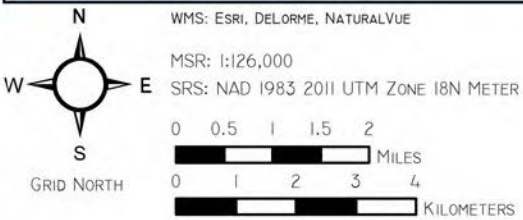
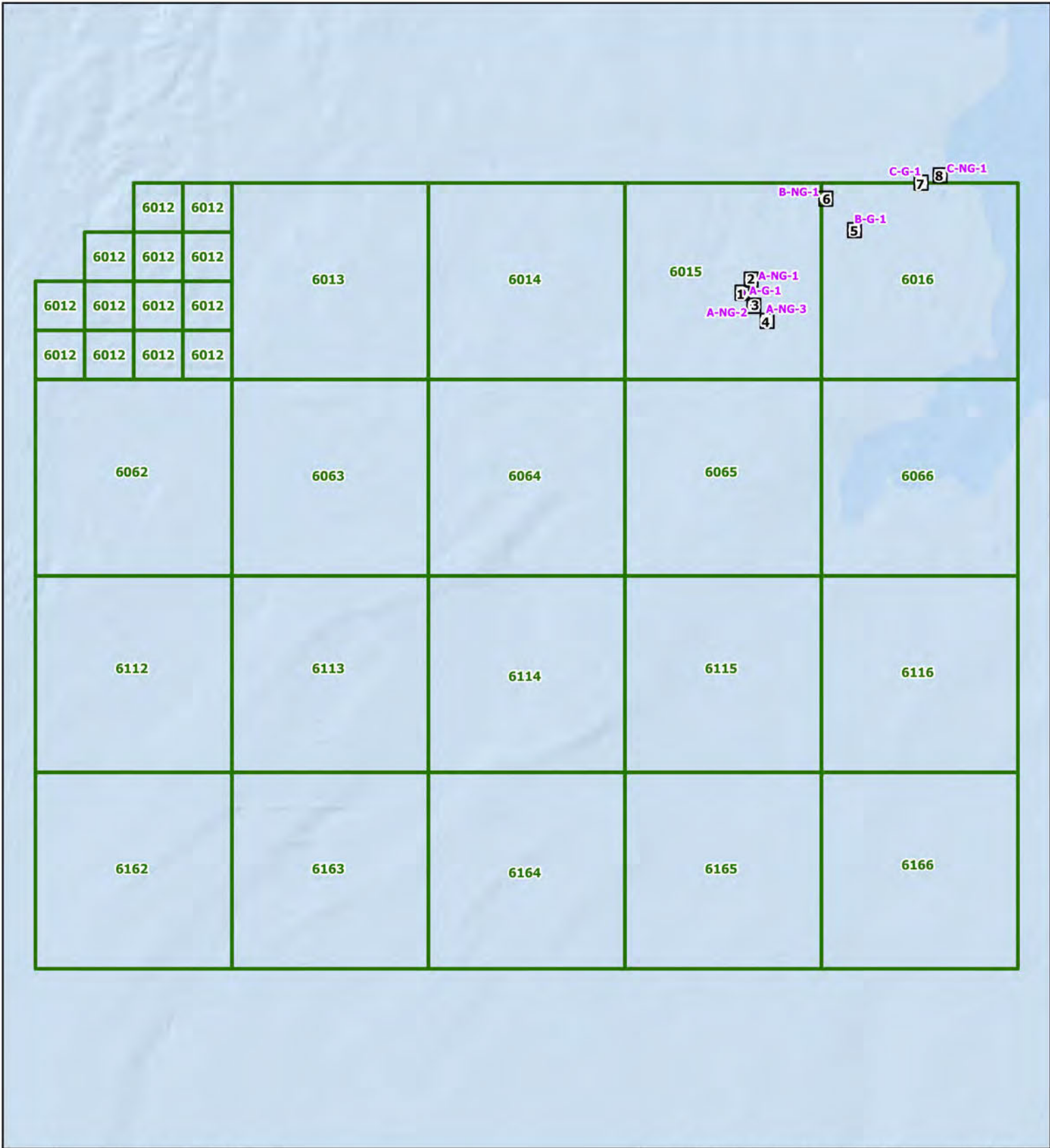


**APPENDIX 1**  
**ARCHAEOLOGICAL RESOURCES**  
**MAPS**



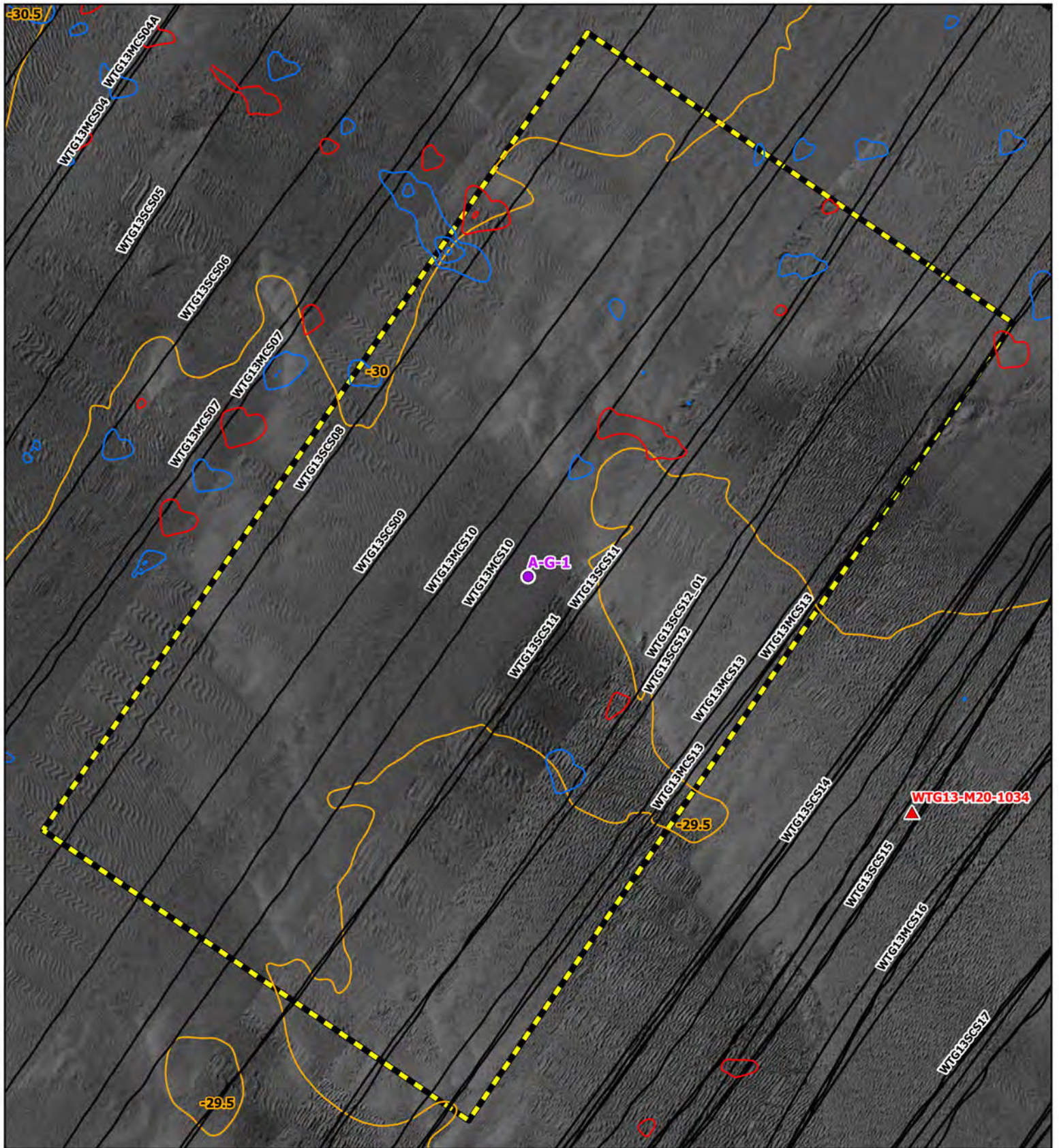
- GEOTECHNICAL LOCATION
- MAP SHEET EXTENT
- LEASE AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration

Index Map



R. Christopher Goodwin & Associates, Inc.  
**NAUTICAL DIVISION**  
 MARINE ARCHAEOLOGY FROM STEM TO STERN



N  
 W E  
 S  
 GRID NORTH

SIDE SCAN SONAR MOSAIC (2020, 0.25 m)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

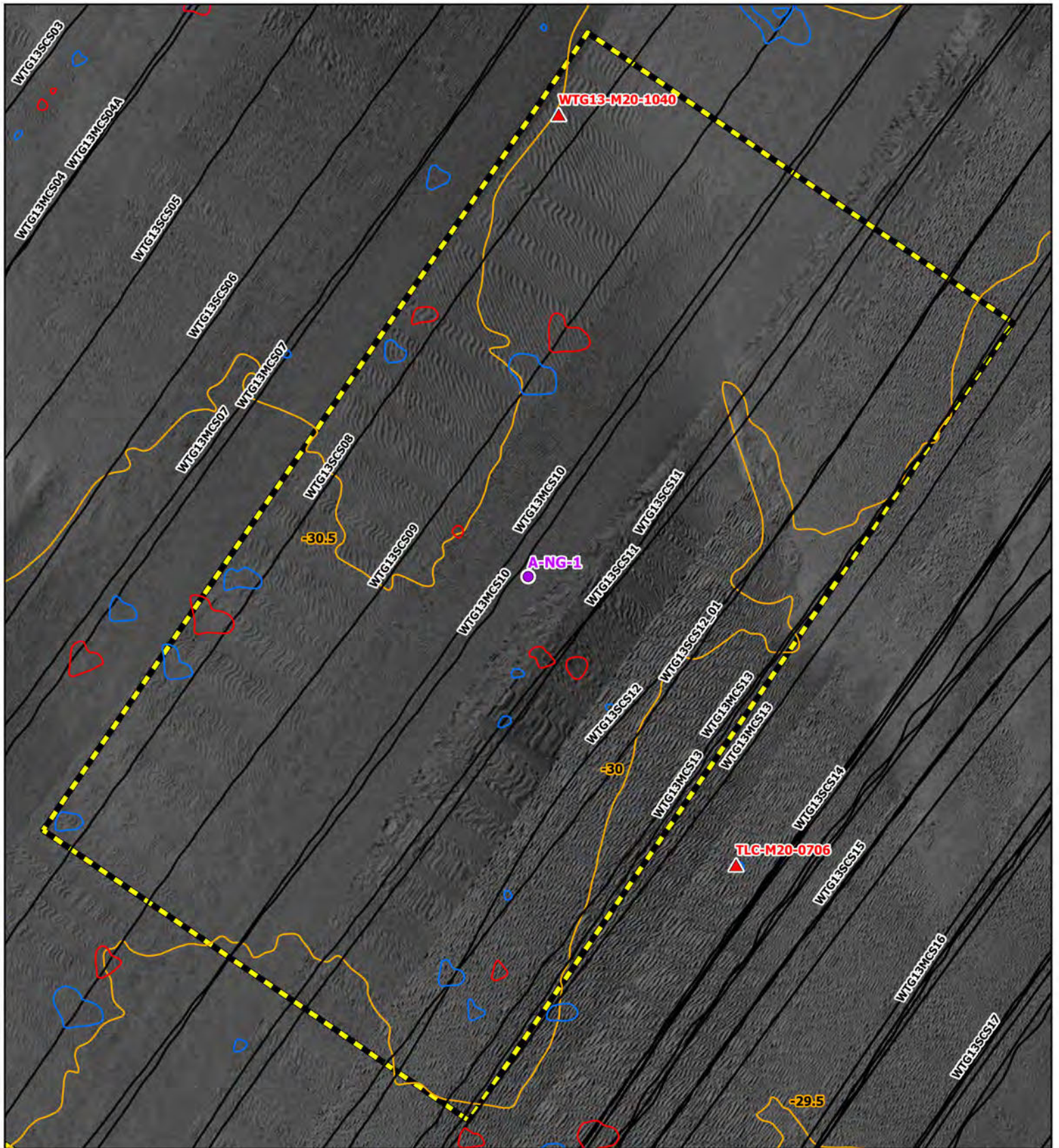
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 FEET  
 0 10 20 30 40  
 METERS

- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 m)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration  
**Map: 1**  
**A-G-1**



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 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

0 25 50 75 100  
 FEET

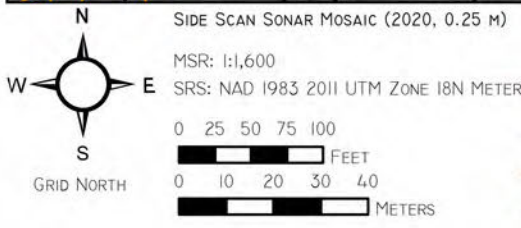
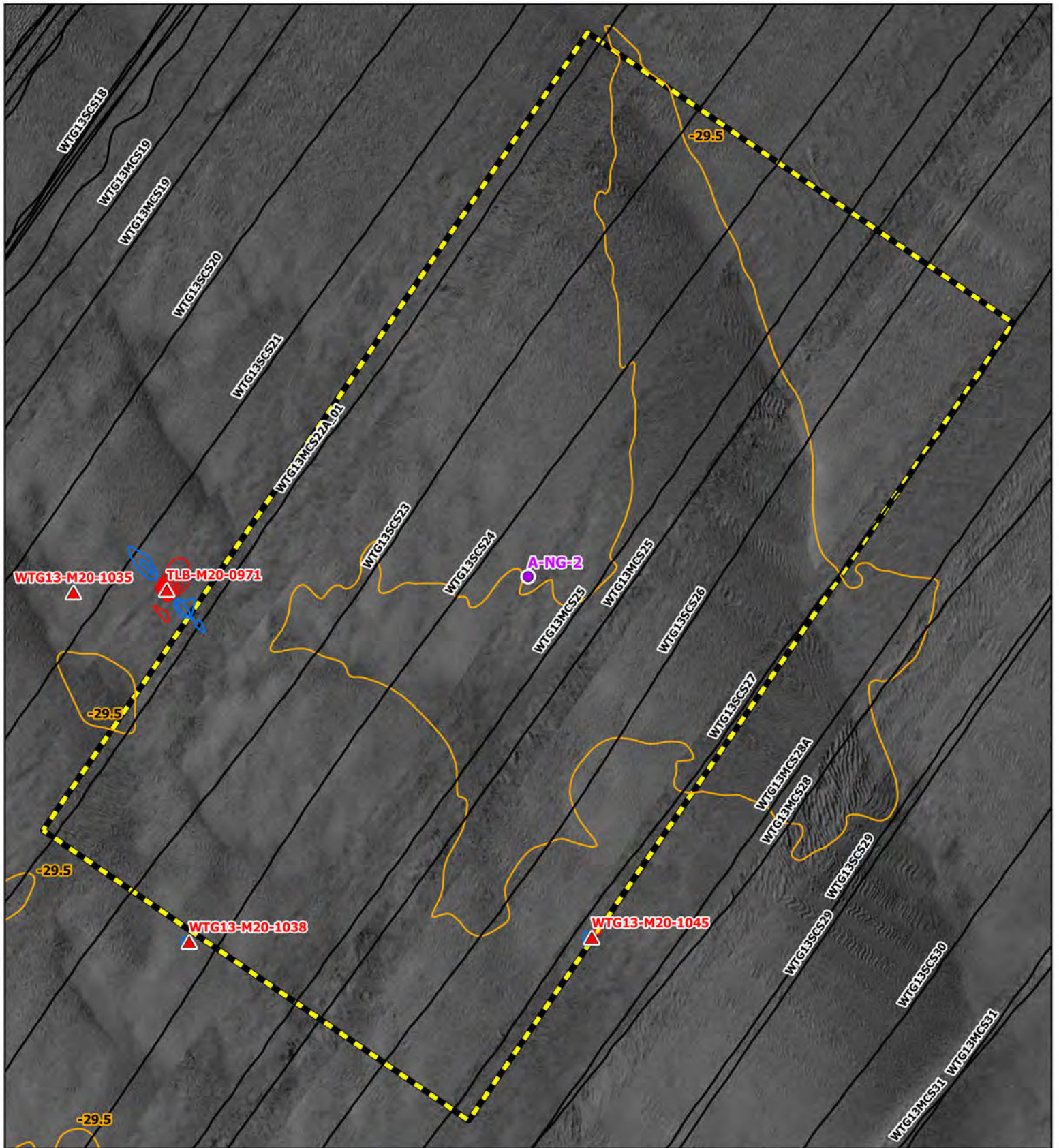
0 10 20 30 40  
 METERS

- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 M)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ▬ ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration  
**Map: 2**  
**A-NG-1**



R. Christopher Goodwin & Associates, Inc.  
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 MARINE ARCHAEOLOGY FROM STEM TO STERN

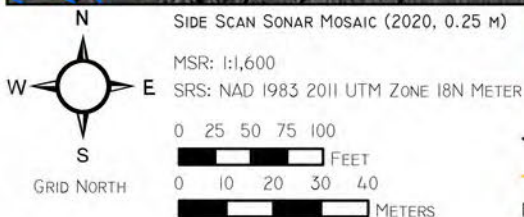
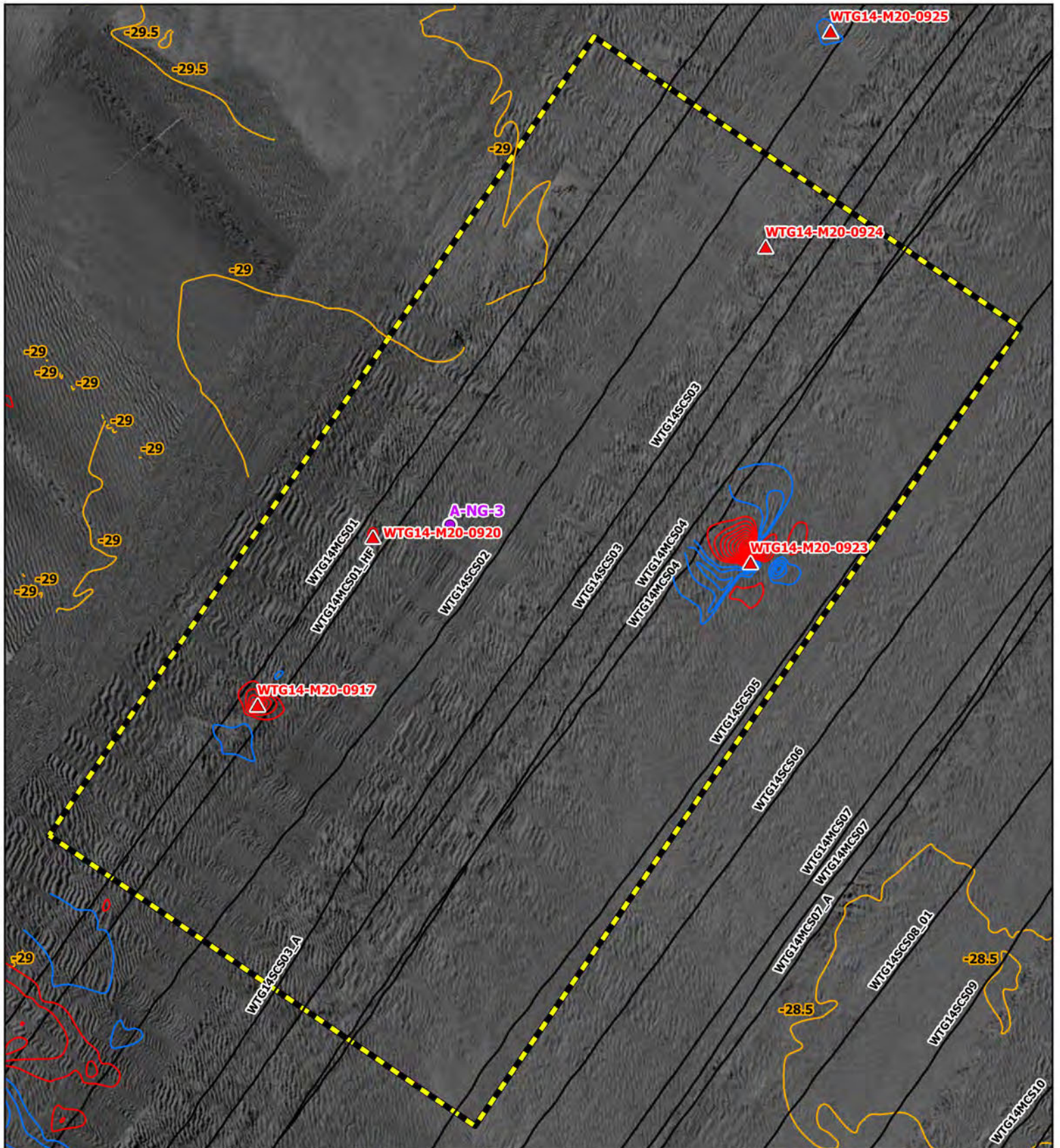


- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 M)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ⎓ ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration  
**Map: 3**  
**A-NG-2**



