# H. Roice Nelson, Jr. – Finder - Expanded Resume

(Digital Version: https://www.walden3d.com/resumes/HRN Papers/HRN Expanded Resume.pdf)

# **Qualification Summary**



Howard Roice Nelson, Jr. (Roice) has over 53 years of experience as an explorer and a principal in both entrepreneurial and technical roles in the oil and gas and mineral exploration industries. Roice is an experienced interpretation geoscientist who has spent most of his career working in the international petroleum industry. The last few years he has done several exploration projects with mining, geothermal, and aquifer geologists. As a seismic interpreter he has worked on over 100 interpretation projects worldwide. Roice has proven success in using, creating, and building new tools and processes for the geological exploration industry. This started with summer internships with Pan American Petroleum (1970), and Amoco (1973), then employment with Mobil Oil in Dallas Texas (1974-1980). Roice was recruited to run a research laboratory at the University of Houston (The Seismic Acoustics Lab), which he grew from 33 sponsors (3 sponsors had just left) to 43 industry sponsors. In his three years at The University of Houston (1980-1982), Roice created or organized 5 research laboratories, including the controlling Allied Geophysical Laboratories (AGL), which is an ongoing industry sponsored research consortium at the U of H. While at the University, Roice wrote the article, "Introduction to Interactive 3D Interpretation," Oil &

Gas Journal, V. 79, No. 40, pp. 106-125, 1981; and the book <u>New Technologies in Exploration Geophysics</u>: Gulf Publishing Company, 281 pages, 1983 (<u>Chinese</u>); which forecast the impact of interactive interpretation technologies.

Roice left the AGL in November of 1982 to become the initial founder of Landmark Graphics Corporation. Roice designed Landmark's first interactive interpretation user interface and functionality, specifying software enhancements, new product requirements, and setting strategic direction. He procured sales and joint marketing agreements and created markets for Landmark in Australia, Canada, China, Europe (including Hungary when it was still behind the iron curtain), India, Latin America (Mexico, Venezuela, and Brazil), and the domestic United States. As the only oil company interpretation geophysicist initially on Landmark's staff, Roice had the opportunity to work on all of Landmark's customer's toughest interpretation problems. Roice has assisted and trained clients for his entire career, doing numerous training courses while at Landmark. Courses include Best Practice methodologies; Interactive Interpretation Techniques; Interactive Sequence Stratigraphy; Information Management for Multi-Disciplinary Teams; Maps, Models, Immersion, and Collaboration; New Technologies in Exploration Geophysics; and Lightning Analysis Basics. Roice created a university program at Landmark Graphics Corporation which placed advanced interactive interpretation systems in many universities worldwide to support research and teaching. He taught courses on interactive interpretation and new technologies for Landmark and for IHRDC all over the world. Landmark was sold to Halliburton on 02 July 1996 for \$525 million, 4 years after Roice left Landmark and lost his stock. The interactive seismic interpretation technologies developed and marketed by Landmark changed the way all oil companies explore for hydrocarbon reserves.

He also created a consulting company (Walden 3-D, Inc., W3D, 1990). Roice left Landmark in 1993consultingyperMedia Corporation and to consult on interpretation projects. Through Walden 3-D, Roice worked closely with Roger N. Anderson of Lamont-Doherty Earth Observatory of Columbia University in New York. This work started with studies of temperature-pressure driven dynamic replenishment of Eugene Island 330 through the Global Basin Research Network, and has continued with the Lamont 4-D Seismic Consortium, the Lamont Portfolio Consortium, and the formation of C.E.S., LLC, and vPatch, Inc. In addition, Roice worked for BHP for about a year on

their subsalt team. As a result of this team's work, BHP won leases on over 70 Federal Lease Blocks in the Gulf of Mexico.

HyperMedia attempted to commercialize a Unix, X-Windows, Motif, Client-Server, hypertext engine initially developed at Landmark in 1988. Although a site license was sold to Saudi Aramco for \$500,000. The company failed because competition was the free Mosaic and later Netscape software (1993), and Roice had guaranteed loans with Landmark stock, which stock went from \$24 per share to \$8 per share. Roice also worked for the Bureau of Economic Geology for over a year. This work involved being the 3-D seismic interpretation geophysicist on collaborative teams with Corpoven and Lagoven (Venezuela oil companies now part of Pedevesa or Petroleos de Venezuela, SA), respectively doing a production drilling study in the Orinoco heavy oil province (providing over 165 drilling locations), and a regional stratigraphic interpretation in the southern half of Lake Maracaibo. In 1998 Roice merged some consulting work being done with the University of Houston's VETL (Virtual Environment Technology Laboratory, page 3) and Energy Innovations to form Continuum Resources International Corporation. Continuum developed human scale visualization environments, and placed facilities at Imperial College in London, England and CURTIN University in Perth, Australia (both part of the Landmark University Program) and built a facility in west Houston. Continuum was doing real-time collaboration in human-scale visualization environments between Perth, London, and Houston in 1999, sending state changes over standard ISDN. Roice left Continuum because of management and because oil companies did not want to let interpretation data out of their control.

In 2000 Roice formed an exploration company (Dynamic Resources Corporation, DRC) to utilize industry and proprietary tools and processes to explore for, develop, and produce natural resources: hydrocarbons, geothermal energy, minerals, etc. This company has built a portfolio of over 200 exploration opportunities. Since geology does not change in human lifetimes, Roice expects to get financing for these projects some time. In 2008 Roice and friends created Dynamic Measurement LLC (DML), with the goal of leading out in a new passive electromagnetics branch in the exploration services industry, designed to explore for oil, gas, minerals, water, kimberlite pipes, etc. DML has 2 issued patents & an exclusive license to the best lightning databases available. DML has done ~50 projects from California to New York and from North Dakota to South Texas. This new exploration technology, mapping geology by datamining lightning strike databases, has demonstrated potential for oil & gas, mining, geothermal, aquifer exploration, and earthquake prediction.

In 2014 Roice and Andrea moved to their hometown of Cedar City, Utah primarily to help Andrea's Mom, Maxine Shirts, who had just turned 90. We were able to help her for about five years, before she passed. Roice runs his four companies from his home, and business has been slow. He has given geology lectures at Enoch Elementary, North Elementary and East Elementary in Cedar, and a tour of Parowan Gap to 65 East Elementary 4<sup>th</sup> Graders. He also went to Bryce Canyon and gave a 2-hour lecture to 7<sup>th</sup> and 8<sup>th</sup> Grade students from Gateway Academy in Enoch. He has helped with several STEAM, STEM, Scout Expo, Children's Jubilee, Southern Utah Rock Club, and Mining Festival rock shows and demonstrations, and has sung 1-2 hours 20+ times at the Cedar City Art's Council's "Last Friday Art Walks." Having grown up in Cedar Valley, on the farm Gateway Academy is now located, Roice understands the importance of water to this area. He has given several presentations to The Central Iron County Water Conservancy District and the Iron County Commissioners about water and particularly 2 untapped aquifers within the Cedar Valley Drainage Basin. Field trips with the Iron County Commissioners and others have demonstrated the opportunity for new water sources within the drainage basin (see <a href="http://www.walden3d.com/IronCounty/CedarValleyWater/">http://www.walden3d.com/IronCounty/CedarValleyWater/</a>). In 2022, Roice joined with Steve Swann to form InterLeeV, LLC., an information management company, now with an issued Patent.

## CONTACT INFORMATION

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## **Roice Nelson CHRONOLOGY**

InterLeeV, LLC Co-Founder

14 January 2022 - Present

ILV established to list, compile, index, sort, retrieve, and display disparate data from multiple sources faster, easier, and more accurately, in a more critical and useful way, using 64-bit words, hashtags, or blocks in a block chain, without a lot of complicated processes or procedures (see 230303 Efficient Integration of Data).

Dynamic Measurement, LLC

Co-Founder/Manager

October 2008 - Present

DML established to exploit using lightning data as an on-shore and shelf NSEM (Natural Sourced Electromagnetic Method) exploration tool and to create a new branch in the geophysical services industry.

Dynamic Resources Corporation

Finder/President

January 2001 - Present

DRC was established to identify, generate, and drill or mine prospects (good prospects never go away - they just get put on hold), until there is an opportunity to commercialize the prospects or new technologies related to them.

Walden 3-D, Inc. Finder/President

May 1990 - Present

W3D established as a new company incubator, doing geotechnical consulting and mini-urban design. Primary companies started include DML, DRC, Walden Visualization Systems, vPatch, Advanced Structures Incorporated, HyperMedia Corporation. Completed major seismic interpretation projects on 5 continents, and developed several unique information technologies including The Infinite Grid<sup>SM</sup>, The Knowledge Backbone<sup>SM</sup>, The Concept Machine<sup>SM</sup>, and the Abbott Atlas.

Geophysical Development Corporation (GDC)

Vice President Interpretation

April 2004 – September 2007

- Business Development

Opened GDC China market, and helped build an integrated interpretation business. Interpretation for Ji Dong (3700 B/D, largest find in China in 10 years), Tarim (130 BCM, 3<sup>rd</sup> largest gas field in Xinjiang), Da Qing, Xing Jiang, and Tuha Chinese Oilfields. Created GDC's Tiles<sup>TM</sup> Studies.

Continuum Resources International Corporation

Co-Founder

September 1997 - August 2000

Demonstrating real-time terabyte collaboration in London England, Perth Australia, and Houston.

Bureau of Economic Development, University of Texas at Austin 1995 - 1997 Consultant

3-D seismic interpretation geophysicist on collaborative teams working with Corpoven and Lagoven in Venezuela.

HyperMedia Corporation January 1991 - 2007

Co-Founder

Designed, built, and produced a UNIX, X-Windows, Motif, Client-Server hypertext engine (publicity).

Global Basins Research Network

Co-Founder

1989 - 1995 (1993 19-minute Video)

Co-founder with Dr. Roger N. Andreson, Columbia, and Dr. Lawrence Cathles III, Cornell

Landmark Graphics Corporation

Co-Founder

November 1982 - September 1992 (1995 Landmark Beginnings 44-minute Video).

Co-founder, only exploration geophysicist early on, established Landmark's University Program (1990 Landmark University Partnership Program).

*University of Houston's Allied Geophysical Laboratory (AGL)* 

Co-Founder

University of Houston's Seismic Acoustics Laboratory (SAL)

General Manager

January 1980 - November 1982

Managed the physical modeling facility at the SAL. Helped create and managed four new labs.

Mobil Oil Corporation July 1974 - January 1980

Geophysicist

Interpretation and acquisition geophysicist.

Summer Intern and Assistant Geophysicist in Denver.

## **EDUCATION**

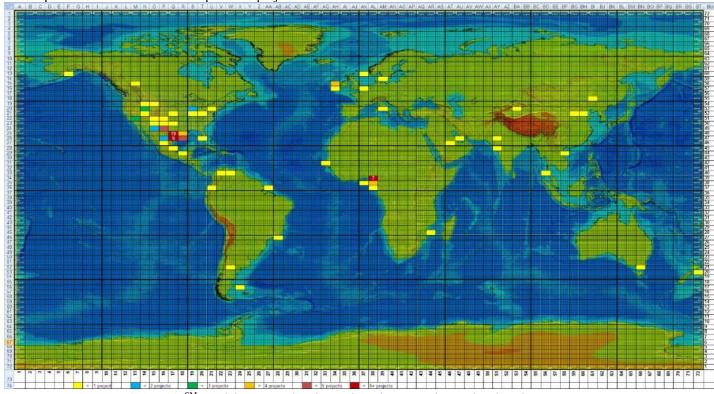
1981, MBA (Masters of Business Administration), Southern Methodist University (SMU).

