

# DISCOVERY

*Energy Services*

## COMPLETIONS AND WORKOVER RIG RIG DISCOVERY 3 SPECIFICATIONS BROCHURE



ISO 9001: 2008  
ISO 14001: 2004  
OHSAS 18001: 2007  
BUREAU VERITAS  
Certification



N° C0223270 / N° C0223271 / N° C0223272



# HIGHLIGHTS

<b>Name:</b>	<b>Discovery 3</b>
<b>Brand</b>	Loadcraft
<b>Power:</b>	550 HP
<b>Year:</b>	2010
<b>Double Drum:</b>	Drawworks and Sandline Drums
<b>Type:</b>	Self-propelled Land Rig
<b>Static Hook Load:</b>	250.000 Libras
<b>Drilling depth:</b>	15.000 FT TUBING 3-1/2" 9,3#





# CARRIER

## CARRIER

Specifications	Data
<b>Manufacturer</b>	Loadcraft
<b>Model</b>	LCI 550C
<b>Brakes</b>	Air brakes in all wheels
<b>Steering</b>	Hydraulic powered
<b>Front axles</b>	2
<b>Rear axles</b>	3
<b>Headlights</b>	Stop and taillights
<b>Reflectors</b>	Air horn
<b>Cab</b>	One man, washer and wiper
<b>Mirrors</b>	Two rear view mirrors





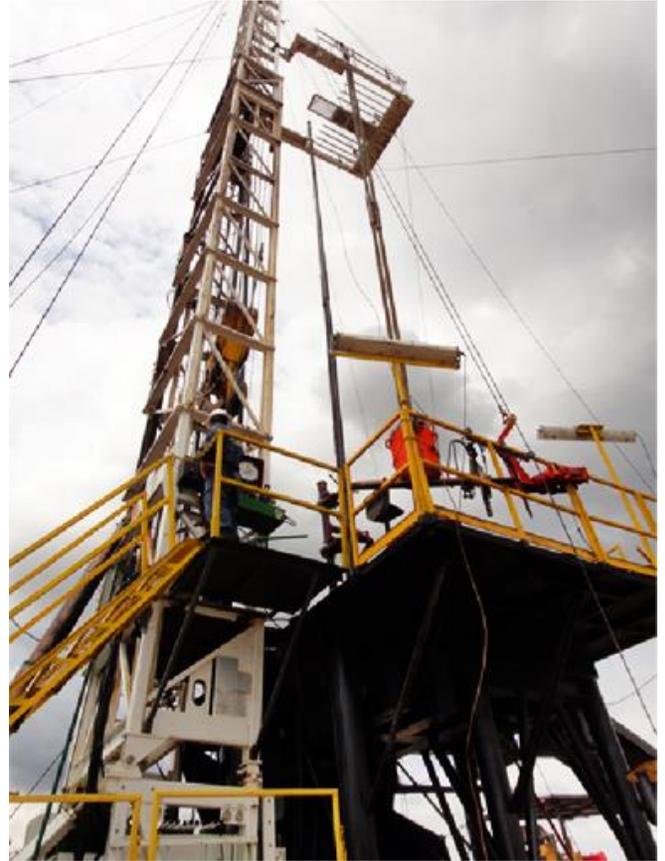
# Rig Discovery-3 In Operations – Casanare



# MAST AND SUBSTRUCTURE

## MAST

Specifications	Data
Manufacturer	Loadcraft
Model	104/250
Type	Telescoping double
Clear Height	104ft
Static Hook Load	250.000 Lbs
Drilling line size	1"



## MAST SUBSTRUCTURE

Specifications	Data
Manufacturer	Prodimetales
Year	2011
Type	Telescoping (Low boy)
Height	14ft
Capacity	250.000 Lbs
Clearence	12ft
Weight	12.000 Kg
Rotary Table:	Sentry 17-1/2" and 250 Ton



# HOISTING EQUIPMENT

## DRAWWORKS

Specifications	Data
Manufacturer	Loadcraft
Year	2010
Model	550/42-12, 42X12
Size	42 X 12"
Single line pull	42.500 Lbs
Shaft Diameter	6-1/2"
Horse power rating	550 HP
Drum Capacity	3260 ft, 1" Wire rope



