



 Property

**Figure 29**  
**1994 Aerial**

Hero Lands Company, L.L.C. vs.  
Chevron U.S.A. Inc., et al.  
Stella Oil & Gas Field  
Plaquemines Parish, Louisiana

Environmental Resources Management  
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Notes:  
January 30, 1994 aerial from USGS Earth Explorer  
(<https://earthexplorer.usgs.gov/>)



 Property

Notes:  
 February 23, 1998 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 30**  
**1998 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana



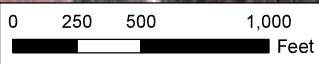


 Property

Notes:  
 December 28, 2002 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 31**  
**2002 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana



 Property

Notes:  
 January 22, 2004 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 32**  
**2004 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana



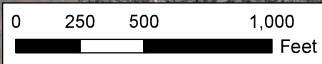
 Property

Notes:  
 October 19, 2005 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 33**  
**2005 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana





 Property

**Figure 34**  
**2006 Aerial**

Hero Lands Company, L.L.C. vs.  
Chevron U.S.A. Inc., et al.  
Stella Oil & Gas Field  
Plaquemines Parish, Louisiana

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Notes:  
May 1, 2006 aerial from USGS Earth Explorer  
(<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N



 Property

Notes:  
 September 20, 2007 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 35**  
**2007 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

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 Property

Notes:  
 October 1, 2008 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 36**  
**2008 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana





 Property

Notes:  
 July 22, 2010 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 37**  
**2010 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana





 Property

Notes:  
 March 24, 2012 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 38**  
**2012 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

Environmental Resources Management  
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 Property

Notes:  
 October 7, 2013 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 39**  
**2013 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana





 Property

Notes:  
 April 30, 2015 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 40**  
**2015 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana





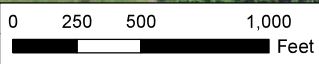
 Property

Notes:  
 September 12, 2017 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 41**  
**2017 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana





 Property

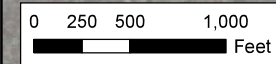
Notes:  
 July 7, 2019 aerial from USGS Earth Explorer  
 (<https://earthexplorer.usgs.gov/>)

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 42**  
**2019 Aerial**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

DRAWN BY: MMG

P:\Projects\0494255 Hero Lands v. Chevron.DU\GIS\Maps\14 Expert Report\143 LDEQ AI Locations.mxd, REVISED: 08/31/2020, SCALE: 1:12,000 when printed at 8.5x11

