UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

	OCCURRED	For Public Release
ŧ.	DATE: 04-MAR-2012 TIME: 1900 HOURS	STRUCTURAL DAMAGE X CRANE OTHER LIFTING DEVICE
2 -	OPERATOR: Energy XXI GOM, LLC REPRESENTATIVE: TELEPHONE: CONTRACTOR: Wood Group Production Services REPRESENTATIVE: TELEPHONE:	DAMAGED/DISABLED SAFETY SYS. X INCIDENT >\$25K Damages H2S/15MIN./20PPM REQUIRED MUSTER SHUTDOWN FROM GAS RELEASE OTHER
	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
	LEASE: 00031 AREA: GI LATITUDE: BLOCK: 22 LONGITUDE:	PRODUCTION DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL
	PLATFORM: L-PRD RIG NAME:	PIPELINE SEGMENT NO. OTHER
	ACTIVITY: EXPLORATION (POE) DEVELOPMENT/PRODUCTION (DOCD/POD) TYPE: HISTORIC INJURY REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days RW/JT (1-3 days) RW/JT (>3 days)	8. CAUSE: X EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER
	Other Injury	9. WATER DEPTH: 55 FT.
	PATABLITI POLLUTION FIRE EXPLOSION	10. DISTANCE FROM SHORE: 8 MI. 11. WIND DIRECTION: W
	LWC HISTORIC BLOWOUT UNDERGROUND SURFACE DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	SPEED: 8 M.P.H. 12. CURRENT DIRECTION: SPEED: M.P.H.
	COLLISION HISTORIC >\$25K <=\$25K	13. SEA STATE: 2 FT.

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17. INVESTIGATION FINDINGS:

The Operator was performing a lift transferring a 6,000 lb. box of produced sand to the deck of the vessel named Miss Darlene. The boom angle was 20 degrees. The crane's load chart does not list a maximum load for 20 degrees but gives the offboard capacity as 10,070 lbs. at an angle of 19 degrees. According to the Crane Operator (CO), there were two individuals giving him hand signals from the deck of the boat immediately after the load was set down. The CO said the load appeared to be in an awkward position on the deck. One person was signaling to raise the load while the other person with a radio was signaling to lower more slack in the line. At the same time, the CO noticed the vessel drifting off location. The boat captain did not respond to the CO's request over the radio to move the vessel back into position. The rigger with the radio began requesting the CO to lower more line. Realizing that the boat captain had lost control of the vessel, the crane operator began spooling out the wire rope as fast as possible. The crane was unable to spool out cable at a rate to compensate for the velocity of the vessel as it drifted away. When the vessel pulled against the crane, the CO noticed the weight gauge reading 14,000 lbs. The crane was shock loaded, side loaded, and overloaded as a result. The Captain regained control of the vessel before additional damage occurred.

- 18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:
 - A. The Captain lost control of the vessel before the load could be disconnected from the crane.
- 19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:
 - A. A failure in communications may have contributed to the incident.
- 20. LIST THE ADDITIONAL INFORMATION:
 - A. The Captain and crew were dismissed prior to the investigation and were unavailable. $\dot{}$

BSEE Inspector's recommendations to prevent recurrence:

- (1) Verify the certification of the Boat Captain and Riggers.
- (2) Involve the vessel crew in the written Job Safety Analysis before the lift.

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21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Compliance contact indicated extensive damage resulting in a complete rework of the crane

Crane was shock loaded.

ESTIMATED AMOUNT (TOTAL): \$300,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans District makes no recommendations to the Agency

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

INC No. G-132 - Failure to verbally notify the District Manager immediately following an incident involving their crane.

25. DATE OF ONSITE INVESTIGATION:

27-MAR-2012

26. ONSITE TEAM MEMBERS:

John Calvin /

29. ACCIDENT INVESTIGATION PANEL FORMED:

OCS REPORT:

30. DISTRICT SUPERVISOR:

David J. Trocquet

APPROVED

DATE: 15-AUG-2012

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INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATE OTHER	
NAME: HOME ADDRESS:	
CITY:	STATE:
WORK PHONE:	TOTAL OFFSHORE EXPERIENCE: YEARS
EMPLOYED BY:	
BUSINESS ADDRESS:	
CITY:	STATE:
ZIP CODE:	

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Crane/Other Material-Handling Equipment Attachment

Equipment Information

Crane equipped with: B

Which line was in use at time of incident? L -

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Installation date: 17-DEC-1997
Manufacturer: AMER AREO
Manufacture date: 01-JAN-1984
Make/Model: AMER AREO / G-20-HD
Any modifications since manufactured? Describe and include date(s).
What was the maximum lifting capacity at the time of the lift?
Static: 16414
                Dynamic: 10070 -
Was a tag line utilized during the lift? Y
Were there any known documented deficiencies prior to conducting
the lift? If yes, what were the deficiencies?
N/A
List specific type of failure that occured during this
incident.(e.g. cable parted, sticking control valve, etc.)
If sling/loose gear failure occurred does operator
have a sling/loose gear inspection program in place?
Type of lift:
  For crane only:
Type of crane: HYDRAULIC
Boom angle at time of incident: Degrees: 20
                                              Radius: 80
What was load limit at that angle? 10070
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If load line involved, what configuration is the load block: 4 part.

