Well Development Form

Project: Casmalia RI

Personnel: Ray WDC

Well No. MW-1

Date: 11/19/04

2' Stick up ~~Aprox. Casing Volume 10.6 gal~~ WDC 1 of 1

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
4:00	14.82	0							Depth 37.5'
9:20	22.60	20	>1000	7.02	22.1	11.45 mS	2.05	233	
9:30	29.21	50	609	7.15	20.8	12.38	5.79	018	
9:40	29.30	60	61.3	6.72	21.9	12.35	4.61	-016	
9:45	30.0	70	26.1	7.07	20.8	12.32	5.02	-001	
9:50	30.0	75	25.9	7.10	19.5	12.39	5.45	009	

1 WV = 11.5 Gal

6.5 well volumes purged

B18848-CP

Well Development Form

Project: Casmalia RI

Personnel: Ray WPC

Development Method Small Kis

Well No. MW-2

Date: 12/8/04

1 of 3

~~Casing Volume 4.26 gal~~

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
10:00	35.43'	0							TD 42.52' TOC
10:10	38.04	4.5	>1000	6.55	17.6°	10.19	2.69	209	
10:20	41.75'	9	>1000	6.64	17.7°	10.17	2.91	272	
10:30	42.50	9.5	>1000	6.68	17.8°	10.21	4.17	252	

1 well volume = 7.6 gal

Total Gallons Removed 9.5

2.1 well volumes removed

Well Development Form

Project: Carmatra RI

Personnel: Ray WDC

Development Method: Smeal Rig

Well No. MW-2

Date: 12/14/04

TD 42.52 WL 40.65 → 1 vol = ~~1.1 gal~~ 1.2 gal

2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
8:40	41.60'	1	>1000	6.41	16.2°	10.55	4.81	-003	
8:50	42.00'	2	>1000	6.56	17.0°	10.57	2.15	-029	

Total Gallons Removed 11.5 gal

2.5 well volumes

Well Development Form

Project: CSC - RIFS

Personnel: WDC

Development Method: Bailer

Well No. MW-2 THIRD VISIT

Date: 12/22/04

3 of 3

TD (42.55') 40.65' → 1 vol = 1.2 gal

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate~~ gpm	Observations
7:40		1.	113	6.51	15.3°	10.78	18.3	033	
7:50	42.00	1.25	234	6.56	16.2°	10.62	23.4	028	

Total Gallons Removed: 12.75 Gal

2.77 well volumes

WL = 4.95
TD = 42.0'

Well Development Form

10 Well Volumes =
1020 Start surging

Job Number:

Project: Casmalia L.F

Development Method Surge, Bail, Pump

Well No. RIMW - 2

Personel: D. Browne . S. Tucker

Date: 3/7/05

Time	Depth to water ft.	Gallons Removed	Turbidity (Ntu)	ph	Temp C	Electrical Conductivity	D.O. mg/liter	Redox Mv	Recovery Rate Inches/min.	Recovery Rate gpm	
1045	4.95	Initial	>1000	5.8	18.7	12.37 ms	69.8	1.10			Start bailing
1100	10.62	10	>1000	6.14	19.1	12.87 ms	74.0	1.12			
1115	20.19	20	670	6.31	19.5	13.20 ms	0.75				Start pumping - Pump set to 40' @ 2 gpm
11:32	26.18	40	532	6.35	20.2	13.50 ms	0.83				
1140	30.05	60	73.0	6.38	20.2	13.58	1.29				
1150	34.57	80	294	6.40	21.5	13.94	1.28				1½ 1.5 gpm
1200	40.28	100	151	6.47	20.5	13.91	4.24				DRY @ 100 gallons
0730	5.03	Initial	182	6.14	12.6	11.51	5.01				Day 2 - WL = 5.03
0750	22.5	20	1.51	6.12	17.0	12.29	1.17				pump set to 41' @ 2 g/min
0800	27.5	40	54.1	6.25	18.2	13.02 ms	1.20				
0810	33.8	60	4.34	6.31	18.5	13.34 ms	4.01				
0825	39.1	~~75~~ 90	3.31	6.27	18.5	13.41 ms	4.16				
0835	Dry	100	10.4	~~10.4~~ 6.40	18.9	13.57	4.21				

Total Gallons Removed:

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Well Development Form

Project: CSC-RIFS

Personnel: WDC

Development Method SURGE + BAIL

Well No. MW-3 - FIRST VISIT

Date: 12/16/04

TD 32.6' WL 12.98' → 1 vol = 9.6 gal

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
		NO PARAMETERS TAKEN - PRODUCT - 38 GAL BAILED.							BAILED DRY @ ≈ 300 hr
			71000						BAILED DRY @ ≈ 18 ?