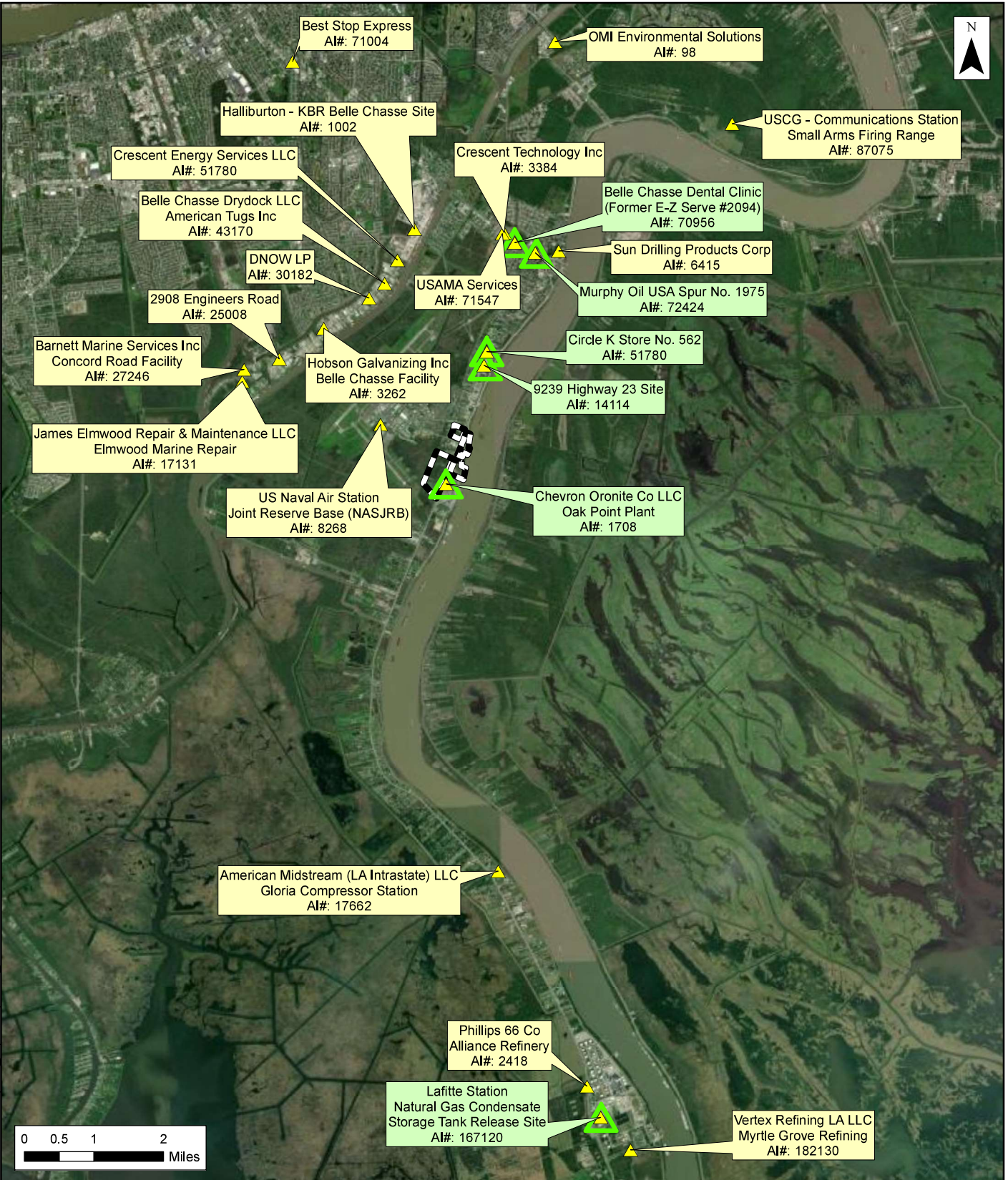


**Property**  
**LDEQ Agency Interest (AI) Location**

Notes:  
 Imagery Basemap via ArcGIS Online.  
 Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 43**  
