

Bureau of Land Management

Amarillo Field Office Helium Operations



Statistical Report for July - 2003



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: October 21, 2003

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Approved for distribution: *Nelson R. Bullard*

Date: 10/21/2003

Table 1 - Summary of Helium Operations

July - 2003

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	93,865	(4,682)	58	20,380	25,187	20,535	155,344	152,942	\$7,985,806
Total CYTD	67,057	3,037	58	12,173	21,015	9,264	112,604	110,862	\$5,819,010

In Kind Transfers	Month	FYTD	CYTD	Cumulative
Transferred	0	181,110	99,356	1,106,442
Volume outstanding	53,586			

Open Market Sales	Award Volume	Outstanding	Sales	Charges Billed (\$)**
Total month	0	0	0	\$0
Total FYTD	1,640,000	410,000	1,230,000	\$64,575,000
Total CYTD	1,640,000		1,230,000	\$64,575,000

Open Market Transfers	Month	FYTD	CYTD	Cumulative
Transferred	201,500	1,021,500	1,021,500	1,021,500
Volume outstanding	208,500			

Natural Gas/Liquids Sales	Natural Gas (Mcf)	NGLs (gal)	Decatherms	\$/unit	Charges Billed (\$)**
Total month	185,909	0	194,990	\$4.7479	\$921,287
Total FYTD	688,419	0	709,870	\$5.1215	\$3,618,495
Total CYTD	688,419	0	709,870	\$5.1215	\$3,618,495

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			201,500					1,202,610	1,120,856	4,113,282
Purchased helium in storage										28,062,863
Private Plant Activity										
Accepted in storage system	82,879	65.0%	53,870	3,003	18,455	(475)	(3,259)	522,917	371,785	7,681,093
Redelivered from storage system	(241,904)	68.3%	(165,134)	0	0	109	249	(1,623,130)	(1,128,277)	(11,279,185)
Total apparent crude produced^	182,158	70.2%	127,873					1,391,658	910,992	7,876,463
Total apparent crude refined^	(293,121)	69.6%	(204,100)					(2,174,094)	(1,461,739)	(11,474,555)

Storage Contract Activity	Metered Gas					Transferred Gas		Stored	Charges Billed (\$)**	
	Gross Gas	Helium	Helium			Helium		Helium	Month	FYTD
	Month	FYTD	CYTD	Cumulative	Month	Cumulative	EOM	Month	FYTD	
Crude Acquired	82,613	53,395	519,658	369,161	25,052,879	287,231	26,788,027			
Crude Disposed	241,557	165,025	1,622,881	1,128,049	23,104,565	85,731	25,302,498		\$218,328	Storage Fees
Grade-A Rdlvrd	0	0	0	0	1,478,718	0	0		\$81,567	RMF Fees
Net/Balance	(158,944)	(111,630)	(1,103,223)	(758,888)	469,596	201,500	1,485,529	1,955,125	\$299,895	\$2,384,752

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	41,776,326	30,097,839	43,146,344	31,097,065	490,620	490,620	0	0
Net Activity	(154,805)	(111,630)	(1,524,823)	(1,110,856)	41,130,901	29,495,589	41,621,521	29,986,209
Total in underground storage	41,621,521	29,986,209	41,621,521	29,986,209	41,621,521	29,986,209	41,621,521	29,986,209

Native Gas	Month		Fiscal Year		Since Start of Conservation Program		Since Field Discovery	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Total in place, beg. of period	207,489,314		208,721,080		265,724,755		318,727,000	
Net Activity	(380,789)		(1,612,555)		(58,616,230)		(111,618,475)	
Total in place, end of month	207,108,525		207,108,525		207,108,525		207,108,525	

Native Gas plus Conservation Gases	Month		Fiscal Year		Since Start of Conservation Program		Since Field Discovery	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Total gases in place, beg. of period	249,265,640		251,867,424		266,215,375		318,727,000	
Net Activity	(535,594)		(3,137,378)		(17,485,329)		(69,996,954)	
Total gases in place, end of month	248,730,046		248,730,046		248,730,046		248,730,046	

Helium Resources Evaluation	Month	FYTD
	Revenue Collected from Federal Lease Holds	\$142,744
Helium Sample Collection Report for month	Submitted 1	Received 4 Analyzed 165

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	428,140	12.0%	51,580	1,686,747	10.9%	183,233	1,686,747	10.9%	183,233
Helium product	68,739	72.7%	49,966	209,184	75.2%	157,254	209,184	75.2%	157,254
Residue natural gas	228,847	0.0%	0	940,021	0.0%	0	940,021	0.0%	0
Vent, flare & plant losses	173,936	0.9%	1,613	822,547	3.2%	25,979	822,547	3.2%	25,979
Helium recovery efficiency			96.9%			85.8%			85.8%

