

2022

OCEANOGRAPHY

Experience Credential



Measurements and Studies of Physical Oceanography and Marine Meteorology

Waves

Measurements:

Directional wave using oceanographic buoys:

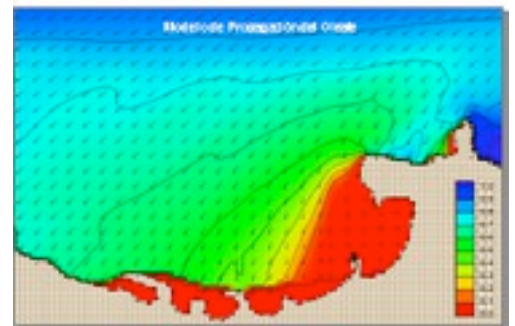
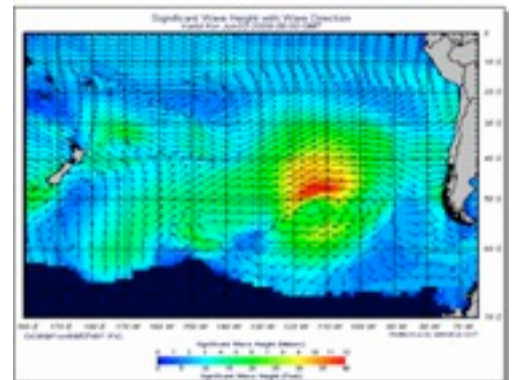
- In real-time data telemetry by satellite, GSM and radio
- Additional sensors:
 - Current velocity profiles
 - Temperature, conductivity, turbidity, salinity
 - Meteorological parameters, as wind, pressure, temperature, pluviosity, solar radiation, etc.

Directional wave using Doppler Acoustic Profiler current meters (ADCP).

Scalar wave using digital pressure gauges.

Studies:

- Wave regime in deep waters (with the support of OceanWeather, Inc.)
- Wave statistic parameters (operational, extreme, significant for sedimentary processes, etc.)
- Wave and wind forecast up to seven days, updated every six hours (with the support of OceanWeather, Inc.)
- Mathematical modeling of the wave propagation



Currents

Instruments: Great diversity of current meters, Doppler acoustic profilers (ADCP) for multiple applications:

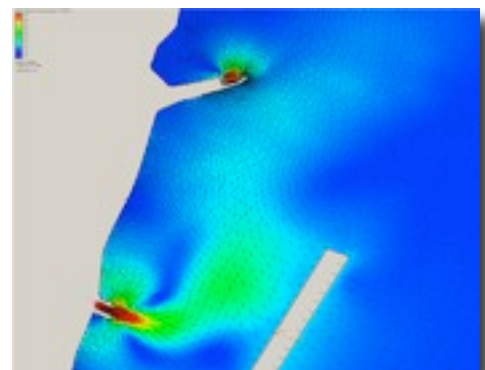
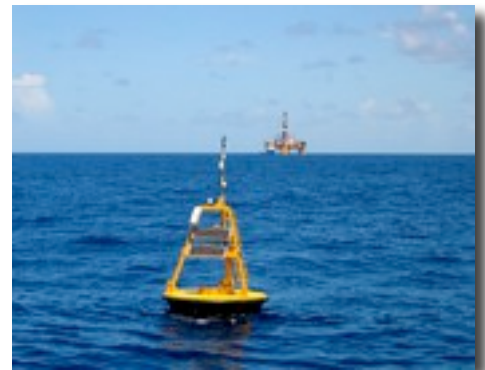
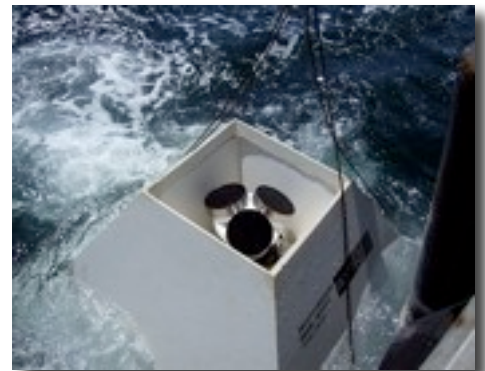
- Nortek AWAC 600 kHz with acoustic surface tracking (AST) for currents and directional wave measurements from the bottom at depths up to 50 meters
- Nortek Continental 190 kHz for deep waters (range: 300 meters)
- Nortek AquaDopp Profiler 400 kHz for measurements from buoys (range: 80 meters)
- Nortek AquaDopp Profiler 1 MHz for currents and directional wave measurements
- SonTek ADP 1 MHz with Bottom Track for flow and currents measurements
- SonTek Argonaut-XR 1.5 MHz for currents and scalar wave measurement in shallow waters

