

INCIDENT ACTION PLAN

Be brief and concise with your entries

Location Bayou Corne Sink Hole	Control Level Company Supervisory	Operational Period From 1/15/13 To 1/16/13
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<p>1.0 SITUATION Disease, community, environment</p> <p>PROMPTS: Weather, disease trends, Resources, Hazards & safety</p> <p>REFERENCE: Maps, weather reports, Sitreps, appreciation, warnings, alerts</p>	<p>CURRENT Partly Cloudy</p>
	<p>PREDICT Isolated thunderstorms</p>
<p>2.0 OBJECTIVES (or MISSION)</p> <p>PROMPTS: Time & space</p> <p>REFERENCE: Appreciation – control options, courses open to disease</p>	<p>CURRENT Objective 1 - Gas Monitoring:</p> <p>3 Gas Monitors have been set up in the field and are obtaining data on a continuous basis.</p> <p>The monitors are running on batteries which must be changed out every morning. Three monitors are located in the swamp and are required to be reached via airboats launched from TBC facilities.</p> <p>The continuous monitoring data is collected at an office trailer located at Texas Brine Grand Bayou Facility. Monitoring the information on a 24 hours basis. Monitoring is being recorded for LEL, VOC, H2S and O2.</p> <p>Respec Mining & Energy: In-place inclinometers and tilt meter monitoring system, weekly report See Attached</p> <p>Objective 2- Elevation survey taking place once a week.</p> <p>Objective 3- Sink hole observation. No slough in / Light bubbling</p> <p>Phase 2 of the remediation plan continues. We are using one vacuum truck, and duck bill skimmer to remove hydrocarbons pooled along East side of sink hole. See Attached Plan.</p>
	<p>ALTERNATE</p>

<p>3.0 EXECUTION add safety information as appropriate</p>

GENERAL OUTLINE	Safety Information: See Attached Safe Work Rules
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<p>PROMPTS: Strategies & tactics (current/proposed/alternate)</p> <p>REFERENCE: Appreciation, Control Options</p>	<p style="text-align: center;">Reference IAP dated 8/9/12</p> <p>Additional to our Safe Work Rules for this project we are adding the awareness of insects, reptiles and animals.</p> <p>Inspect location for flammability</p> <p>Daily Safety Meetings</p> <p>PPE Required on site: Respirator w/ VOC Cartridge, Gloves for sampling, eye protection, life preservers, hearing protection.</p>
<p>GROUPINGS</p>	<p>NA</p>
<p>TASKS Including PR & Media</p>	<p>Same as above</p>
<p>COORDINATING INSTRUCTIONS</p> <p>PROMPTS: Timings, routes, assembly areas, staging areas</p>	<p>Texas Brine Grand Bayou Facility will be used as staging area.</p>
<p>4.0 ADMINISTRATION (Logistics support)</p> <p>PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)</p>	
<p>SUPPLY WHO, WHAT, WHERE, WHEN of resources not readily available</p>	<p>NA</p>
<p>GROUND SUPPORT Transport of personnel, traffic mgt, refuelling, mechanical repair/maintenance</p>	<p>NA</p>
<p>COMMUNICATIONS Installation, maintenance, technical advice</p>	<p>Cell Phone & Landline Communications:</p> <p>Kenneth Blanchard – Area Manager – 985- [REDACTED] (985- [REDACTED]) kblanchard@texasbrine.com</p> <p>Scott Borne – Facility Manager – 985- [REDACTED] (985- [REDACTED]) sborne@texasbrine.com</p> <p>Joel Miller, PE – Consultant – 337- [REDACTED] (337- [REDACTED]) joel.miller@cox-internet.com</p>

