

Bureau of Land Management

Amarillo Field Office

Helium Operations

Statistical Report

for



August - 2018

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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Compi Amarillo, Texas

Issued: November 8, 2018

REVISED

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

Approved for Distribution: Joseph B. Peterson (Acting FM)

Date: November 7, 2018

Table 1 - Summary of Helium Operations

August - 2018

Helium Enrichment Unit Operations

Gas Processed	Month Gross Volume	Month Net Helium	Average Percent	Gross FYTD	Net FYTD
Measured Plant Feed (Mcf*)	540,557	86,488	16.00%	5,853,268	939,396
Helium Product (Mcf*)	116,811	86,710	74.23%	1,268,894	942,991
Residue Natural Gas (Mcf*)	296,725	0	00.00%	3,151,358	40

* Volumes in Mcf at 14.65 psia & 60°F

Natural Gas & Liquids Produced

Gas Processed	Month	FYTD
Natural Gas Sales (Mcf***)	294,526	3,155,820
NGL Sales (gallons)	105,275	1,124,093

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

Bush Dome Reservoir Operations

Conservation gases from all sources	Month Gross Volume	Month Net Helium	Average Percent	Gross FYTD	Net FYTD
Total Withdrawn (Mcf*)	544,180	87,067	16.00%	5,860,964	940,603
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

Conservation Helium	Volume Outstanding	Month	FYTD	CYTD	Cumulative
Conservation Crude Sale Volume Sold/Paid (Mcf*)		0	15,000	0	22,779,063
Conservation Crude Sale Volume Transferred (Mcf*)	0	0	15,000	0	903,477
Conservation Helium in Storage (EOM) (Mcf*)		3,297,597			

* Volumes in Mcf at 14.65 psia & 60°F

In Kind Helium

	Month	FYTD	CYTD	Cumulative
Sale Volumes Transferred (Mcf*)	54,146	158,560	127,322	3,683,723
Sale Volumes Outstanding (Mcf*)	7,092			

* Volumes in Mcf at 14.65 psia & 60°F

Private Company Helium Storage Contracts

Contact Activity	Month Gross Volume	Month Net Helium	Average Percent	Annual Helium FYTD
Crude Acquired (Mcf*)	13,369	8,184	61.22%	111333
Crude Disposed (Mcf*)	124,151	90,780	73.12%	1052107
Net Balance (Mcf*)	(110,782)	(82,596)		(940,774)
Balance of Stored Helium End Of Month (Mcf*)		2,874,531		

* Volumes in Mcf at 14.65 psia & 60°F

Revenue / Charges

Helium Storage Contracts (Charges Billed (\$))	Month	FYTD
Storage Fees Billed (\$)	\$597,119	\$6,614,005
Reservoir Management Fees Billed (\$)	\$226,129	\$1,953,272

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

	Month	FYTD
Conservation Crude Helium Sales	\$0	\$1,815,000
In Kind Sales	\$0	\$10,849,052
Natural Gas & Liquid Sales	\$712,368	\$8,424,895

Helium Resources Evaluation

	Month	FYTD
Revenue Collected from Federal Lease Holds	\$1,623,127	\$19,111,126
Helium Sample Collection Report for month	Submitted - 0	Received - 0
		Analyzed - 12

