

- ◆ Completed 21 hours of graduate level courses with a GPA of 4.0
- ◆ Description and Assessment of Rock Quality from Drill Cuttings, Doug Hayden, October 2005
- ◆ Well Control, Hydrocarbon Evaluation, and Unit Manager Training, 2002
- ◆ Formation Evaluation, Basic and Advanced QLog, 2001
- ◆ Basic Offshore Safety Introduction & Emergency Training, 2001
- ◆ Marine Firefighting, Texas A & M University, 1995
- ◆ OPITO BOSIET Certification Sept 18, 2014

Jaque has over 20 years of experience working on on and offshore drilling rigs, including nine years sailing onboard the *JOIDES Resolution*. She first sailed as a shipboard scientist on Leg 135 and published her results the following year. As a Technician for ODP, she worked in the XRF, XRF, Underway Geophysics and Downhole Tools labs while working with the other technicians to process the thousands of meters of core and many thousands of samples collected on each two month cruise. She then transferred to an industry position, first as a mudlogger, quickly moving up to a Lead Data Engineer position working both in the North Sea and Kazakhstan. In 2005, she moved from mudlogging to Wellsite Geology, working for Sunburst Consulting geosteering wells primarily in the Williston Basin. She was then offered a position with RPS Energy Services and continued to build her experience as a wellsite geologist working both in the US and in Canada. Since 2011, she has been working for Petrotechnical Resources of Alaska, working on a coil tubing rig on the North Slope.

PROFESSIONAL EXPERIENCE

6/11 – present WELLSITE GEOLOGIST, PETROTECHNICAL RESOURCES OF ALASKA

Currently contracted to BP. Currently assigned to the Nordic 1 coil tubing rig, working with and learning from some of the most experienced geologists on the Slope.

8/05 – 4/11 GEOLOGICAL CONSULTANT, RPS ENERGY SERVICES, CALGARY, ALBERTA

Geologic consultant contracted primarily to geosteer horizontal wells both in the US and Canada. Also operated gas detection equipment when required.

3/04 – 5/05 GEOLOGICAL CONSULTANT, SUNBURST CONSULTING INC., BILLINGS, MT

Wellsite geologist responsible for geosteering horizontal wells in the Williston Basin and for the operation of gas trap and gas chromatograph equipment.

1/05 – 2/05 GEOLOGICAL CONSULTANT, NATIONAL GEOGRAPHIC

Consulting Geologist on a National Geographic photographic expedition to document the critically endangered pygmy sloth population on Isla de Veraguas off the coast of Panama.

10/01 – 08/03 SENIOR DATA ENGINEER, DATALOG, UK

Responsible for calibration and maintenance of mudlogging equipment and rig instrumentation and for supervision of sample-catchers. Worked in the Danish sector of the North Sea and in Kazakhstan.

6/01 to 10/01 DATA ENGINEER, DATALOG, US

Completed training as a sample catcher and data engineer in the US before transferring to the UK division.

5/92-03/01 MARINE LAB SPECIALIST, OCEAN DRILLING PROGRAM

Sailed onboard the *JOIDES Resolution* on a two month on-off rotation working in the shipboard laboratories including, XRF, XRD, Underway Geophysics and Downhole Tools. Responsible for sample preparation and analysis, instrument maintenance and calibration, and curation of cores and samples.

12/90-2/91 SHIPBOARD SCIENTIST, OCEAN DRILLING PROGRAM LEG 135, LAU BASIN.

Sailed on the *JOIDES Resolution* from Suva, Fiji to Pago Pago, American Samoa as the carbonate sedimentologist for ODP Leg 13. Described Core and contributed to the Lithostratigraphic chapters of the Initial Results Volume. Completed post-cruise research and published results as: Ledbetter, J.K. and Haggerty, J.A., 1994, Late Miocene sedimentation history of the Tonga forearc at Site 840. In Hawkins, J., Parson, L., Allan, J., et al., Proc. ODP, Sci. Results, 135: College Station, TX (Ocean Drilling Program), 163-172

6/89 - 8/90 RIVER GUIDE AND GEOLOGIC INTERPRETER, WILD RIVERS EXPEDITIONS, BLUFF, UTAH. Worked as a river guide and geologic interpreter for two seasons on the San Juan River in southeastern Utah. Also worked as a guide and interpreter on six Grand Canyon trips for various outfitters.

