

Bureau of Land Management

Amarillo Field Office

Helium Operations

Statistical Report

for

January - 2016



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

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"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: August 26, 2016

Table 1 - Summary of Helium Operations

January - 2016

Helium Enrichment Unit Operations

Gas Processed	Month Gross Volume	Month Net Helium	Average Percent	Gross FYTD	Net FYTD
Measured Plant Feed (Mcf*)	139,690	18,147	12.99%	985,511	147,523
Helium Product (Mcf*)	20,775	15,272	73.51%	184,676	136,245
Residue Natural Gas (Mcf*)	40,079	16	0.04%	428,592	43

* Volumes in Mcf at 14.65 psia & 60°F

Natural Gas & Liquids Produced

Gas Processed	Month	FYTD
Natural Gas Sales (Mcf***)	39,788	423,216
NGL Sales (gallons)	7,118	139,864

*** 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Total Withdrawn (Mcf*)	167,665	33,008	19.69%	1,057,073	179,230
Crude Injection (Mcf*)	0	0	00.00%	52,854	39,041
Crude Production (Mcf*)	18,581	13,759	74.05%	37,008	27,164

* 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	886,000	0	20,952,729
Conservation Crude Sale Volume Transferred (Mcf*)	15,000	0	886,000	0	20,937,729
Conservation Helium in Storage (EOM) (Mcf*)		5,660,097			

* Volumes in Mcf at 14.65 psia & 60°F

In Kind Helium

	Month	FYTD	CYTD	Cumulative
Sale Volumes Transferred (Mcf*)	0	24,765	0	3,288,307
Sale Volumes Outstanding (Mcf*)	33,053			

* 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*)	63,190	44,141	69.85%	144,124
Crude Disposed (Mcf*)	109,157	77,498	71.00%	267,320
Net Balance (Mcf*)	(45,967)	(33,357)		(123,196)
Balance of Stored Helium End Of Month (Mcf*)		3,059,546		

* Volumes in Mcf at 14.65 psia & 60°F

Revenue / Charges

Helium Storage Contracts (Charges Billed (\$))	Month	FYTD
Storage Fees Billed (\$)	\$411,854	\$1,606,125
Reservoir Management Fees Billed (\$)	\$322,181	\$763,682

Field Compressor Charges (Charges Billed (\$))	Month	FYTD
Funded by the Refiners (provides for booster compression services)	\$0	(\$217,296)
Cliffside Refiners, LP, by Agreement #GDA010003 (reimburses BLM for fuel, labor, supplies, etc.)	\$0	\$88,817
Net-Total (Funded by the Refiners for compression costs.)	\$0	(\$128,479)

Enrichment Unit Charges (Charges Billed (\$))	Month	FYTD
Reservoir Management Fees (RMF)	\$322,181	\$763,682
Total operating costs	(\$831,842)	(\$3,239,436)
Sub Total - Items provided by BLM	\$332,762	\$1,243,113
Total - Cliffside Refiners, LP, GDA030001	(\$499,081)	(\$1,996,323)

Conservation Helium - Natural Gas - Liquid Sales (Charges Billed (\$))	Month	FYTD
Conservation Crude Helium Sales	\$0	\$0
In Kind Sales	\$0	\$2,290,488
Natural Gas & Liquid Sales	\$18,410	\$845,631

Helium Resources Evaluation	Month	FYTD
Revenue Collected from Federal Lease Holds	\$1,462,511	\$6,136,864
Helium Sample Collection Report for month	Submitted - 0	Received - 0
		Analyzed - 0

