UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **26-APR-2010** TIME: **1445** HOURS

2. OPERATOR: **Leed Petroleum LLC**
   REPRESENTATIVE: **Delcambre, J.**
   TELEPHONE: **(337) 593-9420**
   CONTRACTOR:
   REPRESENTATIVE:
   TELEPHONE:

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:

4. LEASE: **G31394**
   AREA: **SS** LATITUDE:
   BLOCK: **202** LONGITUDE:

5. PLATFORM: **A**
   RIG NAME:

6. ACTIVITY:
- [ ] EXPLORATION(POE)
- [X] DEVELOPMENT/PRODUCTION (DOCD/POD)

7. TYPE:
- [ ] HISTORIC INJURY
  - [ ] REQUIRED EVACUATION
  - [ ] LTA (1-3 days)
  - [ ] LTA (>3 days
  - [ ] RW/JT (1-3 days)
  - [ ] RW/JT (>3 days)
  - [ ] Other Injury
- [ ] FATALITY
- [ ] POLLUTION
- [ ] FIRE
- [ ] EXPLOSION
- LWC
  - [ ] HISTORIC BLOWOUT
  - [ ] UNDERGROUND
  - [ ] SURFACE
  - [ ] DEVERTER
  - [ ] SURFACE EQUIPMENT FAILURE OR PROCEDURES
- COLLISION [ ] HISTORIC [ ] >$25K [ ] <=$25K
- [ ] STRUCTURAL DAMAGE
- [X] CRANE
- [ ] OTHER LIFTING DEVICE
- [ ] DAMAGED/DISABLED SAFETY SYS.
- [X] INCIDENT >$25K **Crane and related items**
- [ ] H2S/15MIN./20PPM
- [ ] REQUIRED MUSTER
- [ ] SHUTDOWN FROM GAS RELEASE
- [ ] OTHER

6. OPERATION:
- [ ] PRODUCTION
- [ ] DRILLING
- [ ] WORKOVER
- [ ] COMPLETION
- [ ] HELICOPTER
- [ ] MOTOR VESSEL
- [ ] PIPELINE SEGMENT NO.
- [X] OTHER **Construction**

8. CAUSE:
- [X] EQUIPMENT FAILURE
- [ ] HUMAN ERROR
- [ ] EXTERNAL DAMAGE
- [ ] SLIP/TRIP/FALL
- [ ] WEATHER RELATED
- [ ] LEAK
- [ ] UPSET H2O TREATING
- [ ] OVERBOARD DRILLING FLUID
- [ ] OTHER _____

9. WATER DEPTH: **112** FT.

10. DISTANCE FROM SHORE: **54** MI.

11. WIND DIRECTION: **W**
    SPEED: **10** M.P.H.

12. CURRENT DIRECTION: **SW**
    SPEED: **2** M.P.H.

13. SEA STATE: **2** FT.

17. INVESTIGATION FINDINGS:

On 26 April 2010, at approximately 1445 hours, a Shaw Global Services Crane Operator (CO)was conducting crane operations on the platform by removing a scrap basket of junk iron. The junk iron was being removed from the top deck of the platform and weighed approximately 6,000 to 8,000 pounds. The Signal Man (SM) proceeded to give a hand signal for the load to be raised, and the load was suspended over the water facing west at a 65 degree boom angle. The CO momentarily lost visual contact with the SM and stepped away from the crane controls to look for the SM. Once the SM was found, the CO reached for the controls when the left boom cylinder exploded and broke apart at the base of the cylinder. The load dropped a few feet until the broken cylinder came to rest on the deck grating of the platform, leaving the second cylinder to hold the load. At 2000 hours, the grating gave way, and the boom of the crane came to rest on the outside of the platform. The load of junk iron was submerged five feet below the water, and the motor vessel "Warren Thomas" proceeded to pull away from the platform. All personnel were removed from the area.

On 27 April 2010, a lift boat located in the field was able to retrieve the load of junk iron and remove the crane from the platform. The crane was sent in for inspection and repairs, and a third party investigation was ordered.

18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

After investigation, the probable cause of the incident was a boom cylinder failure due to a faulty weld.

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

N/A

20. LIST THE ADDITIONAL INFORMATION:

Repairs to the crane have been completed and include the replacement of both hydraulic cylinders, a new turret, and replacement of the base section of the boom. The repaired crane was recertified by Cargotec on 16 May 2010 and installed on 18 May 2010.

