Well Development Form

Project: Carmel - R1

Personnel: Ray WPC

Development Method Baker

Well No. PZ-10B

Date: 11/23/09

1 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~~ gpm	Observations
8:00	75.57	0							TD 87.30' TOC
	76.60	1	>1000	6.81	19.0	6.05	0.27	-027	
10:15	82.17	4	>1000	6.84	18.4	6.19	1.29	-025	
	84.25	6	>1000	6.88	18.0	6.11	0.88	-027	

1 WV = 1.9 gal

Total Gallons Removed 6 3.2 well volumes

Well Development Form

Project: Carmalin R1

Personnel: Ray WOC

Well No. PZ-10 B

Date: 12/1/04

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
10:10	83.42	0							
10:30	85.10	1	>1000	6.86	16.7°	7.03	3.00	-016	
10:40	87.10	2	>1000	6.79	17.2	6.52	1.01	-021	

1.1 WV removed

8 6 -1

B18848-CP

Well Development Form

Project: Camelia RI

Personnel: Ray WDC

Well No. PZ-103

Date: 12/3/04

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~~ ~~ppm~~	Observations
10:00	82.61	0							
10:30	84.25'	1	>1000	6.91	17.8°	6.31	2.19	-.018	
10:45	86.48'	2	>1000	6.89	17.6°	6.64	3.01	-.020	

1.1 WV removed

10 Gallons

5.2 WV removed total

B16848-CP

12/03/2004 15:40 FAX 8059375167 URS CORP 025

Well Development Form

Project: Camelia - R-1

Personnel: Ray WPC

Development Method: Bailer

Well No. PZ-10C

Date: 11/23/04

~~Casing Volume 3.8 gal~~

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
1:06	123.91'	0							TD 137.16 TOC
2:00	126.21'	2	>1000	7.59	21.3°	7.28	1.20	094	
2:10	133.20'	6	>1000	7.05	18.7°	7.34	1.21	017	
2:15	134.42	7	>1000	7.12	18.6°	7.28	1.54	007	

Total Gallons Removed: 7

1 WV = 2.25 gal

3.2 well volumes

Well Development Form

Project: Calmet RI

Personnel: L-1 WDC

Well No. PZ-10C

Date: 12/1/04

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 ppm~~	Observations
8:30	130.82'	0							
8:40	133.74'	1.5	>1000	6.70	18.4°	8.33	2.85	-017	
8:50	136.16'	3.0	>1000	6.96	17.0	7.94	1.45	-026	

10 6-liters

B16848-CP

12/03/2004 15:38 FAX 8059375167 URS CORP 021

Well Development Form

Project: Carmelita RI

Personnel: Roy WDC

Well No. PZ-10C

Date: 12/3/04

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
12:00	129.10	0							
	132.37	1.5	>1000	6.89	17.5°	7.90	2.40	-021	
	135.59	3	>1000	6.88	17.8°	7.51	2.00	-022	

13 total
5.9 well volumes

B18648-CP

Well Development Form

Project: Cosumnes R-1 Well No. PZ-10D

Personnel: Ray WFC Development Method Bailer Date: 11/23/04

7.3 gal casing volume 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
10:45	196.72	0							TD-224.0 TOC
11:45	204.15	4.5	>1000	7.25	20.3°	8.58	4.99	118	
12:00	209.78	8.0	>1000	7.23	19.1°	8.51	3.12	051	
12:20	221.0	11.0	>1000	7.25	20.1°	8.17	3.35	028	

1 WV = 4.5 gal

2 x wet volume

Total Gallons Removed 11

Well Development Form

Project: Carmelita RI

Personnel: R-Y WAC

Well No. PZ-10D

Date: 12/1/04

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
9:15	212.50'	0							
9:25	215.53'	1	304	7.22	17.5	8.94	4.30	-010	
9:35	220.98'	3	>1000	7.12	16.6	8.76	3.89	-012	
9:45	223.50'	4	>1000	7.20	16.1	8.75	3.26	-014	

