

# Bureau of Land Management

## Amarillo Field Office

### Helium Operations



## Statistical Report for October - 2012



#### *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

#### *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: Nelson R. Bullard*

Issued: February 28, 2013

**"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: March 7, 2013

Table 1 - Summary of Helium Operations

October - 2012

**Helium Enrichment Unit Operations**

Gas Processed	Month			Gross FYTD	Net FYTD
	Gross Volume	Net Helium	Average Percent		
Measured Plant Feed (Mcf*)	714,129	186,474	26.11%	714,129	186,474
Helium Product (Mcf*)	234,035	184,017	78.63%	234,035	184,017
Residue Natural Gas (Mcf*)	323,029	0	00.00%	323,029	0

\* Volumes in Mcf at 14.65 psia & 60°F

**Natural Gas & Liquids Produced**

Gas Processed	Month	FYTD
Natural Gas Sales (Mcf****)	317,461	317,461
NGL Sales (gallons)	119,630	119,630

\*\*\* 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Total Withdrawn (Mcf*)	712,047	185,420	26.04%	712,047	185,420
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	0	1,575,000	16,163,600
Conservation Crude Sale Volume Transferred (Mcf*)	0	525,000	525,000	2,025,000	16,163,600
Conservation Helium in Storage (EOM) (Mcf*)		10,916,225			

\* Volumes in Mcf at 14.65 psia & 60°F

**In Kind Helium**

	Month	FYTD	CYTD	Cumulative
Sale Volumes Transferred (Mcf*)	1,555	1,555	112,826	2,871,682
Sale Volumes Outstanding (Mcf*)	45,876			

\* 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*)	54,327	35,967	66.20%	35,967
Crude Disposed (Mcf*)	291,154	221,879	76.21%	221,879
Net Balance (Mcf*)	(236,827)	(185,912)		(185,912)
Balance of Stored Helium End Of Month (Mcf*)		1,617,559		

\* Volumes in Mcf at 14.65 psia & 60°F

**Revenue / Charges**

Helium Storage Contracts (Charges Billed (\$))	Month	FYTD
Storage Fees Billed (\$)	\$9,012	\$9,012
Reservoir Management Fees Billed (\$)	\$254,209	\$254,209

**Field Compressor Charges (Charges Billed (\$))**

	Month	FYTD
Funded by the Refiners (provides for booster compression services)	(\$55,778)	(\$55,778)
Cliffside Refiners, LP, by Agreement #GDA010003 (reimburses BLM for fuel, labor, supplies, etc.)	\$12,540	\$12,540
Net-Total (Funded by the Refiners for compression costs.)	(\$43,238)	(\$43,238)

**Enrichment Unit Charges (Charges Billed (\$))**

	Month	FYTD
Reservoir Management Fees (RMF)	\$254,209	\$254,209
Total operating costs	(\$811,926)	(\$811,926)
Sub Total - Items provided by BLM	\$318,240	\$318,240
Total - Cliffside Refiners, LP, GDA030001	(\$493,685)	(\$493,685)

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

	Month	FYTD
Conservation Crude Helium Sales	\$0	\$0
In Kind Sales	\$0	\$0
Natural Gas & Liquid Sales	\$1,132,498	\$1,132,498

**Helium Resources Evaluation**

	Month	FYTD
Revenue Collected from Federal Lease Holds	\$1,582,191	\$1,582,191
Helium Sample Collection Report for month	Submitted - 0	Received - 0
	Analyzed - 15	