1 WV = 9.56 gal

Total Gallons Removed 30

3.2 WV

Well Development Form

Project: CSC-RIFS-ARCH

Personnel: RAY THEIS - WDC

Development Method BAIL

Well No. RIMW-3 - SECOND VISIT

Date: 12/17/04

TD 32.6, WL 10.10, 4" ϕ, 1 VOL = 9.5 GAL

2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
0755	18.10	i	NO PARAMETERS TAKEN - PRODUCT						
0830	31.80	30	71000						BAIL DRY @ 30 GAL 3.2 VOL

Total Gallons Removed 60 Gal

6 VV

Well Development Form

Project: CSC-RIFS-ARCH

Personnel: RAY THETS - WDC

Development Method BAIL

Well No. RIMW-3 (THIRD VISIT)

Date: 12/20/04

3 OF 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
1000	DTP - 17.40 DTW - 17.92	0	> 1000						
1030	31.7 - NO PRODUCT	30 GAL	> 1000						BAIL DRY @ 30 GAL
			SILTY GREY-BROWN WATER WITH DARK BROWN FLOATING PRODUCT.						
			MILDLY TURBID. SEDIMENT-FREE						

Total Gallons Removed 30 90 Gal

6.6 well volumes

Well Development Form

Project: Camelia RI

Personnel: Ray WBC

Well No. MW-5

Date: 12/2/04

~~Casing volume~~ 4.6 gal WC

1 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
8:30	54.48'	0							TD 62.20' TOC
9:00	58.64'	5	>1000	7.12	16.7°	4095	4.67	018	
9:20	61.85'	10	>1000	7.08	18.1°	4120	3.68	012	

1 well volume = 5.0 gal

2 well volumes

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Well Development Form

Project: Carmelia RI

Personnel: Ray WDC

Development Method: Small Rig

Well No. MW-5

Date: 12/13/04

TD 62.20' WL 59.50' → 1 vol = ~~1.6~~ 1.8 gal AHH

2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
2:30	59.50	0							
2:35	60.51	1.5	>1000	7.06	20.4°	4437	3.23	005	
	61.85	3.0	>1000	6.99	18.9°	4429	2.47	000	

Total Gallons Removed 13 gallons

2.6 well volume

Well Development Form

Project: CSC-RIPS

Personnel: W.D.C

Development Method bailer

Well No. MW-5 THIRD VISIT

Date: 12/22/04

TD 62.20' WL 60.44 → 1 vol = 1.1 3 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox Recovery Rate gpm	Observations
8115		1.	>1000	6.94°	15.9°	4505	11.9	-002	
8:29		1.	>1000	6.84°	17.3°	4407	28.3	004	
8:33	61.58	1.2	>1000	6.84	17.7°	4448	35.3	-006	

Total Gallons Removed 14.2 Gallons

2.84 well volumes

TD 61.7'
1 well volume 3.13 gallons
10 volumes 31 gal

0920 Start Surging

Well Development Form

Project: Casmalia LF Development Method ~~Surge~~/Bail + Pump Well No. ~~MW~~ RIMW-5

Personel: D. Browne S. Tucker Date: 3-4-05

Time	Depth to water ft.	Gallons Removed	Turbidity (Ntu)	ph	Electrical Conductivity	D.O. mg/liter	Redox Mv	Recovery Rate Inches/min.	Recovery Rate gpm	Temp
0900	56.89	3	7100	6.37	4398 uS	2.74				18.6
0										

