

INCIDENT ACTION PLAN

Be brief and concise with your entries

Location Bayou Corne Sink Hole	Control Level Company Supervisory	Operational Period From 11/19/12 To 11/20/12
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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 Sunny</p> <hr/> <p>PREDICT Sunny</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</p> <p>Objective 1 - Gas Monitoring:</p> <p>3 Gas Monitors have been set up in the field and are obtaining data on a continuous basis. (See Attached Map for Locations)</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. See attached Map.</p> <p>Phase 2 of the remediation plan continues. We are using two vacuum trucks, three drum skimmers, and two mop skimmers to remove hydrocarbons. See Attached Plan.</p> <hr/> <p>ALTERNATE</p>
<p>3.0 EXECUTION add safety information as appropriate</p>	
<p>GENERAL OUTLINE</p> <p>PROMPTS:</p>	<p>Safety Information: See Attached Safe Work Rules Reference IAP dated 8/9/12</p>

<p>REFERENCE: Appreciation, Control Options</p>	<p>the awareness of insects, reptiles and animals. Inspect location for flammability Daily Safety Meetings 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 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: Kenneth Blanchard – Area Manager – 985- [REDACTED] (985- [REDACTED]) kblanchard@texasbrine.com Scott Borne – Facility Manager – 985- [REDACTED] (985- [REDACTED]) sborne@texasbrine.com Joel Miller, PE – Consultant – 337- [REDACTED] (337- [REDACTED]) joel.miller@cox-internet.com Bruce Martin – Operations/PR – 713- [REDACTED] (281- [REDACTED]) bmartin@texasbrine.com</p>

	<p>Mark Cartwright – Technical/Engineering – 713- [REDACTED] (281- [REDACTED]) mcartwright@unitedbrine.com Scott Whitelaw – Environmental/Safety – 713- [REDACTED] (713- [REDACTED]) 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 Structural Chart</p>	<p>Plant Management Supervision / Contractor Work</p>

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

<p style="text-align: center;">EXTRAS</p>	
<p>Attachments</p> <p>PROMPTS:: maps, weather, organisational charts, resources, comms diagram</p>	<p>Site Map Current Weather Safe Work Rules</p>
<p>Plan developers</p> <p>PROMPTS PO, Logs Mgr, Controller</p>	<p>NA</p>
<p>Approval</p> <p>Controller, Ops Director</p>	<p>TBC Company Rep:  FOSC: SOSC: POSC:</p>

MILLER ENGINEERS & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
FRANKLIN, LA.

OXY #5 MONUMENT

1" = 400'

NOTE:
PROPERTY & LEASE LINES ARE APPROXIMATE ONLY.
THIS SKETCH DOES NOT REPRESENT A PROPERTY
BOUNDARY SURVEY.

OXY #4 MONUMENT

APPROX. EDGE
OF SLURRY PIT
8/4/12

TB
WATER SAMPLES

WELL 1

TANK "W"

TANK "E"

WATER WELL 1

T.B.M. 1

T.B.M. 3C

T.B.M. 3A

WATER WELL 5

WATER WELL 2

WELL 3

T.B.M. 3'

