

Bureau of Land Management

Amarillo Field Office

Helium Operations



Statistical Report for July - 2015



Distribution:

Fluid Minerals Group Manager, Washington Office
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Engineering and Technical Support

List of Tables

Table 1 - Summary of Helium Operations
Table 2 - Bush Dome Reservoir Operations
Table 3 - Gas Volumes & Inventory
Table 4 - In Kind Helium Sales
Table 5 - Conservation Crude Sales/Reserve Sell-down
Table 5 - Natural Gas/Liquid Sales
Table 6 - Helium Resources Evaluation
Table 7 - Helium Storage Contract Activity
Table 8 - Compression & CHEU (Charges & Operations)

Amarillo, Texas

Compiled by: David V. Reeves

Issued: February 24, 2016

"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: February 24, 2016

Table 1 - Summary of Helium Operations

July - 2015

Helium Enrichment Unit Operations

Gas Processed	Month			Gross FYTD	Net FYTD
	Gross Volume	Net Helium	Average Percent		
Measured Plant Feed (Mcf*)	386,188	63,732	16.50%	4,361,037	764,901
Helium Product (Mcf*)	83,197	61,171	73.52%	970,541	721,642
Residue Natural Gas (Mcf*)	188,797	5	0.00%	2,127,176	144

* Volumes in Mcf at 14.65 psia & 60°F

Natural Gas & Liquids Produced

Gas Processed	Month	FYTD
Natural Gas Sales (Mcf****)	185,235	2,134,264
NGL Sales (gallons)	49,204	719,727

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

Bush Dome Reservoir Operations

Conservation gases from all sources	Month			Gross FYTD	Net FYTD
	Gross Volume	Net Helium	Average Percent		
Total Withdrawn (Mcf*)	395,183	64,984	16.44%	4,409,314	769,287
Crude Injection (Mcf*)	0	0	00.00%	58,998	43,865
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	0	0	20,051,729
Conservation Crude Sale Volume Transferred (Mcf*)	0	0	1,061,902	0	20,051,729
Conservation Helium in Storage (EOM) (Mcf*)		6,636,779			

* Volumes in Mcf at 14.65 psia & 60°F

In Kind Helium

	Month	FYTD	CYTD	Cumulative
Sale Volumes Transferred (Mcf*)	0	111,915	47,562	3,211,036
Sale Volumes Outstanding (Mcf*)	54,775			

* Volumes in Mcf at 14.65 psia & 60°F

Private Company Helium Storage Contracts

Contact Activity	Month			Annual Helium FYTD
	Gross Volume	Net Helium	Average Percent	
Crude Acquired (Mcf*)	39,121	25,279	64.62%	300,164
Crude Disposed (Mcf*)	126,241	90,836	71.95%	980,965
Net Balance (Mcf*)	(87,120)	(65,557)		(680,801)
Balance of Stored Helium End Of Month (Mcf*)		2,319,276		

* Volumes in Mcf at 14.65 psia & 60°F

Revenue / Charges

Helium Storage Contracts (Charges Billed (\$))	Month	FYTD
Storage Fees Billed (\$)	\$355,660	\$3,157,320
Reservoir Management Fees Billed (\$)	\$169,657	\$1,840,541

Field Compressor Charges (Charges Billed (\$))

	Month	FYTD
Funded by the Refiners (provides for booster compression services)	(\$56,477)	(\$564,771)
Cliffside Refiners, LP, by Agreement #GDA010003 (reimburses BLM for fuel, labor, supplies, etc.)	\$13,232	\$132,318
Net-Total (Funded by the Refiners for compression costs.)	(\$43,245)	(\$432,453)

Enrichment Unit Charges (Charges Billed (\$))

	Month	FYTD
Reservoir Management Fees (RMF)	\$169,657	\$1,840,541
Total operating costs	(\$763,111)	(\$7,849,552)
Sub Total - Items provided by BLM	\$268,205	\$2,900,495
Total - Cliffside Refiners, LP, GDA030001	(\$494,906)	(\$4,949,057)

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

	Month	FYTD
Conservation Crude Helium Sales	\$0	\$0
In Kind Sales	\$0	\$7,376,539
Natural Gas & Liquid Sales	\$547,591	\$6,788,798

Helium Resources Evaluation

	Month	FYTD
Revenue Collected from Federal Lease Holds	\$1,495,256	\$14,414,178
Helium Sample Collection Report for month	Submitted - 0	Received - 0
	Analyzed - 10	

