



NAME **JESSE A HERRERA**
JOB TITLE **SEISMIC ACQUISITION CONSULTANT**

EXPERTISE

<ul style="list-style-type: none"> • Project Management 	Experienced in most aspects of 2D/3D seismic land and transition data acquisition. Supervision of land, offshore, transition crews and HSE; liaison between client and contractor; quality control of data acquisition and processing techniques and methods. Project and contract / bid tender planning, evaluation, scouting.
<ul style="list-style-type: none"> • 2D / 3D Land Seismic 	Extensive experience in both dynamite and Vibroseis land and heli-portable operations in onshore and offshore environments such as mountains, plains, jungle, swamp and transition zone environments. Experience in marine environments.
<ul style="list-style-type: none"> • 2D / 3D Transition Seismic 	3D recording with Sercel and Opseis telemetric systems. Dynamite and airgun transition operations using helicopter, airboats, and shallow marine boats for logistical support.
<ul style="list-style-type: none"> • Terrain Experience 	Jungle, swamp, mountains, plains, land-sea transition, agricultural areas.
<ul style="list-style-type: none"> • Technical Audits 	Pre-survey tests of seismic recording systems. Geophone, cable and box testing.
<ul style="list-style-type: none"> • Other Geotechnical Surveys 	Vertical Seismic Profiles and check-shot surveys. Aerial magnetic and gravity surveys.
<ul style="list-style-type: none"> • HSE 	HSE inspections and audits. Experience monitoring health, safety, and environmental issues on various land and transition projects. Monitoring and supervising land permit operations. Medical Training: US Army Trained Medic; State of Texas Registered Emergency Medical Technician; Trained in CPR, trauma treatment. Industry Courses: Texas A&M Offshore Survival; Aegis Group H2S Safety; Aegis Group Petroleum Safety Course; Canadian Red Cross Basic First Aid
<ul style="list-style-type: none"> • Processing Experience 	Have had experience in both 2D and 3D quality control and processing of land TZ seismic data. Experience with ProMax and other field QC systems. Quality control of geometry, survey, static corrections, velocity analysis, deconvolution, random/coherent noise filtering, post-stack filtering, migration.

PROFESSIONAL SUMMARY

I possess more than 10 years of experience in Geophysical data processing and an additional 20+ years of experience in field operations related to the exploration for hydrocarbons. I consider myself an expert in field operations, planning logistics and quality control, and ensuring operations reach high standards of quality and performance. I have been a Geophysical Party Chief for Shell Oil Company; I was the Staff Operations Geophysicist for the Northern Rocky Mountain Division of Std. Oil (Sohio) from 1981-1986. I was a Geophysical Field Crew Supervisor for Oryx Energy from 1986 through 1992. I was the General Manager for South American operations for Eagle Geophysical de Bolivia, stationed in Santa Cruz, Bolivia. I am fluent in Spanish. I have 2D and 3D experience in onshore, offshore, mountain, and swamp and marsh environments. I have extensive experience in the testing and quality control of Vibroseis operations and parameters. I have supervised conventional and portable operations. At Oryx, I was the leading Quality Control Geophysicist for VSP and other borehole geophysical operations.

RECENT PROJECT LISTING

Recent Projects:						
Country	Client	Type	Contractor	Year	Duration	Terrain
US	Union Gas	3D Dynamite	Global	2011	2 months	Bayous, Wetlands Highlands
US	Third Coast Enterprises	2D Dynamite	Precision	2011	2 months	Forested Hills, Glacial Terrain, Swamps, Lakes
US	EOG	3D Vibroseis	Tidelands	2011	2 months	S Texas Mesquite, Ranch and Farmlands
US	Samson Resources	3D Dynamite	CGGV	2010- 2011	6 months	Bayous, Wetlands Highlands
US	Third Coast Enterprises	3D Dynamite Air Gun	Dawson	2010	5 months	Forested Hills, Glacial Terrain, Swamps, Lakes
Canada	Imperial Oil – Exxon Mobil	2D Vibroseis Hi Res	Impact2000	2010	3 months	Athabasca Oil Sands
US	Petro-Canada	3D-Vibro	Geokinetics	2009	30 days	Prairie, rolling hills
Papua New Guinea	InterOil	2D Heliportable Camp Job	CGGVeritas	2009	45 Days	Mountainous, Rivers, Jungle
US	Zachary Exploration	3D Dynamite Vibroseis	Tidelands	2008- 2009	5 months	Bayous, Wetlands Highlands
US	Agile, Alpine- Crusader	3D-Vibro	Global	2008	9 months	West Texas: Mesas and Valley
New Zealand	Various	2D / dynamite	“Boutique” Mini Crew	2007- 2008	3 Months	Mountains, rolling hills
US	Marathon	3D-Vibro	Global	2007	3 months	North Central Texas, Barnett Shale, Hills, plains
US	Educator	Secondary, College Level	Northside ISD, Alamo College District, Educational Testing Services, Inc.	2001- 2007	6 years	Taught Secondary and College Math courses; Designed Standardized Math Exams
Argentina	BP-Pan American	3D Dynamite	Eagle	1999- 2001	3 years	Mountain /foothills
US	Chesapeake Seitel	Dynamite	Eagle	1996- 1999	4 years	Land / Transition- Swamp and Marsh
US-King Ranch	Exxon	3D Vibroseis	Veritas	1996	5 months	South TX- Mesquite, Coastal Plains
US	Exxon	Vibroseis	Schlumberger	1996	Days	VSPs