WELL 2

T.B.M. 2

T.B.M. 5

T.B.M. 3B

TBC LEASE LINE

WELL 9

GPS BASE

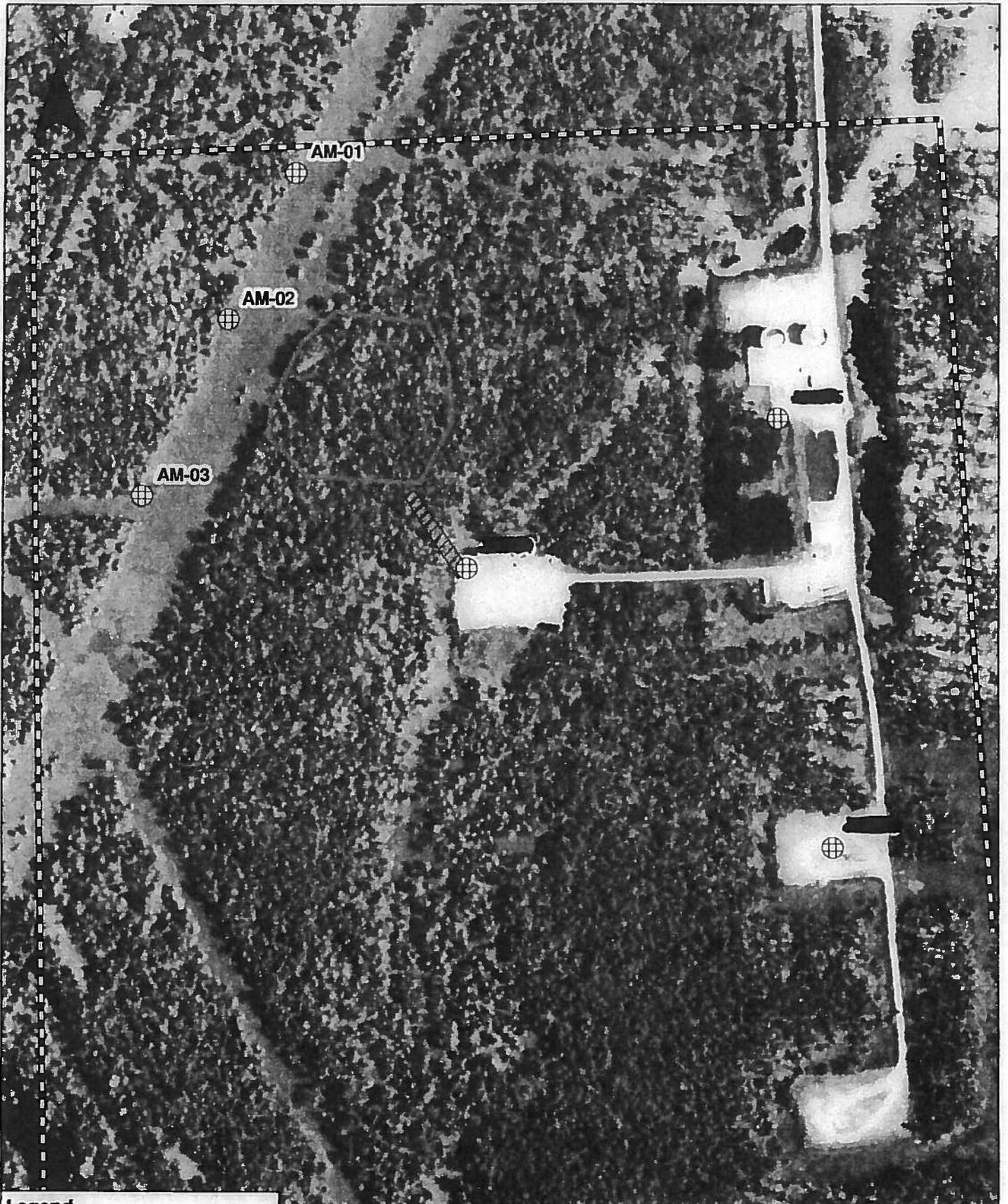
WELL 10

REFERENCE PT.

OXY GPS #4

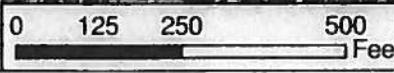
T.B.M. 4





Legend

-  Air Monitoring Stations (2012.08.17)
-  Board Road
-  Approximate Property Line
-  Sinkhole Extents (2012.08.14)



Texas Brine Air Monitoring Locations
8/17/2012 - current

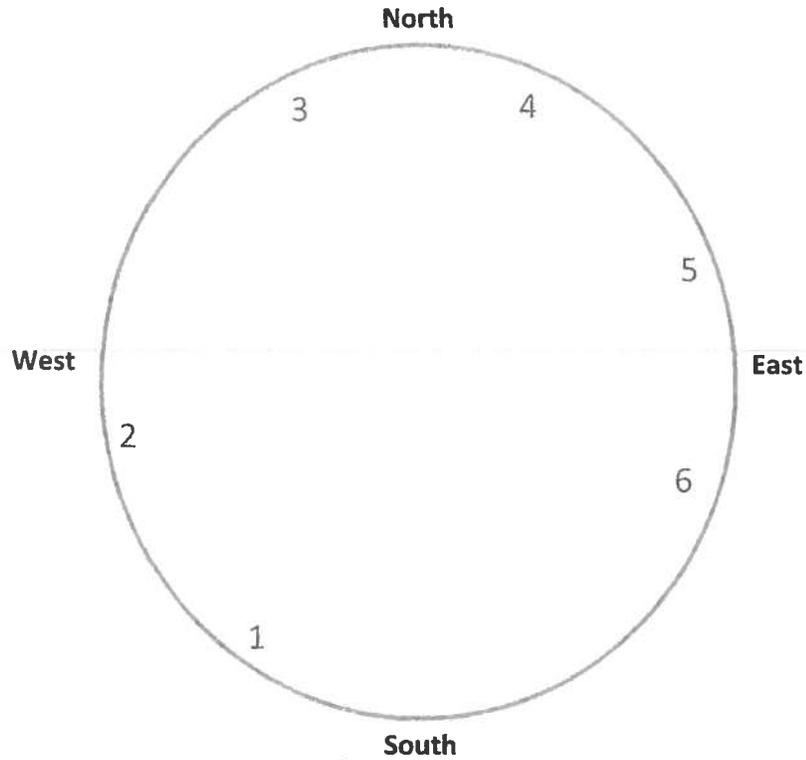
Bayou Corne Sinkhole

Revised: 11/7/12

Date and Time:

11/18/12

	Time	Time	Time	Time
	8:00pm			
Tree 1	✓			
Tree 2	✓			
Tree 3	✓			
Tree 4	✓			
Tree 5	✓			
Tree 6	✓			



Nashua Barbreau

TBC Oxy Grand Bayou Sinkhole Management Plan

Phase Two- Crude Oil/Vegetation/Debris Removal

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.

Texas Brine is following the advice offered by LA DNR and pursuing the use of Oil Gator, as an in-situ 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).

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

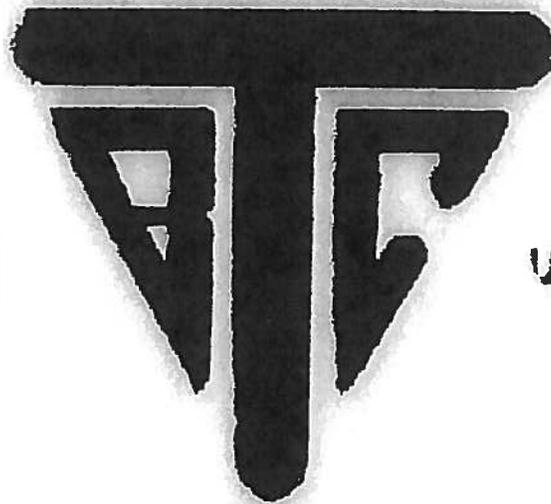
Airboats will remain inside the containment boom once entered

Decon of airboats will take place on location pad next to access road

TEXAS BRINE COMPANY, LLC AND AFFILIATED COMPANIES

Safe Work Practices

UNDERGROUND
STORAGE, LLC



UNITEDBRINE

UNITEDBRINE

TEXAS BRINE COMPANY, LLC

SAFETY MANUAL



American
Institution
of Engineers

November 19, 2012

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

Dear Mr. Martin:

**RE: In-Place Inclinator, Tiltmeter, and Water-Level Monitoring System,
Napoleonville Dome Weekly Report: November 10 Through November 16, 2012**

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 illustrated in Figure 1. Graphs illustrating 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 that reflects 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.

As illustrated in Figures 2 and 3, several movements were recorded at IPIs this week and include the following:

- On November 10, IPI-4 and IPI-5 both recorded gradual movement starting approximately 13:00, and it lasted for 2–3 hours. IPI-4 tilted approximately 0.006 of a degree to the east-southeast and IPI-5 tilted approximately 0.01 degree to the north.
- IPI-4 measured approximately -0.02 of a degree tilt in the *X*-direction at 6:00 on November 13 (tilt away from the sinkhole). *Y*-direction movement was not evident in the data.
- IPI-3 movement was recorded on November 16 at 13:00. In this case, tilt was approximately 0.03 of a degree to the northeast.

Tiltmeters recorded no substantial movements.

Water levels measured at both IPI-2 and southwest of Pad 3 are illustrated in Figure 5. A water-level decrease was recorded at IPI-3 beginning on November 10 at 13:15. The decrease was initially sharp and became gradual until 13:00 on November 11, with a total decrease of approximately 0.25 foot. This was followed by a rise in water levels at both transducers through November 13, then a gradual linear decrease in water levels. From November 13 through November 17, and changes in water levels at both transducers show high correlation. On November 11 and November 12, 0.02 inch and 0.41 inch of rainfall, respectively, was recorded at the Gonzales airport, and on-site Texas Brine Company, LLC personnel reported rainfall and thunderstorms on these days.