**R. Christopher Goodwin & Associates, Inc.**  
**NAUTICAL DIVISION**  
 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
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 SRS: NAD 1983 2011 UTM ZONE 18N METER

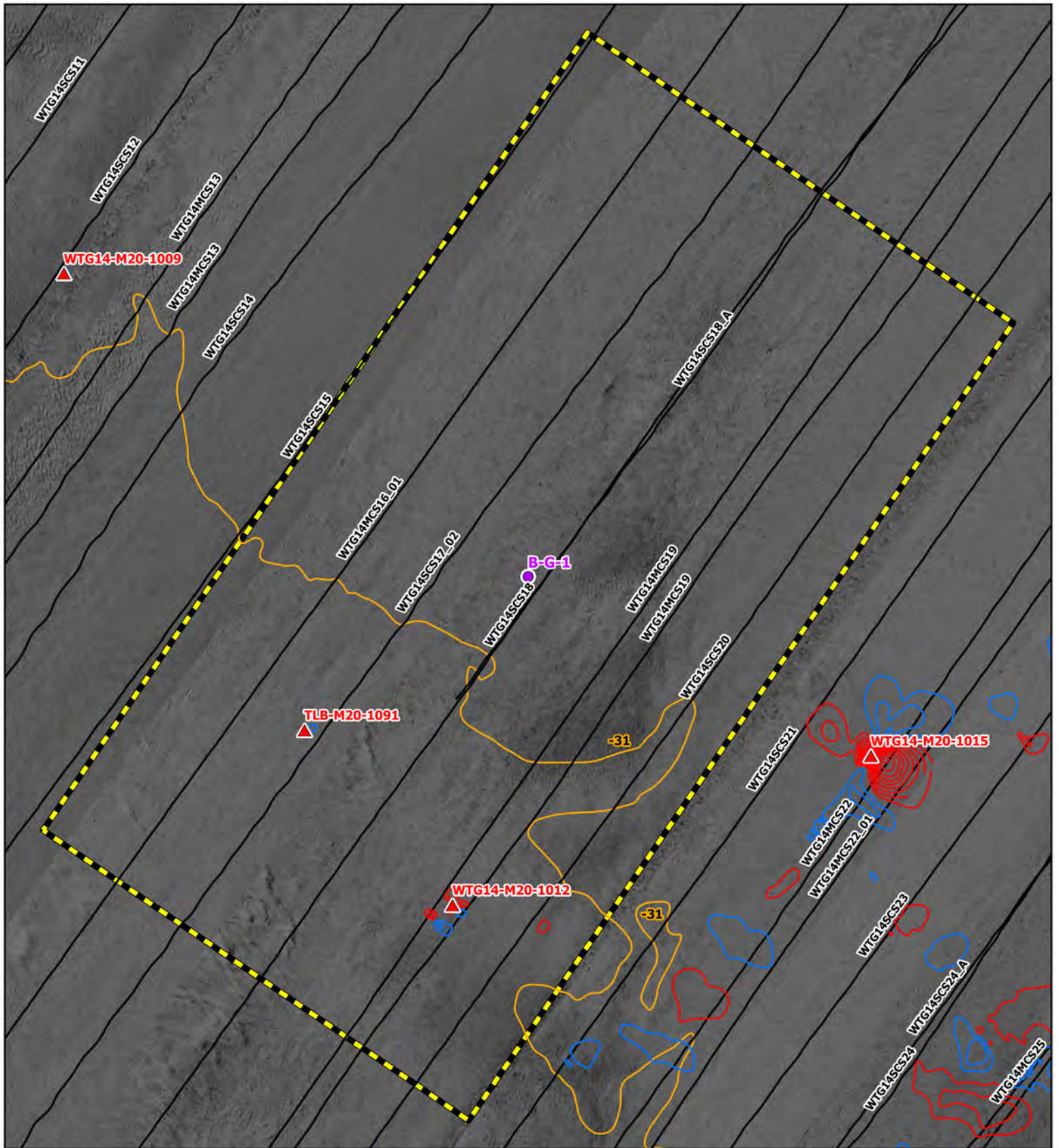
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- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 M)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)

Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration  
**Map: 4**  
**A-NG-3**



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 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 m)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

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 FEET

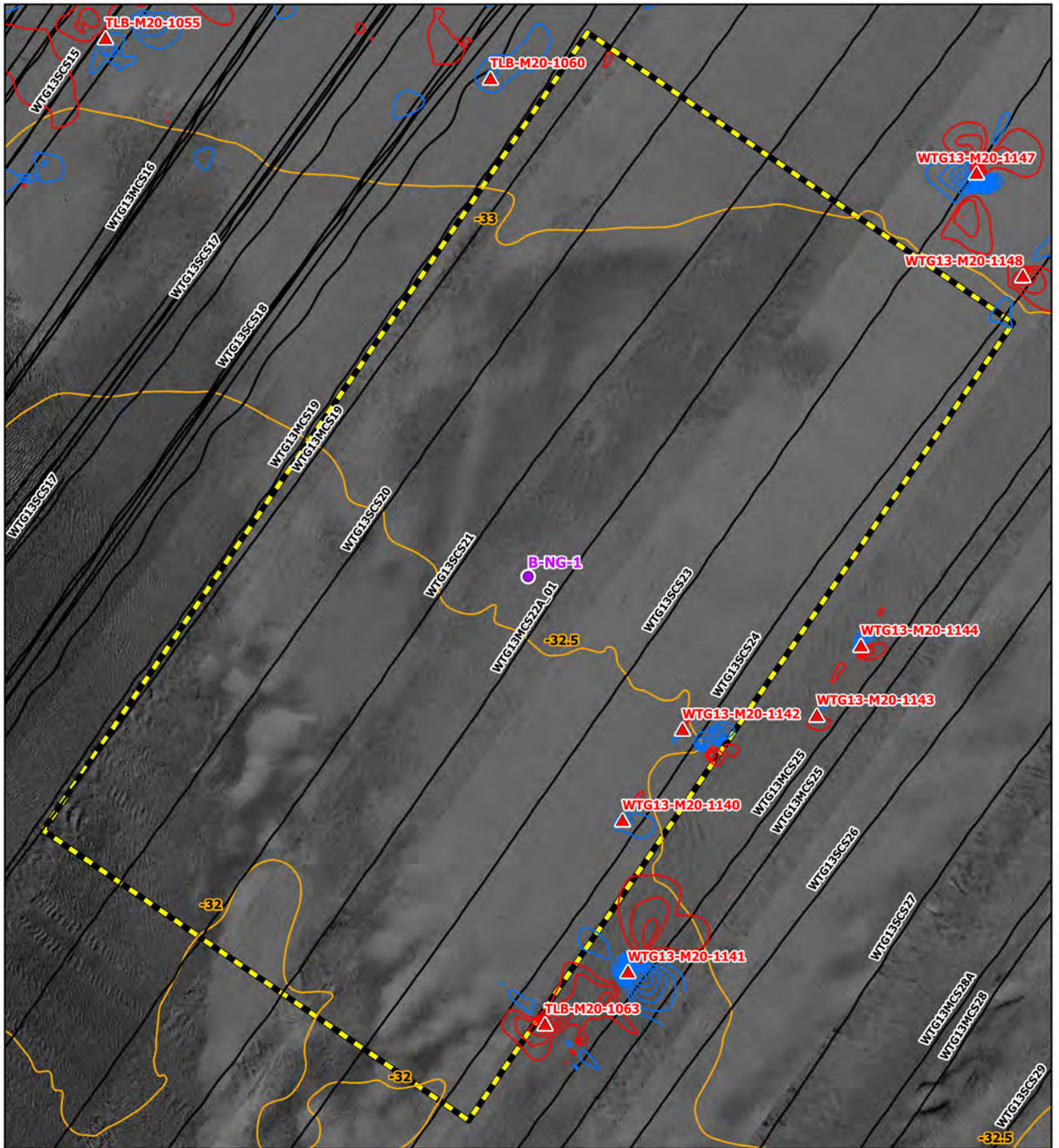
0 10 20 30 40  
 METERS

- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 m)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration  
**Map: 5**  
**B-G-1**



R. Christopher Goodwin & Associates, Inc.  
**NAUTICAL DIVISION**  
 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

0 25 50 75 100  
 FEET

0 10 20 30 40  
 METERS

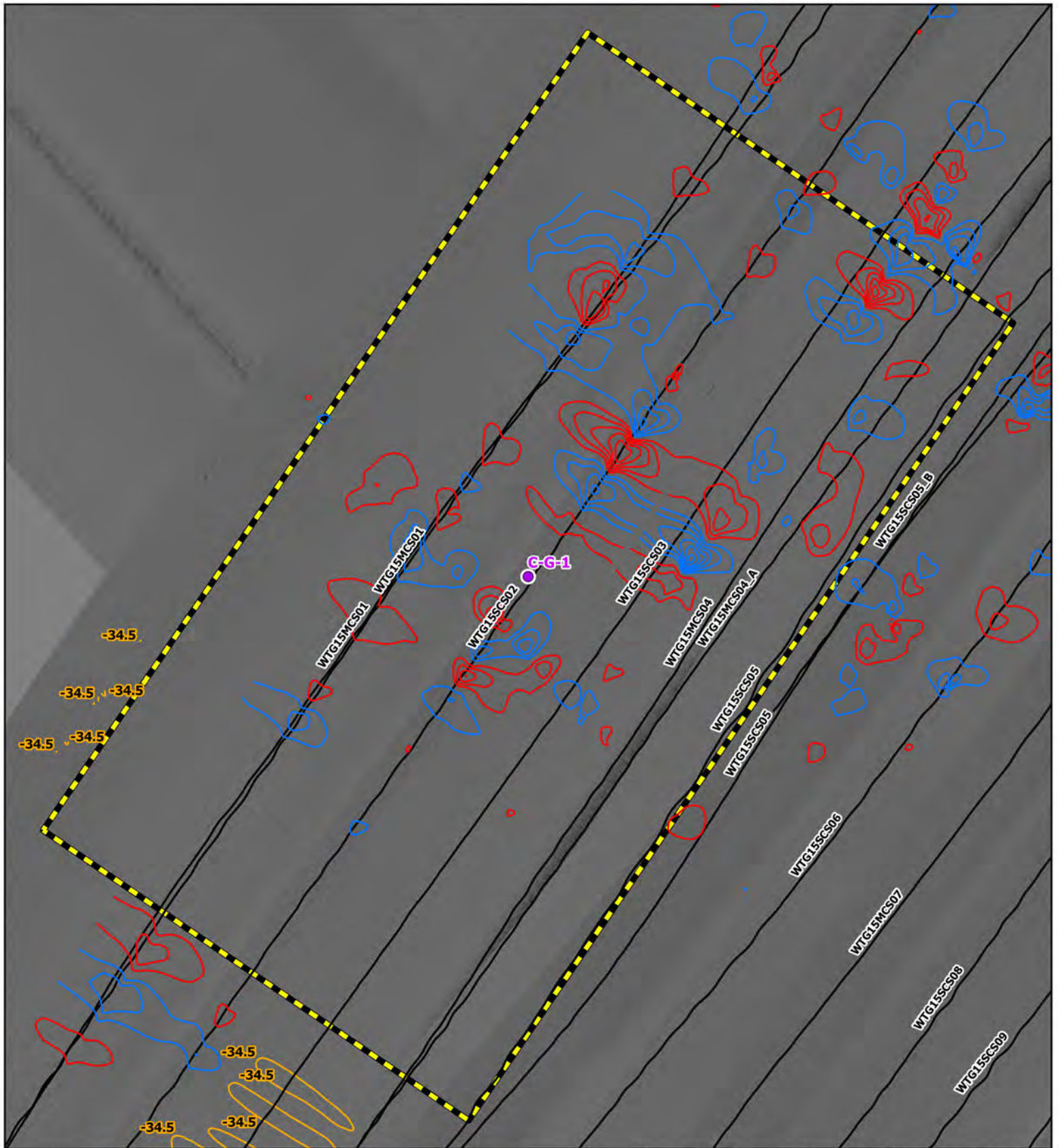
- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 M)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
*Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration*  
**Map: 6**  
**B-NG-1**



R. Christopher Goodwin & Associates, Inc.  
**NAUTICAL DIVISION**  
 MARINE ARCHAEOLOGY FROM STEM TO STERN





N  
 W — O — E  
 S  
 GRID NORTH

SIDE SCAN SONAR MOSAIC (2020, 0.25 m)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

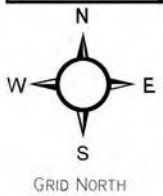
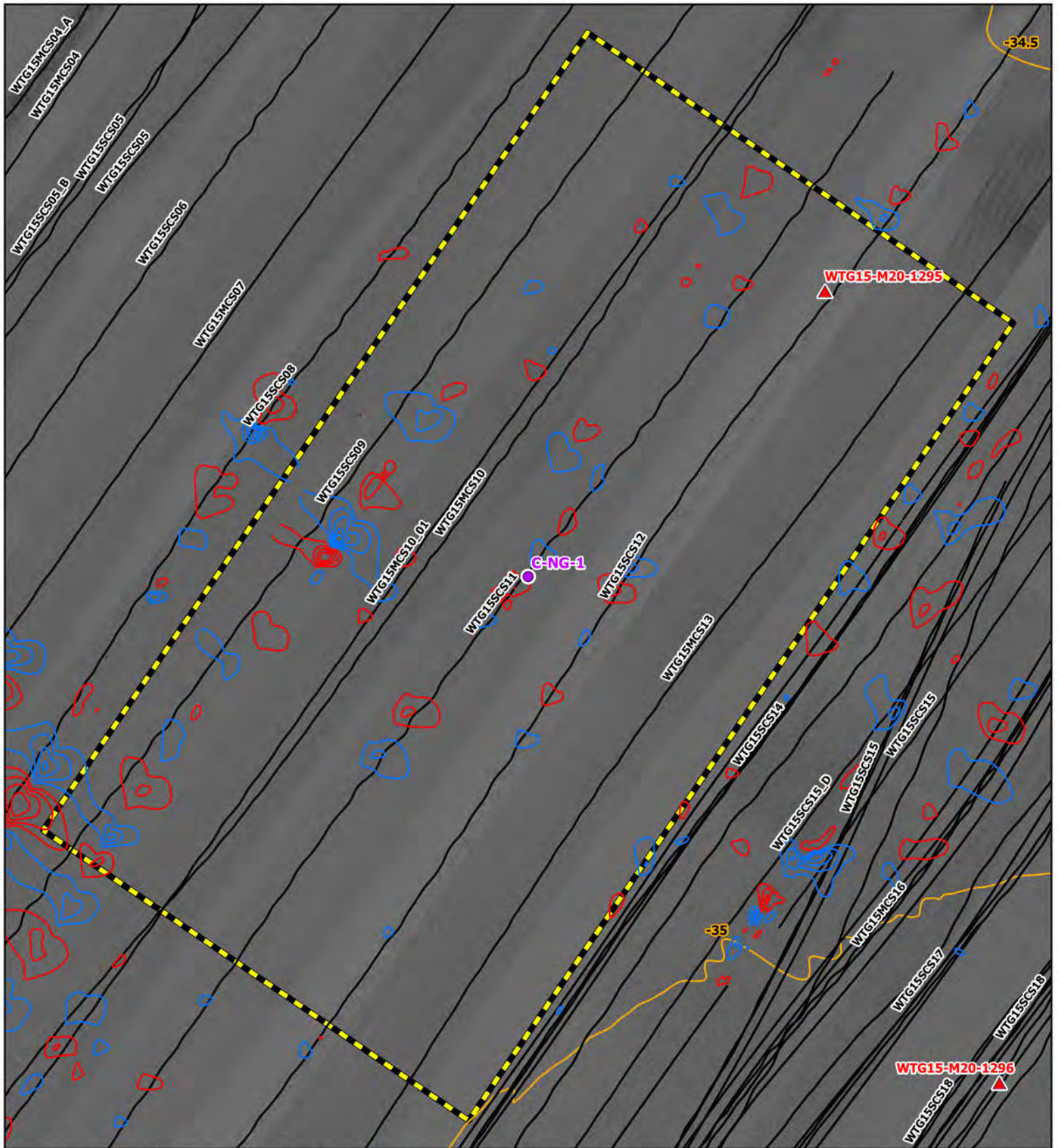
0 25 50 75 100  
 FEET  
 0 10 20 30 40  
 METERS

- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 m)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration  
**Map: 7**  
**C-G-1**



**R. Christopher Goodwin & Associates, Inc.**  
**NAUTICAL DIVISION**  
 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 m)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

0 25 50 75 100  
 FEET

0 10 20 30 40  
 METERS

- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- TRACKLINE
- BATHYMETRIC CONTOUR (0.5 m)
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Gassy/Non-Gassy for Sediment Exploration  
**Map: 8**  
**C-NG-1**



R. Christopher Goodwin & Associates, Inc.  
**NAUTICAL DIVISION**  
 MARINE ARCHAEOLOGY FROM STEM TO STERN

**APPENDIX 2**  
**SUB-BOTTOM PROFILE IMAGES**

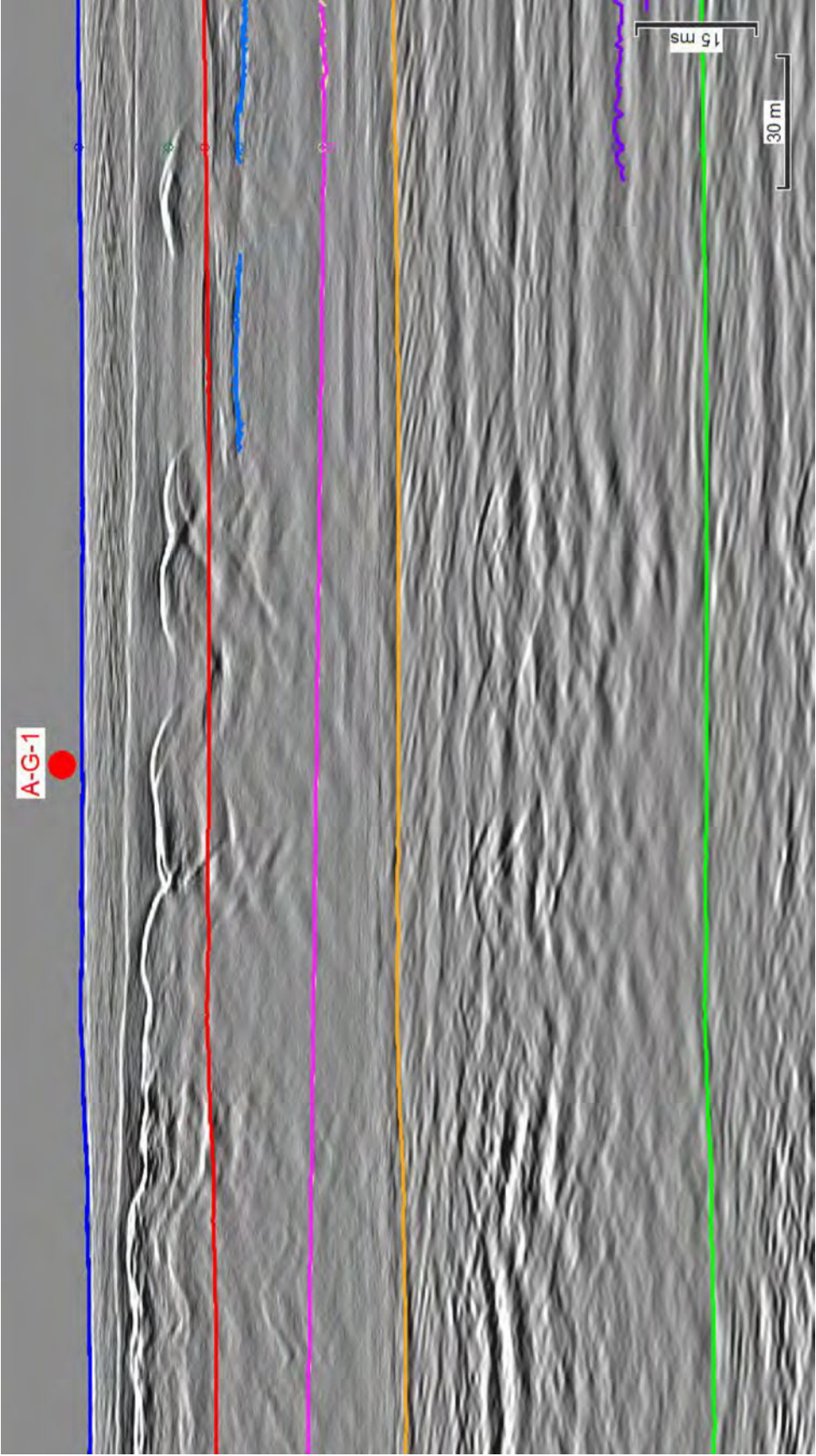


Figure 1: Proposed geotechnical location A-G-1 along seismic line TLB69\_FAST\_MIG