TECHNICAL and ANALYTICAL SKILLS

- Experience with Geolog geosteering software.
- Experience with XRF and XRD sample prep and instrument calibration.
- Experience with rig instrumentation, gas chromatography, hydraulics and basic well control theory

Wellsite Geologist Experience – Petrotechnical Resources Alaska, Anchorage, Alaska, USA

Present Wellsite Geologist III Location: Prudhoe Bay, Alaska
5 June-11 Client: BP Alasksa Rig: Nordic 1 (Coil Tubing)
Wells: ~52 Wells in 3½ years Type: Horizontal re-entries

Wellsite Geologist Experience – RPS Energy Services, Calgary, Alberta, Canada

2-Feb-11 Wellsite Geologist Location: Pike County, PA
1-Mar-11 Client: Talisman Energy USA Rig: Precision Drilling 209
Well Name: Jones (05-034-01) H 1H Type: Horizontal in Marcellus

22-Oct-07 Wellsite Geologist Location: Oooguruk Island
15-Nov-08 Offshore, North Slope of Alaska

15-Nov-08 Wellsite Geologist - Lead
19-Nov-10 Client: Pioneer Natural Resources Rig: Nabors 19AC
Well Name: ODSDW1-44 Type: Vertical Injection with coring
Wells: 13 wells Type: Horizontal in Nuiqsut
Wells: 3 wells Type: Slant to Kuparuk
Wells: 7 wells Type: Horizontal in Kuparuk

18-Nov-06 Wellsite Geologist Location: Elmworth Field, Alberta
29-Nov-06 Client: Greenbank Energy Ltd. Rig: Western Lakota Rig #8
Well Name: Greenbank Type: Vertical well to Nikanassin
Elmworth 4-31-70-8

1-Nov-06 Wellsite Geologist Location: Elmworth Field, Alberta
12-Nov-06 Client: Greenbank Energy Ltd. Rig: Western Lakota Rig #8
Well Name: Greenbank Type: Vertical well to Nikanassin
Shiningbank Elm 1-35-70-9W6

9-Aug-06 Wellsite Geologist Location: Northern Alberta
17-Aug-06 Client: Devon Canada Corp Rig: Precision Drilling 179
Well Name: Devon et al 11A Type: Vertical well to Dunvegan
Dunvegan 11-15-81

30-July-06 Wellsite Geologist Location: Northern Alberta
8-Aug-06 Client: EOG Resources Rig: Trinidad 34E
Well Name: EOG Wapiti 15-21-66-13 Type: Vertical well to Nikanassin

17-July-06 Wellsite Geologist Location: New Norway, Alberta
27-July-06 Client: Quicksilver Resources Rig: Ensign 121
Well Name: QRCI NEWNOR Type: Horizontal CBM well
1-29-45-22 Schlumberger PeriScope MWD

28-June-06 Wellsite Geologist - Lead Location: Southeastern Manitoba
11-July-06 Client: New Midland Petroleum Ltd. Rig: Ammonite #9
Well Name: New Midland Reston Type: Horizontal in Tilston Formation
HZTL 7-2-7-27WPM

1-Jan-06 Wellsite Geologist Location: Helmet, British Columbia
27-Mar-06 Client: CNRL Rig: Precision Drilling Rig 444
Well Names: Various Type: One deep vertical well and four
Underbalanced wells in carbonates

5-Sept-05 Wellsite Geologist - Lead Location: Petroleum County MT, Wildcat
31-Sept-05 Client: Hunter Energy LLC Rig: Patterson Rig 462

	Well Name: Dick Wyman Federal 44-20	Type: Vertical well with underbalanced penetration of three known producing zones
1-Aug-05 22-Sep-05	Wellsite Geologist - Lead Client: Hunter Energy LLC Well Name: Dick Wyman Federal 44-20X	Location: Petroleum County MT, Wildcat Rig: Patterson Rig 462 Type: Twin to the 44-20 well with UBD penetration of two known producing zones