*Rounded to nearest dollar

Table 2 - Bush Dome Reservoir Operations

January - 2016

		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		167,665	222,695,604	33,008	41,688,527	41,155	54,867,399	83,092	112,871,078	8,760	11,403,335	1,650	1,865,265
BIVINS A-3	Jan-16	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	Jan-16	25,020	11,326,942	18,228	6,738,161	5,780	2,783,457	815	1,594,727	33	157,844	164	52,753
BIVINS A-13	Jan-16	6,179	8,374,171	2,446	4,422,266	1,550	2,153,893	1,913	1,575,137	223	174,701	46	48,174
BIVINS A-14	Jan-16	6,167	9,406,956	2,083	5,452,916	1,532	2,385,572	2,246	1,365,747	250	147,714	55	55,006
BIVINS A-4	Jan-16	9,007	13,331,631	993	2,372,961	2,165	3,230,451	5,204	6,915,247	549	694,581	96	118,391
BUSH A-2	Jan-16	11,875	12,980,325	1,078	1,935,536	2,981	3,181,871	6,963	7,033,901	773	720,329	80	108,688
Injection	Jan-16	0	66,445,928	0	47,998,374	0	17,115,016	0	780,035	0	35	0	552,468
inj Bivins A-3	Jan-16	0	(25,652,315)	0	(18,384,452)	0	(6,554,549)	0	(332,777)	0	0	0	(380,537)
inj Bivins A-6	Jan-16	0	(24,383,879)	0	(17,648,566)	0	(6,480,020)	0	(142,553)	0	(71)	0	(112,670)
inj Bivins A-13	Jan-16	0	(6,490,417)	0	(4,706,191)	0	(1,656,853)	0	(122,391)	0	(2)	0	(4,980)
inj Bivins A-14	Jan-16	0	(6,501,333)	0	(4,767,421)	0	(1,602,106)	0	(126,303)	0	(7)	0	(5,497)
inj Bivins A-4	Jan-16	0	(2,527,801)	0	(1,848,815)	0	(601,353)	0	(42,016)	0	0	0	(35,617)
inj Bush A-2	Jan-16	0	(867,658)	0	(625,258)	0	(215,406)	0	(13,980)	0	0	0	(13,015)
Production	Jan-16	18,581	1,254,876	13,759	924,742	4,263	270,231	437	48,129	3	3,199	119	8,575
BIVINS A-1	Jan-16	0	2,686,608	0	48,896	0	636,995	0	1,798,415	0	175,704	0	26,597
BIVINS A-2	Jan-16	8,348	13,940,891	277	1,878,641	1,948	3,415,095	5,465	7,757,678	574	773,289	83	116,187
BIVINS A-5	Jan-16	4,473	15,944,999	838	2,026,683	1,142	3,908,206	2,217	8,969,350	241	902,653	35	138,108
BIVINS A-7	Jan-16	3,431	11,758,599	1,037	2,769,694	894	2,960,549	1,328	5,392,516	150	549,924	22	85,915
BIVINS A-9	Jan-16	10,433	10,332,576	232	196,694	2,690	2,541,333	6,712	6,811,905	713	688,306	86	94,338
BIVINS A-11	Jan-16	4,867	6,398,260	141	137,713	1,244	1,591,528	3,106	4,179,495	330	429,269	46	60,254
BIVINS A-15	Jan-16	16,577	9,695,640	289	428,438	3,903	2,310,184	11,060	6,232,903	1,125	623,989	201	100,127
BIVINS B-1	Jan-16	11,776	7,908,508	261	297,211	2,887	1,916,095	7,689	5,091,804	799	522,375	140	81,021
BIVINS B-2	Jan-16	10,993	6,571,465	210	123,813	2,807	1,646,316	7,046	4,269,942	735	439,371	195	92,022
BUSH A-1	Jan-16	0	5,721,962	0	104,140	0	1,356,677	0	3,830,281	0	374,216	0	56,647
BUSH A-3	Jan-16	5,381	12,009,091	1,844	2,825,446	1,370	2,968,812	1,911	5,548,283	212	561,569	45	104,981
BUSH A-4	Jan-16	6,010	8,589,261	567	1,575,065	1,539	2,148,064	3,493	4,359,467	377	444,823	34	61,843
BUSH A-5	Jan-16	7,677	16,451,820	2,111	3,778,416	1,965	4,128,951	3,203	7,651,725	353	778,328	45	114,401
BUSH A-8	Jan-16	10,363	4,196,571	193	76,901	2,584	1,016,173	6,723	2,771,946	695	279,259	168	52,291
BUSH A-9	Jan-16	0	3,860,915	0	105,037	0	930,915	0	2,537,187	0	253,463	0	34,312
BUSH A-11	Jan-16	5,047	4,521,393	106	132,136	1,214	1,081,406	3,315	2,955,879	341	300,144	70	51,828
BUSH B-1	Jan-16	4,042	3,313,259	73	62,200	961	786,169	2,684	2,214,150	286	218,321	38	32,419
FUQUA A-1	Jan-16	0	2,954,098	0	53,854	0	702,798	0	1,975,175	0	193,573	0	28,699
FUQUA A-2	Jan-16	0	132,119	0	2,404	0	31,322	0	88,458	0	8,637	0	1,297
FUQUA A-3	Jan-16	0	9,303,909	0	577,005	0	2,277,687	0	5,790,357	0	583,701	0	75,160
TT Fuel	Jan-16	3,631	0	66	0	863	0	2,410	0	257	0	35	0
field-wide pcts				19.69%	18.72%	24.55%	24.64%	49.56%	50.68%	5.22%	5.12%	0.98%	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 Jan-16 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 - 15	90.147	23.308
Injection 2003 - 15	(1.394)	(1.137)
Produced to Date 2016	0.168	0.033
Injected to Date 2016	0.000	0.000
Amount of Raw Gas Available to CHEU	91.644	=====> 11.050 total helium in reservoir
Estimated Bottom Hole Pressure	337.494	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

