

# H12740

U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Ocean Survey

## DESCRIPTIVE REPORT

Type of Survey: Basic Hydrographic Survey

Registry Number: H12740

### LOCALITY

State(s): Louisiana

General Locality: Gulf of Mexico

Sub-locality: 15 NM East of Pass a Loutre

2015

CHIEF OF PARTY  
Jonathan L. Dasler, PE, PLS, CH

LIBRARY & ARCHIVES

Date:

**HYDROGRAPHIC TITLE SHEET**

**H12740**

**INSTRUCTIONS:** The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

State(s): **Louisiana**

General Locality: **Gulf of Mexico**

Sub-Locality: **15 NM East of Pass a Loutre**

Scale: **40000**

Dates of Survey: **07/10/2015 to 09/23/2015**

Instructions Dated: **04/03/2015**

Project Number: **OPR-J377-KR2-15**

Field Unit: **David Evans and Associates, Inc.**

Chief of Party: **Jonathan L. Dasler, PE, PLS, CH**

Soundings by: **Reson 7125 SV2**

Imagery by:

Verification by: **Atlantic Hydrographic Branch**

Soundings Acquired in: **meters at Mean Lower Low Water**

**Remarks:**

NAD83, UTM Zone 16 North, Meters, Times are UTC. The purpose of this contract is to provide NOAA with modern, accurate hydrographic survey data with which to update nautical charts of the assigned area.

*The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via <http://www.ncei.noaa.gov/>.*

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## Descriptive Report to Accompany Survey H12740

Project: OPR-J377-KR2-15

Locality: Gulf of Mexico

Sublocality: 15 NM East of Pass a Loutre

Scale: 1:40000

July 2015 - September 2015

**David Evans and Associates, Inc.**

Chief of Party: Jonathan L. Dasler, PE, PLS, CH

### A. Area Surveyed

David Evans and Associates, Inc. (DEA) conducted hydrographic survey operations in the Gulf of Mexico east of Pass a Loutre, Louisiana. Survey H12740 was conducted in accordance with the Statement of Work (April 3, 2015) and Hydrographic Survey Project Instructions (April 3, 2015).

The Hydrographic Survey Project Instructions reference the National Ocean Service (NOS) Hydrographic Surveys Specifications and Deliverables Manual (HSSD), April 2014 as the technical requirements for this project.

#### A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
29° 18' 7.8" N 88° 50' 18.77" W	29° 9' 51.3" N 88° 43' 0.93" W

*Table 1: Survey Limits*

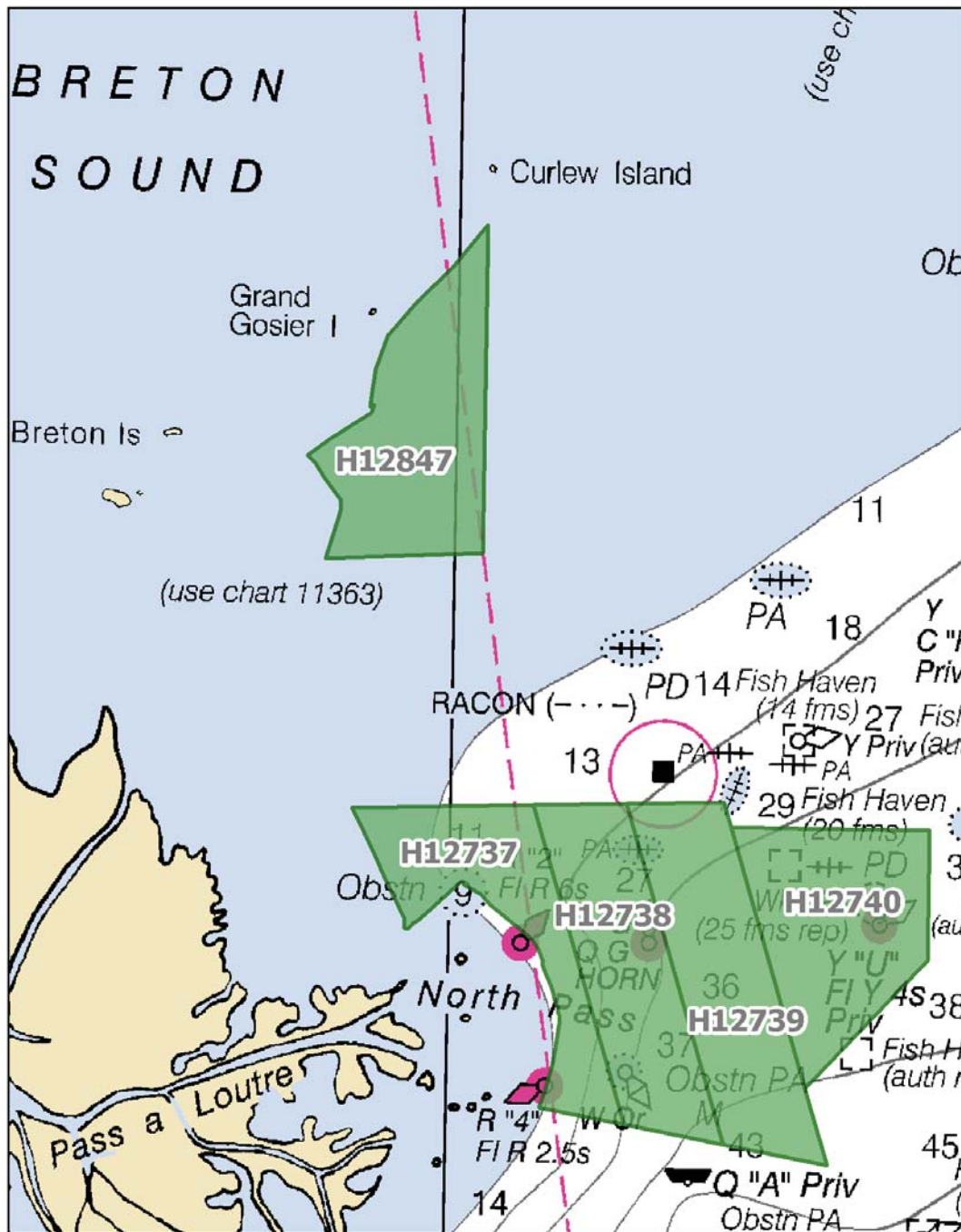


Figure 1: OPR-J377-KR2-15 Assigned Survey Areas

Survey Limits were acquired in accordance with the requirements in the Project Instructions and the HSSD.

## **A.2 Survey Purpose**

The purpose of this project is to provide contemporary surveys to update NOS nautical charting products. This project area is located in a highly trafficked area and covers approximately 81 SNM of emerging critical areas and 31 SNM of priority 3 areas as identified in the 2012 NOAA Hydrographic Survey Priorities. This project is located southeast of Breton Sound, LA and encompasses approximately 146 SNM of survey area.

## **A.3 Survey Quality**

The entire survey is adequate to supersede previous data.



### A.4 Survey Coverage

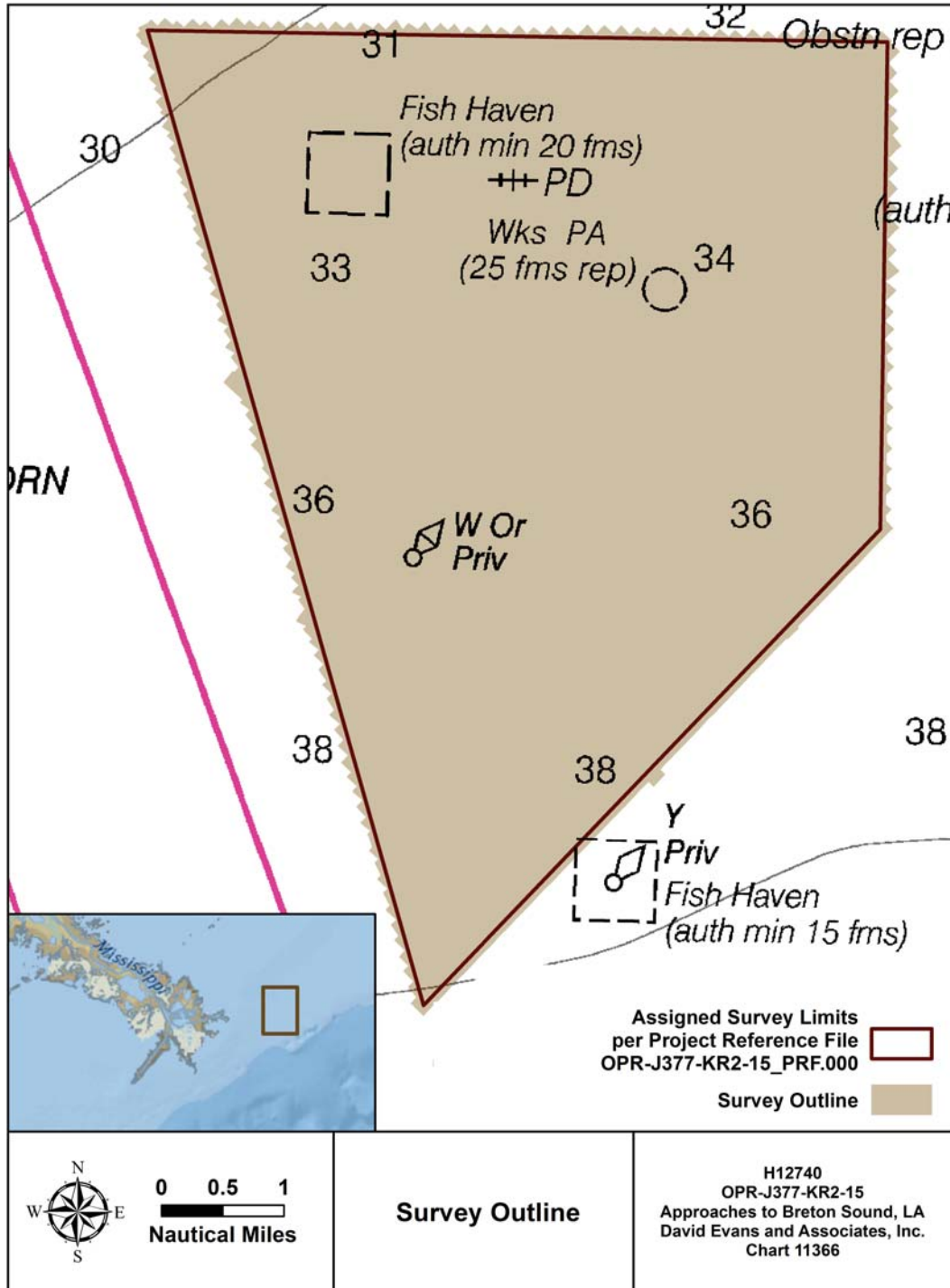


Figure 2: H12740 Survey Outline

The survey consisted of Complete Coverage MBES with backscatter within the survey area defined in the OPR-J377-KR2-15 Project Reference File (PRF).

In some cases coverage holidays exist under platforms where it was not possible to fully ensonify the seabed. Platforms included in the Final Feature File (FFF) may not fall directly on these gaps when the surveyed position was found within 80 meters (2 millimeters at survey scale) of their charted location. In these instances the platforms use the description of 'Retain' to denote that the position of the charted platform has been held.

## **A.5 Survey Statistics**

The following table lists the mainscheme and crossline acquisition mileage for this survey:

	<b>HULL ID</b>	<i>S/V Blake</i>	<i>Total</i>
<b>LNM</b>	<b>SBES Mainscheme</b>	0	0
	<b>MBES Mainscheme</b>	328.67	328.67
	<b>Lidar Mainscheme</b>	0	0
	<b>SSS Mainscheme</b>	0	0
	<b>SBES/SSS Mainscheme</b>	0	0
	<b>MBES/SSS Mainscheme</b>	0	0
	<b>SBES/MBES Crosslines</b>	20.01	20.01
	<b>Lidar Crosslines</b>	0	0
<b>Number of Bottom Samples</b>			8
<b>Number of AWOIS Items Investigated</b>			0
<b>Number Maritime Boundary Points Investigated</b>			0
<b>Number of DPs</b>			0
<b>Number of Items Investigated by Dive Ops</b>			0
<b>Total SNM</b>			32.84

*Table 2: Hydrographic Survey Statistics*

The following table lists the specific dates of data acquisition for this survey:

<b>Survey Dates</b>	<b>Day of the Year</b>
07/10/2015	191
07/11/2015	192
07/12/2015	193
07/13/2015	194
08/19/2015	231
09/23/2015	266

*Table 3: Dates of Hydrography*

## **B. Data Acquisition and Processing**

### **B.1 Equipment and Vessels**

The OPR-J377-KR2-15 Data Acquisition and Processing Report (DAPR), previously submitted with survey H12739, details equipment and vessel information as well as data acquisition and processing procedures. There were no vessel or equipment configurations used during data acquisition that deviated from those described in the DAPR.

#### **B.1.1 Vessels**

The following vessels were used for data acquisition during this survey:

<b>Hull ID</b>	<b><i>S/V Blake</i></b>
<b>LOA</b>	83 feet
<b>Draft</b>	4.5 feet

*Table 4: Vessels Used*



*Figure 3: S/V Blake*

### **B.1.2 Equipment**

The following major systems were used for data acquisition during this survey:

<b>Manufacturer</b>	<b>Model</b>	<b>Type</b>
Reson	7125 SV2	MBES
Applanix	POS/MV 320 v4	Positioning & Attitude
Rolls Royce	MVP30-350 with AML Micro SV&P	Primary Sound Speed Profiler
AML	Micro SV Xchange	Surface Sound Speed
Sea-Bird Electronics	SEACAT SBE 19-03 CTD	Secondary Sound Speed Profiler

*Table 5: Major Systems Used*

## **B.2 Quality Control**

### **B.2.1 Crosslines**

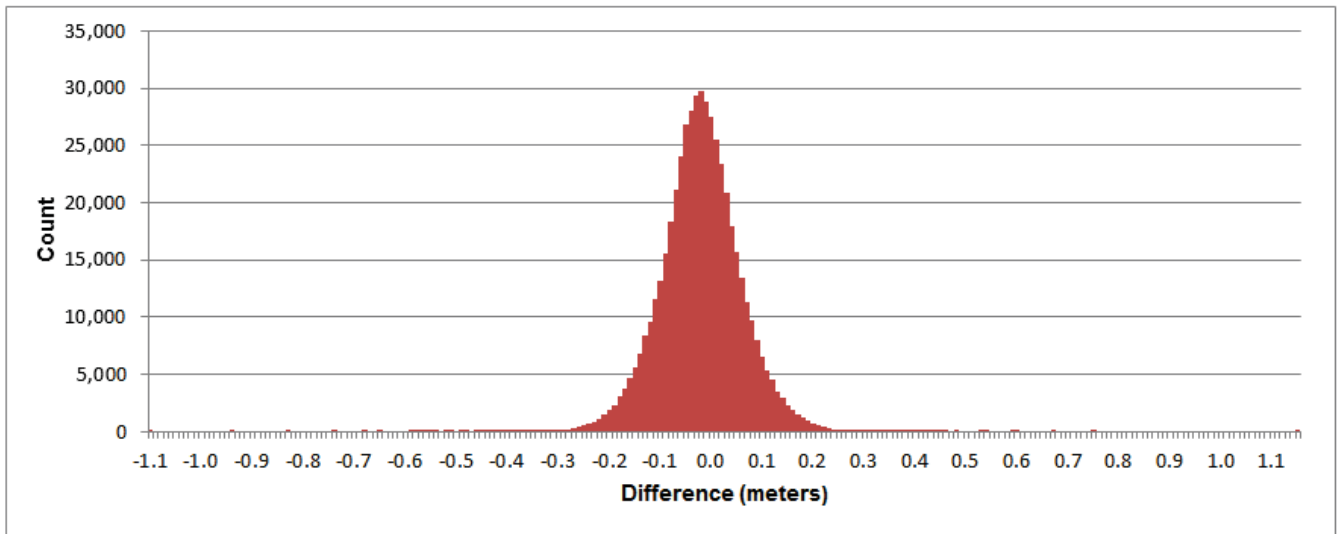
Crosslines acquired for this survey totaled 6% of mainscheme acquisition.

Crosslines were run in a direction perpendicular to main scheme lines across the entire surveyed area, providing a good representation for analysis of consistency. All crosslines were used for crossline comparisons.

Crossline analysis was performed using the CARIS Hydrographic Information Processing System (HIPS) Quality Control (QC) Report tool, which compares crossline data to a gridded surface and reports results by beam number. Crosslines were compared to a 4-meter CUBE surface encompassing mainscheme data for the entire survey area. The QC Report tabular output and plot are included in Separate II. The results of the analysis meet the requirements as stated in the 2014 HSSD.

Additional crossline analysis was performed by computing a 4-meter CUBE surface from the crossline data. The surface was then differenced from a 4-meter surface comprised of all mainscheme, fill, and investigation data. The resultant difference surface was exported using the Base Surface to ASCII function and statistics were compiled on the ASCII data.

Results from the crossline to mainscheme difference analysis are depicted in Figure 4. Outliers from the difference analysis were reviewed in HIPS subset editor and found to result from a combination of tide and sound velocity artifacts or occur over depressions in the seafloor which were not completely represented in the crossline surface.



Mean:	-0.006 m	Standard Deviation:	0.078 m
Minimum:	-1.090 m	Bin size:	0.01 m
Maximum:	1.169 m	Number of Nodes:	505,847

Figure 4: H12740 Crossline Differences

### B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning
0.00 meters	0.128 meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
S/V Blake	n/a meters/second	1.0 meters/second	0.5 meters/second

Table 7: Survey Specific Sound Speed TPU Values

Additional discussion of these parameters is included in the DAPR.

During surface finalization in HIPS, the "greater of the two" option was selected, where the calculated uncertainty from total propagated uncertainty (TPU) is compared to the standard deviation of the soundings influencing the node, and where the greater value is assigned as the final uncertainty of the node. The

uncertainty of the finalized surfaces increased for nodes where the standard deviation of the node was greater than the total propagated uncertainty.

The resulting calculated uncertainty values of all nodes in the finalized 2-meter Complete Coverage multibeam surface range from 0.270 meters to 0.677 meters with a standard deviation of 0.115 meters. The 2-meter final surface was created to capture a 20 meter tall obstruction with a least depth that falls just above the 40 meter maximum depth threshold for a 2-meter Complete Coverage surface. This surface contains only 32 nodes.