Wellsite Geologist Experience – Sunburst Consulting, Billings, Montana, USA

24-Apr-05 15-May-05	Wellsite Geologist - Lead Client: Bill Barrett Corp. Well Name: Picard Trust #31-32H	Location: Williston Basin Rig: Patterson Rig 183 Type: Horizontal (dual lateral)
26-Mar-05 12-Apr-05	Wellsite Geologist - Lead Client: Bill Barrett Corp. Well Name: Lindvig #14-12H	Location: Williston Basin Rig: Patterson Rig 183 Type: Horizontal (dual lateral)
16-Mar-05 25-Mar-05	Wellsite Geologist - Lead Client: Zinke & Trumbo Well Name: Gehrig #1-24H	Location: Williston Basin Rig: Cyclone 10 Type: Horizontal
15-Nov-04 23-Dec-04	Wellsite Geologist - Lead Client: CamWest Well Name: RMU 11-25H	Location: Williston Basin Rig: Western Star Rig #25E Type: Horizontal
11-Nov-04 22-Nov-04	Wellsite Geologist - Lead Client: CamWest Well Name: RMU 16-26H	Location: Williston Basin Rig: Western Star Rig #25E Type: Horizontal
30-Aug-04 26-Sep-04	Wellsite Geologist - Lead Client: Zinke & Trumbo Well Name: Robinson 1-17H	Location: Williston Basin Rig: Caza 43 Type: Horizontal
7-Aug-04 22-Aug-04	Wellsite Geologist - Lead Client: Bill Barrett Corp. Well Name: Metzger-Robinson 24-29H	Location: Williston Basin Rig: Nabors 688 Type: Horizontal
1-Aug-04 6-Aug-04	Wellsite Geologist (one-man job) Client: Great Buffalo Well Name: Collins 9-1	Location: Williston Basin Rig: White Rhino Type: Vertical Wildcat
30-Jun-04 25-Jul-04	Wellsite Geologist – Lead Client: Bill Barrett Corp. Well Name: State 31-16H	Location: Williston Basin Rig: Nabors 688 Type: Horizontal
18-Apr-04 9-May-04	Wellsite Geologist - Lead Client: Bill Barrett Corp. Well Name: Mattingley 44-9H	Location: Williston Basin Rig: Nabors 688 Type: Horizontal
1-Apr-04 17-Apr-04	Wellsite Geologist Client: Kaiser-Francis Well Name: Spyglass 7-1	Location: Williston Basin Rig: Wolverine 44 Type: Vertical with DST
28-Feb-04 31-Mar-04	Wellsite Geologist Client: Zinke & Trumbo Well Name: Aaron 1-22H	Location: Williston Basin Rig: Caza 43 Type: Horizontal

3-Mar-04	Wellsite Geologist	Location: Williston Basin
18-Mar-04	Client: Bill Barrett Corp.	Rig: Wolverine 44
	Well Name: Moen 12-2H	Type: Horizontal

Additional Geologic Consulting Experience – National Geographic

15-Jan-05	Consulting Geologist on a National Geographic Exploratory Expedition
17-Feb-05	to Isla de Veraguas off the coast of Panama

International Onshore Rig Experience - Datalog UK – Senior Data Engineer

24-Jul-03	Senior Data Engineer	Location: Kazakhstan
7-Aug-03	Client: Tengiz-Chevroil	Rig: Parker Rig 107
26-Jun-03	Senior Data Engineer	Location: Kazakhstan
17-Jul-03	Client: Tengiz-Chevroil	Rig: Parker Rig 107

Domestic Onshore Rig Experience - Datalog Canada – Senior Data Engineer

30-Jan-03	Senior Data Engineer	Location: Pinedale, Wyoming
11-Mar-03	Client: Shell	Rig: Nabors 632
10-Apr-03	Senior Data Engineer	Location: Pinedale, Wyoming
26-Apr-03	Client: Shell	Rig: Nabors 270