As a result of the hydraulic cylinder failure, Leed will require that in the future a 2:1 overload bench test be performed for any rebuilt hydraulic cylinders to prevent this reoccurrence.

21. PROPERTY DAMAGED:	NATURE OF DAMAGE:
Crane, handrails, and grating.	**Broken boom cylinders, grating and hand rails were damaged.**

ESTIMATED AMOUNT (TOTAL): **$90,000**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Houma District has no recommendations to report to the Regional Office of Safety Management.

The Houma District concurs with Leed's incident overload bench test recommendation found in Item 20 of this report.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **NO**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

N/A

25. DATE OF ONSITE INVESTIGATION:

26. ONSITE TEAM MEMBERS:

Ronald Washington /

29. ACCIDENT INVESTIGATION PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED DATE: **24-AUG-2010**

INJURY/FATALITY/WITNESS ATTACHMENT

[ ] OPERATOR REPRESENTATIVE	[ ] INJURY
[ ] CONTRACTOR REPRESENTATIVE	[ ] FATALITY
[X] OTHER **Shaw Global Services**	[X] WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

Crane/Other Material-Handling Equipment Attachment

Equipment Information

Installation date: **24-NOV-1988**

Manufacturer: **ELEVATED BOATS INC.**

Manufacture date: **16-NOV-1988**

Make/Model: **C-20** / **C20-50**

Any modifications since manufactured? Describe and include date(s).

What was the maximum lifting capacity at the time of the lift?

Static: **10000** Dynamic: **10000**

Was a tag line utilized during the lift? **N**

Were there any known documented deficiencies prior to conducting the lift? If yes, what were the deficiencies?

boom cylinder failure

List specific type of failure that occured during this incident.(e.g. cable parted, sticking control valve, etc.)

Cylinder exploded and broke apart at the base of the cylinder.

If sling/loose gear failure occurred does operator have a sling/loose gear inspection program in place? **Y**

Type of lift: **DM**

For crane only:

Type of crane: **HYDRAULIC**

Boom angle at time of incident: Degrees: **65** Radius: **50**

What was load limit at that angle? **13600**

Crane equipped with: **L**

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

If load line involved, what configuration is the load block: **0** part.

Load Information

What was being lifted? **PIPE**

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.)

scrap basket of junk iron

Approximate weight of load being lifted: **7500**

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

Was the load identified with the correct or approximate weight? **N**

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.)

The load was to be lowered to the motor vessel Warren Thomas

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)

None

Were personnel wearing a safety harness? **NA**

Was a lifeline available and utilized? **NA**

List property lost overboard.

NONE

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? **15**

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? **7**

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?

Y

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?

HAND SIGNAL

For crane only:

What crane training institution did crane operator attend?

ELEVATED BOATS INC.

Where was institution located? **201 DEAN COURT, HOUMA LA**

Was operator qualified on this type of crane? **Y**

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

Years: **14** Months: **1**

List recent crane operator training dates.

17-OCT-2006

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?

Inspection/Maintenance Information

For crane only:

Is the crane involved classified as Heavy, Moderate or Infrequent use.
M

Was pre-use inspeciton conducted? **Y**

For the annual/quarterly/monthly crane inspections, please fill out the following information:

What was the date of the last inspection? **16-MAY-2010**

Who performed the last inspection? **ALBERT HAYWARD**

Was inspection conducted in-house or by a 3rd party? **TP**

Who qualified the inspector? **MACGREGOR PCS**

Does operators' policy require load or pull test prior to heavy lift? **Y**

Which type of test was conducted prior to heavy lift? **L**

Date of last pull test: **16-MAY-2010** Load test: **16-MAY-2010**

Results: **P**

If fail explain why:
None

Test Parameters: Boom angle: **30** Radius: **53**

What was the date of most recent crane maintenance performed? **16-MAY-2010**

Who performed crane maintenance? (Please clarify persons name or company name.)
CARGOTEC USA INC.

Was crane maintenance performed in-house or by a third party? **TP**

What type of maintenance was performed?
performed pre annual maintenance according to API RP 2D

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?

Safety Management Systems

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?

N

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?

N

Did operator have an operational or safety meeting prior to job being performed?

N

What precautions were taken by operator before conducting lift resulting in incident?

Procedures in place for crane/other material-handling equipment activities:

Did operator have procedures written? **Y**

Did procedures cover the circumstances of this incident? **N**

Was a copy available for review prior to incident? **Y**

Were procedures available to MMS upon request? **N**

Is it documented that operator's representative reviewed procedures before conducting lift?

N

Additional observations or concerns: