

Bureau of Land Management

Amarillo Field Office

Helium Operations

Statistical Report

for

February - 2020



Distribution:

Fluid Minerals Group Manager, Washington Office
NMSO, New Mexico State Director
NMSO, Associate State Director
NMSO, Petroleum Engineer
Field Manager, Amarillo Field Office
Assistant Field Managers (3)
Team Leaders
-Federal Leased Lands
-Resources Evaluation & Gas Analysis
-Division Of Helium Operations, -
Engineering and Technical Support

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Amarillo, Texas

Issued: January 29, 2021

"Please Note: Data in this report is accurate as of print date; however all data is subject to change."

Approved for Distribution: Samuel R. M. Burton

Date: January 29, 2021

Table 1 - Summary of Helium Operations

February - 2020

Helium Enrichment Unit Operations

| Gas Processed | Month | Month | Average Percent | Gross FYTD | Net FYTD |
|----------------------------|--------------|------------|-----------------|------------|----------|
| | Gross Volume | Net Helium | | | |
| Measured Plant Feed (Mcf*) | 466,310 | 72,128 | 15.47% | 2,163,092 | 321,653 |
| Helium Product (Mcf*) | 100,222 | 72,157 | 72.00% | 450,495 | 322,720 |
| Residue Natural Gas (Mcf*) | 235,738 | 0 | 00.00% | 922,539 | 54 |

* Volumes in Mcf at 14.65 psia & 60°F

Natural Gas & Liquids Produced

| Gas Processed | Month | FYTD |
|-----------------------------|---------|---------|
| Natural Gas Sales (Mcf****) | 233,152 | 912,058 |
| NGL Sales (gallons) | 72,935 | 348,255 |

*** Volumes in Mcf at 14.73 psia & 60°F

Bush Dome Reservoir Operations

| Conservation gases from all sources | Month | Month | Average Percent | Gross FYTD | Net FYTD |
|-------------------------------------|--------------|------------|-----------------|------------|----------|
| | Gross Volume | Net Helium | | | |
| Total Withdrawn (Mcf*) | 464,942 | 71,914 | 15.47% | 2,178,625 | 323,388 |
| Crude Injection (Mcf*) | 0 | 0 | 00.00% | 0 | 0 |
| Crude Production (Mcf*) | 0 | 0 | 00.00% | 0 | 0 |

* Volumes in Mcf at 14.65 psia & 60°F

Storage Operations

| In Kind Helium | Month | FYTD | CYTD | Cumulative |
|---------------------------------|---------|---------|--------|------------|
| Sale Volumes Transferred (Mcf*) | 54,379 | 105,848 | 54,379 | 3,955,592 |
| Sale Volumes Outstanding (Mcf*) | (5,391) | | | |

* Volumes in Mcf at 14.65 psia & 60°F

Private Company Helium Storage Contracts

| Contact Activity | Month | Month | Average Percent | Annual Helium FYTD |
|--|--------------|------------|-----------------|--------------------|
| | Gross Volume | Net Helium | | |
| Crude Acquired (Mcf*) | 13,057 | 9,516 | 72.88% | 45521 |
| Crude Disposed (Mcf*) | 102,818 | 73,745 | 71.72% | 349323 |
| Net Balance (Mcf*) | (89,761) | (64,229) | | (303,802) |
| Balance of Stored Helium End Of Month (Mcf*) | | 2,231,933 | | |

* Volumes in Mcf at 14.65 psia & 60°F

Revenue / Charges

| Helium Storage Contracts (Charges Billed (\$)) | Month | FYTD |
|--|-------------|-------------|
| Storage Fees Billed (\$) | \$965,383 | \$4,391,171 |
| Resource Management Fees Billed (\$) | \$274,090 | \$1,096,372 |
| Total Storage and RMF Collected | \$1,239,473 | \$5,487,543 |