Offshore Rig Experience - Datalog UK – Senior Data Engineer

24-Jul-03	Senior Data Engineer – Unit Manager	Location: North Sea, Danish Sector
7-Aug-03	Client: Maersk	Rig: Noble Byron
26-Jun-03	Senior Data Engineer	Location: North Sea, Danish Sector
17-Jul-03	Client: Maersk	Rig: Maersk Exerter
15-May-03	Senior Data Engineer	Location: North Sea, Danish Sector
12-Jun-03	Client: Maersk	Rig: Maersk Endeavour
5-Dec-02	Senior Data Engineer – Unit Manager	Location: North Sea, Danish Sector
29-Dec-02	Client: Maersk	Rig: Maersk Endeavour
30-Oct-02	Senior Data Engineer – Unit Manager	Location: North Sea, Danish Sector
9-Nov-02	Client: Maersk	Rig: Maersk Endeavour
4-Oct-02	Senior Data Engineer – Unit Manager	Location: North Sea, Danish Sector
29-Oct-02	Client: Maersk	Rig: Maersk Endeavour
20-Sep-02	Senior Data Engineer – Unit Manager	Location: North Sea, Danish Sector
26-Sep-02	Client: Maersk	Rig: Maersk Endeavour
4-Sep-02	Senior Data Engineer	Location: North Sea, Danish Sector
19-Sep-02	Client: Maersk	Rig: Maersk Endeavour
28-Jun-02	Senior Data Engineer – Unit Manager	Location: North Sea, Danish Sector

25-Jul-02	Client: Maersk	Rig: Transocean Shelf Explorer
25-Apr-02 16-May-02	Senior Data Engineer – Unit Manager Client: Maersk	Location: North Sea, Danish Sector Rig: Maersk Exerter
21-Mar-02 11-Apr-02	Senior Data Engineer Client: Maersk	Location: North Sea, Danish Sector Rig: Kolskaya
14-Feb-02 28-Feb-02	Senior Data Engineer Client: Maersk	Location: North Sea, Danish Sector Rig: Maersk Exerter
31-Jan-02 13-Feb-02	Senior Data Engineer – Unit Manager Client: Maersk	Location: North Sea, Danish Sector Rig: Maersk Endeavour
29-Nov-01 27-Dec-01	Senior Data Engineer – Unit Manager Client: Maersk	Location: North Sea, Danish Sector Rig: Noble Byron
15-Oct-01 6-Nov-01	Data Engineer Client: Maersk	Location: North Sea, Danish Sector Rig: Noble Byron

Onshore Rig Experience - Datalog USA – Data Engineer and Mudlogger

29-Oct-01 2-Sep-01	Engineer – Temporary relief for lead engineer Client: Anschutz	Location: Southeast Texas
1-Jul-01 6-Aug-01	Engineer – Unit Manager Client: Anschutz	Location: Southeast Texas Rig: Grey Wolf 455
25-Jun-01 30-Jun-01	Engineer on one-man Geologger job Client: Mitchell Energy	Location: Southeast Texas
18-Jun-01 24-Jun-01	Mudlogger and Engineer in Training Client: Anschutz	Location: Southeast Texas Rig: Grey Wolf 455

Offshore Drillship Experience - Ocean Drilling Program – Marine Lab Specialist

3-Jan-01 2-Mar-01	Leg 194 – Marion Plateau, Northeast Australia From Townsville, Australia to Guam Coring Oligocene-Holocene mixed carbonate and siliciclastic sediments that record the depositional history and past sea level variations of the Marion Plateau, northeast Australia
8-Sep-00 7-Nov-00	Leg 192 – Basement Drilling on the Ontong Java Plateau From Guam to Guam Recovered igneous basement and sediment cores in five widely separated sites in previously unsampled areas across the Ontong Java Plateau
6-May-00 16-Jul-00	Leg 190 – Nankai Trough Accretionary Prism From Townsville, Australia to Yokohama, Japan The first of a two-leg program concentrating on coring and sampling a transect of sites across the prism within a three-dimensional (3 D) seismic survey.
10-Jan-00 11-mar-00	Leg 188 – Prydz Bay-Cooperation Sea, Antarctica From Freemantle, Australia to Hobart, Tasmania Coring transects across the Prydz Bay continental shelf, slope, and rise to decipher the Cenozoic glacial history and paleoenvironments of Antarctica.

