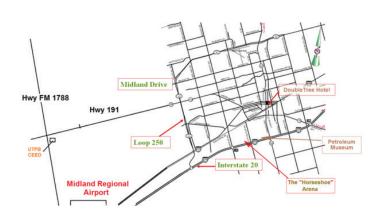
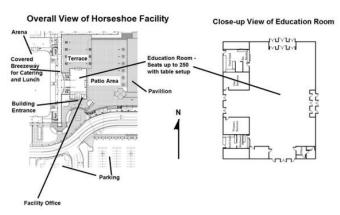


All events are held in The Horseshoe Education Room (HE ROOM) except Tuesday evening's reception. Shuttle van travel available from DoubleTree Hotel Downtown Midland to Horseshoe Facility 7:00 a.m. (Mon-Thurs)

_	SUNDAY DEC 3	MONDAY DEC 4	TUESDAY DEC 5	WEDNESDAY DEC 6	THURSDAY DEC 7
7 am		CHECK-IN HE ROOM	CHECK-IN HE ROOM	CHECK-IN HE ROOM	
8 am				REVIEWS OF THE MONDAY	CHECK-IN HE ROOM
9 am			ROZ SEMINAR AM TOPIC	WORKSHOP AND TUESDAY SEMINAR	
10 am		SESSION I Carbon Management Workshop	The "Exploding" Insights in Reservoir Understanding from the Horizontal Well Revolution	CO ₂ /ROZ THEME SESSION I: CO ₂ EOR Operations and ROZ Activity–Case Histories	
11 am				LUNQUEON VEVNOTE	
NOON		LUNCHEON KEYNOTE SPEAKERS Charles McConnel, Rice University	LUNCHEON KEYNOTE SPEAKER David Christmas, Vice President, Schlumberger, Midland	LUNCHEON KEYNOTE SPEAKER John Harpole, Founder and President, Mercator Energy	FIELD TRIP VENUE Wellman CO ₂ Flood and Facilities; Drive By Horizontal Wells and Kinder Morgan's
1 pm		Dr. Mohammad Piri, University of Wyoming – "Micro and Nano Scale Pore Fluid Movement"	- Schlamberger, midiana		EOR San Andres ROZ Project
2 pm			ROZ SEMINAR PM TOPIC – Exploiting Unconventional	CO ₂ /ROZ THEME SESSION II CO2 Flood and DUROZ Operations – Case Studies	
3 pm		SESSION II Carbon Management Workshop	Oil in a Conventional (Carbonate) Resevoir	oporations oddo otadios	
4 pm		_			
5 pm	ICEBREAKER				
6 pm	DoubleTree Hotel (Sky Lounge, 3rd floor)	RECEPTION Horseshoe Education Room	RECEPTION Susie's South Forty Confections	NO EVENING RECEPTION	
7 pm			Pilot Ceritas CO ₂ , Petro Harvester, tream, APTA and SPE PB Section		
8 pm					

7 a.m. van service will depart the DoubleTree Hotel to go to The Horseshoe Facility, and van service will be available to return to the DoubleTree after the day's events.





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FLOODING CONFERENCE SPONSORS



















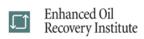






















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MIDLAND, TEXAS,
DECEMBER 4-7, 2017
CO2CONFERENCE.NET

Carbon Management Workshop: Monday, December 4

Latest Policy, Regulatory, Project and Market Developments

	, 9	
Time	Description	Presenter
8:00 am-8:15	5 Opening Remarks	Michael Moore, EWSA and Steve Melzer, Melzer Consulting
8:15-8:45	Opening Keynote Speaker: The Latest on ROZ and CO₂ EOR	Vello Kuuskraa, ARI
8:45-9:30	Policy Regulatory Panel	Brad Crabtree, NEORI and V.P., Great Plains Inst, and Fred Eames, Partner, Hunton Williams
9:30-10:00	Southern States Energy Board Updates	Kenneth Nemeth, Executive Director, SSEB
10:00-10:20	Break	
10:20-10:50	WVU Latest Developments and Projects	James Woods, Director, US-China Energy Center
10:50-11:20	CO ₂ Capture Technology	Tim Thomas, Business Development, Mitsubishi
11:20-11:40	CO ₂ and Ethane Shale Developments	John Harju/Wes Peck, ND EERC
11:40-12:00	Latest Developments and Updates	Mike McGroddy, NETPower
Noon- 1:20 pm	Luncheon and Keynote Speaker	Charles McConnell, former Deputy Assistant Secretary for Fossil Energy, U.S. Department of Energy and Director, Rice Energy and Environment Initiative
Projects, Pro 1:20- 1:50	ograms and Technology Insights Advances in Unconventional Production	Dr. Mohammad Piri, Wy Excellence Chair in Petro Engineering, Thomas and Shelley Botts Chair in Unconventional Reservoirs, University of Wyoming
1:50-2:10	China CO ₂ EOR and CCUS Developments	Bruce Hill, Clean Air Task Force
2:10-2:30	Developments in CO ₂ Technical Services	Wayne Rowe, Schlumberger
2:30:3:00	National Coal Council Initiatives on Carbon Management	Janet Gellici, CEO, National Coal Council
3:00-3:15	Break	
Special Area 3:15-4:15	as of Interest and Programs Afternoon Panel: "Life-cycle Analysis for CCUS: Lessons Learned/Changing Paradigms,"	Nick Azzolina, PhD, Principal Hydrogeologist and Statistician, EERC, ND
	Ethanol CO ₂ , EOR Advances	Steve Melzer, Melzer Consulting and Gerald Bachmeier, CEO, Red Trail Energy
4:15-5:15	Latest on Geologic Storage: Producing Oil and Storing CO ₂ by Applying CO ₂ EOR to the Residual Oil Zone: How Much and at What Cost?	David Morgan, PhD, National Energy Tech Lab
	Carbon Sequestration – Geologic Research & Assessments Project	Peter Warwick, USGS
	Nat'l Risk Assessment Project	George Guthrie, LANL and Grant Bromhal, NRAP
5:15-5:30	Wrap-Up Panel:	Mike Moore, EWSA; Steve Melzer, Melzer Consulting and James Woods, Director, US- China Energy Center
5:30	Adjourn	

