1		
			NO2- (mg/l)	<0.02		
			Coliforms			



Region	MANDALAY		Date	2015/5/24
Township	Natogyi		Reported by	YORITATE Toru
Village / ID	Nyaunggone	MA2-15	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	772147	
	<input type="radio"/> Shallow Well		Y	2368696	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	91	Results of Simplified Water Quality Test	Sample ID	MA2-15-1
	Diameter (in)	2		Temperature (°C)	34.4
	S.W.L (m)	30		pH	8.48
	D.W.L (m)			EC (µs/cm)	2,800
	Yield (m³/hour)	3.4		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Airlift		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Private Well.		Fe (mg/l)	<0.2
		F (mg/l)	1.5		
		NO3- (mg/l)	1.0		
		NO2- (mg/l)	<0.02		
		Coliforms			

Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	772036	
	<input type="radio"/> Shallow Well		Y	2368666	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	61	Results of Simplified Water Quality Test	Sample ID	MA2-15-2
	Diameter (in)	2		Temperature (°C)	30.6
	S.W.L (m)			pH	7.86
	D.W.L (m)			EC (µs/cm)	1,192
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Shallow Yellow
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Drilled in dugwell to use suction pump. *Target : 772248 / 2368667		Fe (mg/l)	<0.2
		F (mg/l)	0.6		
		NO3- (mg/l)	<1		
		NO2- (mg/l)	<0.02		
		Coliforms			



Region	Mandalay		Date	2015.5.24	
Township	Taungthar		Reported by	Sasaki	
Village / ID	Chaungnar	MA2-16	Coordinate (WGS84 UTM)	X	751816
			Y	2357948	

Information of Existing Water Source - 1								
Type	Deep Well	Coordinate	X	751878				
	Shallow Well		Y	2358123				
	Storage reservoir							
	○ Others <i>Dug Well</i>							
Hydrogeological Information	Drilled Depth (m)	15	Sample ID	MA2-16-1				
	Diameter (in)	1.5 m	Temperature (°C)	30.0				
	S.W.L (m)	5	pH	8.16				
	D.W.L (m)		EC (µs/cm)	2,030				
	Yield (m ³ /hour)		Smell	Slightly sour				
	No.of users (person/day)	450	Color	slightly brown				
	Supply facilities		Mn (mg/l)	<0.02				
	Remarks (Lithology , etc.)	This well is located near small stream. The stream water and is almost dry up, so that villagers wait long time for recharge. Almost villagers use only this well for drinking.						
	Fe (mg/l)						<0.2	
	F (mg/l)						3~8	
	NO3- (mg/l)						5~10	
	NO2- (mg/l)						<0.02	
	Coliforms						Too much	



Information of Existing Water Source - 2								
Type	Deep Well	Coordinate	X	751799				
	Shallow Well		Y	2357810				
	Storage reservoir							
	○ Others <i>Dug Well</i>							
Hydrogeological Information	Drilled Depth (m)	5	Sample ID	MA2-16-2				
	Diameter (in)	1.0 m	Temperature (°C)	29.4				
	S.W.L (m)		pH	7.38				
	D.W.L (m)		EC (µs/cm)	3,450				
	Yield (m ³ /hour)		Smell	Non				
	No.of users (person/day)		Color	Slightly turbidity				
	Supply facilities		Mn (mg/l)	<0.02				
	Remarks (Lithology , etc.)	This well is located near small stream. Water is salty, they don't use for drinking.						
	Fe (mg/l)						<0.2	
	F (mg/l)						0.2	
	NO3- (mg/l)						<1	
	NO2- (mg/l)						<0.02	
	Coliforms						5	

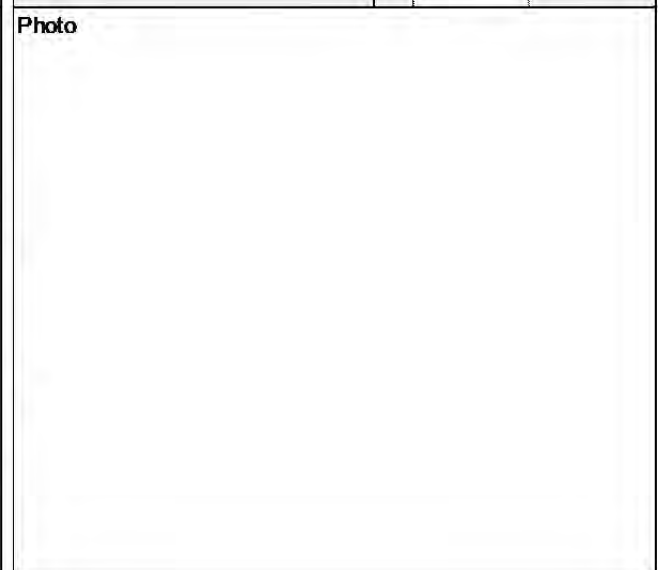


Region	Mandalay		Date	2015.5.25	
Township	Taungthar		Reported by	Sasaki	
Village / ID	Chaungsone (La)	MA2-17	Coordinate (WGS84 UTM)	X	735423
			Y	2354667	

Information of Existing Water Source - 1						
Type	o Deep Well		Coordinate	X	735397	
	Shallow Well			Y	2354670	
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	137	Results of Simplified Water Quality Test	Sample ID	MA2-17-1	
	Diameter (in)	4		Temperature (°C)	34.7	
	S.W.L (m)	98		pH	7.33	
	D.W.L (m)			EC (µs/cm)	1483	
	Yield (m ³ /hour)	16.4		Smell	Non	
	No.of users (person/day)	800		Color	Non	
	Supply facilities	monopump		Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2	
Located in monastery. This well was drilled at 35 years ago. And Villagers repaired clogging by themselves at 2 years ago. Pumping up is 3 times per day.		F (mg/l)	0.2			
		NO3- (mg/l)	<1			
		NO2- (mg/l)	<0.02			
		Coliforms				



Information of Existing Water Source - 2						
Type	Deep Well		Coordinate	X		
	Shallow Well			Y		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID		
	Diameter (in)			Temperature (°C)		
	S.W.L (m)			pH		
	D.W.L (m)			EC (µs/cm)		
	Yield (m ³ /hour)			Smell		
	No.of users (person/day)			Color		
	Supply facilities			Mn (mg/l)		
	Remarks (Lithology , etc.)			Fe (mg/l)		
		F (mg/l)				
		NO3- (mg/l)				
		NO2- (mg/l)				
		Coliforms				

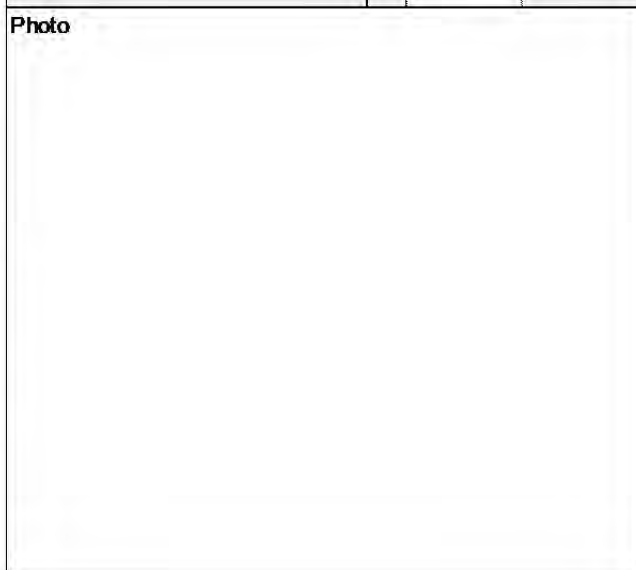


Region	Mandalay		Date	2015.5.24	
Township	Taungthar		Reported by	Sasaki	
Village / ID	Kyaukkartaungkone	MA2-18	Coordinate (WGS84 UTM)	X	748923
				Y	2341631

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	748843		
	Shallow Well		Y	2341588		
	Storage reservoir					
	○ Others <i>Dug Well</i>					
Hydrogeological Information	Drilled Depth (m)	5	Sample ID	MA2-18-1		
	Diameter (in)	1.0 m	Temperature (°C)	31.0		
	S.W.L (m)		pH	8.02		
	D.W.L (m)		EC (µs/cm)	794		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities		Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.)	Villagers wait long time for recharge and villagers use only this well for drinking. In dry season, sometime region will supply the drinking water. but that is not regullary.This village has electric line and alomost house can use it. this village is located in Pegu area, so it is difficult to drill the deep well.		Fe (mg/l)	<0.2	
Results of Simplified Water Quality Test	F (mg/l)			0.2		
	NO3- (mg/l)			5~10		
	NO2- (mg/l)			<0.02		
	Coliforms			14		



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X			
	Shallow Well		Y			
	Storage reservoir					
	○ Others					
Hydrogeological Information	Drilled Depth (m)		Sample ID			
	Diameter (in)		Temperature (°C)			
	S.W.L (m)		pH			
	D.W.L (m)		EC (µs/cm)			
	Yield (m ³ /hour)		Smell			
	No.of users (person/day)		Color			
	Supply facilities		Mn (mg/l)			
	Remarks (Lithology , etc.)			Fe (mg/l)		
Results of Simplified Water Quality Test	F (mg/l)					
	NO3- (mg/l)					
	NO2- (mg/l)					
	Coliforms					

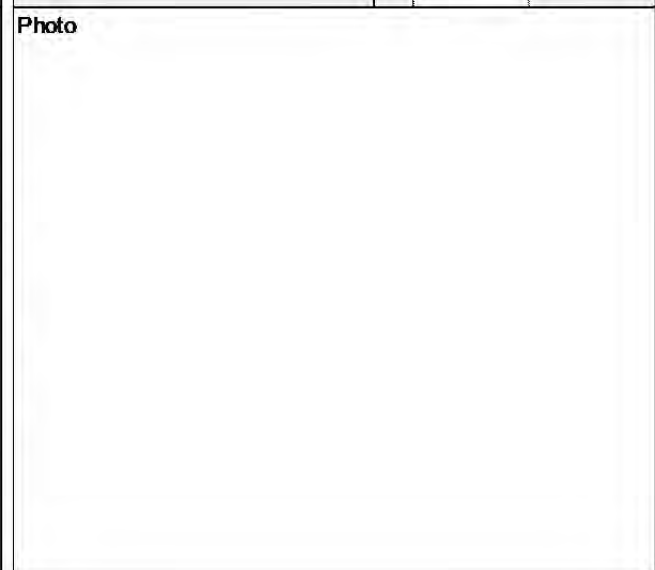


Region	Mandalay		Date	2015.5.25	
Township	Taungthar		Reported by	Sasaki	
Village / ID	Tharzi	MA2-19	Coordinate (WGS84 UTM)	X	740022
			Y	2346931	

Information of Existing Water Source - 1						
Type	o Deep Well		Coordinate	X	740016	
	Shallow Well			Y	2346893	
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	259	Results of Simplified Water Quality Test	Sample ID	MA2-19-1	
	Diameter (in)	4		Temperature (°C)	38.0	
	S.W.L (m)	153		pH	7.38	
	D.W.L (m)			EC (µs/cm)	1,609	
	Yield (m ³ /hour)	3.6		Smell	Slightly sour	
	No.of users (person/day)	950		Color	Non	
	Supply facilities	monopump		Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2	
Drilled in around 1980. BAJ maintained in 2010. Water is not enough in dry season. Neighbor vilage also has same depth well.		F (mg/l)	<0			
		NO3- (mg/l)	<1			
		NO2- (mg/l)	<0.02			
		Coliforms				



Information of Existing Water Source - 2						
Type	Deep Well		Coordinate	X		
	Shallow Well			Y		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID		
	Diameter (in)			Temperature (°C)		
	S.W.L (m)			pH		
	D.W.L (m)			EC (µs/cm)		
	Yield (m ³ /hour)			Smell		
	No.of users (person/day)			Color		
	Supply facilities			Mn (mg/l)		
	Remarks (Lithology , etc.)			Fe (mg/l)		
		F (mg/l)				
		NO3- (mg/l)				
		NO2- (mg/l)				
		Coliforms				



Region	Mandalay		Date	2015.5.25	
Township	Taungthar		Reported by	Sasaki	
Village / ID	Kanaye	MA2-20	Coordinate (WGS84 UTM)	X	740499
			Y	2349023	

Information of Existing Water Source - 1				Information of Existing Water Source - 2							
Type	○ Deep Well		Coordinate	X	740499	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2349023		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	244	Results of Simplified Water Quality Test	Sample ID	MA2-20-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)	4		Temperature (°C)	34.5		Diameter (in)			Temperature (°C)	
	S.W.L (m)	105		pH	7.33		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	1,516		D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)	3.2		Smell	Non		Yield (m³/hour)			Smell	
	No.of users (person/day)	1150		Color	Non		No.of users (person/day)			Color	
	Supply facilities	monopump		Mn (mg/l)	<0.02		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2		Remarks (Lithology , etc.)			Fe (mg/l)	
Drilled in 1981. Village repaired by own budget when pump and generator was broken. Tharzi village (MA2-19) is very near. Using same aquifer?		F (mg/l)	0			F (mg/l)					
		NO3- (mg/l)	<1			NO3- (mg/l)					
		NO2- (mg/l)	<0.02			NO2- (mg/l)					
		Coliforms	19			Coliforms					

Photo



Photo



Region	Mandalay		Date	2015.5.25	
Township	Taungthar		Reported by	Sasaki	
Village / ID	ThayarMyaing	MA2-21	Coordinate (WGS84 UTM)	X	745680
				Y	2342452

Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	745668		
	Shallow Well		Y	2342355		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	36	Results of Simplified Water Quality Test	Sample ID	MA2-21-1	
	Diameter (in)	2		Temperature (°C)	29.8	
	S.W.L (m)			pH	8.41	
	D.W.L (m)			EC (µs/cm)	4,440	
	Yield (m ³ /hour)	3.6		Smell	Non	
	No.of users (person/day)			Color	Non	
	Supply facilities	motor pump		Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2	
Village has 12 shallow well and all of well depth is around 36 - 54m. They used to share with neighboring house. some house can use electricity and pump up by motor. But sometime electricity can't use during several hours by brack out.			F (mg/l)	1.5~3		
			NO3- (mg/l)	45<		
			NO2- (mg/l)	0.5~1		
			Coliforms	7		



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	745625		
	Shallow Well		Y	2342444		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	54	Results of Simplified Water Quality Test	Sample ID	MA2-21-2	
	Diameter (in)	2		Temperature (°C)	29.1	
	S.W.L (m)			pH	8.15	
	D.W.L (m)			EC (µs/cm)	3,460	
	Yield (m ³ /hour)	3.6		Smell	Non	
	No.of users (person/day)			Color	Non	
	Supply facilities	motor pump		Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2	
all of well have small tank. They request big tank. In 1980, 100m depth well was drilled. but that well became salty aroud 4 - 5 years. they already stoped to use now. Simple water quality test is carried out 6 well. all of them have high flouride.			F (mg/l)	1.5		
			NO3- (mg/l)	45<		
			NO2- (mg/l)	<0.2		
			Coliforms	Too much		



Region	Mandalay		Date	2015.5.18	
Township	Yamethin		Reported by	Yamasaki	
Village / ID	Oakpo	MA2-22	Coordinate (WGS84 UTM)	X	826577
				Y	2270843

Information of Existing Water Source - 1				Information of Existing Water Source - 2							
Type	○ Deep Well		Coordinate	X	826855	Type	○ Deep Well		Coordinate	X	826620
	Shallow Well			Y	2270738		Shallow Well			Y	2271085
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	235	Results of Simplified Water Quality Test	Sample ID	MA2-22-1	Hydrogeological Information	Drilled Depth (m)	82	Results of Simplified Water Quality Test	Sample ID	MA2-22-2
	Diameter (in)	2		Temperature (°C)	35.1		Diameter (in)	2		Temperature (°C)	28.7
	S.W.L (m)			pH	8.18		S.W.L (m)			pH	8.20
	D.W.L (m)			EC (µs/cm)	635		D.W.L (m)			EC (µs/cm)	919
	Yield (m³/hour)	4.5		Smell	Non		Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	Non
	Supply facilities	compressor		Mn (mg/l)	<0.02		Supply facilities	compressor		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2		Remarks (Lithology , etc.)			Fe (mg/l)	<0.2
There is residents suffering from kidney stones after 5 years start to drinking. Under repairing due to the engine trouble.			F (mg/l)	0.2	Located in monastery.			F (mg/l)	0.2		
			NO3- (mg/l)	<1				NO3- (mg/l)	<1		
			NO2- (mg/l)	<0.02				NO2- (mg/l)	<0.02		
			Coliforms					Coliforms			

Photo



Photo



Region	Mandalay		Date	2015.5.18	
Township	Yamethin		Reported by	Yamasaki	
Village / ID	Kangyi	MA2-23	Coordinate (WGS84 UTM)	X	828701
				Y	2246082


Information of Existing Water Source - 1						
Type	Deep Well	Coordinate	X	828635		
	Shallow Well		Y	2246064		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	55	Sample ID	MA2-23-1		
	Diameter (in)	2	Temperature (°C)	30.0		
	S.W.L (m)		pH	8.09		
	D.W.L (m)		EC (µs/cm)	2,020		
	Yield (m ³ /hour)	2.2	Smell	Non		
	No.of users (person/day)	20HH	Color	Slightly muddy		
	Supply facilities	compresser	Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.) a bit salty and included sand. But this water can use to drinking. Pump displacement is not so much, and also the number of using households is not much.			Fe (mg/l)	<0.2	
F (mg/l)				0.8		
NO3- (mg/l)				<1		
NO2- (mg/l)				<0.02		
Coliforms				5		



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	829123		
	Shallow Well		Y	2246062		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	220	Sample ID	MA2-23-2		
	Diameter (in)	2	Temperature (°C)	31.3		
	S.W.L (m)	200	pH	8.51		
	D.W.L (m)		EC (µs/cm)	1,983		
	Yield (m ³ /hour)	3.6	Smell	Non		
	No.of users (person/day)	50HH	Color	Non		
	Supply facilities	compresser	Mn (mg/l)	<0.02		
	Remarks (Lithology , etc.) this village has 2 deep well. Another one is not used much due to the pumping cost. Some house can use this water by distributed pipe.			Fe (mg/l)	<0.2	
F (mg/l)				1.5		
NO3- (mg/l)				<1		
NO2- (mg/l)				<0.02		
Coliforms						



Region	Mandalay		Date	2015.5.18	
Township	Pyawbwe		Reported by	Yamasaki	
Village / ID	HtaneKan	MA2-24	Coordinate (WGS84 UTM)	X	804515
			Y	2275435	

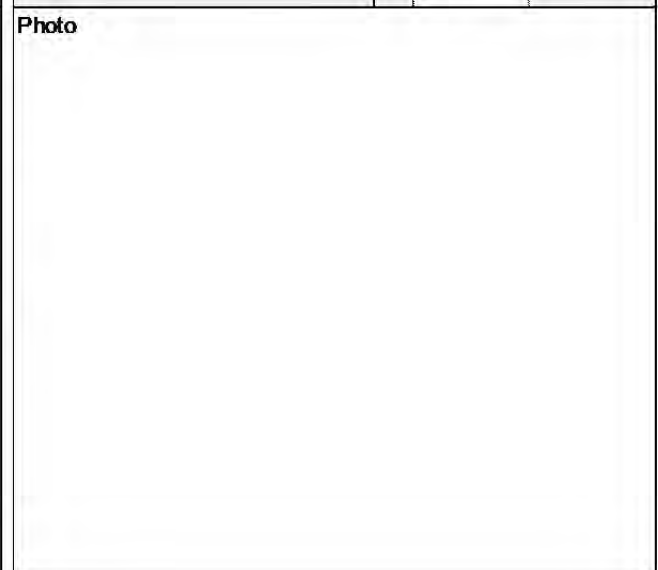
Information of Existing Water Source - 1						Information of Existing Water Source - 2					
Type	○ Deep Well		Coordinate	X	804392	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2275367		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	MA2-24-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	30.1		Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	8.36		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	4,140		D.W.L (m)			EC (µs/cm)	
	Yield (m ³ /hour)			Smell	Non		Yield (m ³ /hour)			Smell	
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	<0.02		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)						Fe (mg/l)	<0.2		Remarks (Lithology , etc.)	
This village can get drinking water from only this well. If water is not enough, residents go to Waryonesu (MA2-25).				F (mg/l)	0					F (mg/l)	
				NO3- (mg/l)	<1			NO3- (mg/l)			
				NO2- (mg/l)	<0.02			NO2- (mg/l)			
				Coliforms				Coliforms			
Photo						Photo					
											

Region	Mandalay		Date	2015.5.18	
Township	Pyawbwe		Reported by	Yamasaki	
Village / ID	Wayronesu	MA2-25	Coordinate (WGS84 UTM)	X	804877
				Y	2275454

Information of Existing Water Source - 1						
Type	○ Deep Well		Coordinate	X	804775	
	Shallow Well			Y	2275467	
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	116	Results of Simplified Water Quality Test	Sample ID	MA2-25-1	
	Diameter (in)	2		Temperature (°C)	30.0	
	S.W.L (m)	11		pH	8.40	
	D.W.L (m)			EC (µs/cm)	1,986	
	Yield (m ³ /hour)	1.4		Smell	Non	
	No.of users (person/day)	100		Color	Non	
	Supply facilities	compressor		Mn (mg/l)	<0.02	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2	
Concrete tank(W=2.5m,L=1m,H=1m) water is supplied by hose.			F (mg/l)	0		
			NO3- (mg/l)	<1		
			NO2- (mg/l)	<0.02		
			Coliforms			



Information of Existing Water Source - 2						
Type	Deep Well		Coordinate	X		
	Shallow Well			Y		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID		
	Diameter (in)			Temperature (°C)		
	S.W.L (m)			pH		
	D.W.L (m)			EC (µs/cm)		
	Yield (m ³ /hour)			Smell		
	No.of users (person/day)			Color		
	Supply facilities			Mn (mg/l)		
	Remarks (Lithology , etc.)			Fe (mg/l)		
			F (mg/l)			
			NO3- (mg/l)			
			NO2- (mg/l)			
			Coliforms			



Region	Mandalay		Date	
Township	Nyaungoo		Reported by	Maruo
Village / ID	Talkone	MA2-26	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X	721221	Type	Deep Well	Coordinate	X			
	Shallow Well		Y	2347331		Shallow Well		Y			
	Storage reservoir					Storage reservoir					
	Others					Others					
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MA2-26	Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID			
	Diameter (in)		Temperature (°C)			Diameter (in)		Temperature (°C)			
	S.W.L (m)		pH			S.W.L (m)		pH			
	D.W.L (m)		EC (µs/cm)			D.W.L (m)		EC (µs/cm)			
	Yield (m ³ /hour)		Smell			Yield (m ³ /hour)		Smell			
	No.of users (person/day)		Color			No.of users (person/day)		Color			
	Supply facilities		Mn (mg/l)			Supply facilities		Mn (mg/l)			
	Remarks (Lithology , etc.)		Fe (mg/l)			Remarks (Lithology , etc.)		Fe (mg/l)			
Khetlankan is northern part of the target village. There have 500ft deep borehole and two tube wells.one from BAJ last 10 years ago(300-500gph) and another from DRD last one year ago(480ft, 2000gph). Legyi is the eastern part of target village and there have JICA tube well from 2008.Water taste is good.	F (mg/l)			F (mg/l)							
	NO3- (mg/l)			NO3- (mg/l)							
	NO2- (mg/l)			NO2- (mg/l)							
	Coliforms			Coliforms							
	Photo					Photo					

Region	Mandalay		Date	
Township	Nyaungoo		Reported by	Maruo
Village / ID	Tawbyar	MA2-27	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	Deep Well	Coordinate	X	726339	
	Shallow Well		Y	2345861	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	183	Sample ID	MA2-27	
	Diameter (in)		Temperature (°C)		
	S.W.L (m)		pH		
	D.W.L (m)		EC (µs/cm)		
	Yield (m ³ /hour)		Smell		
	No.of users (person/day)		Color		
	Supply facilities		Mn (mg/l)		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test			
Thanattin village is next to the target village DRD drilled a borehole, 244m and met sand stone(very hard), but layer not thick. 183m depth, good yield and taste good.					
	Fe (mg/l)				
	F (mg/l)				
	NO3- (mg/l)				
	NO2- (mg/l)				
	Coliforms				

Photo

Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Sample ID		
	Diameter (in)		Temperature (°C)		
	S.W.L (m)		pH		
	D.W.L (m)		EC (µs/cm)		
	Yield (m ³ /hour)		Smell		
	No.of users (person/day)		Color		
	Supply facilities		Mn (mg/l)		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test			
	Fe (mg/l)				
	F (mg/l)				
	NO3- (mg/l)				
	NO2- (mg/l)				
	Coliforms				

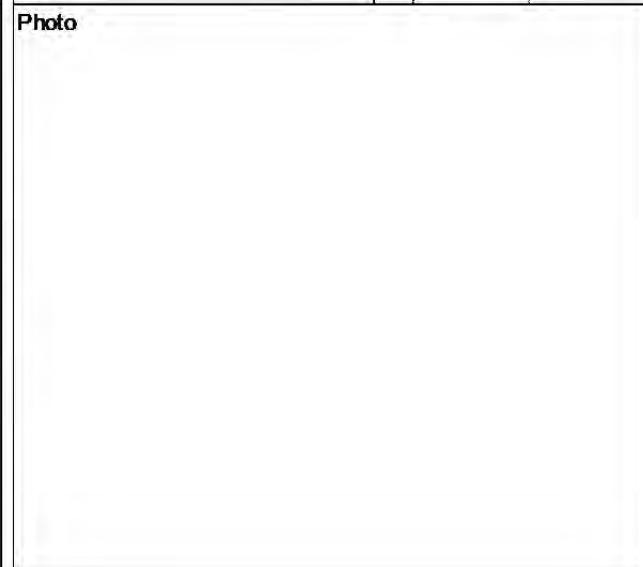
Photo

Region	Mandalay		Date	
Township	Nyaungoo		Reported by	Maruo
Village / ID	Setsetyo	MA2-28	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MA2-28
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m³/hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
Existing tube well but low yield, another tube well drilled by BAJ(900 gph).	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m³/hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			