The resulting calculated uncertainty values of all nodes in the finalized 4-meter Complete Coverage multibeam surface range from 0.271 meters to 0.881 meters with a standard deviation of 0.044 meters.

To determine if surface grid nodes met International Hydrographic Organization (IHO) Order 1 specification, a ratio of the final node uncertainty to the allowable uncertainty at that depth was determined. As a percentage, this value represents the amount of error budget utilized by the uncertainty value at each node. Values greater than 100% indicate nodes exceeding the allowable IHO uncertainty.

For the 2-meter Complete Coverage multibeam surface, the allowable uncertainty utilized ranges from 38% to 94%. The mean allowable uncertainty for the surface is 51% with a standard deviation of 0.207.

For the 4-meter Complete Coverage multibeam surface, the allowable uncertainty utilized ranges from 26% to 90%. The mean allowable uncertainty for the surface is 33% with a standard deviation of 0.045.

### B.2.3 Junctions

Survey H12740 junctions with survey H12739 which was also performed by DEA as part of project OPR-J377-KR2-15.

The following junctions were made with this survey:

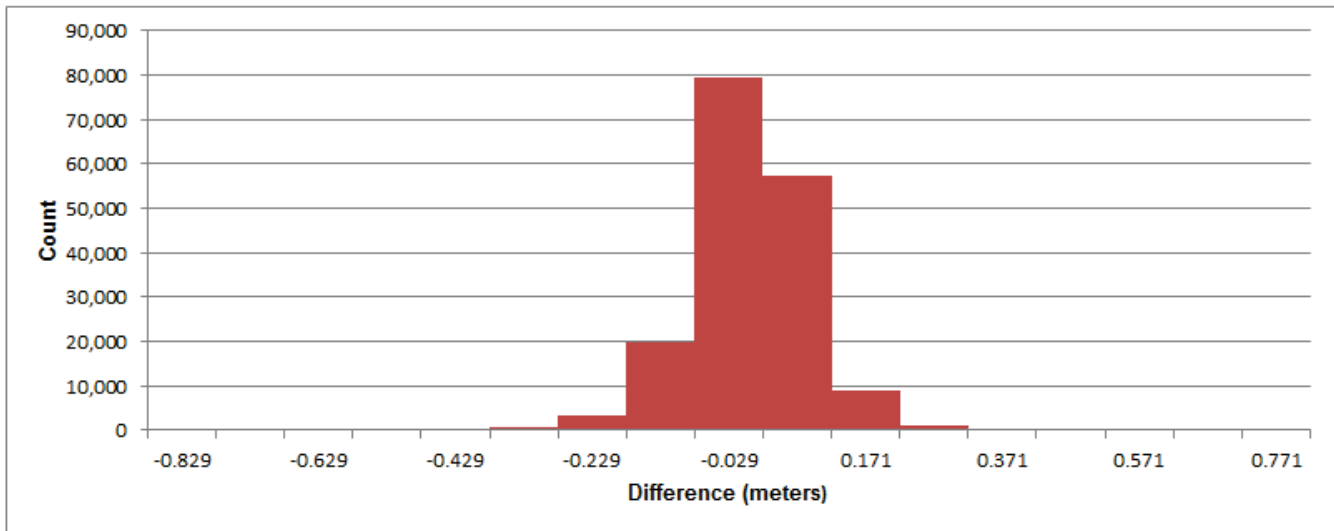
Registry Number	Scale	Year	Field Unit	Relative Location
H12739	1:40000	2015	David Evans and Associates, Inc.	W

*Table 8: Junctioning Surveys*



H12739

Results from the junction analysis are shown in Figure 5. The largest outliers occur over deep pock marks which were not consistently represented between the two surveys. Other differences are associated with sound speed and tide zoning artifacts.



Mean:	-0.00 m	Standard Deviation:	0.082 m
Minimum:	-0.766 m	Bin size:	0.1 m
Maximum:	0.808 m	Number of Nodes:	170,615

*Figure 5: Junction results between H12740 and H12739 4-meter bathy grids*

#### **B.2.4 Sonar QC Checks**

Quality control is discussed in detail in Section B of the DAPR. Results from weekly position checks and weekly multibeam bar checks are included in Separate I Acquisition and Processing Logs of this report. Sound speed checks can be found in Separate II Sound Speed Data Summary of this report.

Multibeam data were reviewed at multiple levels of data processing including: CARIS HIPS conversion, subset editing, and analysis of anomalies revealed in CUBE surfaces.

## **B.2.5 Equipment Effectiveness**

### Navigation Data Gaps

Periodically, survey lines contained navigation timing gaps which were likely caused by a Hypack write delay during acquisition. Survey lines containing navigation data gaps greater than one second were updated with real-time navigation data extracted from the POS/MV .000 files.

The following survey lines use real-time navigation from .000 files: 2015BL1910710, 2015BL1920015, 2015BL1920235.

Additional discussion on this issue can be found in the Section B.4 of the DAPR.

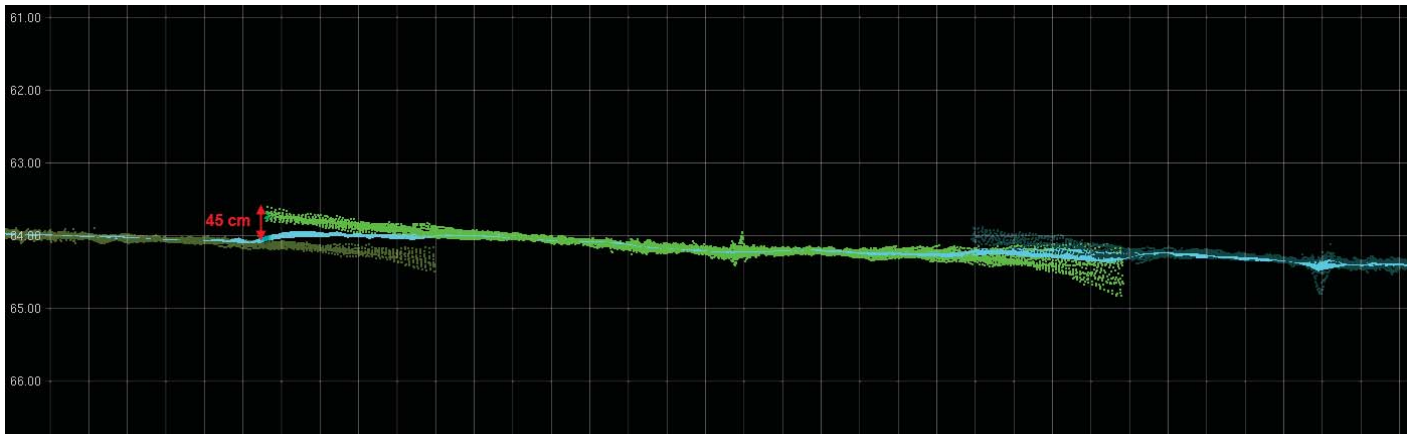
## **B.2.6 Factors Affecting Soundings**

### Sound Speed Artifacts

Refraction artifacts caused by extreme variability in water column sound speed are present throughout the survey. Sound speeds could vary by as much as 10 meters per second over just a few meters in the upper water column with more extreme changes occurring throughout the profile. In some areas the sonar swath exhibited a tilt artifact with the upslope facing beams always mapping shoaler than beams from the opposite side of the swath regardless of vessel heading during acquisition. This tilt artifact typically occurred during a flood tide.

This artifact has been thoroughly investigated with further tests pending. There is a strong correlation with the large variation in surface sound speed during a flood tide and no apparent relationship with crab angle. Sound speed measured at the sonar head during flood tides at times was significantly lower than the trailing MVP sensor. This was attributed to a shallow fresh water lens at the surface during the flood tide. The SSP sensor at the head was still in undisturbed water as it is deployed through a moon pool in the center of the S/V Blake sponsons while the towed sensor at the same depth was in more mixed water in the prop wash of the vessel. Various applications of sound speed were tried (using SSP at the head when applying casts, etc.) but no specific application removed the resultant artifacts.

When present, the artifacts can be as large as 20 to 45 centimeters peak-to-peak in the outer ranges of the swath with the actual error being 10 to 20 centimeters. The impact to the final deliverable surfaces is less extreme and in some cases nonexistent. In all cases the magnitude of the artifact is less than the allowable total vertical uncertainty. In the example graphic (Figure 6) the allowable uncertainty at a depth of 64 meters is 0.97 meters.



*Figure 6: Example of Sound Speed Artifact*

### **B.2.7 Sound Speed Methods**

Sound Speed Cast Frequency: Approximately 15-minute intervals.

A Rolls Royce Moving Vessel Profiler (MVP) was the primary instrument used to acquire sound speed readings during multibeam operations. MVP sound speed readings were measured at approximately 15-minute intervals during survey operations. Additional discussion of sound speed methods can be found in the DAPR.

### **B.2.8 Coverage Equipment and Methods**

Survey speeds were maintained to meet or exceed along-track density requirements. Investigation lines were acquired as needed in order to verify or acquire feature least depths. Fill lines were also run on an as needed basis in order to fill holidays or to increase node density.

### **B.2.9 Density**

The sounding density requirement of 95% of all nodes populated with at least five soundings was verified by exporting the density child layer of each CUBE surface to an ASCII text file and compiling statistics on the density values. For the 4-meter surface more than 99.9% of all final CUBE surface nodes contained five or more soundings. The finalized 2-meter surface, which contained only 32 nodes and one designated sounding, exceeded the density threshold. Nodes with designated soundings were given a node density of one which skewed the density statistic for a surface with such a low density count. The designated sounding and depth estimates for this surface area all valid.

## B.3 Echo Sounding Corrections

### B.3.1 Corrections to Echo Soundings

Data reduction procedures for survey H12740 are detailed in the DAPR. A summary multibeam processing log is included in Separate I of this report.

### B.3.2 Calibrations

No additional calibration tests were conducted beyond those discussed in the DAPR.

## B.4 Backscatter

Multibeam backscatter was logged in Hypack 7K format and included with the H12740 digital deliverables. Data were processed periodically in CARIS HIPS to evaluate backscatter quality but the processed data is not included with the deliverables.

## B.5 Data Processing

### B.5.1 Software Updates

There were no software configuration changes after the DAPR was submitted.

The following Feature Object Catalog was used: 5.3.2

### B.5.2 Surfaces

The following surfaces and/or BAGs were submitted to the Processing Branch:

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12740_MB_2m_MLLW	CUBE	2 meters	31.96 meters - 75.95 meters	NOAA_2m	Complete Coverage
H12740_MB_2m_MLLW_Final	CUBE	2 meters	29.55 meters - 39.97 meters	NOAA_2m	Finalized Complete Coverage
H12740_MB_4m_MLLW	CUBE	4 meters	38.95 meters -	NOAA_4m	Complete Coverage

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
			75.89 meters		
H12740_MB_4m_MLLW_Final	CUBE	4 meters	38.44 meters - 75.89 meters	NOAA_4m	Finalized Complete Coverage

*Table 9: Submitted Surfaces*

Bathymetric grids were created relative to Mean Lower Low Water (MLLW) in CUBE format using Complete Coverage resolution requirements as described in the HSSD.

## C. Vertical and Horizontal Control

A complete description of the horizontal and vertical control for survey H12740 can be found in the OPR-J377-KR2-15 Horizontal and Vertical Control Report (HVCR), submitted under a separate cover. A summary of horizontal and vertical control for this survey follows.

### C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

#### Standard Vertical Control Methods Used:

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Pilot Station East, SW Pass	876-0922

*Table 10: NWLON Tide Stations*

File Name	Status
8760922.tid	Verified Observed

*Table 11: Water Level Files (.tid)*

File Name	Status
J377KR22015CORP.zdf	Final

Table 12: Tide Correctors (.zdf or .tc)

Prior to applying water levels to the hydrographic survey data, DEA filtered the tide signal (5th order Butterworth filter with a cutoff frequency of 6 cycles per day) to remove the signature of vessel traffic passing the NOAA NWLON station at Pilot Station East, SW Pass. CO-OPS and HSD approved this methodology via email on December 18, 2014. A copy of this email is included in Appendix I of this report.

## C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

The projection used for this project is NAD83 UTM Zone 16 North.

During survey operations, some Differential Global Positioning System (DGPS) outages from the primary beacon (293 kHz) occurred. The system was manually switched to the secondary beacon (295 kHz) when the primary signal was lost. No data was acquired during DGPS beacon outages.

The following DGPS Stations were used for horizontal control:

DGPS Stations
English Turn, LA (293 kHz)
Eglin Air Force Base, FL (295 kHz)

Table 13: USCG DGPS Stations

## D. Results and Recommendations

### D.1 Chart Comparison

The majority of the chart comparison was performed by comparing H12740 depths to a digital surface generated from electronic navigational charts (ENCs) covering the survey area. A 10-meter product surface

was generated from a triangular irregular network (TIN) created from the soundings, depth contours, and depth features for each ENC scale. An additional 10-meter HIPS product surface of the entire survey area was generated from the finalized MBES CUBE surfaces. The chart comparison was conducted by creating and reviewing the resultant difference surface. The chart comparison also included a review of all assigned charted features within the survey area.

The raster navigational chart (RNC) comparison was performed by manually comparing the RNCs covering the survey area to the corresponding ENCs and identifying discrepancies between the two chart formats.

The electronic and raster versions of the relevant charts used during the comparison were reviewed to check that all US Coast Guard (USCG) Local Notice to Mariners (LNMs) issued during survey acquisition and impacting the survey area were applied and addressed by this survey.

### D.1.1 Raster Charts

The following are the largest scale raster charts, which cover the survey area:

Chart	Scale	Edition	Edition Date	LNM Date	NM Date
11361	1:80000	78	06/2015	09/15/2015	09/26/2015

*Table 14: Largest Scale Raster Charts*

#### 11361

Coastal chart 11361 was compared to US4LA33M within the H12740 survey area. No differences were observed between the charts.

### D.1.2 Electronic Navigational Charts

The following are the largest scale ENCs, which cover the survey area:

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US4LA33M	1:80000	27	08/21/2013	09/30/2015	NO

*Table 15: Largest Scale ENCs*

#### US4LA33M

Surveyed depths are generally deeper than charted on ENC US4LA33M with differences ranging from 0 to 5 feet. Maximum differences fall within a charted fish haven with an authorized minimum depth of 120 feet. Surveyed depths within this fish haven range from 126 feet to 205 feet. Surveyed depths are up to 20 feet deeper than charted within a kilometer wide depression in the northern portion of the survey area. Numerous pipelines are charted in the vicinity of this depression. Absolute maximum differences are associated with charted features which were found in a new location.



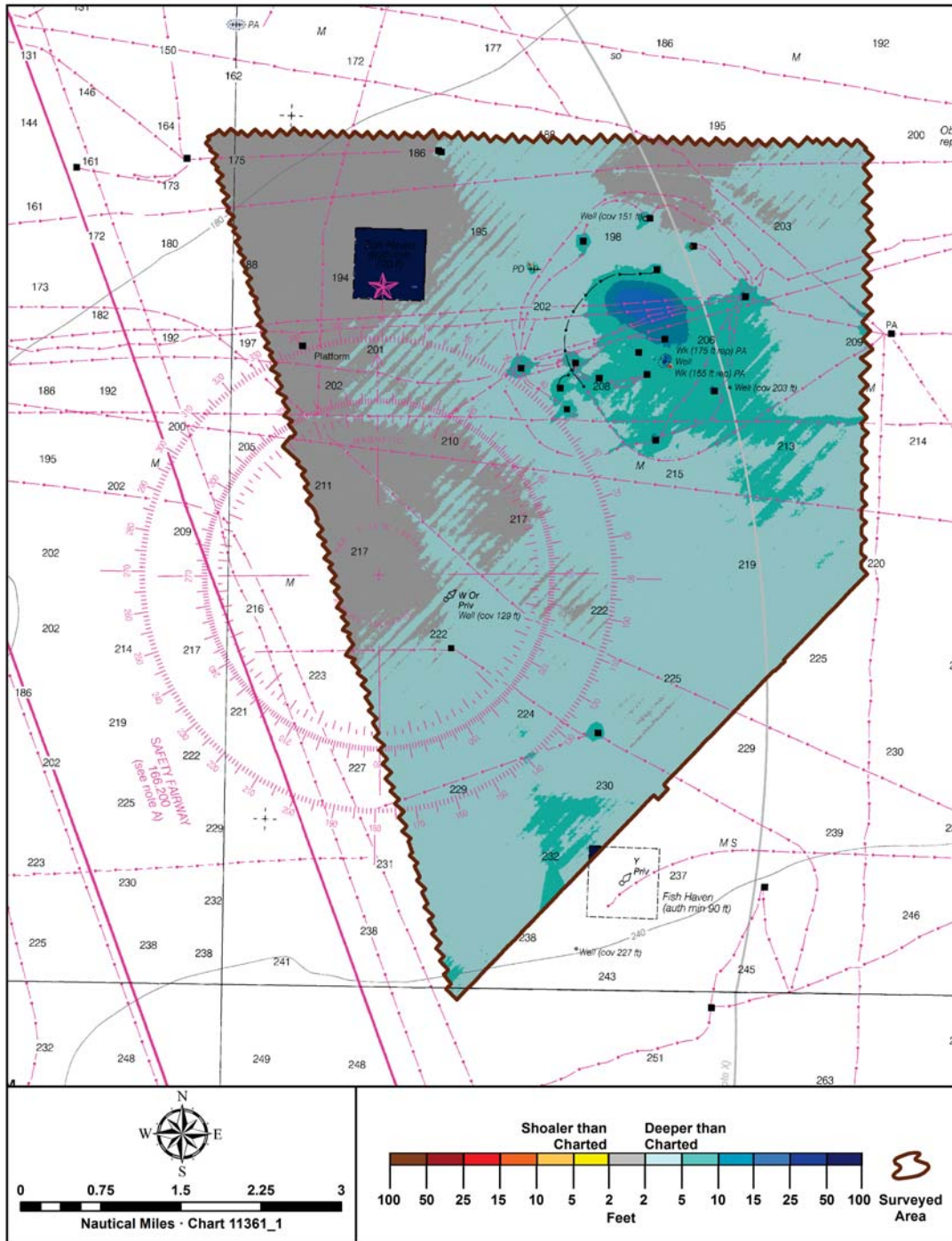


Figure 7: Depth Difference between H12740 and chart US4LA33M

### **D.1.3 AWOIS Items**

No AWOIS Items were assigned for this survey.

### **D.1.4 Maritime Boundary Points**

No Maritime Boundary Points were assigned for this survey.