\*Rounded to nearest dollar

Table 2 - Bush Dome Reservoir Operations

October - 2012

		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
<b>TOTAL</b>		<b>712,047</b>	<b>203,144,061</b>	<b>185,420</b>	<b>37,611,374</b>	<b>178,524</b>	<b>49,984,258</b>	<b>308,962</b>	<b>103,481,083</b>	<b>33,103</b>	<b>10,382,032</b>	<b>6,037</b>	<b>1,685,314</b>
BIVINS A-3	Oct-12	29,477	10,783,189	15,304	3,460,365	7,365	2,727,459	5,969	4,119,958	645	402,953	195	72,455
BIVINS A-6	Oct-12	69,085	9,948,817	43,374	5,924,367	17,236	2,443,380	7,265	1,404,794	713	134,116	497	42,160
BIVINS A-13	Oct-12	48,005	6,823,568	18,755	3,859,067	11,938	1,763,463	15,254	1,050,852	1,702	113,729	355	36,457
BIVINS A-14	Oct-12	62,209	7,516,259	27,612	4,736,213	15,482	1,910,175	16,813	752,357	1,799	78,805	504	38,709
BIVINS A-4	Oct-12	42,619	12,132,331	7,979	2,203,180	10,387	2,941,257	21,552	6,256,973	2,290	624,665	412	106,257
BUSH A-2	Oct-12	54,222	11,336,169	8,031	1,742,482	13,655	2,771,188	28,958	6,108,044	3,199	617,425	380	97,030
Injection	Oct-12	0	66,240,889	0	47,846,276	0	17,067,782	0	775,688	0	23	0	551,121
inj Bivins A-3	Oct-12	0	(25,652,315)	0	(18,384,452)	0	(6,554,549)	0	(332,777)	0	0	0	(380,537)
inj Bivins A-6	Oct-12	0	(24,201,365)	0	(17,514,139)	0	(6,437,517)	0	(138,222)	0	(12)	0	(111,475)
inj Bivins A-13	Oct-12	0	(6,490,417)	0	(4,706,191)	0	(1,656,853)	0	(122,391)	0	(2)	0	(4,980)
inj Bivins A-14	Oct-12	0	(6,501,333)	0	(4,767,421)	0	(1,602,106)	0	(126,303)	0	(7)	0	(5,497)
inj Bivins A-4	Oct-12	0	(2,527,801)	0	(1,848,815)	0	(601,353)	0	(42,016)	0	0	0	(35,617)
inj Bush A-2	Oct-12	0	(867,658)	0	(625,258)	0	(215,406)	0	(13,980)	0	0	0	(13,015)
Production	Oct-12	0	1,217,868	0	897,578	0	261,663	0	47,122	0	3,172	0	8,333
BIVINS A-1	Oct-12	0	2,686,608	0	48,896	0	636,995	0	1,798,415	0	175,704	0	26,597
BIVINS A-2	Oct-12	29,253	13,224,280	1,454	1,851,399	6,909	3,247,478	18,656	7,292,935	1,954	723,730	280	108,737
BIVINS A-5	Oct-12	40,657	14,956,412	8,306	1,842,924	10,367	3,657,119	19,549	8,477,984	2,122	848,025	312	130,360
BIVINS A-7	Oct-12	31,902	10,994,115	10,301	2,528,969	8,310	2,762,324	11,763	5,105,533	1,318	516,938	211	80,351
BIVINS A-9	Oct-12	20,556	9,538,408	430	179,662	5,327	2,335,926	13,235	6,300,749	1,401	634,165	164	87,906
BIVINS A-11	Oct-12	27,316	5,640,370	763	115,677	7,005	1,397,327	17,445	3,696,152	1,850	378,034	252	53,179
BIVINS A-15	Oct-12	26,577	8,587,336	473	409,030	6,284	2,048,564	17,697	5,494,360	1,811	548,466	312	86,916
BIVINS B-1	Oct-12	26,445	6,798,664	739	270,552	6,485	1,646,027	17,162	4,371,073	1,779	444,199	280	66,813
BIVINS B-2	Oct-12	31,037	5,517,101	592	103,743	7,945	1,376,754	19,897	3,594,065	2,087	368,453	515	74,086
BUSH A-1	Oct-12	0	5,721,962	0	104,140	0	1,356,677	0	3,830,281	0	374,216	0	56,647
BUSH A-3	Oct-12	43,748	10,894,340	17,524	2,430,849	11,196	2,685,232	13,189	5,163,807	1,476	518,718	361	95,733
BUSH A-4	Oct-12	29,260	7,902,478	4,909	1,486,563	7,496	1,972,730	15,052	3,981,501	1,630	403,825	173	57,859
BUSH A-5	Oct-12	57,209	14,897,621	17,576	3,325,878	14,622	3,732,623	22,214	7,025,070	2,464	708,743	332	105,307
BUSH A-8	Oct-12	15,777	3,634,652	292	66,639	3,925	876,004	10,254	2,406,540	1,063	241,917	243	43,552
BUSH A-9	Oct-12	10,827	3,815,996	570	102,684	2,779	919,458	6,687	2,509,394	734	250,395	57	34,065
BUSH A-11	Oct-12	15,859	4,213,167	437	124,918	3,808	1,007,586	10,345	2,753,701	1,066	279,256	203	47,706
BUSH B-1	Oct-12	0	3,190,210	0	59,919	0	756,734	0	2,132,627	0	209,651	0	31,278
FUQUA A-1	Oct-12	0	2,954,094	0	53,854	0	702,797	0	1,975,172	0	193,572	0	28,699
FUQUA A-2	Oct-12	0	132,119	0	2,404	0	31,322	0	88,458	0	8,637	0	1,297
FUQUA A-3	Oct-12	7	9,303,794	0	577,003	2	2,277,657	4	5,790,285	0	583,693	0	75,155
TT Fuel	Oct-12	0	0	0	0	0	0	0	0	0	0	0	0
field-wide pct's				26.04%	18.51%	25.07%	24.61%	43.39%	50.94%	4.65%	5.11%	0.85%	0.83%