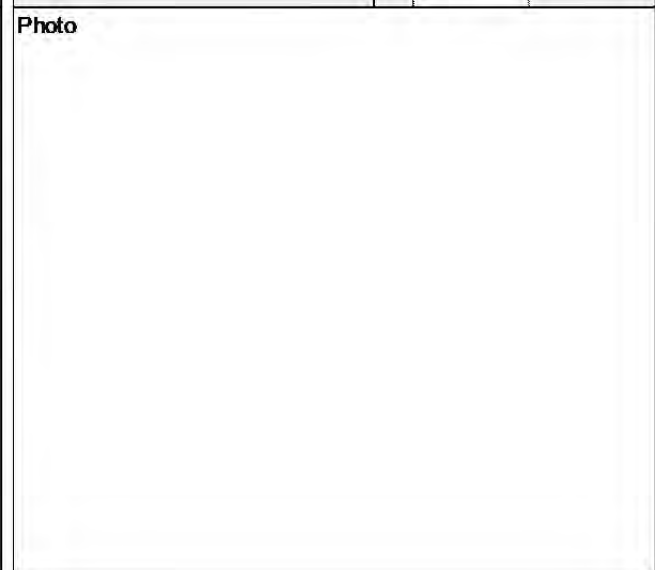


Region	Mandalay		Date	2015/5/7
Township	Nyaungoo		Reported by	Maruo
Village / ID	Kanzauk	MA2-29	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	709762	
	<input type="radio"/> Shallow Well		Y	2328729	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	200	Results of Simplified Water Quality Test	Sample ID	MA2-29-1
	Diameter (in)	6		Temperature (°C)	35.7
	S.W.L (m)			pH	7.06
	D.W.L (m)			EC (µs/cm)	1,036
	Yield (m³/hour)	5.9		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Submersible pump		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Drilled by BAJ in 2003		Fe (mg/l)	<0.2
			F (mg/l)	0.1	
			NO3-(mg/l)		
			NO2-(mg/l)	<0.02	
			Coliforms		



Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X		
	<input type="radio"/> Shallow Well		Y		
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3-(mg/l)		
			NO2-(mg/l)		
			Coliforms		

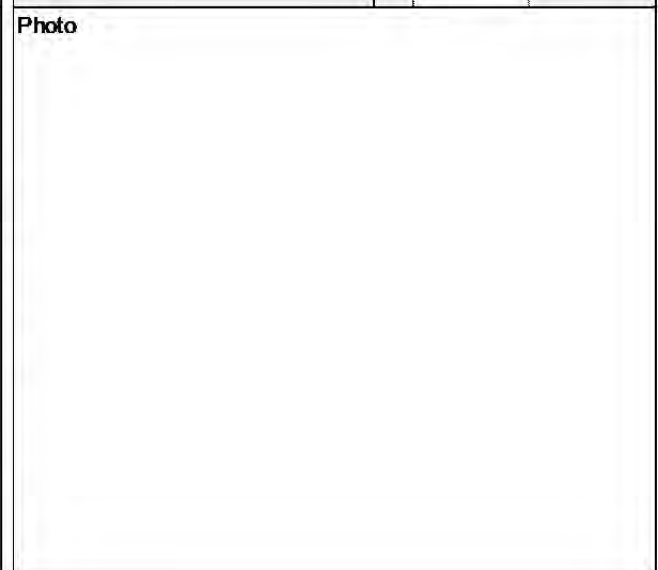


Region	Mandalay		Date	2015/5/7
Township	Nyaungoo		Reported by	Maruo
Village / ID	Talbindel	MA2-30	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	○ Deep Well		Coordinate	X	719325
	Shallow Well			Y	2332051
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	280	Results of Simplified Water Quality Test	Sample ID	MA2-30-1
	Diameter (in)	4		Temperature (°C)	36.3
	S.W.L (m)	219		pH	6.77
	D.W.L (m)			EC (µs/cm)	1,239
	Yield (m³/hour)	3.6		Smell	Iron smell
	No.of users (person/day)			Color	Shallow whie
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Pump position 830ft, BAJ just rehabilitated cleaned element.		Fe (mg/l)	1
			F (mg/l)	0.5	
			NO3- (mg/l)		
			NO2- (mg/l)	<0.02	
			Coliforms		



Information of Existing Water Source - 2					
Type	Deep Well		Coordinate	X	
	Shallow Well			Y	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		

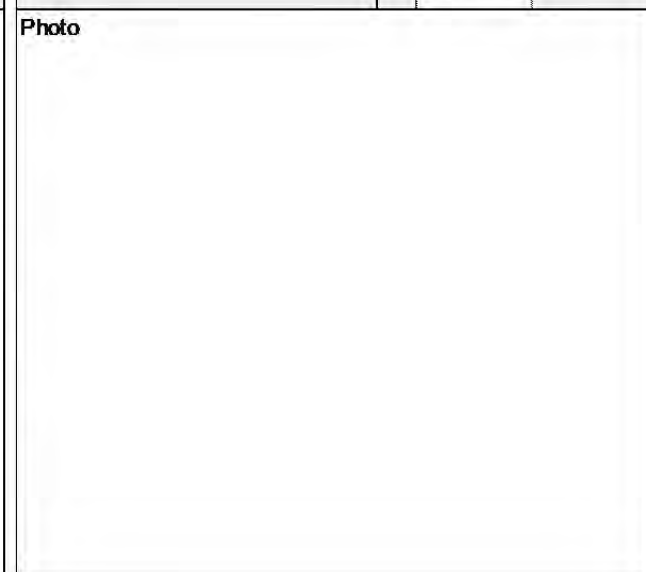


Region	Mandalay		Date	2015/5/6
Township	Nyaungoo		Reported by	Maruo
Village / ID	Mongywettaw	MA2-31	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	724266
	Shallow Well		Y	2337196
	Storage reservoir			
	○ Others(Dug Well)			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MA2-31-1
	Diameter (in)		Temperature (°C)	27.5
	S.W.L (m)		pH	8.05
	D.W.L (m)		EC (µs/cm)	500
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.02
Dug well in the pond. Oyintaungyartan is next to the target village.	F (mg/l)	0		
	NO3-(mg/l)			
	NO2-(mg/l)	<0.02		
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3-(mg/l)			
	NO2-(mg/l)			
	Coliforms			

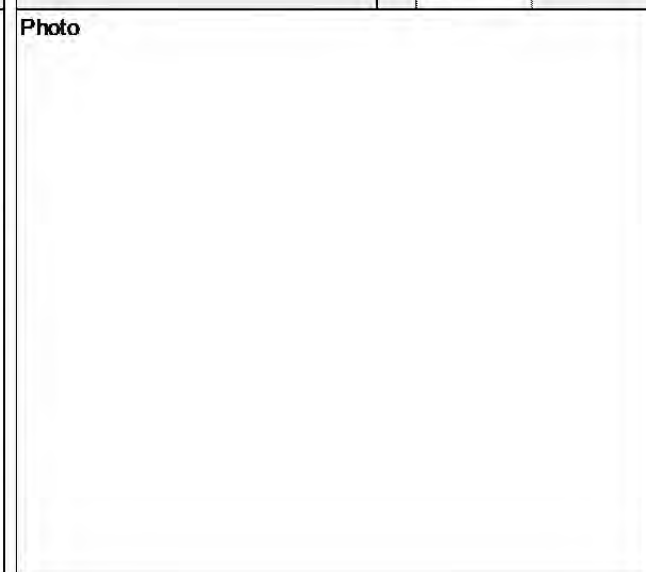


Region	Mandalay		Date	2015/5/7
Township	Nyaungoo		Reported by	Maruo
Village / ID	Phoenekan	MA2-32	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	<input type="radio"/> Deep Well	Coordinate	X	703729
	<input type="checkbox"/> Shallow Well		Y	2334750
	<input type="checkbox"/> Storage reservoir			
	<input type="checkbox"/> Others			
Hydrogeological Information	Drilled Depth (m)	152	Sample ID	MA2-32-1
	Diameter (in)		Temperature (°C)	31.6
	S.W.L (m)	37	pH	7.33
	D.W.L (m)	Big	EC (µs/cm)	1,043
	Yield (m³/hour)		Smell	Non
	No. of users (person/day)		Color	Non
	Supply facilities	Submersible pump	Mn (mg/l)	<0.02
	Remarks (Lithology, etc.)		Fe (mg/l)	<0.2
Pump position - 440 ft About 1.5 miles from Phonenekan village. Taungpon village is next to the target village.		F (mg/l)	0.7	
		NO3- (mg/l)		
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	<input type="checkbox"/> Deep Well	Coordinate	X	
	<input type="checkbox"/> Shallow Well		Y	
	<input type="checkbox"/> Storage reservoir			
	<input type="checkbox"/> Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m³/hour)		Smell	
	No. of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology, etc.)		Fe (mg/l)	
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		



Region	Mandalay		Date	
Township	Nyaungoo		Reported by	Maruo
Village / ID	Nyaungbinthar	MA2-33	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	712483
	Shallow Well		Y	2322525
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MA2-33
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
			Fe (mg/l)	
Remarks (Lithology, etc.)			F (mg/l)	
There is one pond at Khwaypyout village 5 miles far away from target village. Damaged well site WP 170 drilled in 1983, used about 10 years by WRUD(high iron and ground water quality of this area is not good).			NO3- (mg/l)	
			NO2- (mg/l)	
			Coliforms	
Photo				

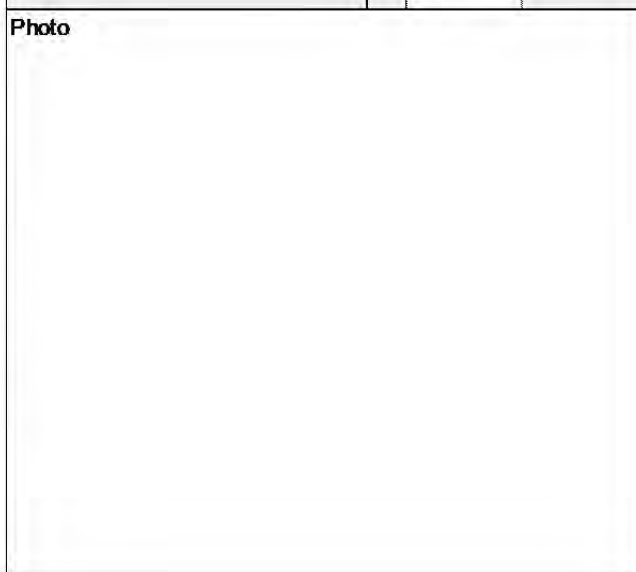
Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
			Fe (mg/l)	
Remarks (Lithology, etc.)			F (mg/l)	
			NO3- (mg/l)	
			NO2- (mg/l)	
			Coliforms	
Photo				

Region	Mandalay		Date	2015/5/6
Township	Nyaungoo		Reported by	Maruo
Village / ID	Saingkan(Tetide)	MA2-34	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	<input type="radio"/> Deep Well	Coordinate	X	725695
	<input type="radio"/> Shallow Well		Y	2329987
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	365	Sample ID	MA2-34-1
	Diameter (in)		Temperature (°C)	34.6
	S.W.L (m)		pH	7.37
	D.W.L (m)		EC (µs/cm)	814
	Yield (m³/hour)		Smell	Iron smell
	No.of users (person/day)		Color	Non
	Supply facilities	Pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.) JICA well. Kudaw village is next to the target village.		Results of Simplified Water Quality Test	
Fe (mg/l)			0.6	
F (mg/l)			0.2	
NO3-(mg/l)				
NO2-(mg/l)			<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	<input type="radio"/> Deep Well	Coordinate	X	
	<input type="radio"/> Shallow Well		Y	
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m³/hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Fe (mg/l)				
F (mg/l)				
NO3-(mg/l)				
NO2-(mg/l)				
		Coliforms		

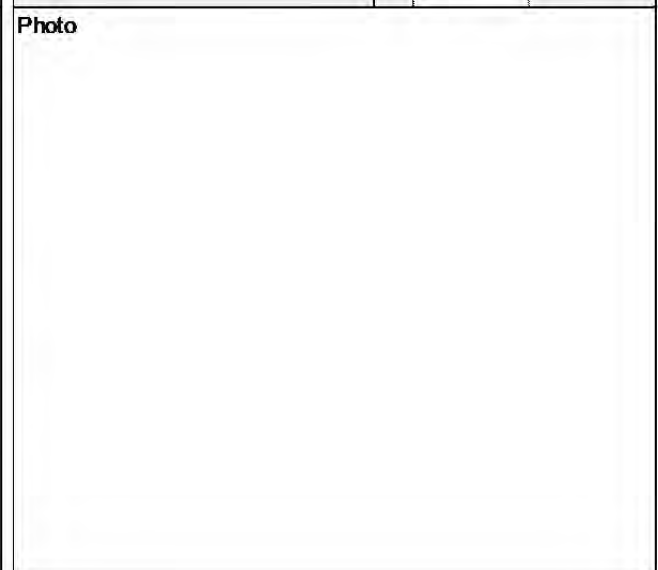


Region	Mandalay		Date	2015/5/6
Township	Nyaungoo		Reported by	Maruo
Village / ID	Byugyi	MA2-35	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	○ Deep Well	Coordinate	X	724027	
	Shallow Well		Y	2324767	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	309	Results of Simplified Water Quality Test	Sample ID	MA2-35-1
	Diameter (in)	6		Temperature (°C)	
	S.W.L (m)	236		pH	7.61
	D.W.L (m)	239		EC (µs/cm)	908
	Yield (m³/hour)	8.2		Smell	Non
	No. of users (person/day)			Color	Non
	Supply facilities	Mono pump		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2
		F (mg/l)	0.1		
		NO3- (mg/l)			
		NO2- (mg/l)	<0.02		
		Coliforms			



Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No. of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
		F (mg/l)			
		NO3- (mg/l)			
		NO2- (mg/l)			
		Coliforms			



Region	Mandalay		Date	2015/5/5
Township	Kyaukpadaung		Reported by	Maruo
Village / ID	Alelywar-2	MA2-36	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X	718697	Type	<input type="radio"/> Deep Well	Coordinate	X	718334
	<input type="radio"/> Shallow Well		Y	2309611		<input type="radio"/> Shallow Well		Y	2309805
	<input type="radio"/> Storage reservoir					<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others					<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	270	Sample ID	MA2-36-1	Hydrogeological Information	Drilled Depth (m)	270	Sample ID	MA2-36-2
	Diameter (in)		Temperature (°C)	32.8		Diameter (in)	4	Temperature (°C)	34.7
	S.W.L (m)		pH	6.20		S.W.L (m)	150	pH	6.00
	D.W.L (m)		EC (µs/cm)	1,907		D.W.L (m)		EC (µs/cm)	1,343
	Yield (m³/hour)		Smell	Iron smell		Yield (m³/hour)	6.8	Smell	Slightly iron
	No.of users (person/day)		Color	Non		No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	3		Supply facilities		Mn (mg/l)	1
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test			Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Iron contents is very high and a little sour.		Fe (mg/l)	>10	Dagagayi is northern part of Aleyawa 2 and 2 km far . Drilled 33 years ago. This tube well is slightly deeper than other well 4-6 deeper.		Fe (mg/l)	3		
		F (mg/l)	0.6			F (mg/l)	0.2		
		NO3- (mg/l)				NO3- (mg/l)	<1		
		NO2- (mg/l)	<0.02			NO2- (mg/l)	<0.02		
		Coliforms				Coliforms			

Photo



Photo



Region	Mandalay		Date	2015/5/26
Township	Kyaukpadaung		Reported by	Maruo
Village / ID	Tanganan	MA2-37	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	○ Deep Well		Coordinate	X	719320	Type	○ Deep Well		Coordinate	X	719095
	Shallow Well			Y	2309491		Shallow Well			Y	2309562
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	MA2-37-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	MA2-37-2
	Diameter (in)			Temperature (°C)	30.3		Diameter (in)			Temperature (°C)	37.4
	S.W.L (m)			pH	6.35		S.W.L (m)			pH	6.32
	D.W.L (m)			EC (µs/cm)	950		D.W.L (m)			EC (µs/cm)	584
	Yield (m ³ /hour)			Smell	Slightly iron		Yield (m ³ /hour)			Smell	Iron smell
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<1		Supply facilities			Mn (mg/l)	<1
	Remarks (Lithology , etc.)						Fe (mg/l)	10		Remarks (Lithology , etc.)	
People get water from Kanni Pond.				F (mg/l)	0.8	Kanni well DRD-035 wp 311 Water temperature always high / different from Tanganan well.				F (mg/l)	1
				NO3- (mg/l)	<1					NO3- (mg/l)	<1
				NO2- (mg/l)	<0.02					NO2- (mg/l)	<0.02
				Coliforms						Coliforms	
Photo					Photo						

Region	Mandalay		Date	2015/5/5
Township	Kyautpadaung		Reported by	Maruo
Village / ID	Lelgyi(Ma)	MA2-38	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				Information of Existing Water Source - 2							
Type	○ Deep Well		Coordinate	X	734592	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2325518		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	300	Results of Simplified Water Quality Test	Sample ID	MA2-38-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)	4		Temperature (°C)	31.5		Diameter (in)			Temperature (°C)	
	S.W.L (m)	52		pH	7.48		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	1,203		D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)	10.2		Smell	Sulfur smell		Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	Slightly muddy		No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	<0.02		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	5		Remarks (Lithology , etc.)			Fe (mg/l)	
7 years ago (2009) developed by air lifting by JICA project and a year ago		F (mg/l)	0.6			F (mg/l)					
		NO3- (mg/l)				NO3- (mg/l)					
		NO2- (mg/l)	<0.02			NO2- (mg/l)					
		Coliforms				Coliforms					

Photo



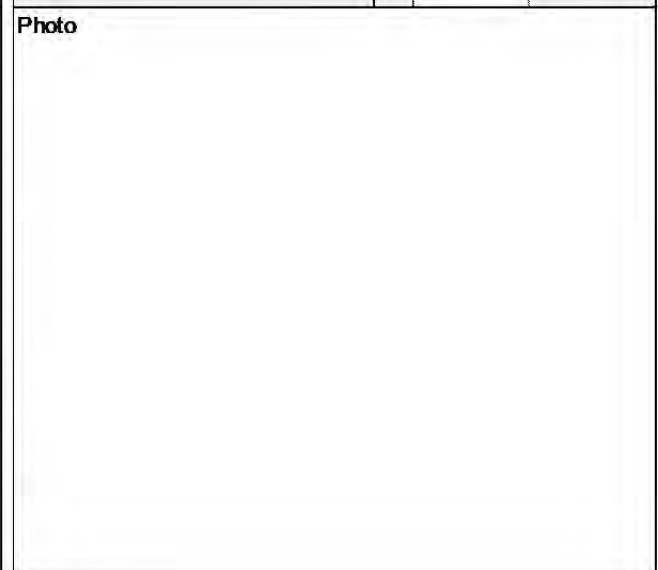
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Region	Mandalay		Date	2015/5/5
Township	Kyaukpadaung		Reported by	Maruo
Village / ID	Thayattaw	MA2-39	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	729384
	Shallow Well		Y	2325075
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	300	Sample ID	MA2-39-1
	Diameter (in)	4	Temperature (°C)	32.8
	S.W.L (m)	226	pH	7.11
	D.W.L (m)		EC (µs/cm)	947
	Yield (m ³ /hour)	2.7	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
		F (mg/l)	<0.1	
		NO3- (mg/l)		
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		



Region	Mandalay		Date	2015/5/5
Township	Kyaukpadaung		Reported by	Maruo
Village / ID	Nakyatkawl	MA2-40	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	○ Deep Well		Coordinate	X	719978	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2312255		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	293	Results of Simplified Water Quality Test	Sample ID	MA2-40-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)	4		Temperature (°C)	32.7		Diameter (in)			Temperature (°C)	
	S.W.L (m)	67		pH	7.07		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	791		D.W.L (m)			EC (µs/cm)	
	Yield (m ³ /hour)	6.8		Smell	Non		Yield (m ³ /hour)			Smell	
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	<1		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2		Remarks (Lithology , etc.)			Fe (mg/l)	
drilled in 1992		F (mg/l)	0.2			F (mg/l)					
		NO3- (mg/l)				NO3- (mg/l)					
		NO2- (mg/l)	<0.2			NO2- (mg/l)					
		Coliforms				Coliforms					
Photo					Photo						

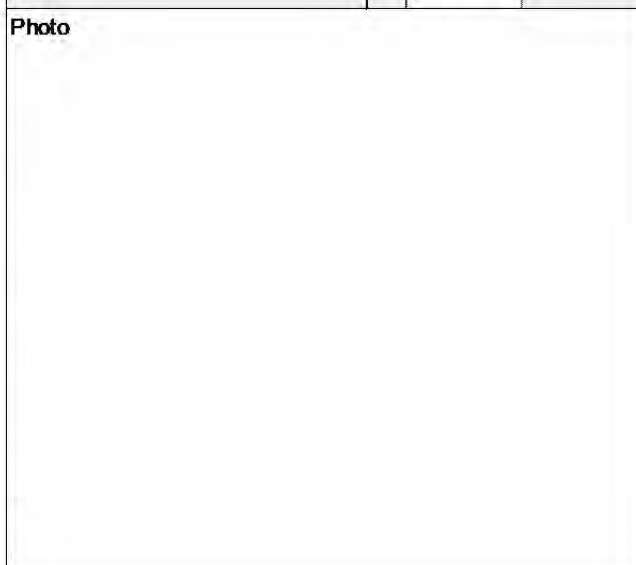
(3) Magway Region

Region	Magway		Date	2015/5/13
Township	Magway		Reported by	Maruo
Village / ID	Natkan	MG2-01	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1						
Type	○ Deep Well	Coordinate	X	706494		
	Shallow Well		Y	2234069		
	Storage reservoir		/			
	Others					
Hydrogeological Information	Drilled Depth (m)	174	Sample ID	MG2-1-1		
	Diameter (in)	4	Temperature (°C)	31.4		
	S.W.L (m)	73	pH	7.16		
	D.W.L (m)		EC (µs/cm)	988		
	Yield (m³/hour)	5.0	Smell	Non		
	No. of users (person/day)		Color	Non		
	Supply facilities	Pump	Mn (mg/l)	0		
	Remarks (Lithology, etc.)	Results of Simplified Water Quality Test				
Drilled by DDA in 2014						
	Fe (mg/l)					0.4
	F (mg/l)					0.4
	NO3- (mg/l)					
	NO2- (mg/l)	<0.02				
	Coliforms					



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X			
	Shallow Well		Y			
	Storage reservoir		/			
	Others					
Hydrogeological Information	Drilled Depth (m)		Sample ID			
	Diameter (in)		Temperature (°C)			
	S.W.L (m)		pH			
	D.W.L (m)		EC (µs/cm)			
	Yield (m³/hour)		Smell			
	No. of users (person/day)		Color			
	Supply facilities		Mn (mg/l)			
	Remarks (Lithology, etc.)	Results of Simplified Water Quality Test				
	Fe (mg/l)					
	F (mg/l)					
	NO3- (mg/l)					
	NO2- (mg/l)					
	Coliforms					

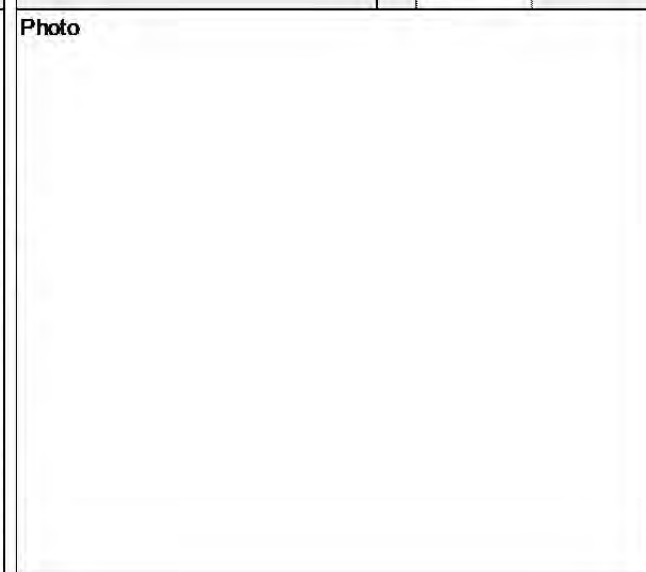


Region	Magway		Date	2015/5/19
Township	Magway		Reported by	Maruo
Village / ID	Thanbo(Ywarthit)	MG2-02	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	○ Deep Well	Coordinate	X	776115	
	Shallow Well		Y	2216165	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	120.3	Results of Simplified Water Quality Test	Sample ID	MG2-2-1
	Diameter (in)	4		Temperature (°C)	32.0
	S.W.L (m)	84		pH	7.16
	D.W.L (m)			EC (µs/cm)	1,494
	Yield (m³/hour)			Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Pump		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Slightly salty Borehole drilled in 1999 by SPDC.		Fe (mg/l)	<0.2
			F (mg/l)	0.6	
			NO3-(mg/l)	3.0	
			NO2-(mg/l)	0.1	
			Coliforms		