1974, **B. S. Geophysics**, University of Utah.

1968, Cedar High School Redmen Graduate.

## PROJECT EXPERIENCE

The map below shows locations of exploration projects Roice has worked on since 1970.



W3D Infinite Grid<sup>SM</sup> Spatial Resume showing Roice's interpretation project locations.

Work as a geoscientist has provided solid experience in seismic data acquisition, processing, and interpretation. Seismic data acquisition training included work on seismic field crews in:

- Rock Springs and Green River, Wyoming (made 8-mm film of field crews for training program);
- The Great Salt Lake;
- Kalamazoo, Michigan;
- offshore Nigeria;
- offshore The Cameroons.

Running 4 seismic crews for 1 1/2 years resulted in extensive field experience in:

- Hugoton, Kansas;
- Mesquite, Nevada;
- Alvar, New Mexico;
- Findley, Ohio;
- on an Opseis land telemetry crew in Sayre, Oklahoma;

- Cedar City, Utah;
- Seminole, Pecos, and Laredo, Texas; as well as
- Gillette and Big Piney, Wyoming.

#### These crews used a variety of sources, including:

- shear-wave vibrators;
- P-wave vibrators;
- shot hole, Poulter staked explosives, surface explosives; as well as
- high frequency air guns on a barge in the Great Salt Lake;
- regular air guns; and
- various pressure & shear-wave piezoelectric elastic waves propagating through physical models at SAL.

Half a dozen noise studies were conducted and interpreted. Six months of seismic processing experience was supplemented by processing the physical and numerical model data at the SAL.

#### Regional interpretation projects include:

- The Andaman Sea, Indonesia, Malaysia and Thailand, MEPSI (Mobil E&P Services, Inc., 1975.
- Offshore Falkland Islands, Argentina, and Uruguay, and Pelotas Basin, Brazil, MEPSI, 1975. \*
- Composite Report, 16.5 million acres offshore Brazil Service Contract Blocks, MEPSI, 1976.
- The Gargano High, Italy, MEPSI, 1976. \*
- 10x20 mile regional study of the Adua, Asabo, and Enang Area of OML 70, Nigeria, MEPSI, 1977. \*
- Abu Dhabi Lease Evaluation, MEPSI, 1977. \*
- First regional 2-D surveys shot with the same parameters connecting Mexico and US deep water fields, NOPEC, 2003.

#### Farm-In Evaluations:

- Scripps Institute of Oceanography, La Jolla, California, obtained available government seismic and well data, particularly in the Andaman Sea, MEPSI, 1975.
- West Casamance Permit Shell Farmout, Senegal, MEPSI, 1976.
- Approached government ministries in Senegal and Mauritania for possible farm-in opportunities in West Africa and for permission for the Ted Nelson to collect regional seismic data, MEPSI, 1976.
- The Gulf of Kutch Reading and Bates in Tulsa, India, MEPSI, 1976.

#### Detailed seismic interpretation projects include:

- Greeley Basin, Colorado, Pan American, 1970. \*
- Brady Unit, Sweetwater County, Wyoming, Pan American, 1970.
- Great Salt Lake, seismic acquisition plan, Amoco, 1973. \*
- Senior Thesis (University of Utah): "A Reflection Seismic Study of the Quaternary Sediments of Yellowstone Lake," 1974.
- Block F-7 Dutch North Sea, Mobil, 1975. \*
- West Cameroon Blocks 308 and 309 and East Cameron 262 in the Gulf of Mexico, Mobil, 1975.
- Puerto Rico Reef Play, MEPSI, 1976.
- Block II, Amazon Delta, Offshore Brazil, MEPSI, 1976.
- Statfjord Field Reapportionment, Norwegian North Sea, MEPSI, 1977.
- Potential in Peru and Chile, MEPSI, 1977.
- Bright Spot studies in OML 70, Offshore MEPSI, 1977.
- Dozens of projects with Landmark Graphics customers, including a year study of the Jiji sub basin for the Bohai Oil Field, People's Republic of China.
- Eugene Island 330 for the GBRN (Global Basin Research Network). Co-founded GBRN with Dr. Roger
  Anderson and Dr. Larry Cathles. Interpreted 3D seismic from Pennzoil and interpreted the "Red Fault,"
  which is described in "Finding a Field of 'Streams' Fluid Flow Concept Could Boost Reserves," by Louise
  S. Durham in May of 1994. This work relates to "Development 3\_D Yields New Find," by Kathy Shirley.
- Participation with interpretation team High Island A339/A340 and A563 for Pennzoil in Gulf of Mexico.

- Evaluation of 15 open blocks for BHP Petroleum in the Eugene Island area, Offshore Louisiana, for the 10 May 1995 lease sale (BHP won 2 blocks with a combined bid of \$508,470 for one of the prospects, and Chevron / LL and E; won the other key identified prospect with a bid of \$575,000).
- The Boling Salt Dome, Waller County, TX.
- A Wilcox play above the Arbuckle in Oklahoma.

## Research, Processing, Velocity, Gravity & Magnetics, & Management at MOBIL/MEPSI\*:

- 3-D plastic sheet model of Dutch North Sea Interpretation Project Block F-7 in the Dutch North Sea;
- Proposal paper for a feasibility study of developing hardware and software to do interactive seismic interpretation and simultaneously display the results in 3D.
- Limited BASIC and FORTRAN programming experience.
- Batch Processing seismic offshore Egypt.
- Processed 1 seismic line offshore Louisiana.
- Hale's refraction project offshore California.
- Helped build stacking velocity computer file for Lithovel Study, Gulf of Alaska.
- Interactive modeling, Gargano High, Italy; Gravity model across Andaman Sea.
- Liaison for MEPSI Geophysical Manager for three months; processed job requests, wrote cables, etc.

Lightning Analysis Projects (inventing a new branch in the geophysical services industry):

#	Date	Location	Comments				
001	16-Jun-08	Colorado County, Texas	First regional test for Vaisala, showing lightning density maps.				
002	16-Jun-08	Colorado County, Texas	Lightning density maps tied to Nehring derived geopressure pods in Colorado County.				
003	16-Jun-08	Colorado County, Texas	Lightning density maps tied to proprietary 3D seismic.				
004	16-Jun-08	Steuben County, New York	Lightning density maps tied to air mag survey and interpreted basement faults in Steuben County.				
005	16-Jun-08	Steuben County, New York	Lightning density mans tied to proprietory gas storage 3				
006	5-Aug-08	South Texas	Lightning attribute maps for large area onshore and offshore South Texas.				
007	8-May-09	Michigan Regional lightning density showed trends into being related to failed rift strike-slip faults.					
008	8-May-09	South Michigan	Did a lot of work relative to the Albion-Scipio Field, a strike slip field defined with aeromagnetics.				
009	27-Dec-09	North Dakota	Data for entire state, no volumes, geostatistical work, including generation of EM-1 & Em-2.				
010	27-Dec-09	Nessen Anticline, North Dakota	Detailed statistical analysis over the Nesson Anticline where oil fields are.				
011	27-Dec-09	First Proprietary 3D Seismic, North Dakota	Statistical Analysis over first proprietary 3D seismic survey.				
012	27-Dec-09	Second Proprietary 3D Seismic, North Dakota  Statistical Analysis over second proprietary 3D survey.					
013	31-Mar-12	Montrail County, North Dakota  Nice correlation of Peak Current with major Ba Fields in Montrail County, North Dakota					
014	7-May-13	Red River County, Texas	Lightning Analysis. Also personally paid to do proprietary 3D seismic interpretation.				
015	7-May-13	Red River County, Texas	Did detail seismic interpretation. Lightning density anomalies overlay possible bright spots on seismic.				

016	1-Jul-13	Hendry County, Florida	First time-lapse lightning attributes maps and animations. They later collected 3D. Company now out of business.		
017	20-May-14	Houston Area, Texas	Did at least 7 projects with this seismic data. Including looking for mapped surface faults in the lightning volumes.  Work for the owner of several wells in southern Michigan		
018	13-Jun-14	South Michigan	Work for the owner of several wells in southern Michigan and we started a calibration test with him. Too busy.		
019	6-Jun-14	Original 3 Domes Iberia Parish, Louisiana	Client negotiated a better price and cannot confirm he paid the invoice amounts. 3 Domes show up in Rise-Time.		
020	16-Jun-14	South Louisiana 3D Survey	Processed the data to match the trace spacing of the proprietary 3D seismic survey.		
021	26-Jun-14	2019 extension in Iberia Parish, Louisiana	We reworked the project across the proprietary 3D seismic survey.		
022	1-Jul-14	Milam County, Texas	Part of the data paid as ORRI. Shallow Eagle Ford wells. Very low production. Spent lot of time in the field.		
023	1-Jul-14	OORI in Milam County, Texas	Client owned 3 leases 2 next to each other on the hill and one across the valley.		
024	1-Jul-14	OORI in Milam County, Texas	Client found us on the Internet after a lightning strike.  Mark Allen funded and negotiated the ORRI.		
025	1-Jul-14	OORI in Milam County, Texas	Western Lease is best prospect for deep serpentine plug good well. There is a viable and big play all the way to Corpus.		
026	5-Dec-14	Goose Point, Louisiana	Co-worker paid for this survey, and we did a lot of field and test work in the area. Kathy Haggar Best Paper GCAGS.		
027	5-Dec-14	Goose Point small area, Louisiana	We got several sparker lines, and many wells, and integrated all of the data into a 3D volume. Good project		
028	6-Jan-15	Resolution Copper, Pinal Co, Arizona	A friend talked me into internally funding this project. Louie Berent demonstrated intrusion halo on lightning data.		
029	30-Jan-15	Katy Area, Texas	Lightning Analysis started at Hockley Dome, and we did a lot processing and interpretation of data here.		
030	31-Jan-15	Brookshire/Sealy Dome, Texas	Proprietary 3D seismic, have not followed up with client.		
031	9-Feb-15	South Houston, Texas	We lost the initial Houston lightning data, reordered, and confusion on the data in-house for this project.		
032	18-May-15	Hockley Dome, Texas	As stated at 030, started at Hockley, Louie Berent did great fault interpretation, do not see the salt dome, R&D.		
033	24-May-15	Northwest Michigan	First processing gave unique anomalies that looked like reefs. Did not have cash flow to get well logs and study more.		
034	24-May-15	Northwest Michigan	Roger Turpening Michigan Tech did a lot of log calibration and provided well data for his MIT Test Sit.		
035	12-Jun-15	South Texas data reorder	Found a paper saying reordered this data, maybe mixed this up with reordering Houston Data. First Risk Point Map.		
036	15-Jun-15	South Texas Bureau of Economic Geology Calibration	An area we did a lot of study and calibration was the Stratton Field in South Texas, tied to other BEG data.		
037	10-Jul-15	Arizona Cu & Au	The client came to Cedar and spent a few days working on the results.		
038	10-Jul-15	Arizona Late, reprocessing after mine start	Client concerned power in the mine impacted lightning. Did 3 processing, 1st 8, 2nd 8, total 16 years.		
039	10-Jul-15	Arizonia All, reprocessed for all lightning data	Presented in Phoenix. Blind Test anomaly. Many other mines, Stock just dropped \$120 and need to follow up.		