Total Gallons Removed: _____

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Well Development Form

Project: Columbia RI

Personnel: Ray WDC

Development Method SM-1 RI

Well No. MW-6

Date: 12/14/04

TD 72.56 WL 72.35

1 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
3:00	72.40	.5	>1000	6.68	23.5	5.07	1.05	005	

1 WV = 0.145-1

Total Gallons Removed 0.5 g-1

3.6 well volumes

Well Development Form

Project: CSC - RIFS

Personnel: WDC

Development Method _____

Well No. MW-6

Date: 12/20/04

TD 72.57 1 vol = .33 2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate~~ inches/min	Redox Recovery Rate gpm	Observations
2:50		.25	>1000	5.93	23.2°	5.62	24.4	-035	

Total Gallons Removed 0.755-1
5 gal

Well Development Form

Project: CSC - RIFS

Personnel: WDC

Development Method

Well No. MW-6 THIRD VISIT

Date: 12/22/04

TD 22.56' WL 72.34' → 1 vol = .1 gal

3 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
8:50	72.37	10 mL	INSUFFICIENT VOLUME FOR PARAMETER READINGS						
			BAILED DRY @ 10 mL						
			>1000, VISUAL ONLY.						

Total Gallons Removed 0.78 gal

5.6 WV

Well Development Form

Project: Cosmetic R1

Personnel: Ray WQC

Well No. MW-7

Date: 12/2/04

Casing volume 8.75 gal WTK

1 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
1:00	63.10'	0							TD 77.75'
1:30	65.00'	9	513						
1:35	69.00	18	721						
1:40	72.60	26	>1000						
1:50	75.50	35	>1000						

1 WV = 9.6 Gal

3.6 WV removed

B18848-CP

Well Development Form

Project: Cumulus RI

Personnel: Ray WPC

Development Method Small Rig

Well No. MW-7

Date: 12/7/04

8.9 gal

2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate Inches/min	Recovery Rate gpm	Observations
1:00	63.13'	0							
1:40	65.74	9	230						
1:50	69.53	18	271						
2:00	75.70	27	281						
2:10	76.0	33	251						

Total Gallons Removed 68

7.1 well volumes

DONE

Well Development Form

Project: Cosmelli RI

Personnel: Ray WOC

Development Method Small Rig

Well No. MW-7 — THIRD VISIT

Date: 12/13/04

TD 77.75' WL 63.23 → 1 vol = ~~6.7 gallons~~ 9.4 gallons

3 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
4:00									
4:30	67.25'	9	46.5						
4:35	70.88	18	69.5						
4:45	74.72	27	57.4						
4:50	76.35	32	74.3						3.4 VOC

Total Gallons Removed 100 Gallons

10.4 well Volumes

Well Development Form

Project: Casmalia RI

Personnel: Ray WDC

Development Method: Small Rig

Well No. MW-8

Date: 12/7/04

1 of 3

~~Casing Volume 9.4 gal~~ WDC

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
10:00	51.75'	0							TD 67.40'
10:25	55.14	5	>1000	6.63	15.8°	3278	1.82	022	
10:30	61.59	15	>1000	6.73	16.7°	3332	3.89	013	
10:[illegible]	68.[illegible]								

IWV = 10.2 Gal

Total Gallons Removed 15 gallons

1.5 Well Volumes

Well Development Form

Project: Carmalia RI

Personnel: Ray WDC

Development Method Small RI

Well No. MW-8

Date: 12/14/04

TD 67.40 WL 53.42 → 1 vol = 9.2 gal ok ✓

2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
10:45	60.87	9	>1000	6.40	22.7°	3263	3.24	-079	
11:00	66.67	18	>1000	6.55	19.4°	3090	3.04	-060	

Total Gallons Removed 33 Gallons

3.2 well volumes

Well Development Form

Project: CSC-RIFS

Personnel: WDC

Development Method

Well No. MW-8 - THIRD VISIT

Date: 12/22/04

TD 67.43 WL 53.20' → 1 vol = 9.3 gal 3 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate~~ inches/min	Redox ~~Recovery Rate~~ gpm	Observations
9:50		1	121	6.22	18.8°	3063	12.0	-203	
9:55	56.55'	4.5	253	6.18	18.6	3172	10.2	-207	
10:03	61.05'	9.5	>1000	6.27	18.3	3165	15.4	-195	
10:07	63.28'	14.5	>1000	6.26	18.2	3070	16.5	-186	
10:15	67.15'	19.0	>1000	6.46	17.8	3067	31.5	-146	DRY @ 19 GAL ~ 2 VOL

