

# INCIDENT ACTION PLAN

Be brief and concise with your entries

<b>Location</b> <b>Bayou Corne</b> <b>Sink Hole</b>	<b>Control Level</b> <b>Company Supervisory</b>	<b>Operational Period</b> <b>From 6/4/13</b> <b>To 6/5/13</b>
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<p><b>1.0 SITUATION</b> Disease, community, environment</p> <p>PROMPTS: Weather, disease trends, Resources, Hazards &amp; safety</p> <p>REFERENCE: Maps, weather reports, Sitreps, appreciation, warnings, alerts</p>	<p><b>CURRENT</b> Partly cloudy</p> <hr/> <p><b>PREDICTION</b> A mix of clouds and sunshine all day with possible stray afternoon showers. 20% chance of precipitation. High Temperature near 91.</p>
<p><b>2.0 OBJECTIVES (or MISSION)</b></p> <p>PROMPTS: Time &amp; space</p> <p>REFERENCE: Appreciation – control options, courses open to disease</p>	<p><b>CURRENT</b></p> <p><b>Objective 1</b> - Demonstrating sinkhole containment and determining if additional sinkholes could form.</p> <p><b>Objective 2</b> - Locating and mitigating the risk posed by the presence of shallow gas.</p> <p><b>Objective 3</b> - Confirming the broader stability of the Napoleonville Salt Dome.</p> <p><b>Current Actions:</b> <b>(For planning purposes only, all activities are subject to change.)</b></p> <p><b><u>Geophone #1 Well/ OG3A</u></b> - Continue drilling - Continue collecting samples from shale shaker every 10'</p> <p><b><u>ORW Wells/ROI Wells</u></b> - Pump ORW-23 and 24 - Install new flow meters</p> <p><b><u>CPT Well</u></b> - No CPT operations conducted today. - Conducting maintenance.</p> <p><b><u>Containment Berm/Roads/Sinkhole</u></b> - Build up north berm access pad. - Approximately 400 feet of the western portion of the south berm settled overnight and is under water, the deepest area being approximately 3.9 feet below water surface; - Deploy new boom and reconfigure existing boom to provide containment and ensure that no contamination leaves the sinkhole area.</p> <p><b><u>Expected Actions (Next 24 Hours):</u></b> - Continue placement of GCL/geotextile/clay on the west berm extension - CPT operations are expected to resume with CPT 9 - Continue Geophone 1 coring and sampling</p>

	<b>Sinkhole Activity – Code 3</b>
<b>3.0 EXECUTION</b> add safety information as appropriate	
<b>GENERAL OUTLINE</b>  PROMPTS: Strategies & tactics (current/proposed/alternate)  REFERENCE: Appreciation, Control Options	<b>Safety Information: See Attached Safe Work Rules          Reference IAP dated 8/9/12</b>  <b>Additional to our Safe Work Rules for this project we are adding          the awareness of insects, reptiles and animals.</b>  <b>Inspect location for flammability</b>  <b>Daily Safety Meetings</b>  <b>PPE Required on site: Respirator w/ VOC Cartridge, Gloves for          sampling, eye protection, life preservers, hearing protection.</b>
<b>GROUPINGS</b>	<b>NA</b>
<b>TASKS</b> Including PR & Media	<b>Same as above</b>
<b>COORDINATING INSTRUCTIONS</b>  PROMPTS: Timings, routes, assembly areas, staging areas	<b>Texas Brine Grand Bayou Facility will be used as staging area.</b>
<b>4.0 ADMINISTRATION</b> (Logistics support)	
PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)	
<b>SUPPLY</b> WHO, WHAT, WHERE, WHEN of resources not readily available	<b>NA</b>
<b>GROUND SUPPORT</b> Transport of personnel, traffic	<b>NA</b>