15 gallons

B18848-CP

12/03/2004 15:37 FAX 8059375167 URS CORP 018

Well Development Form

Project: Ray WDC

Personnel: Casmalia RI

Well No. PZ-10D

Date: 12/3/04

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
11:00	211.51	0							
11:20	214.30	1	405	7.15	16.9°	8.91	3.88	-013	
11:30	218.91	3	>1000	7.22	16.5°	8.75	3.79	-014	
11:40	221.50	4	>1000	7.22	16.8°	8.76	3.31	-016	

19 gallons
4.2 well volumes

B18848-CP

Well Development Form

Project: Carmelita RI

Personnel: Ray WDC

Well No. PZ-11

Date: 11/18/04

Aprox. 2.10' Stick up 7.5 gal Casing Volume 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
7:30	37.43	0							Depth 62.35 TOC
8:15	43.64	2	>1000	6.82	18.8	6.60	3.45	070	
8:40	50.04	6		7.12	18.5	6.63	3.46	045	
8:50	56.65	10		6.92	18.1	6.65	4.35	087	
9:02	60.30	12		6.97	18.2	6.57	4.51	048	TD (62.35) TOC
									11/20/04 54.95' ▽

4.1 = 1 WV

2.9 well volumes

B18848-CP

Well Development Form

Project: Carmalia RI

Personnel: Ray WPC

Well No. PZ-11

Date: 11/30/04

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
2:55	40.51'	0						~~-041~~	
3:05	49.59'	5	494	6.87	19.3°	6.77 mS	4.88	-041	
3:20	59.30	10	790	6.69	18.5°	6.71	3.21	-048	
3:30	60.30	12	>1000	6.79	17.6	6.69	3.69	-050	

24 gallons

5.9 WV

B18848-CP

Well Development Form

Project: Carmalia RI

Personnel: Ray WDC

Development Method: Smeal Rig

1 VOL = 3.2 GAL

TD 62.35', WL 42.79' → ~~1 vol = 5.7 gal~~ AMM

Well No. PZ-11

Date: 12/13/04

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
3:05	42.79'	0							
3:25	51.10'	5	498	6.76	19.8°	6.77	4.55	-002	
3:35	60.90'	10.5	540	6.80	19.4°	6.77	4.62	-026	

Total Gallons Removed 34.5 Gal

8.4 Well Volumes

Well Development Form

Project: CSC - RIFS - CPT

Personnel: A. H. HENKE

Well No. RIPZ-12

Date: 10/1/04

BAIL. 50ml SS BAILER. 1 of 2 S.I. 79-89' BGS. TD = 89 47540.9100.40.7 - CPT

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
1240	71.74								PID = 0
1245		0.25 l	>1000	6.62	20.9	335 µmhos			PID = 0
1310		1 l	>1000	6.52	21.9	355			PID = 0
1330	80.61	1.5 l	>1000	6.65.	21.5	355			PID = 0

1 WV = 20.7 Gal

0.6 well volumes

B18848-CP

Well Development Form

WL = 69.22 ,
TD = 89' 3/4" ϕ

Project: Casmalia LF
Personnel: D. Browne
Well No. RIP2-12
Date: 11/17&104

Bailer 50ml SS Bailer 2 of 2 SS = 79-89
47540.9100.40.3

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
1300 11/05	69.22	Initial	>1000	6.30	20.5	6.69 ms	3.35	6.01	PID = 0
1510	77.50	3/4 lt	>1000	6.56	20.8	6.78	2.93	53.2	well is bent 2' below grade -
@8 11/18 1315	65.2	Initial 1 Liter	268	6.40	20.1	6.22	1.45	7.02	below grade completion but well stick up
1530 11/19	75	1/2 1 liter purged 11/18	>1000	6.32	19.9	5.45	4.57	45.8	1/2" above Christy box
11/22 1215	64.80	Initial	>1000	6.25	20.4	7.58 ms	6.43	111.3	Dry @ 1/2 gall
	using air lift method on 11/22/04								

