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Determination of 2/88 volumes by NGPA Category

Sum of vol ngpa	Total	EL PASO TOTAL (1)	TOTAL RIK	NON RIK PI TOTAL	TOTAL PRODUCTION	PERCENTAGE RIK
102	8305	0	8305	0	8305	100.00%
103	594290	563753.85	1158043.9			
104	347537	329679.66	677216.66			
108	120654	114454.49	235108.49	190292	425400.49	55.27%
109	3005	0	3005		3005	100.00%
Grand Total	1073791	1,007,888	2081679		2081679	

(1) El Paso figures are estimate allocations based on NW figures because I did not receive the actual statement in time to determine the actual amounts.

1062481

FOOTNOTES FOR PAGE 1 OF THE JICARILLA MAJOR PORTION PRICING CALCULATION

B VALUE ESTIMATE OF RESERVES FROM THE JICARILLA STRATA SETTLEMENT FIGURES

C JICARILLA STRATA ESTIMATE VALUE OF THE RESERVES AT A 10% NET PRESENT VALUE DISCOUNT.

D STRATA ESTIMATE FOR EACH YEAR AT THE 10% NET PRESENT VALUE DISCOUNT.
TIMES THE PERCENTAGE OF SETTLEMENT 87.0714%
(EXAMPLE 1989. 1938255 X 0.870714 = 1687666)

STRATA VALUE AMOUNT	16,907,964
SETTLEMENT VALUE	14,722,000
PERCENTAGE DIFFERENCE	0.870714

E NET PRESENT VALUE DISCOUNT
COLUMN C DIVIDED BY COLUMN B
ACTUAL AMOUNT RECEIVED DIVIDED BY THE STRATA 100% ESTIMATE.

F STRATA NGPA ESTIMATE PRICE FROM THE JICARILLA STRATA SUMMARY REPORT AND VALUE ESTIMATE

G SETTLED PRICE
STRATA NGPA ESTIMATE PRICE TIMES THE NET PRESENT VALUE DISCOUNT COLUMN E

H SETTLED PRICE AMOUNT PLUS THE ACTUAL MARKET OUT PRICE RECEIVED.

(EXAMPLE: 1989 102	SETTLED AMOUNT	MARKET OUT	PRICE RECEIVED
	3.583692 +	1.227 =	4.810692

MAJOR PORTION PRICES JANUARY 1984 THROUGH DECEMBER 1988

($/MMBtu)

