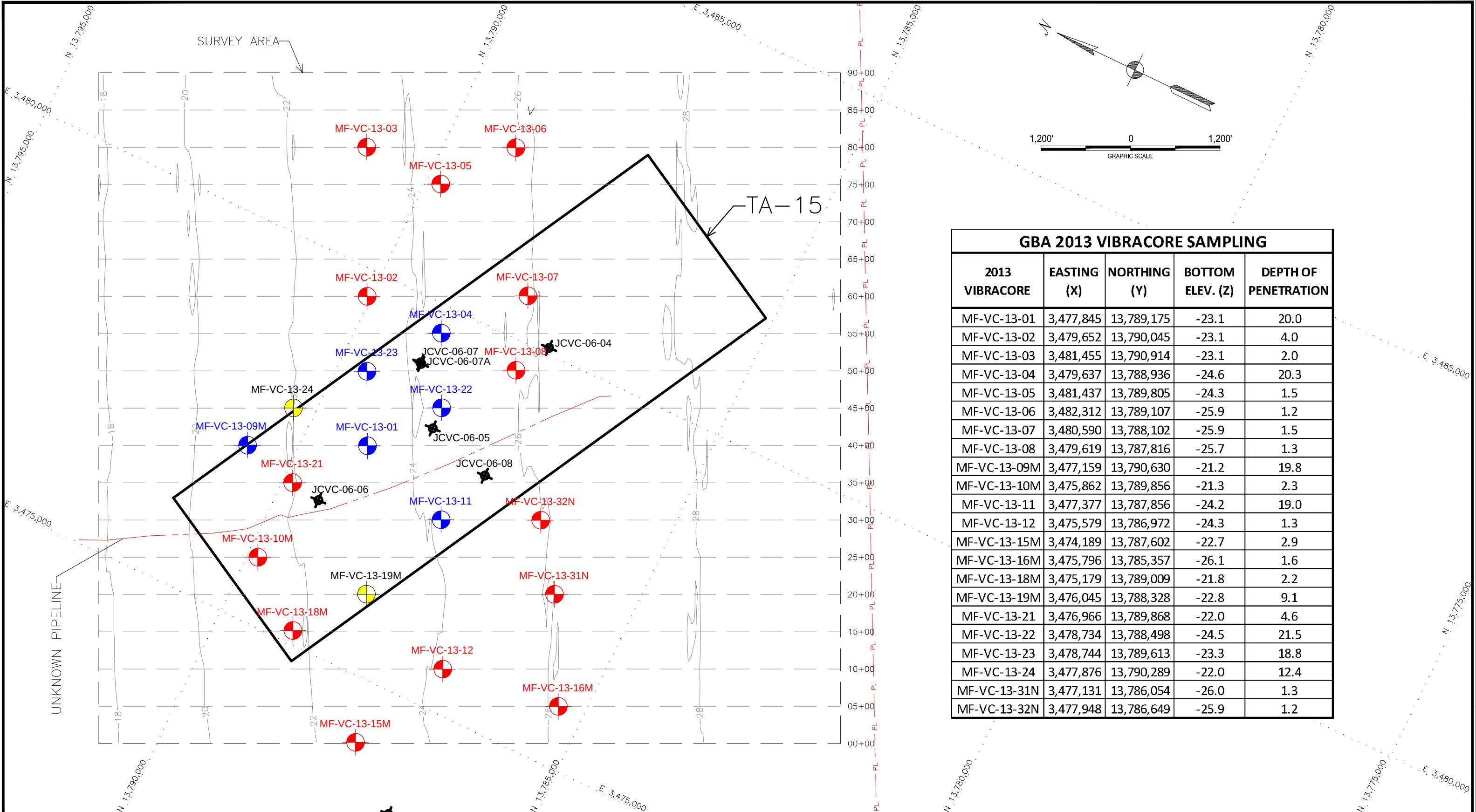




GBA 2013 VIBRACORE SAMPLING				
2013 VIBRACORE	EASTING (X)	NORTHING (Y)	BOTTOM ELEV. (Z)	DEPTH OF PENETRATION
MF-VC-13-01	3,477,845	13,789,175	-23.1	20.0
MF-VC-13-02	3,479,652	13,790,045	-23.1	4.0
MF-VC-13-03	3,481,455	13,790,914	-23.1	2.0
MF-VC-13-04	3,479,637	13,788,936	-24.6	20.3
MF-VC-13-05	3,481,437	13,789,805	-24.3	1.5
MF-VC-13-06	3,482,312	13,789,107	-25.9	1.2
MF-VC-13-07	3,480,590	13,788,102	-25.9	1.5
MF-VC-13-08	3,479,619	13,787,816	-25.7	1.3
MF-VC-13-09M	3,477,159	13,790,630	-21.2	19.8
MF-VC-13-10M	3,475,862	13,789,856	-21.3	2.3
MF-VC-13-11	3,477,377	13,787,856	-24.2	19.0
MF-VC-13-12	3,475,579	13,786,972	-24.3	1.3
MF-VC-13-15M	3,474,189	13,787,602	-22.7	2.9
MF-VC-13-16M	3,475,796	13,785,357	-26.1	1.6
MF-VC-13-18M	3,475,179	13,789,009	-21.8	2.2
MF-VC-13-19M	3,476,045	13,788,328	-22.8	9.1
MF-VC-13-21	3,476,966	13,789,868	-22.0	4.6
MF-VC-13-22	3,478,734	13,788,498	-24.5	21.5
MF-VC-13-23	3,478,744	13,789,613	-23.3	18.8
MF-VC-13-24	3,477,876	13,790,289	-22.0	12.4
MF-VC-13-31N	3,477,131	13,786,054	-26.0	1.3
MF-VC-13-32N	3,477,948	13,786,649	-25.9	1.2

NOTES:

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES SHOWN AND CAN ONLY BE CONSIDERED INDICATIVE OF THE GENERAL CONDITION EXISTING AT THAT TIME.

2. HORIZONTAL COORDINATES ARE REFERENCED TO NAD 83 TEXAS SOUTH CENTRAL ZONE 4204.

3. TARGET AREA 15 LOCATION APPROXIMATED FROM DATA PROVIDED BY THE TEXAS GENERAL LAND OFFICE (2006 OFFSHORE GEOTECHNICAL INVESTIGATIONS TO IDENTIFY SAND SOURCES-CPE).
4. BATHYMETRY, SUB BOTTOM, SIDESCAN, AND MAGNETOMETER DATA USED TO MAP THE REFINED POTENTIAL SAND SOURCE LOCATION AS SHOWN ON THE PLAN.