**LDEQ AI Locations**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

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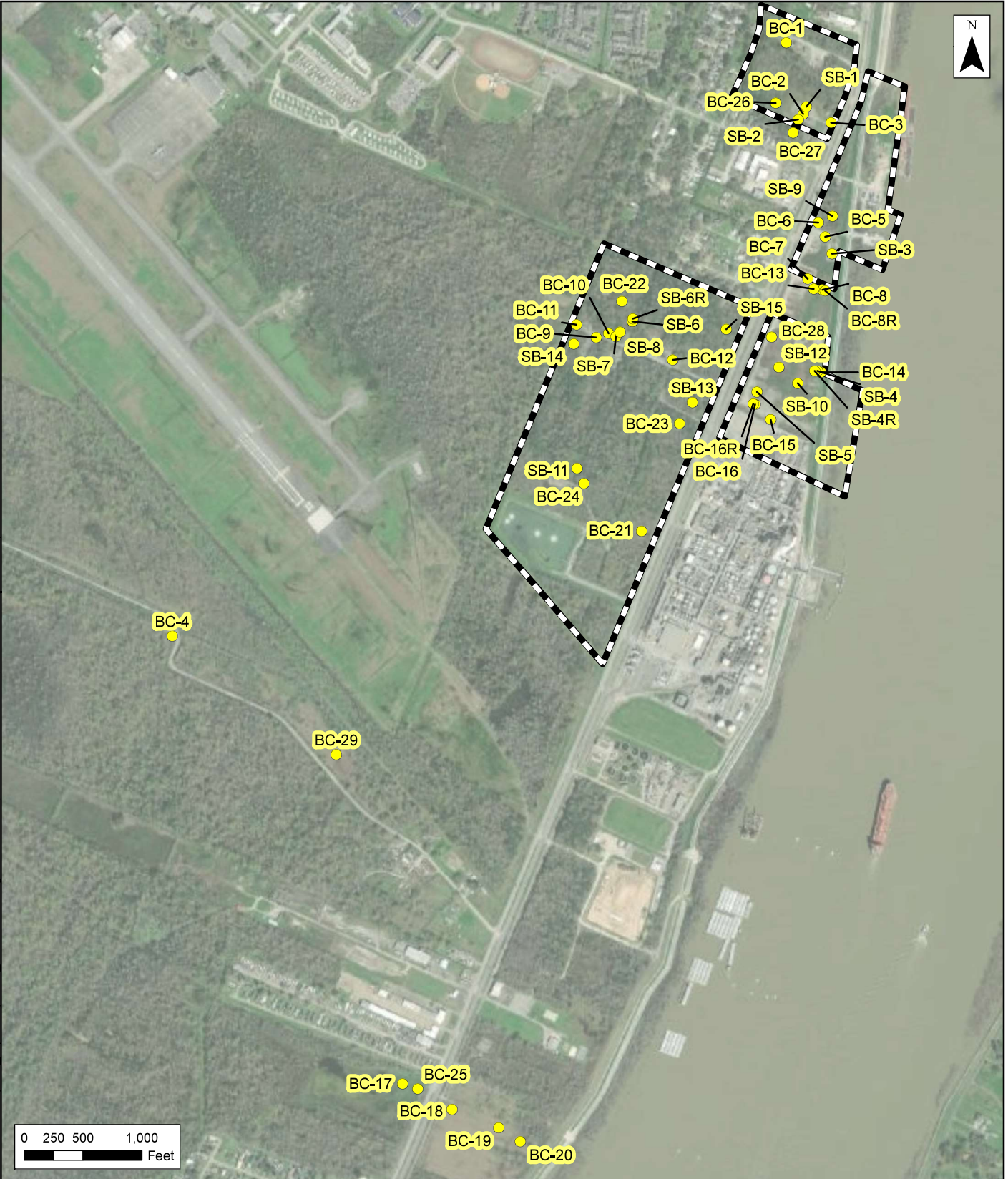