Measurements:

- Profile of the velocity vector in the current in the water column up to 2000 m depth
- Flow measurements with real-time visualization
- Measurement and real-time visual of currents for offshore activities support as navigation, borings, installation of structures

Studies:

- Statistical parameters of the currents
- Currents forecast models
- Hydrodynamic currents modeling in estuaries, tide and open sea estuaries
- Hydrodynamic Models of Diffusion and dispersion thermal plume, pollutants and sediments
- Transport modeling and sediment entrainment



Oceanographic Experience. Relevant Projects

Oceanography and Meteorological Studies in the Corocoro Field and Deltan Platform. Gas Fields Blocks of the Mariscal Sucre Project.

PDVSA
Gulf of Paria, Venezuela



Oceanographic measurements in Block IV, Deltan Platform.

Statoil Venezuela
Orinoco Delta, Venezuela

Oceanographic studies. Project Nigale Bridge.

Cowi - Odebrecht
Zulia State, Venezuela



Oceanographic studies. Expansion project of the El Palito Refinery.

Y & V Engineering and Construction, C.A.
Falcon State, Venezuela

Bathymetric survey for the replacement of the western monobuoy in the TAEJAA.

CONSORCIO FRACK INTERNACIONAL LIMITED

2020

Anzoategui, Venezuela

Modeling the effects of the extension of Río Hato breakwater and design of mitigation works

AGRO PLAYA BLANCA, S.A.

2018- 2019

Cocle Province, Republic of Panama

Engineering and construction service for the complementary stabilization of the submarine pipelines of the marine facilities at the Miramar Receipt, Storage and fuel Distribution Plant.

EMBYSA

2018

Nicaragua

Weather prediction service at the Miramar Receipt, Storage and fuel Distribution Plant.

EMBYSA

2017-2018

Nicaragua

Technical assistance for Axys Watchkeeper buoy repair.

AMBER COVE

2017

Dominican Republic

Acquisition, processing and interpretation service of meteorological and oceanographic data for Barracuda Field, Gulf of Venezuela.

PDVSA PETROLEO, S. A

2017

Gulf of Venezuela

Real-time environmental monitoring service using two metocean buoys in Campo Perla.

CARDON IV, S.A.

2017

Gulf of Venezuela

Meteorological and oceanographic study in support of the offshore operations in Dragon Camp - Accelerated Production Schedule (APS) and strategical areas of the Western Caribbean Delta Project.

PDVSA PETRÓLEO, S.A.

2017 – 2018

Gulf of Venezuela

Geodesic and hydrographic services in PDVSA Occidente, period 2014-2015.

PDVSA PETRÓLEO, S.A.

2017

Zulia State. Venezuela

Installation of the multipurpose station's equipment at the actual locations of the Venezuelan "Simon Bolivar" Geographic Institute tidal gauge network.

UNIT EXPORT LIMITED

2017

Vargas, Carabobo, Falcón, Sucre y Nueva Esparta States. Venezuela

Mecor pipeline project-Venezuela provision of survey support services.

SAIPEM AMERICA INC

2017

Gulf of Venezuela

Engineering for the pipeline of gas exportation and merchandising Aruba and Curazao.