mgt, refuelling, mechanical repair/maintenance	
<b>COMMUNICATIONS</b> Installation, maintenance, technical advice	<b>Cell Phone &amp; Landline Communications:</b> <b>Kenneth Blanchard – Area Manager – [REDACTED] ([REDACTED])</b> <b>kblanchard@texasbrine.com</b> <b>Scott Borne – Facility Manager – [REDACTED] ([REDACTED])</b> <b>sborne@texasbrine.com</b> <b>Joel Miller, PE – Consultant – [REDACTED] ([REDACTED]) joel.miller@cox-</b> <b>internet.com</b> <b>Bruce Martin – Operations/PR – [REDACTED] ([REDACTED])</b> <b>bmartin@texasbrine.com</b> <b>Mark Cartwright – Technical/Engineering – [REDACTED] ([REDACTED])</b> <b>mcartwright@unitedbrine.com</b> <b>Scott Whitelaw – Environmental/Safety – [REDACTED] ([REDACTED])</b> <b>swhitelaw@tum.com</b>
<b>STAGING AREA/ FCP</b> Setting up, communications, staffing	<b>Texas Brine Grand Bayou Facility</b> <b>1301 Hwy 70 South, Belle Rose, La 70341</b>
<b>5.0 ADMINISTRATION (Logistics services)</b>	
PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)	
<b>FACILITIES</b> Security, waste, cleaning	<b>NA</b>
<b>CATERING</b>	<b>NA</b>
<b>OH&amp;S/MEDICAL</b> Medical plan, first aid plan	<b>Call 911</b>
<b>FINANCE</b>	<b>NA</b>
<b>TRAVEL</b>	<b>NA</b>
<b>INDUCTION/ TRAINING</b>	<b>NA</b>
<b>ACCOMMODATION</b>	<b>NA</b>

<b>6.0 CONTROL, COORDINATION &amp; COMMUNICATION</b>	
<b>CONTROL &amp; COORDINATION STRUCTURE</b>  REFERENCE Structural Chart	<b>Plant Management Supervision / Contractor Work</b>
<b>COORDINATION &amp; LIAISON</b>  Local knowledge, police, agency reps, emergency mgt reps	<b>NA</b>
<b>COMMUNICATIONS</b>  PROMPTS Communications structure, operational comms plan, information mgt	<b>Plant Management – Contractor Communication via Cell Phone</b>

<b>EXTRAS</b>	
<b>Attachments</b> PROMPTS: maps, weather, organisational charts, resources, comms diagram	<b>Current Weather Safe Work Rules</b>
<b>Plan developers</b> PROMPTS PO, Logs Mgr, Controller	<b>NA</b>
<b>Approval</b> Controller, Ops Director	<b>TBC Company Rep: William Booher</b> <b>FOSC:</b> <b>SOSC:</b> <b>POSC:</b>

**Belle Rose, Louisiana, United States**

**Today's Forecast:** Tuesday, 4 Jun 2013

**91°F**  
**74°F**

**Sky Conditions:** Partly Cloudy  
**Sunrise:** 6:03 AM **Sunset:** 8:02 PM  
**Wind:** E (85°) @ 8Mph  
**Precipitation Probability:** 20%



[View your complete Local Weather »](#)

**Extended Forecast [Full 10-Day Forecast »](#)**

<b>Wednesday</b> 5 Jun 2013	<b>Thursday</b> 6 Jun 2013	<b>Friday</b> 7 Jun 2013	<b>Saturday</b> 8 Jun 2013
Isolated Thunderstorms	Isolated Thunderstorms	Isolated Thunderstorms	Isolated Thunderstorms
<b>91°F</b> <b>74°F</b>	<b>87°F</b> <b>74°F</b>	<b>90°F</b> <b>73°F</b>	<b>89°F</b> <b>73°F</b>

**Detailed Forecast**

**Today:**

Sun and clouds mixed. A stray afternoon thunderstorm is possible. High 91F. Winds E at 5 to 10 mph.

**Tonight:**

A stray thunderstorm is possible through the evening. Partly cloudy skies. Low 74F. Winds ESE at 5 to 10 mph.

**Tomorrow:**

A mix of clouds and sun with the chance of an isolated thunderstorm in the afternoon. High 91F. Winds ENE at 10 to 20 mph. Chance of rain 30%.

June 3, 2013

Mr. Bruce Martin  
Vice President of Operations  
Texas Brine Company, LLC  
4800 San Felipe  
Houston, TX 77056

Dear Mr. Martin:

**RE: In-Place Inclinometer, Tiltmeter, and Water-Level Monitoring System, Napoleonville Dome Weekly Report: May 25, 2013, Through May 31, 2013**

RESPEC is pleased to submit this weekly report on the in-place inclinometer (IPI), tiltmeter, and water-level monitoring system installed around the sinkhole located near the western flank of the Napoleonville Dome, Assumption Parish, Louisiana. Water-level data in this report and the attached Excel file are submitted in response to Directive #5 contained in the October 11, 2012, Third Amendment to Declaration of Emergency and Directive from the Department of Natural Resources Office of Conservation. IPI and tiltmeter data are also attached as Excel files.