### **D.1.5 Charted Features**

Submerged debris, giving no indication of a wreck, was located approximately 67 meters from the charted Wreck, depth unknown, Position Doubtful (PD). The feature has been included in the FFF as an obstruction with description of 'Update'.

The Wreck (175 feet reported) Position Approximate (PA) has been disproved by the survey and is included in the FFF with a description of 'Delete'.

The Wreck (155 feet reported) PA has been disproved by the survey and is included in the FFF with a description of 'Delete'. The survey found an uncharted obstruction approximately 155 meters to the southeast of the disproved wreck. The obstruction has been included in the FFF with a description of 'New'.

The survey area does not contain any charted features labeled as Existence Doubtful (ED). All charted and surveyed features within the H12740 survey area are portrayed in the FFF.

### **D.1.6 Uncharted Features**

All uncharted features are portrayed in the FFF as surveyed and attributed with the description of 'New'.

### **D.1.7 Dangers to Navigation**

Three Dangers to Navigation (Dtons) were submitted for this survey.

H12740 Dton 01 reported an uncharted platform within the survey area. This feature has been added to the charts.

H12740 Dton 02 reported sections of pipeline which are visibly exposed from the seabed in the multibeam data. While not a direct hazard to surface navigation these exposed pipelines were submitted using the Dton process in order to facilitate the review and reporting of the exposed pipelines. An email on this subject from the project's Contracting Officer's Technical Representative (COTR) is included in the OPR-J377-KR2-15 Project Correspondence.

H12740 DtoN 03 reported four uncharted platforms. This DtoN has not been applied to the charts at survey submission.

### **D.1.8 Shoal and Hazardous Features**

No shoal or hazardous features were located by the survey.

### **D.1.9 Channels**

The H12740 survey area does not contain any anchorage areas, maintained navigation channels, or channel lines.

### **D.1.10 Bottom Samples**

Eight bottom samples were acquired on July 12, 2015 (DN193). The sampling plan followed suggested sample locations included in the PRF provided by the HSD.

## **D.2 Additional Results**

### **D.2.1 Shoreline**

No shoreline investigation was performed for this survey. The OPR-J377-KR2-15 Project Instructions required a limited shoreline verification, but there was no shoreline junction with the survey area.

### **D.2.2 Prior Surveys**

No comparisons with prior surveys were conducted.

### **D.2.3 Aids to Navigation**

Two special purpose buoys charted within the survey area have been disproved.

The WOG MP 301 A Well Buoy has been included in the FFF with description of 'Delete'.

The Texas A&M Oceanographic Light Buoy U has been included in the FFF with description of 'Delete'.

#### **D.2.4 Overhead Features**

With the exception of the overhead catwalks connecting the platforms submitted in DtoN 3, there were no other structures which would impact overhead clearance in the survey area.

#### **D.2.5 Submarine Features**

Multiple pipelines are charted within the survey area and are visible in the survey data and bathymetric surfaces. In some areas, pipelines are exposed on the seabed or there is evidence of pipeline burial beneath the seabed. Sections of pipeline (charted and uncharted) which are visibly exposed from the seabed were reported as a DtoN and are included in the H12740 FFF as pipeline features. These features were submitted to the processing branch using the DtoN process so that the proper authorities could be notified about the condition of the pipelines.

In some areas there is indication of buried pipelines in the survey data and bathymetric surfaces which are not charted, but are depicted in the Bureau of Ocean Energy Management (BOEM) / Bureau of Safety and Environmental Enforcement (BSEE) Gulf of Mexico online web service for OCS (Outer Continental Shelf) oil and gas pipelines. The hydrographer recommends that the charts be updated with contemporary pipeline source documentation.

No submarine cables or tunnels were charted or located within the H12740 survey area.

#### **D.2.6 Ferry Routes and Terminals**

There were no ferry routes or terminals within the survey area.

#### **D.2.7 Platforms**

Sixteen platforms were found within 80 meters (2 millimeters at survey scale) of their charted position and have been included in the FFF with a description of 'Retain'. Five new platforms were located during the survey and submitted as DtoNs 1 and 3. These platforms are included in the FFF with a description of 'New'. Four charted platforms were disproved by the survey and included in the FFF with description of 'Delete'.

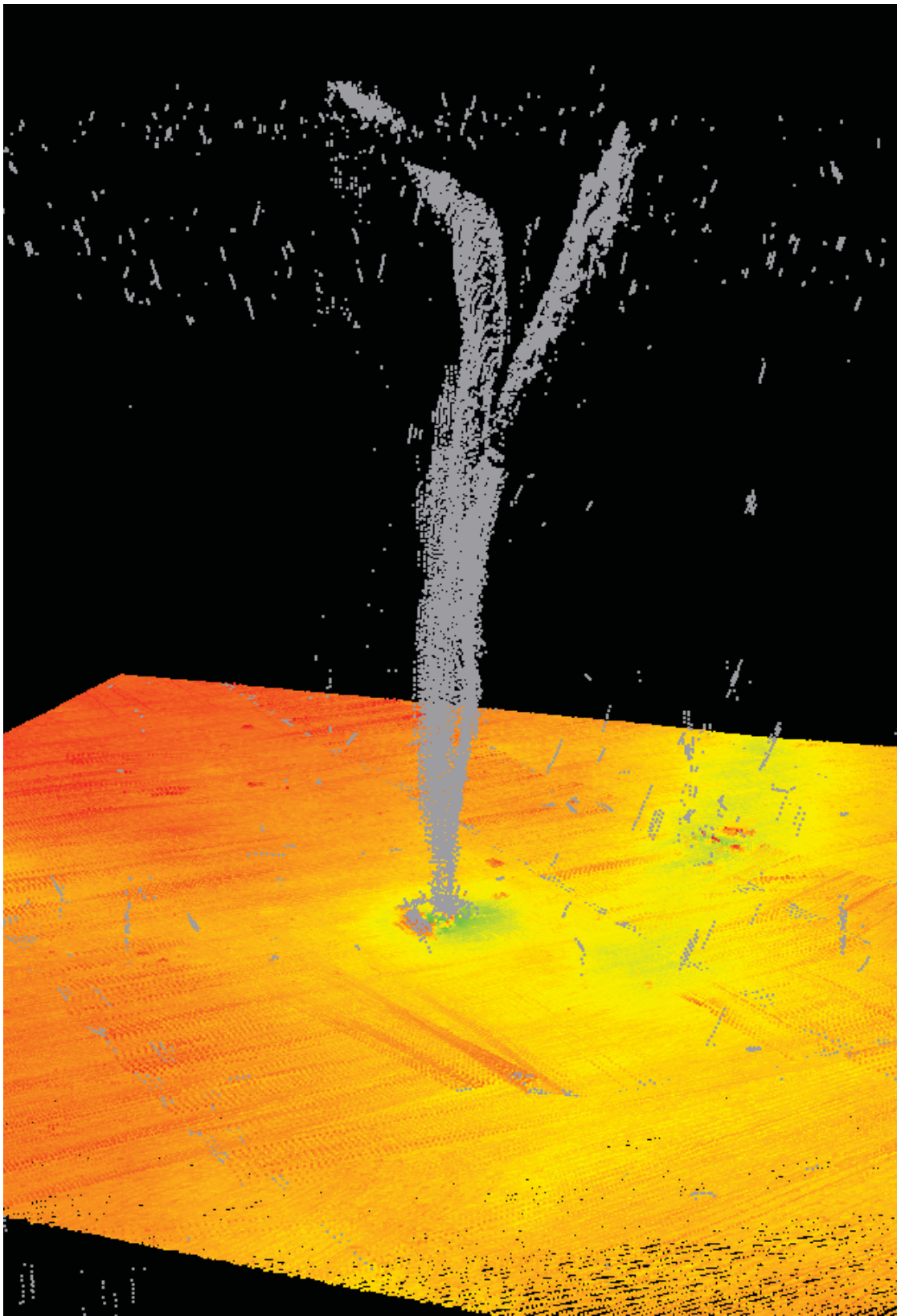
#### **D.2.8 Significant Features**

A one kilometer wide depression lies in the middle of a ring of charted platforms in the northeast corner of the survey area. The depression is up to 5 meters deeper than the surrounding seabed.

A large gas discharge from the seafloor was observed within the H12740 survey area during survey operations on July 11, 2015. This gas discharge, which was visible in the MBES data, was emanating from the seafloor in close proximity to a charted pipeline. A large area of bubbles was also observed at the water surface. DEA immediately reported the gas discharge to the NOAA Gulf Coast Navigation Manager, the

project COTR, USCG and Louisiana Department of Natural Resources personnel, as well as Shell, the owner of the nearby pipeline. After an ROV investigation, Shell was unable to determine if the gas discharge was from a natural seep or from the pipeline. It was later determined that the nearby pipeline transports oil and not gas, therefore it was not the source of the gas discharge. Email correspondence on this issue is included in Appendix II. As shown in Figure 8, all MBES returns on the plume have been rejected in order to accurately depict the seafloor.

On July 12, 2015 DEA reported a large oil sheen that was discovered in the survey area. DEA filed a report with the National Response Center (Incident Report # 1122590) and notified the NOAA Gulf Coast Navigation Manager and the project COTR. The sheen dissipated during survey operations and the source and cause of the sheen was never discovered. Email correspondence on this issue, including a copy of the National Response Center Incident Report, is included in Appendix II of this report.



*Figure 8: MBES Data on Reported Gas Discharge from the Seafloor*

**D.2.9 Construction and Dredging**

No construction or dredging activities were observed during survey operations.

**D.2.10 New Survey Recommendation**

No new surveys or further investigations are recommended for this area.

**D.2.11 Inset Recommendation**

No new insets are recommended for this area.





## E. Approval Sheet

As Chief of Party, Field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Statement of Work, and Hydrographic Survey Project Instructions. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required.

Report Name	Report Date Sent
OPR-J377-KR2-15 Data Acquisition and Processing Report	2015-10-06

Approver Name	Approver Title	Approval Date	Signature
Jonathan L. Dasler, PE, PLS, CH	NSPS/THSOA Certified Hydrographer, Chief of Party	10/22/2015	 Digitally signed by Jon Dasler DN: cn=Jon Dasler, o=David Evans and Associates, Inc., ou=Marine Services Division, email=jld@deainc.com, c=US Date: 2015.10.22 09:17:10 -07'00'
Jason Creech, CH	NSPS/THSOA Certified Hydrographer, Charting Manager / Project Manager	10/22/2015	 Digitally signed by Jason Creech DN: cn=Jason Creech, o=David Evans and Associates, Inc., ou=Marine Services Division, email=jasc@deainc.com, c=US Date: 2015.10.22 09:17:35 -07'00'
Mick Hawkins	Lead Hydrographer	10/22/2015	 Digitally signed by Mick Hawkins DN: cn=Mick Hawkins, o=David Evans and Associates, Inc., ou, email=mh@deainc.com, c=US Date: 2015.10.22 09:18:02 -07'00'
Kathleen Schacht	MBES Data Processing Manager	10/22/2015	 Digitally signed by Kathleen Schacht DN: cn=Kathleen Schacht, o=David Evans and Associates, Inc., ou, email=kmsc@deainc.com, c=US Date: 2015.10.22 09:18:36 -07'00'



## F. Table of Acronyms

<b>Acronym</b>	<b>Definition</b>
<b>AHB</b>	Atlantic Hydrographic Branch
<b>AST</b>	Assistant Survey Technician
<b>ATON</b>	Aid to Navigation
<b>AWOIS</b>	Automated Wreck and Obstruction Information System
<b>BAG</b>	Bathymetric Attributed Grid
<b>BASE</b>	Bathymetry Associated with Statistical Error
<b>CO</b>	Commanding Officer
<b>CO-OPS</b>	Center for Operational Products and Services
<b>CORS</b>	Continually Operating Reference Station
<b>CTD</b>	Conductivity Temperature Depth
<b>CEF</b>	Chart Evaluation File
<b>CSF</b>	Composite Source File
<b>CST</b>	Chief Survey Technician
<b>CUBE</b>	Combined Uncertainty and Bathymetry Estimator
<b>DAPR</b>	Data Acquisition and Processing Report
<b>DGPS</b>	Differential Global Positioning System
<b>DP</b>	Detached Position
<b>DR</b>	Descriptive Report
<b>DTON</b>	Danger to Navigation
<b>ENC</b>	Electronic Navigational Chart
<b>ERS</b>	Ellipsoidal Referenced Survey
<b>ERZT</b>	Ellipsoidally Referenced Zoned Tides
<b>FFF</b>	Final Feature File
<b>FOO</b>	Field Operations Officer
<b>FPM</b>	Field Procedures Manual
<b>GAMS</b>	GPS Azimuth Measurement Subsystem
<b>GC</b>	Geographic Cell
<b>GPS</b>	Global Positioning System
<b>HIPS</b>	Hydrographic Information Processing System
<b>HSD</b>	Hydrographic Surveys Division
<b>HSSD</b>	Hydrographic Survey Specifications and Deliverables

<b>Acronym</b>	<b>Definition</b>
<b>HSTP</b>	Hydrographic Systems Technology Programs
<b>HSX</b>	Hypack Hysweep File Format
<b>HTD</b>	Hydrographic Surveys Technical Directive
<b>HVCR</b>	Horizontal and Vertical Control Report
<b>HVF</b>	HIPS Vessel File
<b>IHO</b>	International Hydrographic Organization
<b>IMU</b>	Inertial Motion Unit
<b>ITRF</b>	International Terrestrial Reference Frame
<b>LNM</b>	Local Notice to Mariners
<b>LNM</b>	Linear Nautical Miles
<b>MCD</b>	Marine Chart Division
<b>MHW</b>	Mean High Water
<b>MLLW</b>	Mean Lower Low Water
<b>NAD 83</b>	North American Datum of 1983
<b>NAIP</b>	National Agriculture and Imagery Program
<b>NALL</b>	Navigable Area Limit Line
<b>NM</b>	Notice to Mariners
<b>NMEA</b>	National Marine Electronics Association
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NOS</b>	National Ocean Service
<b>NRT</b>	Navigation Response Team
<b>NSD</b>	Navigation Services Division
<b>OCS</b>	Office of Coast Survey
<b>OMAO</b>	Office of Marine and Aviation Operations (NOAA)
<b>OPS</b>	Operations Branch
<b>MBES</b>	Multibeam Echosounder
<b>NWLON</b>	National Water Level Observation Network
<b>PDBS</b>	Phase Differencing Bathymetric Sonar
<b>PHB</b>	Pacific Hydrographic Branch
<b>POS/MV</b>	Position and Orientation System for Marine Vessels
<b>PPK</b>	Post Processed Kinematic
<b>PPP</b>	Precise Point Positioning
<b>PPS</b>	Pulse per second

<b>Acronym</b>	<b>Definition</b>
<b>PRF</b>	Project Reference File
<b>PS</b>	Physical Scientist
<b>PST</b>	Physical Science Technician
<b>RNC</b>	Raster Navigational Chart
<b>RTK</b>	Real Time Kinematic
<b>SBES</b>	Singlebeam Echosounder
<b>SBET</b>	Smooth Best Estimate and Trajectory
<b>SNM</b>	Square Nautical Miles
<b>SSS</b>	Side Scan Sonar
<b>ST</b>	Survey Technician
<b>SVP</b>	Sound Velocity Profiler
<b>TCARI</b>	Tidal Constituent And Residual Interpolation
<b>TPU</b>	Total Propagated Error
<b>TPU</b>	Topside Processing Unit
<b>USACE</b>	United States Army Corps of Engineers
<b>USCG</b>	United States Coast Guard
<b>UTM</b>	Universal Transverse Mercator
<b>XO</b>	Executive Officer
<b>ZDA</b>	Global Positioning System timing message
<b>ZDF</b>	Zone Definition File

APPENDIX I  
TIDES AND WATER LEVELS

# H12740

## TIMES OF HYDROGRAPHY

**Project:** OPR-J377-KR2-15

**Contractor Name:** David Evans and Associates, Inc.

**Date:** September 23, 2015

**Inclusive Dates:** July 10, 2015 - September 23, 2015

Field work is complete

Time (UTC)

Day Number	Date	Start Time	End Time
191	07/10/2015	0:19:22	23:32:53
192	07/11/2015	0:15:06	18:22:47
193	07/12/2015	1:58:00	23:59:31
194	07/13/2015	0:02:49	8:32:58
231	08/19/2015	0:32:50	2:35:12
266	09/23/2015	22:35:51	22:37:35

# H12740

## FINAL TIDE NOTE AND ZONING

**DATE:** September 23, 2015

**HYDROGRAPHIC BRANCH:** Atlantic Hydrographic Branch  
**HYDROGRAPHIC PROJECT:** OPR-J377-KR2-15  
**HYDROGRAPHIC SURVEY:** H12740

**LOCALITY:** Approaches to Breton Sound, LA  
**SUB-LOCALITY:** 15 NM East of Pass a Loutre

**TIME PERIOD** <sup>1</sup> : July 10, 2015 - September 23, 2015

### TIDE STATIONS USED:

<u>Station Name</u>	<u>Station ID</u>	<u>Type</u>	<u>Latitude</u>	<u>Longitude</u>
Pilots Station East, SW Pass LA	876-0922	Control	28° 55.9' N	89° 24.5' W