Latest estimates of reserves and feed to HEU

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

As of EOM Oct-12 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 - 11	64.030	17.490
Injection 2003 - 11	(1.189)	(0.985)
Produced to Date 2012	6.735	1.773
Injected to Date 2012	(0.000)	(0.000)
Amount of Raw Gas Available to CHEU	110.988	=====> 14.975 total helium in reservoir
Estimated Bottom Hole Pressure	408.660	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

October - 2012

### Crude Helium Enrichment Unit Operations

		Gross Withdrawal		Net Helium Withdrawal		Nitrogen		Methane		Ethane plus		Other (CO <sub>2</sub> , Ar, H <sub>2</sub> )	
		Month	Cumulative	Month	Cumulative	Month	Cumulative	Month	Cumulative	Month	Cumulative	Month	Cumulative
Measured Feed	Oct-12	714,129	68,303,707	186,474	17,608,399	178,693	17,144,914	309,879	29,800,133	33,031	3,174,119	6,052	576,142
Calculated Feed	Oct-12	710,457	67,966,922	185,336	17,604,475	178,116	17,061,969	307,981	29,564,880	32,996	3,161,656	6,029	573,943
Feed to Box	Oct-12	706,142	67,565,891	185,336	17,604,654	178,116	17,062,051	307,981	29,564,926	32,996	3,161,663	1,714	172,597
Cheu Product	Oct-12	234,035	22,104,235	184,017	17,382,784	43,739	4,138,314	4,622	428,762	0	396	1,657	153,979
Residue	Oct-12	323,029	29,842,667	0	1,477	7,650	750,643	287,354	26,459,146	28,025	2,630,164	0	1,238
Cold Box Vent	Oct-12	116,826	11,617,816	94	85,802	108,307	10,264,931	8,395	1,206,379	(0)	135	31	60,568
Flare/Boot Strap	Oct-12	116,826	2,134,065	94	46,582	108,307	1,519,933	8,395	468,548	(0)	93,600	31	5,402
Fuel From Cheu	Oct-12	7,572	921,057	0	245	242	27,814	6,225	747,642	1,104	145,357	0	0
Shrinkage/Loss	Oct-12	3,866	279,844	0	0	0	0	0	0	3,866	279,844	0	0
Unaccounted*	Oct-12	20,814	1,859,660	1,225	80,311	18,178	1,519,890	1,385	255,887	(0)	1,084	26	2,489

\*Before October 2004, the values are estimated

### Storage Operations

#### Inventory (contained helium)

	Government	Private
Beginning inventory	11,444,592	1,276,916
net acceptances + redeliveries	0	0
In Kind Transfers	(1,555)	1,555
Conservation Crude Sales	(525,000)	525,000
Gain/loss	(1,812)	
Ending Inventory	10,916,225	1,617,559
Total Helium in Reservoir	14,975,314	
Total Helium in Storage	12,533,784	
Helium in native gas	2,441,529	

#### Crude Helium Pipeline

	Gross	Net Helium	Percent
Beginning inventory	32,514	24,877	76.51%
Measured to Pipeline (Private Plants)	54,327	36,099	66.45%
Measured from Pipeline (Private Plant)	290,974	221,879	76.25%
HEU Production	234,035	184,017	78.63%
Injection	0	0	00.00%
Production	0	0	
Ending Inventory	27,921	21,302	76.29%
Gain/Loss	(1,980)	(1,812)	