040	11-Sep-15	Alleyton, Colorado County, Texas	First resistivity volume matched 3-D proprietary seismic Gave us permission to use 1 cross-section for marketing.		
041	9-Mar-16	Superior, Arizona	Took results to the owner, got a proprietary model, reworked against the model. Owner had no interest in follow-up.		
042	22-Jun-16	Superior, Arizona	Only project where we have done a comparison of NLDN & GLD-360 data. Lower resolution, and similar.		
043	20-Apr-16	Houston, Texas Ship Channel (blue)	There is a lot that can be done with existing data, as shown by Louie Berent's work. Maybe data sets for students.		
044	27-Jun-16	Metro Prospect, Houston, Texas	This is a very viable gas prospect, identified solely with lightning, then correlated with past production.		
045	16-Sep-16	South Texas reinterpretation Louis Berent	Louie Berent reworked a lot of projects, showing how much info is in the lightning maps and cross-sections.		
046	21-Jan-16	Avoyelles, St. Landry, Pointe Coupee Parishes, LA	Told the second project data did not tie. We did not follow up. Early Data Cleaning Report, Austin Chalk Play.		
047	8-Feb-16	Midland County, Texas	Thie client agreed to a test project. Co-worker paid for lightning data. No follow-up after Client contact retired.		
048	15-Jul-16	South Texas Regional BEG 2D Correlation	Kathy Haggar found Ewing report and drove reprocessing South Texas data to correlate with BEG data.		
049	24-Oct-16	Blackhawk, San Bernardino Co., CA	We have satellite data and rock samples. Never did resistivity analysis on rock samples. No money.		
050	10-Mar-17	Barker Reservoir Area, Houston, Texas	We hiked the reservoir dyke, found a fault, correlated wit Houston lightning data, made examples.		
051	9-May-17	Well Best Practice, Offshore, South Texas	Ability to calculate apparent resistivity anyplace means a SPOT <sup>sm</sup> can be a Well Reworking Best Practice.		
052	5-Jun-18	Barrite Hills, McCormick County, South Carolina	Willowstick was connected to 2 co-workers, and we have done 3 projects with or for them.		
053	5-Jun-18	Barrite Hills, McCormick County, South Carolina	Willowstick provided USGS Conductivity Surveys, fluid flow models, mine info, we integrated the data.		
054	19-Apr-18	Geothermal, Newcastle, Utah	Successful geothermal well, raising money for production wells and a 20 MW Geothermal Power Plant.		
055	8-Aug-18	Sleeper Mine, Humboldt County, Nevada	Spent a lot of time on this. Was attempting to sell leases. Company that owns Sleeper bought leases.		
056	8-Aug-18	Sleeper Mine, Humboldt County, Nevada	Found interesting trends, proved lightning works, want regional study and someone to buy claims along trends.		
057	20-Aug-18	Manisee County, Northwest Michigan	Reordered and reprocessed Michigan data. Need money to purchase logs, tie logs, someone to buy leases.		
058	11-Sep-18	Tied earthquake Cushing County., Oklahoma	Chief Geophysicist left OGS. Time-Lapse resistivity differences before & after injection induced quake.		
059	25-Sep-18	Covenant Field, Sevier County, Utah	Did a test and showed lightning can see overthrust. Want to do this regionally and find a client for new fields.		
060	25-Sep-18	Quantec Mine, Alberta, Canada	Geophysicist suggested took job in Australia. Have not tied published data on mine. 1st Canadian project.		
061	16-Oct-19	Hildale, Washington County, Utah	Water test Mark Burr helped us sell. The water well has not been drilled yet. Gave suggested locations.		
062	30-Apr-21	North Dakota Antelope Red SPOT <sup>sm</sup>	Used the North Dakota data to write a paper with Dan Ebrom for marketing, Red SPOT <sup>sm</sup> on the west.		
063	30-Apr-21	North Dakota Blue SPOT <sup>sm</sup>	Separate extraction of data and processing of the Blue SPOT <sup>sm</sup> on the east.		
064	30-Apr-21	North Dakota LINE <sup>sm</sup>	LINE <del>sm</del> , note resistivity anomaly at updip pinchout of Bakken and permittivity anomaly at iridium outcrop.		

065	16-Apr-22	Harmony Hills, Iron County, Utah	Willowstick only wanted to look where the City had rights, excellent geologic results, not used.			
066	24-Apr-22	Shirts Canyon, Iron County, Utah	Did additional work to show strike-slip fault interpretation, not used by Willowstick or Cedar City.			
067	20-Mar-23	Washington County, Illinois	First sequestration test, no one evaluated the data, opportunities for follow-on projects with NETL.			

#### HONORS AND SOCIETIES

- Co-Founded Southwestern Heritage Center Historical Society (<u>swhchs.org</u>) with Alva Leon Matheson and Frank Nichols, 23 November 2021. Determination Letter converting non-profit to a <u>501 (c) 3 Non-Profit</u>, 08 June 2022. Had 351 stories in the <u>Stories Database</u> (wrote 24 of these stories), as of 01 August 2023.
- Utah Geological survey, Survey Notes, Director' Perspective: "The times they are a-changin'," Bill Keach, Volume 53, Number 3, September 2021.
- President-Elect, President, Past-President, Cedar City Chapter of Sons of Utah Pioneers, 2018-2021, Cedar City Chapter Board Member and Monuments and Trek Committee 2021-Present.
- <u>Paul Nelson's comments about growing up with an entrepreneur</u>, Chief Architect of the Northrop Grumman Integrated Digital Enterprise (NGIDE) 2.0, Northrup Grumman, ONE, 1st Q 2021, page 34.
- GSH Journal, A Conversation with Roice Nelson, (Geophysical Society of Houston), 29 Jan 2011, p 18-22.
- CSEG Journal, <u>Think outside the box? He doesn't even know there is a box!</u> (Canadian Society of Exploration Geophysics), Satinder Chopra and Penny Colton Interview July 2007, Jan 2008, pages 12-24.
- TLE, H. Roice Nelson Jr.: Quixotic geophysics, Dolores Proubasta, The Leading Edge of The Society of Exploration Geophysicists (SEG), Jul 2003, pages 622-628.
- HBJ, "A Landmark Trend in oil exploration," L. Brubaker (Houston Business Journal), 12 Jan 1987, p. 12.
- American Association of Petroleum Geologists (Associate Editor, Geobyte, 1985-1992).
- Canadian Society of Exploration Geophysicists, 1984-1992.
- Geophysical Society of Houston (received Honorary Membership for life, 1990).
- Houston Geological Society, 1999-2002.
- <u>Society of Exploration Geophysics</u> (<u>Associate Editor</u>, <u>Geophysics</u>, The Journal of the SEG, 1989-90; <u>Enterprise Award</u>, 1999), Life Member.
- Excellence of Poster Presentation: "The Stratigraphy, Sedimentology and Chronostratigraphy of the Mobil Bay Fan, Northeastern Gulf of Mexico, coauthored by D. Bradford Macurda, Jr. and Gary L. Jones, SEPM (Society for Sedimentary Geology), 07 March 1995.
- Resolution passed by unanimous consent of The Board of Directors of Landmark Graphics Corporation: "... recognizing that the success which the Company has attained has been in large measure do to Mr. Nelson's earnest efforts and untiring devotion ...," 12 January 1995.
- World Future Society, 1990-1996.
- Urban Land Institute, 1993-1996.
- European Association of Exploration Geophysicists, 1981-1994.
- Chinese Society of Scientists in 1989-1992.
- Who's Who in the South and Southwest, 1979-1987 editions.
- Dallas Geophysical Society, 1976-1980.
- Society of Exploration Geophysicists Scholarship, 1973-1974
- Sun Oil Scholarship, 1973.
- Missionary, <u>The Church of Jesus Christ of Latter-Day Saints</u>, British Mission turned England East Mission, Canterbury, Ipswich, Norwich, Harlow New Town, Islington, Hyde Park, 1970-1972.
- Phi Eta Sigma (freshman honorary fraternity).
- Pan American Petroleum Scholarship, 1969-1970.
- Phi Sigma Kappa scholarship award, 1969, in Phi Sigma Kappa (social fraternity).
- Honors at Entrance Scholarships, University of Utah (and Utah State University, turned down), 1968-1969.

## SCHOOLS ATTENDED

- Fundamentals of Gas Hydrate Resource Evaluation, Art Johnson, Hydrate Energy International, Tim Collett, USGS, AAPG Annual Convention, San Antonio, Texas, 29 Apr 2008.
- A Framework for B2B, Net Market Makers Ground Zero 2, Houston, Texas, 16 Nov 1999.
- Staging for a Successful IPO, at Continuum Resources International Corporation, by AVP Enterprise, Inc., 29 Jan 1999.
- Decision Makers Workshop, Lamont Portfolio Management Consortium (derivative of Global Basin Research Network, see above), 04-05 Dec 1997.
- The Cutting Edge: Commercialization Advanced Technology, Mid-Continent Technology Transfer Center (MCTTC), Clear Lake, Texas, 20 Apr 1995.
- Basin Analysis and Sedimentary Geology, Houston, TX, 1990.
- Stereographics Course, SIG-Graph 1990 17<sup>th</sup> International Conference, Dallas Convention Center, 06 Aug 1990.
- How to Compete Against Price, Presentation for Landmark Graphics by Southern Methodist University, 31 Aug 1989.
- Vertical Seismic Profiling, A Short Course and Seminar, Southeastern Geophysical Society, New Orleans, LA, 25 March 1981.
- Three-Dimensional Display Techniques, Institute for Graphics Communications, Andover, MA, May 20-22, 1980.
- 3-D Seismic Technique School, SEG, Houston, TX, 18-19 September 1979.
- Carbonate/Sandstone Short Course, Mobil FRL, North Texas, 21-25 August 1978.
- Introductory Well Logging School, Mobil ESC, Dallas, TX, 16-18 August 1977.
- HCI School, Mobil ESC, Dallas, TX, 18-22, April 1977.
- Basic Well Logging School, Mobil ESC, Dallas, TX, 1-19 November 1976.
- Gravity and Magnetics School, Mobil ESC, Dallas, TX, 1 week, April 1975.
- Seismic Exploration II, Mobil ESC, Dallas, TX, 28 October 8 November 1974.
- Mobil Oil Corporation, 1-year training, Dallas, TX, Lagos, Nigeria, and Kalamazoo, MI, 1974-1975.
- Mission: The Church of Jesus Christ of Latter-Day Saints, Called to British Mission, changed to England East Mission just before reported, Oct 1970 Nov 1972.
- N.S.F. Earth Sciences Program (Meteorology, Oceanography, and Geology), Oregon State University, Corvallis, OR, 7 weeks, summer of 1968.
- J.E.S.S.I. (Junior Engineers and Scientists Summer Institute), New Mexico State University, Las Cruces, New Mexico, two weeks summer of 1967.