PRIOR PROFESSIONAL EXPERIENCE

Company	Date(s)	Description
Eagle Geophysical	1996-2001	<i>GM South American and Latin American Operations. In 1998, I presented a paper in Mexico City to the Mexican Society of Petroleum Engineers dealing with 3D seismic acquisition utilizing the Opseis Eagle acquisition system; based in Santa Cruz, Bolivia. Familiar with and scouted several acquisition projects put out for bid by Pemex, prepared Eagle bids for Pemex. Scouted and prepared Eagle bids for acquisition projects in Peru.</i>
Oryx Energy	1986-1992	<i>Supervised Field Crew Operations for all onshore, offshore, domestic and international company crew activities, including VSP and other borehole projects. Traveled to South America for field crew supervision.</i>
Std Ohio	1981-1986	<i>Supervised Field Crew Operations for all Rocky Mountain Division crew activities, including VSP and other borehole projects. This included truck mounted shot hole and/or heliportable dynamite operations as well as Vibroseis crew activities.</i>
Shell Oil-Mid-Continent	1976-1981	<i>Geophysical Party Chief – supervised field and office staff, responsible for recording and processing data quality.</i>
Shell Oil International Ventures	– 1974-1976	<i>Data Processing, data from Cameroon, Somalia and Gabon</i>

SUMMARY OF RECENT PROJECT WORK

Louisiana: 3D program near Eunice, Louisiana in 2011, recorded for Union Gas Exploration. The project was over 50 square miles of recorded data. Data was recorded using primarily a shothole dynamite source. Each source point was at the center of a 12-line patch, each line having 200 live stations. The terrain consisted of farmlands and rice paddies, suburban and urban culture, cut by bayous. The project is the eastern extension of the 2008 work for Zachary Exploration, the purpose is to define clastic stratigraphy for determining future drill sites.

Jackson County, Michigan: 2D program near Manchester, MI, operated by Third Coast Enterprises. The project is over 40 linear miles of recorded data. Data was recorded using a shothole dynamite source with 110' station spacing. Each source point is 2.2 pounds of dynamite buried at 20 feet. The terrain consists of farmlands and forested areas on glacial till. There are lakes, bogs and swamps in the area. The project was designed to define potential anomalies for a future 3D in the area.

Karnes County, Texas: 3D program near Gillett, TX in early 2010. The project is projected to be over 400 square miles of recorded data in different phases in the Eagleford Shale. Data was recorded using a Vibroseis source. Each source point was at the center of a large 14-line patch, each line having 256 live stations. The terrain consisted ranchland with rolling hills and mesquite growth.

Chambers County, East Texas: 3D program near Winnie, TX in late 2010-2011. The project is projected to be over 400 square miles of recorded data in different phases. Data was recorded using primarily a shot hole dynamite source. This portion integrated 3 separate recording systems: Sercel 428, Sercel Unite and RSR. Each source point was at the center of a large 14-line patch, each line having 256 live stations. The terrain consisted of farmlands and rice paddies, suburban and urban culture, cut by bayous, marshes, large duck ponds and wildlife refuges.

Presque Isle, Michigan: 3D program near Rogers City, MI, operated by Third Coast Enterprises. The project is over 30 square miles of recorded data. Data will be recorded using primarily a shothole dynamite source; the shotpoints in the lakes will be acquired using air gun sources. Each source point is at the center of a 14-line patch, each line having 128 live stations. The terrain consists of farmlands and forested areas on glacial drumlins. There are lakes, bogs and swamps in the area. The project was designed to define Niagran reef locations for future drill sites.