5. LOCATIONS OF SHOWN UTILITIES ARE APPROXIMATE. NOT ALL EXISTING UTILITIES WITHIN THE WORK AREA MAY BE SHOWN. PIPELINE SAFETY IS THE RESPONSIBILITY OF ALL PARTIES.

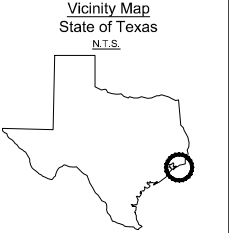
- 

2013 GBA FULL CORE OBTAINED
- 

2013 GBA FULL CORE NOT OBTAINED
- 

2013 GBA PARTIAL CORE OBTAINED
- 

2006 CPE VIBRACORE





ENGINEERS ★ SURVEYORS

GAHAGAN & BRYANT ASSOCIATES, INC.
9330 KIRBY DRIVE, SUITE 100
HOUSTON, TEXAS 77054
TEL: 832.377.4800
FAX: 832.377.4802
WWW.GBA-INC.COM
TX REGISTERED ENGINEERING FIRM
F-408

SAND SOURCE INVESTIGATION FOR THE
McFADDIN NATIONAL WILDLIFE REFUGE BEACH NOURISHMENT
McFaddin National Wildlife Refuge, Jefferson County, Texas

VIBRACORE LOCATIONS

DWG DATE:	DECEMBER 19, 2013	DWG NAME:	McFaddinNWR_PROJECTDRAWINGS.dwg
DRAWN:	CH	CHECKED:	JB/KK
SCALE:	AS SHOWN	SHEET:	3.7
ENGR:	CH	REV:	0

LOG OF BORING

Project: McFaddin NWR Sand Source Investigation

Boring No.: MF-VC-13-10

Date: 11/9/2013

Groundwater during drilling: ---

Northing: 13,789,856.0

Groundwater after 24hrs: ---

Easting: 3,475,862.0

Project No.: HG1315380

Elevation: -21.3 feet

Station: --

Offset: --

ELEV. DEPTH, FEET	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL/ROCK CLASSIFICATION	% PASSING NO. 200 SIEVE	D ₅₀ , MM	SHEAR STRENGTH, TSF MOISTURE CONTENT, %
0		Very Dark Gray Sandy Clay (Munsell 3/N GLEY1)			
-25		Brown Sandy Clay (Munsell 5/2 7.5YR)			
5					
-30					
10					
-35					
15					
-40					
20					
-45					
25					
-50					
30					
-55					
35					

Shear Types:

● = Hand Penet.

■ = Torvane

▲ = Unconf. Comp.

* = UU Triaxial