

# Thomas M. Daley

## **Experience:**

2015-Present Staff Scientist, Energy Geosciences Division, LBNL  
2015-2017 Geophysics Department Head, Earth & Environmental Sciences Area, Lawrence Berkeley National Laboratory (LBNL)  
2014-2015 Geophysics Department Head, Earth Sciences Division, LBNL  
2011-2014 Staff Scientist, Earth Sciences Division, LBNL  
2007-2011 Research Scientist, Earth Sciences Division, LBNL  
1995-2007 Staff Research Associate, Earth Sciences Division, LBNL  
1987-1995 Research Associate, Earth Sciences Division, LBNL  
1982-1985 District Manager, Seismograph Service Corp.  
1980-1982 Field Engineer, Birdwell Division, Seismograph Service Corp.

## **Education:**

1987 M.S. Engineering, Engineering Geoscience, Univ. of California, Berkeley  
1980 B.A. Geophysics, Geology and Geophysics, Univ. of California, Berkeley

## **Research Abstract:**

My research is focused on the acquisition and analysis of borehole seismic data from field scale experiments. Problems addressed include continuous monitoring to detect stress changes, monitoring of geologic sequestration of CO<sub>2</sub>, monitoring for risk assessment, characterization of fracture content and dominant fracture orientation in geothermal and oil fields, high resolution imaging of shallow surface materials, imaging fracture flow zones in contaminated aquifers, and integrated geophysical characterization of volcanic tuff flows for nuclear waste isolation at Yucca Mountain.

## **Professional Affiliations:**

Member: Society of Exploration Geophysicists (SEG), American Geophysical Union (AGU), European Association of Geoscientists and Engineers (EAGE), Bay Area Geophysical Society (BAGS)  
Member: SEG Research Committee  
Chair: SEG CO<sub>2</sub> Research Subcommittee

## **Honors/Awards/Patents**

2016 System and Method of Detecting Well Integrity Failure, US Patent 20,160,116,621  
2015 R&D 100 Award (R&D Magazine): CASSM (Continuous Active-Source Seismic Monitoring)  
2015 Outstanding Performance Award, Lawrence Berkeley National Lab.  
2012 Best Paper at 2011 Annual Meeting, Society of Exploration Geophysicists  
2011 US Patent 8,717,850 Piezotube Borehole Seismic Source  
2008 Schlumberger Gold Award  
2007 Outstanding Performance Award, Lawrence Berkeley National Lab.  
2006 Outstanding Performance Award, Lawrence Berkeley National Lab.

<b>Invited Presentations:</b> .....	<b>2</b>
<b>Journal Publications (Peer and Editorial Reviewed), Book Chapters:</b> .....	<b>4</b>
<b>LBNL and Project Scientific Reports:</b> .....	<b>9</b>
<b>Conference Presentations with Papers or Abstracts:</b> .....	<b>14</b>

## **Invited Presentations:**

1. **Daley, Thomas M.**, 2017, Monitoring CO<sub>2</sub> Storage, Workshop on Geologic Capture and Sequestration of Carbon, National Academy of Sciences, Stanford Univ., Nov. 28, 2017.
2. **Daley Thomas M.**, et al., 2017, Monitoring Technology at Aquistore, IEA Greenhouse Gas Monitoring Network, Traverse City, Michigan, June 12-15, 2017.
3. **Daley, Thomas M.**, Freifeld, B. M., 2016, Advanced Monitoring Technology: DAS (Distributed Acoustic Sensing) at Otway and Aquistore, IEA Greenhouse Gas Monitoring Network Edinburgh, Scotland, July 6, 2016.
4. **Daley, Thomas M.**, and Freifeld, Barry M, 2015, Integrated Technology for Deep Boreholes: Modular Borehole Monitoring (invited), American Geophysical Union Annual Meeting, paper H13M-02.
5. **Daley, T.M.**, 2015, Comparison of Fiber Optic Monitoring with Conventional Geophone Detection Systems at Aquistore, 10<sup>th</sup> Monitoring Network Meeting, International Energy Agency Greenhouse Gas Program, Berkeley, CA, June 10-12, 2015.
6. **Daley, T.M.**, 2015, Induced seismicity from CO<sub>2</sub> storage: monitoring and risk assessment, Stanford Center for Carbon Storage Annual Meeting, Workshop on “Induced Seismicity due to CO<sub>2</sub> injection”, Palo Alto, Ca, May 27-28.
7. **Daley, T. M.**, 2014, Pathways to integrate monitoring in risk assessment based modeling, IEAGHG Monitoring Network and Modeling Network – Combined Meeting, Morgantown WV, 4-8 August, 2014.
8. **Daley, T.M.**, 2014, Continuous Active Source Seismic Monitoring (CASSM): Applications to Crosswell Reservoir Monitoring, Society of Exploration Geophysics, Development and Production Forum: Reservoir Characterization and Monitoring with Advanced Geophysical Technology, Santa Rosa, California, July 3, 2014.
9. **Daley, T.M.**, Miller, D., Freifeld, B.M., Dodds, K., 2014, Results of field testing of simultaneous DAS and Geophone VSP, Workshop: Fibre Optics Sensing for Vertical Seismic Profile (VSP) Surveys: Challenges Faced & The Way Forward for Fiber Optics Sensing Use in VSP Surveys, 76th EAGE Conference & Exhibition 2014, Amsterdam, Netherlands.
10. **Daley, Thomas M.**, and Barry Freifeld, 2014, Borehole Based Monitoring of CO<sub>2</sub> Storage: Recent Developments in Fiber-Optic Sensing, CCS Technical Workshop, Research Institute of Innovative Technology for the Earth, Tokyo, Japan, January 23, 2014.
11. **Daley, Thomas M.**, 2013, Detection, monitoring and modeling of a probable fracture zone at the In Salah CO<sub>2</sub> storage project, Society of Exploration Geophysics, Post-convention Workshop, Houston, Tx, September 27, 2013.
12. **Daley, Thomas M.**, B.M. Freifeld, P. Cook, R. Trautz, K. Dodds, 2013, Modular Borehole Monitoring (MBM) at SECARB’s Citronelle Site: Project Update, IEA GHG CCS Combined Monitoring and Environmental Network Meeting: Canberra, ACT, August 26-30, 2013.
13. **Daley, Thomas M.**, Barry Freifeld, multiple co-authors, 2013, VSP Acquisition Using Fiber Optic Distributed Acoustic Sensing (DAS): A Comparison of Sites and with Conventional Geophones, Society of Petroleum Engineers Workshop on Distributed Fiber-Optic Monitoring for Well and Reservoir Management, Palos Verdes, CA, July 16-18, 2013.
14. **Daley, Thomas M.**, Monitoring the Subsurface with Borehole Seismic: CASSM and Beyond, Stanford Geophysics Department Seminar, May 2, 2013.
15. **Daley, Thomas M.**, Subsurface Monitoring of CO<sub>2</sub> Sequestration – A Review and Look Forward (Invited), 2012, Fall Meeting, American Geophysical Union, Dec. 2012, GC53D-07.
16. Korneev, V., and **Daley, T.M.**, 2012, Uncertainty of micro-seismic events location during fluid injection, 2012, 1st Joint International Workshop for the Earth’s Surface and Subsurface 4D Monitoring, Riyadh, Saudi Arabia, January 8 -11.

17. **Daley, T.M.**, Jonathan B. Ajo-Franklin, Fenglin Niu, 2011, Recent Results from Crosswell CASSM (Continuous Active-Source Seismic Monitoring), American Geophysical Union Annual Meeting, Special session T05, 5-9 December, San Francisco.
18. **Daley, T.M.**, 2011, Monitoring Strategies for Geologic Storage of CO<sub>2</sub>, MIT Carbon Sequestration Forum XII, Cambridge MA, October 26.
19. Ajo-Franklin, J. B., **Thomas Daley**, Belinda Butler-Veytia, John Peterson, Yuxin Wu, Bob Kelly, and Susan Hubbard, 2011, Multi-level continuous active source seismic monitoring (ML-CASSM): Mapping shallow hydrofracture evolution at a TCE contaminated site, SEG Expanded Abstracts 30, 3727 (2011), DOI:10.1190/1.3627980
20. **Daley, T.M.**, 2011, Seismic Monitoring of Geologic Sequestration, Research and Development Symposium, Society of Petroleum Engineers, Austin, Tx, June 7.
21. **Daley, T.M.**, 2010, Geophysical Characterization/MMV Experiences, Joint SECARB Meeting, Electric Power Research Institute, Palo Alto, CA, July 14.
22. **Daley, T.M.**, E. Majer, M. Hoversten, R. Gritto, J. Ajo-Franklin, 2010, Borehole Seismic Monitoring of Sequestration Pilots, Geologic Carbon Sequestration Site Integrity: Characterization and Monitoring Workshop, Columbus, Ohio, June 7-8, 2010.
23. Majer, E. and **Daley, T.M.**, 2010, Induced Seismicity Associated with Fluid Injections for Energy Resource Applications: Lessons learned from Geothermal, Geologic Carbon Sequestration Site Integrity: Characterization and Monitoring Workshop, Columbus, Ohio, June 7-8, 2010.
24. **Daley, T.M.**, 2010, MMV Planning in WESTCARB and DOE's National Risk Assessment Partnership (NRAP), 6<sup>th</sup> Annual International Energy Agency Greenhouse Gas Monitoring Network, Natchez, MS, May 2010.

## **Journal Publications (Peer and Editorial Reviewed), Book Chapters:**

1. Yang, Chenhao; Niu, Fenglin; **Daley, Thomas M**; Taira, Taka-aki, 2018, Continuous Measurement of Stress-Induced Travel Time Variations at SAFOD, Seismological Research Letters, Seismological Society of America
2. Vasco, Donald W; Bissell, Robert C; Bohlooli, Bahman; **Daley, Thomas M**; Ferretti, Alessandro; Foxall, William; GoertzÉ\_êAllmann, Bettina P; Korneev, Valeri; Morris, Joseph P; Oye, Volker; 2018, Monitoring and Modeling Caprock Integrity at the In Salah Carbon Dioxide Storage Site, Algeria, in Geological Carbon Storage: Subsurface Seals and Caprock Integrity, 238-243, American Geophysical Union
3. Jung, Y., C Doughty, A Borgia, KJ Lee, CM Oldenburg, L Pan, **TM Daley**, 2018, [Pressure transient analysis during CO<sub>2</sub> push-pull tests into faults for EGS characterization](#), Geothermics 75, 180-191.
4. Lee, K.J., Curtis M Oldenburg, Christine Doughty, Yoojin Jung, Andrea Borgia, Lehua Pan, Rui Zhang, **Thomas M Daley**, Bilgin Altundas, Nikita Chugunov, 2018, [Simulations of carbon dioxide push-pull into a conjugate fault system modeled after Dixie Valley—Sensitivity analysis of significant parameters and uncertainty prediction by data-worth analysis](#), Geothermics 74, 121-134.
5. Ajo-Franklin, J., Shan Dou, Nathaniel Lindsey, Inder Monga, Chris Tracy, Michelle Robertson, Craig Ulrich, Barry Freifeld, **Tom Daley**, Xiaoye S Li, 2018, [Using Dark Fiber and Distributed Acoustic Sensing for Near-Surface Characterization and Broadband Seismic Event Detection](#), EarthArXiv. July 20
6. Dou, S., Lindsey, N., Wagner, A.M., **Daley, T.M.**, Freifeld, B., Robertson, M., Peterson, J., Ulrich, C., Martin, E.R., and J.B. Ajo-Franklin, 2017, Distributed Acoustic Sensing for Seismic Monitoring of the Near Surface: A Traffic-Noise Interferometry Case Study, Scientific Reports, 7:11620, DOI:10.1038/s41598-017-11986-4
7. Zhu, T., Ajo-Franklin, J., and **T. Daley**, 2017, Spatio-temporal changes in seismic attenuation caused by injected CO<sub>2</sub> at the Frio-II pilot site, Dayton TX, USA, *Journal of Geophysical Research – Solid Earth*, 122(9), 7156-7171, DOI: 10.1002/2017JB014164
8. Marchesini, P., J.B. Ajo-Franklin, **T.M. Daley**, 2017, In-Situ Measurement Of Velocity-Stress Sensitivity Using Crosswell Continuous Active-Source Seismic Monitoring (CASSM), Geophysics 82 (5), 1-27.
9. Borgia, A, Curtis M. Oldenburg, Rui Zhang, Lehua Pan, **Thomas M. Daley**, Stefan Finsterle, T.S. Ramakrishnan, 2017, Simulations of CO<sub>2</sub> injection into fractures and faults for improving their geophysical characterization at EGS sites, Geothermics, Volume 69, September 2017, Pages 189-201, ISSN 0375-6505, <https://doi.org/10.1016/j.geothermics.2017.05.002>.
10. Pevzner, R., Milovan Urosevic, Dmitry Popik, Valeriya Shulakova, Konstantin Tertyshnikov, Eva Caspari, Julia Correa, Tess Dance, Anton Kepic, Stanislav Glubokovskikh, Sasha Ziramov, Boris Gurevich, Rajindar Singh, Matthias Raab, Max Watson, **Tom Daley**, Michelle Robertson, Barry Freifeld, 2017, 4D surface seismic tracks small supercritical CO<sub>2</sub> injection into the subsurface: CO<sub>2</sub>CRC Otway Project, International Journal of Greenhouse Gas Control, 63, 150-157, ISSN 1750-5836, <https://doi.org/10.1016/j.ijggc.2017.05.008>.
11. Pevzner, R., M Urosevic, K Tertyshnikov, B Gurevich, V Shulakova, S Glubokovskikh, D Popik, J Correa, A Kepic, B Freifeld, M Robertson, T Wood, T Daley, R Singh, 2017, [Stage 2C of the CO<sub>2</sub>CRC Otway Project: Seismic monitoring operations and preliminary results](#), Energy Procedia, 114, 3997-4007. <https://doi.org/10.1016/j.egypro.2017.03.1540>
12. White, D, Kyle Harris, Lisa Roach, Brian Roberts, Kyle Worth, Anna Stork, Christopher Nixon, Douglas Schmitt, Tom Daley, Claire Samson, 2017, Monitoring Results after 36 Ktonnes of Deep CO<sub>2</sub> Injection at the Aquistore CO<sub>2</sub> Storage Site, Saskatchewan, Canada, Energy Procedia, 114, 4056-4061. <https://doi.org/10.1016/j.egypro.2017.03.1546>
13. Al Hosni, M Vialle, S., Gurevich, B., **Daley, T. M.**, 2016, Estimation Of Rock Frame Weakening Using Time-Lapse Crosswell: The Frio Brine Pilot Project, Geophysics, 81, B235–B245, DOI: 10.1190/GEO2015-0684.1

