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# Cell Phone Location Tracking Request Response – Cell Phone Company Data Retention Chart

**September 27, 2011**

Below is a clean copy of a document comparing the data retention policies of the top five cell phone providers in the U.S. The document, entitled, “Retention Periods of Major Cellular Providers,” was produced in 2010 by the Department of Justice to advise law enforcement agents seeking to obtain cell phone records and was uncovered by the ACLU's coordinated records request on cell phone location tracking by police. The [original](#) was received by the ACLU of North Carolina.

In August 2011, 35 ACLU affiliates filed 381 requests in 32 states with local law enforcement agencies seeking to uncover when, why and how they are using cell phone location data to track Americans. You can find more information about the effort [here](#).



# Retention Periods of Major Cellular Service Providers

Prepared by the Computer Crime and Intellectual Property Section, U.S. Department of Justice, (202) 514-1026, and FBI's Cellular Analysis Survey Team

	Verizon	AT&T	Sprint/Nextel**	T-Mobile
<b>Subscriber Information</b>	Post-paid: 3-5 years*	Depends on length of service	Unlimited	5 years
<b>Call detail records</b>	1 year	Pre-paid: varies Post-paid: 5-7 years	18 mo. (approx.)	Pre-paid: 2 years Post-paid: 5 years
<b>Cell towers used by phone for calls</b>	1 year	From July 2008	18 mo. (approx.) for Sprint CDMA devices; 18-24 months for Nextel iDEN devices	6 months
<b>Text message (SMS) records</b>	1 year	Post-paid: 5-7 years	18 mo. (approx.) for Sprint CDMA devices; not available for Nextel iDEN devices	Pre-paid: 2 years Post-paid: 5 years
<b>Text message (SMS) content</b>	3-5 days (never more than 10)	Not retained	Not retained	Not retained
<b>Cell towers used for SMS transmission</b>	Not retained	1 year	Varies	180 days
<b>Pictures (MMS)</b>	PixPlace only (customer can add or delete pictures any time)	Not retained	Contact provider	Can be stored online. Retained until deleted, or until service is canceled or suspended.
<b>IP session information</b>	1 year	72 hours maximum	18 mo. (approx.)	Not retained
<b>IP source &amp; destination information</b>	90 days	72 hours maximum	6 mo. (approx.)	Not retained
<b>Bill copies (post-paid only)</b>	3-5 years, but only last 12 months readily available *	5-7 years	7 years	Pre-paid: 2 years Post-paid: 5 years
<b>Payment history (post-paid only)</b>	3-5 years, check copies for 6 months*	Depends on length of service	Unlimited	5 years

• May vary by former company.

\*\* For records older than mid-November 2007, Sprint can only provide bill reprints with outgoing info.



# Retention Periods of Major Cellular Service Providers

Prepared by the Computer Crime and Intellectual Property Section, U.S. Department of Justice, (202) 514-1026, and FBI's Cellular Analysis Survey Team

	TracFone	Cricket	MetroPCS	US Cellular
<b>Subscriber Information</b>	2 years	18 months	6 months minimum	7 years
<b>Call detail records</b>	2 years	6 months	6 months	1 year
<b>Cell towers used by phone for calls</b>	Not available	6 months (?)	6 months	1 year
<b>Text message (SMS) records</b>	Not available	Phone-to-phone: Not retained Web-to-phone: 3 mos.	60 days	1 year
<b>Text message (SMS) content</b>	Not available	Phone-to-phone: Not retained Web-to-phone: 3 mos.	60 days	3-5 days
<b>Cell towers used for SMS transmission</b>	Unknown	Not retained	Not retained	Not retained
<b>Pictures (MMS)</b>	Not available	Not retained	Not retained	Unknown
<b>IP session information</b>	30 days	Not retained	Not retained	1 year
<b>IP source &amp; destination information</b>	30 days	Not retained	Not retained	Unknown
<b>Bill copies (post-paid only)</b>	Not available	Unknown	Unknown	7 years
<b>Payment history (post-paid only)</b>	Life of the phone	Unknown	Unknown	1 year

**UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF NEW YORK**

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**UNITED STATES OF AMERICA,**

**v.**

**11-mj-1234(F)**

**GEORGE ORWELL,**

**Defendant.**

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**EX PARTE APPLICATION IN SUPPORT OF RULE 17(b) SUBPOENAS**

**STATE OF NEW YORK )  
COUNTY OF MONROE) ss:  
CITY OF ROCHESTER )**

MARK D. HOSKEN, being duly sworn, deposes and states that:

1. I am an Assistant Federal Public Defender for the Western District of New York and am assigned to represent the above entitled defendant regarding felony charges which are currently pending in the Western District of New York.
2. On April 11, 2011, the Office of the Federal Public Defender was assigned to represent George Orwell since he was determined to be financially unable to hire his own attorney to represent him on these charges.
3. A detention hearing is scheduled to be conducted on April 25, 2011 at 9:30 AM, before the Honorable Jonathan W. Feldman, United States Magistrate Judge for the Western District of New York.
4. George Orwell is in custody and remains financially unable to hire an attorney or pay the fees of the witnesses to be called in defense of the charges against him.
5. George Orwell anticipates the need to review and present evidence of his detailed cell

phone records at the detention hearing. The presence of these detailed cell phone records are necessary for the defendant to present an adequate defense to the Government's motion for detention.

6. It is believed that the government contends George Orwell made and/or received a telephone call from Joseph Mitchell while Mr. Mitchell was an escapee from the Monroe County Jail. Upon information and belief, Mr. Orwell used a cell phone with service provided by Verizon on or about March 31, 2011 to communicate with Mr. Mitchell. It is critical to the defendant to review those cell phone call records and determine the time of the call(s). A call made prior to Mr. Mitchell was determined to be an escapee by the Monroe County Sheriff's Department and broadcast to the Western New York Community would assist Mr. Orwell rebut the government's claim that he knowingly assisted Mr. Mitchell's escape.
7. This subpoena is similarly sought as it appears the government is solely accusing Mr. Orwell of knowingly aiding and assisting Mr. Mitchell's escape by attempting to conceal his whereabouts. Notwithstanding the fact that others lived at, owned the property, and were present when Mr. Mitchell was discovered, Mr. Orwell was solely charged. Based on a review of the criminal complaint and the police reports provided, the only apparent difference between Mr. Orwell and others is the telephone conversation Mr. Orwell had with Mr. Mitchell on or about March 31, 2011.