Sincerely,



Eric L. Krantz
Engineer

ELK:llf

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

RSI-2153-12-045

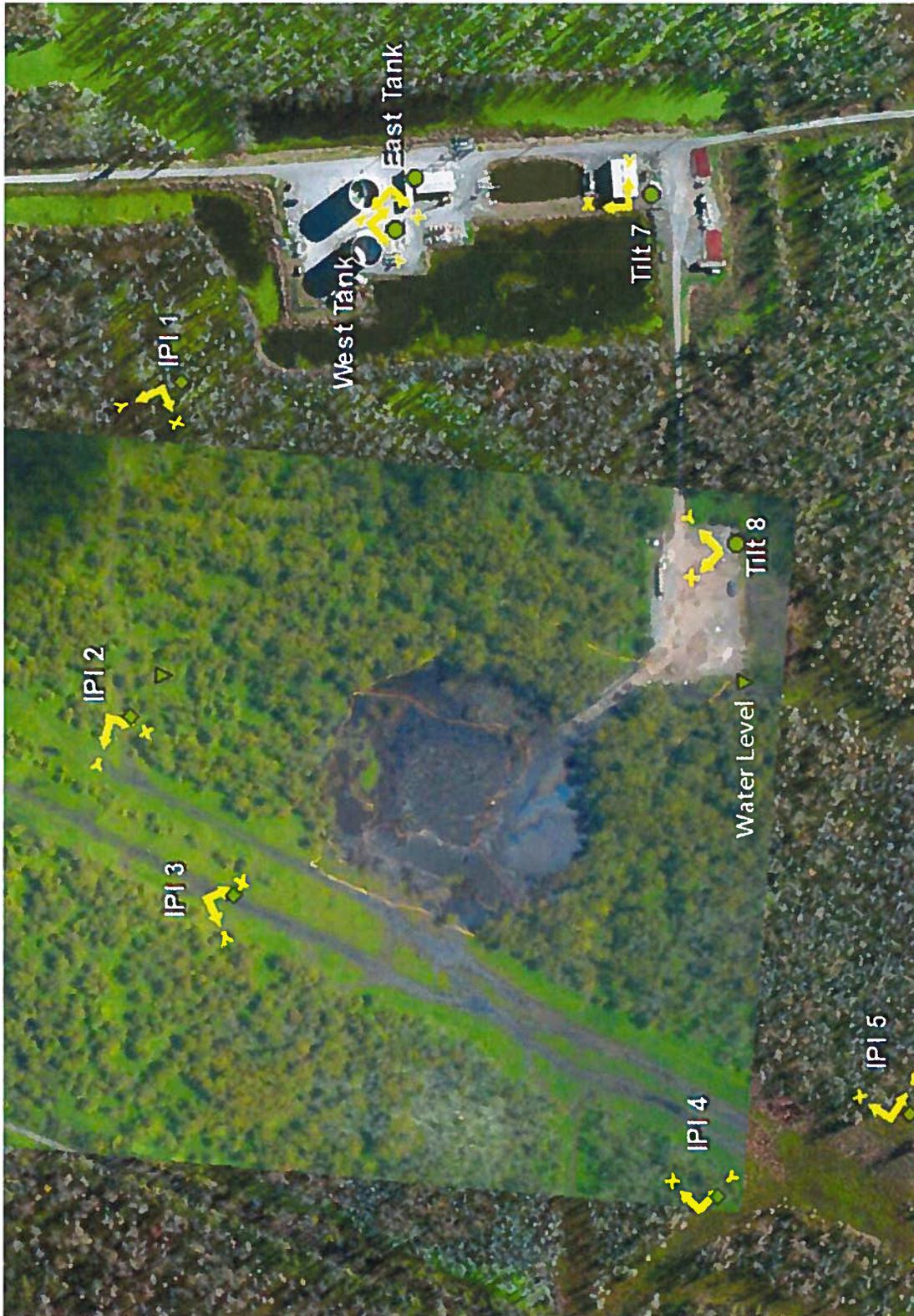


Figure 1. Monitoring Locations.