* 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

July - 2003

	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	93,865	(4,682)	58	20,380	25,187	20,535	155,344	152,942	\$7,985,806	
Total CYTD	67,057	3,037	58	12,173	21,015	9,264	112,604	110,862	\$5,819,010	
Cumulative	678,387	16,413	58	162,593	177,548	143,270	1,178,270	1,159,953	\$57,793,849	
In Kind Transfers							Month	FYTD	CYTD	Cumulative
Transferred							0	181,110	99,356	1,106,442
Volume outstanding							53,586			

* 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

July - 2003

	Award Volume*	Outstanding*	Sales*	Charges Billed (\$) **
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Conservation Helium

Air Liquide S.A.

(billed quarterly)

Month	0	0	0	\$0
FYTD	50,000	12,500	37,500	\$1,968,750
Cumulative	50,000		37,500	\$1,968,750

Air Products, L.P.

Month	0	0	0	\$0
FYTD	680,400	170,100	510,300	\$26,790,750
Cumulative	680,400		510,300	\$26,790,750

BOC Gases

Month	0	0	0	\$0
FYTD	834,000	208,500	625,500	\$32,838,750
Cumulative	834,000		625,500	\$32,838,750

Keyes Helium Co.

Month	0	0	0	\$0
FYTD	75,600	18,900	56,700	\$2,976,750
Cumulative	75,600		56,700	\$2,976,750

Total month	0	0	0	\$0
Total FYTD	1,640,000	410,000	1,230,000	\$64,575,000
Total CYTD	1,640,000		1,230,000	\$64,575,000
Cumulative	1,640,000		1,230,000	\$64,575,000

Open Market Transfers

	Month	FYTD	CYTD	Cumulative
Transferred	201,500	1,021,500	1,021,500	1,021,500
Volume outstanding	208,500			

* Volumes in Mcf at 14.65 psia & 60°F

Natural Gas (Mcf) ***	NGLs (gal)	Decatherms	\$/unit	Charges Billed (\$) **
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Natural Gas/Liquids Sales

El Paso Natural Gas

Provides Firm/Interruptible natural gas transportation services

(billed monthly)

Month	186,472		208,475	(\$0.1317)	(\$27,460)
FYTD	643,030		711,425	(\$0.1544)	(\$109,841)
Cumulative	643,030		711,425	(\$0.1544)	(\$109,841)

Minerals Management Service

Provides natural gas marketing services under a Cooperative Agreement

Month				\$0.0000	\$0
FYTD				\$0.0000	\$0
Cumulative				\$0.0000	\$0

Cenergy Marketing

Month	185,909	0	194,990	\$4.888771	\$948,748
FYTD	688,419	0	709,870	\$5.276270	\$3,728,336
Cumulative	688,419	0	709,870	\$5.276270	\$3,728,336

Total month	185,909	0	194,990	\$4.747943	\$921,287
Total FYTD	688,419	0	709,870	\$5.121537	\$3,618,495
Total CYTD	688,419	0	709,870	\$5.121537	\$3,618,495
Cumulative	688,419	0	709,870	\$5.121537	\$3,618,495

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

**Rounded to nearest dollar

Table 3 - Helium Resources Evaluation

July - 2003

All Volumes in Mcf at 14.7 psia & 70°F

	Month*	FYTD*
Revenue Collected From Federal Leaseholds		
Fee Sales & Royalties	\$137,142	\$4,275,461
Natural Gas Royalties (1)	\$4,540	\$32,193
Natural Gas Rentals	\$0	\$0
Other	\$6,321	\$57,567
Revenue Collected from Federal Lease Holds	\$142,744	\$4,314,427

*Totals do not sum

	Month	FYTD
Helium Analysis and Evaluation		
Number of Sample Request Letters Sent	1	81
Number of Samples Received	4	20
Number of Samples Analyzed	3	19
Total Number of Samples Analyzed For Resources Division	5	191
Total Number of Samples Analyzed (2)	165	2,091

U. S. Helium Production

CYTD

Domestic

1997 Helium Sold	3,853,991
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 (projected)	4,700,000
Estimated Helium Resources (as of 01/01/2001)	323,000,000

	Month	FYTD	CYTD
U.S. Helium Exports (3)	132,062	1,117,463	774,887

(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 statistics as of: June 2003

Table 4 - Federal Acquisition & Storage Operations

July - 2003

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	201,500					1,202,610	1,120,856		4,113,282
Balance of purchased helium in storage									28,062,863

Bureau Plants

Delivery/Handling Credit	0	---	0			0			13,205,259
Withdrawal	0	---	0			5			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*									