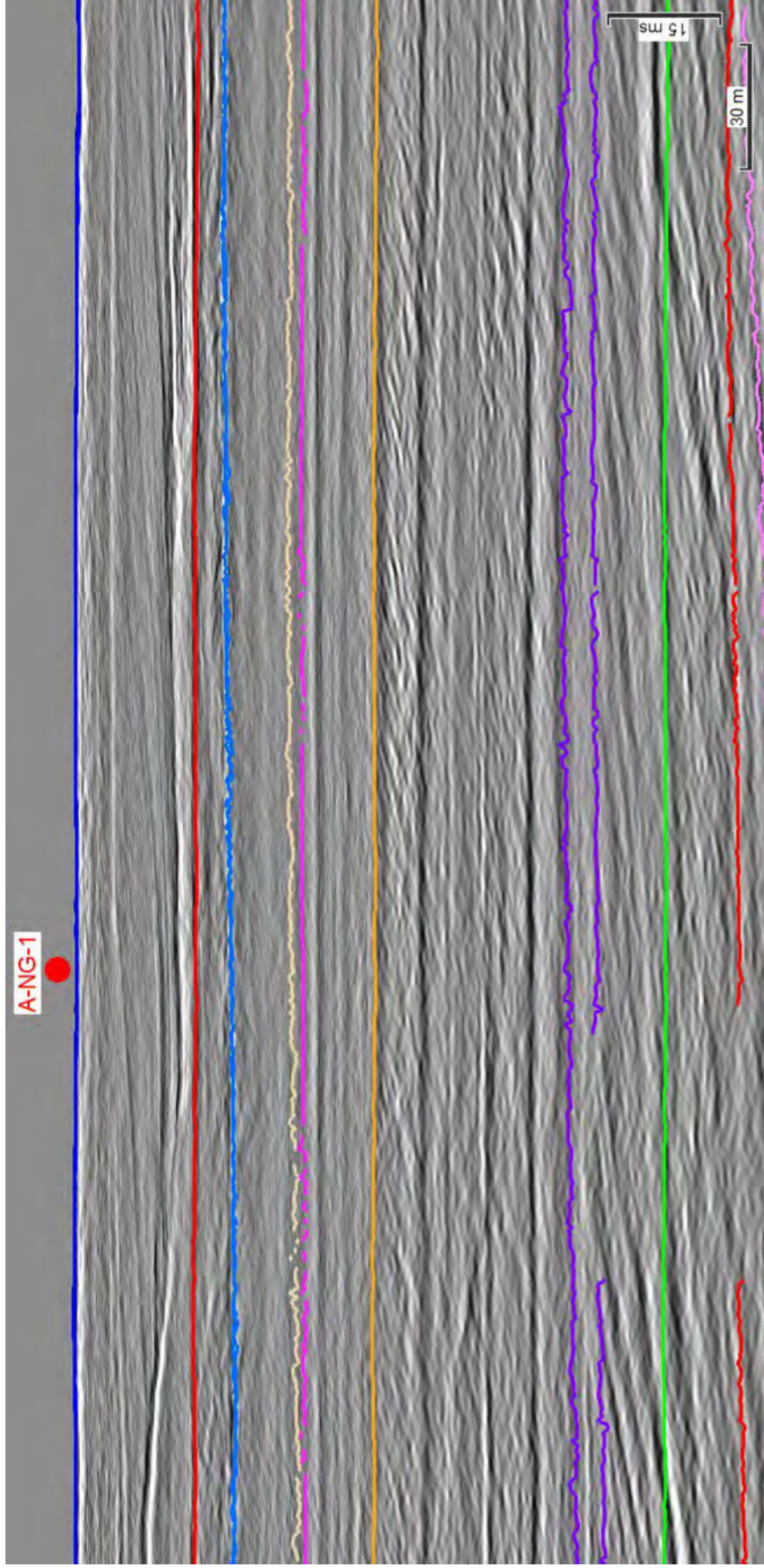


Figure 2: Proposed geotechnical location A-NG-1 along seismic line WTG13MCS16\_FAST\_MIG

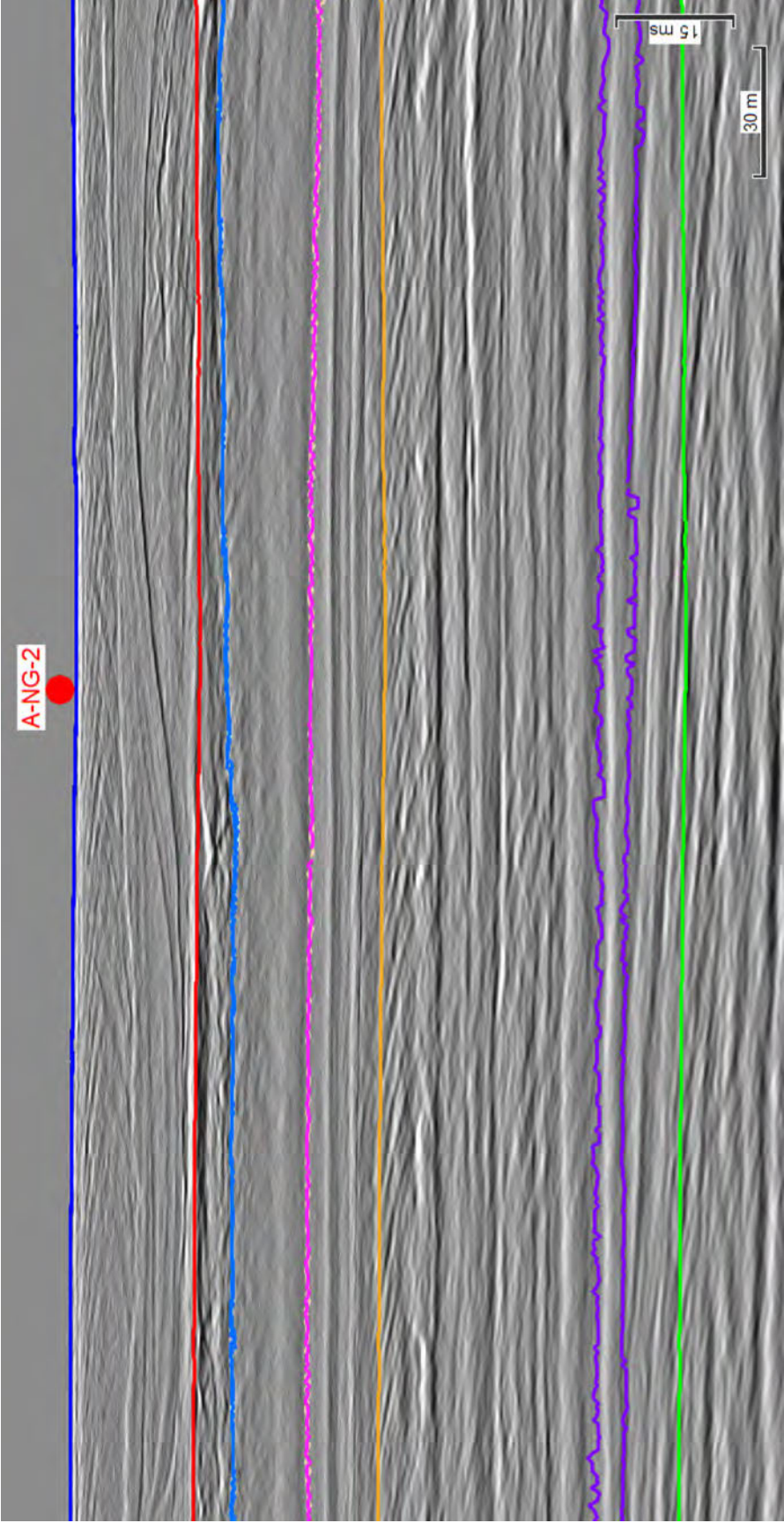


Figure 3: Proposed geotechnical location A-NG-2 along seismic line TLB69\_FAST\_MIG

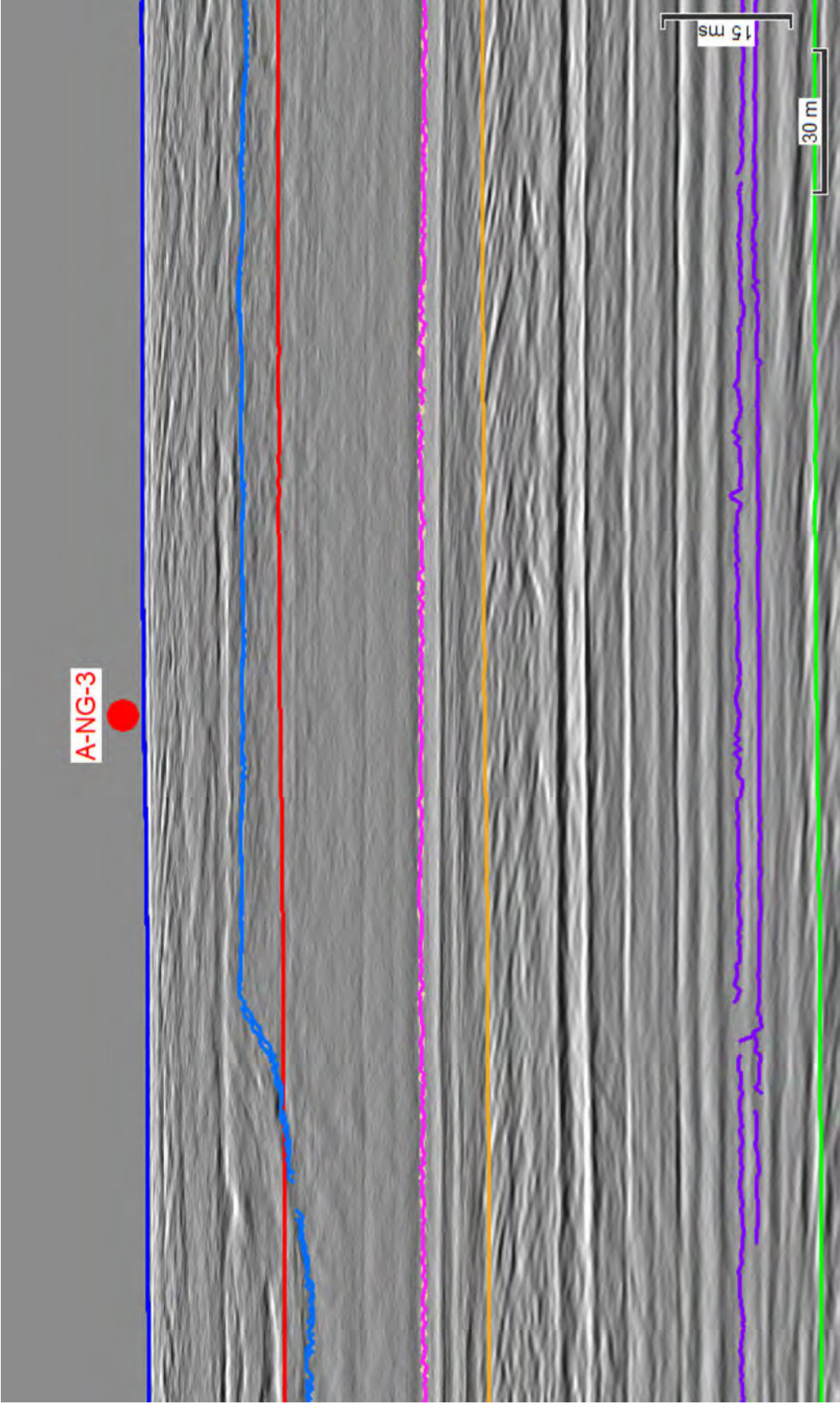


Figure 4: Proposed geotechnical location A-NG-3 along seismic line TLB69\_FAST\_MIG

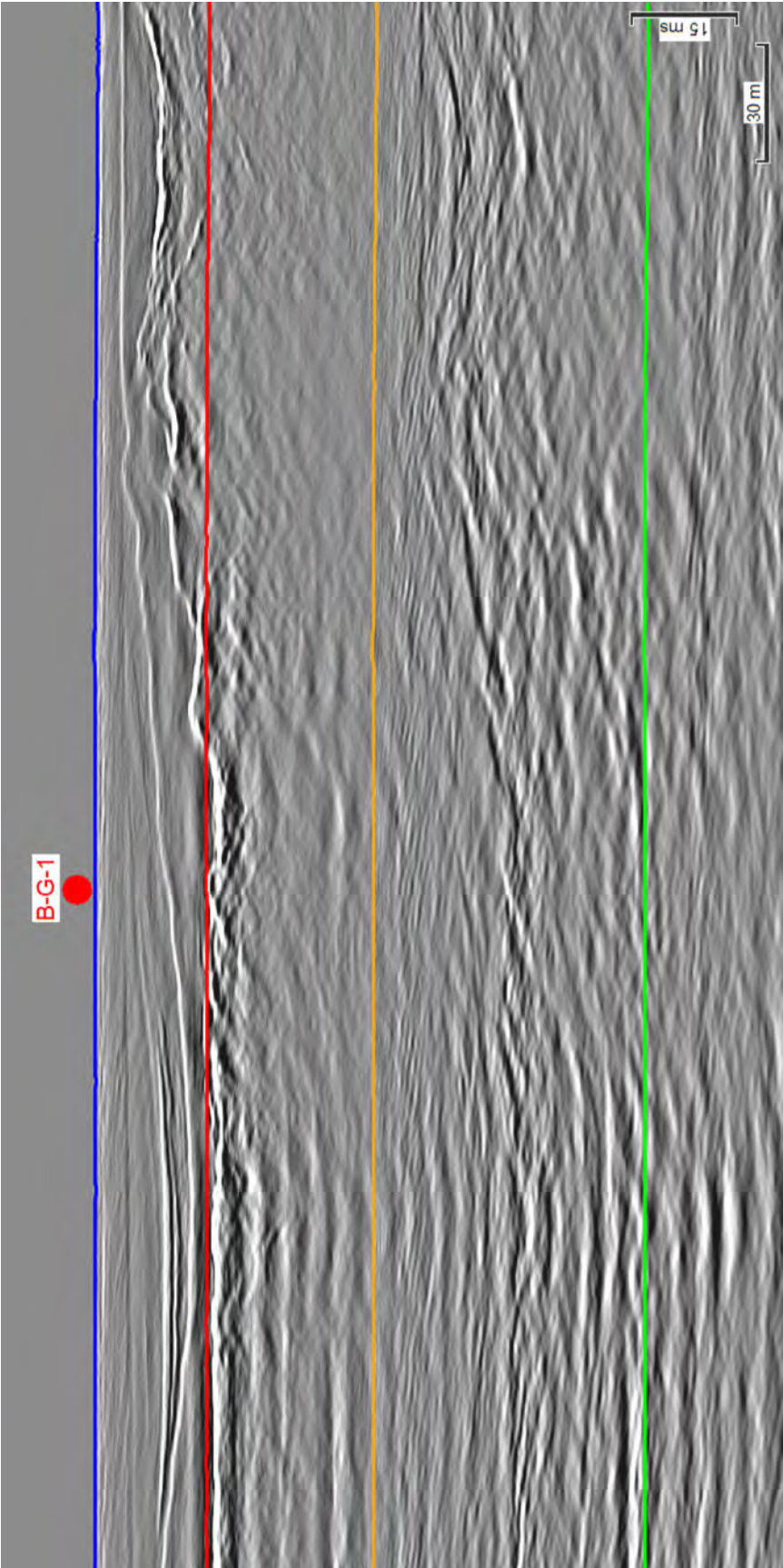


Figure 5: Proposed geotechnical location B-G-1 along seismic line TLB77B\_FAST\_MIG\_PSEDEMUL





Figure 6: Proposed geotechnical location B-NG-1 along seismic line TLB77B\_FAST\_MIG\_PSDEMUL

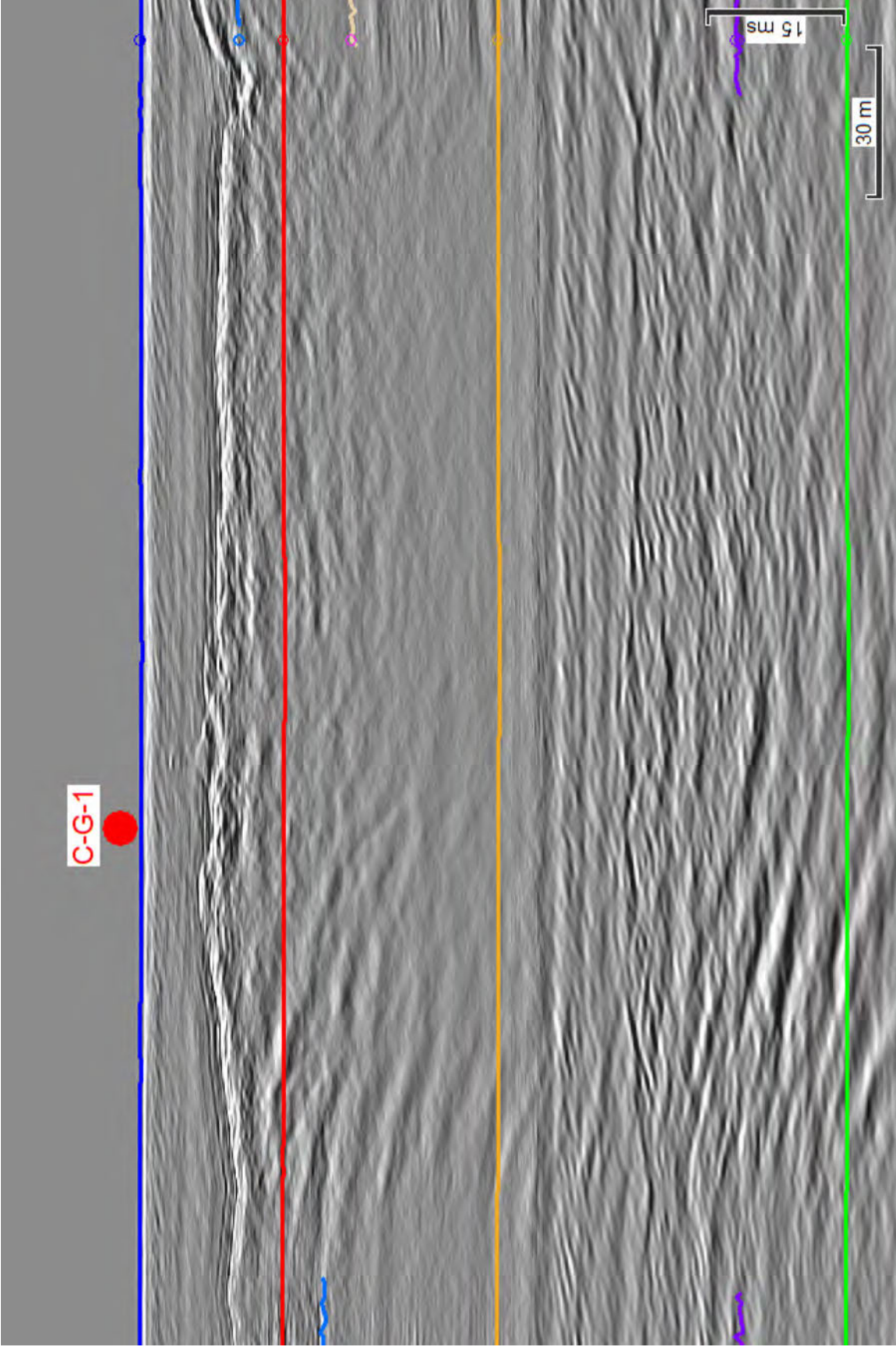


Figure 7: Proposed geotechnical location C-G-1 along seismic line TLB83A\_01\_FAST\_MIG

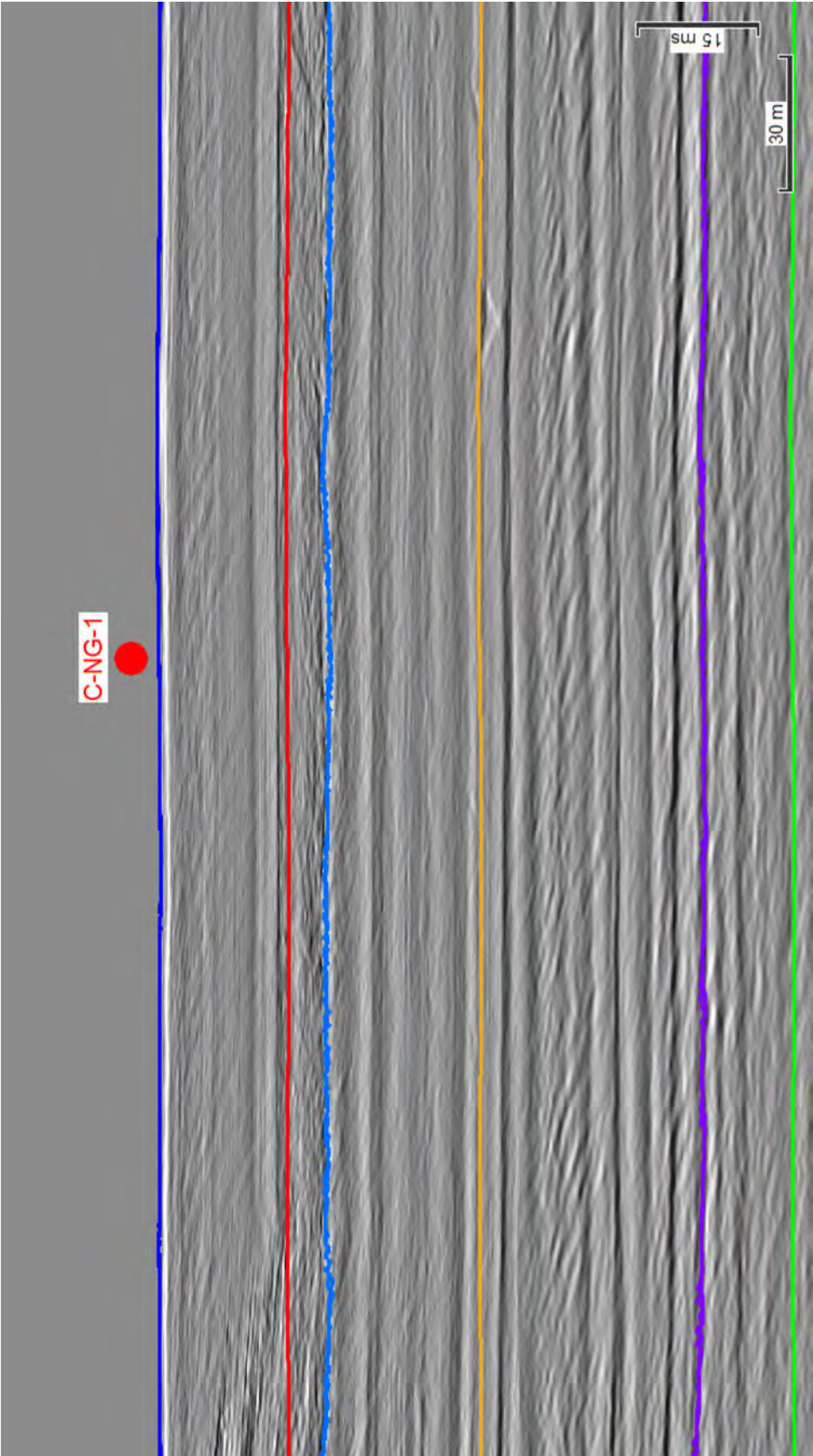


Figure 8: Proposed geotechnical location C-NG-1 along seismic line WTG15MCS10\_FAST\_MIG



April 5, 2021

Mr. James Bennett, Chief  
Bureau of Ocean Energy Management  
Office of Renewable Energy Programs  
45600 Woodland Road, VAM-OREP  
Sterling, VA 20166

Dear Mr. Bennett:

**RE: Coastal Virginia Offshore Wind Commercial Project - Cultural Resources Clearance for Geotechnical Investigations Along the Export Cable Route, Block E and Block F**

Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy, the Applicant), is submitting the attached geotechnical clearance reports for 11 proposed geotechnical locations located along the Export Cable Route, Block E and Block F within the Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf (OCS) Offshore Virginia (Lease No. OCS-A-0483) Condition 4.2.2 in support of the Coastal Virginia Offshore Wind Commercial (CVOW) Commercial Project.

