

INCIDENT ACTION PLAN

Be brief and concise with your entries

Location Bayou Corne Sink Hole	Control Level Company Supervisory	Operational Period From 10/16/12 To 10/17/12	
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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>
	<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 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>Objective 2- Elevation survey taking place once a week.</p> <p>Objective 3- Sink hole observation. See attached Map. Phase 2 of the remediation plan continues. We are using three vacuum trucks and four drum skimmers to remove hydrocarbons. See Attached Plan.</p> <p>Objective 4- Inclinometers Monitoring Report. See Attached</p>
	<p>ALTERNATE</p>

<p>3.0 EXECUTION add safety information as appropriate</p>
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<p>GENERAL OUTLINE</p> <p>PROMPTS: Strategies & tactics (current/proposed/alternate)</p> <p>REFERENCE: Appreciation, Control Options</p>	<p>Safety Information: See Attached Safe Work Rules 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. Inspect location for flammability</p>
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	<p>Daily Safety Meetings PPE Required on site: Respirator w/ VOC Cartridge, Gloves for sampling, eye protection, life preservers, hearing protection.</p>
GROUPINGS	NA
TASKS Including PR & Media	Same as above
COORDINATING INSTRUCTIONS PROMPTS: Timings, routes, assembly areas, staging areas	Texas Brine Grand Bayou Facility will be used as staging area.
<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>	
SUPPLY WHO, WHAT, WHERE, WHEN of resources not readily available	NA
GROUND SUPPORT Transport of personnel, traffic mgt, refuelling, mechanical repair/maintenance	NA
COMMUNICATIONS Installation, maintenance, technical advice	<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 Mark Cartwright – Technical/Engineering – 713- [REDACTED] (281- [REDACTED]) mcartwright@unitedbrine.com Scott Whitelaw – Environmental/Safety – 713- [REDACTED] (713- [REDACTED])</p>

	swhitelaw@tum.com
STAGING AREA/ FCP Setting up, communications, staffing	Texas Brine Grand Bayou Facility 1301 Hwy 70 South, Belle Rose, La 70341
5.0 ADMINISTRATION (Logistics services)	
PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)	
FACILITIES Security, waste, cleaning	NA
CATERING	NA
OH&S/MEDICAL Medical plan, first aid plan	Call 911
FINANCE	NA
TRAVEL	NA
INDUCTION/ TRAINING	NA
ACCOMMODATION	NA
6.0 CONTROL, COORDINATION & COMMUNICATION	
CONTROL & COORDINATION STRUCTURE REFERENCE Structural Chart	Plant Management Supervision / Contractor Work
COORDINATION & LIAISON	NA

Local knowledge, police, agency reps, emergency mgt reps	
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	Site Map Current Weather Safe Work Rules
Plan developers PROMPTS PO, Logs Mgr, Controller	NA
Approval Controller, Ops Director	TBC Company Rep: FOSC: SOSC: POSC:

