

Bureau of Land Management

Amarillo Field Office

Helium Operations



Statistical Report for April - 2015



Distribution:

Fluid Minerals Group Manager, Washington Office
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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 18, 2016

Table 1 - Summary of Helium Operations

April - 2015

Helium Enrichment Unit Operations
Gas Processed

	Month			Gross FYTD	Net FYTD
	Gross Volume	Net Helium	Average Percent		
Measured Plant Feed (Mcf*)	419,897	69,767	16.62%	3,072,836	535,094
Helium Product (Mcf*)	85,922	62,574	72.83%	674,273	501,578
Residue Natural Gas (Mcf*)	166,018	17	0.01%	1,478,234	139

* Volumes in Mcf at 14.65 psia & 60°F

Natural Gas & Liquids Produced

Gas Processed

	Month	FYTD
Natural Gas Sales (Mcf****)	164,128	1,494,650
NGL Sales (gallons)	65,798	525,731

**** 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Total Withdrawn (Mcf*)	435,557	72,249	16.59%	3,091,821	534,798
Crude Injection (Mcf*)	0	0	00.00%	52,193	38,733
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*)		6,637,592			

* Volumes in Mcf at 14.65 psia & 60°F

In Kind Helium

	Month	FYTD	CYTD	Cumulative
Sale Volumes Transferred (Mcf*)	17,356	111,915	47,562	3,211,036
Sale Volumes Outstanding (Mcf*)	24,788			

* 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*)	49,385	32,578	65.97%	205,818
Crude Disposed (Mcf*)	132,198	94,359	71.38%	671,979
Net Balance (Mcf*)	(82,813)	(61,781)		(466,161)
Balance of Stored Helium End Of Month (Mcf*)		2,533,916		

* Volumes in Mcf at 14.65 psia & 60°F

Revenue / Charges

Helium Storage Contracts (Charges Billed (\$))

	Month	FYTD
Storage Fees Billed (\$)	\$356,130	\$2,093,291
Reservoir Management Fees Billed (\$)	\$137,664	\$1,226,733

Field Compressor Charges (Charges Billed (\$))

	Month	FYTD
Funded by the Refiners (provides for booster compression services)	(\$56,477)	(\$395,340)
Cliffside Refiners, LP, by Agreement #GDA010003 (reimburses BLM for fuel, labor, supplies, etc.)	\$13,232	\$92,623
Net-Total (Funded by the Refiners for compression costs.)	(\$43,245)	(\$302,717)

Enrichment Unit Charges (Charges Billed (\$))

	Month	FYTD
Reservoir Management Fees (RMF)	\$137,664	\$1,226,733
Total operating costs	(\$768,811)	(\$5,525,204)
Sub Total - Items provided by BLM	\$273,905	\$2,060,864
Total - Cliffside Refiners, LP, GDA030001	(\$494,906)	(\$3,464,340)

Conservation Helium - Natural Gas - Liquid Sales

(Charges Billed (\$))

	Month	FYTD
Conservation Crude Helium Sales	\$0	\$0
In Kind Sales	\$0	\$5,097,527
Natural Gas & Liquid Sales	\$415,991	\$4,931,917

Helium Resources Evaluation

	Month	FYTD
Revenue Collected from Federal Lease Holds	\$2,942,863	\$10,078,824
Helium Sample Collection Report for month	Submitted - 0	Received - 0
	Analyzed - 9	

