

CompuWeather

SAMPLE

SITE SPECIFIC WEATHER ANALYSIS Wind Report



PREPARED FOR:

Robinson, Smith & Walsh

John Smith

July 1, 2017

REFERENCE:

JACK HIGGINS / 4151559-01

1 Maple Street, Houston, TX 77034

CompuWeather Sample Report – Please note that this report contains sample data and fictitious names, dates, addresses and case references. This report is intended to demonstrate the structure and detail that is included in a CompuWeather Weather Analysis. All CompuWeather Reports are specific to individual cases or claims and may or may not include all the sections or information contained in this sample report.

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PROJECT INFORMATION

Report Completion Date: July 1, 2017
Prepared for: Robinson, Smith & Walsh
1 Bolduc Street
Queensboro, NY
Attn: John Smith
Case Reference: Jack Higgins / 4151559-01
Date of Incident / Loss: April 27, 2013
Location of Loss / Incident: 1 Maple Street, Houston, TX 77034
Type of Incident: Wind
Scope: Determination of wind and general weather conditions for April 27, 2013.

ABSTRACT

Robinson, Smith & Walsh has requested that CompuWeather's Forensic Meteorologists perform a site specific analysis of the weather conditions that occurred on April 27, 2013 for the location of 1 Maple Street, Houston, TX 77034. CompuWeather researched all the available weather data from approved sources for the surrounding area, analyzed the information and interpreted the conditions that took place for the requested location during the period requested.

CompuWeather has determined that peak wind gusts of 40-44 mph occurred on April 27, 2013 (date of the incident), in the vicinity of 1 Maple Street, Houston, TX 77034 (site of the incident).

INTRODUCTION

This report is based on a review of weather data recorded in the vicinity of 1 Maple Street, Houston, TX 77034 (site of the incident; see map in the Incident Location & Data Sources section) on April 27, 2013. In order to determine the weather conditions during the period in question, official copies of National Oceanic and Atmospheric Administration data were reviewed.

The process employed to produce this weather analysis begins with verifying the point of loss and performing a rigorous search of all the available and relevant weather data from the local geographical area that the incident site falls within. Once this data has been analyzed, the data is interpreted to make the determination as to the weather that occurred at the exact incident site.

In addition, all meteorological data used to prepare this report is reviewed for quality and can be certified. Data and meteorological reports taken by individuals or organizations not affiliated with the National Oceanic and Atmospheric Administration are not used in our practice.

Note that in this weather analysis, all wind data pertain to the surface level (33 feet above ground). In addition, sustained winds represent the 2-minute average and wind gusts represent the 5-second duration.

All procedures used during the analysis of this case were conducted in accordance with long-standing, standard and accepted practices in the field of meteorology. This report was based on the available data at the time the report was prepared. CompuWeather reserves the right to amend this report should additional data or relevant information become available.

ANALYSIS OF GENERAL WEATHER CONDITIONS FOR APRIL 27, 2013

On April 27, 2013, rain and thunderstorms occurred frequently from around 10:45 AM CDT through 6:20 PM CDT. The strongest thunderstorms occurred between approximately 5:20 PM and 5:40 PM CDT, during which time wind gusts of up to approximately 40-44 mph occurred from the west to southwest.

Outside of the thunderstorm, prior to 5:20 PM CDT, the wind was generally out of the east to southeast at approximately 25 mph or less. After 5:40 PM CDT, the wind was from the south to southwest at approximately 10-20 mph with occasional gusts as high as 25 mph.

Total rainfall on this day was approximately 2.10-2.50 inches, and the temperature ranged between a high near 75 F and a low near 64 F.

Wind direction is defined as the direction from which the wind is blowing in reference to true north (see Wind Direction Compass included in this report).

All wind speeds represent the surface level wind speeds at 10 meters (33 feet) above ground level.

CONCLUSION

DATE IN QUESTION: April 27, 2013

LOCATION: 1 Maple Street, Houston, TX 77034

CASE REFERENCE: Jack Higgins / 4151559-01

In conclusion, it can be stated with a reasonable degree of meteorological certainty that on April 27, 2013 (date of the incident), thunderstorms produced wind gusts of approximately 40-44 mph between 5:20 PM CDT and 5:40 PM CDT in the vicinity of 1 Maple Street, Houston, TX 77034 (site of the incident). In addition, total rainfall on this day was approximately 2.10-2.50 inches.