*Rounded to nearest dollar

Table 2 - Bush Dome Reservoir Operations

July - 2015

		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
TOTAL		395,183	220,738,676	64,984	41,351,726	98,752	54,379,804	205,660	111,865,056	22,090	11,295,224	3,697	1,846,865
BIVINS A-3	Jul-15	0	10,961,112	0	3,548,629	0	2,772,147	0	4,159,383	0	407,301	0	73,653
BIVINS A-6	Jul-15	20,891	11,242,031	11,343	6,683,522	5,176	2,763,023	3,818	1,586,270	401	157,052	153	52,164
BIVINS A-13	Jul-15	25,395	8,246,448	8,789	4,377,609	6,400	2,121,719	8,966	1,530,419	1,046	169,493	192	47,208
BIVINS A-14	Jul-15	28,188	9,195,120	9,296	5,384,203	7,068	2,332,533	10,408	1,286,436	1,168	138,819	248	53,129
BIVINS A-4	Jul-15	26,138	13,186,333	3,161	2,355,996	6,305	3,195,434	14,838	6,832,195	1,560	685,841	274	116,866
BUSH A-2	Jul-15	34,276	12,801,360	3,596	1,917,675	8,608	3,136,943	19,646	6,930,477	2,190	708,802	236	107,463
Injection	Jul-15	0	66,364,401	0	47,938,187	0	17,095,985	0	778,261	0	33	0	551,936
inj Bivins A-3	Jul-15	0	(25,652,315)	0	(18,384,452)	0	(6,554,549)	0	(332,777)	0	0	0	(380,537)
inj Bivins A-6	Jul-15	0	(24,302,352)	0	(17,588,419)	0	(6,460,944)	0	(140,780)	0	(70)	0	(112,140)
inj Bivins A-13	Jul-15	0	(6,490,417)	0	(4,706,191)	0	(1,656,853)	0	(122,391)	0	(2)	0	(4,980)
inj Bivins A-14	Jul-15	0	(6,501,333)	0	(4,767,421)	0	(1,602,106)	0	(126,303)	0	(7)	0	(5,497)
inj Bivins A-4	Jul-15	0	(2,527,801)	0	(1,848,815)	0	(601,353)	0	(42,016)	0	0	0	(35,617)
inj Bush A-2	Jul-15	0	(867,658)	0	(625,258)	0	(215,406)	0	(13,980)	0	0	0	(13,015)
Production	Jul-15	0	1,217,868	0	897,578	0	261,663	0	47,122	0	3,172	0	8,333
BIVINS A-1	Jul-15	0	2,686,608	0	48,896	0	636,995	0	1,798,415	0	175,704	0	26,597
BIVINS A-2	Jul-15	15,977	13,864,491	561	1,876,021	3,731	3,397,259	10,426	7,707,761	1,101	768,022	158	115,428
BIVINS A-5	Jul-15	18,292	15,865,615	3,343	2,011,978	4,668	3,887,941	9,144	8,929,849	995	898,355	142	137,493
BIVINS A-7	Jul-15	14,721	11,706,163	4,567	2,753,197	3,838	2,946,874	5,591	5,372,807	627	547,717	99	85,568
BIVINS A-9	Jul-15	25,598	10,227,931	564	194,372	6,604	2,514,336	16,468	6,744,594	1,751	681,150	210	93,480
BIVINS A-11	Jul-15	16,166	6,341,965	487	135,977	4,136	1,577,139	10,295	4,143,681	1,095	425,446	152	59,723
BIVINS A-15	Jul-15	27,883	9,554,877	488	425,977	6,571	2,277,020	18,586	6,139,062	1,903	614,387	335	98,431
BIVINS B-1	Jul-15	26,937	7,776,235	606	294,271	6,603	1,883,668	17,581	5,005,457	1,833	513,376	315	79,462
BIVINS B-2	Jul-15	22,188	6,461,496	422	121,718	5,664	1,618,245	14,222	4,199,469	1,493	431,974	386	90,089
BUSH A-1	Jul-15	0	5,721,962	0	104,140	0	1,356,677	0	3,830,281	0	374,216	0	56,647
BUSH A-3	Jul-15	20,864	11,901,956	7,026	2,789,302	5,314	2,941,538	7,520	5,509,723	832	557,295	172	104,098
BUSH A-4	Jul-15	16,030	8,514,136	1,702	1,567,427	4,104	2,128,830	9,142	4,316,311	989	440,155	93	61,414
BUSH A-5	Jul-15	31,011	16,295,848	8,562	3,735,917	7,936	4,089,049	12,905	7,586,303	1,426	771,100	182	113,480
BUSH A-8	Jul-15	13,218	4,132,299	245	75,698	3,294	1,000,151	8,575	2,730,266	891	274,935	213	51,250
BUSH A-9	Jul-15	0	3,860,915	0	105,037	0	930,915	0	2,537,187	0	253,463	0	34,312
BUSH A-11	Jul-15	6,432	4,490,134	135	131,486	1,545	1,073,894	4,226	2,935,339	438	298,020	89	51,396
BUSH B-1	Jul-15	4,979	3,290,991	90	61,785	1,187	780,891	3,303	2,199,365	352	216,739	47	32,209
FUQUA A-1	Jul-15	0	2,954,098	0	53,854	0	702,798	0	1,975,175	0	193,573	0	28,699
FUQUA A-2	Jul-15	0	132,119	0	2,404	0	31,322	0	88,458	0	8,637	0	1,297
FUQUA A-3	Jul-15	0	9,303,909	0	577,005	0	2,277,687	0	5,790,357	0	583,701	0	75,160
TT Fuel	Jul-15	1,224	0	23	0	292	0	811	0	87	0	11	0
field-wide pcts				16.44%	18.73%	24.99%	24.64%	52.04%	50.68%	5.59%	5.12%	0.94%	0.84%