Monitoring locations are illustrated in Figure 1, and graphs that illustrate the tilt data, as recorded by each instrument, are provided in Figures 2 through 4. The IPI data for the *X*-directions and *Y*-directions are plotted separately in Figures 2 and 3, respectively. The tiltmeter data for both the *X*- and *Y*-directions are plotted in Figure 4. A condition reflecting no changes in ground movement plots as a horizontal line on these graphs. Note that the instruments installed are very sensitive; they can measure ground tilt to less than 1/1,000 of a degree. Inclinometer alarm levels are set at  $\pm 1.0$  degree and tiltmeter alarms are set at  $\pm 0.5$  degree.

This week, tilt readings from inclinometer IPI-3a indicate a 0.23 degree movement toward the south. IPI-4 and IPI-5 became submerged and communication with the instruments was lost at 13:00 on May 10 because of a breach in the western berm after a heavy rainstorm. Instruments are still below water level and cannot be safely retrieved until water levels decrease. Figure 5 shows water-level temporal trends at the IPI-2 and Rig Access Road transducers. Figure 6 shows water-level temporal trends at the Pad 3 and Rig Access Road transducers. Water levels inside the berm dropped approximately 0.3 foot this week, as measured by the IPI-2 transducer.

Sincerely,

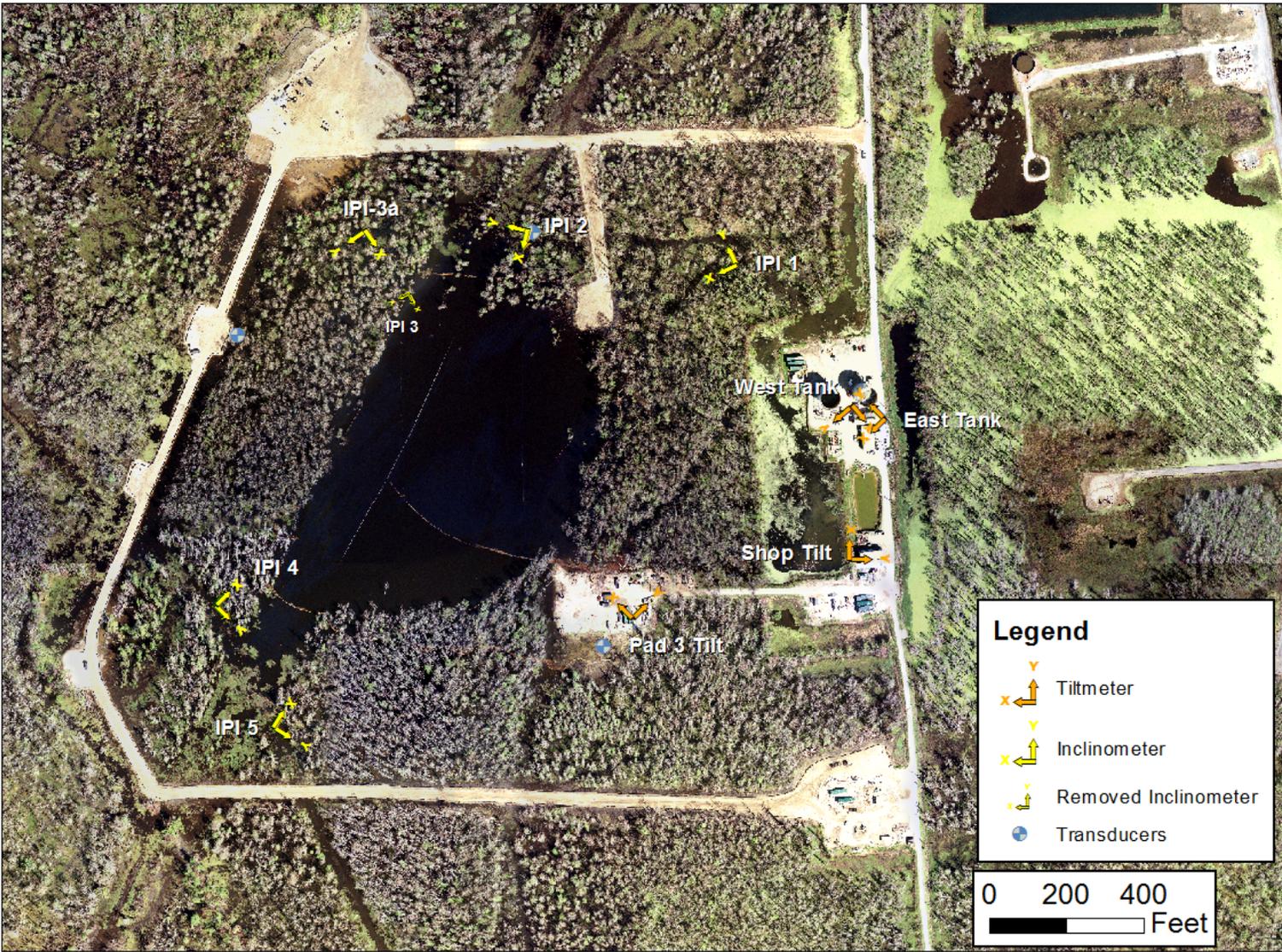


Eric L. Krantz  
Engineer

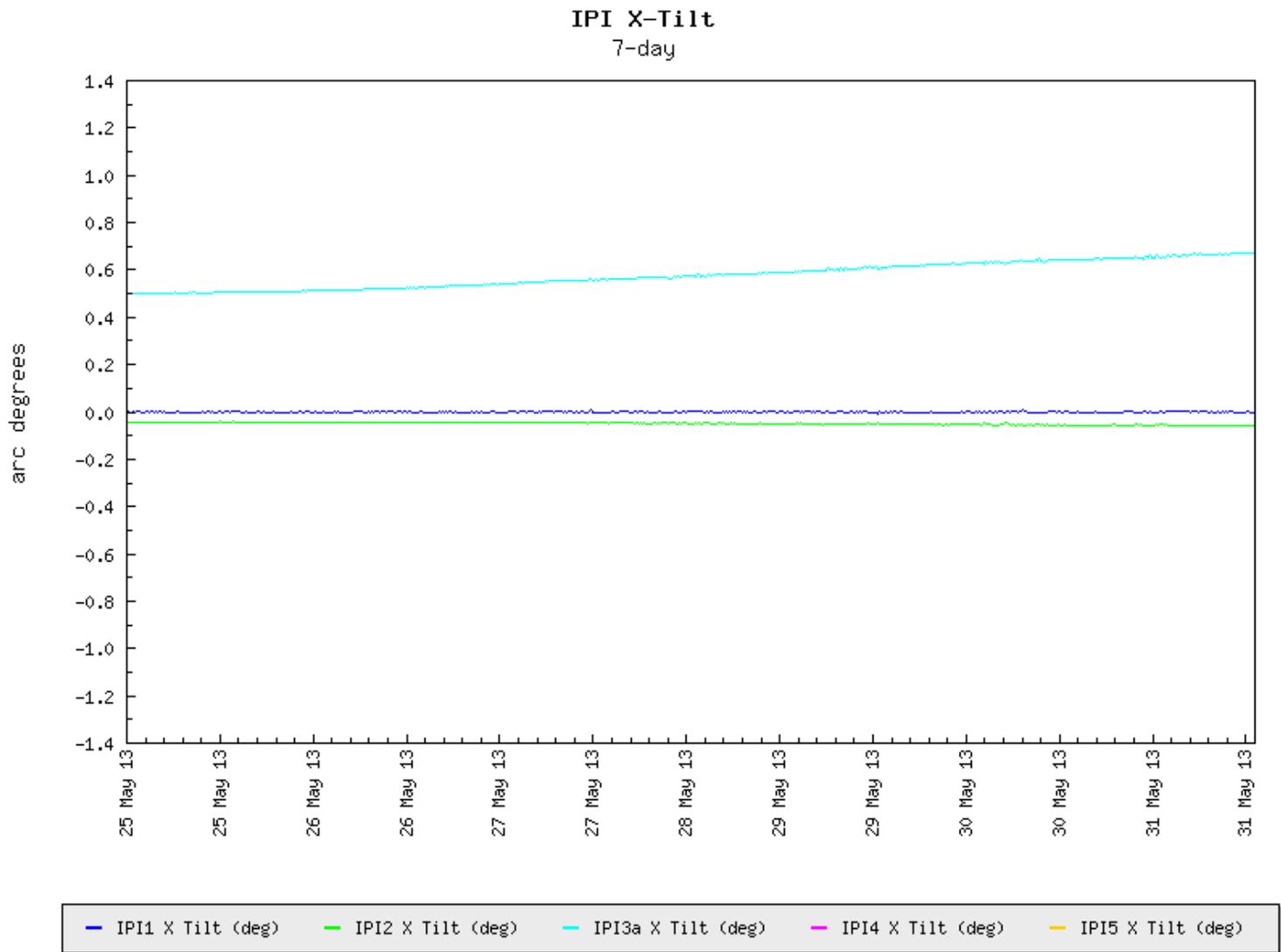
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Enclosure