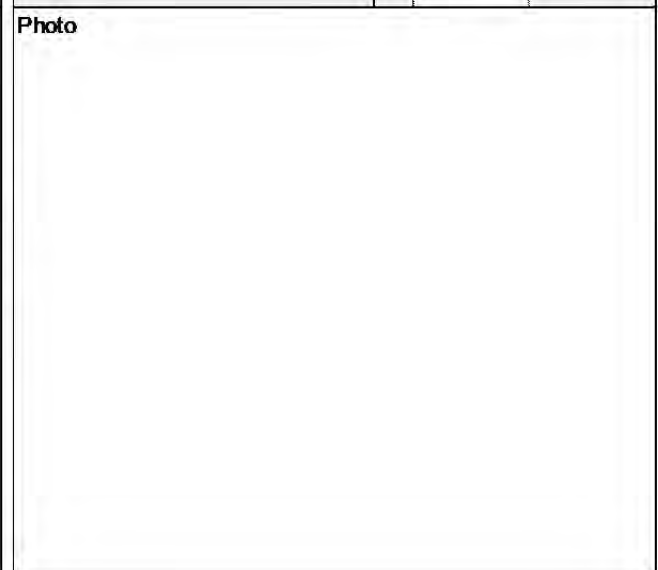
Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3-(mg/l)		
			NO2-(mg/l)		
			Coliforms		



Region	Magway		Date	2015/5/12
Township	Magway		Reported by	Maruo
Village / ID	Nyaungbinthar	MG2-03	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	o Deep Well	Coordinate	X	736944	
	Shallow Well		Y	2243982	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	120	Results of Simplified Water Quality Test	Sample ID	MG2-3-1
	Diameter (in)	4		Temperature (°C)	32.6
	S.W.L (m)	154		pH	7.30
	D.W.L (m)			EC (µs/cm)	1,067
	Yield (m³/hour)	6.4		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<1
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.02
		F (mg/l)	0.1		
		NO3- (mg/l)			
		NO2- (mg/l)	<0.02		
		Coliforms			

Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
		F (mg/l)			
		NO3- (mg/l)			
		NO2- (mg/l)			
		Coliforms			

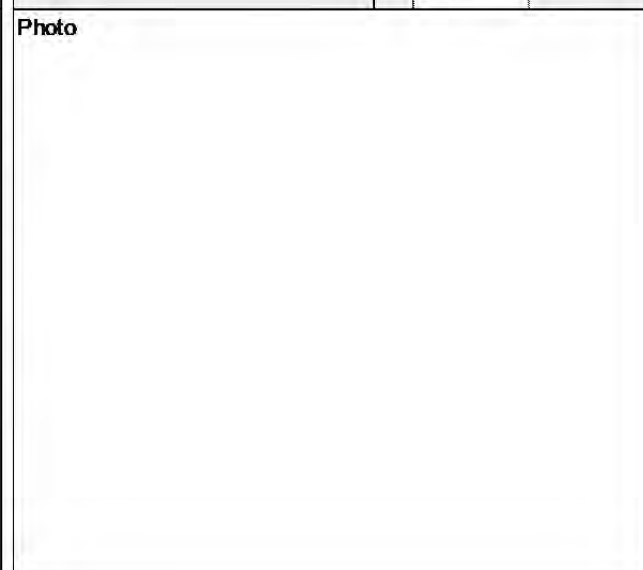


Region	Magway		Date	2015/5/15
Township	Magway		Reported by	Maruo
Village / ID	Konegyi	MG2-04	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	○ Deep Well	Coordinate	X	718611	
	Shallow Well		Y	2237657	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	220	Results of Simplified Water Quality Test	Sample ID	MG2-4-1
	Diameter (in)	6		Temperature (°C)	33.0
	S.W.L (m)	134		pH	7.11
	D.W.L (m)			EC (µs/cm)	1,010
	Yield (m³/hour)	9.1		Smell	Slightly iron
	No.of users (person/day)			Color	Non
	Supply facilities	Mono pump		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Drilled originally in 1978 Repaired in 2004. Again in 2014 by BAJ.		Fe (mg/l)	0.3
			F (mg/l)	0.3	
			NO3- (mg/l)	<1	
			NO2- (mg/l)	<0.02	
			Coliforms		



Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		

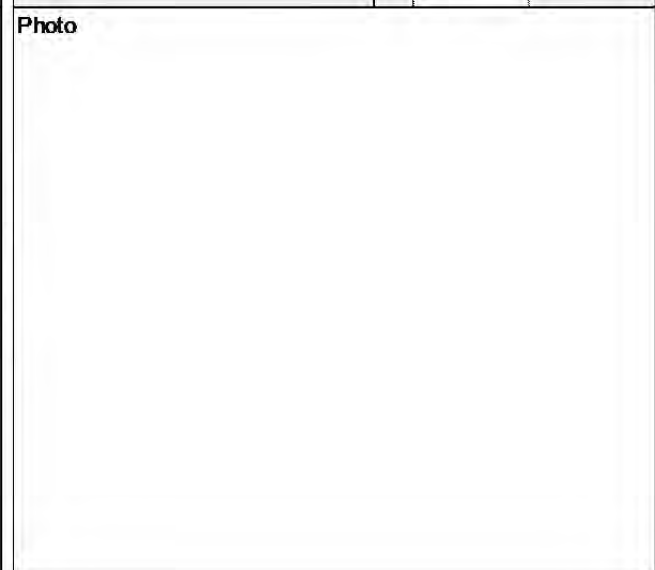


Region	Magway		Date	2015/5/16
Township	Magway		Reported by	Maruo
Village / ID	Sainggya	MG2-05	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	725131	
	<input type="radio"/> Shallow Well		Y	2213520	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	200	Sample ID	MG2-5-1	
	Diameter (in)	4	Temperature (°C)	33.4	
	S.W.L (m)	153	pH	7.23	
	D.W.L (m)		EC (µs/cm)	1,460	
	Yield (m ³ /hour)	5.5	Smell	Slightly iron	
	No.of users (person/day)		Color	Non	
	Supply facilities		Mn (mg/l)	<1	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test			
BAJ replaced Mono pump Bore hole drilled in 1985 by WRUD.					
	Fe (mg/l)				0.7
	F (mg/l)				0.3
	NO3- (mg/l)				<1
	NO2- (mg/l)	<0.02			
	Coliforms				



Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X		
	<input type="radio"/> Shallow Well		Y		
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)		Sample ID		
	Diameter (in)		Temperature (°C)		
	S.W.L (m)		pH		
	D.W.L (m)		EC (µs/cm)		
	Yield (m ³ /hour)		Smell		
	No.of users (person/day)		Color		
	Supply facilities		Mn (mg/l)		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test			
	Fe (mg/l)				
	F (mg/l)				
	NO3- (mg/l)				
	NO2- (mg/l)				
	Coliforms				

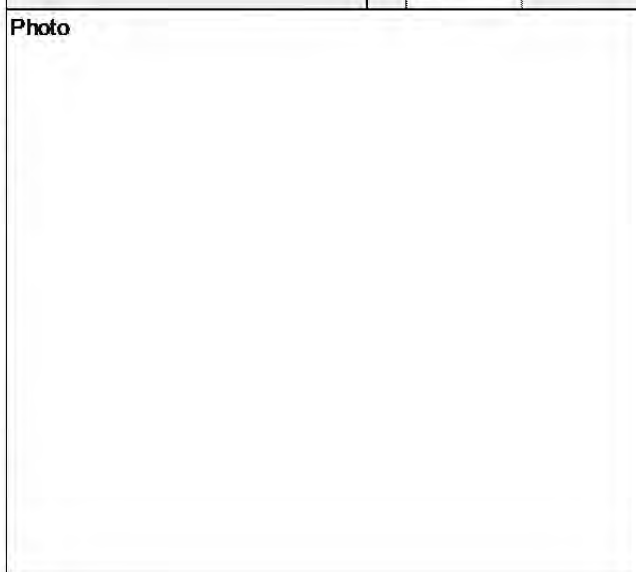


Region	Magway		Date	2015/5/15
Township	Magway		Reported by	Maruo
Village / ID	Thapyaysan(N)	MG2-06	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	712184
	Shallow Well		Y	2227130
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	189	Sample ID	MG2-6-1
	Diameter (in)	6	Temperature (°C)	35.5
	S.W.L (m)	97	pH	7.32
	D.W.L (m)		EC (µs/cm)	1,108
	Yield (m ³ /hour)	9.1	Smell	Slightly iron
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		
Chinese generator with MONO 640-A- Pump		Fe (mg/l)	0.2	
		F (mg/l)	0.5	
		NO3- (mg/l)	2.0	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		
		Fe (mg/l)		
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		



Region	Magway		Date	2015/5/16
Township	Magway		Reported by	Maruo
Village / ID	Shwekyaw	MG2-07	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	○ Deep Well		Coordinate	X	733928
	Shallow Well			Y	2207547
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	198	Results of Simplified Water Quality Test	Sample ID	MG2-7-1
	Diameter (in)	4		Temperature (°C)	33.7
	S.W.L (m)	82		pH	7.57
	D.W.L (m)			EC (µs/cm)	1,352
	Yield (m ³ /hour)	6.8		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Tunk is sealed - Water analysis from the tunk. UNICEF constructed in1986.		Fe (mg/l)	0.2
	F (mg/l)			0.6	
	NO3- (mg/l)			<1	
	NO2- (mg/l)			<0.02	
	Coliforms				

Photo

Information of Existing Water Source - 2					
Type	Deep Well		Coordinate	X	
	Shallow Well			Y	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m ³ /hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
	F (mg/l)				
	NO3- (mg/l)				
	NO2- (mg/l)				
	Coliforms				

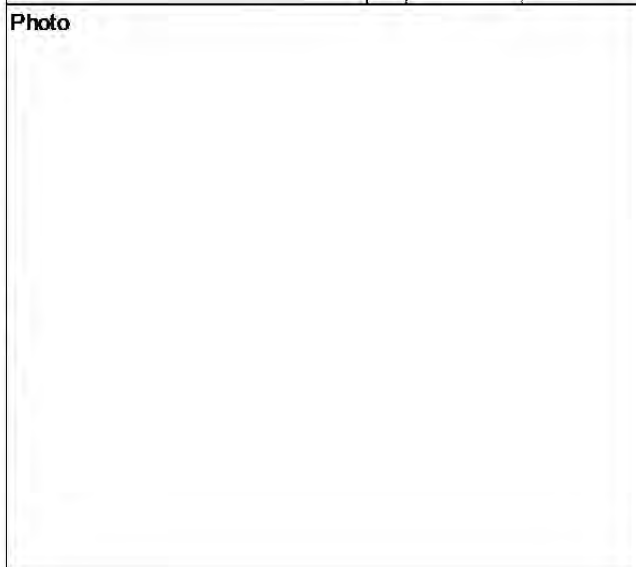
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Region	Magway		Date	2015/5/12
Township	Magway		Reported by	Maruo
Village / ID	Leikkan	MG2-08	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1			
Type	<input type="radio"/> Deep Well	Coordinate	X 726925
	<input type="radio"/> Shallow Well		Y 2239707
	<input type="radio"/> Storage reservoir		
	<input type="radio"/> Others		
Hydrogeological Information	Drilled Depth (m)	114	Results of Simplified Water Quality Test
	Diameter (in)	6	
	S.W.L (m)		
	D.W.L (m)		
	Yield (m³/hour)	5.9	
	No.of users (person/day)		
	Supply facilities	Pump	
	Sample ID	MG2-8-1	
	Temperature (°C)	31.8	
	pH	7.0	
	EC (µs/cm)	872	
	Smell	Slightly iron	
	Color	Non	
	Mn (mg/l)	<1	
	Fe (mg/l)	0.3	
	F (mg/l)	0.2	
	NO3- (mg/l)		
	NO2- (mg/l)	<0.02	
	Coliforms		
Remarks (Lithology , etc.)			
Drilled by WRUD in 1981 BAJ cleaned element of MONO pump Villagers replaced generator 2014			



Information of Existing Water Source - 2			
Type	<input type="radio"/> Deep Well	Coordinate	X
	<input type="radio"/> Shallow Well		Y
	<input type="radio"/> Storage reservoir		
	<input type="radio"/> Others		
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test
	Diameter (in)		
	S.W.L (m)		
	D.W.L (m)		
	Yield (m³/hour)		
	No.of users (person/day)		
	Supply facilities		
	Sample ID		
	Temperature (°C)		
	pH		
	EC (µs/cm)		
	Smell		
	Color		
	Mn (mg/l)		
	Fe (mg/l)		
	F (mg/l)		
	NO3- (mg/l)		
	NO2- (mg/l)		
	Coliforms		
Remarks (Lithology , etc.)			

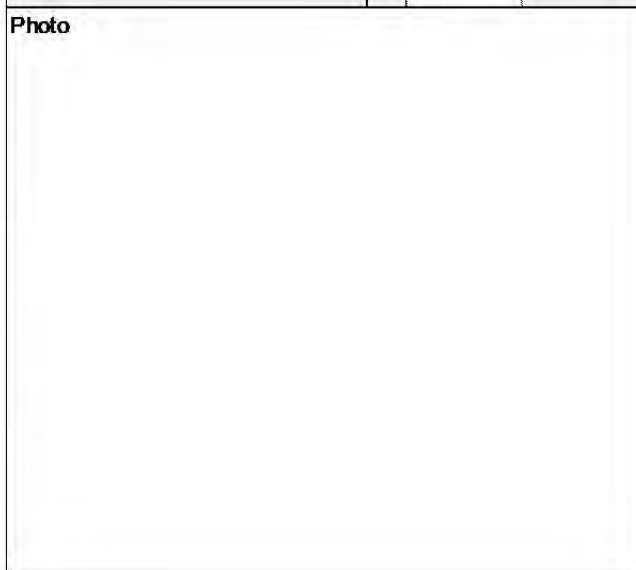


Region	Magway		Date	2015/5/15
Township	Magway		Reported by	Maruo
Village / ID	Ywarthitgyi	MG2-09	Coordinate (WGS84 UTM)	X
			Y	


Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	722084
	Shallow Well		Y	2237682
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	177	Sample ID	MG2-9-1
	Diameter (in)		Temperature (°C)	32.2
	S.W.L (m)	104	pH	7.04
	D.W.L (m)		EC (µs/cm)	805
	Yield (m ³ /hour)	6.8	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Drilled in 2010 by SPDC. Chinese engine with Mono pump SPDC : State peace and Development Council.	F (mg/l)			0.1
	NO3- (mg/l)			<1
	NO2- (mg/l)			<0.02
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			



Region	Magway		Date	2015/5/20
Township	Chauk		Reported by	Maruo
Village / ID	Kanyaygyi	MG2-10	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Sauce - 1					Information of Existing Water Sauce - 2						
Type	○ Deep Well		Coordinate	X	702708	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2281908		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	327	Results of Simplified Water Quality Test	Sample ID	MG2-10-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)	4		Temperature (°C)	29.4		Diameter (in)			Temperature (°C)	
	S.W.L (m)	210		pH	7.37		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	1,013		D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)	4.1		Smell	Iron smell		Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	<1		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	2		Remarks (Lithology , etc.)			Fe (mg/l)	
Originally drilled by WRUD in 1981. BAJ replaced elements of MONO pump in 2007.		F (mg/l)	0.8			F (mg/l)					
		NO3- (mg/l)	<1			NO3- (mg/l)					
		NO2- (mg/l)	<0.02			NO2- (mg/l)					
		Coliforms				Coliforms					
Photo		Photo		Photo		Photo					
											

Region	Magway		Date	2015/5/20
Township	Chauk		Reported by	Maruo
Village / ID	Myaysoon(Ywarthit)	MG2-11	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	○ Deep Well	Coordinate	X	699118
	Shallow Well		Y	2278070
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	259	Sample ID	MG2-11-1
	Diameter (in)		Temperature (°C)	31.6
	S.W.L (m)		pH	7.42
	D.W.L (m)		EC (µs/cm)	1,109
	Yield (m ³ /hour)	6.8	Smell	Iron smell
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Myaysoon(W) is 1.5mile from Myaysoon (Ywarthit). Chinese engine and Mono pump drilled in 1971 by WRUD. To lift water by pump it takes 10 minutes.	F (mg/l)			1.2
	NO3- (mg/l)			<1
	NO2- (mg/l)			<0.02
	Coliforms			

Photo

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			

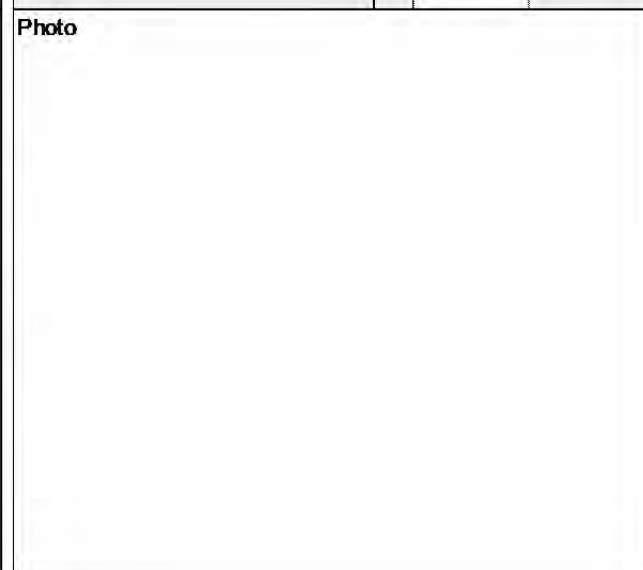
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Region	Magway		Date	2015/5/20
Township	Chauk		Reported by	Maruo
Village / ID	Zeebwar	MG2-12	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	<input type="radio"/> Deep Well	Coordinate	X	711611
	<input type="radio"/> Shallow Well		Y	2298972
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)	152	Sample ID	MG2-12-1
	Diameter (in)	4	Temperature (°C)	28.2
	S.W.L (m)		pH	7.86
	D.W.L (m)		EC (µs/cm)	1,409
	Yield (m³/hour)	7.3	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Existing well owned by a Monastery High fluoride Electrified submersible pump.		Fe (mg/l)
	F (mg/l)			2
	NO3- (mg/l)			1
	NO2- (mg/l)			<0.02
	Coliforms			



Information of Existing Water Source - 2				
Type	<input type="radio"/> Deep Well	Coordinate	X	
	<input type="radio"/> Shallow Well		Y	
	<input type="radio"/> Storage reservoir			
	<input type="radio"/> Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m³/hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			

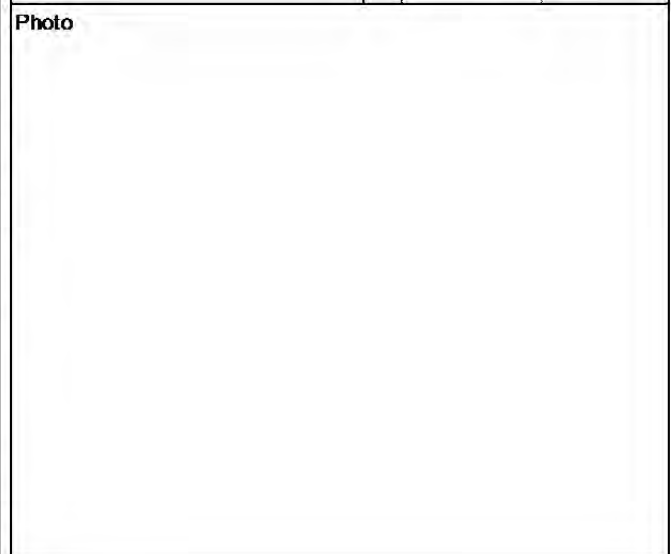


Region	Magway		Date	2015/5/21
Township	Chauk		Reported by	Maruo
Village / ID	Yarpyay	MG2-13	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Sauce - 1					
Type	○ Deep Well		Coordinate	X	690042
	Shallow Well			Y	2301200
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	148	Results of Simplified Water Quality Test	Sample ID	MG2-13-1
	Diameter (in)	6		Temperature (°C)	31.8
	S.W.L (m)			pH	7.42
	D.W.L (m)			EC (µs/cm)	2,150
	Yield (m³/hour)	4.5		Smell	Iron smell
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Htaukshaykan village is next to the target village. Drilled in 1985 by WRUD.		Fe (mg/l)	0.5
			F (mg/l)	0.1	
			NO3- (mg/l)	<1	
			NO2- (mg/l)	<0.02	
			Coliforms		



Information of Existing Water Sauce - 2					
Type	Deep Well		Coordinate	X	
	Shallow Well			Y	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		

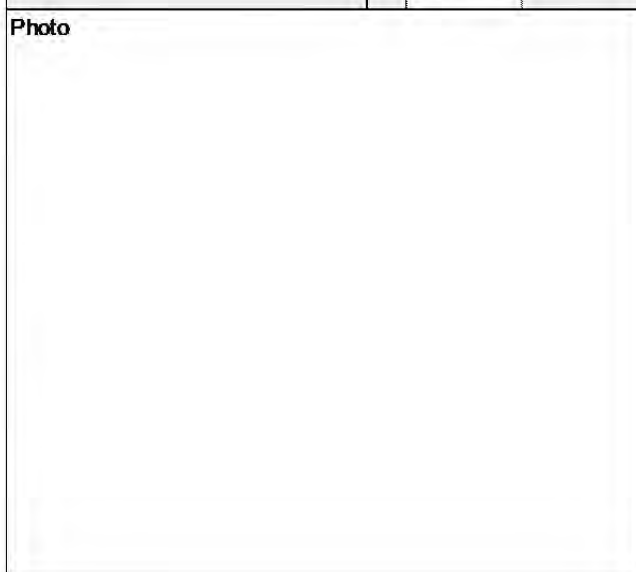


Region	Magway		Date	2015/5/21
Township	Chauk		Reported by	Maruo
Village / ID	Kyatesu(N)	MG2-14	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	665497	
	<input type="radio"/> Shallow Well		Y	2292703	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	67	Results of Simplified Water Quality Test	Sample ID	MG2-14-1
	Diameter (in)	2		Temperature (°C)	37.8
	S.W.L (m)			pH	8.15
	D.W.L (m)			EC (µs/cm)	3,090
	Yield (m³/hour)	3.4		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Private tube well - salty water Compressor well - water is always hot.		Fe (mg/l)	<0.2
			F (mg/l)	0	
			NO3-(mg/l)	1	
			NO2-(mg/l)	<0.02	
			Coliforms		



Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X		
	<input type="radio"/> Shallow Well		Y		
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3-(mg/l)		
			NO2-(mg/l)		
			Coliforms		

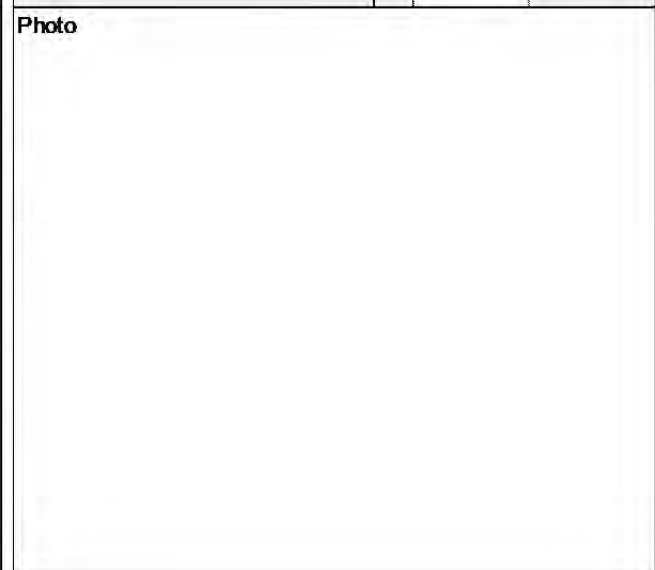


Region	Magway		Date	2015/5/21
Township	Chauk		Reported by	Maruo
Village / ID	Winkabar	MG2-15	Coordinate (WGS84 UTM)	X
			Y	


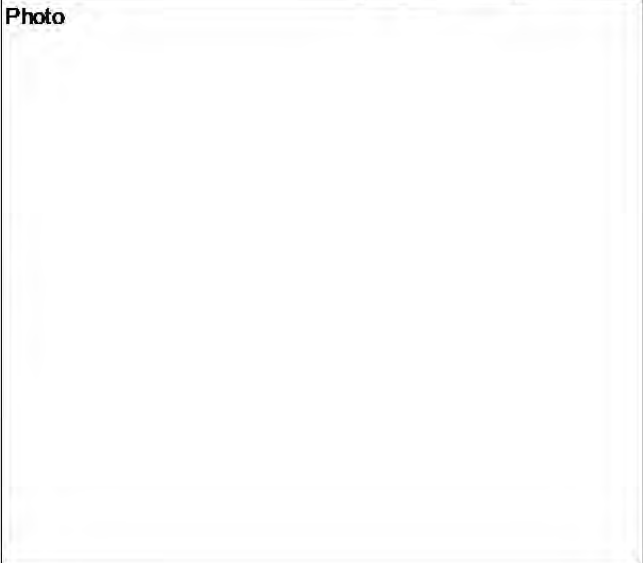
Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	684440	
	<input type="radio"/> Shallow Well		Y	2287209	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	110	Results of Simplified Water Quality Test	Sample ID	MG2-15-1
	Diameter (in)	4		Temperature (°C)	30.5
	S.W.L (m)	30		pH	8.37
	D.W.L (m)			EC (µs/cm)	703
	Yield (m³/hour)	4.1		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities	Compressor		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Compressor well drilled in 2015 by regional government.		Fe (mg/l)	<0.2
			F (mg/l)	0.2	
			NO3-(mg/l)	1.5	
			NO2-(mg/l)	0.1	
			Coliforms		



Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X		
	<input type="radio"/> Shallow Well		Y		
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3-(mg/l)		
			NO2-(mg/l)		
			Coliforms		



Region	Magway		Date	2015/5/21
Township	Chauk		Reported by	Maruo
Village / ID	Kyatkan	MG2-16	Coordinate (WGS84 UTM)	X
			Y	

