# I. Condensing Solvents

1. Dunn, S.G., Nenniger, E.H., Rajan, V.S.V., “A Study of Bitumen Recovery by Gravity Drainage Using Low

Temperature Soluble Gas Injection”, The Canadian Journal of Chemical Engineering, 67, 978-991, Dec 1989.

1. Butler, R. M., & Mokrys, I. J. (1991, January 1). A New Process (VAPEX) For Recovering Heavy Oils Using Hot Water And Hydrocarbon Vapour. Petroleum Society of Canada. doi:10.2118/91-01-09
2. Butler, R. M., Mokrys, I. J., & Das, S. K. (1995, January 1). The Solvent Requirements for Vapex Recovery. Society of Petroleum Engineers. doi:10.2118/30293-MS
3. Das, S. K. (1998, September 1). Vapex: An Efficient Process for the Recovery of Heavy Oil and Bitumen. Society of Petroleum Engineers. doi:10.2118/50941-PA
4. Nenniger, J. E., & Dunn, S. G. (2008, January 1). How Fast is Solvent Based Gravity Drainage? Petroleum Society of Canada. doi:10.2118/2008-139
5. Nenniger, J. E., & Gunnewiek, L. (2009, January 1). Dew Point vs Bubble Point: A Misunderstood Constraint on Gravity Drainage Processes. Petroleum Society of Canada. doi:10.2118/2009-065
6. Alkindi, A. S., Muggeridge, A. H., & Al-Wahaibi, Y. M. (2010, January 1). Experimental Investigation into the Influence of Convective Dispersion and Model Height on Oil Drainage Rates during VAPEX. Society of Petroleum Engineers. doi:10.2118/129169-MS
7. Alkindi, A. S., Al-Wahaibi, Y. M., & Muggeridge, A. (2008, January 1). An Experimental Investigation into the Influence of Diffusion and Dispersion on Heavy Oil Recovery by VAPEX. International Petroleum Technology Conference. doi:10.2523/IPTC-12710-MS
8. Alkindi, A., Al-Wahaibi, Y., & Muggeridge, A. (2011, June 1). Experimental and Numerical Investigations Into Oil-Drainage Rates During Vapor Extraction of Heavy Oils. Society of Petroleum Engineers. doi:10.2118/141053-PA
9. Frauenfeld, T., Jossy, C., Jossy, E., Wasylyk, B., & Meza Diaz, B. (2012, January 1). Experimental Evaluation of Dispersion and Diffusion in UTF Bitumen/n-Butane System. Society of Petroleum Engineers. doi:10.2118/157904-MS
10. Ghesmat, K., “In-Situ Solvent-Assisted Gravity Drainage of Bitumen: Nonlinear Numerical Analysis, SPE journal Feb 2014, 109-121 (SPE 165579)

# II. Electrical Heating

Joule Heating

1. Vermeulen, F.E., Chute, F.S., “Electromagnetic Techniques in the In-Situ Recovery of Heavy Oils”, Journal of Microwave Power, 18(1), 1983.
2. Chute, F.S., Vermeulen, F.E., “Present and Potential Applications of Electromagnetic Heating in the In-Situ Recovery of Oil”, AOSTRA Journal of Research, 4 (1988), 19-33.
3. Glandt, C. A., & Chia-Fu, H. (1992, January 1). Electric Preheating in Low-Injectivity Tar Sand Deposits. Society of Petroleum Engineers. doi:10.2118/24165-MS
4. McGee, B. C. W., Vermeulen, F. E., & Yu, L. (1999, March 1). Field Test of Electrical Heating With Horizontal And Vertical Wells. Petroleum Society of Canada. doi:10.2118/99-03-04
5. Sahni, A., Kumar, M., & Knapp, R. B. (2000, January 1). Electromagnetic Heating Methods for Heavy Oil Reservoirs. Society of Petroleum Engineers. doi:10.2118/62550-MS
6. Vermeulen, F., & McGee, B. (2000, August 1). In-Situ Electromagnetic Heating for Hydrocarbon Recovery and Environmental Remediation. Petroleum Society of Canada. doi:10.2118/00-08-DAS
7. McGee, B.C.W., Vermeulen, F.E., ”Power Losses in Steel Pipe Delivering Very Large Currents”, IEEE TRANSACTIONS ON POWER DELIVERY, 17(1), p25-32, 2002
8. McGee, B. C. W., & Vermeulen, F. E. (2007, January 1). The Mechanisms of Electrical Heating For the Recovery of Bitumen From Oil Sands. Petroleum Society of Canada. doi:10.2118/07-01-03
9. McGee, B. C. W., McDonald, C. W., & Little, L. (2008, January 1). Electro-Thermal Dynamic Stripping Process- Integrating Environmentalism with Bitumen Production. Society of Petroleum Engineers. doi:10.2118/117470-MS
10. McGee, B. C. W., & Donaldson, R. D. (2009, January 1). Heat Transfer Fundamentals for Electro-thermal Heating of Oil Reservoirs. Petroleum Society of Canada. doi:10.2118/2009-204
11. Arora, D. et.al., “Systems and Methods for Treating a Subsurface Formation with Electrical Conductors”, Patent CA 3 739 039
12. Lashgari, H., Delshad, M., Sepehrnoori, K., & De Rouffignac, E. P. (2014, June 10). Development of Electrical Joule’’s Heating Simulation for Heavy Oil Reservoirs. Society of Petroleum Engineers. doi:10.2118/170173-MS