*Rounded to nearest dollar

Table 2 - Bush Dome Reservoir Operations

August - 2018

		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		544,180	238,281,222	87,067	44,274,185	134,459	58,741,511	285,937	120,970,706	31,275	12,279,001	5,442	2,015,819
BIVINS A-3	Aug-18	0	10,961,113	0	3,548,629	0	2,772,147	0	4,159,384	0	407,301	0	73,653
BIVINS A-6	Aug-18	51,453	12,652,744	20,964	7,350,567	12,878	3,113,491	15,522	1,932,546	1,688	193,525	401	62,613
BIVINS A-13	Aug-18	37,091	9,376,488	11,851	4,754,375	9,304	2,403,826	14,049	1,946,025	1,605	216,565	282	55,699
BIVINS A-14	Aug-18	41,985	10,594,882	11,189	5,800,728	10,369	2,678,399	18,047	1,849,881	1,991	200,246	389	65,627
BIVINS A-4	Aug-18	34,748	14,461,056	3,607	2,499,387	8,297	3,502,805	20,259	7,564,651	2,192	763,513	393	130,700
BUSH A-2	Aug-18	8,493	13,985,310	385	2,018,712	2,114	3,434,497	5,329	7,629,869	608	786,657	56	115,576
Injection	Aug-18	0	66,474,735	0	48,019,788	0	17,121,580	0	780,676	0	37	0	552,655
inj Bivins A-3	Aug-18	0	(25,652,315)	0	(18,384,452)	0	(6,554,549)	0	(332,777)	0	0	0	(380,537)
inj Bivins A-6	Aug-18	0	(24,412,686)	0	(17,669,978)	0	(6,486,588)	0	(143,192)	0	(72)	0	(112,856)
inj Bivins A-13	Aug-18	0	(6,490,417)	0	(4,706,191)	0	(1,656,853)	0	(122,391)	0	(2)	0	(4,980)
inj Bivins A-14	Aug-18	0	(6,501,333)	0	(4,767,421)	0	(1,602,106)	0	(126,303)	0	(7)	0	(5,497)
inj Bivins A-4	Aug-18	0	(2,527,801)	0	(1,848,815)	0	(601,353)	0	(42,016)	0	0	0	(35,617)
inj Bush A-2	Aug-18	0	(867,658)	0	(625,258)	0	(215,406)	0	(13,980)	0	0	0	(13,015)
Production	Aug-18	0	1,254,876	0	924,742	0	270,231	0	48,129	0	3,199	0	8,575
BIVINS A-1	Aug-18	0	2,686,608	0	48,896	0	636,995	0	1,798,415	0	175,704	0	26,597
BIVINS A-2	Aug-18	23,024	14,534,026	765	1,898,880	5,342	3,553,718	15,034	8,144,860	1,648	814,430	235	122,137
BIVINS A-5	Aug-18	28,569	16,750,361	5,184	2,176,454	7,226	4,113,826	14,317	9,369,497	1,610	946,176	232	144,409
BIVINS A-7	Aug-18	16,761	12,149,672	4,936	2,886,301	4,320	3,062,363	6,623	5,545,436	766	567,078	116	88,494
BIVINS A-9	Aug-18	32,709	11,252,353	888	219,445	8,253	2,775,921	20,948	7,402,076	2,330	752,712	290	102,199
BIVINS A-11	Aug-18	21,918	6,936,132	645	153,484	5,484	1,727,533	14,012	4,522,870	1,552	466,672	226	65,573
BIVINS A-15	Aug-18	36,667	10,727,522	620	446,293	8,450	2,550,777	24,544	6,921,982	2,583	695,558	469	112,912
BIVINS B-1	Aug-18	34,566	8,911,109	812	320,327	8,418	2,162,629	22,486	5,743,009	2,409	591,573	441	93,572
BIVINS B-2	Aug-18	31,399	7,428,683	580	139,939	7,862	1,863,177	20,185	4,819,912	2,186	498,164	586	107,491
BUSH A-1	Aug-18	0	5,721,962	0	104,140	0	1,356,677	0	3,830,281	0	374,216	0	56,647
BUSH A-3	Aug-18	32,539	12,905,332	10,268	3,122,989	8,151	3,195,955	12,425	5,876,333	1,415	597,601	280	112,455
BUSH A-4	Aug-18	25,156	9,180,316	2,169	1,627,857	6,446	2,299,457	14,922	4,704,989	1,494	482,803	124	65,210
BUSH A-5	Aug-18	45,959	17,723,044	11,387	4,109,467	11,635	4,453,427	20,344	8,198,143	2,311	839,772	281	122,235
BUSH A-8	Aug-18	18,183	4,759,292	329	87,249	4,461	1,155,389	11,807	3,136,878	1,260	317,922	325	61,855
BUSH A-9	Aug-18	0	3,860,915	0	105,037	0	930,915	0	2,537,187	0	253,463	0	34,312
BUSH A-11	Aug-18	19,022	4,874,586	419	139,738	4,537	1,166,299	12,454	3,187,284	1,336	324,367	277	56,898
BUSH B-1	Aug-18	3,940	3,435,064	68	64,357	913	814,753	2,629	2,295,190	290	227,120	40	33,643
FUQUA A-1	Aug-18	0	2,954,098	0	53,854	0	702,798	0	1,975,175	0	193,573	0	28,699
FUQUA A-2	Aug-18	0	132,119	0	2,404	0	31,322	0	88,458	0	8,637	0	1,297
FUQUA A-3	Aug-18	0	9,303,912	0	577,005	0	2,277,687	0	5,790,357	0	583,701	0	75,162
TT Fuel	Aug-18	0	0	0	0	0	0	0	0	0	0	0	0
field-wide pct's				16.00%	18.58%	24.71%	24.65%	52.54%	50.77%	5.75%	5.15%	1.00%	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 Aug-18 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 - 17	101.638	25.237
Injection 2003 - 17	(1.423)	(1.159)
Produced to Date 2018	4.307	0.690
Injected to Date 2018	0.000	0.000
Amount of Raw Gas Available to CHEU	76.041	====> 8.486 total helium in reservoir
Estimated Bottom Hole Pressure	280.095	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