Date	102 New Gas	103 New Onshore	104 Post 1974	104 1973/1974 Biennium	104 Replacement	104 (1) Flowing	105 Existing Intrastate	108 Stripper	109 Other	Note
Jan-84	$ 3.636	$ 2.899	$ 2.409	$ 2.047	$ 1.170	$ 0.616	$ 1.170	$ 3.891	$ 2.409	(2)
Feb-84	$ 3.659	$ 2.909	$ 2.417	$ 2.054	$ 1.174	$ 0.618	$ 1.174	$ 3.916	$ 2.417	(2)
Mar-84	$ 3.682	$ 2.919	$ 2.425	$ 2.061	$ 1.178	$ 0.620	$ 1.178	$ 3.941	$ 2.425	(2)
Apr-84	$ 3.706	$ 2.929	$ 2.433	$ 2.068	$ 1.182	$ 0.622	$ 1.182	$ 3.966	$ 2.433	(2)
May-84	$ 3.730	$ 2.939	$ 2.441	$ 2.075	$ 1.186	$ 0.624	$ 1.186	$ 3.992	$ 2.441	(2)
Jun-84	$ 3.755	$ 2.949	$ 2.449	$ 2.082	$ 1.190	$ 0.626	$ 1.190	$ 4.018	$ 2.449	(2)
Jul-84	$ 3.780	$ 2.959	$ 2.457	$ 2.089	$ 1.194	$ 0.628	$ 1.194	$ 4.044	$ 2.459	(2)
Aug-84	$ 3.802	$ 2.967	$ 2.464	$ 2.095	$ 1.197	$ 0.630	$ 1.197	$ 4.068	$ 2.464	(2)
Sep-84	$ 3.824	$ 2.975	$ 2.471	$ 2.101	$ 1.200	$ 0.632	$ 1.200	$ 4.092	$ 2.471	(2)
Oct-84	$ 3.847	$ 2.983	$ 2.478	$ 2.107	$ 1.203	$ 0.634	$ 1.203	$ 4.116	$ 2.478	(2)
Nov-84	$ 3.871	$ 2.992	$ 2.486	$ 2.113	$ 1.207	$ 0.636	$ 1.207	$ 4.142	$ 2.486	(2)
Dec-84	$ 3.895	$ 3.001	$ 2.494	$ 2.119	$ 1.211	$ 0.638	$ 1.211	$ 4.168	$ 2.494	(2)
Jan-85	$ 3.919	$ 3.010	$ 2.502	$ 2.125	$ 1.215	$ 0.640	$ 1.215	$ 4.194	$ 2.502	(2)
Feb-85	$ 3.940	$ 3.016	$ 2.507	$ 2.129	$ 1.217	$ 0.641	$ 1.217	$ 4.216	$ 2.507	(2)
Mar-85	$ 3.961	$ 3.022	$ 2.512	$ 2.133	$ 1.219	$ 0.642	$ 1.219	$ 4.238	$ 2.512	(2)
Apr-85	$ 3.982	$ 3.028	$ 2.517	$ 2.137	$ 1.222	$ 0.643	$ 1.222	$ 4.260	$ 2.517	(2)
May-85	$ 4.012	$ 3.041	$ 2.528	$ 2.146	$ 1.227	$ 0.646	$ 1.227	$ 4.292	$ 2.528	(2)
Jun-85	$ 4.217	$ 3.185	$ 2.648	$ 2.247	$ 1.284	$ 0.675	$ 1.284	$ 4.511	$ 2.564	(2)
Jul-85	$ 4.248	$ 3.199	$ 2.659	$ 2.256	$ 1.289	$ 0.678	$ 1.289	$ 4.544	$ 2.659	(2)
Aug-85	$ 4.272	$ 3.206	$ 2.666	$ 2.262	$ 1.292	$ 0.679	$ 1.292	$ 4.569	$ 2.666	(2)
Sep-85	$ 4.296	$ 3.214	$ 2.672	$ 2.267	$ 1.295	$ 0.680	$ 1.295	$ 4.594	$ 2.672	(2)
Oct-85	$ 4.320	$ 3.221	$ 2.678	$ 2.272	$ 1.298	$ 0.681	$ 1.298	$ 4.621	$ 2.678	(2)
Nov-85	$ 4.346	$ 3.230	$ 2.685	$ 2.278	$ 1.301	$ 0.684	$ 1.301	$ 4.648	$ 2.685	(2)
Dec-85	$ 4.372	$ 3.240	$ 2.693	$ 2.285	$ 1.305	$ 0.686	$ 1.305	$ 4.676	$ 2.693	(2)
Jan-86	$ 4.398	$ 3.249	$ 2.700	$ 2.291	$ 1.308	$ 0.688	$ 1.308	$ 4.704	$ 2.700	(2)
Feb-86	$ 4.431	$ 3.263	$ 2.685	$ 2.301	$ 1.313	$ 0.691	$ 1.313	$ 4.739	$ 2.711	(2)
Mar-86	$ 4.457	$ 3.273	$ 2.689	$ 2.307	$ 1.316	$ 0.693	$ 1.316	$ 4.768	$ 2.719	(2)
Apr-86	$ 4.483	$ 3.282	$ 2.691	$ 2.313	$ 1.319	$ 0.695	$ 1.319	$ 4.796	$ 2.726	(2)
May-86	$ 4.507	$ 3.289	$ 2.693	$ 2.318	$ 1.322	$ 0.696	$ 1.322	$ 4.822	$ 2.732	(2)
Jun-86	$ 4.531	$ 3.297	$ 2.698	$ 2.324	$ 1.325	$ 0.697	$ 1.325	$ 4.848	$ 2.739	(2)
Jul-86	$ 4.555	$ 3.304	$ 2.704	$ 2.329	$ 1.328	$ 0.698	$ 1.328	$ 4.874	$ 2.745	(2)
Aug-86	$ 4.578	$ 3.310	$ 2.024	$ 2.333	$ 1.331	$ 0.699	$ 1.331	$ 4.899	$ 2.750	(2)
Sep-86	$ 4.601	$ 3.317	$ 2.027	$ 2.337	$ 1.333	$ 0.700	$ 1.333	$ 4.924	$ 2.755	(2)