- Property
- LDEQ Agency Interest (AI) Location
- GW Class 3 Determination

Notes:  
 Imagery Basemap via ArcGIS Online.  
 Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 44**  
**Groundwater Class 3 Determinations**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

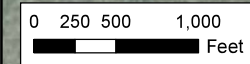






-  Property
-  ICON Soil Boring Location

Notes:  
 Imagery Basemap via ArcGIS Online.  
 Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 45**  
**ICON Soil Boring Locations**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil and Gas Field  
 Plaquemines Parish, Louisiana



-  Property
-  ICON Soil NORM Sample Location

Notes:  
 Imagery Basemap via ArcGIS Online.  
 Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 45**  
**ICON NORM Sample Locations**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil and Gas Field  
 Plaquemines Parish, Louisiana

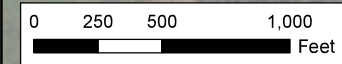




- Property
- ICON Monitoring Well Location

Notes:  
 Imagery Basemap via ArcGIS Online.  
 Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

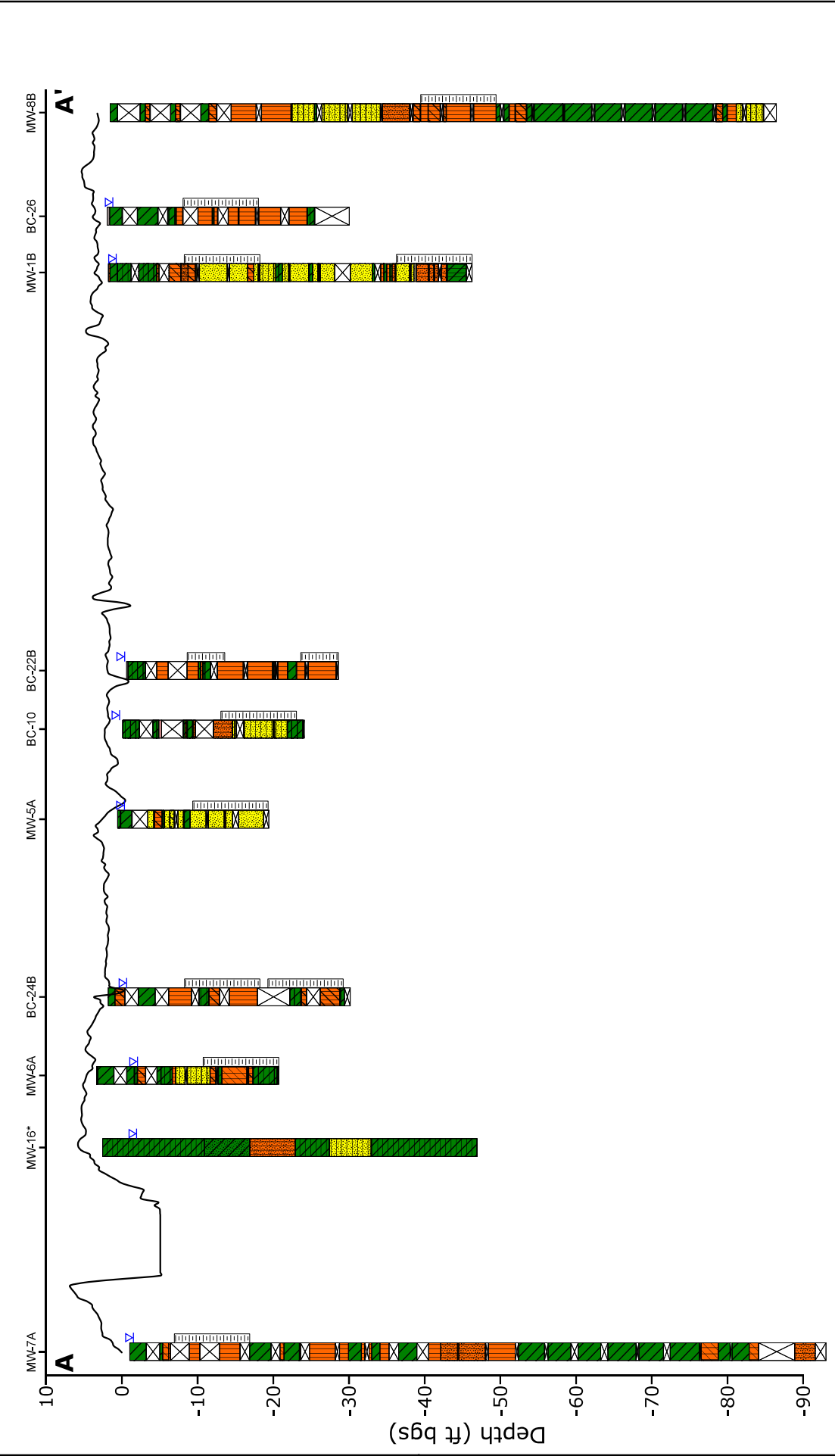
**Figure 48**  
**ICON Monitoring Well Locations**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil and Gas Field  
 Plaquemines Parish, Louisiana



-  Property
-  ERM Monitoring Well Location

Notes:  
 Imagery Basemap via ArcGIS Online.  
 Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 49**  
**ERM Monitoring Well Locations**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil and Gas Field  
 Plaquemines Parish, Louisiana



