Name / Years of Experience:	Jose Luis Ortiz-Volcan - >30 years in Integrated Asset Management & Asset Optimization, Strategic Planning, Risk Based Project Management, Artificial Intelligence and Machine Learning Business Applications.	Countries:	Venezuela, Kuwait, Mexico, Colombia, Trinidad & Tobago, Suriname and United States.
Last 3 Job Titles & Companies:	 Consultant/CEO-OptimaWell LLC Consultant - Kuwait Oil Company - Technical & Heavy Oil Operations and Asset Development Consultant Halliburton Production & Reservoir Center of Excellence- Technical Manager / Corporate Planning (PDV) 	Email: jloovolcan@gmail.com jlov@optimawell.us Mobile: +1.470.775.2885 www.linkedin.com/in/jose-luis-ortiz-volcan- 802927210	

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Part 1 - Summary

With extensive experience in upstream integrated asset management (IAM) and asset optimization, resulting in millions of dollars in savings and added value, I have successfully led 38 projects across 47 complex assets spanning seven countries: Kuwait, Suriname, Colombia, Mexico, Trinidad & Tobago, Venezuela, and US-Alaska. My leadership roles encompassed major national and international oil operating companies such as Kuwait Oil Company, US ARCO Oil and Gas, and Venezuela PDVSA, along with consulting services, business development, and sales roles at Halliburton and OptimaWell.

These projects covered all phases of the economic life cycle (appraisal, development, production, IOR/EOR (thermal and non-thermal), and maturity) and involved the application of information technology, data management, process automation, and artificial intelligence. They ranged in complexity from shallow to deep reservoirs, encompassing conventional, heavy, and extra-heavy oil, both onshore and offshore, well delivery projects (construction and intervention). My extensive experience in energy management for heavy oil mature complex assets undergoing steam-based thermal enhanced oil recovery projects is one of my strengths.

Notable achievements include implementing IAM systems at the corporate level within two major national oil companies, applying IAM methodologies to a \$6 billion heavy oil development project, and delivering \$4 million in cost savings through an in-house IAM initiative, which earned recognition through a memo of appreciation. Additionally, I served as the principal consultant for two significant technical service agreements between Shell and KOC, overseeing over 1000 professionals and field workers and implementing a KPI-based performance assessment system that resulted in \$3 million in savings after resolving payment disputes. These technical service agreements included Shell asset management framework.

Furthermore, I led production centers of excellence and heavy oil centers of excellence, demonstrating a commitment to excellence and innovation. My passion lies in customer-centered approaches, technology, and strategic thinking, as I strive to identify, leverage and mature business opportunities for emerging technologies to enhance sustainable value. I specialize in defining decision support documentation that prioritizes safety, reliability, environmental sustainability, and the delivery of high-quality products and services.

With a background in Chemical Engineering, an M.Sc. in Petroleum Engineering, a Master's in Business Management, and a Post Graduate Program in Artificial Intelligence and Machine Learning for Business Applications, I am well-equipped to contribute across various facets of the energy industry.

Part 2 - Key Projects / Technical - Operational Achievements - Experience (Positions/Roles)

- 2021-Present: Founder, CEO & Consultant OptimaWell LLC Tampa, Florida (United States of America)
- Leading Implementation of Virtual Technology-Empowered Integrated Asset Management Center (VTEIAMC) to
 empower small and medium oil and gas assets with OptimaWell <u>Enterprise Resource to Sustainable Value Planning</u>
 <u>System</u> to unlock the full potential of resources, streamline processes, and catalyze growth. Transform challenges
 into opportunities and propel customers towards unparalleled success.
- Technology business consulting to create sustainable value by providing integrated asset management as a service to apply risk management, artificial intelligence, data analytics, and reliability-based process/project optimization to assets in oil and gas, energy, health, safety, and the supply chain.
- Coleader and Mentor of Artificial Intelligence Machine Learning Business Projects customer profiling, price modeling, potential new customers prediction, image classification, sentiment analysis, for banking, retailing, travel,

social media, and health sectors. Each project life cycle includes data preprocessing, exploratory data analysis, model selection, tuning, interpretation, business insights and recommendations.

- 2012-2021: Kuwait Oil Company North of Kuwait Conventional Oil Fields and Heavy Oil Field Development
 Projects Enhanced Technical Service Agreement Shell/KOC North of Kuwait Planning Consultant (Kuwait)
 - Consultant for \$ 6 billion CAPEX Project, the first phase of a heavy oil field development project in Kuwait including EOR/IOR technology selection review (steam-based Cyclic Steam Stimulation and Steamflood final selection), well design using Project Gate System / Front End Loading (FEL) methodology, economic evaluation under uncertainty and risk of whole life cycle for heavy oil green fields (2013-2016)
 - ✓ Task Force Team Lead for Heavy Crude Oil Sampling and Assay for Refinery Capacity Planning: Design, Plan and Execution North of Kuwait Ratqa Lower Fars Heavy Oil Field Development (Kuwait).
 - ✓ Development of HSE Management System for steam-based thermal EOR operations, including Quantitative Risk Assessment (probabilistic assessment and simulation) for minimum safety distance and SIMOPs under thermal steam-based operations. New standard for heavy oil approved.
 - ✓ Implementation of Project Gate Systems (Front End Loading FEL), for wells and surface infrastructure.