Conservation Helium - Natural Gas - Liquid Sales (Charges Billed (\$))

| | Month | FYTD |
|----------------------------|-----------|-------------|
| In Kind Sales | \$0 | \$4,234,910 |
| Natural Gas & Liquid Sales | \$221,554 | \$1,269,887 |

Helium Resources Evaluation

| | Month | FYTD |
|--|---------------|---------------|
| Revenue Collected from Federal Lease Holds | \$2,015,251 | \$8,530,396 |
| Helium Sample Collection Report for month | Submitted - 0 | Received - 0 |
| | | Analyzed - 15 |

*Rounded to nearest dollar

Table 2 - Bush Dome Reservoir Operations

February - 2020

| | | Gross Withdrawal | | Net Helium Withdrawal | | Nitrogen | | Methane | Methane | Ethane plus | | Other (CO2, Ar, H2) | |
|-----------------|--------|------------------|--------------------|-----------------------|-------------------|----------------|-------------------|----------------|--------------------|---------------|-------------------|---------------------|------------------|
| | | Month | Cumulative | Month | Cumulative | Month | Cumulative | Month | Cumulative | Month | Cumulative | Month | Cumulative |
| TOTAL | | 464,942 | 246,593,140 | 71,914 | 45,540,559 | 117,157 | 60,797,695 | 252,855 | 125,405,456 | 18,332 | 12,750,321 | 4,683 | 2,099,109 |
| BIVINS A-3 | Feb-20 | 0 | 10,961,114 | 0 | 3,548,629 | 0 | 2,772,147 | 0 | 4,159,384 | 0 | 407,301 | 0 | 73,653 |
| BIVINS A-6 | Feb-20 | 46,511 | 13,439,100 | 16,172 | 7,644,387 | 11,578 | 3,309,697 | 16,523 | 2,193,646 | 1,865 | 222,510 | 373 | 68,860 |
| BIVINS A-13 | Feb-20 | 33,838 | 9,942,775 | 9,852 | 4,927,667 | 8,471 | 2,545,703 | 13,666 | 2,167,308 | 1,588 | 242,054 | 260 | 60,044 |
| BIVINS A-14 | Feb-20 | 38,688 | 11,240,947 | 8,446 | 5,955,957 | 9,467 | 2,837,186 | 18,335 | 2,143,074 | 2,069 | 232,994 | 371 | 71,735 |
| BIVINS A-4 | Feb-20 | 30,991 | 14,996,254 | 2,936 | 2,551,364 | 7,688 | 3,630,919 | 19,226 | 7,881,672 | 774 | 795,449 | 367 | 136,850 |
| BUSH A-2 | Feb-20 | 4,961 | 14,109,793 | 220 | 2,024,141 | 1,296 | 3,465,627 | 3,272 | 7,708,416 | 142 | 795,221 | 32 | 116,388 |
| Injection | Feb-20 | 0 | 66,474,735 | 0 | 48,019,788 | 0 | 17,121,580 | 0 | 780,676 | 0 | 37 | 0 | 552,655 |
| inj Bivins A-3 | Feb-20 | 0 | (25,652,315) | 0 | (18,384,452) | 0 | (6,554,549) | 0 | (332,777) | 0 | 0 | 0 | (380,537) |
| inj Bivins A-6 | Feb-20 | 0 | (24,412,686) | 0 | (17,669,978) | 0 | (6,486,588) | 0 | (143,192) | 0 | (72) | 0 | (112,856) |
| inj Bivins A-13 | Feb-20 | 0 | (6,490,417) | 0 | (4,706,191) | 0 | (1,656,853) | 0 | (122,391) | 0 | (2) | 0 | (4,980) |
| inj Bivins A-14 | Feb-20 | 0 | (6,501,333) | 0 | (4,767,421) | 0 | (1,602,106) | 0 | (126,303) | 0 | (7) | 0 | (5,497) |
| inj Bivins A-4 | Feb-20 | 0 | (2,527,801) | 0 | (1,848,815) | 0 | (601,353) | 0 | (42,016) | 0 | 0 | 0 | (35,617) |
| inj Bush A-2 | Feb-20 | 0 | (867,658) | 0 | (625,258) | 0 | (215,406) | 0 | (13,980) | 0 | 0 | 0 | (13,015) |
