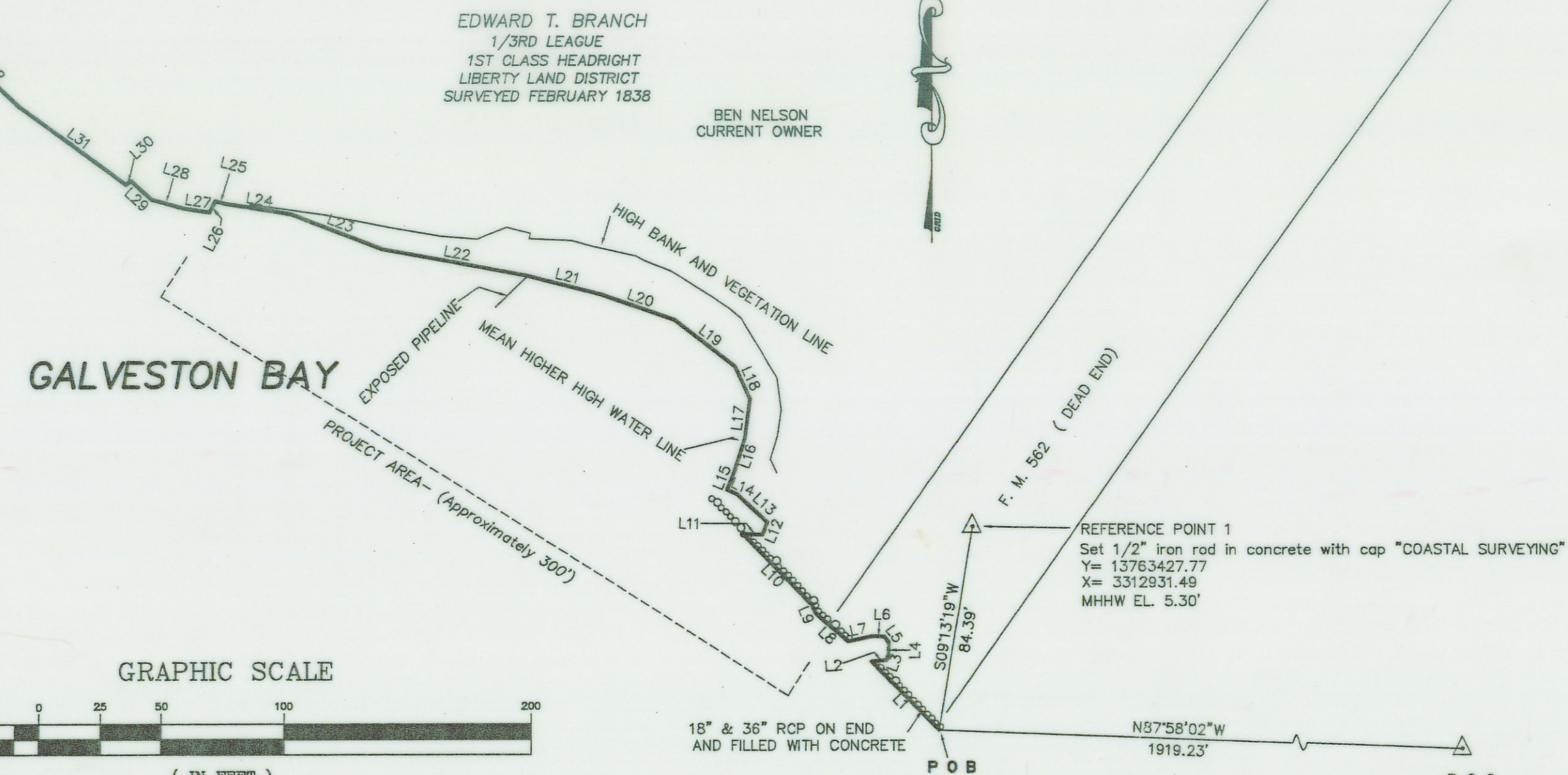
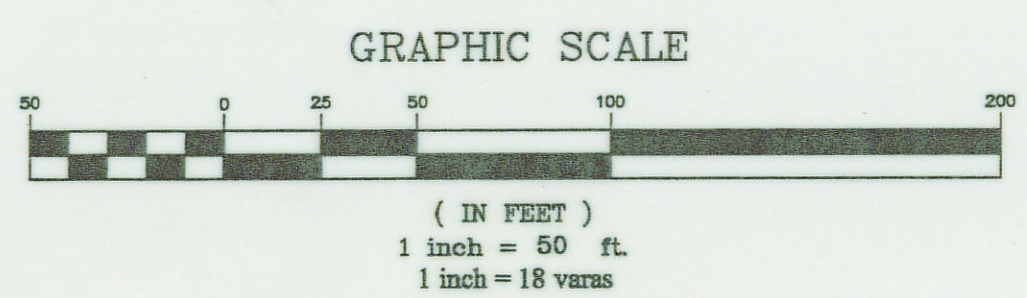


RECEIVED  
FEB 14 2003  
GENERAL LAND OFFICE



Survey of the MEAN HIGHER HIGH WATER line of part of the Southwesterly shoreline of the Edward T. Branch Survey, Chambers County, Texas, and said line being more particularly described as follows:  
 COMMENCING at Monument SMITH POINT (Y=13,763,276.39 and X= 3,314,835.99 feet);  
 Thence N 87°58'02" W, a distance of 1919.23 feet (690.9 V) to the said MEAN HIGHER HIGH WATER line along the face of existing culverts placed vertically and filled with concrete and the POINT OF BEGINNING (Y=13,763,344.47 and X= 3,312,917.97 feet);  
 THENCE along the said Mean Higher High Water line the following courses and distances:

LINE	FEET	BEARING	(VARAS)
L1	39.32	S44°26'11"E	14.2
L2	6.00	N85°13'20"E	2.2
L3	2.36	N20°51'24"E	0.8
L4	4.90	N01°43'46"E	1.8
L5	3.08	N36°17'49"W	1.1
L6	4.80	N88°16'50"W	1.7
L7	10.06	S78°19'14"W	3.6
L8	17.39	N48°02'56"W	6.3
L9	3.73	N23°51'12"W	1.3
L10	40.15	N44°01'56"W	14.5
L11	7.84	S87°34'25"E	2.8
L12	5.53	N21°30'33"E	2.0
L13	16.83	N47°01'39"W	6.1
L14	4.55	N65°59'43"W	1.6
L15	7.91	N22°17'32"E	2.8
L16	14.10	N17°44'24"E	5.1
L17	16.55	N07°21'34"E	6.0
L18	14.55	N24°39'56"W	5.2
L19	31.56	N52°36'10"W	11.4
L20	31.42	N70°49'41"W	11.3
L21	30.55	N75°27'47"W	11.0
L22	59.58	N79°20'16"W	21.4
L23	39.32	N68°41'35"W	14.2
L24	27.85	N80°26'30"W	10.0
L25	3.75	N75°29'50"W	1.4
L26	5.30	S27°29'51"W	1.9
L27	10.60	N80°43'24"W	3.8
L28	13.75	N74°32'13"W	5.0
L29	11.43	N47°27'41"W	4.1
L30	2.67	S48°16'51"W	1.0
L31	54.47	N53°31'46"W	19.6
L32	35.86	N46°28'57"W	12.9
L33	15.41	S78°43'09"W	5.5
L34	26.58	N31°45'11"W	9.6



Tidal Datum at EAGLE POINT, GALVESTON BAY, Texas—National Ocean Service Station ID: 8771013 based on:

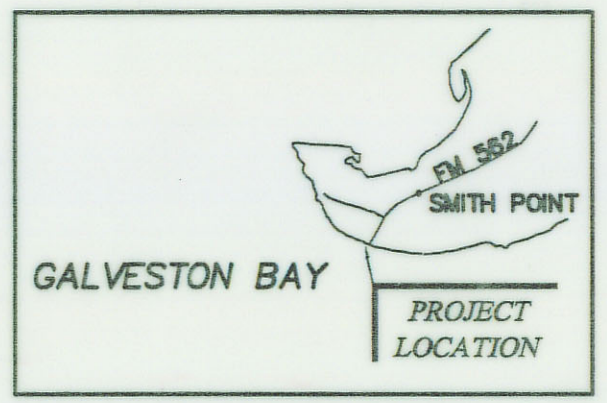
LENGTH OF SERIES: 57 MONTHS  
 TIME PERIOD: October 1993— June 1998  
 TIDAL EPOCH: 1960—1978  
 CONTROL TIDE STATION: 8771450 GALVESTON PIER 21, GALVESTON CHANNEL

PROJECT GAUGE  
 LOCATION: North of Project at the end of pier belonging to the Little Baytown Property Owner's Association  
 TIME: January 02, 2003 3:09 PM—January 06, 2003 10:57 AM

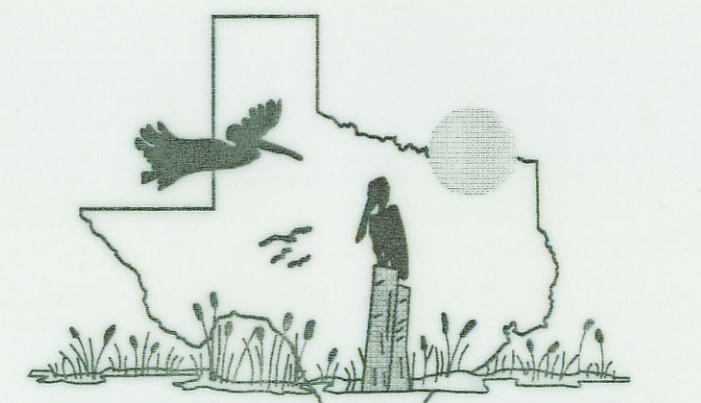
NOTES:

- 1.) ALL COORDINATES REFER TO THE STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, AS DEFINED BY ARTICLE 21.071 OF THE NATURAL RESOURCES CODE OF THE STATE OF TEXAS, 1983 DATUM (1993 ADJUSTMENT).
- 2.) CONTROL MONUMENT: SMITH POINT  
 NGS PID AW1444  
 SCALE FACTOR = 0.99986880  
 CONVERGENCE + 2.04 28.5.
- 3.) ALL DISTANCES ARE GRID DISTANCES, (U. S. SURVEY FEET)

"NOTICE:  
 This survey was performed in accordance with Section 33.136, Natural Resources Code, for the purpose of evidencing the location of the shoreline in the area depicted in this survey as that shoreline existed before commencement of erosion response activity, as required by Chapter 33, Natural Resources Code. The line depicted on this survey fixes the shoreline for the purpose of locating a shoreline boundary, subject to movement landward as provided by Section 33.136, Natural Resources Code."



VICINITY MAP (NOT TO SCALE)



COASTAL SURVEYING OF TEXAS  
 8017 HARBORSIDE DRIVE PH (409) 740-1517  
 GALVESTON, TX. 77553 FAX (409) 740-0377  
 www.surveygalveston.com  
 "SERVING GALVESTON COUNTY OVER 50 YEARS"

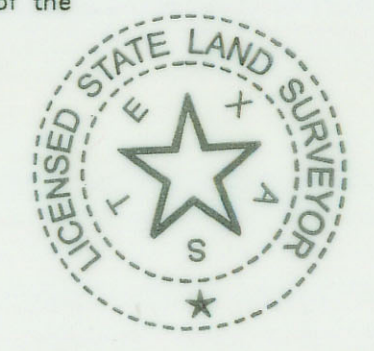
TEXAS GENERAL LAND OFFICE  
 Art. 33.136, Natural Resources Code  
 County Galveston, SK. NO. 20  
 File Date June 25, 2003 by D.J.H.  
 see Report to in box.

January 06, 2003

I hereby certify that the above described property was surveyed in the field according to law by me on the above referenced dates, and that the above map together with dimensions and coordinates is true and correct as of the above date.