B18848-CP

Well Development Form

Project: Cumalia RI

Personnel: Ray WDC

Development Method: Small Rig

Well No. PZ-15

Date: 12/14/04

1 of 2

TD 162.14' WL 89' → 1 vol = 12.4 gal

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	~~Recovery Rate inches/min~~	~~Recovery Rate gpm~~	Observations
12:50	118.50'	12	>1000	7.31°	20.9	4048	2.85	-027	
1:20	131.55'	24	>1000	7.28°	19.6	4010	3.96	-051	
1:45	134.88	36	>1000	7.16	19.5	3995	3.91	-069	
2:00	137.25	48	>1000	7.23	19.4	3958	466	-084	

1 WV = 11.9 Gallons

Total Gallons Removed 48

4 Well volumes

Well Development Form

Project: CSC. RIFS

Personnel: WDC

Development Method: Small Rig

Well No. PZ-15

Date: 12/17/04

TD 162.30' WL 85.95' → 1 vol = ~~12.3~~ 12.4 gal. 2 of 2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	D.O. ~~Recovery Rate inches/min~~	Recovery Rate gpm	Observations
1:12	100.60'	13	16.2	6.56	23.1°	3993	11.3	-061	
2:17	100.87'	26	12.19	7.04	22.4°	3964	23.0	-103	
3:25	101.22'	39	2.31	7.02	22.0°	3903	18.7	-126	
4:30	102.51'	52	4.25	7.22	20.9°	3963	28.2	-035	
4:05	162.10'	65	3.87	7.04	19.9	3931	17.8	-077	
5:15	132.45'								

Total Gallons Removed: 113 gallons

9.5 Well volumes

Well Development Form

Project: Carmelia RI

Personnel: Ray WDC

Development Method _____

Well No. PZ-16

Date: 12/9/04

Casing Volume 23 gal

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
12:00	72.55	0							TD 152.05 TOC
1:50	122.56'	23	>1000	7.19	18.9°	5.86	4.12	-009	
2:30	146.15'	46	>1000	7.19	18.0°	5.77	6.13	-021	
2:50	148.00'	58	>1000	7.28	18.1	5.77	6.36	-011	

Total Gallons Removed 58

1 WV = 13 Gal

4.5 WV removed

Well Development Form

Project: CSC-RIFS

Personnel: WDC

Development Method

Well No. PZ-16

Date: 12/19/04

TD 152.05' WL 71.48' → 1 vol. = 13-14 gal 20w2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate~~ inches/min	Redox ~~Recovery Rate~~ ppm	Observations
1:05	81.00'	14	3.25	6.71	26.2°	5.68	15.6	-18.3	
2:15	83.10'	28	2.73	6.84	24.6°	5.65	23.5	-180	
2:55	94.15'	42	2.68	6.82	23.5	5.63	20.0	-176	
3:10	147.76'	56	2.70	6.80	22.9	5.61	21.2	-169	4.26 vol
3:15	142.60'								

Removed 114 Gallons

88 well volume

Well Development Form

Project: Casmalia RI

Personnel: Ray WDC

Well No. PZ-17

Date: 11/22/04

1 of 3

2' stick up ~~Aprox. 2ft gal Casing Volume WSF~~

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
8:30	76.72	0							TD 161.80' TOC
10:00	111.25	5	>1000	6.85	18°	8.08 mS	3.50	015	
10:30	152.17	15	>1000	7.62	19.2°	8.18	4.42	049	
10:50	159.7	25	>1000	7.55	18.8°	8.26	5.43	014	

1 WV = 13.9

1.8 Well Volume

B18848-CP

Well Development Form

Project: Camelia RI

Personnel: RJ WMC

Well No. D2-17

Date: 12/1/04

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
11:30	141.97'	0							
11:40	152.72'	2	551	7.03	20°	7.68	3.55	-014	
11:50	155.95'	4	762	7.13	18.6°	7.65	3.61	-017	
12:05	160.10'	6.5	444	6.99	18.5	7.65	3.60	-019	
12:20	161.0'	7	450	6.90	15.3	7.66	3.02	-017	