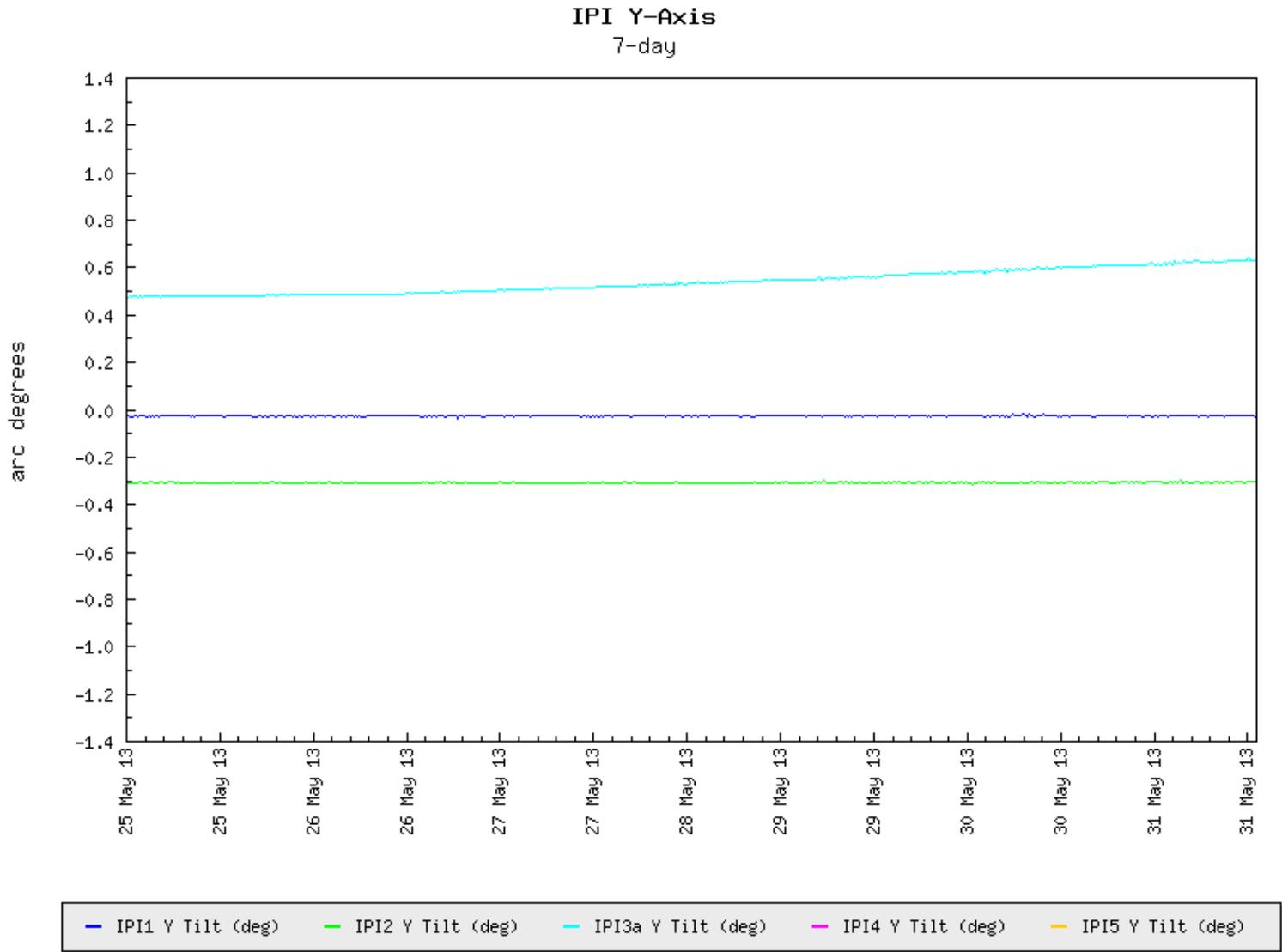
cc: Mr. Mark Cartwright, Texas Brine Company, LLC  
Mr. Scott Borne, Texas Brine Company, LLC  
Project Central File 2153 — Category C