This letter and attached report provide the results of Phase I cultural resources analyses of high-resolution geophysical (HRG) survey data collected by Alpine Ocean Seismic Survey, Inc. to support geotechnical investigations. In summary:

- No sonar contacts that represent significant cultural resources were identified within the analytical areas.
- No magnetic anomalies that represent significant cultural resources were identified within the analytical areas.
- Analyses of the seismic data suggest that geotechnical samples will not impact any submerged and buried landforms that exhibit the potential to contain preserved archaeological resources.
- No historic properties, such as shipwrecks, were detected at the proposed sampling locations.

Please contact Scott Lawton at [scott.lawton@dominionenergy.com](mailto:scott.lawton@dominionenergy.com) or (804) 273-2600 if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink that reads "Joshua J. Bennett".

Joshua J. Bennett  
Vice President – Offshore Wind

James Bennett  
April 5, 2021  
Page 2

Enclosure(s)

Cc: Dominion Env. - Jason Ericson, Darrell Shier, Scott Lawton, Mitchell Jabs  
Dominion Offshore Wind – GT Hollett, Will Kinnan, Ed Buchanan  
BOEM - Casey Reeves, Algene Byrum, Jen Draher, Willie Hoffman  
Tetra Tech - Janelle Lavallee, Alex Cross  
McNeilan and Assoc. - Tom McNeilan

March 31, 2021

Mr. Lloyd Eley  
Project Manager  
Dominion Energy  
5000 Dominion Boulevard  
Glen Allen, MD 23060

**RE: Coastal Virginia Offshore Wind Commercial Project – Cultural Resources Clearance for Geotechnical Investigations along the Blocks E and F**

Dear Mr. Eley:

This letter report provides the results of Phase I cultural resources analyses of high-resolution geophysical (HRG) survey data collected by Alpine Ocean Seismic Survey, Inc. to support geotechnical investigations for the Coastal Virginia Offshore Wind Commercial Project. The planned geotechnical campaign consists of shallow coring (piston or vibracores) and seabed Cone Penetrometer Tests; this memorandum reviews 11 of these locations for gathering geologic information (Tables 1, 2, 3, 4, and 5). The geotechnical investigation will be conducted by a vessel that is equipped with a dynamic positioning system. Activities at the geotechnical locations will not exceed a targeted depth of five (5) to seven (7) meters (m) below seabed.

The QMA reviewed the HRG survey data within a rectangular analytical area (100 m by 200 m) centered on each of the 11 proposed geotechnical locations located along the Export Cable Route (ECR), within Blocks E and F. The reviewed data included at minimum six (6) parallel lines of survey data that captured each of the proposed locations. This review focused on identification of any potential submerged cultural resources and buried, preserved landforms through geophysical investigations.

There are eight (8) proposed geotechnical locations within the Dam Neck Ocean Disposal Site (DNODS). The DNODS was authorized by the Environmental Protection Agency for the placement of dredged materials from the Thimble Shoal Channel, Atlantic Ocean Channel and the Cape Henry Channel. The earliest use of the DNODS began in 1967, with the deepening of the Thimble Shoals Channel. Dredged materials been typically disposed of using either a hopper dredge or bottom pump scow. There are numerous magnetic anomalies and seabed contacts throughout the DNODS boundary, which are likely associated with dredged material placement activities.

High-resolution side scan sonar imagery was recorded throughout the survey area and viewed as high-resolution mosaicked files (Appendix 1, Table 6). No sonar contacts that represent significant cultural resources were identified within the analytical areas.

Two marine magnetometers configured into a transverse gradiometer array collected magnetic data along each survey line. Magnetic anomalies were interpreted using magnetic residual field grid data, magnetic


contour mapping, and by observing their characteristics in terms of amplitude, duration, magnetic signature, and spatial distribution (Appendix 1, Table 7). All of the recorded anomalies expressed characteristics atypical of shipwreck signatures (i.e., a low amplitude [ $<50$  nT] and short to medium duration 1.8-55.2 m)). No magnetic anomalies that represent significant cultural resources were identified within the analytical areas.

Seismic data were collected and interpreted along each survey line associated with the geotechnical locations (Appendix 2). All seismic data were reviewed to their full vertical extent. The geotechnical locations were also reviewed with respect to the ground model and interpreted horizons. Analyses of the seismic data suggest that none of the proposed geotechnical samples will not impact any submerged and buried landforms that exhibit the potential to contain preserved archaeological resources.

The analyses considered all portions of the seafloor within the limits of bottom-disturbing activities as they pertain to the proposed sampling locations (Tables 1, 2, 3, 4, 5, 6, and 7; Appendices 1 and 2). Based on the current data, if the geotechnical sampling activities are contained within the established analytical areas (Tables 1, 2, 3, 4, and 5), no potential archaeological resources will be affected by the proposed geotechnical activities. No historic properties, such as shipwrecks, were detected at the proposed sampling locations.

If you have questions, please do not hesitate to contact us.

Best regards,



Ashley Himmelstein, M.A.  
Nautical Archaeologist

**Table 1. Proposed geotechnical locations for ECR Block E**

Core ID <sup>1</sup>	Easting (X) <sup>2</sup>	Northing (Y) <sup>2</sup>	Longitude <sup>3</sup>	Latitude <sup>3</sup>
E-08	424178.20	4073924.80	-75.85002132	36.80813617
E-09	423689.10	4074028.50	-75.85551434	36.80903158
E-16/F01	420348.90	4074737.10	-75.89303109	36.81514337

<sup>1</sup> E-16/F01 are located within the DNODS.

<sup>2</sup> Projected coordinates are referenced to UTM Zone 18N, NAD83 (2011), meters.

<sup>3</sup> Geographical coordinates are referenced to NAD83.

**Table 2: Proposed geotechnical locations for ECR Block F**

Core ID	Easting (X) <sup>1</sup>	Northing (Y) <sup>1</sup>	Longitude <sup>2</sup>	Latitude <sup>2</sup>
F-04rev	418932.19	4074658.12	-75.90890467	36.81431111
F-09	416450.00	4074410.00	-75.93670355	36.81185876

<sup>1</sup> Projected coordinates are referenced to UTM Zone 18N, NAD83 (2011), meters.

<sup>2</sup> Geographical coordinates are referenced to NAD83.

**Table 3: Proposed geotechnical locations for ECR X Locations, located within the DNODS**

Core ID	Easting (X) <sup>1</sup>	Northing (Y) <sup>1</sup>	Longitude <sup>2</sup>	Latitude <sup>2</sup>
X-03	419945.00	4074535.00	-75.89753775	36.81328762
X-04	421055.00	4075100.00	-75.88515299	36.8184736
X-05	421100.00	4074835.00	-75.88462101	36.81608874
X-06rev	421352.56	4074995.79	-75.88180626	36.81755907
X-07rev	421825.18	4074873.44	-75.87649517	36.81649543
X-08rev	421685.49	4074966.25	-75.87807076	36.81732043

<sup>1</sup> Projected coordinates are referenced to UTM Zone 18N, NAD83 (2011), meters.

<sup>2</sup> Geographical coordinates are referenced to NAD83.



**Table 4: Proposed geotechnical locations for ECR Block F South**

<b>Core ID</b>	<b>Easting (X)<sup>1</sup></b>	<b>Northing (Y)<sup>1</sup></b>	<b>Longitude<sup>2</sup></b>	<b>Latitude<sup>2</sup></b>
Fs-08rev	416989.67	4073977.58	-75.93060674	36.80800864

<sup>1</sup> Projected coordinates are referenced to UTM Zone 18N, NAD83 (2011), meters.

<sup>2</sup> Geographical coordinates are referenced to NAD83.

**Table 5: Proposed geotechnical locations for ECR Block E North**

<b>Core ID</b>	<b>Easting (X)<sup>1</sup></b>	<b>Northing (Y)<sup>1</sup></b>	<b>Longitude<sup>2</sup></b>	<b>Latitude<sup>2</sup></b>
En-13	421819.00	4074841.00	-75.8766	36.8162

<sup>1</sup> Projected coordinates are referenced to UTM Zone 18N, NAD83 (2011), meters.

<sup>2</sup> Geographical coordinates are referenced to NAD83.

**Table 6: Side Scan Sonar Contacts within Analytical Areas**

SSS ID	Associated Geotechnical Location	Height (m)	Width (m)	Length (m)	Associated Mag Anomaly	Easting (X) <sup>1</sup>	Northing (Y) <sup>1</sup>	Longitude <sup>2</sup>	Latitude <sup>2</sup>
SSS_E_030	E-08	0.70	0.66	1.95	MAG_1362	424181.97	4073933.67	-75.84997994	36.80821643
SSS_E_045	X-06rev	0.44	0.68	1.18	-	421392.98	4074986.65	-75.88135217	36.81748005
SSS_F_007	E-16/F-01	0.33	0.36	0.63	-	420269.04	4074732.65	-75.8939259	36.81509653

<sup>1</sup> Projected coordinates are referenced to UTM Zone 18N, NAD83 (2011), meters.

<sup>2</sup> Geographical coordinates are referenced to NAD83.

**Table 7: Magnetic Anomalies within Analytical Areas**

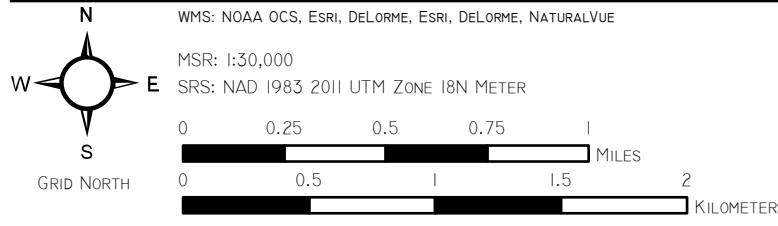
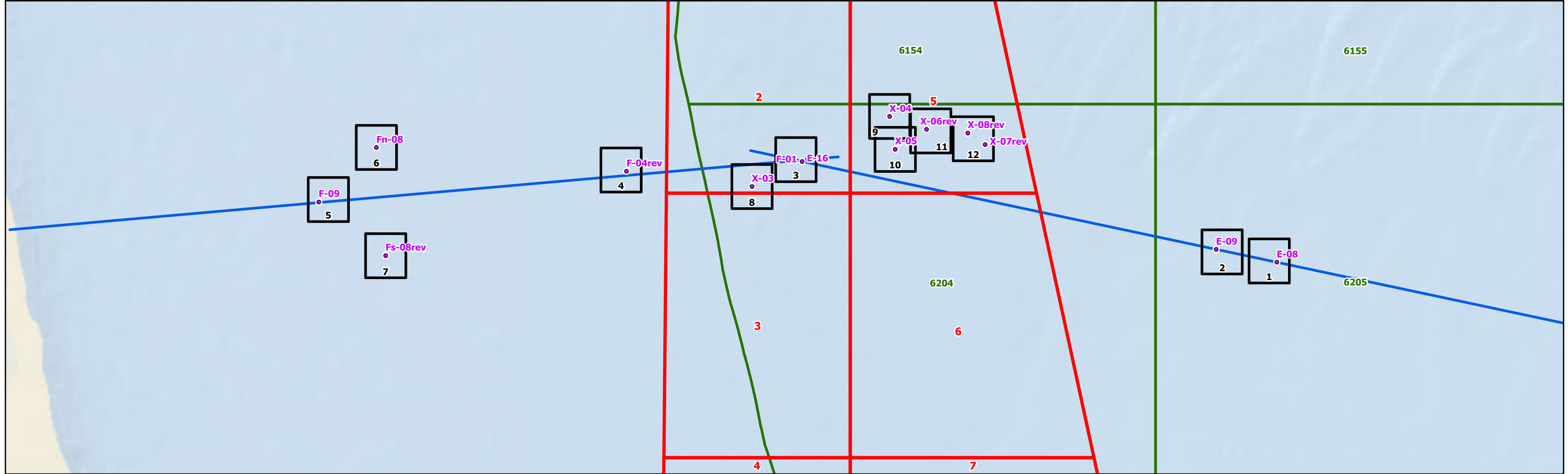
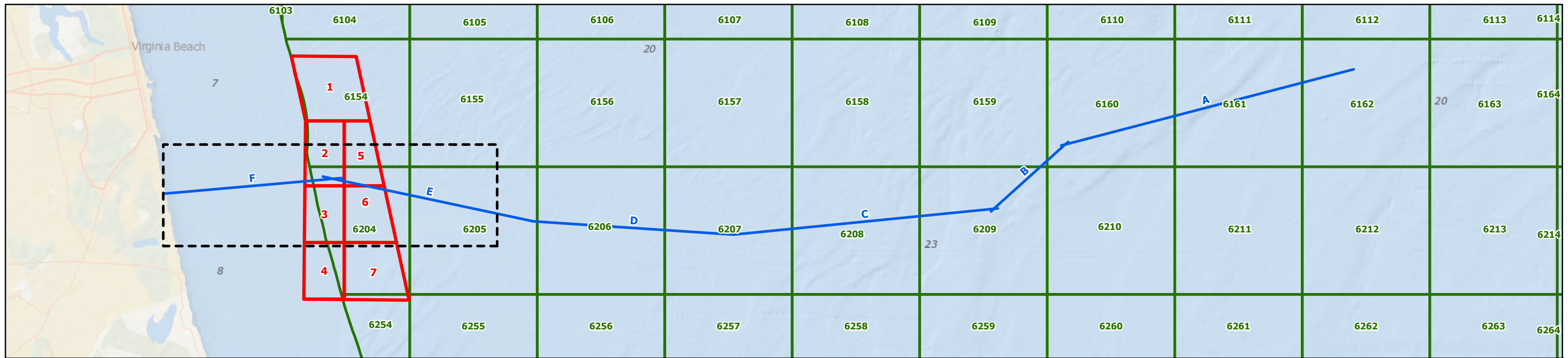
Mag ID	Associated Geotechnical Location	Sensor Altitude (m)	Amplitude (nT)	Duration (m)	Depth (m)	Signature Characteristics	Associated SSS Contact	Easting (X) <sup>1</sup>	Northing (Y) <sup>1</sup>	Longitude <sup>2</sup>	Latitude <sup>2</sup>
MAG_0243	F-09	2.95	0.60	2.38	1.74	Dipole	-	416436.89	4074439.72	-75.93685377	36.81212548
MAG_0244	F-09	4.21	0.45	4.03	4.30	Dipole	-	416448.79	4074406.00	-75.93671667	36.81182259
MAG_0247	F-09	2.83	1.59	4.90	4.60	Dipole	-	416454.00	4074443.03	-75.93666233	36.81215683
MAG_0251	F-09	2.56	0.00	3.11	1.89	Dipole	-	416484.67	4074443.39	-75.93631856	36.81216278
MAG_0255	F-09	2.18	-21.02	10.38	2.95	Monopole	-	416502.40	4074391.15	-75.93611408	36.81169348
MAG_0257	F-09	2.65	-10.41	10.92	3.14	Monopole	-	416513.14	4074446.09	-75.93599971	36.81218963
MAG_0276	F-09	2.01	-10.85	6.90	2.05	Dipole	-	416595.49	4074399.13	-75.93507142	36.81177362
MAG_0282	F-09	2.07	0.01	2.84	1.70	Dipole	-	416626.59	4074403.78	-75.93472331	36.81181827
MAG_0583	F-04rev	4.22	1.46	3.62	3.24	Dipole	-	418956.25	4074692.57	-75.90863865	36.81462372
MAG_0770	X-03	3.85	-4.80	15.07	8.36	Monopole	-	419980.73	4074584.30	-75.8971424	36.81373502
MAG_0819	E-16/F-01	4.23	-6.03	21.38	6.02	Monopole	-	420195.29	4074788.68	-75.89475855	36.81559534
MAG_0822	E-16/F-01	4.30	-0.59	5.09	4.87	Dipole	-	420205.82	4074815.29	-75.8946433	36.81583608
MAG_0827	E-16/F-01	4.75	-25.54	22.59	4.79	Monopole	-	420221.46	4074713.89	-75.89445733	36.81492342
MAG_0837	E-16/F-01	4.23	0.00	2.38	1.21	Dipole	-	420245.62	4074720.04	-75.89418713	36.81498089
MAG_0843	E-16/F-01	4.03	-7.28	11.92	4.63	Monopole	-	420268.67	4074703.91	-75.89392704	36.81483745
MAG_0852	E-16/F-01	3.66	1.54	3.40	5.89	Complex	-	420287.35	4074711.96	-75.89371847	36.81491158
MAG_0863	E-16/F-01	3.57	0.01	3.35	1.23	Dipole	-	420305.24	4074709.73	-75.89351768	36.81489299

Mag ID	Associated Geotechnical Location	Sensor Altitude (m)	Amplitude (nT)	Duration (m)	Depth (m)	Signature Characteristics	Associated SSS Contact	Easting (X) <sup>1</sup>	Northing (Y) <sup>1</sup>	Longitude <sup>2</sup>	Latitude <sup>2</sup>
MAG_0875	E-16/F-01	3.76	6.32	2.28	2.58	Monopole	-	420324.12	4074791.28	-75.89331457	36.81562964
MAG_0877	E-16/F-01	3.22	-10.70	12.50	2.54	Monopole	-	420324.68	4074705.46	-75.8932993	36.81485614
MAG_0881	E-16/F-01	3.47	-8.42	22.41	4.16	Monopole	-	420329.39	4074784.12	-75.89325474	36.81556554
MAG_0895	E-16/F-01	3.98	0.43	1.87	3.98	Dipole	-	420349.37	4074772.29	-75.89302951	36.81546059
MAG_0900	E-16/F-01	3.45	0.01	4.55	2.24	Dipole	-	420357.31	4074785.85	-75.89294192	36.81558349
MAG_0917	E-16/F-01	3.71	-2.64	7.96	4.40	Dipole	-	420374.96	4074767.60	-75.89274214	36.81542047
MAG_1078	X-04	4.21	-12.63	55.29	17.05	Monopole	-	420967.95	4075118.04	-75.88613079	36.81862894
MAG_1088	X-05	4.18	0.00	3.05	-1.61	Dipole	-	421010.07	4074891.35	-75.88563504	36.81658915
MAG_1095	X-05	3.41	35.34	2.32	2.50	Monopole	-	421047.03	4074827.99	-75.88521411	36.81602114
MAG_1100	X-05	4.41	2.61	2.80	6.00	Dipole	-	421105.13	4074847.46	-75.88456479	36.81620148
MAG_1125	X-06rev	4.57	-5.80	25.73	4.99	Monopole	-	421266.59	4074998.40	-75.88277033	36.81757545
MAG_1128	X-06rev	3.65	3.27	2.03	3.68	Dipole	-	421282.31	4074994.84	-75.88259373	36.81754467
MAG_1133	X-06rev	4.54	4.90	2.43	3.68	Monopole	-	421308.89	4074958.94	-75.88229203	36.81722329
MAG_1154	X-06rev	4.04	11.99	2.74	3.53	Monopole	-	421429.53	4075018.32	-75.88094568	36.81776855
MAG_1181	X-08rev	4.27	-5.34	43.27	5.01	Monopole	-	421624.52	4074980.27	-75.87875574	36.81744175
MAG_1186	X-08rev	3.90	-6.32	12.10	4.88	Monopole	-	421659.65	4075005.14	-75.87836446	36.81766883
MAG_1188	X-08rev	3.66	10.52	2.25	3.00	Monopole	-	421672.08	4075001.50	-75.87822473	36.81763705
MAG_1192	X-07rev	4.07	-24.91	3.04	3.25	Dipole	-	421698.84	4074869.33	-75.87791112	36.81644793
MAG_1194	X-08rev	3.73	0.23	2.04	4.55	Dipole	-	421710.42	4074929.85	-75.87778753	36.8169944
MAG_1362	E-08	3.88	7.95	2.93	3.64	Dipole	SSS_E_030	424186.43	4073932.28	-75.84992981	36.80820425

<sup>1</sup> Projected coordinates are referenced to UTM Zone 18N, NAD83 (2011), meters.