PDVSA GAS, S.A.

2017

Aruba y Curazao

Conceptual Engineering Offshore Natural Gas Supply to Aruba from Venezuela.

Y&V INGENIERÍA Y CONSTRUCCIÓN

2016

Aruba and Venezuela

Technical assistance for assembly and deployment of metocean buoys in Chile.

AXYS

2017

Chile

Technical assistance for assembly and deployment of metocean buoys in Uruguay.

AXYS

2017

Uruguay

Preventive technical and corrective maintenance of the elements of the Oceanographic Parameters and Marine Meteorology Measuring System OPMMMS of the General Marine Management.

MINISTRY OF NATIONAL DEFENSE (DIMAR)

2016

Colombia

Bathymetric survey with geophysical instrumentation and topographic control of the 20" line laying over the axis of the New Sumandes Poliduct.

EHCOPEK, S.A

2016

Zulia State. Venezuela

PLNG-MAR-15008-METOCEAN ADCP 's Redundant System.

PERU LNG S.R.L.

2016

Peru

Navigation study of the Apure River 2016.

ALIVA OF PANAMÁ

2016

Apure State. Venezuela

Technical assistance for the assembly and deployment of two metocean buoys in Panama.

AXYS

2016

Panama.

Exploratory bathymetric survey between the auxiliary platform and WHP Petrowarao of Petrosucre platform - Pedernales Field.

PERENCO DE VENEZUELA, S.A.

2015

Sucre State. Venezuela

Technical advisory service measurement and processing of oceanographic data from the instrument optic (OBS) Optical Backscatter Sensor.

INSTITUTO DE INVESTIGACIONES MARINAS Y COSTERAS JOSÉ BENITO VIVES DE ANDREIS- INVEMAR

2015

Republic of Colombia

DGPS survey control sublacustrine laying of gas line 26 " between ULE and Bajo Grande.

EHCOPEK, S.A.

2015

Zulia State. Venezuela

Bathymetric survey with Monobeam echo sounder and side scan sonar lying. Bajo Grande-ULE.

EHCOPEK, S.A.

2015

Zulia State. Venezuela

Bathymetric and geophysical survey in the dock areas and Pralca access channel.

PRODUCTORA DE ALCOHOLES HIDRATADOS, C.A. PRALCA
2015
Zulia State, Venezuela

Meteorological and oceanographic study in support of offshore operations in Campo Dragon - (EPA) and strategic areas of Delta Caribe Oriental Project.
PDVSA PETROLEO, S.A.
2015
Sucre State, Venezuela

Topo - bathymetric survey for the tourism development "Luna Sol City Beach". Located on the Peninsula of Macanao, Nueva Esparta State.
NOUEL CONSULT, C.A.
2015
Nueva Esparta State. Venezuela

Oceanographic Buoys Supply and installation.
CARDON IV, S.A.
2014
Caribbean Sea

Professional services for the hydrographic and geodetic control dredging the docks PDVSA West, 2014-2016.
PDVSA PETROLEO, S.A.
2014
Zulia State. Venezuela

Acquisition, processing and interpretation of bathymetric data for areas adjacent to the navigation channel Corocoro Field.
PDVSA PETROSUCRE, S.A.
2014
Gulf of Venezuela

Topo bathymetric survey. Petrocedeño, Petrochemical Complex Jose Antonio Anzoategui.
CONSTRUCTORA COSACO, C.A.
2014
Anzoátegui State, Venezuela

Geodetic support and technical direction dredging of the lake terminal Ana María Campos Petrochemical Complex.
PEQUIVEN
2014
Zulia State. Venezuela

Acquisition, processing and interpretation of meteorological and oceanographic data for the Barracuda field.

PDVSA PETROLEO, S.A.

2013-2015

Golfo de Venezuela

Developing a methodology to measure fluids in Boca Grande, Orinoco river.