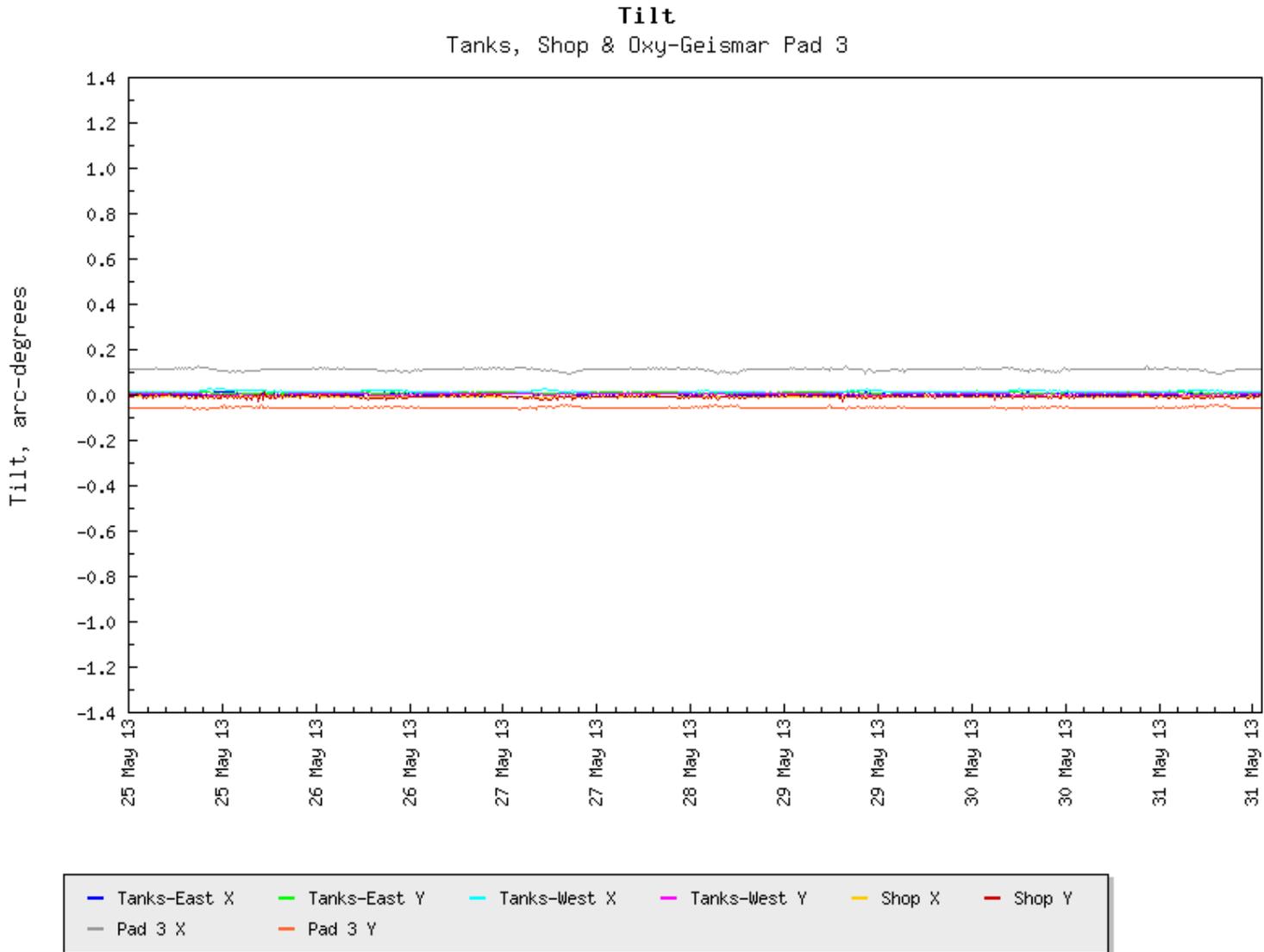
**Figure 1.** Monitoring Locations Showing the New Location of IPI-3a.



