

Bureau of Land Management

Amarillo Field Office Helium Operations



Statistical Report for February - 2004



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
-Natural Gas Engineering

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Amarillo, Texas

Issued: April 14, 2004

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Approved for distribution: *Nelson R. Bullard*

Date: 04/14/2004

Table 1 - Summary of Helium Operations

February - 2004

In Kind Sales	NASA*	Navy*	Army*	Air Force*	DOE*	Other Fed*	Subtotal*	In Kind	Charges Billed (\$)**		
Total month	0	0	0	0	0	0	0	0	\$0		
Total FYTD	27,606	1,527	0	9,324	4,141	9,099	51,698	50,898	\$2,671,822		
Total CYTD	0	0	0	0	0	0	0	0	\$0		
In Kind Transfers								Month	FYTD	CYTD	Cumulative
Transferred								50,781	97,343	50,781	1,257,281
Volume outstanding								117			
Open Market Sales				Award Volume	Outstanding	Sales	Charges Billed (\$)**				
Total month				0	(275,000)	275,000	\$14,850,000				
Total FYTD				675,600	337,800	337,800	\$18,241,200				
Total CYTD				0		318,900	\$17,220,600				
Open Market Transfers								Month	FYTD	CYTD	Cumulative
Transferred								43,900	472,800	62,800	1,702,800
Volume outstanding								275,000			
Natural Gas/Liquids Sales	Natural Gas (Mcf)		NGLs (gal)		Decatherms		\$/unit	Charges Billed (\$)**			
Total month	314,652		92,706		326,043		\$4.9513	\$1,602,975			
Total FYTD	1,061,873		183,866		1,137,358		\$4.8779	\$5,517,435			
Total CYTD	568,061		134,656		563,628		\$5.1756	\$2,900,059			

Purchased Helium	Month			Month	FYTD	Month	FYTD	FYTD	CYTD	Cumulative
	Helium Mixture	Helium Percent	Helium	Low Purity Helium		Below 50% Helium		Contained Helium		
Total purchased										32,176,145
Helium transferred			94,681					570,143	113,581	4,945,421
Purchased helium in storage										27,230,724
Private Plant Activity										
Accepted in storage system	82,201	67.0%	55,050	1,430	6,870	(128)	(1,069)	324,099	125,654	8,128,326
Redelivered from storage system	(194,520)	72.1%	(140,153)	0	0	6	11	(755,492)	(280,716)	(12,367,870)
Total apparent crude produced^	181,525	71.5%	129,751					684,189	270,434	7,861,430
Total apparent crude refined^	(293,956)	73.1%	(214,934)					(1,116,125)	(426,038)	(12,656,480)

Storage Contract Activity	Metered Gas					Transferred Gas		Stored	Charges Billed (\$)**	
	Gross Gas	Helium	Helium			Helium		Helium		
	Month		FYTD	CYTD	Cumulative	Month	Cumulative	EOM	Month	FYTD
Crude Acquired	82,120	54,922	323,030	125,429	25,498,038	175,029	28,049,898			
Crude Disposed	194,503	140,147	755,481	280,710	24,193,239	80,348	25,732,230		\$305,351	Storage Fees
Grade-A Rdlvrd	0	0	0	0	1,478,718	0	0		\$64,986	RMF Fees
Net/Balance	(112,383)	(85,225)	(432,451)	(155,281)	(173,919)	94,681	2,317,668	2,143,749	\$370,337	\$1,685,560

Bush Dome Reservoir Operations	Month		Fiscal Year		Since Start of Conservation Program		Since Field Discovery	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Conservation gases from all sources								
In underground storage, beg. of period	40,907,123	29,473,644	41,328,824	29,775,145	490,620	490,620	0	0
Net Activity	(71,682)	(48,976)	(493,382)	(350,478)	40,344,821	28,934,048	40,835,441	29,424,668
Total in underground storage	40,835,441	29,424,668	40,835,441	29,424,668	40,835,441	29,424,668	40,835,441	29,424,668
Native Gas								
Total in place, beg. of period	204,961,056		206,235,982		265,724,755		318,727,000	
Net Activity	(501,573)		(1,776,499)		(61,265,272)		(114,267,517)	
Total in place, end of month	204,459,483		204,459,483		204,459,483		204,459,483	
Native Gas plus Conservation Gases								
Total gases in place, beg. of period	245,868,179		247,564,806		266,215,375		318,727,000	
Net Activity	(573,255)		(2,269,882)		(20,920,451)		(73,432,076)	
Total gases in place, end of month	245,294,924		245,294,924		245,294,924		245,294,924	