Latest estimates of reserves and feed to HEU

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

As of EOM	Jul-15	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
Remaining Gas In Place July 2002		181.660
Produced July 2002 through Dec 2002		1.096
Production 2003 - 14		85.349
Injection 2003 - 14		(1.300)
Produced to Date 2015		3.009
Injected to Date 2015		(0.013)
Amount of Raw Gas Available to CHEU		93.519 =====> 11.327 total helium in reservoir
Estimated Bottom Hole Pressure		344.394
		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

July - 2015

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	Jul-15	386,188	85,855,455	63,732	21,365,957	96,456	21,537,171	200,818	38,148,416	21,571	4,068,880	3,611	735,031
Calculated Feed	Jul-15	393,960	85,533,050	64,962	21,329,099	98,461	21,450,625	204,849	37,943,698	22,004	4,074,333	3,685	735,295
Feed to Box	Jul-15	390,854	85,004,992	64,962	21,329,277	98,461	21,450,707	204,849	37,943,744	22,004	4,074,336	580	206,928
Cheu Product	Jul-15	83,197	26,883,187	61,171	21,036,538	19,766	5,133,059	1,710	526,060	5	560	545	186,970
Residue	Jul-15	188,797	38,121,849	5	1,782	4,781	942,013	167,101	33,827,362	16,910	3,349,445	0	1,246
Cold Box Vent	Jul-15	61,600	14,492,685	69	88,111	53,494	12,848,817	8,025	1,494,675	0	118	12	60,964
Flare/Boot Strap	Jul-15	61,600	5,008,934	69	48,890	53,494	4,103,819	8,025	756,844	0	93,583	12	5,797
Fuel From Cheu	Jul-15	4,754	1,158,421	2	334	123	34,335	3,834	939,895	794	183,857	0	0
Shrinkage/Loss	Jul-15	3,364	408,926	0	0	0	0	0	0	3,364	408,926	0	0
Unaccounted*	Jul-15	33,436	2,591,711	2,948	123,582	15,355	2,011,696	15,114	452,110	(0)	1,102	19	3,222

*Before October 2004, the values are estimated

Storage Operations

Inventory (contained helium)

	Government	Private
Beginning inventory	6,638,464	2,384,833
net acceptances + redeliveries	0	0
		(65,557)
In Kind Transfers	0	0
Conservation Crude Sales	0	0
Gain/loss	(1,685)	
Ending Inventory	6,636,779	2,319,276
Total Helium in Reservoir	11,327,025	
Total Helium in Storage	8,956,055	
Helium in native gas	2,370,969	

Crude Helium Pipeline

	Gross	Net Helium	Percent
Beginning inventory	39,857	28,737	72.10%
Measured to Pipeline (Private Plants)	39,121	25,795	65.94%
Measured from Pipeline (Private Plant:	126,241	90,836	71.95%
HEU Production	83,197	61,171	73.52%
Injection	0	0	00.00%
Production	0	0	
Ending Inventory	32,408	23,182	71.53%
Gain/Loss	(3,526)	(1,685)	