**Figure 50**  
**Cross Section A-A'**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

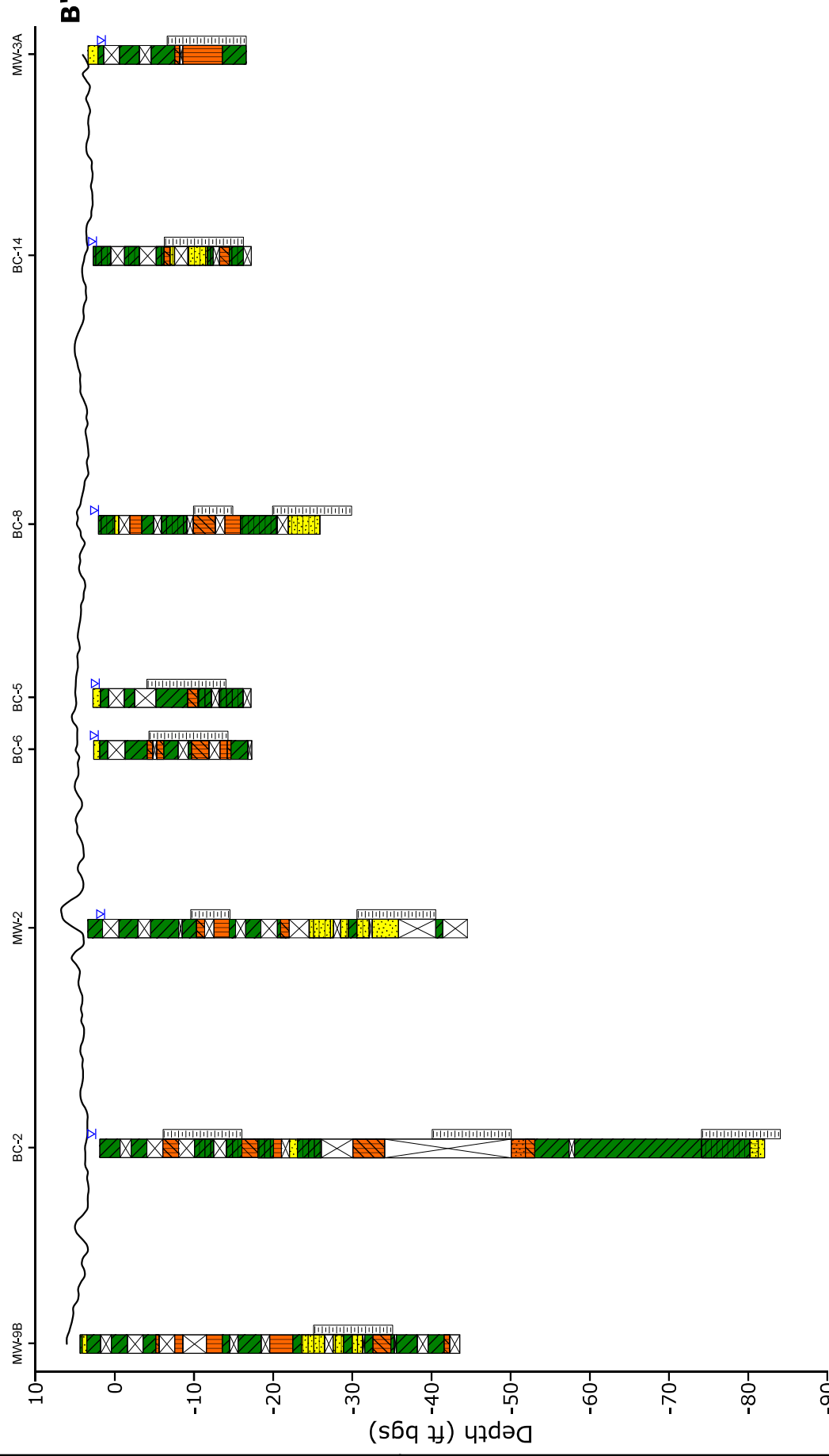
**Notes:**  
 Topographic profile from lidar data.  
 Water levels shown in the A-Zone from 7/27/20  
 corrected to Equivalent Fresh Water Head (EFWH) values.  
 \*MW-16 log obtained from EDMS  
 records for AI #1708. MW-16 screened  
 interval and water level unknown.

20  
10  
0

500 1000 Feet

**Legend:**

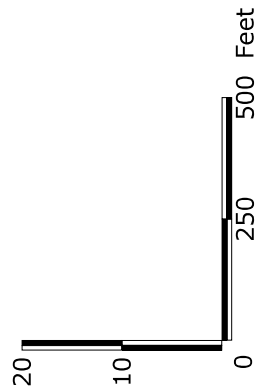
- Clay
- Silty Clay
- Sandy Clay
- Clayey Silt
- Silt
- Sandy Silt
- Clayey Sand
- Silty Sand
- Sand
- No Recovery
- Vegetation
- Shells
- Peat
- Well Screen
- Water Level (EFWH)