14. Al Hosni, M, E Caspari, R Pevzner, **T. M. Daley**, B Gurevich, 2016, Case History: Using time-lapse vertical seismic profiling data to constrain velocity–saturation, *Geophysical Prospecting* 64 (4), 987-1000, **DOI:** 10.1111/1365-2478.12386
15. Miller, D. E., **T.M. Daley**, D. White, B.M. Freifeld, M. Robertson, J. Cocker, M. Craven, 2016, Simultaneous Acquisition of Distributed Acoustic Sensing VSP with Multi-mode and Single-mode Fiber-optic Cables and 3C-Geophones at the Aquistore CO<sub>2</sub> Storage Site, Recorder, *Canadian Society of Exploration Geophysics*, v41, n06, p28-33.
16. Harbert, W., **T M. Daley**, G Bromhal, C Sullivan, L Huang, 2016, Progress in monitoring strategies for risk reduction in geologic CO<sub>2</sub> storage, *International Journal of Greenhouse Gas Control*, pp. 260-275. DOI: 10.1016/j.ijggc.2016.05.007
17. **Daley, T.M.**, Miller, D. E., Dodds, K., Cook, P., Freifeld, B.M., 2016, Field Testing of Modular Borehole Monitoring with Simultaneous Distributed Acoustic Sensing and Geophone Vertical Seismic Profile at Citronelle, Alabama, *Geophysical Prospecting*, 64 (5), 1318-1334, DOI: 10.1111/1365-2478.12324.
18. Harris, K., White, D., Melanson, D., Samson, C., and **Daley, T. M.**, 2016, Feasibility of Time-lapse VSP Monitoring at the Aquistore CO<sub>2</sub> Storage Site Using a Distributed Acoustic Sensing System, *International Journal of Greenhouse Gas Control*, 50, p248-260. [doi:10.1016/j.ijggc.2016.04.016](https://doi.org/10.1016/j.ijggc.2016.04.016)
19. Commer, M., J Doetsch, B Dafflon, Y Wu, **TM Daley**, SS Hubbard, 2016, Time-lapse 3-D electrical resistance tomography inversion for crosswell monitoring of dissolved and supercritical CO<sub>2</sub> flow at two field sites: Escatawpa and Cranfield, Mississippi, USA, *International Journal of Greenhouse Gas Control*, 49, p297-311. [doi:10.1016/j.ijggc.2016.03.020](https://doi.org/10.1016/j.ijggc.2016.03.020)
20. **Daley, Thomas M.**, J. Torquil Smith, John Henry Beyer and Douglas LaBrecque, 2015, Borehole EM Monitoring at Aquistore with a Downhole Source, Chapter 39 in *Carbon Dioxide Capture for Storage in Deep Geologic Formations – Results from the CO<sub>2</sub> Capture Project, Volume Four: CCS Technology Development and Demonstration Results (2009-2014)*, Karl F. Gerdes, editor, CPL Press, ISBN 978-1-872691-68-8.
21. Freifeld, Barry M., **Thomas M. Daley** and Paul Cook, 2015, Modular Borehole Monitoring an Integrated Deployment Package Development, Chapter 29 in *Carbon Dioxide Capture for Storage in Deep Geologic Formations – Results from the CO<sub>2</sub> Capture Project, Volume Four: CCS Technology Development and Demonstration Results (2009-2014)*, Karl F. Gerdes, editor, CPL Press. ISBN 978-1-872691-68-8.
22. Freifeld, Barry M., **Thomas M. Daley**, Paul Cook and Douglas E. Miller, 2015, Modular Borehole Monitoring: Deployment and Testing, Chapter 37 in *Carbon Dioxide Capture for Storage in Deep Geologic Formations – Results from the CO<sub>2</sub> Capture Project, Volume Four: CCS Technology Development and Demonstration Results (2009-2014)*, Karl F. Gerdes, editor, CPL Press. ISBN 978-1-872691-68-8.
23. Zhang, R., **Daley, T.M.**, Vasco, D., 2015, Improving thin-bed resolution: Application of a sparse-layer inversion on 3D seismic observations from the In Salah carbon dioxide storage project, *Interpretation*, v 3, n3, p SS65-SS71. doi: 10.1190/INT-2014-0204.1
24. Zhang, R., Vasco, D. and **Daley, T. M.**, Study of seismic diffractions caused by a fracture zone at In Salah carbon dioxide storage project, 2015 *International Journal of Greenhouse Gas Control*, v 42, p 75-86. DOI:10.1016/j.ijggc.2015.07.033
25. Zhang, R., Vasco, D., **Daley, T.M.**, 2015, Characterization of a fracture zone using seismic attributes at the InSalah CO<sub>2</sub> storage project, *Interpretation*, SM37-46. DOI:10.1190/INT-2014-0141.1.
26. **Daley, T.M.**, J. Hendrickson, JH Queen, 2015, Monitoring CO<sub>2</sub> Storage at Cranfield, Mississippi with Time-Lapse Offset VSP–Using Integration and Modeling to Reduce Uncertainty, *Energy Procedia* 63, 4240-4248.
27. Freifeld, B, **T Daley**, P Cook, R Trautz, K Dodds, 2015, The Modular Borehole Monitoring Program: a research program to optimize well-based monitoring for geologic carbon sequestration, *Energy Procedia* 63, 3500-3515.

28. White, D.J., L.A.N Roach, B. Roberts, **T.M. Daley**, 2015, Initial Results from Seismic Monitoring at the Aquistore CO<sub>2</sub> Storage Site, Saskatchewan, Canada, *Energy Procedia* 63, 4418-4423.
29. **Daley, T.M.**, Freifeld, B., Siggins, T., 2014, Seismic Monitoring at Naylor-1 using High Resolution Travel Time (HRTT) and Offset VSP, In: *Geologically Storing Carbon: Learning from the Otway Project Experience*. (Ed. P J Cook) 408pp. CSIRO Publishing, Melbourne, ISBN: 9781486302307.
30. Vasco, D.W., **Thomas M. Daley** and Andrey Bakulin, 2014, Utilizing the onset of time-lapse changes: a robust basis for reservoir monitoring and characterization, *Geophysical Journal International*, doi: 10.1093/gji/ggt526.
31. Oye, Volker, Eyvind Aker, **Thomas M. Daley**, Daniela Kühn, Bahman Bohloli, Valeri Korneev, Microseismic Monitoring and Interpretation of Injection Data from the in Salah CO<sub>2</sub> Storage Site (Krechba), Algeria, 2013, *Energy Procedia*, Volume 37, 2013, Pages 4191-4198, ISSN 1876-6102, <http://dx.doi.org/10.1016/j.egypro.2013.06.321>.
32. **Daley, Thomas M.**, Barry M. Freifeld, Jonathan Ajo-Franklin, Shan Dou, Roman Pevzner, Valeriya Shulakova, Sudhendu Kashikar, Douglas E. Miller, Julia Goetz, Jan Hennings, Stefan Lueth, 2013, Field testing of fiber-optic distributed acoustic sensing (DAS) for subsurface seismic monitoring, *The Leading Edge* 32, 6 (2013); pp. 699-706, <http://dx.doi.org/10.1190/tle32060699.1>
33. Doetsch, J., Kowalsky, M.B., Doughty, C., Finsterle, S., Ajo-Franklin, J.B., Carrigan, C., Yang, X., Hovorka, S.D., **Daley, T.M.**, 2013. Constraining CO<sub>2</sub> simulations by coupled modeling and inversion of electrical resistance and gas composition data. *International Journal of Greenhouse Gas Control* 18, 510-522. <http://dx.doi.org/10.1016/j.ijggc.2013.04.011>
34. Ajo-Franklin, J., B., Peterson, J., Doetsch, J., **Daley, T.M.**, 2013, High-Resolution Characterization of a CO<sub>2</sub> Plume Using Crosswell Seismic Tomography: Cranfield, MS, *International Journal of Greenhouse Gas Control*, 18, 497-509, <http://dx.doi.org/10.1016/j.ijggc.2012.12.018>
35. Nakagawa, Seiji, Timothy J. Kneafsey, **Thomas M. Daley**, Barry M. Freifeld, and Emily V. Rees, 2013, Laboratory seismic monitoring of supercritical CO<sub>2</sub> flooding in sandstone cores using the Split Hopkinson Resonant Bar technique with concurrent x-ray CT imaging, *Geophysical Prospecting*, 61, 254–269.
36. Dafflon B., Wu Y., Hubbard S.S., Birkholzer J., **Daley T.**, Pugh J., Peterson J.E., and Trautz R. 2012. Monitoring CO<sub>2</sub> intrusion and associated geochemical transformations in a shallow groundwater system using complex electrical method, *Environ. Sci. Techn.*; 47(1), 314-321, 2013.
37. **Daley, Thomas M.**, Jonathan B. Ajo-Franklin, Christine Doughty, 2011, Constraining the reservoir model of an injected CO<sub>2</sub> plume with crosswell CASSM at the Frio-II brine pilot, *International Journal of Greenhouse Gas Control*, 5, pp. 1022-1030, DOI information: 10.1016/j.ijggc.2011.03.002.
38. Myer, L. R., and **Daley, T. M.**, 2011, Elements of a best practices approach to induced seismicity in geologic storage, *Energy Procedia*, V. 4, p 3707-3713.
39. Hovorka, S.D., Timothy A. Meckel, Ramon H. Trevino, Jiemin Lu, Jean-Philippe Nicot, Jong-Won Choi, David Freeman, Paul Cook, **Thomas M. Daley**, Jonathan B. Ajo-Franklin, Barry M. Freifeild, Christine Doughty, Charles R. Carrigan, Doug La Brecque, Yousif K. Kharaka, James J. Thordsen, Tommy J. Phelps, Changbing Yang, Katherine D. Romanak, Tongwei Zhang, Robert M. Holt, Jeffery S. Lindler, Robert J. Butsch, 2011, Monitoring a large volume CO<sub>2</sub> injection: Year two results from SECARB project at Denbury's Cranfield, Mississippi, USA, *Energy Procedia*, Volume 4, 2011, Pages 3478-3485.
40. Zhou, Rongmao, Lianjie Huang, James T. Rutledge, Michael Fehler, **Thomas M. Daley**, Ernest L. Majer, 2010, Coda-wave interferometry analysis of time-lapse VSP data for monitoring geological carbon sequestration, *International Journal of Greenhouse Gas Control*, 4, 679–686, doi:10.1016/j.ijggc.2010.01.010. LBNL-3076E.
41. **Daley, Thomas M.**, Fenglin Niu, Paul G. Silver, Ernest L. Majer, 2010, Acquisition of Crosswell Seismic Monitoring Data. In: Junzo Kasahara, Valeri Korneev and Michael Zhdanov, editors: *Active Geophysical Monitoring*, Vol 40, *Handbook of Geophysical Exploration: Seismic Exploration*, Klaus Helbig and Sven Treitel. The Netherlands, Elsevier, 2010, pp. 165-176.

42. Lumley, D., Sherlock, D., **Daley, T.**, Huang, L., Lawton, D., Masters, R., Verliac, M., and White, D., 2010. Highlights of the 2009 SEG summer research workshop on “CO<sub>2</sub> Sequestration Geophysics,” The Leading Edge, v29, p138-145, LBNL-3074E.
43. Xu, T., Y.K. Kharaka, C. Doughty, B.M. Freifeld, **T.M. Daley**, 2010, Reactive transport modeling to study changes in water chemistry induced by CO<sub>2</sub> injection at the Frio brine pilot, Chemical Geology, v. 271, p. 153-164, 2010. (LBNL-3056E)
44. Dodds, K., **Daley, T.**, Freifeld, B., Urosevic, M., Kepic, A. and Sharma, S., 2009, Developing a monitoring and verification plan with reference to the Australian Otway CO<sub>2</sub> pilot project, The Leading Edge, v28, n7, 812-818, LBNL-2310E.
45. Freifeld, B.M., **Daley, T.M.**, Hovorka, S.D., Hennings, J., Underschultz, J., and Sharma S, 2009, Recent advances in well-based monitoring of CO<sub>2</sub> sequestration, Energy Procedia, Elsevier, Vol. 1, Issue 1, 2277- 2284.
46. Niu, F., Silver, P.G., **Daley, T.M.**, Cheng, X., Majer, E.L., 2008, Preseismic velocity changes observed from active source monitoring at the Parkfield SAFOD drill site, Nature, 454, 204-208, DOI:10.1038/nature07111, LBNL-717E.
47. **Daley, T.M.**, Myer, L.R., Peterson, J.E., Majer, E.L., Hoversten, G.M., 2008, Time-lapse crosswell seismic and VSP monitoring of injected CO<sub>2</sub> in a brine aquifer, Environmental Geology, 54, 1657-1665, DOI:10.1007/s00254-007-0943-z.
48. **Daley, T.M.**, R.D. Solbau, J.B. Ajo-Franklin, S.M. Benson, 2007, Continuous active-source monitoring of CO<sub>2</sub> injection in a brine aquifer, Geophysics, v72, n5, pA57–A61, DOI:10.1190/1.2754716.
49. Silver, P.G., **Daley, T.M.**, Niu, F., Majer, E.L., 2007, Active source monitoring of crosswell seismic travel time for stress induced changes, Bulletin of Seismological Society of America, v97, n1B, p281-293.
50. Ajo-Franklin, J.B., Minsley, B.J., **Daley, T.M.**, 2007, Applying Compactness Constraints to Seismic Traveltime Tomography, Geophysics, v72, n4, pR67-R75, DOI:10.1190/1.2742496.
51. Majer, E. L., **T. M. Daley**, V. Korneev, D. Cox, J. E. Peterson, and J. H. Queen, 2006, Cost-effective imaging of CO<sub>2</sub> injection with borehole seismic methods, The Leading Edge, V25, n10, pp. 1290-1302.
52. Hovorka, S.D., Benson. S.M., Doughty, C., Freifeld, B.M., Sakurai, S., **Daley, T.M.**, Kharaka, Y.K, Holtz, M.H., Tarutz, R.C., Nance, S.H., Myer, L.R. and Knauss K.G., 2006, Measuring permanence of CO<sub>2</sub> storage in saline formations: the Frio experiment, Environmental Geosciences, V. 13, no 2, pp 1-17, DOI:10.1306/eg.11210505011.
53. **Daley, T.M.**, Schoenberg, M.A., Rutqvist, J., Nihei, K.T., 2006, Fractured reservoirs: An analysis of coupled elastodynamic and permeability changes due to pore pressure variation, Geophysics, v71, n5, O33-O41.
54. Nakagawa, S. and **Daley, T.M.**, 2006, Analytical modeling of wave generation by the borehole orbital vibrator source, Geophysics 71, F1-F11.
55. Schoenberg, M.A., and **Daley, T.M.**, 2004, Criteria for quasi-shear wavefront triplication in a transversely isotropic material, Journal of the Acoustical Society of America, 115, p2626.
56. Gritto, R., **T.M. Daley**, and L.R. Myer, 2004, Joint cross well and single well seismic studies of CO<sub>2</sub> injection in an oil reservoir, Geophysical Prospecting, 52, p323-339.
57. Gritto, R., V.A. Korneev, **T.M. Daley**, M.A. Feighner, E.L. Majer, and J.E. Peterson, 2004, Surface-to-tunnel seismic tomography studies at Yucca Mountain, Nevada. Journal of Geophysical Research, v109, nB3, B03310, 10.1029/2002JB002036, LBNL-50470.
58. Korneev, V.A., Goloshubin, G.M., **Daley, T.M.**, and Silin, D.B., 2004, Seismic low-frequency effects in monitoring of fluid saturated reservoirs, Geophysics, 69, 522-532.
59. **Daley, T.M.**, Majer, E.L., Peterson, J.E., 2004, Crosswell seismic imaging in a contaminated basalt aquifer, Geophysics, 69, 16-24.

