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ENGINEERING REPORT

Summerland, CA, Channel 290D FM Translator Application

EXHIBIT 1: LPFM PRECLUSION STUDY

Gold Coast Broadcasting, LLC ("Applicant") submits this technical minor amendment for its pending 1983 application for a new FM translator station at Summerland, CA. The pending application file number is BNPFT-20030317GZT.

This Exhibit 1 addresses only the LPFM Preclusion Study.

LPFM PRECLUSION STUDY RESULTS

This Engineering Report demonstrates that this application meet the FCC's requirements for this Auction 83 FM translator pursuant to *Creation of a Low Power FM Service, Amendment of Service Rules and Eligibility Rules for FM Broadcast Translator Stations*, Fifth Order on Reconsideration and Sixth Report and Order, FCC 12-144 (re: December 4, 2012) ("Fifth Order on Reconsideration"). Additionally, the FCC's LPFM spectrum availability program,

http://www.fcc.gov/Bureaus/MB/Databases/source_code/lpfm6.20121206.zip

("LPFM6"), is used as support for this Engineering Report.

An LPFM Preclusion Study is required by this application (based on the location of the herein proposed transmitter site) to each of the following *Spectrum Limited* Arbitron Metro Markets:

Oxnard-Ventura ("Oxnard"), CA –

Mrkt # 119; 20 min. grid centered at N 34-11-51 W 119-10-34 (d,m,s; NAD 27);

Santa Barbara, CA –

Mrkt # 218; 20 min. grid centered at N 34-25-24 W 119-42-12 (d,m,s; NAD 27).

Note that there are no *Spectrum Available* Metro Markets located within 39 kilometers of the proposed transmitter site.

Metro Area Preclusion Study Results

Oxnard Spectrum Limited Metro Market

Figure 1, attached, is the LPFM6 output file for the Oxnard Metro Market with the study centered at the grid center.

From Figure 1 it is shown that zero channels are available within the 20-minute Grid for future LPFM on the same or first adjacent channels of the herein proposed FM translator (channels 289, 290 and 291).

As required by the Fifth Order on Reconsideration, this FM translator will not preclude the future use of a LPFM application from a potential LPFM channel/point located within the 20-minute Oxnard Grid.

Santa Barbara Spectrum Limited Metro Market

Figure 2, attached, is the LPFM6 output file for the Santa Barbara Metro Market with the study centered at the grid center.

From Figure 2 it is shown that zero channels are available within the 20-minute Grid for future LPFM on the same or first adjacent channels of the herein proposed FM translator (channels 289, 290 and 291).

As required by the Fifth Order on Reconsideration, this FM translator will not preclude the future use of a LPFM application from a potential LPFM channel/point located within the 20-minute Santa Barbara Grid.

Transmitter Site Test Study Results

This study proposes a site that is not located within a Top-50 Spectrum Limited Market and is generally not required. A *Transmitter Site Test* was made out of an abundance of caution and is submitted below showing that the study passes the test.

Figure 3, attached, is the complete LPFM6 output file for a study centered at the herein proposed translator site. From this site, the center location is shown to be available for future LPFM on channels 222, 223, 227, 231, 238, 242, 246, 250, 262, 266, 267, 281, 282, 286 and 294. Therefore, since at least one channel exists for future LPFM at the proposed transmitter site, the transmitter site test for this application is successfully passed.

FIGURE 1

Oxnard, CA
 Latitude 34-11-51
 Longitude 119-10-34
 Grid Size 21 x 21
 Micro FM 100 Watts at 30m HAAT
 Co-Channel and 1st Adjacent Protected
 2nd Adjacent Channel Not Protected
 3rd Adjacent Channel Not Protected
 I.F. Not Protected
 TV Channel 6 Protected
 CP Records Protected
 APP Records Protected
 FM Translators Protected
 TV Channel 6 Translators/LP Protected
 Auc83 FX App Records Not Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	0	240	0	260	0	280	0
201	0	221	0	241	0	261	0	281	146
202	0	222	24	242	0	262	24	282	23
203	0	223	0	243	0	263	0	283	0
204	0	224	0	244	0	264	0	284	0
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	24	266	23	286	23
207	0	227	150	247	0	267	59	287	0
208	0	228	0	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	0	270	0	290	0
211	0	231	152	251	0	271	3	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	55	293	0
214	0	234	0	254	0	274	0	294	0
215	0	235	0	255	0	275	0	295	0
216	0	236	0	256	215	276	0	296	0
217	0	237	0	257	156	277	0	297	0
218	0	238	24	258	0	278	0	298	0
219	0	239	0	259	0	279	0	299	0
								300	10