*Rounded to nearest dollar

Table 2 - Bush Dome Reservoir Operations

April - 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		435,557	219,421,183	72,249	41,117,238	108,769	54,050,139	225,413	111,195,798	24,706	11,223,304	4,419	1,834,705
BIVINS A-3	Apr-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	Apr-15	26,773	11,147,902	13,531	6,633,803	6,656	2,739,417	5,352	1,568,082	809	155,127	426	51,472
BIVINS A-13	Apr-15	22,530	8,160,068	8,013	4,347,811	5,639	2,099,952	7,666	1,499,827	985	165,924	227	46,554
BIVINS A-14	Apr-15	27,698	9,092,112	9,218	5,350,157	6,899	2,306,693	10,014	1,248,479	1,272	134,559	295	52,224
BIVINS A-4	Apr-15	30,322	13,097,505	3,745	2,345,112	7,323	3,173,996	17,123	6,781,905	1,813	680,551	319	115,940
BUSH A-2	Apr-15	40,297	12,687,779	4,453	1,905,437	10,126	3,108,415	22,887	6,865,672	2,553	701,577	278	106,679
Injection	Apr-15	0	66,357,596	0	47,933,055	0	17,094,498	0	778,121	0	32	0	551,891
inj Bivins A-3	Apr-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	Apr-15	0	(24,295,547)	0	(17,583,286)	0	(6,459,457)	0	(140,640)	0	(70)	0	(112,095)
inj Bivins A-13	Apr-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	Apr-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	Apr-15	0	(2,527,801)	0	(1,848,815)	0	(601,353)	0	(42,016)	0	0	0	(35,617)
inj Bush A-2	Apr-15	0	(867,658)	0	(625,258)	0	(215,406)	0	(13,980)	0	0	0	(13,015)
Production	Apr-15	0	1,217,868	0	897,578	0	261,663	0	47,122	0	3,172	0	8,333
BIVINS A-1	Apr-15	0	2,686,608	0	48,896	0	636,995	0	1,798,415	0	175,704	0	26,597
BIVINS A-2	Apr-15	18,653	13,812,579	664	1,874,186	4,360	3,385,132	12,163	7,673,897	1,282	764,450	185	114,914
BIVINS A-5	Apr-15	19,350	15,803,884	3,551	2,000,693	4,933	3,872,188	9,636	8,898,992	1,079	894,997	151	137,014
BIVINS A-7	Apr-15	18,686	11,653,367	5,746	2,736,858	4,868	2,933,112	7,143	5,352,718	801	545,464	128	85,214
BIVINS A-9	Apr-15	21,818	10,154,968	480	192,771	5,633	2,495,505	14,035	6,697,649	1,492	676,162	178	92,881
BIVINS A-11	Apr-15	19,331	6,290,057	570	134,435	4,970	1,563,813	12,333	4,110,582	1,276	421,992	182	59,235
BIVINS A-15	Apr-15	30,362	9,467,464	532	424,447	7,160	2,256,414	20,238	6,080,802	2,068	608,420	364	97,381
BIVINS B-1	Apr-15	30,164	7,690,911	696	292,332	7,399	1,862,751	19,664	4,949,787	2,056	507,575	348	78,466
BIVINS B-2	Apr-15	24,803	6,391,228	472	120,382	6,334	1,600,303	15,899	4,154,432	1,669	427,244	430	88,866
BUSH A-1	Apr-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	Apr-15	21,984	11,829,836	7,414	2,764,953	5,601	2,923,169	7,909	5,483,789	875	554,425	185	103,500
BUSH A-4	Apr-15	17,272	8,463,354	1,894	1,561,956	4,395	2,115,829	9,801	4,287,419	1,076	437,031	106	61,119
BUSH A-5	Apr-15	38,374	16,190,199	10,751	3,706,655	9,820	4,062,017	15,828	7,542,421	1,750	766,247	225	112,858
BUSH A-8	Apr-15	15,879	4,094,280	295	74,992	3,958	990,674	10,301	2,705,602	1,070	272,374	255	50,638
BUSH A-9	Apr-15	0	3,860,915	0	105,037	0	930,915	0	2,537,187	0	253,463	0	34,312
BUSH A-11	Apr-15	7,147	4,471,228	150	131,090	1,714	1,069,354	4,693	2,922,916	490	296,734	99	51,135
BUSH B-1	Apr-15	4,113	3,279,218	75	61,571	980	778,088	2,728	2,191,553	291	215,907	38	32,099
FUQUA A-1	Apr-15	0	2,954,098	0	53,854	0	702,798	0	1,975,175	0	193,573	0	28,699
FUQUA A-2	Apr-15	0	132,119	0	2,404	0	31,322	0	88,458	0	8,637	0	1,297
FUQUA A-3	Apr-15	0	9,303,907	0	577,005	0	2,277,687	0	5,790,357	0	583,701	0	75,158
TT Fuel	Apr-15	1,853	0	34	0	442	0	1,228	0	132	0	17	0
field-wide pct's				16.59%	18.74%	24.97%	24.63%	51.75%	50.68%	5.67%	5.11%	1.01%	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 Apr-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	Net Helium
Remaining Gas In Place July 2002	181.660	33.997
Produced July 2002 through Dec 2002	1.096	0.743
Production 2003 - 14	85.349	22.474
Injection 2003 - 14	(1.300)	(1.067)
Produced to Date 2015	1.691	0.296
Injected to Date 2015	(0.006)	(0.004)
Amount of Raw Gas Available to CHEU	94.830	=====> 11.556 total helium in reservoir
Estimated Bottom Hole Pressure	349.216	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