COASTAL SURVEYING OF TEXAS

*Sidney Bouse*  
 Sidney Bouse  
 Licensed State Land Surveyor  
 Registered Professional Land Surveyor No. 5287  
 email: sid@surveygalveston.com



Notes found in Field Book: LSL 3, Pgs 40-47

Lines Shown were surveyed on the ground JANUARY 6, 2003  
 Field Personnel: Scott Bouse

MEAN HIGHER HIGH WATER  
 Survey of part of the Southwesterly shoreline of the EDWARD T. BRANCH SURVEY, Chambers County, Texas

Chambers Galveston Co. NRC Art. 33.136 Sketch 4

counter 78569



21400

SURVEYORS REPORT ON THE  
MEAN HIGHER HIGH WATER LINE SURVEY OF PART OF THE  
EDWARD T. BRANCH SURVEY, ABSTRACT NO. 40  
CHAMBERS COUNTY, TEXAS

I surveyed the line of Mean Higher High Water of the Edward T. Branch Survey, Chambers County, Texas, as authorized by Robert Koenig of Kinder Morgan Ship Channel Pipeline, L.P., and in my capacity as Licensed State Land Surveyor for the State of Texas.

HISTORY

The Edward T. Branch Survey is a First Class Headright grant of "one third of a League of land situated on Smith's Point fronting Trinity Bay on the South and East Bay on the North" according to the field notes as found in the Archives and Records Division of the General Land Office, Austin, Texas.

I can not read the name of the surveyor, but on page one of the said field notes, he has a date of June 18<sup>th</sup>, 1841. Page two contains a certification with the same signature declaring the date of the survey to be February 1838. This page also includes a sketch of the survey without a scale and a statement of acceptance by the Surveyors Office of the Town of Liberty dated October 14, 1841.

CONSTRUCTION

An Act to adapt the Common Law of England was approved on January 20, 1840. The Littoral State boundary of land granted prior to this date must be surveyed according to the Spanish and Mexican Civil Laws and is determined to be along the Mean Higher High Water Line. Lands granted after this date are to be located along the Mean High Water Line as required under current Common Law.

It is my belief that the second page of the field notes contains the actual date of the Original Survey. This date of February 1838 is certified to by the Original Surveyor and found correct by the Liberty Land Office at that time.

A tide gauge and tide staff were set up along the Southerly line of a pier belonging to the Little Baytown Property Owner's Association just North of the project area. Tide data was collected on 3-minute intervals from

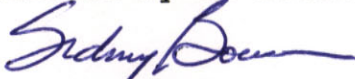
TEXAS GENERAL LAND OFFICE  
Art. 33.136, Natural Resources Code  
Chambers Report  
COUNTY GALVESTON, SK. NO. 10 Sketch 7  
File Date 6-25-2003 by D.J.H.

Chambers  
Galveston Co. NRC Art. 33.136 Report 10 Pg. 1 of 14  
See flattened sketch

2140

January 02, 2003 through January 06, 2003. Data was collected and tied to EAGLE POINT, GALVESTON BAY, TEXAS (NOS Station Id: 8771013) for the same time period. A conventional 3-wire Level tie was made from the tide gauge to Control Point 1. Control point 1 is a ½" iron rod set in concrete with a cap marked "COASTAL SURVEYING". The local Mean Higher High Water Elevation was determined for my project gauge and transferred to Control Point 1. This elevation was transferred to the shoreline. The location of the Mean Higher High Water so established was secured using Trimble RTK GPS and tied to NGS Monument "Smith Point".

I hereby certify that the above line was so established by me according to law on January 06, 2003.



Sidney Bouse  
Licensed State Land Surveyor  
RPLS 5287



Chambers Sketch 4  
Galveston Co. NRC Art. 33.136 Report 10 Pg. 2 of 14



191 Liberty 1st Clap  
E. T. Branch  
Liberty

1st Clap  
Good and not paid  
Total due \$22.60

conflicts with old  
Survey.

File 87.  
Liberty Co. 1st Clap

File notes - 1/3 Sec.  
Edward T. Branch

For certificate see <sup>THIS</sup> File  
~~Robertson Co~~

Rec'd. the sum of Twenty two  
dollars &  $\frac{60}{100}$  cents in the  
Pay notes of the Gov. for dues  
on the within filed note  
J. C. Cady  
Chf. Clk

Chambers  
Gardner Co. NRC Art. 33.136 Report 20 Pg. 3 & 14

Sketch 4



2110

Survey for E. J. Branch of one third of a League of land situated on Trinity Point fronting Trinity bay on the South & East bay on the North, being the quantity of land to which he is entitled to by virtue of Land Certificate No 24 issued by the Board of Land Comm<sup>r</sup> for the County of Shelby

Beginning at a mound and stake on East bay, thence along said bay the following courses - S 87° W 860 - at 83° W 700 - at north 68° W 400 - at 56° W 1140 - at 24° E 470 - at north 15° W 500 - at 44° W 340 - at 26° W 300 - at N 64° E 50 - at 15° W 250 - at 28° W 890 - ~~S 72° W 200~~ the most western end of the point, and the East end of Red fish bar. thence with the meanders of Trinity bay - S 45° E 790 - at 69° E 700 - S 32° E 660 - S 56° E 160 - S 83° E 450 - S 30° E 630 - at north 43° E - 10.50 at 33° E 34 - at 48° E at 30 timber 460 S 45° E 110 - at 50° E 348 - at 38° E 243 to corner stake, on the margin of the bay, from which a H. shaker 18 in dia. marked E. T. B bears at 30° E dis. 12.10 and another of the same kind 18 in dia marked X. bears S 35° W dis. 12.10 thence South at 170 a line known as Carrols line East dis 12 and edge of Prairie - 3040 beginning corner

June 18, 1841

Josiah Loney }  
Simon Loney } C. C.

J. J. Magman  
J. J.

one labor made balance pasture land



I solemnly declare under oath of my office that  
the foregoing survey was made since the first  
of February 1838 and that the boundaries both  
natural and artificial are truly given.

C. W. Maynes  
S.



Quincy office  
Town of Liberty Cal. 14<sup>th</sup> 1841

To the Com. Genl. L.O. I certify that I have examined  
the foregoing field notes and find them correct.

Thomas H. Hardin  
City. Cal. L.