### PLANE OF REFERENCE (MEAN LOWER LOW WATER) :

0.000m

### HEIGHT OF MEAN HIGH WATER ABOVE PLANE OF REFERENCE:

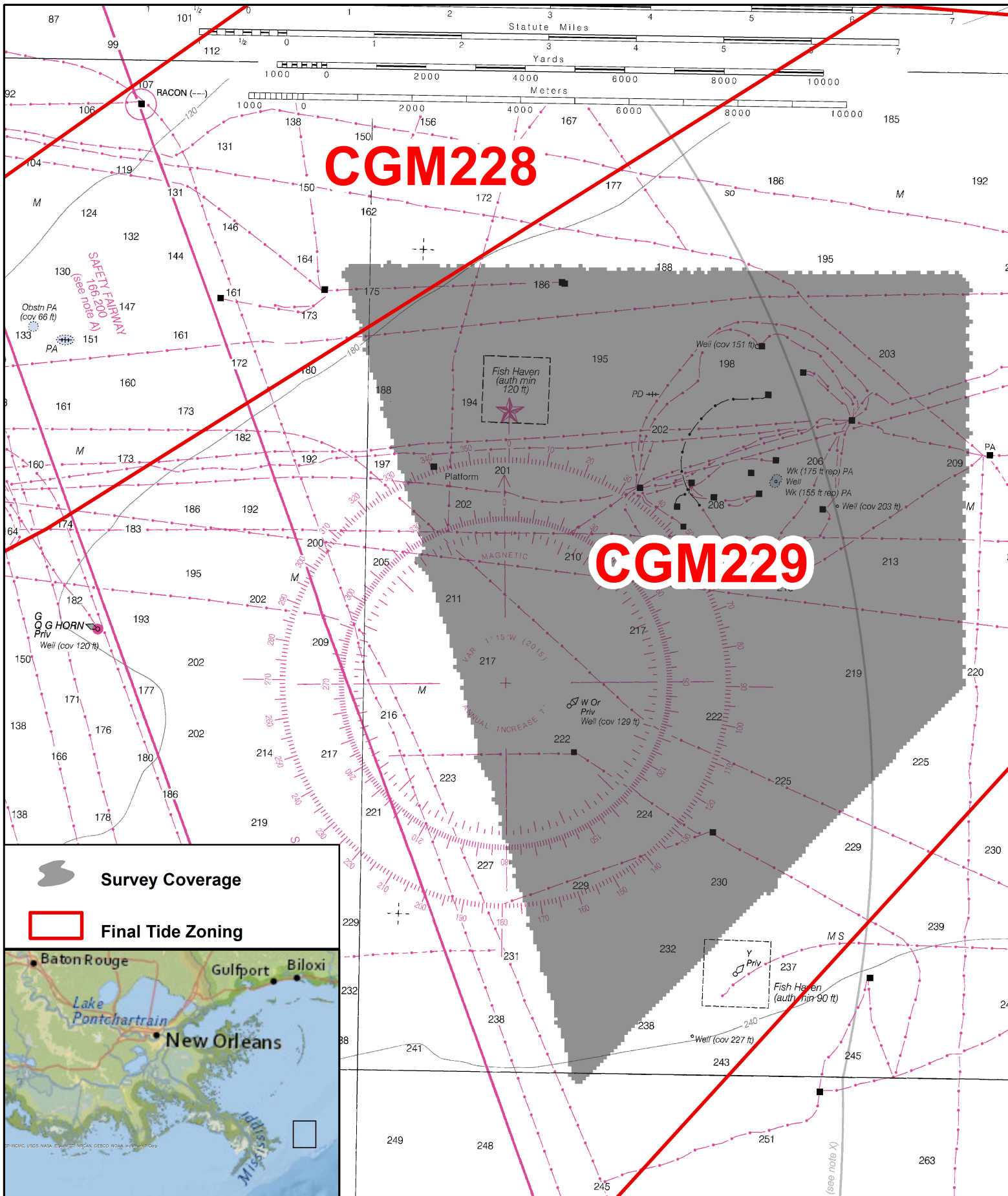
0.359m


### FINAL ZONING AND TIDAL REDUCERS TO CHART DATUMN:


<u>Zone</u>	<u>Time Corrector</u> <u>(Mins)</u>	<u>Range Ratio</u>
CGM228	12	1.01
CGM229	0	1.01

---


<sup>1</sup> Please refer to the comprehensive list in attached Times of Hydrography.



 **Survey Coverage**

 **Final Tide Zoning**





0 0.5 1  
Nautical Miles

**H12740**  
**Final Tide Zoning Chartlet**

**OPR-J377-KR2-15**  
**Approaches to Breton Sound, LA**  
**David Evans and Associates, Inc.**  
**Chart 11361**

## Jason Creech

---

**From:** Christina Fandel - NOAA Federal <christina.fandel@noaa.gov>  
**Sent:** Thursday, December 18, 2014 5:20 AM  
**To:** Jon Dasler  
**Cc:** Jason Creech; Lucy Hick - NOAA Federal; Tiffany Squyres - NOAA Federal  
**Subject:** Re: OPR-J377-KR2-15 Draft Project Instructions

Jon,

I contacted CO-OPS regarding your request to smooth the tidal data from the SW Pass station to eliminate the high frequency noise generated when ships pass by the gauge. Colleen Fanelli, the Hydrographic Planning Lead at CO-OPS, has agreed to your request and has granted DEA permission to apply a low pass filter to the water level data for tide reduction at the SW Pass (8760922) station. Please let me know if you have any questions.

Christy

On Tue, Dec 16, 2014 at 6:15 PM, Jon Dasler <[Jld@deainc.com](mailto:Jld@deainc.com)> wrote:

Thanks Christy. One of the issues we will want to address with CO-OPS are the glitches in the recorded water level every time a ship passes the SW Pass gauge at 8760922. We did binomial smoothing last time (approved by Steve Gill) to remove this from the water level data as this clearly does not happen offshore. Below is a sample from the gauge. At times the impact is greater than what is being shown below.





**PRODUCTS**

Data, Analyses, and Publications

**PROGRAMS**

Serving the Nation

Home / Products / Water Levels / 8760922 Pilots Station East, SW Pass, LA ☆

Station Info

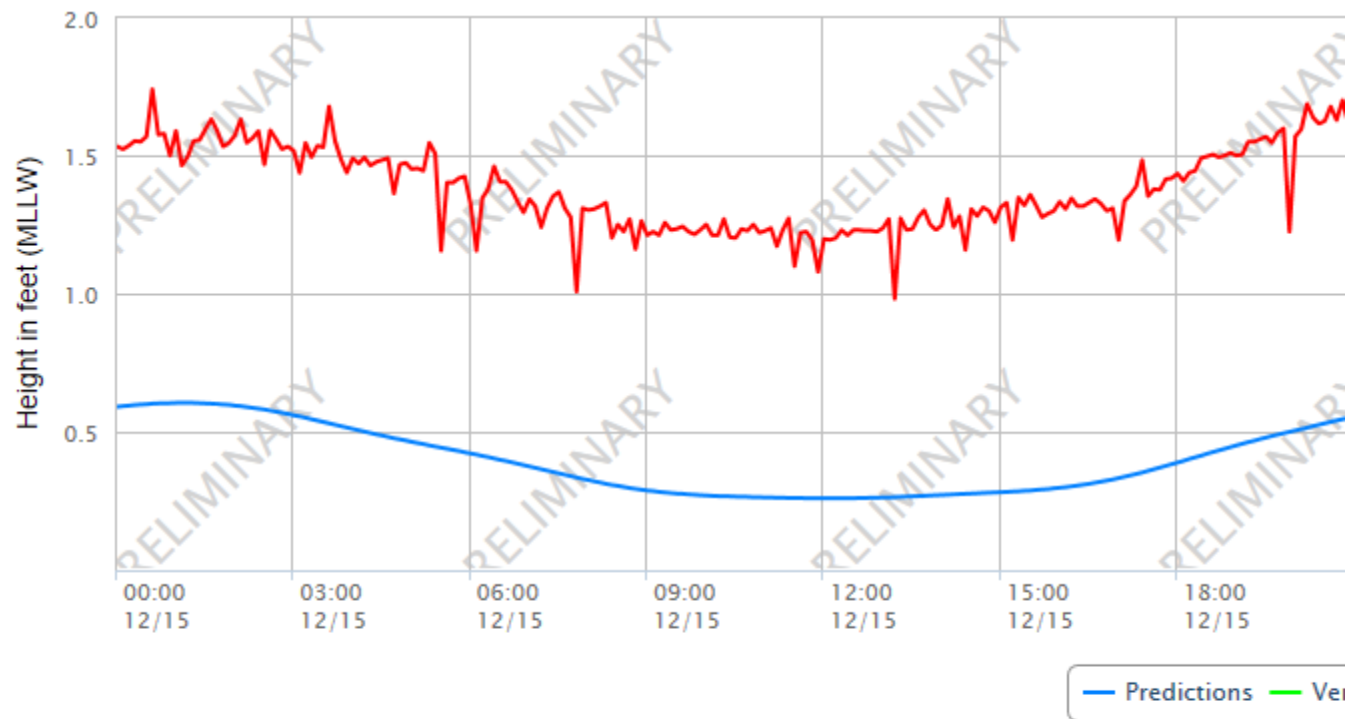
Tides/Water Levels

Meteorological Obs.

Phys. Oceanography

PORTS®

Observed Water Lev  
From 2014/12



Options for

8760922 Pilots Station East,...

From:

**Jon L. Dasler, PE, PLS, CH** | Vice President, Director of Marine Services

David Evans and Associates, Inc. | Marine Services Division | [www.deamarine.com](http://www.deamarine.com)

t: [360.314.3200](tel:360.314.3200) | c: [503.799.0168](tel:503.799.0168) | [jld@deainc.com](mailto:jld@deainc.com)



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---

**From:** Christina Fandel - NOAA Federal [mailto:[christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)]

**Sent:** Tuesday, December 16, 2014 1:42 PM

**To:** Jon Dasler; Jason Creech

**Cc:** Lucy Hick - NOAA Federal; Tiffany Squyres - NOAA Federal

**Subject:** OPR-J377-KR2-15 Draft Project Instructions

Jason and Jon,

Attached please find a zipped file containing the draft project instructions for OPR-J377-KR2-15 as well as the preliminary GIS files. Please provide a cost estimate for this survey area at your earliest convenience.

For reference, Lucy Hick will be the COR for this project and I will serve as the Technical Point of Contact. Please include both Lucy and myself on all correspondence regarding this project.

Thank you and please let me know if you have any questions or concerns.

Christy

--

Christy Fandel

Physical Scientist

Hydrographic Survey Division

Office of Coast Survey, NOAA

[Christina.Fandel@noaa.gov](mailto:Christina.Fandel@noaa.gov)

[\(301\) 713-2702 x178](tel:(301)713-2702x178)

--

Christy Fandel

Physical Scientist

Hydrographic Survey Division

Office of Coast Survey, NOAA

[Christina.Fandel@noaa.gov](mailto:Christina.Fandel@noaa.gov)

[\(301\) 713-2702 x178](tel:(301)713-2702x178)

## APPENDIX II

# SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE

## Jason Creech

---

**From:** Jon Dasler  
**Sent:** Sunday, July 12, 2015 6:04 PM  
**To:** Jon Dasler; ed.landgraf@shell.com; tim.osborn@noaa.gov  
**Cc:** christina.fandel@noaa.gov; Jason Creech  
**Subject:** RE: RE: Gas leak on Shell pipeline  
**Attachments:** Slide1.JPG; Slide2.JPG

Corrected the text on slide 1.

---

**From:** Jon Dasler  
**Sent:** Sun 7/12/2015 4:07 PM  
**To:** ed.landgraf@shell.com; tim.osborn@noaa.gov  
**Cc:** christina.fandel@noaa.gov; Jason Creech  
**Subject:** RE: RE: Gas leak on Shell pipeline

Attached are the latest images from the survey vessel Blake. They were unable to get a subbottom return on the pipelines but trenches evident in the multibeam data match charted pipeline positions. There is a minor depression at the gas seep which could be from lifted sediment from the rising gas bubbles.

Jon L. Dasler, P.E., P.L.S., C.H.  
Senior Vice President, Director Of Marine Services  
David Evans and Associates, Inc.  
Main: (360) 314-3200 Direct: (360) 314-3202  
Mobile: (503) 799-0168  
e-mail [jld@deainc.com](mailto:jld@deainc.com)

---

**From:** ed.landgraf@shell.com [<mailto:ed.landgraf@shell.com>]  
**Sent:** Sun 7/12/2015 3:53 PM  
**To:** tim.osborn@noaa.gov; Jon Dasler  
**Cc:** christina.fandel@noaa.gov; Jason Creech  
**Subject:** RE: RE: Gas leak on Shell pipeline

Many Many Thanks!!! I am passing all this along – would be interesting to see if there is an impression where the leak is? If so could be from a boat anchor or jack up rig leg?

Shell is doing overflights and pressure test on the systems as part of the investigation they also made a NRC notification earlier today...

---

**From:** Tim Osborn - NOAA Federal [<mailto:tim.osborn@noaa.gov>]  
**Sent:** Sunday, July 12, 2015 3:47 PM  
**To:** Jon Dasler  
**Cc:** Landgraf, Ed L SEPCO-UAS/D/VDW; Christina Fandel - NOAA Federal; [Jasc@deainc.com](mailto:Jasc@deainc.com)  
**Subject:** RE: Gas leak on Shell pipeline

Thanks for the continued investigation. The amount of development and infrastructure in this area that you are surveying across is impressive.

On Jul 12, 2015, at 2:13 PM, Jon Dasler <[Jld@deainc.com](mailto:Jld@deainc.com)> wrote:

The gas discharge is 200 meters east of an abandoned 8" gas pipeline owned by Southern Natural Gas (details in BOEM query below and image attached). It is possible that line is not positioned correctly in the BOEM data base. The Blake is sediment sampling in the area today and I asked them to use their 12 kHz deep ocean echosounder as a subbottom profiler to see if they can identify a buried pipeline running northeast of the seep and also see if they can detect the Shell oil pipeline. The gas seep is in Block MP 299 (image attached).

**Jon L. Dasler, PE, PLS, CH** | Senior Vice President, Director of Marine Services  
David Evans and Associates, Inc. | Marine Services Division | [www.deamarine.com](http://www.deamarine.com)  
t: 360.314.3200 | c: 503.799.0168 | [jld@deainc.com](mailto:jld@deainc.com)

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---

**From:** Tim Osborn - NOAA Federal [<mailto:tim.osborn@noaa.gov>]  
**Sent:** Sunday, July 12, 2015 8:24 AM  
**To:** [ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)  
**Cc:** Jon Dasler; Christina Fandel - NOAA Federal  
**Subject:** RE: Gas leak on Shell pipeline

Ed

Thanks. This will be good to verify.

On Jul 12, 2015, at 9:27 AM, [ed.landgraf@shell.com](mailto:ed.landgraf@shell.com) wrote:

Yes will close the loop looks like might be a natural air seep as we have no gas lines just oil.

---

**From:** Tim Osborn - NOAA Federal [<mailto:tim.osborn@noaa.gov>]  
**Sent:** Saturday, July 11, 2015 9:47 PM  
**To:** Landgraf, Ed L SEPSCO-UAS/D/VDW  
**Cc:** [jld@deainc.com](mailto:jld@deainc.com); [christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)  
**Subject:** Re: Gas leak on Shell pipeline

Ed

Thanks. Can Pipeline get back on their investigation of this?  
It was great seeing you and the family last weekend.

On Jul 11, 2015, at 9:44 PM, "[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)" <[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)> wrote:

Ok thanks I have notified our Shell pipeline folks and they are investigating – may be tomorrow before we hear back – I told them just bubbles...

---

**From:** Jon Dasler [<mailto:jld@deainc.com>]  
**Sent:** Saturday, July 11, 2015 9:40 PM  
**To:** Jon Dasler  
**Cc:** Landgraf, Ed L SEPSCO-UAS/D/VDW; [tim.osborn@noaa.gov](mailto:tim.osborn@noaa.gov); [christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)  
**Subject:** Re: Gas leak on Shell pipeline

I also see the product code for this pipeline is oil. The crew did not observe a sheen or a smell. Is this an oil pipeline? I suppose this could be a natural seep near the pipeline. There must also be a current shear as the gas rises straight up then hits current in the upper water column

Jon Dasler, PE, PLS  
Director of Marine Services

David Evans and Associates, Inc.  
360-314-3200  
Direct: 360-314-3202  
Mobile: 503-799-0168  
Email: [jld@deainc.com](mailto:jld@deainc.com)  
[www.deamarine.com](http://www.deamarine.com)  
Sent from my iPad

On Jul 11, 2015, at 6:49 PM, Jon Dasler <[Jld@deainc.com](mailto:Jld@deainc.com)> wrote:

Ed  
It looks like the origin and destination lease blocks are what is listed in the BOEM query. If I am reading this correctly, the origin of the pipeline is a flange at MP 290 and the destination is 20-SSTI in Block MP 146. Water depth is 216 feet. The Satellite phone for the lab on our survey vessel Blake is 1-480-752-7300. They can be reached 24/7.  
<image1.PNG>

Jon Dasler, PE, PLS  
Director of Marine Services  
David Evans and Associates, Inc.  
360-314-3200  
Direct: 360-314-3202  
Mobile: 503-799-0168  
Email: [jld@deainc.com](mailto:jld@deainc.com)  
[www.deamarine.com](http://www.deamarine.com)  
Sent from my iPad

On Jul 11, 2015, at 6:38 PM, Jon Dasler <[Jld@deainc.com](mailto:Jld@deainc.com)> wrote:

I believe so. I don't have a lease block map in front of me but I see that listed on the feature they identified in the BOEM data base. I will call the ship.

Jon Dasler, PE, PLS  
Director of Marine Services  
David Evans and Associates, Inc.  
360-314-3200  
Direct: 360-314-3202  
Mobile: 503-799-0168  
Email: [jld@deainc.com](mailto:jld@deainc.com)  
[www.deamarine.com](http://www.deamarine.com)  
Sent from my iPad

On Jul 11, 2015, at 6:33 PM, "[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)" <[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)> wrote:

[So the Block is MP 146? Just want to confirm?](#)

**From:** Jon Dasler [<mailto:Jld@deainc.com>]  
**Sent:** Saturday, July 11, 2015 8:30 PM  
**To:** Landgraf, Ed L SEPCO-UAS/D/VDW  
**Cc:** [Jld@deainc.com](mailto:Jld@deainc.com); [tim.osborn@noaa.gov](mailto:tim.osborn@noaa.gov);

[christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)

**Subject:** Re: Gas leak on Shell pipeline

I have a message into our crew on depth. The images shows the bubbles over 65 meters off the Seafloor (215 ft). The actual water depth may be slightly deeper.

Jon Dasler, PE, PLS  
Director of Marine Services  
David Evans and Associates, Inc.  
360-314-3200  
Direct: 360-314-3202  
Mobile: 503-799-0168  
Email: [jld@deainc.com](mailto:jld@deainc.com)  
[www.deamarine.com](http://www.deamarine.com)  
Sent from my iPad

On Jul 11, 2015, at 6:21 PM,  
"[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)" <[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)>  
wrote:

Go it thanks Jon I will contact our folks.

**From:** Jon Dasler [<mailto:Jld@deainc.com>]

**Sent:** Saturday, July 11, 2015 8:16 PM

**To:** Landgraf, Ed L SEPCO-UAS/D/VDW

**Cc:** Osborn Tim; Federal Christina Fandel - NOAA

**Subject:** Fwd: Gas leak on Shell pipeline  
Ed

The image from our survey boat is attached below.