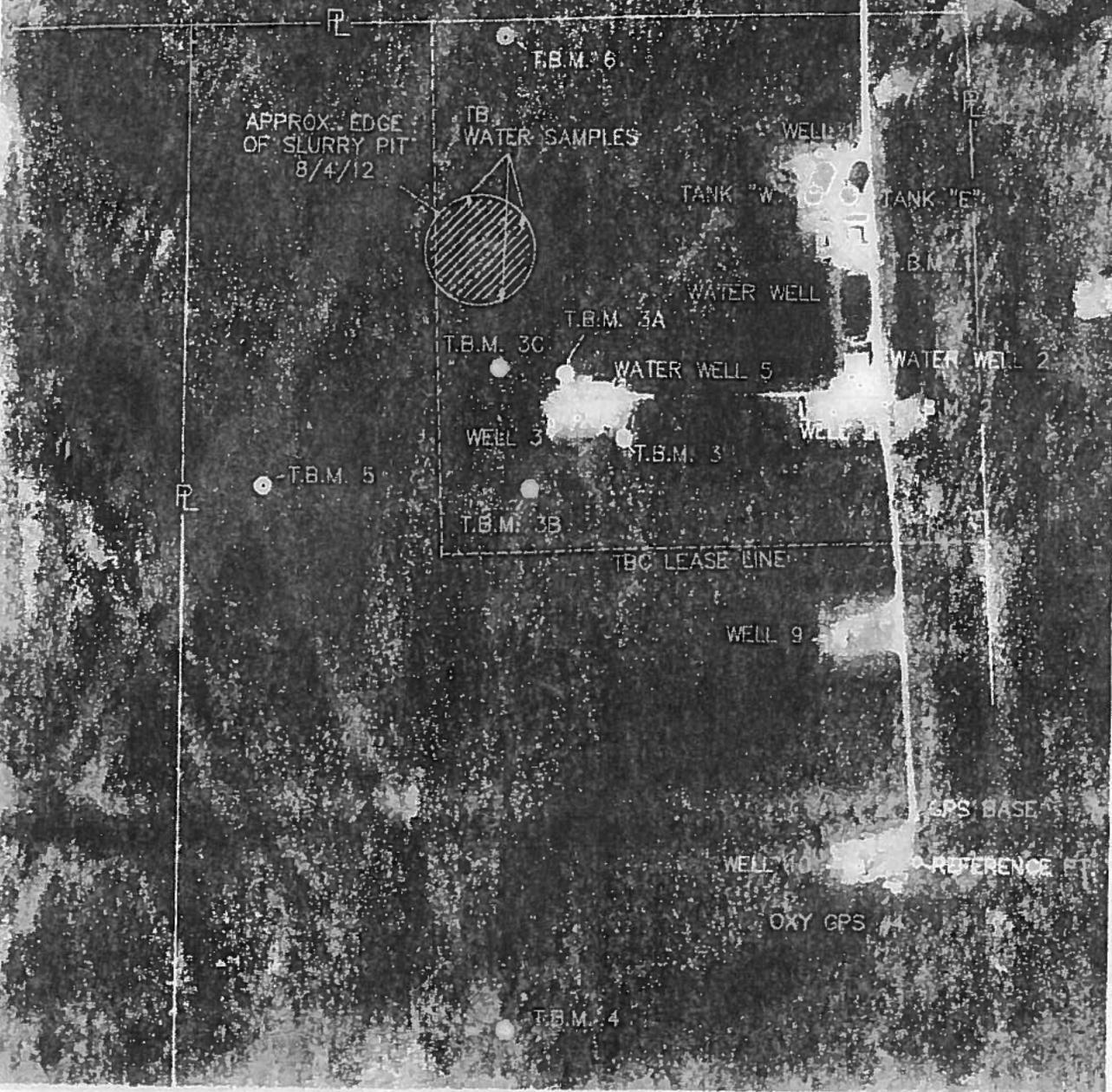
MILLER ENGINEERS & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
FRANKLIN, LA.

OXY #5 MONUMENT

1" = 400'