**WHEREFORE**, the defendant respectfully requests that a subpoena be issued pursuant to Rule 17(b) of the Federal Rules of Criminal Procedure for the production of George Orwell's detailed cell phone call records on or before April 25, 2011, and continuing from day to day until



**UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF NEW YORK**

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**UNITED STATES OF AMERICA,**

**v.**

**11-mj-1234(F)**

**GEORGE ORWELL,**

**Defendant.**

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**ORDER UNDER SEAL FOR RULE 17(b) SUBPOENAS**

Upon the ex parte application of Mark D. Hosken, Esq., Assistant Federal Public Defender for the Western District of New York, counsel for the Defendant George Orwell, for an Order, pursuant to Rule 17(b) of the Federal Rules of Criminal Procedure, directing the issuance of a subpoena for Verizon Cell Phone Call Records and the Court having read and considered the application and good cause appearing therein; it is

**ORDERED**, that the Defendant's application be and hereby is granted, and the Clerk is directed to issue such subpoenas directed to CellCo Partnership d/b/a Verizon Wireless commanding said company to appear and testify at the time and place specified therein and continuing from day to day until the defendant has an opportunity to call these witnesses during the normal course of his detention hearing; and it is further

**ORDERED**, that the costs incurred by the process and the fees of the individuals so subpoenaed shall be paid in the same manner in which similar costs and fees are paid in cases where a witness is subpoenaed on behalf of the government; and it is further

**ORDERED**, that the Federal Public Defender's Office be permitted to serve this subpoena by fax at the number provided by CellCo Partnership d/b/a Verizon Wireless –

(888)667-0028; and it is further

**ORDERED**, that CellCo Partnership d/b/a Verizon Wireless may comply with this subpoena by returning said call records to the Court or counsel for the Defendant before April 25, 2011; and it is further

**ORDERED**, that the application, this Order, and the subpoena issued be sealed, and that only an authorized representative of the Federal Public Defender's Office be permitted to view and utilize said documents until further Order of this Court.

Dated: April 19, 2011  
Rochester, New York

s/  
Honorable Jonathan W. Feldman  
United States Magistrate Judge

UNITED STATES DISTRICT COURT

for the

Western District of New York

United States of America )

v. )

GEORGE ORWELL )

Case No. 11-MJ-1234(F)

Defendant )

SUBPOENA TO TESTIFY AT A HEARING OR TRIAL IN A CRIMINAL CASE

To: CellCo Partnership d/b/a Verizon Wireless
180 Washington Valley Road
Bedminster, NJ 07921
Subpoenas Fax # 888-667-0028

YOU ARE COMMANDED to appear in the United States district court at the time, date, and place shown below to testify in this criminal case. When you arrive, you must remain at the court until the judge or a court officer allows you to leave.

Table with 2 columns: Place of Appearance and Courtroom No./Date and Time. Place of Appearance: U.S. Magistrate Judge Feldman, 2330 U.S. Courthouse, 100 State St. Rochester, NY 14614. Courtroom No.: Magistrate Judge Feldman. Date and Time: 04/25/2011 9:30 am.

You must also bring with you the following documents, electronically stored information, or objects (blank if not applicable):

Detailed cell phone call records including date, time, length of call, number dialed, number received for the cellular number: XXX-XXX-7449. The range of records should commence on March 28, 2011 and continue through April 9, 2011. Such records must include the beginning and ending cell tower information with associated latitude and longitude, facing (sector) and azimuth (angle).

(SEAL)

Date: 04/19/2011

CLERK OF COURT

Signature of Clerk or Deputy Clerk

The name, address, e-mail, and telephone number of the attorney representing (name of party) George Orwell, who requests this subpoena, are:

Mark D. Hosken
Supervisory Assistant Federal Public Defender
Federal Public Defender's Office
28 East Main Street, Suite 400
Rochester, New York 14614
585-263-6201
Mark\_Hosken@fd.org
Attorney for George Orwell

Case No. 11-MJ-1234(F)

**PROOF OF SERVICE**

This subpoena for *(name of individual and title, if any)* CellCo Partnership d/b/a Verizon Wireless  
was received by me on *(date)* 04/19/2011 .

I served the subpoena by delivering a copy to the named person as follows: \_\_\_\_\_  
By fax to CellCo Partnership d/b/a Verizon Wireless Subpoena fax number 888-667-0028  
\_\_\_\_\_ on *(date)* 04/19/2011 ; or

I returned the subpoena unexecuted because: \_\_\_\_\_  
\_\_\_\_\_ .

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also  
tendered to the witness fees for one day's attendance, and the mileage allowed by law, in the amount of  
\$ \_\_\_\_\_ .

My fees are \$ \_\_\_\_\_ for travel and \$ \_\_\_\_\_ for services, for a total of \$ 0.00 .

I declare under penalty of perjury that this information is true.

Date: 04/19/2011

\_\_\_\_\_  
*Server's signature*

Judith M. Middleton, Senior Legal Assistant

\_\_\_\_\_  
*Printed name and title*

Federal Public Defender's Office  
28 East Main Street, Suite 400  
Rochester, NY 14614

\_\_\_\_\_  
*Server's address*

Additional information regarding attempted service, etc:

<u>Details</u>	<u>Switch</u>	<u>Date</u>	<u>Time</u>	<u>Dir</u>	<u>MDN</u>	<u>Called #</u>	<u>CPN</u>
<a href="#">1</a>	Buffalo	03/06/11	9:12:58	LL	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">2</a>	Rochester	03/06/11	9:13:05	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">3</a>	Buffalo	03/06/11	9:47:52	LL	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">4</a>	Rochester	03/06/11	9:47:58	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">5</a>	Rochester	03/06/11	9:56:11	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">6</a>	Rochester	03/06/11	9:57:30	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">7</a>	Buffalo	03/06/11	10:02:58	LL	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">8</a>	Rochester	03/06/11	10:03:05	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">9</a>	Buffalo	03/06/11	10:13:40	MF	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">10</a>	Rochester	03/06/11	10:13:44	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">11</a>	Buffalo	03/06/11	10:34:10	LL	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">12</a>	Rochester	03/06/11	10:34:15	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">13</a>	Buffalo	03/06/11	11:54:50	LL	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">14</a>	Rochester	03/06/11	11:54:52	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">15</a>	Rochester	03/06/11	13:17:23	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">16</a>	Rochester	03/06/11	13:18:44	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">17</a>	Rochester	03/06/11	13:19:49	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">18</a>	Rochester	03/06/11	13:29:15	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">19</a>	Buffalo	03/06/11	13:29:33	MF	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">20</a>	Rochester	03/06/11	13:30:22	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">21</a>	Buffalo	03/06/11	13:34:33	LL	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">22</a>	Rochester	03/06/11	13:34:37	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">23</a>	Rochester	03/06/11	13:44:25	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">24</a>	Rochester	03/06/11	13:44:45	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">25</a>	Rochester	03/06/11	14:05:43	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">26</a>	Rochester	03/06/11	14:33:07	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">27</a>	Rochester	03/06/11	14:56:46	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">28</a>	Buffalo	03/06/11	15:03:16	LL	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">29</a>	Rochester	03/06/11	15:03:22	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">30</a>	Buffalo	03/06/11	15:08:01	MF	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">31</a>	Rochester	03/06/11	15:08:04	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">32</a>	Rochester	03/06/11	15:32:08	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999
<a href="#">33</a>	Rochester	03/06/11	15:42:38	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999

SWITCH	Call Date	Call Time	Orig C/G	Orig Cell Face	Term C/G	Term Cell Face	DIR	MDN	Called #	CPN	SZR
Rochester	4/2/2011	18:40:40	1863	4 = Gamma	191	4 = Gamma	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	25
Rochester	4/2/2011	18:10:06	1863	4 = Gamma	191	4 = Gamma	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	62
Rochester	4/2/2011	17:09:27	310	3 = Beta	801	3 = Beta	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	45
Rochester	4/2/2011	15:24:11	145	2 = Alpha	2402	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	76
Rochester	4/2/2011	15:24:01	145	2 = Alpha	1834	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	9
Rochester	4/2/2011	15:22:18	145	2 = Alpha	878	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	24
Rochester	4/2/2011	15:21:38	145	2 = Alpha	878	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	32
Rochester	4/2/2011	15:21:29	145	2 = Alpha	1834	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	9
Rochester	4/2/2011	15:19:44	2402	2 = Alpha	145	2 = Alpha	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	44
Rochester	4/2/2011	15:19:25	145	2 = Alpha	878	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	39
Rochester	4/2/2011	15:19:16	145	2 = Alpha	1835	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	15:18:37	145	2 = Alpha	2404	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	24
Rochester	4/2/2011	15:18:28	145	2 = Alpha	1835	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	14:43:31	1867	3 = Beta	145	3 = Beta	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	34
Rochester	4/2/2011	14:26:11	2402	3 = Beta	145	3 = Beta	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	60
Rochester	4/2/2011	14:09:49	2401	3 = Beta	145	3 = Beta	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	40
Rochester	4/2/2011	14:07:20	2400	3 = Beta	145	3 = Beta	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	60
Rochester	4/2/2011	14:06:03	2401	3 = Beta	145	3 = Beta	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	52
Rochester	4/2/2011	12:34:37	145	2 = Alpha	878	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	26
Rochester	4/2/2011	12:34:28	145	2 = Alpha	1835	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	12:33:30	145	2 = Alpha	878	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	12:33:21	145	2 = Alpha	1835	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	12:32:28	145	2 = Alpha	878	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	28
Rochester	4/2/2011	12:32:19	145	2 = Alpha	1834	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	12:31:40	145	2 = Alpha	878	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	23
Rochester	4/2/2011	12:31:31	145	2 = Alpha	1834	2 = Alpha	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	12:12:06	310	3 = Beta	878	3 = Beta	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	33
Rochester	4/2/2011	12:11:55	310	3 = Beta	1835	4 = Gamma	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	9
Rochester	4/2/2011	11:47:42	310	3 = Beta	878	3 = Beta	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	39
Rochester	4/2/2011	11:47:34	310	3 = Beta	1834	3 = Beta	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	11:43:27	60	3 = Beta	1901	4 = Gamma	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	34
Rochester	4/2/2011	11:43:18	60	3 = Beta	1834	3 = Beta	MO	(999) 999-9999	(999) 999-9999	(999) 999-9999	8
Rochester	4/2/2011	11:25:01	1906	2 = Alpha	310	2 = Alpha	MT	(999) 999-9999	(999) 999-9999	(999) 999-9999	30





**LAW ENFORCEMENT RESOURCE TEAM**

180 Washington Valley Road | Bedminster, NJ 07921

Phone: 800-451-5242 | Fax: 908-306-7491 or 908-306-7492

# AMA EXPLANATION FORM

**CALL DETAIL RECORDS WITH CELL SITE LOCATIONS AND SECTOR  
FACING FOR RECORDS UNDER 60 DAYS OR UNDER 5,000 LINES**

SWITCH	DATE	TIME	ORIG C/G	Orig Cell Face	TERM C/G	Term Cell Face	DIR	MDN	CALLED #	CPN	SZR
<p>This equipment that routes calls to and from your target. It is a general reflection of the area your target might be at. The switch may inhabit a different time zone as your target because several hundred cell sites are typically homed off a single switch and this may or may not constitute an area large enough to encompass a time zone border.</p>	<p>This is the date of the call</p>	<p>This is the start time of the call. Time stamps reflect the switching center that routed the call which may or may not reside in the same time zone as your target.</p>	<p>This is valid cell site for outgoing calls. <b>Valid only on MO calls</b></p>	<p>This is the cell site sector of the <b>MO call only</b>. This information denotes the direction the target was facing the tower at the time of this call. Each cell face is approximately 120 degrees. <b>Alpha</b> runs North from 10 o'clock to 2 o'clock, <b>Beta</b> runs South East from 2 o'clock to 6 o'clock, and <b>Gamma</b> runs South West from 6 o'clock to 10 o'clock. Actual orientation may differ. You will need to consult the cell site list and confirm the azimuth (actual center point of each cell face) for each site as cell site facing may differ from the default in the field.</p>	<p>This is valid cell site for an incoming call. <b>Valid only on MT calls</b></p>	<p>This is the cell site sector of the <b>MO call only</b>. This information denotes the direction the target was facing the tower at the time of this call. Each cell face is approximately 120 degrees. Alpha runs North from 10 o'clock to 2 o'clock, Beta runs South East from 2 o'clock to 6 o'clock, and Gamma runs South West from 6 o'clock to 10 o'clock. Actual orientation may differ. You will need to consult the cell site list and confirm the azimuth (actual center point of each cell face) for each site as cell site facing may differ from the default in the field.</p>	MO=Outbound call	<p>This is your target # and reflects the number for which the report was generated.</p>	<p>This is the number dialed during an MO (outbound) call. In certain instances, this field may be populated by a routing number for incoming calls. This field is accurate as to the dialed number during an outbound call but may not reflect the dialed digits for an incoming call. Therefore, it should be considered accurate only for outbound MO calls</p>	<p>This is the calling party # for MT (incoming) calls and MF (calls to voicemail). This column reflects accurately the number initiating the call for incoming call.</p>	<p>This is the duration of the call in seconds</p>
							MT=Incoming call				
							MF=Incoming call to voicemail-In rare cases, it could be mobile forwarding				
							MM=Mobile to Mobile call				
							LL, CN, TR all pertain to routing information and will not be relevant to your investigation				

**Codes:**

\*86 is voicemail retrieval

#225 is checking account balance

#646 is checking minutes

#777 is data/web services

#738 is prepaid voicemail retrieval

#729 is adding minutes for prepaid

\*67 is used to block the mobile #

\*82 is used to unblock the mobile #



**Explanation Form For Historical Records**

<b><u>Network Element</u></b>	<b><u>Mobile Directory Number</u></b>	<b><u>Dialed Digit</u></b>	<b><u>Call Direction</u></b>	<b><u>Seizure Date Time</u></b>	<b><u>Seizure Duration</u></b>	<b><u>Calling Party Number</u></b>
This is the switching equipment that transacted the call. A switch is named by the basic geographic area it covers. Switches route calls for hundreds of cell sites.	This is your target #	This is the number dialed to initiate the call. For inbound calls this number will be the same as the Mobile Directory Number column and for outbound calls this is the number your target dialed.	This is the type of call, e.g. inbound, outbound, or voicemail.	This is the exact date and time of the start of each call	This is the duration of the call in seconds	This is the calling party that initiated the call. If the call is outbound this column will be the same as the Mobile Directory Number column. If the call is inbound, this is the number that dialed your target.
			Inbound calls display the following numbers: 0 & 6. Calls to voicemail display the letter "F."			
			Outbound calls display the following numbers: 1 & 3			
			Mobile to Mobile calls display the number 2. Any other letter or number is a routing or unknown call type and does not detail actual transactional data for a completed call.			
			Any other letter or number is a routing or unknown call type and does not detail actual transactional data for a completed call. Subscriber information is not available for routing numbers.			

**When the #s in the Mobile Directory Number column, Dialed Digit column and the Calling Party Number column are all different, then you are looking at a routing #. The Routing # will appear in the Dialed Digit column. (All three numbers are different)**

**If you see your target # in the Mobile Directory Number column, the Dialed Digit column and the Calling Party Number column, then you are looking at your target checking his/her voicemail. (All three numbers are the same)**

- \*86 is voicemail retrieval**
- #225 is checking account balance**
- #646 is checking minutes**
- #777 is data/web services**
- #738 is prepaid voicemail retrieval**
- #729 is adding minutes for prepaid**
- \*67 is used to block the mobile #**
- \*82 is used to unblock the mobile #**



Please refer to the legend below that explains the columns and the information displayed on the attached report.

**LEGEND FOR AT&T MOBILITY RECORDS LABELED "DATA SOURCE: SCAMP"**

The attached file is being sent in a text file format to provide you with the ability to download into your data analysis system.

Once downloaded into an EXCEL format, header information will appear at the top displaying the AT&T 6-digit file number, creation date, the AT&T database source, date the report was run, and the account number of the target.

You may receive up to 3 separate reports for usage: Voice, Data and SMS. This is indicated at the beginning of each report. The fields you will find on usage reports are as follows:

**VOICE:**

**Conn. Date and Conn. Time:** The date and time the call was actually connected.

**Seizure Time:** The number of minutes and seconds it took from the time the 'Send' button was pressed to the time the call was connected to the network.

**Originating Number:** If target number appears in this field, the call is an outgoing call and the called number is in the Terminating Number field.

**Terminating Number:** If target number appears in this field, the call is an incoming call and the caller's number is in the Originating Number field. In rare instances, you may see all \*\*\* in this column. This is an indication that an invalid number was entered.

**Elapsed Time:** Number of minutes and seconds of the call between the connection time and the end of the call, also known as call duration. Does not include seizure time.

**Number Dialed:** This column represents the number that was actually dialed by the calling party or the voicemail access number if the call was forwarded to voicemail.

**IMEI:** International Mobile Equipment Identification number.

**IMSI:** International Mobile Subscriber Identity number.

**Description:** This field uses 2 key characters that describe the parties involved and a short description suffix key word that describes what is known about how the call was handled. Outbound calls will always be described as "DIR". "M" indicates the presence of an AT&T Mobility number. "m" indicates the presence of another wireless carrier's number. The number "2" will always be shown in the middle of the two characters and is used in lieu of "to". For example, M2O means AT&T Mobile "to" a Non-Mobile Phone Number. This report will not show routing by the receiving side of an outbound call. The tables below describe the potential values.

**Key Character Definitions**

Field	Description
M	AT&T Mobile Phone (based on billing validation)
m	Other Carrier Mobile Phone (based on billing validation)
O	Non-Mobile Phone Number

Calls will have 4 potential "suffix" descriptions.

**Description Suffix Definitions**

Field Suffix	Description
DIR	Outbound calls will display DIR except for voicemail checks directly from the handset (VMC). Inbound calls will display DIR if no forwarding took place. Either the phone was answered or rang and was not answered.
VMC	Call was from handset to check Voicemail box.
VMB	Call was routed to VoiceMail number.
FWD	Call was forwarded to another number.
	Forwarding action could not be determined.