NAD83 degrees minutes decimal seconds

Lat 29 15 22.17 N

Long [088 45 51.46](#) W

Should be position of leak on Seafloor

They also attached the properties from the BOEM data base and a photo of the bubbles on the sea surface. Please feel free to call or email me any time.

Jon Dasler, PE, PLS  
Director of Marine Services  
David Evans and Associates, Inc.  
360-314-3200  
Direct: 360-314-3202  
Mobile: 503-799-0168  
Email: [jld@deainc.com](mailto:jld@deainc.com)  
[www.deamarine.com](http://www.deamarine.com)



Sent from my iPad

Begin forwarded message:

**From:** "David Evans  
and Associates"  
<[blake@gmn-  
usa.com](mailto:blake@gmn-usa.com)>  
**Date:** July 11, 2015 at  
9:12:13 AM PDT  
**To:**  
<[jld@deainc.com](mailto:jld@deainc.com)>,  
<[Jasc@deainc.com](mailto:Jasc@deainc.com)>  
**Subject: Gas leak on  
Shell pipeline**

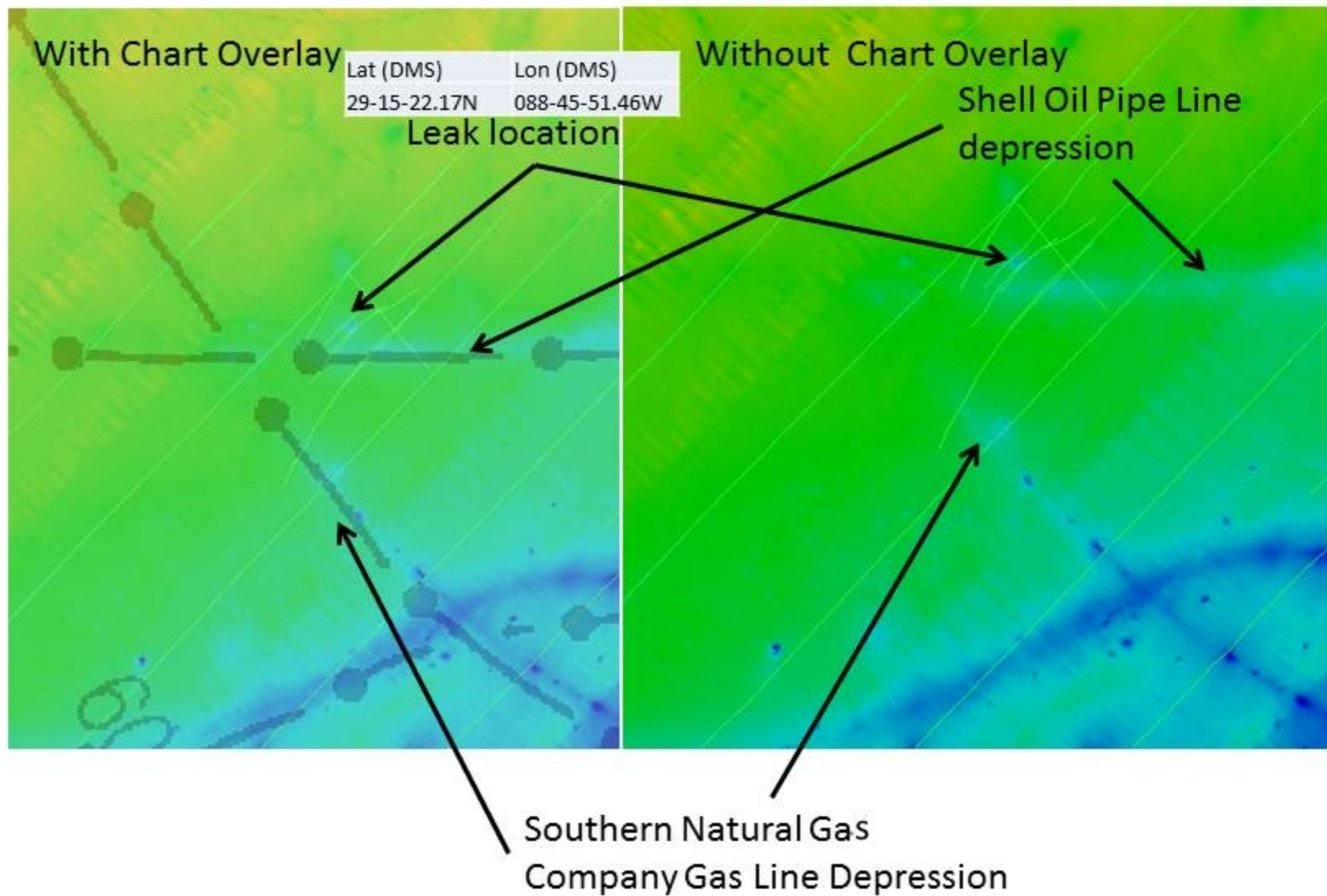
Jason,

Over night we found a  
potential gas leak.  
The leak is very close  
to a Shell pipeline  
which runs all the  
way from offshore  
onto land. We  
collected full water  
column once on the  
day shift and we  
observed bubbles at  
the sea surface.

Attached is more  
information.

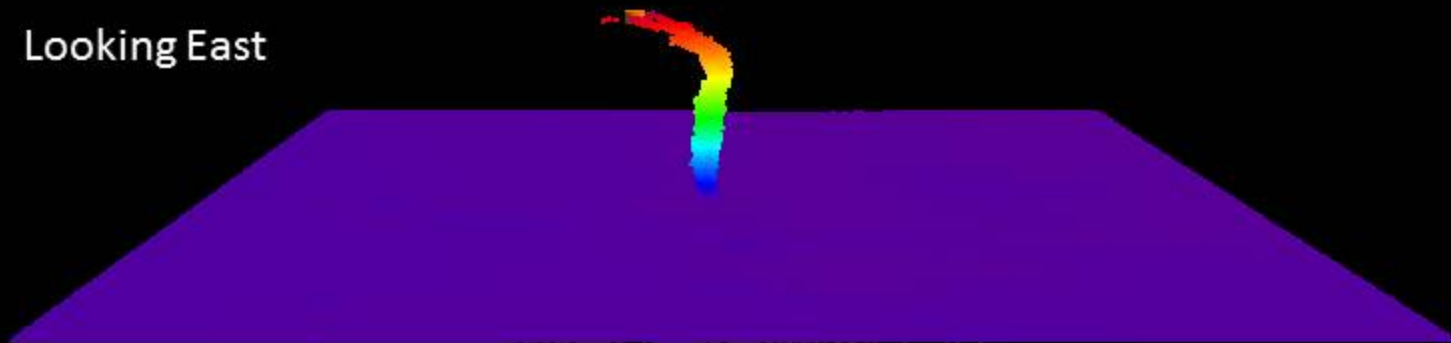
Mick

<image001.jpg>



The pipeline depressions on the seafloor match almost perfectly with the charted locations of those pipelines.

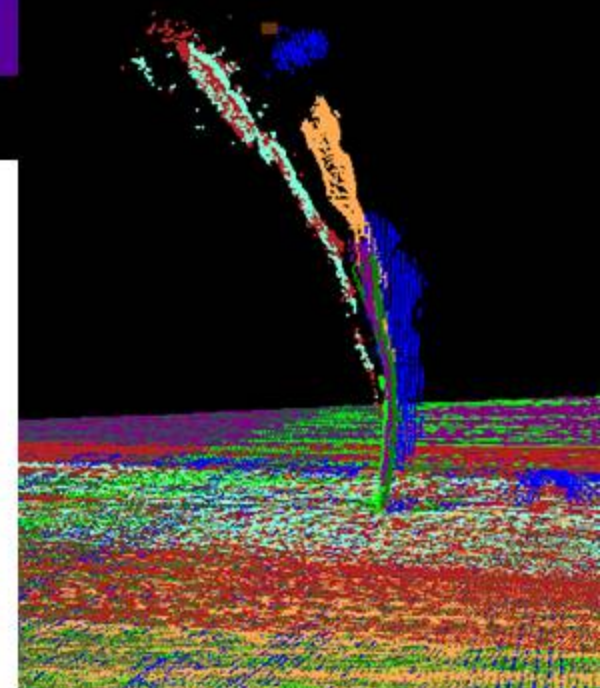
Looking East



Looking North



Looking South West  
Colored by Line



Leak location

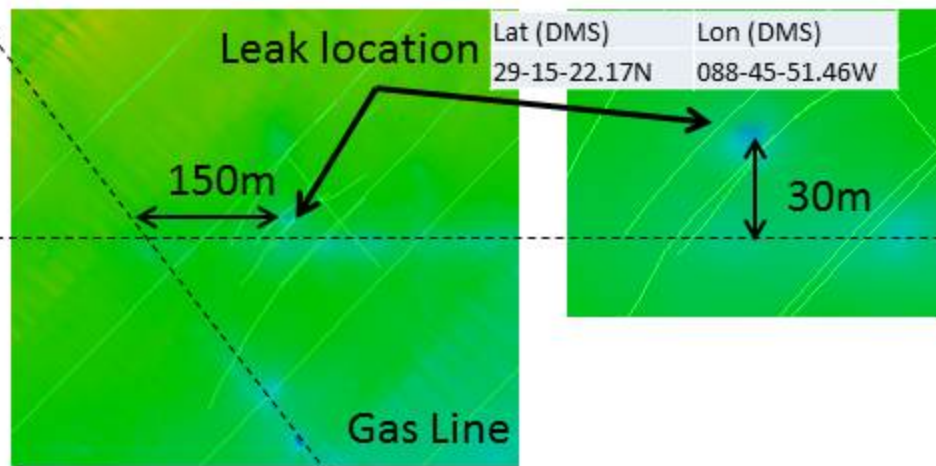
Lat (DMS)	Lon (DMS)
29-15-22.17N	088-45-51.46W

150m

30m

Shell Line

Gas Line



## Jason Creech

---

**From:** Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>  
**Sent:** Sunday, July 12, 2015 8:00 PM  
**To:** Ed Landgraf Shell  
**Cc:** Jon Dasler; Jason Creech; Christina Fandel - NOAA Federal  
**Subject:** Re: Gas leak on Shell pipeline

Ed

Thank you for the very prompt response by Shell on this.

**To:** <[tim.osborn@noaa.gov](mailto:tim.osborn@noaa.gov)>, <[Jld@deainc.com](mailto:Jld@deainc.com)>  
**Cc:** <[christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)>, <[Jasc@deainc.com](mailto:Jasc@deainc.com)>

*Many Many Thanks!!! I am passing all this along – would be interesting to see if there is an impression where the leak is? If so could be from a boat anchor or jack up rig leg?*

*Shell is doing overflights and pressure test on the systems as part of the investigation they also made a NRC notification earlier today...*

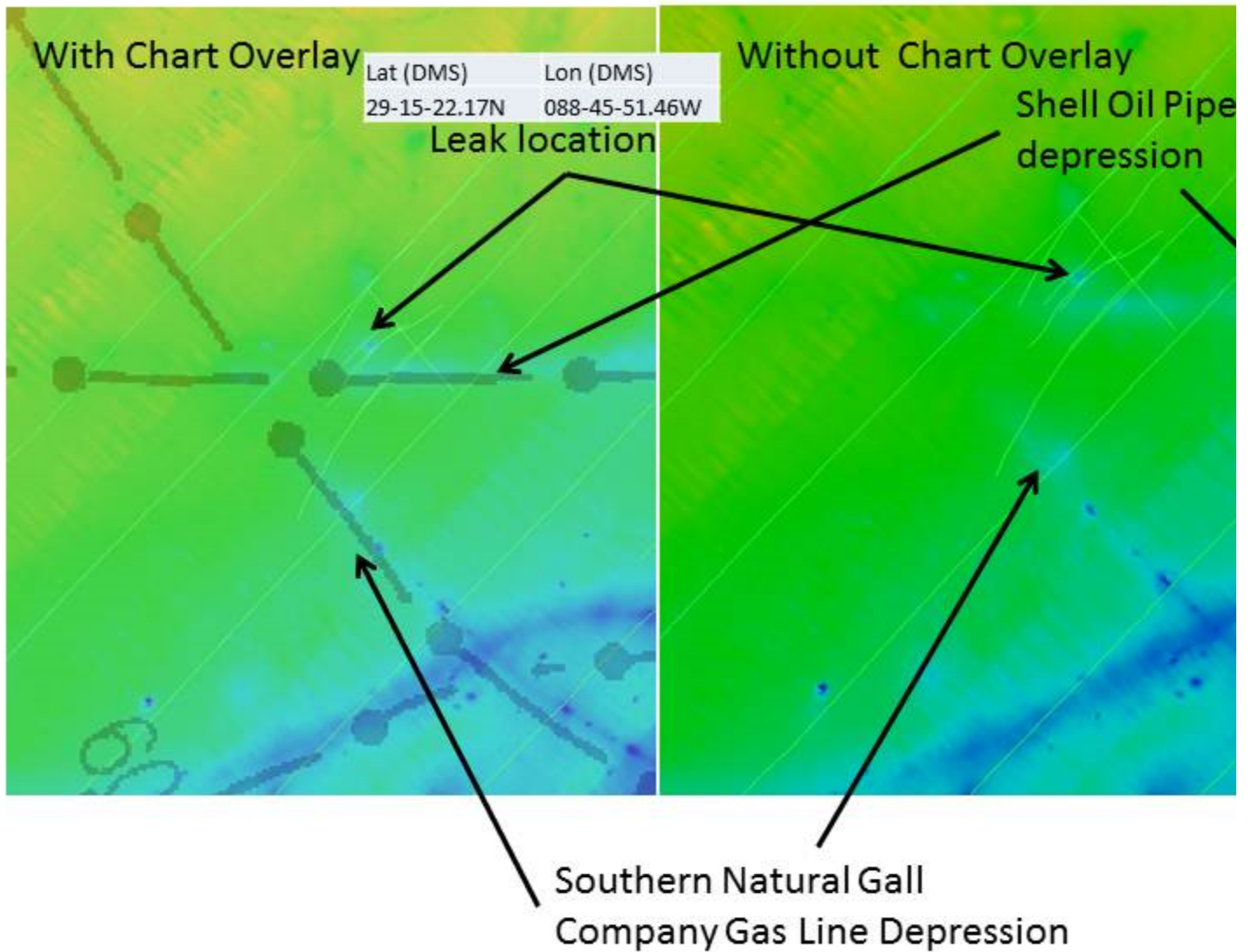
---

**From:** Tim Osborn - NOAA Federal [<mailto:tim.osborn@noaa.gov>]  
**Sent:** Sunday, July 12, 2015 3:47 PM  
**To:** Jon Dasler  
**Cc:** Landgraf, Ed L SEPCO-UAS/D/VDW; Christina Fandel - NOAA Federal; [Jasc@deainc.com](mailto:Jasc@deainc.com)  
**Subject:** RE: Gas leak on Shell pipeline

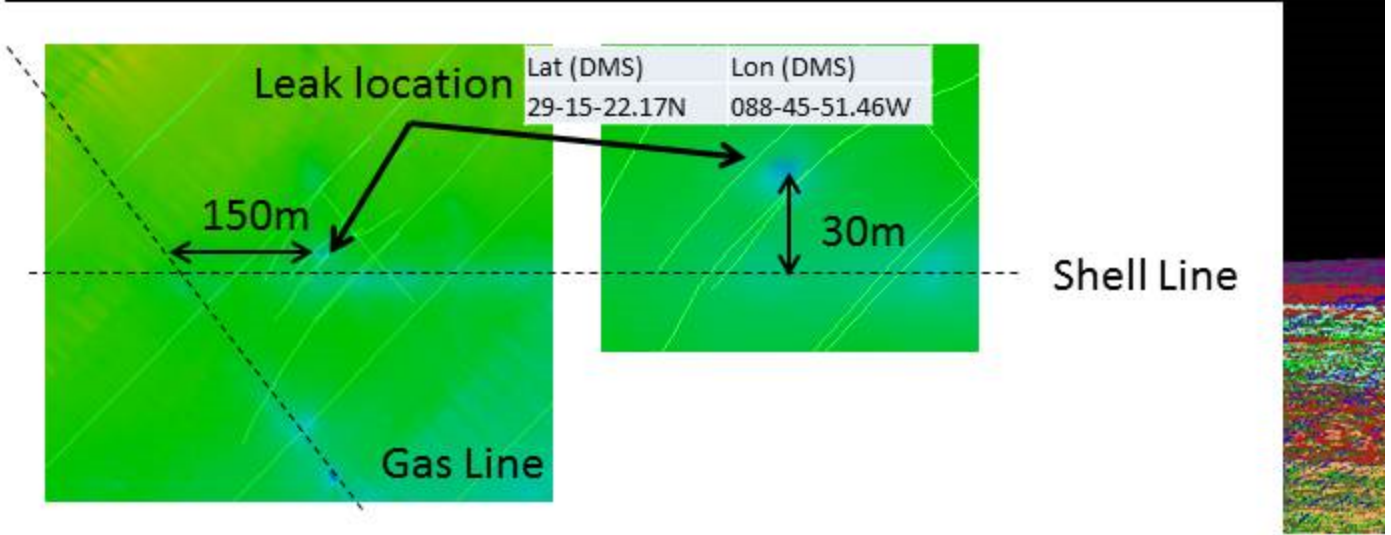
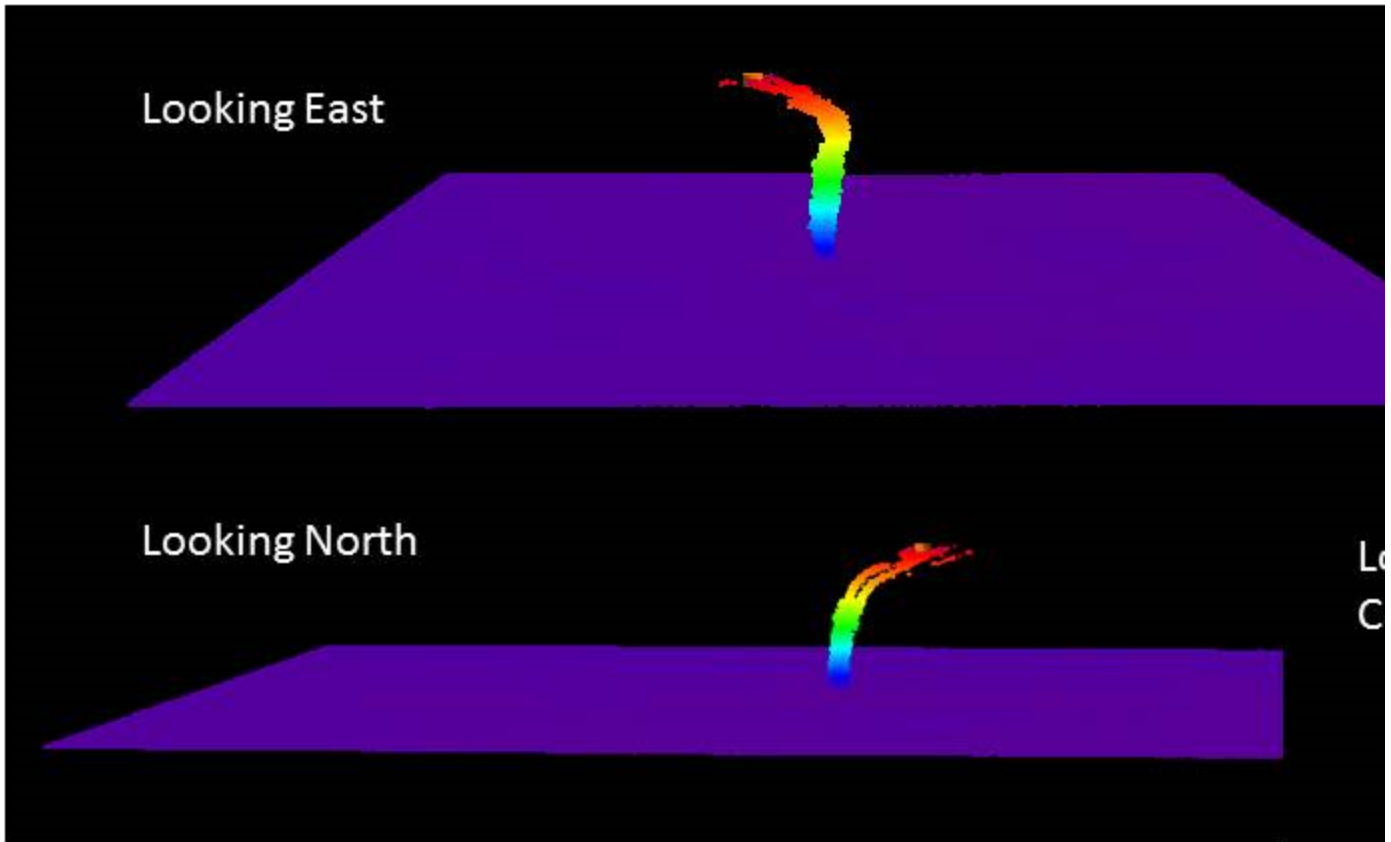
Thanks for the continued investigation. The amount of development and infrastructure in this area that you are surveying across is impressive.

