APPENDIX O

DRILLER'S DEVELOPMENT PUMPING PRODUCTION LOGS

Layne Christensen Company
Fontana

Date: 4-11-01 Page 1

Customer: City of San Bernardino #11Z Job No. 27- 5567

Meter 12 X 326 Static level 158.50 Feet Airline depth 364.78 Feet Hours/Day 2 Total hours 2

Operator: P. Weber

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments
12:38	START						2233556
:53	56.5	100	167.73'	9.23'	1000	10.8	BROWN - muddy
1:08	8.0	100	167.96'	9.46'	1000	10.6	EXTR. cloudy
:23	4.2	100	167.85'	9.35'	1000	10.7	" "
:38	7.6	100	167.85	9.35	1000	10.7	" "
:53	7.6	100	167.96'	9.46'	1000	10.6	" SL. CLEAR. "
2:08	4.5	100	167.85'	9.35'	1000	10.7	Cloudy
	Shutdown						
3:00	Resume pumping						
:15	7.6	100	167.39'	8.89'	1000	11.2	BROWN muddy
:30	4.9	100	167.73'	9.23'	1000	10.8	" "
:45	Shut down - pump failure						223427
							23,146 gpd

Layne Christensen Company
Fontana

Date: 4-17-01 Page 2

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 X 326 Static level 160.00 Feet Airline depth 366.51 Feet Hours/Day 7 Total hours 9

Operator: R. Weber

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments	
8:52	Start						223427 T.S.	
9:07	19.3	150	170.73'	10.73'	1000	14.0	EXTR. Brown muddy	63
:22	3.8	150	170.67'	10.67'	1000	14.1	EXTR. Cloudy	29
:37	3.4	150	170.62'	10.62'	1000	14.1	" "	15
:52	1.9	150	170.39'	10.39'	1000	14.4	" "	25
10:07	3.0	150	170.50'	10.50'	1000	14.3	Cloudy -Qt	14
:22	3.4	300	176.16'	16.16'	1050	18.6	EXTR. Cloudy - Brown	40
:37	3.0	300	175.12'	15.12'	1050	19.8	" "	48
:52	11.4	300	176.05'	16.05'	1050	18.7	EXTR. cloudy	40
11:07	4.0	350	177.55'	17.55'	1050	19.9	" "	356
:22	3.5	350	178.36'	18.36'	1050	19.0	" "	392
:37	7.2	350	178.47'	18.47'	1050	18.9	" "	492
:52	7.2	350	178.01'	18.01'	1050	19.4	" "	506
12:07	8.0	350	178.01'	18.01'	1050	19.4	" "	462
:22	8.3	350	178.01'	18.01'	1050	19.4	" "	451
:37	11.4	350	177.55'	17.55'	1050	19.9	" "	411
:52	13.3	350	178.24'	18.24'	1050	19.2	" "	354
1:07	11.4	350	177.78'	17.78'	1050	19.7	" "	382
:22	11.4	350	177.43'	17.43'	1050	20.1	" "	346
:37	9.2	350	177.66'	17.66'	1050	19.8	" "	337
:52	8.0	350	177.66'	17.66'	1050	19.8	" "	304
2:07	8.0	350	177.43'	17.43'	1050	20.1	" "	286
:22	7.6	350	177.32'	17.32'	1050	20.2	" "	248
:37	8.0	350	177.55'	17.55'	1050	19.9	" "	223
:52	7.6	350	177.55'	17.55'	1050	19.9	" "	209
3:07	8.0	350	177.55'	17.55'	1050	19.9	" "	201
:22	8.0	350	178.01'	18.01'	1050	19.4	EXTR Cldy - Sl. Clr. "	176
:37	8.3	350	178.24'	18.24'	1050	19.2	" "	176
:52	7.2	350	177.32'	17.32'	1050	20.2	" Qt "	189
4:07	pump seperated - Shutdown						223930	
							163978 gpd	

Layne Christensen Company
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Date: 4-20-01 Page 3

Customer: SAN BERNARDINO #112 Job No. 27- 5567

Meter 12 X 324 Static level 160.75 Feet Hours/Day 5½
Airline depth 344.39 Feet Total hours 14½