12-Oct-99 Drydock and Transit
12-Nov-99 From Singapore Drydock to Freemantle, Australia
Refurbish and upgrade science labs and transit to Australia

12-Apr-99 Leg 185 – Izu-Mariana Margin
14-Jun-99 From Hong Kong, China to Yokohama, Japan
Coring program designed to determine the geochemical composition of the sediments and upper volcanic section of oceanic crust being subducted into the western Pacific arc system.

7-Dec-98 Leg 183 – Kerguelen Plateau-Broken Ridge
11-Feb-99 From Freemantle, Australia to Freemantle, Australia
Coring program to study the formation and evolution of a giant LIP (Large Igneous Province) including magma flux, petrogenesis and postmagmatic processes.

11-Aug-98 Leg 181 – Southwest Pacific Gateways
8-Oct-98 From Sydney, Australia to Wellington, New Zealand
Seven holes were cored to reconstruct the stratigraphy, paleohydrography, and dynamics of the Deep Western Boundary Current and related water masses.

9-Apr-98 Leg 179 – Hammer Drilling and NERO (Indian Ocean)
7-Jun-98 From Capetown, South Africa to Darwin, Australia
Conducted engineering tests of the hammer drill-in casing system, and establishing a borehole, cased and cemented to basement and deepened as far as possible for future deployment of an ocean-bottom observatory.

9-Dec-97 Leg 177 – Southern Ocean Paleooceanography
5-Feb-98 From Capetown, South Africa to Punta Arenas, Chile
Seven sites in the high latitudes of the southeast Atlantic Ocean were cored to improve the present latitudinal and bathymetric coverage in the Southern Ocean and to fill a critical gap in the distribution of ocean-drilled sites.

9-Aug-97 Leg 175 – Benguela Current
9-Oct-97 From Las Palmas, Canary Islands to Capetown, South Africa
Coring off the coast of western South Africa to determine the history of the Benguela Current and to study the history of productivity of the upwelling region off the coast of Angola and Namibia.

15-Jun-97 Legs 174A & 174B – New Jersey Sea Level transect & Coastal Plain
9-Aug-98 From Halifax, Nova Scotia to New York City, New York
Evaluate the variability of Oligocene-Miocene sequences and the influences of tectonics and sediment supply on sequence distribution and to evaluate major global events in continental margin successions.

14-Feb-97 Leg 172 – Northwest Atlantic Sediment Drifts
15-Apr-97 From Charleston, South Carolina to Lisbon, Portugal
The 11 sites cored comprise complete and expanded sequences of slope and drift sediments well suited for high-resolution paleoceanographic studies, particularly for the past 1 million years.

16-Oct-96 Leg 170 – Costa Rica Accretionary Wedge
17-Dec-96 From San Diego, California to Balboa, Panama
This leg investigated mass and fluid flux through a subduction complex by drilling a complete reference site through the sediments into the basement in the trench, a site in the lower, deformed wedge through the décollement and into basement, and a site higher up on the continental slope.

16-June-96 Leg 168 – Juan de Fuca Ridge
15-Aug-96 From San Francisco, California to Victoria, British Columbia
Ten sites were cored to investigate three hydrothermal regimes located on the sediment-covered eastern flank of the Juan de Fuca Ridge.