INSTITUTO NACIONAL DE CANALIZACIONES.

2013

Orinoco river. Venezuela

Technical support services for the 230kv submarine cable interconnection project between Margarita Island and Chacopata Sucre.

LS, CABLE & SYSTEM LTD

2013-2014

Sucre and Nueva Esparta Satates. Venezuela

Multibeam bathymetry pre-dredging pipeline corridor CIGMA – Dragon field.

HIDRO PROYECTOS DEL CARIBE, S.A.

2013

Sucre State, Venezuela

Metocean service for the designing of submarine infrastructures and of associated surfaces to the Deltana-Cigma Platform project in the Atlantic Facade area.

PDVSA PETRÓLEOS S.A.

2013

Deltana Platform. Venezuela

Multibeam bathymetry pre-dredging at Cigma gas pipeline corridor – Dragon field.

HYDRO PROYECTOS DEL CARIBE, S.A.

2013

Güiria, Sucre State. Venezuela

Bathymetric survey in the Jetty of operations aquatic Odebrech in the Lake of Maracaibo.

ODEBRECHT

2013

Lake of Maracaibo. Venezuela

Multibeam bathymetry in corridor for laying electric cables.

OCEANOGRAFÍA MERCATOR, C.A.

2013

Sucre and Nueva Esparta States. Venezuela

Equipment and Data Processing for Geophysical and Bathymetric Off-Shore.

AMUNDARAY INGENIERÍA GEOTÉCNICA, C.A.

2013

Sucre State, Venezuela

Acquisition, processing and interpretation of meteorological and oceanographic data in the Corocoro and Posa fields.

PDVSA PETROSUCRE, S.A.

2013

Gulf of Paria, Venezuela

Bathymetric study for the new GNL terminal in San Pedro de Macoris, Dominican Republic.

Y&V INGENIERIA Y CONSTRUCCION

2012

Dominican Republic

Study of marine currents for the new GNL terminal in San Pedro de Maris, Dominican Republic.

Y&V INGENIERIA Y CONSTRUCCION

2012

Dominican Republic

Acquisition and processing of meteorological data for Barracuda Field.

PDVSA PETROLEO, S.A.

2012 - 2013

Gulf of Venezuela

Meteorological and oceanographic services for infrastructure development of the Early Production System on Rio Caribe field, and support in drilling of the Dragon and Patao fields.

PDVSA PETROLEO, S.A.

2012

Gulf of Venezuela

Review of Geotechnical and Oceanographic Information available in the offshore field of Pacific Rubiales Peru.

PACIFIC RUBIALES PERU

2012

Republic of Peru

Metocean study for port facilities in the LNG exportation terminal in Tolu.

PACIFIC RUBIALES

2011

Tolu, Colombia

Bathymetric raising in the service dock of Petroanzoategui.

INELECTRA, S.A.C.A.

2011

Anzoategui State, Venezuela

Geodesic and hydrographic services in PDVSA Occidente.

PDVSA Occidente, S.A.

2010-2012

Zulia State, Venezuela

Oceanographic parameters study (currents, waves and tides) in the port area of BILWI.

EMBYSA

2010

North Atlantic Autonomous Region. NAAR. Nicaragua

Geotechnical and topographic study for the location of the new monobuoy, Jose Cryogenic Complex.

PDVSA

2009

Anzoategui State, Venezuela

Oceanographic studies for the Nigale Bridge project.

COWI – ODEBRECHT

2008 - 2009

Zulia State, Venezuela

Oceanographic studies. Expansion project of the El Palito Refinery.

Y & V INGENIERÍA Y CONSTRUCCION, C.A.

2008 - 2009

Falcon State, Venezuela

Oceanographic and meteorological studies in the Corocoro camp and Delta Platform. Gas field blocks of the Mariscal Sucre Project.

PDVSA

2008

Gulf of Paria, Venezuela

Detail Engineering. Intake and discharge of water circulation works. Thermoelectric plant. Termozulia II.