 Preparation of decision support package documentation for Stage 3 Phase I 60 MBOD as required by KOC Project Gate System.
 - ✓ Implementation of Well Delivery Project Gate System for drilling and completion of 1500 wells Phase I 60 MBOPD SR Lower Fars, Stage Gates 1,2& 3.1 during period.
 - ✓ Development of techno-economic models for evaluation under risk and uncertainty of proposals and projects. This includes cost optimization studies for thermal steam based EOR projects.
 - ✓ Implementation of Project Gate System for South Ratqa Lower Fars Well Delivery in Kuwait Oil Company North of Kuwait.
 - ✓ Conceptualization of Field Assessment Small Steamflood Test for corrosion effects of H2S (Kuwait).
 - ✓ Integrated Surface-Subsurface Health, Safety and Environment (HSE) Risk Assessment for Steamflood Enhanced Oil Recovery (EOR) Project in South Ratga Field North Kuwait (Kuwait)
 - ✓ Development of Techno-Economic Model for Economic Evaluation Under Uncertainty and Risk of Steam Based Thermal Enhanced Oil Recovery Heavy Oil Field Development Proposals in North of Kuwait (Kuwait)
 - ✓ Technical and Economic Review Project Gate System Stage Gate 3.1 for Phase I South Ratqa Field Development and Preparation of Decision Support Package (DSP3.1) for Corporate Business Planning Process (Kuwait)
- Generated \$4 million in savings by performing in-house a key Integrated Asset Management Business Opportunity
 Assessment Under Uncertainty and Risk providing solutions for development of significant volumes of sour heavy and
 extra-heavy oil found at a Deep Extra Heavy Oil Green Field at Abdali Lower Burgan Field and Tayarat Carbonate
 Formation in Kuwait. Presented in Society of Petroleum Engineers SPE-193675-MS (Memorandum of Appreciation
 from KOC) 2017-2018
- Technical and management consultant during execution of two major performance-based Technical Service
 Agreements (ETSAs) between Shell and KOC (North of Kuwait), worth \$1.4 billion OPEX each, with over 1000
 professionals and field workers, for Conventional Fields and Heavy Oil Fields. To provide enhanced oil recovery and
 production operations best practices and technologies 2016-2021
- Supported Advancement of the Enterprise Risk Management ERM Body of Knowledge of the ERM Community.
 (Appreciation Award Certificate) 2018
- Engagement and Support Throughout Implementation of Risk Adjusted Return on Capital RAROC (Award Certificate) 2017
- Co-Leader of Kuwait Oil Company Center of Excellence for Heavy Oil, Kuwait (Award Certificate) 2017-2020
- Process Safety Management Audit Team Member for Gathering Center GC4 in Southeast Asset Kuwait Oil Company (Kuwait) - 2016
- Contracting Strategy Options for Enhanced Technical Service Agreement (ETSA) with International Oil Companies, to
 Meet Business Needs of North of Kuwait Conventional and Heavy Oil Fields (Kuwait) Planning Phase: 2014-2015
- 2011-2012: Halliburton Senior Technical Consultant (Mexico)
 - Project Leader of Corporate Project "National Well Productivity Strategy" for the 12 production assets of PEMEX (Mexico) 2011/2012