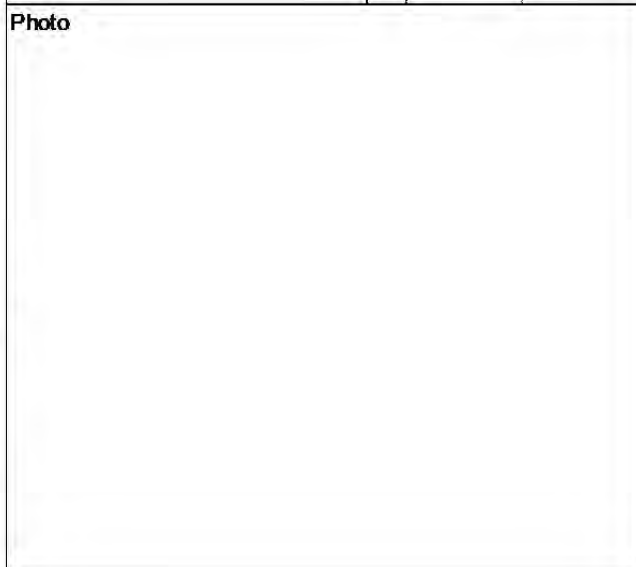
Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	○ Deep Well		Coordinate	X	690394	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2296166		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	171	Results of Simplified Water Quality Test	Sample ID	MG2-16-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	40.2		Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	8.50		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	1,571		D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)	1.4		Smell	Oilly smell		Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	<1		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)						Fe (mg/l)	<0.2		Remarks (Lithology , etc.)	
Existing well just by a pond at the edge of the village.				F (mg/l)	0.3					F (mg/l)	
				NO3- (mg/l)	<1					NO3- (mg/l)	
				NO2- (mg/l)	<0.02					NO2- (mg/l)	
				Coliforms						Coliforms	
Photo					Photo						
											

Region	Magway		Date	2015/5/20
Township	Chauk		Reported by	Maruo
Village / ID	Sudat	MG2-17	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	○ Deep Well	Coordinate	X	707065	
	Shallow Well		Y	2285476	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	365	Results of Simplified Water Quality Test	Sample ID	MG2-17-1
	Diameter (in)	4		Temperature (°C)	29.5
	S.W.L (m)	262		pH	7.32
	D.W.L (m)			EC (µs/cm)	1,089
	Yield (m³/hour)	6.8		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Mono pump - Electricity powered. Gwaypin(DRD-001) is next to the target Village.		Fe (mg/l)	<0.2
			F (mg/l)	0.2	
			NO3-(mg/l)	1	
			NO2-(mg/l)	0.05	
			Coliforms		



Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3-(mg/l)		
			NO2-(mg/l)		
			Coliforms		



Region	Magway		Date	
Township	Chauk		Reported by	Maruo
Village / ID	Myaynilain	MG2-18	Coordinate (WGS84 UTM)	X
			Y	

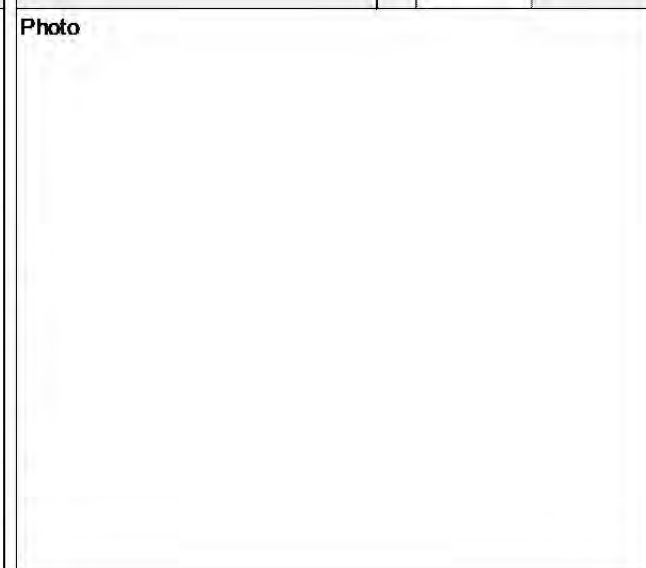
Information of Existing Water Source - 1					Information of Existing Water Source - 2						
Type	Deep Well		Coordinate	X	698834	Type	Deep Well		Coordinate	X	
	Shallow Well			Y	2287047		Shallow Well			Y	
	Storage reservoir						Storage reservoir				
	Others						Others				
Hydrogeological Information	Drilled Depth (m)	244	Results of Simplified Water Quality Test	Sample ID	MG2-18	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)	4		Temperature (°C)			Diameter (in)			Temperature (°C)	
	S.W.L (m)	146		pH			S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)			D.W.L (m)			EC (µs/cm)	
	Yield (m ³ /hour)	7.3		Smell			Yield (m ³ /hour)			Smell	
	No.of users (person/day)			Color			No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)			Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)			Remarks (Lithology , etc.)			Fe (mg/l)	
No tube well and no dug well.Nearest tube well at Nyaungzin village 3 miles far from target village by WRUD in 1981. Water quality is very good.		F (mg/l)				F (mg/l)					
		NO3- (mg/l)				NO3- (mg/l)					
		NO2- (mg/l)				NO2- (mg/l)					
		Coliforms				Coliforms					
Photo					Photo						

Region	Magway		Date	2015/5/19
Township	Yenangyaung		Reported by	Maruo
Village / ID	Lelgyinyoe	MG2-19	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	724077
	Shallow Well		Y	2266805
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	278	Sample ID	MG2-19-1
	Diameter (in)	4	Temperature (°C)	30.9
	S.W.L (m)	134	pH	6.82
	D.W.L (m)		EC (µs/cm)	1,410
	Yield (m ³ /hour)	6.5	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Water with sand	F (mg/l)			0.3
Slightly salty	NO3- (mg/l)			1.5
Existing well drilled in 1981 by WRUD.	NO2- (mg/l)			<0.02
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			



Region	Magway		Date	2015/5/19
Township	Yenangyaung		Reported by	Maruo
Village / ID	Teipyinsakan	MG2-19	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	○ Deep Well	Coordinate	X	724896
	Shallow Well		Y	2268094
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	248	Sample ID	MG2-19-2
	Diameter (in)	6	Temperature (°C)	31.1
	S.W.L (m)	142	pH	6.50
	D.W.L (m)	148	EC (µs/cm)	2,370
	Yield (m ³ /hour)	10.2	Smell	Iron smell
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Next to Lelgyinyoe village . BAJ well - 2014	F (mg/l)			1.0
	NO3- (mg/l)			<1
	NO2- (mg/l)			<0.02
	Coliforms			

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			



Region	Magway		Date	2015/5/8
Township	Myothit		Reported by	Maruo
Village / ID	Laytinesin(S)	MG2-20	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	○ Deep Well	Coordinate	X	732910
	Shallow Well		Y	2235168
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	200	Sample ID	MG2-20-1
	Diameter (in)	6	Temperature (°C)	31.6
	S.W.L (m)	110	pH	7.18
	D.W.L (m)		EC (µs/cm)	705
	Yield (m ³ /hour)	15.9	Smell	Slightly iron
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
2003 - JICA Technical Cooperation drilled.	F (mg/l)			0.2
	NO3- (mg/l)			
	NO2- (mg/l)			<0.02
	Coliforms			

Photo

Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			

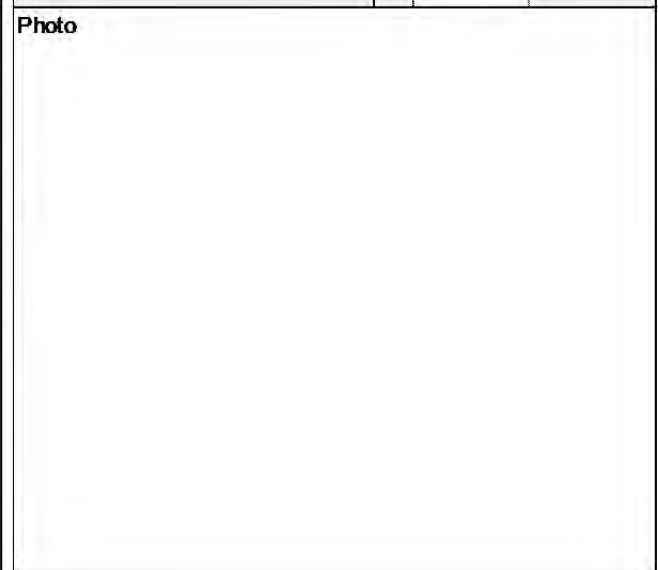
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Region	Magway		Date	2015/5/10
Township	Myothit		Reported by	Maruo
Village / ID	Tharmyar	MG2-21	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1									
Type	<input type="radio"/> Deep Well	Coordinate	X 736194						
	<input type="checkbox"/> Shallow Well		Y 2241244						
	<input type="checkbox"/> Storage reservoir								
	<input type="checkbox"/> Others								
Hydrogeological Information	Drilled Depth (m)	198	Sample ID MG2-21-1						
	Diameter (in)			Temperature (°C) 32.1					
	S.W.L (m)	119			pH 6.91				
	D.W.L (m)					EC (µs/cm) 666			
	Yield (m³/hour)	245.5					Smell Non		
	No.of users (person/day)							Color Non	
	Supply facilities	Pump							Mn (mg/l) <0.02
		F (mg/l) 0.1							
			NO3- (mg/l)						
				NO2- (mg/l) <0.02					
					Coliforms				
Remarks (Lithology , etc.)									
Drilled in 2002 by JICA- working well.									



Information of Existing Water Source - 2									
Type	<input type="checkbox"/> Deep Well	Coordinate	X						
	<input type="checkbox"/> Shallow Well		Y						
	<input type="checkbox"/> Storage reservoir								
	<input type="checkbox"/> Others								
Hydrogeological Information	Drilled Depth (m)		Sample ID						
	Diameter (in)			Temperature (°C)					
	S.W.L (m)				pH				
	D.W.L (m)					EC (µs/cm)			
	Yield (m³/hour)						Smell		
	No.of users (person/day)							Color	
	Supply facilities								Mn (mg/l)
		F (mg/l)							
			NO3- (mg/l)						
				NO2- (mg/l)					
					Coliforms				
Remarks (Lithology , etc.)									

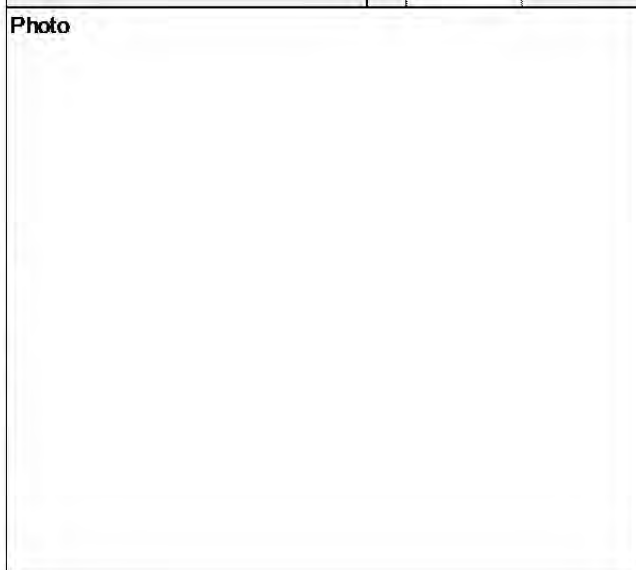


Region	Magway		Date	2015/5/8
Township	Myothit		Reported by	Maruo
Village / ID	Aungmyinthar	MG2-22	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well		X	733075
	Shallow Well		Y	2231654
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	104	Sample ID	MG2-22-1
	Diameter (in)	4	Temperature (°C)	36.6
	S.W.L (m)	55	pH	7.87
	D.W.L (m)		EC (µs/cm)	993
	Yield (m ³ /hour)	3.2	Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Drilled by WRUD in 1981	F (mg/l)			0.3
210 - House hold, 1150 - Populations.	NO3- (mg/l)			
	NO2- (mg/l)			<0.02
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well		X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			

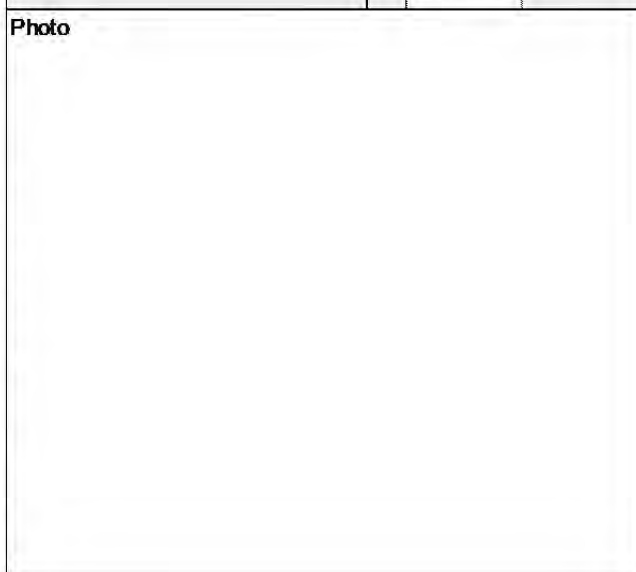


Region	Magway		Date	2015/5/9
Township	Myothit		Reported by	Maruo
Village / ID	Ngwelay	MG2-23	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	o Deep Well	Coordinate	X	738864	
	Shallow Well		Y	2222537	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	116	Results of Simplified Water Quality Test	Sample ID	MG2-23-1
	Diameter (in)	4		Temperature (°C)	38.5
	S.W.L (m)	52		pH	7.51
	D.W.L (m)			EC (µs/cm)	863
	Yield (m³/hour)	6.8		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Drilled by WRUD in 1980. There is a new well at the edge of the village . Pump was broken and has been repaired.		Fe (mg/l)	<0.2
			F (mg/l)	0.3	
			NO3- (mg/l)		
			NO2- (mg/l)	<0.02	
			Coliforms		



Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		

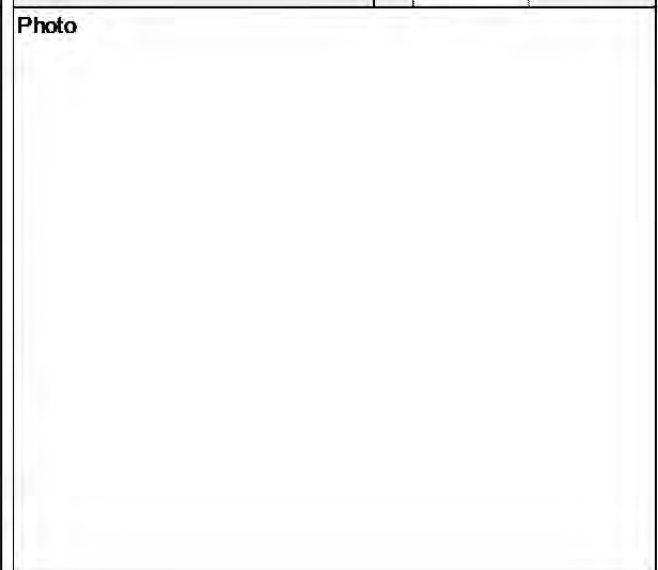


Region	Magway		Date	2015/5/9
Township	Myothit		Reported by	Maruo
Village / ID	Indaw(N)	MG2-24	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	<input type="radio"/> Deep Well	Coordinate	X	742446	
	<input type="radio"/> Shallow Well		Y	2229548	
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)	110	Results of Simplified Water Quality Test	Sample ID	MG2-24-1
	Diameter (in)	2		Temperature (°C)	41.5
	S.W.L (m)			pH	8.13
	D.W.L (m)			EC (µs/cm)	928
	Yield (m³/hour)	3.6		Smell	Non
	No.of users (person/day)			Color	High turbidity
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Air lifting well. Only one well in this village. Drilled by DDA in 2011.		Fe (mg/l)	<0.2
			F (mg/l)	0.1	
			NO3-(mg/l)		
			NO2-(mg/l)	<0.02	
			Coliforms		



Information of Existing Water Source - 2					
Type	<input type="radio"/> Deep Well	Coordinate	X		
	<input type="radio"/> Shallow Well		Y		
	<input type="radio"/> Storage reservoir				
	<input type="radio"/> Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
			F (mg/l)		
			NO3-(mg/l)		
			NO2-(mg/l)		
			Coliforms		

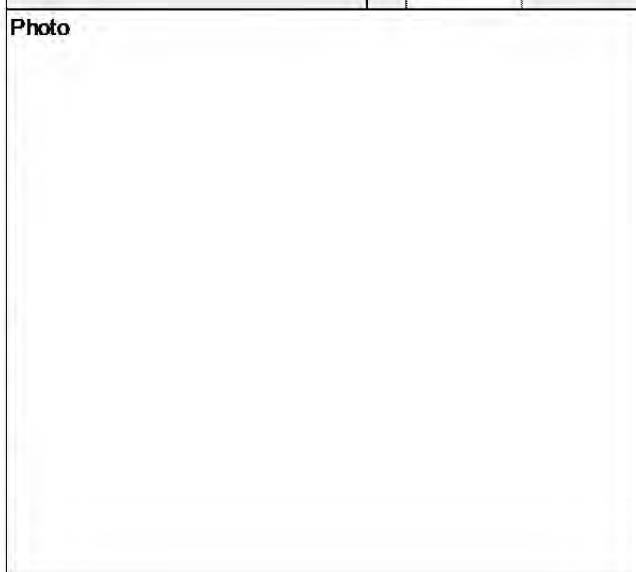


Region	Magway		Date	2015/5/9
Township	Myothit		Reported by	Maruo
Village / ID	Htanaungkwin	MG2-25	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	770840
	○ Shallow Well		Y	2225170
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	11	Sample ID	MG2-25-1
	Diameter (in)	2	Temperature (°C)	29.4
	S.W.L (m)	10	pH	7.34
	D.W.L (m)		EC (µs/cm)	1,085
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
Hand pump well near the Dam.	F (mg/l)			0.1
	NO3- (mg/l)			
	NO2- (mg/l)			<0.02
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test		Fe (mg/l)
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			

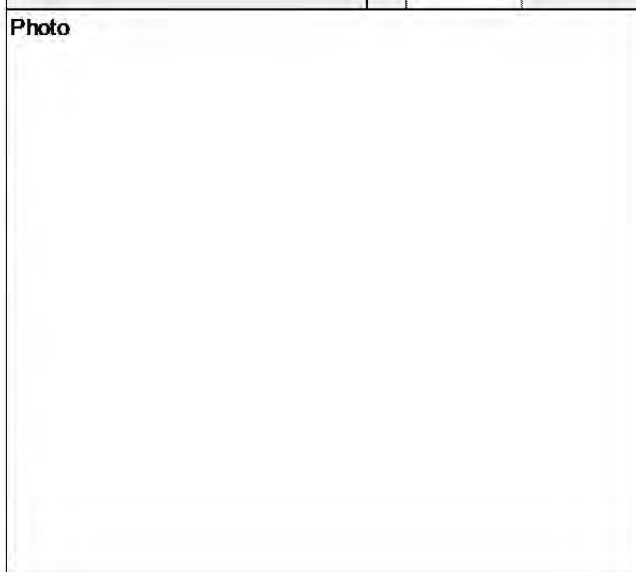


Region	Magway		Date	2015/5/9
Township	Myothit		Reported by	Maruo
Village / ID	Manawtgone	MG2-26	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	o Deep Well	Coordinate	X	732002	
	Shallow Well		Y	2222325	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	128	Results of Simplified Water Quality Test	Sample ID	MG2-26-1
	Diameter (in)	6		Temperature (°C)	32.0
	S.W.L (m)	24		pH	8.31
	D.W.L (m)			EC (µs/cm)	662
	Yield (m³/hour)	10.5		Smell	Non
	No.of users (person/day)			Color	Non
	Supply facilities			Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)			Fe (mg/l)	<0.2
		F (mg/l)	0.1		
		NO3- (mg/l)			
		NO2- (mg/l)	<0.02		
		Coliforms			



Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)			Temperature (°C)	
	S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	
	Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	
		F (mg/l)			
		NO3- (mg/l)			
		NO2- (mg/l)			
		Coliforms			



Region	Magway		Date	
Township	Natmauk		Reported by	Maruo
Village / ID	Kangyigone	MG2-27	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	742461
	Shallow Well		Y	2259232
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-27
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
People get water from the river bed dug well.	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			
Photo				

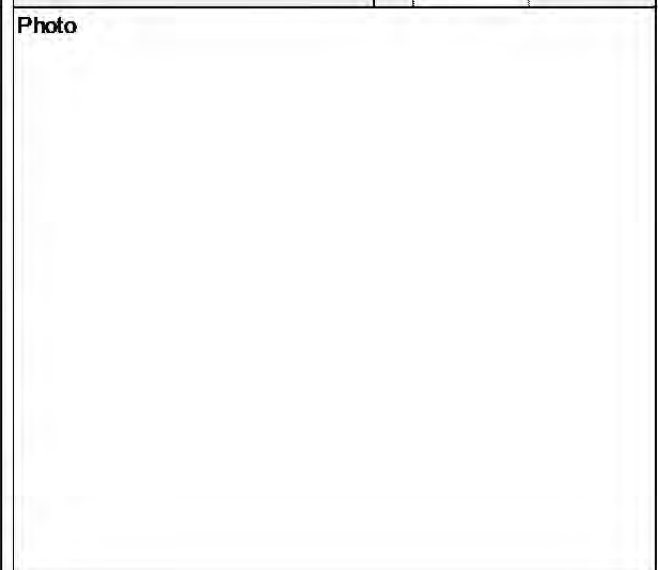
Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			
Photo				

Region	Magway		Date	2015/5/11
Township	Natmauk		Reported by	Maruo
Village / ID	Htonepoutchine	MG2-28	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Source - 1					
Type	Deep Well	Coordinate	X	730959	
	Shallow Well		Y	2255652	
	Storage reservoir				
	○ Others(Dug Well)				
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-28-1	
	Diameter (in)		Temperature (°C)	31.3	
	S.W.L (m)		pH	7.58	
	D.W.L (m)		EC (µs/cm)	868	
	Yield (m ³ /hour)		Smell	Non	
	No.of users (person/day)		Color		
	Supply facilities		Pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2	
	F (mg/l)	0.6			
	NO3-(mg/l)				
	NO2-(mg/l)	0.05			
	Coliforms	35			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3-(mg/l)			
	NO2-(mg/l)			
	Coliforms			

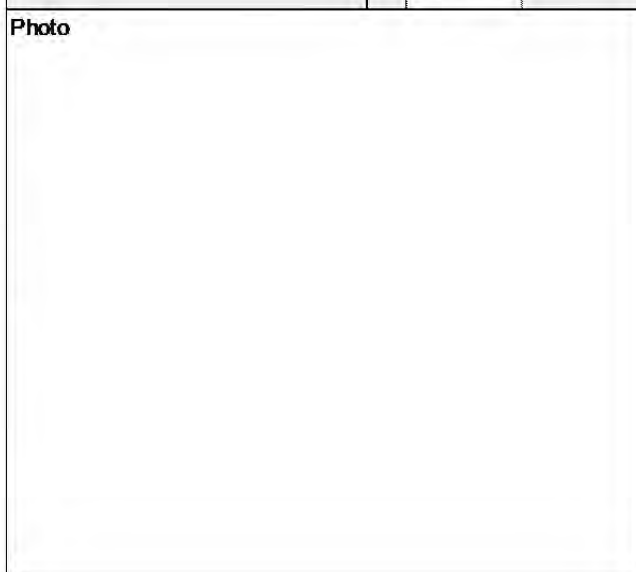


Region	Magway		Date	2015/5/11
Township	Natmauk		Reported by	Maruo
Village / ID	Satkyattaung (Monastery)	MG2-28	Coordinate (WGS84 UTM)	X
				Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	731705
	Shallow Well		Y	2255329
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	106.6	Sample ID	MG2-28-2
	Diameter (in)	2	Temperature (°C)	33.3
	S.W.L (m)		pH	8.21
	D.W.L (m)		EC (µs/cm)	701
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities	Compressor	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.) It drill more than 500ft, water became salty. This village is next to the target village.		Results of Simplified Water Quality Test	
Fe (mg/l)			0.7	
F (mg/l)			0	
NO3- (mg/l)				
NO2- (mg/l)			<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Fe (mg/l)				
F (mg/l)				
NO3- (mg/l)				
NO2- (mg/l)				
		Coliforms		

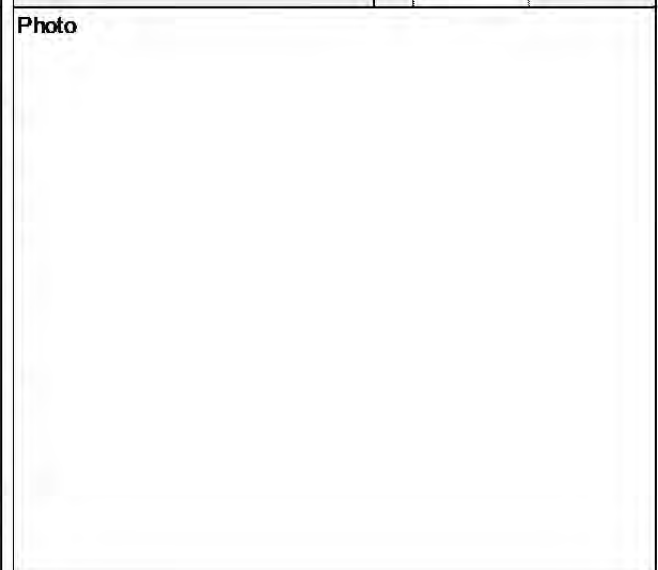


Region	Magway		Date	2015/5/10
Township	Natmak		Reported by	Maruo
Village / ID	Padaukgote(Ywargyi)	MG2-29	Coordinate (WGS84 UTM)	X Y

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	737425
	Shallow Well		Y	2248858
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	219	Sample ID	MG2-29-1
	Diameter (in)		Temperature (°C)	35.2
	S.W.L (m)		pH	6.93
	D.W.L (m)		EC (µs/cm)	2,950
	Yield (m ³ /hour)	3.6	Smell	Iron smell
	No.of users (person/day)		Color	Non
	Supply facilities	Pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.) EC very high		Results of Simplified Water Quality Test	
Fe (mg/l)			3	
F (mg/l)			0.8	
NO3- (mg/l)				
NO2- (mg/l)			<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Fe (mg/l)				
F (mg/l)				
NO3- (mg/l)				
NO2- (mg/l)				
		Coliforms		