<sup>2</sup> Geographical coordinates are referenced to NAD83.

**APPENDIX 1**  
**ARCHAEOLOGICAL RESOURCES**  
**MAPS FOR BLOCK E AND F**  
**CORRIDORS**

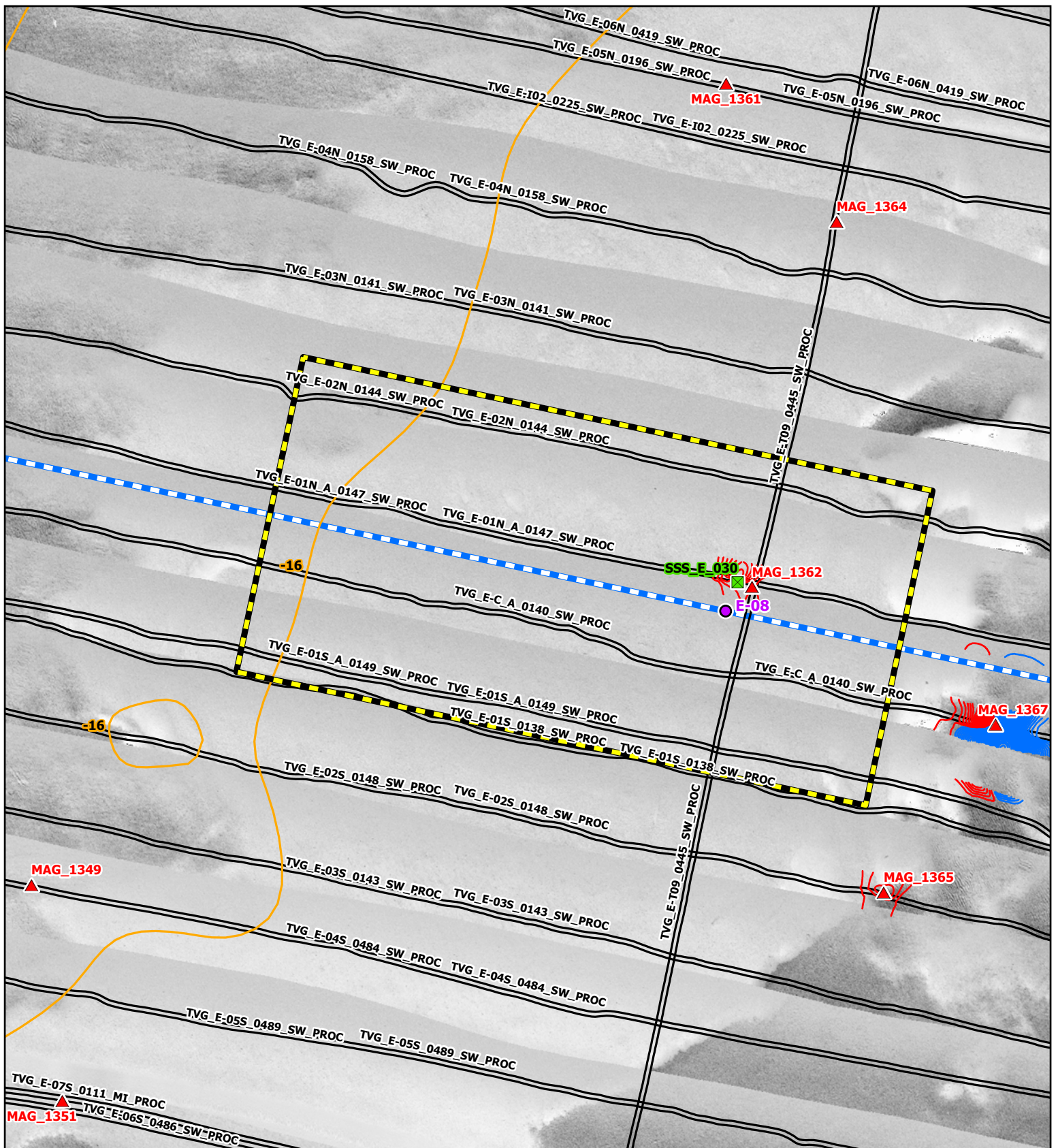


- GEOTECHNICAL LOCATION
- ECR CENTERLINE
- DAM NECK OCEAN DISPOSAL SITE
- BOEM LEASE BLOCK
- MAP SHEET EXTENT

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
*Geotechnical Clearance: Blocks E and F*

**Index Map**

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**NAUTICAL DIVISION**  
 MARINE ARCHAEOLOGY FROM STEM TO STERN



N  
 W E S  
 GRID NORTH

SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

0 25 50 75 100  
 FEET  
 0 10 20 30 40  
 METERS

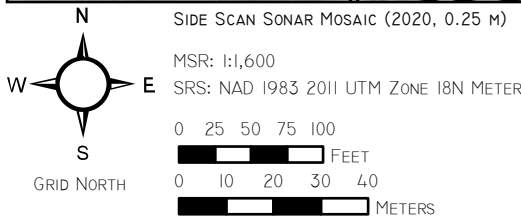
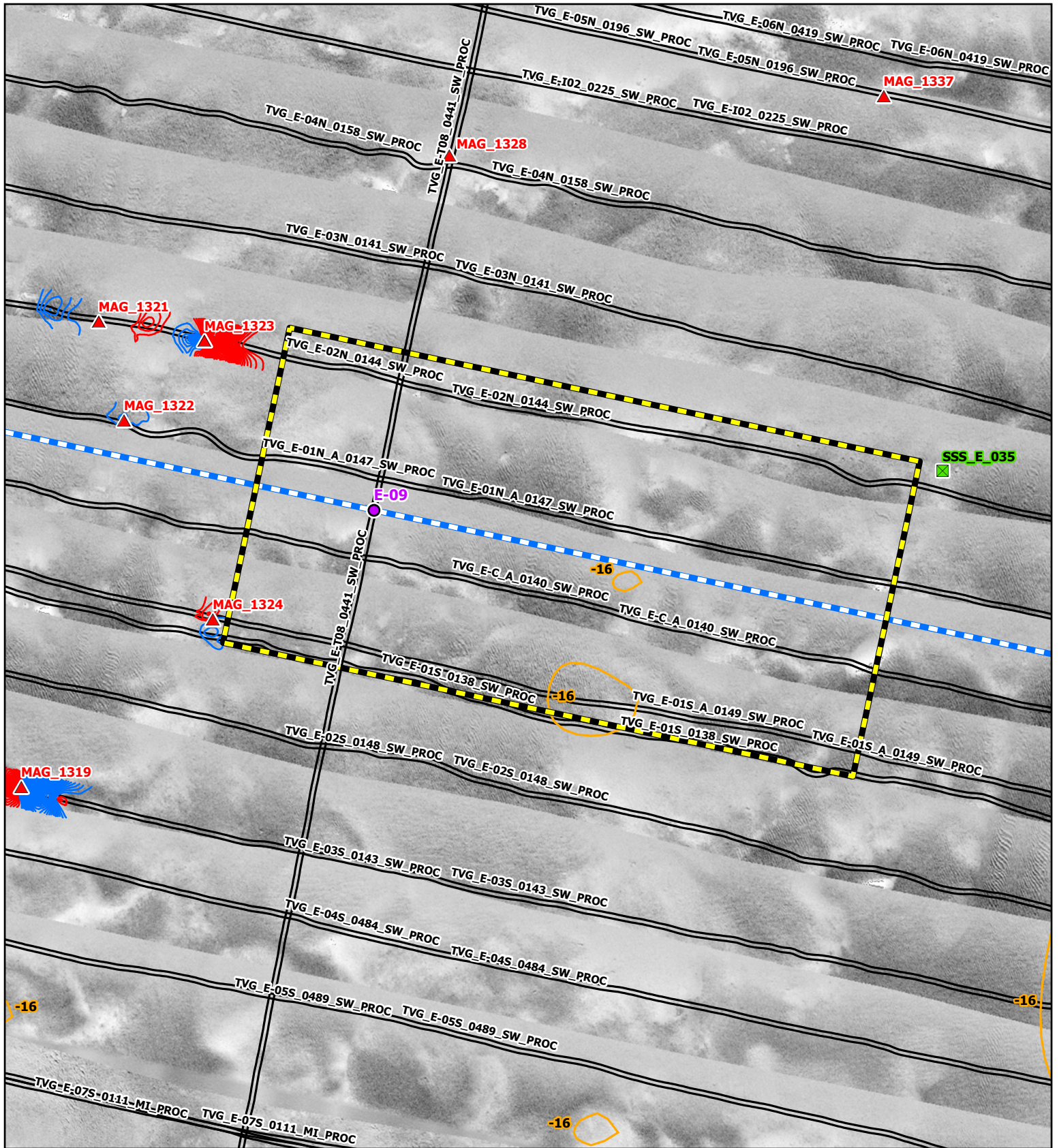
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- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Blocks E and F

**Map: 1**  
**E-08**



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 MARINE ARCHAEOLOGY FROM STEM TO STERN

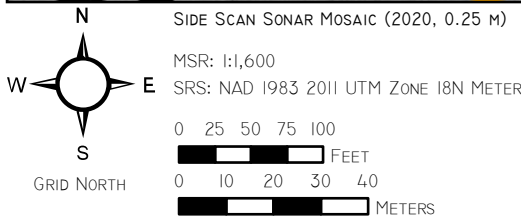
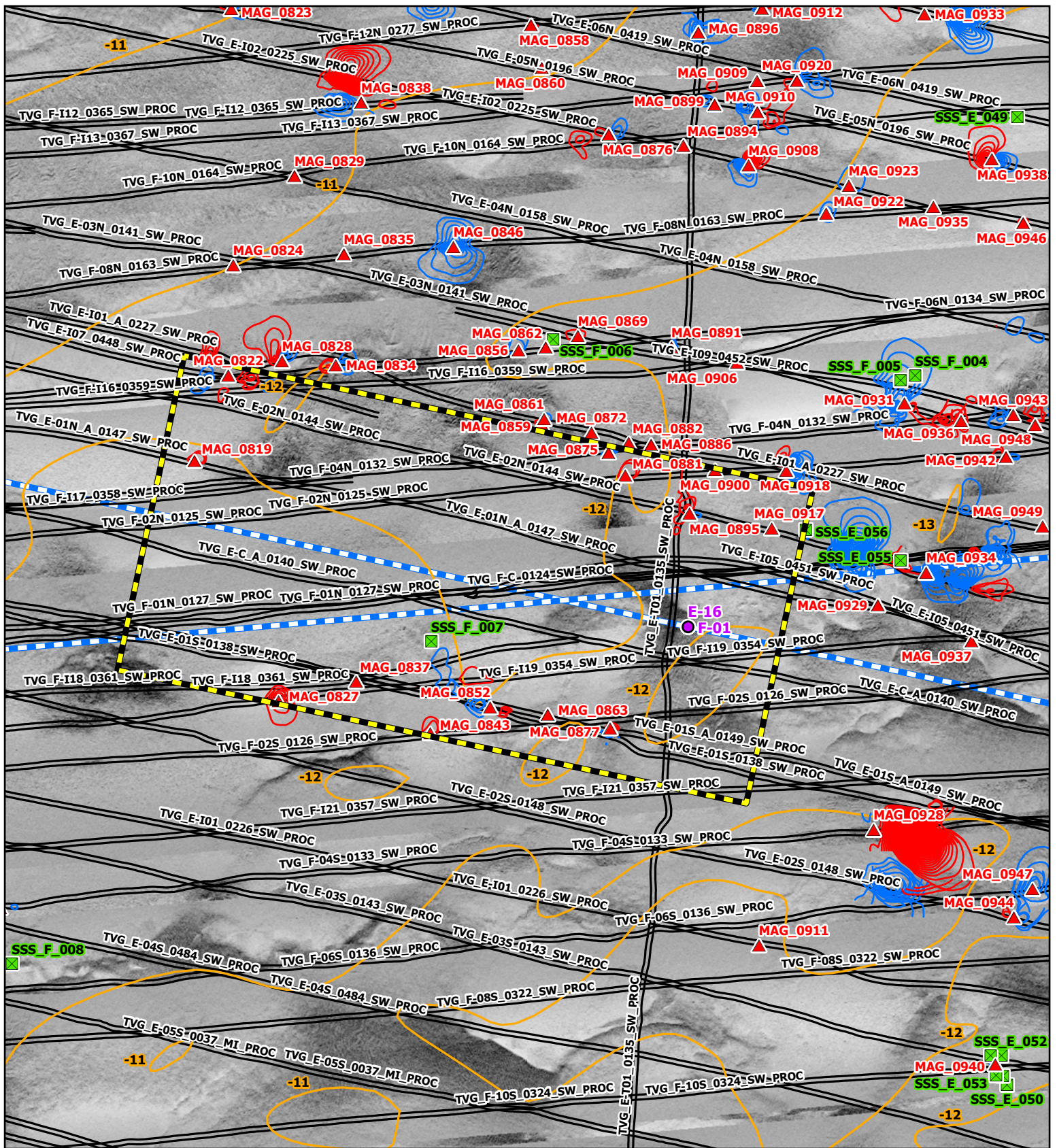


- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- - - ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
Outer Continental Shelf,  
Offshore Virginia (Lease No. OCS-A-0483)  
*Geotechnical Clearance: Blocks E and F*

**Map: 2**  
**E-09**





SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

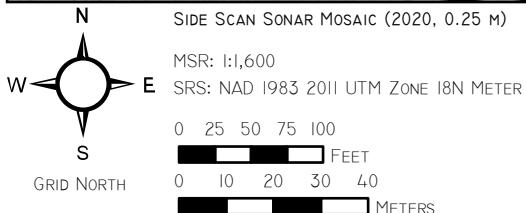
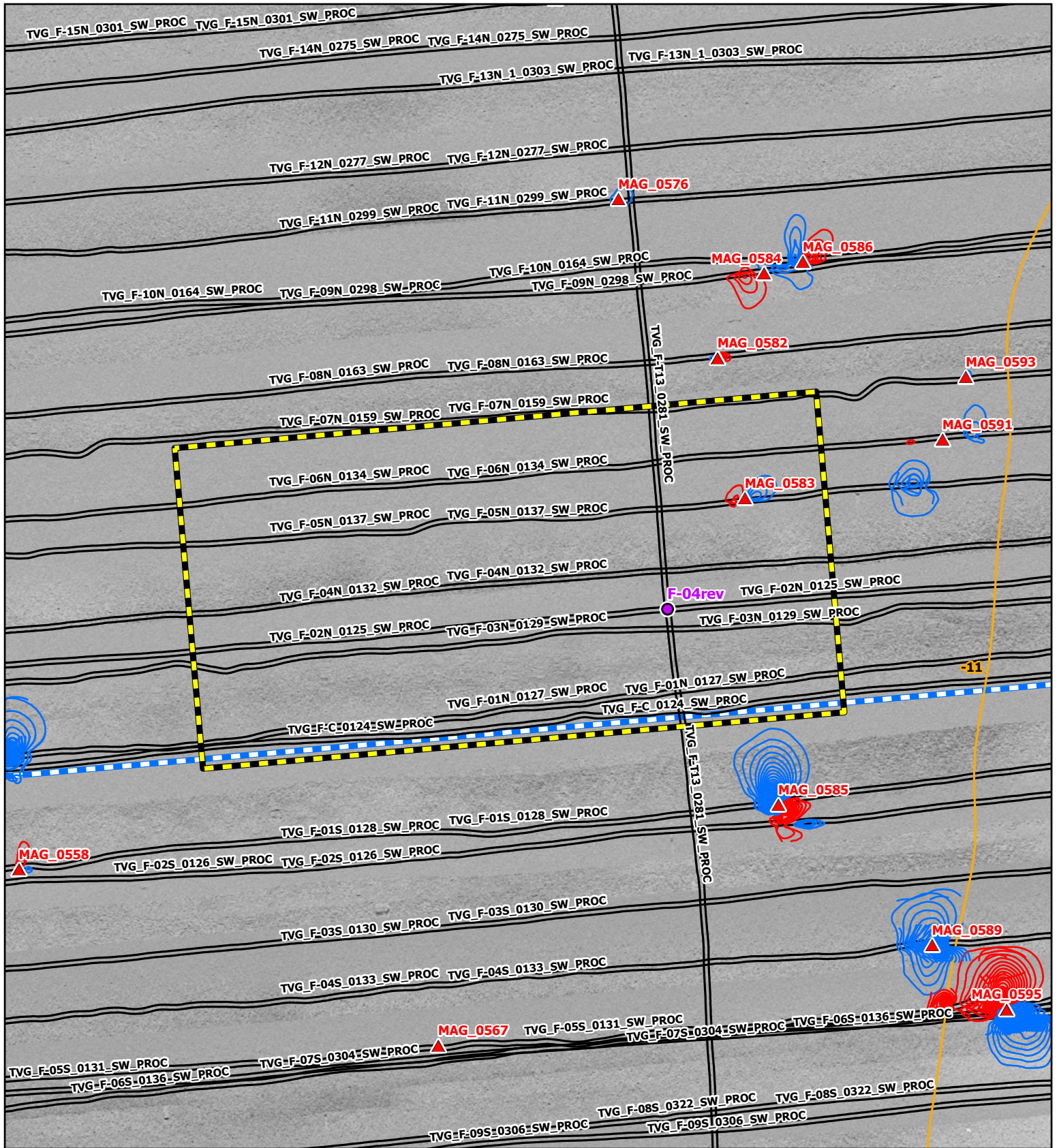
Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Blocks E and F

Map: 3  
 E-16/F-01



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 MARINE ARCHAEOLOGY FROM STEM TO STERN





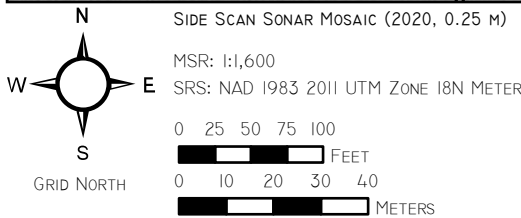
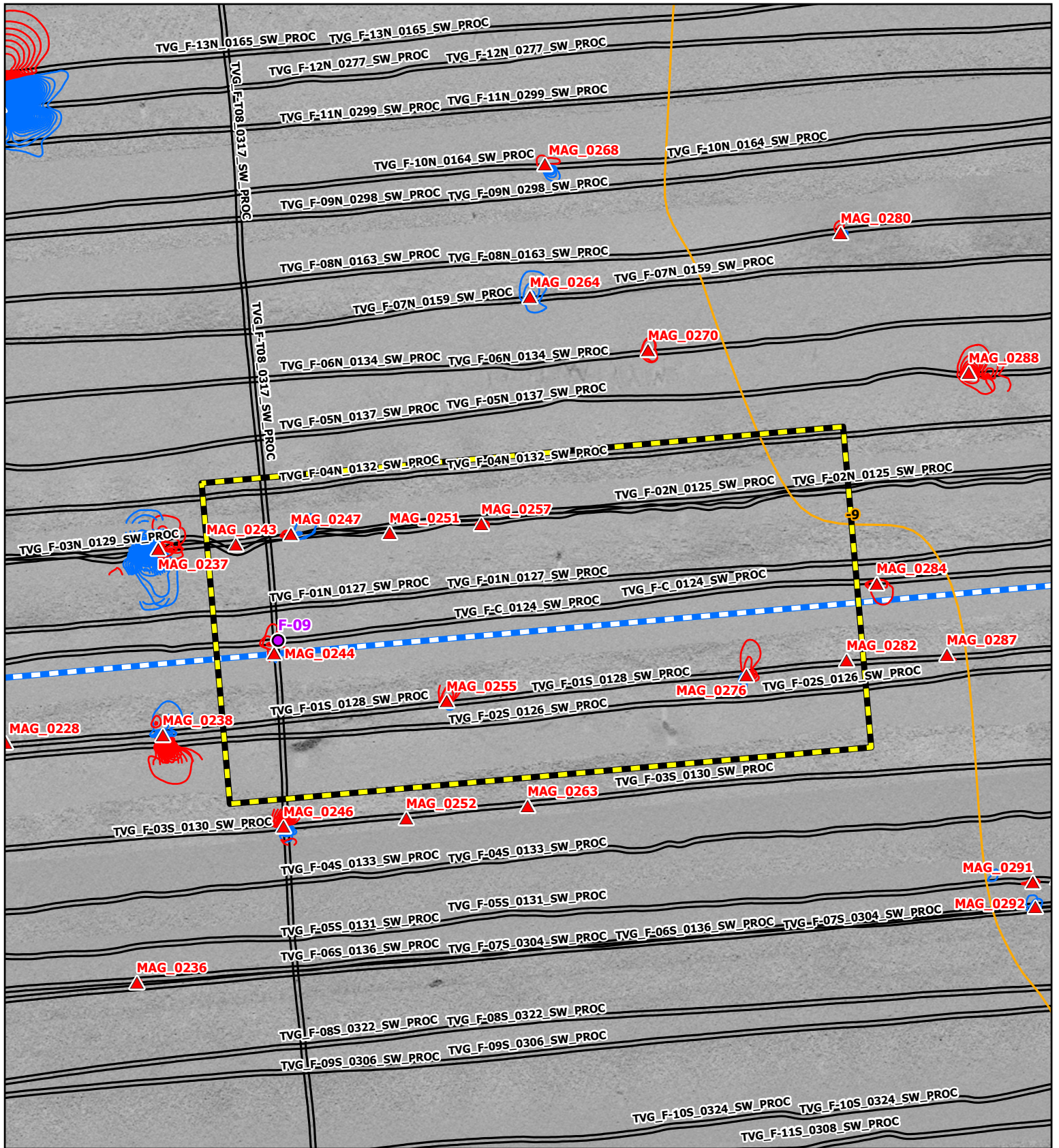
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- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Blocks E and F