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Ocean Service

Page 1 of 5

Station ID: 8771013	PUBLICATION DATE: 01/14/2000
Name: EAGLE POINT, GALVESTON BAY TEXAS	
NOAA Chart: 11327	Latitude: 29° 28.8' N
USGS Quad: TEXAS CITY	Longitude: 94° 55.1' W

To reach the tidal bench marks from the Post Office in San Leon, head south on 9th Street for 1.4 km (0.9 mi) to Avenue I, then turn east on Avenue I for 0.6 km (0.4 mi) to 5th Street., then turn south on 5th Street and go approximately 183 m (600 ft) to "Butler's on the Bay" hotel. The bench marks are located in the vicinity of the pier and along 5th Street. The tide gauge is located on the pier opposite the hotel, mounted on a square galvanized steel structure.

T I D A L   B E N C H   M A R K S

PRIMARY BENCH MARK STAMPING: LUB 1013 A 1992  
DESIGNATION: 877 1013 A

MONUMENTATION:	Bench Mark disk	VM#: 13445
AGENCY:	Lamar Univ. Beaumont	PID:
SETTING CLASSIFICATION:	Stainless steel rod	

The primary bench mark is a disk located east of Butlers on the Bay Motel near the foot of a private pier, 40.51 m (132.9 ft) east of the centerline of 5th Street, 3.69 m (12.1 ft) NE of the north edge of the private pier, 3.35 m (10.9 ft) SW of a fence, and 0.70 m (2.3 ft) WNW of the bulkhead. The bench mark is set 5 cm (0.2 ft) below ground level, crimped to a stainless steel rod driven 10.7 m (35 ft) to refusal, and encased in a 6-inch PVC pipe with concrete kickblock.

BENCH MARK STAMPING: LUB 1013 B 1992  
DESIGNATION: 877 1013 B

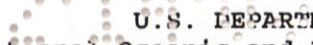
MONUMENTATION:	Bench Mark disk	VM#: 13446
AGENCY:	Lamar Univ. Beaumont	PID:
SETTING CLASSIFICATION:	Stainless steel rod	

The bench mark is a disk located east of Butlers on the Bay Motel, 18.41 m (60.4 ft) SW of the SW corner of a house, 6.77 m (22.2 ft) ESE of the centerline of 5th Street, and 0.82 m (2.7 ft) NE of a wood utility pole. The bench mark is set 5 cm (0.2 ft) below ground level, crimped to a stainless steel rod driven 10.7 m (35 ft) to refusal, and encased in a 6-inch PVC pipe with concrete kickblock.

*Chambers*  
*Galveston Co. NRC Art. 33.136 Report 10 Pg. 6 of 14*

*Sketch 7*  
*counter 78575*



  
 U.S. DEPARTMENT OF COMMERCE  
 National Oceanic and Atmospheric Administration  
 National Ocean Service

Page 2 of 5

Station ID: 8771013	PUBLICATION DATE: 01/14/2000
Name: EAGLE POINT, GALVESTON BAY TEXAS	
NOAA Chart: 11327	Latitude: 29° 28.8' N
USGS Quad: TEXAS CITY	Longitude: 94° 55.1' W

## T I D A L B E N C H M A R K S

BENCH MARK STAMPING: LUB 1013 C 1992  
 DESIGNATION: 877 1013 C

MONUMENTATION:	Bench Mark disk	VM#:	13447
AGENCY:	Lamar Univ. Beaumont	PID:	
SETTING CLASSIFICATION:	Stainless steel rod		

The bench mark is a disk located 13.01 m (42.7 ft) NE of the NE corner of Butlers on the Bay Motel, 10.24 m (33.6 ft) north of the centerline of a gravel entrance to the motel parking area, 6.89 m (22.6 ft) west of the centerline of 5th Street, and 1.01 m (3.3 ft) SE of the end of a fence. The bench mark is set 5 cm (0.2 ft) below ground level, crimped to a stainless steel rod driven 10.7 m (35 ft) to refusal, and encased in a 6-inch PVC pipe with concrete kickblock.

BENCH MARK STAMPING: LUB 1013 D 1992  
 DESIGNATION: 877 1013 D

MONUMENTATION:	Bench Mark disk	VM#:	13448
AGENCY:	Lamar Univ. Beaumont	PID:	
SETTING CLASSIFICATION:	Stainless steel rod		

The bench mark is a disk located 44 m (145 ft) NNE of bench mark LUB 1013 C 1992, 5.94 m (19.5 ft) east of the centerline of 5th Street, 1.52 m (5.0 ft) SW of a utility (gas) meter, and 1.01 m (3.3 ft) NW of a wood utility pole. The bench mark is set 5 cm (0.2 ft) below ground level, crimped to a stainless steel rod driven 10.7 m (35 ft) to refusal, and encased in a 6-inch PVC pipe with concrete kickblock.

*Chambers*  
~~Galveston Co. NRC Art. 33.136 Report #10 Pg. 7 of 14~~

*Sketch 7*  
 counter 78576







U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Ocean Service

Page 4 of 5

Station ID: 8771013	PUBLICATION DATE: 01/14/2000
Name: EAGLE POINT, GALVESTON BAY TEXAS	
NOAA Chart: 11327	Latitude: 29° 28.8' N
USGS Quad: TEXAS CITY	Longitude: 94° 55.1' W

## T I D A L D A T U M S

Tidal datums at EAGLE POINT, GALVESTON BAY based on:

LENGTH OF SERIES:	57 MONTHS
TIME PERIOD:	October 1993 - June 1998
TIDAL EPOCH:	1960-1978
CONTROL TIDE STATION:	8771450 GALVESTON PIER 21, GALVESTON CHANNEL

Elevations of tidal datums referred to Mean Lower Low Water (MLLW), in METERS:

HIGHEST OBSERVED WATER LEVEL (10/06/1996)	=	1.082
MEAN HIGHER HIGH WATER (MHHW)	=	0.336
MEAN HIGH WATER (MHW)	=	0.323
MEAN SEA LEVEL (MSL)	=	0.189
MEAN TIDE LEVEL (MTL)	=	0.174
MEAN LOW WATER (MLW)	=	0.025
MEAN LOWER LOW WATER (MLLW)	=	0.000
LOWEST OBSERVED WATER LEVEL (12/29/1997)	=	-1.109