- 2010-2011: OptimaWell Founder, Consultant and Director (Colombia, Venezuela)
 - Leading consultant Project Charter, Well design and Pilot Project Plan for Heavy Oil Exploratory & Appraisal Project in Block CPO-17 for HOCOL (Colombia) 2010
- 2009-2010: Halliburton Senior Technical Consultant (Trinidad & Tobago, Suriname)
 - Project Charter for Horizontal Well Pilot Project in Tambaredjo and Calcutta Heavy Oil fields (Suriname) 2009-2010.
 - Lead Heavy Oil Tambaredjo NW Field Development Project Execution Plan Integration Planning Session Detailed
 Definition Phase and Project Execution Plan (Suriname) 2010
 - O Analysis and Evaluation of Calcutta Heavy Oil Field Asset Management Project (Suriname) March 2010
- 2007-2009: Halliburton Production Operations Practice Manager / Field Development Project Manager and Landmark Business Development (Venezuela, Trinidad & Tobago, Colombia, Suriname, Ecuador)
- o Project Leader Well Productivity and Recovery Center for Lake Maracaibo Mature Fields "+Barrels in 123 concept"
- Hydraulic Fracturing Optimization Eocene Frac Lake Maracaibo (Venezuela) Project manager 2008-2009
- o Identification of Opportunities to Increase Reserves and Production Western Venezuelan Reservoirs -2008
- Heavy Oil Field Development in Heavy Oil Fields Tambaredjo NW and Calcutta including IOR-EOR technologies (Suriname) - Project Manager - 2008-2009
- 2002-2007: PDV Corporate Planning Department, Venezuela Production Technology Sr. Planning Consultant
 - Project Manager for Implementation of Production Asset Management in PDVSA. Alliance with Roberth Gordon University (Aberdeen), EPS (Edinburgh), The Woodhouse Partnership (TWP) and Norway based companies (UK & Norway) – 2003-2006.
- o PDVSA Corporate Risk Management Project, Business Plan Risk Assessment and Mitigation 2006-2007
- o Technology Planning Consultant PDVSA Corporate Planning 2005-2007
- o ERP SAP Implementation Corporate Project Team Leader 2004
- 2001-2002: PDV Production Division Venezuela Manager Reservoir and Production Center of Excellence
 - Manager of Production Center of Excellence connecting professionals working in 7 regional Centers of Excellence giving technical support to 24 Exploitation Units in Charge of the upstream processes of Petróleos de Venezuela (from Reservoir to point of sales). Total Production: 3.3 MMBOD.
- Project Manager for Production Asset Management Implementation in PDVSA. Alliance with Roberth Gordon University (Aberdeen), EPS (Edinburgh), and Norway companies (UK & Norway) – 1999-2002
- o PDVSA Corporate Study for Cretaceous Reservoirs in Lake Maracaibo Jointly with Shell (Venezuela)-2001-2002
- 1999-2001: PDV Production Division Venezuela Production Optimization Technical Manager
 - Corporate Department responsible for professionals working in the following specialized areas: well productivity, artificial lift, surface processes engineering, reliability engineering, gas engineering, oil and water treatment and subsurface-surface integrated automation. A key Subsurface-Surface Automation approach was developed as the integration platform.
 - Leader Responsible of 1st Subsurface-Surface Production Optimization Best Practices Initiative at Corporate Level
 PDV Exploration & Production (Venezuela) July 2000
 - Manager Production Optimization "Well Integrated Productivity Methodology (MIP)" in PDV 24 asset units (alliance with Schlumberger, Halliburton, CoreLab, EPS). 1000+ wells light, medium and heavy oil, achieved higher productivity indices (2x to 10x), competency development of 220 production optimization professionals (Venezuela) – 1998-2001
- 1998: PDV Technical Manager Eastern Division (Eastern Region & Orinoco Oil Belt, Venezuela)
 - Technical Manager after integration of Lagoven Eastern Division and Corpoven technical resources, including Exploration, Reservoir Integrated Studies, Facilities Projects Engineering, Reliability Engineering, Technical Competences Development, Automation.
- 1996-1998: PDV Technical Services Manager Eastern Lagoven (North of Monagas and Orinoco Oil Belt)
 - This organization gave support to 2 production assets with a total production of 500 MSTBOD with 7 processes under leadership: Exploration, Planning and Budget Follow up, Reliability Engineering, Facilities Engineering, Technology and Automation. Management of several heavy oil enhanced oil recovery projects in Faja (Orinoco Oil Belt) Morichal Area.
 - Application of Asset Management and Integrated Productivity Methodology PDVSA Production Eastern Technical Manager Field Development Projects for High Pressure High Temperature Deep Reservoirs from Oligocene,

- Paleocene and Cretaceous Black, condensate and volatile oil and gas-Water and Gas Injection Projects (Venezuela)-1996-1997
- Technical Manager for Orinoco Belt Heavy and Extra Heavy Oil Development Projects Cerro Negro, Jobo, Pilon Lagoven Eastern Venezuela, -1996
- 1995-1996: PDV (Lagoven, Venezuela) Corporate Production Technology Manager Caracas, Venezuela
- 1st Venezuelan Exploration and Production National Data Base (BADEP) Leader of multidisciplinary team (alliance PDVSA and Geoquest Schlumberger) responsible for first Exploration and Production corporate data base - 1995-1996
- Proposed and got approval for a corporate project called "ARAR" oriented to improving key technical competences for Exploration and Production PDVSA organization.
- Leader of multifunctional corporate transformation team that proposed strategy and business plan to speed up application of automation-based optimization technologies in business portfolio of Venezuela oil company Lagoven.
- 1994-1995: PDV (Lagoven, Venezuela) Reservoir Manager Center South Lake Maracaibo Asset
 - Led and supervised 26 professionals (reservoir engineers, geologists, petrophysist, drilling and completions engineers, production engineers, computer engineers) in an interdisciplinary team responsible for keeping the potential production of light crude oil from 90 reservoirs, with 900 MMBls of proved undeveloped reserves. Portfolio included water injection recovery projects.
 - Reservoir Manager responsible for initiative of risk-based integrated reservoir management to optimize well candidate selection process for workovers in deep reservoirs Center South Lake Maracaibo (Venezuela) – 1993-1994
- 1993-1994: PDV (Lagoven, Venezuela) Head Production Engineering Group Western Division, Lake Maracaibo
 - Led and supervised 58 engineers and 27 technicians organized in 3 teams: Artificial Lift, Productivity and Production Control, Production Facilities Oil and Water Treatment and Laboratories. This group provided technical support to Western Division on all Production Processes associated to a potential production of 790 MSTBOD and 5000 oil wells (90% producing by artificial lift) from condensate, light, medium, heavy and extra-heavy oil reservoirs.
 - Technical leader (petroleum engineering) for the Automation Master Plan in upstream oil and gas for Lagoven Western Division.
 - Head of Production Engineering Group and Leader for Production Data Base "Centinela" adopted as Standard
 Production Data Base in PDVSA Exploration and Production (Venezuela) 1993-1994
 - Project Leader 1st Automation of Gas Lift Optimization (PRAP project) in Lake Maracaibo, Center South Lake, including development of production engineering software applications (Venezuela) – 1993
- 1991-1993: PDV (Lagoven, Venezuela) Artificial Lift and Production Optimization Technical Leader / Supervisor
 - Supervision and coordination of 30 engineers, 5 technicians and 40 technical processes in the areas of design, troubleshooting and optimization of artificial lift wells. Application of new technologies in artificial lift. Planning and controlling resources for new gas lift installations.
 - Technical lead for development of 1st worldwide Artificial Intelligence based gas lift applications: SOLAG for optimization, SEDILAG (expert system) and NETLAG (neural networks) for well diagnosis (Venezuela) – 1991-1993
- 1990-1991: ARCO Oil and Gas Research Center Plano, Texas, United States of America
- Special assignment Arco Oil and Gas, Research Center (Formation Damage and Production Optimization Technical Group) – Development of gas lift expert system prototype for oil wells Prudhoe Bay field (North Slope, Alaska).
- Worked as well in the Formation Damage and Production Optimization Technical Group
- 1988: Production Optimization Team for Rosa Mediano Production System, Lake Maracaibo, Venezuela
- Member of a team in charge of optimizing the Rosa Mediano production system. Performed a optimization study for the La Rosa Mediano production System (1200 wells, 70 reservoirs). Production problems were detected and corrected. A strategy was designed and implemented increasing oil production from 95000 up to 110000 STBOD. – 1988
- 1986-1988: (Lagoven, Venezuela) Supervisor Well Analysis and Diagnosis Gas Lift Troubleshooting and Optimization Lagoven Western Division, Venezuela
 - Supervised 4 engineers, 3 technicians. Troubleshooting of 800 gas lift wells/month. As a result 3000 STB/day recovered by detecting and correcting gas lift malfunctions.
 - Surveillance of the production process associated to: 560000 STBO/day of production. 3600 wells (80% by gas lift), 178 gas lift manifolds, 130 flow stations, 16 compressor plants (3000 MMscf/day of compression capacity). Technical support to Production Operations Organization.