102 | 103 | 104 | 104 | 104 | 104 (1) | 105 | 108 | 109

Date	New Gas	New Onshore	Post 1974	1973/1974 Biennium	Replace-ment	Flowing	Existing Intrastate	Stripper	Other	Note
Oct-86	$ 4.624	$ 3.323	$ 2.030	$ 2.341	$ 1.335	$ 0.701	$ 1.335	$ 4.949	$ 2.761	(2)
Nov-86	$ 4.653	$ 3.333	$ 2.034	$ 2.349	$ 1.339	$ 0.703	$ 1.339	$ 4.980	$ 2.769	(2)
Dec-86	$ 4.682	$ 3.344	$ 2.036	$ 2.356	$ 1.343	$ 0.705	$ 1.343	$ 5.011	$ 2.777	(2)
Jan-87	$ 3.933	$ 3.054	$ 2.685	$ 2.411	$ 1.753	$ 1.338	$ 1.753	$ 4.148	$ 2.685	(2)
Feb-87	$ 3.948	$ 3.057	$ 2.689	$ 2.414	$ 1.754	$ 1.339	$ 1.754	$ 4.164	$ 2.689	(2)
Mar-87	$ 3.961	$ 3.059	$ 2.691	$ 2.415	$ 1.755	$ 1.340	$ 1.755	$ 4.177	$ 1.755	(2)
Apr-87	$ 3.974	$ 3.061	$ 2.693	$ 2.417	$ 1.756	$ 1.341	$ 1.756	$ 4.191	$ 1.756	(2)
May-87	$ 3.993	$ 3.068	$ 2.698	$ 2.421	$ 1.758	$ 1.342	$ 1.758	$ 4.211	$ 1.758	(2)
Jun-87	$ 4.012	$ 3.075	$ 2.704	$ 2.426	$ 1.761	$ 1.344	$ 1.761	$ 4.232	$ 1.761	(2)
Jul-87	$ 2.742	$ 2.226	$ 2.024	$ 1.873	$ 1.364	$ 0.717	$ 1.364	$ 2.862	$ 2.024	(2)
Aug-87	$ 2.753	$ 2.230	$ 2.027	$ 1.875	$ 1.368	$ 0.720	$ 1.368	$ 2.874	$ 2.027	(2)
Sep-87	$ 2.764	$ 2.234	$ 2.030	$ 1.878	$ 1.372	$ 0.722	$ 1.372	$ 2.885	$ 2.030	(2)
Oct-87	$ 2.775	$ 2.238	$ 2.034	$ 1.881	$ 1.377	$ 0.724	$ 1.377	$ 2.897	$ 2.034	(2)
Nov-87	$ 2.784	$ 2.240	$ 2.036	$ 1.882	$ 1.380	$ 0.725	$ 1.380	$ 2.907	$ 2.036	(2)
Dec-87	$ 2.793	$ 2.243	$ 2.038	$ 1.884	$ 1.383	$ 0.726	$ 1.383	$ 2.917	$ 2.038	(2)
Jan-88	$ 2.803	$ 2.245	$ 2.040	$ 1.886	$ 1.386	$ 0.727	$ 1.386	$ 2.927	$ 2.040	(3)
Feb-88	$ 2.754	$ 2.189	$ 1.983	$ 1.828	$ 1.391	$ 0.730	$ 1.391	$ 2.879	$ 1.983	(3)
Mar-88	$ 2.764	$ 2.192	$ 1.985	$ 1.830	$ 1.394	$ 0.732	$ 1.394	$ 2.890	$ 1.985	(3)
Apr-88	$ 2.610	$ 2.031	$ 1.823	$ 1.667	$ 1.398	$ 0.734	$ 1.398	$ 2.736	$ 1.823	(3)
May-88	$ 2.619	$ 2.033	$ 1.825	$ 1.669	$ 1.401	$ 0.735	$ 1.401	$ 2.747	$ 1.825	(3)
Jun-88	$ 2.629	$ 2.036	$ 1.827	$ 1.671	$ 1.404	$ 0.736	$ 1.404	$ 2.757	$ 1.827	(3)
Jul-88	$ 5.210	$ 3.505	$ 2.912	$ 2.466	$ 1.407	$ 0.737	$ 1.407	$ 5.575	$ 2.912	(4)
Aug-88	$ 5.244	$ 3.517	$ 2.922	$ 2.475	$ 1.412	$ 0.739	$ 1.412	$ 5.612	$ 2.922	(4)
Sep-88	$ 5.279	$ 3.530	$ 2.933	$ 2.483	$ 1.417	$ 0.742	$ 1.417	$ 5.649	$ 2.933	(4)
Oct-88	$ 5.313	$ 3.543	$ 2.943	$ 2.492	$ 1.423	$ 0.744	$ 1.423	$ 5.686	$ 2.943	(4)
Nov-88	$ 5.350	$ 3.555	$ 2.954	$ 2.501	$ 1.428	$ 0.746	$ 1.428	$ 5.725	$ 2.954	(4)
Dec-88	$ 5.387	$ 3.569	$ 2.964	$ 2.510	$ 1.433	$ 0.748	$ 1.433	$ 5.764	$ 2.964	(4)