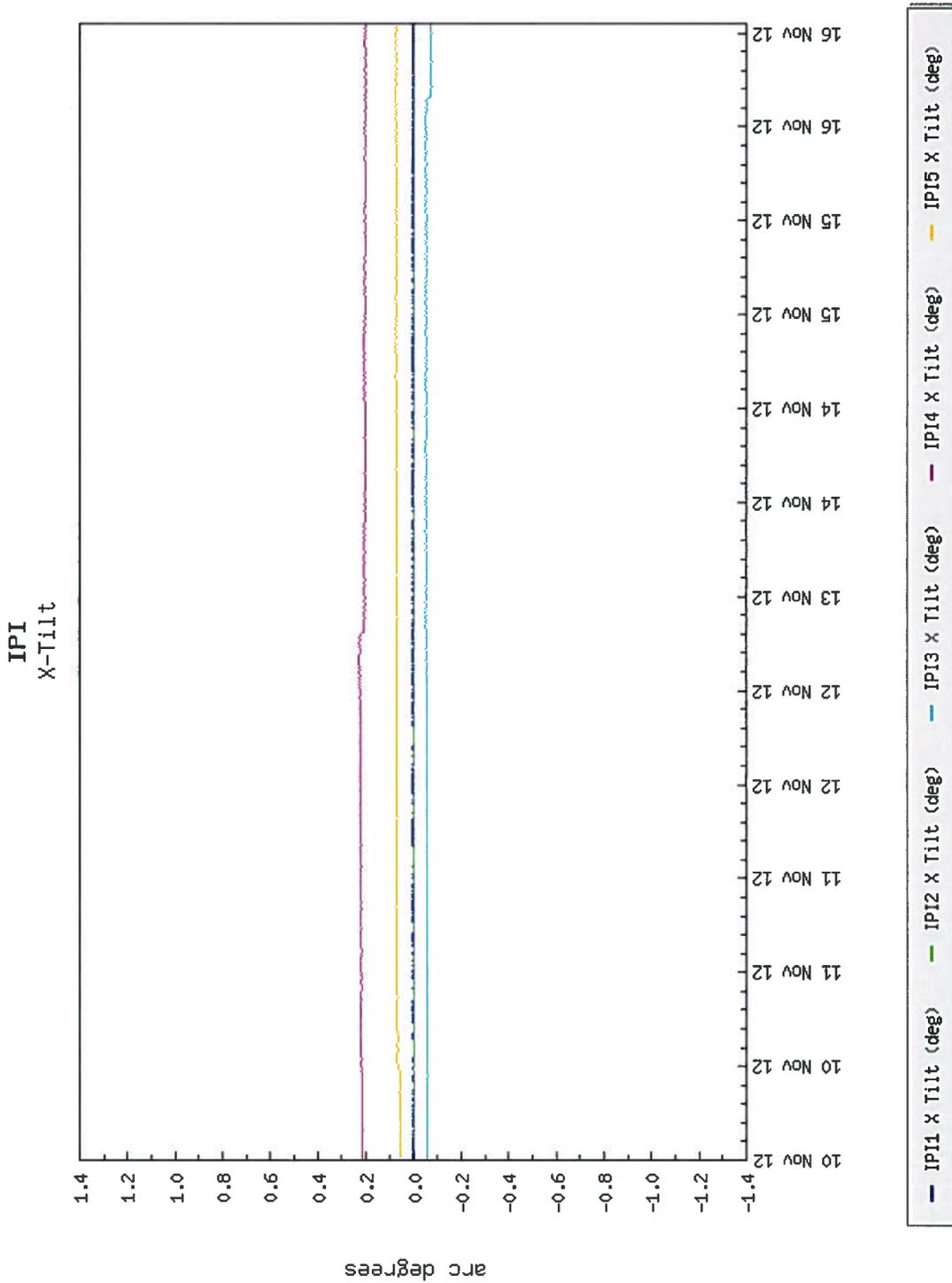


Figure 2. Inclinometer X-Direction Temporal Trends.