323 Collected gal / well volume

2.2 well volumes

B18848-CP

12/03/2004 15:35 FAX 8058375167 URS CORP 011

Well Development Form

Project: Carmelita R1

Personnel: Ray WPC

Development Method: Simo-1 Rig

Well No. PZ-17

Date: 12/13/04

3 of 3

TD 161.8', WL 138.63' → 1 vol = ~~6.7 gal.~~ 3.8 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
12:40	138.63'	0							
1:10	153.14	3.5	175	6.83	20.6°	7.30	2.78	-043	
1:25	159.0	7	394	6.87	19.5°	7.40	3.37	034	
1:40	160.29	8.5	494	6.89	19.3°	7.38	3.41	027	

Total Gallons Removed _____

Well Development Form

Project: Carmelin RI

Personnel: Ray WPC

Well No. PZ-18

Date: 11/17/04

Apox, 2.7' stick up ~~+ casing volume = 5½ gal.~~

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
4:00	25.60'	0							Depth 43.15'
4:40				6.63	18.3	10.19 mS	2.98	060	
7:30	25.74'	0							
7:45	26.65'	2	71000	6.42	17.4°	10.33 mS	5.27'	079	
7:55	26.97	4	↓	6.91	17.8°	10.36	4.36	061	
8:05	27.88	8	↓	6.90	17.8°	10.46	4.36	051	
8:30	29.81	18	↓	7.06	19.1°	10.96	5.08	061	
9:30	35.77	40	145	7.41	20.9°	11.80	6.09	053	
9:45	39.57		170	7.31	19.4	11.80	6.13	095	TD 43.15 TOC
11/20/04 3:20	25.60'	0							
3:30	27.30	5.5	234	7.12	18.8	11.59	4.11	036	
3:50	28.49	11	307	7.03	18.7	11.34	3.55	-012	
		51 gal							

1 WV = 2.9 gal

B18848-CP

Well Development Form

Project: Carmelia RI

Personnel: Ray WPC

Development Method: Bailer

Well No. PZ-18

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
4:25	25.89	0							
4:38	27.45	5	350	6.90	17.5°	11.39 mS	4.85	170	
4:47	28.89	10	265	6.80	17.6°	11.53	3.87	250	
4:53	30.45	15	214	6.82	17.7°	11.48	5.36	230	

Total Gallons Removed: 665-1

1 WV = 29.5-1

22.8 well volumes

Well Development Form

Project: CSC - RIFS - ARCH

Personnel: Ray WAC

Well No. RIPZ-19

Date: 11/17/04

- Approx. 2.25' stick up

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
1:00	40.58'	0							Depth 53.05' TOC
1:45	41.70'	.5	>1000 Ntu	6.92	20.6°	6.41 mS	3.99	078	
2:15	43.20	1.5		7.09	20.2°	6.53	5.07	083	
2:25	44.81	2.5		7.05	19.6°	6.57	5.52	091	
2:35	46.38'	3.5		7.11	19.5°	6.24	5.32	067	
2:40	48.13'	4.5		7.13	19.6°	6.60	5.17	072	
2:47	50.01'	5.5		7.17	19.5°	6.83	5.23	068	
2:55	51.35'	6.5		7.09	19.6°	6.80	4.26	124	
3:00	52.46'	7		7.07	19.3°	6.72	4.24	146	TD (53.06) TOC
11/20/04 2:20	41.85	0							
2:35	47.78	3		7.21	19.1°	7.50	3.79	089	
2:50	51.22	5.5		7.13	19.0°	7.97	3.22	074	
		12.5 gal							

1 WV = 2.0 gal

6.25 Well volumes

B18848-CP

Well Development Form

Project: Columbia RI

Personnel: Ray WVC

Development Method: Smeal Rig

Well No. PZ-19

Date: 11/30/04

Zone 2

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery Rate~~ Inches/min	Redox ~~Recovery Rate~~ gpm	Observations
4:10	43.44'	0							
4:20	47.38'	3	>1000	6.59	17.4°	7.83	4.55	015	
4:30	51.21'	5	>1000	6.52	17.1°	7.85	2.23	-013	