Bench Mark Elevation Information In METERS above:

Stamping or Designation	MLLW	MHW
LUB 1013 A 1992	1.463	1.140
LUB 1013 B 1992	2.696	2.373
LUB 1013 C 1992	2.602	2.279
LUB 1013 D 1992	2.590	2.267
LUB 1013 E 1992	2.544	2.221
EAGLE PT NO 2 1932	3.085	2.762

## Foot Notes:

Galveston Bay, Texas has anomalous relative sea level trends compared to most other geographic regions in the United States. This is due to a general subsidence of land in this area, which has been occurring at a rapid rate. Because of the magnitude of the sea level trends in these areas, NOAA has adopted a procedure for computing accepted tidal datums for the National Water Level Observation Network (NWLON) using the last several years of sea level data rather than the 19-year tidal epoch. The tide ranges are still based on the 1960 - 1978 National Tidal Datum Epoch (NTDE) and are applied to the 5 year (1990 - 1994) mean tide level (MTL) to compute other tidal datums. The adoption of this procedure was necessary to ensure that these tidal datums accurately represent the existing stand of sea level.

*Chambers*  
Galveston Co. NRC Art. 33.136 Report *10* *Sketch 4* Pg. 9 of 14  
counter 78578 *9*



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Ocean Service

Page 5 of 5

Station ID: 8771013	PUBLICATION DATE: 01/14/2000
Name: EAGLE POINT, GALVESTON BAY TEXAS	
NOAA Chart: 11327	Latitude: 29° 28.8' N
USGS Quad: TEXAS CITY	Longitude: 94° 55.1' W

D E F I N I T I O N S

Mean Sea Level (MSL) is a tidal datum determined over a 19-year National Tidal Datum Epoch. It pertains to local mean sea level and should not be confused with the fixed datums of North American Vertical Datum of 1988 (NAVD 88).

NGVD 29 is a fixed datum adopted as a national standard geodetic reference for heights but is now considered superseded. NGVD 29 is sometimes referred to as Sea Level Datum of 1929 or as Mean Sea Level on some early issues of Geological Survey Topographic Quads. NGVD 29 was originally derived from a general adjustment of the first-order leveling networks of the U.S. and Canada after holding mean sea level observed at 26 long term tide stations as fixed. Numerous local and wide-spread adjustments have been made since establishment in 1929. Bench mark elevations relative to NGVD 29 are available from the National Geodetic Survey (NGS) data base via the World Wide Web at National Geodetic Survey.

NAVD 88 is a fixed datum derived from a simultaneous, least squares, minimum constraint adjustment of Canadian/Mexican/United States leveling observations. Local mean sea level observed at Father Point/Rimouski, Canada was held fixed as the single initial constraint. NAVD 88 replaces NGVD 29 as the national standard geodetic reference for heights. Bench mark elevations relative to NAVD 88 are available from NGS through the World Wide Web at National Geodetic Survey.

NGVD 29 and NAVD 88 are fixed geodetic datums whose elevation relationships to local MSL and other tidal datums may not be consistent from one location to another.

The Vertical Mark Number (VM#) and PID# shown on the bench mark sheet are unique identifiers for bench marks in the tidal and geodetic databases, respectively. Each bench mark in either database has a single, unique VM# and/or PID# assigned. Where both VM# and PID# are indicated, both tidal and geodetic elevations are available for the bench mark listed.

The NAVD 88 elevation is shown on the Elevations of Tidal Datums Table Referred to MLLW only when two or more of the bench marks listed have NAVD 88 elevations. The NAVD 88 elevation relationship shown in the table is derived from an average of several bench mark elevations relative to tide station datum. As a result of this averaging, NAVD 88 bench mark elevations computed indirectly from the tidal datums elevation table may differ slightly from NAVD 88 elevations listed for each bench mark in the NGS database.

*Chambers*  
*Galveston Co. NRC Art. 33.136 Report 10*

*Sketch 7*

*Pg. 10 of 14*

*counter 78579*

10



# The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

DATABASE = Sybase , PROGRAM = datasheet, VERSION = 6.69

1 National Geodetic Survey, Retrieval Date = JANUARY 6, 2003

AW1444 \*\*\*\*\*

AW1444 DESIGNATION - SMITH POINT  
 AW1444 PID - AW1444  
 AW1444 STATE/COUNTY- TX/CHAMBERS  
 AW1444 USGS QUAD - SMITH POINT (1993)

AW1444 \*CURRENT SURVEY CONTROL

AW1444\* NAD 83(1993) - 29 31 34.65544(N) 094 45 55.43078(W) ADJUSTED  
 AW1444\* NAVD 88 - 3.67 (+/-2cm) 12.0 (feet) VERTCON

AW1444 LAPLACE CORR- 0.27 (seconds) DEFLEC99  
 AW1444 GEOID HEIGHT- -26.82 (meters) GEOID99

AW1444 HORZ ORDER - SECOND  
 AW1444 VERT ORDER - FIRST CLASS II (See Below)

AW1444.The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in February 1996.

AW1444.The NAVD 88 height was computed by applying the VERTCON shift value to the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

AW1444.The vertical order pertains to the superseded datum.

AW1444.The Laplace correction was computed from DEFLEC99 derived deflections.

AW1444.The geoid height was determined by GEOID99.