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Load Information

What was being lifted? OTHER

Description of what was being lifted (e.g. 10 joints of 2 3/8-inch pipe, ten 500-lb. sacks of sand, 2 employees, etc.)

Produced Sand

Approximate weight of load being lifted: 6000

Was crane/lifting device equipped with an operable weight indicator? Y

Was the load identified with the correct or approximate weight? Y

Where was the lift started, where was it destined to finish, and at what point in the lift did the incident occur? Give specific details (e.g. pipe rack, riser cart, drill floor, etc.)

Transferring 6,000 pounds of produced sand to the deck of the vessel named Miss

If personnel was being lifted at the time of this incident, give specific details of lifting device and riding apparatus in use (e.g. 1) crane-personnel basket, 2) air hoist-boatswain chair, other)

N/A

Were personnel wearing a safety harness?

Was a lifeline available and utilized?

List property lost overboard.

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Rigger/Operator Information

Has rigger had rigger training?

If yes, date of last training:

How many years of rigger experience did rigger have?

How many hours was the operator on duty prior to the incident?

Was operator on medication when incident occurred? N-

How many hours was the rigger on duty prior to the incident?

How much sleep did rigger have in the 24 hours preceding this incident?

Was rigger on medication when incident occurred?

Were all personnel involved in the lift drug tested immediately following this incident?

Operator: N Rigger: Other:

While conducting the lift, was line of sight between operator and load maintained?

N -

Does operator wear glasses or contact lenses? N -

If so, were glasses or contacts in use at time of the incident? N-

Does operator wear a hearing aid? N-

If so, was operator using hearing aid at time of the incident? N

What type of communication system was being utilized between operator and rigger at time of this incident?

Radio/VHF and Hand Signal

For crane only:

What crane training institution did crane operator attend?

CAREER TRAINING CENTER

Where was institution located? NEW IBERIA LA-

Was operator qualified on this type of crane? ${\bf Y}$ -

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How much actual operational time did operator have on this particular crane involved in this incident?

Years: 1 Months 3

List recent crane operator training dates.

7/20/2010

For other material-handling equipment only:

Has operator been trained to operate the lifting device involved in the incident? N

How many years of experience did operator have operating the specific type of lifting device involved in the incident?

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Inspection/Maintenance Information

For crane only:

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Is the crane involved classified as Heavy, Moderate or Infrequent use.
Was pre-use inspeciton conducted?
For the annual/quarterly/monthly crane inspections, please fill out the following
information:
What was the date of the last inspection? 30-JUL-2011
Who performed the last inspection? JONATHAN LOWERY
Was inspection conducted in-house or by a 3rd party?
Who qualified the inspector?
                               SPARROW ENGINEERING AND OPERATIONS
Does operators' policy require load or pull test prior to heavy lift? N
Which type of test was conducted prior to heavy lift? P
                                      Load test: 30-JUL-2011
Date of last pull test: 30-JUL-2011
Results: P
 If fail explain why:
 Test Parameters: Boom angle: 65
                                              Radius: 40
 What was the date of most recent crane maintenance performed? 30-JUL-2011
 Who performed crane maintenance? (Please clarify persons name or company name.)
   SPARROW ENGINEERING AND OPERATIONS
 Was crane maintenance performed in-house or by a third party? Tp.
  What type of maintenance was performed?
  Quarterly
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For other material-handling equipment only:

Was equipment visually inspected before the lift took place?

What is the manufacture's recommendation for performing periodic inspection on the equipment involved in this incident?

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Safety Management Systems

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Does the company have a safety management program in place? N
Does the company's safety management program address crane/other material-
handling equipment operations?
Provide any remarks you may have that applies to the company's safety management
program and this incident?
Did operator fill out a Job Safety Analysis (JSA) prior to job being performed?
Did operator have an operational or safety meeting prior to job being performed?
  Y
What precautions were taken by operator before conducting lift resulting in
incident?
 The operator wrote a JSA and established radio communication with the boat
 captain.
Procedures in place for crane/other material-handling equipment activities:
 Did operator have procedures written?
 Did procedures cover the circumstances of this incident?
 Was a copy available for review prior to incident?
Were procedures available to MMS upon request?
Is it documented that operator's representative reviewed procedures before conducting
lift?
     Y
Additional observations or concerns:
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