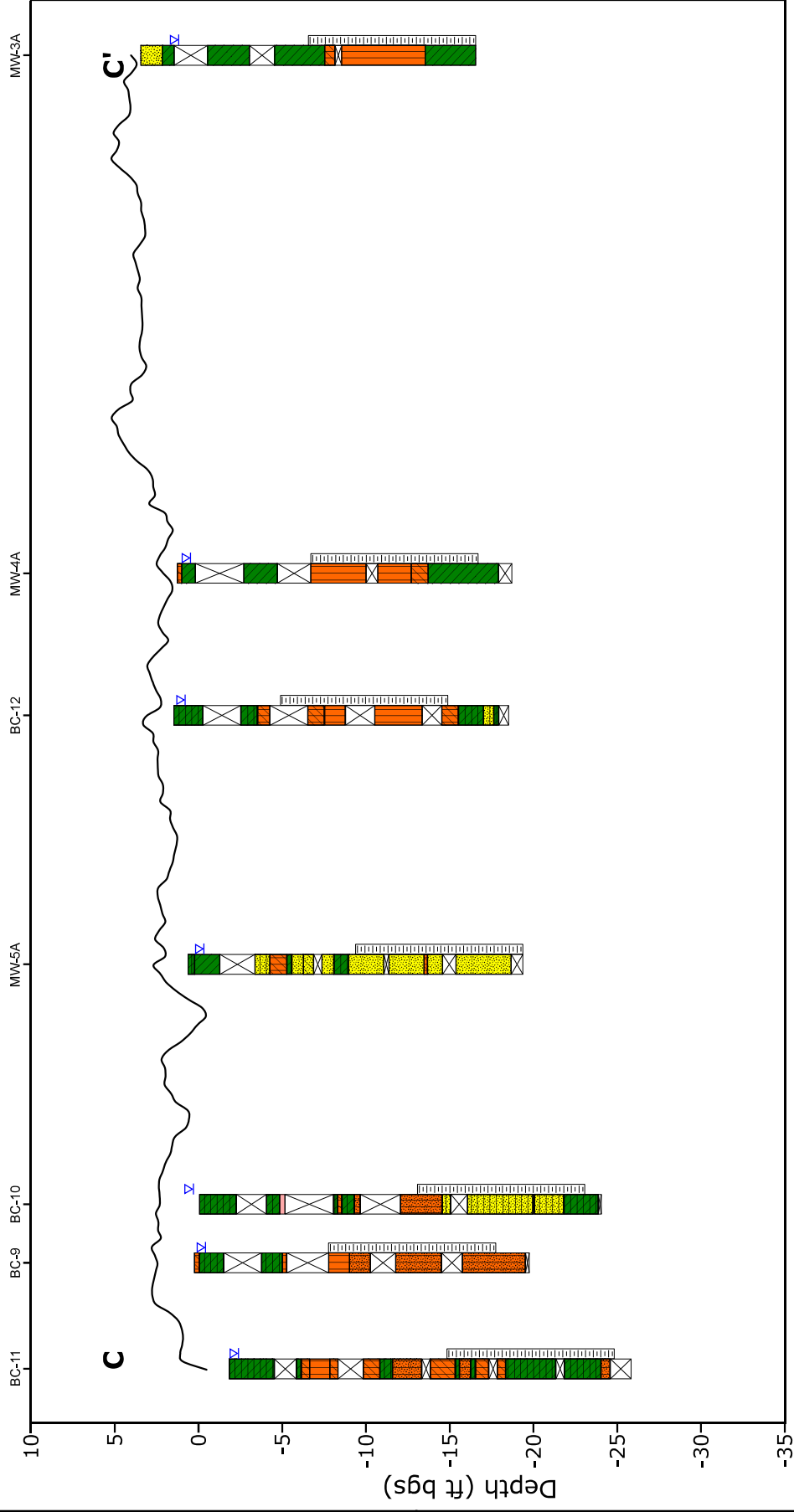


**Figure 51**  
**Cross Section B-B'**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

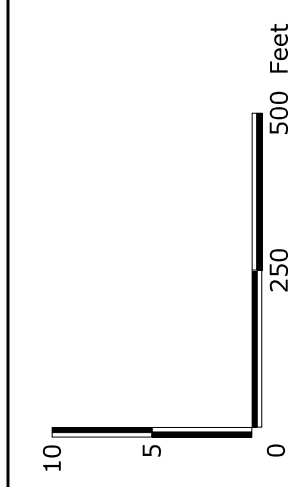
Environmental Resources Management  
 www.erm.com  
 ERM

Notes:  
 Topographic profile from lidar data.  
 Water levels shown in the A-Zone from 7/27/20  
 corrected to Equivalent Fresh Water Head (EFWH) values.  
 BC-2 was also screened from 18-28' (BC-2B),  
 but was P&A'd shortly after installation





- Clay
  - Silty Clay
  - Clayey Silt
  - Silt
  - Sandy Silt
  - Clayey Sand
  - Silty Sand
  - Sand
  - No Recovery
  - Vegetation
  - Shells
- Well Screen
  - Water Level (EFWH)



Notes:  
 Topographic profile from lidar data.  
 Water levels shown in the A-Zone from 7/27/20  
 corrected to Equivalent Fresh Water Head (EFWH) values.