| Production | Feb-20 | 0 | 1,254,876 | 0 | 924,742 | 0 | 270,231 | 0 | 48,129 | 0 | 3,199 | 0 | 8,575 |
| BIVINS A-1 | Feb-20 | 0 | 2,686,608 | 0 | 48,896 | 0 | 636,995 | 0 | 1,798,415 | 0 | 175,704 | 0 | 26,597 |
| BIVINS A-2 | Feb-20 | 18,618 | 14,861,404 | 585 | 1,909,245 | 4,543 | 3,630,024 | 12,772 | 8,359,239 | 525 | 837,398 | 192 | 125,497 |
| BIVINS A-5 | Feb-20 | 25,306 | 17,180,682 | 4,588 | 2,252,602 | 6,635 | 4,223,067 | 13,345 | 9,588,363 | 525 | 968,683 | 213 | 147,968 |
| BIVINS A-7 | Feb-20 | 15,634 | 12,410,610 | 4,827 | 2,964,151 | 4,144 | 3,129,704 | 6,327 | 5,648,383 | 225 | 578,063 | 111 | 90,308 |
| BIVINS A-9 | Feb-20 | 23,683 | 11,738,588 | 710 | 233,421 | 5,980 | 2,899,109 | 15,067 | 7,712,260 | 1,707 | 787,229 | 218 | 106,570 |
| BIVINS A-11 | Feb-20 | 18,293 | 7,259,738 | 545 | 163,161 | 4,592 | 1,808,814 | 11,724 | 4,729,568 | 1,247 | 489,292 | 184 | 68,903 |
| BIVINS A-15 | Feb-20 | 24,377 | 11,284,089 | 404 | 455,672 | 5,630 | 2,679,470 | 16,392 | 7,294,543 | 1,651 | 734,397 | 300 | 120,008 |
| BIVINS B-1 | Feb-20 | 29,831 | 9,455,778 | 712 | 333,035 | 7,591 | 2,295,793 | 20,303 | 6,098,732 | 820 | 627,498 | 406 | 100,720 |
| BIVINS B-2 | Feb-20 | 23,922 | 7,901,297 | 440 | 148,786 | 6,039 | 1,980,840 | 15,445 | 5,124,878 | 1,573 | 531,315 | 425 | 115,477 |
| BUSH A-1 | Feb-20 | 0 | 5,721,962 | 0 | 104,140 | 0 | 1,356,677 | 0 | 3,830,281 | 0 | 374,216 | 0 | 56,647 |
| BUSH A-3 | Feb-20 | 28,219 | 13,391,165 | 9,121 | 3,275,414 | 7,265 | 3,317,893 | 11,173 | 6,063,982 | 409 | 617,156 | 251 | 116,719 |
| BUSH A-4 | Feb-20 | 22,709 | 9,577,128 | 1,680 | 1,659,099 | 6,043 | 2,401,063 | 14,285 | 4,942,491 | 564 | 506,982 | 138 | 67,493 |
| BUSH A-5 | Feb-20 | 41,589 | 18,435,595 | 9,923 | 4,280,564 | 10,890 | 4,634,351 | 19,747 | 8,520,290 | 766 | 873,707 | 263 | 126,683 |
| BUSH A-8 | Feb-20 | 15,861 | 5,041,300 | 286 | 92,372 | 3,923 | 1,224,957 | 10,325 | 3,319,854 | 1,056 | 337,288 | 272 | 66,829 |
| BUSH A-9 | Feb-20 | 0 | 3,860,915 | 0 | 105,037 | 0 | 930,915 | 0 | 2,537,187 | 0 | 253,463 | 0 | 34,312 |
| BUSH A-11 | Feb-20 | 16,881 | 5,165,261 | 381 | 146,084 | 4,211 | 1,236,043 | 11,565 | 3,378,699 | 467 | 343,397 | 256 | 61,037 |
| BUSH B-1 | Feb-20 | 5,028 | 3,518,384 | 86 | 65,801 | 1,169 | 834,166 | 3,364 | 2,350,778 | 359 | 233,139 | 51 | 34,501 |
| FUQUA A-1 | Feb-20 | 0 | 2,954,098 | 0 | 53,854 | 0 | 702,798 | 0 | 1,975,175 | 0 | 193,573 | 0 | 28,699 |
| FUQUA A-2 | Feb-20 | 0 | 132,119 | 0 | 2,404 | 0 | 31,322 | 0 | 88,458 | 0 | 8,637 | 0 | 1,297 |
| FUQUA A-3 | Feb-20 | 0 | 9,303,912 | 0 | 577,005 | 0 | 2,277,687 | 0 | 5,790,357 | 0 | 583,701 | 0 | 75,162 |
| TT Fuel | Feb-20 | 14 | 0 | 0 | 0 | 3 | 0 | 9 | 0 | 1 | 0 | 0 | 0 |
| field-wide pcts | | | | 15.47% | 18.47% | 25.20% | 24.66% | 54.38% | 50.86% | 3.94% | 5.17% | 1.01% | 0.85% |