- Responsible of the computerized gas lift optimizer system (SOLAG system) used in gas lift gas optimization. 0
- Application of new gas lift technologies for highly depleted reservoirs, Optimization of size of surface and subsurface equipment to adapt them to new gas lift production operational conditions resulting from depletion, recovery processes, thermal recovery processes.
- Bridge between the artificial lift section and the research institute of Petróleos de Venezuela (INTEVEP). 0
- Leader of an interdisciplinary group in charge of studying the feasibility of automation of gas lift gas measurement and controlling operations in Lake Maracaibo field.
- Artificial Lift Engineer for Heavy Oil Artificial Lift and Production Optimization in 2 Orinoco Belt thermal pilot projects undergoing continuous steam injection and cyclic steam injection (Venezuela, Orinoco Belt, PETC/PICV projects) –
- Artificial Lift Engineering Leader for development of Chamber Lift Method for Intermittent Gas Lifting Marginal Wells in Lake Maracaibo. Lagoven, affiliate of Petroleos de Venezuela (Venezuela, Lake Maracaibo) -1984-1994
- Instructor Production Engineering & Artificial Lift Corporate Courses PDVSA 1982-19881984-1986: Supervisor Artificial Lift and Production Optimization North Area – Western Division, Lake Maracaibo
- 1982-1984: (Lagoven, Venezuela) Artificial Lift and Production Optimization Engineer, Lake Maracaibo, Venezuela
 - Design, troubleshooting, and optimization of artificial lift equipment for wells producing under gas lift (continuous, intermittent, and slug flow), sucker rod pumping, chamber lift and plunger lift. Surveillance of oil production: Natural flow and artificial lift. Forecasting gas compression capacity needed in the future, within the framework of medium time range planning studies. Technical services to production operating personnel. Assistance in detecting communications in wells and special artificial lift completion works.
- 1981-1982: Reservoir Engineer B6X2N2 Project- Western Division, Lake Maracaibo, Venezuela
 - Waterflooding surveillance project for B-6-X.03 reservoir (600 wells, 45000 STB/day). Feasibility studies for stimulating oil and gas wells. Control of water and gas production by recommending alternatives completions or changes in production zones.
- 1980-1981: Production Fluids Process Engineer (Lagoven, Venezuela) Western Division, Lake Maracaibo
- Design, control and optimization of chemical treatment operational processes for 9 production systems with 1.2 MMbbls/day of associated production. Coordination of oil storage, distribution and transportation of oil for refining and sales.

Part 3 - Education (Academics) - Licenses & Certifications

2022- Post Graduate Program in Artificial Intelligence and Machine Learning (Business Applications)- The University of Texas at Austin-McCombs School of Business. Texas. U.S.A. GPA: 4.17/4.33 ("A")

Link to Certificate: https://vrfy.digital/mhHpN

Link to Grade Book: https://olympus1.mygreatlearning.com/gradesheet/ANOASCWI

Link to Projects: https://eportfolio.greatlearning.in/jose-luis-ortiz-volcan

- 1995- MBA. Business Management and Financial Management. Zulia University. Venezuela MBA Thesis: Reservoir Management Processes Optimization In Central South Lake operated by Lagoven Venezuela
- 1990- MSc. Petroleum Engineering from Texas A&M University. Texas. U.S.A. M.Sc. Thesis: An Artificial Intelligence Approach for Model-Based Gas Lift Troubleshooting - Major GPA: 4.0/4.0 ("A"), Overall GPA: 3.81/4.0 ("A") Link: https://oaktrust.library.tamu.edu/handle/1969.1/ETD-TAMU-1990-THESIS-077?show=full
- 1979- BSc. Chemical Engineering. Eastern University. Venezuela BSc. Thesis: Studies on the Production of Ethanol as Fuel from Sugar Cane Molasses