Tuck Trigg Reservoir Operations

Native Gas (Gross)	Since Field		
	Month	Fiscal Year	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

July - 2015

	NASA*	Navy*	Army*	Air Force*	DOE*	Other Fed*	Subtotal*	In Kind+	Charges Billed (\$)**	
In Kind Helium										
AirGas South West, Contract no. INC98-0101									(billed quarterly)	
Month										
FYTD										
AirGas North Central, Contract no. INC98-0102										
Month										
FYTD										
AirGas Intermountain, Contract no. INC98-0103										
Month										
FYTD										
Air Liquide Helium America, Inc., Contract no. INC98-0104										
Month										
FYTD										
Air Products, L.P., Contract no. INC98-0105										
Month										
FYTD										
Linde Gas North America, LLC, Contract no. INC98-0106										
Month										
FYTD										
Corp Brothers, Inc., Contract no. INC98-0107										
Month										
FYTD										
FIBA Technologies, Inc., Contract no. INC98-0108										
Month										
FYTD										
General Air Service & Supply Co., Contract no. INC98-0109										
Month										
FYTD										
Praxair, Inc., Contract no. INC98-0112										
Month										
FYTD										
United States Welding, Inc., Contract no. INC98-0113										
Month										
FYTD										
Matheson Tri-Gas, Inc., Contract no. INC98-0114										
Month										
FYTD										
GT & S, Contract no. INC00-0115										
Month										
FYTD										
Global Gases America, Contract no. INC13-0116										
Month										
FYTD										
Total month	0	0	0	0	0	0	0	0	\$0	
Total FYTD	42,455	1	0	0	0	58,991	101,446	99,881	\$7,376,539	
Total CYTD	28,209	0	0	0	0	42,128	70,336	69,250	\$5,263,000	
Cumulative	1,808,896	108,674	450	271,584	421,753	705,757	3,317,114	3,265,736	\$185,705,748	
In Kind Transfers							Month	FYTD	CYTD	Cumulative
Transferred							0	111,915	47,562	3,211,036
Volume outstanding							54,775			

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

**Rounded to nearest dollar

Table 5 - Conservation Crude Sales/Reserve Sell-down

July - 2015

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	285,217		285,217	\$20,224,815	
<u>Air Products, L.P.</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	7,710,561		7,710,561	\$532,797,027	
<u>Linde Gas North America, LLC</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	5,890,632		5,890,632	\$390,129,669	
<u>Keyes Helium Co., LLC</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	956,113		956,113	\$63,831,798	
<u>Matheson Tri-Gas, Inc.</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	24,000		24,000	\$1,917,500	
<u>Praxair, Inc.</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	4,946,572		4,946,572	\$356,081,964	
<u>Linde Gas, LLC discontinued 10 2008</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	200,000		200,000	\$11,035,000	
<u>Global Gases America</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	22,967		22,967	\$2,112,565	
<u>Airgas Merchant Gases</u>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	15,667		15,667	\$1,488,365	
Total month	0	0	0	\$0	
Total FYTD	0	0	0	\$0	
Total CYTD	0		0	\$0	
Cumulative	20,051,729		20,051,729	\$1,379,618,703	
Conservation Crude Transfers					
		Month	FYTD	CYTD	Cumulative
Transferred		0	1,061,902	0	20,051,729
Volume outstanding		0			