Latest estimates of reserves and feed to HEU

Based on NITEC's 2003 reserves study
from NITEC's interim report

As of EOM Feb-20 Volumes in BCF

| | | |
|-------------------------------------|---------|--|
| Initial Gas In Place | 330.040 | |
| Produced 1924 to 1961 | 48.830 | |
| Injected 1924 to 1961 | 0.450 | |
| Remaining Gas In Place 1961 | 281.660 | |
| Left Behind Pipe, 1961 | 82.060 | =====> 1.500 BCF of contained helium |
| Remaining in Place, 1961 | 199.600 | |
| Gas In Place 1961 | 199.600 | |
| Produced 1961 to July 2002 | 82.450 | |
| Injected 1961 to July 2002 | 64.510 | Net Helium |
| Remaining Gas In Place July 2002 | 181.660 | 33.997 |
| Produced July 2002 through Dec 2002 | 1.096 | 0.743 |
| Production 2003 - 19 | 113.305 | 27.048 |
| Injection 2003 - 19 | (1.423) | (1.159) |
| Produced to Date 2020 | 0.952 | 0.144 |
| Injected to Date 2020 | 0.000 | 0.000 |
| Amount of Raw Gas Available to CHEU | 67.730 | =====> 7.220 total helium in reservoir |
| Estimated Bottom Hole Pressure | 249.516 | est z-factor 0.980 |