- 1999- Leading and Managing People Program certificate from Columbia University. Graduate School of Business
- 1998- PDVSA Business Leaders certificate from Harvard University. Graduate School of Business Administration.
- 2021 2 Udemy Certificates: R Language for Beginners / The Python Bible
- 2022 6 Great Learning Certificates: Random Forest, Analytics in Risk, My SQL Basics, SQL for Data Science, Data Visualization using Tableau and Data Visualization Using Power BI

Part 4 - 46 Publications and Presentations

- Jose Luis Ortiz Volcan:" Un Viaje al Mundo de la Inteligencia Artificial: Guía Práctica para su Aplicación en el Negocio de Exploración y Producción", (Spanish presentation English title: "A Journey into the World of Artificial Intelligence: A Practical Guide for its Application in the Exploration and Production Business") SPE Caracas Petroleum Section Webinar, 21 July 2022. Link: https://www.youtube.com/watch?v=ZS9S97W74k0&t=253s ,
 Venezuela
- Jose Luis Ortiz Volcan:" Metodología Integral de Productividad, MIP", (Spanish presentation English title: "Integral Methodology for Productivity Optimization") Society of Petroleum Engineers SPE Caracas Petroleum Section Webinar, 11 November 2020. Link: https://www.youtube.com/watch?v=S63BVBJi9-Q, Venezuela
- J.L. Ortiz-Volcan, W. Al-Khamees and K. Ahmed.:" Strategic Competencies For Integrated Subsurface-surface Heavy Oil Field Operations And Optimization". Paper SPE-197997-MS. 4th Kuwait Oil & Gas Conference, 13-16 October 2019. Kuwait. Link: https://doi.org/10.2118/197997-MS
- J.L. Ortiz-Volcan.: Integrated Production Optimization: Key for Improved Oil Recovery in Non-Conventional Fields".
 SPE Workshop Production Optimization. 18-19 September 2018. Kuwait.
 Link: https://www.spe.org/events/en/2018/workshop/18aku2/about-this-workshop.html
- J.L. Ortiz-Volcan, K. Ahmed, S. Azim, Y. Issa, R. Pandit, A.K. Al-Jasmi, M.O. Hassan, A. Sanyal, Kuwait Oil Company, S. Taduri, Kuwait Gulf Oil Company.:" Opportunity Assessment of A Deep Extra Heavy Oil Green Field: Scenarios for Life Cycle Cost Optimization under Uncertainty and Risk". Paper SPE-193675-MS. SPE Heavy Oil Conference and Exhibition (HOCE), 10-12 December 2018. Kuwait. Link: https://doi.org/10.2118/193675-MS
- 6. J.L. Ortiz-Volcan, W. Al-Khamees and K. Ahmed.:"Strategic Competencies for Non-Conventional Heavy and Extra Heavy Oil Fields: Identification, Definition and Measurement". Paper SPE-193671-MS. SPE Heavy Oil Conference and Exhibition (HOCE), 10-12 December 2018. Kuwait. Link: https://doi.org/10.2118/193671-MS
- J.L. Ortiz-Volcan, W. Al-Khamees and K. Ahmed.:" Benchmarking Of Heavy Oil Fields: A Tool for Identification of Opportunities for Total Cost and Production Optimization". Paper SPE-193647-MS. SPE Heavy Oil Conference and Exhibition (HOCE), 10-12 December 2018. Kuwait. Link: https://doi.org/10.2118/193647-MS
- 8. Herminio Passalacqua, Jose Luis Ortiz Volcan, Mohamad Hasan Al Einawi, Jamaneh Mostafa Kadnaji, and Fatemah Karam.: "Application of a Multiple Attribute Decision Making Method to Improve Oil and Gas Field Development Projects". Paper SPE-187564-MS. SPE Kuwait Oil & Gas Show and Conference. Kuwait City, Kuwait, 15-18 October 2017. Link: https://doi.org/10.2118/187564-MS
- J.L. Ortiz-Volcan, F.H. Shanat and F. Haider.:" Method to Measure Front End Loading (FEL) of Steam-Based Thermal Recovery Projects to Assess Impact of Reservoir Complexity, Uncertainty and Risk in Future Performance". Paper SPE-187556-MS. SPE Kuwait Oil & Gas Show and Conference. Kuwait City, Kuwait, 15-18 October 2017. Link: https://doi.org/10.2118/187556-MS
- 10. J.L.Ortiz-Volcan, F.M. Behbahani, M.G.Akbar.:"Cost Optimization of a Thermal Recovery Project in Heavy Oil Green Field Kuwait". Paper SPE-184103-MS. SPE International Heavy Oil Conference and Exhibition (HOCE). 6–8 December 2016. Mangaf, Kuwait. Link: https://doi.org/10.2118/184103-MS
- 11. M.Al-Obaidi, J.L.Ortiz-Volcan, F.J.Gomez and M.G.Akbar.: "Supply Chain Modeling of a Steam-Based Thermal EOR Heavy Oil Field Development Project in Kuwait: Lessons Learned". Paper SPE-184097-MS. SPE International Heavy Oil Conference and Exhibition (HOCE). 6–8 December 2016. Mangaf, Kuwait. Link: https://doi.org/10.2118/184097-MS
- 12. F.F. Haider, Ortiz-Volcan JL, LA. Pichery.: "HSE Integrated Risk Assessment for a Steamflood Pilot Program". Paper SPE-175376. SPE Kuwait Oil and Gas Show and Conference. 11-14 October 2015. Mishref, Kuwait. Link: https://doi.org/10.2118/175376-MS
- 13. Ortiz-Volcan J.L., R. Ghouti, A.M.Al-Naqi, A.K. Jain: "Heavy Crude Oil Sampling and Assay for Refinery Capacity Planning: Design, Plan and Execution in a Supergiant Green Field". Paper SPE-175292. SPE Kuwait Oil and Gas Show and Conference. 11-14 October 2015. Mishref, Kuwait. Link: https://doi.org/10.2118/175292-MS
- 14. Anil Kumar Jain, Khalid Ahmed, Jose L. Ortiz-Volcan and Waleed Al-Khamees.:"Water Analysis-A Key Tool For Reservoir Monitoring Under Cyclic Steam Stimulation".Paper SPE-175287-MS. SPE Kuwait Oil and Gas Show and Conference. 11-14 October 2015. Mishref, Kuwait. Link: https://doi.org/10.2118/175287-MS
- 15. Ortiz-Volcan J.L and Iskandar A:"A Life Cycle Approach for Assessing Production Technologies In Heavy Oil Well Construction Projects". Paper SPE-150709. 2011 SPE Heavy Oil Conference and Exhibition (HOCE), 12-14 December 2011. Mangaf, Kuwait. Link: https://doi.org/10.2118/150709-MS