Helium Resources Evaluation	Month		FYTD	
	Submitted	Received	Analyzed	108
Revenue Collected from Federal Lease Holds	\$572,748	0	\$3,349,999	
Helium Sample Collection Report for month	13	0	108	

Helium Enrichment Unit Operations	Month			FYTD			Cumulative		
	Helium-Gas Mixture	Helium Percent	Helium	Helium-Gas Mixture	Helium Percent	Helium	Helium-Gas Mixture	Helium Percent	Helium
Gas Processed									
Plant feed	610,264	21.0%	127,875	2,099,129	17.9%	375,148	4,860,842	15.0%	728,012
Helium product	162,665	77.7%	126,418	468,499	77.1%	361,137	894,715	76.4%	683,657
Residue natural gas	307,283	0.0%	0	1,032,238	0.0%	157	2,561,882	0.0%	168
Vent, flare & plant losses	132,524	1.1%	1,457	602,965	2.3%	13,853	1,728,712	2.6%	44,187
Helium recovery efficiency			98.9%			96.3%			93.9%

* Volumes in Mcf at 14.7 psia & 70°F; all other volumes in 14.65 psia & 60°F

**Rounded to nearest dollar

^ Other sources of helium are accessed but data are not available

Table 2 - In Kind Helium Sales

February - 2004

	NASA*	Navy*	Army*	Air Force*	DOE*	Other Fed*	Subtotal*	In Kind+	Charges Billed (\$)**
In Kind Helium									
Aeriform, Contract no. INC98-0101 (billed quarterly)									
Month									
FYTD									
AGA Gas, Inc., Contract no. INC98-0102									
Month									
FYTD									
AirGas, Inc., Contract no. INC98-0103									
Month									
FYTD									
Air Liquide S.A., Contract no. INC98-0104									
Month									
FYTD									
Air Products, L.P., Contract no. INC98-0105									
Month									
FYTD									
BOC Gases, 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									
Jack B. Kelley Co., Contract no. INC98-0110									
Month									
FYTD									
Portland Welding Supply, Contract no. INC98-0111									
Month									
FYTD									
Praxair, Inc., Contract no. INC98-0112									
Month									
FYTD									
United States Welding, Inc., Contract no. INC98-0113									
Month									
FYTD									
Tri-Gas, Inc., Contract no. INC98-0114									
Month									
FYTD									
Messer Griesheim Ind., Contract no. INC00-0115									
Month									
FYTD									

Total month	0	0	0	0	0	0	0	0	\$0
Total FYTD	27,606	1,527	0	9,324	4,141	9,099	51,698	50,898	\$2,671,822
Total CYTD	0	0	0	0	0	0	0	0	\$0
Cumulative	732,588	19,929	58	177,843	185,577	161,176	1,277,171	1,257,323	\$62,908,077

In Kind Transfers		Month	FYTD	CYTD	Cumulative
Transferred		50,781	97,343	50,781	1,257,281
Volume outstanding		117			

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

**Rounded to nearest dollar

COMPANY PROPRIETARY INFORMATION

Table 2.1 - Open Market/Reserve Sell-down
Helium & Natural Gas Sales

February - 2004

	Award Volume*	Outstanding*	Sales*	Charges Billed (\$)**
Conservation Helium				
Air Liquide S.A. (billed quarterly)				
Month	0	0	0	\$0
FYTD	0	0	0	\$0
Cumulative	50,000		50,000	\$2,625,000
Air Products, L.P.				
Month	0	0	0	\$0
FYTD	0	0	0	\$0
Cumulative	680,400		680,400	\$35,721,000
BOC Gases				
Month	0	(275,000)	275,000	\$14,850,000
FYTD	550,000	275,000	275,000	\$14,850,000
Cumulative	1,384,000		1,109,000	\$58,635,000
Keyes Helium Co.				
Month	0	0	0	\$0
FYTD	75,600	37,800	37,800	\$2,041,200
Cumulative	151,200		113,400	\$6,010,200
AGA Gas, Inc.				
Month	0	0	0	\$0
FYTD	50,000	25,000	25,000	\$1,350,000
Cumulative	50,000		25,000	\$1,350,000
Total month	0	(275,000)	275,000	\$14,850,000
Total FYTD	675,600	337,800	337,800	\$18,241,200
Total CYTD	0		318,900	\$17,220,600
Cumulative	2,315,600		1,977,800	\$104,341,200