JANTESA

2008

Zulia State, Venezuela

Simulation of the intake and discharge cooling systems of Termozulia I, II y III.

JANTESA

2008

Zulia State, Venezuela

Field studies for the project of the coast works for sediment control at the Care river mouth.

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES. MARNR

2006 - 2007

Vargas State. Venezuela

Topo-bathymetric rising of the lagoon for separation of hydrocarbons in the Jose Cryogenic Complex.

VENELIN

2006

Anzoategui State, Venezuela

Data collection and processing services for the meteorological and oceanographic study of the project Mariscal Sucre.

PDVSA –CVP

2006-2008

Sucre State, Venezuela

Bathymetrical rising in the adjacent area to Pier N° 1 of the Cardon refinery.

COSTA NORTE CONSTRUCCIONES, S.A.

2006.

Falcon State, Venezuela

Bathymetrical risings in the water intake channel, combine cycle project Termozulia II.

JANTESA

2006-2007

Zulia State, Venezuela

Currents measurements. Block IV, Deltan Platform Project.

STATOIL OF VENEZUELA, A.S.

2006-2008

Orinoco Delta, Venezuela

Currents measurements from the boring platform Sovereign Explorer.

STATOIL OF VENEZUELA. A.S.

2006

Orinoco Delta, Venezuela.

Metoocean desk study Gulf of Paria gas pipeline.

GEOHIDRA CONSULTANTS, S.A.

2006-2007

Gulf of Venezuela

Site location study for the gas liquefaction plant of the off-shore Deltan Platform.

Chevron – Texaco

2005 - 2006

West of Venezuela

Update of depth in the area of construction of the protective breakwater of the Naiguatá Fishery Port harbor.

CONSTRUCTORA 2306, C.A.

2005

Vargas State, Venezuela.

Topo-bathymetric rising and update of the oceanic beach improvement project.

CLUB PUERTO AZUL

2005

Vargas State, Venezuela

Waves study. La Tortuga island endogenous development project.

CHEVRON –TEXACO

2005 - 2008

La Tortuga island, Venezuela

Technical-financial pre-feasibility study for the construction of a river port in Cabruta.

MINISTRY OF INFRASTRUCTURE. MINFRA.

2003- 2004

Guarico State, Venezuela

Bathymetric and geophysical study in the Orinoco river for the laying of a fiber optic cable between the communities of Los Barrancos and San Felix.

CORPOTELETECNICAL

2005- 2009

Monagas and Bolivar States, Venezuela

Bathymetric study in the Tiznaos reservoir to determine its capacity.

AKUATERRA

2005

Guarico State, Venezuela

Marine engineering studies for the Barbacoa-Cumana-Margarita Island gas pipeline.

PROYECTA CORP. S.A.

2005 - 2006

Sucre state, Venezuela

Related bathymetry to the technical advisory in coastal engineering.

CORPOVARGAS

2005 - 2008

Vargas State, Venezuela

Oceanographic rising for the WHP platform in Güiria.

CONOCO – PHILLIPS

2004

Sucre, Venezuela

Metocean data evaluation for the marine exportation facilities in Güiria.

SHELL OF VENEZUELA, S.A.

2003 - 2004

Gulf of Paria, Venezuela

Bathymetric study in the Santo Tomas de Castilla port.

Perenco Guatemala Ltda

2003

Republic of Guatemala

Bathymetric and geodesic risings for the mobilization of the Maersk Pioneer barge to the water injection well.

PERENCO OF VENEZUELA

2002

Delta Amacuro State, Venezuela

Geodetic, geophysical, hydrographic and satellite services for the Capture of Pedernales sector.

PERENCO OF VENEZUELA, S.A.

2001 - 2005

Delta Amacuro State, Venezuela

Geodetic services in PDVSA Occidente.

PDVSA OCCIDENTE

2000 - 2009

Estado Zulia, Venezuela

Currents measurements at the Strait of Maracaibo.