- 16. Ortiz-Volcan J.L., Ronelba Blanco, Diane Djotaroeno.: "An Alternate Simplified Approach For Selecting Enhanced Oil Recovery Technologies Using Analogs And Hubbert Peak Oil Theory". Paper SPE-144982. SPE Enhanced Oil Recovery Conference held July 2011 in Kuala Lumpur, Malaysia. Link: https://doi.org/10.2118/144982-MS
- 17. Ortiz-Volcan J.L.: "Development of Heavy Oil Offshore Lake Maracaibo Field Using Slug Gas Lift: A Case History". Paper SPE-143920. Brasil Offshore Conference June 2011, Macaé, Rio de Janeiro. Brasil. Link: https://doi.org/10.2118/143920-MS
- 18. Ortiz-Volcan J.L and Iskandar A: "A Methodology to Assess Uncertainties and Risks in Heavy Oil Projects". Paper SPE-139345. SPE LACPEC 2010 December 2010, Lima, Peru. Link: https://doi.org/10.2118/139345-MS
- Reyes C., Ortiz J.L. and E. Azuaje: "A Reliability Based Systemic Method for Water Production Analysis, Diagnosis and Solution Design", Paper SPE-138935. SPE LACPEC 2010 December 2010. Lima, Peru. Link: https://doi.org/10.2118/138935-MS
- 20. Ortiz J.L.: "Early Production Assessment During Visualization Phase of a Well Project Life Cycle Reservoir, Well and Surface Integration". SPE ATW Maximum Reservoir Contact: Multilateral, Horizontal, and Extended-Reach Wells Construction 20–22 June 2010 / Bucaramanga, Colombia.
- 21. Ortiz.J.L. Astor J.G., Sanchez F. and Iskandar A.: "Collaborative Well Project (FEL-VCD) Application to Optimize Value in the Whole Well Life Cycle: Methodology, Applications and Lessons Learned". SPE ATW Maximum Reservoir Contact: Multilateral, Horizontal, and Extended-Reach Wells Construction 20–22 June 2010 / Bucaramanga, Colombia.
- 22. Ortiz J.L: "Case Study: An Integrated Asset Management Approach to Unconventional Oil Natural Assets Venezuela". Platts Securing Benchmarks and Supply: The Challenges for Crude Oil May 13th to 14th 2008 Renaissance Wien Hotel Vienna, Austria.
- 23. Ortiz J.L: "Subsurface-Surface Artificial Lift Integrated Optimization: keeping Low Production Costs While Creating More Value" SPE Applied Technology Workshop "A Field Life Cycle Perspective to Artificial Lift Asset Systems" 20-25 Feb 2007 Cartagena, Colombia.
- 24. Soto B.R., Perez O.P., Ortiz, J.L., Perez S.: "How to Use Artificial Intelligence to Select the Most Appropriate EOR Process and the Corresponding Artificial Lift Method", at SPE Applied Technology Workshop "A Field Life Cycle Perspective to Artificial Lift Asset Systems" 20-25 Feb 2007 Cartagena, Colombia.
- 25. Ortiz J.L: "Integrated Well Productivity Optimization: Lessons Learned in 25 Years". SPE Applied Technology Workshop Opportunities in Mature Oil Fields: Technical and Economic Challenges 23–25 Aug 2006 Miraflores Park Lima, Peru
- 26. Ortiz, J.L. (PDVSA), S. Yesquen (Petrobras Energia Perú) and T. Blasingame (Texas A&M University) "**Technologies for Mature Fields: A Compilation**". SPE Applied Technology Workshop Opportunities in Mature Oil Fields: Technical and Economic Challenges 23–25 Aug 2006 Miraflores Park Lima, **Peru**
- 27. Ortiz, J.L. (PDVSA) and T. Blasingame (Texas A&M University) Cochairs ATW "Key Success Factors When Selecting Technologies for Mature Fields: Navigation Guidelines for a Moving Target" Applied Technology Workshop ATW Key Technologies To Create More Value From Mature Fields- 21–24 February 2006 Hilton Margarita & Suites Margarita Island, Venezuela
- 28. Ortiz, J.L. (Chairman SPE Caracas Petroleum Section) "Systemic Vision of Fossil Energy" 2nd Seminar of SPE Venezuelan Student Chapters Simon Bolivar University Sartenejas, Caracas, Venezuela September 29-30 2005
- 29. Ortiz, J.L. & Haskell, J.B.: **"Technology Transfer Program Increases Production in Venezuela"** Offshore Magazine, Volume 62, Issue 8, January 1st 2002. **USA** (http://www.offshore-mag.com/articles/print/volume-62/issue-8/news/technology-transfer-program-increases-production-in-venezuela.html)
- 30. Ortiz, J.L. (Senior Technology Planning Consultant PDVSA Corporate Planning) "Subsurface Surface Production Optimization: A Vision" 2nd Production Optimization Under Automated Operations Internal Conference PDVSA Production Western Lagunillas, Venezuela February 2002.
- 31. Ortiz, J.L.(Manager Center of Excellence for Production) "Subsurface Surface Integrated Optimization Creating Value for PDVSA While Keeping Low Production Costs" First Technology Conference PDVSA Operating Agreements Partner Companies 10-11 May 2001 Gran Salon PDVSA CIED Caracas Venezuela
- 32. Ortiz J.L.: "Subsurface-Surface Integrated Optimization (2SIO): Keeping Low Production Costs in PDVSA while Creating More Value". Presented in the Second Smart Reservoirs Conference. SMI. London, UK. June 2000. https://www.smi-online.co.uk/energy/archive/6-2000/conference/smart-reservoirs#day 2
- 33. Cedeño, M. and Ortiz J.L.: "SOLAG: An Intelligent Gas Lift Optimization System for Continuous and Intermittent Gas Lift Wells", Paper SPE-26972 presented in the III SPE Latin-American Conference (LAPEC) .Buenos Aires. Argentina. April, 1994. Link: https://doi.org/10.2118/26972-MS