Open Market Transfers

	Month	FYTD	CYTD	Cumulative
Transferred	43,900	472,800	62,800	1,702,800
Volume outstanding	275,000			

* Volumes in Mcf at 14.65 psia & 60°F

	Natural Gas (Mcf)***	NGLs (gal)	Decatherms	\$/unit	Charges Billed (\$)**
Natural Gas/Liquids Sales					
El Paso Natural Gas Provides Firm/Interruptible natural gas transportation services (billed monthly)					
Month	312,943		346,355	(\$0.0793)	(\$27,460)
FYTD	1,020,849		1,127,423	(\$0.1218)	(\$137,301)
Cumulative	2,212,270		2,449,771	(\$0.1233)	(\$302,061)
Minerals Management Service Provides natural gas marketing services under a Cooperative Agreement					
Month				\$0.0000	\$0
FYTD				\$0.0000	\$0
Cumulative				(\$0.0056)	(\$12,448)
Cenergy Marketing					
Month	312,943	0	316,383	\$4.998140	\$1,569,972
FYTD	1,056,106	0	1,118,038	\$4.977974	\$5,535,073
Cumulative	2,292,105	0	2,394,912	\$4.995961	\$11,904,361
Seminole Transportation & Gathering					
Month	0	92,706	9,660	\$6.259068	\$60,463
FYTD	0	183,866	19,320	\$6.193730	\$119,663
Cumulative	0	183,866	19,320	\$6.193730	\$119,663
Total month	312,943	92,706	326,043	\$4.951276	\$1,602,975
Total FYTD	1,056,106	183,866	1,137,358	\$4.877906	\$5,517,435
Total CYTD	564,976	134,656	563,628	\$5.175577	\$2,900,059
Cumulative	2,292,105	183,866	2,414,232	\$4.875273	\$11,709,514

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

**Rounded to nearest dollar

Table 3 - Helium Resources Evaluation

February - 2004

All Volumes in Mcf at 14.7 psia & 70°F

Revenue Collected From Federal Leaseholds

	Month*	FYTD*
Fee Sales & Royalties	\$569,285	\$3,330,458
Natural Gas Royalties (1)	\$2,778	\$14,952
Natural Gas Rentals	\$0	\$0
Other	\$4,518	\$21,855
Revenue Collected from Federal Lease Holds	\$572,748	\$3,349,999

*Totals do not sum

Helium Analysis and Evaluation

	Month	FYTD
Number of Sample Request Letters Sent	13	14
Number of Samples Received	0	7
Number of Samples Analyzed	0	12
Total Number of Samples Analyzed For Resources Division	2	25
Total Number of Samples Analyzed (2)	108	458

U. S. Helium Production

<i>Domestic</i>	CY Volumes
1998 Helium Sold	4,029,755
1999 Helium Sold	4,203,019
2000 Helium Sold	4,564,589
2001 Helium Sold	4,756,719
2002 Helium Sold	4,584,904
2003 Helium Sold	Data Not Complete
2004 Helium Sold (projected)	4,700,000
Estimated Helium Resources (as of 01/01/2003)	305,000,000

	FY-2003	CY-2003
U.S. Helium Exports (3)	1,457,623	1,487,258

(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 4 - Federal Acquisition & Storage Operations

February - 2004

All Volumes in Mcf at 14.65 psia & 60°F

	Month		Month	FYTD	Month	FYTD	FYTD	CYTD	Cumulative
	Helium-Gas Mixture	Helium Percent	Helium	Low Purity Helium	Below 50% Helium	Contained Helium			
Purchased									
Cities Service Helex - Jayhawk		---							6,403,147
National Helium Corp. - Liberal		---							11,561,830
Nothern Helex Co. - Bushton		---							4,475,921
Phillips Petroleum - Dumas		---							5,111,036
Phillips Petroleum - Sherman		---							4,624,211
<i>Total purchased</i>									32,176,145