60. Gritto, R., Romero, A.E., **Daley, T.M.**, 2004, Results of a VSP experiment at the Resurgent Dome, Long Valley Caldera, California, *Geophysical Research Letters*, v31, L06603, doi:10.1029/2004GL019451, LBNL-52488.
61. Hoversten, G.M., Gritto, R., Washbourne, J., **Daley, T.**, 2003, Pressure and fluid saturation prediction in a multicomponent reservoir using combined seismic and electromagnetic imaging, *Geophysics*, 68, 1580-1591.
62. **Daley, T.M.**, Gritto, R., Majer, E.L., West, P., 2003, Tube-wave suppression in single-well acquisition, *Geophysics*, 68, p863-869.
63. Gritto, R.; **Daley, T. M.**; Majer, E. L., 2003: Estimating Subsurface Topography from Surface-to-Borehole Seismic Studies at the Rye Patch Geothermal Reservoir, Nevada, USA, *Geothermics*, Vol. 32, No.3, pp. 275-295, LBNL-50490.
64. **Daley, T.M.** and Cox, D., 2001, Orbital vibrator seismic source for simultaneous P- and S-wave crosswell acquisition, *Geophysics*, 66, 1471-1480.
65. D'Onfro, P.S., Rizer, W.D., Queen, J.H., Majer, E.L., Peterson, J.E., **Daley, T.M.**, Vasco, D.W., Datta-Gupta, A., Long, J.C.S., 1998, An integrated approach for characterizing fractured reservoirs. In: Jones, G., Fisher, Q.J. and Knipe, R.J. (eds) *Faulting, Fault Sealing and Fluid Flow in Hydrocarbon Reservoirs*. Geological Society, London, Special Publications, 147, 193-208. doi:10.1144/GSL.SP.1998.147.01.12
66. Wilt, M., Schenkel, C., **Daley, T.**, Peterson, J., Majer, E., Murer, A.S., Johnston, R.M., Klonsky, L., 1997, Mapping Steam and Water Flow in Petroleum Reservoirs, *SPE Reservoir Engineering* 12 (4), 284-287.
67. Majer, E.L., Peterson, J.E., **Daley, T.M.**, Kaelin, B., Queen, J., D'Onfro, P., and Rizer, W., 1997, Fracture Detection using Crosswell and Single Well Surveys, *Geophysics*, v62, n2.
68. Majer, E.L., Datta-Gupta, A., Peterson, J.E., Vasco, D.W., Meyer, L.R., **Daley, T.M.**, Kaelin, B., Queen, J., D'Onfro, P.S., Rizer, W.D., Cox, D., and Stinton, J., 1996, Utilizing crosswell, single well and pressure transient tests for characterizing fractured gas reservoirs, *The Leading Edge*, v15, n8.
69. **Daley, T.M.**, and T. V. McEvelly, Shear-Wave Anisotropy in the Parkfield Varian Well, 1990, *Bulletin of the Seismological Society of America*, 80, p857, 1990.
70. **Daley, T.M.**, T.V. McEvelly and E.L. Majer, Multiply Polarized Shear-Wave VSP's from the Cajon Pass Drillhole, 1988, *Geophysical Research Letters*, v15, p1001, 1988.
71. **Daley, T.M.**, T. V. McEvelly and E.L. Majer, 1988, Analysis of P and S wave VSP Data from the Salton Sea Scientific Drilling Project, *Journal of Geophysical Research*, v93, p13025.



## **LBL and Project Scientific Reports:**

1. Kuhlman, Kristopher L; Brady, Patrick Vane; MacKinnon, Robert J; Heath, Jason E; Herrick, Courtney G; Jensen, Richard P; Gardner, W Payton U; Sevougian, S David; Bryan, Charles R; Jang, Je-Hun; Emily Stein, Stephen J Bauer, **Tom Daley**, Barry M Freifeld, Jens Birkholzer, Frank Spane, 2016, Deep Borehole Field Test Laboratory and Borehole Testing Strategy 2016, Sandia National Laboratories (SNL-NM), Albuquerque, NM (United States)
2. Oldenburg, CM; Dobson, PF; Wu, Y; Cook, PJ; Kneafsey, TJ; Nakagawa, S; Ulrich, C; Siler, DL; Guglielmi, Y; Ajo-Franklin, JB; J Rutqvist, **TM Daley**, JT Birkholzer, HF Wang, NE Lord, BC Haimson, H Sone, P Vigilante, WM Roggenthen, TW Doe, MY Lee, M Ingraham, H Huang, ED Mattson, J Zhou, TJ Johnson, JP Morris, JA White, PA Johnson, DD Coblenz, J Heise, MD Zoback, Intermediate-Scale Hydraulic Fracturing in a Deep Mine-kISMET Project Summary 2016, 2016, Lawrence Berkeley National Laboratory (LBL), Berkeley, CA (United States).
3. **Daley, Thomas M**; Vasco, Don; Ajo-Franklin, Jonathan; Dobeck, Laura; Spangler, Lee; Leonti, Michelle; Final Scientific/Technical Report for project “Geomechanical Monitoring for CO<sub>2</sub> Hub Storage: Production and Injection at Kevin Dome, 2017, Montana State University, Energy Research Institute.
4. LaBrecque, Douglas; Brigham, Russell D; Schmidt-Hattenburger, Conny; Um, Evan; Petrov, Peter; **Daley, Thomas**; Deep Controlled Source Electro-Magnetic Sensing: A Cost Effective, Long-Term Tool for Sequestration Monitoring, 2017, Multi-Phase Technologies, LLC, Sparks, NV (United States)
5. Nazari, S.; **Daley, T. M.** Assessing Uncertainty and Repeatability in Time-lapse Vertical Seismic Profile (VSP) Monitoring of CO<sub>2</sub> Injection in a Brine Aquifer, Frio Formation, Texas—A Case Study; NRAP-TRS- III-023-2017; NRAP Technical Report Series; U.S. Department of Energy, National Energy Technology Laboratory: Morgantown, WV, 2017, p 48.
6. **Daley, T. M.**; Sullivan, E. C.; Tan, S.; Huang, L.; Harbert, W. *Analysis of Field Vertical Seismic Profiling (VSP) Data: Cranfield 3D-VSP Project*; NRAP-TRS-III-011-2017; NRAP Technical Report Series; U.S. Department of Energy, National Energy Technology Laboratory: Morgantown, WV, 2017; p 52.
7. Foxall, William, Christine Doughty, Kyung Jae Lee, Seiji Nakagawa, **Thomas Daley**, Elizabeth Burton, Corinne Layland-Bachmann, Sharon Borglin, Katie Freeman, Jonathan Ajo-Franklin, Preston Jordan, Timothy Kneafsey, Curtis Oldenburg, Craig Ulrich, 2017. *Investigation Of Potential Induced Seismicity Related To Geologic Carbon Dioxide Sequestration In California*. California Energy Commission. Publication Number: CEC-XXX-201X-XXX.
8. Kuhlman, Kristopher L, Patrick Vane. Brady, Robert J. MacKinnon, William Payton Gardner, Jason E. Heath, Courtney G Herrick, Richard P. Jensen, Hadgu, T., Sevougian, S. David; Birkholzer, Jens, Freifeld, Barry M.; **Daley, T.**, 2015. “Deep Borehole Field Test: Characterization Borehole Science Objectives, Sandia National Laboratory Report: SAND2015-4424R, United States. doi:10.2172/1184360. <http://www.osti.gov/scitech/servlets/purl/1184360>.
9. Newman, G. Um, E., **Daley, T.M.**, 2014, EM Modeling at Aquistore: Final Report to the Carbon Capture Project, Lawrence Berkeley National Laboratory.
10. **Daley, T.M.**, 2014, Letter Report on Monitoring Planning for Kimberlina Synthetic Site, National Risk Assessment Partnership.
11. **Daley, T.M.**; Harbert W.; Bromhal G.; Sullivan, E.C.; *Monitoring Strategies for Risk Reduction in Carbon Storage*, NRAP-TRS-III-00X-2013, Level III Technical Report Series, March 2014.
12. **Daley, T. M.**; Sullivan, E. C.; Tan, S.; Huang, L.; Harbert, W. *Analysis of Field VSP Data: Cranfield 3D-VSP Project*; NRAP-TRS-III-XXX-2013; NRAP Technical Report Series; U.S. Department of Energy, National Energy Technology Laboratory: Morgantown, WV, 2013; p X.
13. White, Joshua A., William Foxall, Corinne Bachmann, Thomas M. Daley, and Laura Chiamonte, Induced Seismicity and Carbon Storage: Risk Assessment and Mitigation Strategies, National Risk Assessment Partnership, Technical Report Series, 2014.

14. Quanlin Zhou; Yoojin Jung; Fei Chen; Xiaoyi Liu; Jens T. Birkholzer; Michael B. Kowalsky; **Tom Daley**. *Early Detection of Brine and CO<sub>2</sub> Leakage Using Pressure and Surface-Deformation Monitoring Data: Methodology Development, Demonstration, and Application*; NRAP-TRS-III-XXX-2013; NRAP Technical Report Series; U.S. Department of Energy, National Energy Technology Laboratory: Morgantown, WV, 2013; p XX.
15. Freifeld, B.M., **Thomas M. Daley** and Paul Cook, 2013, Modular Borehole Monitoring An Integrated Deployment Package, Final Report to CO<sub>2</sub> Capture Project. LBNL ????
16. **Daley, T.M.**, Beyer, J, Smith, T. and La Brecque, D, 2013, Borehole EM Monitoring at Aquistore: Final Report to the Carbon Capture Project (CCP), Report Number: LBNL-6238E, Lawrence Berkeley National Laboratory.
17. Kowalsky, Michael B., Joseph Doetsch, Michael Commer, Stefan Finsterle, Christine Doughty, Quanlin Zhou, Jonathan Ajo-Franklin, Jens Birkholzer, **Thomas Daley**, 2013, Coupled Inversion of Hydrological and Geophysical Data for Improved Prediction of Subsurface CO<sub>2</sub> Migration, Lawrence Berkeley National Laboratory Report, NRAP-TRS-III-00X-2013, Level III Technical Report Series, September 2013.
18. Daley, **T.M.**, J.E. Peterson, V.A. Korneev, GEO-SEQ Subtask 2.3: In Salah Microseismic Monitoring and Analysis, Milestone Report Q3 FY2012, LBNL Report, June 2012.
19. Nazari, Siamak and **Daley, Thomas M.** *Assessing Uncertainty and Repeatability in Time-lapse VSP Monitoring of CO<sub>2</sub> Injection in a Brine Aquifer, Frio Formation, Texas (A case study)*; Report LBNL-6482E, Lawrence Berkeley National Laboratory, Berkeley, CA; 2013.
20. **Daley, T.M.**, J.E. Peterson, V.A. Korneev, GEO-SEQ Subtask 2.3.4: Microseismic Monitoring and Analysis, LBNL-4597E, May 2011
21. **Daley, T.M.**, R. Haught, J.E. Peterson, K. Boyle, J.H. Beyer and L.R. Hutchings, 2010, Seismicity Characterization and Monitoring at WESTCARB's Proposed Montezuma Hills Geologic Sequestration Site, Lawrence Berkeley National Laboratory Report LBNL-4006E, October 2010.
22. **Daley, T.M.**, Sandeep Sharma, Aleksander Dzunic, Milovan Urosevic, Anton Kepic, Don Sherlock, 2009, Borehole Seismic Monitoring at Otway Using the Naylor-1 Instrument String, LBNL-2337E.
23. **Daley, T.M.**, Freifeld, B.M., Ajo-Franklin, J.B., Doughty, C., Benson, S.M., Frio-II Brine Pilot: Report on GEOSEQ Activities, 2007, Lawrence Berkeley National Laboratory Report, LBNL-63613.
24. **Daley, T.M.** and Majer E.L., 2007, Borehole seismic monitoring of seismic stimulation at Occidental Permian Ltd's South Wason Clear Fork Unit, LBNL-62613.
25. **Daley, T.M.**, Niu, F., Silver, P.G., and Majer, E.L., Acquisition of crosswell seismic monitoring data, Special Issue on Active Source Monitoring, LBNL-62400.
26. Benson, Sally M., Myer, Larry R., Oldenburg, Curtis M., Doughty, Christine A., Pruess, Karsten, Lewicki, Jennifer, Hoversten, Mike, Gasperikova, Erika; **Daley, Thomas**; Majer, Ernie; Lippmann, Marcelo Tsang, Chin-Fu; Knauss, Kevin; Johnson, James; Foxall, William Ramirez, Abe; Newmark, Robin; Cole, Dave; Phelps, Tommy J.; Parker, J. Palumbo, A.; Horita, J.; Fisher, S.; Moline, Gerry; Orr, Lynn Kovscek, Tony; Jessen, K.; Wang, Y.; Zhu, J.; Cakici, M.; Hovorka, Susan; Holtz, Mark; Sakurai, Shinichi; Gunter, Bill; Law, David van der Meer, Bert., GEO-SEQ Best Practices Manual. Geologic Carbon Dioxide Sequestration: Site Evaluation to Implementation, 2004, LBNL-56623.
27. Majer, Ernest; Queen, John; **Daley, Tom**; Fortuna, Mark; Cox, Dale; D'Onfro, Peter; Goetz, Rusty; Coates, Richard; Nihei, Kurt; Nakagawa, Seiji; Myer, Larry; Murphy, Jim; Emmons, Charles; Lynn, Heloise; Lorenz, John; LaClair, David; Imhoff, Mathias; Harris, Jerry; Wu, Chunling; Urban, Jame; Maultzsch, Sonja; Liu, Enru; Chapman, Mark; Li, Xiang-Yang; A Handbook for the Application of Seismic Methods for Quantifying Naturally Fractured Gas Reservoirs in the San Juan Basin, New Mexico, 2004, LBNL-56409.