* All volumes on Table 2 are reported in Mcf at 14.65 psia & 60°F

Table 3 - Gas Volumes & Inventory

February - 2020

Crude Helium Enrichment Unit Operations

| | | Gross Withdrawal | | Net Helium Withdrawal | | Nitrogen | | Methane | | Ethane plus | | Other (CO2, Ar, H2) | |
|------------------|--------|------------------|-------------|-----------------------|------------|----------|------------|---------|------------|-------------|------------|---------------------|------------|
| | | Month | Cumulative | Month | Cumulative | Month | Cumulative | Month | Cumulative | Month | Cumulative | Month | Cumulative |
| Measured Feed | Feb-20 | 466,310 | 111,481,479 | 72,128 | 25,502,750 | 117,502 | 27,894,406 | 253,597 | 51,572,020 | 18,386 | 5,527,497 | 4,697 | 984,806 |
| Calculated Feed | Feb-20 | 464,927 | 111,370,773 | 71,914 | 25,500,371 | 117,154 | 27,859,972 | 252,846 | 51,477,819 | 18,331 | 5,545,376 | 4,683 | 987,234 |
| Feed to Box | Feb-20 | 460,909 | 110,628,718 | 71,914 | 25,500,550 | 117,154 | 27,860,054 | 252,846 | 51,477,865 | 18,331 | 5,545,370 | 664 | 244,879 |
| Cheu Product | Feb-20 | 100,222 | 32,431,222 | 72,157 | 25,135,345 | 25,143 | 6,427,684 | 2,274 | 644,147 | 2 | 932 | 646 | 223,114 |
| Residue | Feb-20 | 235,738 | 51,096,645 | 0 | 2,226 | 6,122 | 1,246,364 | 208,077 | 45,334,385 | 21,539 | 4,512,405 | 0 | 1,265 |
| Cold Box Vent | Feb-20 | 68,762 | 18,187,655 | 41 | 92,058 | 58,952 | 16,120,271 | 9,755 | 1,913,353 | 0 | 246 | 14 | 61,727 |
| Flare/Boot Strap | Feb-20 | 0 | 8,574,528 | 0 | 53,124 | 0 | 7,259,311 | 0 | 1,161,305 | 0 | 94,251 | 0 | 6,537 |
| Fuel From Cheu | Feb-20 | 7,251 | 1,519,801 | 4 | 515 | 188 | 43,695 | 5,848 | 1,231,348 | 1,212 | 244,244 | 0 | 0 |
| Shrinkage/Loss | Feb-20 | (4,422) | 590,221 | 0 | 0 | 0 | 0 | 0 | 0 | (4,422) | 590,221 | 0 | 0 |
| Unaccounted* | Feb-20 | 53,357 | 4,538,458 | (288) | 162,757 | 26,749 | 3,164,718 | 26,891 | 1,206,105 | (0) | 974 | 4 | 3,904 |

*Before October 2004, the values are estimated

Storage Operations

Inventory (contained helium)

| | Government | Private |
|-----------------------------------|------------|-----------|
| Beginning inventory | 2,747,371 | 2,241,783 |
| net acceptances + redeliveries | 0 | (64,229) |
| In Kind Transfers | (54,379) | 54,379 |
| Conservation Crude Sales | 0 | 0 |
| Gain/loss | (2,925) | |
| Ending Inventory | 2,690,066 | 2,231,933 |
| Total Helium in Reservoir | 7,219,794 | |
| Total Helium in Storage | 4,921,999 | |
| Helium in native gas | 2,297,901 | |

Crude Helium Pipeline

| | Gross | Net Helium | Percent |
|--|---------|------------|---------|
| Beginning inventory | 29,451 | 21,091 | 71.61% |
| Measured to Pipeline (Private Plants) | 13,057 | 9,516 | 72.88% |
| Measured from Pipeline (Private Plant: | 102,818 | 73,745 | 71.72% |
| HEU Production | 100,222 | 72,157 | 72.00% |
| Injection | 0 | 0 | 00.00% |
| Production | 0 | 0 | |
| Ending Inventory | 36,132 | 25,986 | 71.92% |
| Gain/Loss | (3,780) | (3,032) | |

Tuck Triqq Reservoir Operations

| Native Gas (Gross) | Month | Fiscal Year | Since Field |
|--------------------------------------|-----------|-------------|-------------|
| | | | Discovery |
| Total in place, beg. of period | 5,198,688 | 5,198,688 | 5,890,000 |
| Recoverable in place, beg. of period | 4,528,688 | 4,528,688 | 5,220,000 |
| Production during period to date | 0 | 0 | 691,312 |
| Total in place, end of month | 5,198,688 | 5,198,688 | 5,198,688 |
| Recoverable in place, end of month | 4,528,688 | 4,528,688 | 4,528,688 |