April - 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	Apr-15	419,897	84,567,255	69,767	21,136,150	104,783	21,214,904	217,755	37,494,453	23,541	3,998,601	4,052	723,147
Calculated Feed	Apr-15	433,706	84,216,813	72,216	21,094,633	108,327	21,121,258	224,185	37,275,271	24,576	4,002,502	4,402	723,148
Feed to Box	Apr-15	429,953	83,698,779	72,216	21,094,812	108,327	21,121,341	224,185	37,275,317	24,574	4,002,505	651	204,805
Cheu Product	Apr-15	85,922	26,586,918	62,574	20,816,474	20,152	5,064,988	2,623	519,906	15	551	558	185,000
Residue	Apr-15	166,018	37,472,907	17	1,778	3,919	926,468	147,330	33,251,685	14,751	3,291,730	0	1,246
Cold Box Vent	Apr-15	48,770	14,271,293	36	87,936	42,279	12,656,581	6,446	1,465,735	0	117	9	60,924
Flare/Boot Strap	Apr-15	48,770	4,787,541	36	48,715	42,279	3,911,583	6,446	727,904	0	93,582	9	5,757
Fuel From Cheu	Apr-15	4,548	1,140,380	2	325	118	33,868	3,668	925,345	760	180,842	0	0
Shrinkage/Loss	Apr-15	2,651	398,788	0	0	0	0	0	0	2,651	398,788	0	0
Unaccounted*	Apr-15	19,899	2,496,303	1,797	110,142	10,273	1,963,666	7,813	418,278	(0)	1,102	17	3,114

*Before October 2004, the values are estimated

Storage Operations

Inventory (contained helium)

	Government	Private
Beginning inventory	6,655,441	2,578,341
net acceptances + redeliveries	0	0
	0	(61,781)
In Kind Transfers	(17,356)	17,356
Conservation Crude Sales	0	0
Gain/loss	(493)	
Ending Inventory	6,637,592	2,533,916
Total Helium in Reservoir	11,556,381	
Total Helium in Storage	9,171,508	
Helium in native gas	2,384,873	

Crude Helium Pipeline

	Gross	Net Helium	Percent
Beginning inventory	31,558	22,648	71.77%
Measured to Pipeline (Private Plants)	49,385	32,709	66.23%
Measured from Pipeline (Private Plant)	132,198	94,467	71.46%
HEU Production	85,922	62,574	72.83%
Injection	0	0	00.00%
Production	0	0	
Ending Inventory	32,385	22,972	70.93%
Gain/Loss	(2,282)	(493)	

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

April - 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	33,244	1	0	0	0	37,745	70,990	69,894	\$5,097,527	
Total CYTD	18,998	0	0	0	0	20,881	39,880	39,263	\$2,983,988	
Cumulative	1,799,686	108,674	450	271,584	421,753	684,511	3,286,657	3,235,749	\$183,426,736	
In Kind Transfers							Month	FYTD	CYTD	Cumulative
Transferred							17,356	111,915	47,562	3,211,036
Volume outstanding							24,788			

* 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

April - 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	\$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	164,128	---	181,059	1,103	(\$27,997)
FYTD	1,494,650	---	1,608,257	1,076	(\$195,979)
Cumulative	36,889,831	---	40,466,546	1,097	(\$4,108,068)
<u>Minerals Management Service</u>					
		No Longer Provides Natural Gas Marketing Services			
Cumulative	---	---	---	---	(\$179,913)
<u>Tenaska</u>					
		Purchaser - Natural Gas		\$/Unit	
Month	---	---	176,900	\$2.283200	\$403,898
FYTD	---	---	1,601,100	\$2.972570	\$4,759,381
Cumulative	---	---	40,143,463	\$4.778134	\$190,984,283
<u>Sandstone</u>					
		Purchaser - Natural Gas Liquids			
Month	---	65,798	7,084	\$5.659256	\$40,090
FYTD	---	525,731	52,239	\$7.054395	\$368,515
Cumulative	---	11,125,959	1,182,911	\$12.229059	\$14,465,889
	Natural Gas (Mcf)***	NGLs (gal)	Purchased (Dth's)	\$/Per Unit (\$/Dth)	Total (\$)
Total month	164,128	65,798	183,984	\$2.261018	\$415,991
Total FYTD	1,494,650	525,731	1,653,339	\$2.983004	\$4,931,917
Total CYTD	735,895	271,965	828,207	\$2.425200	\$2,008,568
Cumulative	36,889,831	11,125,959	41,326,374	\$4.887647	\$201,162,190