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

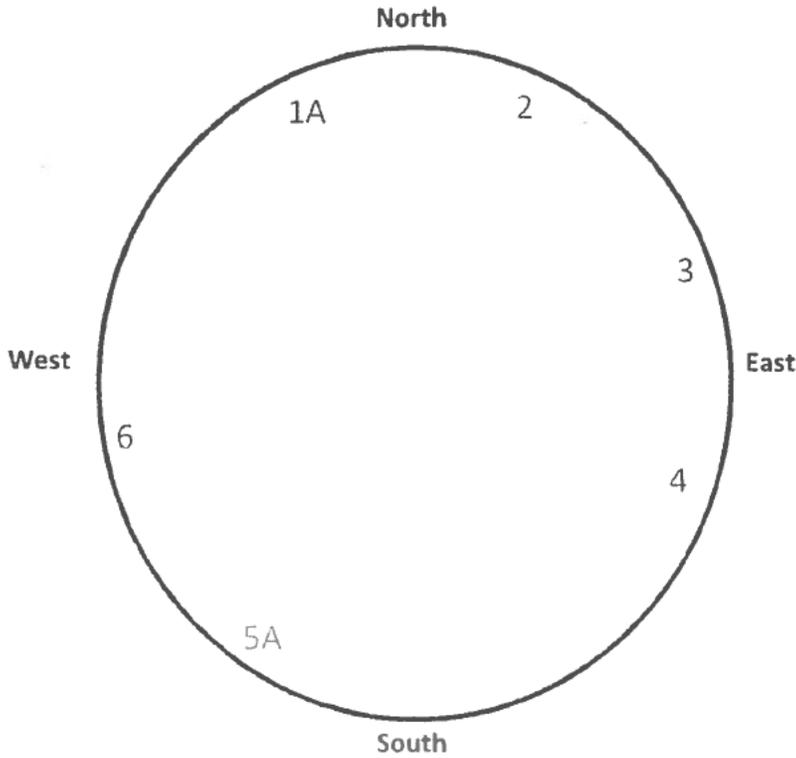
OXY #5 MONUMENT



Bayou Corne Sinkhole

Date and Time: 10-15-12

	Time 7:00 p.m.	Time 10:00 p.m.	Time 1:00 a.m.	Time 4:00 a.m.
Tree 1		✓		
Tree 2		✓		
Tree 3		N/A		
Tree 4		N/A		
Tree 5		N/A		
Tree 6		N/A		



NOTE: Coordinates for each tree are forth coming.

By: *Phil Blanchard*

M-01

AM-02

AM-03



13 Air Monitoring Locations
3/17/2012 - current

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

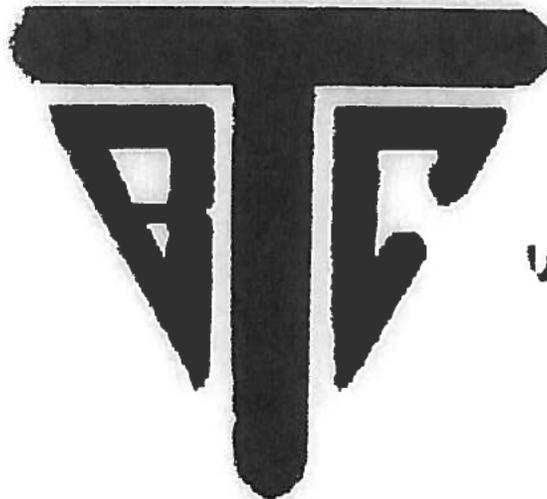
Airboats will remain inside the containment boom once entered

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

UNIVERSITY MANOR, LLC



The American Chemical Society

America's
Chemistry
Council

October 15, 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 and Tiltmeter Monitoring System, Napoleonville Dome
Weekly Report: October 6 Through October 12, 2012**

RESPEC is pleased to submit this weekly report on the in-place inclinometer (IPI) and tiltmeter monitoring system installed around the sinkhole located near the western flank of the Napoleonville Dome, Assumption Parish, Louisiana. The locations of IPIs and tiltmeters are shown in Figure 1. Graphs illustrating the data, as recorded by each IPI and tiltmeter, 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.

Figure 5 shows water level in feet measured at IPI-2 with respect to the bottom of the IPI-3 housing. A water level of 0 feet would indicate that the water is at the bottom of the IPI-3 housing; and a positive value would indicate that the housing is submerged or partially submerged. Negative values, as shown in Figure 5, indicate that the water level remains below the bottom of the IPI-3 housing.