Operator: R. WEBER

develop

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments T.S.S
12:27	START						223880 -TOTALIZER
:42	26.5	225	173.79'	13.04'	1000	17.3	BROWN muddy 807
:57	3.8	225	172.98'	12.23'	1000	18.4	EXTR. cloudy 209
1:12	15.1	225	172.98'	12.23'	1000	18.4	muddy 807
:27	11.4	225	172.98'	12.23'	1000	18.4	EXTR. cloudy 357
:42	5.7	225	172.87'	12.12'	1000	18.6	cloudy 157
:57	3.8	225	172.98'	12.23'	1000	18.4	cloudy -SL. cleaning QT 102
2:12	8.5	500	185.34'	24.59'	1000	20.3	EXTR. cloudy -LT. BROWN 707
:27	13.3	500	185.00'	24.25'	1000	20.6	" 701
:42	12.1	500	185.00'	24.25'	1000	20.6	EXTR. cloudy 463
:57	11.0	500	186.15'	25.40'	1000	19.7	" " 370
3:12	11.7	500	186.84'	26.09'	1000	19.2	" " 480
:27	11.4	500	187.07'	26.32'	1000	19.0	" " 522
:42	11.0	500	187.19'	26.44'	1000	18.9	" " 466
:57	11.4	500	187.31'	26.56'	1000	18.8	" " 392
4:12	9.7	500	187.42'	26.67'	1000	18.7	" " 373
:27	10.4	500	187.19'	26.44'	1000	18.9	" " 379
:42	11.7	500	187.54'	26.79'	1000	18.7	" " 393
:57	11.0	500	187.54'	26.79	1000	18.7	" " 369
5:12	11.0	600	190.42'	29.67'	1000	20.2	" " 460
:27	13.5	600	189.85'	29.10'	1000	20.6	" " 477
:42	21.2	600	190.73'	29.98'	1000	20.0	" " 448
:57	24.7	600	191.93'	31.18'	1000	19.2	" " 426
							Shutdown 224447
							168,542 gpd

Layne Christensen Company
Fontana

Date: 4-21-01 Page 4

Customer: SAN BERNARDINO #112 Job No. 27- 5567

Meter 12 X 32 Static level 161.43 Feet Airline depth 344.39 Feet Hours/Day 7 1/2 Total hours 22

Operator: R. WEBER

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments	
							develop	
7:10	START						224447	7.5.5
:25	37.9	300	173.79'	12.36'	1000	24.3	muddy - Brown	807
:40	7.6	300	173.56'	12.13'	1000	24.7	Cloudy	176
:55	7.2	300	173.45'	12.02'	1000	25.0	Cloudy - QT	335
8:10	13.3	500	181.07'	19.64'	1000	25.5	EXTR. Cloudy	454
:25	7.6	500	180.84'	19.41	1000	25.8	" "	487
:40	12.1	500	182.45'	21.02'	1000	23.8	" "	363
:55	8.3	500	182.92'	21.49'	1000	23.3	Cloudy	245
9:10	6.5	500	182.92'	21.49'	1000	23.3	" "	222
:25	7.2	500	182.69'	21.26'	1000	23.5	" "	196
:40	7.2	500	182.80'	21.37'	1000	23.4	" "	163
:55	6.1	500	182.69'	21.26'	1000	23.5	" " - QT	150
10:10	15.1	750	194.24'	32.81'	1025	22.9	EXTR. Cloudy - Lt. Brown	713
:25	15.1	750	196.43'	35.00'	1025	21.4	" "	777
:40	12.3	750	196.57	35.14'	1025	21.3	" "	628
:55	11.8	750	196.57	35.14'	1025	21.3	EXTR. Cldy	531
11:10	10.6	750	196.70	35.27'	1025	21.3	" " SX1	453
:12	resume pumping							
:27	98.9	300	174.60'	13.17'	1000	22.8	Muddy	807
:42	7.6	300	174.60'	13.17'	1000	22.8	Lt. Brown	444
:57	15.1	300	174.37'	12.94'	1000	23.2	EXTR. Cldy - QT	289
12:12	18.9	500	182.45'	21.02'	1000	23.8	Lt Brown	500
:27	17.0	500	181.53'	20.10'	1000	24.9	" "	440
:42	14.1	500	181.41'	19.98'	1000	25.0	EXTR. Cloudy - QT	169
:57	10.6	700	189.62'	28.19'	1025	24.8	Lt. Brown	577
1:12	11.4	700	189.85'	28.42'	1025	24.6	" "	463
:27	20.8	700	190.31'	28.88'	1025	24.2	" "	418
:42	14.7	700	190.77'	29.34	1025	23.9	" "	296
:57	13.3	700	191.23'	29.80	1025	23.5	EXTR. Cldy - QT	265
2:12	17.0	900	202.56	41.13'	1050	21.9	Brown	659
:27	16.3	900	204.86'	43.43	1050	20.7	" "	777
:42	20.6	900	205.79'	44.36	1050	20.3	" "	809