A call described as "m2M\_DIR" would be interpreted as a call from another carrier's mobile phone to an AT&T mobile phone that was not forwarded. For example, the call was not routed to voicemail. A call described as "O2M\_FWD" would be a call from a non-mobile phone number to an AT&T mobile number that was forwarded to the number listed in the Terminating Number field.

**Cell Location:** Column only displays if location information was requested. The first two numbers indicate the beginning and ending LAC/CID information followed by the longitude/latitude and the azimuth (center point of the sector) of all cell sites that serviced the call. If the target was traveling, you may see more than one cell site in this field which will indicates hand offs while the call is in progress.

**DATA USAGE:**

The Data report displays many of the same columns as on the other reports, but also includes:

**Bytes Up:** The number of bytes sent from mobile station to the network.

**Bytes Dn:** The number of bytes from the network to the mobile station.

**Access Pt:** Displays the network interface access point.

**Cell Location:** Column only displays if location information was requested. Same information is displayed as noted above.



**SMS USAGE:**

**Originating Number:** If target number appears in this field, the SMS is outgoing and the receiving number is in the Terminating Number field.

**Terminating Number:** If target number appears in this field, the SMS is incoming and the receiving number is in the Originating Number field.

**Description:** This field describes the direction of the message and a short description that describes what is known about the type of message. Outbound calls will always be described as "OUT" with no suffix description, and inbound messages will provide a description when it is known.

**Key Prefix Definitions**

Field	Description
IN	Inbound Message
OUT	Outbound Message

**Description Suffix Definitions  
(These are ALL SYSTEM GENERATED MESSAGES)**

Field Suffix	Description
VMN	VoiceMail message is waiting notification
VMP	VoiceMail box has been accessed notification.
VMA	Indicates either a voice mail notification or accessed notification.
AGM	General notification message from AT&T (time to add credit etc.).
ACB	Account Balance check response.
ACM	Account minutes available check response.
ACD	Account data used check response.

A message described as "IN\_VMP" would be interpreted as an inbound system message to the phone notifying the user that the voicemail box has been checked. A message labeled as "IN\_ACB" means the user requested an "Account Balance Check" and the reply was received by the phone.

**Cell Location:** The first two numbers indicate the beginning and ending LAC/CID information followed by the longitude/latitude and the azimuth (center point of the sector) of all cell sites that serviced the call. If the target was traveling, you may see more than one cell site in this field.

## Key to Understanding CDMA Call Detail Reports

<b>Calling number:</b>	This column reflects the number placing the call (the individual who initiated the call). If the call is an outgoing call, this will be the Sprint PCS target number.
<b>Called number:</b>	This column reflects the number actually called. In most cases this number will be the same as the number in the "Dialed Digits" column. If the number has been forwarded, or if there is a routing number, then this will be reflected. If the number has a 11 in front of the area code, that means the call rolled to voicemail and was NOT answered by the customer.
<b>Dialed digits:</b>	This column reflects the digits that the caller enters into the keypad of the phone. If the call is an incoming call, this will be the Sprint PCS target number.
<b>M_R #:</b>	Mobile Role (Type of Call). Listed as outgoing, incoming, routed call or undetermined.
<b>Start Date:</b>	Date and time the call was initiated.
<b>End Date:</b>	Date and time the call was ended.
<b>Duration:</b>	Duration of call, in seconds.
<b>Repoll number:</b>	This reflects which phone switch handled the call.
<b>First Cell:</b>	Specific cell site in which the call was initiated. The <b>last 3 digits</b> represent the site number. The first digit reflects the sector. (See attached "Three Sector Layout" page for sector orientation.) For example, if the number in the column reads 2083, the cell site is 083 and the sector is 2.
<b>Last Cell:</b>	Specific cell site in which the call was ended. The <b>last 3 digits</b> represent the site number. The first digit reflects the sector. (See attached "Three Sector Layout" page for sector orientation.) For example, if the number in the column reads 2083, the cell site is 083 and the sector is 2.

\*Routed calls come in two main varieties. The first, also known as Temporary Local Dialing Number (TLDN). They may be considered to be bridge/router numbers to complete a call. The second is when a call is not answered, but is routed to voicemail. Calls routed straight to voicemail will also have an "11" before the number indicated in the "Called\_Nbr" column.

The CDMA call detail report may indicate the sending and receipt of text messages and e-mail. While not flagged as text messages, the line will indicate no duration, the dialed digits column will either be blank or will show an e-mail address, and the repoll column will contain one of the following numbers: 13; 291; 292; 293; 294; 295; 296; 297; 298; 347; 681; 682; 683; 684; 686; 687; 688.

\* On the CDMA network, Sprint maintains Gateway and SWAT (Soft Wireless Access Tandem) networks in areas where there are large Sprint customer populations. These provide the required extra space that helps Sprint maintain all of the calls. When a call moves through a gateway or SWAT cell site information is not retained and is not recoverable.

\*800) 877-2400, (866) 677-8204, (866) 222-2604, and (877) 836-4746 are numbers that connect customers using Instinct phones to their voicemail.

**Sprint**  
Corporate Security  
Mailstop: KSOPHM0206  
6480 Sprint Parkway  
Overland Park, KS 66251  
913-315-0660  
Fax: 913-315-0736

### Star Codes

Your request has been fulfilled, at least in part, by what is known as a CDMA CDR Report. A CDMA CDR Report lists information about incoming/outgoing calls including the digits dialed on the handset. As a dialing shortcut, PCS subscribers may use star codes (an asterisk (\*) plus a short number sequence) when using our wireless telephones. This code will appear in the dialed digits column of the CDMA CDR Report. Following is a list of the most common star codes. Additional star codes may exist in the market from which the call is made. Please contact the Subpoena Compliance Group at the number listed above for more information concerning star codes.

