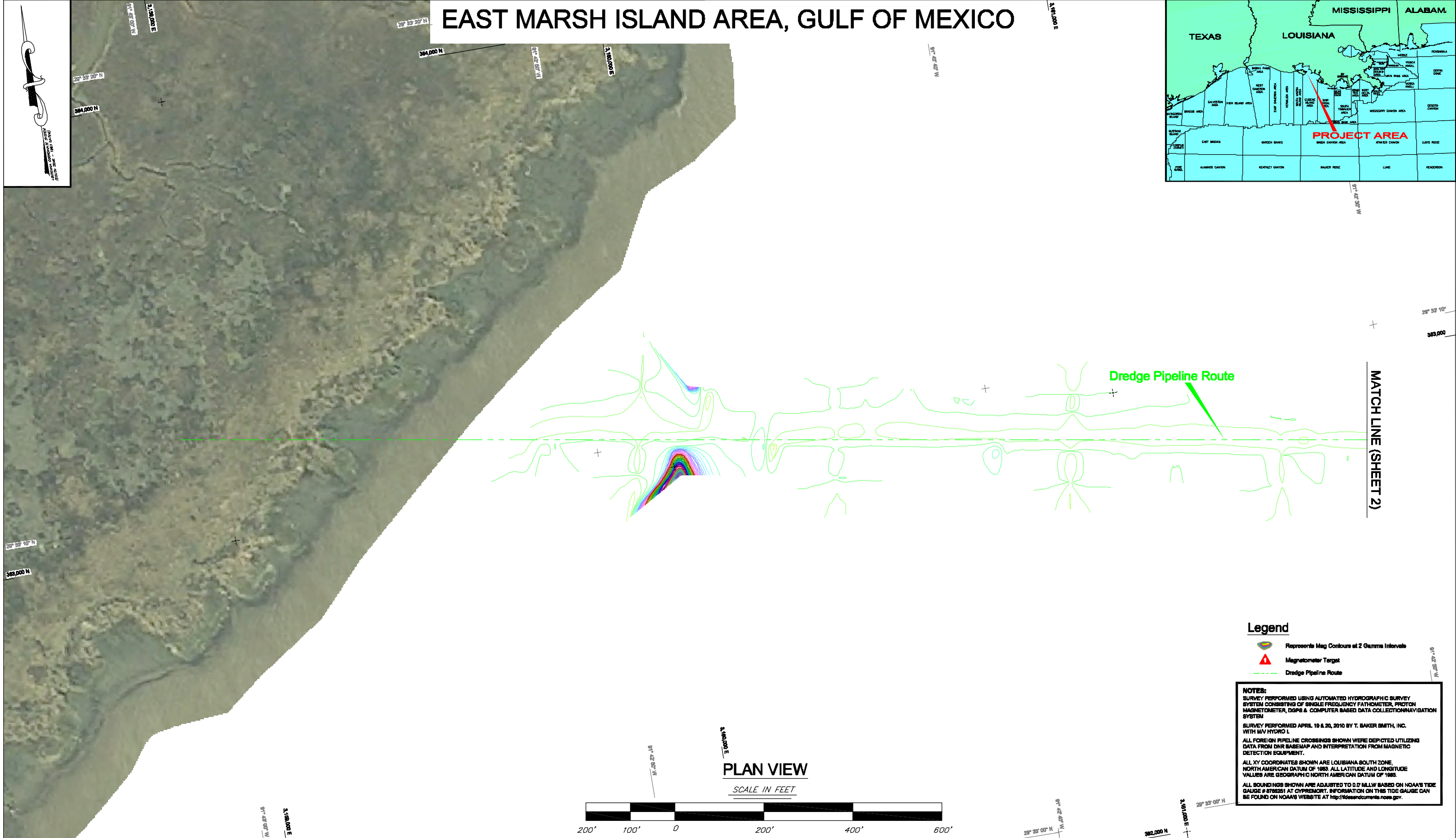
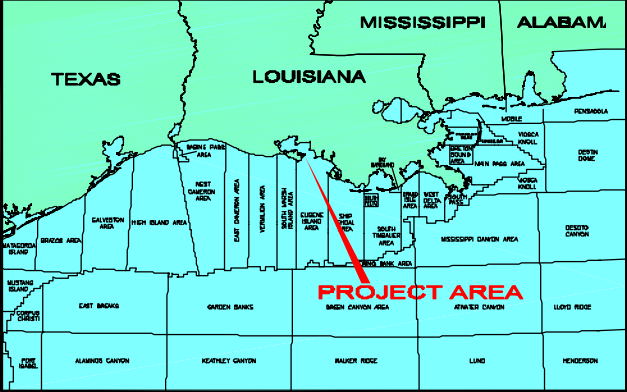