Layne Christensen Company
Fontana

Date: 4-21-01 Page 5

Customer: San Bernardino #112 Job No. 27- 55567

Meter 12 X 326 Static level 161.43 Feet Airline depth 344.39 Feet Hours/Day 3 1/2 Total hours 25 1/2

Operator: R. Weber

develop

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments	
2:57	12.1	850	206.36	44.93	1050	18.9	Brown	807
3:12	11.9	850	206.97	45.54'	1050	18.7	EXTR. Cloudy -SX1	502
:29	readjust for pumping							
:44	56.8	500	178.87'	17.44'	1000	28.7	Brown muddy	807
:59	14.2	500	179.34'	17.91'	1000	27.9	EXTR. Cldy	302
4:14	13.3	500	179.45'	18.02'	1000	27.7	" "	316
:29	12.5	500	179.34'	17.91'	1000	27.9	Cloudy -QT	141
:44	14.1	750	186.61'	25.18'	1025	29.8	Lt. Brown	308
:59	8.0	750	187.65'	26.22	1025	28.6	EXTR. Cldy	180
5:14	18.3	1000	200.24	38.81'	1050	25.8	Muddy	572
:29	13.3	1000	203.48'	42.05'	1050	23.8	EXTR. Cloudy	618
44	18.9	1000	204.63'	43.20'	1050	23.1	" "	588
:59	22.7	1000	205.79'	44.36'	1050	22.5	" "	507
6:14	30.3	1000	205.79'	44.36	1050	22.5	" "	555
							Shutdown	225697
							495,520 gpd	

Layne Christensen Company
Fontana

Date: 4-22-01 Page 6

Customer: SAN BERNARDINO #112 Job No. 27- 5567

Meter 2 X 320 Static level 162.00 Feet Airline depth 344.39 Feet Hours/Day 7 Total hours 324.2

Operator: R. WERFE

develop

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments	
7:10	START						225697	T.S.S
:25	75.7	500	178.41'	16.41'	1000	30.5	EXTR. Cldy	398
:40	11.7	500	180.38'	18.38'	1000	27.2	Cloudy -Q1	100
:55	11.4	750	189.38'	27.38'	1050	27.4	EXTR. Cldy	365
8:10	8.3	750	191.23'	29.23'	1050	25.7	Cloudy -Q1	175
:25	11.4	1000	201.17'	39.17'	1050	25.5	EXTR. Cldy	414
:40	15.1	1000	203.48'	41.48'	1075	24.1	" "	298
:55	11.4	1000	203.48'	41.48'	1075	24.1	Cloudy -SX2	259
:58	resume pumping							
9:13	63.6	300	173.64'	11.64'	1000	25.8	Muddy 7250	807
:28	7.6	325	173.79'	11.79'	1000	27.6	EXTR. Cloudy	327
:43	9.5	325	174.60'	12.60'	1000	25.8	Cloudy -Q1	98
:58	7.6	500	175.87'	13.87'	1000	36.0	EXTR. Cloudy 1350	236
10:13	12.1	500	177.83'	15.83'	1000	31.6	Cloudy -Q1	187
:28	15.1	750	185.00	23.00'	1050	32.6	Cloudy	167
:43	7.6	750	184.07'	22.07'	1050	34.0	Cldy -Q1 1550	82
:58	13.3	1000	192.16'	30.16'	1100	33.2	EXTR. Cldy -1800	291
11:13	8.0	1000	193.54'	31.54'	1100	31.7	Cloudy -Q1	190
128	15.9	1200	199.32'	37.32'	1125	32.2	EXTR. Cldy	370
:43	11.4	1200	202.09'	40.09	1125	29.9	" "	270
:58	11.4	1200	202.90'	40.90	1125	29.3	" " 2000	257
12:13	7.4	1200	203.94'	41.94	1125	28.6	" " -SX2	220
:22	resume pumping							
:37	53.0	700	180.49'	18.49'	1025	37.9	EXTR. Cldy	396
:52	7.6	700	180.61'	18.61'	1025	37.6	Cloudy -SX3	226
:56	resume							
1:11	60.6	750	180.14'	18.14'	1025	41.3	EXTR. Cloudy	3606
:26	7.6	750	180.26'	18.26'	1025	41.1	Cloudy	192
41	15.1	750	180.26'	18.26	1025	41.1	Sl. Cldy -SX3	69
:45	resume							
2:00	56.5	800	180.14	18.14'	1025	44.1	Cloudy -Q1	123
:15	11.4	1000	185	23.00'	1050	43.5	EXTR. Cldy	200