On Jul 12, 2015, at 2:13 PM, Jon Dasler <[Jld@deainc.com](mailto:Jld@deainc.com)> wrote:

The gas discharge is 200 meters east of an abandoned 8" gas pipeline owned by Southern Natural Gas (details in BOEM query below and image attached). It is possible that line is not positioned correctly in the BOEM data base. The Blake is sediment sampling in the area today and I asked them to use their 12 kHz deep ocean echosounder as a subbottom profiler to see if they can identify a buried pipeline running northeast of the seep and also see if they can detect the Shell oil pipeline. The gas seep is in Block MP 299 (image attached).



The pipeline depressions on the seafloor match almost perfectly with locations of those pipelines.



Identify from: <Top-most layer >

- BOEM\_Pipelines
  - SOUTHERN NATURAL GAS COMPANY,

Location: 88°45'59.569"W 29°15'22.958"N

Field	Value
FID	377
Shape	Polyline
FNODE_	0
TNODE_	0
LPOLY_	0
RPOLY_	0
LENGTH	0.063458
PPL_ARCS_	6805
PPL_ARCS_I	6805
SEGMENT_NU	9083
ROW_NUMBER	G12303
PPL_SIZE_C	08
PROD_CODE	GAS
STATUS_COD	ABN
CO_NAME	SOUTHERN NATURAL GAS COMPANY,
ORIG_AR_CO	MP
ORIG_BLK_N	298
ORIG_ID_NA	B
DEST_AR_CO	MP
DEST_BLK_N	299
DEST_ID_NA	PP
AUTH_CODE	DOT
MAOP_PRSS	1440
PLOT_CODE	10

Identified 1 feature

**Jon L. Dasler, PE, PLS, CH** | Senior Vice President, Director of Marine Services

David Evans and Associates, Inc. | Marine Services Division | [www.deamarine.com](http://www.deamarine.com)

t: 360.314.3200 | c: 503.799.0168 | [jld@deainc.com](mailto:jld@deainc.com)



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[Please consider the environment before printing this email.](#)

---

**From:** Tim Osborn - NOAA Federal [<mailto:tim.osborn@noaa.gov>]  
**Sent:** Sunday, July 12, 2015 8:24 AM  
**To:** [ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)  
**Cc:** Jon Dasler; Christina Fandel - NOAA Federal  
**Subject:** RE: Gas leak on Shell pipeline

Ed

Thanks. This will be good to verify.

On Jul 12, 2015, at 9:27 AM, [ed.landgraf@shell.com](mailto:ed.landgraf@shell.com) wrote:

Yes will close the loop looks like might be a natural air seep as we have no gas lines just oil.

---

**From:** Tim Osborn - NOAA Federal [<mailto:tim.osborn@noaa.gov>]  
**Sent:** Saturday, July 11, 2015 9:47 PM  
**To:** Landgraf, Ed L SEPCO-UAS/D/VDW  
**Cc:** [Jld@deainc.com](mailto:Jld@deainc.com); [christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)  
**Subject:** Re: Gas leak on Shell pipeline

Ed



Thanks. Can Pipeline get back on their investigation of this?

It was great seeing you and the family last weekend.

On Jul 11, 2015, at 9:44 PM, "[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)" <[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)> wrote:

Ok thanks I have notified our Shell pipeline folks and they are investigating – may be tomorrow before we hear back – I told them just bubbles...

---

**From:** Jon Dasler [<mailto:Jld@deainc.com>]  
**Sent:** Saturday, July 11, 2015 9:40 PM  
**To:** Jon Dasler  
**Cc:** Landgraf, Ed L SEPCO-UAS/D/VDW; [tim.osborn@noaa.gov](mailto:tim.osborn@noaa.gov); [christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)  
**Subject:** Re: Gas leak on Shell pipeline

I also see the product code for this pipeline is oil. The crew did not observe a sheen or a smell. Is this an oil pipeline? I suppose this could be a natural seep near the pipeline. There must also be a current shear as the gas rises straight up then hits current in the upper water column

Jon Dasler, PE, PLS

Director of Marine Services

David Evans and Associates, Inc.

360-314-3200

Direct: 360-314-3202

Mobile: 503-799-0168

Email: [jld@deainc.com](mailto:jld@deainc.com)

[www.deamarine.com](http://www.deamarine.com)

Sent from my iPad

On Jul 11, 2015, at 6:49 PM, Jon Dasler <[Jld@deainc.com](mailto:Jld@deainc.com)> wrote:

Ed

It looks like the origin and destination lease blocks are what is listed in the BOEM query. If I am reading this correctly, the origin of the pipeline is a flange at MP 290 and the destination is 20-SSTI in Block MP 146. Water depth is 216 feet. The Satellite phone for the lab on our survey vessel Blake is 1-480-752-7300. They can be reached 24/7.

<image1.PNG>

Jon Dasler, PE, PLS

Director of Marine Services

David Evans and Associates, Inc.

360-314-3200

Direct: 360-314-3202

Mobile: 503-799-0168

Email: [jld@deainc.com](mailto:jld@deainc.com)

[www.deamarine.com](http://www.deamarine.com)

Sent from my iPad

On Jul 11, 2015, at 6:38 PM, Jon Dasler <[Jld@deainc.com](mailto:Jld@deainc.com)> wrote:

I believe so. I don't have a lease block map in front of me but I see that listed on the feature they identified in the BOEM data base. I will call the ship.

Jon Dasler, PE, PLS

Director of Marine Services

David Evans and Associates, Inc.

360-314-3200

Direct: 360-314-3202

Mobile: 503-799-0168

Email: [jld@deainc.com](mailto:jld@deainc.com)

[www.deamarine.com](http://www.deamarine.com)

Sent from my iPad

On Jul 11, 2015, at 6:33 PM, "[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)" <[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)> wrote:

So the Block is MP 146? Just want to confirm?

---

**From:** Jon Dasler [<mailto:Jld@deainc.com>]  
**Sent:** Saturday, July 11, 2015 8:30 PM  
**To:** Landgraf, Ed L SEPCO-UAS/D/VDW  
**Cc:** [Jld@deainc.com](mailto:Jld@deainc.com); [tim.osborn@noaa.gov](mailto:tim.osborn@noaa.gov); [christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)  
**Subject:** Re: Gas leak on Shell pipeline

I have a message into our crew on depth. The images shows the bubbles over 65 meters off the Seafloor (215 ft). The actual water depth may be slightly deeper.

Jon Dasler, PE, PLS

Director of Marine Services

David Evans and Associates, Inc.

360-314-3200

Direct: 360-314-3202

Mobile: 503-799-0168

Email: [jld@deainc.com](mailto:jld@deainc.com)

[www.deamarine.com](http://www.deamarine.com)

Sent from my iPad

On Jul 11, 2015, at 6:21 PM,  
"[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)" <[ed.landgraf@shell.com](mailto:ed.landgraf@shell.com)>  
wrote:

Go it thanks Jon I will contact our folks.

---

**From:** Jon Dasler  
[<mailto:Jld@deainc.com>]  
**Sent:** Saturday, July 11, 2015 8:16 PM  
**To:** Landgraf, Ed L SEPCO-UAS/D/VDW  
**Cc:** Osborn Tim; Federal Christina  
Fandel - NOAA  
**Subject:** Fwd: Gas leak on Shell  
pipeline

Ed

The image from our survey boat is  
attached below.

NAD83 degrees minutes decimal  
seconds

Lat 29 15 22.17 N

Long [088 45 51.46](#) W

Should be position of leak on  
Seafloor

They also attached the properties  
from the BOEM data base and a  
photo of the bubbles on the sea  
surface. Please feel free to call or  
email me any time.

Jon Dasler, PE, PLS

Director of Marine Services

David Evans and Associates, Inc.

360-314-3200

Direct: 360-314-3202

Mobile: 503-799-0168

Email: [jld@deainc.com](mailto:jld@deainc.com)

[www.deamarine.com](http://www.deamarine.com)

Sent from my iPad

Begin forwarded message:

**From:** "David Evans  
and Associates"

<[blake@gmn-  
usa.com](mailto:blake@gmn-usa.com)>

**Date:** July 11, 2015 at  
9:12:13 AM PDT

**To:**  
<[jld@deainc.com](mailto:jld@deainc.com)>,  
<[Jasc@deainc.com](mailto:Jasc@deainc.com)>

**Subject: Gas leak on  
Shell pipeline**

Jason,

Over night we found a  
potential gas leak.

The leak is very close  
to a Shell pipeline  
which runs all the  
way from offshore  
onto land. We  
collected full water  
column once on the  
day shift and we  
observed bubbles at

the sea surface.

Attached is more  
information.

Mick

<image001.jpg>

**From:** Mick Hawkins  
**Sent:** Monday, August 17, 2015 12:35 PM  
**To:** MRN\_Everyone  
**Subject:** FW: Additional information on gas leak  
**Attachments:** MP299\_MS1000\_Sonar Images.zip; MP299\_ROV Snap Shots.zip; Odyssey\_Sheen\_Event\_Planning\_Map\_Rev2.pdf

For anyone that is interested, please see the attached images from ROV and sector scanning sonar from the gas leak we discovered during NOAA26 operations. Also in the text below there is a section of the report from the ROV engineer.

Mick

**Mick Hawkins** | Operations Manager Gulf Coast Region, Project Manager  
David Evans and Associates, Inc. | Marine Services Division | [www.deamarine.com](http://www.deamarine.com)  
t: 360.314.3200 | c: 228.238.3163 | [mhawkins@deainc.com](mailto:mhawkins@deainc.com)

---

**From:** [jonathan.j.s.smith@shell.com](mailto:jonathan.j.s.smith@shell.com) [<mailto:jonathan.j.s.smith@shell.com>]  
**Sent:** Monday, August 17, 2015 2:15 PM  
**To:** Mick Hawkins  
**Subject:** RE: Additional information on gas leak

Mick,

Thanks for the follow-up. I was out of the office for the last week so just catching up on emails.

We sent a ROV vessel to the site on July 17<sup>th</sup>. Note that there is a Plugged and Abandoned well drilled by Chevron in 1962 in close proximity to the pipeline but due to the positioning accuracy in 1962 the as-drilled position is in question so we had the ROV fly to the coordinate of record but didn't see any evidence of the well. Also the pipelines were buried. I've attached a map showing our planning map with the well location. We could not confirm if the bubbles were from a natural seep or associated with the well.

Below is the write-up by my Geomatics Engineer onboard the ROV Vessel. I'm also attaching some sonar images of the feature for reference.

Thanks, Jonathan

-----

ROV was deployed at 0230 this morning. The vis in the water column is Ok, but at bottom we can only see maybe 2ft if ROV doesn't stir up the sediment. Sun has not come up yet, so we have been unable to see any evidence on the sea surface. The vessel put a high beam light on the water for us to look, but we were unsuccessful in a surface visual verification (no bubble or sheen seen).

We navigated the ROV to the seep location and we were able to positively identify the location with the ROV video and sonar (see attached). The USBL position compared well with the NOAA coordinate provided.

**Seep Location (USBL positioning):**

**SPCS27, NAD27, LA South**

N 233466.07'

E 2819199.99'

**WGS84**

Lat. 29° 15' 22.093"N

Long. 88° 45' 51.534"W

When we were at the seep location, we were able to see bubbles at bottom and in the water column. We tried to have the ROV creep in on the seep location from different angles to positively identify bubbles coming out of the seabed, but the seep is too strong and is stirring up the sediment on bottom. From sonar scans, we measured an approximate 14ft diameter seep. When we scanned the seep with the sonar from roughly 20ft out, we noticed from one angle their appeared to be a hole in the sonar scan just before the seep (see attached). Not sure what this is or if it could be an abandoned well location. ROV vis would not allow us to perform a confirmation.

-----

---

**From:** Mick Hawkins [<mailto:MHawkins@deainc.com>]

**Sent:** Friday, August 14, 2015 4:01 PM

**To:** Smith, Jonathan S SEPCO-UAX/Y/GO

**Subject:** RE: Additional information on gas leak

Hi Jonathon,

I just wanted to touch base with you on the gas leak that was discovered while we were out on our last project. On Tuesday the 18<sup>th</sup> of August we are heading back out to the same area to finalise our charting survey of the area, part of our plan is to go back over the leak that we found and see if it is still there, and to try to see if we can confirm that there isn't any structure sitting above the seafloor associated with the leak. It's pretty deep (for charting purposes), so even if there is something it probably won't affect the chart. I'm 99% positive there is nothing there, but if the gas has gone, we will get a better picture of the area.

We also have our low frequency (12kHz) single beam on board and intend on using it to see if we can see anything below the mud at the location.



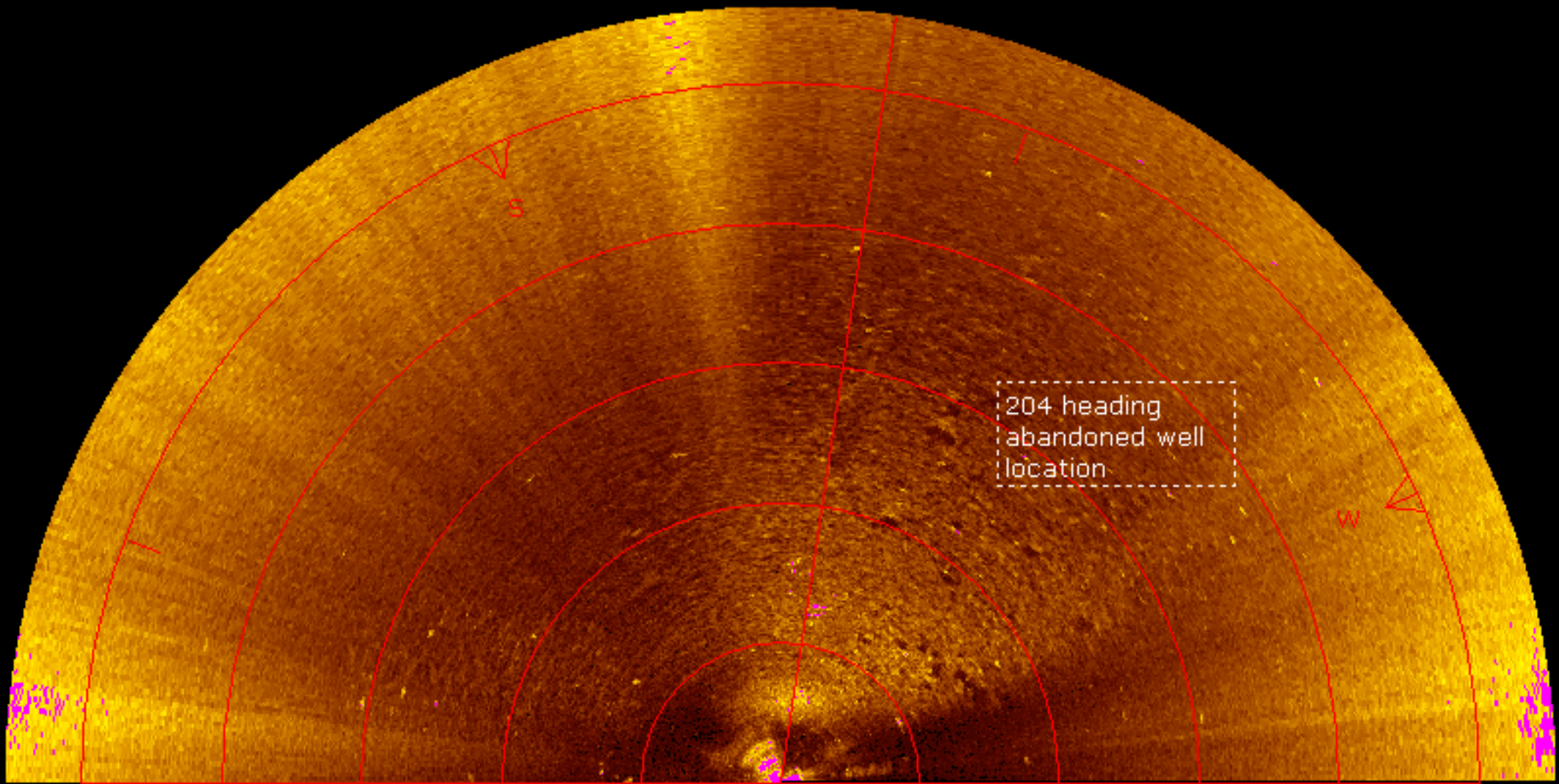
Did you discover if this leak was from a natural source? I realize that it wasn't from the Shell pipe in the area, as it is an oil pipe, but if you do have some more information that could help us disprove that there is anything there, it would be greatly appreciated.