January - 2016

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	Jan-16	139,690	87,723,905	18,147	21,669,256	34,204	22,002,691	76,149	39,124,045	8,057	4,173,630	3,133	754,283
Calculated Feed	Jan-16	143,673	87,444,036	18,589	21,637,845	35,587	21,927,568	79,590	38,943,413	8,426	4,181,842	1,481	753,368
Feed to Box	Jan-16	142,349	86,900,671	18,589	21,638,023	35,587	21,927,651	79,590	38,943,459	8,426	4,181,845	157	209,693
Cheu Product	Jan-16	20,775	27,273,463	15,272	21,324,884	4,890	5,223,967	477	534,506	2	578	134	189,529
Residue	Jan-16	40,079	39,003,724	16	1,825	868	963,884	35,552	34,608,119	3,644	3,428,646	1	1,250
Cold Box Vent	Jan-16	12,033	14,788,192	7	88,383	10,232	13,100,918	1,791	1,537,762	0	118	2	61,012
Flare/Boot Strap	Jan-16	12,033	5,304,441	7	49,162	10,232	4,355,920	1,791	799,931	0	93,583	2	5,846
Fuel From Cheu	Jan-16	1,057	1,188,597	1	349	27	35,116	853	964,232	177	188,899	0	0
Shrinkage/Loss	Jan-16	583	423,239	0	0	0	0	0	0	583	423,239	0	0
Unaccounted*	Jan-16	5,592	2,731,098	485	137,068	2,830	2,079,462	2,272	510,136	(0)	1,102	4	3,330

*Before October 2004, the values are estimated

Storage Operations

Inventory (contained helium)

	Government	Private
Beginning inventory	5,659,788	3,070,239
net acceptances +	0	0
redeliveries	0	(33,357)
In Kind Transfers	0	0
Conservation Crude Sales	0	0
Gain/loss	309	
Ending Inventory	5,660,097	3,036,882
Total Helium in Reservoir	11,050,411	
Total Helium in Storage	8,696,979	
Helium in native gas	2,353,432	

Crude Helium Pipeline

	Gross	Net Helium	Percent
Beginning inventory	35,020	24,609	70.27%
Measured to Pipeline (Private Plants)	63,190	44,164	69.89%
Measured from Pipeline (Private Plant)	109,157	77,498	71.00%
HEU Production	20,775	15,272	73.51%
Injection	0	0	00.00%
Production	18,581	13,759	74.05%
Ending Inventory	28,961	20,615	71.18%
Gain/Loss	551	309	

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

January - 2016

	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	12,072	0	0	0	0	18,539	30,610	30,138	\$2,290,488		
Total CYTD	0	0	0	0	0	0	0	0	\$0		
Cumulative	1,827,158	108,674	450	271,584	421,753	743,914	3,373,533	3,321,285	\$189,928,472		
In Kind Transfers								Month	FYTD	CYTD	Cumulative
Transferred								0	24,765	0	3,288,307
Volume outstanding								33,053			