Layne Christensen Company
Fontana

Date: 4-22-01 Page 7

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 X 326 Static level 162.00 Feet
Airline depth 344.39 Feet

Hours/Day 4
Total hours 36½

Operator: R. Weber

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments	T.S.S.
2:30	11.0	1000	185.00'	23.00'	1050	43.5	Cloudy -SX3	73
:34	resume							
:49	53.0	1000	184.07'	22.07'	1050	45.3	Extr.cldy	184
3:04	11.4	1000	184.76'	22.76'	1050	43.9	Cloudy -SX3	98
:08	resume							
:23	53.0	1000	185.00'	23.00'	1050	43.5	Cloudy -SX3	167
:28	resume							
:43	53.0	1025	185.23'	23.23'	1050	44.1	Cloudy -SX3	169
:48	resume							
4:03	45.4	1150	185.92'	23.92'	1050	48.1	Extr.cldy	192
:18	12.5	1150	186.61'	24.61'	1050	46.7	Cloudy -SX5	71
:24	resume							
:39	45.4	1150	185.00	23.00'	1050	50.0	Cloudy -SX5	110
:47	resume							
5:02	45.4	1050	182.92'	20.92'	1025	50.2	Cloudy -SX5	116
:09	resume							
:24	64.4	1250	186.38'	24.38'	1100	51.3	Cloudy -SX5	124
:32	resume							
:47	64.4	1500	191.81'	29.81'	1150	50.3	Cloudy -SX5	222
:55	resume							
6:10	49.2	1700	196.43'	34.43'	1200	49.4	Extr.cldy	210
							Shutdown 22747.6	
							579,954 gpd	
	21' 60'							

Layne Christensen Company
Fontana

Date: 4-23-01 Page 8

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 X 320 Static level 161.40 Feet Airline depth 344.39 Feet Hours/Day 3 1/2 Total hours 40

Operator: R. Weber

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments (drawdown)
7:10	START						227476 7.5.%
:25	15.5	1500	188.81'	27.41'	1150	54.7	Cloudy - 5x3 88
:30	resume						
:45	24.6	1500	190.77'	29.37'	1150	51.1	Cloudy - 5x5 129
:52	resume						
8:07	28.4	1500	190.31'	28.91	1150	51.9	Cloudy - 5x5 143
:13	resume						
:28	30.3	1500	189.73'	28.33'	1150	52.9	Cloudy 156
:43	14.0	1500	189.85'	28.45'	1150	52.7	Cleaning - 5x3 47
:51	resume						
9:06	26.5	1700	194.00'	32.60'	1200	52.1	Cloudy - 5x5 160
:12	resume						
:27	37.9	1700	194.47'	33.07'	1200	51.4	Cloudy 176
	Shutdown - change surface pipe						
5:15	resume						
:30	12.2	1500	187.31'	25.91	1200	57.9	Cloudy - 5x3 84
:35	resume						
:50	53	3350	232.81'	71.41'	1500	46.9	Extra cldy - 18 p.s.i. discharge 5x1 605
:56	resume						
6:11	113.16	3500	250.25'	88.85'	1550	39.4	muddy - 20 p.s.i. 805
							Shutdown 228384
							296,008 gpd