## AUXILIARY BRAKE

Specifications	Data
Manufacturer	Parmac
Reference	202



# HOISTING EQUIPMENT

## SANDLINE DRUM

Specifications	Data
Manufacturer	Loadcraft
Model	42X8
Size	42 X 8"
Drum Capacity	14.400 ft of 9/16 Sandline

## TRANSMISSION

Specifications	Data
Manufacturer	Caterpillar
Model	CAT TH35-E81
Type	Automatic
Power shift	From cab and rear control



## ENGINE

Specifications	Data
Manufacturer	Caterpillar
Model	CAT C15
Rating	540 HP @ 2100 rpm
Exhaust	With spark arrestor
Air compressor	Driven from engine
Emergency stop	High water temp, low oil pressure and overspeed emergency shutdown

# HOISTING EQUIPMENT

## HYDRAULIC SYSTEM

Specifications	Data
Hydraulic pump	50 GPM (PTO Driven by transmission)
Oil Tank	195 Gal
Max. Pressure	2500 PSI @ 2100 rpm
System rating pressure	3000 PSI
Raising Cylinder	Three stages (hydraulic)
Jackscrews	4 hydraulic leveling jacks

## HANDLING WINCH

Specifications	Data
Type	Hydraulic powered
Capacity	8.000 Lbs
Rated line pull	100 fpm and 2.000 PSI
Line	325 ft of 1/2"
Fail-safe brake	Included

## TRAVELING BLOCK

Specifications	Data
Manufacturer	McKissick
Type	Hook block
Reference	84A
Load capacity	150 TON
Sheaves	4 sheaves of 1"
Fail-safe brake	Included
Link elevators	150 TON, 6 ft



# ROTARY SYSTEM

## ROTARY TABLE

Specifications	Data
Manufacturer	Sentry
Load capacity	250 Ton
Reference	SI-RT-175 X 44
Load capacity	150 TON
Size	17-1/2"
Max. Working torque	10.132 ft.Lbs
Max speed	300 rpm



## KELLY SYSTEM

Specifications	Data
Kelly type	Square 3-1/2" X 40ft
Bottom conexión	3-1/2 IF pin
Top conexión	6-5/8 Reg LH box
Kelly drive bushing	Square drive 17-1/2"
Kelly master Bushing	Included
Load capacity	150 TON
Size	17-1/2"
Max. Working torque	10.132 ft.Lbs
Max speed	300 rpm



# ROTARY SYSTEM

## SWIVEL

Specifications	Data
Manufacturer	Western Rubber
Bottom connexion	6-5/8 Reg LH pin
Reference	15 NV
Capacity	150 Ton
Rotating load capacity	90 Ton @ 100 rpm
Working pressure	4.500 PSI
Main bearing	Full apex roller
Fluid passage	3"
Rotary hose	3" X 5000 PSI (35ft)





# CIRCULATING SYSTEM

## MUD PUMP

Specifications	Data
Manufacturer	Gardner Denver
Reference	PAH08
Liners	4-1/2
Stroke length	8"
Engine	Detroit 8V 71
Horse power rating	400 HP
Transmission	Automatic Allison 750





# CIRCULATING SYSTEM

## MUD TANKS

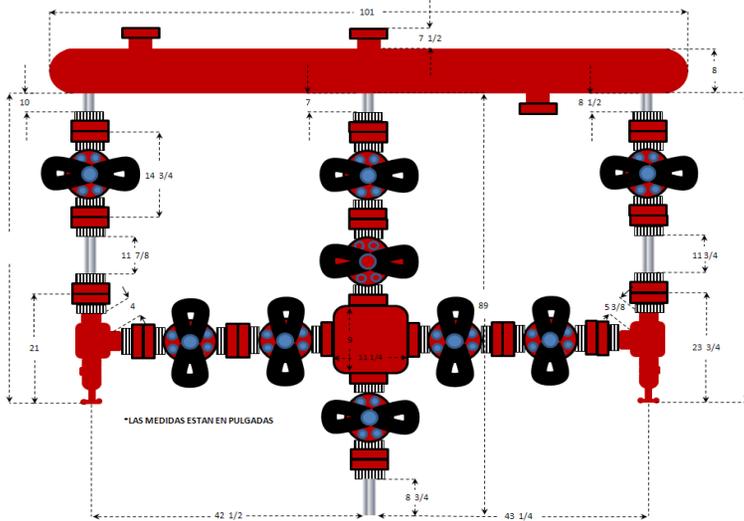
Specifications	Data
Qty	2
Capacity	250 BBL (TOTAL: 500 BBL)
Agitators	2 (for each tank)
Cetrifuge	4X6 (Electric engine of 40HP)
Type	Fast move
Fixed poor boy	Included
Electric instalation	Explosion proof (6 lamps)
Mud mixing Hopper	Included