	<p>Bruce Martin – Operations/PR – 713- (281-) bmartin@texasbrine.com Mark Cartwright – Technical/Engineering – 713- (281-) mcartwright@unitedbrine.com Scott Whitelaw – Environmental/Safety – 713- (713-) swhitelaw@tum.com</p>
<p>STAGING AREA/ FCP Setting up, communications, staffing</p>	<p>Texas Brine Grand Bayou Facility 1301 Hwy 70 South, Belle Rose, La 70341</p>
<p>5.0 ADMINISTRATION (Logistics services)</p> <p>PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)</p>	
<p>FACILITIES Security, waste, cleaning</p>	<p>NA</p>
<p>CATERING</p>	<p>NA</p>
<p>OH&S/MEDICAL Medical plan, first aid plan</p>	<p>Call 911</p>
<p>FINANCE</p>	<p>NA</p>
<p>TRAVEL</p>	<p>NA</p>
<p>INDUCTION/ TRAINING</p>	<p>NA</p>
<p>ACCOMMODATION</p>	<p>NA</p>
<p>6.0 CONTROL, COORDINATION & COMMUNICATION</p>	
<p>CONTROL & COORDINATION STRUCTURE</p> <p>REFERENCE</p>	<p>Plant Management Supervision / Contractor Work</p>

Structural Chart	
COORDINATION & LIAISON Local knowledge, police, agency reps, emergency mgt reps	NA
COMMUNICATIONS PROMPTS Communications structure, operational comms plan, information mgt	Plant Management – Contractor Communication via Cell Phone

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

Site Specific Safety Plan for Remediation of the Bayou Corne Sink Hole

The following plan is a site specific plan for the remediation of the Bayou Corne sink hole which will be achieved in two Phases. Phase one will include the construction of an access road to the sink hole which will allow the use of a long reach excavator. The excavator will be used to remove vegetation near the access road and place into roll off boxes. Phase two will consist of placing one or more airboats with attached rakes that will be used to push vegetation towards the access road where it will be removed and placed in roll off boxes. By removing the vegetation this allow us the use o skimmers and absorbent booms to aid in hydrocarbon removal.

Site Setting

The Texas Brine facility is located at 1301 Hwy 70, Belle Rose, LA 70341. The facility is located South of 70. The site is located on raised pads and roads but the property is otherwise swamp. A site map is attached. The nearest hospital Our Lady of the Lake is located in Napoleonville, LA. which is a 15 minute trip.

Site Specific Hazards

The site is located in a swamp setting and potential dangers may be present. Personnel should be aware of

Alligators
Wasps
Snakes
Spiders

Emergency Contact

911 will used in any emergency.
Cell phones on site

Site Safety

Safety Meeting

Held at the beginning of each shift.

PPE Requirements

Hard hat
Safety Glasses
Steel toe boots

Air Monitoring

A system of air monitoring devices have been placed across the property surrounding the sink hole. One air monitoring device is located next to the access road.

Airboats will have hand held monitors on there person at all times when on the sink hole

Spotters and Warnings

A person or persons armed with an air horn will be placed on site looking for safety issues such as

Leaning trees
Falling trees
Ground Movement

Driver of the truck attached to the roll off box will remain in the truck at all times and will be ready to vacate the access road on signal.

Heavy Equipment

Long reach excavator

Environmental

Vegetation will be placed in lined roll off boxes and disposed of.
Airboats will remain inside the containment boom once entered
Decon of airboats will take place on location pad next to access road.

10-12-2012

(THIS PLAN CAN BE ADJUSTED BY TBC FOR WEATHER RELATED ISSUES, OR SITE CONDITIONS)

This plan is being followed as an approach to sinkhole management. The primary focus for this plan is to:

1. Recover liquid hydrocarbons that are found on the surface of the sinkhole. By removing the free phase Hydrocarbons that are found on the surface of the sinkhole, off-site migration of these Hydrocarbons will be greatly reduced. Thus, limiting the impacts of the Hydrocarbons to the sinkhole surface and the immediate area. Additionally, the removal of the free phase Hydrocarbons will greatly reduce the "smell" associated with the sinkhole
2. To further understand the dynamics of the sinkhole, through profiling and visual observation of the surface of the sinkhole.

Phase One focused on the removal of floating vegetation and debris within the sinkhole. To date, the vast majority of floating vegetation and debris has been cleaned and cleared off of the surface of the sinkhole area. On October 8, 2012, we began to bring on site equipment and staffing to move into Phase Two of the Sinkhole Management, Crude Oil Removal

Crude Oil removal will take place on near the mat road that was constructed on September 24, 2012. Texas Brine began reconstruction of the mat road at well pad #3, going toward the sinkhole. This road has been constructed of river sand, filter fabric and wooden mats. The mat road has been constructed in the previous footprint, to the outside and on the eastern side of the sinkhole.