### 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

October - 2012

	NASA*	Navy*	Army*	Air Force*	DOE*	Other Fed*	Subtotal*	In Kind+	Charges Billed (\$)**	
<b>In Kind Helium</b>										
<b>AirGas South West, Contract no. INC98-0101</b>									(billed quarterly)	
Month										
FYTD										
<b>AirGas North Central, Contract no. INC98-0102</b>										
Month										
FYTD										
<b>AirGas Intermountain, Contract no. INC98-0103</b>										
Month										
FYTD										
<b>Air Liquide Helium America, Inc., Contract no. INC98-0104</b>										
Month										
FYTD										
<b>Air Products, L.P., Contract no. INC98-0105</b>										
Month										
FYTD										
<b>Linde Gas North America, LLC, Contract no. INC98-0106</b>										
Month										
FYTD										
<b>Corp Brothers, Inc., Contract no. INC98-0107</b>										
Month										
FYTD										
<b>FIBA Technologies, Inc., Contract no. INC98-0108</b>										
Month										
FYTD										
<b>General Air Service &amp; Supply Co., Contract no. INC98-0109</b>										
Month										
FYTD										
<b>Jack B. Kelley Co., Contract no. INC98-0110</b>										
Month										
FYTD										
<b>Portland Welding Supply, Contract no. INC98-0111</b>										
Month										
FYTD										
<b>Praxair, Inc., Contract no. INC98-0112</b>										
Month										
FYTD										
<b>United States Welding, Inc., Contract no. INC98-0113</b>										
Month										
FYTD										
<b>Matheson Tri-Gas, Inc., Contract no. INC98-0114</b>										
Month										
FYTD										
<b>GT &amp; S, Contract no. INC00-0115</b>										
Month										
FYTD										
<b>Total month</b>	0	0	0	0	0	0	0	0	\$0	
<b>Total FYTD</b>	0	0	0	0	0	0	0	0	\$0	
<b>Total CYTD</b>	43,910	7,152	64	95	15,795	54,751	121,766	119,886	\$7,852,518	
<b>Cumulative</b>	1,684,213	95,308	328	271,486	397,415	514,659	2,963,409	2,917,483	\$161,471,691	
<b>In Kind Transfers</b>							Month	FYTD	CYTD	Cumulative
Transferred							1,555	1,555	112,826	2,871,682
Volume outstanding							45,876			

\* 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

October - 2012

## Helium &amp; Natural Gas Sales

	Award Volume*	Outstanding*	Sales*	Charges Billed (\$)*** (billed quarterly)	
<b>Conservation Helium</b>					
<b><u>Air Liquide Helium America, Inc.</u></b>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	264,250		264,250	\$18,302,250	
<b><u>Air Products, L.P.</u></b>					
Month	185,535	0	0	\$0	
FYTD	185,535	185,535	0	\$0	
Cumulative	6,495,940		6,310,405	\$398,977,879	
<b><u>Linde Gas North America, LLC</u></b>					
Month	136,185	0	0	\$0	
FYTD	136,185	136,185	0	\$0	
Cumulative	5,060,305		4,924,120	\$301,164,528	
<b><u>Keyes Helium Co., LLC</u></b>					
Month	27,615	0	0	\$0	
FYTD	27,615	27,615	0	\$0	
Cumulative	811,045		783,430	\$48,129,823	
<b><u>Matheson Tri-Gas, Inc.</u></b>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	10,000		10,000	\$587,500	
<b><u>Praxair, Inc.</u></b>					
Month	175,665	0	0	\$0	
FYTD	175,665	175,665	0	\$0	
Cumulative	3,847,060		3,671,395	\$237,055,671	
<b><u>Linde Gas, LLC discontinued 10 2008</u></b>					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	200,000		200,000	\$11,035,000	
<b>Total month</b>	525,000	0	0	<b>\$0</b>	
<b>Total FYTD</b>	525,000	525,000	0	<b>\$0</b>	
<b>Total CYTD</b>	2,100,000		1,575,000	<b>\$119,306,250</b>	
<b>Cumulative</b>	16,688,600		16,163,600	<b>\$1,015,252,650</b>	
<b>Conservation Crude Transfers</b>					
		Month	FYTD	CYTD	Cumulative
Transferred		525,000	525,000	2,025,000	16,163,600
Volume outstanding		0			