GUASARE COAL COMPANY, C.A.

1998 - 1999

Zulia State, Venezuela

Bathymetric rising of piers at the unit of delayed coking of CRAY in Amuay. Amuay Refinery.

PDVSA

1998

Falcon State, Venezuela

Remediation study of the lake of Maracaibo.

BECHTEL – PDVSA

1998

Zulia State, Venezuela

Currents and waves evaluation in the Pedernales area.

FUGRO

1998

Delta Amacuro State, Venezuela

Hydrologic and hydrographic studies of the base line of the Guarapiche Block.

ENSR

1997

Delta Amacuro State, Venezuela

Installation, operation and maintenance of equipment for oceanographic measurements in the Gulf of Venezuela.

GUASARE COAL COMPANY, C.A.

1997

Zulia State, Venezuela

Engineering services of the Deep Water Terminal DWT.

LAGOVEN, S.A.

1996 - 1998

Sucre State, Venezuela

Oceanographic measurements in the Delta Centro Block.

LOUISIANA LAND & EXPLORATION

1996 - 1997

Delta Amacuro State, Venezuela

Hydrographic measurements in the Gulf of Paria.

ENRON

1996

Sucre State, Venezuela

Hydrographic measurements of currents and waves in the coasts of Jose.

LOCKWOOD GREENE

1996

Anzoátegui State, Venezuela

Waves and currents hydrodynamic measurements in the Gulf of Paria.

Intevep

1995

Sucre State, Venezuela

Hydrographic measurements in the Gulf of Paria for the Deep Water Terminal DWT in the Gulf of Paria.

LAGOVEN, S.A. – INELECTRA

1995

Sucre State, Venezuela

Bathymetrical and geophysical rising at the off-shore terminal facilities in the Western Cryogenic Plant.

TOTAL OIL & GAS

1994

Anzoategui State, Venezuela

Oceanographic measurements for the location of the submarine wastewaters discharge of Barcelona.

HALCROW CONSULTING ENGINEERS

1994

Anzoategui State, Venezuela

Preliminary evaluation of the hydraulic functioning of Los Olivitos marsh.

PRODUCTORA DE SAL, C.A.

1993

Zulia State, Venezuela

Hydrographic and navigation services for the maintenance of the navigation operations in the San Juan river.

PDVSA

1986 - 2000

Monagas State, Venezuela

Bathymetric rising at the western cryogenic complex in Jose.

INTEVEP, S.A.

1986

Anzoategui State, Venezuela

Hydrographic integral study for the optimization of the nautical activities of the piers in PDVSA Occidente.

PDVSA

2003

Zulia State, Venezuela

Additional scope of the environment impact study of the Punta de Aves project, Chichiriviche.

PROMOTORA VARADERO

2003

Falcon State, Venezuela

Bathymetric rising in the thermoelectric plant of Tacao.

C.A. ELECTRICIDAD DE CARACAS

2003

Vargas State, Venezuela

Bathymetric rising in Playa Grande, Carupano.

CAMUDOCA-UDO

2003

Sucre State, Venezuela

Coastal works feasibility study to optimize the sea water caption in the Quisiro and Casigua shrimp farms.

INTER SEA FARMS INTERNATIONAL OF VENEZUELA, S.A.

2002 - 2003

Zulia and Falcon States, Venezuela

Bathymetric study in the area of the marine terminal for the project of storage, repair and dispatch bunker at the El Palito refinery.

PDVSA.

2001

Carabobo State, Venezuela

Bathymetric raising in the Amuay refinery.

PDVSA

2001

Falcon State, Venezuela

Bathymetric raising in the Jose cryogenic condominium.

AMBIOCONSULT

2001

Anzoategui State, Venezuela

Current measurements in the area where the submarine discharge of the treatment plant of the Hamaca project will be located. Cryogenic Complex of Jose.

AMBIOCONSULT

2001

Anzoategui State, Venezuela

Topo-bathymetric rising, design of the Macuto protective breakwater.