RSI-2153-12-047

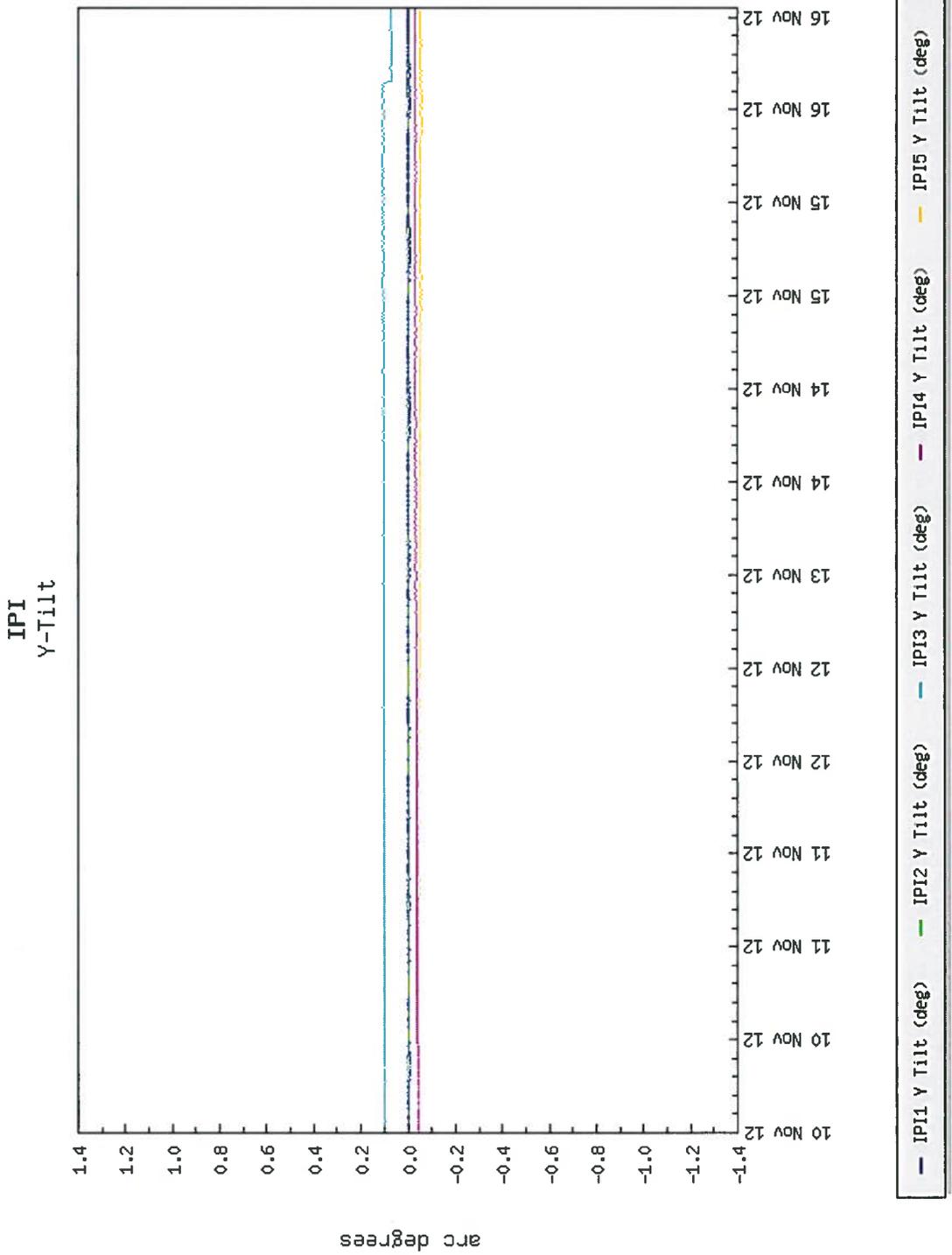


Figure 3. Inclinometer Y-Direction Temporal Trends.