	North	East	Units	Scale	Converg.
AW1444; SPC TXSC	- 4,195,055.033	1,010,364.030	MT	0.99986880	+2 04 28.5
AW1444; UTM 15	- 3,267,595.898	328,914.637	MT	0.99996117	-0 52 12.9

	Primary Azimuth Mark	Grid Az
AW1444: SPC TXSC	- SMITH POINT AZ MK	297 41 21.4
AW1444: UTM 15	- SMITH POINT AZ MK	300 38 02.8

PID	Reference Object	Distance	Geod. Az
AW1444			dddmmss.s
AW1444	AW3058 SMITH POINT RM N	30.570 METERS	00049
AW1444	CV9402 SMITH POINT RM		00052
AW1444	CV9403 SMITH POINT RM 1		08131
AW1444	CV9404 SMITH POINT RM E	30.496 METERS	08430
AW1444	AW5821 HOUSTON SHIP CHAN PLINE LT 47	APPROX.10.9 KM	2305725.4
AW1444	AW1443 SMITH POINT RM 2	38.107 METERS	29337
AW1444	AW1441 SMITH POINT AZ MK		2994549.9

AW1444 SUPERSEDED SURVEY CONTROL

AW1444 NAD 83(1986) - 29 31 34.67197(N) 094 45 55.41188(W) AD( ) 2  
 AW1444 NAD 27 - 29 31 33.84400(N) 094 45 54.70400(W) AD( ) 2  
 AW1444 NGVD 29 - 3.666 (m) 12.03 (f) ADJ UNCH 1 2

AW1444.Superseded values are not recommended for survey control.  
 AW1444.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.  
 AW1444.See file dsdata.txt to determine how the superseded data were derived.

AW1444 U.S. NATIONAL GRID SPATIAL ADDRESS: 15RUN2891567596(NAD 83)

AW1444\_MARKER: DS = TRIANGULATION STATION DISK  
 AW1444\_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT  
 AW1444\_STAMPING: SMITH PT USED 1900 1911 1932  
 AW1444\_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO  
 AW1444+STABILITY: SURFACE MOTION

HISTORY	Date	Condition	Report By
AW1444	- 1900	MONUMENTED	USE
AW1444	- 1932	GOOD	CGS
AW1444	- 1940	GOOD	CGS
AW1444	- 1942	GOOD	CGS



AW1444	HISTORY	- 1955	GOOD	AEROS
AW1444	HISTORY	- 1958	GOOD	SHELL
AW1444	HISTORY	- 1960	GOOD	CGS
AW1444	HISTORY	- 1962	GOOD	CGS
AW1444	HISTORY	- 1963	GOOD	CGS
AW1444	HISTORY	- 1963	GOOD	CGS
AW1444	HISTORY	- 1973	GOOD	NGS
AW1444	HISTORY	- 1978	GOOD	NGS
AW1444	HISTORY	- 20020614	MARK NOT FOUND	USPSQD

AW1444

AW1444 STATION DESCRIPTION

AW1444

AW1444'DESCRIBED BY US ENGINEERS 1900

AW1444'LOCATED ABOUT 2 MILES SW FROM THE EXTREME W PORTION OF SMITH  
 AW1444'POINT, 152 METERS N OF THE BLUFF BANK ON THE BAY, 104 METERS  
 AW1444'SE OF THE SE CORNER OF W. HEIMANS LOT, 130 METERS SW OF THE  
 AW1444'NW CORNER OF H. HEIMANS FIELD FENCE, AND 13 FEET ABOVE MEAN  
 AW1444'LOW WATER.

AW1444'

AW1444'STATION IS MARKED BY A BRASS PLUG, 3/8 INCH IN DIAMETER, WITH  
 AW1444'A 1/8-INCH HOLE IN THE CENTER OR WITH CROSS LINES ON THE TOP,  
 AW1444'ABOUT 2 FEET BELOW GROUND IN SANDSTONE BLOCK. ABOVE THE PLUG  
 AW1444'IS A UNITED STATES ENGINEERS STANDARD CAST-IRON STATION MARK  
 AW1444'PROJECTING 3 INCHES ABOVE THE SURFACE.

AW1444'

AW1444'THE REFERENCE MARK IS A UNITED STATES ENGINEERS STANDARD CASTIRON  
 AW1444'REFERENCE MARK PROJECTING 3 INCHES ABOVE THE SURFACE. IT IS 100  
 AW1444'FEET FROM THE STATION S 77 DEG 06 MIN W.

AW1444

AW1444 STATION RECOVERY (1932)

AW1444

AW1444'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1932 (EOH)

AW1444'STATION IS LOCATED ON SMITH POINT, AT THE CONFLUENCE OF EAST  
 AW1444'BAY AND GALVESTON BAY. IT IS ON THE S SIDE OF THE POINT AND  
 AW1444'ABOUT 2 MILES SE FROM THE EXTREME END, ON THE PROPERTY OF SUN  
 AW1444'OIL COMPANY. IT IS LOCATED 124 METERS N OF HIGH-WATER MARK,  
 AW1444'APPROXIMATELY 380 YARDS E BY N OF SUMMER COTTAGE OWNED BY J.W.  
 AW1444'HARTFIELD OF BEAUMONT, TEXAS. IT IS 30.633 METERS S BY E  
 AW1444'OF REFERENCE MARK (U.S.E.) AND 38.175 METERS E BY S OF  
 AW1444'REFERENCE MARK 2.

AW1444'

AW1444'SURFACE, UNDERGROUND, AND REFERENCE MARKS ARE BRONZE DISKS  
 AW1444'SET IN CONCRETE. R.M.S 1 AND 2 ARE U.S.C. AND G.S. DISKS.

AW1444'

AW1444'REFERENCE MARK IS A U.S.E. MARK (IRON PIPE WITH CAP).

AW1444

AW1444 STATION RECOVERY (1940)

AW1444

AW1444'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1940 (WLH)

AW1444'IN GOOD CONDITION.

AW1444

AW1444 STATION RECOVERY (1942)

AW1444

AW1444'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1942 (CJB)

AW1444'STATION AND TWO REFERENCE MARKS WERE RECOVERED AS DESCRIBED  
 AW1444'AND FOUND TO BE IN GOOD CONDITION.

AW1444'

AW1444'STATION IS ABOUT 1.4 MILES S AND 0.2 MILE E OF THE SMITH POINT  
 AW1444'POST OFFICE, ABOUT 377 FEET N OF HIGH-WATER MARK, AND ABOUT  
 AW1444'2 MILES SE OF THE EXTREME END OF THE POINT.

AW1444'

AW1444'STATION MARK IS A U.S.E. TRIANGULATION-STATION DISK SET IN A  
 AW1444'CONCRETE POST. IT IS STAMPED SMITH POINT. MONUMENT PROJECTS  
 AW1444'ABOUT 0.2 FOOT.