Sloughing was witnessed at the sinkhole edge around 8:30 a.m. local time on Tuesday, October 9, 2012. Measureable changes in water level at IPI-2 and tilt at IPI-4 coincided with the sloughing event. The following are anomalous data events occurring near the time of the sloughing event:

1. On October 9, between 8:30 and 8:45 a.m., there was an obvious, but relatively small, drop in water level of 0.03 feet.
2. Between 8:30 and 8:45 a.m., the resultant of *X* and *Y* tilt at IPI-4 was toward the ENE (southern edge of the sinkhole between sinkhole and Oxy-Geismar 3 pad) about 0.075 degrees. This equates to about 0.013 feet in a 10-foot vertical post.
3. There was very slight movement recorded at IPI-3, which tilted toward the northwest about 0.008 degrees, which is roughly 0.0014 feet (0.017 inches) in a 10-foot post. This tilt is at approximately the limit of resolution of the instruments.
4. No anomalous movement was apparent at the tiltmeter sites or at IPI-1, IPI-2, or IPI-5.

Outside of this event, IPI and tiltmeter data have reflected stable conditions over the past week. The radio and cell phone communication systems onsite have been online all week.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eric L. Krantz', written in a cursive style.

Eric L. Krantz
Engineer

ELK:llf

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

RSI-2153-12-006



Figure 1. Inclinometer and Tiltmeter Locations.