28. Benson, S.M., L.R. Myer, J.G. Blencoe, M.D. Cakici, D. Cole, W. Daily, **T. Daley**, C.A. Doughty, S. Fisher, W. Foxall, W. Gunter, M. Holtz, J. Horita, G.M. Hoversten, S. Hovorka, K. Jessen, J.W. Johnson, B.M. Kennedy, K.G. Knauss, A. Kovscek, D. Law, M.J. Lippmann, E.L. Majer, B. van der Meer, G. Moline, R.L. Newmark, C.M. Oldenburg, J. Orr, Franklin M, A.V. Palumbo, J.C. Parker, T.J. Phelps, K. Pruess, A. Ramirez, S. Sakurai, C.-F. Tsang, Y. Wang, and J. Zhu, The GEO-SEQ Project Results. LBNL Report, Berkeley, CA, 2004. LBNL/PUB-901. 2004.
29. **Daley, T.M.**, R. Gritto, and E.L. Majer, Single-well seismic imaging of a gas-filled hydrofracture, Berkeley, California, 2003. Berkeley Lab Report LBNL-53601.
30. Gritto, R., A.E. Romero, and **T.M. Daley**, VSP analysis at Long Valley Caldera, California. Geophysical Research Letters (submitted), 2003; Berkeley Lab Report LBNL-52488, 2003.
31. **Daley, T.M.**, Leonard, M., Majer, E.L., Queen, J.H., Cox, V.D., 2003 Measurement of fracture induced anisotropy in shear-wave attenuation with VSP data, LBNL-39464, Berkeley, CA.
32. Gritto, R., **Daley, T. M.**, Myer, L. R., Joint Cross Well and Single Well Studies at Lost Hills, California, Lawrence Berkeley National Laboratory Report, LBNL-50651, Berkeley, CA, 2002.
33. **Daley, T.M.** and Gritto, R., 2001, Field test of INEEL tube-wave suppressor and LBNL borehole seismic system at Richmond Field Station, February 2001, LBNL-49015, Berkeley, CA.
34. Gritto, R, **Daley, T.M.**, and Majer, E.L., Seismic mapping of the subsurface structure at the Ryepatch geothermal reservoir, Lawrence Berkeley National Laboratory Report, LBNL-47032, Berkeley CA, October, 2000.
35. **Daley, T.M.**, Majer, E.L., Peterson, J.E., Crosswell seismic imaging in a contaminated basalt aquifer, Lawrence Berkeley National Laboratory Report LBNL-45533, Berkeley CA, April, 2000.
36. **Daley, T.M.**, Majer, E.L., Peterson, J.E., Crosswell seismic imaging in a contaminated basalt aquifer, Lawrence Berkeley National Laboratory Report LBNL-45533, Berkeley CA, April, 2000.
37. **Daley, T.M.**, Feighner, M.A., Majer, E.L., Monitoring underground gas storage in a fractured reservoir using time lapse VSP, Lawrence Berkeley National Laboratory Report LBNL-44876, Berkeley, CA, March 2000.
38. **Daley, T.M.** Calibration test of DAS-2 Borehole ADC, Lawrence Berkeley National Laboratory Report LBNL-45268, Berkeley, CA, March 2000.
39. **Daley, T.M.**, Majer, E.L, Gritto, R., Single well seismic imaging – Status Report, Lawrence Berkeley National Laboratory Report LBNL-45342, Berkeley, Ca, March 2000.
40. Feighner, M.A., Gritto, R., **Daley, T.M.**, Keers, H., Majer, E.L., Three-dimensional seismic imaging of the Ryepatch geothermal Reservoir, Lawrence Berkeley National Laboratory Report, LBNL-44119, Berkeley CA, November, 1999.
41. **Daley, T.M.**, Majer, E.L., Peterson, J.E. and Roberts, P., Field Monitoring of Seismic Stimulation Sites, Lawrence Berkeley National Laboratory Report LBNL-44536, Berkeley CA, Nov. 1, 1999.
42. **Daley, T.M.**, Gritto, Korneev, V.A., Feighner, M.A., Majer, E.L., Peterson, J.E., Surface-to-tunnel seismic tomography on kilometer scale at Yucca Mountain, Lawrence Berkeley National Laboratory Report LBNL-44537, Berkeley CA, November 1999.
43. **Daley, T.M.**, and Cox, D., Orbital vibrator seismic source for simultaneous P- and S-wave crosswell acquisition, Lawrence Berkeley National Laboratory Report LBNL-43070, Berkeley, CA, March 31, 1999.
44. Gritto, R., A. E. Romero, and **T. M. Daley**, VSP analysis at Long Valley Caldera, Eastern California, LBNL-39108, Lawrence Berkeley National Laboratory, Berkeley, Calif., 1999.
45. **Daley, T.M.**, Single Well Seismic Imaging Tests: Nov 1997 at Bayou Choctaw Site, LBNL Report #42672, Lawrence Berkeley National Laboratory, February 1998.

46. **Daley, T.M.**, Single Well Seismic Imaging in a Deep Borehole using a piezoelectric Orbital Vibrator, LBNL Report #42673, Lawrence Berkeley National Laboratory, June 1997.
47. Feighner, M., **Daley, T.M.**, Majer, E.L. Results of Vertical Seismic Profiling at Well 46-28, Rye Patch Geothermal Field, Pershing County, Nevada, LBNL Report #41800, Lawrence Berkeley National Laboratory, February 25, 1998.
48. **Daley, T.M.**, Peterson, J.E., and Majer, E.L., Crosswell Seismic Tomography in Basalt Flows at the INEEL TAN Site, in Earth Science Division Annual Report 1997, Lawrence Berkeley National Laboratory LBNL-42452.
49. Feighner, M.A., **Daley, T.M.**, Gritto, R., and Majer, E.L., Report on CDP Reflection Image and Subsurface Structure Along Lines B and C: UZ-16 VSP, Lawrence Berkeley National Laboratory, YMP Milestone report SP3B2BM4, September 30, 1997.
50. Majer, E.L, Feighner, M.A., and **Daley, T.M.**, Completion of Regional Seismic Reflection Profile Reprocessing Part 2: Modeling of Seismic Reflection Profiles from Yucca Mountain, Lawrence Berkeley National Laboratory, LBNL-40174, April 1997.
51. Majer, E.L., Feighner, M.A., Johnson, L., **Daley, T.**, Karageorgi, E., Lee, K.H., Williams, K., McEvelly, T., Synthesis of Borehole and Surface Geophysical Studies at Yucca Mountain, Nevada and Vicinity, Volume 1: Surface Geophysics, Yucca Mountain Project Milestone Report OB05M, Lawrence Berkeley National Laboratory, August 30, 1996.
52. Majer, E.L., Feighner, M., Johnson, L., **Daley, T.M.**, Williams, K., Karageorgi, E., McEvelly, T.V., Letter Report on Surface Geophysics Synthesis: Data Interpretation, Lawrence Berkeley National Laboratory, Yucca Mountain Project Milestone Report, OB05H, June 1996.
53. Majer, E.L., Peterson, J.E., **Daley, T.M.**, Kaelin, B., Queen, J., P.D'Onfro, and Rizer. W., Fracture Detection using Crosswell and Single Well Surveys, Lawrence Berkeley National Laboratory report LBL-38259, 1996.
54. **Daley, T.M.**, Karageorgi, E., McEvelly, T.V., LBNL High Resolution Reflection Profiles: Site Characterization Program, Yucca Mountain Project Status Report, Lawrence Berkeley National Laboratory, Jan 1996.
55. Majer, E.L., Feighner, M., Johnson, L., **Daley, T.M.**, Williams, K., Karageorgi, E., McEvelly, T.V., Letter Report on Surface Geophysics Synthesis: Data Processing, Lawrence Berkeley National Laboratory, Yucca Mountain Project Milestone Report, OBO5F, OBO5G, February 1996.
56. Feighner, M., L. Johnson, K. Lee, **T.M. Daley**, E. Karageorgi, P. Parker, T. Smith, K. Williams, A. Romero, and T.V. McEvelly, Results and Interpretation of Multiple Geophysical Surveys at Yucca Mountain, Nevada, January 1996, Lawrence Berkeley National Laboratory, LBL-38200.
57. Majer, E.L., Feighner, M. Johnson, L., Lee, K., **Daley, T.**, Karageorgi, E., Parker, P. Smith, T., Williams, K., Romero, A., McEvelly, T.V., Results of Geophysical Surveys along the North-South and South ESF Alignment, Summary Report: Interpretation of Multiple Geophysical Surveys, Lawrence Berkeley National Laboratory, Yucca Mountain Project Milestone Reports OBB02 and OBB03, Sep 1995.
58. **Daley, T.M.**, LBL High Frequency Borehole Seismic System: Training Manual, Lawrence Berkeley National Laboratory, May 1995.
59. **Daley, T.M.**, McEvelly, T.V., Karageorgi, E., Haught, R., High Resolution Seismic Profiling at LBNL: Status Report, Lawrence Berkeley National Lab, Nov 1995.
60. Majer, E., Peterson, J., Hubbard, S., **Daley, T.**, Vasco, D., Final Report: Evaluation of the Applicability of High Resolution Crosshole Seismic Imaging Beneath the H-Tank Area for Geomechanical Properties, Lawrence Berkeley National Lab., Aug 1995.
61. **Daley, T.M.** and Haught, R., System Response Tests of LBL's High Frequency Piezoelectric Cross-Well Seismic Equipment in San Francisco Bay, Lawrence Berkeley National Lab., June 1994.

62. **Daley, T.M.**, Majer, E.L., Karageorgi, E., Analysis Paper: Combined Analysis of Surface Reflection Imaging and Vertical Seismic Profiling, Interim Report for Yucca Mountain Project, Lawrence Berkeley National Lab., Milestone 3GGF241M, 1994.
63. **Daley, T.M.**, High Resolution VSP Surveys in Shallow Ground Water Monitoring Wells at Lawrence Berkeley Laboratory, Lawrence Berkeley Laboratory, May 1994.
64. **Daley, T.M.**, E.L. Majer, and J.H. Queen, Application of 4-component shear-wave VSP rotation for determination of fracture-induced anisotropy, Earth Science Division 1992 Annual Report, Lawrence Berkeley Lab., Sep 1993.
65. **Daley, T.M.**, Majer E.L., Analysis Paper: Data Reduction NRG-6/WT-2 VSP, Interim Report for Yucca Mountain Project, Lawrence Berkeley Laboratory, 1993.
66. **Daley, T.M.**, J.E. Peterson Jr, and T.V. McEvelly, A Search for Evidence of Nonlinear Elasticity in the Earth, Lawrence Berkeley Laboratory, Berkeley CA, December 1992, LBL-33313.
67. Leonard, M.A., **T.M. Daley**, and L.R. Johnson, VSP site characterization at NTS: OSSY '91, Summary Report, 1992, Lawrence Berkeley Laboratory, #LBL-32521.
68. **Daley, T.M.**, Majer, E.L., Seismic Imaging of the SWCC, Lawrence Berkeley Laboratory, January 1992, LBL-31982.
69. Okaya, D., Karageorgi, E., **Daley, T.M.**, IRIS-SEIS Users Manual and Installation Guide, Version 1.3.0, Lawrence Berkeley Lab., Jan 1991, LBL-29817.
70. **Daley, T.M.**, T.V. McEvelly, and A. Michelini, VSP Site Characterization at Nevada Test Site - Summary Report, 1990, Lawrence Berkeley Laboratory, Berkeley CA, October 1990, LBL-29778.