\* Volumes in Mcf at 14.65 psia &amp; 60°F

## Natural Gas/Liquid Sales

	Natural Gas (Mcf)***	NGLs (gal)	Decatherms	Avg Btu Value	Charges Billed (\$)*** (billed monthly)
<b><u>El Paso Natural Gas</u></b>					
Provides Measured Firm/Interruptible Transportation Services					
Month	317,461	---	346,620	1,092	(\$29,599)
FYTD	317,461	---	346,620	1,092	(\$29,599)
Cumulative	29,256,503	---	32,142,921	1,099	(\$3,264,088)
<b><u>Minerals Management Service</u></b>					
No Longer Provides Natural Gas Marketing Services					
Cumulative	---	---	---	---	(\$179,913)
<b><u>Tenaska</u></b>					
Purchaser - Natural Gas					
Month	---	---	330,722	\$3.015364	\$997,247
FYTD	---	---	330,722	\$3.015364	\$997,247
Cumulative	---	---	31,916,135	\$5.058322	\$160,615,525
<b><u>Sandstone</u></b>					
Purchaser - Natural Gas Liquids					
Month	---	119,630	12,780	\$12.899036	\$164,850
FYTD	---	119,630	12,780	\$12.899036	\$164,850
Cumulative	---	8,396,580	895,914	\$12.330760	\$11,047,300
	Natural Gas (Mcf)***	NGLs (gal)	Purchased (Dth's)	\$\$ Per Unit (\$\$/Dth)	Total (\$\$)
<b>Total month</b>	317,461	119,630	343,502	\$3.296917	<b>\$1,132,498</b>
<b>Total FYTD</b>	317,461	119,630	343,502	\$3.296917	<b>\$1,132,498</b>
<b>Total CYTD</b>	2,941,037	1,055,149	3,272,368	\$2.672196	<b>\$8,744,409</b>
<b>Cumulative</b>	29,256,503	8,396,580	32,812,049	\$5.151930	<b>\$168,218,824</b>

\*\*\* Volumes in Mcf at 14.73 psia &amp; 60°F

\*\*Rounded to nearest dollar

## Table 6 - Helium Resources Evaluation

October - 2012

All Volumes in Mcf at 14.7 psia & 70°F

<b>Revenue Collected From Federal Leaseholds</b>	Month*	FYTD*
Fee Sales & Royalties	\$1,523,915	\$1,523,915
Natural Gas Royalties (1)	\$6,280	\$6,280
Natural Gas Rentals	\$0	\$0
Other	\$51,996	\$51,996
<b>Revenue Collected from Federal Lease Holds</b>	<b>\$1,582,191</b>	<b>\$1,582,191</b>

\*Totals do not sum

<b>Helium Analysis and Evaluation</b>	Month	FYTD
Number of Sample Request Letters Sent	0	0
Number of Samples Received	0	0
Number of Samples Analyzed	18	18
Total Number of Samples Analyzed For Resources Division	18	18
Total Number of Other Samples Analyzed (2)	15	15

### U. S. Helium Production

<i>Domestic</i>	FY Volume	CY Volume
2007 Helium Sold	4,995,600	4,965,176
2008 Helium Sold	4,771,200	4,668,286
2009 Helium Sold	4,325,600	4,238,415
2010 Helium Sold	4,559,100	4,644,278
2011 Helium Sold	4,691,100	4,768,537
Estimated Helium Resources as of 12/31/2006 (Mcf)		732,000,000