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

**Rounded to nearest dollar

Table 6 - Helium Resources Evaluation

April - 2015

All Volumes in Mcf at 14.7 psia & 70°F

Revenue Collected From Federal Leaseholds	Month*	FYTD*
Fee Sales & Royalties	\$2,944,111	\$10,056,325
Natural Gas Royalties (1)	\$0	\$0
Natural Gas Rentals	\$0	\$0
Other	\$22,499	\$177,398
Revenue Collected from Federal Lease Holds	\$2,942,863	\$10,078,824

*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	8
Total Number of Samples Analyzed For Resources Division	0	6
Total Number of Other Samples Analyzed (2)	9	66

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

April - 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			
	Month										
Total All Contracts*											
Crude Acquired	49,385	66.0%	32,578	205,818	115,992	31,295,592	71,943	54,227,182			
Crude Disposed	132,198	71.4%	94,359	671,979	386,525	49,903,310	54,587	31,606,830		\$356,130	Storage Fees
Grade-A Rdlvrd	0		0	0	0	1,478,718				\$137,664	RMF Fees
Net/Balance	(82,813)		(61,781)	(466,161)	(270,533)	(20,086,436)	17,356	22,620,352	2,533,916	\$493,794	\$3,320,024
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	6,655,441
Crude Disposed: In Kind Sales transferred for the month	(17,356)
Conservation Crude Sales/Reserve Sell Down transferred (mont	0
Gains and Loses for the month	(493)
Net/Balance of Purchased Helium Remaining for Sale	6,637,592

*Includes In Kind and Conservation Crude transfers from Government storage

**Rounded to nearest dollar

Table 8 - Compression & CHEU (Charges & Operations)

April - 2015

Field/CHEU Compressor Operations		Month	FYTD	Cumulative
Spot gas fuel price *	\$ per/MMBTU	\$2.28	\$3.01	\$5.06
Fuel used * (now includes field compression well head)	total MMBTU	6,803	60,347	1,588,404
Field Compression Fuel Cost *	\$dollars	\$0	\$0	\$654,398
CHEU Compression Fuel Cost *	\$dollars	\$8,783	\$110,001	\$4,142,452
CHEU Process Fuel Cost *	\$dollars	\$6,728	\$64,017	\$2,769,514
Rental compressor(s) fuel consumed (well head)	\$dollars	\$0	\$4,221	\$201,880
Rental Compressor(s) helium in fuel (Mcf x \$\$)	\$dollars	\$0	\$3,286	\$263,847
Rental compressor(s) helium in fuel (Mcf)	Mcf	0	31	3154
#1 Compressor run time *	hours	0	3,040	92,504
#2 Compressor run time *	hours	629	3,165	57,820
#3 Compressor run time *	hours	486	3,064	56,076

* Field/CHEU Compressor Operations based on Apr 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)	(\$395,340)	(\$10,922,970)
Cliffside Refiners, LP, GDA010003 (BLM provided fuel *, labor, supplies, etc.)	\$13,232	\$92,623	\$2,725,819
Net Total - Cliffside Refiners, LP	(\$43,245)	(\$302,717)	(\$8,197,151)

* BLM provided fuel cost is based on Mar 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	728	101.1%	5,009	98.4%	100,718
Producing residue gas	663	92.0%	4,827	94.9%	99,236
Producing helium product	551	76.5%	4,643	91.2%	96,097
Producing natural gas liquids	660	91.7%	4,810	94.5%	94,880

CHEU Charges	Charges Billed (\$)*		
	Month	FYTD	Cumulative
Reservoir Management Fees (RMF)	\$137,664	\$1,226,733	\$28,545,081
Total operating costs	(\$768,811)	(\$5,525,204)	(\$123,327,036)
Labor	\$76,760	\$537,318	\$12,391,404
Compressor fuel cost Mar 15	\$9,869	\$123,555	\$4,178,822
HEU fuel cost Mar 15	\$7,452	\$68,767	\$2,803,313
Electrical power cost Mar 15	\$129,996	\$971,454	\$18,711,638
Other	\$49,828	\$359,770	\$11,910,715
Sub Total - Items provided by BLM	\$273,905	\$2,060,864	\$53,205,247
Total - Cliffside Refiners, LP, GDA030001	(\$494,906)	(\$3,464,340)	(\$70,121,789)

***Rounded to nearest dollar**

CHEU Utility Usage	Month	FYTD	Cumulative
Cheu Fuel Gas (Mcf) usage Apr 15	2,873	19,598	497,825
Cheu Pure Water Usage (gallons) Apr 15	467	6,206	283,184
Electricity Metered (Kwh) consumed Mar 15	2,379,644	17,759,319	83,785,484