**Figure 52**  
**Cross Section C-C'**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil & Gas Field  
 Plaquemines Parish, Louisiana

Environmental Resources Management  
 www.erm.com  
 ERM

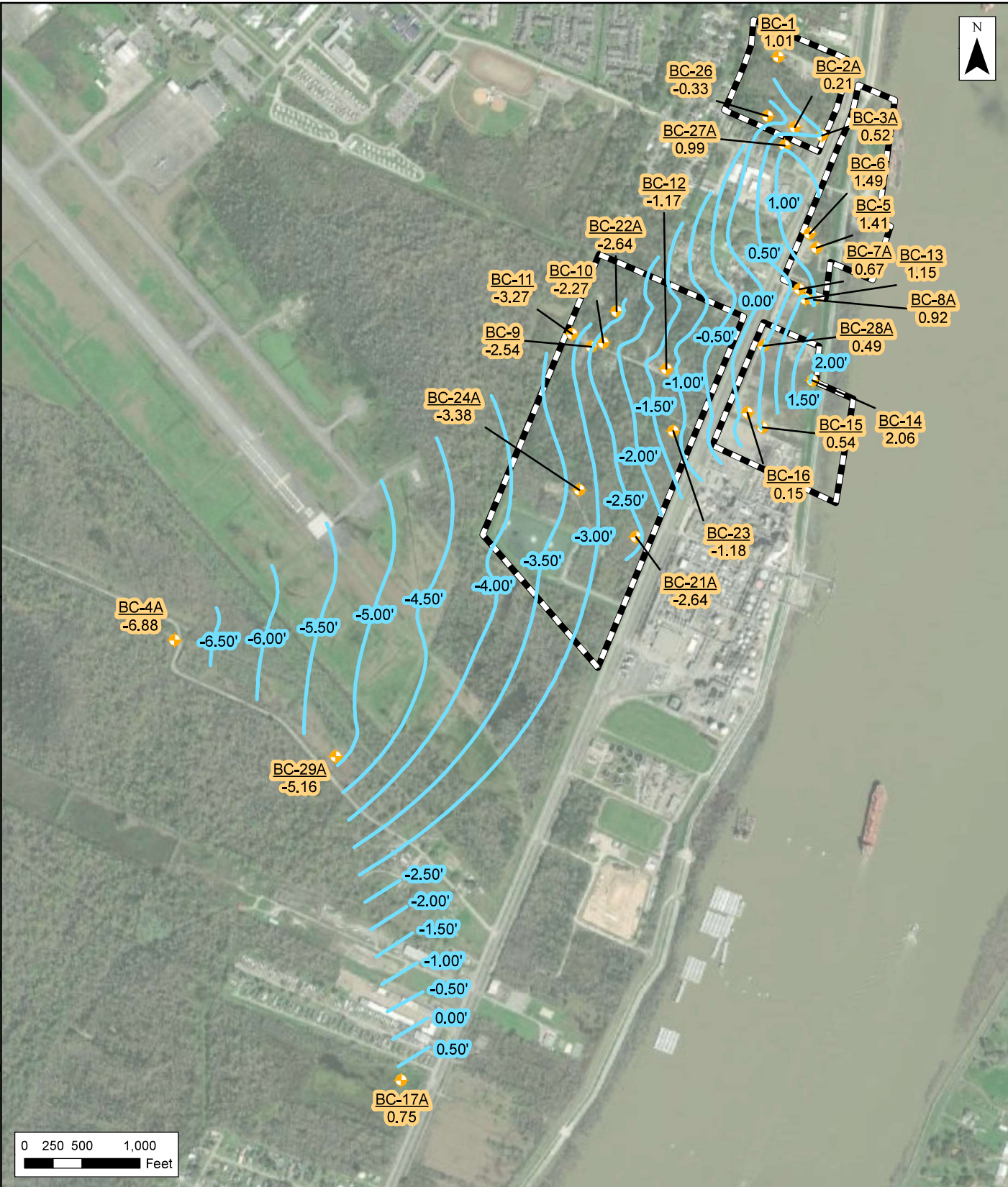




- Property
- ERM Monitoring Well Location
- ICON Monitoring Well Location
- AI # 1708 Well
- A-A'
- B-B'
- C-C'

Notes:  
 MW-16 well location based on EDMS records for AI #1708  
 Imagery Basemap via ArcGIS Online.