- 20-Feb-96 Leg 166 – Bahamas Transect
19-Apr-96 From San Juan, Puerto Rico to Acapulco, Mexico
Cored 17 holes at seven sites on the Great Bahama Bank to evaluate causes and effects of eustatic sea-level fluctuations and fluid-flow processes within the margins of isolated platforms.
- 31-Oct-95 Leg 164 – Blake Ridge and Carolina Rise
19-Dec-95 From Halifax Nova Scotia to Miami, Florida
Cruise devoted to refining our understanding of the amounts and in situ characteristics of natural gas hydrate stored in marine sediments. Coring documented that finely disseminated gas hydrate occupies a minimum of 1% of the sedimentary section between 200 and 450 meters below seafloor (mbsf).
- 7-Jul-95 Leg 162 – North Atlantic-Arctic Gateways II
3-Sep-95 From Aberdeen, Scotland to Reykjavik, Iceland
The second of two legs designed to investigate what role three major northern geographical areas (the Northern Gateway region, the Greenland-Norway Sea, and the Southern Gateway region) have played in regulating the global climate system.
- 7-Mar-95 Leg 160 – Mediterranean Sea I
3-May-95 From Marseilles, France to Naples, Italy
The first in a two-leg program to investigate the tectonic and paleoceanographic history of the Mediterranean Sea. One focus was on accretionary and collisional processes associated with the convergent boundary between the African and European plates. The other focus was on the origin and paleoceanographic significance of sapropels
- 28-Nov-94 Transit and Drydock
3-Jan-95 From Las Palmas, Canary Islands to Falmouth, UK to Dakar, Senegal
Refurbish science labs in Falmouth dry dock
- 24-Jul-94 Leg 157 – Gran Canaria and Madeira Abyssal Plain
23-Sep-94 From Bridgetown, Barbados to Las Palmas, Canary Islands
Seven sites were drilled in the volcanoclastic apron around Gran Canaria and in the Madeira Abyssal Plain to investigate the evolution and decay of the large intraplate, oceanic volcanic system and the Neogene erosional history of the Canary Basin.
- 25-Mar-94 Leg 155 – Amazon Deep Sea Fan
25-May-94 From Bridgetown, Barbados to Bridgetown, Barbados
Cored 17 sites on the Amazon fan, recovering material which, through foraminiferal, isotopic, and paleomagnetic analyses will permit an unprecedented level of time resolution for paleoclimate studies and for correlation between different fan environments.
- 22-Nov-93 Leg 153– Mid-Atlantic Ridge – Kane Fracture Zone
22-Jan-94 From St. Johns, Newfoundland to Bridgetown, Barbados
Five sites were drilled along the western flank of the Mid-Atlantic Ridge to investigate the chemical composition and evolution of the lower crust and mantle created at a slow-spreading ridge, the geometry of magmatic and deformation structures preserved in residual peridotite and in lower crustal rocks, and the intensity and diversity of metamorphism attending crustal evolution in this slow-spreading environment.
- 24-Jul-93 Leg 151 – North Atlantic-Arctic Gateways
24-Sep-93 From St. Johns, Newfoundland to Reykjavik, Iceland
JOIDES Resolution, accompanied by the Finnish icebreaker MSV Fennica, recovered ODP's first scientific drill cores from the eastern Arctic Ocean.
- 24-Mar-93 Leg 149 B & C – Iberia Abyssal Plain
25-May-93 Ponta Delgada, Azores to Lisbon, Portugal
The first of a series of ODP legs designed to study the sedimentation history and tectonic evolution of the Iberia-Newfoundland conjugate rifted margins.

- 21-Jan-93 Leg 148 – Costa Rica Rift
10-Mar-93 Balboa, Panama to Balboa, Panama
Re-entering and deepening 504B, the deepest hole ever drilled into the oceanic crust. The hole was deepened to a total depth of 2111 mbsf, penetrating the seismic transition to layer 3, the deepest layer of crust.
- 20-Sept-92 Leg 146 – Cascadia Margin
22-Nov-92 From Victoria, British Columbia to San Diego, California
Coring at five sites on an accretionary prism near a subduction zone to evaluate the fluid outflow from the accretionary wedge and the nature of a well-defined bottom-simulating-reflector thought to represent the base of sediments containing methane hydrate.
- 20-May-92 Leg 144 – Northwest Pacific Atolls and Guyots
20-July-92 From Majuro Atoll, Marshall Islands to Yokohama, Japan
Coring on the Marshall Islands guyot cluster, flat-topped guyots capped by shallow-water carbonate platform sediments overlying volcanic substrate.

Offshore Experience - ODP Cruises – Shipboard Scientist

- 17-Dec-90 Leg 135 – Lau Basin
28-Feb-91 From Suva, Fiji to Pago Pago, American Samoa
Coring a transect across a region of lithospheric extension between the Lau Ridge and the Tonga Trench to study the evolution of these backarc basins and their relationships to plate subduction processes in oceanic trenches.