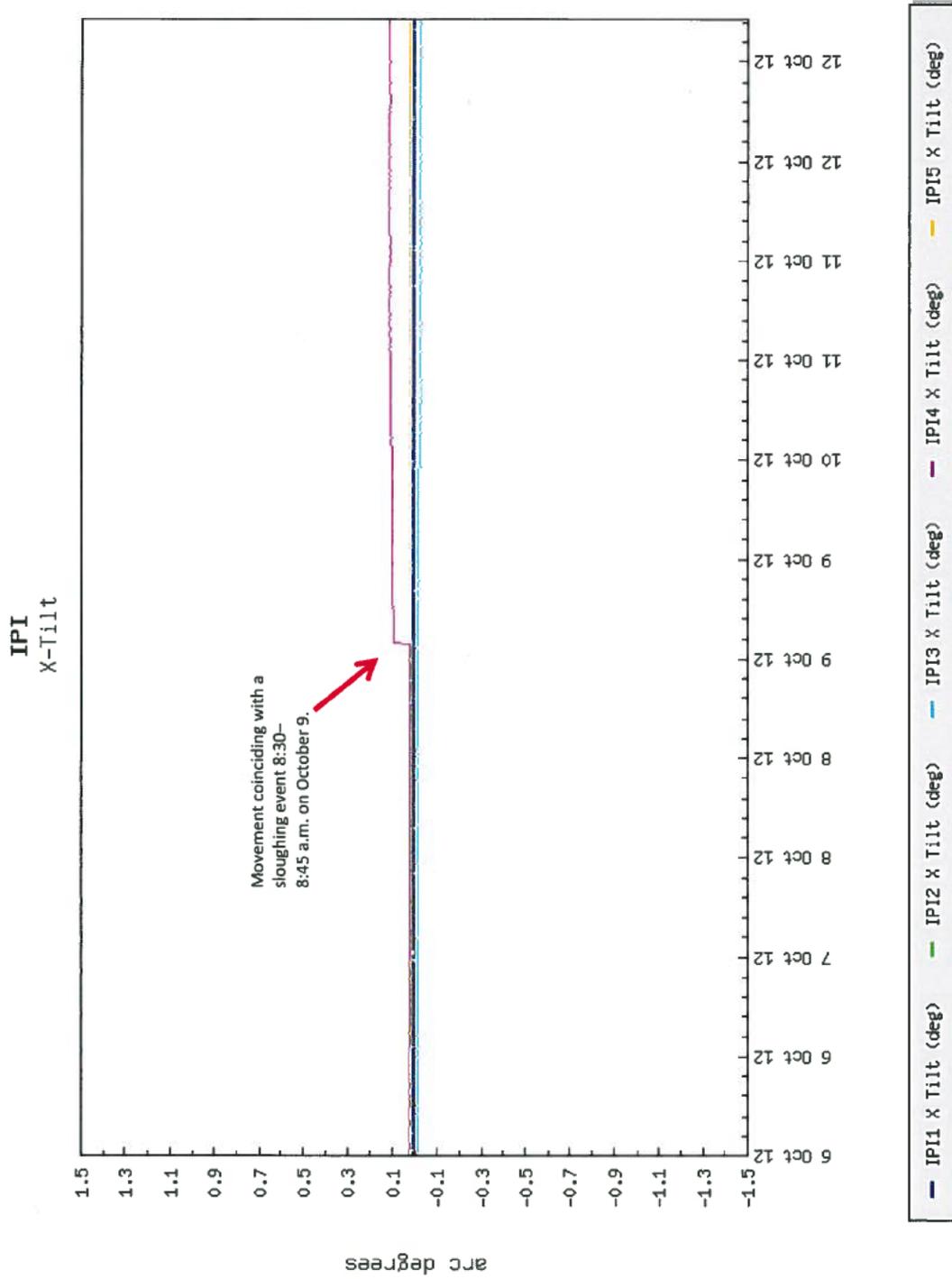


Figure 2. Inclinometer X-Direction Temporal Trends.