Total Gallons Removed 52 gallons

5 1 well volumes

WL= 38.92
TD= 66.9

Well Development Form

Project: Cosmalia LF 475409100.15.1 Development Method Surge/Bail/Pump Well No. RIMW-8

Personel: D. Browne S. Tucker Date: 3-4-05

Time	Depth to water ft.	Gallons Removed	Turbidity (Ntu)	ph	Electrical Conductivity	D.O. mg/liter	Redox Mv	Recovery Rate Inches/min.	Recovery Rate gpm	Temp
~~1050~~ 1150	38.92	Initial								START Surging
1115	38.92	↓	>1000	6.5	24.4 uS	0.92	115.5			21.9 strong sulfur odor
1128	47.75	10	>1000	6.65	2906.	0.92	-280.2 MV			18.9 start pumping from 62' @ 2gpm
1133	50.50	20	>1000	6.68	2894 uS	0.60	282.5			19.0
1138	58.2	30	>1000	6.76	2921 uS	1.20	252.5			19.3
~~1150~~ 1150	62.0	40	>1000	6.77	2933 uS	0.65	-278			19.9
1200	lower	pump	to	65.5'					start	pumping
1207	DRY	@	40	gallons						

Total Gallons Removed: _____

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WL = 38.3
TD = 66.9

Well Development Form

Job Number: _____

Project: Casmalia LF Development Method: Pump Well No.: RIMW-8

Personel: D. Browne S. Tucker Date: 3/8/05

Time	Depth to water ft.	Gallons Removed	Turbidity (Ntu)	ph	Temp C	Electrical Conductivity	D.O. mg/liter	Redox Mv	Recovery Rate Inches/min.	Recovery Rate gpm	Dry 2 - Pump set to 65' @ 2gpm
10.17	38.3	initial	32.1	5.6	15.6	6.27 ms	4.02			1.5	initial @ 2 gpm
10.27	54.2	20	7.64	6.41	19.3	3300 ms	1.16				Slight Sulfur odor
10.37	61.9	35	85.7	6.11	20.1	3317 ms	0.68				DRY @ 40 gallons

Total Gallons Removed: _____

MACTEC

Reviewed by _____

Well Development Form

Project: Carmelia RI

Personnel: Ray WPC

Development Method: Small Rig

Well No. MW-9

Date: 12/6/04

~~Casing Volume 9.14 gal~~ WPC

1 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
3:20	50.75'	7		9.20					TD 66.05' TOC
3:30	51.33'	12	>1000	9.30	17.4	3239	6.83	026	
3:45	52.48	17	>1000	9.50	17.8	3300	7.54	-006	
4:00	60.25	27	>1000	9.55	17.6	3285	6.54	-006	
4:10	65.10	34	>1000	9.26	17.6	3256	7.30	-014	

1 WV = 10.0

Total Gallons Removed 34 gal 3.4 well volumes

Well Development Form

Project: Cymalia RI

Personnel: Roy WPC

Development Method: Smeal RI

Well No. MW-9

Date: 12/8/04

~~Casing volume 8.49 gal~~ WV

2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate~~ ~~inches/min~~	Redox ~~Recovery Rate~~ ~~gpm~~	Observations
11:10	51.90'	0							TD 66.05'
11:20	55.29	5	461	9.22	17.9°	3466	5.60	018	
11:30	58.90	10	>1000	9.23	18.4°	3477	6.13	092	
11:45	62.80'	15	>1000	9.11	18.6°	3451	5.46	088	
12:10	65.50	18	>1000	9.12	18.5	3414	4.97	087	

Total Gallons Removed 52 Gal

5.2 WV

Well Development Form

Project: Casmalia RI

Personnel: Ray WDC

Development Method: Smeal Rig

Well No. MW-9

Date: 12/10/04

3 of 3

Casing Volume 5.46 gal.