Map: 4  
 F-04rev



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 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
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 SRS: NAD 1983 2011 UTM ZONE 18N METER

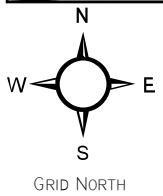
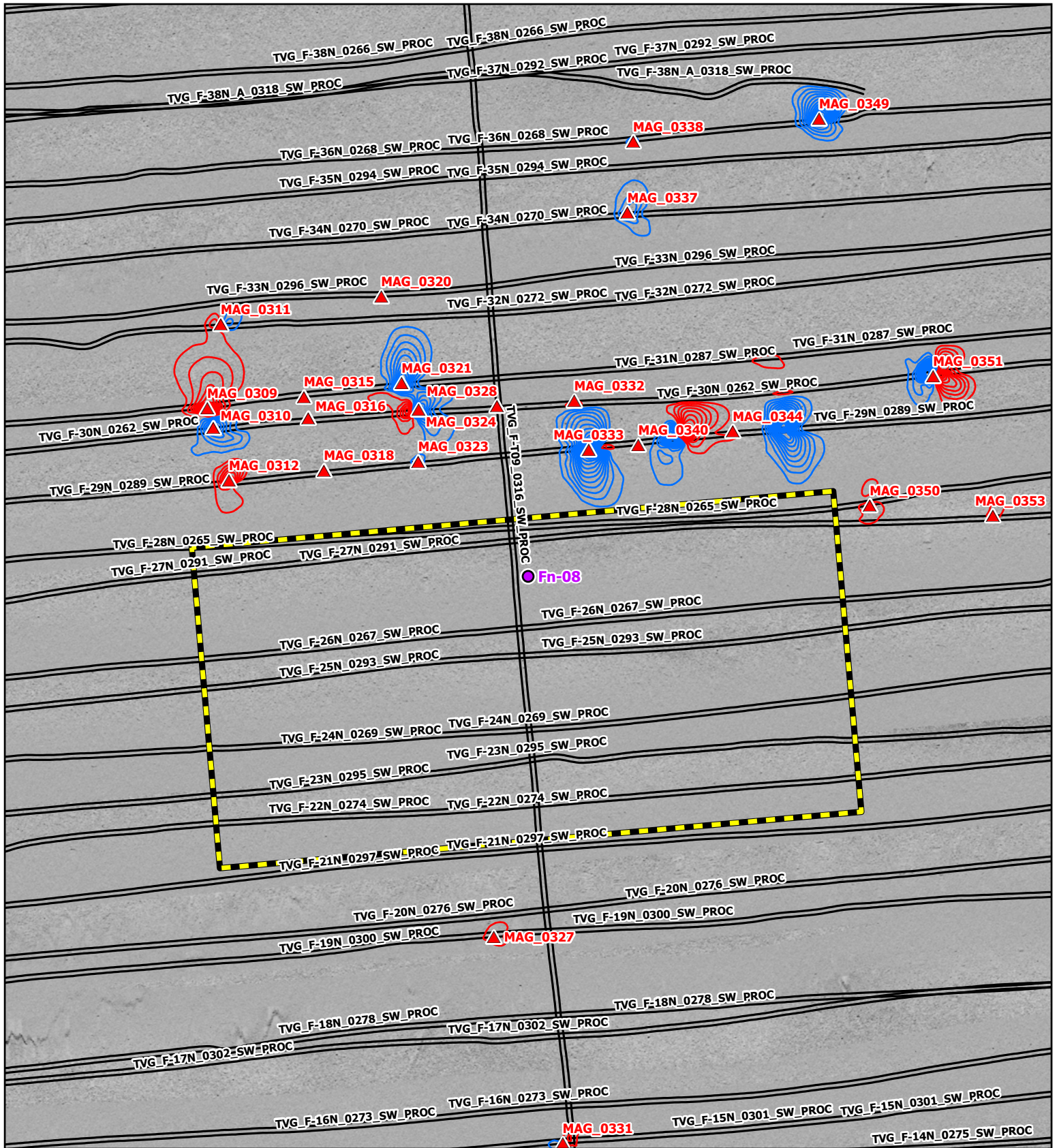
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- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Blocks E and F

Map: 5  
 F-09



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 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 m)  
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 SRS: NAD 1983 2011 UTM ZONE 18N METER

0 25 50 75 100  
 FEET

0 10 20 30 40  
 METERS

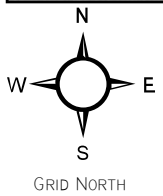
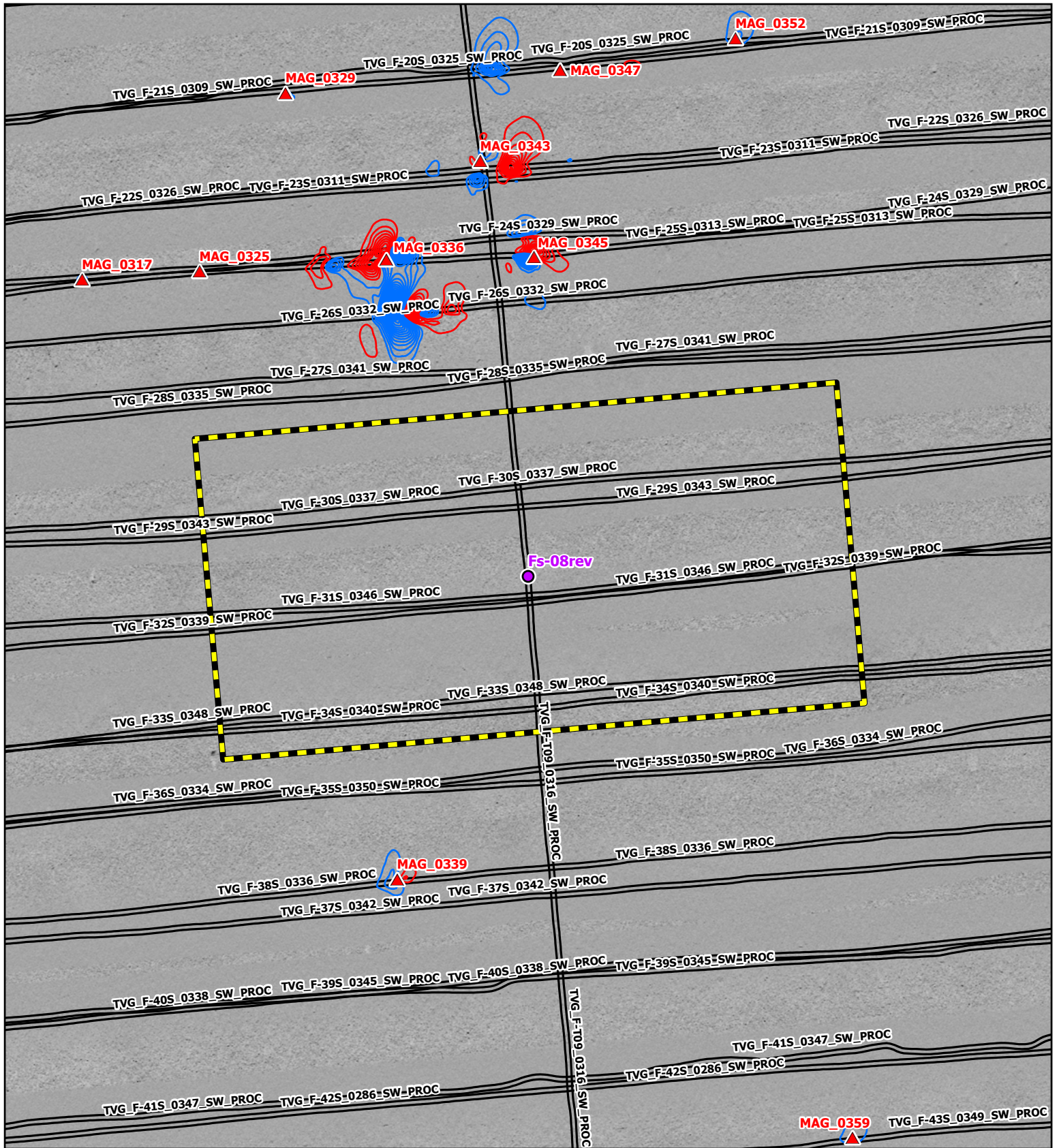
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- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Blocks E and F

Map: 6  
 Fn-08



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 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 m)  
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 SRS: NAD 1983 2011 UTM ZONE 18N METER

0 25 50 75 100  
 FEET

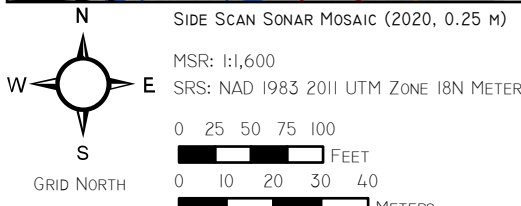
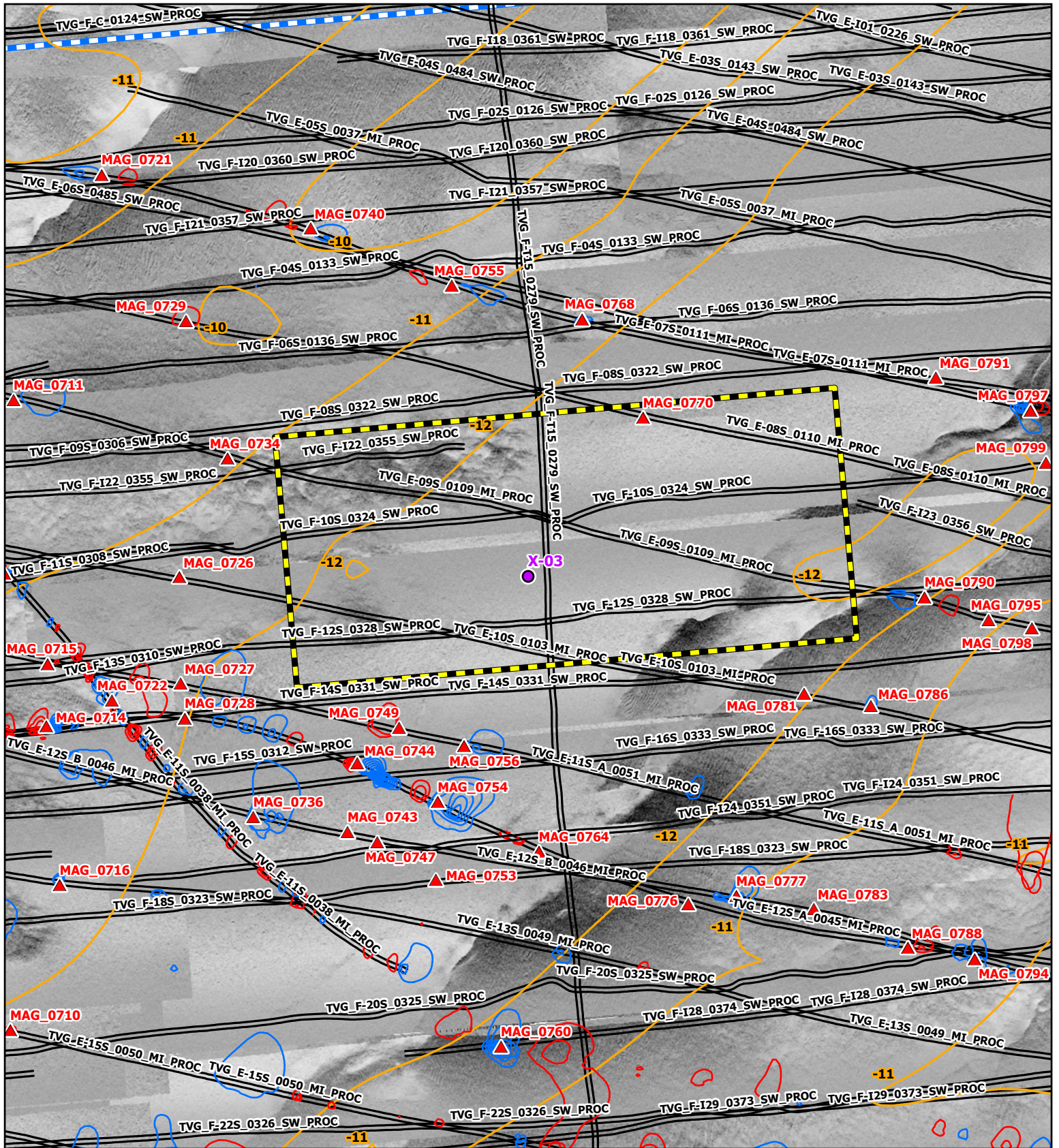
0 10 20 30 40  
 METERS

- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
*Geotechnical Clearance: Blocks E and F*  
**Map: 7**  
**Fs-08rev**



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 MARINE ARCHAEOLOGY FROM STEM TO STERN



SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
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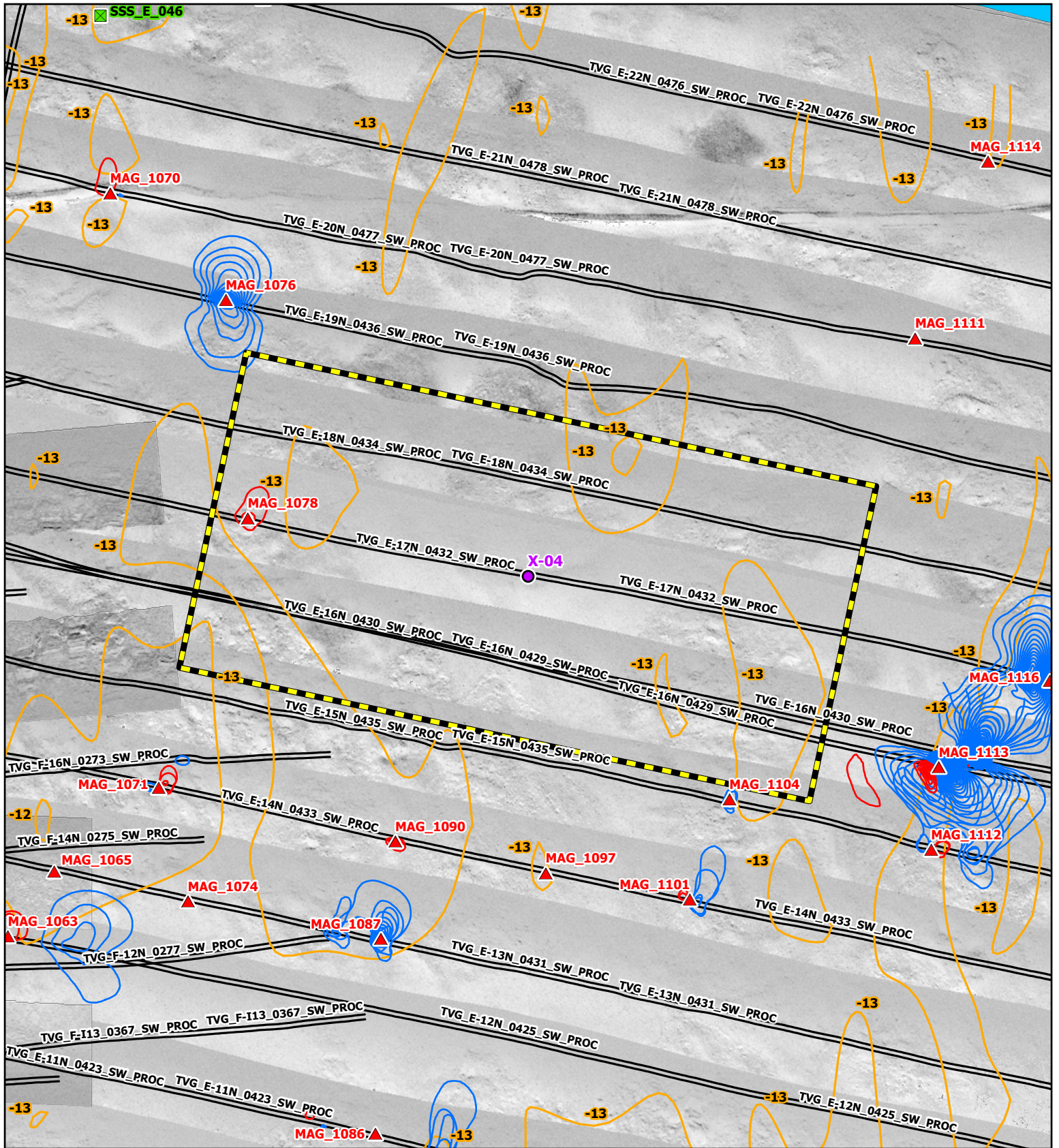
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- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Blocks E and F

Map: 8  
 X-03



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N  
 W E S  
 GRID NORTH

SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

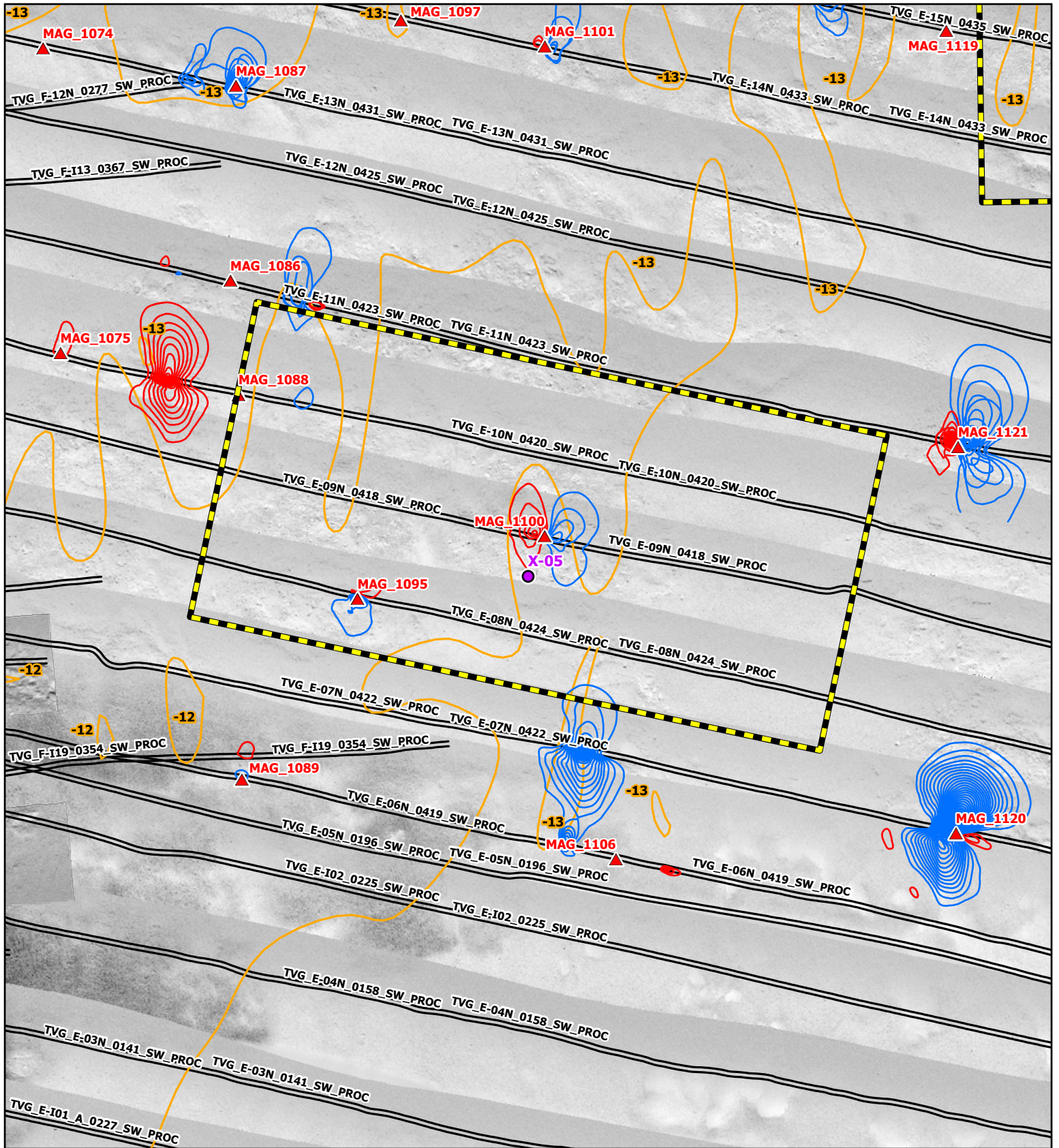
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 FEET  
 0 10 20 30 40  
 METERS