As discussed in the Phase One Plan for Sinkhole Management, the mat road will play a vital part in our recovery of oiled vegetation and crude oil removal. Texas Brine plans to collect crude oil via physical means with skimmers, and vacuums. We will also use Air Boats to sweep the surface of the sinkhole. Texas Brine has fabricated an oil collection box that will be placed at the end of the mat road, in the water, that will assist in the collection of crude oil.

Product that is recovered will be placed into a frac tank and stored for disposal. These Frac tanks are stored near the sinkhole in an orderly fashion. The vacuum trucks that are used are inspected for leaks and drips prior to leaving the facility for disposal. Occasionally, the Long-reach boom and operator may have to go back out on the mat road to sweep in additional debris that has been swept in by the air boats. The additional debris will be handled as discussed in Phase One. As a safety precaution, the truck driver will be instructed to remain in his vehicle with on ready should any movement be observed on the sinkhole. The truck driver will remain at/in his vehicle during the loading process. A spotter will be placed in a stationary location on Well Pad # 3 to watch for any movement of trees or debris in the sinkhole. Additionally, there will be supervision of the project entire project by TBC Employees

remediation of crude oil in hard to reach places or in marginal places where oil may have escaped the containment boom. Texas Brine will not proceed with the use of this material or other materials until approval has been issued by the lead agency on this incident. The use of any such absorbent material will be used to augment the traditional physical oil removal procedures.

If any personnel or contractors are allowed onto the sinkhole, then air monitoring devices will be used to monitor the levels of VOC's on the site.

The safe execution of this activity is the goal of TBC. This is why every person entering the property, must wear proper PPE (Hard Hat, Long Pants, Steel Toed Boots, and Safety Glasses).

January 14, 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: January 5 Through January 11, 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.

Monitoring locations are shown in Figure 1. Graphs illustrating the tilt data, as recorded by each instrument, are provided in Figures 2–4. 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 1/100 of a degree. Alarm levels are set at ± 1.0 degree for all inclinometers and ± 0.5 degree for all tiltmeters. Water levels measured at IPI-2 and southwest of Pad 3 are shown in Figure 5, and an Excel file with this data is attached.

The positive spike in the *X*-direction (toward the sinkhole) at the Pad 3 tiltmeter on January 10 is cultural noise—a large tanker truck momentarily parked adjacent to the tiltmeter while turning around. No evidence of tilt was apparent in the tiltmeter and IPI data this week.

Sincerely,



Eric L. Krantz, P.E.
Engineer

ELK:llf

cc: Mr. Mark Cartwright, Texas Brine Company, LLC
Mr. Scott Borne, Texas Brine Company, LLC

RSI-2153-13-008



Figure 1. Monitoring Locations.

RSI-2153-13-009

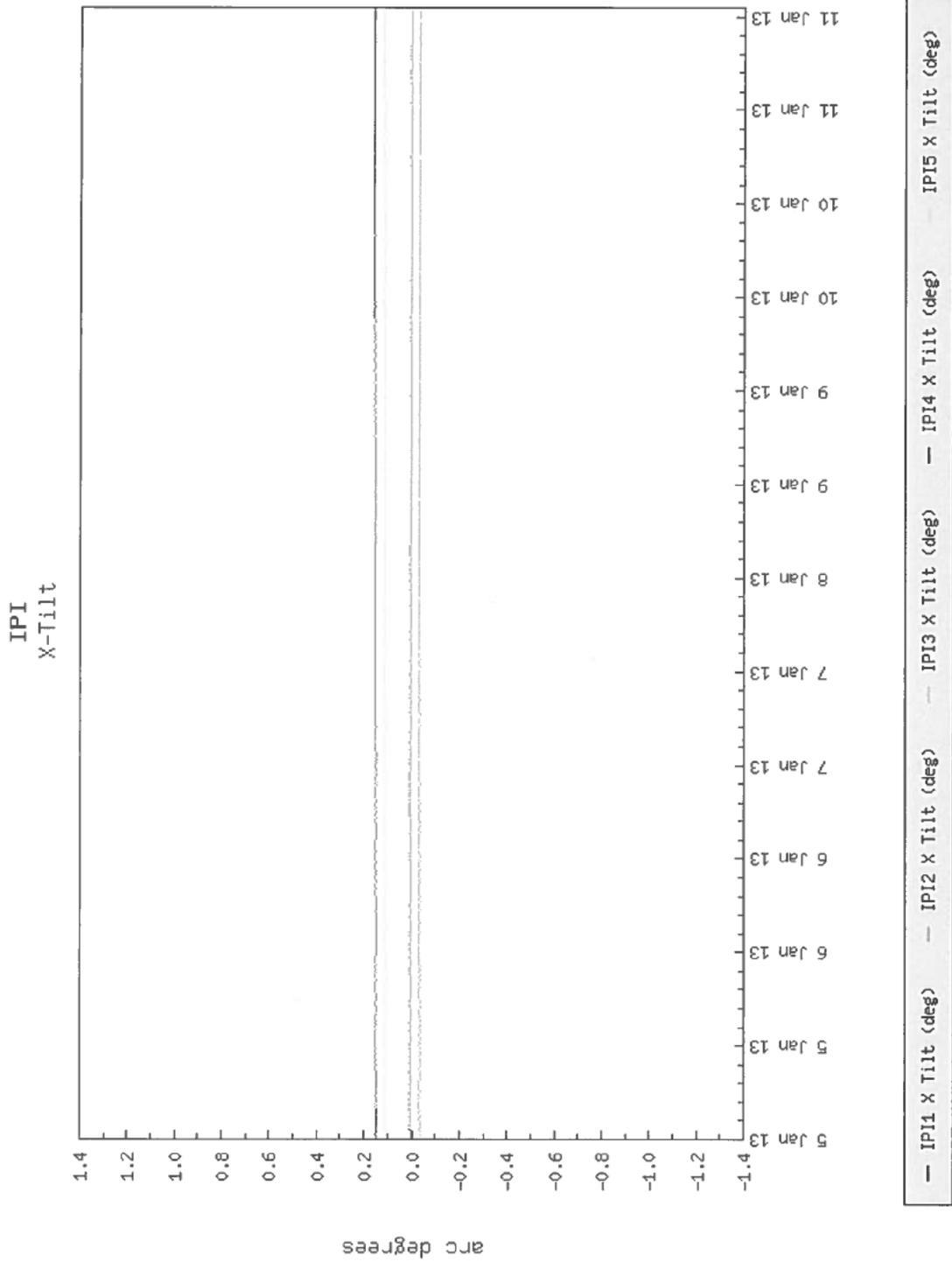


Figure 2. Inclinometer X-Direction Temporal Trends.