Best regards,

**Mick Hawkins** | Operations Manager Gulf Coast Region, Project Manager  
David Evans and Associates, Inc. | Marine Services Division | [www.deamarine.com](http://www.deamarine.com)  
t: 360.314.3200 | c: 228.238.3163 | [mhawkins@deainc.com](mailto:mhawkins@deainc.com)

30 us-ft/div Head #1

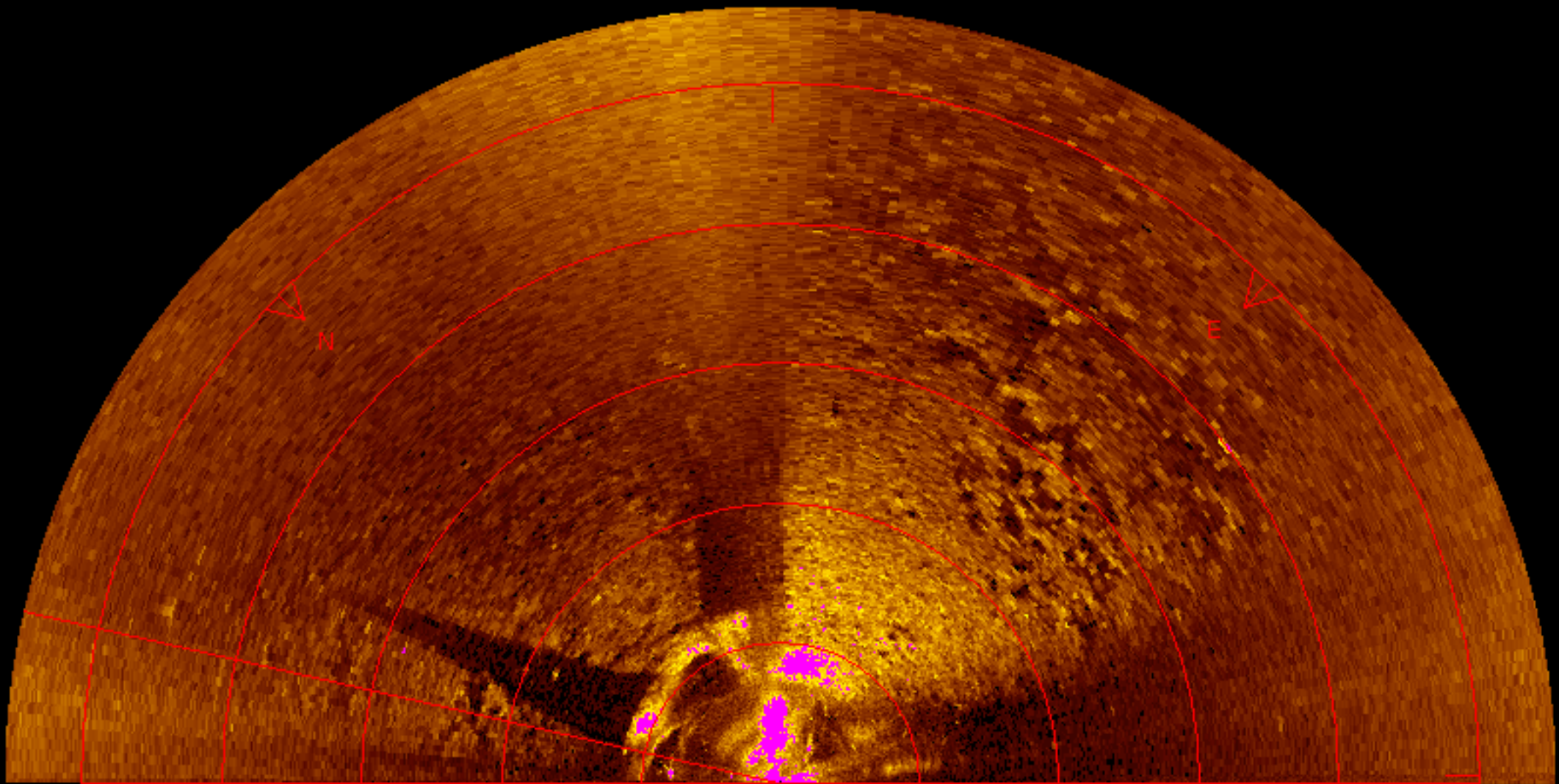
0.00011991°S  
0.00039942°E  
B 106.4°  
↘ 151.868 us-ft

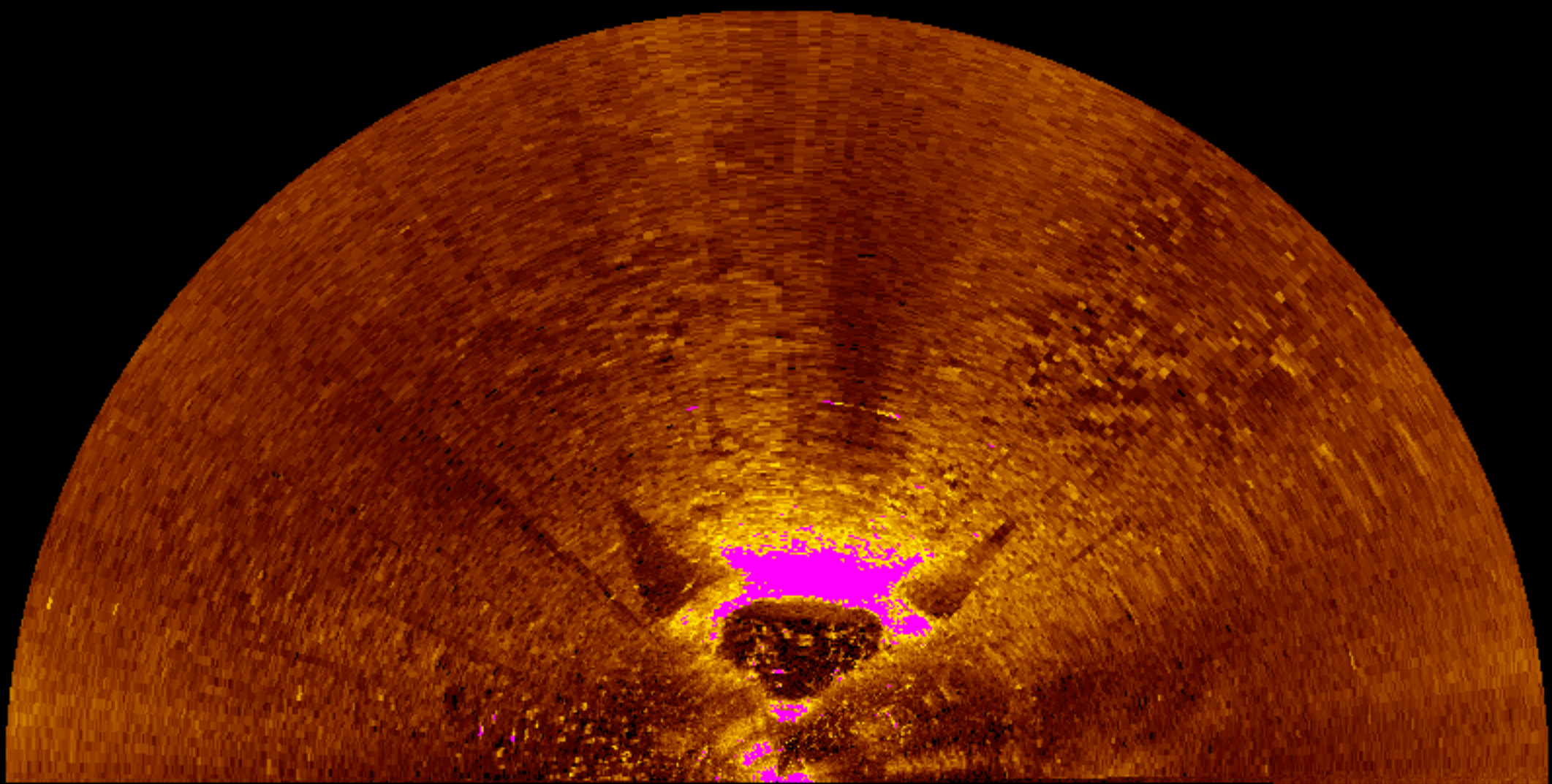


204 heading  
abandoned well  
location

18 us-ft/div Head #1

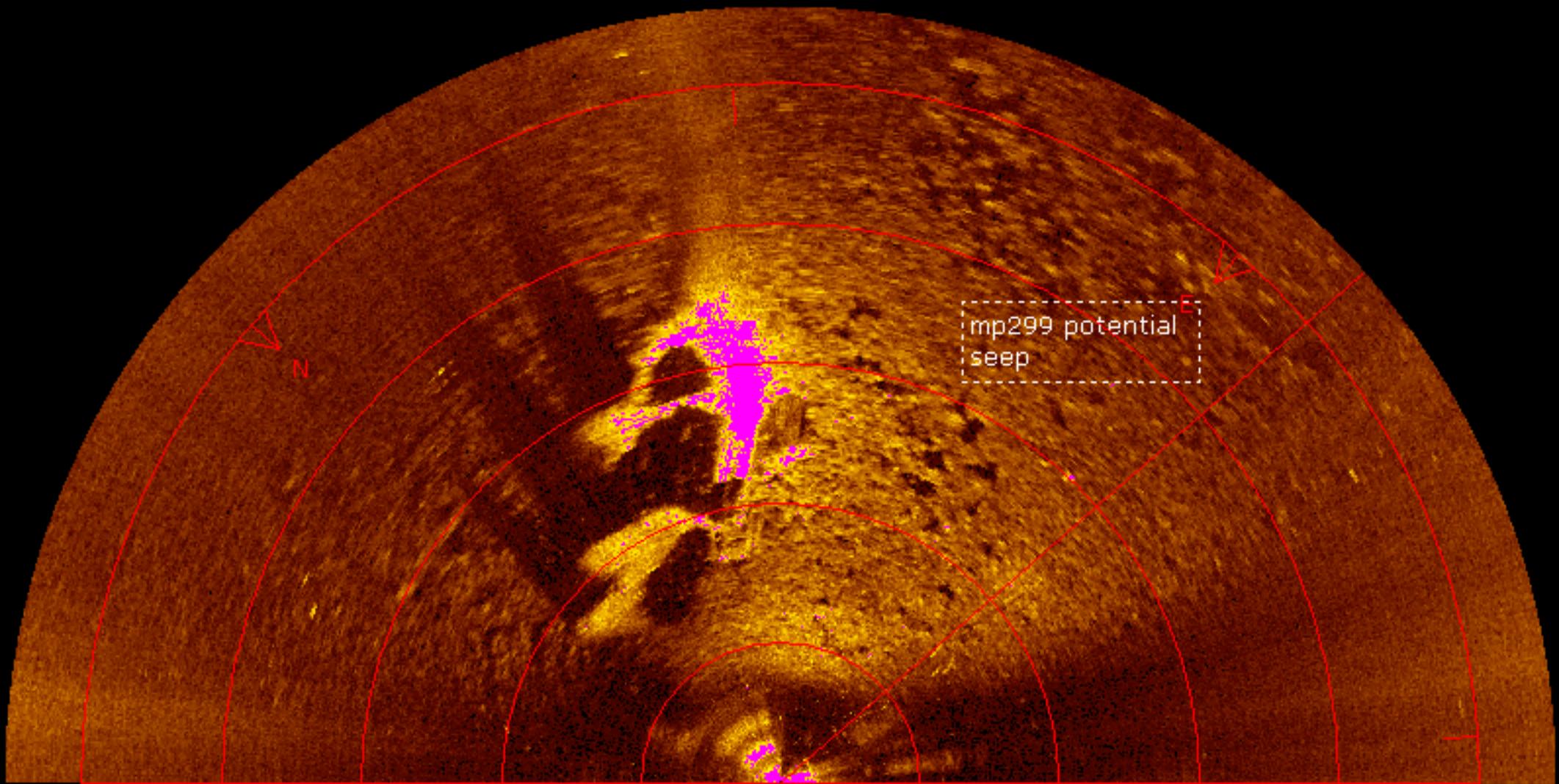
0.00015512°N  
0.00019979°W  
B 307.5°  
↘ 91.936 us-ft





18 us-ft/div Head #1

0.00017535°N  
0.00020553°W  
B 310.1°  
↘ 98.184 us-ft



mp299 potential  
seep

N

CAGE  
THR: 512  
DPT: 103  
HDG: 056  
TRM: 0.4



ROV  
DPT: 223  
ALT: 0  
BTY: 223

OCEANEERING<sup>®</sup>

S: 2,819,200N: 2,294,66  
Dive Number: 12

16 JUL 15  
04:09:29

CAGE

THR: 512

DP1: 102

HDS: 056

TRM: 0.4



15 30

45 60

75 90

P: -16

054

R: 0

TRN: 0.1

ROV

DPT: 205

ALT: 51

BTY: 256

OCEANEERING<sup>®</sup>

E: 2,819,203N: 2,234,65

Dive Number: 12

16 JUL 15

04:11:22

CAGE

THR: 512

DPT: 102

HDG: 056

TRN: 0.4



ROV

DPT: 203

ALT: 20

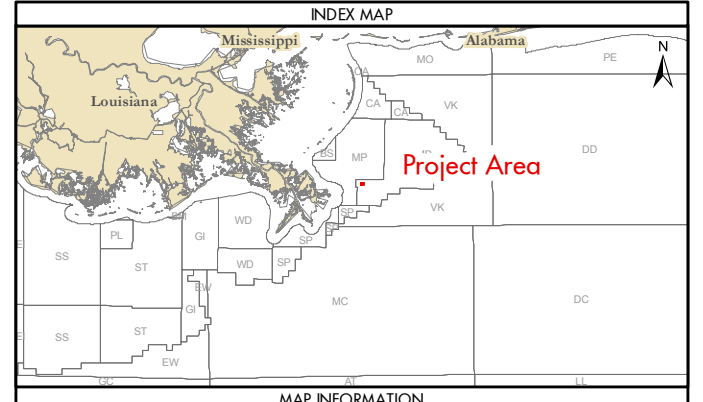
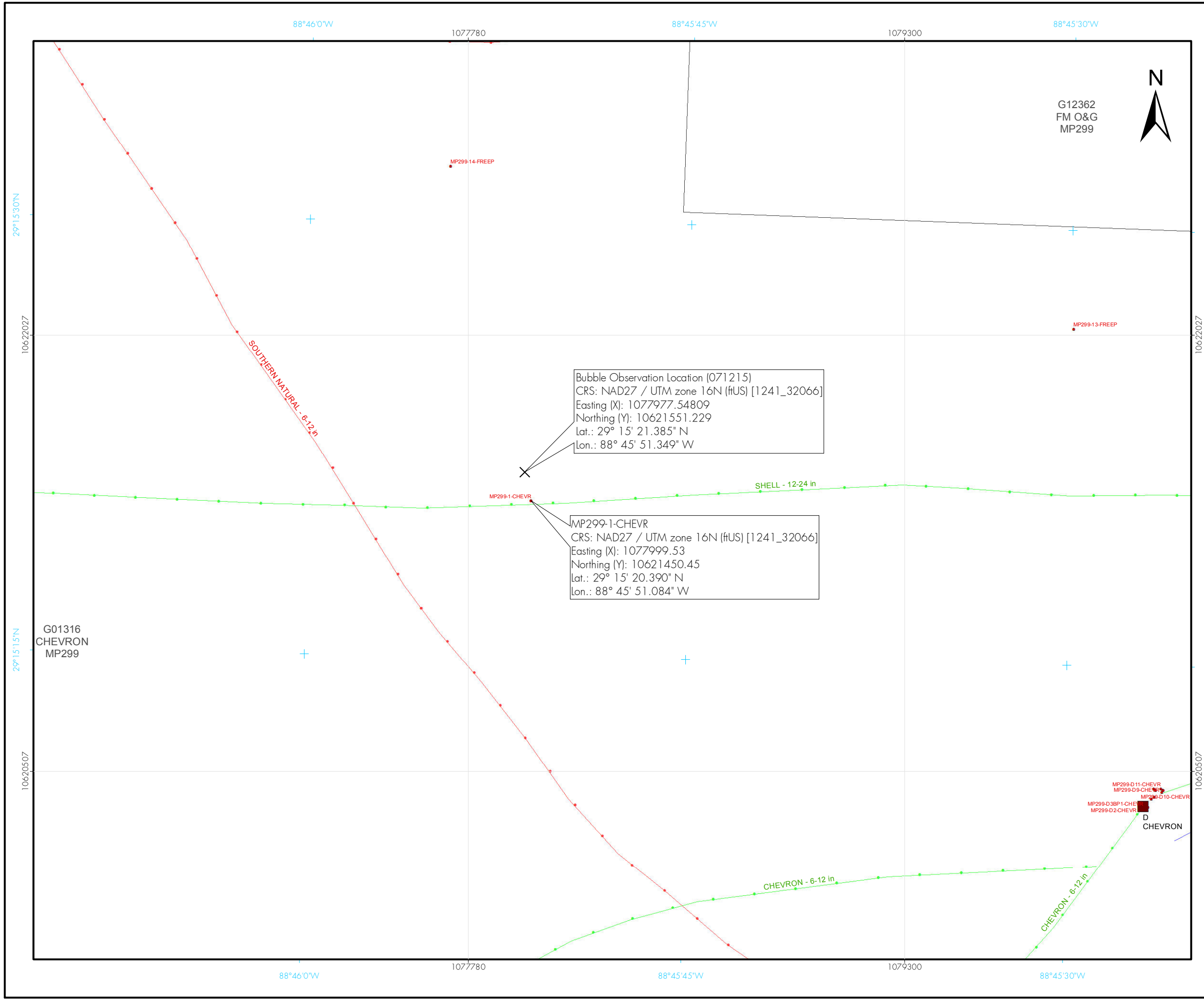
BTY: 223

OCEANEERING<sup>®</sup>

E: 2,819,203N: 2,234,65  
Dive Number: 12

16 JUL 15  
04:11:26





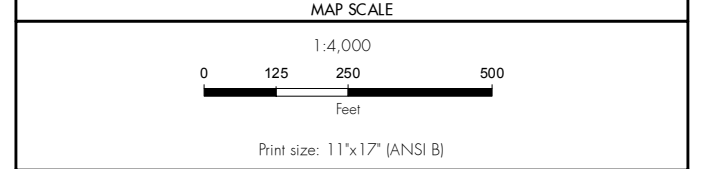
**MAP INFORMATION**

**Legend**

- ✕ Bubble Observation Location (071215)
- Platform
- Existing Wells (Surface)
- Pipeline
  - Gas
  - Oil
  - Other
- GoM OCS Block (Other Operated)
- HBP
- + Graticule Grid Tick
- Measured Grid Line

**NOTES**

This map has been prepared by Shell from a variety of sources both within Shell and third party information (ESRI, GOM3, and/or IHS). The map may be subject to errors of judgement and/or opinion. Information from third party sources can not be confirmed or guaranteed by Shell. The copyright in this document is vested in Shell 14 Jul 2015. All rights reserved.