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO Recovery ~~Rate~~ inches/min	Redox Recovery ~~Rate~~ gpm	Observations
9:45	56.85'	0							TD 66.05'
9:55	62.35'	5.5	755	8.26	24.6°	3431	4.74	-010	
10:15	64.00'	8.0	252	8.29	25.5°	3476	3.88	-013	

Total Gallons Removed: ~~60~~ 60 Gal

6 Wv

WL = 48.23
TD = 65.50
10 % well Volume = 1[illegible].7

Well Development Form

Job Number: 47540.9000.1521

Project: Casmalia L.F

Development Method: Surge

Well No. RI MW-9

Personel: D. Browne S. Tucker

Bail, Pump

Date: 3/7/05

Time	Depth to water ft.	Gallons Removed	Turbidity (Ntu)	ph	Temp C	Electrical Conductivity	D.O. mg/liter	Redox Mv	Recovery Rate Inches/min.	Recovery Rate gpm	Surge from 745-815
0815	48.23	Initial	>1000	7.44	16.8	3347 us	1.76	21.2			Start bailing
0830	47.93	11	645	10.39	16.9	3532 us	2.51	19.8			
0845	48.57	20	379	10.53	17.8	3484	2.84	2.36			
0858											Start pump 1y: pump @ 63.5' @ 2 gpm
0910	56.06	40.0	19.1	7.38	18.4	3612 us	2.55	55.8			
0920	62.1	60.0	295	8.35	18.0	3582	2.26	55.6			Dry @ 60 gallons - wait for Recharge
0930	50.62	Initial	772	6.48	16.5	3918 us	3.39				Day 2 pump set to 64' @ 2 gpm
0940	59.3	20	11.9	7.63	18.2	3681 us	3.75				
0950	DRY	40	76.4	7.70	18.7	3709	2.80				DRY @ 40 gallons

3/8

Total Gallons Removed: 160

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Well Development Form

Project: Casmalia - R1

Personnel: Ray WDC

Well No. PZ-2

Date: 11/19/04

2.40' stick up ~~Well Volume 4.8 gal~~ WP 1 of 2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	~~Recovery Rate~~ D.O inches/min	~~Recovery Rate~~ Redox gpm	Observations
11:30	36.02	0	>1000						Depth 52.55
1:20	36.80	1	|	7.02	20.0°	4490 µS	3.81	048	
1:50	37.45	4	|	6.40	18.4	4239	2.53	056	
2:20	39.76	13	|	7.64	18.4	4165	2.70	060	
2:45	39.51	22	|	7.41	18.5	4691	2.97	-098	

1 WV = 2.7 gal

8.1 well volumes purged

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Well Development Form

Project: Cornell's RI

Personnel: Ray WDC

Development Method: Small Rig

Well No. PZ-2

Date: 11/30/04

2 of 2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
11:30	36.23'	0							
11:50		4.8	397	6.69	19.4°	3970			
12:00	40.03'	9.6	>1000	6.71	19.6°	4340			
12:05	41.95'	14.4	>1000	6.64	19.4°	4297			
12:10	42.59'	19.2	>1000	6.64	19.6°	4367			
12:20	43.70'	24.0	145	6.72	19.0°	4335			
12:30	44.47'	28.8	139	6.69	20.6°	4361			
12:40	45.00'	33.6	137	6.68	20.4°	4347			

Total Gallons Removed 55.6

20.6 well volumes

Well Development Form

Project: Camelia R.I.

Personnel: D. Browne

Well No. B1 PB - 3

Date: 11/17/09

SL = ? TD = 32.7 1 of 2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. Recovery Rate inches/min	Redox Recovery Rate gpm	Observations
1045	22.95	Initial	53.6	6.43	19.5	8.68 ms	0.53	52.5	
1245	Dry	1 lt	> 1000	6.53	19.8	8.41	0.07	88.9	
11/18 0945	28.74	¼ lt	> 1000	6.22	19.4	8.66	0.65	62.5	dry
11/18 1945	~~27.0~~	¼ Lt	> 1000	6.31	19.1	8.02	0.52	45.8	
12/6/09	28.50	¼ lit	> 1000	6.42	18.9	8.45	0.40	65.8	dry