## Conference Presentations with Papers or Abstracts:

1. A Gordon, D Lawton, K Hall, B Freifeld, **T Daley**, P Cook, 2018, Depth registration of VSP DAS fiber, SEG Technical Program Expanded Abstracts 2018, 5427-543.
2. KW Hall, DC Lawton, **TM Daley**, BM Freifeld, P Cook, 2018, Effect of source effort and source distance on optical-fibre data at CaMI. FRS, Newell County, Alberta, SEG Technical Program Expanded Abstracts 2018, 206-210.
3. **T.M. Daley**, P. Marchesini, M. Wilt, P. Cook, B.M. Freifeld and D. Lawton, 2017, Containment and Monitoring Institute - Baseline Geophysics for CO<sub>2</sub> Monitoring with Crosswell Seismic and Electromagnetics EAGE/SEG Research Workshop 2017, DOI: 10.3997/2214-4609.201701934
4. Julia Correa, Barry Freifeld, Michelle Robertson, Roman Pevzner, Andrej Bona, Dmitry Popik, Konstantin Tertyshnikov, Thomas Daley, 2018, [3D Vertical Seismic Profiling Acquired Using Fibre-Optic Sensing Das—Results From The CO2CRC Otway Project](#), ASEG Extended Abstracts 2018 (1), 1-5.
5. R. Pevzner, M. Urosevic, K. Tertyshnikov, B. Gurevich, V. Shulakova, S. Glubokovskikh, D. Popik, J. Correa, A. Kepic, B. Freifeld, M. Robertson, T. Wood, **T. Daley** and R. Singh, 2017, Seismic Monitoring of a Small-scale Supercritical CO<sub>2</sub>/CH<sub>4</sub> Injection - CO2CRC Otway Stage 2C Case Study, EAGE/SEG Research Workshop 2017 DOI: 10.3997/2214-4609.201701938
6. **Daley, Tom**; Ringrose, Philip. (2017) EAGE, SEG to host CO<sub>2</sub> storage research workshop in Trondheim, Norway. *The Leading Edge*. vol. 36 (1).
7. Dou, Shan; Wood, Todd; Ajo-Franklin, Jonathan; Robertson, Michelle; **Daley, Thomas**; Freifeld, Barry; Pevzner, Roman; Gurevich, Boris; 2017, Surface orbital vibrator for permanent seismic monitoring: A signal contents and repeatability appraisal, SEG Technical Program Expanded Abstracts 2017, 5906-5910, 2017, Society of Exploration Geophysicists
8. Ajo-Franklin, Jonathan; Dou, Shan; **Daley, Thomas**; Freifeld, Barry; Robertson, Michelle; Ulrich, Craig; Wood, Todd; Eckblaw, Ian; Lindsey, Nathan; Martin, Eileen; 2017, Time-lapse surface wave monitoring of permafrost thaw using distributed acoustic sensing and a permanent automated seismic source, SEG Technical Program Expanded Abstracts 2017, 5223-5227, Society of Exploration Geophysicists.
9. Marchesini, Pierpaolo; **Daley, Thomas**; Ajo-Franklin, Jonathan; 2017, Measuring the effects of pore-pressure changes on seismic amplitude using crosswell continuous active-source seismic monitoring (CASSM), SEG Technical Program Expanded Abstracts 2017, 5917-5922, Society of Exploration Geophysicists
10. Oldenburg, CM; Dobson, PF; Wu, Y; Cook, PJ; Kneafsey, TJ; Nakagawa, S; Ulrich, C; Siler, DL; Guglielmi, Y; Ajo-Franklin, J; **TM Daley**, JT Birkholzer, HF Wang, NE Lord, BC Haimson, H Sone, P Vigilante, WM Roggenthen, TW Doe, MY Lee, M Ingraham, H Huang, ED Mattson, J Zhou, TJ Johnson, MD Zoback, JP Morris, JA White, PA Johnson, DD Coblenz, J Heise, 2017, Overview of the kISMET Project on Intermediate-Scale Hydraulic Fracturing in a Deep Mine, 51st US Rock Mechanics/Geomechanics Symposium, 2017, American Rock Mechanics Association.
11. Correa, JC; Freifeld, BM; Robertson, M; Pevzner, R; Bona, A; Popik, D; Yavuz, S; Tertyshnikov, KV; Ziramov, S; Shulakova, V; **T.M. Daley**, 2017, Distributed Acoustic Sensing Applied to 4D Seismic-Preliminary Results from the CO2CRC Otway Site Field Trials 79th EAGE Conference and Exhibition 2017.
12. Borgia, Andrea; Oldenburg, Curtis M; Zhang, Rui; Pan, Lehua; Daley, Thomas M; Finsterle, Stefan; Ramakrishnan, TS; 2017, Simulations of CO<sub>2</sub> injection into fractures and faults for improving their geophysical characterization at EGS sites, Geothermics.
13. Ajo-Franklin, J.B., Wagner, A.M., Lindsey, N.J., Dou, S., Bjella, K.L., **Daley, T.M.**, Freifeld, B.M., Ulrich, C., Gelvin, A., Morales, A., James, S., Saari, S., Ekblaw, I., Wood, T., Robertson, M., and E. Martin, 2017, “Applying distributed fiber optic sensing to permafrost evolution: A controlled thaw experiment”, SAGEEP 2017, Cryosphere.

14. Ajo-Franklin, J.B., Lindsey, N., Wagner, A.M., Dou, S., Martin, E.R., Ekblaw, I., Ulrich, C., James, S.R., Freifeld, B.M., and **T.M. Daley**, 2016, “Ambient vehicular noise recorded on a 2D distributed fiber optic sensing array: Applications to permafrost thaw detection and imaging”, American Geophysical Union Fall Meeting.
15. Marchesini, P., **Daley, T.M.**, Hovorka, S.D., and J.B. Ajo-Franklin, 2016, “In-situ measurements of velocity-stress sensitivity with cross-well CASSM”, American Geophysical Union Fall Meeting.
16. Freifeld, B.M., Pevzner, R., Dou, S., Correa, J., **Daley, T.M.**, Robertson, M., Tertyshnikov, K., Wood, T., Ajo-Franklin, J., Urosevic, M., Gurevich, B., 2016, “CO2CRC Otway Project deployment of a Distributed Acoustic Sensing Network Coupled with Permanent Rotary Sources”, 78th EAGE Conference and Exhibition, 2016/5/31.
17. Eileen Martin, Nathaniel Lindsey, Shan Dou, Jonathan Ajo-Franklin, **Thomas Daley**, Barry Freifeld, Michelle Robertson, Craig Ulrich, Anna Wagner, and Kevin Bjella (2016) Interferometry of a roadside DAS array in Fairbanks, AK. SEG Technical Program Expanded Abstracts 2016: pp. 2725-2729. doi: 10.1190/segam2016-13963708.1
18. Shan Dou, Jonathan Ajo-Franklin, **Thomas Daley**, Michelle Robertson, Todd Wood, Barry Freifeld, Roman Pevzner, Julia Correa, Konstantin Tertyshnikov, Milovan Urosevic, and Boris Gurevich (2016) Surface orbital vibrator (SOV) and fiber-optic DAS: Field demonstration of economical, continuous-land seismic time-lapse monitoring from the Australian CO2CRC Otway site. SEG Technical Program Expanded Abstracts 2016: pp. 5552-5556. doi: 10.1190/segam2016-13974161.1
19. B.M. Freifeld R. Pevzner, S. Dou, J. Correa, **T.M. Daley**, M. Robertson, K. Tertyshnikov, T. Wood J. Ajo-Franklin, Milovan Urosevic and B. Gurevich, 2016, A New Paradigm in Permanent Reservoir Surveillance – The CO2CRC Otway Project deployment of an Areal Distributed Acoustic Sensing Network Coupled with Permanent Rotary Surface Sources, 78<sup>th</sup> EAGE Conference & Exhibition 2016, Vienna, Austria, 30 May – 2 June 2016
20. John H. Queen, **Thomas M. Daley**, Ernest L. Majer, Kurt T. Nihei, Drew L. Siler and James E. Faulds, 2016, Surface Reflection Seismic and Vertical Seismic Profile at Brady's Hot Springs, NV, USA, 41st Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, February 22-24, 2016, Proceedings SGP-TR-209.
21. Ajo-Franklin, Jonathan Blair; Lindsey, Nate; Martin, Eileen Rose; Wagner, Anna M; Robertson, Michelle; Bjella, Kevin; Gelvin, Arthur; Ulrich, Craig; Wu, Yuxin; Freifeld, Barry M; **Daley, Thomas M**, 2015, Ambient Noise Surface Wave Tomography for Geotechnical Monitoring Using Large N Distributed Acoustic Sensing, American Geophysical Union Annual Meeting, Paper S41A-2707.
22. Huang, L, T Chen, Y Lin, W Foxall, LJ Hutchings, CE Bachmann, **TM Daley**, 2015, Design of an Optimal Microseismic Monitoring Network: Synthetic Study for the Kimberlina CO<sub>2</sub> Storage Demonstration Site, AGU Fall Meeting Abstracts 1, 4372.
23. Hubbard, Susan S.; Walck, Marianne C; Blankenship, Doug; Bonneville, Alain; Bromhal, Grant S; **Daley, Thomas M**; Pawar, Rajesh; Polsky, Yarom; Mattson, Earl; Mellors, Robert, 2015, The DOE Subsurface (SubTER) Initiative: Revolutionizing Responsible use of the Subsurface for Energy Production and Storage, American Geophysical Union Annual Meeting, Paper H51M-1561
24. Zhu, Tieyuan; Franklin, Jonathan Blair Ajo; **Daley, Thomas M**, 2015, The movement of sequestered CO<sub>2</sub> revealed by seismic attenuation spatial and temporal changes in Frio-II site, USA, American Geophysical Union Annual Meeting, paper S21A-2675.
25. Al-Hosni, M., Vialle, S., Gurevich, B., **Daley, T.**, 2015, Effect of CO<sub>2</sub> on Rock Properties: Frio Crosswell Case Study, Third EAGE Workshop on Rock Physics, European Association of Geoscientists and Engineers, Nov. 15-18, 2015, Istanbul, Turkey.
26. Zhang, R., D. Vasco, **T.M. Daley** and W. Harbert, 2015, Characterization of a fracture zone using seismic attributes at the In Salah CO<sub>2</sub> storage project, Society of Exploration Geophysicists Annual Meeting, New Orleans, October 18-23, 2015, DOI: <http://dx.doi.org/10.1190/segam2015-5737359.1>



27. Martin, E.R., Ajo-Franklin, J., Dou, S., Nindsey, N., **Daley, T.M.**, Freifeld, B., Robertson, M., Wagner, A., Ulrich, C., 2015, Interferometry of ambient noise from a trenched distributed acoustic sensing array, Society of Exploration Geophysicists Annual Meeting, New Orleans, October 18-23, 2015, DOI <http://dx.doi.org/10.1190/segam2015-5902207.1>
28. Ajo-Franklin, J., N. Lindsey, S. Dou, **T.M. Daley**, B. Freifeld, E.R. Martin, M. Robertson, C. Ulrich and A. Wagner, 2015, A field test of distributed acoustic sensing for ambient noise recording, Society of Exploration Geophysicists Annual Meeting, New Orleans, October 18-23, 2015, DOI <http://dx.doi.org/10.1190/segam2015-5926936.1>
29. Longton, M., A. Strudley, D. White, **T.M. Daley**, D.E. Miller, 2015, Simultaneous Acquisition of Distributed Acoustic Seismic Surveys with Single-mode and Multi-mode Fiber Optic Cables at Aquistore CO<sub>2</sub> Storage Site and a Comparison with 3C Geophones, Third EAGE Workshop on Permanent Reservoir Monitoring, 16-19 march 2015, Oslo Norway.
30. Ajo-Franklin, J., **Thomas Daley**, Barry Freifeld, David Tang, Ruxun Zhang, Anna Wagner, Shan Dou, Nate Lindsey, Kevin Bjella, Roman Pevzner, 2014, Development of a surface-wave imaging system for geotechnical applications based on distributed acoustic sensing (DAS) and ambient noise interferometry, American Geophysical Union Fall Meeting, San Francisco, December 2014, NS41C-08.
31. Huang, Lianjie, Ting Chen, Youzuo Lin, William Foxall, Lawrence Hutchings, Corinne Bachmann, and **Thomas Daley**, 2014, Design of an Optimal Seismic Monitoring Network: Synthetic Study for the Kimberlina CO<sub>2</sub> Storage Demonstration Site, American Geophysical Union Fall Meeting, December 2014, San Francisco, S31A-4372.
32. **Daley, T.M.**, D. White, D. E. Miller, M. Robertson, B. M. Freifeld, F. Herkenhoff, J. Cocker, 2014, Simultaneous Acquisition of Distributed Acoustic Sensing VSP with Multi-mode and Single-mode Fiber Optic Cables and 3-Component Geophones at the Aquistore CO<sub>2</sub> Storage Site, Society of Exploration Geophysicists 84th Annual Meeting, Denver CO, October 26-31, 2014, Technical Program Expanded Abstracts 2014: 5014-5018.
33. **Daley, T.M.**, Hendrickson, J., Queen, J.H., 2014, Monitoring CO<sub>2</sub> Storage at Cranfield, Mississippi with Time-Lapse Offset VSP – Using Integration and Modeling to Reduce Uncertainty, 12<sup>th</sup> International Conference on Greenhouse Gas Control Technologies, Austin, Tx., October 5-9.
34. **Daley, T. M.**, 2014, Pathways to integrate monitoring in risk assessment based modeling, IEAGHG Monitoring Network and Modeling Network – Combined Meeting, Morgantown WV, 4-8 August, 2014, Invited.
35. **Daley, T.M.**, Miller, D., Freifeld, B.M., Dodds, K., 2014, Results of field testing of simultaneous DAS and Geophone VSP, Workshop: Fibre Optics Sensing for Vertical Seismic Profile (VSP) Surveys: Challenges Faced & The Way Forward for Fiber Optics Sensing Use in VSP Surveys, 76th EAGE Conference & Exhibition 2014, Amsterdam, Netherlands. Invited
36. Cocker, J., Craven, M., Herkengoff, F., Strudley, A, White, D., **Daley, T.**, Miller, D., 2014, A direct comparison of Fibre-Optic distributed acoustic sensing (DAS) and conventional 3C clamped geophones in a 3D VSP, Workshop: Fibre Optics Sensing for Vertical Seismic Profile (VSP) Surveys: Challenges Faced & The Way Forward for Fiber Optics Sensing Use in VSP Surveys, 76th EAGE Conference & Exhibition 2014, Amsterdam, Netherlands. Invited
37. Bachmann, C., W. Foxall, and **T. Daley**, 2014. Comparing induced seismicity on different scales, Proc. 39th Workshop on Geothermal Reservoir Eng., Stanford University, CA, Feb 24-26, 7p.
38. Bachmann, C.E., William Foxall; **Thomas M. Daley**, 2013, Induced Seismicity of the Paradox Valley Brine Injection, American Geophysical Union Fall Meeting, Paper S33D-2481, San Francisco, December 9-13.
39. **Daley, T.M.**, Joel Hendrickson, John H. Queen, 2013, Analysis of Time-Lapse Offset VSP For Monitoring of CO<sub>2</sub> Storage at Cranfield, Mississippi, American Geophysical Union Fall Meeting, Paper S33C-2439, San Francisco, December 9-13.
40. Zhang, R., and **Daley, T.M.**, 2013, Modeling scattering from fracture zones in surface seismic: monitoring CO<sub>2</sub> at InSalah, American Geophysical Union Fall Meeting, Paper S23-E06, San Francisco, December 9-13.



