

DISCOVERY

Energy Services

COMPLETIONS AND WORKOVER RIG RIG DISCOVERY 1 SPECIFICATIONS BROCHURE



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

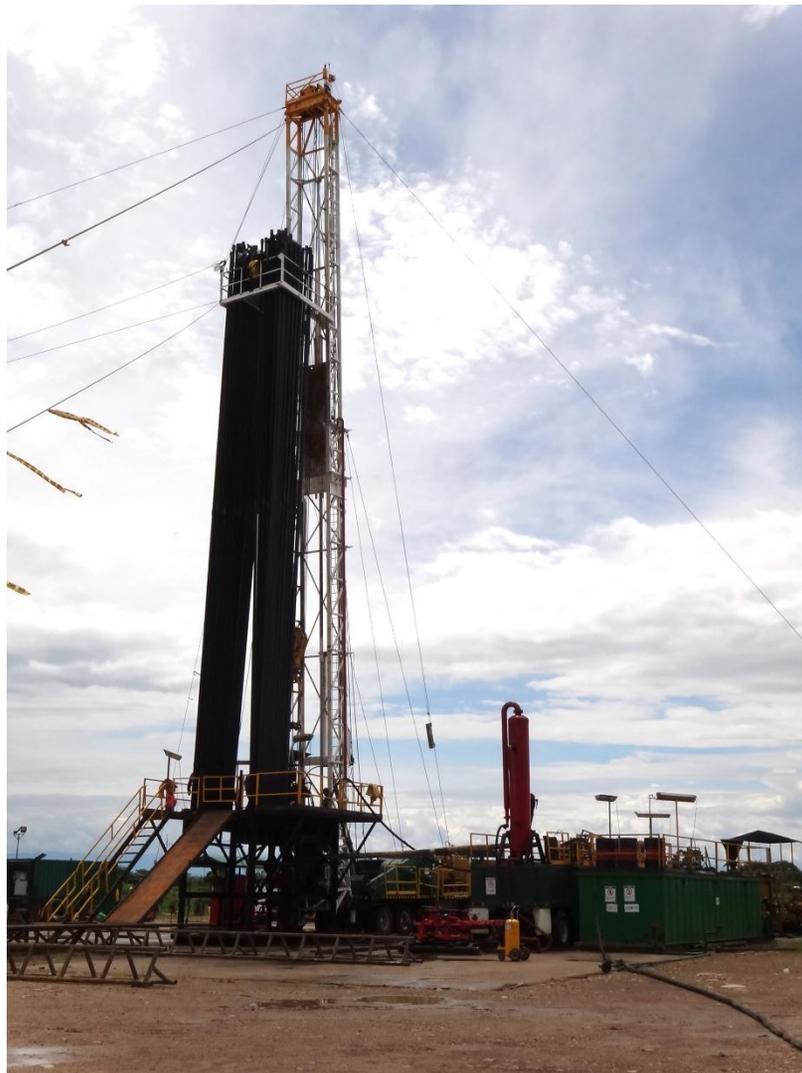


N° C0223270 / N° C0223271 / N° C0223272



HIGHLIGHTS

Name:	Discovery 1
Brand	Cardwell
Power:	350 HP
Double Drum:	Drawworks and Sandline Drum
Type:	Back-In Winchmobile
Static Hook Load:	160.000 Libras
Service:	8.000 FT TUBING 3-1/2"