# WELL CONTROL SYSTEM\*

## ANULAR BOP

Specifications	Data
Manufacturer	Hydril
Size	11 X 5M and 11»X5M
Top conexión	Studded
Bottom conexión	Flanged
Max. Working pressure	5000 PSI



## RAM BOP

Specifications	Data
Manufacturer	Hydril
Size	11 X 5M and 11»X5M
Top conexión	Studded
Bottom conexión	Flanged
Max. Working pressure	5000 PSI
Rams	Blind Rams and Pipe rams
Pipe rams	3-1/2 and 2-7/8

## CHOKE MANIFOLD

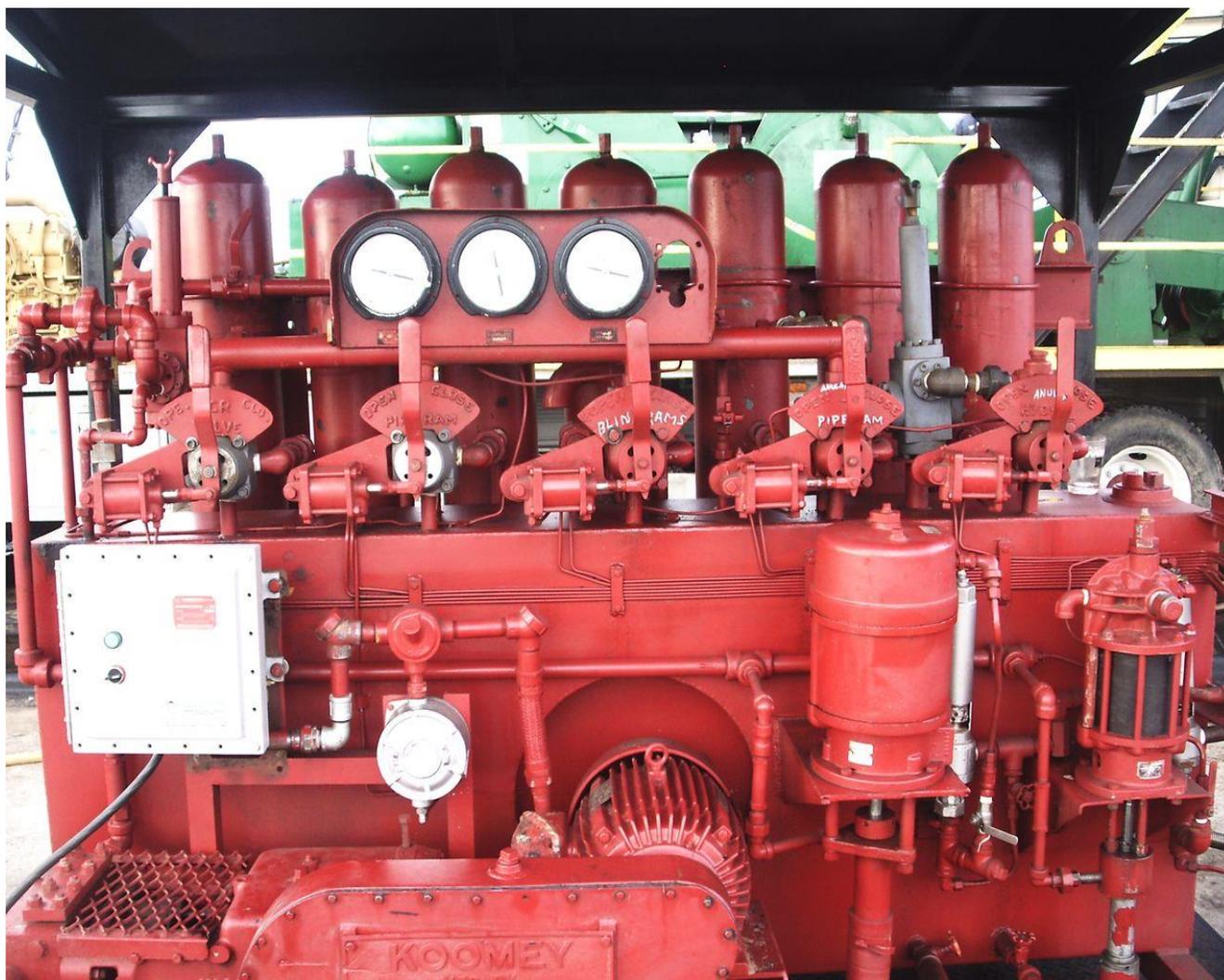
Specifications	Data
Reference	2-1/16 X 5M
Valves	9 gate flanged valve 2-1/16 X 5M
Conexiones	2" Fig. 1502
Chokes	2 graduable chokes