CONSEJO DE LA JUDICATURA DEL ESTADO VARGAS

2001

Vargas State, Venezuela

Coastal dynamics study of the sector between Punta Cabo Blanco y Punta Cazonero, El Agua Beach.

CORPOTURISMO

2001

Nueva Esparta State, Venezuela

Topo-bathymetric rising and study for the stabilization of the Caruao river margin.

SINGLE AUTHORITY FOR THE STATE OF VARGAS AREA

2000

Vargas State, Venezuela

Field studies for the preservation project of the Sinamaica lagoon.

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES. MARN

2000

Zulia State, Venezuela

Bathymetry in the fishery docks and loading pier of Los Monjes.

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES. MARN.

2000

Federal Premises, Venezuela

Bathymetry, topography and geodesic reconsideration study of the Camuri Chico – Tanaguareñas coastal section.

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES. MARN

2000

Vargas State, Venezuela

Topo-bathymetric rising and reconstruction project of the West filling breakwater. Ricardo Zuloaga Generation Complex.

C.A. LA ELECTRICIDAD DE CARACAS

2000

Vargas State, Venezuela

Evaluation of the fluvial sediment discharge effect on the sedimentation of La Guaira port.

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES. MARN

2000

Vargas State, Venezuela

Topo-bathymetric and currents measurements in the Orinoco river, Puerto Ayacucho.

SERVICIOS DE INGENIERÍA PRISMA, C.A.

1998

Amazonas State, Venezuela

Currents with Doppler and currents with propeller current meters in the Cryogenic of Jose.

BENTHOS – AMBIOCONSULT

2000

Anzoategui State, Venezuela

Field studies for the construction and redevelopment of artificial beaches and pools in the Central sector, Antofagasta.

MUNICIPALITY OF ANTOFAGASTA

1999

Antofagasta. Chile

Technical assistance. Marine current measurements for the Arrecifes thermo electrical plant project.

C.A. LA ELECTRICIDAD DE CARACAS

1999

Vargas State, Venezuela

Coastal tachometric raising and aerial photography in Hiquerote.

HIDROCAPITAL

1998

Miranda Miranda, Venezuela

Professional services for the compilation and consolidation of oceanographic information in the area of Arrecifes.

C.A. LA ELECTRICIDAD DE CARACAS

1998

Vargas State, Venezuela

Bathymetry and currents and waves measurements in the Guamal estuary.

LAGOVEN, S.A.

1996

Monagas State, Venezuela

Bathymetric rising in the harbor of Puerto Cabello Port.

AUTONOMOUS PORT INSTITUTE OF PUERTO CABELLO. IPAPC

1998

Carabobo State, Venezuela

Bathymetric raising in Bergantín Bay and Corpoven's Piers in Guaraguao.

CORPOVEN

1998

Anzoategui State, Venezuela

Topographic raising and submarine inspection in the South sector of the Tocoa plant.

C.A. LA ELECTRICIDAD DE CARACAS

1998

Vargas State, Venezuela

Currents analysis in the block "Gulf of Paria West".

HIDROMET

1997

Sucre State, Venezuela

Bathymetric raising of the navigation channel of the Maracaibo lake.

PDV MARINA

1997

Zulia State, Venezuela

Topo-bathymetric raising in Jose.

PDVSA

1997

Anzoategui State, Venezuela

Bathymetric and geophysical raising at the Punta Cuchillo sector in the Orinoco river.

LAGOVEN, S.A.

1996

Bolívar State, Venezuela

Topo-bathymetric raising in the dock sector of Tecnosal in Araya.

TECNOSAL

1996

Sucre State, Venezuela

Control soundings in the piers of Corpoven in Guaraguao.

CORPOVEN

1996

Anzoategui State, Venezuela

Marine terminal of Punta Codore. Topo-bathymetric raising and current measurements.

NOUEL INGENIEROS, C.A.