Induction heating

1. Koolman, M., Huber, N., Diehl, D., & Wacker, B. (2008, January 1). Electromagnetic Heating Method to Improve Steam Assisted Gravity Drainage. Society of Petroleum Engineers. doi:10.2118/117481-MS
2. Wacker, B., Karmeileopardus, D., Trautmann, B., Helget, A., & Torlak, M. (2011, January 1). Electromagnetic Heating for In-Situ Production of Heavy Oil and Bitumen Reservoirs. Society of Petroleum Engineers. doi:10.2118/148932-MS

RF Heating

1. Bermudez, J. M., Acosta, W., Andarcia, L., Suarez, A. F., Vaca, P., Pasalic, D., & Okoniewski, M. (2014, September 24). Assisted Extra Heavy Oil Sampling by Electromagnetic Heating. Society of Petroleum Engineers. doi:10.2118/171073-MS
2. Ghannadi, S., Irani, M., & Chalaturnyk, R. J. (2014, June 10). Induction and Radio Frequency Heating Strategies for Steam-Assisted Gravity Drainage Start-Up Phase. Society of Petroleum Engineers. doi:10.2118/170037-MS
3. Despande, S.R., Wright, B.N., Watt, A., 2015. “Techniques for Installing Effective Solvent Extraction Incorporating Electromagnetic Heating (“ESEIEH”) Completions”, WHOC15-317, Edmonton, Alberta.
4. Wise, S., & Patterson, C. (2016, June 7). Reducing Supply Cost With EseiehTM Pronounced Easy. Society of Petroleum Engineers. doi:10.2118/180729-MS
5. <http://www.acceleware.com/>

# III. Enhanced Waterflood

Polymer

1. Beliveau, D. (2009, October 1). Waterflooding Viscous Oil Reservoirs. Society of Petroleum Engineers. doi:10.2118/113132-PA
2. Delamaide, E., Zaitoun, A., Renard, G., Tabary, R.,” Pelican Lake Polymer Flood - First Successful Application in a High Viscosity Reservoir”, EAGE 17th European Symposium on Improved Oil Recovery, St.Petersburg, Russia, April 2013, B33.
3. Delamaide, E., Zaitoun, A., Renard, G., & Tabary, R. (2013, July 2). Pelican Lake Field: First Successful Application of Polymer Flooding in a Heavy Oil Reservoir. Society of Petroleum Engineers. doi:10.2118/165234-MS
4. Delamaide, E., Bazin, B., Rousseau, D., & Degre, G. (2014, March 31). Chemical EOR for Heavy Oil: The Canadian Experience. Society of Petroleum Engineers. doi:10.2118/169715-MS
5. RODRIGUEZ MANRIQUE, F., Rousseau, D., Bekri, S., Djabourov, M., & Bejarano, C. A. (2014, December 8). Polymer Flooding for Extra-Heavy Oil: New Insights on the Key Polymer Transport Properties in Porous Media. Society of Petroleum Engineers. doi:10.2118/172850-MS
6. <http://www.snf-group.com/about-us>