* 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

January - 2016

Helium & Natural Gas Sales

	Award Volume*	Outstanding*	Sales*	Charges Billed (\$)**	
Conservation Helium					
(billed quarterly)					
Air Liquide Helium America, Inc.					
Month	0	0	0	\$0	
FYTD	20,000	0	50,000	\$5,230,000	
Cumulative	335,217		335,217	\$25,454,815	
Air Products, L.P.					
Month	0	0	0	\$0	
FYTD	193,875	0	318,875	\$33,038,000	
Cumulative	8,029,436		8,029,436	\$565,835,027	
Linde Gas North America, LLC					
Month	0	0	0	\$0	
FYTD	140,021	0	140,021	\$14,562,184	
Cumulative	6,030,653		6,030,653	\$404,691,853	
Keyes Helium Co., LLC					
Month	0	0	0	\$0	
FYTD	21,000	0	21,000	\$2,184,000	
Cumulative	977,113		977,113	\$66,015,798	
Matheson Tri-Gas, Inc.					
Month	0	0	0	\$0	
FYTD	68,000	0	68,000	\$7,072,000	
Cumulative	107,000		107,000	\$10,569,500	
Praxair, Inc.					
Month	0	0	0	\$0	
FYTD	183,104	0	273,104	\$28,407,816	
Cumulative	5,219,676		5,219,676	\$384,489,780	
Linde Gas, LLC discontinued 10 2008					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	200,000		200,000	\$11,035,000	
Global Gases America					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	22,967		22,967	\$2,112,565	
Airgas Merchant Gases					
Month	0	0	0	\$0	
FYTD	0	0	0	\$0	
Cumulative	15,667		15,667	\$1,488,365	
IACX Energy					
Month	0	0	0	\$0	
FYTD	0	0	15,000	\$1,575,000	
Cumulative	15,000		15,000	\$1,575,000	
Total month	0	0	0		0
Total FYTD	626,000	0	886,000		\$0
Total CYTD	0		0		\$0
Cumulative	20,952,729		20,952,729		\$1,473,267,703
Conservation Crude Transfers					
		Month	FYTD	CYTD	Cumulative
Transferred		0	886,000	0	20,937,729
Volume outstanding		15,000			

* Volumes in Mcf at 14.65 psia & 60°F

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	39,788	---	43,951	1,105	(\$27,997)	
FYTD	423,216	---	466,524	1,102	(\$111,988)	
Cumulative	38,381,200	---	42,109,383	1,097	(\$4,360,403)	
Minerals Management Service						
		No Longer Provides Natural Gas Marketing Services				
Cumulative	---	---	---	---	(\$179,913)	
Tenaska						
		Purchaser - Natural Gas			\$/Unit	
Month	---	---	23,000	\$1.931739	\$44,430	
FYTD	---	---	468,392	\$1.916863	\$897,843	
Cumulative	---	---	41,785,605	\$4.684007	\$194,897,498	
Sandstone						
		Purchaser - Natural Gas Liquids				
Month	---	7,118	757	\$2.611268	\$1,977	
FYTD	---	139,864	14,932	\$4.003178	\$59,775	
Cumulative	---	11,604,163	1,234,607	\$11.912266	\$14,706,968	
	Natural Gas (Mcf)***	NGLs (gal)	Purchased (Dth's)	\$\$ Per Unit (\$\$/Dth)	Total (\$\$)	
Total month	39,788	7,118	23,757	\$0.774919	\$18,410	
Total FYTD	423,216	139,864	483,324	\$1.749614	\$845,631	
Total CYTD	39,788	7,118	23,757	\$0.774919	\$18,410	
Cumulative	38,381,200	11,604,163	43,020,212	\$4.785906	\$205,064,149	

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

**Rounded to nearest dollar

Table 6 - Helium Resources Evaluation

January - 2016

All Volumes in Mcf at 14.7 psia & 70°F

Revenue Collected From Federal Leaseholds	Month*	FYTD*
Fee Sales & Royalties	\$1,447,926	\$6,079,604
Natural Gas Royalties (1)	\$0	\$0
Natural Gas Rentals	\$0	\$0
Other	\$56,760	\$171,056
Revenue Collected from Federal Lease Holds	\$1,462,511	\$6,136,864

*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	1	1
Total Number of Other Samples Analyzed (2)	0	26

U. S. Helium Production

<i>Domestic</i>	FY Volume	CY Volume
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
2015 Helium Sold	4,559,100	4,644,278
Estimated Helium Resources as of 12/31/2006 (Mcf)		732,000,000

	FY-2015	CY-2015
U.S. Helium Exports (3)	2,423,915	2,334,648

(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

January - 2016

All Volumes in Mcf at 14.65 psia & 60°F

	Metered Gas					Transferred Gas Helium		Stored Helium EOM	Charges Month	Billed (\$)** FYTD	
	Gross Gas Month	Helium %	Helium	Helium FYTD	Helium CYTD	Helium Cumulative	Month				Cumulative
Total All Contracts*											
Crude Acquired	63,190	69.9%	44,141	144,124	44,141	30,510,081	35,806	54,661,907			
Crude Disposed	109,157	71.0%	77,498	267,320	77,498	50,656,375	35,806	29,968,259	\$411,854	Storage Fees	
Grade-A Rdlvrd	0		0	0	0	1,478,718			\$322,181	RMF Fees	
Net/Balance	(45,967)		(33,357)	(123,196)	(33,357)	(21,625,012)	0	24,693,648	3,059,546	\$734,035	\$2,369,807
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											
IACX Energy, Contract no. 3297											
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											
Air Liquide Helium America, Inc., Contract no. 3284											
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											

There was an error on transfers between companies. This error is corrected in a later month.

Government Helium	
Remaining Crude Acquired beginning of the month	5,659,788
Crude Disposed: In Kind Sales transferred for the month	0
Conservation Crude Sales/Reserve Sell Down transferred (month)	0
Gains and Losses for the month	309
Net/Balance of Purchased Helium Remaining for Sale	5,660,097

*Includes In Kind and Conservation Crude transfers from Government storage

**Rounded to nearest dollar

Table 8 - Compression & CHEU (Charges & Operations)

January - 2016

Field/CHEU Compressor Operations

		Month	FYTD	Cumulative
Spot gas fuel price *	\$ per/MMBTU	\$1.93	\$1.91	\$4.99
Fuel used * (now includes field compression well head)	total MMBTU	4,250	19,952	1,649,241
Field Compression Fuel Cost *	\$dollars	\$1,729	\$4,049	\$658,447
CHEU Compression Fuel Cost *	\$dollars	\$1,933	\$18,254	\$4,222,413
CHEU Process Fuel Cost *	\$dollars	\$4,541	\$15,850	\$2,823,275
Rental compressor(s) fuel consumed (well head)	\$dollars	\$0	\$0	\$207,234
Rental Compressor(s) helium in fuel (Mcf x \$\$)	\$dollars	\$0	\$0	\$315,893
Rental compressor(s) helium in fuel (Mcf)	Mcf	0	0	3645
#1 Compressor run time *	hours	421	2,001	97,320
#2 Compressor run time *	hours	88	1,007	60,771
#3 Compressor run time *	hours	1	995	58,975

* Field/CHEU Compressor Operations based on Jan 16 activity

Field Compressor Charges

	Charges Billed (\$)*		
Linde Gas North America, LLC, Contract no. 3249			
Praxair, Inc., Contract no. 3251			
Air Products, L.P., Contract no. 3256			
Keyes Helium Co., LLC, Contract no. 3287			
SubTotal - Cliffside Refiners, LP (provides booster compression services)	\$0	(\$217,296)	(\$11,422,651)
Cliffside Refiners, LP, GDA010003 (BLM provided fuel *, labor, supplies, etc.)	\$0	\$88,817	\$2,880,795
Net Total - Cliffside Refiners, LP	\$0	(\$128,479)	(\$8,541,856)

* BLM provided fuel cost is based on Dec 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	744	100.0%	2,474	83.8%	106,838
Producing residue gas	164	22.0%	1,662	56.3%	104,380
Producing helium product	136	18.3%	1,550	52.5%	101,115
Producing natural gas liquids	163	21.9%	1,611	54.6%	99,968

CHEU Charges

	Charges Billed (\$)*		
	Month	FYTD	Cumulative
Reservoir Management Fees (RMF)	\$322,181	\$763,682	\$30,268,884
Total operating costs	(\$831,842)	(\$3,239,436)	(\$130,463,942)
Labor	\$130,284	\$521,138	\$13,296,341
Compressor fuel cost Dec 15	\$8,715	\$30,063	\$4,265,247
HEU fuel cost Dec 15	\$5,280	\$16,454	\$2,856,541
Electrical power cost Dec 15	\$117,149	\$390,125	\$19,741,229
Other	\$71,333	\$285,334	\$12,502,589
Sub Total - Items provided by BLM	\$332,762	\$1,243,113	\$55,871,302
Total - Cliffside Refiners, LP, GDA030001	(\$499,081)	(\$1,996,323)	(\$74,592,640)

***Rounded to nearest dollar**

CHEU Utility Usage

	Month	FYTD	Cumulative
Cheu Fuel Gas (Mcf) usage Jan 16	2,663	8,087	518,821
Cheu Pure Water Usage (gallons) Jan 16	569	2,943	287,866
Electricity Metered (Kwh) consumed Dec 15	2,598,874	8,813,679	105,511,550