RSI-2153-12-048

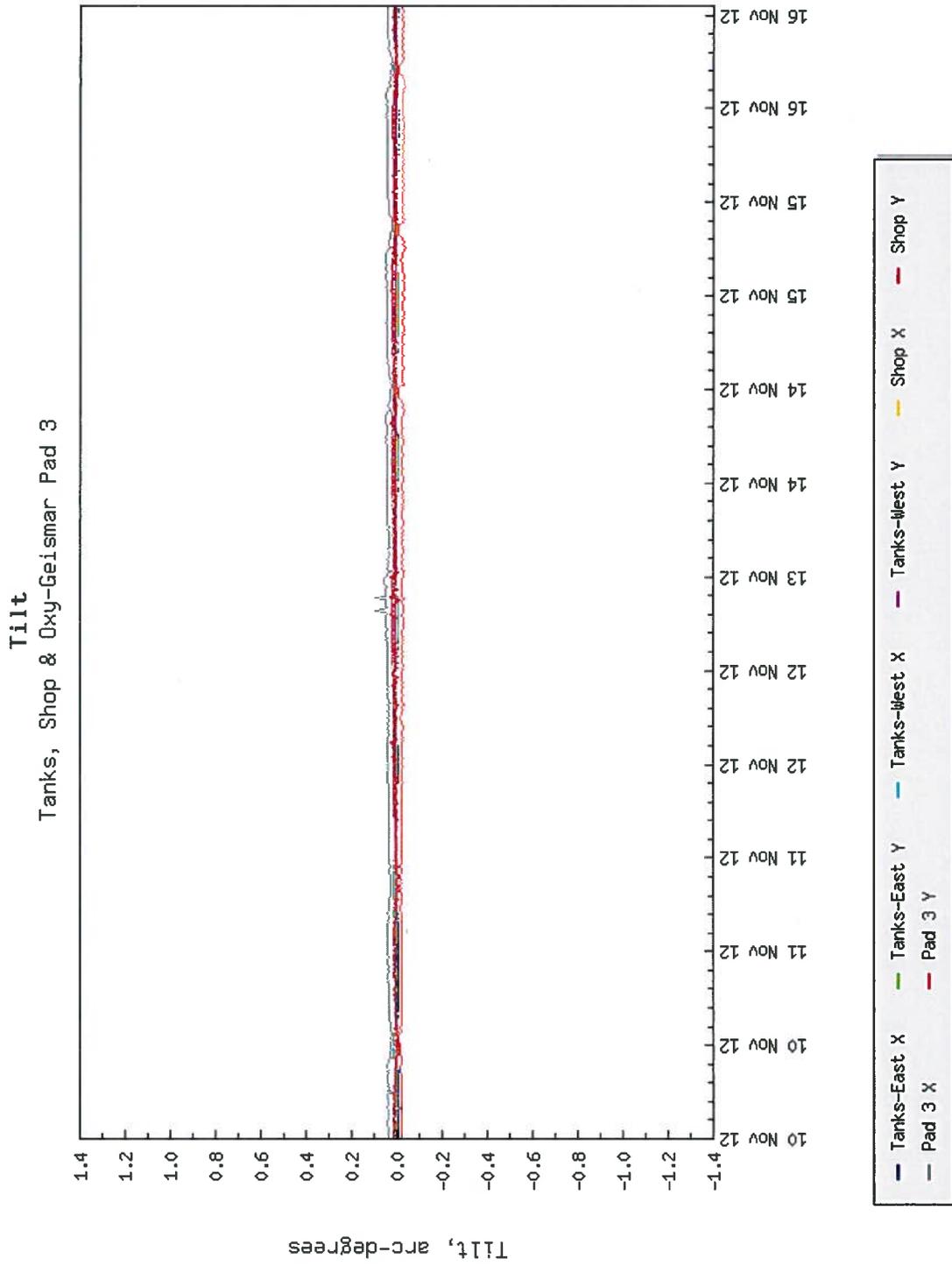


Figure 4. Tiltmeter Temporal Trends.