August - 2018

Crude Helium Enrichment Unit Operations

		Gross Withdrawal		Net Helium Withdrawal		Nitrogen		Methane		Ethane plus		Other (CO ₂ , Ar, H ₂)	
		Month	Cumulative	Month	Cumulative	Month	Cumulative	Month	Cumulative	Month	Cumulative	Month	Cumulative
Measured Feed	Aug-18	540,557	103,199,572	86,488	24,240,153	133,564	25,845,560	284,033	47,153,946	31,067	5,058,047	5,406	901,866
Calculated Feed	Aug-18	544,180	103,062,476	87,067	24,234,061	134,459	25,804,636	285,937	47,045,474	31,275	5,074,321	5,442	903,984
Feed to Box	Aug-18	539,541	102,391,979	87,067	24,234,239	134,459	25,804,718	285,937	47,045,520	31,275	5,074,318	804	233,184
Cheu Product	Aug-18	116,811	30,694,801	86,710	23,874,423	27,013	6,001,318	2,303	606,347	3	875	782	211,838
Residue	Aug-18	296,725	47,054,592	0	2,171	6,974	1,151,788	263,093	41,754,128	26,657	4,145,242	0	1,263
Cold Box Vent	Aug-18	82,200	16,947,443	55	90,020	73,945	15,040,679	8,184	1,755,184	0	121	16	61,439
Flare/Boot Strap	Aug-18	82,200	7,463,692	55	50,799	73,945	6,295,681	8,184	1,017,353	0	93,586	16	6,272
Fuel From Cheu	Aug-18	6,706	1,401,929	3	456	174	40,642	5,408	1,136,284	1,121	224,547	0	0
Shrinkage/Loss	Aug-18	3,494	518,507	0	0	0	0	0	0	3,494	518,507	0	0
Unaccounted*	Aug-18	33,605	3,695,519	298	168,601	26,354	2,763,708	6,948	758,266	(0)	1,098	5	3,845

*Before October 2004, the values are estimated

Storage Operations

Inventory (contained helium)

	Government	Private
Beginning inventory	3,351,904	2,902,981
net acceptances + redeliveries	0	0
In Kind Transfers	(54,146)	54,146
Conservation Crude Sales	0	0
Gain/loss	(160)	
Ending Inventory	3,297,597	2,874,531
Total Helium in Reservoir	8,486,167	
Total Helium in Storage	6,172,128	
Helium in native gas	2,314,039	

Crude Helium Pipeline

	Gross	Net Helium	Percent
Beginning inventory	30,933	22,763	73.59%
Measured to Pipeline (Private Plants)	13,369	8,193	61.28%
Measured from Pipeline (Private Plants)	124,151	90,780	73.12%
HEU Production	116,811	86,710	74.23%
Injection	0	0	00.00%
Production	0	0	
Ending Inventory	36,607	26,726	73.01%
Gain/Loss	(355)	(160)	