41. Trautz, R., **Thomas M. Daley**, Barry Freifeld, Paul Cook, Kevin Dodds, George Koperna, Jr., Yousif Kharaka, Christopher Conaway, Jim Thordsen, Burt Thomas, 2013, Advanced Monitoring Technologies and their Application at the SECARB Phase III CO<sub>2</sub> Storage Site near Citronelle Alabama, Carbon Management Technology Conference, Alexandria, VA USA, October 21-23, 2013.
42. **Daley, T.M.**, Barry M. Freifeld, Paul Cook, Robert Trautz, Kevin Dodds, 2013, Design and Deployment of a Modular Borehole Monitoring System at SECARB's Citronelle Sequestration Site, Twelfth Annual Conference on Carbon Capture, Utilization & Sequestration May 13 – 16, Pittsburgh, Pennsylvania.
43. **Daley, Thomas M.**, Subsurface Monitoring of CO<sub>2</sub> Sequestration – A Review and Look Forward (Invited), 2012, Fall Meeting, American Geophysical Union, Dec. 2012, GC53D-07.
44. Wang, J.; Christina Morency; **Thomas M. Daley**; Phil R. Cummins, 2012, Crosswell seismic imaging of CO<sub>2</sub> sequestration at the Frio Pilot based on spectral-element and adjoint methods, Fall Meeting, American Geophysical Union, Dec. 2012 S41A-2355.
45. Doetsch, J.; Michael B. Kowalsky; Christine Doughty; Stefan Finsterle; Jonathan B. Ajo Franklin; Xianjin Yang; Charles R. Carrigan; **Thomas M. Daley**, 2012, Structural and Fully Coupled Joint Inversion for CO<sub>2</sub> Migration Monitoring (Invited), Fall Meeting, American Geophysical Union, Dec. 2012 NS34A-01.
46. Oye, V., Eyvind Aker, **Thomas M. Daley**, Daniela Kühn, Bahman Bohloli, Valeri Korneev, 2012, Microseismic monitoring and interpretation with associated injection data from the In Salah CO<sub>2</sub> storage site (Krechba), Algeria, International Conference on Greenhouse Gas Technologies, Kyoto, Nov. 2012.
47. Doetsch, J., M.B. Kowalsky, S. Finsterle, C. Doughty, J.B. Ajo-Franklin, and **T.M. Daley**, 2012. Geophysical data improve stability and convergence of hydrological property estimation: A synthetic CO<sub>2</sub> injection study, Proc. TOUGH Symp. 2012, September 17-19, Berkeley, CA.
48. Korneev, V., and **Thomas Daley**, 2012, Microseismic location uncertainty during fluid injection, Annual Meeting, Society of Exploration Geophysics, Nov. 2012, Las Vegas, DOI <http://dx.doi.org/10.1190/segam2012-0848.1>
49. Doetsch, J., M.B. Kowalsky, S. Finsterle, C. Doughty, J.B. Ajo-Franklin, and **T.M. Daley**, 2012, Geophysical Data Improve Stability And Convergence Of Hydrological Property Estimation: A Synthetic CO<sub>2</sub> Injection Study, Proceedings, TOUGH Symposium 2012, Lawrence Berkeley National Laboratory, Berkeley, California, September 17-19, 2012
50. Freifeld, B, **Tom Daley**, Paul Cook, Sudhendu Kashikar, Douglas Miller, Kevin Dodds, 2012, CO<sub>2</sub> Storage Assurance and Well Integrity Monitoring Using Distributed Temperature and Seismic Fiber-Optic Sensor Systems, Society of Petroleum Engineers, Research Workshop, August 1-3, Palos Verdes, California.
51. Doetsch, Joseph, Michael B. Kowalsky, Christine Doughty, Stefan Finsterle, Jonathan B. Ajo-Franklin, Xianjin Yang, Charles R. Carrigan, and **Thomas M. Daley**, 2012, Fully coupled hydrogeophysical inversion of CO<sub>2</sub> migration data in a deep saline aquifer, SEG-AGU Hydrogeophysics Workshop, 8-11 July 2012, Boise State University, Boise, Idaho.
52. **Daley, Thomas M.**, John E. Peterson, Valeri Korneev, Allan Mathieson, Volker Oye, Anthony Siggins, 2012, Microseismic Monitoring at InSalah and Otway Sequestration Sites, 11th Annual Carbon Capture, Utilization and Sequestration Conference, April 30- May 2, 2012, Pittsburg, PA.
53. Pugh, J., Marco Bianchi, Jens Birkholzer, Baptiste Dafflon, **Tom Daley**, Kirk Ellison, Richard Esposito, Susan Hubbard, Dennis Newell, Peter Nico, Dan Patel, John Peterson, Nic Spycher, Rob Trautz, Charuleka Varadharajan, Yuxin Wu, Liange Zheng, 2012, Assessing the Impact of Elevated Dissolved Carbon Dioxide on Groundwater Quality through a Controlled Release Field Test: Test Design and Implementation, 11th Annual Carbon Capture, Utilization and Sequestration Conference, April 2012, Pittsburg, PA.

54. John Henry Beyer, J. Torquil Smith, **Tom Daley**, Greg Newman, 2012, Time-Lapse Controlled-Source Electromagnetic (CSEM) Surveys to Monitor CO<sub>2</sub>: Proposed Land-Based CSEM System Design Model Results, 11th Annual Carbon Capture, Utilization and Sequestration Conference, April 30- May 2, 2012, Pittsburg, PA.
55. Yuxin Wu, Baptiste Dafflon, Susan Hubbard, John Peterson, John Pugh, **Tom Daley**, Rob Trautz, Jens Birkholzer, Complex electrical method as a monitoring tool for CO<sub>2</sub> intrusion into shallow groundwater systems and associated geochemical transformations, -11th Annual Carbon Capture, Utilization and Sequestration Conference, April 2012, Pittsburg, PA.
56. Korneev, V., and **Daley, T.M.**, 2012, Uncertainty of micro-seismic events location during fluid injection, 2012, 1st Joint International Workshop for the Earth's Surface and Subsurface 4D Monitoring, Riyadh, Saudi Arabia, January 8 -11.
57. Siggins, A., and **Daley, T.M.**, 2011 Microseismic monitoring Otway – Phase 2, CO2CRC Research Symposium, Adelaide, Australia, Nov 30 – Dec 3.
58. **Daley, T.M.**, Jonathan B. Ajo-Franklin, Fenglin Niu, 2011, Recent Results from Crosswell CASSM (Continuous Active-Source Seismic Monitoring), American Geophysical Union Annual Meeting, Special session T05, 5-9 December, San Francisco.
59. Dafflon, B., Wu, Y., Hubbard, S.S., Birkholzer, J.T., **Daley, T.M.**, Pugh, J.D., Peterson, J., and Trautz, R.C., Evaluating sensitivity of complex electrical methods for monitoring CO<sub>2</sub> intrusion into a shallow groundwater system and associated geochemical transformations, Abstract GC41E-02, presented at 2011 Fall Meeting, AGU, San Francisco, CA, 5-9 Dec.
60. Nakagawa, S., Timothy J. Kneafsey, **Thomas M. Daley** and Barry M. Freifeld, 2011, Laboratory seismic monitoring of supercritical CO<sub>2</sub> flooding in sandstone cores using the Split Hopkinson Resonant Bar technique with concurrent x-ray CT imaging, First International Workshop in Rock Physics, Colorado School of Mines, Golden, CO, August 2011.
61. Ajo-Franklin, J., and B. Butler-Veytia, S. Hubbard, **T. Daley**, J. Peterson, E. Gasperikova, Y. Wu and B. Kelly (2011), Evaluating Geophysical Imaging Techniques to Evaluate Delivery and Distribution of Amendments in Low-Permeability Aquifers”, International Symposium on Bioremediation and Sustainable Environmental Technologies, Reno, NV, June 27-30, 2011.
62. **Daley, T.M.**, J.B. Ajo-Franklin, C. Doughty, S. Hovorka, 2011, Borehole Seismic Monitoring at SECARB's Phase-III Cranfield Site – Initial Time-Lapse Results, 11<sup>th</sup> Annual Carbon Capture and Storage Conference, Pittsburg, PA, May 2011, #935.
63. **Daley, T.M.** and Hovorka, S. D., 2010, Site closure monitoring of two CO<sub>2</sub> plumes with VSP at the Frio Pilot, American Geophysical Union Fall Meeting, H13C-0983, Dec. 2010, San Francisco, California.
64. Nakagawa, S.; T. J. Kneafsey; **T. M. Daley**; B. M. Freifeld, 2010, Short-core acoustic resonant bar test and x-ray CT imaging on sandstone samples during super-critical CO<sub>2</sub> flooding and dissolution, American Geophysical Union Fall Meeting, S13B-2015, Dec. 2010, San Francisco, California.
65. Ajo Franklin; J.B; **T. M. Daley**; B. Butler-Veytia; J. Peterson; E. Gasperikova; S. S. Hubbard, 2010, Multi-level continuous active source seismic monitoring (ML-CASSM): Application to shallow hydrofracture monitoring, NS44A-04, American Geophysical Union Fall Meeting, Dec. 2010, San Francisco, California.
66. Susan D. Hovorka, Timothy A. Meckel, Ramon H. Trevino, Jiemin Lu. Jean-Philippe Nicot, Jong-Won Choi, David Freeman, Paul Cook, **Thomas M. Daley**, Jonathan B.Ajo- Franklin, Barry M. Freifeild, Christine Doughty, Charles R.Carrigan, Doug La Brecque, Yousif K. Kharaka, James J.Thordsen. Tommy J. Phelps, Changbing Yang, Katherine D. Romanak, Tongwei Zhang, Robert M. Holt, Jeffery S. Lindler, Robert J. Butsch, Monitoring a large volume CO<sub>2</sub> injection: Year two results from SECARB project at Denbury's Cranfield, Mississippi, USA, Greenhouse Gas Technology International Meeting, Energy Procedia 00 (2010) 000–000.

67. Myer, Larry R, and **Thomas M. Daley**, 2010, Elements of a best practices approach to induced seismicity in geologic storage, Greenhouse Gas Technology International Meeting, Sept. 19-23, 2010, Amsterdam, The Netherlands, Energy Procedia 00 (2010) 000–000.
68. Ajo-Franklin, J. and **Daley, T.** 2010, Using Optimal Design to Improve CO<sub>2</sub> Sequestration Monitoring Strategies Geologic Carbon Sequestration Site Integrity: Characterization and Monitoring Workshop, Columbus OH, June. 7-8, 2010.
69. **Daley, T.M.**, Ajo-Franklin, J.B., Doughty, C., Hovorka, S., 2010, Seismic monitoring and reservoir modeling at SECARB's Phase-III Cranfield Site, Ninth Annual Conference on Carbon Capture and Sequestration, Pittsburgh, May 10-13, 2010.
70. Xu, T., Y.K. Kharaka, C. Doughty, B.M. Freifeld, and **T.M. Daley**, Modeling of geochemical changes induced by CO<sub>2</sub> injection at the Frio-I Brine Pilot, presented at Ninth National Conference on Carbon Capture and Sequestration, National Energy Technology Lab., Pittsburgh, PA, May 10-13, 2010.
71. Siggins, A.F., **Daley, T.**, 2010, Passive microseismic monitoring at an Australian CO<sub>2</sub> geological storage site, European Geophysical Union Congress, Vienna, April 2010.
72. **Daley, T.M.**, Niu, F., Ajo-Franklin, J.B., Solbau, R., Silver, P.G., 2009, (Invited) Crosswell CASSM (Continuous Active-Source Seismic Monitoring): Recent Developments, American Geophysical Union Annual Meeting, NG22A-06, San Francisco, Dec 15, 2009.
73. **Daley, T.M.**, and Peterson, J.E., 2009, Update on seismic monitoring using the Naylor-1 sensors, CO2CRC Research Symposium, Coolom, Australia, Dec 1-3, 2009.
74. **Daley, T.M.**, 2009, (Invited) Borehole Seismic Monitoring for Small Scale Sequestration Pilots, 2009, Society of Exploration Geophysicists' Summer Research Workshop, Banff, Canada, August 25, 2009.
75. Ajo-Franklin, J.B., **Daley, T.**, 2009, Using Optimal Experiment Design to Improve CO<sub>2</sub> Sequestration Monitoring Strategies, Society of Exploration Geophysicists' Summer Research Workshop, Banff, Canada, August 26, 2009.
76. **Daley, T.M.**, Sharma, S., Dzunic, A., Urosevic, U., Kepic, A., 2009, Otway Project Seismic Monitoring: Update on use of multi-purpose borehole seismic sensors for CO<sub>2</sub> injection monitoring, 8<sup>th</sup> Annual Conference on Carbon Capture and Sequestration, May 2009.
77. **Daley, T.**, 2009, (Invited) Seismic Monitoring of Carbon Sequestration, Electric Power Research Institute (EPRI) Workshop on Costs of CO<sub>2</sub> Transport and Storage, March 17-18, 2009.
78. Niu, F., P. Silver, **T. Daley**, R. Nadeau, T. Taira, X. Cheng, E. Majer, 2008, Seismic Imaging of Stress Transient, Eos Trans. AGU, 89(53), Fall Meet. Suppl., Abstract S51E-02
79. Freifeld, B., **Daley, T.**, Hovorka, S. Henninges, J., Unterschultz, J., Sharma, S., 2008, Recent advances in well-based monitoring of CO<sub>2</sub> sequestration, 9th International Conference on Greenhouse Gas Control Technologies, 16 - 20 November, Washington DC.
80. **Daley, T. M.**, D. Sherlock, A. Dzunic, S. Sharma, 2008, Seismic Monitoring at the Otway Project with the Naylor-1 Borehole Sensors, CO2CRC Research Symposium, Queenstown, New Zealand, December 1-4.
81. Urosevic M., A. Kepic, D. Sherlock, **T. Daley**, B. Freifeld, S. Sharma, K. Dodds, 2008, Application of geophysical monitoring within the Otway Project SE Australia, Society of Exploration Geophysicists Annual Meeting, November 10-14, Paper: SS 6.6.
82. **Daley, T.M.**, J. B. Ajo-Franklin, and C. Doughty, 2008, Integration of crosswell CASSM (continuous active source seismic monitoring) and flow modeling for imaging of a CO<sub>2</sub> plume in a brine aquifer, Society of Exploration Geophysicists Annual Meeting, November 10-14, Paper SS 6.7.
83. **Daley, T.M.**, Don Sherlock, Barry Freifeld, Jonathan Ajo-Franklin, Sandeep Sharma, 2008, Monitoring of CO<sub>2</sub> sequestration in a depleted gas reservoir: The Otway Project, Society of Exploration Geophysicists Unconventional Resources Research Workshop, Vancouver, BC.