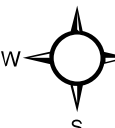
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- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
 Geotechnical Clearance: Blocks E and F  
**Map: 9**  
**X-04**













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 MARINE ARCHAEOLOGY FROM STEM TO STERN



N  
 W  E  
 S  
 GRID NORTH

SIDE SCAN SONAR MOSAIC (2020, 0.25 M)  
 MSR: 1:1,600  
 SRS: NAD 1983 2011 UTM ZONE 18N METER

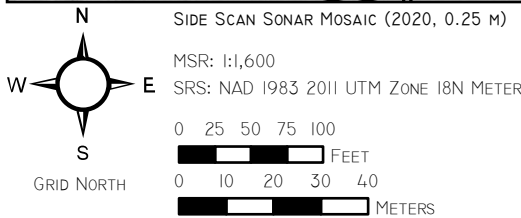
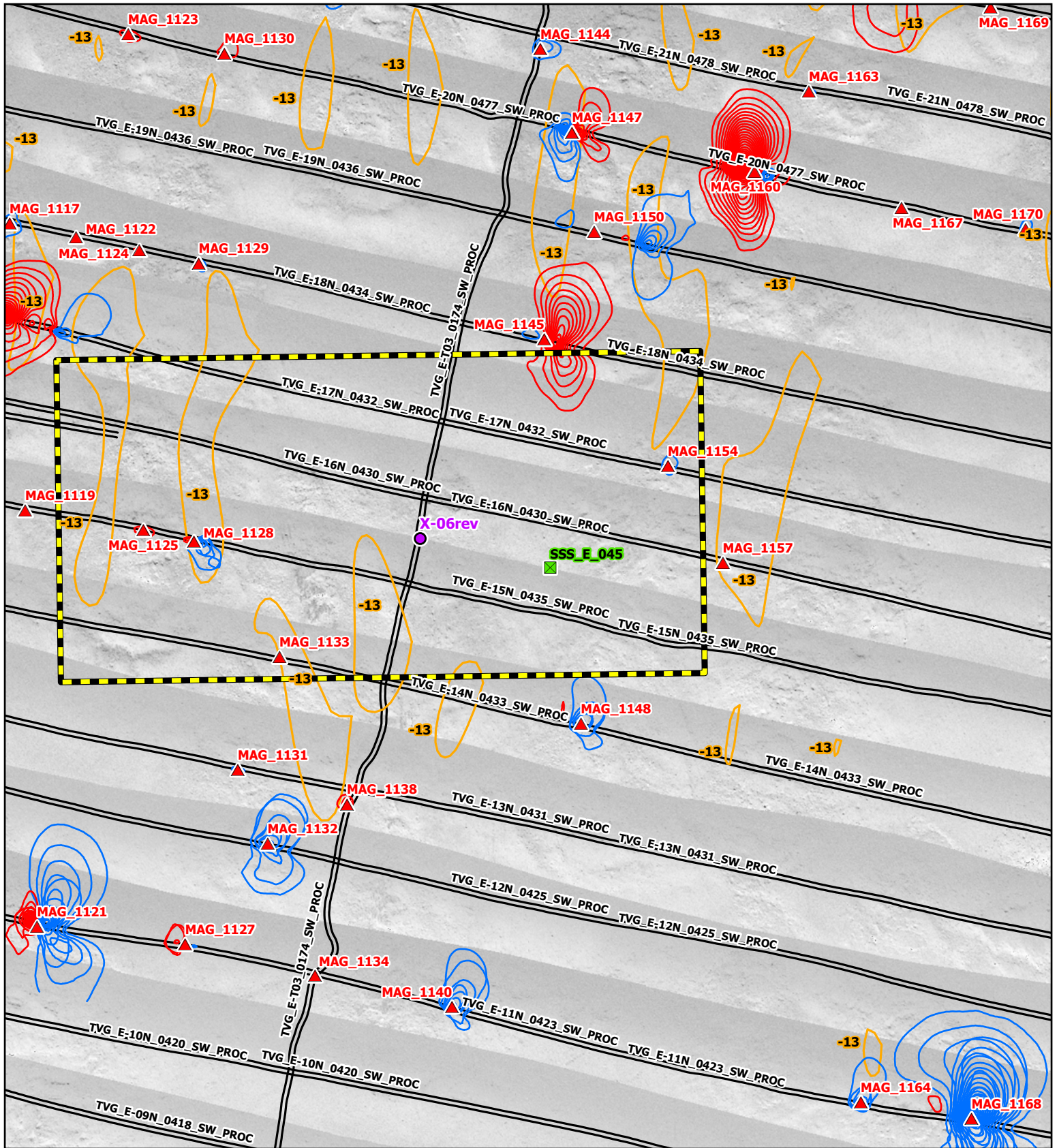
0 25 50 75 100  
 FEET  
 0 10 20 30 40  
 METERS

-  GEOTECHNICAL LOCATION
-  MAGNETIC ANOMALY
-  SIDE SCAN SONAR CONTACT
-  ECR CENTERLINE
-  BATHYMETRIC CONTOUR (1 M INTERVAL)
-  TRACKLINE
-  MAGNETIC CONTOUR (5 NT)
-  NEGATIVE
-  POSITIVE
-  ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
*Geotechnical Clearance: Blocks E and F*  
**Map: 10**  
**X-05**



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 MARINE ARCHAEOLOGY FROM STEM TO STERN



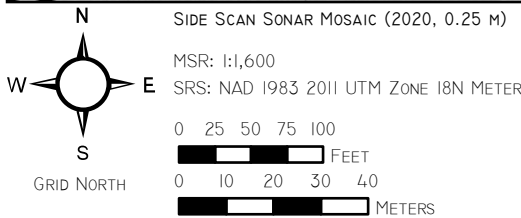
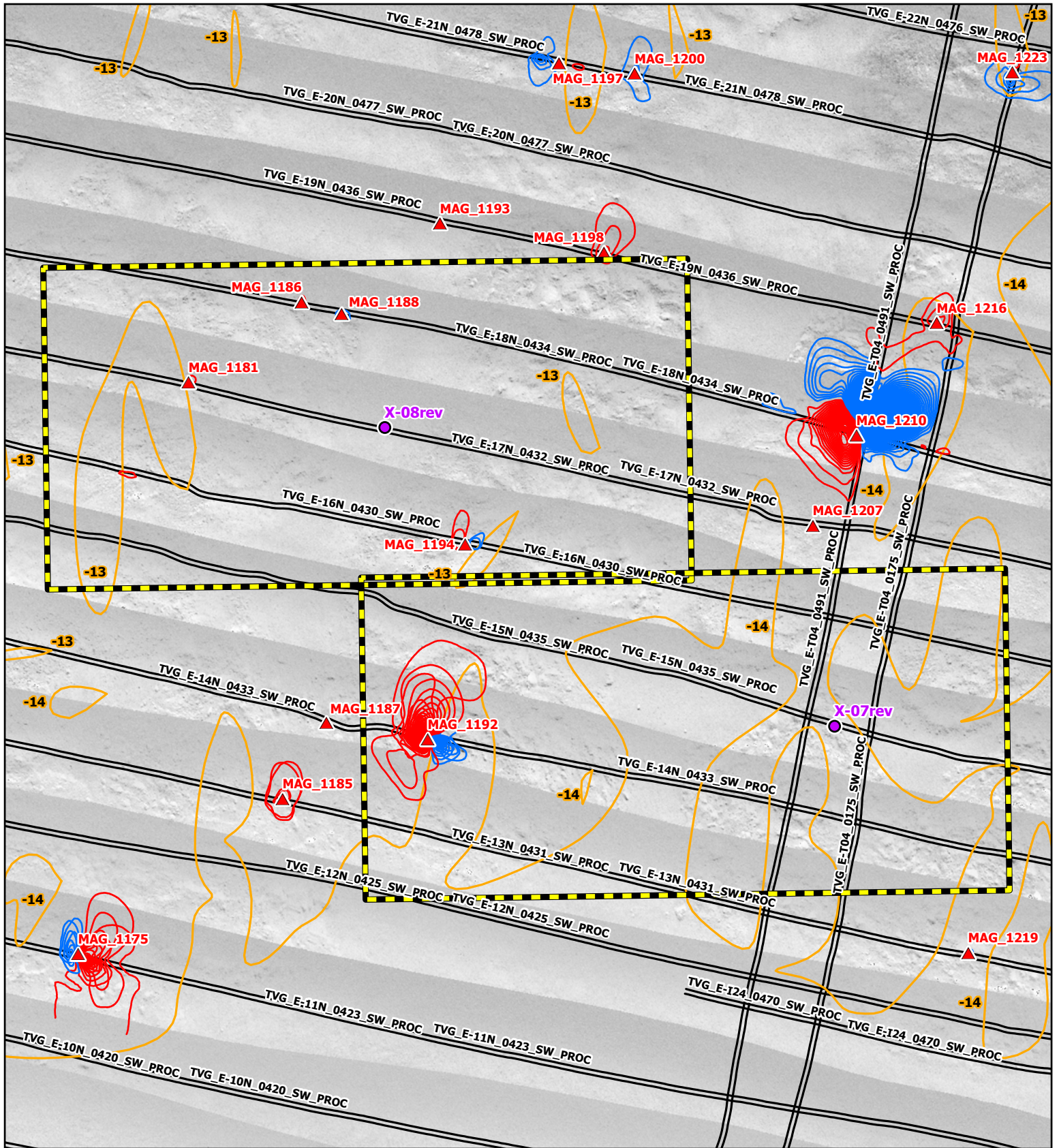
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- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
*Geotechnical Clearance: Blocks E and F*  
**Map: 11**  
**X-06rev**



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 MARINE ARCHAEOLOGY FROM STEM TO STERN





- GEOTECHNICAL LOCATION
- ▲ MAGNETIC ANOMALY
- SIDE SCAN SONAR CONTACT
- ECR CENTERLINE
- BATHYMETRIC CONTOUR (1 M INTERVAL)
- TRACKLINE
- MAGNETIC CONTOUR (5 NT)
- NEGATIVE
- POSITIVE
- ▭ ANALYTICAL AREA

Coastal Virginia Offshore Wind Commercial Project  
 Outer Continental Shelf,  
 Offshore Virginia (Lease No. OCS-A-0483)  
*Geotechnical Clearance: Blocks E and F*  
**Map: 12**  
 X-07rev, X-08rev



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 MARINE ARCHAEOLOGY FROM STEM TO STERN

**APPENDIX 2**  
**SEISMIC PROFILES**

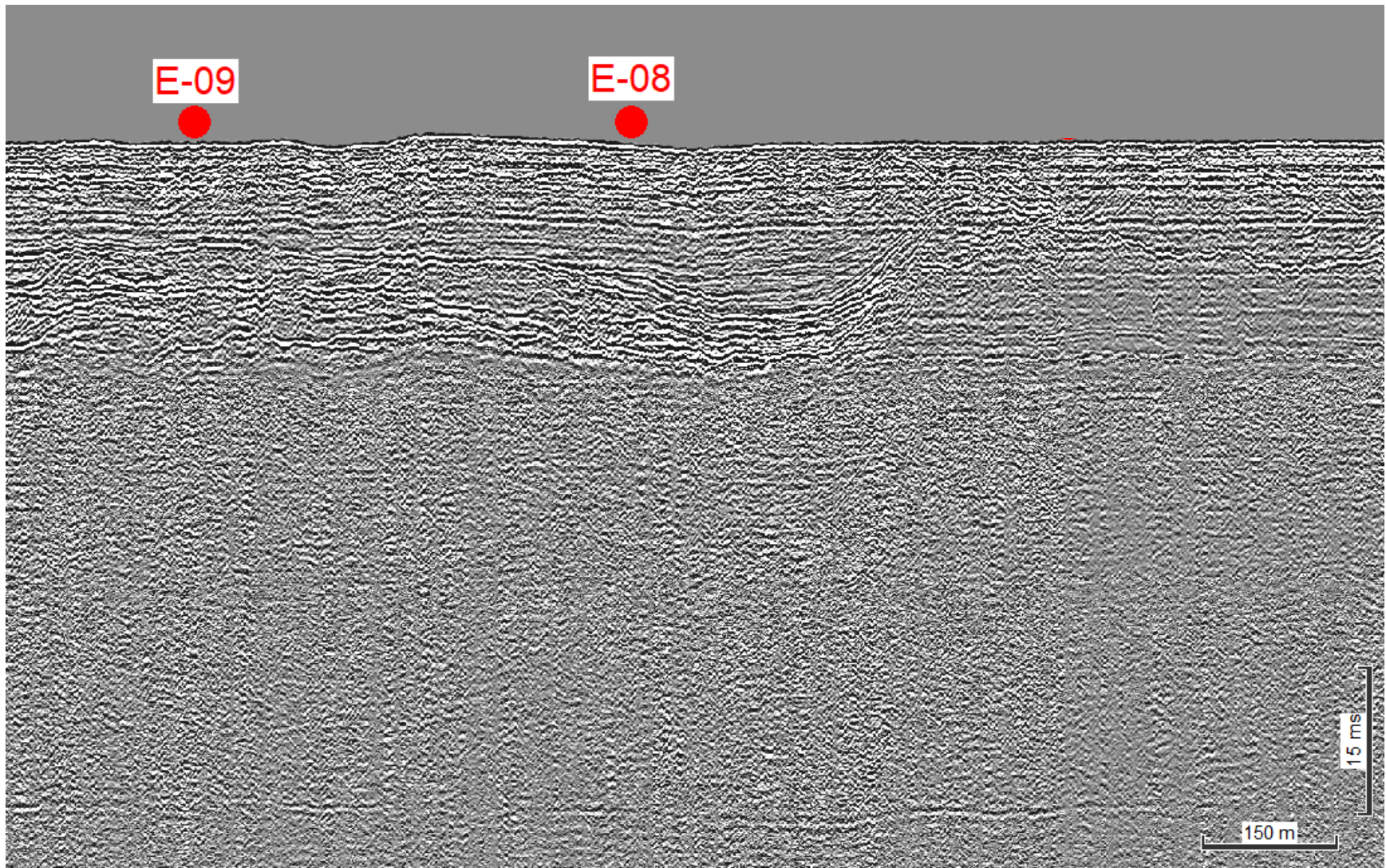


Figure 1: Proposed geotechnical locations E-09 and E-08 in ECR Corridor E along seismic line UHRS\_140\_E-C\_A\_Proc

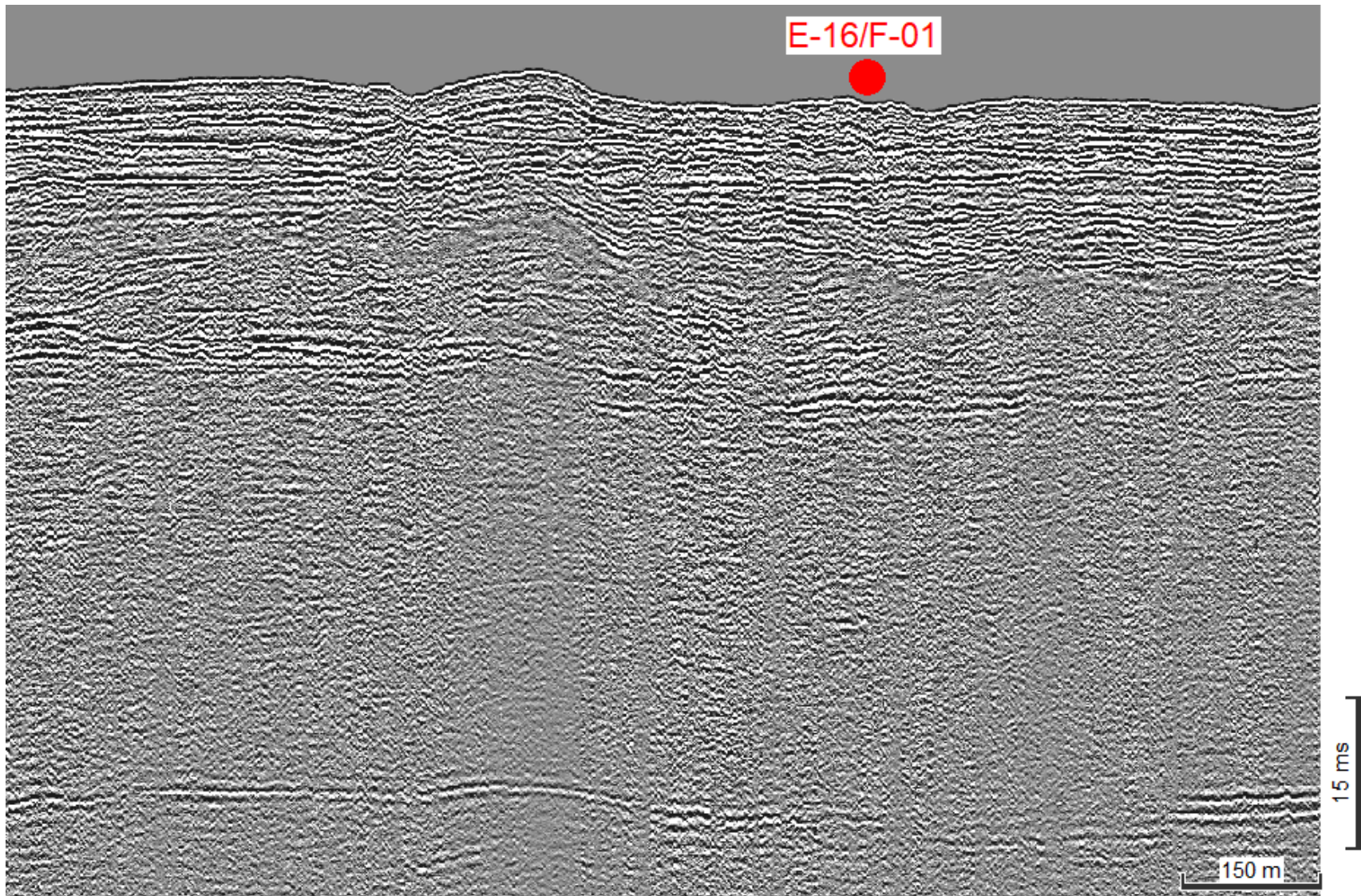


Figure 2: Proposed geotechnical locations E-16/F01 in ECR Corridor E along seismic line UHRS\_124\_F-C\_Proc