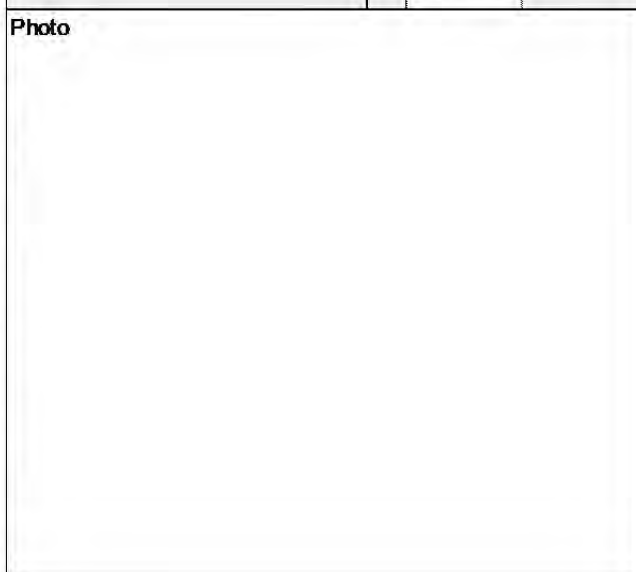


Region	Magway		Date	2015/5/12
Township	Natmauk		Reported by	Maruo
Village / ID	Sellel	MG2-30	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1			
Type	○ Deep Well	Coordinate	X 783632
	Shallow Well		Y 2259197
	Storage reservoir		
	Others		
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID MG2-30-1
	Diameter (in)		Temperature (°C) 33.9
	S.W.L (m)		pH 8.68
	D.W.L (m)		EC (µs/cm) 935
	Yield (m³/hour)		Smell Non
	No.of users (person/day)		Color Non
	Supply facilities Pump		Mn (mg/l) <1
			Fe (mg/l) 0.2
Remarks (Lithology , etc.) WP 220- Hand pump			F (mg/l) 0.2
			NO3-(mg/l)
			NO2-(mg/l) <0.02
			Coliforms




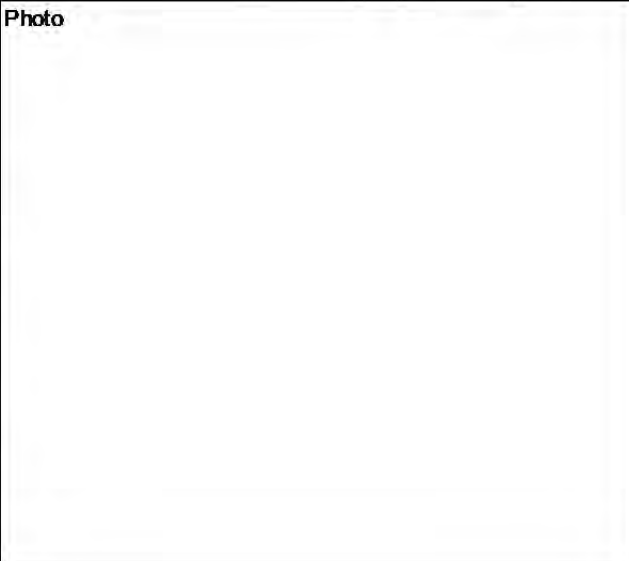
Information of Existing Water Source - 2			
Type	Deep Well	Coordinate	X
	Shallow Well		Y
	Storage reservoir		
	Others		
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID
	Diameter (in)		Temperature (°C)
	S.W.L (m)		pH
	D.W.L (m)		EC (µs/cm)
	Yield (m³/hour)		Smell
	No.of users (person/day)		Color
	Supply facilities		Mn (mg/l)
			Fe (mg/l)
Remarks (Lithology , etc.)			F (mg/l)
			NO3-(mg/l)
			NO2-(mg/l)
			Coliforms



Region	Magway		Date	2015/5/11
Township	Natmauk		Reported by	Maruo
Village / ID	Padaukgone	MG2-31	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X		Type	Deep Well	Coordinate	X	
	Shallow Well		Y			Shallow Well		Y	
	Storage reservoir					Storage reservoir			
	Others					Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-31	Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)			Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH			S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)			D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell			Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color			No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)			Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)			Remarks (Lithology , etc.)		Fe (mg/l)	
People get water from 5 dug wells at the river bed, and no tube well. Some of the dug well are 50 years old.	F (mg/l)			F (mg/l)					
	NO3- (mg/l)			NO3- (mg/l)					
	NO2- (mg/l)			NO2- (mg/l)					
	Coliforms			Coliforms					
Photo					Photo				

Region	Magway		Date	2015/5/10
Township	Natmauk		Reported by	Maruo
Village / ID	Ywartharlay	MG2-32	Coordinate (WGS84 UTM)	X
			Y	

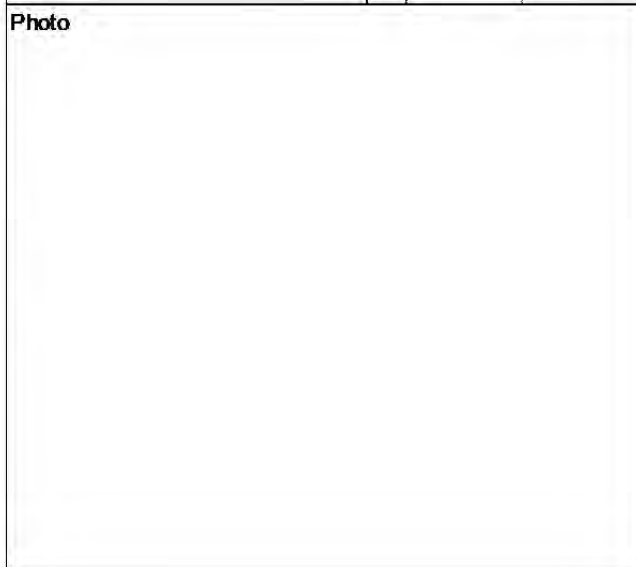
Information of Existing Water Source - 1				Information of Existing Water Source - 2							
Type	○ Deep Well		Coordinate	X	731373	Type	Deep Well	Coordinate	X		
	Shallow Well			Y	2275351		Shallow Well		Y		
	Storage reservoir						Shallow Well				
	Others										
Hydrogeological Information	Drilled Depth (m)	177	Results of Simplified Water Quality Test	Sample ID	MG2-32-1	Hydrogeological Information	Drilled Depth (m)		Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)	2		Temperature (°C)	33.5		Diameter (in)			Temperature (°C)	
	S.W.L (m)	67		pH	7.29		S.W.L (m)			pH	
	D.W.L (m)			EC (µs/cm)	3,840		D.W.L (m)			EC (µs/cm)	
	Yield (m³/hour)	3.4		Smell	Iron smell		Yield (m³/hour)			Smell	
	No.of users (person/day)			Color	Non		No.of users (person/day)			Color	
	Supply facilities	Airlift compressor		Mn (mg/l)	2		Supply facilities			Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)	1		Remarks (Lithology , etc.)			Fe (mg/l)	
Now discharge only 500 g/d ,drilled in 2006. Natmauk Municipality funded the cost 2275000 kyats. There have DRD well 200 m far from the the target village by WRUD in Phankharsen village.(168m depth and SWL 85 m)		F (mg/l)	0.2			F (mg/l)					
		NO3- (mg/l)				NO3- (mg/l)					
		NO2- (mg/l)	0.0			NO2- (mg/l)					
		Coliforms				Coliforms					
Photo		Photo									
											

Region	Magway		Date	
Township	Natmak		Reported by	Maruo
Village / ID	Wayonegone	MG2-33	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	o Deep Well	Coordinate	X	736518	
	storage reservoir		Y	2267323	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-33-1	
	Diameter (in)		Temperature (°C)	34	
	S.W.L (m)		pH	7.35	
	D.W.L (m)		EC (µs/cm)	5,330	
	Yield (m ³ /hour)		Smell	Slightly iron	
	No.of users (person/day)		Color	Non	
	Supply facilities		Pump	Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		JICA well - drilled in 2014 by JICA Grant. Oakpho village is next to the target village.	Fe (mg/l)	8
		F (mg/l)	0.8		
		NO3- (mg/l)			
		NO2- (mg/l)	<0.02		
		Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)			Fe (mg/l)
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		

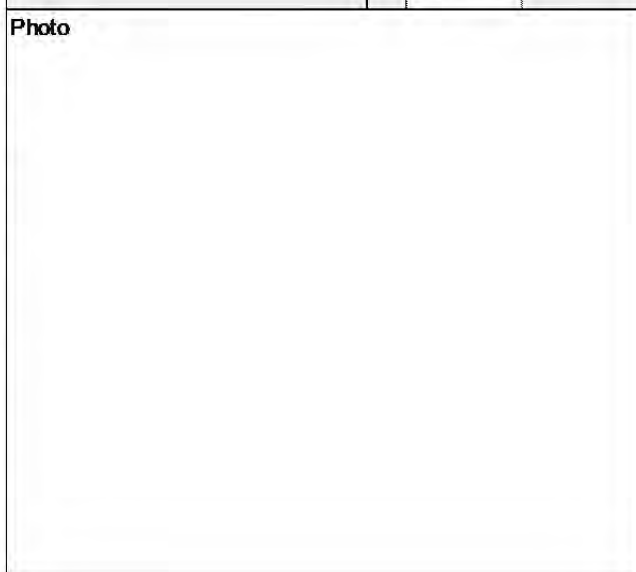


Region	Magway		Date	2015/5/11
Township	Natmauk		Reported by	Maruo
Village / ID	Nyaunggone	MG2-34	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	732682
	Shallow Well		Y	2256117
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-34-1
	Diameter (in)		Temperature (°C)	29.6
	S.W.L (m)		pH	7.88
	D.W.L (m)		EC (µs/cm)	1,280
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<0.02
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Dug well by a river. People say a bit salty and not salty, high fluoride.	F (mg/l)	1.3		
	NO3- (mg/l)			
	NO2- (mg/l)	<0.02		
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3- (mg/l)			
	NO2- (mg/l)			
	Coliforms			



Region	Magway		Date	
Township	Natmauk		Reported by	Maruo
Village / ID	Kyugyaung	MG2-35	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1					
Type	Deep Well	Coordinate	X	744567	
	Shallow Well		Y	2259271	
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-35	
	Diameter (in)		Temperature (°C)		
	S.W.L (m)		pH		
	D.W.L (m)		EC (µs/cm)		
	Yield (m ³ /hour)		Smell		
	No.of users (person/day)		Color		
	Supply facilities		Mn (mg/l)		
			Fe (mg/l)		
Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	F (mg/l)		
People get water from river under flow, and no other sources.			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		
			Photo		

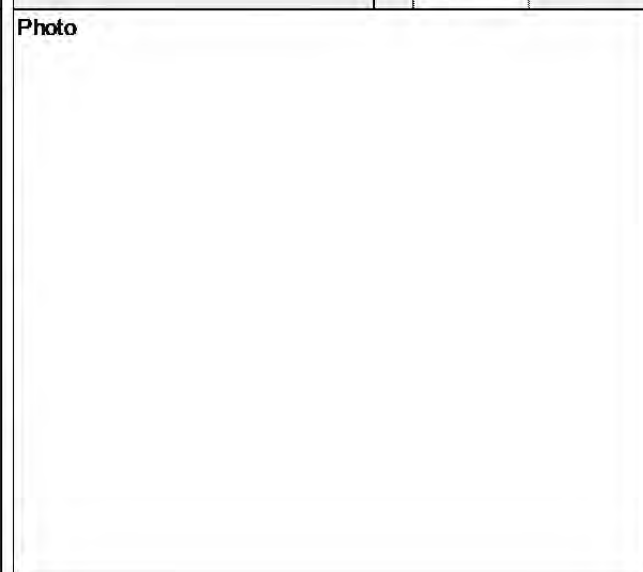
Information of Existing Water Source - 2					
Type	Deep Well	Coordinate	X		
	Shallow Well		Y		
	Storage reservoir				
	Others				
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID		
	Diameter (in)		Temperature (°C)		
	S.W.L (m)		pH		
	D.W.L (m)		EC (µs/cm)		
	Yield (m ³ /hour)		Smell		
	No.of users (person/day)		Color		
	Supply facilities		Mn (mg/l)		
			Fe (mg/l)		
Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	F (mg/l)		
			NO3- (mg/l)		
			NO2- (mg/l)		
			Coliforms		
			Photo		

Region	Magway		Date	2015/5/18
Township	Taungdwingyi		Reported by	Maruo
Village / ID	Kokkohla	MG2-36	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	765957
	Shallow Well		Y	2218608
	Storage reservoir			
	○ Others(Dug Well)			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-36-1
	Diameter (in)		Temperature (°C)	28.9
	S.W.L (m)		pH	7.04
	D.W.L (m)		EC (µs/cm)	1,335
	Yield (m³/hour)		Smell	Non
	No.of users (person/day)		Color	Non
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Dug well - 15m deep	F (mg/l)	0.3		
	NO3-(mg/l)	20		
	NO2-(mg/l)	0.1		
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m³/hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3-(mg/l)			
	NO2-(mg/l)			
	Coliforms			

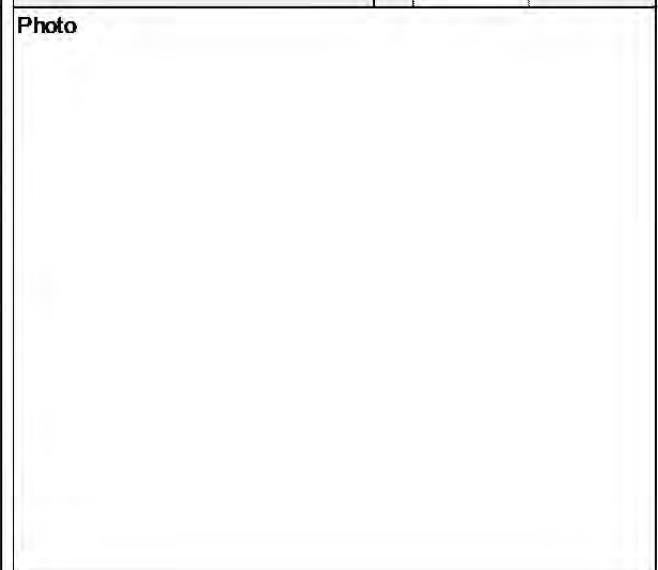


Region	Magway		Date	2015/5/18
Township	Taungdwingyi		Reported by	Maruo
Village / ID	Kokkohla	MG2-36	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	766919
	Shallow Well		Y	2218218
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	116	Sample ID	MG2-36-2
	Diameter (in)	4	Temperature (°C)	29.7
	S.W.L (m)	18	pH	8.67
	D.W.L (m)		EC (µs/cm)	1,587
	Yield (m ³ /hour)	3.2	Smell	Muddy smell
	No.of users (person/day)		Color	Shallow yellow
	Supply facilities	Compressor	Mn (mg/l)	<1
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
Pantwinlay village is next to target village. WRUD well drilled in 2014.		Fe (mg/l)	<0.2	
		F (mg/l)	2.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
		Fe (mg/l)		
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		

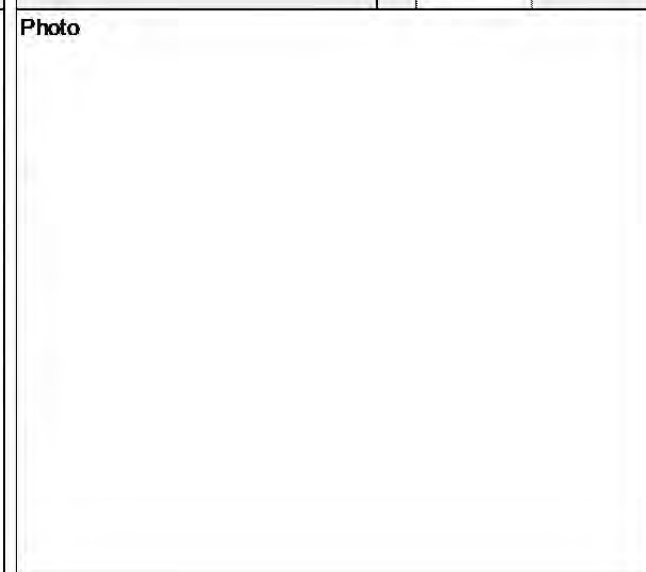


Region	Magway		Date	2015/5/17
Township	Taungdwingyi		Reported by	Maruo
Village / ID	Kangyigone	MG2-37	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	o Deep Well	Coordinate	X	762556
	Shallow Well		Y	2192933
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	183	Sample ID	MG2-37-1
	Diameter (in)		Temperature (°C)	29.3
	S.W.L (m)	165	pH	8.82
	D.W.L (m)		EC (µs/cm)	4,520
	Yield (m ³ /hour)	0.2	Smell	Non
	No.of users (person/day)		Color	HighTurbidity
	Supply facilities	Compressor	Mn (mg/l)	<1
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
High fluoride		Fe (mg/l)	<0.2	
		F (mg/l)	3.0	
		NO3- (mg/l)	<1	
		NO2- (mg/l)	<0.02	
		Coliforms		



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	
		Fe (mg/l)		
		F (mg/l)		
		NO3- (mg/l)		
		NO2- (mg/l)		
		Coliforms		

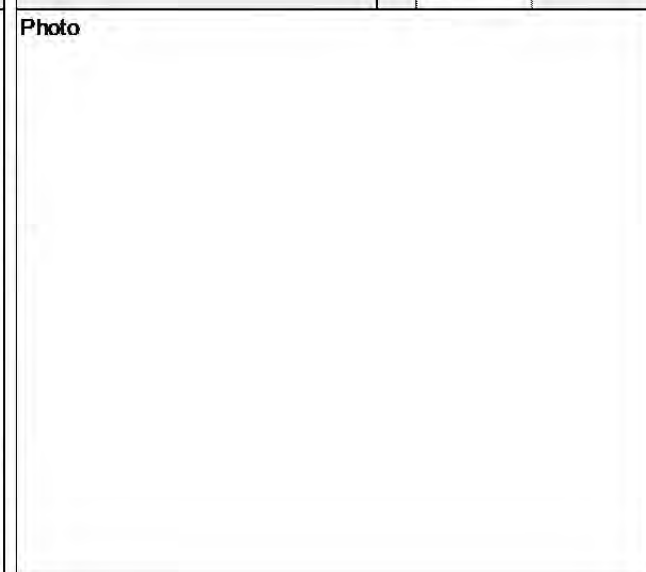


Region	Magway		Date	2015/5/17
Township	Taungdwingyi		Reported by	Maruo
Village / ID	Kangyigone	MG2-37	Coordinate (WGS84 UTM)	X
			Y	


Information of Existing Water Source - 1						
Type	o Deep Well	Coordinate	X	757586		
	Shallow Well		Y	2193879		
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)	183	Sample ID	MG2-37-2		
	Diameter (in)	2	Temperature (°C)	30.1		
	S.W.L (m)	2	pH	8.77		
	D.W.L (m)		EC (µs/cm)	722		
	Yield (m ³ /hour)		Smell	Non		
	No.of users (person/day)		Color	Non		
	Supply facilities	Compressor	Mn (mg/l)	<1		
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test				
Payatkyl village is next to the target village along the main road.						
	Fe (mg/l)					<0.2
	F (mg/l)					0.2
	NO3- (mg/l)					<1
	NO2- (mg/l)					<0.02
	Coliforms					



Information of Existing Water Source - 2						
Type	Deep Well	Coordinate	X			
	Shallow Well		Y			
	Storage reservoir					
	Others					
Hydrogeological Information	Drilled Depth (m)		Sample ID			
	Diameter (in)		Temperature (°C)			
	S.W.L (m)		pH			
	D.W.L (m)		EC (µs/cm)			
	Yield (m ³ /hour)		Smell			
	No.of users (person/day)		Color			
	Supply facilities		Mn (mg/l)			
	Remarks (Lithology , etc.)	Results of Simplified Water Quality Test				
	Fe (mg/l)					
	F (mg/l)					
	NO3- (mg/l)					
	NO2- (mg/l)					
	Coliforms					



Region	Magway		Date	2015/5/18
Township	Taungdwingyi		Reported by	Maruo
Village / ID	Htaukkyantgwin	MG2-38	Coordinate (WGS84 UTM)	X
			Y	

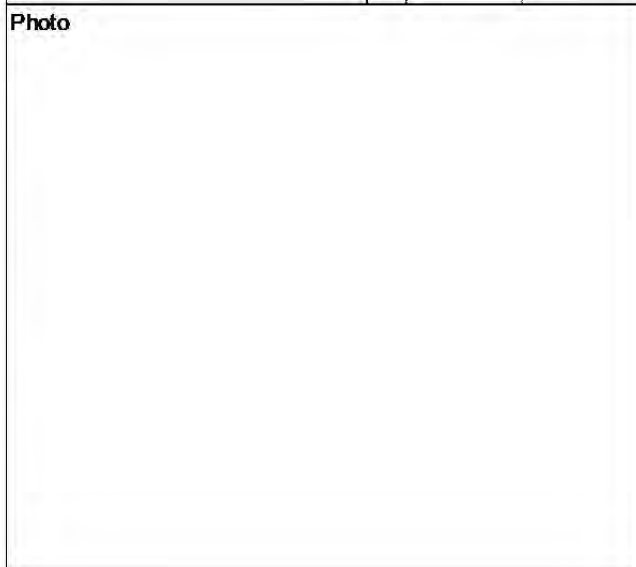
Information of Existing Water Source - 1					Information of Existing Water Source - 2																												
Type	Deep Well	Coordinate	X	772150	Type	Deep Well	Coordinate	X																									
	Shallow Well		Y	2184875		Shallow Well		Y																									
	Storage reservoir					Storage reservoir																											
	Others					Others																											
Hydrogeological Information	Drilled Depth (m)	15	Sample ID	MG2-38-1	Hydrogeological Information	Drilled Depth (m)		Sample ID																									
	Diameter (in)		Temperature (°C)	28.7		Diameter (in)		Temperature (°C)																									
	S.W.L (m)		pH	7.48		S.W.L (m)		pH																									
	D.W.L (m)		EC (µs/cm)	1,615		D.W.L (m)		EC (µs/cm)																									
	Yield (m ³ /hour)		Smell	Non		Yield (m ³ /hour)		Smell																									
	No.of users (person/day)		Color	Non		No.of users (person/day)		Color																									
	Supply facilities		Mn (mg/l)	<1		Supply facilities		Mn (mg/l)																									
	Remarks (Lithology , etc.) Hand pump		Results of Simplified Water Quality Test			Fe (mg/l)	<0.2	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test																							
F (mg/l)					0.6	Fe (mg/l)																											
NO3- (mg/l)					3	F (mg/l)																											
NO2- (mg/l)					<0.02	NO3- (mg/l)																											
Coliforms						NO2- (mg/l)																											
Photo 		Photo		Photo		Photo		Photo																									

Region	Magway		Date	2015/5/17
Township	Taungdwingyi		Reported by	Maruo
Village / ID	Hlebwegyi	MG2-39	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	747939
	Shallow Well		Y	2200787
	Storage reservoir			
	○ Others(Dug Well)			
Hydrogeological Information	Drilled Depth (m)	5	Sample ID	MG2-39-1
	Diameter (in)		Temperature (°C)	30.5
	S.W.L (m)		pH	8.00
	D.W.L (m)		EC (µs/cm)	845
	Yield (m³/hour)		Smell	Non
	No.of users (person/day)		Color	Slightly turbidity
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.) Dug well- 5m deep.		Results of Simplified Water Quality Test	Fe (mg/l)
F (mg/l)				0.1
NO3-(mg/l)				4
NO2-(mg/l)				<0.02
Coliforms				



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)		Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m³/hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Results of Simplified Water Quality Test	Fe (mg/l)
F (mg/l)				
NO3-(mg/l)				
NO2-(mg/l)				
Coliforms				

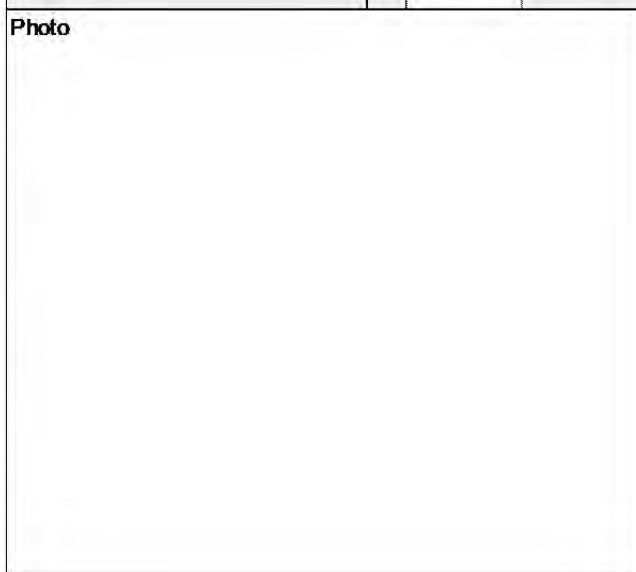


Region	Magway		Date	2015/5/17
Township	Taungdwingyi		Reported by	Maruo
Village / ID	YayHtwetgyi	MG2-40	Coordinate (WGS84 UTM)	X
			Y	

Information of Existing Water Source - 1				
Type	Deep Well	Coordinate	X	743090
	Shallow Well		Y	2197425
	Storage reservoir			
	○ Others(Dug Well)			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	MG2-40-1
	Diameter (in)		Temperature (°C)	29.5
	S.W.L (m)		pH	7.93
	D.W.L (m)		EC (µs/cm)	678
	Yield (m ³ /hour)		Smell	Non
	No.of users (person/day)		Color	Turbidity
	Supply facilities		Mn (mg/l)	<1
	Remarks (Lithology , etc.)		Fe (mg/l)	<0.2
Dug well,one of thee in one place.	F (mg/l)	0.2		
	NO3-(mg/l)	1		
	NO2-(mg/l)	<0.02		
	Coliforms			