- 34. Ortiz,J.L. and Prato,A.: "Lessons Learned During the Development of a Gas Lift Troubleshooting Expert System: A Case History ", Conference on Artificial Intelligence in Petroleum Exploration and Production (CAIPEP), Dallas, Texas, USA, May 1993.
- 35. Ortiz, J.L.: "Gas Lift Engineering and Operations in Lake Maracaibo Field: An Endless Learning Experience", Gas Lift Workshop, American Society of Mechanical Engineers (ASME), Houston, Texas, USA, January 1993.
- 36. Ortiz, J.L.: "Gas Lift Valves Evaluation", III Artificial Lift Seminar held in Intevep, Los Teques, Venezuela, October 1992.
- 37. Ortiz, J.L.: "Application of Artificial Intelligence in the Diagnosis of Gas Lift Equipments", III LatinAmerican Petroleum Congress, ARPEL, Rio de Janeiro, **Brasil**, October 1992.
- 38. Ortiz, J.L.: "Gas Lift Troubleshooting Engineering: An Improved Approach." Paper SPE-20674, 65th Annual Conference Society of Petroleum Engineers (SPE), New Orleans, Louisiana, USA., September 1990. Link: https://doi.org/10.2118/20674-MS
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- 40. Ortiz, J.L.: "Gas Lift Engineering in Lagoven: A New Vision" II LatinAmerican Hydrocarbon Congress, ARPEL, Rio de Janeiro, Brazil, September 1988, Vol.3, No.3, pp 187-195.
- 41. Bravo, C.T., Mata A., and Ortiz, J.L.: "Artificial Intelligence Applied to Gas Lift: DIALOGO System" Work presented in the VII Lagoven's Technical Congress, Amuay Refinery, Venezuela, January 1988.
- 42. Zimmerman, W. and Ortiz J.L.: "Slug Flow Gas Lift" Work presented in the French Venezuelan Multiphase Flow Seminar. Held in Intevep. Los Teques. Venezuela. September, 1987.
- 43. Ortiz, J.L.: "Analysis and Diagnosis of Gas Lift Wells" Work Presented in the First Artificial Lift Seminar Petroleos de Venezuela. Held in Lagovèn. Maracaibo. Venezuela. September, 1985.
- 44. Ortiz, J.L.: "Gas Lift Optimization Using SOLAG". Work presented in the First Production Technology Congress held in Intevep. Los Teques. Venezuela. January 1985.
- 45. Araujo, M. and Ortiz, J.L.: "Communication Tests in Gas Lift Wells". Seventh Technical Seminar of the Venezuelan Society of Petroleum Engineers. SVIP. Caracas. Venezuela. 1984.
- 46. Ortiz, J.L.: "Gas Lift Optimization". Fifth Lagoven's Technical Congress. Tía Juana. Lagoven. Venezuela. November 1983.