Total	1111								

NOTE THAT ACTUAL CHANNEL STUDIES ARE NOT INCLUDED SINCE CHANNELS 289, 290 AND 291 SHOW ZERO AVAILABILITY.

{End of Figure 1}

FIGURE 2

Santa Barbara, CA
 Latitude 34-25-24
 Longitude 119-42-12
 Grid Size 21 x 21
 Micro FM 100 Watts at 30m HAAT
 Co-Channel and 1st Adjacent Protected
 2nd Adjacent Channel Not Protected
 3rd Adjacent Channel Not Protected
 I.F. Not Protected
 TV Channel 6 Protected
 CP Records Protected
 APP Records Protected
 FM Translators Protected
 TV Channel 6 Translators/LP Protected
 Auc83 FX App Records Not Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	0	240	0	260	0	280	0
201	0	221	0	241	0	261	0	281	13
202	0	222	236	242	80	262	13	282	114
203	0	223	235	243	69	263	0	283	0
204	0	224	0	244	0	264	0	284	0
205	0	225	0	245	51	265	0	285	0
206	0	226	0	246	236	266	236	286	13
207	0	227	8	247	0	267	235	287	0
208	0	228	0	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	236	270	0	290	0
211	0	231	236	251	0	271	0	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	0	293	0
214	0	234	0	254	0	274	0	294	9
215	0	235	0	255	0	275	0	295	0
216	0	236	0	256	0	276	0	296	0
217	0	237	0	257	0	277	0	297	0
218	0	238	114	258	205	278	0	298	0
219	0	239	0	259	0	279	1	299	0
								300	0

Total	2340								

NOTE THAT ACTUAL CHANNEL STUDIES ARE NOT INCLUDED SINCE CHANNELS 289, 290 AND 291 SHOW ZERO AVAILABILITY.

{End of Figure 2}

FIGURE 3 (9 Pages)

Summerland, CA
 Latitude 34-20-16
 Longitude 119-32-29
 Grid Size 11 x 11
 Micro FM 100 Watts at 30m HAAT
 Co-Channel and 1st Adjacent Protected
 2nd Adjacent Channel Not Protected
 3rd Adjacent Channel Not Protected
 I.F. Not Protected
 TV Channel 6 Protected
 CP Records Protected
 APP Records Protected
 FM Translators Protected
 TV Channel 6 Translators/LP Protected
 Auc83 FX App Records Not Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	0	240	0	260	0	280	0
201	0	221	0	241	0	261	0	281	111
202	0	222	121	242	114	262	111	282	121
203	0	223	106	243	0	263	0	283	0
204	0	224	0	244	0	264	0	284	0
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	121	266	121	286	111
207	0	227	99	247	0	267	121	287	0
208	0	228	0	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	121	270	0	290	0
211	0	231	121	251	0	271	0	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	0	293	0
214	0	234	0	254	0	274	0	294	97
215	0	235	0	255	3	275	0	295	0
216	0	236	0	256	0	276	0	296	0
217	0	237	0	257	3	277	0	297	0
218	0	238	121	258	1	278	0	298	0
219	0	239	0	259	0	279	0	299	0
								300	0

Total	1724								

Total allotments, least preclusive spacing: 33
 Total allotments, most preclusive spacing: 15
 Summerland, CA Summerland, CA
 Latitude 34-20-16 Latitude 34-20-16

Longitude 119-32-29
Least preclusive siting
Availability of Channel 222 (X)

```
+-----+-----+
|O-----|
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+-----+
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|-----|
|-----|
|-----|
|-----O|
+-----+
```

Longitude 119-32-29
Most preclusive siting
Availability of Channel 222 (X)