RSI-2153-13-010

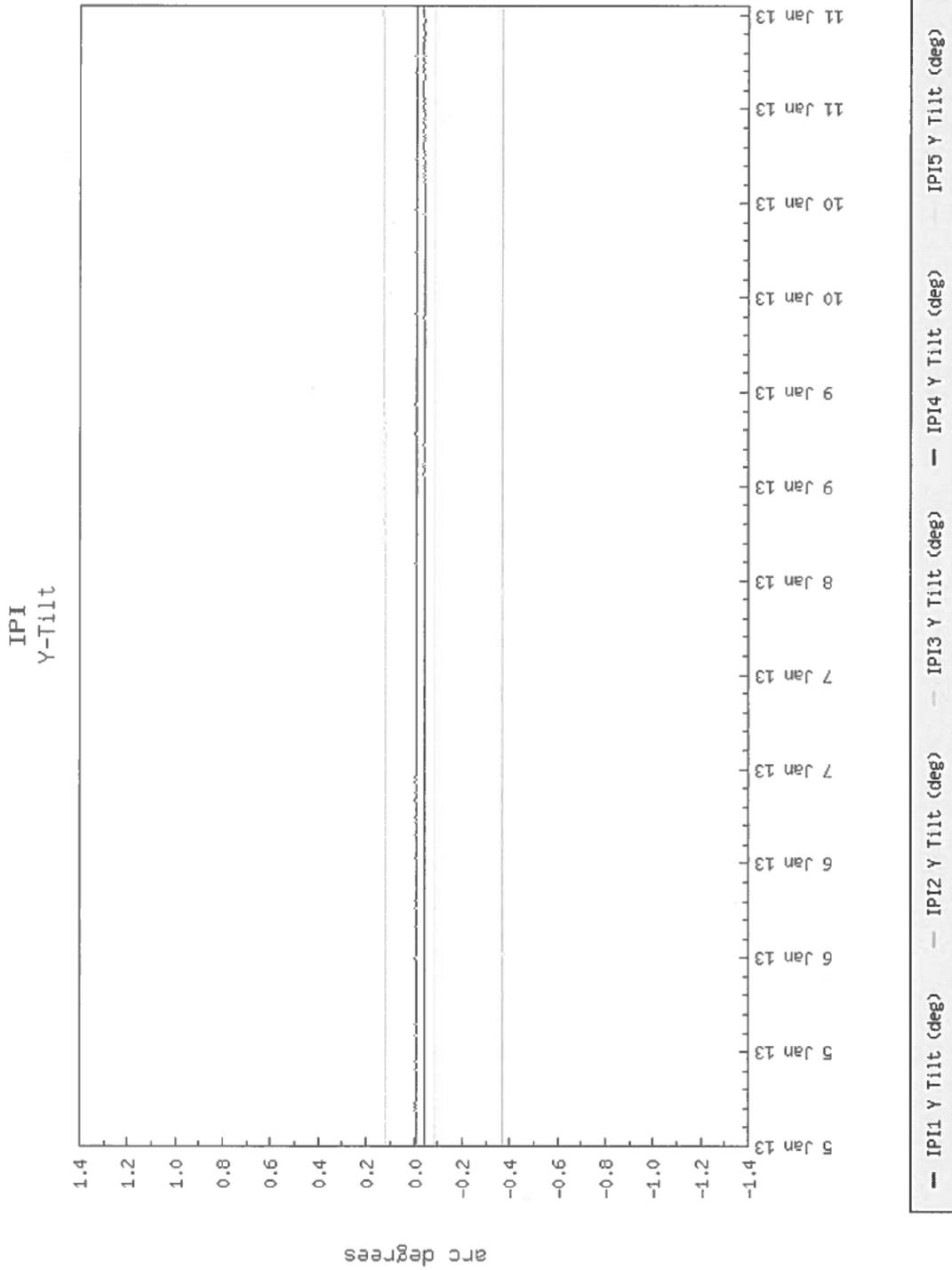


Figure 3. Inclinometer Y-Direction Temporal Trends.