RSI-2153-12-018

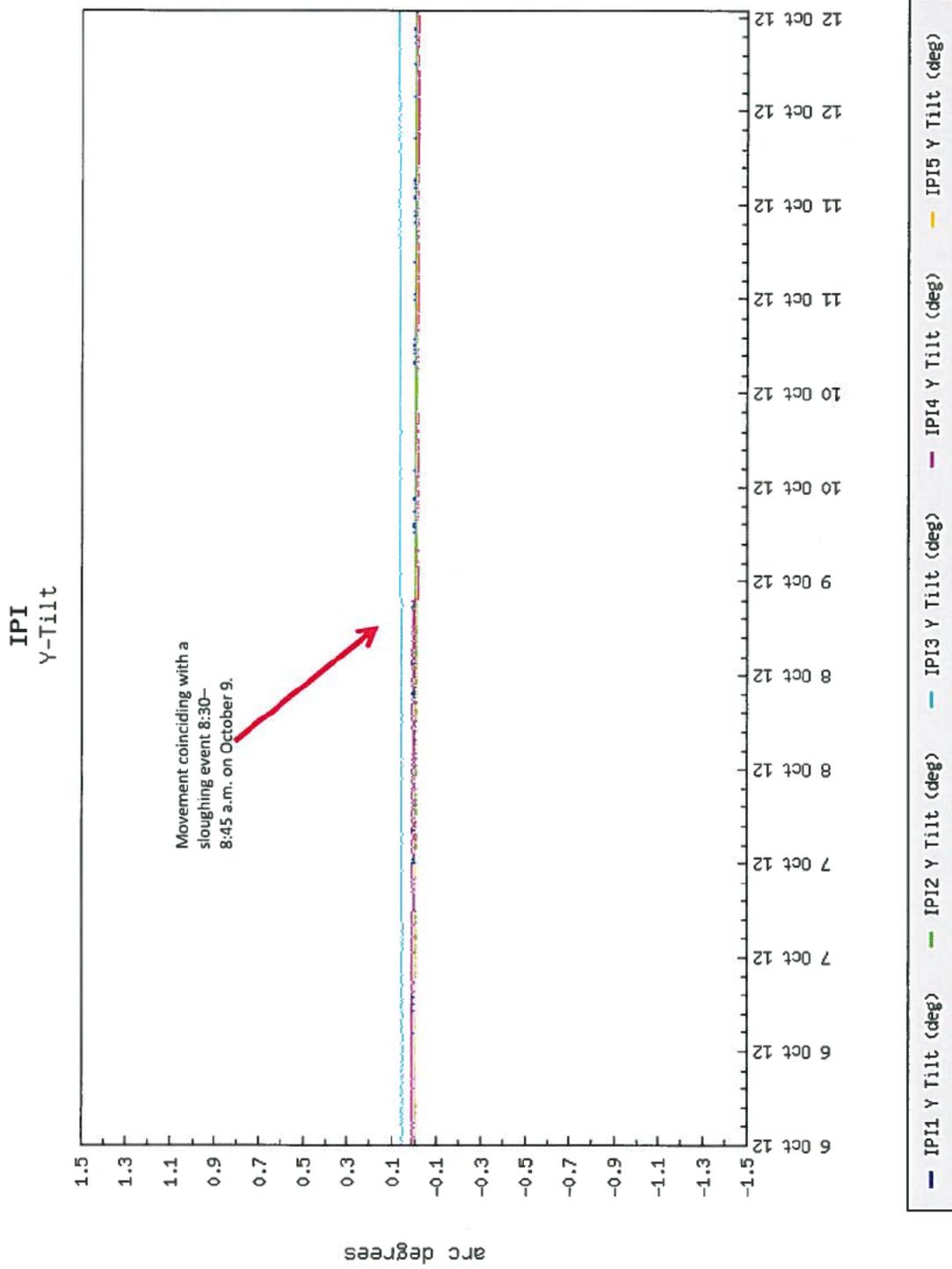


Figure 3. Inclinometer Y-Direction Temporal Trends.