**GEODETTIC PARAMETERS**

**Horizontal Coordinate Reference System**  
 CRS name (ESRI): NAD 1927 BLM Zone 16N  
 CRS name (Shell): NAD27 / UTM zone 16N (ftUS) [1241\_32066]  
 CRS code (EPSG): [32066]  
 Geodetic datum: North American 1927  
 Projection name: Transverse Mercator  
 Horizontal units: Foot US

**Vertical Coordinate Reference System**  
 Vertical datum: N/A  
 Elevation/Depth: N/A  
 Vertical units: N/A



**RESTRICTED**

UA Geomatics

**ODYSSEY SHEEN EVENT PLANNING MAP**  
**Gulf of Mexico**  
 Main Pass  
 Block 299

Author: David Irick Date: 14 Jul 2015  
 Reviewed By: Map Status: Draft

## Jason Creech

---

**From:** Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>  
**Sent:** Sunday, July 12, 2015 8:19 PM  
**To:** Jon Dasler  
**Cc:** Christina Fandel - NOAA Federal; Ed Landgraf Shell; Jason Creech; Stanley Tarrant; Jamie Gatz; Dave Ledet USCG D8 Waterways; karl.morgan@la.gov  
**Subject:** Oil in H12740, NOAA Surveying and NRC Report on Oil Sheen

Thank you for the crew observing and documenting this and for the follow on report to the National Response Center.

This will be followed on Monday with the daylight.

**From:** "Jon Dasler" <[Jld@deainc.com](mailto:Jld@deainc.com)>  
**Date:** July 12, 2015 at 9:52:54 PM CDT  
**To:** "Jon Dasler" <[Jld@deainc.com](mailto:Jld@deainc.com)>, "Osborn Tim" <[tim.osborn@noaa.gov](mailto:tim.osborn@noaa.gov)>  
**Cc:** "Jason Creech" <[Jasc@deainc.com](mailto:Jasc@deainc.com)>, "Federal Christina Fandel - NOAA" <[christina.fandel@noaa.gov](mailto:christina.fandel@noaa.gov)>  
**Subject: RE: Oil in H12740**

Following is the filed report.

NATIONAL RESPONSE CENTER 1-800-424-8802

\*\*\* For Public Use \*\*\*

Information released to a third party shall comply with any applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1122590

### INCIDENT DESCRIPTION

\*Report taken at 22:34 on 12-JUL-15  
Incident Type: UNKNOWN SHEEN  
Incident Cause: UNKNOWN  
Affected Area: GULF OF MEXICO  
Incident was discovered on 12-JUL-15 at 14:00 local incident time.  
Affected Medium: WATER GULF OF MEXICO

---

### SUSPECTED RESPONSIBLE PARTY

XX

---

### INCIDENT LOCATION

MP290 County: BRETON SOUND  
State: LA  
Latitude: 29° 15' 14" N  
Longitude: 088° 46' 30" W  
GULF OF MEXICO

---

RELEASED MATERIAL(S)

CHRIS Code: OUN Official Material Name: UNKNOWN OIL

Also Known As:

Qty Released: 0 UNKNOWN AMOUNT Qty in Water: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

CALLER IS REPORTING AN UNKNOWN SHEEN FROM AN UNKNOWN SOURCE IN THE GULF OF MEXICO.

INCIDENT DETAILS

Platform Rig Name:

Platform Letter:

Location Area ID:

Location Block ID:

OCSG Number:

OOSP Number:

State Lease Number:

Pier Dock Number:

Berth Slip Number:

---SHEEN INFORMATION---

Sheen Color: RAINBOW

Sheen Odor Description:

Sheen Travel Direction:

Sheen Size Length:

Sheen Size Width: 500 METERS

---WATER INFORMATION---

Body of Water: GULF OF MEXICO

Tributary of:

Nearest River Mile Marker:

Water Supply Contaminated: UNKNOWN

IMPACT

Fire Involved: NO Fire Extinguished: UNKNOWN

INJURIES: NO Hospitalized: Empl/Crew: Passenger:

FATALITIES: NO Empl/Crew: Passenger: Occupant:

EVACUATIONS:NO Who Evacuated: Radius/Area:

Damages: NO

Closure Type	Description of Closure	Hours	Direction of Closure
N			

Air:

N

Major

Road:

Artery:N

N

Waterway:

N

Track:

Environmental Impact: UNKNOWN

Media Interest: UNKNOWN Community Impact due to Material:

REMEDIAL ACTIONS

MAKING NOTIFICATION

Release Secured: UNKNOWN

Release Rate:

Estimated Release Duration:

---

WEATHER

---

ADDITIONAL AGENCIES NOTIFIED

Federal:  
State/Local:  
State/Local On Scene:  
State Agency Number:

---

NOTIFICATIONS BY NRC

CENTERS FOR DISEASE CONTROL (GRASP)  
12-JUL-15 22:43  
DHS NOC (NOC)  
12-JUL-15 22:43  
DOT CRISIS MANAGEMENT CENTER (MAIN OFFICE)  
12-JUL-15 22:43  
FLD INTEL SUPPORT TEAM NEW ORLEANS (SUPERVISOR, FIST NEW ORLEANS)  
12-JUL-15 22:43  
JFO-LA (COMMAND CENTER)  
12-JUL-15 22:43  
JFO-LA (FEMA JFO LA)  
12-JUL-15 22:43  
LA DEPT OF ENV QUAL (MAIN OFFICE)  
12-JUL-15 22:43  
LA DEPT OF NATURAL RESOURCES (OFFICE OF CONSERVATION)  
12-JUL-15 22:43  
LA DEPT OF WILDLIFE AND FISHERIES (MAIN OFFICE)  
12-JUL-15 22:43  
LA GOV OFFICE HS AND EMERGENCY PREP (MAIN OFFICE)  
12-JUL-15 22:43  
LA OFFICE OF GOV (MAIN OFFICE)  
12-JUL-15 22:43  
LA OFFICE OF PUBLIC HEALTH (MAIN OFFICE)  
12-JUL-15 22:43  
NATIONAL INFRASTRUCTURE COORD CTR (MAIN OFFICE)  
12-JUL-15 22:43  
NOAA RPTS FOR LA (MAIN OFFICE)  
12-JUL-15 22:43  
NATIONAL RESPONSE CENTER HQ (AUTOMATIC REPORTS)  
12-JUL-15 22:43  
REPORTING PARTY (RP SUBMITTER)  
12-JUL-15 22:43  
SECTOR NEW ORLEANS (COMMAND CENTER)  
  
LA STATE POLICE (MAIN OFFICE)  
12-JUL-15 22:43  
LA STATE POLICE (ANALYTICAL AND FUSION EXCHANGE)  
12-JUL-15 22:43  
DEPT OF ENERGY STPR (STRATEGIC PETROLEUM RESERVE-EMERGENCY MGMT)  
12-JUL-15 22:43  
USCG DISTRICT 8 (MAIN OFFICE)  
12-JUL-15 22:43  
USCG DISTRICT 8 (PLANNING)  
12-JUL-15 22:43

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ADDITIONAL INFORMATION

CALLER HAS PHOTOS AND A SKETCH IF ANYONE WOULD LIKE TO VIEW THEM.

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\*\*\* END INCIDENT REPORT #1122590 \*\*\*

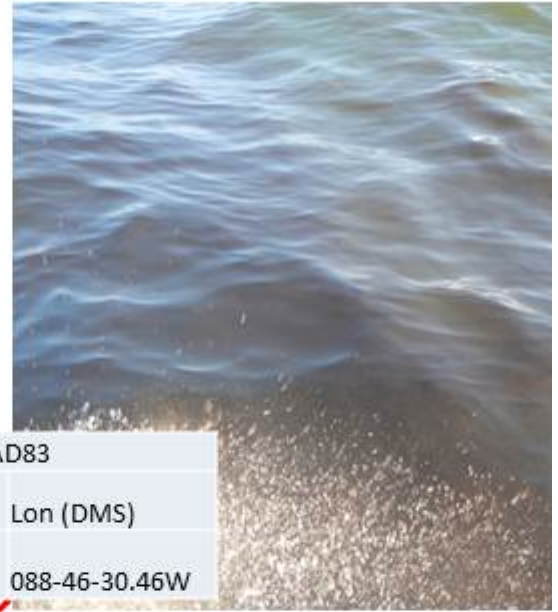
Report any problems by calling 1-800-424-8802  
PLEASE VISIT OUR WEB SITE AT <http://www.nrc.uscg.mil>

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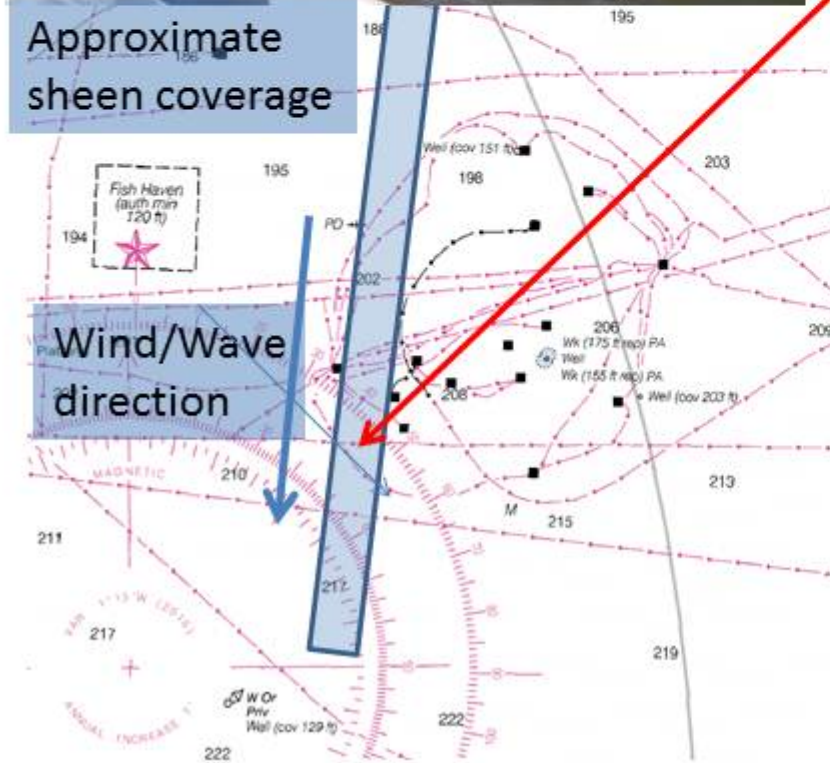
**From:** Jon Dasler  
**Sent:** Sun 7/12/2015 7:46 PM  
**To:** Jon Dasler; Osborn Tim  
**Cc:** Jason Creech; Federal Christina Fandel - NOAA  
**Subject:** RE: Oil in H12740

I filed a report with the National Response Center. Report #1122590. They will email me a copy of the report and notify the USCG. The direction this may be coming from is where they are removing pipelines in Chandeleur Sound in our survey area for OPR-J311.

Jon L. Dasler, P.E., P.L.S.,C.H.  
Senior Vice President, Director Of Marine Services  
David Evans and Associates, Inc.  
Main: (360) 314-3200 Direct: (360) 314-3202  
Mobile: (503) 799-0168  
e-mail [jld@deainc.com](mailto:jld@deainc.com)



NAD83	
Lat (DMS)	Lon (DMS)
29-15-14.24N	088-46-30.46W



Sheen on surface approx 500m wide, small patches of visible oil and strong odor approximately 2pm C. Shortly after taking the photos the weather deteriorated and the sheen and smell went away completely. The source was not from the platforms in the area and is thought to be coming from the

**From:** Jon Dasler  
**Sent:** Sun 7/12/2015 7:24 PM  
**To:** Osborn Tim  
**Cc:** Jason Creech; Federal Christina Fandel - NOAA  
**Subject:** Fwd: Oil in H12740

More information on spotted oil slick. I am not sure if the helicopter they saw taking photos was USCG or not. It may have been the Shell over flight.

**From:** "David Evans and Associates" <[blake@gmn-usa.com](mailto:blake@gmn-usa.com)>  
**Date:** July 12, 2015 at 7:17:03 PM PDT  
**To:** <[jld@deainc.com](mailto:jld@deainc.com)>  
**Cc:** <[jasc@deainc.com](mailto:jasc@deainc.com)>  
**Subject:** Oil in H12740

Jon,

Attached is information on the oil found in the area. We saw and smelled the oil on the first pass through this sheen, the second pass we did not see any oil, just a sheen on the surface, by the time we came through the third time the weather had picked up and the oil, sheen and smell had completely gone.

As I said on the phone, we had discussed with Rosanne about reporting it to the Coast Guard, she said she saw a helicopter flying around taking photos. Once the weather picked up, we didn't think there was anything left to report.

Mick



Tim

Crew is reporting a large oil slick in H12740 coming from NE outside survey area. I will call them for position and approximate size.

Jon Dasler, PE, PLS  
Director of Marine Services  
David Evans and Associates, Inc.  
360-314-3200  
Mobile [503-799-0168](tel:503-799-0168)  
Email: [jld@deainc.com](mailto:jld@deainc.com)  
[www.deamarine.com](http://www.deamarine.com)

Sent from my iPhone

Begin forwarded message:

**From:** "David Evans and Associates" <[blake@gmn-usa.com](mailto:blake@gmn-usa.com)>  
**Date:** July 12, 2015 at 6:06:29 PM PDT  
**To:** <[jasc@deainc.com](mailto:jasc@deainc.com)>, <[jld@deainc.com](mailto:jld@deainc.com)>, <[rmch@deainc.com](mailto:rmch@deainc.com)>, <[jame@deainc.com](mailto:jame@deainc.com)>, <[cmhu@deainc.com](mailto:cmhu@deainc.com)>, <[kmsc@deainc.com](mailto:kmsc@deainc.com)>, <[mjch@deainc.com](mailto:mjch@deainc.com)>, Mike Hill <[mlhi@deainc.com](mailto:mlhi@deainc.com)>, <[msha@deainc.com](mailto:msha@deainc.com)>, <[pwhe@deainc.com](mailto:pwhe@deainc.com)>, <[jxst@deainc.com](mailto:jxst@deainc.com)>  
**Subject:** NOAA26 Blake Sitrep [07122015](#)

-----  
SITREP FOR: S/V BLAKE  
-----

PROJECT: NOAA0026  
-----

DATE: 12 July 2015

DAY NUMBER: 193

TIME: UTC  
-----

Survey Crew: Mick Hawkins, Pat Heidingsfelder, Jediah Bishop,  
Jason Dorfman, Dave Moehl

Captain/Engineer: Rosanne Weglinski

Captain: JB McClenon

Engineer: Danny Gouge

Cook/Mate: Sonja Bridges  
-----

On Water Ops: 24.0 Hrs

Survey Main scheme: 14.0 Hrs in H12740

Survey Fill: 4.0 Hrs in H12740

Survey Fill: 1.0 Hrs in H12737

Crossline: 0.0 Hrs

Fill: 0.0 Hrs

Weather: 0.0 Hrs

Equipment: 0.0 Hrs

Transit: 0.0 Hrs

Weekly Checks: 0.0 Hrs

Other: 5.0 Hrs Bottom Samples in H740 & H739  
-----

Survey Mileage: 75.46 NM H12740

Fill Mileage: 5.50 NM H12740

Fill Mileage: 0.61 NM H12737  
-----

Current Day Operation: Conducted Main Scheme and Fill MBES collection  
in H12740. Completed Bottom Samples for H12739 and H12740.  
-----

Next Day Operations: Complete H12740 Main Scheme and Crosslines; check  
for holiday and density gaps; Patch test and weekly checks.

Return to GPT.  
-----

COMMENTS:Continued H12740 main scheme and completed fill on known  
holidays. Completed bottom samples for H12740 and H12739. No issues  
with the bottom sampler, the weather was not ideal, but with the  
captain on the stern controls the vessel remained stable enough to  
successfully complete the task.

Checked coverage for H12737, 739 and 740 and determined sufficient  
coverage was obtained.

**Large patch of oil in the middle of survey area, slick seemed to come  
from the North East of H12740 (outside of survey area), Weather picked  
up and we could not identify the source of the oil.**



Equipment: Screw jacks seem to be making popping noises when tightened, these are now the weakest point in the strut design. We will want to have spares on board before the next project.

Weather: Forecast turned ugly overnight, 3-4ft seas, strong winds from the North. Forecast was to worsen, but fortunately this was not the case and by mid-afternoon the weather had improved greatly.

Metatracker update: Completed first review through DN193  
Coverage Update: Completed 99.9% coverage of H12737 (remaining holidays are under platforms); 100% coverage of H12738; 100% coverage of H12739; 89.6% coverage of H12740.

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If you have any questions, please direct them back to me via email or phone [757-441-6746](tel:757-441-6746) x102.

Thank you for your assistance with this matter.

Respectfully,

*Vanessa Self Miller*  
*Hydrographer/Physical Scientist*  
*Atlantic Hydrographic Branch*  
*439 West York St.*  
*Norfolk, VA 23510*  
[757-441-6746 x102](tel:757-441-6746)

APPROVAL PAGE

H12740

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NCEI for archive

- H12740\_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12740\_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: \_\_\_\_\_

**Lieutenant Commander Briana Welton, NOAA**  
Chief, Atlantic Hydrographic Branch