Total Gallons Removed 17.5

8.75 well volumes

Note: Calculated TD should be ≈ 62.5 FT
40-60' screen interval
2.5' stickup

Well Development Form

Project: Camelia RI

Personnel: Ray WRC

Well No. PZ-20

Date: 11/22/04

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
11:45	53.70	0							TD 64.95
1:00	55.53	5	>1000	6.92	20.1	5.77 mS	2.45	020	
1:15	63.91	5	>1000	7.13	19.0	5.80	3.63	128	
1:20	64.40	5.5	>1000	7.33	19.0	5.74	2.61	109	

1 WV = 1.89 gal

3.1 well volume

B18848-CP

Well Development Form

Project: Camelia RI

Personnel: Ray WDC

Well No. PZ-20

Date: 12/1/04

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
2:00	58.50'	0							
2:20	59.83'	.5	406	6.74	18.0°	6.29	3.80	-020	
2:30	62.39'	2	>1000	6.64	18.6°	6.05	2.54	-017	
2:45	63.42'	2.5	>1000	6.65	18.5°	6.19	3.05	-011	

8 6-1
4.4 well Volumes

B18848-CP

Well Development Form

Project: Camelia RI

Personnel: Ray WDC

Well No. DZ-20

Date: 12/8/04

~~2.4 gal/min~~

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
3:00	60.85								TD 64.95 TOC
3:20	64.73	2.5	>1000	6.64	20.2	6.22	4.47	024	

10.5 Gal

5.8 well volumes

B18848-CP

Well Development Form

WL = 88.43
TD = 105
Ø = 3/4"

Project: Casmalia L.F
Personnel: D. Browne

Well No. RIPZ-22
Date: 11/17/04

Bailer -> 50 ml S.S. bailer S.I = 95'-105' 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
11/17 1300	88.43	Initial	123	6.16	22.6	7.93ms	2.25 mg/lt	-99.4	PID = 0
1350	95.98	0.5 lt	>1000	6.42 ~~9.17~~ DSB	20.8	9.10ms	0.97	-166	
1445	97.40	1 lt	>1000	6.44	20.6	8.99ms	1.58	-101	
1525	101.15	2 lt	>1000	6.77	20.3	8.90	0.60	-99.1	
1605	94.87	Initial	~~>100~~ DSB 103	6.41	19.0 ~~16.1~~ DSB	8.73	0.59	-112	
1645	101.50	1 lt	>1000	6.59	17.7	8.35	.01	-136	
11/18 1105	99.10	Initial	>1000	6.25	19.5	8.62	.54	-111	
1145	can't get WL	1/2 lt	>1000	6.49	19.2	8.37	0.37	-129	can't get bailer down Casing Too wet
1245	↓	1 lt	>1000	6.33	19.8	8.75	0.65	-132	
11/23 1315	97.61	1.5 lt	>1000	6.15	20.0	9.65	0.78	-54.3	

4.5 Liters 1 WV = 0.68 Gal
1.75 well volumes purged

B18848-CP

Well Development Form

Project: CSC-RIFS-CPT

Personnel: A H HENKE

Development Method SURGE + BAIL

Well No. RIPZ-24

Date: 12/21/04

TD 48.9, WL 39.33, 3/4" ϕ, 1 VOL = 0.22 GAL.

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
1225	39.33								TD 48.9
1235		SURGE	S.I.	39-42					OBSTRUCTION AT 41' (BEND IN CASING?)
1255		SURGE	S.I.	42-48					
1300		SURGE	S.I.	43-49					
1310		SURGE	S.I	38-44					
1330	37.82	BEGIN BAILING							
1345		DJC - BENT / THICK MUD - OK TO ADD DEI							
		KEEP BAILING							
1415		OK TO ADD WATER - 1 l - TEFLON BAILER TOO LIGHT TO AGETATE							
		STILL FIGHTING BENT TOC. GET TOOLS TO DIG OUT.							
1445		BAIL 2.5 l							
~~1645~~ 1630	39.7								
1645	DEPART								