RSI-2153-12-019

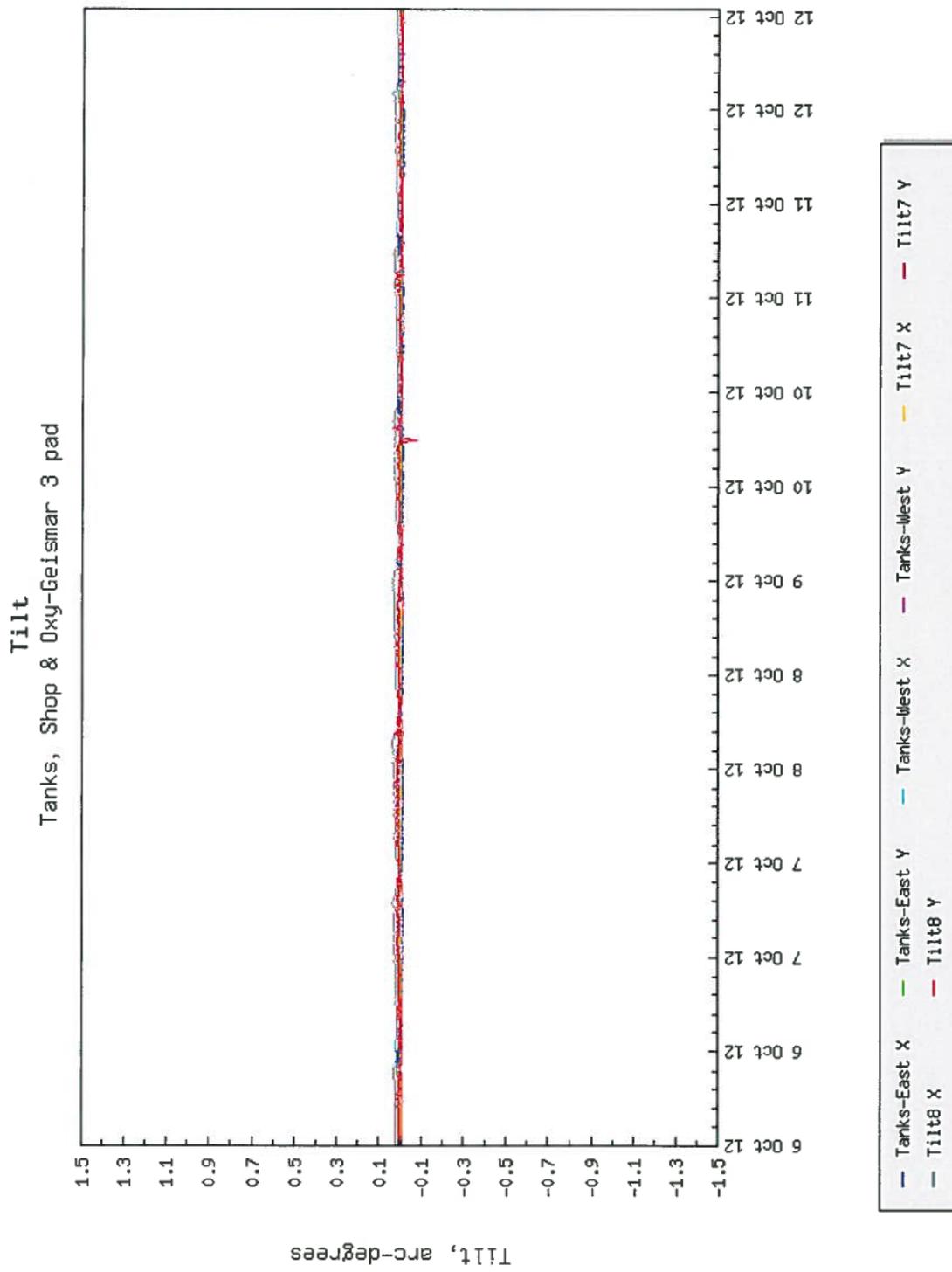


Figure 4. Tiltmeter Temporal Trends.