RSI-2153-13-011

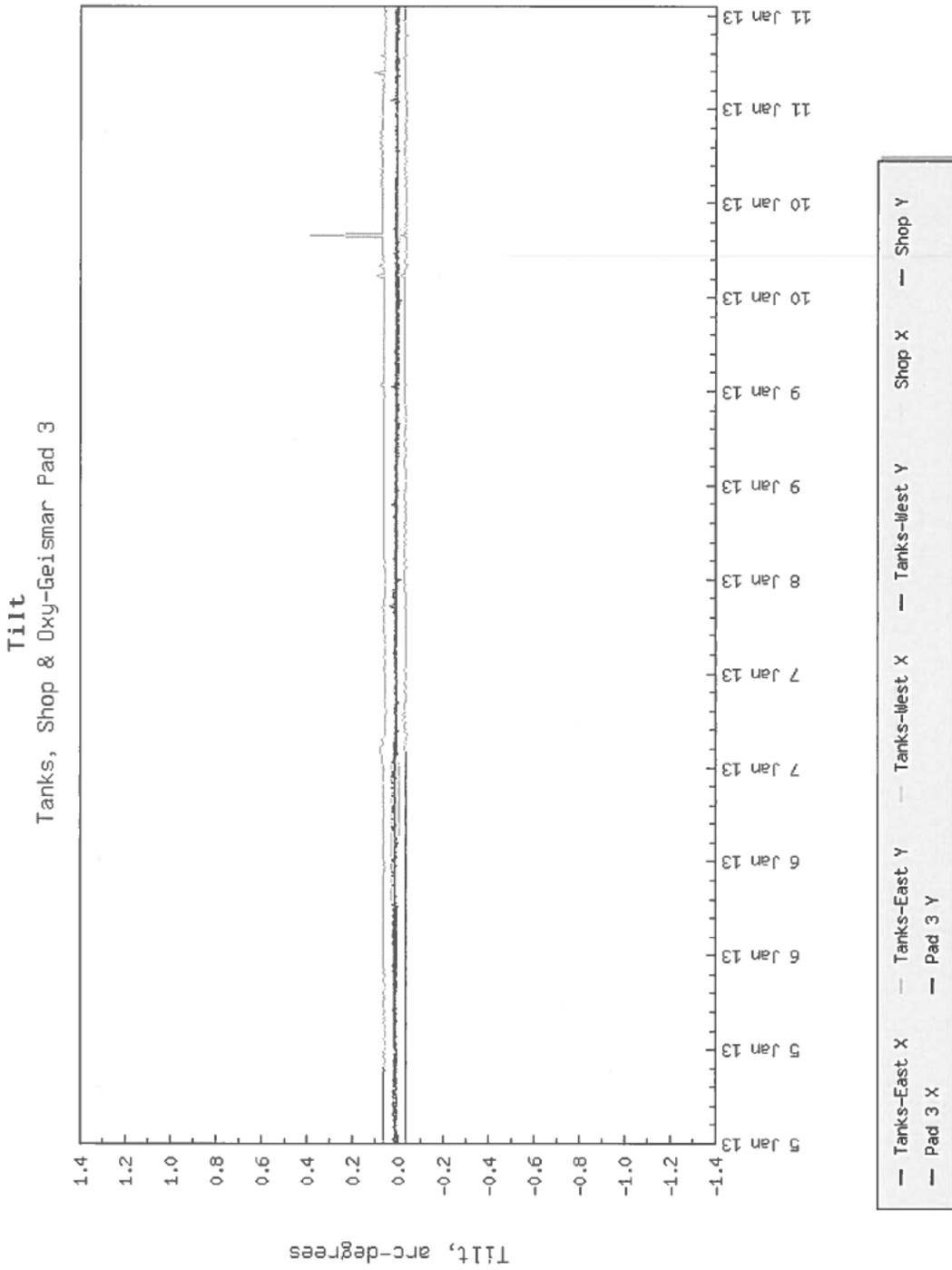


Figure 4. Tiltmeter Temporal Trends.