Layne Christensen Company
Fontana

Date: 4-24-01 Page 9

Customer: SAN BERNARDINO - #112 Job No. 27- 5567

Meter 12 X 326 Static level 161.40' Feet
Airline depth 344.39 Feet

Hours/Day 6
Total hours 46

Operator: R. WEBER

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments (develop)	
7:10	START						228384	
:25	15.1	2500	216.64'	55.24'	1300	45.25	Cloudy	302
:40	9.5	2450	217.91'	56.51'	1300	43.4	Cloudy - SX3	196
:45	resume							
8:00	22.7	2400	212.02'	50.62'	1300	47.4	EXTR. Cloudy - SX3	298
:04	resume							
:19	26.5	2400	210.52'	49.12'	1300	48.9	EXTR. Cldy - SX3	
:23	resume							
:38	26.9	2400	209.94'	48.54'	1300	49.4	EXTR. Cldy - SX3	
:42	resume							
:57	34.1	2600	213.29'	51.89'	1350	50.1	EXTR. Cldy - SX3	
9:02	resume							
:17	64.4	3250	231.20'	69.80'	1500	46.6	EXTR. Cldy - SX3	
:30	resume							
:45	53.0	3700	242.05'	80.65'	1600	45.9	EXTR. Cldy - SX3	400
:51	resume							
10:06	208	3700	245.06'	83.66'	1600	44.2	EXTR. Cldy - SX3	
:12	resume							
:27	No Read	3450	238.36'	76.96'	1550	44.8	Muddy	542
:42	49.2	3400	239.86'	78.46'	1550	43.3	EXTR. Cldy - SX3	297
:45	resume							
11:00	53	3300	234.05'	72.65'	1500	45.4	EXTR. Cldy	218
:15	26.5	3300	235.24'	73.84'	1500	44.7	Cloudy - SX3	161
:19	resume							
:34	71.9	3400	233.74'	72.34'	1500	47.0	Muddy	
:49	26.5	3350	234.89'	73.49'	1500	45.6	EXTR. Cldy - SX3	
:54	resume							
12:09	34.7	3500	236.62'	75.22'	1550	46.5	Cloudy	171
:24	23.1	3500	238.13'	76.73'	1550	45.6	Cldy - SX3	130
:28	resume							
:43	49.2	3500	238.70'	77.30'	1550	45.3	Cloudy	
:58	22.7	3500	239.63'	78.23'	1550	44.7	Cloudy - SX3	

Layne Christensen Company
Fontana

Date: 4-24-01 Page 10

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 X 326 Static level 161.40 Feet
Airline depth 344.39 Feet

Hours/Day 5
Total hours 57

Operator: R. Weber

develop

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments	
1:03	Resume pumping							
:18	43.5	3950	247.37'	86.97'	1675	45.4	Extr. Cldy -24 p.s.i	
:33	22.7	3950	249.68'	88.28'	1650	44.7	Cloudy - 5x3	
:41	resume							
:56	45.4	4000	250.83'	89.43'	1700	44.7	extr. cloudy	
2:11	20.8	4000	253.49'	92.09'	1700	43.4	Cloudy - 5x3	
:15	resume							
:30	45.4	4100	252.33'	90.93'	1700	45.1	Cloudy	
:45	17.7	4100	253.95'	92.55'	1700	44.3	Cloudy	
3:00	14.4	4100	254.30'	92.90'	1700	44.1	Cloudy - 5x3	
:04	resume							
9	30.3	3350	235.12'	73.73'	1500	45.4	Cloudy	
:34	9.5	3350	234.89'	73.49'	1500	45.6	cloudy - 5x3	
:37	resume							
:52	30.3	3550	239.51'	78.11'	1550	45.4	cloudy - AIR	
4:07	18.9	3550	240.44'	79.04'	1550	44.9	Cloudy - AIR - Sl. clearing - 5x3	
:15	resume							
:30	26.5	2900	222.19'	60.79'	1400	47.7	Cloudy -Q9	
:45	18.9	3350	231.77'	70.37'	1500	47.6	Sl. Cldy - 5x3	
:50	resume							
5:05	25.4	3950	245.17'	83.77'	1650	47.2	cloudy	106
:20	11.4	3950	246.09'	84.69'	1650	46.6	Sl. cldy	63
:35	11.4	3950	247.60'	86.20'	1650	45.8	clearing	57
:50	18.9	3950	247.71'	86.31'	1650	45.8	clearing	61
6:05	19.3	3950	247.94'	86.54	1650	45.6	clear	58
							Shutdown	
							234416	
							1,966,432 gpd	

ground up - 96"

Layne Christensen Company
Fontana

Date: 4-25-01 Page 11

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 X 326 Static level 163.00 Feet Airline depth 344.39 Feet Hours/Day 6 Total hours 57