CARRIER

CARRIER

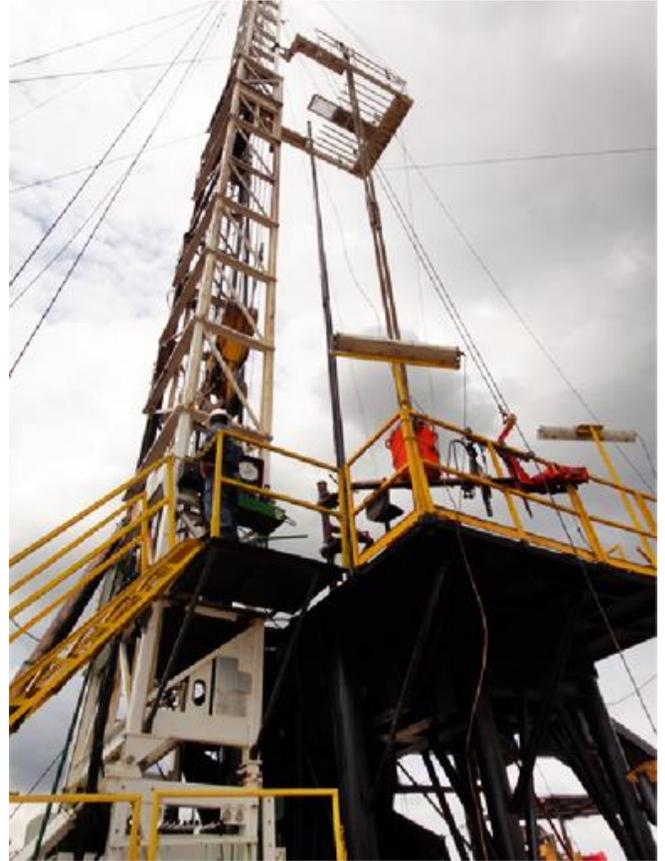
Specifications	Data
Manufacturer	Cardwell
Model	K-210B - 350
Brakes	Air brakes in all wheels
Steering	Mechanical powered
Front axles	2
Rear axles	2
Headlights	Stop and taillights
Reflectors	Air horn
Cab	One man, washer and wiper
Mirrors	Two rear view mirrors



MAST AND SUBSTRUCTURE

MAST

Specifications	Data
Manufacturer	Service King Mfg - Usa
Model	250/96
Type	Telescoping double
Clear Height	96ft
Static Hook Load	250.000 Lbs (6 lines)
Drilling line size	1" 6X29 EIPS/IWRC



MAST SUBSTRUCTURE

Specifications	Data
Manufacturer	Frank Equipment
Year	2010
Type	Telescopic
Height	14ft
Capacity	250.000 Lbs
Weight	10.000 Kg
Rotary Table:	IDECO 175 F



HOISTING EQUIPMENT

DRAWWORKS

Specifications	Data
Manufacturer	Cardwell
Year	1986
Model	K 210 B
Single line pull	30.000 Lbs
Shaft Diameter	6"
Horse power rating	350 HP
Drum Capacity	3260 ft, 1" Wire rope



AUXILIARY BRAKE

Specifications	Data
Manufacturer	Parmac
Reference	D. 122



HOISTING EQUIPMENT

SANDLINE DRUM

Specifications	Data
Manufacturer	Cardwell
Model	K 210-B
Drum Capacity	10.000 ft of 9/16" Wire Rope

TRANSMISSION

Specifications	Data
Manufacturer	Allison
Model	CBT - 5860
Type	Tormatic
Power shift	From cab and rear control



ENGINE

Specifications	Data
Manufacturer	Caterpillar
Model	3406
Rating	500 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	C.MODEL 37X - 45 GPM
Oil Tank	195 Gal
Max. Pressure	2500 PSI @ 2100 rpm
System rating pressure	3000 PSI
Raising Cylinder	Two (2) Hydraulic C Ylinders 107" X 2-7/8"
Jackscrews	4 hydraulic leveling jacks

HANDLING WINCH

Specifications	Data
Type	Hydraulic powered
Capacity	4000 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	Tubing Block
Reference	86 A
Load capacity	100 TON
Sheaves	3 sheaves of 1"
Fail-safe brake	Included
Link elevators	100 TON, 5 ft



ROTARY SYSTEM

ROTARY TABLE

Specifications	Data
Manufacturer	IDECO 175 F
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	85 TON
Size	17-1/2"
Max. Working torque	10.132 ft.Lbs
Max speed	300 rpm



CIRCULATING SYSTEM

MUD PUMP

Specifications	Data
Manufacturer	Dowell Schlumberger
Reference	Dowell PG-03
Liners	4-1/2"
Stroke length	5"
Engine	Detroit 8V-71 turbo
Horse power rating	350 HP
Year	2007
Transmission	Automatic Allison 4460