DATE OF INCIDENT SUMMARY TABLE:	April 27, 2013
Rain Amount(s):	2.10-2.50 inches
High / Low Temps:	75° / 64° F
Peak Wind Dir & Speed:	W-SW 40-44 mph

All procedures used during my investigation of this incident were conducted in accordance with long-standing, standard and accepted industrial practices. My conclusions presented within this report are based on the aforementioned data, available at the time of this report generation. I reserve the right to change my conclusions should additional data come to my attention.

Prepared by: Certified Consulting Meteorologist

Title: CompuWeather Senior Forensic Meteorologist

Signature: Signature

Date: July 1, 2017

INCIDENT LOCATION & DATA SOURCES - MAP

The incident location for this analysis is indicated by a star on the map below. Additionally shown on the map are the surrounding weather data sites.

A listing of data sites reviewed for this analysis is indicated on the following page.



INCIDENT LOCATION & DATA SOURCES - LIST

Below is a list of data which were reviewed for this analysis. The names of each data site, their three letter identifier in parentheses, and their approximate distances to the loss location (in miles) are indicated.

National Weather Service hourly reporting sites:

- William P. Hobby Airport – Houston, TX (KHOU) – 2 mi
- Ellington Field Airport – Houston, TX (EFD) – 3 mi
- Clover Field Airport – Houston, TX (KLVJ) – 7 mi

Hourly weather data is provided by the Automated Surface Observing Systems (ASOS) and Automated Weather Observing System (AWOS). This program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). It serves as the nation's primary surface weather observing network, containing over 800 sites nationwide, and is designed to support weather forecasting and the meteorological, hydrological, and climatological research communities.

National Climatic Data Center global network:

- South Houston 3.0 S, TX – less than 1 mi
- South Houston 4.0 SSW, TX – 1 mi
- Pasadena 2.8 SW, TX – 2 mi
- Pasadena 2.4 WSW, TX – 2 mi
- Pasadena 3.6 WNW, TX – 2 mi

A National Climatic Data Center database of weather stations worldwide that record daily and/or hourly weather conditions such as temperature, precipitation, wind and/or snowfall. The data is reviewed by the National Climatic Data Center for a reasonable level of quality assurance.

National Weather Service NEXRAD radar:

- Base Reflectivity Images from Houston, TX for April 27, 2013.
- Storm Total Precipitation Images from Houston, TX for April 27, 2013.

The Next Generation Weather Radar system (NEXRAD) is comprised of 159 land-based Weather Surveillance Radar-1988 Doppler (WSR-88D) sites throughout the United States and select overseas locations. This system is a joint effort of the United States Departments of Commerce (DOC), Defense (DOD), and Transportation (DOT). The controlling agencies are the National Weather Service (NWS), Air Force Weather Agency (AFWA) and Federal Aviation Administration (FAA), respectively. Radar scans at radial distances typically greater than 100 miles, covering an area larger than 30,000 square miles around each radar site. It helps provide estimates of several weather elements which aid in weather forecasting and meteorological research – some of which include location and intensity of precipitation, storm track and speed, and precipitation amounts.

National Centers for Environmental Information – Storm Events Database:

- Harris County, TX

This database contains numerous local storm reports nationwide which provide details about significant weather events since 1950. Such significant weather events include strong wind/wind damage, tornados, hail, flooding, and many other significant weather phenomena. These observations are reported to the National Weather Service by a wide variety of organizations and individuals; some of which include, storm spotters, emergency management, law enforcement, and public.

COMPUWEATHER APPROVED INFORMATION RESOURCES

The following is general listing of data resources that are used by CompuWeather for forensics weather analysis but are not limited to:

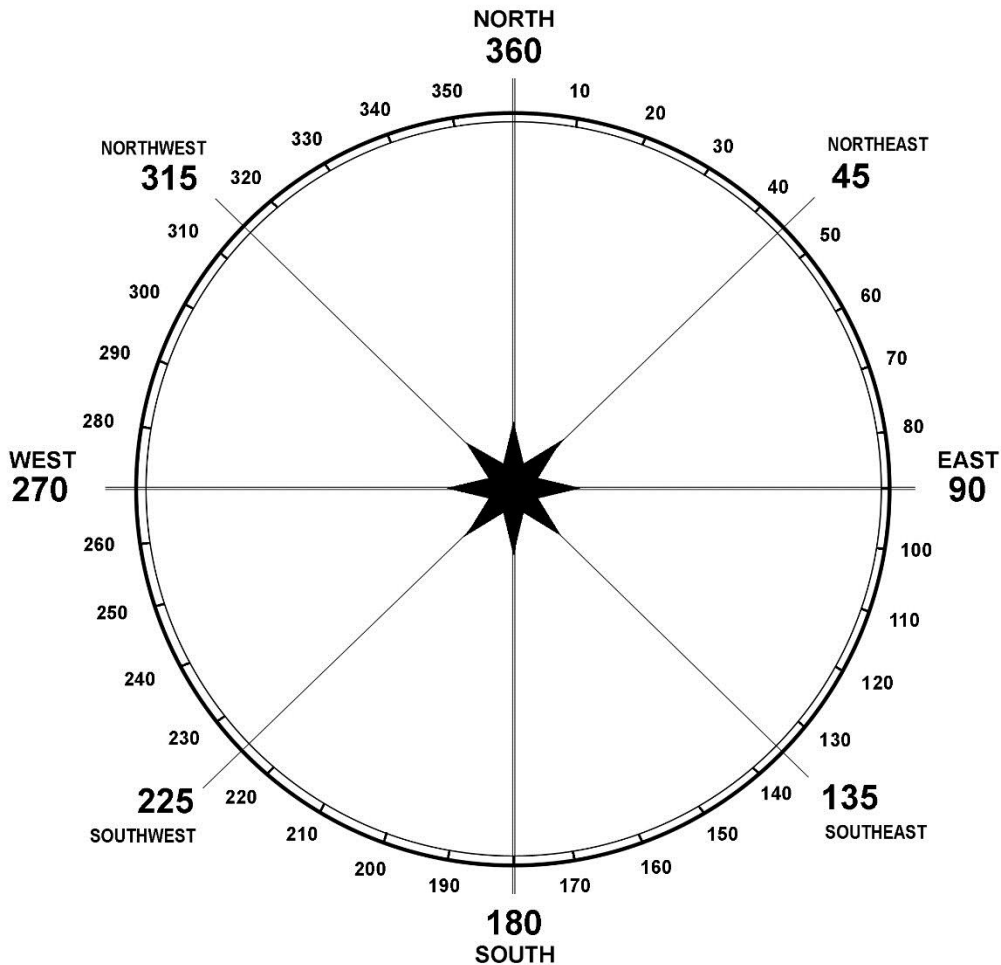
- National Oceanic and Atmospheric Administration (NOAA)
 - National Centers for Environmental Information (NCEI)
 - National Weather Service (NWS)
 - Storm Prediction Center (SPC)
 - Hydrometeorological Design Studies Center (HDSC)
 - National Hurricane Center (NHC)
 - National Data Buoy Center (NDBC)
 - National Ocean Service (NOS)
 - National Operational Hydrologic Remote Sensing Center (NOHRSC)
 - National Environmental Satellite, Data, and Information Service (NESDIS)
 - Climate Reference Network (CRN)
 - Remote Automatic Weather Stations (RAWS)
 - National Centers for Environmental Prediction (NCEP)
- National Resources Conservation Service (NCRS)
- United States Geological Survey (USGS)
- United States Naval Observatory (USNO)

WIND DIRECTION COMPASS

The wind direction on the compass diagram (below) indicates the direction and their approximate degree equivalents (degrees from true north (360°)). Wind Direction indicates the direction from which the wind is blowing. In other words, if the wind direction is “S (180°)”, the wind is from the south (blowing towards the north).

Approximate Wind Direction and Degrees° equivalents:

N...	350°/360°/10°	S...	170° – 190°
NNE...	20° – 30°	SSW...	200° – 210°
NE...	40° – 50°	SW...	220° – 230°
ENE...	60° – 70°	WSW...	240° – 250°
E...	80° – 100°	W...	260° – 280°
ESE...	110° – 120°	WNW...	290° – 300°
SE...	130° – 140°	NW...	310° – 320°
SSE...	150° – 160°	NNW...	330° – 340°



For additional weather tools and reference materials, please check:
<http://compuweather.com/downloads/>

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