* Volumes in Mcf at 14.65 psia & 60°F

Natural Gas/Liquid Sales

	Natural Gas (Mcf)***	NGLs (gal)	Decatherms	Avg Btu Value	Charges Billed (\$) ** (billed monthly)
<u>El Paso Natural Gas</u>					
		Provides Measured Firm/Interruptible Transportation Services			
Month	185,235	---	204,207	1,102	(\$27,997)
FYTD	2,134,264	---	2,312,953	1,084	(\$280,332)
Cumulative	37,529,445	---	41,171,242	1,097	(\$4,192,421)
<u>Minerals Management Service</u>					
		No Longer Provides Natural Gas Marketing Services			
Cumulative	---	---	---	---	(\$179,913)
<u>Tenaska</u>					
		Purchaser - Natural Gas		\$/Unit	
Month	---	---	205,250	\$2.670208	\$548,060
FYTD	---	---	2,306,750	\$2.854078	\$6,583,645
Cumulative	---	---	40,849,113	\$4.740252	\$192,808,547
<u>Sandstone</u>					
		Purchaser - Natural Gas Liquids			
Month	---	49,204	5,417	\$5.081673	\$27,527
FYTD	---	719,727	73,344	\$6.619281	\$485,485
Cumulative	---	11,319,955	1,204,016	\$12.111848	\$14,582,859
	Natural Gas (Mcf)***	NGLs (gal)	Purchased (Dth's)	\$/Per Unit (\$/Dth)	Total (\$)
Total month	185,235	49,204	210,667	\$2.599319	\$547,591
Total FYTD	2,134,264	719,727	2,380,094	\$2.852324	\$6,788,798
Total CYTD	1,375,509	465,961	1,554,962	\$2.485880	\$3,865,449
Cumulative	37,529,445	11,319,955	42,053,129	\$4.847335	\$203,019,071

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

**Rounded to nearest dollar

Table 6 - Helium Resources Evaluation

July - 2015

All Volumes in Mcf at 14.7 psia & 70°F

Revenue Collected From Federal Leaseholds	Month*	FYTD*
Fee Sales & Royalties	\$1,512,522	\$14,391,435
Natural Gas Royalties (1)	\$0	\$0
Natural Gas Rentals	\$0	\$0
Other	\$22,743	\$260,486
Revenue Collected from Federal Lease Holds	\$1,495,256	\$14,414,178

*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	41	49
Total Number of Samples Analyzed For Resources Division	41	47
Total Number of Other Samples Analyzed (2)	10	95

U. S. Helium Production

<i>Domestic</i>	FY Volume	CY Volume
2010 Helium Sold	4,558,202	4,691,987
2011 Helium Sold	4,531,140	4,645,930
2012 Helium Sold	4,725,187	4,623,130
2013 Helium Sold	4,279,765	4,166,708
2014 Helium Sold	3,815,746	3,466,014
Estimated Helium Resources as of 12/31/2006(Mcf)		732,000,000

	FY-2014	FY-2014
U.S. Helium Exports (3)	2,553,129	2,432,311

(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

July - 2015

All Volumes in Mcf at 14.65 psia & 60°F

	Metered Gas						Transferred Gas		Stored Helium EOM	Charges Billed (\$)**	
	Gross Gas	Helium %	Helium	Helium			Helium			Month	FYTD
				FYTD	CYTD	Cumulative	Month	Cumulative			
Total All Contracts*											
Crude Acquired	39,121	64.6%	25,279	300,164	210,338	31,389,938	45,055	54,349,570			
Crude Disposed	126,241	72.0%	90,836	980,965	695,511	50,212,296	45,055	31,729,218		\$355,660	Storage Fees
Grade-A Rdlvrd	0		0	0	0	1,478,718				\$169,657	RMF Fees
Net/Balance	(87,120)		(65,557)	(680,801)	(485,173)	(20,301,076)	0	22,620,352	2,319,276	\$525,317	\$4,997,861
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. 1995-3249											
Crude Acquired											
Crude Disposed											
Net/Balance											
Praxair, Inc., Contract no. 1995-3251											
Crude Acquired											
Crude Disposed											
Net/Balance											
Air Products, L.P., Contract no. 1995-3256											
Crude Acquired											
Crude Disposed											
Net/Balance											
, Contract no.											
Crude Acquired											
Crude Disposed											
Net/Balance											
ExxonMobil Gas Marketing Co., Contract no. 1995-3280											
Crude Acquired											
Crude Disposed											
Net/Balance											
Pioneer Natural Resources USA, Inc, Contract no. 1995-3286											
Crude Acquired											
Crude Disposed											
Net/Balance											
Keyes Helium Co., LLC, Contract no. 1995-3287											
Crude Acquired											
Crude Disposed											
Net/Balance											
Air Liquide Helium America, Inc., Contract no. 2003-3284											
Crude Acquired											
Crude Disposed											
Net/Balance											
Matheson Tri-Gas, Inc., Contract no. 2007-3288											
Crude Acquired											
Crude Disposed											
Net/Balance											
Airgas Merchant Gases, Contract no. 2009-3290											
Crude Acquired											
Crude Disposed											
Net/Balance											
Global Gases America, Contract no. 2013-3293											
Crude Acquired											
Crude Disposed											
Net/Balance											
Linn Operating, Inc., Contract no. 2015-3296											
Crude Acquired											
Crude Disposed											
Net/Balance											