5:30 Adjourn

5:45-7:30 Reception at The Horseshoe Facility, Education Room

Sponsors Petro Harvester, Stakeholder Midstream, Mitsubishi, Kinder Morgan CO₂, Pilot Ceritas CO₂, Applied Petroleum Technology Academy

23rd Annual CO₂/ROZ Seminar: Tuesday, December 5

ROZ Science, Activity Updates on Horizontal Depressuring the San Andres Formation, and ROZ CO₂ EOR

NOZ Science,	Activity opulates on Horizontal Depressuring the San Andi	es Formation, and NOZ CO2 EON
Time	Description	Presenter
8:15 am-8:45	Introduction and Update to Current ROZ Exploitation	Steve Melzer, Melzer Consulting
8:45-9:15	Review of ROZ's Work Beneath Major San Andres Oilfields	John Allison, Firethorne
9:15-10:00	Greenfield ROZ's: Science and ROZ Fairways	Dr. Robert Trentham, UTPB
10:00-10:15	Break	
10:15-10:45	ROZ Reservoir Diagnostics (Conventional Rocks and Unconventional Oils)	Steve Melzer, Melzer Consulting
10:45-11:20	Engineering Tools Overview	Robert Laronga, Schlumberger
11:20-12:00	GeoSteering and Data Integration Examples Presented	
12:00-1:00	Lunch and Keynote Speaker	David Christmas, Vice President, Permian Basin, Schlumberger
Evolving Eng	ineering Practices for San Andres ROZ Development	
Case Historie		
1:00-1:25 1:25-2:00	a. Tall Cotton CO ₂ EOR b. Horizontals	Allison and Melzer Lance Taylor, Steward Energy II
2:00-2:45	Performance Variability in the Horizontals Panel	Lance Taylor; Russell Hall, R. K. Hall & Associates
2:45-3:10	Afternoon Break	
Horizontal Co 3:10-3:45	a. Hydrofracturing	Cudd Energy Services
3:45-4:00	b. Open Hole Experience	Ben Azar, ROZ Resources
4:00-4:30	What Follows Reservoir Depressuring?	George Koperna, ARI; Jim Erdle, CMG
4:30-5:00	Panel and Group Discussion: Questing for ROZ's Elsewhere in the World	Illinois and Williston Basins, and Australia Panelists
5:00	Wrap-Up and Adjourn	
5:15-7:30	Reception at Susie's South Forty Confections	
Sponsors	Petro Harvester, Mitsubishi, Kinder Morgan CO ₂ , Pilot Cer	ritas CO ₂ , Stakeholder Midstream, Applied



Petroleum Technology Academy and the Permian Basin Section of the SPE

CO₂ Conference Theme Sessions: Wednesday, December 6

Theme Session 1: CO₂ Flood and DUROZ Operations and Case Histories I

Time	Description	Presenter
7:30 am-8:00	Recap of Tuesday's Seminar	Steve Melzer, APTA and Melzer Consulting
8:00-8:45	Recap of the EOR Carbon Management Workshop	Mike Moore, EWSA and Workshop Director
8:45-9:15	Reid Vapor Pressure and NGL Crude Blending – How to Cut Costs and Maximize Profit	Eric Prim, Pilot Energy Solutions, LLC
9:15 - 9:45	Electric Submersibles with a Permanent Magnet Motor	Wallace Huard, Novomet
9:45-10:10	Break	
10:10-10:45	Studies and Field Data on a Cypress Sandstone ROZ in Illinois	Nathan Webb, University of Illinois
10:40-11:30	Panel Discussion	All Speakers
11:30-1:00	Lunch and Keynote Speaker at The Horseshoe Facility's Education Room	John Harpole, Founder and President, Mercator Energy

Theme Session 2: CO₂ Flood and DUROZ Operations and Case Histories II

1:00-2:00	Update on the Northwest Shelf Horizontal San Andres Play	Russell Hall, R. K. Hall & Associates
2:00-2:40	Steward Energy's Horizontal San Andres Case Histories	Lance Taylor, Steward Energy II
2:40-3:10	Grayburg Formation (PB) ROZ Assessment	Vello Kuuskraa, Advanced Resources International
3:10-3:30	Break	
3:30-4:15	Williston Basin ROZ Modelling	Wes Peck, ND EERC
4:15-4:45	Studies of Fractures: Induced and Natural	Richard Baker, Consultant, Calgary
4:45- 5:00	Tall Cotton Greenfield ROZ Phases 1 and 2 CO₂ EOR Project	John Allison and Steve Melzer
5:00-5:15	Panel Discussion	All Speakers

No Evening Reception

CO₂ Conference Field Trip: Thursday, December 7

Time	Description
8:15	Depart The Horseshoe Facility for Wellman Flood in Terry County
10:30-Noon	Guided Tour of Wellman Field and Processing Facility Conducted by Trinity CO ₂ and Pilot Ceritas
Noon-1:00	Box Lunch On Site
1:00	Depart for Western Yoakum County Horizontal Wells
2:15	Depart for Drive By of Kinder Morgan's CO ₂ EOR San Andres ROZ Project in Western Gaines County
3:00-4:15	Return to The Horseshoe Facility