AW1444'

AW1444'REFERENCE MARK IS ABOUT 100 FEET NNW OF THE STATION. IT IS  
 AW1444'AN IRON CAP RIVETED TO THE TOP OF A 3-1/2-INCH IRON PIPE  
 AW1444'PROJECTING ABOUT 0.1 FOOT.

AW1444'

AW1444'REFERENCE MARK 2 IS ABOUT 96 FEET W FROM THE STATION (PACED).

AW1444'IT IS A U.S.E. REFERENCE-MARK DISK SET IN A CONCRETE POST AND IS  
 AW1444'STAMPED SMITH POINT NO 2.

AW1444'

AW1444'REFERENCE MARK 1 WAS NOT SEARCHED FOR AT THIS TIME.

AW1444

AW1444 STATION RECOVERY (1955)

AW1444

AW1444'RECOVERY NOTE BY AERO SERVICE CORPORATION 1955 (DWR)

AW1444'STATION STAMPED SMITH POINT USED 1900 1932 1938 WAS FOUND



AW1444 'IN GOOD CONDITION.

AW1444

AW1444

STATION RECOVERY (1958)

AW1444

AW1444 'RECOVERY NOTE BY SHELL OIL COMPANY 1958

AW1444 'ORIGINAL AND SUBSEQUENT DESCRIPTIONS SATISFACTORY. STATION

AW1444 'RECOVERED IN GOOD CONDITION. R.M. 1 (NE) AND R.M. (U.S.E.)

AW1444 'WERE RECOVERED IN GOOD CONDITION. NO SEARCH WAS MADE FOR

AW1444 'R.M. 2.

AW1444

AW1444

STATION RECOVERY (1960)

AW1444

AW1444 'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1960 (JKW)

AW1444 'STATION, R.M. (U.S.E.) AND R.M. 2 RECOVERED IN GOOD CONDITION.

AW1444 'THE ANGLE TO R M 1 WAS MEASURED AND A SEARCH WAS MADE ALONG THE

AW1444 'LINE BUT THE MARK COULDN'T BE FOUND. IT IS PROBABLY STILL

AW1444 'IN PLACE BUT THE AREA IS COVERED WITH THICK GRASS AND THE

AW1444 'DISTANCE IS APPROXIMATE. THE DISTANCES TO THE RECOVERED R MS

AW1444 'WERE VERIFIED.

AW1444 '

AW1444 'REVISED DESCRIPTION FOLLOWS. THE STATION IS LOCATED ON SMITH

AW1444 'POINT ABOUT 2 MILES EAST OF THE WESTERN EXTREMITY OF THE POINT,

AW1444 'IN AN OPEN PASTURE ABOUT MIDWAY BETWEEN THE TWO ROADS WHICH

AW1444 'FORK JUST NORTH OF THE POINT. STATION IS ABOUT 325 FEET NORTH

AW1444 'OF THE BANK AND ABOUT ON RANGE WITH THE WEST SIDE OF A PROMINENT

AW1444 'CLUMP OF TREES. A 45 FOOT STEEL OBSERVING TOWER IS IN PLACE

AW1444 'OVER THE STATION MARK. A STANDARD DISK STAMPED SMITH POINT

AW1444 'USED 1900-1911-1932 IN TOP OF A 10 INCH SQUARE CONCRETE

AW1444 'MONUMENT WHICH PROJECTS 2 INCHES.

AW1444 '

AW1444 'R M 2 IS 38.175 METERS (125.24 FEET) WEST OF THE STATION

AW1444 'ON A LOW SAND RIDGE AND JUST EAST OF A POND. A STANDARD

AW1444 'DISK STAMPED SMITH POINT USED NO. 2 1900-1911-1932 IN TOP

AW1444 'OF A 10 INCH SQUARE CONCRETE MONUMENT WHICH PROJECTS 2 INCHES.

AW1444 '

AW1444 'R M (U.S.E.) IS 30.633 METERS (100.50 FEET) NORTH OF THE STATION

AW1444 'AT THE BASE OF THE SLOPE OF A LOW SAND RIDGE. AN IRON CAP WITH

AW1444 'ARROW AND LETTERS U S E D CAST IN CAP RIVETED TO THE TOP

AW1444 'OF A 3.5 INCH IRON PIPE WHICH PROJECTS 2 INCHES.

AW1444 '

AW1444 'THE STATION CAN BE REACHED BY TRUCK BY FOLLOWING FARM ROAD

AW1444 '562 TO THE BEACH THEN WALK EASTERLY ABOUT 2000 FEET TO THE

AW1444 'STATION.

AW1444

AW1444

STATION RECOVERY (1962)

AW1444

AW1444 'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1962 (GEV)

AW1444 'RECOVERED IN GOOD CONDITION. 1960 DESCRIPTION ADEQUATE.

AW1444 '45 FOOT STEEL TOWER STILL STANDS.

AW1444

AW1444

STATION RECOVERY (1963)

AW1444

AW1444 'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1963 (GEV)

AW1444 'STATION RECOVERED IN GOOD CONDITION. THE 1960 RECOVERY NOTE

AW1444 'BY J.K.W. IS ADEQUATE.

AW1444

AW1444

STATION RECOVERY (1963)

AW1444

AW1444 'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1963 (RWT)

AW1444 'THE STATION MARK, REFERENCE MARK 2 AND REFERENCE MARK (USE)

AW1444 'WERE FOUND IN GOOD CONDITION. ANOTHER REFERENCE MARK (USE) WAS

AW1444 'FOUND EAST OF THE STATION. THE DIRECTION TO REFERENCE MARK

AW1444 '2 CHECKED BUT THE DISTANCE WAS FOUND TO BE 0.070 METERS

AW1444 'SHORTER THAN PREVIOUSLY MEASURED. THE DIRECTION TO REFERENCE

AW1444 'MARK (USE) DID NOT CHECK BY 1 MINUTE AND 30.4 SECONDS AND THE

AW1444 'DISTANCE WAS FOUND TO BE 0.063 METERS SHORTER THAN PREVIOUSLY

AW1444 'MEASURED. REFERENCE MARK NUMBER 1 WAS SEARCHED FOR BUT COULD

AW1444 'NOT BE FOUND. AN AZIMUTH MARK WAS ESTABLISHED AT THIS TIME.