\*all well control equipment is as per API RP 53

# WELL CONTROL SYSTEM\*

## ACCUMULATOR UNIT

Specifications	Data
Bottles	6 for 10 Gal
Working pressure	3000 PSI
Pre-charge pressure	1000 PSI
Hydraulic pump	Triplex
Pneumatic pump	Included
Four way rotary valve	
valve	3
Pressure regulator	2
Electric system	Explosion proof





# WELL CONTROL SYSTEM\*

## POOR BOY

Specifications	Data
Size	24"
Type	Fixed at mud tank
Liquid outlet	6"
Gas outlet	3"





# POWER SYSTEM

## GENERATORS

Specifications	Data
Manufacturer	General power
Qty	2
Capacity	131 KVA
Cabin	Isolated cabin
Model	GP131S
Conexions	Explosion proof (Appleton)





## MANUAL TOOLS

Specifications	Data
Pipe wrenches	2 of each size (24, 36, 48 y 60)
Chain wrenches	24 and 36"

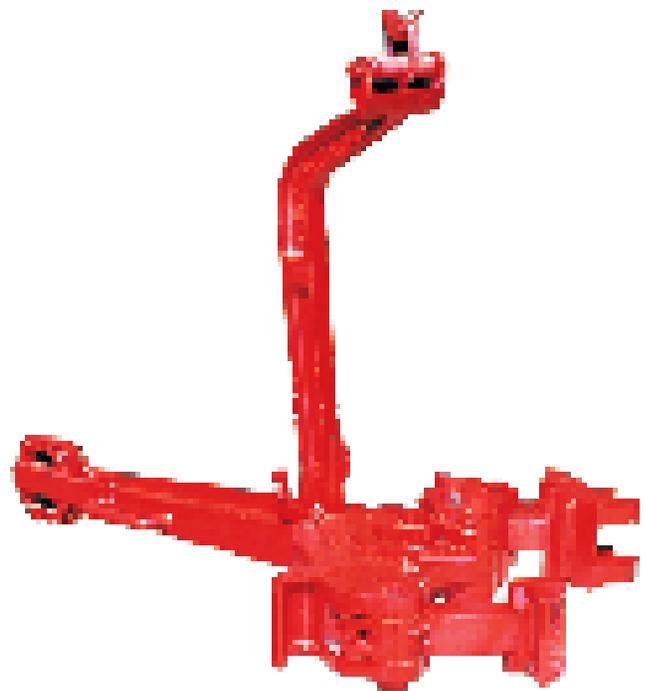
## HYDRAULIC TONG

Specifications	Data
Manufacturer	Foster
Tubing sizes	2-3/8, 2-7/8, 3-1/2
Reference	58-93R
Type	Hydraulic powered



## MANUAL TONGS

Specifications	Data
Manufacturer	BJ
Type	C
Range	3-1/2 to 5-1/2" and 7 to 8-1/2"
Torque rating	Up to 35.000 Lbs