EAST MARSH ISLAND AREA, GULF OF MEXICO



Legend

- Represents Mag Contours at 2 Gamma Intervals
- Magnetometer Target
- Dredge Pipeline Route

NOTES:

SURVEY PERFORMED USING AUTOMATED HYDROGRAPHIC SURVEY SYSTEM CONSISTING OF SINGLE FREQUENCY FATHOMETER, PROTON MAGNETOMETER, DGPS & COMPUTER BASED DATA COLLECTION/NAVIGATION SYSTEM

SURVEY PERFORMED APRIL 19 & 20, 2010 BY T. BAKER SMITH, INC. WITH M/V HYDRO I

ALL FOREIGN PIPELINE CROSSINGS SHOWN WERE DEPICTED UTILIZING DATA FROM DNR BASEMAP AND INTERPRETATION FROM MAGNETIC DETECTION EQUIPMENT.

ALL XY COORDINATES SHOWN ARE LOUISIANA SOUTH ZONE, NORTH AMERICAN DATUM OF 1983. ALL LATITUDE AND LONGITUDE VALUES ARE GEOGRAPHIC NORTH AMERICAN DATUM OF 1983.

ALL SOUNDINGS SHOWN ARE ADJUSTED TO 0.0' MLLW BASED ON NOAA'S TIDE GAUGE # 8766261 AT CYPREMOINT. INFORMATION ON THIS TIDE GAUGE CAN BE FOUND ON NOAA'S WEBSITE AT <http://tidesandcurrents.noaa.gov>.

PLAN VIEW

SCALE IN FEET

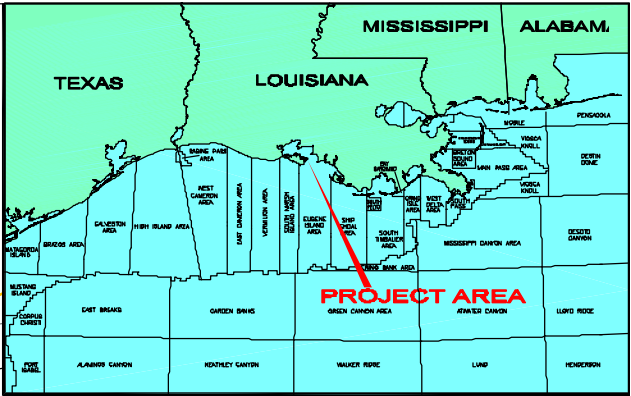


NOTES:					T. BAKER SMITH PROFESSIONAL CONSULTANTS SINCE 1913 (985) 868-1450 www.tbsmith.com		FILE NAME: 100146H01-H TBS NO.: 2010.0148 DATE: 4-22-10 PLOT SCALE: 1" = 100' DRAWN BY: E.T.S. APPROVED: S.J.B.	WEEKS MARINE, INC. 2010 HAZARD SURVEY OF PROPOSED DREDGE PIPELINE ROUTE AND BORROW AREA LOCATED IN EAST MARSH ISLAND AREA GULF OF MEXICO	1 OF 6
	DATE	REVISIONS	DRAWN BY	APPROVED BY					

EAST MARSH ISLAND AREA, GULF OF MEXICO

POINT #	X	Y	LAT	LON
1	3,162,255.24	382,769.42	29° 33' 07.20"	91° 42' 22.58"
2	3,162,251.62	382,717.64	29° 33' 06.89"	91° 42' 22.63"
3	3,162,241.57	382,666.74	29° 33' 06.19"	91° 42' 22.74"
4	3,162,224.83	382,617.76	29° 33' 05.70"	91° 42' 22.93"
5	3,162,212.94	382,567.05	29° 33' 05.20"	91° 42' 23.06"
6	3,162,308.57	382,780.66	29° 33' 07.12"	91° 42' 21.99"
7	3,162,296.61	382,710.92	29° 33' 06.63"	91° 42' 22.12"
8	3,162,285.06	382,661.11	29° 33' 06.13"	91° 42' 22.25"
9	3,162,277.94	382,610.46	29° 33' 05.63"	91° 42' 22.33"
10	3,162,270.81	382,559.80	29° 33' 05.13"	91° 42' 22.41"
11	3,163,992.75	382,479.61	29° 33' 04.39"	91° 42' 02.91"
12	3,163,885.63	382,454.45	29° 33' 04.14"	91° 42' 04.12"
13	3,163,781.48	382,419.59	29° 33' 03.79"	91° 42' 05.30"
14	3,163,676.56	382,384.73	29° 33' 03.44"	91° 42' 06.48"
15	3,163,570.46	382,353.46	29° 33' 03.13"	91° 42' 07.69"

Depicts Pipeline Position as per Magnetometer



Dredge Pipeline Route

Legend

- Represents Mag Contours at 2 Gamma intervals
- Foreign Pipelines as per DNR Basemap
- Foreign Pipelines as per Magnetometer
- Dredge Pipeline Route

NOTES:
SURVEY PERFORMED USING AUTOMATED HYDROGRAPHIC SURVEY SYSTEM CONSISTING OF SINGLE FREQUENCY FATHOMETER, PROTON MAGNETOMETER, DGPS & COMPUTER BASED DATA COLLECTION/NAVIGATION SYSTEM.
SURVEY PERFORMED APRIL 19 & 20, 2010 BY T. BAKER SMITH, INC. WITH MV HYDRO I.
ALL FOREIGN PIPELINE CROSSINGS SHOWN WERE DEPICTED UTILIZING DATA FROM DNR BASEMAP AND INTERPRETATION FROM MAGNETIC DETECTION EQUIPMENT.
ALL XY COORDINATES SHOWN ARE LOUISIANA SOUTH ZONE, NORTH AMERICAN DATUM OF 1983. ALL LATITUDE AND LONGITUDE VALUES ARE GEOGRAPHIC NORTH AMERICAN DATUM OF 1983.
ALL SOUNDINGS SHOWN ARE ADJUSTED TO 0.0' MLLW BASED ON NOAA'S TIDE GAUGE # 870809 AT CYTREMORT. INFORMATION ON THIS TIDE GAUGE CAN BE FOUND ON NOAA'S WEBSITE AT <http://tidesandcurrents.noaa.gov>.

PLAN VIEW

SCALE IN FEET



NOTES:

DATE	REVISIONS	DRAWN BY	APPROVED BY	



FILE NAME:	100140H02-H
TBS NO.:	2010.0148
DATE:	4-22-10
PLOT SCALE:	1" = 100'
DRAWN BY:	E.T.G.
APPROVED:	S.J.B.

WEEKS MARINE, INC.

2010 HAZARD SURVEY OF
PROPOSED DREDGE PIPELINE ROUTE AND
BORROW AREA LOCATED IN
EAST MARSH ISLAND AREA
GULF OF MEXICO

SHEET N
2
OF
6

Map of the Gulf of Mexico coastal region showing various management areas. A red arrow points to the 'PROJECT AREA' located in the central part of the Gulf, between the 'CLASSIC PLANT AREA' and 'SOUTH TURKEY AREA'. The map includes labels for states (TEXAS, LOUISIANA, MISSISSIPPI, ALABAMA) and numerous specific management areas such as 'BONNE PAYS AREA', 'NIST CANYON AREA', 'SOUTH TURKEY AREA', and 'MISSISSIPPI CANYON AREA'.

① Depicts Pipeline Position as per Magnetometer

➤ Possible Sub-Sea Well Location

Dredge Pipeline Route

MATCH LINE (SHEET 2)

MATCH LINE (SHEET 4)

Legend

-  Represents Mag Contours at 2 Gamma intervals
-  Foreign Pipelines as per DNR Basemap
-  Foreign Pipelines as per Magnetometer
-  Dredge Pipeline Route

NOTES:

SURVEY PERFORMED USING AUTOMATED HYDROGRAPHIC SURVEY SYSTEM CONSISTING OF SINGLE FREQUENCY FATHOMETER, PROTON MAGNETOMETER, DGPS & COMPUTER BASED DATA COLLECTION/NAVIGATION SYSTEM.

SURVEY PERFORMED APRIL 10 & 20, 2010 BY T. BAKER SMITH, INC. WITH NEW HYDROS L.

ALL FOREIGN PIPELINE CROSSINGS SHOWN WERE DEPICTED UTILIZING DATA FROM DNR BASEMAP AND INTERPRETATION FROM MAGNETIC DETECTION EQUIPMENT.

ALL XY COORDINATES SHOWN ARE LOUISIANA SOUTH ZONE, NORTH AMERICAN DATUM OF 1983. ALL LATITUDE AND LONGITUDE VALUES ARE GEOGRAPHIC NORTH AMERICAN DATUM OF 1983.

ALL BOUNDINGS SHOWN ARE ADJUSTED TO D.P. MILLER BASED ON NOAA'S TIDE GAUGE CRISPER, KY CYRUSMONT. INFORMATION ON THIS TIDE GAUGE CAN BE FOUND ON NOAA'S WEBSITE AT www.noaa.gov UNDER TIDE GAUGES.

PLAN VIEW

SCALE IN FEET



NOTES:

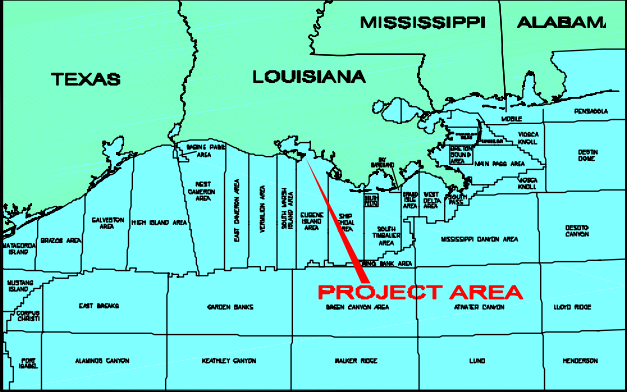
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FILE NAME:	100148H03-H
TBS NO.:	2010.0148
DATE:	4-22-10
PLOT SCALE:	1" = 100'
DRAWN BY:	E.T.G.
APPROVED:	S.J.B.

WEEKS MARINE, INC.
2010 HAZARD SURVEY OF
PROPOSED DREDGE PIPELINE ROUTE AND
BORROW AREA LOCATED IN
EAST MARSH ISLAND AREA
GULF OF MEXICO

SHEET N
3
OF
6

EAST MARSH ISLAND AREA, GULF OF MEXICO



Dredge Pipeline Route

PLAN VIEW

SCALE IN FEET



Legend

- Represents Mag Contours at 2 Gamma Intervals
- Foreign Pipelines as per DNR Basemap
- Foreign Pipelines as per Magnetometer
- Dredge Pipeline Route

NOTES:
SURVEY PERFORMED USING AUTOMATED HYDROGRAPHIC SURVEY SYSTEM CONSISTING OF SINGLE FREQUENCY FATHOMETER, PROTON MAGNETOMETER, DGPS & COMPUTER BASED DATA COLLECTION/NAVIGATION SYSTEM.
SURVEY PERFORMED APRIL 19 & 20, 2010 BY T. BAKER SMITH, INC. WITH M/V HYDRO I.
ALL FOREIGN PIPELINE CROSSINGS SHOWN WERE DEPICTED UTILIZING DATA FROM DNR BASEMAP AND INTERPRETATION FROM MAGNETIC DETECTION EQUIPMENT.
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ALL SOUNDINGS SHOWN ARE ADJUSTED TO 0.0' MLLW BASED ON NOAA'S TIDE GAUGE # 876691 AT GYFREMORT. INFORMATION ON THIS TIDE GAUGE CAN BE FOUND ON NOAA'S WEBSITE AT <http://tidesandcurrents.noaa.gov>.

NOTES:			
DATE	REVISIONS	DRAWN BY	APPROVED BY

TBS **T. BAKER SMITH**
PROFESSIONAL CONSULTANTS SINCE 1913
(985) 868-1650 www.tbsmith.com



FILE NAME:	100140HD4-H
TBS NO.:	2010.0148
DATE:	4-22-10
PLOT SCALE:	1" = 100'
DRAWN BY:	E.T.S.
APPROVED:	S.J.B.

WEEKS MARINE, INC.
2010 HAZARD SURVEY OF
PROPOSED DREDGE PIPELINE ROUTE AND
BORROW AREA LOCATED IN
EAST MARSH ISLAND AREA
GULF OF MEXICO

SHEET N
4
OF
6

EAST MARSH ISLAND AREA, GULF OF MEXICO



MATCH LINE (SHEET 4)

MATCH LINE (SHEET 6)