- \*18 - Ping the nearest tower, call delivery activate
- \*180 - Call delivery deactivate
  - \*2 - Customer Care
  - \*3 - Payment Center
- \*31 - Three Way Calling
  - \*4 - Account information
  - \*5 - Spanish Customer care
- \*67 - Caller ID block
- \*68 - Override caller ID block
- \*70 - Cancel call waiting for that call
- \*711 - Customer Care
  - \*72 - Activates call forwarding
- \*720 - Deactivates call forwarding
  - \*73 - Call forwarding no answer
  - \*74 - Call forward busy
- \*811 - Customer Care
  - \*82 - Override caller ID block- for that call
- \*911 - 911
- \*073 - Cancel call forward no answer
- \*074 - Cancel call forward busy

### Other numbers which may appear in the dialed digits column:

- 411 - Directory assistance
- 611 - Customer Care
- 711 - Telecommunications Relay Service(hearing impaired)
- 911 - Can also dial 0911 or 1911)
- c777 - Web Browsing (SINS)

## **RECEIVING RECORDS IN ELECTRONIC FORMAT**

Your request has been satisfied, at least in part, by records furnished on compact disc (CD) or via e-mail. Sprint uses CDs when the response is particularly voluminous or if records are requested in electronic format. Once "recorded" the CD cannot be deleted, re-recorded or appended. Information on CD is normally in one of three formats:

### **RICH TEXT FORMAT (RTF)**

These files are text files readable by any word processor such as Microsoft Word/Works or WordPerfect. Generally, we use this format for letters, summaries and explanatory documents. To retrieve these documents, open your word processor of choice then use the open file command (normally listed under File in the Window Menu bar). Navigate to the drive containing the CD and double click on the file name. While you may not manipulate the file and re-save directly on the CD, it may be manipulated and re-saved elsewhere.

### **SPREADSHEET FILES (XLS or CSV)**

These files are normally used for longer reports such as the Viador Report of recent calls or a listing of all cell sites associated with a particular switch/repoll. We use Microsoft Excel to generate these files and recommend that product for viewing them. To retrieve these documents, open your spreadsheet program of choice then use the open file command (normally listed under File in the Window Menu bar). Navigate to the drive containing the CD and double click on the file name. These files may be uploaded to products such as PenLink in either CSV or XLS format. Please see your program documentation for assistance. While you may not manipulate the file and re-save directly on the CD, it may be manipulated and re-saved elsewhere.

### **TAGGED IMAGE FORMAT (TIF or TIFF)**

This format is used for stored bills and for print outs from our customer service/billing system. All Windows based machines come with TIF viewers but accessing the viewer software may be unfamiliar. To retrieve these documents, open the My Computer folder on your desktop or Open the Windows Explorer (not Internet Explorer). Navigate to the drive containing the CD and **RIGHT** click on the file name. This will open a menu. Choose "OPEN WITH." A new dialog box will open. Look for applications that do Imaging. The most common are "Imaging", "Imaging Preview", "Microsoft Imaging", "Kodak Imaging" and Microsoft Office Document Imaging." Single click on your choice and also click on the check box which says, "Always use this program to open these files." This will set the program as your default and next time you need to open a TIF file, you may just double click on the desired document. Once open, most TIF viewers only display the current page. To go to the next page, use the page up/down keys on your computer keyboard or look for helper arrows. You may also wish to peruse the Help feature offered in every Windows based program. Please note: these files may not normally be uploaded to products such as PenLink since they are not open for manipulation. Please see your program documentation for assistance.

You may also receive files in a bundled, WinZip format (ZIP). These files contain other files (of the three types listed above). Zipped files are used to save space on particularly large requests. To open a ZIP file, open the My Computer folder on your desktop or Open the Windows Explorer (not Internet Explorer). Navigate to the drive containing the CD and double click on the file name. If this does not work, return to the folder containing your document and **RIGHT** click on the file name. This will open a menu. Choose "OPEN WITH." A new dialog box will open. Look for applications that do zipping. The most common is "WinZip." Single click on your choice and also click on the check box which says, "Always use this program to open these files." This will set the program as your default and next time you need to open a ZIP file, you may just double click on the desired document.

Please feel free to contact the Sprint Subpoena Compliance Department for further assistance: 913-315-0660 or 866-259-7534.

<u>Phone Switch</u> <u>Vender</u>	<u>Repoll</u> <u>Code</u>	<u>SWITCH</u>
NORTEL	1	Chicago - Bridgeview 1 (Chicago S.)
NORTEL	2	Kansas City 1 - Lenexa 1
LUCENT	3	LA Unwired (Londonderry, NH)(Affiliate)
LUCENT	4	Santa Maria "Deactivated"
NORTEL	6	Horizon PCS (Erie, PA)(Affiliate)
NORTEL	7	Kansas City 2 - Lenexa 2
NORTEL	8	Chicago - Aurora
LUCENT	9	Boston - Walpole 2
LUCENT	10	San Francisco - Santa Clara
NORTEL	12	Puerto Rico - Bayamon 1
NORTEL	14	Horizon PCS (Johnson City, TN) (Affiliate)
NORTEL	15	Tampa - Fort Meyers
NORTEL	16	Horizon PCS (Waynesboro, VA 2 )(Affiliate)
LUCENT	17	San Diego 3 - Carlsbad 2
LUCENT	18	New York - Long Island City 1
NORTEL	19	Norfolk 1
NORTEL	21	DFW - Dallas 1
NORTEL	22	Hammond 1
NORTEL	23	Hammond 2
NORTEL	27	Oklahoma City
LUCENT	32	Denver 1 - Englewood, CO
NORTEL	40	Little Rock
NORTEL	45	Omaha
NORTEL	46	Horizon PCS (Charleston, WV) (Affiliate)
NORTEL	50	Des Moines - Urbandale
NORTEL	52	Northern PCS (St. Cloud, MN) (Affiliate)
NORTEL	55	Minneapolis 1
NORTEL	60	Minneapolis 2
LUCENT	62	Alamosa PCS (Jeff City, MO) (Affiliate)
NORTEL	65	Birmingham
NORTEL	70	St. Louis 2 - Maryland Heights
NORTEL	71	IPCS (Davenport, IA) (Affiliate)
NORTEL	75	St. Louis 1 - Maryland Heights
NORTEL	78	Columbus, OH - Worthington
NORTEL	79	Chicago - Arlington Heights 2 (Chicago N.)
NORTEL	80	Cincinnati - Sharonville
NORTEL	81	Austin 1
NORTEL	86	San Antonio 1