Information of Existing Water Source - 2				
Type	Deep Well	Coordinate	X	
	Shallow Well		Y	
	Storage reservoir			
	Others			
Hydrogeological Information	Drilled Depth (m)	Results of Simplified Water Quality Test	Sample ID	
	Diameter (in)		Temperature (°C)	
	S.W.L (m)		pH	
	D.W.L (m)		EC (µs/cm)	
	Yield (m ³ /hour)		Smell	
	No.of users (person/day)		Color	
	Supply facilities		Mn (mg/l)	
	Remarks (Lithology , etc.)		Fe (mg/l)	
	F (mg/l)			
	NO3-(mg/l)			
	NO2-(mg/l)			
	Coliforms			



Appendix 5.4 Evaluation of Villages (Step5)

(1) Sagaing Region

Region	No.	Township	Villages	ID	Survey Method *1)	Surveyor *2)	Estimated Results of Target Aquifer			Remarks	Estimated Drilling Depth (m)	Estimated SWL (m)	Recommended Screen range (m)	Possibility for Groundwater Development *3)
							Distribution Depth (m)	Resistivity Value (Ω-m)	Thickness (m)					
Sagaing	1	Budalin	Yonedaw	SA2-01	VES	DRD	>115	12.7	45	Drilling depth is decided by information of existing tube well.	160	40	18m	C
	2		Nyaungbinther	SA2-02	VES	DRD	70 - 176	20.2	90	Drilling depth is decided by existing tube well which is located near the site.	160	40	12m	A
	3		Maungtaung	SA2-03	VES	DRD	>120	42.9	30	Potential of upper aquifer(40.5-120.5m) is low, and water quality has little problem (Salty)	150	40	12m	B
	4		Kantawthar	SA2-04	VES	DRD	>39	12.9 - 48.5	85	Drilling depth is decided by information of existing tube well.	125	39	18m	C
	5		Mhonehtoo	SA2-05	VES	DRD	60 - 108	24.1	40	There is the possibility that the water quality worsens at 100m or lower.	100	30	12m	A
	6		Watku-I	SA2-06	VES	DRD	36 - 101	11.7	64	It is expected that capacity of target aquifers is low.	100	36	18m	C
	7	Chaugoo	Tharbinkan	SA2-07	VES	DRD	49 - 200	37.2 - 17	101	Drilling depth is decided by information of existing tube well.	150	70	12m	A
	8		Natyaygan	SA2-08	VES	DRD	>170	16.8	30	Main selection basis of drilling depth is resistivity value.	200	61	18m	B
	9	Ayadaw	Sithar	SA2-09	VES	DRD	44 - 137	18.9	56	Drilling depth is decided by information of existing tube well.	100	44	12m	A
	10		Oakkan	SA2-10	VES	DRD	54 - 277	11.9	176	Drilling depth is decided by information of existing tube well.	230	3	18m	C
	11		Wanyang	SA2-11	VES	DRD	>165	18.2	85	Drilling depth is decided by information of existing tube well.	250	55	12m	A
	12		Wartannakalay	SA2-12	VES	DRD	43 -102	11.4	62	Drilling depth is decided by information of existing tube well.	105	43	18m	C
	13		Yathar	SA2-13	VES	DRD	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2
	14		Zepintel	SA2-14	VES	DRD	75 - 129	25.2	55	It is expected that capacity of target aquifers is low.	130	50	18m	C
	15	Salingyi	Yonobinyoe	SA2-15	VES	DRD	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2
	16		Mintaw	SA2-16	VES	DRD	74 - 172	40.5	96	It is assumed that water quality is not suitable for drinking at the shallow part of target aquifer.	170	40	12m	B
	17		Kine	SA2-17	VES/2D	DRD/ESS	>40	<10(8-10)	80	From comparison results of resistivity with existing data, it is estimated that low resistivity value shows mixed layer of thin sand layer(aquifer) and clay layer.	120	40	18m	D-1
	18	Myinmu	Kalappyan	SA2-18	VES	DRD	>161	21.6	39	It is assumed that water quality is not suitable for drinking at the shallow part of target aquifer.	200	36	12m	A
	19		Hlayokkan	SA2-19	VES	DRD	121 -197	14.3	74	From existing borehole, it is expected that capacity of target aquifers is low.	195	121	18m	C
	20		Makyeekan	SA2-20	-	DRD2	-	-	-	Based on evaluation of "step1", It has been excluded from target village.	-	-	-	-
	21		Watkye	SA2-21	VES	DRD	>168	11.4	32	Main selection basis of drilling depth is resistivity value.	200	36	18m	C
	22		Thahkyakone(Ywama)	SA2-22	VES	DRD	>144	12.5	36	Main selection basis of drilling depth is resistivity value.	180	55	18m	C
	23		Magyidaw	SA2-23	VES	DRD	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2
	24	Kanbalu	Thindaw	SA2-24	VES	DRD	52 - 90	20.9	28	Main selection basis of drilling depth is resistivity value.	80	50	12m	A
	25		Lwingyi	SA2-25	VES	DRD	>184	41	36	From existing borehole, it is expected that capacity of upper aquifer(99-184m) is low.	220	31	12m	B
	26		Koetaungboh(Kyunkone)	SA2-26	VES	DRD	>144	37.9	41	From existing borehole, it is expected that capacity of target aquifers is low.	185	60	18m	C
	27		Ingototo	SA2-27	VES	DRD	<157	24 - 49	126	From existing borehole, it is expected that capacity of target aquifers is low.	150	50	18m	C
	28		Myayhtoo	SA2-28	VES	DRD	>150	<10(4.7)	35	From comparison results of resistivity with existing data, it is estimated that low resistivity value shows mixed layer of thin sand layer(aquifer) and clay layer.	200	150	18m	D-1
	29		Khaowntar	SA2-29	VES	DRD	>182	13	33	Main selection basis of drilling depth is resistivity value.	215	30	18m	C
	30		Nyuangkanthar	SA2-30	VES	DRD	138 - 189	12.1	37	Main selection basis of drilling depth is resistivity value.	175	50	18m	C
	31		Myaymon	SA2-31	VES	DRD	>125	24.1	30	From information of existing tube well, it is assumed that upper aquifer (63-125m) has salinity. So, target aquifer is set to lower layer (>125m)	155	80	12m	A
	32	Layytwinzin	SA2-32	VES	DRD	>181	22	29	From information of existing tube well, it is assumed that potential of upper aquifer (117-181m) is low. So, target aquifer is set to lower layer (>181m)	210	120	18m	C	
	33	Dabayin	Chaungchar	SA2-33	VES	DRD	>174	16.3	31	Main selection basis of drilling depth is resistivity value.	205	60	18m	B
	34		Minyogone	SA2-34	VES	DRD	42 - 159	12	68	Main selection basis of drilling depth is resistivity value.	110	3	18m	C
	35		Shandaw	SA2-35	VES	DRD	81 - 286	14.3	169	Drilling depth is decided by information of existing tube well.	250	0	18m	C
	36		Kyuntaw (S)	SA2-36	VES	DRD	68-183	12.4	32	Drilling depth is decided by information of existing tube well.	100	68	18m	C
	37	Wetlet	PalaoThwe (Ywarthit)	SA2-37	VES	DRD	102-163	38.5	28	Main selection basis of drilling depth is resistivity value.	130	55	12m	A
	38		Poukkan	SA2-38	VES	DRD	10-241	<10(8.2)	120	From comparison results of resistivity with existing data, it is estimated that low resistivity value shows mixed layer of thin sand layer(aquifer) and clay layer.	150	30	18m	D-1
	39		Shwenyunglaw	SA2-39	VES	DRD	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2
	40		Sabeidaw	SA2-40	VES	DRD	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2

*1) VES: Vertical Electrical Sounding 2D: Two-dimensional Electrical Sounding

*2) DRD: Department of Rural Development GH: Golden Hours Construction Co., Ltd. (Local Consultant) ESS: Earth System Science Co., Ltd. (Study Team)

*3) Table of classification criteria

Aquifer Potential	Estimated Facies Resistivity Value (In the case of under the groundwater)	Resistivity (Ohm-m)	Possibility for Groundwater Development		Recommended Screen Range	
Low	Clay layer or Aquifer which contains saline	Less than 10	D-2	Difficult	-	
			D-1	Low - Difficult		
	Unconsolidated Sediment	Alternation of silt rich layers	10 -15	C ¹⁾	Medium - Low	18m
				B	Medium	
High	Sand layer	17.5-40	A	High	12m	
	Unconsolidated - Semi-consolidated sediment	40-50	B	Medium		
			C	Medium - Low		
Low	Semi-consolidated sediment or Gravelly Silt / Clay	50-60	C	Medium - Low	18m	
	Consolidated sediment (Massive rock)	Over 60	D-2	Difficult	-	

*1) Aquifer with low potential which is assumed from hydrogeological information are included into "C" (Regardless of small and large of the resistivity value)

(2) Mandalay Region

Region	No.	Township	Villages	ID	Survey Method *1)	Surveyor *2)	Estimated Results of Target Aquifer				Estimated Drilling Depth (m)	Estimated SWL (m)	Recommended Screen range (m)	Possibility for Groundwater Development *3)
							Distribution Depth (m)	Resistivity Value (Ω-m)	Thickness (m)	Remarks				
Mandalay	41	Mahaing	Htantawgyi	MA2-01	2D	ESS	100 - 150	>11	50	Main selection basis of drilling depth are resistivity value and geological cross section.	150	60	18m	C
	42		Asone	MA2-02	VES	GH	125 - 265	15	25	Main selection basis of drilling depth is resistivity value.	150	60	18m	B
	43		Khintha(S)	MA2-03	VES	GH	>235	10.4	35	Main selection basis of drilling depth is resistivity value.	270	60	18m	C
	44	Myingyan	Chaysay	MA2-04	VES	DRD	>132	18.7	28	Main selection basis of drilling depth is resistivity value.	160	50	12m	A
	45		Talgyi	MA2-05	VES	DRD	>136	14	34	Main selection basis of drilling depth is resistivity value.	170	50	18m	C
	46		Kuywar	MA2-06	VES/2D	DRD/ESS	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2
	47		Yonehto	MA2-07	VES	DRD1	>136	18.2	29	Main selection basis of drilling depth is resistivity value.	165	60	12m	A
	48		Nyaungwum	MA2-08	VES	GH	-	<10	-	-	-	-	-	D-2
	49	Ngazon	Konelel	MA2-09	-	-	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-
	50		Phaungkarlaw	MA2-10	-	-	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-
	51		Kaungzin	MA2-11	2D	ESS	>200	>10	70	Main selection basis of drilling depth is resistivity value.	250	100	18m	C
	52		Ywarsite	MA2-12	-	-	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-
	53	Natogyi	Kyaungnan	MA2-13	-	-	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-
	54		Kyaungkangyibin	MA2-14	2D	ESS	167-200	10 -11	33	Main selection basis of drilling depth is resistivity value.	200	167	18m	C
	55		Nyaunggone	MA2-15	2D	ESS	100 - 150	13-14	50	Main selection basis of drilling depth is resistivity value.	150	61	18m	C
	56	Taungtha	Chaungnar	MA2-16	2D	ESS	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2
	57		Chaungson(La)	MA2-17	VES	GH	112-189	18.1	28	Drilling depth is decided by information of existing tube well.	140	98	12m	A
	58		Kyaukkaitaungkone	MA2-18	2D	ESS	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2
	59		Tharzi	MA2-19	VES	GH	154-290	14.3	137	From information of existing tube well, it is assumed that potential of target aquifer is low.	290	154	18m	C
	60		Kanaye	MA2-20	VES	GH	105-268	17.8	160	From information of existing tube well, it is assumed that potential of target aquifer is low.	265	105	18m	C
	61		Tharyamyaing	MA2-21	2D	ESS	150 - 250	16-17	50	Drilling depth is decided by information of existing tube well.	200	150	18m	B
	62	Yamethin	Oakpo	MA2-22	VES	DRD	126-263	11.1	134	From information of existing tube well, it is assumed that potential of target aquifer is low.	260	30	18m	C
	63		Kangyi	MA2-23	VES	DRD	>314	13.7	36	Main selection basis of drilling depth is resistivity value.	350	200	18m	C
	64	Pyawbwe	Htanekan	MA2-24	VES	DRD	>236	11.7	34	Main selection basis of drilling depth is resistivity value.	270	30	18m	C
	65		Waryonosu	MA2-25	VES	DRD	>278	22.4	27	Main selection basis of drilling depth is resistivity value.	305	11	12m	A
	66	Nyaungoo	Talkone	MA2-26	VES	DRD	>245	21.9	30	Main selection basis of drilling depth is resistivity value.	275	150	12m	A
	67		Tawbyar	MA2-27	VES	DRD	176-265	40.9	89	Drilling depth is decided by information of existing tube well.	265	176	12m	B
	68		Setsetyo	MA2-28	VES	DRD	>363	31.2	27	Main selection basis of drilling depth is resistivity value.	390	269	12m	A
	69		Kanzauk	MA2-29	VES	DRD	>65	17.9-49.0	135?	Drilling depth is decided by information of existing tube well.	200	65	12m	A
	70		Talbindel	MA2-30	VES	DRD	211-300	26.9	90	Drilling depth is decided by information of existing tube well.	300	210	12m	A
	71		Mongywellaw	MA2-31	VES	DRD	>210	34.1	60	Drilling depth is decided by information of existing tube well.	270	210	12m	A
	72		Phoenekan	MA2-32	2D	ESS	<125	14 -30	90	Drilling depth is decided by information of existing tube well.	125	35	18m	C
	73		Nyaungbinthar	MA2-33	2D	ESS	150 -200 (<200)	19-20	50	Main selection basis of drilling depth is resistivity value.	200	100	12m	A
	74		Saingan(Totile)	MA2-34	VES	DRD	>263	19.9	107	Drilling depth is decided by information of existing tube well.	370	263	12m	A
	75		Byugyi	MA2-35	VES	DRD	>231	23.6	79	Drilling depth is decided by information of existing tube well.	310	230	12m	A
	76	Kyaukpadaung	Aleywar-2	MA2-36	2D	ESS	<230	20-30	80	Drilling depth is decided by information of existing tube well.	230	150	12m	A
	77		Tangakan	MA2-37	-	DRD	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-
	78		Lelgyi(Ma)	MA2-38	2D	ESS	>300	>13	50	Main selection basis of drilling depth is resistivity value.	350	51.5	18m	C
	79		Thayattaw	MA2-39	VES	DRD	>223	38.7	127	From information of existing tube well, it is assumed that potential of target aquifer is low.	350	223	18m	C
	80		Nakyadhwel	MA2-40	VES	DRD	233-300	33.4	62	Drilling depth is decided by information of existing tube well.	295	67	12m	A

*1) VES: Vertical Electrical Sounding 2D : Two-dimensional Electrical Sounding

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*3) Table of classification criteria

Aquifer Potential	Estimated Facies Resistivity Value (In the case of under the groundwater)	Resistivity (Ohm-m)	Possibility for Groundwater Development	Recommended Screen Range
Low	Clay layer or Aquifer which contains saline	Less than 10	D-2	Difficult
	Alternation of clay rich and thin sand layers (The aquifer is formed by thin sand layers.)		D-1	Low - Difficult
High	Alternation of silt rich layers	10 -15	C ^{*)}	Medium - Low
	Alternation of sand rich layers	15-17.5	B	Medium
	Sand layer	17.5-40	A	High
	Unconsolidated - Semi-consolidated sediment	40-50	B	Medium
Low	Semi-consolidated sediment or Gravelly Silt / Clay	50-60	C	Medium - Low
	Consolidated sediment (Massive rock)	Over 60	D-2	Difficult

**) Aquifer with low potential which is assumed from hydrogeological information are included into "C" (Regardless of small and large of the resistivity value)

(3) Magway Region

Region	No.	Township	Villages	ID	Survey Method *1)	Surveyor *2)	Estimated Results of Target Aquifer				Estimated Drilling Depth (m)	Estimated SWL (m)	Recommended Screen range (m)	Possibility for Groundwater Development *3)
							Distribution Depth (m)	Resistivity Value (Ω-m)	Thickness (m)	Remarks				
Magway	81	Magway	Natkan	MG2-01	VES	ESS	121 - 251	20.4	59	Drilling depth is decided by information of existing tube well.	180	75	12m	A
	82		Thanbo(Ywarthit)	MG2-02	VES	ESS	>73	14.9	47	Drilling depth is decided by information of existing tube well.	120	73	18m	C
	83		Nyaungbinthar	MG2-03	VES	ESS	>148	17.8	52	Drilling depth is decided by information of existing tube well.	200	150	12m	A
	84		Konegyi	MG2-04	VES	ESS	>213	36.4	27	Main selection basis of drilling depth is resistivity value.	240	134	12m	A
	85		Saingya	MG2-05	VES	ESS	>162	15.8	38	Drilling depth is decided by information of existing tube well.	200	162	18m	B
	86		Thapyaysan(N)	MG2-06	VES	ESS	>139	29.1	51	Drilling depth is decided by information of existing tube well.	190	108	12m	A
	87		Shwekyaw	MG2-07	VES	ESS		18.2	111	Drilling depth is decided by information of existing tube well.	200	89	12m	A
	88		Leikkan	MG2-08	VES	ESS	95-206	39.6	25	Main selection basis of drilling depth is resistivity value.	120	100	12m	A
	89		Ywarthitgyi	MG2-09	VES	ESS	>107	19.2	73	Drilling depth is decided by information of existing tube well.	180	105	12m	A
	90	Kanyaygyi	MG2-10	VES	GH	>212	56.2	118	It is assumed that potential of target aquifer is low.	330	212	18m	C	
	91	Myaysoon(Ywarthit)	MG2-11	VES	GH	>150	31.2	110	Drilling depth is decided by information of existing tube well.	260	150	12m	A	
	92	Zeebwar	MG2-12	2D	ESS	<135	15-21	55	Drilling depth is decided by information of existing tube well.	135	80	18m	B	
	93	Yonpyay	MG2-13	VES	GH	>115	22.2	55	Drilling depth is decided by information of existing tube well.	170	115	12m	A	
	94	Kyatesu(N)	MG2-14	VES	GH	>117	24.5	28	Main selection basis of drilling depth is resistivity value.	145	23	12m	A	
	95	Winkabar	MG2-15	VES	GH	>71	22.9	39	Drilling depth is decided by information of existing tube well.	110	30	12m	A	
	96	Kyatkan	MG2-16	VES	GH	>80	23.8	90	Drilling depth is decided by information of existing tube well.	170	100	12m	A	
	97	Sudat	MG2-17	VES	GH	>270	39.2	100	Drilling depth is decided by information of existing tube well.	370	270	12m	A	
	98	Myaynilain	MG2-18	VES	GH	160 - 268	44.9	89	Drilling depth is decided by information of existing tube well.	250	160	12m	B	
	99	Yenangyaung	Logyinyo	MG2-19	2D	ESS	134-280	23-25	146	Drilling depth is decided by information of existing tube well.	280	134	12m	A
	100	Myothit	Laythesin(S)	MG2-20	VES	GH	>109	23.1	91	Drilling depth is decided by information of existing tube well.	200	109	12m	A
101	Thamyar		MG2-21	VES	GH	170-362	33.1	30	Drilling depth is decided by information of existing tube well.	200	120	12m	A	
102	Aungmyinther		MG2-22	VES	GH	55-124	16.5	65	From information of existing tube well, it is assumed that potential of target aquifer is low.	120	55	18m	C	
103	Ngwelay		MG2-23	VES	GH	52-112	46.9	63	Drilling depth is decided by information of existing tube well.	115	52	12m	B	
104	Indaw(N)		MG2-24	VES	GH	>110	17.8	30	From information of existing tube well, it is assumed that potential of target aquifer is low.	145	55	18m	C	
105	Htanaungwin		MG2-25	-	-	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-	
106	Manawgone		MG2-26	VES	GH	98-305	28.5	32	Drilling depth is decided by information of existing tube well.	130	24	12m	A	
107	Natmauk	Kangyigone	MG2-27	VES	ESS	141-220	26.2	79	Drilling depth is decided by information of existing tube well.	220	141	12m	A	
108		Htonepoutchine	MG2-28	2D	ESS	60-110	15-17	50	Main selection basis of drilling depth is resistivity value.	110	70	18m	B	
109		Padaukgote(Ywargyi)	MG2-29	-	-	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-	
110		Sellel	MG2-30	2D	ESS	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2	
111		Padaukgone	MG2-31	-	-	-	-	-	Based on evaluation of "step1", it has been excluded from target village.	-	-	-	-	
112		Ywartharlay	MG2-32	VES	ESS	-	<10	-	It has been excluded by low resistivity value. (Less than 100-m)	-	-	-	D-2	
113		Wayonogone	MG2-33	2D	ESS	<120	12-20	40?	Main selection basis of drilling depth is resistivity value.	120	70	18m	C	
114	Nyaunggone	MG2-34	VES	ESS	57-147	25.1	53?	Drilling depth is decided by information of existing tube well.	110	70	12m	A		
115	Kyugyaung	MG2-35	VES	ESS	>175	15.8	45	Drilling depth is decided by information of existing tube well.	220	140	18m	B		
116	Taungdwingyi	Kokkohla	MG2-36	VES	ESS	>210	<10(8.4)	35	From comparison results of resistivity with existing data, it is estimated that low resistivity value shows mixed layer of thin sand layer(aquifer) and clay layer.	245	100	18m	D-1	
117		Kangyigone	MG2-37	2D	ESS	150 - 230	11	80	Drilling depth is decided by information of existing tube well.	230	70	18m	C	
118		Htaukkyantwin	MG2-38	VES/2D	ESS/GH	290-477	18.7	30	Main selection basis of drilling depth is resistivity value.	320	100	12m	A	
119		Hlebwegyi	MG2-39	VES	ESS	>225	22	30	Main selection basis of drilling depth is resistivity value.	255	100	12m	A	
120		Yayhtwetgyi	MG2-40	VES	ESS	82-226	37.7	98	Drilling depth is decided by information of existing tube well.	180	40	12m	A	

*1) VES: Vertical Electrical Sounding 2D: Two-dimensional Electrical Sounding

*2) DRD: Department of Rural Development GH: Golden Hours Construction Co., Ltd. (Local Consultant) ESS: Earth System Science Co., Ltd. (Study Team)

*3) Table of classification criteria

Aquifer Potential	Estimated Facies Resistivity Value (In the case of under the groundwater)	Resistivity (Ωm-m)	Possibility for Groundwater Development	Recommended Screen Range	
Low ↑ ↓ High	Unconsolidated Sediment Clay layer or Aquifer which contains saline Alternation of clay rich and thin sand layers (The aquifer is formed by thin sand layers.)	Less than 10	D-2	Difficult	18m
			D-1	Low - Difficult	
	Sand layer	10 - 15	C ¹⁾	Medium - Low	
			B	Medium	
			A	High	
Unconsolidated - Semi-consolidated sediment	17.5-40	B	Medium	12m	
		C	Medium - Low	18m	
Low	Consolidated sediment (Massive rock)	Over 60	D-2	Difficult	-

*1) Aquifer with low potential which is assumed from hydrogeological information are included into "C" (Regardless of small and large of the resistivity value)

Appendix 5.5 Examination on Necessity of the Requested Drilling Rigs

The DRD's CDZ Project Office has a plan to use 5 existing drilling rigs and 2 requested rigs (7 rigs in total) to the CDZ for the drilling of deep wells in the Second 5-Yer Plan. Examination was made on the necessity of requested drilling rigs (TOP300 type and TOP500 type or equivalent).

1. THE NUMBER OF WELLS TO BE DRILLED

In CDZ, the total of 717 wells will be drill in the Second 5-Year Plan including 100 wells of which construction materials will be provided by the Project, namely 275 wells in Sagaing, 180 wells in Mandalay and 262 wells in Magway. According to the DRD, about half of the 717 wells can be drilled by subcontractors. Therefore, the DRD has to construct the remaining half, 359 wells, in CDZ.

Although, the drilling depth of these wells has not been determined at present, it can be assumed that the depth of wells may be distributed with same ratio as the estimated results of drilling depth by our field survey in 120 villages, considering the regional geological conditions in the area.

Table-1 shows the distribution of the estimated depth of wells to be drilled in the 110 villages selected after investigation of 120 villages.

Table-1 Distribution of Estimated Well Depth of 110 Village

Region	- 200m	- 250m	- 300m	301m -	Total
Sagaing	36 (92%)	1 (3%)	2 (5%)	0 (0%)	39 (100%)
Mandalay	16 (48%)	7 (21%)	5 (15%)	5 (15%)	33 (100%)
Magway	25 (65%)	6 (16%)	4 (11%)	3 (8%)	38 (100%)
Total	77 (70%)	14 (13%)	11 (10%)	8 (7%)	110 (100%)
Rig to be Applied	TOP300	TOP500	TOP750 (HR)		

Based on the above percentage, the depth of 359 wells drilled by the DRD in the Second 5-Year Plan is supposed as shown in Table-2.

Table-2 Distribution of Depth of Wells to be Drilled in Second 5-Year Plan Project

Region	- 200m	- 250m	- 300m	301m -	Total
Sagaing	127	4	7	0	138
Mandalay	44	19	14	14	90
Magway	85	21	14	10	131
Total	256	44	35	24	359
Rig to be Applied	TOP300	TOP500	TOP750 (HR)		

2. POSSIBLE NUMBER OF DEEP WELLS TO BE DRILLED BY THE DRD’S RIGS

In order to estimate how many number of deep wells can be drilled by 5 rigs of the DRD in a year, the actual number of deep wells drilled in the past 3 years are summarized in Table 3.