CIRCULATING SYSTEM

MUD TANKS

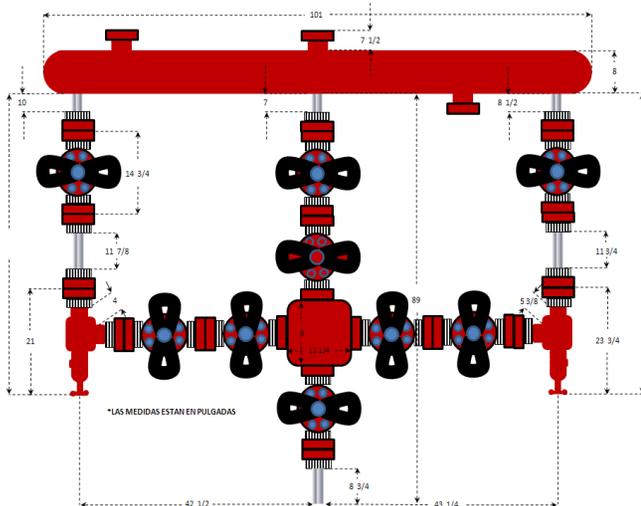
Specifications	Data
Qty	2
Capacity	250 BBL (TOTAL: 500 BBL)
Agitators	3
Cetrifuge	4X4 (Electric engine of 40HP)
Type	Fast move (Low boy)
Fixed poor boy	Included
Electric instalation	Explosion proof (6 lamps)
Mud mixing Hopper	Included



WELL CONTROL SYSTEM*

ANULAR BOP

Specifications	Data
Manufacturer	Hydril
Size	7-1/16 X 5M
Top conexión	Studded
Bottom conexión	Flanged
Max. Working pressure	5000 PSI



RAM BOP

Specifications	Data
Manufacturer	Hydril
Size	7-1/16 X 5M
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 fo 10 Gal
Working pressure	3000 PSI
Pre-charge pressure	1000 PSI
Hydraulic pump	Triplex
Pneumatic pump	Included
Four way rotary valve	4
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
Quantity	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"

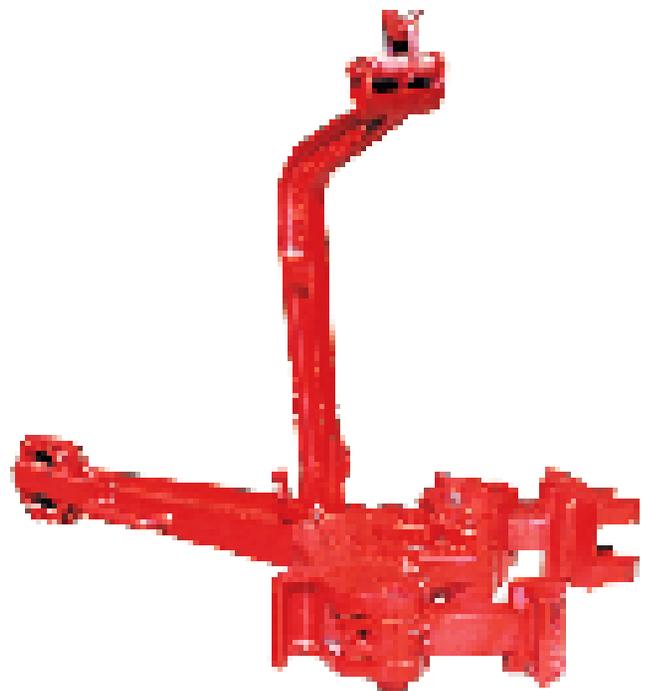
HYDRAULIC TONG

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





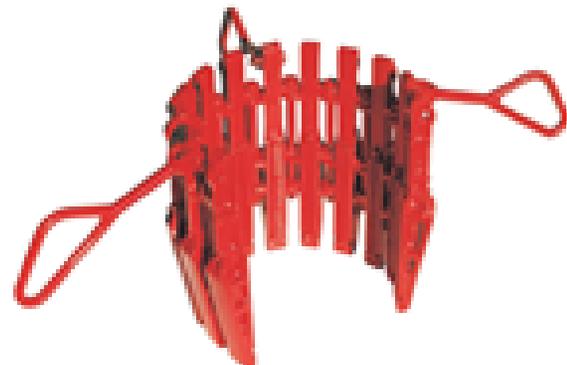
ELEVATORS

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)
	Varco - BJ (2-7/8 to 3-1/2)
Rotary slips	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