* All volumes on Table 3 are reported in Mcf at 14.65 psia & 60°F

Table 4 - In Kind Helium Sales

February - 2020

| NASA* | Navy* | Army* | Air Force* | DOE* | Other Fed* | Subtotal* | In Kind+ | Charges Billed (\$)** | | |
|--|-----------|---------|------------|---------|------------|-----------|-----------|-----------------------|---------------|------------|
| In Kind Helium | | | | | | | | (billed quarterly) | | |
| Airgas Merchant Gases, Contract no. INC18-0102 | | | | | | | | | | |
| Month | | | | | | | | | | |
| FYTD | | | | | | | | | | |
| Air Liquide Helium America, Inc., Contract no. INC18-0104 | | | | | | | | | | |
| Month | | | | | | | | | | |
| FYTD | | | | | | | | | | |
| Air Products, L.P., Contract no. INC18-0105 | | | | | | | | | | |
| Month | | | | | | | | | | |
| FYTD | | | | | | | | | | |
| Messer, LLC, Contract no. INC18-0106 | | | | | | | | | | |
| Month | | | | | | | | | | |
| FYTD | | | | | | | | | | |
| Praxair, Inc., Contract no. INC18-0112 | | | | | | | | | | |
| Month | | | | | | | | | | |
| FYTD | | | | | | | | | | |
| Matheson Tri-Gas, Inc., Contract no. INC18-0114 | | | | | | | | | | |
| Month | | | | | | | | | | |
| FYTD | | | | | | | | | | |
| Global Gases America, Contract no. INC18-0116 | | | | | | | | | | |
| Month | | | | | | | | | | |
| FYTD | | | | | | | | | | |
| Month | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | | |
| FYTD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | | |
| Total month | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | | |
| Total FYTD | 20,294 | 52 | 0 | 0 | 0 | 24,933 | 45,279 | 44,578 | \$4,234,910 | |
| Total CYTD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | |
| Cumulative | 2,153,360 | 108,870 | 450 | 271,593 | 422,045 | 1,055,937 | 4,012,254 | 3,950,126 | \$244,954,337 | |
| In Kind Transfers | | | | | | | Month | FYTD | CYTD | Cumulative |
| Transferred | | | | | | | 54,379 | 105,848 | 54,379 | 3,955,592 |
| Volume outstanding | | | | | | | (5,391) | | | |

Natural Gas / Natural Gas Liquid Sales

| | Natural Gas (Mcf)*** | NGLs (gal) | Decatherms | Avg Btu Value | Charges Billed (\$)** |
|---|----------------------|------------|-------------------|--------------------------|-----------------------|
| El Paso Natural Gas | | | | | |
| Provides Measured Firm/Interruptible Transportation Services (billed monthly) | | | | | |
| Month | 233,152 | --- | 256,596 | 1,101 | \$0 |
| FYTD | 912,058 | --- | 1,004,028 | 1,101 | \$0 |
| Cumulative | 50,428,096 | --- | 54,918,797 | 1,089 | (\$5,088,325) |
| Minerals Management Service | | | | | |
| No Longer Provides Natural Gas Marketing Services | | | | | |
| Cumulative | --- | --- | --- | --- | (\$179,913) |
| ETC Marketing Ltd | | | | | |
| Purchaser - Natural Gas | | | | | |
| Month | --- | --- | 259,300 | \$0.725130 | \$188,026 |
| FYTD | --- | --- | 1,014,100 | \$1.053280 | \$1,068,131 |
| Cumulative | --- | --- | 54,819,459 | \$4.046279 | \$220,988,251 |
| Sandstone | | | | | |
| Purchaser - Natural Gas Liquids | | | | | |
| Month | --- | 72,935 | 7,855 | \$4.268371 | \$33,528 |
| FYTD | --- | 348,255 | 37,643 | \$5.359724 | \$201,756 |
| Cumulative | --- | 15,796,076 | 1,684,285 | \$10.294781 | \$17,339,346 |
| | | | | | |
| | Natural Gas (Mcf)*** | NGLs (gal) | Purchased (Dth's) | \$\$ Per Unit (\$\$/Dth) | Total (\$\$) |
| Total month | 233,152 | 72,935 | 267,155 | \$0.829310 | \$221,554 |
| Total FYTD | 912,058 | 348,255 | 1,051,743 | \$1.207412 | \$1,269,887 |
| Total CYTD | 459,688 | 146,972 | 522,849 | \$0.910034 | \$475,810 |
| Cumulative | 50,428,096 | 15,796,076 | 56,503,744 | \$4.139299 | \$233,059,358 |