1996

Falcon State, Venezuela

Bathymetric raising in the adjacent area of the Puerto Cabello piers.

NATIONAL INSTITUTE OF WATERWAYS. INC

1996

Carabobo State, Venezuela

Control bathymetries of the dredging in Puerto Cabello.

AUTONOMOUS PORT INSTITUTE OF PUERTO CABELLO. IPAPC

1995 - 1996

Carabobo State, Venezuela

Bathymetric, topographic, currents (with floaters and fluorescein) and water quality monitors at La Playa development, Morón.

PDVSA

1995

Falcon State, Venezuela

Hydrographic and geophysical measurements for the pipe laying of reuse wastewaters of Maracaibo.

PEQUIVEN, S.A.

1995

Zulia State, Venezuela

Current measurements and hydrographic parameters in the Maturin Bar and Güiría.

LAGOVEN, S.A.

1995

Monagas State and Gulf of Paria, Venezuela

Bathymetric raising and dredging project at the harbor of the fishery pier of Playa Blanca.

NOUEL INGENIEROS. C.A.

1995

Carabobo State, Venezuela

Geophysical and bathymetric raising in Punta Cuchillo.

LAGOVEN, S.A.

1995

Bolívar State, Venezuela

Bathymetric raising of the Cementos Caribe harbor.

CEMENTOS CARIBE

1995

Falcon State, Venezuela

Bathymetric raising and sample collection in Pozuelos Bay.

CORPORATION PUERTOS DEL SOL

1993

Anzoategui State, Venezuela

Bathymetrical works in the area of the port of El Guamache.

PDVSA

1993

Nueva Esparta State, Venezuela

Velocity and flow measurements at the section INC-1 in the strait of the Maracaibo lake.

LAKE COAST PASSAGE

1993

Zulia State, Venezuela

Bathymetrical works in the piers areas of the Corpoven's refinery in Puerto La Cruz.

CORPOVEN, S.A.

1992

Anzoategui State, Venezuela

Bathymetrical works in the area of the construction piers of Jose.

PDVSA

1992

Anzoategui State, Venezuela

Bathymetric raising at the Cementos Caribe docks in Puerto Cumarebo.

Caribe Cement Company

1992

Falcon State, Venezuela

Complimentary topo-bathymetric raising in Guaraguao Bay.

PDVSA

1992

Nueva Esparta State, Venezuela

Hydrographic studies in the area of the Generating Complex Ricardo Zuloaga and Puerto La Cruz.

TECNOCONSULT

1992

Federal District, Venezuela

Bathymetric raising and dredging in Aguasal estuary.

COEMPRO

1991

Miranda State, Venezuela

Oceanographic measurements for the preliminary plan of effect control measures.

MARINOS DIQUES Y VARADERO

1990

Sucre State, Venezuela

Bathymetric raising and geometric project of the dredging of the Venepal reservoir in Morón.

VENEPAL

1989

Carabobo State, Venezuela

Bathymetric raising of the alternatives for the coal exportation port terminal.

VEPICA - BROWN & ROOT

1989

Zulia State, Venezuela

Bathymetric raising and sediment studies in Yacua Bay.

NOUEL INGENIEROS, C.A.

1988

Sucre State, Venezuela

Orinoco River bathymetrical rising, El Jobal – Los Pijiguaos pier sector.

CAPV

1988

Bolivar State, Venezuela

Topo-bathymetric raising of the lower bed of the Yaracuy river.

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES. MARNR

1986

Yaracuy State, Venezuela

Currents measurements for the hydraulic project of the filling and its protection for the construction of the Maracaibo lake boulevard.

MINISTRY OF ENVIRONMENT AND NATURAL RESOURCES. MARNR

1986

Zulia State, Venezuela

Bathymetries, tides and geotechnics for the preliminary project of the Carenero Marine Terminal.

NOUEL INGENIEROS, C.A.

1980

Miranda State, Venezuela