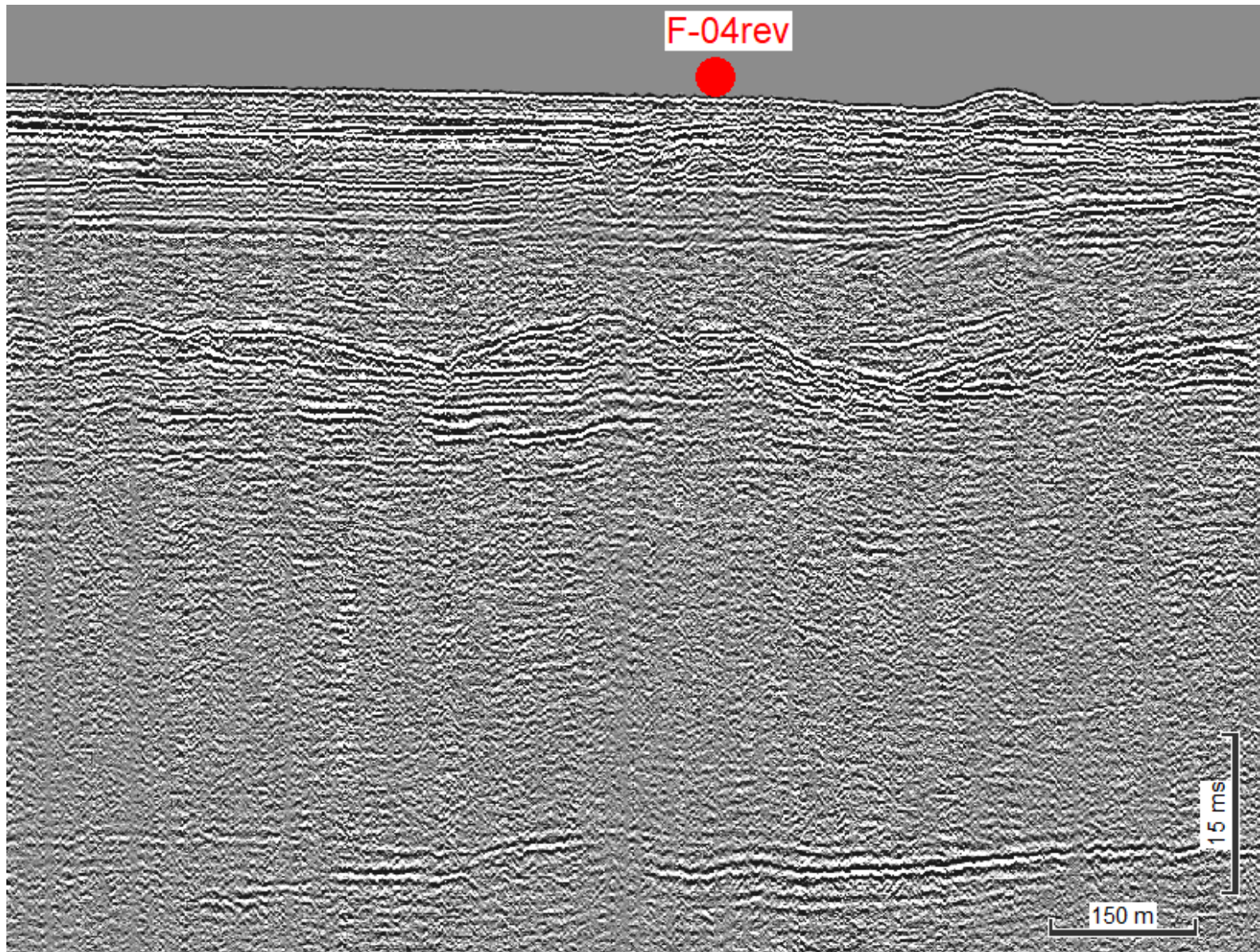


Figure 3: Proposed geotechnical locations F-04rev in ECR Corridor E along seismic line UHRS\_124\_F-C\_Proc

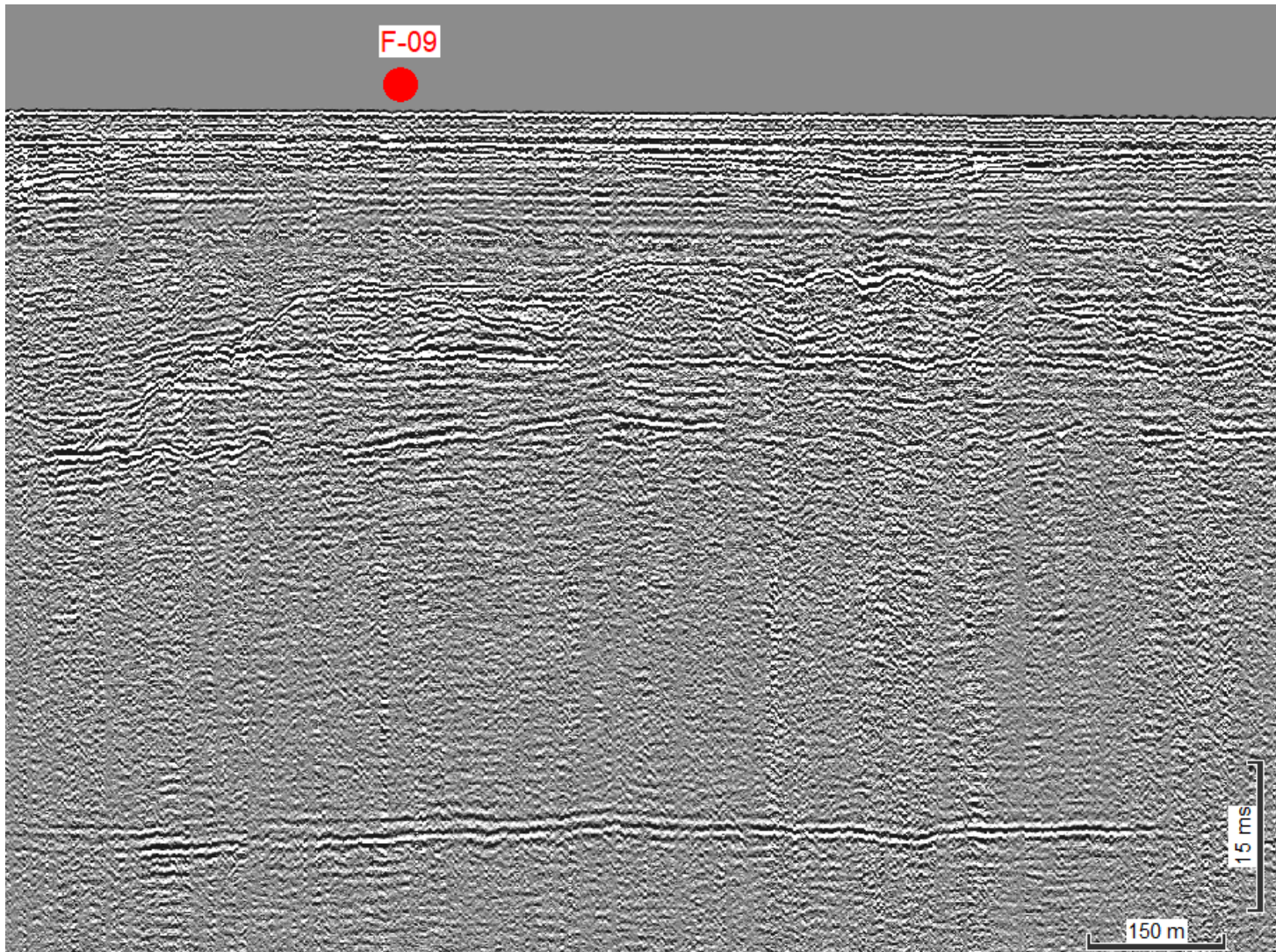


Figure 4: Proposed geotechnical locations F-09 in ECR Corridor E along seismic line UHRS\_124\_F-C\_Proc

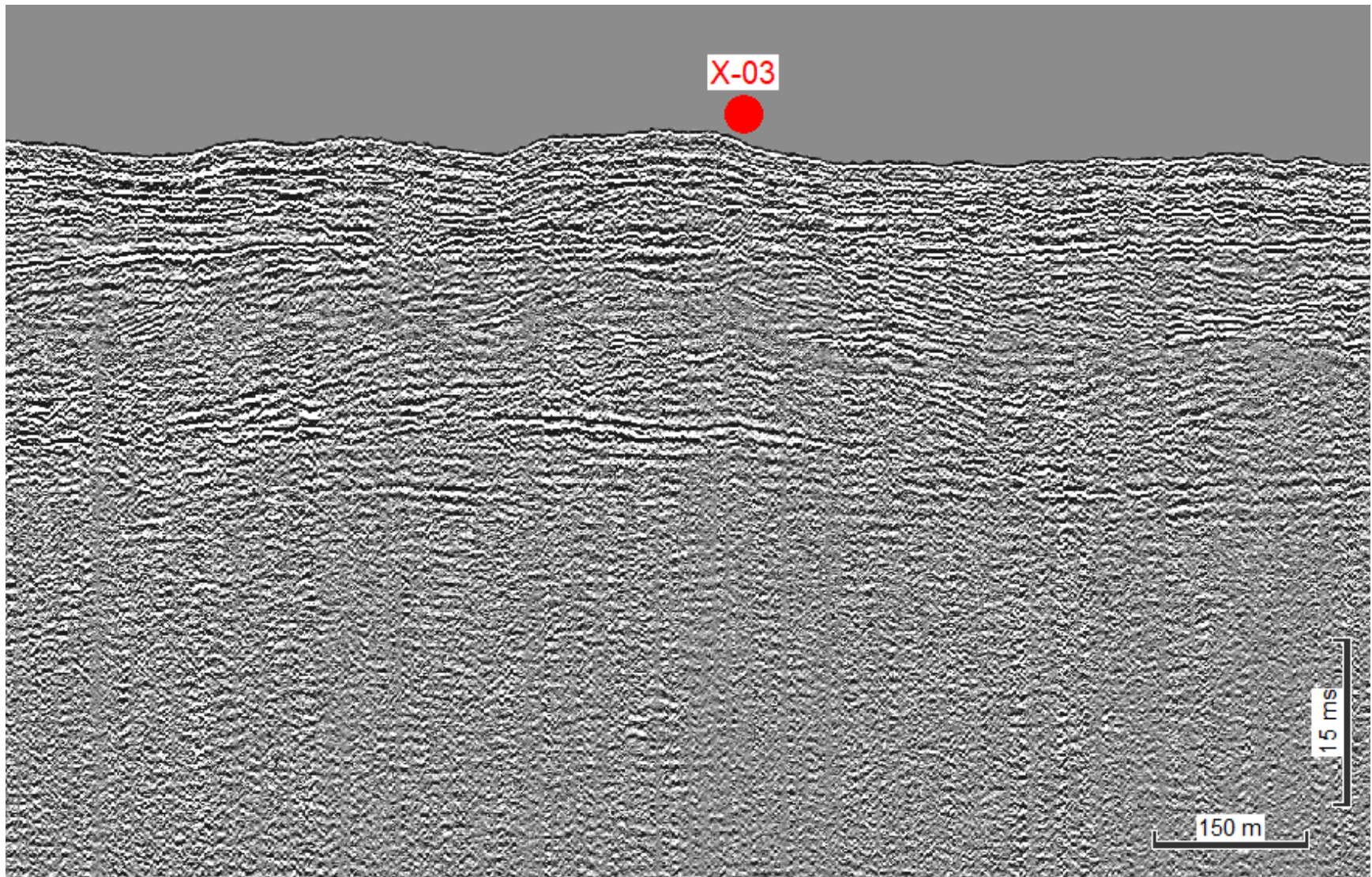


Figure 5: Proposed geotechnical locations X-03 in ECR Corridor E along seismic line UHRS\_136\_F-6S\_Proc

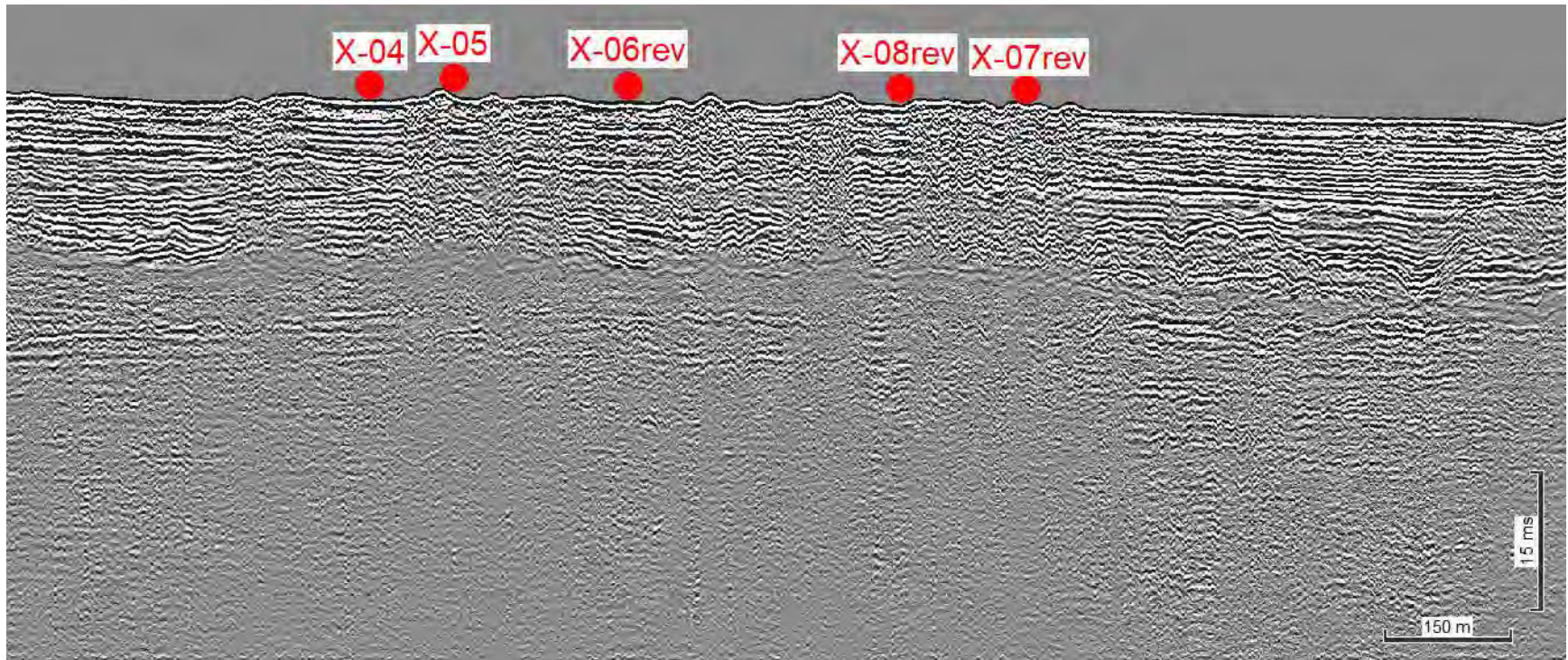


Figure 6: Proposed geotechnical locations X-04, X-05, X-06rev, X-07rev, and X-08rev in the ECR along seismic line UHRS\_E-17N\_SW\_432\_Proc\_MLLW



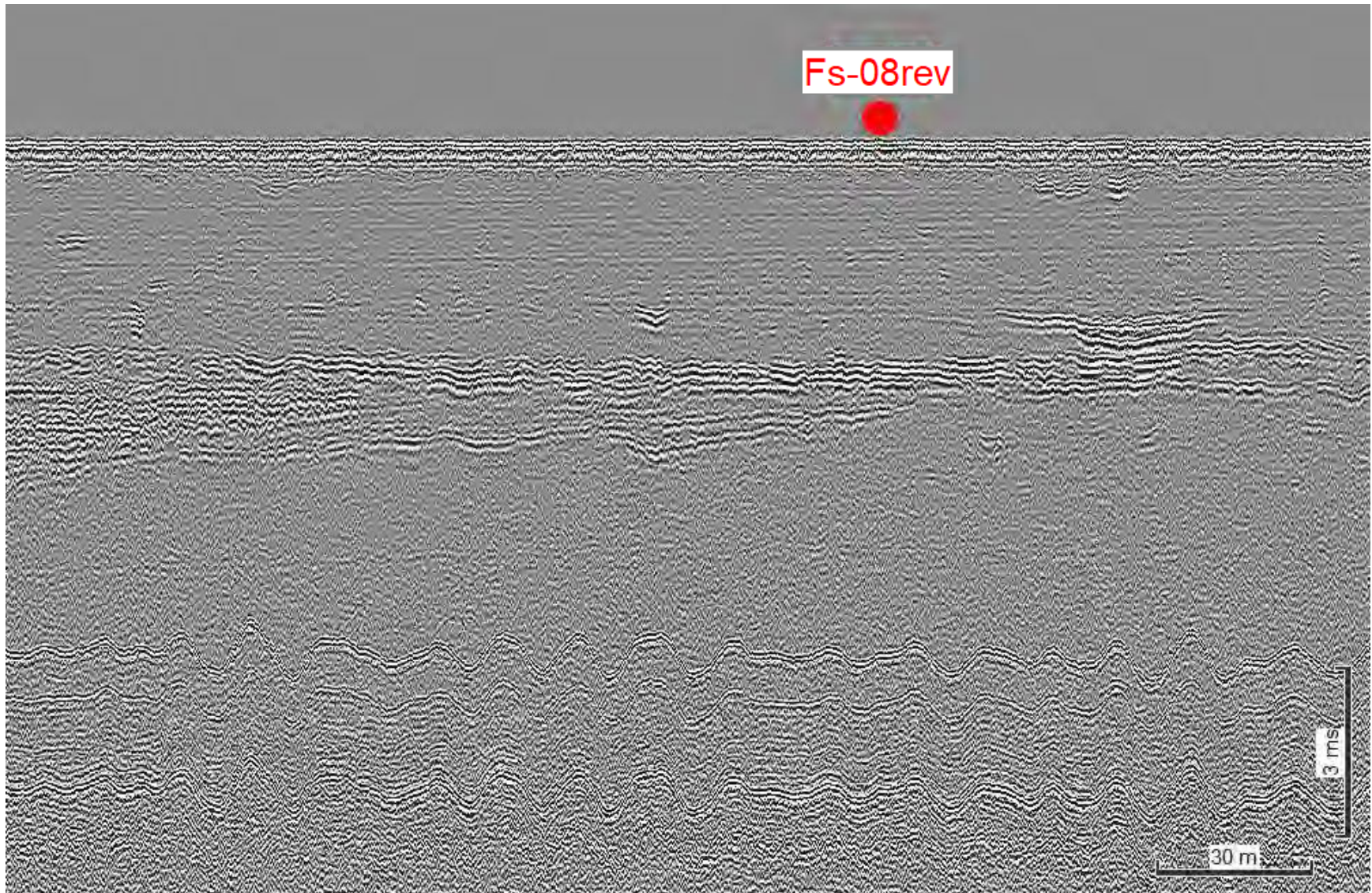


Figure 7: Proposed geotechnical location Fs-08rev in ECR Corridor E along seismic line SPB\_F-27S\_SW\_341\_PROC1\_MLLW

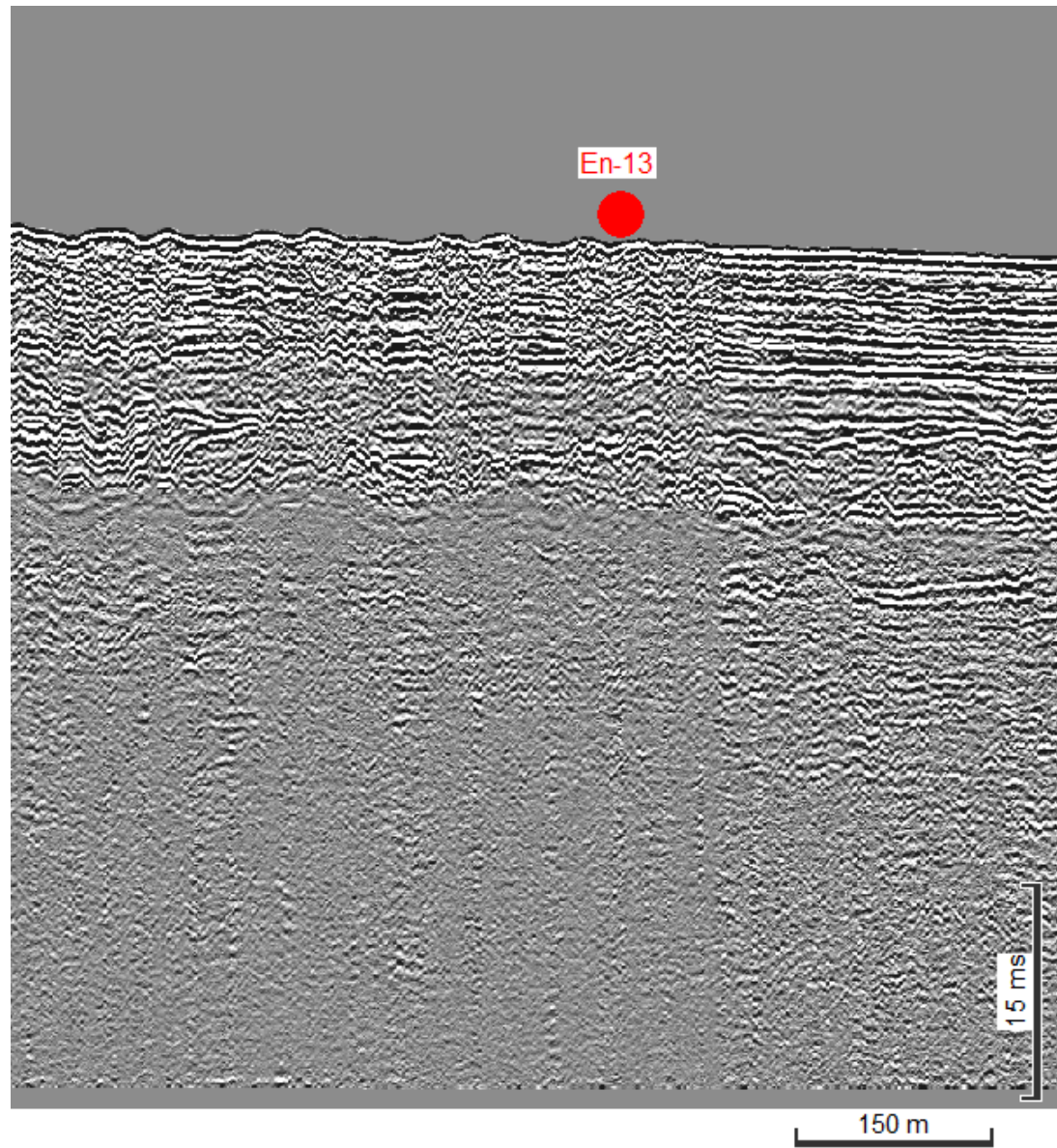


Figure 8: Proposed geotechnical location En13 in ECR Corridor E along seismic line UHRS\_E-14N\_SW\_433\_Proc\_MLLW