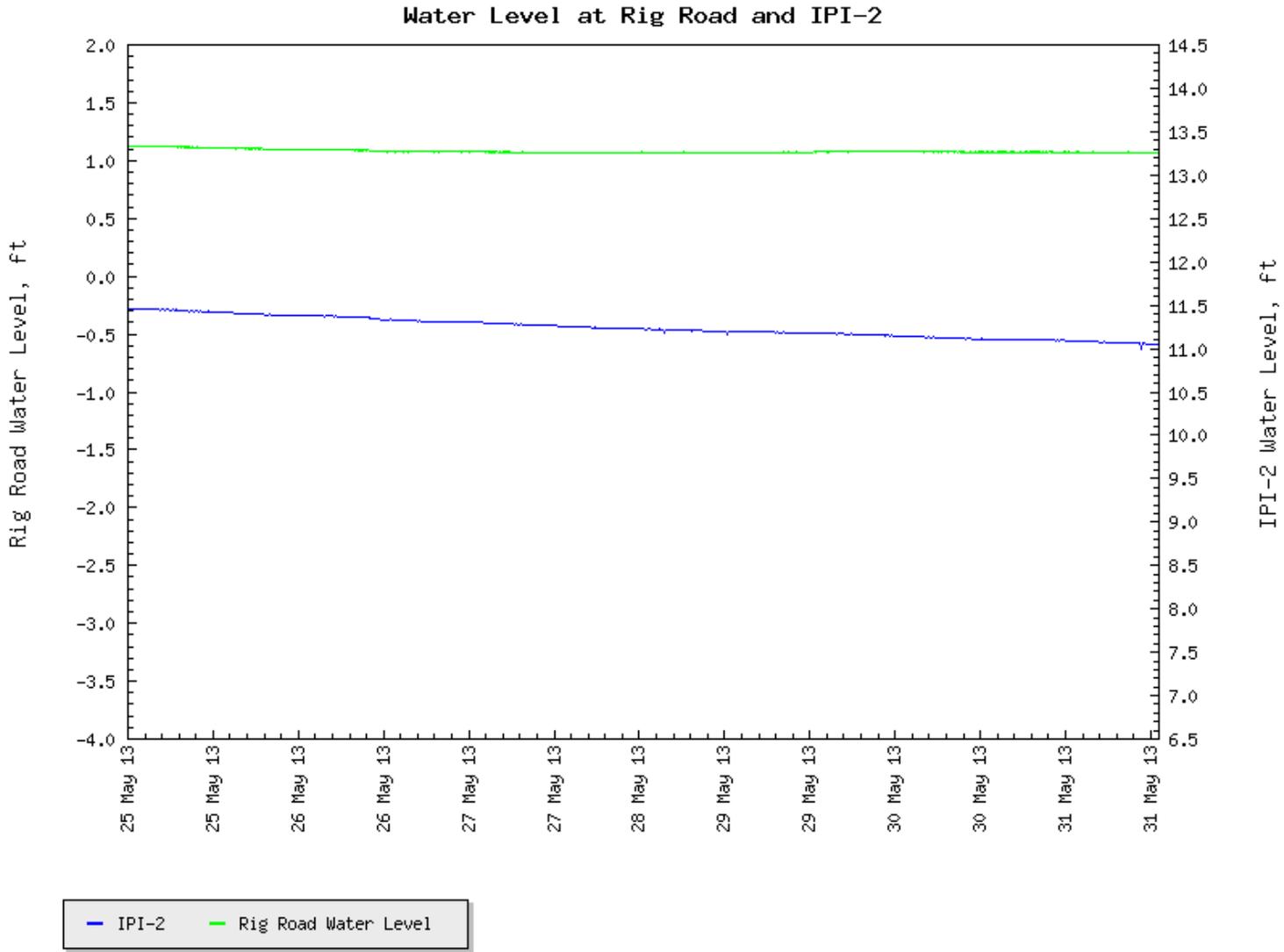
**Figure 2.** Inclinometer X-Direction Temporal Trends.



