Remembering Two Legacy Members

Recently, we lost two SOOGA lifetime members, Carl Heinrich and Mike McKee (the obituaries can be found on page 10).

Carl was the last of the original founding members, and was active in SOOGA as a board member and co-editor of The Insider, becoming an honorary member in 2019. Carl received the SOOGA Work Horse, Lifetime Achievement awards and was the first recipient to receive the SOOGA Hall of Fame in 2013.

Mike was a SOOGA Board member and chair on the Governmental Affairs Committee from early 1990’s until 2012. Mike received the SOOGA Work Horse award and was the recipient of the 2013 Lifetime Achievement award.

They are oil and gas legends, when times were simpler, and will be missed in the oil patch.

SOOGA 2020 Board of Trustees Elections

Due to the COVID-19 we had to cancel our April 23rd, 2020 Spring Membership Meeting. The votes were submitted by mail and email and were counted on April 23, 2020. The new Trustees for 2020-2023 year are Barry Bowers, Huffman-Bowers Inc; Roger Heldman, HG Energy; Jim Javins, Mid-Atlantic Energy; and Keith Young, BD Oil Gathering; Congratulations!!

NOTICE

Due to COVID-19 our May 15th, 2020 Spring Golf Outing has been rescheduled to June 26, 2020. Our Spring Clay Shoot is still scheduled for June 12, 2020. If there are any changes we will notify you asap. Please see page 5 for all future events.

Did you know that you could save paper and receive your Insider via email?

Contact us at mail@sooga.org to sign up.
Amid the current COVID-19 situation and all of the reactions surrounding it, I hope this edition of the Crow’s Nest finds you and your families safe and healthy. Remember you and your companies are an essential part of the infrastructure of this great nation. Your efforts to produce the oil and gas this country needs to function, whether people are going to work or are forced to stay at home, are vital to our nation’s survival. The price volatility for crude oil is a whole other topic that changes daily.

I am sorry to announce we recently lost two SOOGA board members, past and present. Mike McKee served on the SOOGA Board for several years. Carl Heinrich was a founding member of SOOGA 42 years ago and served on the Board of Trustees up to his passing. He is in the SOOGA Hall of Fame as well as the OOOGA Hall of Fame. He was an independent oil and gas man in the truest sense. Carl will be missed. Carl was also an editor of the Insider. He contributed many articles over the years explaining the geology of southeastern Ohio in great detail.

Since you get plenty of daily coverage on COVID-19 on the state and national level and since many state functions are still shut down, we decided not to bombard you with articles that may not be relevant by the time you are reading this edition of the Insider. Instead we decided to reach back in time and honor Carl by reprinting a few of his past articles. Hopefully this will give all of you some enjoyment and a break from the current events.

COVID-19 and the reactions to it have created a series of challenges none of us have ever experienced. We are all figuring this out as time goes by. Please use common sense and common decency toward those around you to stay safe in these trying times.

Keep your head down and keep digging.

Don Huck
President

In celebration of April, 22, 2020 Earth Day, Don Huck, SOOGA President, planted a Redbud tree on behalf of the Southeastern Ohio Oil & Gas Association.
## 2020 NEW MEMBERS

SOOGA would like to welcome the following new members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREG SHORT</td>
<td>AllStar Ecology, LLC</td>
<td>304-816-3490</td>
</tr>
<tr>
<td>JESSE ROUSH</td>
<td>Southeastern Ohio Port Authority</td>
<td>740-760-0158</td>
</tr>
<tr>
<td>MARK LYTLE</td>
<td>MS Lytle Oil &amp; Gas</td>
<td>330-466-2853</td>
</tr>
</tbody>
</table>

## President

**Don Huck**  
Artex Oil Company  
740-373-3313

## Vice President

**Jared Stevens**  
Stevens Oil & Gas  
740-374-4542

## Past President

**Christy Chavez**  
Reno Oil & Gas LLC.  
740-373-5302

## Treasurer

**John Albrecht**  
740-350-0112

## Secretary

**Henry (Winnie) Sinnett**  
Buckeye Oil Producing Co.  
304-354-7962

## Executive Secretary

**Billie Leister**  
SOOGA  
740-374-3203

## TRUSTEES

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathy Hill</td>
<td>Ergon Oil Purchasing, Inc.</td>
<td>740-350-2804</td>
</tr>
<tr>
<td>Steve Sigler</td>
<td>Buckeye Oil Producing Co.</td>
<td>330-264-8847</td>
</tr>
<tr>
<td>Bob Matthey</td>
<td>Lippizan Petroleum, Inc.</td>
<td>304-869-3418</td>
</tr>
<tr>
<td>Dan Corcoran</td>
<td>Theisen Brock, LPA</td>
<td>740-373-5455</td>
</tr>
<tr>
<td>Brian Chavez</td>
<td>Reno Oil &amp; Gas LLC.</td>
<td>740-373-5302</td>
</tr>
<tr>
<td>Melinda Johnson</td>
<td>J.F. Deem Oil &amp; Gas, LLC</td>
<td>304-428-0005</td>
</tr>
<tr>
<td>Robert Gerst, Sr.</td>
<td>Ergon Oil Purchasing, Inc.</td>
<td>740-516-6623</td>
</tr>
<tr>
<td>Jim Javins</td>
<td>Mid-Atlantic Energy</td>
<td>614-561-3118</td>
</tr>
<tr>
<td>Barry Bowers</td>
<td>Huffman-Bowers Inc.</td>
<td>740-342-5205</td>
</tr>
<tr>
<td>Kevin Rothenbuhler</td>
<td>Utica Resource Operating</td>
<td>740-336-7831</td>
</tr>
<tr>
<td>Roger Heldman</td>
<td>HG Energy, LLC</td>
<td>304-420-1107</td>
</tr>
<tr>
<td>Matt Lupardus</td>
<td>HG Energy, LLC</td>
<td>304-420-1127</td>
</tr>
<tr>
<td>Linda O’Brien</td>
<td>O’Brien’s Safety Services</td>
<td>740-350-4228</td>
</tr>
</tbody>
</table>

## 2020 MEMBERSHIP DUES REMINDER

SOOGA Members,

Your membership is very important in keeping our Association strong in fighting the battles our industry is always facing. We have sent out a couple of reminders for your 2020 Membership/Advertising dues. If you have any questions or would like to pay by credit card please contact the SOOGA office at 740-374-3203.

Thanks so much,

Billie
Southeastern Ohio Oil and Gas Association
Gas Committee Report
April, 2020

PRICING
Prices April 6, 2020

NYMEX Settle – March -2020  $1.63
One Year NYMEX strip (May, 2020 – Apr. 2021)  $2.30
Summer NYMEX strip for 2020 (May.-October, 2020)  $1.98
TCO Index Posting – April, 2020  $1.34
DTI Index Posting – April, 2020  $1.19

March 5, 2020 Storage Report:

<table>
<thead>
<tr>
<th>Region</th>
<th>03/27/20</th>
<th>03/20/20</th>
<th>net change</th>
<th>implied flow</th>
<th>03/27/20</th>
<th>03/20/20</th>
<th>net change</th>
<th>implied flow</th>
<th>03/27/20</th>
<th>03/20/20</th>
<th>net change</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td>382</td>
<td>398</td>
<td>-16</td>
<td>-16</td>
<td>214</td>
<td>283</td>
<td>78.5</td>
<td>35.0</td>
<td>1123</td>
<td>1694</td>
<td>17.2</td>
</tr>
<tr>
<td>Midwest</td>
<td>476</td>
<td>492</td>
<td>-16</td>
<td>-16</td>
<td>243</td>
<td>363</td>
<td>95.9</td>
<td>31.1</td>
<td>1105</td>
<td>2024</td>
<td>-3.4</td>
</tr>
<tr>
<td>Mountain</td>
<td>92</td>
<td>92</td>
<td>0</td>
<td>0</td>
<td>63</td>
<td>111</td>
<td>46.0</td>
<td>-17.1</td>
<td>1105</td>
<td>733</td>
<td>14.6</td>
</tr>
<tr>
<td>Pacific</td>
<td>197</td>
<td>194</td>
<td>3</td>
<td>3</td>
<td>110</td>
<td>204</td>
<td>79.1</td>
<td>-3.4</td>
<td>1105</td>
<td>733</td>
<td>14.6</td>
</tr>
<tr>
<td>South Central</td>
<td>840</td>
<td>829</td>
<td>11</td>
<td>11</td>
<td>492</td>
<td>733</td>
<td>70.7</td>
<td>14.6</td>
<td>1105</td>
<td>733</td>
<td>14.6</td>
</tr>
<tr>
<td>Salt</td>
<td>256</td>
<td>258</td>
<td>-2</td>
<td>-2</td>
<td>151</td>
<td>215</td>
<td>69.5</td>
<td>19.1</td>
<td>1105</td>
<td>733</td>
<td>14.6</td>
</tr>
<tr>
<td>Nonsalt</td>
<td>585</td>
<td>571</td>
<td>14</td>
<td>14</td>
<td>342</td>
<td>518</td>
<td>71.1</td>
<td>12.9</td>
<td>1105</td>
<td>733</td>
<td>14.6</td>
</tr>
<tr>
<td>Total</td>
<td>1,986</td>
<td>2,005</td>
<td>-19</td>
<td>-19</td>
<td>1,123</td>
<td>1,694</td>
<td>76.8</td>
<td>17.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued page 6)
2020 SOOGA Calendar of Events

**Canceled**
2020 Spring Membership Meeting
April 23, 2020
Marietta Shrine Club
Marietta, OH 45750

**Rescheduled to June 26, 2020**
2020 Spring Golf
May 15, 2020
Lakeside Golf Course
Beverly, OH

2020 Spring Clay Shoot
June 12, 2020
Hilltop Sports
Whipple, OH 45788

2020 SOOGA’s 1st Industry Appreciation Boat Ride
July 31, 2020
Valley Gem
Marietta, OH 45750

2020 Fall Golf Outing
August 21, 2020
Golf Club of West Virginia
Waverly, WV 26184

2020 Annual Trade Show
September 24, 2020
Broughton’s Community Building
Marietta, OH 45750

2020 Fall Clay Shoot
October 16, 2020
Hilltop Sports
Whipple, OH 45750

2020 Fall Gun Giveaway
November 1st - 30th
Prices/Supply/Demand

**Northeast prices are down.** At the Algonquin Citygate, which serves Boston-area consumers, the price went down 6¢ from $1.55/MMBtu last Wednesday to $1.49/MMBtu yesterday. At the Transcontinental Pipeline Zone 6 trading point for New York City, the price remained unchanged week over week at $1.38/MMBtu.

The Tennessee Zone 4 Marcellus spot price decreased 6¢ from $1.32/MMBtu last Wednesday to $1.26/MMBtu yesterday. The price at Dominion South in southwest Pennsylvania fell 4¢ from $1.31/MMBtu last Wednesday to $1.27/MMBtu yesterday.

**Supply falls.** According to data from IHS Market, the average total supply of natural gas fell by 1% compared with the previous report week. Dry natural gas production remained unchanged week over week. Average net imports from Canada decreased by 14% from last week, driven by decreased imports into the Northeast at the Waddington border crossing in upstate New York.
Demand is down, driven by declines in power generation and building consumption. Total U.S. consumption of natural gas fell by 7% compared with the previous report week, according to data from IHS Market. Natural gas consumed for power generation declined by 7% week over week. In the residential and commercial sectors, consumption declined by 10%. Industrial sector consumption decreased by 4% week over week. Natural gas exports to Mexico decreased 2%.

U.S. LNG exports increase week over week. Nineteen LNG vessels (nine from Sabine Pass, three each from Corpus Christi and Freeport, and two each from Cove Point and Cameron) with a combined LNG-carrying capacity of 70 Bcf departed the United States between March 26 and April 1, 2020, according to shipping data provided by Marine Traffic.

Natural Gas
Ohio's Utica Shale 2019 Fourth Quarter Production
During the Fourth quarter of 2019, Ohio's horizontal shale wells produced 5,813,755 barrels of oil and 614,218,362 Mcf (614 billion cubic feet) of natural gas, according to the figures released today by the Ohio Department of Natural Resources (ODNR).

Compared to a year ago, oil production increased by 29.54% and natural gas production showed a 10.81% increase over the second quarter of 2018.

<table>
<thead>
<tr>
<th></th>
<th>2018 Quarter 4 (Shale)</th>
<th>2019 Quarter 4 (Shale)</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrels of oil</td>
<td>5,810,484 bbl</td>
<td>6,803,057 bbl</td>
<td>17.08%</td>
</tr>
<tr>
<td>Mcf of natural gas</td>
<td>663,534,323 Mcf</td>
<td>684,771,042 Mcf</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

The ODNR quarterly report lists 2,523 horizontal shale wells, 2,452 of which reported oil and natural gas production during the quarter. Of the wells reporting oil and natural gas results:

There are currently 3,225 Utica Permits, and 2,732 Utica shale wells drilled, with 11 rigs running.
Obituaries

Carl C. Heinrich, 81, of Reno, Ohio, passed away March 18, 2020 with his family at his side. He was born May 26, 1938 in Allegheny County, PA, the only child of late Brig. Gen. Joseph E. Heinrich and Maxine Piekarski. On February 12, 1966 he married Judith Cole, who survives. At age 17 he enlisted in the Army. Following active duty, he continued service in several PA and OH military reserve units and later served in the Ohio Defense Corps achieving the rank of Captain. He graduated from Marietta College in 1964 with a dual BS degree in Petroleum Engineering and Geology. He then served as the district engineer for Quaker State in Parkersburg WV. In 1978, he and his wife Judy started their oil and gas production company, Heinrich Enterprises Inc., which grew and expanded into many other production entities with oil and gas wells across Southeastern OH and WV. The family business continues today, under the name of Reno Oil and Gas, with the first employee ever hired still working with the family after 40 years. In addition to his primary passion in the oil and gas industry, he was a Washington County deputy sheriff, firearms instructor, and training School Commander through Ohio Peace Officer Training Academy. He trained many peace officers from all agencies throughout Southeast Ohio and he continued to maintain a position as a Constable. He is known as a pioneer and leader in the Oil and Gas Industry. His distinguished life in his field and community is revealed by his many awards. His honors included the SOOGA (Southeastern Ohio Oil & Gas Association) Hall of Fame; SOOGA Wildcatter Lifetime Achievement award; OOGA (Ohio Oil & Gas Association) Hall of Fame; Marietta College Petroleum Engineering Distinguished Alumnus, Society of Petroleum Engineers’ Legion of Honor; Certificate of Recognition from the US Department of the Interior; Keeper of the Flame award from the Petroleum History Institute; 2019 Marietta Community Foundation Philanthropist of the year; and the 2020 Marietta College Linsley Community Partner Award. He is survived by his wife of 54 years, Judith Cole Heinrich; his son Joseph Heinrich of Derry NH, grandchildren (Brent, Haley, Michelle); his daughter and son-in-law, Christyann and Brian Chavez of Marietta OH, and grandsons (Bryson Chavez, Carson Chavez). He was preceded in death by his parents. Due to the pandemic restrictions, a small private mass will be held at the Basilica of St. Mary of the Assumption. A celebration of life and interment in the Veterans Garden in East Lawn Memorial Park Cemetery will be scheduled at a later date. In lieu of flowers, donations can be made in his honor to the SOOGA Legacy Fund at Marietta Community Foundation, 100 Putnam St, Marietta, Ohio 45750.

Michael P. McKee passed away on April 17, 2020 in Florida. No public services are scheduled at this time. Bay Funeral Home & Cremation Services Englewood, FL. He is survived by his wife Sue and son, Kyle.

Mike was Vice-President and General Manager of Ohio Oil Gathering Corporation in Frazeysburg, Ohio. He started with the company as a field laborer and had over 35 years of service and experience. Mike graduated from Middle Tennessee State University in 1973 with a B. S. Degree. Mike was a long time member of SOOGA and was on the Board of Trustees as chairman of the Governmental Affairs Committee from the early 1990’s until 2012. Mike was awarded the Work Horse in 2006 and Lifetime Achievement in 2013. Donations can be made in his honor to the SOOGA Legacy Fund at Marietta Community Foundation, 100 Putnam St, Marietta, Ohio 45750.
2006 SOOGA Spring Membership Meeting Awards  (Mike McKee fourth from left)

2007 Board of Trustees Tour of the Ergon Refinery in Newell, WV
(Mike McKee 1st in front on right)
Premium Service for a Premium Product

Whether buying or transporting crude, Ergon Oil Purchasing offers flexible logistics to move your product from wellhead to market. Through Ergon’s refineries, network of terminals, barge and trucking fleets, we understand what drives the crude oil industry.

Call 1-800-278-3364 to learn more.
eopsales@ergon.com
EAGLE RESEARCH CORPORATION
Manufacturer of Precision Gas Measurement & Control Products

Since 1976

EAGLE RESEARCH CORPORATION
1076 State Route 34 | Hurricane, WV 25526
1.877.757.6665 | www.eagleresearchcorp.com

Field to Front Office Solutions™

LESLEY EQUIPMENT CO.
Sales - Rentals - Parts - Service
www.lec1.com
888-694-4695

EMP ELECTRIC MOTORS & PUMPS LLC
SALES SERVICE SOLUTIONS
365 Stony Run Road
Beverly, OH 45715
Office: 740-984-4846
Fax: 740-984-8298
www.electricmotorsnpumps.com

NEW ELECTRIC MOTORS & PUMPS
MOTOR & PUMP REPAIR
DRIVE • THERMOCOUPLES • HEAT TRACE
GAS DETECTION - FIXED & PORTABLE
BALANCING AND MACHINE SHOP

Industrial Product Solutions

The most important asset to your company is your employees. They’re worth protecting.
O’Brien’s Safety Services can help.

PEC BASIC

- Confined Space Rescue Standby Teams
- Safety Consulting/Training
- OSHA Authorized Training
- PEC Basic SafeLand USA Orientation
- ROCK-N-RESCUE Dealer

O’Brien’s Safety Services, L.L.C.
740.336.8407 p 740.374.6956 f
www.obrienssafetyservices.com

Available around the clock to meet your safety needs.
Serving Ohio, Pennsylvania and West Virginia.
GAS PRICING 2020

MARCH 2020
NYMEX Settlement: $1.821
Inside FERC/DTI: $1.460 (Basis: -$0.361)
Inside FERC/TCO: $1.550 (Basis: -$0.271)

APRIL 2020
NYMEX Settlement: $1.634
Inside FERC/DTI: $1.219 (Basis: -$0.414)
Inside FERC/TCO: $1.420 (Basis: -$0.294)

OIL PRICING 2020

AMERICAN REFINING GROUP AVERAGE

2/11 to 2/20
- Group 1 OH: $50.99
- Group 2 OH: $47.99
- Group 3 OH: $45.99

2/21 to 2/29
- Group 1 OH: $48.65
- Group 2 OH: $45.65
- Group 3 OH: $43.65

3/01 to 3/10
- Group 1 OH: $41.07
- Group 2 OH: $38.07
- Group 3 OH: $36.07

3/11 to 3/20
- Group 1 OH: $27.34
- Group 2 OH: $24.34
- Group 3 OH: $22.34

3/21 to 3/31
- Group 1 OH: $21.24
- Group 2 OH: $18.24
- Group 3 OH: $16.24

4/01 to 4/10
- Group 1 OH: $24.10
- Group 2 OH: $21.10
- Group 3 OH: $19.10

4/11 to 4/20
- Group 1 OH: $19.09
- Group 2 OH: $16.09
- Group 3 OH: $14.09

ARG GROUP PRICING CATEGORIES AND DEFINITIONS FOR PENNSYLVANIA GRADE CRUDE OIL (LEGACY)

Group 1 (OH/PA/NY) – 150.0 net barrels of crude from 3 stops within 10 mile, with a BS&W of 2.5% or less (If able to load 160 net barrels the BS&W will be waived)

Group 2 (OH/PA/NY) – 60.0-149.99 net barrels from 2 stops

Group 3 (OH/PA/NY) – 30-59.9 net barrels from single location

For questions relating to ARG Group Pricing or Utica / Marcellus Shale pricing, please contact: Bill Murray, VP-Crude Supply & Logistics- 330-649-2832; bmurray@amref.com

www.amref.com

www.ergon.com
CRUDE PRICE ALERT

Ergon Oil Purchasing - Appalachian Basin

In response to recent volatility and unprecedented events in the crude oil market, Ergon will base April monthly Penn grade pricing on postings from April 1st through April 19th. Penn grade crude oil sold to Ergon at the wellhead in April will be as follows:

Tier 1 $21.82  Tier 2 $18.82  Tier 3 $16.82

Ergon will continue to post prices through the end of the month to reflect the full month average for informational purposes. Should a daily posting close higher than the above pricing, Ergon will factor that posting into the final month average for April. Please contact your Ergon Crude Supply Account Manager should you have any additional questions or concerns.

Ben Jezovnik - PA and NY - 443-536-1164  Joe Wesolowski- OH - 412-529-0407

ARG - PENN GRADE CRUDE PRICING ALERT

In an effort to assist and partner with our valued Penn Grade suppliers during this very difficult and uncertain time in the crude oil markets, ARG will pay the following prices for the last 10 days of April (21st - 30th):

Group 1: $21.82  Group 2: $18.82  Group 3: $16.82

We will continue to monitor the market and ensure you receive a competitive market price for your Penn Grade crude oil production.

If you have any questions, please contact your Crude Relationship Manager
Matt Teichmer: (330) 324-5075 for OH/WVA
Dan Palmer: (814) 558-0011 for PA/NY
COVID-19 – CORONAVIRUS  
Decontamination Services & Daily Employee Temperature Checks

With this epidemic unfolding, exposures in public and workplaces is increasing right before our eyes.

Based on what is currently known about COVID-19 and the coronavirus, exposure is spread from person-to-person, most frequently through close contact (within about 6’). This type of transmission occurs through respiratory droplets that are created by sneezing and coughing.

Current evidence suggests the coronavirus may remain viable for hours to days on surfaces made from a variety of materials. Cleaning of visibly dirty surfaces followed by disinfection is a best practice measure for prevention of this virus.

SRCO is providing decontamination services during this crisis. Decontamination may be needed in various areas such as office areas, company vehicles, operator cabs or stations and individual workspaces where an individual has been identified as having a confirmed positive test, symptoms consistent with COVID-19, or any other circumstance that may cause concern.

SRCO is also providing onsite temperature checks as employees arrive to work. Onsite technicians can conduct no-contact, non-invasive digital temperatures with documentation to establish whether a worker will be allowed access to the facility.

To discuss these available services, please call our office.

330-477-1100

Sincerely,

Curt Speck & Becki DePasquale
Safety Resources Company of Ohio, Inc.
4650 Southway Street S.W. Canton, Ohio 446706

Continued to page 17
SRCO is providing onsite temperature checks as employees arrive to work. Onsite technicians can conduct no-contact, non-invasive digital temperatures with documentation to establish whether a worker will be allowed access to the facility.

Based on what is currently known about COVID-19 and the coronavirus, exposure is spread from person-to-person, most frequently through close contact (within about 6’). This type of transmission occurs through respiratory droplets that are created by sneezing and coughing.
DXP Enterprises, Inc.
Phone: (513) 489-5200
Fax: (513) 247-5330
Marietta, OH 45750
www.dxpe.com

DXP Enterprises / Industrial Fluid Handling Process Equipment

John Boyd
John.Boyd@DXPE.Com
Office: 740-376-9502
Cell: 412-477-1986

DXP is committed to bringing you the highest quality & most innovative pumping solutions available. Our team is available 24 hours a day to support you.

Chemineer
- Mixers / Agitators
- Gearbox Repair
- Kenics Static Mixing
- High Shear Inline

Corken
- Side Channel & Vane Solutions
- Low NPSHr, Application Solutions

Lux
- Drum Pumping
- High Viscosity Option

Micropump
- Magnetic Drive Sealless
- Low Flow Metering
- Built In Variable Speed

Viking Pump
- Positive Displacement Gear Pumps
- Sealed and Magnetic Drive Solutions
- Internal Gear, External Gear & Lobe

Goulds Water Technology
- Stainless Steel
- Multistage Inlet
- Close Coupled
- Submersible

Pulsafeeder
- High Pressure Metering
- Metering & Dosing
- Simplex, Duplex, Triplex

Wilden
- Progressing Cavity Pumps

Sandpiper
- Air Operated Double Diaphragm
- Efficient Air Vantage System
- ATEX Rated & Alloy Options

Eaton
- Heavy Duty Strainer
- Duplex Options
- Bolted or Threaded
- Low Pressure Drop

John Crane
- Single Cartridge
- Double Cartridge
- Gas Barrier Seals
- Mixer & Agitator
- High Temperature

Sundyne
- Sealless Magnetic Drive
- ETFE Lined Casings
- ANSI End Suction, Low Flow, Vertical Inline & Self Primer

Peerless Pump
- Fire Protection Pumps & Packages
- Vertical Turbine Pumps For Industry
- Single Stage Horizontal Split Case
- Multistage Horizontal Split Case
- Engine Driven Fire Pump Packages
- End Suction & Vertical Inline Pumps

Wrightflow Technologies
- Low Shear Lobe Pumps
- Circumferential Piston

Teikoku USA Inc
- Magnetic Drive Gear Pumps

Iwaki
- Canned Motor Pumps
- Sealless Technology
- ANSI Dimensioned
- Pump Wear Detection

Rotating Equipment Repairs
- API, Piston & Gear Pumps
- Field Service
- Gearbox
This program on the radio is brought to you by the Southeastern Ohio Oil and Gas Association and can be heard every Saturday at 9 A.M. Listen to the program on any of these five stations:

Previous episodes can be found on SOOGA.org or by searching for Energy Insights WMOA on Youtube.
SOOGA’s Energy Insights recently traveled to Washington DC to get a perspective of the industry on a federal level. Please listen to episode from members of the Energy and Commerce Committee as well as the person in charge of the Environmental Protection Agency (EPA) Administrator Andrew Wheeler.

The Capitol Hill playlist:
https://www.youtube.com/playlist?list=PLUcBXfTWJF4N6dqRCL4byVHhnILpmA-by

All episodes:
https://www.youtube.com/playlist?list=PLUcBXfTWJF4MK5_1jUyxiQnMFRD_eCdne

The most recent 10 episode titles are listed here.
The West Virginia legislature passed the following bills in the 2929 session and the governor signed them into law:

**House Bill 4001** - The West Virginia Impact Fund - This was passed to create further economic development, infrastructure development and job creation in WV. The creation of a sovereign well fund will establish a depository for foreign investment into the state for major economic projects. This could be used to help fund ethane crackers or possibly the Appalachian Storage Hub.

**House Bill 4090** - The marginal well plugging legislation - This bill lowers severance tax to 2.5% on any well that does less than 60 mcf per day or less than 10 barrels of oil. Then the first 4 to 6 million dollars paid in will be used to set up an orphaned and abandoned well fund in WV.

**House Bill 4091** - The Expedited Permitting Bill will be used to pay higher fees to have your horizontal permits expedited.

**House Bill 4217** - Contains revisions to the Deep Well Spacing - crafted to support and enhance the drilling of horizontal wells and eliminates the current 3000 foot surface spacing rule in addition to other down hole spacing requirements.

**Senate Bill 802** - The Direct Serve Bill - gives the producer an opportunity to sell natural gas directly to a new industry and not go through the local utility.
Moving a little closer to home, this month’s article will deal with another historic well which is owned by Quaker State Oil Refining Corp. This is the “Big Moses” well, officially known as the Moses V. Spencer #1, which is located in McElroy District of Tyler County, along Indian Creek.

The drilling of this well started on August 3, 1894 as a joint venture of the Victory Oil and Gas Company of Pittsburgh, Pennsylvania; Wilson Brothers of Wellsville, New York; and George Earnest of Sistersville, West Virginia. The drilling contractor was Wilson Brothers and they used their wooden standard rig (cable tool) with an 84 foot derrick.

The wood conductor was set at a depth of 14 feet, the 158 feet of 10-3/4 inch casing. Shortly afterward, 1050 feet of 8-1/4 inch casing was set after drilling through four feet of coal and twenty feet of Cow Run sand. Drilling progressed through the Salt Sands and the Keener until a small flow of gas was found in the top of the Big Injun at 1750 feet on September 3, 1894. Then, the boiler was “moved back.” This was a common procedure with the old standard rigs where a steam engine was used for drilling. During the normal drilling operations, the boiler usually set about 10-15 feet back of the engine house out in the open. The boiler was usually fired by coal and light provided inside the rig at night by “yellow dogs.” When gas was hit, then the boiler was moved back further to a distance of 30 to 40 feet from the engine house.

This provided a safety factor as the boiler fire would be far enough away that it would not be a hazard.

At the same time, the forge used to dress bits was also moved from the derrick floor to the boiler area. From this point on all drilling would only be done during the daylight hours. The crew had to carry each bit back to the forge for sharpening and then back to the well for use.

It took two days to get the necessary pipe and connections from Sistersville and then make the necessary changes. On September 5, drilling was resumed. The tool pusher was L.C. Wilson and the drillers and tool dressers were George McCutchen, J.G. McElhattan, J.N. Curry and Joseph Smith respectively. Since they did not run at night, the two crews were to split up the daylight hours.

After a few hours of drilling in the top of the Big Injun Sand, they hit one of the pebble streaks where a stronger flow of gas was also found. The gas flow became stronger and Wilson told the crew to pull the tools out of the hole and stand them back in the derrick to see if the gas would die down. The gas flow increased continually as the well began to “drill itself in.” The pebble streaks in the Big Injun of this area are so porous and soft that the gas flow was washing out the bottom of the hole and deepening itself into the “pay zone.” At this point, nothing could be seen of the derrick but a cloud of sand and dust.

(Continued to page 23)
By the morning of September 6th, the gas was so strong that it had picked up the tools hanging in derrick and blown them up through the crown block.

In this case, the stem was 38 feet long and 4-1/2 inches in diameter with a rope socket, big-hole jars and a new 8-1/4 inch bit attached. Those of you who have had to “rassle” this size of cable tool can visualize the weight and the force required to blow them about like straws in the wind.

At this point, the flow was estimated at 100 million cubic feet per day flowing through the 8-1/4 inch casing at a pressure of 575 pounds per square inch.

By now the original owners elected to bail out of the operation and sold the gas rights only in the lease and well to the Philadelphia Gas Company. This company was a forerunner of the present Equitable Gas Company and they undertook to control the well and also lay a 10 inch pipeline to their main 16 inch line which delivered gas to Pittsburgh. In a very wise move, the original owners kept the rights to produce any oil found on the lease. More about that later.

Meanwhile, back at the well, which had now been nicknamed the “Big Moses,” things were getting a bit hectic. Philadelphia Gas had contracted with a man named Matheny to cap the well for them. Matheny must have been a typical “oil field supply store commando” as he ordered a number of valves and fittings before going out to the well. After arriving at the well, he took one look at it and promptly departed for parts unknown.

After this fiasco, the job of taming the mighty well was given to L.C. Wilson, his driller George McCutchen, and tool dresser, J.N. Curry. They began working on it in November 1894.

By then a 10 inch gas line had been laid to the well. First, they filled the annulus between the 8-1/4 and 10 inch casing with 8 barrels of cement. Next, they dug down the outside of 10 inch casing to a depth of 14 feet where they set timbers to hold anchor bolts and then filled the hole back up with cement. Next, they set a 10 inch “Y” with two 10 inch gate valves over the well and pulled it down into place over the 8-1/4 casing with turnbuckles on the anchor bolts.

The well was finally shut in by this method on November 28th. All of this work was done at great risk by McCutchen and Curry, while the well was blowing open. If you have ever been around a large well blowing open, it is not hard to imagine the noise and pressure they were working under. At one point, the gas caught one of the cement barrels and it was blown 300 feet up into the air before bursting apart.

This ended the first phase of the taming of the mighty “Big Moses” well. However, all was not to remain so for long. There still was a tremendous gas volume and pressure in the Big Injun reservoir which they had tapped and other things were to happen before the wealth of this great resource was harnessed. The details of this will continue next month.
Carl Heinrich pictures from the past

Marietta College Hall of Fame award, April 2019

Oil & Gas Museum Antero Exhibit
I was born in 1938 in Allegheny County, Pennsylvania. My father was a career military officer so we moved frequently. My early years were spent in Allegheny and Warren Co., PA as well as New Jersey where I graduated from high school. At the age of 17 ½, I enlisted in the “brown shoe” Army. After active duty I finished out my military obligation in several reserve units in Pennsylvania. In those days of compulsory draft everybody served in one of several service branches unless you were 4F (physical or mental exemption) or CO (conscientious objector). If you were 4F or CO most young men felt this did not enhance your resume and thus we served our country. Later I served in the Ohio Military Reserve achieving the rank of Captain.