Accepted in storage system	82,879	65.0%	53,870	3,003	18,455	(475)	(3,259)	522,917	371,785	7,681,093
Redelivered from storage system	(241,904)	68.3%	(165,134)			109	249	(1,623,130)	(1,128,277)	(11,279,185)
Total apparent crude produced^	182,158	70.2%	127,873					1,391,658	910,992	7,876,463
Total apparent crude refined^	(293,121)	69.6%	(204,100)					(2,174,094)	(1,461,739)	(11,474,555)

- * 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 but data are not available

Acquisition & Storage Summary - Contained Helium

	Month	FYTD	Cumulative
Total acquisition	53,870	522,917	69,515,570
Total disposition	165,134	1,623,135	40,756,574
Total stored in conservation system	(111,264)	(1,100,218)	28,758,996
Helium in pipeline system plus apparent losses			(1,227,213)
Helium in underground storage			29,986,209

COMPANY PROPRIETARY INFORMATION

Table 4.1 - Helium Storage Contract Activity

July - 2003

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					
Total All Contracts*											
Crude Acquired	82,613	1	53,395	519,658	369,161	25,052,879	287,231	26,788,027			
Crude Disposed	241,557	1	165,025	1,622,881	1,128,049	23,104,565	85,731	25,302,498		\$218,328	Storage Fees
Grade-A Rdlvrd	0		0	0	0	1,478,718				\$81,567	RMF Fees
Net/Balance	(158,944)		(111,630)	(1,103,223)	(758,888)	469,596	201,500	1,485,529	1,955,125	\$299,895	\$2,384,752
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											
Crude Acquired											
Crude Disposed											
Net/Balance											
Linde Gas AG, Contract no. 2001-3282											
Crude Acquired											
Crude Disposed											
Net/Balance											
Mitsui & Co. (U.S.A.), Inc., Contract no. 2002-3289											
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							0				
Open Market/Reserve Sell down							201,500	4,113,282			
Net/Balance									28,062,863		

*Includes In Kind and Open Market transfers from Government storage

**Rounded to nearest dollar

COMPANY PROPRIETARY INFORMATION

Table 6 - Helium Enrichment Unit Operations

July - 2003

All Volumes in Mcf at 14.65 psia & 60°F

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	428,140	12.0%	51,580	1,686,747	10.9%	183,233	1,686,747	10.9%
Helium product	68,739	72.7%	49,966	209,184	75.2%	157,254	209,184	75.2%	157,254
Residue natural gas	228,847	0.0%	0	940,021	0.0%	0	940,021	0.0%	0
Vent, flare & plant losses	173,936	0.9%	1,613	822,547	3.2%	25,979	822,547	3.2%	25,979
Helium recovery efficiency			96.9%			85.8%			85.8%

Utility Usage	Month			FYTD			Cumulative		
	Gallons/Mcf	KWh	Runtime	Gallons/Mcf	KWh	Runtime	Gallons/Mcf	KWh	Runtime
	Natural gas liquids	0			0			0	
K100 compressor		914,201	723		3,297,553	2,572		3,297,553	2,572
K600 compressor		1,547,227	706		4,779,217	2,163		4,779,217	2,163
K610 compressor			637			1,690			1,690
Other electrical usage		245,993	744		1,822,803	3,376		1,822,803	3,376
Fuel gas	2,804			14,138			14,138		
Water	2,510			9,720			9,720		

HEU Runtime & Charges

Enrichment Unit Runtime

	Month		FYTD		Cumulative	
	Runtime	Percent	Runtime	Percent	Runtime	Percent
Processing feed gas	723	97.2%	2,572	76.2%	2,572	76.2%
Producing helium product	637	85.6%	1,690	50.1%	1,690	50.1%
Producing residue gas	706	94.9%	2,163	64.1%	2,163	64.1%

Enrichment Unit Charges

	Charges Billed (\$)*		
	Month	FYTD	Cumulative
Reservoir Management Fees (RMF)	\$81,567	\$417,988	\$417,988
Total operating costs	(\$1,042,057)	(\$2,919,066)	(\$2,919,066)
Labor	\$26,695	\$106,780	\$106,780
Compressor fuel	\$6,579	\$8,235	\$8,235
HEU fuel	\$18,860	\$29,910	\$29,910
Electric power	\$83,181	\$115,679	\$115,679
Flare, vent & plant losses	\$439,699	\$790,286	\$790,286
Other	\$17,250	\$69,000	\$69,000
Sub Total - Items provided by BLM	\$592,263	\$1,119,890	\$1,119,890
Total - Cliffside Refiners, LP, GDA030001	(\$449,794)	(\$1,799,176)	(\$1,799,176)

*Rounded to nearest dollar