Operator: R. Weber

develop

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments
7:10	START						234/16 T.S.S
:25	18.6	3500	226.81'	63.81'	1550	54.9	CLEARing (21 p.s.i LINE) 60
:40	11.7	3450	229.12'	66.12'	1550	52.2	CLEARing - SX3 38
:46	resume						
8:01	21.9	3500	229.12'	66.12'	1550	52.9	Sl. cldy
:16	12.8	3450	230.85'	67.85'	1550	50.8	CLEARing - SX3
:22	resume						
:37	53.0	3500	229.35'	66.35'	1550	52.8	Sl. cldy
:52	7.6	3450	230.96'	67.96'	1550	50.8	CLEARing
9:07	5.7	3450	231.43'	68.43'	1550	50.4	CLEARing SX3
:15	resume						
30	46.4	3500	231.08'	68.08'	1550	51.4	Sl. cldy
:45	7.6	3500	231.20'	68.20'	1550	51.3	CLEARing - SX3
:48	resume						
10:03	37.8	3500	230.39'	67.39'	1550	51.9	Sl. cldy
:18	9.5	3500	231.43'	68.43'	1525	51.1	CLR - SX3
:25	resume						
:40	45.4	3500	229.81'	66.81'	1525	52.4	Sl. cldy
:55	9.8	3500	230.96'	67.96'	1525	51.5	CLR - SX3
11:00	resume						
:15	36.6	3500	230.96'	67.96'	1525	51.5	Sl. cldy
:30	8.7	3500	231.43'	68.43	1525	51.1	CLR - SX3
:34	resume						
:49	11.4	2400	208.44'	45.44'	1300	52.8	CLEARing
12:04	2.8	2400	208.80	45.80'	1300	52.4	CLR - SX3
:08	resume						
:23	26.5	2850	216.41'	53.41'	1400	53.4	CLEARing
:38	7.7	2850	217.34'	54.34'	1400	52.4	CLR - SX3
:42	resume						
:57	34.2	3300	226.58'	63.58'	1500	51.9	Sl. cldy - 18 p.s.i
1:12	9.5	3300	226.58	63.58	1500	51.9	CLR - SX3
:17	resume						

Layne Christensen Company
Fontana

Date: 4-25-01 Page 17

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 X 326

Static level 163.00 Feet
Airline depth 344.39 Feet

Hours/Day 3
Total hours 60

Operator: R. Weber

develop

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments
1:32	26.5	3500	229.23'	66.23'	1525	52.8	Sl. cldy
:47	5.7	3500	230.50'	67.50	1525	51.9	C/R - 5x3
:52	resume						
2:07	14.5	3500	229.12'	66.12'	1525	52.9	Clearing
:22	5.5	3500	230.04'	67.04'	1525	52.2	C/R - 5x3
:26	resume						
:41	37.9	3400	228.89'	65.89'	1500	51.6	Clearing
:56	4.2	3450	228.89'	65.89'	1500	52.4	C/R - 5x3
3:00	resume						
:15	30.3	3500	228.89'	65.89'	1525	53.1	Clearing
:30	7.6	3500	229.12'	66.12	1525	52.9	C/R - 5x3
36	Resume						
:51	22.7	3450	227.85'	64.85'	1500	53.2	Clearing
4:06	4.7	3450	228.42'	65.42'	1500	52.7	C/R
							Shutdown - 239306
							5,200,026 gallons

Layne-Christensen Company
Fontana

Date: 4-26-01 Page 13

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 X 326 Static level 163.25 Feet Airline depth 344.70 Feet Hours/Day 6 3/4 Total hours 66 3/4