In the late 50’s and early 60’s I spent several nomadic years working in Pennsylvania, Ohio and West Virginia as a cable tool rig tool dresser, rotary roughneck, well tender, compression station operator, pipeline walker, well site geologist, etc. Most of this was as an employee of Devonian Gas and Oil Co. and several drilling companies. During this period I was well site geologist on a well in Herkimer Co., NY. At that time it was the most eastern drilling operation in NY. Alas, it was non-productive even though it was drilled through Marcellus and Utica.

From 1975 on I have had a “second career” in law enforcement as a deputy sheriff, firearms instructor and training school commander through Ohio Peace Officer Training Commission. I have trained many officers from all agencies in Washington and Morgan Counties except Ohio Highway Patrol.

A native of Pennsylvania’s oil region, my first experience in Ohio was in 1959 when I was sent to Ashtabula County to supervise the drilling of a deep Gatesburg (now known as Rose Run) wildcat being drilled with cable tools. While set in the Gatesburg, we completed in the Clinton and that well is still producing.

After completing Marietta College, I graduated in 1964 with a dual BS degree from the Petroleum Engineering and Geology Department. Then I went to the Morrow County oil boom, working for Well Supervision Inc. as their engineer-geologist. (See my article in the Morrow Co. Anthology for details of the last of the old time oil booms).

After Morrow Co., I returned to Washington Co., Ohio where I operated several old shallow well leases and drilled a number of new wells to the Devonian Shale. The “shale” was a new deeper zone for this area and many technological problems had to be solved, but many of these early wells are still profitable producers. At that time cable tool drilling was $3.25 per foot and natural gas was 25 cents per MCF.

(Continued to page 26)
In 1970 I joined the Quaker State Oil Refining Corp. and served as District Engineer until 1978 at their production office in Belpre, Ohio. This district covered all of Ohio, except Ashtabula County, as well as other southern Appalachian areas; we drilled many Clinton wells primarily in East Canton and Hocking County areas. I engineered and installed the first disposal well in the East Canton oil field.

Since 1978 I have been active in southeastern Ohio as a land man, operator – driller – consultant – for my own account and for clients and joint venture partners. My family continues to operate a successful producing company, operating existing stripper wells in addition to developing new Marcellus, Oriskany and Clinton production and disposal wells.

Working with Jim Massey of Aircowell I successfully designed and performed the first all gas (nitrogen) frac job in 1978. (See SPE paper # 10129 where I was co-author describing the technical aspects of this process.) This process has been extensively used in the Appalachian producing area since then. Also, I have been actively involved in research, development and production of Devonian Shale reservoirs since 1965 (Thirty Foot, Gordon as well as deeper zones to include Marcellus).

In 1966 I married Judy Cole, college sweetheart and future business partner. We have two children, Christyann Chavez (who works with husband Brian in our company) and Joseph of Derry, New Hampshire. Brian and Christy have become active partners of our company as leaders of the next generation.
Southeastern Ohio Oil and Gas Association
2020 Membership & Advertising Form

Date: ____/____/____

Name __________________ Company __________________ Title __________________
Address __________________ City ______________ State ______ Zip ______
Phone __________________ Fax ________________ Email __________________

MEMBERSHIP CLASSIFICATION (Please Check One)

- $150 Annually  ☐ Producer  ☐ Contractor  ☐ Allied Industry  ☐ Professional
- $100 Annually  ☐ Associate (Additional employees of Company)
- $75.00 Annually  ☐ Royalty Owner /Non-Operating Investor
- $50.00 Annually  ☐ Student

Independent Package $600.00
- Special Acknowledgement—Logo/ad at all association events & functions
- One free ticket to Association Golf or Clay Shoot outing (OF YOUR CHOICE)

Producer Package $250.00
- Special Acknowledgement—Logo/ad at all association events & functions

Welltender Package $150.00
- Special Acknowledgement—Logo/ad at all association events & functions

For additional advertising options visit: www.sooga.org

The information presented herein is for informational purposes only and should not be considered as legal or other professional advice. To determine how various topics may affect you individually, consult your attorney and/or other professional advisors. Southeastern Ohio Oil & Gas Association, its Board of Trustees, Officers, Members and/or Staff are not liable or responsible for any damage or loss resulting from the use of information in this publication or from inaccuracies contained herein.