Part 5 - Professional Activities/Awards

- **2023:** Society of Petroleum Engineers Certificate of Recognition for serving as volunteer service and contribution for the SPE Petroleum Aware Chatbot Tester 2023.
- 2023: Society of Petroleum Engineers Caracas Section. Certificate of Appreciation in Recognition for Presentation of "A Journey into the World of Artificial Intelligence: A Practical Guide for its Application in the Exploration and Production Business". 21 July 2022.
- 2023: Society of Petroleum Engineers certification for achieving 30 years of membership.
- **2022:** Society of Petroleum Engineers Caracas Section. Certificate of Appreciation in Recognition for Participation as Instructor of Integrated Well Productivity Methodology in PAI Program. 15 October 2022.
- 2022: Society of Petroleum Engineers Certification for 29 Years of Membership. Lifetime member.
- 2022: Society of Petroleum Engineers Western Section. Certificate for Presentation of Integrated Productivity Methodology (Spanish) presentation, Maracaibo, Venezuela, 11 February 2022.
- **2021**: Society of Petroleum Engineers Caracas Section. Certificate for Presentation of Integrated Productivity Methodology (Spanish) presentation, Caracas, Venezuela, 11 November 2020.
- **2018**: Society of Petroleum Engineers Certificate of Appreciation in Recognition of Participation at the SPE Workshop Production Optimization, Smart Strategies and Innovation, Kuwait City, Kuwait.
- **2018:** Award by Kuwait Oil Company In Recognition for Advancement of the Enterprise Risk Management ERM Body of Knowledge of the ERM Community.
- 2017-2020: Member of Kuwait Oil Company KOC Center of Excellence for Heavy Oil, Kuwait
- **2017**: Certificate of Appreciation (Gold) from Kuwait Oil Company for Participation, Engagement and Support Throughout Risk Adjusted Return on Capital RAROC Implementation
- 2016-2020: Member of Kuwait Oil Company KOC Heavy Oil Abstracts Review Committee, Kuwait

- 2015-2019: Member of SPE Reservoir, Production, Projects Facilities, Management/IT and HSE Technical Communities
- 2015: Technical Committee Member 2015 SPE Artificial Lift Conference Latin-American and Caribbean, Bahia Brazil
- 2015: Technical Committee Member World Heavy Oil Congress WHOC, Canada
- 2014: Technical Committee Member Heavy Oil Conference & Exhibition HOCE, Kuwait
- 2014: Technical Committee Member Heavy and Extra Heavy Oil Conference Latin America, Colombia
- 2012: Cochairman Latin-American and Caribbean Petroleum Conference SPE Student Chapters Meeting, Mexico City
- 2012: Technical Committee Member 2012 SPE Latin-American and Caribbean Petroleum Conference, Mexico City
- 2011: Society of Petroleum Engineers (SPE) –SPE Caracas Petroleum Section Technology Transfer Chairman
- 2008-2009: Technical Committee Member 2009 SPE Latin American and Caribbean Petroleum Engineering Conference, Cartagena Colombia
- **2010:** Technical Committee Member SPE Applied Technology Workshop on Multilateral, Horizontal, and Extended-Reach Wells Construction, Bucaramanga Colombia
- 2010: Cochairman Latin-American and Caribbean Petroleum Conference SPE Student Chapters Meeting, Peru 2010
- 2010: Technical Committee Member 2010 SPE Latin-American and Caribbean Petroleum Conference, Lima Peru
- 2008: Cochair SPE Applied Technology Workshop on Carbonates & Naturally Fractured Reservoirs, Maracaibo Venezuela
- 2008-2009: Technical Committee Member 2009 SPE Latin American and Caribbean Petroleum Engineering Conference, Cartagena Colombia
- 2008: SPE Latin American and Caribbean Regional Service Award Recipient
- 2007-2010: Section Continuing Education Chairperson SPE Caracas Petroleum Section
- 2007: Cochairman SPE Applied Technology Workshop on Artificial Lift, Cartagena Colombia
- 2006: Technical Committee Member SPE Applied Technology Workshop on Mature Fields, Lima Peru
- 2006: Cochairman SPE Applied Technology Workshop on IOR-Mature Fields, Margarita Island Venezuela
- 2002-2007: Chairperson SPE Caracas Petroleum Section (oldest SPE Section outside USA), Venezuela

Part 6 - Professional Associations

- Society of Petroleum Engineers International (SPE) lifetime professional member.
- Venezuelan Society of Petroleum Engineers Sociedad Venezolana de Ingenieros de Petróleo (SVIP)
- Kuwait Society of Engineers
- Instrumentation, Systems and Automation Society (ISA)
- Project Management Institute (PMI)
- American Association for Artificial Intelligence (AAAI)

Part 7 - Software, Programming Languages and Standards

- Artificial Intelligence and Machine Learning Libraries for Business Applications Supervised learning, Unsupervised Learning, Deep Learning and Natural Language Processing.
- Programming languages and IDE Languages Python, R, SQL, LISP, Visual Basic, Fortran IDE Anaconda
- Data Visualization, Data Analytics, and Business Intelligence Tools Tableau, Power BI, Spotfire
- Systems Thinking (System Dynamic Modeling): Ithink / Visual thinking tools: Mind manager, FreeMind 0.8
- Project Management: MS Project, PRIMAVERA
- MS Office Suite (Word, Excel, Access, Outlook, Publisher)
- Nodal analysis software (Wellflow, Pipesim) and Reservoir Simulation Software (Nexus, VIP, Eclipse)
- Enterprise Resource Planning (ERP) & Enterprise Asset Management (EAM) Software SAP, IBM Maximo
- Resources and Reserves Management Systems (Halliburton ARIES, applications using Python)
- Planning, risk, and reserves software (Merak PEEP) and developed own economic analysis under uncertainty and risk.
- Designed novel Enterprise Resource to Sustainable Value Planning System (early phases of software development.)
- Asset Management Standards British PAS-55 and ISO55000 series of standards.

Part 8 - Selected Photos and Images from Corporate or Professional Publications



North Sea











