*** Volumes in Mcf at 14.73 psia & 60°F

**Rounded to nearest dollar

Table 5 - Conservation Crude Sales/Reserve Sell-down

February - 2020

Helium & Natural Gas Sales

This Table has been suspended as of 9/30/2018, BLM is no longer selling crude helium on the Open Market per Helium Stewardship Act of 2013.

Table 6 - Helium Resources Evaluation

February - 2020

All Volumes in Mcf at 14.7 psia & 70°F

| Revenue Collected From Federal Leaseholds | Month* | FYTD* |
|--|-------------|-------------|
| Fee Sales & Royalties | \$1,989,121 | \$8,462,036 |
| Natural Gas Royalties (1) | \$0 | \$0 |
| Natural Gas Rentals | \$0 | \$0 |
| Other | \$68,360 | \$299,332 |
| Revenue Collected from Federal Lease Holds | \$2,015,251 | \$8,530,396 |

*Totals do not sum

| Helium Analysis and Evaluation | Month | FYTD |
|---|-------|------|
| Number of Sample Request Letters Sent | 0 | 0 |
| Number of Samples Received | 0 | 0 |
| Number of Samples Analyzed | 0 | 0 |
| Total Number of Samples Analyzed For Resources Division | 0 | 0 |
| Total Number of Other Samples Analyzed (2) | 15 | 63 |

U. S. Helium Production

| <i>Domestic</i> | FY Volume | CY Volume |
|---|-----------|-------------|
| 2013 Helium Sold | 4,725,187 | 4,623,130 |
| 2014 Helium Sold | 4,279,765 | 4,166,708 |
| 2015 Helium Sold | 3,815,746 | 3,463,698 |
| 2016 Helium Sold | 3,282,185 | 3,466,014 |
| 2017 Helium Sold | 4,559,100 | 4,644,278 |
| Estimated Helium Resources as of 12/31/2016 (Mcf) | | 723,000,000 |

| | FY-2017 | CY-2017 |
|--------------------------------|-----------|-----------|
| U.S. Helium Exports (3) | 2,520,645 | 2,451,207 |
| US Helium Imports | 731,407 | 666,908 |

- (1) Includes drip gas sales & other miscellaneous gas sales.
- (2) Includes pipeline, field survey, and other requested analyses.
- (3) Data from Department of Commerce - Bureau of the Census.