Table 3 Actual Number of Deep Wells Drilled by the DRD’s 5 Rigs in the Past 3 Years

Rig	DRD001	DRD-002	DRD-005	DRD-010	DRD-011
	TOP300	TOP300	TOP300	TOP750HR	TOP750
Year	1983	1983	1986	2013	2013
2012	7	6	2	-	-
2013	6	9	10	2	2
2014	3	8	14	9	6
Total	16	23	26	11	8

Following issues were examined on the number of deep wells drilled by each rig during 5 years from the year 2017 which is the start of the Second 5-Year Plan project.

Depths of deep wells to be drilled by each rig are as follows.

TOP300: Up to 200m depth

TOP500: Up to 250m depth

TOP750: More than 300m depth

(1) DRD-001 Rig (TOP300 type) (introduced in 1983)

The number of deep wells drilled by the rig in the past 3 years were 7 in 2012 and 6 in 2013, however it was 3 in 2014 due to maintenance.

According to the CDZ Project Office, it is possible to drill 8 deep wells in a year. However, the Study Team evaluated it was 6 in a year because the rig was introduced 30 years ago and drilling efficiency was recently worsened. Furthermore, the rig seems to be received large service for maintenance in 2011. Considering these situation, it should be assumed the rig will receive 2 times of service for maintenance in 5 years. Therefore, the number of deep wells to be drilled by the rig will be 3 in the year when the rig will receive service for maintenance as same as that in 2014 (half of the other years).

Based on the assumption described above, the rig will drill the number of deep wells shown in Table 4 in 5 years.

Table 4 The Number of Deep Wells to be Drilled by the Rig (DRD-001)

Item	Years	Annual Drilling capacity (well)	Total (well)
Ordinary year (without maintenance)	3	6	18
Year, large maintenance is planned	2	3	6
Total			24

(2) DRD-002 Rig (TOP300 type) (introduced in 1983)

The DRD-002 Rig was introduced in a same year as that of the DRD-001 rig. Although 30 years already passed after introduced, the condition of the rig is better than that of the DRD001 Rig. The rig drilled 23 deep wells in the past 3 years (7.7 wells per year in average) as shown in Table 3. The rig drilled 9 deep wells in 2013 and 8 in 2014. Therefore, it is evaluated possible to drill 8 deep wells in a year.

As for maintenance, the condition is same as that of the DRD001 Rig because it is also 30 years passed since introduction. In such case, the rig will drill 4 deep wells in a year (half of the other years).

Table 5 Possible Number of Deep Wells to be Drilled by the DRD-002 Rig

Item	Years	Annual Drilling capacity (well)	Total (well)
Ordinary year (without maintenance)	3	8	24
Year, large maintenance is planned	2	4	8
Total			32

(3) DRD-005 Rig (TOP300 type) (introduced in 1986)

After the DRD-005 Rig introduced in 1986, nearly 30 years passed. However, the rig drilled 26 deep wells in the past 3 years (8.7 wells per year in average). Therefore, it is evaluated possible to drill 8 deep wells in a year. According to the record of the DRD, the rig received large service 2 times, in 2009 and 2012. Considering this situation, it is assumed that the rig will receive large services twice during 5 years of the Second 5-Year Plan project period and the rig will drill 4 deep wells in the years when the rig will receive large service for maintenance.

Table 6 Possible Number of Deep Wells to be Drilled by the DRD-005 Rig

Item	Years	Annual Drilling capacity (well)	Total (well)
Ordinary year (without maintenance)	3	8	24
Year, large maintenance is planned	2	4	8
Total			32

(4) DRD-010 Rig (TOP750 type) and DRD-011 Rig (TOP750HR type) (introduced in 2013)

The DRD-010 and the DRD-011 Rigs were introduced in 2013, therefore, conditions of the rigs are well. In case of the drilling of deep wells up to 300m depth. It is quite possible for the rigs to drill 8 wells in a year as the DRD Project Office expects.

On the other hand, in case of the well more than 300m depth, it needs more times to drill. It will be reasonable to assume the capacity of drilling as 6 wells per year. As for the large maintenance, it

will be once for these 2 rigs during 5 years of the project period. Accordingly, each rig will drill following number of wells in a year described in Table 7.

Table 7 Possible Number of Deep Wells to be Drilled by the DRD-010 or DRD 011 Rigs (up to 300m depth)

Item	Years	Annual Drilling capacity (well)	Total (well)
Ordinary year (without maintenance)	4	8	32
Year, large maintenance is planned	1	4	4
Total			36

Table 8 Possible Number of Deep Wells to be Drilled by the DRD-010 or DRD 011 Rigs (more than 300m depth)

Item	Years	Annual Drilling capacity (well)	Total (well)
Ordinary year (without maintenance)	4	6	24
Year, large maintenance is planned	1	3	3
Total			27

Based on the assumption described above, the existing 5 rigs will drill the number of deep wells described.

3. NECESSITY OF REQUESTED RIGS

(1) The number and Depth of Deep Wells, and Drilling Rigs to be Used

Examination is made as described below whether all the planned number of deep wells would be drilled by the DRD’s rigs to be input to the Second 5-Year Plan. The region and depth wise number of deep wells to be drilled in the Second 5-Year Plan is summarized in Table 9.

Table 9 Region and Depth Wise Number of Deep Wells to be Drilled in the Second 5-Year Plan

Well Depth	- 200m	- 250m	- 300m	301m -	Total
Sagaing	127	4	7	0	138
Mandalay	44	19	14	14	90
Magway	85	21	14	10	131
Total	256	44	35	24	359
Rig to be Applied	TOP300	TOP500	TOP750 (HR)		

The types of rigs to be used for drilling of each depth of deep wells are as follows.

- Wells less than 200m depth to be drilled by TOP300 type of rig

Based on the assumption in Table 3, 4 and 5, the 3 TOP300 type of rigs can drill 88 deep

wells in 5 years of the project period. This number is farther less than the planned well number of 256 wells, therefore, 168 wells will be remained undrilled.

- Wells less than 250m depth to be drilled by TOP500 type of rig

The DRD owns 1 TOP500 type of rig. The rig was repaired the hydraulic system, however, the drilling capacity was much lowered. It cannot be employed for drilling of wells more than 150m depth. Therefore, a rig of which capacity is same as that of the TOP500 type of rig or more is necessary for the project to drill up to 250m depth.

- Wells less than 300m depth to be drilled by TOP750 or TOP750HR type of rigs

It is possible to drill 72 deep wells in 5 years (14.4 wells per year in average). The planned number of wells less than 300m is 35 wells, therefore, drilling of these wells will be completed in 2.4 years. Remaining 2.6 years can be used for drilling of other wells more than 300m.

- Well more than 300m depth to be drilled by TOP750 or TOP750HR type of rigs

The 2 rigs can drill 54 wells more than 300m depth in 5 years (10.8wells per year in average), therefore, 24 deep wells more than 300m depth will be drilled in 2.22 years (less than 2.6 years).

(2) Necessity of Introduction of the Rig Capable to Drill up to 250m Depth

It is obvious from the discussion above the necessity of introduction of TOP500 type of rig or more for the Second 5-Year Plan project. The deep wells more than 250m depth will be drilled by 2 existing rigs, TOP750 and TOP750HR Rigs.

Assuming the requested rig is introduced in September 2017, the rig will be used in the project 4 years and 7 months (about 4.6 years). Since the rig is brand new, it will drill 10 deep wells in a year and the large maintenance will be not required. The rig is capable to drill 46 deep wells up to 250m depth in 4.6 years as shown in Table 10.

Table 10 The Number of Deep Wells to be Drilled by Requested RIG (up to 250m depth)

Item	Years	Annual Drilling capacity (well)	Total (well)
Ordinary year (without maintenance)	4.6	10	46
Year, large maintenance is planned	0	0	0
Total			46

The number of deep wells up to 250m depth planned in the Second 5-Year Plan is 44, therefore, drilling of all the wells will be completed by introducing the requested rig

(3) Necessity of Introduction of the Rig Capable to Drill up to 200m Depth

If deep wells up to 200m depth are drilled by 3 DRD's rigs (TOP300 type), 168 wells will be remained undrilled at the end of the Second 5-Year Plan. Therefore, introduction of new rig is required.

If 1 requested rig is introduced, the number of deep wells which will be drilled is shown in Table 11, assuming the rig needs no large maintenance due to brand new and it will drill 10 wells in a year. The total of 46 deep wells will be drilled by the new rig during the Second 5-Year Plan, however, 122 wells will be still remained.

Table 11 The Number Deep Wells to be Drilled by Requested RIG (up to 200m depth)

Item	Years	Annual Drilling capacity (well)	Total (well)
Ordinary year (without maintenance)	4.6	1	46
Year, large maintenance is planned	0	0	0
Total			46

The necessity of introduction of the requested rig is quite high as discussed above, however, the target of the DRD will not be achieved. Therefore, it is necessary for the DRD to request the assistance to other Donors, NGOs, etc.. In addition, the aged rigs donated by the UNICEF and kept by the DRD should be used in the project after maintenance.

<Reference: The period necessary for drilling of deep wells>

The DRD is assuming the period necessary for drilling of deep wells as following table.

Work Item	Necessary Period (day)	Note
Preparation	1	
Preparation of mud pit and others	5	
Drilling	20	
Installation of casing	1	
Development and pumping test	3	The pumping test will be continued by air-lifting till the water becomes clean.
Total	30	

The Study Team proposes to carry out the well logging and pumping test by the submersible pump. If this proposal is accepted by the DRD, 3 more days are necessary to complete the drilling of a well. Therefore, the necessary period for drilling of 1 well up to 300m is 33 days. Based on the assumption above, the necessary periods for completion of 1 deep well are assumed as follows.

Well up to 200m depth: 27 days

Well up to 250m depth: 30 days

Well up to 300m depth: 33 days

Well up to 400m depth: 40 days

These periods are subject to change depending on the geological condition and other conditions. The periods shown above are the net working period. Actual work needs the periods for mobilization to the site, maintenance work for the equipment such as washing, lubrication, etc. Considering these conditions, it is evaluated the DRD's opinion as reasonable that 8 deep wells, in average, will be drilled by each rig in a year.

Appendix 5.6 Total Dynamic Head of Submersible Pumps to be Installed

(1) Sagaing Region

Region	No.	Township	Village Tracks	Villages	ID	Estimated Drilling Depth (Pre-survey Result)	Estimated S.W.L m	TDH proposed by DRD	Pump TDH	3 phase electricity
Sagaing	1	Budalin	Htanaungkone	Yonedaw	SA2-01	160 m	40	150 m	100 m	
	2		Ngapayin	Nyaungbinthar	SA2-02	160 m	40	150 m	100 m	
	3		Maunghtaung	Maunghtaung	SA2-03	150 m	40	100 m	100 m	
	4		Ywarhit	Kantawthar	SA2-04	125 m	39	150 m	100 m	
	5		Konethar	Mhonehtoo	SA2-05	100 m	30	100 m	60 m	
	6		Watluu-I	Watluu-I	SA2-06	100 m	36	60 m	60 m	
	7	Chaugoo	Thanbinkan	Thanbinkan	SA2-07	150 m	70	150 m	150 m	
	8		Natyaygan	Natyaygan	SA2-08	200 m	61	100 m	150 m	
	9	Ayadaw	Ngartowma	Sithar	SA2-09	100 m	44	100 m	100 m	
	10		Leinhla	Oakkan	SA2-10	230 m	3	200 m	100 m	○
	11		Warryaung	Warryaung	SA2-11	250 m	55	200 m	150 m	○
	12		Yechinn	Warrtannkalay	SA2-12	105 m	43	100 m	100 m	
	13		Nyaungchayhtauk	Yathar	SA2-13	-	-			
	14		Warryaung	Zeepinlel	SA2-14	130 m	50	100 m	100 m	○
	15	Salingyi	Yonebinyoe	Yonebinyoe	SA2-15	-	-			
	16			Minntaw	SA2-16	170 m	40	60 m	100 m	
	17		Moe Kyo Pyin	Kine	SA2-17	120 m	40	150 m	100 m	
	18	Myinmu	Kalarpyan	Kalarpyan	SA2-18	200 m	36	150 m	100 m	
	19		Nyaungbinkan	Hlayookan	SA2-19	195 m	121	150 m	150 m	
	20		Makyeekan	Makyeekan	SA2-20	-	-			
	21		Latpanyin	Watkyia	SA2-21	200 m	36	150 m	100 m	
	22			(Ywarma)	SA2-22	180 m	55	150 m	150 m	
	23		Inma	Magyidaw	SA2-23	-	-			
	24	Thindaw	Thindaw	Thindaw	SA2-24	80 m	50	60 m	60 m	
	25			Lwingyi	SA2-25	220 m	31	150 m	150 m	
	26	Kanbalu	Koetaungboh	Koetaungboh (Kyunkone)	SA2-26	185 m	60	150 m	150 m	
	27		Nyaungkanthar	Inngoteto	SA2-27	150 m	50	100 m	60 m	
	28		Myayhtoo	Myayhtoo	SA2-28	200 m	150	150 m	200 m	
	29		Khaowntar	Khaowntar	SA2-29	215 m	30	100 m	100 m	
	30		Nyuangkanthar	Nyuangkanthar	SA2-30	175 m	50	100 m	150 m	
	31		Myaymon	Myaymon	SA2-31	155 m	80	100 m	100 m	○
	32		Pazigi	Layytwinzin	SA2-32	210 m	120	60 m	150 m	
	33	Paygone(S)	Chaugchar	SA2-33	205 m	60	100 m	150 m		
	34	Dabayin	Intimelay	Minyogone	SA2-34	110 m	3	100 m	60 m	○
	35		Mintelgone	Shandaw	SA2-35	250 m	0	200 m	150 m	○
	36		Satpyaryin	Kyuntaw (S)	SA2-36	100 m	68	60 m	100 m	○
	37	Wetlet	Sharkwal	PalaeThwe (Ywarhit)	SA2-37	130 m	55	100 m	100 m	
	38		Poukkan	Poukkan	SA2-38	150 m	30	60 m	100 m	
	39		Yonepingone	Shwenyaungtaw	SA2-39	-	-			
	40		Khawtaw	Sabeidaw	SA2-40	-	-			

(2) Mandalay Region

Region	No.	Township	Village Tracks	Villages	ID	Estimated Drilling Depth (Pre-survey Result)	Estimated S.W.L m	TDH proposed by DRD	Pump TDH	3 phase electricity	
Mandalay	41	Mahlaing	Yayhtwet	Htantawgyi	MA2-01	150 m	60	60 m	100 m		
	42		Kyatse	Asone	MA2-02	150 m	60	60 m	100 m		
	43		Yaychobutar	Khinthar(S)	MA2-03	270 m	60	60 m	100 m		
	44	Myingyan	Chaysay	Chaysay	MA2-04	160 m	50	100 m	100 m		
	45		Pinlai	Talgyi	MA2-05	170 m	50	60 m	100 m		
	46		Kuywar	Kuywar	MA2-06	-	-			○	
	47		Yonehto	Yonehto	MA2-07	165 m	60	100 m	100 m	○	
	48		Phatpin-I	Nyaungwum	MA2-08	-	-				
	49	Ngazon	Konelel	Konelel	MA2-09	-	-				
	50		Magyigyat	Phaungkadaw	MA2-10	-	-				
	51		Kaungzin	Kaungzin	MA2-11	250 m	100	150 m	150 m		
	52		Thanbo	Ywarsite	MA2-12	-	-				
	53	Natogyi	Kyaungnan	Kyaungnan	MA2-13	-	-				
	54		Myinni	Kyaungkangyibin	MA2-14	200 m	167	100 m	200 m	○	
	55		Nyaunggone	Nyaunggone	MA2-15	150 m	61	60 m	100 m		
	56	Taungtha	Obo	Chaungnar	MA2-16	-	-				
	57		Zagyan	Chaungson(La)	MA2-17	140 m	98	100 m	150 m	○	
	58		Kyaukkar	Kyaukkartaungkone	MA2-18	-	-				
	59		Kanmyel		Tharzi	MA2-19	290 m	154	200 m	200 m	
	60				Kanaye	MA2-20	265 m	105	200 m	200 m	
	61			Tharyarmaing	Tharyarmaing	MA2-21	200 m	150	100 m	200 m	
	62	Yamethin	Myinnar	Oakpo	MA2-22	260 m	30	100 m	100 m		
	63		Nabukyin	Kangyi	MA2-23	350 m	200	250 m	250 m		
	64	Pyawbwe	Seitcho	Htanekan	MA2-24	270 m	30	150 m	150 m		
	65			Waryonesu	MA2-25	305 m	11	100 m	100 m		
	66	Nyaungoo	Sinthamway	Talkone	MA2-26	275 m	150	200 m	200 m		
	67		Tawbyar	Tawbyar	MA2-27	265 m	176	200 m	200 m		
	68		Setsetyo	Setsetyo	MA2-28	390 m	269	300 m	300 m		
	69		Pyon	Kanzauk	MA2-29	200 m	65	200 m	150 m		
	70		Kantain	Talbindel	MA2-30	300 m	210	250 m	250 m		
	71		Tawpyar	Mongywettaw	MA2-31	270 m	210	250 m	250 m		
	72		Tuywintaung	Phoenekan	MA2-32	125 m	35	150 m	100 m		
	73		Nyaungbinthar	Nyaungbinthar	MA2-33	200 m	100	200 m	150 m		
	74		Kudaw	Saingkan(Tetide)	MA2-34	370 m	263	300 m	300 m		
	75		Byugyi	Byugyi	MA2-35	310 m	230	300 m	300 m		
	76	Kyaukpadaung	Tangkan	Aleywar-2	MA2-36	230 m	150	200 m	200 m		
	77			Tangkan	MA2-37	-	-			○	
	78		Lelgyi(N)	Lelgyi(Ma)	MA2-38	350 m	51.5	100 m	100 m		
	79		Kannbyu	Thayattaw	MA2-39	350 m	223	250 m	300 m		
	80		Nakyatkwal	Nakyatkwal	MA2-40	295 m	67	300 m	250 m	○	

(3) Magway Region

Region	No.	Township	Village Tracks	Villages	ID	Estimated Drilling Depth (Pre-survey Result)	Estimated S.W.L m	TDH proposed by DRD	Pump TDH	3 phase electricity
Magway	81	Magway	Natkan	Natkan	MG2-01	180 m	75	150 m	100 m	○
	82		Sharzaungkan	Thanbo(Ywarthit)	MG2-02	120 m	73	100 m	100 m	
	83		Kyarkan	Nyaungbinthar	MG2-03	200 m	150	150 m	200 m	
	84		Nyaungbinthar	Konegyi	MG2-04	240 m	134	200 m	200 m	
	85		Paypinsan	Sainggya	MG2-05	200 m	162	150 m	200 m	
	86		Thapyaysan	Thapyaysan(N)	MG2-06	190 m	108	150 m	150 m	
	87		Supyitsan	Shwekyaw	MG2-07	200 m	89	150 m	150 m	
	88		Nyaungkan	Leikkan	MG2-08	120 m	100	100 m	100 m	
	89			Ywarthitgyi	MG2-09	180 m	105	150 m	150 m	
	90	Chauk	Thanbo	Kanyaygyi	MG2-10	330 m	212	300 m	300 m	
	91		Myaysoon	Myaysoon (Ywarthit)	MG2-11	260 m	150	250 m	200 m	
	92		Zeebwar	Zeebwar	MG2-12	135 m	80	150 m	100 m	
	93		Chaungtat	Yenpyay	MG2-13	170 m	115	150 m	150 m	
	94		Pakhanng	Kyatesu(N)	MG2-14	145 m	23	100 m	60 m	
	95		Salintaung	Winkabar	MG2-15	110 m	30	100 m	60 m	
	96		Magyikone	Kyatkan	MG2-16	170 m	100	150 m	100 m	
	97		Gwaypin	Sudat	MG2-17	370 m	270	300 m	300 m	
	98		Nyaungzin	Myaynilain	MG2-18	250 m	160	200 m	200 m	
	99	Yenangyaung	Indaw	Legyinyo	MG2-19	280 m	134	250 m	200 m	
	100	Myothit	Laytinesin	Laytinesin(S)	MG2-20	200 m	109	200 m	150 m	
	101			Tharmyar	MG2-21	200 m	120	200 m	150 m	
	102			Aungmyinthar	MG2-22	120 m	55	100 m	100 m	
	103		Wargyiini	Ngwelay	MG2-23	115 m	52	100 m	100 m	
	104		Htauksharkan	Indaw(N)	MG2-24	145 m	55	100 m	100 m	
	105		Dantdalunbin	Htanaungkwin	MG2-25	-	-			
	106		Manawtkone	Manawtgone	MG2-26	130 m	24	100 m	100 m	○
	107	Natmauk	I-Sauk	Kangyigone	MG2-27	220 m	141	200 m	200 m	
	108		Htonepoutchine	Htonepoutchine	MG2-28	110 m	70	100 m	100 m	
	109		Padaukgote	Padaukgote (Ywargyi)	MG2-29	-	-			
	110		Sellel	Sellel	MG2-30	-	-			
	111		Thamhonepin	Padaukgone	MG2-31	-	-			
	112		Tegyi	Ywartharlay	MG2-32	-	-			
	113		Wayonegone	Wayonegone	MG2-33	120 m	70	100 m	100 m	
	114		Htonepoutchine	Nyaunggone	MG2-34	110 m	70	100 m	100 m	
	115		I-Zauk	Kyugyaung	MG2-35	220 m	140	200 m	200 m	
	116	Taungdwingyi	Pantwinlay	Kokkohla	MG2-36	245 m	100	100 m	200 m	○
	117		Payatkyal	Kangyigone	MG2-37	230 m	70	150 m	150 m	
	118		Warthonepyu	Htaukkyantgwin	MG2-38	320 m	100	300 m	250 m	○
	119		Hlebwegyi	Hlebwegyi	MG2-39	255 m	100	250 m	200 m	
	120			Yayhtwetgyi	MG2-40	180 m	40	150 m	150 m	
					Total	20,005 m				