Chemical

1. Fortenberry, R. P., Kim, D. H., Nizamidin, N., Adkins, S., Pinnawala Arachchilage, G. W. P., Koh, H. S., … Pope, G. A. (2013, September 30). Use of Co-Solvents to Improve Alkaline-Polymer Flooding. Society of Petroleum Engineers. doi:10.2118/166478-MS
2. Taghavifar, M., Fortenberry, R. P., De Rouffignac, E., Sepehrnoori, K., & Pope, G. A. (2014, June 10). Hybrid Thermal-Chemical Processes (HTCP) for Heavy-Oil and Oil-Sand Recovery. Society of Petroleum Engineers. doi:10.2118/170161-MS
3. Vermolen, E. C. M., Pingo Almada, M., Wassing, B. M., Ligthelm, D. J., & Masalmeh, S. K. (2014, January 19). Low-Salinity Polymer Flooding: Improving Polymer Flooding Technical Feasibility and Economics by Using Low-Salinity Make-up Brine. International Petroleum Technology Conference. doi:10.2523/IPTC-17342-MS
4. Aminzadeh, B., Hoang, V., Inouye, A., Izgec, O., Walker, D., Chung, D., … Dwarakanath, V. (2016, April 11). Improving Recovery of a Viscous Oil Using Optimized Emulsion Viscosity. Society of Petroleum Engineers. doi:10.2118/179698-MS

# IV. Steam-Solvent

Viscosity

1. Larter, S. R., Adams, J., Gates, I. D., Bennett, B., & Huang, H. (2006, January 1). The Origin, Prediction and Impact of Oil Viscosity Heterogeneity on the Production Characteristics of Tar Sand and Heavy Oil Reservoirs. Petroleum Society of Canada. doi:10.2118/2006-134 or /08-01-52
2. Gates, I. D., Adams, J., & Larter, S. (2007, January 1). The Impact of Oil Viscosity Heterogeneity on the Production Characteristics of Tar Sand and Heavy Oil Reservoirs. Part II: Intelligent, Geotailored Recovery Processes in Compositionally Graded Reservoirs. Petroleum Society of Canada. doi:10.2118/2007-023 or /08-09-40
3. Larter, S. R., Gates, I. D., & Adams, J. J. (2008, January 1). From Steam Towards Sustainability! Possible Transition Technologies For the Heavy Oil And Bitumen Industry. Petroleum Society of Canada. doi:10.2118/2008-133
4. Huang, H., Bennett, B., Oldenburg, T., Adams, J., & Larter, S. (2006, January 1). Geological Controls on the Origin of Heavy Oil and Tar Sands and Their Impacts on In Situ Recovery. Petroleum Society of Canada. doi:10.2118/2006-045 or /08-04-37
5. Yarranton, H., van Dorp, J., Verlaan, M., & Lastovka, V. (2013, May 1). Wanted Dead or Live: Crude-Cocktail Viscosity--A Pseudocomponent Method to Predict the Viscosity of Dead Oils, Live Oils, and Mixtures. Society of Petroleum Engineers. doi:10.2118/160314-PA

General

1. Ziritt, J. L., and Burger, J., "Combined Steam and Solvent Injection", 2nd International Conference on the Future of Heavy Crude and Tar Sands, UNITAR ( Feb. 7 17, 1982) Caracas, Venezuela, 760-772.
2. Bracho, L. G., & Oquendo, O. A. (1991, January 1). Steam-Solvent Injection, Well LSJ-4057, Tia Juana Field, Western Venezuela. Society of Petroleum Engineers. doi:10.2118/21530-MS

ES-SAGD

1. Nasr, T. N., Beaulieu, G., Golbeck, H., & Heck, G. (2003, January 1). Novel Expanding Solvent-SAGD Process “ES-SAGD.” Petroleum Society of Canada. doi:10.2118/03-01-TN
2. Khaledi, R. R., Beckman, M. S., Pustanyk, K., Mohan, A., Wattenbarger, C. C., Dickson, J. L., & Boone, T. T. (2012, January 1). Physical Modeling of Solvent-Assisted SAGD. Society of Petroleum Engineers. doi:10.2118/150676-MS
3. Dittaro, L. M., Dickson, J. L., & Boone, T. J. (2013, June 11). Integrating the Key Learnings from Laboratory, Simulation, and Field Tests to Assess the Potential for Solvent Assisted - Steam Assisted Gravity Drainage. Society of Petroleum Engineers. doi:10.2118/165485-MS
4. Khaledi, R., Boone, T. J., Motahhari, H. R., & Subramanian, G. (2015, June 9). Optimized Solvent for Solvent Assisted-Steam Assisted Gravity Drainage (SA-SAGD) Recovery Process. Society of Petroleum Engineers. doi:10.2118/174429-MS