Athabasca Oil Sands, Alberta, CA: Winter work in the Athabasca Oil Sands region [Muskeg] of Canada, north of Fort McMurray, AB. High resolution seismic data was recorded in several areas to define the thickness of the Oil Sands as well as the stratigraphy in the sands. Data were recorded with 100 channel spreads, 6m source and 6m receiver spacing, using an Aram recording system and 15000 lb Mini Vibes.

Weld County, CO: A 160 square km 3D program in Petro-Canada's Weld County oil field east and south of Cheyenne, WY or east of Fort Collins, CO. Data was recorded using a Sercel 428 recording system and I/O Vibrators using Sercel Vibe Electronics. Testing determined a nonlinear sweep gave excellent results for the data. Receiver line spacing was 300m and source line spacing was 400m... Each source point was at the center of a 16-line patch, each line having 200 live stations. The terrain consisted of prairie and farm fields. The project was designed to delineate channel sands for determining future drill sites in the field.

Papua New Guinea: A 100km 2D program in InterOil's Antelope Gas Field discovery. The program is a camp-based fully heli-portable operation in very rugged, mountainous jungle terrain. Each line is to be recorded with the entire line live for each shot. Shot spacing is 60m with receiver spacing of 15m. Each line will have approximately 1000 live traces per shot. Data will be recorded using a Sercel 428 recording system. An additional 300km is expected to be added to the current program.

Louisiana: 3D program near Eunice, Louisiana in late 2008, operated by Zachary Exploration. The project was over 200 square miles of recorded data. Data was recorded using primarily a shothole dynamite source. Vibrators were used when dynamite shotholes could not be drilled near structures or other culture in the prospect. Each source point was at the center of a 12-line patch, each line having 200 live stations. The terrain consisted of farmlands and rice paddies, suburban and urban culture, cut by bayous. The project was to define clastic stratigraphy for determining future drill sites.

West Texas: Agile Seismic contracted for a 3D program in Terrell and Pecos counties of West Texas from spring through the fall of 2008. The project was approximately 270 square miles of recorded data. Data was recorded using Vibroseis and a Sercel 428 recording system. Each VP was at the center of 16 lines with 208 live stations. The recording crew consisted of approximately 75 individuals. The terrain was mostly Mesa tops and valley floors between the Mesa tops. There were several dry creeks crossing the prospect. Some

areas were cleared by hand or by “Gators.” The project was designed to define the stratigraphy of the Jurassic beds in the area to determine future drilling operations

New Zealand: Field QC and project management for a “boutique” crew hired for specific period of time [Dec, 2007-Feb 2008]. Crew recorded approximately 100km of high resolution, heliportable, and 2D seismic data for several clients on both North Island and on South Island. Data were recorded by a Sercel 408 “Lite” system. I supervised conventional and heliportable drills and did extensive Project Management work including scouting and permitting during the absence of the contracted Permitter.

Central Texas: Marathon Oil contracted for 2 3D programs in the Barnett Shale area of Central Texas during the summer and fall of 2007. The project was more than 70 square miles of recorded data. Data was recorded using Vibroseis and a Sercel 428 recording system. Each VP was at the center of 16 lines with 96 live stations. The recording crew consisted of approximately 75 individuals. The terrain was mostly flat with rolling hills. There were several creeks and rivers crossing the prospect. Some areas were cleared by hand or by “Gators.” The project was designed to define the stratigraphy of the Barnett Shale in the area to determine future drilling operations.

OTHER INFORMATION

EDUCATION

- Bachelor of Science, Mathematics University of Houston
- MEducation, University of Texas at San Antonio

TECHNICAL COURSES

- Enform Training (Canada) Field Seismic Operations Supervisor Course
- SEG VSP Acquisition
- SEG Land Acquisition
- Pelton Vibroseis Systems
- Shell Oil Company- Bellaire Training Center
 - Seismic Stratigraphy
 - Land Acquisition Techniques
 - Seismic Geometry
 - Field Geology
 - Ardmore Basin
 - Rocky Mountain Overthrust Belt
 - Recent Clastics

SAFETY COURSES

- Texas A&M Offshore Survival-1997
- Aegis Group H2S Safety Course-2009
- Aegis Group Petroleum Safety Course 2010
- Canadian Red Cross Basic First Aid Course 2010
- Emergency Medical Technician Course 1995

NATIONALITY USA

CONTACT INFORMATION

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