AW1444 '

AW1444 'THERE IS A 45 FOOT STEEL OBSERVING TOWER IN PLACE OVER THE

AW1444 'STATION MARK BUT WAS NOT STURDY ENOUGH FOR OBSERVING. THE

AW1444 'TOWER WAS BUILT OVER REFERENCE MARK 2 AND THE OBSERVATION

AW1444 'WAS TAKEN FROM THERE.

AW1444 '

AW1444 'A COMPLETE NEW DESCRIPTION FOLLOWS--

AW1444 '

AW1444 'THE STATION IS ON SMITH POINT ABOUT 2 MILES EAST OF THE WESTERN

AW1444 'EXTREMITY OF THE POINT, IN AN OPEN PASTURE ABOUT MIDWAY BETWEEN

AW1444 'THE TWO ROADS WHICH FORK JUST NORTH OF THE POINT UNDER A

*Chambers*

*Galveston Co. NRC Art. 33.136 Report 10 Pg. 13 of 14*



AW1444'45 FOOT TOWER.

AW1444'

AW1444'TO REACH FROM THE CROSSROADS IN THE VILLAGE OF SMITH POINT,  
AW1444'GO SOUTHWEST AND SOUTH ON SHELL ROAD FOR 0.7 MILE TO A WIRE  
AW1444'GATE ON THE LEFT. TURN LEFT, PASS THROUGH THE GATE AND GO  
AW1444'EASTERLY THROUGH PASTURE, KEEPING ON THE SOUTH SIDE OF SOME  
AW1444'TREES, FOR 0.2 MILE TO THE STATION.

AW1444'

AW1444'TO REACH THE AZIMUTH MARK FROM THE CROSSROAD IN SMITH POINT,  
AW1444'GO SOUTHWEST AND SOUTH ON THE SHELL ROAD FOR 0.8 MILE TO THE  
AW1444'AZIMUTH MARK ON THE LEFT.

AW1444'

AW1444'THE STATION MARK IS A STANDARD DISK STAMPED SMITH PT USED 1900  
AW1444'1911 1932 SET IN THE TOP OF A 10 INCH SQUARE CONCRETE POST  
AW1444'WHICH PROJECTS 1 INCH. THE MARK IS IN THE CENTER OF A 4  
AW1444'LEGGED STEEL TOWER, ABOUT 6 FEET SOUTHEAST OF A CLUMP OF  
AW1444'CAT CLAW BUSHES AND 2.5 FEET NORTH OF A 3 INCH DIAMETER  
AW1444'CREOSOTE WITNESS POST WITH SIGN.

AW1444'

AW1444'REFERENCE MARK 2 IS A STANDARD DISK STAMPED SMITH PT 2 USED  
AW1444'1900 1911 1932 SET IN THE TOP OF A 10 INCH SQUARE CONCRETE  
AW1444'POST WHICH PROJECTS 2 INCHES. THE MARK IS ON A LOW SAND RIDGE  
AW1444'AND JUST EAST OF A POND.

AW1444'

AW1444'REFERENCE MARK (USE) IS AN IRON CAP WITH A ARROW AND LETTERS  
AW1444'U S E D CAST IN A CAP RIVETED TO THE TOP OF A 3-1/2 INCH IRON  
AW1444'PIPE WHICH PROJECTS 1 INCH ABOVE GROUND SURFACE.

AW1444'

AW1444'THE IRON CAP HAS A 1/4 INCH HOLE IN THE CENTER OF THE TOP.  
AW1444'THE MARK IS AT THE BASE OF THE SLOPE OF A LOW SAND RIDGE.

AW1444'

AW1444'THE OTHER REFERENCE MARK (USE) IS IDENTICAL TO THE REFERENCE  
AW1444'MARK (USE) DESCRIBED AND IS 33 FEET WEST OF A CAT CLAW BUSH.

AW1444'

AW1444'THE AZIMUTH MARK IS A STANDARD DISK STAMPED SMITH PT 1963  
AW1444'SET IN A 10 INCH SQUARE CONCRETE POST WHICH PROJECTS 6 INCHES  
AW1444'ABOVE THE GROUND SURFACE. THE MARK IS 39 FEET EAST OF THE  
AW1444'CENTERLINE OF A SHELL ROAD, 10 FEET SOUTH OF A POWERLINE GUY  
AW1444'POLE, 2 FEET NORTH OF A 3 INCH DIAMETER WOOD CREOSOTE WITNESS  
AW1444'POST WITH SIGN AND 1 FOOT WEST OF A WIRE FENCE.

AW1444

STATION RECOVERY (1973)

AW1444

AW1444'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1973

AW1444'1.35 MI SE FROM SMITH POINT.

AW1444'ABOUT 0.95 MILE SOUTHWEST ALONG FARM ROAD 562 FROM THE VAN TA UN STORE  
AW1444'AT SMITH POINT, THENCE 0.1 MILE EAST ALONG A PRIVATE SHELL ROAD TO  
AW1444'HARTFIELD CAMP, THENCE 0.3 MILE SOUTHEAST ALONG THE SHORE LINE OF EAST  
AW1444'BAY, ABOUT 150 YARDS NORTHEAST OF THE WATER LINE OF THE BAY, ABOUT  
AW1444'0.15 MILE NORTHWEST OF A LARGE GROVE OF TREES, 170 FEET SOUTHEAST OF  
AW1444'THE SOUTHEAST EDGE OF A SMALL POND, UNDER A 45 FOOT HIGH STEEL TOWER,  
AW1444'125 FEET SOUTHEAST OF RM 2, SET IN THE TOP OF A CONCRETE POST FLUSH  
AW1444'WITH THE LEVEL OF THE GROUND.

AW1444

STATION RECOVERY (1978)

AW1444

AW1444'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1978

AW1444'RECOVERED IN GOOD CONDITION.

AW1444

STATION RECOVERY (2002)

AW1444

AW1444'RECOVERY NOTE BY US POWER SQUADRON 2002 (CHN)

AW1444'STEEL OBSERVATION TOWER NO LONGER EXISTS TO PROVIDE REFERENCE POINT.

\*\*\* retrieval complete.

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