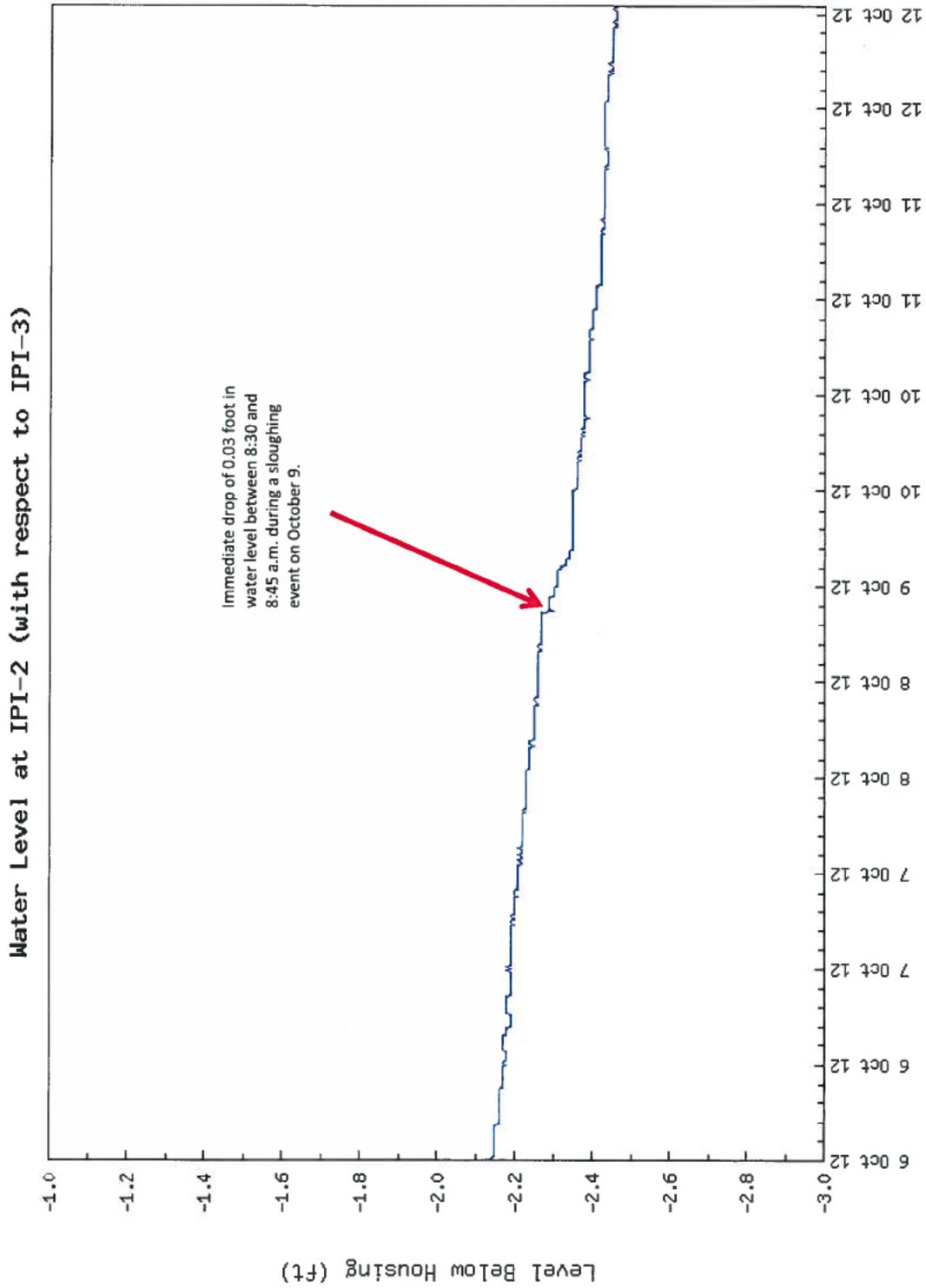


Figure 5. Water-Level Data: Water Level References For the Bottom of Housing of IPI-3.

69°F Belle Rose, Louisiana

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

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Belle Rose, Louisiana

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Current Conditions - °F | °C As of 9:53 AM on Tuesday 16 Oct 2012 (Local Time) from KBTR Reporting Station

 Clear
69°F
 Feels Like: 69°
 Wind Chill: 69°
 Heat Index: 69°
 Dew Point: 54°
 Humidity: 58%
 Pressure: 29.99"
 Report Text: KBTR 161453Z AUTO 10009KT 10SM CLR 21/12 A2999 RMK AO2 SLP155 T02060122 51007 TSHO

Today's Forecast

11 AM P Cloudy		77°
12 PM P Cloudy		78°
1 PM M Cloudy		79°

[View Complete Hourly Forecast »](#)

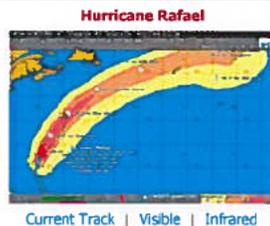
Local Information

 **No Weather Alerts for this location**

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10 Day Forecast - °F | °C

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oct 16	oct 17	oct 18	oct 19	oct 20	oct 21	oct 22	oct 23	oct 24	oct 25
M Cloudy	P Cloudy	AM Showers	Sunny	Sunny	Sunny	Sunny	P Cloudy	Sunny	Sunny
80° 63°	85° 69°	83° 58°	81° 54°	83° 59°	84° 63°	85° 65°	83° 63°	80° 55°	76° 56°

Details for Tuesday, October 16

A mix of clouds and sun during the morning will give way to cloudy skies this afternoon. High around 80F. Winds E at 5 to 10 mph.
Evening: Cloudy skies early, followed by partial clearing. Low 63F. Winds light and variable.



Sunrise: 7:07 AM | Moonrise: 8:22 AM | Moonphase: Waxing Crescent | Direction: E (100°) | Speed: 9Mph(14Km, 7kts)
 Sunset: 6:32 PM | Moonset: 7:28 PM

Daily Forecast Chart

Chart Options: Temperature