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+-----+-----+
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+-----+
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Point #001 at 34-15-16 119-27-29
Point #121 at 34-25-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 223 (X)

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+-----+-----+
|-----O|
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+-----+
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|-----|
|O-----|
+-----+
```

Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 223 (X)

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+-----+-----+
|-----|
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+-----O-----+
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|-----|
+-----+
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Point #011 at 34-25-16 119-27-29
Point #111 at 34-15-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 227 (X)

```
+-----+-----+
|-----O|
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+-----+
+-----+
+-----+
+-----+
+-----+
+-----+
```

Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 227 (X)

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+-----+-----+
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+-----+
+-----O-----+
+-----+
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| O - - - - - |
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Point #011 at 34-25-16 119-27-29
Point #111 at 34-15-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 231 (X)

```
+ - - - - + - - - - +
| O - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
+ - - - - + - - - - +
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - O |
+ - - - - + - - - - +
```

Point #001 at 34-15-16 119-27-29
Point #121 at 34-25-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 238 (X)

```
+ - - - - + - - - - +
| O - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
+ - - - - + - - - - +
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - O |
+ - - - - + - - - - +
```

Point #001 at 34-15-16 119-27-29
Point #121 at 34-25-16 119-37-29

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| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
+ - - - - + - - - - +
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Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 231 (X)

```
+ - - - - + - - - - +
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
+ - - - - O - - - - +
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
+ - - - - + - - - - +
```

Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 238 (X)

```
+ - - - - + - - - - +
| - - - - - |
| - - - - - |
| - - - - - |
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+ - - - - O - - - - +
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
| - - - - - |
+ - - - - + - - - - +
```

Point #061 at 34-20-16 119-32-29

Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 242 (X)
+-----+-----+
-----O

+-----+

O-----
+-----+-----+

Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 242 (X)
+-----+-----+

+-----O-----+

+-----+-----+

Point #011 at 34-25-16 119-27-29
Point #111 at 34-15-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 246 (X)
+-----+-----+
O-----

+-----+

-----O
+-----+-----+

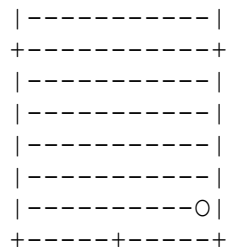
Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 246 (X)
+-----+-----+

+-----O-----+

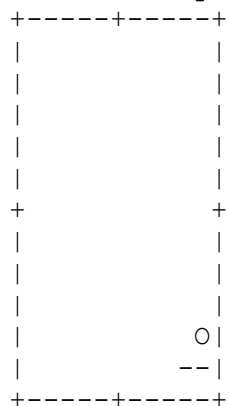
+-----+-----+

Point #001 at 34-15-16 119-27-29
Point #121 at 34-25-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 250 (X)
+-----+-----+
O-----

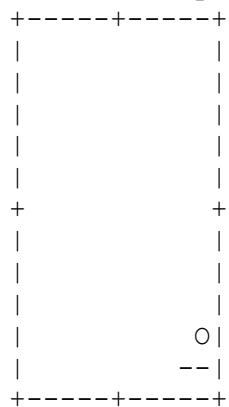
Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 250 (X)
+-----+-----+



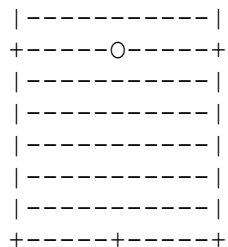
Point #001 at 34-15-16 119-27-29
Point #121 at 34-25-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 255 (X)



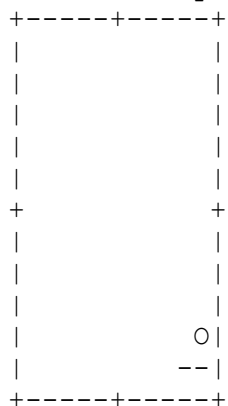
Point #002 at 34-16-16 119-27-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 257 (X)



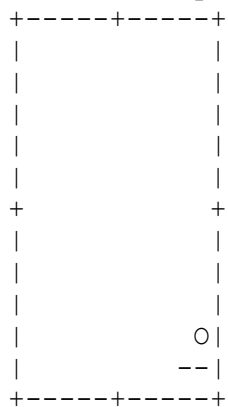
Point #002 at 34-16-16 119-27-29



Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 255 (X)



Point #002 at 34-16-16 119-27-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 257 (X)



Point #002 at 34-16-16 119-27-29

Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 258 (X)