# **ACTIVITIES**

- U.S. Patent: "Efficient Integration of Data into Augmented and Virtual Reality Environments," H. Roice Nelson, Jr., Steven C. Swann, United States Patent Office, US Patent 11,494,952 B1, Cedar City, Utah, 08 November 2022; 24 August 2023 Publication.
- U.S. Patent: "Method for Determining Geological Surface and Subsurface Resistivity," L.R. Denham, H. Roice Nelson, Jr., & D. James Siebert, United States Patent Office, US Patent 9,523,785 B2, Houston, TX, 20 Dec 2016.
- U.S. Patent: "Method for Locating Sub-Surface Natural Resources," H. Roice Nelson, Jr, Joseph H. Roberts,
   D. James Siebert, Wulf E. Massell, Samuel D. LeRoy, Leslie R. Denham, Robert Ehrlich, Richard L. Coons,
   United States Patent Office, US Patent 8,344,721 B2, Houston, TX, 01 Jan 2013.
- 2 Chinese news releases, each tied to a project Roice did the first interpretation on for Chinese clients:

Date: Oct 12, 2007 3:41 PM Subject: Dabei-3

The gas field, known as Dabei-3, boasts an estimated reserve of as much as 130 billion cubic metres, and will serve as an important backup supply source for the west-east gas pipelines," the unnamed source told the China Daily newspaper. PetroChina's Beijing office declined to comment but the official Xinhua news agency quoted officials in the Xinjiang as confirming the company had discovered 130 bcm of natural gas.

The discovery has the potential to be the third largest gas field in Xinjiang, after Kela-2 and Dina-2 gas fields, said Dai Jinxin, a researcher with the Research Institute of Petroleum Exploration and Development

affiliated with PetroChina. "Gas fields with reserves of more than 100 bcm are considered giant gas fields even globally," Dai said. Since more exploration and evaluation are needed at the new field, it is too early to give any specific figures, the source added.

"We will drill more appraisal wells to determine the final reserve at a cost of around 200 million yuan (\$26.6 million)," the insider said.

#### Second

20 March 2007 06:03 GMT | last updated: 20 March 2007 07:05 GMT

PetroChina joins Bohai payday By Upstream staff

PetroChina has made a significant oil discovery in the tidal and shallow water areas of Bohai Bay in northern China, the company said at a press conference. The Beijing-based integrated giant said "a series of significant breakthroughs and important developments were accomplished at the Jidong tidal and shallow water areas in Bohai Bay Basin".

With an initial daily output of 500 tonnes (3700 barrels), the Bohai Bay field is "the largest find in China in 10 years," said PetroChina's vice-chairman and president Jiang Jiemin at a press conference in Hong Kong yesterday. No other details on the field were revealed.

The company said it also made breakthroughs at "Baibao, Jiyuan and the surrounding areas of Sulige in the Erdos Basin, the northern part of Songliao Basin, the Sichuan Basin, and the northwestern rim of the Junggar Basin," China Daily reported. PetroChina said it now has six domestic oil and gas fields with annual output "breaking through 10 million tonnes of oil equivalent" including Daqing, Changqing, Tarim, Xinjiang, Liaohe and the Southwest oilfields.

Another large Chinese oil company CNOOC Limited yesterday revealed a large oil and gas discovery in Bohai Bay called Bozhong (BZ) 28-2E.

CNOOC Ltd said it had made four discoveries in the Yellow River Mouth Sag of Bohai Bay and hoped "to develop a large-scale cluster of oil and gas fields in the future".

- Instructor, <u>Lightning Analysis Basics</u>, 421-page manual:
  - 1. Iron Springs Resort, 19-21 January 2021
- Instructor, "Interactive 3-D Seismic Interpretation Emphasizing Carbonates," H. Roice Nelson, Jr., Dubai Princess Hotel, Interadigm Course, 27 September 2011:
  - 1. Introductions and Overview
    - The Brain Exercise
  - 2. Relating Seismic Acquisition, Processing, and Interpretation
    - SketchUp Exercises
    - SALNOR Workshop & Answers
  - 3. <u>Seismic Interpretation Principles and Workflow</u>
    - Contouring Exercise
    - Carbonate Outcrop Workshop
    - Carbonate Patterns Workshop
  - 4. Seismic Attributes
  - 5. Advanced Seismic Interpretation and Reservoir Characterization
  - 6. Seismic Exploration Breakthroughs
- Arranged publication into Chinese of Fred J. Hilterman's book: "Seismic Amplitude Interpretation," <u>Cover, Bio, Preface</u>, 29 Nov 2006.
- GSH 1999 Spring Symposium / 15<sup>th</sup> Annual SEG Gulf Coast Technical Meeting and Virtual Reality Tour, page 13, H. Roice Nelson, Jr. General Chairman, Continuum Resources Corporation, April 15-16, 1999.
- Co-authored with Dr. Carolyn Sumners and Gary Young, "<u>Astronomy of the Ancient Americas</u>," Houston Museum of Natural Science, Burke Baker Planetarium Show, Houston, TX, 03 January 29 May 1992.
- Instructor, Landmark School: Interactive Sequence Stratigraphy:
  - 1. Sydney, Australia, 25 February 1991
  - 2. Melbourne, Australia, 26 February 1991
  - 3. Perth, Australia, 28 February 1991 & Perth, Australia, 01 March 1991
  - 4. Jakarta, Indonesia, 4 March 1991 & Jakarta, Indonesia, 5 March 1991

- Instructor, Landmark School: <u>New Technologies in Exploration Geophysics</u>: Prior to Congreso Venezolano De Geofisica, Caracaras, Venezuela, one day course for Venezuelan oil company managers, 20 Oct 1990.
- Instructor, Landmark School: <u>Interactive Interpretation Procedures</u>:
  - Public Schools:
    - New Orleans, LA, April, 1987.
    - London, England, 26-29 May 1986.
    - Washington D. C., October, 1985.
    - Denver, CO, 15-26 July 1985
    - London, England, 3-13 April 1985
    - Houston, TX, 1-12 April 1985
    - Calgary, Alberta, Canada, 19-27 February 1985
    - New Orleans, December 1984
    - Houston, TX, October 1984
  - 2. Private Schools:
    - Amoco, New Orleans, LA, August 1986
    - Orion Surveys, Kristiansand S., Norway, 27-28 February 1986
    - Placid, New Orleans, 19-21 November 1985
    - Texaco, New Orleans, 28-30 October 1985
    - Texaco, Los Angeles, CA, 24-26 June 1985
    - Marathon International, Houston, 22-25 April 1985
    - Shell Research, The Hague, 21-25 January 1985
- Instructor, IHRDC school: New Technologies in Exploration Geophysics:
  - 1. Public Schools:
    - Derah Dun, India, 16-20 December 1985.
    - Denver, CO, 5-7 September 1984.
    - London, England 25-27 June 1984.
    - Calgary, Canada May 2-4, 1984.
    - Houston, Texas March 21-23, 1984.
    - Derah Dun, India, 7-11 November 1983.
    - Caracas, Venezuela, 20 October 1983.
    - London, England, 6-8 June 1983.
    - Denver, CO, 18-20 May 1983.
  - 2. Private Schools:
    - Getty Oil, Houston, TX, 4-7 June 1984.
    - IFP, Paris, France, 29 February 2 March 1984.
    - Bass Enterprises, Steamboat Springs, CO, 6 December 1983.
    - Caracas, Venezuela, October 1983.
- Instructor, Landmark Graphics Sales Training, March 25, 1984.
- Guest Speaker, Pacific Coast Section of the SEG:
  - 1. Los Angeles, CA, 02 November 1988
  - 2. Bakersfield, CA, 01 November 1988
  - 3. Ventura, CA, 31 October 1988
- Guest Speaker, Pacific Coast Section of the SEG:
  - 1. Bakersfield, CA, 14 May 1985.
  - 2. Los Angeles, CA, 13 May 1985.
- Guest Speaker, Southeastern SEG, New Orleans, LA, 30 April 1985.
- Guest Speaker, CPS/SEG Joint Meeting, Beijing, People's Republic of China, 12-16 April 1985.
- Guest Speaker, Houston Geophysical Society's Modeling Symposium, Houston, TX, 10 May 1983.
- Co-Authored with Martha Ellyn Nelson, and helped put on a two-hour musical with twelve original songs, "Swedish Roots," Dallas First Ward, Dallas, TX, 1979, Maplewood II Ward, Houston, TX, 15 April 1983.
- Guest Speaker, Tulsa Geophysical Society's Seminar "Computer Assisted Interpretation," Tulsa, OK, 21 March 1983.
- Guest Speaker, Austin Geological Society, Monthly Meeting, Austin, TX, 7 March 1983.

- Guest Speaker, Texaco, Thursday Research Seminar, Houston, TX, 2 December 1982.
- Guest Speaker, Distinguished Lecture Series, Southern Utah State College, Cedar City, UT, 5 August 1982.
- Guest Speaker, CDC Petroleum Executive Seminar, Minneapolis, MN, 12-14 July 1982.
- Lecturer, SAL 3-D Seismic Techniques School, Oxford, England, 15-17 June 1982.
- Lecturer, SAL 3-D Seismic Interpretation Workshop, Norwegian Petroleum Society, Kristiansand S., Norway, 10-12 March 1982.
- Lecturer, SEG 3-D Seismic Techniques School:
  - 1. Houston, TX, 9-10 December 1981
  - 2. Calgary, Alberta, Canada, 8-9 June 1981.
- Guest Speaker, CDC Petroleum Executive Seminar, Minneapolis, MN, 3-5 June 1981.
- Quoted in John Noble Wolford's "The Mapmakers," Alfred a. Knopf, New York, 1981.
- First documented Description of Geophysical Work Experience, December 1979.

## CO-ORGANIZED THESE SEG RESEARCH COMMITTEE WORKSHOPS:

- Anderson, R. N., Lamont-Doherty Geological Observatory; Cathles III, L. M.; Nunn, J.; Nelson, Jr., H. R.; Klaveness, A., Klaveness Research; "Active Fluid Flow in Dynamic Sedimentary Basins," Workshop at SEG Sixty-Second Annual International Meeting and Exposition, New Orleans, LA, 25-29 October 1992.
- Bahorich, Mike, Amoco Research; Bowen, Bruce, TGS; Brumbaugh, Conoco; Dorn, Geoff, ARCO; Johnston, Dave, Exxon; Jones, Gary and Nelson, Jr., H. R., Landmark/LGC; "Sequence Stratigraphy," Workshop at SEG Sixty-Second Annual International Meeting and Exposition, New Orleans, LA, 25-29 October 1992.
- Cauldwell, Jack; "Lithology Determination," SEG Research Committee Summer Workshop, St. Louis, MO, 29 July - 1 August 1991.
- Kirk, Rob; and Nelson, Jr., H. R.; "Petroleum Exploration Sequence Stratigraphy," Workshop at ASEG 8th Conference and Exhibition, Sydney, Australia; 22-24 February 1991.
- Nelson, Jr., H. R.; Stark, Tracy J.; Wyatt, Kay Dautenhahn; Dorn, Geoffrey A.; Ottolini, Richard A.; Massell, Wulf F.; Sovelius, Paul E.; and Shanks, John L.; "Scientific Visualization;" Society of Exploration Geophysicists Sixtieth Annual International Meeting & Exposition; San Francisco, CA; (Report by John L. Shanks) 28 September 1990.
- Nelson, Jr., H. R.; and Hugg, James W.; "Sequence Stratigraphy," Society of Exploration Geophysicists 58th Annual International Meeting and Exposition; Anaheim, CA; 03 November 1988.
- Wyatt, R. D.; Nelson, Jr., H. R.; Wassen, C. B.; "Interval Velocity Determination;" Society of Exploration Geophysicists Annual International Meeting and Exposition; Houston, TX; 11-15 October 1987.
- Treitel, Sven; Hoover, Gary; Paul, Don; Hilterman, Fred J.; Skerl, Damirl; Hewitt, Marvin R.; Elliott, Sheldon E.; and Nelson, Jr., H. R. who gave a presentation titled: "The Role of Technology Transfer," Research Committee Symposium; Annual SEG Convention; Houston, TX; November 1986.