Purchased helium produced/transferred	94,681					570,143	113,581		4,945,421
Balance of purchased helium in storage									27,230,724

Bureau Plants

Delivery/Handling Credit	0	---	0			0			13,205,259
Withdrawal	0	---	0			0			7,540,255

Private Plants

Helium accepted under terminated contracts (pre-FY96)									16,453,073
Helium redelivered under terminated contracts (pre-FY96)									13,007,062

Pioneer - Fain*									
GPM - Dumas*									
Crescendo - Sunray*									
Air Products - Guymon*									
GPM - Sherhan*									
GPM to APG+									
<i>Total GPM - Sherhan</i>									
Keyes Helium - Sturgis* ^									
Keyes Helium - Sturgis* ^									
<i>Total Keyes Helium - Sturgis* ^</i>									
Pioneer - Satanta*									
Williams - Baker*									
National Helium - Liberal*									
National to APL+									
<i>Total National Helium - Liberal</i>									
Air Products - Liberal*									
Praxair - Jayhawk* ^									
Praxair - Jayhawk* ^									
<i>Total Praxair - Jayhawk* ^</i>									
Amoco to Praxair+									
CIG - Lakin*									
BOC Gases - Otis* ^									
KN Processing - Bushton*									
KNP to Praxair+									
<i>Total KN Processing - Bushton</i>									
Praxair - Bushton*									

Plant Inactive

Accepted in storage system	82,201	67.0%	55,050	1,430	6,870	(128)	(1,069)	324,099	125,654	8,128,326
Redelivered from storage system	(194,520)	72.1%	(140,153)			6	11	(755,492)	(280,716)	(12,367,870)
Total apparent crude produced^	181,525	71.5%	129,751					684,189	270,434	7,861,430
Total apparent crude refined^	(293,956)	73.1%	(214,934)					(1,116,125)	(426,038)	(12,656,480)

* Denotes CUSTODY TRANSFER activity in to or out of the crude helium pipeline system

+ Denotes activity between private plants that does not enter the crude helium pipeline system

^ Other sources of helium are accessed by helium refiners, but data are not available to BLM

Acquisition & Storage Summary - Contained Helium

	Month	FYTD	Cumulative
Total acquisition	55,050	324,099	69,962,803
Total disposition	140,153	755,492	41,845,259
Total stored in conservation system	(85,103)	(431,393)	28,117,544
Helium in pipeline system plus apparent losses			(1,307,124)
Helium in underground storage			29,424,668

COMPANY PROPRIETARY INFORMATION

Table 4.1 - Helium Storage Contract Activity

February - 2004

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
	Month			FYTD	CYTD	Cumulative	Month	Cumulative			
Total All Contracts*											
Crude Acquired	82,120	66.9%	54,922	323,030	125,429	25,498,038	175,029	28,049,898			
Crude Disposed	194,503	72.1%	140,147	755,481	280,710	24,193,239	80,348	25,732,230		\$305,351	Storage Fees
Grade-A Rdlvrd	0		0	0	0	1,478,718				\$64,986	RMF Fees
Net/Balance	(112,383)		(85,225)	(432,451)	(155,281)	(173,919)	94,681	2,317,668	2,143,749	\$370,337	\$1,685,560
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		
BOC Gases, Contract no. 1995-3249											
Crude Acquired											
Crude Disposed											
Net/Balance											
Praxair, Inc., Contract no. 1995-3251 months - projected depletion											
Crude Acquired											
Crude Disposed											
Net/Balance											
Air Products, L.P., Contract no. 1995-3256											
Crude Acquired											
Crude Disposed											
Net/Balance											
Oneok Field Services, Contract no. 1995-3258											
Crude Acquired											
Crude Disposed											
Net/Balance											
ExxonMobil Gas Marketing Co., Contract no. 1995-3280											
Crude Acquired											
Crude Disposed											
Net/Balance											
Pioneer, Contract no. 1995-3286											
Crude Acquired											
Crude Disposed											
Net/Balance											
Keys Helium Co., Contract no. 1995-3287 months - projected depletion											
Crude Acquired											
Crude Disposed											
Net/Balance											
Messer Griesheim Ind., Contract no. 1998-3283 months - projected depletion											
Crude Acquired											
Crude Disposed											
Net/Balance											
Linde Gas LLC, Contract no. 2001-3282											
Crude Acquired											
Crude Disposed											
Net/Balance											
Mitsui & Co. (U.S.A.), Inc., Contract no. 2002-3289 months - projected depletion											
Crude Acquired											
Crude Disposed											
Net/Balance											
Air Liquide S.A., Contract no. 2003-3284											
Crude Acquired											
Crude Disposed											
Net/Balance											
Government Helium											
Crude Acquired							0	32,176,145			
Crude Disposed:	In Kind Sales						50,781				
	Open Market/Reserve Sell down						43,900	4,945,421			
Net/Balance									27,230,724		