Tuck Trigg 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

August - 2018

	NASA*	Navy*	Army*	Air Force*	DOE*	Other Fed*	Subtotal*	In Kind+	Charges Billed (\$) **	
In Kind Helium										
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										
Linde Gas North America, 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										
Total month	0	0	0	0	0	0	0	0	\$0	
Total FYTD	72,417	1	0	0	0	56,974	129,392	127,388	\$10,849,052	
Total CYTD	57,046	0	0	0	0	38,232	95,279	93,803	\$8,061,497	
Cumulative	2,023,209	108,685	450	271,593	422,045	919,276	3,745,256	3,687,265	\$220,780,266	
In Kind Transfers							Month	FYTD	CYTD	Cumulative
Transferred							54,146	158,560	127,322	3,683,723
Volume outstanding							7,092			

* Volumes in Mcf at 14.7 psia & 70°F
+ Volumes in Mcf at 14.65 psia & 60°F

**Rounded to nearest dollar

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	294,526	---	324,178	1,101	\$0
FYTD	3,155,820	---	3,410,673	1,081	(\$167,982)
Cumulative	46,606,696	---	50,708,289	1,088	(\$5,088,325)
Minerals Management Service					
No Longer Provides Natural Gas Marketing Services					
Cumulative	---	---	---	---	(\$179,913)
Tenaska					
Purchaser - Natural Gas					
Month	---	---	324,398	\$1.989117	\$645,265
FYTD	---	---	3,451,652	\$2.234776	\$7,713,670
Cumulative	---	---	50,566,539	\$4.288626	\$216,034,425
Sandstone					
Purchaser - Natural Gas Liquids					
Month	---	105,275	11,253	\$5.963092	\$67,103
FYTD	---	1,124,093	120,950	\$7.269179	\$879,207
Cumulative	---	14,352,330	1,528,049	\$10.808035	\$16,515,207
	Natural Gas (Mcf)***	NGLs (gal)	Purchased (Dth's)	\$\$ Per Unit (\$\$/Dth)	Total (\$\$)
Total month	294,526	105,275	335,651	\$2.122348	\$712,368
Total FYTD	3,155,820	1,124,093	3,572,602	\$2.358196	\$8,424,895
Total CYTD	2,352,677	844,655	2,657,784	\$2.263850	\$6,016,824
Cumulative	46,606,696	14,352,330	52,094,588	\$4.378726	\$227,281,394

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

**Rounded to nearest dollar

Table 5 - Conservation Crude Sales/Reserve Sell-down

August - 2018

Helium & Natural Gas Sales

	Award Volume*	Outstanding*	Sales*	Charges Billed (\$)** (billed quarterly)	
Conservation Helium					
<u>Air Liquide Helium America, Inc.</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	335,217		335,217	\$25,454,815	
<u>Air Products, L.P.</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	8,962,845		8,962,845	\$671,868,990	
<u>Linde Gas North America, LLC</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	6,289,226		6,289,226	\$433,603,032	
<u>Keyes Helium Co., LLC</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	1,013,471		1,013,471	\$70,080,272	
<u>Matheson Tri-Gas, Inc.</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	360,034		360,034	\$38,155,146	
<u>Praxair, Inc.</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	5,550,116		5,550,116	\$421,704,984	
<u>Global Gases America</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	36,267		36,267	\$3,535,665	
<u>Airgas Merchant Gases</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	15,667		15,667	\$1,488,365	
<u>IACX Energy</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	16,220		16,220	\$1,720,180	
<u>Uniper Global Commodities North America LLC</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	41,334		41,334	\$5,038,746	
<u>Weil Group Resources LLC</u>					
Month	0	0	0	\$0	
FYTD	0	0	15,000	\$1,815,000	
Cumulative	21,000		21,000	\$2,529,000	
<u>NAH USA Helium Marketing, Inc</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	11,334		11,334	\$1,348,746	
Total month					
	0	0	0	0	
Total FYTD					
	0	0	15,000	\$1,815,000	
Total CYTD					
	0		0	\$0	
Cumulative					
	22,779,063		22,779,063	\$1,678,646,449	
Conservation Crude Transfers					
		Month	FYTD	CYTD	Cumulative
Transferred		0	15,000	0	903,477
Volume outstanding		0			