NORTEL	92	DFW - Ft. Worth 1
NORTEL	97	New Orleans - Kenner
N/A	98	Anaheim SWAT
N/A	99	Kansas City SWAT
NORTEL	100	Alamosa PCS (Appleton, WI)(Affiliate)
LUCENT	101	Charleston 2 Ntelos
LUCENT	102	Sacramento
LUCENT	103	Horizon PCS (Waynesboro, VA I) 2 (Affiliate)
LUCENT	104	Los Angeles. - Ontario 2
LUCENT	106	San Diego 2 - Carlsbad 1
LUCENT	107	DC - Beltsville 3
LUCENT	108	UbiquiTel (Reno, NV)(Affiliate)
LUCENT	109	Portland 1 - Tigard
<b>Phone Switch</b>	<b>Repoll</b>	<b>SWITCH</b>
<b>Vender</b>	<b>Code</b>	
LUCENT	110	Westbury Tandem Gateway
LUCENT	113	Phoenix 3- Rosner 1
LUCENT	116	UbiquiTel (Spokane)(Affiliate)
LUCENT	117	Alamosa PCS (Beaver Creek, OR)(Affiliate)
LUCENT	120	Shentel (Edinburg, VA)(Affiliate)
LUCENT	123	Phoenix 1
LUCENT	130	Salt Lake City
NORTEL	137	Alamosa PCS (Phoenix)(Affiliate)
LUCENT	144	San Francisco - Oakland
LUCENT	145	Milwaukee 2 - New Berlin 2
LUCENT	152	San Francisco - Brisbane 1
N/A	153	Westbury SWAT
LUCENT	159	San Francisco - Brisbane 2
LUCENT	166	Seattle - Redmond 1
LUCENT	170	San Francisco - Santa Rosa
NORTEL	171	IPCS - Kentwood (Grand Rapids, MI) (Affiliate)
LUCENT	173	Detroit 4 - Lansing 2
NORTEL	175	Indianapolis
NORTEL	180	Louisville
N/A	181	Elkridge Airave
N/A	182	Phoenix Airave
N/A	183	Ft Worth Airave
NORTEL	185	Miami 1
LUCENT	262	New York - Westbury 1
NORTEL	191	Nashville
LUCENT	196	Detroit 1
LUCENT	205	Milwaukee - New Berlin 1
LUCENT	206	Detroit 3 - Lansing 1
NORTEL	207	Raleigh - Morrisville 2
NORTEL	208	Cleveland 1
LUCENT	212	Detroit 2
LUCENT	214	IPCS - Kentwood (Grand Rapids, MI) (Affiliate) "Deactivated"
NORTEL	218	Miami 3 - Deerfield Beach
LUCENT	223	Pittsburgh 1
LUCENT	230	Philadelphia 1 - Pennsauken 1
LUCENT	232	New York - Long Island City 2
LUCENT	233	LA Unwired (Shreveport, LA 1) (Affiliate)

LUCENT	240	Hartford - Wallingford 1
LUCENT	241	Philadelphia 3 - Pennsauken 1
LUCENT	244	LA Unwired ( <i>Shreveport, LA 2</i> ) (Affiliate)
LUCENT	245	LA Unwired ( <i>Albany 2</i> )(Affiliate)
LUCENT	247	Boston - Walpole 1
N/A	253	Manhattan SWAT
LUCENT	254	Boston - Woburn 1
LUCENT	262	New York - Westbury 1
NORTEL	266	Houston - Westland 1
NORTEL	267	Houston - Fallstone 2 ( <i>Houston South 2</i> )
LUCENT	268	Los Angeles - Santa Fe Springs 1
NORTEL	269	LA Unwired ( <i>Montgomery, AL</i> ) (Affiliate)
LUCENT	270	Rochester
LUCENT	271	New York - Long Island City 3
<b>Phone Switch Vender</b>	<b>Repoll Code</b>	<b>SWITCH</b>
LUCENT	273	Los Angeles - Santa Fe Springs 2
LUCENT	277	Albany 1
NORTEL	278	San Antonio - Schertz 1
LUCENT	280	UbiquiTel ( <i>Fresno, CA</i> ) (Affiliate)
LUCENT	284	New York - Westbury 2
LUCENT	290	New York - Teterboro 1
N/A	291	sms1 - Text Messaging
N/A	292	sms2 - Text Messaging
N/A	293	sms3 - Text Messaging
N/A	294	sms4 /sms13- Text Messaging
N/A	295	sms5 - Text Messaging
N/A	296	sms6 - Text Messaging
N/A	297	sms7 - Text Messaging
N/A	298	sms8 - Text Messaging
NORTEL	306	Chicago - Arlington Heights 1 ( <i>Chicago S.</i> )
N/A	340	Norcross SWAT
N/A	341	Fort Worth SWAT
N/A	342	Oroville SWAT
N/A	343	Elkridge SWAT
N/A	344	Orlando SWAT
N/A	345	Chicago SWAT
N/A	346	Satsuma SWAT
OS	351	Lenexa OS
LUCENT	353	Las Vegas 1
LUCENT	357	Philadelphia 4 - Pennsauken 2
NORTEL	359	DFW - Fort Worth 3
LUCENT	400	DC/Baltimore - Hanover 1
LUCENT	420	Connecticut - Wallingford 2
LUCENT	421	Boston - Woburn 2
LUCENT	425	New York - Teterboro 3/Branchburg 1
LUCENT	427	Buffalo - Cheetowaga
LUCENT	432	DC - Beltsville 1
LUCENT	434	Gulf Coast Wireless ( <i>Baton Rouge, LA</i> )(Affiliate)
LUCENT	436	DC - Beltsville 2
LUCENT	438	DC/Baltimore - Hanover 2
LUCENT	440	Pittsburgh 2