1.75 liters purged 1 WV = 0.39 l

4.5 Well volumes purged

B18848-CP

Well Development Form

Project: A U HENKE

Personnel: CSC - RIFS - CPT

Development Method SURGE & BAIL
BAIL USING TEFLON BAILER

Well No. RIPZ-3

Date: 12/15/04

2 of 2

Time	Depth to Water (ft)	~~Gallons~~ Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. ~~Recovery Rate~~ inches/min	ORP ~~Recovery Rate~~ ~~gpm~~	Observations
0750	26.22	(							
0800		200 ml	335	6.58	17.2	9.24 mS	1.77 mg/l	-156 mV	
0810		400 ml	>1000	6.81	17.2	9.24 mS	2.20 mg/l	-146 mV	
0815	29.67	430 ml	DRY						TD 29.8
0845	29.52								

Total Gallons Removed 430 ml

Well Development Form

Project: Cosmalur

Personnel: D. Brown

Well No. RIPZ-4

Date: 11/18/04

1 of 2

TD = 35.30

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O Recovery Rate inches/min	Redox Recovery Rate gpm	Observations
1000	33.38	Initial	25.7	6.66	19.9	4.90 mS	3.00	-20.8	dry @ 120 ml
11/19/1445	34.01	1/8 gl	>1000	6.52	19.2	3.82	2.97	-19.5	dry
12/6/04	34.92 Not enough	1/4 gl	water	for	parameters				1/4 liter pumped

0.08 = 1 wv Gal

0.5 Liter total this page

= 1.7 Well volumes this page

B18848-CP

Well Development Form

Project: CSC - RIFS - CPT

Personnel: A. H. HENKE

Development Method SURGE + BAIL

BAIL USING TEFLON BAILER

Well No. RIP2-4

Date: 12/15/04

2 of 2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	ORP ~~Recovery Rate inches/min~~	D.O. ~~Recovery Rate gpm~~	Observations
0820	32.20	i							
0825		150 ml	290	6.53	16.8	9.10 mS	-198 mV	1.80 mg/l	
0830		300 ml	195	6.61	17.3	10.24 mS	-186 mV	2.60 mg/l	
0840		400 ml	254	6.68	16.9	10.25 mS	-140 mV	3.10 mg/l	
0845	35.05	DRY @ 400 ml							
0900	34.85								TD 35.4

Total Gallons Removed 400 ml

Well Development Form

Project: Cumana LI

Personnel: Ray WDC

Well No. RIPZ-5

Date: 11/15/04

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. ~~Recovery Rate inches/min~~	Recovery Rate gpm	Observations
2:27	42.50	0							TD = 63.23
2:30	42.88	.5		6.09	20.0°	3755	3.57		
2:45	43.85	1.5		6.39	17.0°	3752	5.50		
3:05	44.70	4.5		6.26	17.4°	4183	4.60		
3:15	44.65	5.5		6.44	17.6°	2078	4.80		
3:25	43.95	7.5		6.42	17.6°	2143	4.58		
3:30	44.86	9.5		6.54	17.5°	2143	4.58		
3:38	44.31	11.5		6.26	17.7°	4308	4.60		
3:48	45.90	16.5		6.38	17.3°	4412	4.56		
4:00	44.90	21.5		6.30	17.2°	2441	5.71		
4:20	44.10	26.5		6.21	17.5°	4350	4.95		
4:30	43.74	31.5		6.32	17.1°	4535	4.50		

1 WV = 3.5 gallons

9 Well volumes

Well Development Form

Project: Cumulis R1

Personnel: R-4 URC

Well No. PZ-5

Date: 11/30/04

~~Casing volume 6.3 gal~~

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate Inches/min	Recovery Rate gpm	Observations
9:00	42.16	0							TD 63.73' TOC
9:35		6.5	>1000	5.50	18.5°	3767	2.30	025	
9:45	44.13	13	70.3	5.56	17.13	3745	1.80	052	
9:55	43.41	19.5	54.2	5.52	18.2	3680	1.88	035	
10:10	43.23	26	51.9	5.56	18.1	3837	2.08	063	
10:35	43.45	32.5	8.13	5.58	19.3	3858	1.61	099	
10:50	43.53	39.0	8.52	5.56	16.8	3819	1.42	071	
10:58	43.	45.5	8.85	5.53	19.0	3805	1.42	065	