	FY-2011	CY-2011
<b>U.S. Helium Exports</b> (3)	2,966,225	3,027,731

(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

October - 2012

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
	Month		FYTD	CYTD	Cumulative					
<b>Total All Contracts*</b>										
Crude Acquired	54,327	66.2%	35,967	35,967	303,925	30,314,964	559,479	48,989,645		
Crude Disposed	291,154	76.2%	221,879	221,879	2,046,665	45,611,556	32,924	30,596,776		
Grade-A Rdlvrd	0		0	0	0	1,478,718				
Net/Balance	(236,827)		(185,912)	(185,912)	(1,742,740)	(16,775,310)	526,555	18,392,869	1,617,559	\$9,012 Storage Fees \$254,209 RMF Fees \$263,220 \$263,220
<b>Total Prior Contracts (TERMINATED)</b>										
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		
<b>Linde Gas North America, LLC, Contract no. 1995-3249</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>Praxair, Inc., Contract no. 1995-3251</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>Air Products, L.P., Contract no. 1995-3256</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>ExxonMobil Gas Marketing Co., Contract no. 1995-3280</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>Pioneer Natural Resources USA, Inc, Contract no. 1995-3286</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>Keyes Helium Co., LLC, Contract no. 1995-3287</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>Air Liquide Helium America, Inc., Contract no. 2003-3284</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>Matheson Tri-Gas, Inc., Contract no. 2007-3288</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										
<b>Airgas Merchant Gases, Contract no. 2009-3290</b>										
Crude Acquired										
Crude Disposed										
Net/Balance										

<b>Government Helium</b>		
Remaining Crude Acquired beginning of the month		11,444,592
Crude Disposed: In Kind Sales transferred for the month		(1,555)
Conservation Crude Sales/Reserve Sell Down transferred (month)		(525,000)
Gains and Losses for the month		(1,812)
Net/Balance of Purchased Helium Remaining for Sale		10,916,225

\*Includes In Kind and Conservation Crude transfers from Government storage

\*\*Rounded to nearest dollar

## Table 8 - Compression & CHEU (Charges & Operations)

October - 2012

Field/CHEU Compressor Operations		Month	FYTD	Cumulative
Spot gas fuel price *	\$ per/MMBTU	\$3.02	\$4.15	\$5.23
Fuel used * (now includes field compression well head)	total MMBTU	13,267	13,267	1,286,801
Field Compression Fuel Cost *	\$dollars	\$0	\$0	\$654,398
CHEU Compression Fuel Cost *	\$dollars	\$15,302	\$15,302	\$3,574,057
CHEU Process Fuel Cost *	\$dollars	\$11,129	\$11,129	\$2,401,129
Rental compressor(s) fuel consumed (well head)	\$dollars	\$13,632	\$13,632	\$32,725
Rental Compressor(s) helium in fuel (Mcf x \$\$)	\$dollars	\$15,036	\$15,036	\$72,562
Rental compressor(s) helium in fuel (Mcf)	Mcf	179	179	939
#1 Compressor run time *	hours	744	744	75,521
#2 Compressor run time *	hours	34	34	49,322
#3 Compressor run time *	hours	710	710	40,444

\* Field/CHEU Compressor Operations based on Oct 12 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)	(\$55,778)	(\$55,778)	(\$9,182,738)
Cliffside Refiners, LP, GDA010003 (BLM provided fuel *, labor, supplies, etc.)	\$12,540	\$12,540	\$2,298,881
<b>Net Total - Cliffside Refiners, LP</b>	<b>(\$43,238)</b>	<b>(\$43,238)</b>	<b>(\$6,883,858)</b>

\* BLM provided fuel cost is based on Sep 12 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	744	100.0%	744	100.0%	79,370
Producing residue gas	744	100.0%	744	100.0%	78,473
Producing helium product	744	100.0%	744	100.0%	75,565
Producing natural gas liquids	744	100.0%	744	100.0%	74,069

CHEU Charges	Charges Billed (\$)*		
	Month	FYTD	Cumulative
Reservoir Management Fees (RMF)	\$254,209	\$254,209	\$23,089,480
Total operating costs	(\$811,926)	(\$811,926)	(\$98,040,535)
Labor	\$91,255	\$91,255	\$9,247,516
Compressor fuel cost Sep 12	\$14,389	\$14,389	\$3,609,570
HEU fuel cost Sep 12	\$8,782	\$8,782	\$2,434,827
Electrical power cost Sep 12	\$126,972	\$126,972	\$14,696,487
Other	\$76,842	\$76,842	\$9,638,177
Sub Total - Items provided by BLM	\$318,240	\$318,240	\$42,835,932
Total - Cliffside Refiners, LP, GDA030001	(\$493,685)	(\$493,685)	(\$55,204,603)

**\*Rounded to nearest dollar**

CHEU Utility Usage	Month	FYTD	Cumulative
Cheu Fuel Gas (Mcf) usage Oct 12	3,188	3,188	409,911
Cheu Pure Water Usage (gallons) Oct 12	1,302	1,302	258,894
Electricity Metered (Kwh) consumed Sep 12	2,648,484	2,648,484	2,648,484