Dredge Pipeline Route

Unknown Magnetic Anomaly

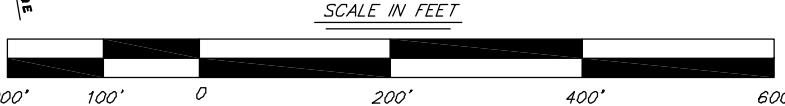
Unknown Magnetic Anomalies

Legend

- Represents Mag Contours at 2 Gamma Intervals
- Dredge Pipeline Route

NOTES:
SURVEY PERFORMED USING AUTOMATED HYDROGRAPHIC SURVEY SYSTEM CONSISTING OF SINGLE FREQUENCY FATHOMETER, PROTON MAGNETOMETER, DGPS & COMPUTER BASED DATA COLLECTION/NAVIGATION SYSTEM.
SURVEY PERFORMED APRIL 19 & 20, 2010 BY T. BAKER SMITH, INC. WITH MV HYDRO I.
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ALL SOUNDINGS SHOWN ARE ADJUSTED TO 0.0' MLLW BASED ON NOAA'S TIDE GAUGE # 870625 AT CYPRESSPORT. INFORMATION ON THIS TIDE GAUGE CAN BE FOUND ON NOAA'S WEBSITE AT <http://tidesandcurrents.noaa.gov>.

PLAN VIEW



NOTES:				
	DATE	REVISIONS	DRAWN BY	APPROVED BY

TBS **T. BAKER SMITH**
PROFESSIONAL CONSULTANTS SINCE 1913
(985) 868-1058 www.tbasmith.com

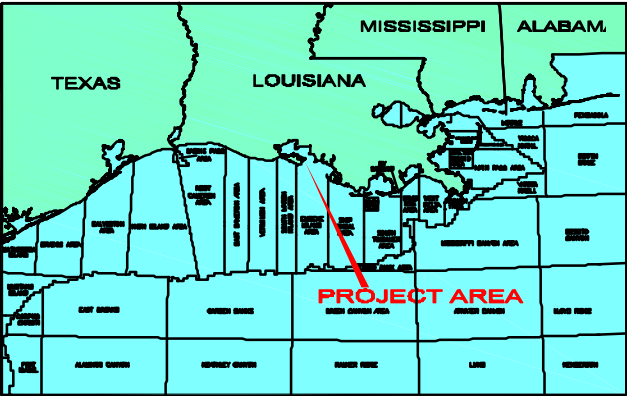


FILE NAME:	100140H08-H
TBS NO.:	2010.0148
DATE:	4-22-10
PLOT SCALE:	1" = 100'
DRAWN BY:	E.T.G.
APPROVED:	S.J.B.

WEEKS MARINE, INC.
2010 HAZARD SURVEY OF
PROPOSED DREDGE PIPELINE ROUTE AND
BORROW AREA LOCATED IN
EAST MARSH ISLAND AREA
GULF OF MEXICO