## PROFESSIONAL PRESENTATIONS

- 299. "230303 Efficient Integration of Data," White Paper by H. Roice Nelson, Jr. & Steven C. Swann 298. "Concentrations of placer minerals in Mississippian Antler Basin regressive sequences," Dr. Alan Chamberlain, Larry McMaster, and H. Roice Nelson, Jr., Nevada Geological society Symposium, Reno, NV, 02-04 May 2022.
- 297. "Detecting metal concentrations with surface gamma ray logs," Dr. Alan Chamberlain, Larry McMaster, and H. Roice Nelson, Jr., Nevada Geological society Symposium, Reno, NV, 02-04 May 2022.
- 296. "<u>Great Basin portion of the western North American Cordillera</u>," Dr. Alan Chamberlain, Larry McMaster, and H. Roice Nelson, Jr., Nevada Geological society Symposium, Reno, NV, 02-04 May 2022.
- 295. "Regional Lightning Analysis," Screen Capture & Supporting Animation, Les R. Denham, Dr. Dan Ebrom, and H. Roice Nelson, Jr., Hart Energy, 05 July 2021.
- 294. "<u>Rainbird Village</u>," Colleen Dick, Harrison Quigley, H. Roice Nelson, Jr., Plans for Permaculture Development near Cedar City, 12 May 2021.
- 293. "Bavinger House and Lighting," Friends of Kebyar Journal, v35.2 No. 90, Dec 2020.
- 292. "<u>Lightning Analysis Creating Geo-Frameworks</u>," (<u>PowerPoint animations</u>), Sun City Rock-On Geology Club, 12 Oct 2019.

- 291. "Field to Regional Lightning Analysis Projects Results and Opportunities," Dynamic Measurement White Paper, H. Roice Nelson, Jr., July 31, 2019.
- 290. "Recent advances in remote sensing technologies for hydrocarbon exploration and environmental evaluation," Yong Ye Li, Roice Nelson, William Jeffery, Douglas Foster, Dominique Dubucq, Michel Verliac, Khalid Soofi, and Ira Leifer, The Leading Edge, pages 554-555, July 2019.
- 289. "The Nature of Members of the Godhead, Angels, and Satan," H. Roice Nelson, Jr., White Paper, June 15, 2019.
- 288. "<u>Untapped Aquifers Cedar Valley Drainage Basin,</u>" H. Roice Nelson, Jr., Notes for Iron County Commissioners: Untapped Aquifers Field Trip, 08 Mar 2019
- 287. "Does Lightning Strike Twice?" H. Roice Nelson, Jr., Les R. Denham, Dr. Jim Siebert, & Kathleen S. Haggar, GEO ExPro Volume 15 number 5 pages, London, England, 22 Oct 2018.
- 286. "Lightning Analysis at South Carolina Superfund Site," (PowerPoint) Kathleen S. Haggar & H. Roice Nelson, Jr., SEG 2018 Annual Convention Remote Imaging Workshop, Anaheim, CA, 19 Oct 2018.
- 285. "Harris County, Texas Lightning Analysis Fault Interpretation," L. J. Berent & H. Roice Nelson, Jr., SEG 2018 Annual Convention Remote Imaging Workshop, Anaheim, CA, 19 Oct 2018.
- 284. "Remote Imaging and Lightning Analysis" (Abstract, PowerPoint animation), H. Roice Nelson, Jr., Les R. Denham, and Dr. Jim Siebert, SEG 2018 Annual Convention Remote Imaging Workshop, Anaheim, CA, 19 Oct 2018.
- 283. "Dynamic Measurement Seeking \$600,000 To Build a New Branch in the Geophysical Services Industry," (PowerPoint animation) H. Roice Nelson, Jr., Les R. Denham, Dr. Jim Siebert, Michael F. Reed, Louis J. Berent, & Kathleen S. Haggar, SEG 2018 Annual Convention JaWS (Juice a Winning Startup Shark Tank), Anaheim, CA, 16 Oct 2018.
- 282. "Integrated EM technologies map contamination plumes, seeps, geohazards faults and possible migration pathways at Barite Hills / Nevada Gold Fields EPA Superfund Site in South Carolina, USA: <u>Left</u>, <u>Middle</u>, <u>Right</u>," Kathleen S. Haggar, H. Roice Nelson, Jr., & Louis J. Berent, 2018 AAPG Annual Convention, Salt Lake City, Utah, 22 May 2018.
- 281. "Mapping Subsurface Faults with Lightning and Resistivity: <u>Left, Middle, Right,</u>" Louis J. Berent & H. Roice Nelson, Jr., 2018 AAPG Annual Convention, Salt Lake City, Utah, 22 May 2018.
- 280. "Mining and Oil & Gas Applications of Lightning Analysis," Dr. D. James Siebert, Kathleen S. Haggar, Louis J. Berent, & H. Roice Nelson, Jr., Vaisala's Bi-Annual ILDC/ILMC Convention, Ft. Lauderdale, FL, 13 Mar 2018.
- 279. "<u>Lightning data analysis provides geologic insights at South Carolina EPA Superfund Site</u>," Kathleen S. Haggar, Dr. D. James Siebert, Louis J. Berent, & H. Roice Nelson, Jr., Vaisala's Bi-Annual ILDC/ILMC Convention, Ft. Lauderdale, FL, 13 Mar 2018.
- 278. "Shocking Path of Least Resistance Shines Light on Subsurface by Revealing the Paths of Water and the Presence of Faults: Stacked EM Case Studies over Barite Hills Superfund Site in South Carolina -or- 3 EM Case Studies over a superfund Site / Former Gold Mine, South Carolina, USA," Kathleen S. Haggar, H. Roice Nelson, Jr., and Louis J. Berent, AGU (American Geophysical Union), New Orleans, LA, 13 Dec 2017.
- 277. "How to Test Fractured Quartz Monzonite Aquifer; How to Test Cretaceous Aquifer," H. Roice Nelson, Jr., 5-page answer to Paul Cozzens' question "How do you test these proposed new aquifers?", 17 Aug 2017.
- 276. "Lightning Risk Points," H. Roice Nelson, Jr., The Leavitt Group, Cedar City, Utah, 28 Jun 2017.
- 275. "An Unconventional Tool for Unconventional Exploration AAPG Poster 2614153," Louis J. Berent & H. Roice Nelson, Jr., 2017 AAPG Annual Convention, Houston, Texas, 05 Apr 2017.
- 274. "Calibrating Apparent Resistivity Traces, Lines, and Volumes Derived from Lightning Strike Data in South TX AAPG Poster 261411," Kathleen S. Haggar, H. Roice Nelson, Jr., Louis J. Berent, & Les R. Denham, 2017 AAPG Annual Convention, Houston, Texas, 05 Apr 2017.
- 273. "Harnessing Lightning in the Hunt for Hydrocarbons AAPG Poster 2614175," Louis J. Berent & H. Roice Nelson, Jr., 2017 AAPG Annual Convention, Houston, Texas, 04 Apr 2017.
- 272. "Memorial, Richard L Coons," The Leading Edge, page 362, April 2017.
- 271. "Geology and Water: The Framework of Southern Utah," H. Roice Nelson, Jr., The Iron County Historical Society Monthly Meeting, Cedar City, Utah, 08 Mar 2017.
- 270. "Lightning Analysis: creating geo-frameworks," H. Roice Nelson, Jr., University of Utah Geoscience Department invited presentation to faculty and students, Salt Lake City, Utah, 03 Mar 2017
- "<u>Lightning Analysis: creating geo-frameworks</u>," H. Roice Nelson, Jr., Southern Utah Rock Club Monthly Meeting, Cedar City, Utah, 02 Mar 2017.

- "Interview on Empire-Broadcasting Radio Network," H. Roice Nelson, Jr. by Michael David, New York, New York from Cedar City, Utah, 05 Jan 2017.
- 267. "<u>Lightning Analysis for Mapping Faults and Identifying Exploration Sweetspots</u>," H. Roice Nelson, Jr., 201 SEG Convention HPC Visualization Theater, Dallas, TX, 17-18 Oct 2016.
- 266. "<u>Using Lightning Databases to derive Rock Property and Lightning Attribute Maps and Volumes</u>," H. Roice Nelson, Jr. & Dr. Jim Siebert, presentation to students and professors tied to joint geothermal grant, application, SMU (Southern Methodist University) University Presentation, Dallas, TX, 14 Oct 2016.
- 265. "Lightning Analysis for Mapping Faults and Identifying Exploration Sweetspots," with notes, H. Roice Nelson, Jr., Rocky Mountain + Pacific Coast AAPG Meeting, Las Vegas, NV, 04 Oct 2016.
- 264. "The History of Seismic Interpretation Workstations," H. Roice Nelson, Jr., DHI (Direct Hydrocarbon Indicator) Consortium Meeting, The Woodlands, TX, 22 Sep 2016.
- 263. "<u>Lightning Sparks Interest in the Unconventional Mapping of Active Subsurface Faults</u>," Louis J. Berent & H. Roice Nelson, Jr., 2016 GCAGS (Gulf Coast Association of Geological Societies) Oral Presentation, Corpus Christi, TX, 19 Sep 2016.
- 262. "New Lightning Attribute Volumes Compared to the BEG's Stratton 3D Seismic Survey," Kathleen S. Haggar, Les R. Denham, and H. Roice Nelson, Jr., 2016 Gulf Coast Association of Geological Societies (GCAGS), Corpus Christi, TX, 19 Sep 2016.
- 261. "The Cedar Valley Aquifer and The Cedar Valley Drainage Basin," Gary Farnsworth Player & H. Roice Nelson, Jr., Cedar City Rotary Club, Cedar City, Utah, 06 Sep 2016.
- 260. "The Cedar Valley Aquifer and The Cedar Valley Drainage Basin," Gary Farnsworth Player & H. Roice Nelson, Jr., Presentation to the Board of Commissioners of the County of Iron, State of Utah, Parowan, Utah, 11 Jul 2016.
- 259. "Lightning Sparks Interest in Unconventional Exploration!" Whiting Petroleum Webinar, Cedar City UT to Midland, TX, Roice Nelson & Louis Berent, 03 Mar 2016.
- 258. "Introduction: Using Lighting Databases to obtain resistivity information for geothermal exploration," H. Roice Nelson, Jr., Dr. Jim Siebert, and Les R. Denham, DOE HADES (Hot And Deep Energy Seminar) Lunch 'N Learn Webinar, Cedar City, UT to Denver, CO and Pittsburg, PA, 19 Jan 2016.
- 257. "<u>Lightning, A Shockingly Unconventional Technology for Exploration</u>," D. James Siebert, Louis J. Berent, & H. Roice Nelson, Jr., West Texas Geological Society Bulletin, Volume 55, Number 3, pages 16-17 & 20-23, Jan 2016.
- 256. "A New E&P Tool Lightning Database," H. Roice Nelson, Jr., DML University Program Webinar for Texas A&M Graduate Students, on-line from Cedar City, Utah to College Station, Texas, 06 Oct 2015.
- 255. "<u>Lightning, A Shockingly Unconventional Way to Conduct Exploration</u>," Louis Berent & Roice Nelson, 2<sup>nd</sup> Annual Texas Hydrogeology Workshop, Cave Without A Name, Boerne, TX, 25 Sep 2015.
- 254. "Mapping Faults with Lightning, Natural-Sourced Electomagnetics (NSEM)," Louis J. Berent (with H. Roice Nelson, Jr.), GCAGS, September 22, 2015.
- 253. "Analysis of the Goose Point area near Lacombe, Louisiana, Validates new geophysical Data Type –
  Natural Sourced Electromagnetism (NSEM) for Detection of Lineaments Associated with Faults and
  Sedimentary Features," Kathleen S. Haggar, Les R. Denham, and Louis J. Berent (with H. Roice Nelson,
  Jr.), GCAGS, September 22, 2015.
- 252. "Rock Properties from Lightning Databases: Transforming Geotechnical Operations and Accelerating the <u>Time-to-Value</u>," H. Roice Nelson, Jr. & Dr. Jim Siebert, Landmark LIFE (Landmark Innovation Forum and Exposition), Houston, TX, 25-26 Aug 2015.
- 251. "Optimizing West Desert Drilling Locations with Maps and Rock Property Volumes Derived from Lightning Databases," H. Roice Nelson, Jr., CICWCD Board Meeting (Central Iron County Water Conservancy District), Cedar City, UT, 18 Jun 2015.
- 250. "Geologic Frameworks derived from Lightning Maps and Resistivity Volumes," Kathleen S. Haggar, Louis J. Berent, & H. Roice Nelson, Jr., 2015 AAPG Annual Convention, Denver, CO, 02 Jun 2015
- 249. "Aquifers, Faults, Subsidence, and Lightning Databases," K. S. Haggar, L. Denham, & H. R. Nelson, Jr., Louisiana Remote Sensing & GIS Conference, Baton Rouge, LA, 12 May 2015.
- 248. "Aquifers, Faults, Subsidence and the Lightning Data Base ... and Lagniappe," K. S. Haggar, L. Denham, & H. R. Nelson, Jr., NOGS Lunch (New Orleans Geological Society), New Orleans, LA, 04 May 2015.
- "<u>Lightning A Shockingly Unconventional Technology for Exploration</u>," Jim Siebert, Louis Berent, & Roice Nelson, 2014 SW-AAPG Convention, Wichita Falls, TX, 14 Apr 2015.
- 246. "Deriving Exploration Maps and Rock Property Volumes from Lightning Databases," H. Roice Nelson, Jr. & Dr. D. James Siebert, Introductory Presentation at Brigham Young University, Provo, UT, 22 Jan 2015.