84. R. Zhou, L. Huang, J. Rutledge; **T. M. Daley** and E. L. Majer, 2008, Using the coda-wave interferometry method and timelapse VSP data to estimate velocity changes from geological carbon sequestration in a brine aquifer Society of Exploration Geophysicists Annual Meeting, November 10-14, Paper TL 2.5.
85. **Daley, T.M.**, Sherlock, D., Freifeld, B., Sharma, S., 2008, Otway Project: Multi-Purpose Borehole Seismic Sensors; Design, Installation and Preinjection Monitoring Data, 7<sup>th</sup> annual conference on carbon capture and sequestration, May 2008.
86. Ajo-Franklin, J., Doughty, C., **Daley, T.M.**, Combining analysis of continuous active source seismic monitoring and multiphase flow modeling for CO<sub>2</sub> sequestration: The Frio II brine pilot, 7<sup>th</sup> annual conference on carbon capture and sequestration, May 2008.
87. Zhou, R., Huang, L., Rutledge, J., **Daley T.M.** and Majer, E.L., Velocity Change Estimation Using Time-Lapse VSP Data for Monitoring CO<sub>2</sub> Injection in a Brine Aquifer, 7<sup>th</sup> annual conference on carbon capture and sequestration, May 2008.
88. Zhou, R., Huang, L., Daley, T.M., Majer, E.L., Denli, H., and Rutledge, J., 2008. Monitoring of geological carbon sequestration using the coda-wave interferometry method and time-lapse VSP data, 70th EAGE Conference, Expanded Abstracts, 3199-3203.
89. **Daley, T.M.**, Niu, F., Silver, P.G., Majer, E.L., Benson, S.M., 2007, (Invited) Continuous Crosswell Seismic Measurement: Applications to Monitoring of Stress and CO<sub>2</sub>, American Geophysical Union, Fall Meeting, Paper NG44A-04.
90. Niu, F., Silver, P.G., **Daley, T.M.**, Cheng, X., Majer, E.L., 2007, Detection of Subsurface Stress/Strain Changes with Active Source Monitoring at the Parkfield SAFOD Drill Site, American Geophysical Union, Fall Meeting, Paper T53C-06.
91. Ajo-Franklin, J.B., Doughty, C.A., **Daley, T.M.**, 2007, Integration of Continuous Active-Source Seismic Monitoring and Flow Modeling for CO<sub>2</sub> Sequestration: The Frio II Brine Pilot, American Geophysical Union, Fall Meeting, Paper H11J-02.
92. **Daley, T.M.**, 2007, (Invited) Seismic Based Monitoring and Verification Programs at Frio-II/WestCarb/SeaCarb/Otway, IEA Greenhouse Gas R&D Program, Monitoring Network 4<sup>th</sup> Annual Meeting, Edmonton, Alberta, Nov 7-9, 2007.
93. **Daley, T.M.**, R.D. Solbau, J.B. Ajo-Franklin, S.M. Benson, 2007, Continuous crosswell monitoring of CO<sub>2</sub> injection in a brine aquifer, Society of Exploration Geophysicists International Exposition and Seventy-Seventh Annual Meeting, Sep. 17-21, 2007.
94. **Daley, T.M.**, R.D. Solbau, J.B. Ajo-Franklin, S.M. Benson, 2007, Continuous Crosswell Seismic During CO<sub>2</sub> Injection: A New Monitoring Technology Deployed at the Frio-II Experiment, Sixth Annual Conference on Carbon Capture and Sequestration, paper #143, May7-10, 2007.
95. Cheng, X., Niu, F., Silver, P.G., **Daley, T.M.**, Majer, E.L., 2006, Continuous in-situ measurement of stress induced travel time variation at Parkfield, American Geophysical Union, Annual Meeting, EOS Trans. AGU, Fall Meet. Suppl., paper NG42A-04.
96. **Daley, T.M.**, Silver, P.G., Niu, F., Majer, E.L., 2006, (Invited) In-situ measurement of stress-induced travel time variation with continuous crosswell acquisition, Stress Effects on Velocity Workshop, Society of Exploration Geophysicists International Exposition and Seventy-Sixth Annual Meeting.
97. **Daley, T.M.**, Silver, P.G., Niu, F., Majer, E.L., 2006, (Invited) Precision measurement of in-situ travel time variation with continuous crosswell acquisition, Bay Area Geophysical Society, Oct. 24.

98. Majer, E., S. Pride, W. Lo, T. Daley, G. Sposito, S. Nakagawa and P. Roberts, Modeling and Field Results from Seismic Stimulation, 17th International Symposium on Nonlinear Acoustics, AIP Conference Proceedings - May 30, 2006, v838, p167-173.
99. **Daley, T.M.**, Myer, L.R., Hoversten, G.M., Benson, S.M., Successful Borehole Seismic Imaging of Injected CO<sub>2</sub> in a Deep Saline Formation, Fifth Annual Conference on Carbon Capture and Sequestration, May 8-11 2006, Alexandria, VA.
100. Trautz, R., L. Myer, S. Benson, C. Oldenburg, **T. Daley**, and J. Seeman, 2006, A combined saline formation and gas reservoir CO<sub>2</sub> injection pilot in Northern California. 8th International Green House Gas Control Technology. Trondheim, Norway, Research Council of Norway. LBNL-60169. 2006.
101. **Daley, T.**, L. Myer, G.M. Hoversten, J.E. Peterson Jr., and V. Korneev, 2006, Borehole Seismic Monitoring of Injected CO<sub>2</sub> at the Frio Site. 8th International Conference on Greenhouse Gas Control Technologies Congress. Trondheim, Norway. LBNL-60160. 2006.
102. **Daley, T.M.** and Korneev, V.A., 2006, In-Situ Borehole Seismic Monitoring of Injected CO<sub>2</sub> at the FrioSite, Proceedings, International CO<sub>2</sub>SC Symposium, Berkeley, CA, March 20-22.
103. **Daley, T.M.**, Myer, L., Hoversten, G.M., Peterson, J.E., 2005, Borehole Seismic Monitoring of Injected CO<sub>2</sub> at the Frio Site, American Geophysical Union, Annual Meeting, EOS Trans. AGU, 86(52), Fall Meet. Suppl.
104. Silver, P.G., Niu, F., **Daley, T.M.**, Majer, E.L., 2005, Developing a Methodology for Observing Stress-Induced Temporal Variations in Travel Time: A Progress Report, American Geophysical Union, Annual Meeting, EOS Trans. AGU, 86(52), Fall Meet. Suppl.
105. **Daley, T.M.**, L.R. Myer, E.L. Majer, J.E. Peterson, 2005, Acquisition of time-lapse, 6-component, P- and S-wave, crosswell seismic survey with orbital vibrator and of time-lapse VSP for CO<sub>2</sub> injection monitoring, 75th annual international meeting of the Society of Exploration Geophysicists, Nov. 2005, Houston Tx.
106. **Daley, T.M.**, L.R. Myer, E.L. Majer, Time Lapse Monitoring of CO<sub>2</sub> Injection with Vertical Seismic Profiles (VSP) at the Frio Project. 4th Annual Conference on Carbon Sequestration, May 2005, Alexandria, VA.
107. Hoversten, G.M., Chen, J., **Daley, T.**, Peterson, J., Dodds, K, Zhang, P., Wilt, M., Little, J., Sakurai, S., Myer, L., Joint inversion of crosswell seismic and EM data for CO<sub>2</sub> saturation, 4th Annual Conference on Carbon Sequestration, May 2005, Alexandria, VA.
108. Sakurai, S., Muller, N, Rmakrishnan, T.S., Boyd, A, **Daley, T.**, Hoversten, M., and Peterson, J., Integrated evaluation for measuring, monitoring and verifying CO<sub>2</sub> distribution, 4th Annual Conference on Carbon Sequestration, May 2005, Alexandria, VA.
109. Wilt, M., J. Little, T. M. Daley, L.R. Myer and G.M. Hoversten, and K. Dodds, Remote Imaging of a CO<sub>2</sub> Plume: Crosswell EM and Crosswell Seismic, 4th Annual Conference on Carbon Sequestration, May 2005, Alexandria, VA.
110. **Daley, Thomas, M.**, L.R. Myer, E.L. Majer, 2004, VSP and Crosswell Seismic Monitoring of a CO<sub>2</sub> Injection, Eos Trans, AGU, 2004 Fall Meeting, LBNL-56314-abs.
111. Toomey, Aoife; Daley, Tom; Wang, Xiuming; Modelling Borehole Wave Propagation using a 3D Variable-Grid Finite-Difference Scheme; EOS Trans, AGU, 2004 Fall Meeting, LBNL-56313 Abs.
112. Wu, C., Harris, J. M., **Daley, T.** and Majer, E., 2004, San Juan single-well seismic data analysis and modeling study, 74th Ann. Internat. Mtg.: Soc. of Expl. Geophys., 342-345.
113. **Daley, Thomas, M.**, Schoenberg, M.A., Rutqvist, J., Nihei, K, 2003, Coupled Modeling of Time-Lapse Change in Seismic Propagation and Permeability in Fractured Reservoirs Due to Fluid Injection, Eos Trans. AGU, 2003 Fall Meet. Suppl., Abstract S41E.0134.
114. Valette-Silver, N. Silver, P., Niu, F., **Daley, T. M.**, and Majer, E.L., 2003, Developing a methodology for imaging stress transients at seismogenic depth, Eos Trans. AGU, 2003 Fall Meet. Suppl., LBNL-53736Abs.

115. Nakagawa, S., **Daley, T.M.**, and Majer, E.L., 2003, Waves generated by borehole orbital vibrator source, 73rd Ann. Internat. Mtg.: Soc. of Expl. Geophys., Expanded Abstracts, 22, p2247.
116. Schoenberg, M. and **Daley, T.**, 2003, qSV wave front triplication in a transversely isotropic material, 73rd Ann. Internat. Mtg.: Soc. of Expl. Geophys., 137-140.
117. Myer, L., S. Benson, D. Cole, **T. Daley**, C. Doughty, A. Dutton, B. Freifeld, W. Gunter, M. Holtz, S. Hovorka, M. Hoversten, B.M. Kennedy, Y. Kharaka, K. Knauss, P. Knox, E. Majer, T. Phelps, K. Pruess, and J. Robinson, Subsurface Monitoring and Verification at the Frio Pilot Test. 7th International Conference on Greenhouse Gas Control Technologies. Vancouver, Canada. LBNL-54221 Ext. Abs. 2003.
118. Korneev, V.A., **Daley, T.M.**, Silin, D.B., Goloshubin, G.M., Seismic Low-frequency Effects in Fluid-saturated Reservoirs, Workshop on Interpreting Reservoir Architecture Using Scale-Frequency Phenomena, Oklahoma City, June 2003.
119. Gritto, R.; **Daley, T. M.**; Myer, L. R., 2003, Imaging of CO<sub>2</sub> injection during and enhanced-oil-recovery experiment, Underground Injection Science and Technology Symposium, Berkeley, CA, October 2003, LBNL-52626, pp. 1-12.
120. Maultzsch, S., Liu, E., Li, X.Y., **Daley, T.M.**, Queen, J.H., Cox, D., Shear-wave splitting analysis of a 3D VSP from the San Juan Basin, 65th Ann. Conf. and Exhib. European Association of Geoscientists and Engineers, June, 2003, LBNL-53969.
121. **Daley, T.M.**, Gritto, R., Majer, E.L. and West, P, Tube-wave suppression in single-well seismic acquisition, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract S72A-1128, 2002.
122. Roberts, P.M., Majer, E. L., Lo, W.C., Sposito, G., **Daley, T.M.**, An integrated approach to seismic stimulation of oil reservoirs: Laboratory, field and theoretical results from DOE/Industry collaborations, Proceedings, 16th International Symposium on Nonlinear Acoustics, Invited Presentation with Extended Abstract, Moscow, Russia, August 2002, 8 pp, LBNL-53970.
123. Hoversten, G.M., R. Gritto, **T. Daley**, E.L. Majer, and L. Myer, Crosswell seismic and electromagnetic monitoring of CO<sub>2</sub> sequestration. GHGT-6. Kyoto, Japan. LBNL-51281 Ext. Abs. 2002.
124. Gritto, R., **Daley, T.M.**, Myer, L.R., Seismic borehole monitoring of CO<sub>2</sub> injection in an oil reservoir, Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract S72A-1137, 2002.
125. **Daley, T.M.**, Nihei, K.T., Myer, L.R., Queen, J.H., Fortuna, M., Murphy, J., Coates, R., Numerical modeling of scattering from discrete fracture zones in a San Juan Basin gas reservoir, 72nd Ann. Internat. Mtg. Soc. Expl. Geophys., Oct, 2002.
126. Hoversten, G.M., Gritto, R., Washbourne, J., **Daley, T.M.**, Fluid saturation and pressure prediction in a multi-component reservoir by combined seismic and electromagnetic imaging, 72nd Ann. Internat. Mtg. Soc. Expl. Geophys., Oct, 2002.
127. Myer, L., S. Benson, D. Cole, **T. Daley**, C. Doughty, A. Dutton, B. Freifeld, W. Gunter, M. Holtz, S. Hovorka, M. Hoversten, B.M. Kennedy, Y. Kharaka, K. Knauss, P. Knox, E. Majer, T. Phelps, K. Pruess, and J. Robinson, Subsurface Monitoring and Verification at the Frio Pilot Test. 7th International Conference on Greenhouse Gas Control Technologies (GHGT-7). Vancouver, Canada. LBNL-54221 Ext. Abs., 2003."
128. Bansal, R., Imhof, M.G., **Daley, T.M.**, 2002, Seismic characterization of fractures in a naturally fractured gas reservoir, 72nd Ann. Internat. Mtg. Soc. Expl. Geophys., Oct, 2002, LBNL-53791.
129. Majer, E.L., Williams, K.H., Peterson, J.E., **Daley, T.M.**, 2002, Application of high resolution crosswell radar and seismic for mapping flow in the vadose zone, 72nd Ann. Internat. Mtg. Soc. Expl. Geophys., Oct. 2002.
130. Majer, E.L., Queen, J.H., **Daley, T.M.**, Murphy J., Fortuna M., Lynn H., Coates, R., Eike P., Sinton J., Cox D., Myer, L., Nihei, K., Nakagowa, S., Scaling between logs, single well, VSP and surface seismic for fracture quantification in naturally fractured gas reservoirs, 72nd Ann. Internat. Mtg. Soc. Expl. Geophys., Oct, 2002.