RSI-2153-12-049

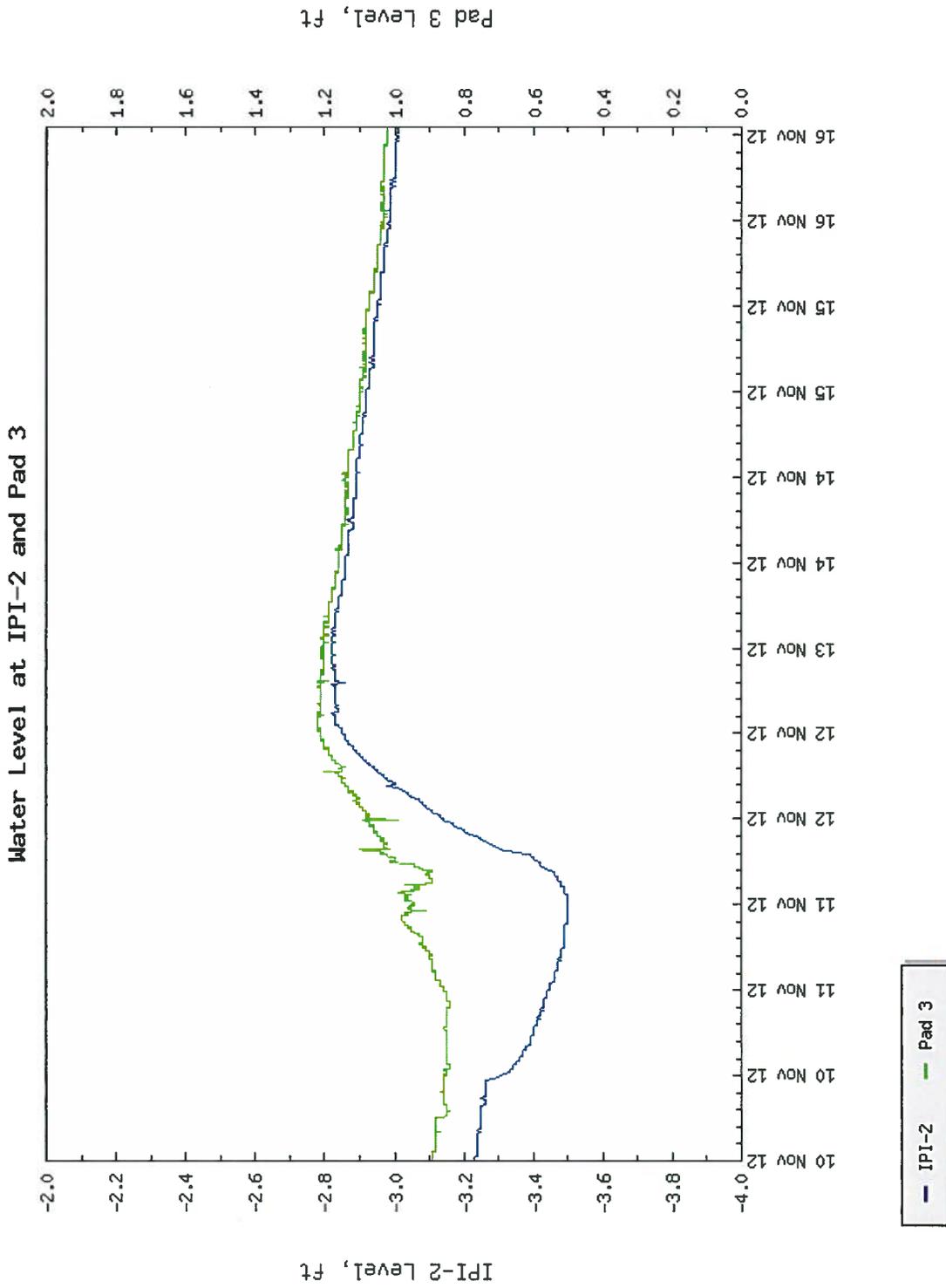


Figure 5. Water-Level Temporal Trends.

40°F Belle Rose, Louisiana

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

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National News

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Belle Rose, Louisiana

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

Current Conditions - °F | °C

As of 6:53 AM on Monday 19 Nov 2012 (Local Time) from KBTR Reporting Station

Clear **40°F**
Feels Like: 40°

Wind Chill: 40° Ceiling: Unl
Heat Index: 40° Visibility: 10mi
Dew Point: 39° Wind: 0mph
Humidity: 97% Direction: NA NA
Pressure: 30.28" Gusts: NA

Report Text: KBTR 191253Z AUTO 00000KT 10SM CLR 04/04 A3028 RMK AO2 SLP254 T00440039 TSHO

Today's Forecast

8 AM		54°
9 AM		60°
10 AM		64°

Local Information

No Weather Alerts for this location

View Detailed Observations for the last 48 Hours · 14 Days

View Complete Hourly Forecast »

Radar · Satellite · Surface Analysis

10 Day Forecast - °F | °C

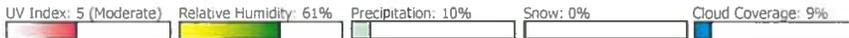
View the Detailed Extended Forecast »

mon	tue	wed	thu	fri	sat	sun	mon	tue	wed
nov 19	nov 20	nov 21	nov 22	nov 23	nov 24	nov 25	nov 26	nov 27	nov 28
M Sunny	P Cloudy	Sunny	Sunny	Sunny	AM Clouds	M Sunny	P Cloudy	Sct Showers	Showers
74° 49°	75° 49°	76° 49°	74° 48°	75° 51°	69° 44°	69° 48°	71° 52°	74° 54°	74° 51°

Details for Monday, November 19

A good deal of sunshine. High 74F. Winds light and variable.

Evening: A few passing clouds. Low 49F. Winds light and variable.



Sunrise: 6:33 AM
Sunset: 5:06 PM

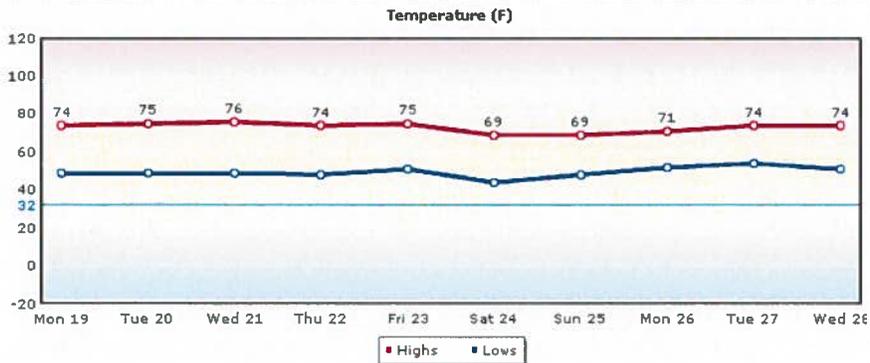
Moonrise: 11:45 AM
Moonset: 11:21 PM

Moonphase: Waxing Crescent

Direction: ENE (71°)
Speed: 4Mph(6Km, 3Kts)

Daily Forecast Chart

Chart Options: Temperature



Temperature UV Index Relative Humidity Precipitation Snow Clouds Wind

Daily Forecast Hourly Forecast Past Observations Historic Averages

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- US Weather Maps
- US Current Weather
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- Weather Analysis Charts
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Weather Center



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