- 245. "Using Lightning for Exploration," Les R. Denham, Dr. Jim Siebert, and H. Roice Nelson, Jr., GSH (Geophysical Society of Houston) Potential Fields SIG (Special Interest Group), Houston, TX, Jan 15, 2015.
- 244. "Plan, Build, and Protect Remotely Mapping Geology with Naturally Sourced Electromagnetic Analysis (NSEM)," Kathleen S. Haggar & H. Roice Nelson, Jr., New Orleans Division - U.S. Army Corps of Engineers, New Orleans, LA, 19 Dec 2014.
- 243. "SLFPA-W Geological Facts-of-Life: Flood Protection in Coastal Louisiana," Kathleen S. Haggar & H. Roice Nelson, Jr., Technical Review SLFPA-W (South Louisiana Flood Protection Agency West), New Orleans, LA, 17 Dec 2014.
- 242. "<u>Using Resistivity from Lighting Databases in Exploration</u> 5 Resistivity Volume movies: <u>George Bush Park.gif; North Houston.gif; cube display.gif; log-correlation movie.gif;</u> and <u>seismicresisivity movie.gif</u>, Kathleen S. Haggar & H. Roice Nelson, Jr., Joint Lafayette Geological Society (LGS) & Lafayette SIPES Lunch, Lafayette, LA, 19 Nov 2014.
- 241. "Resistivity Volumes from Lightning Databases," "Seminar on Resistivity Volumes," Dr. Jim Siebert, Les R. Denham, and H. Roice Nelson, Jr., Hilton Garden Inn during 2014 SEG Convention, Denver, CO, 29 Oct 2014.
- 240. "Aquifers, Faults, Subsidence, and Lightning Databases," Kathleen S. Haggar, Les R. Denham, and H. Roice Nelson, Jr., 2014 Gulf Coast Association of Geological Societies (GCAGS), Lafayette, LA, 07 Oct 2014.
- 239. "<u>Using Lightning Data Analysis as a geologic framework for Exploration and Planning</u>," H. Roice Nelson, Jr., Southern Utah University Science Center Room 122, Cedar City, Utah, 22 Sep 2014.
- 238. "Enhancing Reservoir Characterization using Lightning Strike Data," H. Roice Nelson, Jr., Dr. Jim Siebert, and Les R. Denham, LIF: Landmark Innovation Forum, Houston, TX, 04 Sep 2014.
- 237. "Cedar Valley Water Field Trip Notes," Gary F. Player Geologist, H. Roice Nelson, Jr. Geophysicist, Field Trip for Brent Hunter, Paul Monroe, and Spencer Jones, Central Iron County Water Conservancy District (CICWCD), Cedar City, Utah, 18 Jul 2014.
- 236. "<u>Lightning Maps and Resistivity Volumes</u>," First Announcement Resistivity Volumes, Barker, TX, 20 May 2014.
- 235. "Mapping Faults and Natural Resources with Lightning Data Bases," H. Roice Nelson, Jr., Xie Zhishuang (Steven), D. James Siebert, L.R. Denham, CPS-SEG 2014 Conference: Advancing Geophysical Innovation, Beijing, China, 21 Apr 2014.
- 234. "The Technology and Economics of Lightning Analysis," H. Roice Nelson, Jr. & Kathy S. Haggar, Southwest Louisiana Geophysical Society, Lafayette, LA, 15 Apr 2014.
- 233. "Telluric and Earth Currents, Lightning Strike Locations, and Natural Resource Exploration," H. Roice Nelson, Les Denham, and Dr. Jim Siebert, 2014 AAPG Annual Convention, Houston, TX, 09 April 2014.
- 232. "Lightning, A New Key for Pipeline Protection," Jim Siebert (and silent author, Roice Nelson), Pipeline & Gas Journal, Vol. 241 No. 2, 18 Feb 2014.
- 231. "Finding Faults with Mother Nature," Rhonda Duey, Executive Editor's interview with Roice Nelson and Jim Siebert, Hart Energy, Houston, TX, 03 Feb 2014.
- 230. "Analytics, Aquifers, Faults, and Lightning Databases," H. Roice Nelson, Jr. & Kathy S. Haggar, Baton Rouge Geological Society, Baton Rouge, LA, 13 Dec 2013.
- 229. "There is a difference between an education and obtaining a degree, from the perspective of an old car, 3-D seismic, and lightning data analysis," H. Roice Nelson, Jr., SUU Research Symposium, Cedar City Utah, 18 Nov 2013.
- 228. "Lightning Data and Resource Exploration," L.R. Denham, H. Roice Nelson, Jr., D. James Siebert, 2013 Annual SEG Convention, Houston, TX, 18 Sep 2013.
- 227. "Lightning Strikes A New Exploration Tool?," Ken Milam, Explorer Correspondent's interview with H. Roice Nelson, Tulsa, OK, AAPG Explorer, June 2013, pages 26 and 28.
- 226. "Lightning Data: a new geophysical data type," H. Roice Nelson, Jr., D. James Siebert, L.R. Denham, 2013 AAPG Annual Convention, Pittsburg, PA, 20 May 2013.
- 225. "Yes, lightning does strike twice in the same place!," H. Roice Nelson, Jr., Introductory presentation at University of Utah, Salt Lake City, UT, 19 Mar 2013.
- 224. "Lightning data the new EM "seismic" data," H. Roice Nelson, Jr., D. James Siebert, L.R. Denham, 2012
- SEG Convention Workshop invited by Dr. Kurt Strack, Las Vegas, NV, 08 Nov 2012.
- 223. "Lightning Data a new tool for geophysical exploration," H. Roice Nelson, Jr., D. James Siebert, and L.R. Deham, Dynamic Measurement LLC, Abstract prepared for 2012 AAPG, 03 April 2012.

- 222. "Clarification of the term 'Aged Peat'", H. Roice Nelson, Jr., Report for Humatech Inc., 05 February 2013.
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- 220. "Geopressure Cells: Roice Nelson, Dynamic Resources Corporation, Colorado School of Mines Reservoir Characterization Project, Spring 2008 Sponsors Meeting, 11 Apr 2008.
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## **INTERESTS**

- A. Family (10 children, 17 grandchildren, send out a weekly Grandkidlet since 07 January 2018, and have held The Annual Nelson Grandkids Summer Science Camp each summer from 2010-2023):
  - 2010 July 7-10: Geography & Condensation; 43 page book.
  - 2011 August 8-10: Mining & Infinite Gridsm; 60 page book.
  - 2012 June 27-29: Geocaching & GPS; 61 page book.
  - 2013 July 22-24: Volcanoes and Surveying; 59 page book. 4
  - 2014 July 03-05: Patterns, Computers, & Programming; 41 page book.
  - 6 2015 June 05-11: Archaeology, Petroglyphs, Petrified Forest; 46 page book.
  - 2016 July 06-08: html programming; 61 page book. 7
  - 2017 August 02-03: 8-G: Geography, Genetics, Genealogy, Grandma, Grandpa, Geology, Geophysics, & Guitar; 47 page book taken from 174 page book.
  - 2018 July 01-05: Hot Springs & Continental Divide; 17 page book.
  - 10 2019 June 18-20: Science and Engineering of iFLY; 41 page book.
  - 11 2020 July 20-24: Engines; 34 page book.
  - 12 2021 June 27-30: Gravity; 36 page book.
  - 13 2022 June 27-30: Light; 41 page book.
  - 14 2023 June 10-12: Water; 45 page book.
- B. Church (Houston Temple Worker, 17 February 2009-20 January 2014; Cedar City Temple Worker, 14 December 2015 to Present, except for COVID shutdown; and Cedar City Family History Center Consultant, 3-hours weekly since fall of 2014, except for COVID shutdown, Science Camps, and trips); History (President-Elect, President, Past-President, Board of Directors, Chairman Monuments & Trek Committee Cedar City Chapter of Sons of Utah Pioneers, also member of Iron County Historical Society); Interested in Religious Traditions (see Table 3a-4 The Gods of Mankind, in An Open Mind); & swhchs.org (currently planning the headquarters, museum, stories database, historical trails & associated entities: [Movie Studio, to leverage stories]; [350 pre-1900 wagons to be moved to Cedar City]; and [West World Heritage City, a 2,000 acre western cowboy entertainment venue – think Cowboy Country Disney Land]).
- C. Work (Continue Making a Difference); Lightning Analysis; Seismic Acquisition and Interpretation (2-D and 3-D); Geotechnical Integration (built a digital model of all of the wells in Cedar Valley in September of 2005); Cosmology; Creativity; Entrepreneurship; Pattern Finding; People; Presentations; World-Wide-Web (Hypermedia; designed and built a UNIX, MOTIF, client-server, class-menu driven, hypertext engine with hyperlinked overlays for geological interpretations 1988-1994), prototyped a database driven with spatially indexed web pages for Iron County, emphasizing water issues in the Cedar Valley Drainage Basin); Experiences in England in 1970 led to starting a project with Raymond Gardner, now Walden 3-D, Inc. The initial vision statement was "Building 3-D Intelligent Cities," evolving to "Designing Responsive Environments" (for urban and rural planning activities). Strength is spatial relationships. Vocation, geophysics and geology, is spatial problems. Avocation, urban planning, is spatial problems. Urban Planning interests resulted in The Urban Machinesm, urban planning projects described at www.walden3d.com, Rainbird Village (2021. see our-people), and World Wide Holdings (2022).