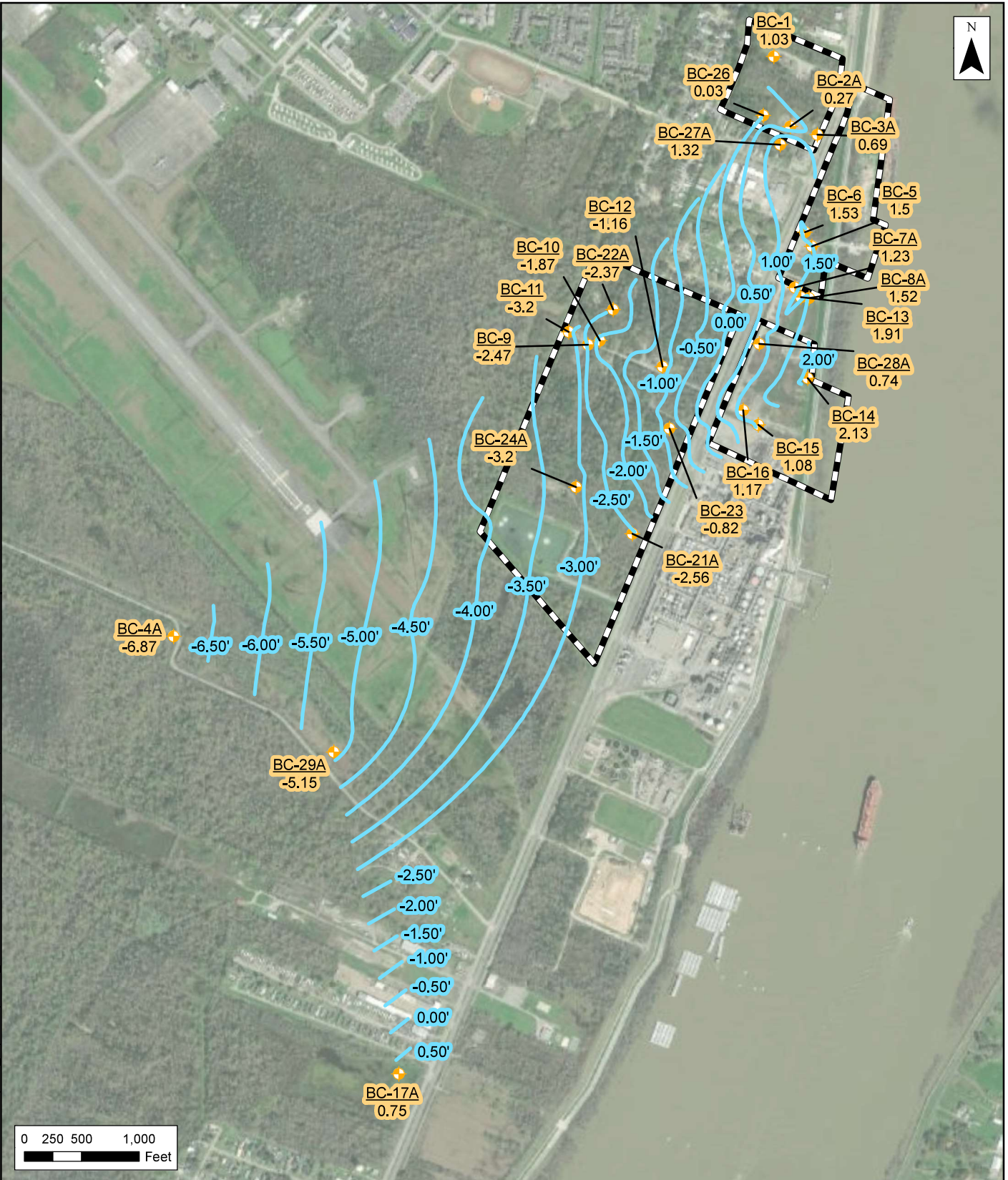
**Figure 53**  
**Cross Section Transect Map**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil and Gas Field  
 Plaquemines Parish, Louisiana



- Property
- ICON A-Zone MW
- Potentiometric Surface Contour

Notes:  
 Water level measurements were taken 5/7/2019.  
 Elevation Information based on Survey Data.  
 BC-3A measurement obtained from ICON.  
 Imagery Basemap via ArcGIS Online.

**Figure 54**  
**A Zone Potentiometric Surface Map - 05-2019**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil and Gas Field  
 Plaquemines Parish, Louisiana



- Property
- ICON A-Zone MW
- Potentiometric Surface Contour

Notes:  
 Water level measurements were taken 5/7/2019.  
 Elevation Information based on Survey Data.  
 Water levels corrected to equivalent fresh water head.  
 BC-3B measurement obtained from ICON.  
 Imagery Basemap via ArcGIS Online.

Source: Esri - ArcGIS Online; NAD 1983 UTM Zone 15N

**Figure 55**  
**A Zone EFWH Potentiometric Surface Map 05-2019**  
 Hero Lands Company, L.L.C. vs.  
 Chevron U.S.A. Inc., et al.  
 Stella Oil and Gas Field  
 Plaquemines Parish, Louisiana