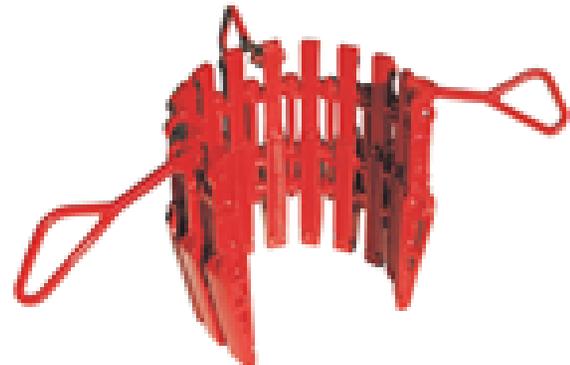
## ELEVATORS

Specifications	Data
Tubing elevators	90° for 2-3/8, 2-7/8 and 3-1/2
Drill pipe elevator	18° for 3-1/2
Torque rating	Up to 35.000 Lbs
Type	Latch



## SLIPS

Specifications	Data
Pneumatic slips	Cavins for 100 tons (2-3/8 to 3-1/2)
Rotary slips	Varco - BJ (2-7/8 to 3-1/2) 150 tons
Drill Collar slips	4-3/4 Drill Collar slips
Safety clamp	4-3/4 Drill Collars

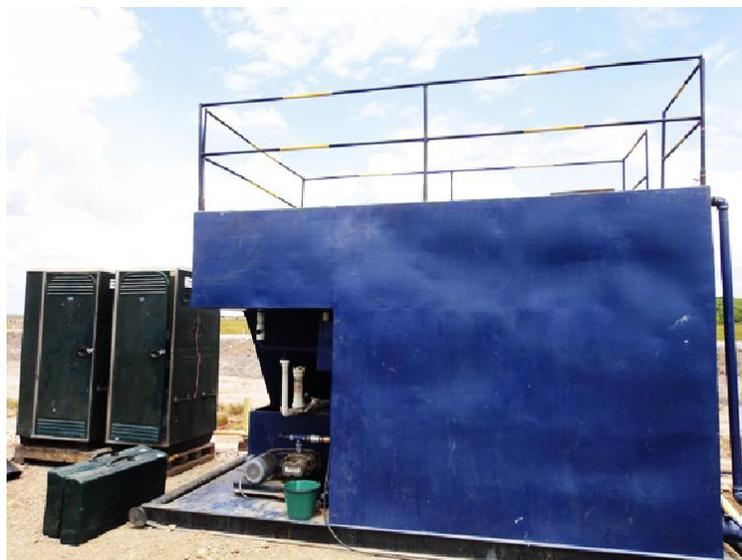




# CAMPING

## MIN CAMP

Specifications	Data
Units	3
Beds	2 or 4 for every room
Bathroom	1 for each room
Year	2010
Skidd	Yes
Refrigerator	For Coman and assistant
Red fox unit	60 people capacity
Dining room	included





# INSTRUMENTATION

## WEIGHT INDICATOR

Specifications	Data
Manufacturer	Martin Decker
Type	Clipper
Lines	8 lines of 1"
Range	0-280.000 Lbs

## JOINT TORQUE

Specifications	Data
Manufacturer	Martin Decker
Range	0-10.000 ft.Lbs
Type	Pressure Cell

## ROTARY TORQUE

Specifications	Data
Manufacturer	Forum
Range	0-500

## STROKE COUNTER

Specifications	Data
Model	5700
Totalizer	Included
Mud pumps	2





# MISCELLANEOUS

## SWABBING EQUIPMENT

Specifications	Data
Oil saver	Guiberson HD
Swivel rope socket	Guiberson for 9/16
Sinker bars	2 of 10ft
Swab mandrel	Knuckle joint type (2)
Hydraulic pump	Including a hose of 50ft
Depthometer	Cavins
Lubricator	4"
Swabbing tree	4" with 3 gate valves (4"X5M)

## SAFETY EQUIPMENT

Specifications	Data
Fall Protection	Full body harnesses, Body belts, Lanyards , SRL'S.
Low speed descender	Included
Climbing assist system	Included
Gas detector	Portable
Breathalyzer	Portable