LASER

1. Leaute, R. P. (2002, January 1). Liquid Addition to Steam for Enhancing Recovery (LASER) of Bitumen with CSS: Evolution of Technology from Research Concept to a Field Pilot at Cold Lake. Society of Petroleum Engineers. doi:10.2118/79011-MS
2. Leaute, R. P., & Carey, B. S. (2005, January 1). Liquid Addition to Steam for Enhancing Recovery (LASER) of Bitumen With CSS: Results From the First Pilot Cycle. Petroleum Society of Canada. doi:10.2118/2005-161
3. Leaute, R. P., & Carey, B. S. (2007, September 1). Liquid Addition to Steam for Enhancing Recovery (LASER) of Bitumen with CSS: Results from the First Pilot Cycle. Petroleum Society of Canada. doi:10.2118/07-09-01

Steam Drive

1. Lastovka, V., Hooijkaas, T., van Dorp, J.J., Verlaan, M., “Experimental Investigation of Solvent Addition to Vertical Steam Drive (VSD) as an Improved Method for Thermal Recovery of Extra-heavy Oil/Bitumen”, EAGE 18th European Symposium on Improved Oil Recovery, Dresden, Germany, April 2015, B15.
2. Castellanos-Diaz, O., Verlaan, M. L., & Hedden, R. (2016, March 21). Solvent Enhanced Steam Drive: Results from the First Field Pilot in Canada. Society of Petroleum Engineers. doi:10.2118/179815-MS
3. Hedden, R., Verlaan, M., & Lastovka, V. (2014, April 12). Solvent Enhanced Steam Drive. Society of Petroleum Engineers. doi:10.2118/169070-MS
4. Verlaan, M. L., Hedden, R., Castellanos Díaz, O., Lastovka, V., & Giraldo Sierra, C. A. (2015, October 11). Solvent Enhanced Steam Drive: Experiences from the First Field Pilot in Canada. Society of Petroleum Engineers. doi:10.2118/175414-MS

# V. Steam-Foam

1. Keijzer, P. P. M., Muijs, H. M., Janssen-van, R. R., Teeuw, D., Pino, H., Avila, J., & Rondon, L. (1986, January 1). Application of Steam Foam in the Tia Juana Field, Venezuela: Laboratory Tests and Field Results. Society of Petroleum Engineers. doi:10.2118/14905-MS
2. Falls, A. H., Lawson, J. B., & Hirasaki, G. J. (1988, January 1). The Role of Noncondensable Gas in Steam Foams. Society of Petroleum Engineers. doi:10.2118/15053-PA
3. Muijs, H. M., Keijzer, P. P. M., & Wiersma, R. J. (1988, January 1). Surfactants for Mobility Control in High-Temperature Steam-Foam Applications. Society of Petroleum Engineers. doi:10.2118/17361-MS
4. Patzek, T. W., & Koinis, M. T. (1990, April 1). Kern River Steam-Foam Pilots. Society of Petroleum Engineers. doi:10.2118/17380-PA
5. Patzek, T. W., & Myhill, N. A. (1989, January 1). Simulation of the Bishop Steam Foam Pilot. Society of Petroleum Engineers. doi:10.2118/18786-MS
6. Hirasaki, G. J. (1989, May 1). The Steam-Foam Process. Society of Petroleum Engineers. doi:10.2118/19505-PA
7. Hirasaki, G. J. (1989, January 1). Supplement to SPE 19505, The Steam-Foam Process--Review of Steam-Foam Process Mechanisms. Society of Petroleum Engineers.
8. Kovscek, A. R., Patzek, T. W., & Radke, C. J. (1993, January 1). Simulation of Foam Transport in Porous Media. Society of Petroleum Engineers. doi:10.2118/26402-MS
9. Patzek, T. W. (1996, May 1). Field Applications of Steam Foam for Mobility Improvement and Profile Control. Society of Petroleum Engineers. doi:10.2118/29612-PA
10. Lau, H. C. (2012, August 1). Alkaline Steam Foam: Concepts and Experimental Results. Society of Petroleum Engineers. doi:10.2118/144968-PA
11. Bagheri, S. R., & Clark, H. P. (2015, October 11). Steam-Foam Technology as an Option to Improve Steam Drive Efficiency. Society of Petroleum Engineers. doi:10.2118/175278-MS