```
+-----+-----+
|       |       |
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|       |       |
|       |       |
|       |       |
|       |       |
|O      |       |
+-----+-----+
```

Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 258 (X)

```
+-----+-----+
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|       |       |
|       |       |
|       |       |
|       |       |
+       +       +
|       |       |
|       |       |
|       |       |
|       |       |
|O      |       |
+-----+-----+
```

Point #111 at 34-15-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 262 (X)

```
+-----+-----+
|  -----O|
|  -----|
|  -----|
|  -----|
|  -----|
+-----+-----+
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|-----|
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|-----|
|O-----|
+-----+-----+
```

Point #111 at 34-15-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 262 (X)

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+-----+-----+
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Point #011 at 34-25-16 119-27-29
Point #111 at 34-15-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 266 (X)

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+-----+-----+
|O-----|
|-----|
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|-----|
|-----|
```

Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 266 (X)

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+-----+-----+
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|-----|
|-----O|
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Point #001 at 34-15-16 119-27-29
Point #121 at 34-25-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 267 (X)

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+-----+
|-----O|
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|O-----|
+-----+

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Point #011 at 34-25-16 119-27-29
Point #111 at 34-15-16 119-37-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Least preclusive siting
Availability of Channel 281 (X)

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+-----+
|-----O|
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|O-----|
+-----+

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Point #011 at 34-25-16 119-27-29

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+-----O-----+
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+-----+

```

Point #061 at 34-20-16 119-32-29
Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 267 (X)

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+-----+

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Summerland, CA
Latitude 34-20-16
Longitude 119-32-29
Most preclusive siting
Availability of Channel 281 (X)

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+-----+
|-----|
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|-----|
+-----O-----+
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+-----+

```

Point #061 at 34-20-16 119-32-29

Point #111 at 34-15-16 119-37-29

Summerland, CA

Latitude 34-20-16

Longitude 119-32-29

Least preclusive siting

Availability of Channel 282 (X)

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+-----+-----+
|O-----|
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|-----O|
+-----+-----+
```

Summerland, CA

Latitude 34-20-16

Longitude 119-32-29

Most preclusive siting

Availability of Channel 282 (X)

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+-----+-----+
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+-----+-----+
```

Point #001 at 34-15-16 119-27-29

Point #121 at 34-25-16 119-37-29

Summerland, CA

Latitude 34-20-16

Longitude 119-32-29

Least preclusive siting

Availability of Channel 286 (X)

```
+-----+-----+
|-----O|
|-----|
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+-----+
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|O-----|
+-----+-----+
```

Summerland, CA

Latitude 34-20-16

Longitude 119-32-29

Most preclusive siting

Availability of Channel 286 (X)

```
+-----+-----+
|-----|
|-----|
|-----|
|-----|
|-----|
+-----O-----+
|-----|
|-----|
|-----|
|-----|
|-----|
+-----+-----+
```

Point #011 at 34-25-16 119-27-29

Point #111 at 34-15-16 119-37-29

Summerland, CA

Latitude 34-20-16

Longitude 119-32-29

Least preclusive siting

Availability of Channel 294 (X)

```
+-----+-----+
|-----O|
|-----|
|-----|
+-----+-----+
```

Point #061 at 34-20-16 119-32-29

Summerland, CA

Latitude 34-20-16

Longitude 119-32-29

Most preclusive siting

Availability of Channel 294 (X)

```
+-----+-----+
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+-----+-----+
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|   -----   |
|   -----   |
+ ----- +
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|-----|
|O-----|
+-----+-----+

```

Point #011 at 34-25-16 119-27-29
Point #111 at 34-15-16 119-37-29

```

|   -----   |
|   -----   |
+ ----O---- +
|-----|
|-----|
|-----|
|-----|
|-----|
+-----+-----+

```

Point #061 at 34-20-16 119-32-29

{End of Figure 3}