Appendix 5.7 Summary of Socio-Economic Survey Results

Region	Project ID	Village	Population	No. of Household	No of Household in Income Level			Monthly Average HH Income	Electrification	Major Industry		No. of Water Supply Facilities		Status of Village Water Committee						Water Source for Drinking		Water Source for Domestic		Current Water Tariff (MMK/Gallon)	Fetching Time (Minutes)		Frequency of Priority Development					Annual Household O&M Expenditure (MMK)	% of O&M Cost over Average H/H Income			
					Better Off	Middle	Worse Off			1st	2nd	Function	Not Function	Establishment	Male	Female	O&M Experience	Water Fund	Financial Record	Operation Out Sourcing	Rain	Dry	Rain		Dry	Rain	Dry	Water	Health	Education	Electrification			Others		
Sagaing	SA2-01	Yonedaw	450	96	30	50	16	131,500	Yes	Agriculture	Livestock	1	0	No	0	0	Yes	No	No	No	DTW	DTW	DTW	DTW	4	5	6	2	2					3	49,834	3.16%
	SA2-02	Nyaungbinthar	223	53	20	20	13	192,100	Yes	Agriculture	Livestock	2	0	Yes	6	0	Yes	No	No	No	P	PW	PW	PW	3	36	58	2			1			44,731	1.94%	
	SA2-03	MaungHtanng	4,303	1,010	300	550	160	247,000	Yes	Agriculture	Livestock	1	0	No	0	0	No	No	No	UW	UW	UW	UW	0	3	4	6			1			45,293	1.53%		
	SA2-04	Kantawthar	450	110	33	43	34	133,000	No	Agriculture		1	0	No	0	0	No	Yes	Yes	No	UW	UW	UW	UW	4	17	13	1	4		2			43,491	2.73%	
	SA2-05	Mhonehtoo	204	50	20	20	10	100,500	No	Agriculture		1	0	Yes	5	0	Yes	No	No	No	DTW	DTW	DTW	DTW	0	11	10	3	1		1	3		43,376	3.60%	
	SA2-06	Wattuu I	860	220	90	90	40	204,000	No	Agriculture	Livestock	2	0	No	0	0	Yes	No	No	Yes	PW	PW	DTW	DTW	0	20	20	6	2		1	1		41,559	1.70%	
	SA2-07	Thann Pin Kan	935	198	80	90	28	145,000	No	Agriculture	Livestock	1	0	Yes	9	0	No	Yes	Yes	Yes	PT	PT	PT	PT	4	0	0	1	1		2	6		57,375	3.30%	
	SA2-08	Nat Yay Kan	900	171	60	80	31	158,000	No	Agriculture	Livestock	2	0	Yes	9	4	Yes	Yes	Yes	Yes	UW	UW	UW	UW	4	9	7					10		63,947	3.37%	
	SA2-09	Sithar	412	85	40	40	5	125,500	No	Agriculture	Livestock	1	0	Yes	10	0	Yes	No	No	No	DTW	DTW	DTW	DTW	0	8	10	7	1		1			51,530	3.42%	
	SA2-10	Oakkan	800	300	110	150	40	127,000	Yes	Agriculture		3	0	Yes	11	0	Yes	Yes	Yes	Yes	DTW	DTW	DTW	DTW	0	26	32	7	1					28,350	1.86%	
	SA2-11	Waryaug	4,000	920	300	500	120	241,000	No	Agriculture	Livestock	2	0	Yes	6	0	Yes	Yes	Yes	Yes	DTW	DTW	DTW	DTW	0	1	1	1	1			5		52,826	1.83%	
	SA2-12	WarTannKalay	1,000	100	30	40	30	182,000	No	Agriculture	Livestock	2	0	Yes	0	4	Yes	No	No	Yes	DTW	DTW	DTW	DTW	4	26	38	5			2			106,313	4.87%	
	SA2-13	Yathar	766	318	150	120	48	166,000	No	Agriculture		1	0	Yes	10	0	Yes	Yes	Yes	Yes	DTW	DTW	DTW	DTW	0	9	10	3	2		3					
	SA2-14	Zeepinlae	1,879	350	100	200	50	162,500	No	Agriculture	Livestock	2	0	Yes	10	0	Yes	No	No	No	DTW	DTW	DTW	DTW	3	9	11	3	3	1					57,075	2.93%
	SA2-15	Yonepinyoe	128	23	10	10	3	100,000	No	Agriculture	Livestock	1	0	Yes	14	1	No	No	No	No	DTW	DTW	DTW	DTW	3	48	44	8			1					
	SA2-16	MinDaw	1,100	280	100	120	60	405,000	No	Agriculture		1	0	No	0	0	Yes	No	No	Yes	OW	OW	OW	OW	0	39	33	3	1		4	1		41,766	0.86%	
	SA2-17	Kine	280	72	30	30	12	112,000	No	Agriculture		1	0	No	0	0	No	No	No	No	US	STW	STW	STW	0	10	10	7			1	1		41,344	3.08%	
	SA2-18	Kalapyan	383	78	35	30	13	150,500	No	Agriculture	Livestock	1	0	No	0	0	No	No	No	No	DTW	DTW	DTW	DTW	4	16	12	7			2			52,202	2.89%	
	SA2-19	HlayOoKan	585	63	20	30	13	133,000	No	Agriculture		2	0	Yes	4	0	No	No	No	Yes	US	US	US	US	3	28	44	8			1			112,821	7.07%	
	SA2-20	Magyikan	1,148	253	100	100	53	273,500	No	Agriculture		1	0	Yes	5	0	Yes	No	No	No	STW	STW	PWS	ow, stw	3	7	8	2			2	5				
	SA2-21	Watyka	748	153	50	70	33	202,000	No	Agriculture		2	0	Yes	5	0	Yes	Yes	Yes	Yes	PT	PT	PT	PT	3	0	0	5	1		1			51,975	2.14%	
	SA2-22	ThaHtayKone	410	55	20	20	15	313,500	No	Agriculture		1	0	No	0	0	Yes	No	No	No	DTW	DTW	DTW	DTW	3	6	4	6	1		1			90,573	2.41%	
	SA2-23	Magyitaw	161	39	15	15	9	186,500	No	Agriculture	Livestock	1	0	No	0	0	Yes	Yes	Yes	Yes	PW	PW	PW	PW	3	7	7			2	4	4				
	SA2-24	Thindaw	817	60	30	25	5	189,000	Yes	Agriculture	Livestock	1	0	Yes	3	0	Yes	No	No	No	P	PW	PW	PW	3	19	23	4	5					144,762	6.38%	
	SA2-25	LwinGyi	499	60	20	30	10	162,000	Yes	Agriculture		1	0	Yes	5	0	Yes	No	No	No	PW	PW	PW	PW	3	8	8	5	3					101,048	5.20%	
	SA2-26	Kyaunkone	1,171	253	100	100	53	211,000	Yes	Agriculture		1	0	No	0	0	No	No	No	No	P	PW	PW	PW	3	6	6	6	4					56,236	2.22%	
	SA2-27	Inngotote	1,278	280	105	105	70	165,500	No	Agriculture		1	1	No	0	0	No	No	No	Yes	PW	PW	PW	PW	0	11	75	2	6		1			48,524	2.44%	
	SA2-28	Myayhtoo	1,844	386	195	150	41	111,667	Yes	Agriculture	Livestock	2	0	No	0	0	No	No	No	No	PW	PW	PW	PW	0	24	16	5	2	1	1			89,483	6.68%	
	SA2-29	Khnowntar	1,004	104	30	60	14	190,000	No	Agriculture		2	0	No	0	0	No	No	No	No	PW	PW	PW	PW	0	6	6	2	1		4	2		102,632	4.50%	
	SA2-30	Nyaungkanthar	539	123	30	65	28	172,000	No	Agriculture	Livestock	1	0	No	0	0	No	No	No	No	P	P	P	P	0	18	42	8					53,243	2.58%		
	SA2-31	Myaymon	2,527	415	140	260	15	224,000	No	Agriculture		1	0	No	0	0	No	No	No	Yes	PW	DTW	DTW	DTW	0	10	22	2	1	1	3	1		64,735	2.41%	
	SA2-32	Laytwintzin	714	150	50	70	30	411,500	No	Agriculture	Livestock	1	0	No	0	0	No	Yes	Yes	Yes	P	PW	PW	PW	4	15	23	4			1	2		57,834	1.17%	
	SA2-33	Chaugchar	513	102	30	55	17	203,000	No	Agriculture		1	0	Yes	5	0	No	No	No	No	P	O	O	O	0	5	6			2		7		61,107	2.51%	
	SA2-34	Minyogone	445	79	30	30	19	164,000	No	Agriculture		1	0	No	0	0	Yes	No	No	No	PW	PW	PW	PW	0	20	20	8						59,885	3.04%	
	SA2-35	Shandaw	415	70	25	35	10	230,100	No	Agriculture		1	0	No	0	0	Yes	No	No	No	UW	UW	UW	UW	0	19	47	9						72,032	2.61%	
	SA2-36	Kyuntaw	420	100	30	40	30	144,500	No	Agriculture		1	0	No	0	0	No	No	No	No	PW	PW	PW	PW	0	11	11	5			1	2		44,651	2.58%	
	SA2-37	Palae Thwe	250	63	30	30	3	131,000	No	Agriculture	Livestock	1	0	No	0	0	Yes	No	No	No	DTW	DTW	DTW	DTW	3	17	19	6	1				1	42,188	2.68%	
	SA2-38	Poukkan	1,500	267	100	100	67	144,000	No	Agriculture	Livestock	1	0	No	0	0	No	No	No	No	PW	PW	PW	PW	0	6	5	1	4		3			59,726	3.46%	
	SA2-39	Shwenyungta w	270	70	25	30	15	129,500	No	Agriculture	Livestock	1	0	No	0	0	No	No	No	No	DTW	DTW	DTW	DTW	0	12	17	5	3			1				
SA2-40	Sabeitaw	250	57	20	20	17	223,500	No	Agriculture	Livestock	2	0	No	0	0	No	No	No	No	DTW	DTW	DTW	DTW	0	14	19				3		6				
Mandalay	MA2-01	Htantawgyi	284	100	35	45	20	335,455	No	Agriculture		1	0	No	0	0	No	No	No	No	DTW	DTW	O	O	0	18	23	2			1	2		30,193	0.75%	
	MA2-02	Asone	635	145	70	50	25	111,000	No	Agriculture		1	0	Yes	7	0	Yes	No	No	No	PW	PW	PW	PW	3	10	10	1			1	2	2	46,558	3.50%	
	MA2-03	Khinthar	490	80	30	40	10	172,000	No	Agriculture		1	0	No	0	0	No	No	No	Yes	PW															

Appendix 5 Other Relevant Data

Region	Project ID	Village	Population	No. of Households	No of Household in Income Level			Monthly Average HH Income	Electrification	Major Industry		No. of Water Supply Facilities		Status of Village Water Committee							Water Source for Drinking		Water Source for Domestic		Current Water Tariff (MMK/Gallon)	Fetching Time (Minutes)		Frequency of Priority Development					Annual Household O&M Expenditure (MMK)	% of O&M Cost over Average H/H Income		
					Better Off	Middle	Worse Off			1st	2nd	Function	Not Function	Establishment	Male	Female	O&M Experience	Water Fund	Financial Record	Operation Out Sourcing	Rain	Dry	Rain	Dry		Rain	Dry	Rain	Dry	Water	Health	Education			Electrification	Others
Meggway	MG2-01	Natkan	1,244	310	150	100	60	331,000	No	Agriculture	Livestock	1	0	Yes	20	0	Yes	No	No	Yes	P	P	P	P	0	41	56	4				4		49,336	1.07%	
	MG2-02	Thanbo	297	64	25	35	4	238,000	Yes	Agriculture		1	0	Yes	5	2	No	No	No	Yes	P	P	P	P	3	57	77	5	1			1		101,724	1.73%	
	MG2-03	Nyaungpinthar	1,450	267	95	150	22	198,500	No	Agriculture		2	0	Yes	10	0	Yes	No	No	No	P	P	PT	PT	3	21	29	3				2	1	87,535	4.27%	
	MG2-04	Konegyi	1,187	254	100	100	54	205,500	No	Agriculture		2	0	Yes	7	0	Yes	No	No	Yes	PT	PT	DTW	DTW	0	37	47	5						79,248	3.55%	
	MG2-05	Saingya	1,760	416	150	200	66	275,500	No	Agriculture	Livestock	2	0	Yes	5	0	Yes	No	No	Yes	DTW	DTW	DTW	DTW	3	83	88	6				1	1	42,188	2.40%	
	MG2-06	Thapyaysan (N)	250	72	30	38	4	342,500	No	Agriculture		1	0	Yes	7	0	Yes	Yes	Yes	Yes	DTW	DTW	DTW	DTW	3	65	82	7						32,357	1.03%	
	MG2-07	Shwekyaw	253	95	35	40	20	113,000	No	Agriculture		2	0	Yes	5	2	No	No	No	Yes	DTW	DTW	DTW	DTW	0	31	55	7				1		52,876	2.39%	
	MG2-08	Leikkan	1,134	228	90	95	43	145,000	No	Agriculture		2	0	Yes	11	0	Yes	No	No	Yes	PW	DTW	DTW	DTW	3	49	72	4	1					71,332	3.04%	
	MG2-09	Ywarthitgyi	1,820	310	140	140	30	176,000	No	Agriculture	Craft Making	1	0	Yes	5	0	Yes	No	No	Yes	DTW	DTW	DTW	DTW	3	36	47	2		1	2			128,900	3.38%	
	MG2-10	Kanyaygyi	1,246	230	100	100	30	219,800	No	Agriculture	Livestock	2	0	Yes	10	0	No	No	No	Yes	P	DTW	DTW	DTW	4	34	48	7						97,521	4.89%	
	MG2-11	Myaysoon	328	63	26	26	11	160,100	No	Agriculture	Livestock	1	0	No	0	0	No	No	No	Yes	P	DTW	DTW	DTW	4	54	43	8						50,987	5.08%	
	MG2-12	Zeenwar	1,175	245	100	100	45	304,000	Yes	Agriculture		2	0	No	0	0	No	No	No	Yes	UW	P	UW	P	0	39	64	4						52,313	1.40%	
	MG2-13	Yenpyay	155	36	10	20	6	104,500	No	Agriculture	Livestock	1	0	Yes	12	0	No	No	No	No	P	P	PWS	PWS	3	26	130	7						46,391	4.17%	
	MG2-14	Kyatesu	720	165	80	80	5	129,500	No	Agriculture	Livestock	2	0	No	0	0	Yes	Yes	Yes	Yes	P	PW	PW	PW	4	9	26	5						47,657	2.99%	
	MG2-15	Winkabar	2,600	580	200	320	60	98,000	No	Agriculture	Livestock	2	0	Yes	5	0	No	Yes	Yes	Yes	UW	PWS	PWS	PWS	3	7	9	1	4			2	1	43,808	4.05%	
	MG2-16	Kyatkan	478	116	30	50	36	232,000	No	Agriculture	Livestock	2	0	No	0	0	No	No	No	No	PW	PW	PW	PW	4	4	58	8						111,533	1.57%	
	MG2-17	Sudat	450	96	30	60	6	164,500	Yes	Agriculture		1	0	No	0	0	No	No	No	No	P	PW	P	PW	3	26	42	4						115,838	5.65%	
	MG2-18	Myaynialin	235	38	12	16	10	125,800	No	Agriculture		2	0	No	0	0	No	No	No	No	P	DTW	DTW	DTW	3	23	151	8						94,602	7.67%	
	MG2-19	Leikyinyoe	1,500	297	80	154	63	202,000	No	Agriculture		2	0	Yes	26	0	No	Yes	Yes	No	DTW	DTW	DTW	DTW	3	25	31	7				1		45,710	3.90%	
	MG2-20	Laytinesin	2,246	597	200	320	77	186,500	No	Agriculture	Livestock	2	0	Yes	11	0	Yes	No	No	Yes	P	DTW	DTW	DTW	0	14	26	5			1	2			68,325	2.04%
	MG2-21	Tharmyar	3,211	571	200	300	71	217,000	No	Agriculture	Livestock	2	0	Yes	10	0	No	Yes	Yes	Yes	P	DTW	DTW	DTW	3	44	49	9						67,997	2.62%	
	MG2-22	Ayaungmyintha	1,260	197	100	65	32	174,000	No	Agriculture	Livestock	2	0	Yes	5	0	Yes	No	No	No	P	DTW	DTW	DTW	0	38	36	9			1			28,454	3.26%	
	MG2-23	Ngwelay	910	340	100	200	40	212,000	No	Agriculture	Livestock	1	0	Yes	10	0	Yes	No	No	No	P	DTW	DTW	DTW	0	38	39	7					1		25,662	1.12%
	MG2-24	Indaw(N)	490	203	80	120	3	100,000	No	Agriculture	Livestock	1	0	Yes	5	0	Yes	No	No	No	P	P	PW	PW	4	10	230	10								2,149
	MG2-25	Htanaungkwin	1,528	228	90	110	28	100,000	No	Agriculture	Livestock	1	0	No	0	0	Yes	No	No	Yes	P	P	DTW	DTW	3	17	19	10							46,439	
	MG2-26	Manowtgone	795	182	70	100	12	100,000	No	Agriculture		1	0	No	0	0	No	Yes	Yes	No	P	P	UW	UW	3	10	230	10							100,861	3.87%
	MG2-27	Kangyigone	350	65	20	30	15	242,000	Yes	Agriculture		1	0	No	0	0	No	Yes	Yes	No	STW	STW	STW	STW	0	42	56	7	1						57,353	3.47%
	MG2-28	Htonepouthchin	2,050	380	100	220	60	229,000	No	Agriculture		2	0	No	0	0	No	No	No	Yes	DTW	DTW	DTW	DTW	0	22	41	5	4							2,099
	MG2-29	Padaukgote	1,248	300	60	200	40	181,000	No	Agriculture		1	0	Yes	7	0	No	No	No	No	P	P	PW	PW	0	35	78	8				1				
	MG2-30	Sellel	2,000	360	100	200	60	100,000	No	Agriculture		1	0	No	0	0	Yes	No	No	Yes	PW	PW	PWS	PWS	0	15	60	4	3	1						
	MG2-31	Podaukgone	820	152	40	100	12	100,000	No	Agriculture		1	0	No	0	0	Yes	No	No	No	P	P	PW	PW	4	10	230	10								
	MG2-32	Ywartharlay	410	81	30	40	11	178,300	No	Agriculture	Livestock	1	0	Yes	10	0	Yes	No	No	No	P	P	PW	PW	4	45	39	6							51,526	
	MG2-33	Wayonegone	727	150	40	90	20	191,750	No	Agriculture	Livestock	2	0	Yes	5	0	No	No	No	No	US	P	P	P	4	57	81	8	1						40,889	2.24%
	MG2-34	Nyaunggone	1,200	312	100	190	22	100,000	No	Agriculture		1	0	No	0	0	No	No	No	Yes	P	P	PW	PW	0	10	230	10							114,469	3.41%
	MG2-35	Kyugyaung	550	90	30	50	10	108,444	No	Agriculture		1	0	No	0	0	No	No	No	No	STW	STW	STW	STW	0	24	66	6							76,968	8.80%
	MG2-36	Ko kkohla	904	220	70	120	30	136,500	No	Agriculture		3	0	No	0	0	Yes	No	No	No	DTW	DTW	DTW	DTW	0	10	10	4	1						56,872	4.70%
	MG2-37	Kangyigone	1,100	235	150	60	25	260,500	No	Agriculture		3	0	No	0	0	Yes	No	No	No	PW	DTW	UW	DTW	3	16	62	3							106,768	1.82%
	MG2-38	Htaukkyantgwin	1,539	270	100	100	70	126,000	No	Agriculture		2	0	No	0	0	No	No	No	No	P	STW	STW	STW	0	10	230	4							53,532	7.06%
	MG2-39	Hlebwegyi	543	190	70	100	20	132,000	No	Agriculture	Livestock	2	0	No	0	0	No	No	No	No	PW	STW	PWS	STW	0	64	85	5	1						58,089	3.38%
	MG2-40	Yayhtwetgyi	655	137	55	55	27	122,000	No	Agriculture	Livestock	2	0	No	0	0	No	No	No	Yes	STW	STW	STW	STW	0	48	76	4			1				4,841	3.97%

☐ : Villages dropped out from evaluation procedures

Notes: P=Pond, US=Unprotected Spring, UW=Unprotected Well, PS= Protected Spring, PW=Protected Well, DTW=Deep Tube Well, STW=Shallow Tube Well, Fetching Time 0 minute was observed in some target villages where public taps were available near sample households. However, the demand of quality and quantity of water was obviously confirmed (ref. Appendix 5.1)

Appendix 5.8 Breakdown of the Cost to be Borne by the Myanmar Side

The cost to be borne by the Myanmar side is described in 3.5.2 of Clause 3.5 in Chapter 3. The operation and maintenance cost for the procured equipment is also described in 3.5.4 in the same Chapter. They are shown in Table 1 and Table 2, respectively.

Table 1 The Cost to be Borne by the Myanmar (Same as Table 2.5.1)

Item	Cost (x10 ³ MMK)
A. Cost for the First Year	
1) B/A and A/P	11,446
2) Deep Well Drilling	162,500
3) Construction of Water Supply Facility	268,300
4) Maintenance of the procured equipment	25,075
5) Travel allowance and expense for attending the soft component	3,500
6) Water Quality Analysis	356
Total for the First Year ①	471,177
B. Cost after the First Year	
1) Deep Well Drilling	162,500
2) Construction of Water Supply Facility	268,300
3) Maintenance of the procured equipment	25,075
4) Water Quality Analysis	356
Total for each Year after the First Year ②	456,231
Total after the First Year ③ = ② × 4	1,824,924
Grand Total for 5 Years ① + ③	2,296,101

Table 2 Operation and Maintenance Cost for the Procured Equipment (Same as Table 2.5.2)

Item	Number	Cost per Unit	Annual Cost
Drilling rig	2	1,875,000	3,750,000
Cargo truck with crane	2	5,500,000	11,000,000
Air compressor	2	625,000	1,250,000
Submersible pump	4	150,000	600,000
Generator ^(*)	1	625,000	625,000
Logging machine	2	150,000	300,000
		Total	17,225,000

1. CONSTRUCTION COST FOR DEEP WELLS

The cost for drilling of 100 deep wells planned in the project is estimated assuming 200 deep wells are drilled in each year during five (5) years.

The drilling cost for 2016/2017 fiscal year described in the DRD's document is applied for estimation of the drilling cost without consideration of inflation rate. Sum of the cost for drilling of seven (7) deep wells including installation of pumps in 2016/2017 fiscal year is,

$$48.5764 + 8.2950 = 56.8714 \text{ (million MMK)}$$

Accordingly, the cost for one (1) deep well becomes,

$$(48.5764 + 8.2950) \div 7 = 8.124 \text{ (million MMK/well)}$$

Appendix 5. Other Relevant Data

Since 20 deep wells will be drilled in one(1) year, the total cost for one (1) year is,

$$8.124 \times 20 = 162.48 \text{ (million MMK)} \approx 162,500 \text{ (thousand MMK)}$$

For the calculation of the unit cost for well drilling, the cost described in the document of the DRD is adopted without consideration of inflation. Since the sum of the drilling cost (48.5764 million MMK) for seven (7) wells to be drilled in 2016/2017 and the installation cost of pumps (8.2950million MMK) is 56.8714 million MMK, the construction cost for a well is 8.124 million MMK. The DRD will construct 20 wells every year, therefore, the annual construction cost of wells is 162.48 million MMK ($\approx 162,500$ thousand MMK).

2. CONSTRUCTION COST FOR WATER SUPPLY FACILITY

According to the document which describes the construction cost for 120 water supply facilities including drilling of wells, construction of pump houses and water supply tank, etc. is 2,587.83million MMK. Accordingly, the construction cost for 20 water supply facilities is 431.31 million MMK.

The construction cost for pump houses and water supply tanks is led by deducting the construction cost of wells described in 1. above from 431.31 million MMK.

$$431.31 - 162.48 = 268.83 \text{ million MMK} \approx 268,880 \text{ thousand MMK}$$

3. OPERATION AND MAINTENANCE COST FOR THE PROCURED EQUIPMENT

The cost for operation and maintenance for the procured equipment is shown in (1) to (6) below. However, the part of the equipment to be maintained and spare parts to be replaced often largely changes according to the actual using condition of the equipment. Large difference between the cost described in this report and the actual cost can be happened even if the detailed operation and maintenance cost is estimated at present. Therefore, it is desirable for the DRD to up data the cost considering the actual cost which will be happened after procurement.

(1) Drilling Rig

Table 2 shows the operation and maintenance cost for the drilling rigs. The rigs will not move from the drilling site up to the completion of the drilling work once those are mobilized to the drilling site. Therefore, the maintenance is mainly changing of spare parts for mud pumps which most gall, and maintenance of vehicles which mount the rigs.

Table 3 Operation and Maintenance Cost for Drilling Rigs

Item	Unit Price (MMK)	Quantity	Unit	Total (MMK)	Note
Packing for mud pump	255,000	12	piece	3,060,000	Change 4 pieces (1 set) every 4 months
V-belt for mud pump	4,500	16	piece	72,000	Change 16 pieces (1 set) every year
Hydraulic oil	500	1,800	L	900,000	Change 300L every 2 months
Tire	480,000	2	piece	960,000	Change 10 pieces every 5 years (allocate the cost for 2 pieces every year)

Item	Unit Price (MMK)	Quantity	Unit	Total (MMK)	Note
Engine oil	3,500	60	L	210,000	
Air filter	160,000	1	piece	160,000	
Element set/Oil filter	85,000	1	piece	85,000	
Gasket/Oil filter	55,000	1	piece	55,000	
Differential oil filter	24,000	1	piece	24,000	
Fuel filter	95,000	2	piece	190,000	
Miscellaneous	84,000	1	lot	84,000	
Total				5,800,000	

(2) Cargo Truck with Crane

Table 3 shows the maintenance cost for the cargo truck with crane. The truck will repeatedly drive long distance carrying heavy materials on the rough road except for the main load. Therefore, tires will be easily worn away. Other major maintenance cost is changing of fuel oil and filters such as air filter, oil filter etc.

Table 4 Maintenance Cost for Cargo Truck with Crane

Item	Unit Price (MMK)	Quantity	Unit	Total	Unit Price (MMK)
Tire	480,000	5	piece	2,400,000	Change 10 pieces every 5 years (allocate the cost for 2 pieces every year)
Engine oil	3,500	180	L	630,000	
Air filter	160,000	4	piece	640,000	
Element set/Oil filter	85,000	12	piece	1,020,000	
Gasket/Oil filter	55,000	2	piece	110,000	
Differential oil filter	24,000	2	piece	48,000	
Fuel filter	95,000	6	piece	570,000	
Miscellaneous	82,000	1	lot	82,000	
Total				5,500,000	

(3) Air Compressor

Table 5 shows the maintenance cost for air compressor. The cost is composed mainly of changing of engine oil and air filter.

Table 4 Maintenance Cost for Air Compressor

Item	Unit Price (MMK)	Quantity	Unit	Total
Engine oil	4,500	80	L	360,000
Air filter	250,000	1	piece	250,000
Miscellaneous	15,000	1	lot	15,000
Total				625,000

(4) Submersible Pump

The maintenance cost for submersible pump is 150,000 MMK since it is enough for the maintenance to wash well and put grease well.

(5) Generator

Table 6 shows the maintenance cost for the generator. The cost is composed mainly of changing of engine oil and air filter.

Table 4 Maintenance cost for Generator

Item	Unit Price (MMK)	Quantity	Unit	Total
Engine oil	3,500	13	L	45,500
Air filter	210,000	2	piece	420,000
Fuel filter	60,000	2	piece	120,000
Miscellaneous	39,500	1	lot	39,500
Total				625,000

(6) Well Logging Machine

The maintenance cost for well logging machine is 150,000 MMK since it is enough for the maintenance to wash well and put grease well.

4. COST FOR PARTICIPATION IN THE SOFT COMPONENT

The cost for participation in the soft component is estimated based on the discussion with the DRD. The number of attendant is 15 persons in total, 3 persons from the Headquarters and 4 persons each from Sagaing, Mandalay and Magway regions, for well logging technique and pumping test technique. The total period of the soft component is 1 month each. Therefore, the cost for participation is as follows.

Participation cost for 1 soft component program

Allowance: 3,000 MMK/person/day x 15 persons x 30 days = 1,350,000 MMK

Transportation: 15,000 MMK/person x 15 persons = 225,000 MMK

Total: 1,575,000 MMK/program

The soft component program is held 2 times, therefore,

1,575,000 MMK/program x 2 programs = 3,150,000 MMK

Contingency

350,000 MMK

Therefore, the total cost is 3,500,000 MMK.

5. COST FOR WATER QUALITY ANALYSIS

The cost is composed of 1 time of analysis cost at the completion of the drilling work and the transportation fee for the samples. Table 7 shows the price of agent necessary for water quality analysis of 100 samples. The DRD will analyses the 20 samples a year. Therefore, 20% of the total cost shown in Table 7 is allocated.

Table 7 Price of Agent for Water Quality Analysis of 100 Samples

No.	Parameter	Contents	Price (Yen)	Quantity	Total (Yen)
1	Arsenic (As)	For 100 samples	13,600	1	13,600
2	Hardness	For 40 samples	4,600	3	13,800
3	Fluoride (F)	For 40 samples	4,600	3	13,800
4	Nitrate (NO ₃)	For 30 samples	4,600	4	18,400
5	Iron (Fe)	For 30 samples	4,600	4	18,400
6	Chloride (Cl)	For 50 samples	4,600	2	9,200
Total					87,200

Cost for the Agent for 1 year: 87,200 Yen x 20% = 17,440 Yen \approx 156 thousand

Transportation cost from the site to Naypyitaw: 10,000 MMK/sample

Total transportation cost for 1 year: 10,000 MMK x 20samples = 200 thousand MMK

Therefore, the annual cost for water quality is 156 + 200 = 356 (thousand MMK).