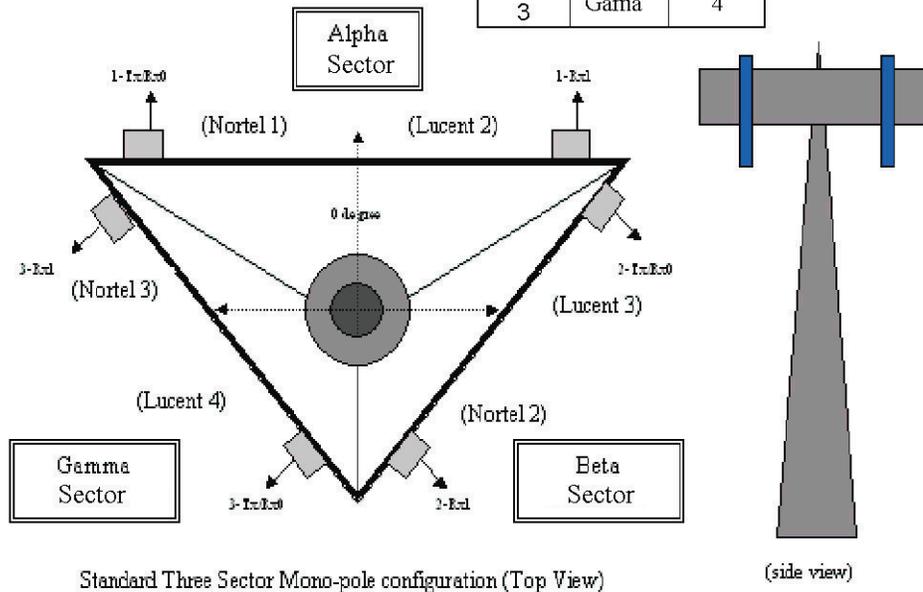
NORTEL	442	Horizon PCS <i>(Ft. Wayne, IN 1)</i> (Affiliate)
LUCENT	448	Philadelphia 2
LUCENT	449	Phoenix 2
NORTEL	464	Miami 2
NORTEL	472	DFW - Dallas 2
LUCENT	474	Denver 2 - Englewood 2
NORTEL	476	San Antonio 2
LUCENT	502	Seattle - Redmond 2
LUCENT	504	New York - Teterboro 2
LUCENT	505	UbiquiTel <i>(Boise, ID)</i> (Affiliate)
LUCENT	541	New York - Harrison
LUCENT	546	DC - Elkridge
NORTEL	553	Raleigh - Morrisville 1
LUCENT	554	LA Unwired <i>(Jackson, MS 1)</i> (Affiliate)
NORTEL	558	Richmond 1
NORTEL	559	Orlando 1
<b>Phone Switch</b>	<b>Repoll</b>	<b>SWITCH</b>
<b>Vender</b>	<b>Code</b>	
NORTEL	561	Atlanta - Norcross 1
NORTEL	564	Memphis 1
NORTEL	565	Orlando 2
NORTEL	566	Houston - Fallstone 1 <i>(Houston South 1)</i>
NORTEL	567	Rio Grand Valley - McAllen
NORTEL	568	Houston - <i>Vantage 1</i> <i>(Houston North 1)</i>
NORTEL	570	Houston <i>Vantage 2</i> <i>(Houston North 2)</i>
NORTEL	588	Charlotte 1
NORTEL	601	Knoxville 1
NORTEL	604	Jacksonville 1
NORTEL	606	Tampa 1
LUCENT	607	Airgate PCS <i>(Greenville, SC 1)</i> (Affiliate)
NORTEL	622	Atlanta - Roswell 1
NORTEL	623	Chicago - Bridgeview 2 <i>(Chicago S.)</i>
NORTEL	624	Atlanta - Roswell 2
NORTEL	628	Alamosa PCS <i>(Oklahoma City)</i> (Affiliate)
LUCENT	630	Georgia PCS <i>(Macon)</i> (Affiliate)
LUCENT	631	Airgate <i>(Columbia, SC 1)</i> (Affiliate)
NORTEL	633	Honolulu - Moanalua 1
LUCENT	634	Enterprise Comm. <i>(Columbus, GA)</i> (Affiliate) "D"
LUCENT	636	San Diego 1
LUCENT	638	Los Angeles - Irvine 1 <i>(Orange County)</i>
LUCENT	639	Los Angeles - Burbank 2 <i>(Los Angeles North, LA3)</i>
LUCENT	640	Los Angeles - Ontario 1
LUCENT	642	Los Angeles - Irvine 2 <i>(Los Angeles South, LA 1)</i>
LUCENT	644	Los Angeles - Burbank 1 <i>(Los Angeles North, LA 2)</i>
NORTEL	648	Swiftel <i>(Brookings, SD 1)</i> (Affiliate)
NORTEL	649	Kansas City 3 - Independence 1
NORTEL	650	Alamosa PCS <i>(ElPaso)</i> (Affiliate)
NORTEL	652	Alamosa PCS <i>(Laredo)</i> (Affiliate)
NORTEL	654	Alamosa PCS <i>(Albuquerque)</i> (Affiliate)
NORTEL	655	DFW - Fort Worth 2
NORTEL	656	Alamosa PCS <i>(Lubbock)</i> (Affiliate)
LUCENT	678	Manhattan Tandem Gateway

<b>LUCENT</b>	679	New York - Manhattan 2
<b>LUCENT</b>	680	New York - Manhattan 1
<b>NORTEL</b>	688	IPCS ( <i>Gridley, IL</i> ) ( <b>Affiliate</b> ) "Deactivated"
<b>LUCENT</b>	690	Airgate PCS ( <i>Columbia, SC 2</i> ) ( <b>Affiliate</b> )
<b>NORTEL</b>	691	Houston - Westland 2
<b>NORTEL</b>	692	Austin 2
<b>LUCENT</b>	693	UbiquiTel ( <i>Evansville, IN</i> )( <b>Affiliate</b> )
<b>LUCENT</b>		Wallingford 3 "Deactivated"



# Three Sector Layout

Sprint CDMA Sector Orientations		
Nortel		Lucent
1	Alpha	2
2	Beta	3
3	Gamma	4



This layout can be applied to both the Sprint (CDMA) and Nextel (iDEN) networks. iDEN only utilizes Motorola technology, so the Nortel/Lucent key is only applicable to the Sprint (CDMA) network.

\*\*Please keep in mind that this configuration is a standard three sector mono-pole. Sprint Nextel's cell sites can be set-up in a variety of ways, Antennas may be placed on different structures such as buildings, towers, water tanks, etc. Also, not every cell site has three sectors. Some may have two sectors or may be an omni site. (Omni sites do not have sectors). The direction that the sectors face depends on the need for coverage in a particular area.