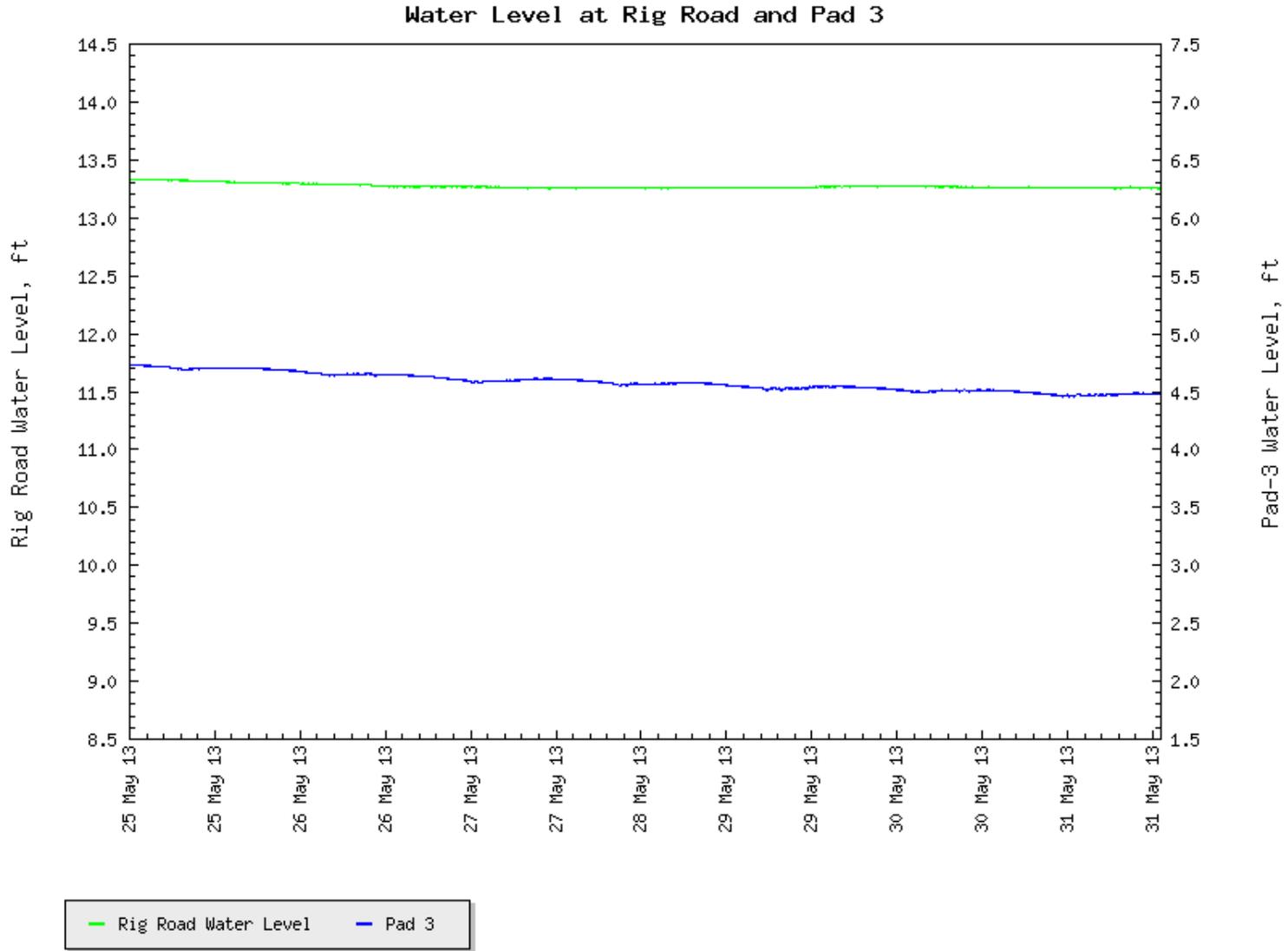
**Figure 3.** Inclinerometer Y-Direction Temporal Trends.



**Figure 4.** Tiltmeter Temporal Trends.



**Figure 5.** Water-Level Temporal Trends Showing Rig Access Road Data and IPI-2 Data.



**Figure 6.** Water-Level Temporal Trends Showing Rig Access Road Data and Pad 3 Data.