* Volumes in Mcf at 14.65 psia & 60°F

Table 6 - Helium Resources Evaluation

August - 2018

All Volumes in Mcf at 14.7 psia & 70°F

Revenue Collected From Federal Leaseholds	Month*	FYTD*
Fee Sales & Royalties	\$1,613,060	\$19,062,514
Natural Gas Royalties (1)	\$0	\$0
Natural Gas Rentals	\$0	\$0
Other	\$48,612	\$458,287
Revenue Collected from Federal Lease Holds	\$1,623,127	\$19,111,126

*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	33	44
Total Number of Samples Analyzed For Resources Division	0	0
Total Number of Other Samples Analyzed (2)	12	198

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

August - 2018

All Volumes in Mcf at 14.65 psia & 60°F

	Metered Gas					Transferred Gas Helium		Stored Helium EOM	Charges Billed (\$)**		
	Gross Gas	Helium %	Helium	Helium			Month		Cumulative	Month	FYTD
				FYTD	CYTD	Cumulative					
Total All Contracts*											
Crude Acquired	13,369	61.2%	8,184	111,333	75,290	32,228,699	77,438	60,397,627			
Crude Disposed	124,151	73.1%	90,780	1,052,107	767,021	53,769,491	23,292	26,677,516	\$597,119	Storage Fees	
Grade-A Rdlvrd	0		0	0	0	1,478,718			<u>\$226,129.17</u>	RMF Fees	
Net/Balance	(110,782)		(82,596)	(940,774)	(691,731)	(23,019,510)	54,146	33,720,111	\$823,248	\$8,567,278	
Total Prior Contracts (TERMINATED)											
Crude Acquired				0	0	17,406,129	0	18,196,898			
Crude Disposed				0	0	11,830,863	0	19,148,768			
Grade-A Rdlvrd				0	0	1,478,718					
Number of trailers				0	0	9,834		0			
Linde Gas North America, 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											
Pioneer Natural Resources USA, Inc, Contract no. 3286											
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											
Linn Operating, Inc., Contract no. 3296											
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											
Weil Group Resources LLC, Contract no. 3299											
Crude Acquired											
Crude Disposed											
Net/Balance											
NAH USA Helum Marketing, Inc, Contract no. 3300											
Crude Acquired											
Crude Disposed											
Net/Balance											

Government Helium	
Remaining Crude Acquired beginning of the month	3,351,904
Crude Disposed: In Kind Sales transferred for the month	(54,146)
Conservation Crude Sales/Reserve Sell Down transferred (m)	0
Gains and Losses for the month	(160)
Net/Balance of Purchased Helium Remaining for Sale	3,297,597

*Includes In Kind and Conservation Crude transfers from Government storage

**Rounded to nearest dollar

** New Contracts

Table 8 - Compression & CHEU (Operations)

August - 2018

Field/CHEU Compressor Operations		Month	FYTD	Cumulative
Spot gas fuel price *	\$ per/MMBTU	\$1.99	\$2.25	\$4.65
Fuel used * (now includes field compression well head)	total MMBTU	7,752	89,102	1,899,803
Rental compressor(s) helium in fuel (Mcf)	Mcf	0	0	3645
#1 Compressor run time *	hours	652	6,963	116,522
#2 Compressor run time *	hours	482	7,108	79,231
#3 Compressor run time *	hours	355	1,166	63,174

* Field/CHEU Compressor Operations based on Aug 18 activity

Crude Helium Enrichment Unit (CHEU) CHEU Runtime	Month		FYTD		Cumulative
	Runtime Hrs	Percent	Runtime Hrs	Percent	Runtime Hrs
Processing feed gas	744	100.0%	7,792	96.9%	128,917
Producing residue gas	744	100.0%	7,657	95.2%	125,941
Producing helium product	744	100.0%	7,620	94.8%	122,274
Producing natural gas liquids	744	100.0%	7,646	95.1%	121,347

CHEU Utility Usage	Month	FYTD	Cumulative
CheU Fuel Gas (Mcf) usage Aug 18	3,011	34,085	608,326
CheU Pure Water Usage (gallons) Aug 18	74	6,924	316,163
Electricity Metered (Kwh) consumed Jul 18	2,883,035	28,775,961	176,054,587