*Includes In Kind and Open Market transfers from Government storage

**Rounded to nearest dollar

COMPANY PROPRIETARY INFORMATION

Table 6 - Helium Enrichment Unit Operations

February - 2004

All Volumes in Mcf at 14.65 psia & 60°F (*except where noted)

Gas Processed	Month			FYTD			Cumulative		
	Helium-Gas Mixture	Helium Percent	Helium	Helium-Gas Mixture	Helium Percent	Helium	Helium-Gas Mixture	Helium Percent	Helium
	Plant feed	610,264	21.0%	127,875	2,099,129	17.9%	375,148	4,860,842	15.0%
Helium product	162,665	77.7%	126,418	468,499	77.1%	361,137	894,715	76.4%	683,657
Residue natural gas	307,283	0.0%	0	1,032,238	0.0%	157	2,561,882	0.0%	168
Vent, flare & plant losses	132,524	1.1%	1,457	602,965	2.3%	13,853	1,728,712	2.6%	44,187
Helium recovery efficiency			98.9%			96.3%			93.9%

Utility Usage	Month			FYTD			Cumulative		
	Volume*	KWh	Runtime	Volume*	KWh	Runtime	Volume*	KWh	Runtime
	Natural gas liquids (*gallons)	76,673			193,540			193,540	
K100 compressor		470,376	688		1,911,609	2,800		6,868,169	6,788
K600 compressor		1,507,807	685		5,595,770	2,533		13,274,249	6,041
K610 compressor			682			2,373			5,309
Dew point control system		31,818	680		91,539	1,911		91,539	1,911
Other electrical usage		206,667	696		1,044,626	3,648		3,340,311	8,488
Fuel gas (*Mcf)	4,899			16,901			37,608		
Water (*gallons)	3,800			17,741			32,031		

HEU Runtime & Charges

Enrichment Unit Runtime

	Month		FYTD		Cumulative	
	Runtime	Percent	Runtime	Percent	Runtime	Percent
Processing feed gas	688	98.9%	2,800	76.8%	6,788	80.0%
Producing natural gas liquids	680	97.7%	1,911	52.4%	1,911	22.5%
Producing helium product	682	98.0%	2,373	65.0%	5,309	62.5%
Producing residue gas	685	98.4%	2,533	69.4%	6,041	71.2%

Enrichment Unit Charges

	Charges Billed (\$)*		
	Month	FYTD	Cumulative
Reservoir Management Fees (RMF)	\$64,986	\$328,126	\$900,295
Total operating costs	(\$898,437)	(\$4,731,974)	(\$9,724,071)
Labor	\$32,270	\$185,163	\$635,152
Compressor fuel	\$14,118	\$53,968	\$80,557
HEU fuel	\$16,581	\$54,546	\$111,954
Electric power	\$94,113	\$536,307	\$850,989
Flare, vent & plant losses	\$264,978	\$1,520,105	\$2,861,270
Other	\$17,250	\$86,250	\$189,750
Sub Total - Items provided by BLM	\$439,310	\$2,436,339	\$4,729,672
Total - Cliffside Refiners, LP, GDA030001	(\$459,127)	(\$2,295,635)	(\$4,994,399)

*Rounded to nearest dollar