131. Schoenberg, M., Nihei, K, **Daley, T.M.**, Rutqvist, J., Majer, E.L., Fractured reservoirs: An analysis of coupled elasto-dynamic and permeability changes due to pore pressure variation, SEG Pore Pressure Workshop, May 2002, LBNL-50697.
132. Majer, E.L., Williams, K.H., Peterson, J.E., **Daley, T.M.**, Application of high resolution crosswell radar and seismic for mapping flow in the vadose zone LBNL-50701
133. Majer, E.L., Williams, K.H., **Daley, T.M.**, Peterson, J.E., Mock tank high-resolution seismic and radar measurements: Final report February 28, 2001, LBNL-50745.
134. Gritto, R., **Daley, T.M.**, Feighner, M., Majer, E.L., Integrated seismic studies at the Rye Patch Geothermal Reservoir, Nevada, GRC, LBNL-50590.
135. **Daley, T.M.**, K.T. Nihei, L.R. Myer, E.L. Majer, J.H. Queen, M. Fortuna, J. Murphy, R.T. Coates, Finite-difference seismic modeling of discrete fractures in a San Juan basin gas reservoir, Eos. Trans. AGU, 82(47), Fall Meet. Suppl., S31A-0582, LBNL-48956, 2001.
136. Gritto, R., **Daley, T.M.**, Majer, E.L., Time Lapse Borehole Seismic Monitoring of CO<sub>2</sub> Injection in an Oil Reservoir, Eos., Trans. AGU, 82(47), S31A-0581, 2001.
137. Majer, E.L., Korneev, V., **Daley, T.M.**, Li, G., Davis, T., Washbourne, J., Merry, H., Weyburn field horizontal-to-horizontal crosswell seismic profiling: Part 1 - Planning and data acquisition, Society of Exploration Geophysics, Annual Meeting, 2001.
138. Gritto, R., **Daley, T. M.**, Majer, E. L. (2001): A model of the Subsurface Structure at the Ryepatch Geothermal Reservoir Based on Surface-to-Borehole Seismic Data, Subsurface Structure at the Ryepatch Geothermal Reservoir, Geothermal Resources Council Transactions, Vol. 25, LBNL-47812.
139. Roberts, P.M., Kostrov, S.A., Wooden, W.O., Majer, E.L., **Daley, T.M.**, Laboratory and field observations of stress-wave induced changes in oil flow behavior, Society of Exploration Geophysics, Annual Meeting, September, 2001.
140. Goloshubin, G.M., **Daley, T.M.**, Korneev, V.A., Seismic low-frequency effects in gas reservoir monitoring VSP data, Society of Exploration Geophysics, Annual Meeting, September, 2001.
141. Majer, E.L., **Daley, T.M.**, Gritto, R., Korneev, V., Guoping, L., Application of Crosswell and Single Well Seismic Methods for Mapping CO<sub>2</sub> Movement, Geologic Society of America, 97th Annual Meeting, April 9-11, 2001.
142. Hoversten, G.M., Majer, E.L., **Daley, T.M.**, Crosswell Seismic and Electromagnetic Monitoring of CO<sub>2</sub> Sequestration, American Association of Petroleum Geologists, Annual Meeting, June 2001.
143. **Daley, Thomas M.**, Ernest L. Majer, Roland Gritto, Sally M. Benson, Borehole Seismic Monitoring of CO<sub>2</sub> Injection in a Diatomite Reservoir, American Geophysical Union 2000 Fall Meeting, EOS, v81, n48, Nov. 28, 2000.
144. Gritto, R., **Daley, Tom M.**, Majer, E.L., Seismic Mapping of the Subsurface Structure at the Rye Patch Geothermal Reservoir, Nevada, American Geophysical Union 2000 Fall Meeting, EOS, v81, n48, Nov. 28, 2000.
145. **Daley, Thomas M.**, Ernest L. Majer, Roland Gritto and Jerry M. Harris, Progress and Issues in Single Well Imaging, Society of Exploration Geophysicist Annual Meeting, August 2000, LBNL #45230.
146. Gritto, R., Majer, E. L., Daley, T. M., Development and Application of 3-D Seismic Imaging Methods for Geothermal Environments, Proceedings of the Geothermal Resources Council 2000 Annual Meeting, San Francisco, CA, LBNL-46032 pp. 1-8.
147. **Daley, T.M.**, Gritto, R., Korneev, V.A., Feighner, M.A., Majer, E.L. and Peterson, J.E., Surface-To-Tunnel Seismic Tomography on Kilometer Scale at Yucca Mountain, AGEEP Proceedings of the Environmental and Engineering Geophysical Society, February 2000.

148. **Daley, T.M.**, Majer, E.L., Feighner, M.A., Time Lapse Multi-Offset 9-C VSP in a Fractured Reservoir used for Underground Natural Gas Storage, American Geophysical Union 1999 Fall Meeting, EOS, v80, 46, pF694, Nov. 16, 1999.
149. Feighner, M.A., Gritto, R., **Daley, T.M.**, Majer, E.L., Teplow, W.J., Seismic Studies at the Rye Patch Geothermal Reservoir, Nevada, American Geophysical Union 1999 Fall Meeting, EOS, v80, 46, pF1163, Nov. 16, 1999.
150. Gritto, R., **Daley, T.M.**, Majer, E.L., Seismic Imaging of Salt Dome Structures, American Geophysical Union 1999 Fall Meeting, EOS, v80, 46, pF694, Nov. 16, 1999.
151. Majer, E.L., **Daley, T.M.**, Myer, L.R., Nihei, K., Feighner, M., Peterson, J.E., Korneev, V., Gritto, R., Kaelin, B., Queen, J., Mroz, T., Application of high resolution seismic imaging methods for fracture quantification, 1999 Oil and Gas Conference, Dallas, June 28-30, 1999.
152. **Daley, T.M.**, Peterson, J.E., and Majer, E.L., 1999, Simultaneous acquisition of P- and S-wave crosswell seismic profiles in a contaminated basalt aquifer, AGEEP Proceedings of the Environmental and Engineering Geophysical Society, March 1999, p703-712, LBNL #42627.
153. **Daley, T.M.**, Majer, E.L., and Peterson, J.E., Seismic Crosswell Surveys in a Fractured Basalt Aquifer, EOS, v79, 45 pF802, American Geophysical Union, Fall meeting November 1998.
154. Gritto, R.A., Korneev, V.A. **Daley, T.M.**, Feighner, M.A., Majer, E.L., Surface to Tunnel Imaging at Yucca Mountain Nevada, EOS, v79, 45, pF822, American Geophysical Union, Fall meeting November 1998.
155. Pellerin, L, D. Reichhardt, **T. Daley**, F Gilbert, S Hubbard, E. Majer, J Peterson, W Daily and A Ramirez, 1998, Verification of Subsurface Barriers Using Integrated Geophysical Techniques, Symposium on the Application of Geophysics to Engineering and Environmental Problems, 11, no. 1, 635-643.
156. **Daley, T.M.**, Majer, E.L., Mroz, T., Acquisition of Vertical Seismic Profiles (VSP) in a Fractured Reservoir used for Underground Natural Gas Storage, American Geophysical Union, Fall Meeting, San Francisco, Ca, in EOS, v78, n46 Nov 1997.
157. Wood, T.R., Bukowski, J.M., Majer, E.L., **Daley T.**, Peterson, J., and Williams, K.E., Imaging of Geologic Structure Controlling Radionuclide Migration in Fractured Rock using Seismic Crosshole Tomography, Technical Information Exchange Conference, Idaho Falls, Id, August 1997.
158. Wilt, M., Schenkel, C., **Daley, T.**, Peterson, J., Majer, E., Murer, A.S., Johnston, R.M., Klonsky, L., Mapping Steam and Water Flow in Petroleum Reservoirs, Society of Petroleum Engineers Symposium, Bakersfield, CA, Feb. 1997.
159. Majer, E., M. Feighner, L. Johnson, K. Lee, **T.M. Daley**, E. Karageorgi, P. Parker, T. Smith, K. Williams, A.Romero, T.V McEvelly, Ponce, T., Langenheim, V., 1996, Results and Interpretation of Multiple Geophysical Surveys at Yucca Mountain, Nevada, Proceedings of IHLW Conference, Las Vegas Nv, 1996.
160. D'Onfro, P.S., Majer, E.L., Peterson, J.E., **Daley, T.M.**, Vasco, D.W., Long, J.C.S., Data-Gupta, A., Queen, J.H. and Rizer, W.D., An integrated approach for characterization of fractured reservoirs; Faulting, Fault Sealing and Fluid Flow in Hydrocarbon Reservoirs, Conference abstract, Univ. of Leeds, Sep. 1996.
161. Romero, A.E., R. Gritto, **T.M. Daley**, E.L. Majer, J.W. Rector, Analysis of VSP data from the DOE exploratory well (LVF 51-20) at Long Valley Caldera, Eastern California, American Geophysical Union, EOS, v74,n43,1993.
162. **Daley, T.M.**, McEvelly, T.V., Joint VSP and Microearthquake Tomography for Fault Zone Structure, Seismological Society of America, Annual Meeting, 1992.
163. Jech, J., **Daley, T.**, McDonald, J.A., Psencik,I., Linearized and nonlinear kinematic inversion for anisotropic media, Fifth International Workshop on Seismic Anisotropy, Banff Canada, May 1992.



164. Jech, J., **Daley, T.M.**, Psencik, I., Numerical Modeling of Anisotropic Structures from Varian Well VSP Data, Society of Exploration Geophysicists, annual Meeting, 1992.
165. **Daley, T.M.**, McEvelly, T.V., Update of Shear-Wave Anisotropy Measurements at the Parkfield Varian Well, Seismological Society of America, Annual Meeting, 1991.
166. Lee, J.M., **Daley, T.M.**, Majer, E.L., Nine-Component VSP Data from Yucca Valley, Nevada, American Geophysical Union, annual meeting 1991.
167. **Daley, T.M.**, McEvelly, T.V., Update of Shear-Wave Anisotropy Measurements at Seismological Research Letters, v61,n1, 1990.
168. Clymer, R., **Daley, T.**, Karageorgi, E., Majer, E., McEvelly, T.V., Some unconventional applications of Multi-component Seismic Data, SEG annual meeting 1990.
169. Majer, E.L., Peterson, J.E., **Daley, T.M.** and Tura, M.A., Imaging Structure at Yucca Mountain Using VSP and Crosswell Seismic Methods, U.S. Geological Survey CASY Symposium, 1990.
170. **Daley, T.**, Majer, E.L., McEvelly, T.V., Cervený, V., Gajewski, D., Jech, J., Psencik, I., Anisotropic Inversion of VSP data from the Geysers, American Geophysical Union, annual meeting, EOS, p1209, Oct 24, 1989.
171. **Daley, T.M.**, McEvelly, T.V., Lippert, D., The Parkfield monitoring program: Repeated VSP surveys at the Varian deep borehole array, Seismological Society of America, Annual Meeting, April 1989.
172. Majer, E.L., Peterson, J.E., Meyer, L.R., Karasaki, K., **Daley, T.M.**, Long, J.C.S., 1989, VSP and Cross Hole Tomographic Imaging for Fracture Characterization, Proceedings: Nuclear waste isolation in the unsaturated zone, Focus '89, Publisher, American Nuclear Society, La Grange Park, Illinois, pp.417-426.
173. **Daley, T.M.**, McEvelly, T.V., Majer, E.L., Analysis of P- and S-Wave VSP Data from the Salton Sea Scientific Drilling Project, Geothermal Resources Council Transactions, v12, Oct 1988.
174. **Daley, T.M.**, McEvelly, T.V., Majer, E.L., Determination of Anisotropy From Multi-Component VSPs - Part 1: Techniques, American Geophysical Union, Chapman Conference on Seismic Anisotropy, Berkeley, Ca, 1988.
175. Majer, E.L., **Daley, T.M.**, McEvelly, T.V., Myer, L.R., Determination of Anisotropy From Multi-Component VSPs -Part 2: Case Histories, American Geophysical Union, Chapman Conference on Seismic Anisotropy, Berkeley, Ca, 1988.
176. McEvelly, T.V., **Daley, T.M.**, Clymer, R.W., Monitoring of Anisotropy with VSP Surveys and Surface Array Data at Parkfield, Ca; American Geophysical Union, Chapman Conference on Seismic Anisotropy, Berkeley, Ca, 1988.