



Human Performance Attachment
Driver Cellular Telephone Records
Fort Lauderdale, FL
HWY18FH013
(5 pages)

Interpreting Call Detail Records

Your response includes Call Detail Records (CDR) either with or without location. Our query results in an Excel file with multiple columns. This is a combined report of calls and messages. Each row represents one call on the T-Mobile network. Some fields only appear in reports with location information.

Calls made while roaming also **do not** appear on this report.

Entries with outgoing calls to 8056377249 indicate incoming calls that are forwarded (out) to the voicemail system. Entries with outgoing calls to 8056377243 = 805-MESSAGE indicate voicemail retrieval.

Please remember that T-Mobile CDR systems natively use Coordinated Universal Time (UTC). By default, that means a day of call detail records are taken from 00:00:01 to 23:59:59 UTC which may differ from your intended time range due to your time zone. If specific times other than our default are important to your inquiry, please submit legal demands with the date range/time frame adjusted for UTC to avoid delay or confusion. We are unable to convert the time displayed in the records to the local time of the handset.

The columns present on your CDR may be:

COLUMN NAME	DESCRIPTION	LOCATION RPT ONLY?	NOTES
Date	Date format mm/dd/yyyy	NO	
(UTC) Time	24 hour time format - hh:mm:ss in UTC	NO	In UTC time
Duration	Duration in seconds	NO	
Call Type	Type of call: callForwarding = Forwarded Call; mSOriginating = Outgoing Voice Call; mSTerminating = Incoming Voice; mSOriginatingSMSinMSC = Outgoing SMS; mSTerminatingSMSinMSC = Incoming SMS; moc=Mobile Originating Call; mtc= Mobile Terminating Call; SMS = text message; RCS-IMChat = rich content message, multimedia and text	NO	Cell Site location is not available for Call Types SMS and RCS-IMChat
Direction	Outgoing or Incoming to the target telephone number	NO	
Calling Number	Phone number that initiated the call	NO	
Dialed Number	Dialed digits	NO	
Called Number	Phone number that received the call	NO	
Destination Number	The final destination number to which the network has connected the call (might be different from the one dialed by subscriber if network translation was applied)	NO	
IMSI	International Mobile Subscriber Identity of the target number, if present	NO	
IMEI	International Mobile Equipment Identity of the target number, if present	NO	
Completion Code	Completed successfully or Abnormal Completion (network interruption). Abnormal completion calls display on this report but may or may not show on a customer's bill.	NO	
Service Code	11 Calling line identification presentation 12 Calling line identification restriction 13 Connected Line ID Presentation 20 All Call Forwarding Services 21 Call Forwarding Unconditional (CFU) 28 All Cond Call Forwarding Services 29 Call Forwarding on Mobile Subscriber Busy (CFB) 2A Call Forwarding on No Reply (CFNRy) 2B Call Forwarding on Not Reachable (CFNRc) 31 Explicit Call Transfer (ECT) 42 Call Hold 41 Call waiting 51 Multi-Party (MPY)	NO	
Switch Name	Name of the switch which was used to deliver the call to the target number.	NO	This is NOT an indication of the location of the device.
1st LTE Site ID	EnodeBid value in decimal	YES	Only present if the call was over LTE
1st LTE Sector ID	ID of the first sector used if the site is an LTE site	YES	Only present if the call was over LTE

1st LAC	1st LAC value in decimal	YES	Not present if the call was over LTE
1st Cell ID	1st Cell Site ID value in decimal	YES	Not present if the call was over LTE
1st Tower Azimuth	Location: Azimuth orientation of antenna serving user if available (see note below)	YES	
1st Tower LAT	Latitude of 1st cell tower used.	YES	
1st Tower LONG	Longitude of 1st cell tower used.	YES	
1st Tower Address	Street Address of the 1st serving tower if available	YES	
1st Tower City	City of the 1st serving tower if available	YES	
1st Tower State	State of the 1st serving tower if available	YES	
1st Tower Zip	ZIP of the 1st serving tower if available	YES	
Last LTE Site ID	EnodeBid value in decimal	YES	Only present if the call was over LTE
Last LTE Sector ID	ID of the last sector used if the site is an LTE site	YES	Only present if the call was over LTE
Last LAC ID	Last LAC value in decimal	YES	Not present if the call was over LTE
Last Cell ID	Last Cell Site ID value in decimal	YES	Not present if the call was over LTE
Last Tower Azimuth	Azimuth orientation of antenna serving user if available (see note below)	YES	
Last Tower LAT	Latitude of last cell tower used.	YES	
Last Tower LONG	Longitude of last cell tower used.	YES	
Last Tower Address	Street Address of the last serving tower if available	YES	
Last Tower City	City of the last serving tower if available	YES	
Last Tower State	State of the last serving tower if available	YES	
Last Tower Zip	ZIP of the last serving tower if available	YES	

A NOTE ON AZIMUTH: The azimuth listed is the center compass degree facing of the identified sector of the tower. Generally, the coverage of a tower is circular and divided in three equal pieces (each 120 degrees wide). Due north is 0, due south is 180. However, not every tower is aligned with the first sector starting at 0. Using the listed azimuth, rough direction from the tower can be calculated for a call. The center degree of the sector's facing is indicated in this field. For example, if a facing has a listed orientation of 90, the center of the coverage is pointed at 90 degrees but the sector will cover traffic from roughly 60 degrees on either side (thus 30 to 150 degrees in this example).

For more information on UTC, please visit: <http://www.timeanddate.com/time/aboututc.html>. To convert records to your local time, you will need to use a converter such as http://www.worldtimeserver.com/convert_time_in_UTC.aspx.