Operator: Ron Weber

Step test

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments		
7:15	Start							239307	7.5.5
:20	6.4	1525	184.08'	20.83'	1150	73.2	CIR	330.4	29
:30	3.5	1535	185.05'	21.80'	1150	70.4	CIR	77.5	23
:45	2.3	1517	186.08'	22.83	1150	66.4	(10p.s.i Line)	447.3	4
8:00	0.35	1504	185.06'	21.81'	1150	68.9		516.5	7
:15	No Sand	1499	185.56'	22.31'	1150	67.2	Adj Q ↑	585.5	
:31	0	1505	187.19'	24.19'	1150	62.2		659.4	
:45	0	1504	187.47'	24.22'	1150	62.1		724	
9:00	0	1502	187.53'	24.28'	1150	61.9		793.1	
:15	0	1500	187.53'	24.28'	1150	61.8	QT	862.1	2
:20	1.3	2014	196.62'	33.37'	1250	60.4	CIR	893	13
:30	3.7	2005	196.86'	33.61'	1275	59.7	CIR	954.5	
:45	1.1	1993	197.09'	33.84'	1275	58.9	CIR	240046.2	4
10:00	2.8	1986	197.20'	33.95'	1275	58.5		137.6	
:15	0.35	1978	197.43'	34.18'	1275	57.9	CIR - Adj QT	228.6	
:30	1.8	2192	201.48'	38.23'	1300	57.3	CIR	329.5	1
:45	1.6	2225	201.71'	38.46'	1300	57.9	CIR	431.9	
11:00	1.5	2238	201.94'	38.69'	1300	57.8	CIR	534.9	1
:15	1.1	2188'	201.94	38.69'	1300	56.6		635.6	
:30	0	2212	201.82'	38.57'	1300	57.4	CIR	737.4	
:35	4.0	2686	210.48'	47.23	1350	56.9	CIR	778.6	
:45	5.3	2722	211.29'	48.04'	1350	56.7	CIR	862.1	9
12:00	1.4	2721	211.52'	48.27'	1350	56.4	CIR	987.3	
:15	2.3	2712	211.87'	48.62'	1350	55.8	CIR	241112.1	5
:30	0.35	2719	211.99'	48.74	1350	55.8	CIR	237.2	
:45	0.7	2710	212.56'	49.31'	1350	55.0	CIR	361.9	0
1:00	1.8	2708	212.33'	49.08'	1350	55.2	CIR	486.5	
:16	1.7	2702	212.33'	49.08'	1350	55.1	CIR	619.1	0
:30	0.8	2701	212.33'	49.08'	1350	55.0	CIR	241735.1	
:35	5.3	3318	222.96'	59.71	1525	55.6	CIR	786	
:45	6.8	3380	224.50'	61.33'	1525	55.1	CIR	822.7	
2:00	4.6	3386	225.73'	62.48'	1525	54.2	CIR	242045.5	3

Layne Christensen Company
Fontana

Date: 4-26-01 Page 14

Customer: San Bernardino #112 Job No. 27- 5567

Meter 12 x 326

Static level 163.25 Feet
Airline depth 344.70 Feet

Hours/Day 5 1/4
Total hours 72

Operator: R. Weber

Step test. (cont.)

Time	P.P.M.	G.P.M.	Pumping Level	Draw-down	Engine R.P.M.	Specific Capacity	Comments		T.S.S
2:15	5.3	3379	226.31'	63.06	1525	53.6	C/R	242201	
:30	2.8	3377	226.19'	62.94'	1525	53.7	C/R	356.4	1
:45	1.8	3373	226.08'	62.83	1525	53.7	C/R	511.6	
3:00	2.3	3373	226.65'	63.40'	1525	53.2	C/R	666.8	0
:15	1.4	3373	226.89'	63.64'	1525	53.0	C/R	822	6
:30	2.1	3370	226.89	63.64	1525	53.0	C/R Q↑	977.1	1
:35	13.8	3918	237.51'	74.26	1650	52.7	Clearing	243037.2	33
:45	9.0	3974	238.44'	75.19'	1650	52.9	C/R	159.1	22
4:00	6.7	4040	240.75'	77.50'	1700	52.1	C/R	345	20
:15	4.2	4062	241.44'	78.19'	1700	52.0	C/R	531.9	17
:31	7.1	4060	241.67'	78.42'	1700	51.8	C/R	731.2	13
:45	7.5	4054	242.36'	79.11'	1700	51.2	C/R	905.3	0
5:00	7.5	4055	242.71'	79.46'	1700	51.0	C/R	244091.9	10
:15	3.8	4053	243.06'	79.81'	1700	50.8	C/R	278.4	7
:30	5.7	4053	243.17'	79.92'	1700	50.7	C/R	464.9	9
:45	4.9	4048	243.52'	80.27'	1700	50.4	C/R	651.2	4
6:00	4.6	4047	243.63'	80.38'	1700	50.3	C/R	837.4	0
:15	2.8	4049	243.98'	80.73'	1700	50.2	C/R	245023.7	3
:30	3.9	4049	243.86'	80.61'	1700	50.2	C/R	210	1
:50	5.8	4047	244.21'	80.96'	1700	50.0	C/R	458.3	1
7:00	7.4	4049	244.44'	81.19'	1700	49.9	C/R	582.5	1
:15	3.5	4051	244.67'	81.42	1700	49.8	C/R	245768.9	0
							Shutdown		
							2,106,579 gpd		

3374 gpm

4045 gpm