77 gallons

22 well volumes

B18848-CP

12/03/2004 15:33 FAX 8059375167 URS CORP 007

Well Development Form

Project: Casmalia RI

Well No. PZ-6

Personnel: Ray WDC

Development Method Small Rig

Date: 12/14/04

TD 52.70 WL 51.54 → 1 vol = .19 ✓OK

1 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
9:40	52.40'	.5	>1000	6.86	20.3°	8.67	2.75	034	
9:50	52.50'	.75	>1000	6.87	19.4°	2.34	3.85	104	

Total Gallons Removed 0.75

3.9 wv

1 wv = 0.19 Gal

0.75 gal removed

Well Development Form

Project: CSC - RIFS

Personnel: W.D.C

Development Method

Well No. PZ-6

Date: 12/20/04

TD 52.70' WL 51.89' → 1 vol = .13 gal 2 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
4:00	52.50	.5	>1000	6.69	18.7°	8.98	35.8	-040	

Total Gallons Removed 1.25 Gal

6.6 vv

Well Development Form

Project: CSC - RIFS

Well No. PZ-6 THIRD VISIT

Personnel: WBC

Development Method

Date: 12/22/04

TD 52.70 LW 52.25 → 1 vol .07

3 of 3

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gem~~	Observations
8:00	52.65'	200 mL	>1000	7.09	14.2°	8.84	25.1	-016	BAILED DRY @ 200ml

Total Gallons Removed 1.30 Gal

6.8 WV

Well Development Form

Project: CSC-RIFS

Personnel: WDC

Development Method

Well No. P2-8

Date: 12/16/04

TD 34.0' Wl 17.07' → 1 vol. = 2.8 gal

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
10:00	18.00'	3	>1000	NO PARAMETERS TAKEN — PRODUCT					
10:03	19.15	6	>1000						
10:06	20.37'	9	>1000						
10:09	22.00'	12	>1000						
10:25	31.90'	24	>1000						
10:50	32.47	34	>1000						

1 WV = 12.4 gal

Total Gallons Removed 34

2 Volumes

Well Development Form

Project: Cosmelli RI

Personnel: Ray WRC

Well No. PZ-9

Date: 11/17/04

-2.0'

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. ~~Recovery Rate inches/min~~	Redox ~~Recovery Rate gpm~~	Observations
8:00	46.61'	Ø							Depth 71.87' TOC
9:30	51.79	1	Off scale	6.80	18.3°C	4100	4.07	059	
9:50	55.17'	4	>1000	7.47	20.0°C	4179	3.41	051	
10:05	59.55'	7		7.40	18.8°C	4151	4.20	040	
10:20	64.68'	10		7.56	18.4°C	4183	4.68	034	
10:30	69.61	13		7.54	18.5°C	4229	2.50	045	
10:40	Baled Dry	15		7.33	17.9°C	4140	3.48	030	TD 71.50' TOC
11/20/04 12:00	47.13'								
12:20	59.49'	5	>1000	7.51	19.1°	4003	3.86	058	
12:45	67.60	10		7.85	18.3°	3870	4.33	060	
12:55	70.98	13		7.60	18.2	3869	3.00	067	

286 gal

B18848-CP

Well Development Form

Project: Camelot RI

Personnel: Kay WDC

Development Method Bailer

Well No. PZ-9

Date: 11/23/04

2 of 2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. ~~Recovery~~ Rate inches/~~min~~	Redox ~~Recovery~~ Rate ~~gpm~~	Observations
3:20	46.71	0							
3:39	58.57	5	482	7.56	18.0°	3776	4.61	202	
3:52	67.00	10.5	>1000	7.40	17.5°	3826	2.54	245	
4:00	69.30	12.5	>1000	7.45	17.8°	3824	2.46	187	

Total Gallons Removed 40.5

1 WV = 4.19 gal

9.9 well volumes