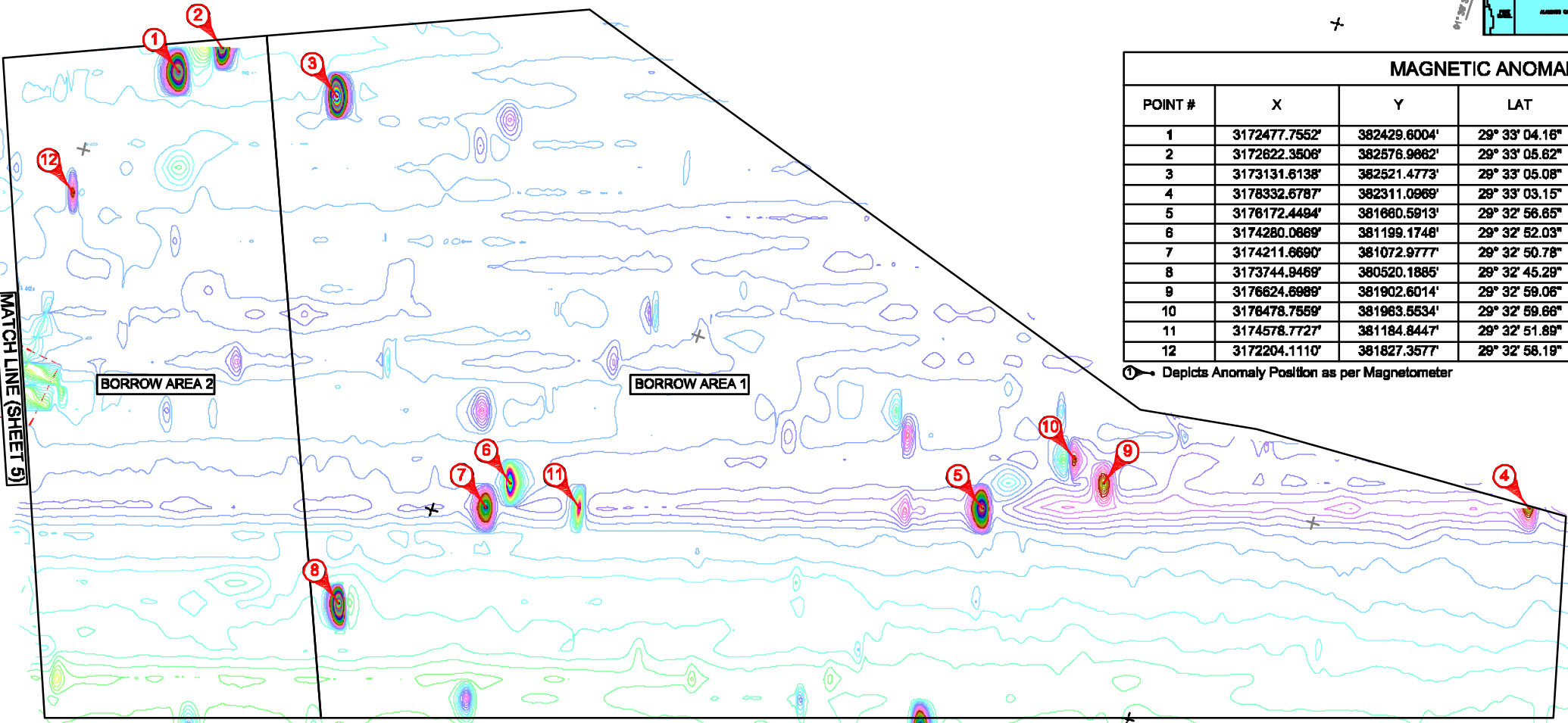
SHEET N
5
OF
6

EAST MARSH ISLAND AREA, GULF OF MEXICO



MAGNETIC ANOMALIES					
POINT #	X	Y	LAT	LO	MAGNETIC SIGNATURE (GAMMAS)
1	3172477.7552'	382429.6004'	29° 33' 04.16"	91° 40' 26.84"	118
2	3172622.3506'	382576.9862'	29° 33' 05.62"	91° 40' 25.21"	98
3	3173131.6138'	382521.4773'	29° 33' 05.08"	91° 40' 19.44"	202
4	3178332.6787'	382311.0969'	29° 33' 03.15"	91° 39' 20.54"	20
5	3176172.4494'	381680.5913'	29° 32' 56.65"	91° 39' 44.98"	72
6	3174280.0869'	381199.1748'	29° 32' 52.03"	91° 40' 08.39"	88
7	3174211.6690'	381072.9777'	29° 32' 50.78"	91° 40' 07.16"	50
8	3173744.9469'	380520.1885'	29° 32' 45.29"	91° 40' 12.43"	152
9	3176624.6989'	381902.6014'	29° 32' 59.06"	91° 39' 39.87"	28
10	3176478.7559'	381963.5534'	29° 32' 59.66"	91° 39' 41.52"	20
11	3174578.7727'	381184.8447'	29° 32' 51.89"	91° 40' 03.01"	44
12	3172204.1110'	381827.3577'	29° 32' 58.19"	91° 40' 29.92"	26

Depicts Anomaly Position as per Magnetometer



PLAN VIEW

SCALE IN FEET



Legend

- Represents Mag Contours at 2 Gamma Intervals
- Dredge Pipeline Route

NOTES:
SURVEY PERFORMED USING AUTOMATED HYDROGRAPHIC SURVEY SYSTEM CONSISTING OF SINGLE FREQUENCY FATHOMETER, PROTON MAGNETOMETER, DGPS & COMPUTER BASED DATA COLLECTION/NAVIGATION
SURVEY PERFORMED APRIL 19 & 20, 2010 BY T. BAKER SMITH, INC. WITH M/V HYDRO I
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NOTES:

22JUNE2010	REVISED MAGNETIC ANOMALIES COORDINATES	L.A.B.		
DATE	REVISIONS	DRAWN BY	APPROVED BY	



FILE NAME:	100146H08-H
TBS NO.:	2010.0148
DATE:	4-22-10
PLOT SCALE:	1" = 300'
DRAWN BY:	E.T.S.
APPROVED:	S.J.B.

WEEKS MARINE, INC.

2010 HAZARD SURVEY OF
PROPOSED DREDGE PIPELINE ROUTE AND
BORROW AREA LOCATED IN
EAST MARSH ISLAND AREA
GULF OF MEXICO

SHEET N
6
OF
6