D. Music (Choirs: sing in our Ward Choir; have sung in Cedar City Messiah, except COVID year, since moving home in 2014, and brought Ken Turner's Christian Painting Collection to the Cedar City Messiah in 2015; typically sing in 4 concerts per year with the Cedar City Master Singers); writing songs with guitar (see psalmscountdown.net for 439 recorded songs, including putting 156 Psalms, and other scriptures to the music of my songs, including the Book of Job [twice: Job; & Roice], the entire Book of Mormon with each chapter as a four line stanza, including with unique people, creation date, & image indices [below, where a















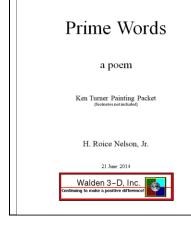


thumbnail image links to the Song or Psalm the image is posted with] replicated with 8 layers of transparency); Reading (Literature, History, Science Fiction, Anthropology, etc.); and Writing (<u>Prime Words [Stanzas]</u>, An Open Mind, Stand Back Up);

E. Outdoors: Rock Collecting; gardening; slow jogging/fast walking:

Start	End	Miles
07 Nov 2022	02 Sep 2023	381.77
01 Dec 2021	07 Nov 2022	511.25
08 Nov 2020	30 Nov 2021	769.20
06 Nov 2019	09 Nov 2020	1,028.75
06 Nov 2018	05 Nov 2019	635.25
15 Feb 2018	06 Nov 2018	369.85
15 Nov 2017	15 Feb 2018	133.25
07 Nov 2016	14 Nov 2017	667.10
09 May 2016	06 Nov 2016	284.70
TOTAL		4,781.12 miles

F. Art (designed 9 & commissioned 13 original paintings by <u>Kenneth R. Turner</u> to go with poetry efforts, named <u>Prime Words</u> - click on images below for larger view).



H. Roice Nelson, Jr.

21 June 2014

Thoughts about 979 entities (nouns),
And their place as a foundation of language.

A set of 791 (7\*113) four line stanzas,
Amatteur poetry written for my children.

Shared to demonstrate a portable electronic replacement for books:
ELDO (Electronic Document) a solar-powered electronic hyperjournal.

First Published 1991

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Walden 3-D, Inc.
211 Baker Road #382

Barker, Texas 77413

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A Personal Note To The Reader PRIME WORDS – a poem built around 797 concepts

Organized in seven chapters, the poem describes ways; in which words and their source, thoughts, effect our individual leves, maintied, and the universe. The readers will hopefully find someting that equation of the control of the

Few, if any of the ideas in the poem are original. The descriptions of the power of thoughts and words are influenced by a variety of cultures; including burn telliment of Nomemonin (Dadic-Institutery). Americansin (organization-democracy), and the geoscience branch of the international oil and gas exploration and production community. The 79 pines were detained of the production of wide distributions of the contraction of the

This effort is deficited to my parents, Howard, R. Noleon, Sr. and Pauline Hafen Noleon it does not seen enought as with perins word IT-ANNS. Six Men, Mustake for teaching as show that province centained to books and how to think. And Dad, thinks for showing no the meaning of patience, integrity, and how to books and show to think. And Dad, thinks for showing no the meaning of patience, integrity, and how to work and enders. Hopelithly this work will have just well made for the opportunity to love and to think. In districting a small part of the Japany accompanying loving, this record is admit to leaving our children a sounded of well never that of holds combact insurants from Demonstration 1931 from the middle care children is sounded for when the state of the State State of the State S

With love and best regards,

H. Roice Nelson, Jr.

"Poetry is not a monument to the poet. Nor is it a slice of his wisdom, dished out to a hungry world. (A poet rarely says anything rest of the world doesn't already know. He simply stimulates our awareness of it. He helps us identify universal feelings."

Why does he do it? Because poetry is just as therapeutic for the writer as it is for the reader."

poem makes you appreciate, or empathize, or resolve, or relive, or simply think, then the poet has served his purpose an eved himself in the process."

[Form Incide 1 Statem absolute Description Town Montel.]



0. Chapter: Dedication Location: Trailing Clouds Family: Children's Portrait Concept: Continuation Dec. 1990: Sara Ellyn, Benjamin Bengt, Robert Llewllyn, (Howard) Roice, III, Melanie Robbyn, and Paul Fredrick Nelson

Personal Note
Owner: Martha Ellyn Nelson
Chapter: Dedication
90° View
Type: Portrait
Location: Inside
1 Perspective Season: All Seasons Time: Trailing Clouds Family: Children's Portrait Concept: Continuation 1 Scale 1 Minute Pose

Portraits of

(Howard) Roice Nelson, III

Benjamin Bengt Nelson Paul Frederick Nelson

Melanie Robbyn Nelson

Sara Ellyn Nelson

Painted in December of 1990

This is a standard group portrait, except for the worlds without number behind the children. These lights represent our spirits, and pure light or energy (2-mc). The exception is the shoeting star, which is Lucifer falling to earth to tempt us to follow him. In the words of William Wordsworth (1770-1859)

The soul data rises with us, our life's star.

Hath had elsewhere its setting. And comment from afar.

Not in entire forgetfithers, and not in utter calachease,

But training clouds of glory do we come.

But training clouds of glory do we come.

Ode (ulmainsine of innortainy from Recollections of Early Childred (1801-1809) stara 5

It seems appropriate to start this book with our children's portrait, since this work was undertaken as an attempt to pass on a journal of my feelings, philosophical musings, and thoughts to our children, and across the generations to their descendants.

Division 1. PROLOGUE [3 stanzas]  1. God: He is the one God and the Father of all spirits			ter 1. THOUGHTS [		7/28		2.2 2 2 22	
1.	God:	He is the one God and the Father of all spirits Speaking so we may gain all He has and become one His body of flesh and bones is intelligent above all Listen for his voice saying, "This is my beloved Son"	1.	Mindwalk:	Have you ever gone alone For a walk in your mind Searching high and low For whatever you may find	8.	Accomplishment:	Oh the power of our thinking And the strength of all our thoughts Look at all that follows concepts Our words, works, and all we're taught
2.	Jesus Christ	Firstborn of the father, the word in the beginning Creator of earth, Jebovah said, "Before Abraham was, I am." Born of the wigin Mary, the Lamb of God was slain In triumph and in glory, our Redeemer brought resurrection	2.	Motive:	Thoughts in our most private moments When we choose that fork in the road Not sure of outcomes from the hints Of what will grow from choices sowed	9.	Others:	Associates may have acquired Stronger thoughts than we yet hold Driving our lives along their path If we let them, by not being bold
3.	The Holy Ghost	A personage of Spirit, sent down from heaven To dwell in our hearts, teaching gospel righteousness The power of the Holy Ghost fills us with peace and joy Freely revealing mysteries, to natural men foolishness	3.	Observation:	Vicariously learning as we watch Others, in the present and the past Nature, in all her wonder and her awe Learning opportunities are vast	10.	History.	A record of trials and problems Seldom of great accomplishments Life's many hard to find gems Seem hidden, found from hints
			4.	Meditation:	Good thoughts mend up our soul Taking us past the earth, or time To a glimpse of heaven, or eternity Insights helping the universe to rhyme	11.	Choice:	We alone control our mind Naming the players on the stage With hymns or prayers we find The way, eternal life our wage
			5.	Sponge:	Thoughts take up little room Since intelligence is light and truth Our hearts and minds consume Input of all facts of reasonable proof	12.	Analysis:	When we make a phase spectrum Of our thoughts, words, and works Some build and others tear down Our essence across the apex hirks
		"For we labor diligently to write, to persuade our children, and also our brethren, to believe in Christ,	6.	Dream:	Images created in our minds eye Emotions, and abstractions new A release from reality, two reverie Beauty, honor, an ideal too	13.	Opportunity:	Watching for mutually beneficial mergers Remembering rain helps the flowers grow Keeping our intent and vision's end in sight Helping progress, reaping what we sow
		And to be reconciled to God; For we know that it is by grace That we are sayed, after all we can do."  2 Neph 27:23 The Book of Memon	7.	Goal:	We meet our intentions and objectives By thinking a project through in detail Duplicating numerous hours of practice Accomplishments for all the world to hail	14.	Imagination:	There is power hidden in our mind If we let go, so we can see Ideas waiting for us to find And to remember what might be
15.	Right.	An intuitive mind discerns the patterns Conceiving music to play in the Astoria Creating for those to come art lanterns Compositions dedicated "Solio Deo Gloria"	22.	Thinks:	It may take a decade or more To grow an idea into a think Forming intentions or a plan Lifting mankind to a paradise link	29.	Chronicle:	Numerous histories are written Of mankind, our thoughts, and deeds And societies learn to build upon These, the earlier planted seeds
16.	Left	The analytical hemisphere of our brain Discretely simplifying. like blocks of Lego Do building, life to language in the main Temporal mathematical sequences of ego	23.	Integrity:	No activity or project on this earth Is worth reputation compromise Though temptation follows birth An honest code is the true prize	30.	Compose:	Thoughts become credible when put Down in black and white to share Appraised by impression's quiet Impact on the reader and their year
17.	Ideas:	Ideas are simply daydreams Urnil put into useful works And work is useless motion Without doing thought-out words	24.	Glasnost:	As more gates open in the curtains Of iron, bamboo, and supersition Seeing beyond the vell for certain Unashamed of thoughts or mission	31.	Imagery:	A poet's mind may wander Past the world and yesterday To tap thoughts starting life And truths he needs to say
18.	Small:	Take from life's ocean a single drop And build something truly great Starting something that w'''' and stop Guided by the spirit is more than fate	25.	Philosophy:	Some thoughts touch the universe As does "I think, therefore I am" And some thoughts change for good or bad The course and all the plans of man			
19.	Positive:	We must take care in our requests For we might get just what we ask Whether forcetling doom and gloom Or heavenly light in which to bask	26.	Theory:	The gedunken are the thoughts Scientists find as they diligently seek For knowledge past experiments, as Beyond known processes they peak			
20.	Plan:	Thinking through a master plan A trusting and thoughtful man proposes Implementing the best he can It seems that heaven soon disposes	27.	Memory:	Recall of holographic images from our Dictionary of unspeakable feelings must Grow with more glucocorticoid receptors Regulating stress through the hippocampus			
21.	Kosher:	By choosing right and living the law We discover a duty no one can avoid Influencing others by what they saw Light in a cognitive disconance's void	28.	Journal:	Written memories for us and future generations Mi Yung Lee reminded us why and how To write out our thoughts for detailed reflections			