# VI. Fractured Carbonates

1. Van Wunnik, J. N. M., & Wit, K. (1992, February 1). Improvement of Gravity Drainage by Steam Injection Into a Fractured Reservoir: An Analytical Evaluation. Society of Petroleum Engineers. doi:10.2118/20251-PA
2. Shahin, G. T., Moosa, R., Al-Kharusi, B. S., & Chilek, G. (2006, January 1). The Physics of Steam Injection in Fractured Carbonate Reservoirs: Engineering Development Options That Minimize Risk. Society of Petroleum Engineers. doi:10.2118/102186-MS
3. Boerrigter, P.M., van Dorp, J.J., “Advances in Understanding Thermally Assisted GOGD”, EAGE 15th European Symposium on Improved Oil Recovery, Paris, France, April 2009, A15.
4. Edmunds, N., Barrett, K., Solanki, S., Cimolai, M., & Wong, A. (2009, September 1). Prospects for Commercial Bitumen Recovery from the Grosmont Carbonate, Alberta. Petroleum Society of Canada. doi:10.2118/09-09-26
5. Hosseininejad Mohebati, M., Yang, D., & MacDonald, J. (2014, July 1). Thermal Recovery of Bitumen From the Grosmont Carbonate Formation - Part 1: The Saleski Pilot. Society of Petroleum Engineers. doi:10.2118/171560-PA
6. Yang, D., Hosseininejad Mohebati, M., Brand, S., & Bennett, C. (2014, July 1). Thermal Recovery of Bitumen From the Grosmont Carbonate Formation—Part 2: Pilot Interpretation and Development Strategy. Society of Petroleum Engineers. doi:10.2118/171561-PA
7. Niz-Velasquez, E., Bagheri, S. R., van Dorp, J. J., Verlaan, M. L., & Jennings, J. W. (2014, July 1). Modelling Development of a Thermal Gas/Oil Gravity-Drainage Process in an Extraheavy-Oil Fractured Reservoir. Society of Petroleum Engineers. doi:10.2118/169031-PA
8. Roberts, B., & Hamida, T. (2014, July 1). Recovery of Bitumen From a Carbonate Reservoir by Thermal-Assisted Gravity Drainage (TAGD). Society of Petroleum Engineers. doi:10.2118/171562-PA
9. Yang, D., Hosseininejad, M., Stewart, D., & Brand, S. (2015, June 9). Type Curves for Cyclic Steam Operations in the Grosmont Saleski Pilot and Their Implications for Recovery Mechanisms. Society of Petroleum Engineers. doi:10.2118/174448-MS

# VII. Modelling

1. Van Heel, A. P., Boerrigter, P. M., & van Dorp, J. J. (2008, August 1). Thermal and Hydraulic Matrix-Fracture Interaction in Dual-Permeability Simulation. Society of Petroleum Engineers. doi:10.2118/102471-PA
2. Liu, K., Subramanian, G., Dratler, D. I., Lebel, J.-P., & Yerian, J. A. (2009, June 1). A General Unstructured-Grid, Equation-of-State-Based, Fully Implicit Thermal Simulator for Complex Reservoir Processes. Society of Petroleum Engineers. doi:10.2118/106073-PA
3. Wong, A. H. W., & Edmunds, N. R. (2010, January 1). Numerical Simulation of the Solvent Drainage Process. Society of Petroleum Engineers. doi:10.2118/137721-MS
4. Van Batenburg, D. W., Bosch, M., Boerrigter, P. M., De Zwart, A. H., & Vink, J. C. (2011, January 1). Application of Dynamic Gridding Techniques to IOR/EOR-Processes. Society of Petroleum Engineers. doi:10.2118/141711-MS
5. Bogdanov, I., Torres, J., & Corre, B. (2012, January 1). Numerical Simulation of Electromagnetic Driven Heavy Oil Recovery. Society of Petroleum Engineers. doi:10.2118/154140-MS
6. Cuthiell, D., & Edmunds, N. (2013, May 1). Thoughts on Simulating the VAPEX Process. Society of Petroleum Engineers. doi:10.2118/158499-PA
7. Ghesmat, K. (2014, February 1). In-Situ, Solvent-Assisted Gravity Drainage of Bitumen: Nonlinear Numerical Analysis. Society of Petroleum Engineers. doi:10.2118/165579-PA
8. Pasalic, D., Vaca., P., Okoniewski, M., “Modelling EM Assisted Oil Recovery”, International Conference on Electromagnetics in Advanced Applications (ICEAA), Aug 2014.