60-18 = 42'

Total Gallons Removed _____

Well Development Form

Project: CSC-RIFS-CPT

Personnel: ATHENIKE

Development Method BAIL

Well No. RIPZ-24

Date: 12/23/04

* NOTE * AFTER SURVEYING TOC CUT DOWN ~ 0.22'

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
1345	39.31	6							
1350		VERY VISCOUS - MUD							
1430	39.7	2 GAL	RESEMBLING WATER			HIGH TURBIDITY.			
1450	39.3	3 GAL							TD 50.0
		TOTAL 7.5 GAL REMOVED 12/21/04 - 12/23/04 = 16 WELL VOL.							

Total Gallons Removed _____

Well Development Form

Project: CSC - RIFS - CPT

Personnel: A. HENKE

Development Method SURGE + BAIL

Well No. RIPZ-26

Date: 12/21/04

TD 18.8 , WL 11.10 , 3/4" ϕ 1 VOL = 0.18 GAL ≈ 0.72 l

2.6' STICK UP
TD 16.2' BGS
S.I. 5.9 - 15.9 BGS

NO PHYSICAL PARAMETERS MEASURED

Time	Depth to Water (ft)	ml ~~Gallons~~ Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate inches/min	Recovery Rate gpm	Observations
0950	11.10	~~SURGE~~ AIR S.I. 2							
1010		SURGE S.I.		12-18'					
1025		SURGE S.I.		10-16'					
1035	11.5	MEASURE WL		11.5	TD	14.2			
1040		1	>> 1000	THICK, MUDDY WATER. GREYISH BROWN. NO SHEEN					
1100	13.8	1150 ml	>> 1000						TD 18.9'
1110	13.1								
1120	14.2	2350 ml	>> 1000						
1130	14.7	2950 ml	>> 1000						
1140 AIR	15.2	3550 ml	>> 1000						

Total Gallons Removed _____

Well Development Form

Project: Camatic RI

Personnel: Kay WBC

Development Method Submersible

Well No. RGPZ-108?

Date: 12/13/04

TD 77.44, WL 76.34 → 1 vol = 0.2 gal Casing Volume ~~1.3~~ ~~gal~~ 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
12:00	76.34'	0							TD 77.44' TOC
12:10	77.43	.5	>1000	7.18	18.7	5.97	2.69	-024	

1 WV = 0.18

Total Gallons Removed 0.5 6-1

Well Development Form

Project: CSC-RIFS

Personnel: WDC

Development Method

Well No. RG PZ 1032 ~~RIPZ-1032~~

Date: ~~12/20/04~~ 12/20/04

TD 77.50' WL 77.18' → 1 vol = .05

2043

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	DO ~~Recovery~~ Rate inches/min	Redox Recovery Rate gpm	Observations
3:25	77.40	.12	>1000	6.43	19.4°	643	7.3	-154	

Total Gallons Removed 0.625 l

Well Development Form

Project: CSC - RIFS

Well No. RGPZ-10B2 THIRD VISIT

Personnel: WDC

Development Method

Date: 12/22/04

3 OF 3

TD 77.45' GWL 77.22' → 1 vol = .03 gal

Time	Depth to Water (ft)	Gallons Removed	Turbidity (Ntu)	pH	Temp °C	E.C.	Recovery Rate Inches/min	Recovery Rate gpm	Observations
9:05	77.30'	10 mL	> 1000 (VISUAL)						BAIL DRY @ 10mL
			INSUFFICIENT VOLUME FOR PARAMETER READINGS						

Total Gallons Removed 0.656-1

Well Development Form

WL = 80.23
TD = 82.5

Job Number: _____

Project: Casmalia LF Development Method Surge Well No. RG-11B-3

Personel: D. Browne S. Tucker Bail 4 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	
1410	80.23	Initial	20.7	6.07	19.0	9.86MS	1.03				
1420	Dry	1.5	5.98	6.43	18.8	9.73	1.95				cloudy grayish brown odorless

Total Gallons Removed: 1.5

MACTEC

Reviewed by _____