I. Chapter: Thoughts Location: Hotel Overture Family: Reflections of Home Concept: Dreams

and another nothing but burs. The act of doing business is to harmess our depoleums. In the worlds of Richard Locka (1618-1658)

Steen walls do not a prices make, '
Not iron burs a cage, 
Minds innocers and quiet take 
That for an humanity of the control of the



II. Chapter: Pre-Existence Location: Music Room Family: Eternal Perspective Concept: Heaven

4 Perspective

2 Scales

1 Day Reading

This is a 360° perspective four music room, an eternal, timeless, recursive perspective. This is Ben's spaining and on the left he is coming down the stairs as a you'dn, on the right as an old man, and in the center he is locating on the gaint case as an inflant. The stairs come down "from heaven" and return again, as do our lives. Not only is the pastring a 360° view of the room, but of Ben's life. The pairt case is prominent in this and each of the other painting, a room, withing a connection to the senge; that accompany each chapter. Jam reading an eldo felectronic document in 1991 when this was painting a 360° view of the room, but of benefit is a public on the tension of the room in the stair stand is littled by a configuration of the reading a sputher in the spen of the room benefit with a sputher against a synthesizer in the open roll top desk. Musical instruments from India, England, 7datra, China, Yugoloxia, Nigoria, Huganya, and Australa are on top of the bodschled. The painting of the Sc. George Temple is reflected on the piano. The stenciling in the hall was hand-painted by Marti. The scriptores are open to Arzhaham 322, and his account of the intelligences that were or gammed before the world was. It is use that high in the room made a stainburg attent on the calling. This pattern is always a symbol of power. A pattern in the staburst represents the crown of eternal light upon the labors, even in his detection, the hold a crown of light. Notice that one third of the stair pietras of high in the celling of lift on heaven and two-christs supported the Savie. The books and the music symbolics the pre-existence before they are read and or joint to their performance. The leave prespectives the colorous chosendage of the world and includes the key religious records of Arabia, China, Egypt. England, India, Israel Japan, Mesoasmerica, Mexico, Persia, Russia, and Viguolsvia with an emphasis on "Mormonism," western history, and the mind. The artis, Ken Turner, is a sma

III. Chapter: Creation Location: Back Yard Family: Family Time Concept: Earth

Division 2. Body. Section A. Astrophysical. B. Geological. Section C. Biological.

Owner: Paul Frederick Nelson Type: Garden View Season. Summer

Location: Back Yard Family: Family: Time 180° View 1 Perspective 2 Scales Time: Afternoon Concept: Earth 7 Organizing Times

Congregation 1 Location 1 Locatio



IV. Chapter: Mankind Location: Parent's Home Family: Workers and Thinkers Concept: Brain

Chapter IV. Maniand

Location: Parent 3 Home

Family: Wedern and Tankers: Concept: Brann

1 Scale

1 S



V. Chapter: Civilization Location: Landscape Monuments Family: Morning Prayer Concept: Milestones

Division 2. Body. Section A: Milestones. Section B: Connections. Section C: Work.

Owner: Sara Elyn Sullivan

Type: Landscape
Season: Spring
Cardion Landscape Monuments Family, Morning Prayer
9 Perspectives
12 Scales

Compared to the control of the contr



VI. Chapter: Living Location: Webster's Flat Family: Family Reunion Concept: Vail



VII. Chapter: Words Location: St. George Temple Family: Second Coming Concept: Rapture

Division 3. Epilogue.
Owner: H. Roice Nelson, Jr.
Chapter VIII: Defication
Location: St. George Temple
45°, 90°, 180° Views
3 Perspectives
3 Scales

a moment

This painting is self explanatory. It is three views of the second coming of the Savior. The televisia view shows the St. George Valley from a distance, where one knows what is happening by the pillar of light, and yet not be able to participate. Paul Haffer's farm and home town of Sarra Clara are shown on the far left. Piler Valley Mountain is in the background overlooking Calf Speing Ronato, their Baffer manning grain genated to the month earther, etc. George (John's hamestown) to the south. Notice the guidar case is open in welfer to sing the stong self-yet at like vietna, and is yould not seen that the south. Notice the guidar case is open in welfer to sing the stong self-yet at like vietna, and is yould not seen that the south. Notice the guidar case is open in welfer to sing the stong self-yet at like vietna, and is south to south. Notice the guidar case is open in welfer to suggest the state of the state of the self-yet of the self-yet of the state of the self-yet of the sel

#### Division 3. EPILOGUE [3 stanzas]

Family, Church, Work:
 Each life revolves around similar concepts
 Though we all find our own balance
 Emphasizing that which brings us joy
 Knowing if we stray it leads to malice

Serve Fellowmen:

When in the service of our fellow beings We are only in the service of our God No better than any other soul on Earth How we serve measures our state of thought

Christ set the perfect example for all men Allowing inheritance of eternal life to those Who follow the Son and endure to the end Showing a joyous life to friends and foes

Chapter VII. WORDS [11stanzas]

4. Skill:

The spectrum of communication methods Extend our senses with the messages Whether in the office or the woods Setting thoughts, actions, and life's passages

As we ponder all the words we hear Trying to isolate the narrow path We search for some truth, knowing We can receive all the Father hath 2. Hope:

Starting with nothing more than desire To find the words of eternal life We cut through hypocrisy and greed Finding gems of truth with our mind's knife

The forum of our lifetime Allows us each to build the skills To recognize words acceptable Implementing until our soul fills

Saints try to find the words That will bring them back to God Words of truth and light That compose the iron rod

Truthful words express the power Of a mind in tune with God Stubborn only in doing right Speaking words all should applaud

Choosing words so our point Can be made without error And with our thoughts be joined And sent out like an arrow

Fear God and keep his commandments Is the whole duty of this life For he brings every word and work Into judgment without strife

9. Garden:

Grown for pleasure and for a feast Restoring order so hearts don't harden We should simply "live in peace" And then "Cultiver norte jardin"

Earth is a wonderful testing place Others, in the present and the past Nature, in all her wonder and her awe Learning opportunities are vast

11. Amen

To our brain life ends at omega But like tracing the circle of a ring We will find ourselves back at alpha Listening to all the heavenly choirs sing

"For we labor diligently to engraven words upon plates, hoping that our beloved brethren, and our children,

and our children,
will receive them with thankful hearts,
and look upon them;
that they may learn with joy
And not with sorrow, neither with contempt, concerning their first parents."

Med 43 Th Book oftlemone



1 of 3 Paintings paid for anonymously, now at Paul Nelson's house in Providence, Utah.



2 of 3 Paintings paid for anonymously, now at Roice & Andrea Nelson's house in Cedar City, Utah.

Ken brought 10 of his paintings of Christ to the Cedar City Messiah Performance, 13 Dec2013, and hung them with this painting with the following note:

#### **Artists Statement:**

I have been painting professionally 45 years for private, corporate, and royal patrons around the world. The subject matter has been wide and varied, often requiring a great deal of research on my part. I enjoy the synergism that comes from working with my clients. The paintings of Christ in this exhibit originated from my own desires to illustrate some of my favorite passages in the scriptures and from a series of discussions I had with Roice Nelson years ago about a proposed series of paintings of Christ. I was recently asked what I would paint for myself. These are those paintings. They are not commercially oriented but my personal expression of faith. They do not exist, however, without the interest and support of many other people, including my wife, Nell.

#### Ken Turner



3 of 3 paintings paid for anonymously, now at Roice & Andrea Nelson's house in Cedar City, Utah.



Gift from Ken Turner to Andrea Nelson, when Roice and Andrea Nelson got married 15 May 1999, now at Roice & Andrea Nelson's house in Cedar City, Utah.



Gift from Ken Turner to Andrea Nelson, when Roice and Andrea Nelson moved back to Utah, the 4<sup>th</sup> of July week 2014, now at Roice & Andrea Nelson's house in Cedar City, Utah.

## **RELIGIOUS BACKGROUND:** The Church of Jesus Christ of Latter-Day Saints

This section is included for completeness, specifically because church assignments have trained me and enhanced my natural interest in working with and teaching youth, leading field camps, and opening minds. Church volunteer work has expanded to community service, including: representing The Southern Utah Rock Club with rocks from my collection at the Children's Jubilee at the Heritage Center on the 9<sup>th</sup> of February 2019; a geology STEM lecture to all 4<sup>th</sup> Grade Students at Enoch Elementary the 22<sup>nd</sup> of March 2019; a lecture at Ruby's Inn at Bryce Canyon to 65 7<sup>th</sup> and 8<sup>th</sup> Grader students from Gateway Academy on the 23<sup>rd</sup> of March 2019; lecture on geology, petroglyphs, and dinosaur footprints to 85 4<sup>th</sup> Grader students from East Elementary at Parowan Gap on the 2<sup>nd</sup> of April 2019; etc.

- Hillcrest Ward, Cedar City, Utah, 2014-present: Minister/Home Teacher; Cedar City Temple Worker 14
  Dec 2018 25 Aug 2024; Temple and Family History Consultant 28 Dec 2014 to 22 November 2022,
  Family History Leader 14 Jul 2019 Jul 2024; Family History Center Shift Leader 28 Dec 2014-Present;
  Stake Blood Drive Coordinator for Hillcrest Ward 2014-2020.
- Nottingham Country Ward, Katy, Texas, 1984-2014: Home Teacher; Houston Temple Worker (17 Feb 2009- 20 Jun 2014); Ward Employment Specialist; Sunday School Teacher; Primary Teacher; Cub Scout Pack Committee Chairman; Teachers Quorum Advisor; Priest Quorum Advisor and Young Men's President; 2nd and 1st Councilor in Bishopric; Stake Missionary; Assistant High Priest Quorum Advisor; Venturing Crew Advisor (16-18-year-old scout leader); Ward Activities Committee Chairman.

- Maplewood 2nd Ward, Houston, Texas, 1980-1984: Home Teacher; Priest's Quorum Advisor (16-18-year-old young men) and Young Men's President; Elder's Quorum President.
- Dallas 1st Ward, Dallas, Texas, 1974-1979: Home Teacher; Teacher's Quorum Advisor (14-16-year-old young men); Elders Quorum President; Ward Clerk; Ward Executive Secretary.
- Voluntary Missionary Service in the British Mission (renamed England East Mission), 1970-1972: Canterbury, Ipswich, Norwich, Harlow New Town; Islington, and Earls Court Districts.
- University of Utah Student Wards, Salt Lake City, Utah, 1968-1970, 1973-1974: Home Teacher; Institute Choir at General Conference in April 1969; Elders Quorum Instructor.
- 5th generation member, but converted in 1968 at age 18, after growing up in a family with little interest in religion.

As a geoscientist, I love to study data and to go to the field and look at rocks and derive new insights. I love to create new opportunities (businesses) and watch how they impact friends and family. I have had a wonderful life: reading, writing, learning, teaching, camping, traveling, presentations, guitar, singing, Science Camps, hiking, running, dinners, discussions, moving rocks, going to movies, watching television, etc. However, the emotionally satisfying and fulfilling parts of my life have not been found at school or at work or even with friends, but have been found with grandkids, my wife, my children (birth and step-children), with my prayers, my faith, my knowledge of our Savior and of His prophets, and of the truths the gospel is built on.