Table 7 - Helium Storage Contract Activity

February - 2020

All Volumes in Mcf at 14.65 psia & 60°F

| | Metered Gas | | | | | Transferred Gas | | Stored Helium EOM | Charges Billed (\$)** | | |
|---|-------------|-------------------|----------|-----------|----------------|-----------------|--------|-------------------|-----------------------|----------------|-------------|
| | Gross Gas | Helium % Month | Helium | FYTD | Helium CYTD | Cumulative | Month | | Cumulative | Month | FYTD |
| Total All Contracts* | | | | | | | | | | | |
| Crude Acquired | 13,057 | 72.9% | 9,516 | 45,521 | 22,333 | 27,503,274 | 59,119 | 61,412,448 | | | |
| Crude Disposed | 102,818 | 71.7% | 73,745 | 349,323 | 160,575 | 55,157,733 | 4,740 | 26,968,375 | \$965,382.66 | Storage Fees | |
| Grade-A Rdlvrd | 0 | | 0 | 0 | 0 | 1,478,718 | | | <u>\$274,090.06</u> | RMF Fees | |
| Net/Balance | (89,761) | | (64,229) | (303,802) | (138,242) | (29,133,177) | 54,379 | 34,444,073 | 2,231,933 | \$1,239,472.72 | \$5,487,543 |
| Total Prior Contracts (TERMINATED) | | | | | | | | | | | |
| Crude Acquired | | | | 0 | 0 | 17,406,129 | 0 | 18,235,232 | | | |
| Crude Disposed | | | | 0 | 0 | 11,830,863 | 0 | 19,187,102 | | | |
| Grade-A Rdlvrd | | | | 0 | 0 | 1,478,718 | | | | | |
| Number of trailers | | | | 0 | 0 | 9,834 | | | 0 | | |
| Messer, LLC, Contract no. 3249 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Praxair, Inc., Contract no. 3251 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Air Products, L.P., Contract no. 3256 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Air Liquide Helium America, Inc., Contract no. 3284 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Keyes Helium Co., LLC, Contract no. 3287 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Matheson Tri-Gas, Inc., Contract no. 3288 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Airgas Merchant Gases, Contract no. 3290 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Global Gases America, Contract no. 3293 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Scout Energy Partners, Contract no. 3294 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| IACX Energy, Contract no. 3297 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |
| Uniper Global Commodities North America LLC, Contract no. 3298 | | | | | | | | | | | |
| Crude Acquired | | | | | | | | | | | |
| Crude Disposed | | | | | | | | | | | |
| Net/Balance | | | | | | | | | | | |

| Government Helium | |
|--|-----------|
| Remaining Crude Acquired beginning of the month | 2,747,371 |
| Crude Disposed: In Kind Sales transferred for the month | (54,379) |
| Conservation Crude Sales/Reserve Sell Down transferred (month) | 0 |
| Gains and Losses for the month | (2,925) |
| Net/Balance of Purchased Helium Remaining for Sale | 2,690,066 |

*Includes In Kind and Conservation Crude transfers from Government storage

**Rounded to nearest dollar

** New Contracts

Table 8 - Compression & CHEU (Operations)

February - 2020

| Field/CHEU Compressor Operations | | Month | FYTD | Cumulative |
|--|--------------|--------|--------|------------|
| | | | | |
| Spot gas fuel price * | \$ per/MMBTU | \$0.73 | | |
| Fuel used * (now includes field compression well head) | total MMBTU | 8,398 | 40,902 | 2,036,917 |
| #1 Compressor run time * | hours | 0 | 1,070 | 124,614 |
| #2 Compressor run time * | hours | 696 | 3,068 | 86,814 |
| #3 Compressor run time * | hours | 696 | 2,692 | 71,547 |

* Field/CHEU Compressor Operations based on Feb 20 activity

| Crude Helium Enrichment Unit (CHEU) CHEU Runtime | Month | | FYTD | | Cumulative |
|---|-------------|---------|-------------|---------|-------------|
| | Runtime Hrs | Percent | Runtime Hrs | Percent | Runtime Hrs |
| Processing feed gas | 696 | 100.0% | 3,425 | 93.9% | 141,528 |
| Producing residue gas | 696 | 100.0% | 3,361 | 92.1% | 138,311 |
| Producing helium product | 696 | 100.0% | 3,277 | 89.8% | 134,391 |
| Producing natural gas liquids | 696 | 100.0% | 3,344 | 91.7% | 133,654 |

| CHEU Utility Usage | Month | FYTD | Cumulative |
|--|-----------|------------|-------------|
| | | | |
| Cheu Fuel Gas (Mcf) usage Feb 20 | 3,274 | 36,373 | 682,480 |
| Cheu Pure Water Usage (gallons) Feb 20 | 419 | 2,084 | 327,877 |
| Electricity Metered (Kwh) CHEU consumed Jan 20 | 2,621,117 | 12,178,119 | 225,373,746 |

| Booster Compressor Operations and Usage | Month | FYTD | Cumulative |
|--|---------|-----------|------------|
| | | | |
| Electricity Metered (Kwh) Booster Compressor consumed Jan 20 | 647,986 | 1,248,739 | 1,248,739 |