RSI-2153-13-012

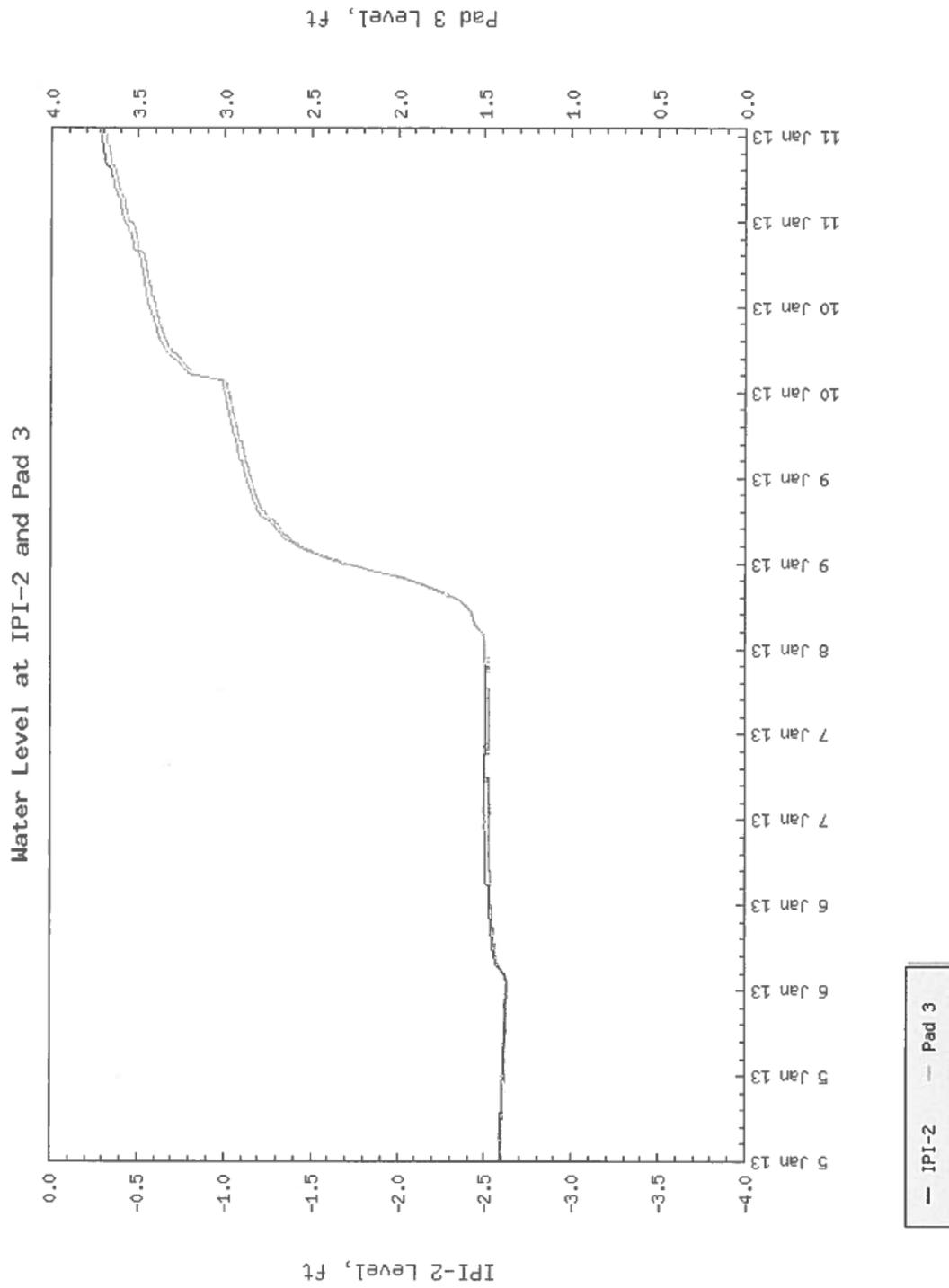


Figure 5. Water Level Temporal Trends.

Universal Time:

41°F Belle Rose, Louisiana

Enter City, State, Country or U.S. Zip code or Airport Id

Local Weat

Local National Global Storms Health Travel Community Forecast Current Radar Satellite wxMap iNav

Weather Report

Home » Local » Weather Report

Belle Rose, Louisiana

Weather Report | Interactive Weather Map | Extended Forecast | Hourly Forecast | Past Observations | Historic Averages | Related

Current Conditions - °F °C		As of 5:53 AM on Tuesday 15 Jan 2013 (Local Time) from KBTR Reporting Station	
 Overcast 41°F Feels Like: 41° Wind Chill: 41° Ceiling: 700 Heat Index: 41° Visibility: 10mi Dew Point: 40° Wind: 0mph Humidity: 96% Direction: NA NA Pressure: 30.04" Gusts: NA <small>Report Text: KBTR 151153Z AUTO 00000KT 10SM OVC007 05/04 A3004 RMK AO2 RAE51 SLP173 P0004 60013 70067 T00500044 10050 20044 55007 TSN0</small>	Today's Forecast		 No Weather Alerts for this location
	7 AM Showers  46°		
		8 AM Showers  47°	
		9 AM Showers  48°	
View Detailed Observations for the last 48 Hours · 14 Days		View Complete Hourly Forecast »	
		Radar · Satellite · Surface Analysis	

10 Day Forecast - °F °C										View the Detailed Extended Forecast »	
tue	wed	thu	fri	sat	sun	mon	tue	wed	thu		
jan 15	jan 16	jan 17	jan 18	jan 19	jan 20	jan 21	jan 22	jan 23	jan 24		
											
52° 41°	48° 36°	55° 36°	56° 37°	62° 40°	63° 39°	58° 37°	53° 36°	55° 44°	62° 47°		

Details for Tuesday, January 15
 Showers this morning becoming less numerous during the afternoon hours. High 52F. Winds N at 5 to 10 mph. Chance of rain 60%.
Evening: A few showers this evening with overcast skies overnight. Low 41F. Winds NNW at 10 to 15 mph. Chance of rain 30%.

UV Index: 2 (Low) Relative Humidity: 84% Precipitation: 60% Snow: 14% Cloud Coverage: 91%

Sunrise: 7:01 AM Moonrise: 9:29 AM Moonphase:  Waxing Crescent Direction: N (357°) Speed: 8Mph(13Km, 7Kts)
 Sunset: 5:27 PM Moonset: 9:52 PM

Daily Forecast Chart Chart Options: Temperature