# VIII. Solar Steam

1. Van Heel, A. P., Van Wunnik, J. N. M., Bentouati, S., & Terres, R. (2010, January 1). The Impact Of Daily And Seasonal Cycles In Solar-Generated Steam On Oil Recovery. Society of Petroleum Engineers. doi:10.2118/129225-MS
2. Palmer, D., & O’Donnell, J. (2014, March 31). Construction, Operations and Performance of the First Enclosed Trough Solar Steam Generation Pilot for EOR Applications. Society of Petroleum Engineers. doi:10.2118/169745-MS
3. Chaar, M., Venetos, M., Dargin, J., & Palmer, D. (2015, December 1). Economics Of Steam Generation For Thermal Enhanced Oil Recovery. Society of Petroleum Engineers. doi:10.2118/172004-PA
4. Testa, D., L. Carnelli, L., Corso, G., Lazzari, C., De Simoni, M., Sassi, G., Tegami, A., “Concentrating Solar Power Applied to EOR: High Temperature Fluid Circulation for Enhancing the Recovery of Heavy Oil”, 12th Offshore Mediterranean Conference and Exhibition in Ravenna, Italy, March 25-27, 2015.

# IX. Miscellaneous

1. Belgrave, J. D. M., Nzekwu, B. I., & Chhina, H. S. (2007, January 1). SAGD Optimization With Air Injection. Society of Petroleum Engineers. doi:10.2118/106901-MS
2. Freeman, L.W., Nzekwu, B.I., Belgrave, J.D.M., “A Breath of Fresh Air – EnCana’s Gas Displacement Solution to the Gas Over Bitumen Issue”, World Heavy Oil Congress Edmonton, March 2008, WHOC08-497
3. Boone, T.J., Sampath, K., Courtnage, D.E., “Assessment of GHG emissions associated with in-situ heavy oil recovery processes”, World Heavy Oil Congress, Aberdeen, Schotland, 2012, WHOC12-412
4. Boone, T. T., Wattenbarger, C. C., Clingman, S., & Dickson, J. L. (2011, January 1). An Integrated Technology Development Plan for Solvent-based Recovery of Heavy Oil. Society of Petroleum Engineers. doi:10.2118/150706-MS
5. Smith, R. J., Meier, S. W., Adair, N. L., Kushnick, A. P., Leonardi, S. A., Herbolzheimer, E., … Wang, J. (2013, June 11). Slurrified Heavy Oil Reservoir Extraction (SHORE): A non-thermal, recovery method. Society of Petroleum Engineers. doi:10.2118/165498-MS
6. Boone, T. J., Dickson, J. L., Lu, P., & Elliott, J. (2014, December 10). Development of Solvent and Steam-Solvent Heavy Oil Recovery Processes Through an Integrated Program of Simulation, Laboratory Testing and Field Trials. International Petroleum Technology Conference. doi:10.2523/IPTC-18214-MS
7. Judzis, A., & Poddar, A. (2012, September 1). R&D Grand Challenges - Reviewing the Five R&D Grand Challenges Plus One. Society of Petroleum Engineers. doi:10.2118/0912-0069-JPT
8. Karanikas, J. M. (2012, May 1). Unconventional Resources: Cracking the Hydrocarbon Molecules In Situ. Society of Petroleum Engineers. doi:10.2118/0512-0068-JPT
9. Judzis, A., Felder, R., Curry, D., Seiller, B., Pope, G. A., Burnett, D., … Poddar, A. (2011, January 1). R&D Grand Challenges - JPT Article Series. Society of Petroleum Engineers. doi:10.2118/163061-MS