Government Helium	
Remaining Crude Acquired beginning of the month	6,638,464
Crude Disposed: In Kind Sales transferred for the month	0
Conservation Crude Sales/Reserve Sell Down transferred (mont	0
Gains and Losses for the month	(1,685)
Net/Balance of Purchased Helium Remaining for Sale	6,636,779

*Includes In Kind and Conservation Crude transfers from Government storage

**Rounded to nearest dollar

Table 8 - Compression & CHEU (Charges & Operations)

July - 2015

Field/CHEU Compressor Operations		Month	FYTD	Cumulative
Spot gas fuel price *	\$ per/MMBTU	\$2.67	\$3.28	\$5.04
Fuel used * (now includes field compression well head)	total MMBTU	6,655	84,450	1,612,507
Field Compression Fuel Cost *	\$dollars	\$0	\$0	\$654,398
CHEU Compression Fuel Cost *	\$dollars	\$10,226	\$144,726	\$4,177,177
CHEU Process Fuel Cost *	\$dollars	\$7,543	\$86,315	\$2,791,812
Rental compressor(s) fuel consumed (well head)	\$dollars	\$0	\$9,575	\$207,234
Rental Compressor(s) helium in fuel (Mcf x \$\$)	\$dollars	\$19,080	\$36,252	\$296,813
Rental compressor(s) helium in fuel (Mcf)	Mcf	180	342	3465
#1 Compressor run time *	hours	572	4,394	93,858
#2 Compressor run time *	hours	542	4,355	59,010
#3 Compressor run time *	hours	0	4,280	57,292

* Field/CHEU Compressor Operations based on Jul 15 activity

Field Compressor Charges	Charges Billed (\$)*		
Linde Gas North America, LLC, Contract no. 1995-3249			
Praxair, Inc., Contract no. 1995-3251			
Air Products, L.P., Contract no. 1995-3256			
Keyes Helium Co., LLC, Contract no. 1995-3287			
SubTotal - Cliffside Refiners, LP (provides booster compression services)	(\$56,477)	(\$564,771)	(\$11,092,401)
Cliffside Refiners, LP, GDA010003 (BLM provided fuel *, labor, supplies, etc.)	\$13,232	\$132,318	\$2,765,514
Net Total - Cliffside Refiners, LP	(\$43,245)	(\$432,453)	(\$8,326,887)

* BLM provided fuel cost is based on Jun 15 fuel consumed

***Rounded to nearest dollar**

Crude Helium Enrichment Unit (CHEU) CHEU Runtime	Month		FYTD		Cumulative
	Runtime Hrs	Percent	Runtime Hrs	Percent	Runtime Hrs
Processing feed gas	742	99.8%	7,191	98.6%	102,900
Producing residue gas	591	79.4%	6,845	93.8%	101,254
Producing helium product	577	77.6%	6,647	91.1%	98,101
Producing natural gas liquids	587	78.9%	6,824	93.5%	96,894

CHEU Charges	Charges Billed (\$)*		
	Month	FYTD	Cumulative
Reservoir Management Fees (RMF)	\$169,657	\$1,840,541	\$29,158,889
Total operating costs	(\$763,111)	(\$7,849,552)	(\$125,651,384)
Labor	\$76,760	\$767,598	\$12,621,683
Compressor fuel cost Jun 15	\$11,811	\$156,837	\$4,212,104
HEU fuel cost Jun 15	\$6,832	\$90,250	\$2,824,796
Electrical power cost Jun 15	\$122,974	\$1,357,316	\$19,097,501
Other	\$49,828	\$528,494	\$12,079,440
Sub Total - Items provided by BLM	\$268,205	\$2,900,495	\$54,044,878
Total - Cliffside Refiners, LP, GDA030001	(\$494,906)	(\$4,949,057)	(\$71,606,506)

***Rounded to nearest dollar**

CHEU Utility Usage	Month	FYTD	Cumulative
Cheu Fuel Gas (Mcf) usage Jul 15	2,538	27,138	505,365
Cheu Pure Water Usage (gallons) Jul 15	208	7,501	284,479
Electricity Metered (Kwh) consumed Jun 15	2,484,806	25,557,578	91,583,743