MAJOR PORTION PRICES JANUARY 1989 THROUGH JUNE 1995

($/MMBtu)

Date	102 New Gas	103 New Onshore	104 Post 1974	104 1973/1974 Biennium	104 Replace-ment	104 (1) Flowing	105 Existing Intrastate	108 Stripper	109 Other	Note
1989	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528	(5)
1990	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551	(5)
1991	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576	(5)
1992	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609	(5)
1993	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648	(5)
1994	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694	(5)
1995	$ 4.856	$ 3.087	$ 2.737	$ 2.499	$ 2.099	$ 2.063	$ 2.063	$ 5.113	$ 2.750	(5)

FOOTNOTES FOR MAJOR PORTION PRICES

(1) Also the price for Certain Rocky Mountain Gas - Large Producer

(2) January 1984 through December 1986 prices are Maximum Lawful Price plus Tax Reimbursements (See below).

(3) January 1987 through June 1988 Weighted Average of Maximum Lawful Prices plus Tax Reimbursements (See Below) and Contract Amendment Prices.

(4) July 1988 through December 1988 prices are Maximum Lawful *Prices plus Tax Reimbursement* (See Below).

(5) January 1989 through June 1995 prices are Jicarilla contract prices including settlement.

Tax Reimbursements are calculated as shown below:

DATE	*Severance Tax* per MMBtu	*Privilege Tax* 87.5% of Value
1/1/84 through 5/31/85	$0.05	
6/1/85 through 1/31/86	$0.05	5.000%
2/1/86 through 1/31/87	$0.05	5.180%
2/1/87 through 1/31/88	$0.05	5.280%
2/1/88 through 12/31/88	$0.05	5.470%

Payors for processed gas

07	lease number	03	lease number
PAYOR	Total	PAYOR	Total
10860	12	10860	12
11110	3	11110	3
11270	4	11270	4
11274	3	11274	3
13190	29	13190	29
16459	1	16459	1
16480	2	16480	2
17555	34	17555	34
20150	8	20150	8
21665	4	21665	4
22201	1	22201	1
25435	2		
28450	1	28450	1
28523	1	28523	1
29248	1	29248	1
31070	5	31070	5
33155	2	33155	2
37312	1	37312	1
37790	5	37790	5
38100	6	38100	6
38188	3	38188	3
40115	3	40115	7
41471	1		
48663	4	48663	4
49554	1	49554	1
		50210	2
		73820	1
77090	1	77090	1
	138		142

PAYOR	NAME	LEASE	GASPAY	DUAL ACCT. RESP.	ALLOW FILED
10860	AMOCO	32 LEASES	30 MILLION	NOT PERFORMED	ALLOW
13190	BAYLESS, ROBERT L.	32 LEASES	1240086.00	NOT PERFORMED	ALLOW
28450	GIANT EXPL. & PROD. COMP	117	176940.86	NOT PERFORMED	ALLOW
12923	BANNON ENERGY INC.	360	10932.91	NOT PERFORMED	NONE
23315	FAMCOR	156	159.19	NOT PERFORMED	NONE
23619	FLOYD OIL COMPANY	69	128094.26	NOT PERFORMED	NONE
23708	FORCENERGY GAS EXPL.	77,122,358,360,390	78938.71	NOT PERFORMED	NONE
23710	FORCENERGY GAS EXPL.	77,122,358,360,390	26804.43	NOT PERFORMED	NONE
25435	GENERAL MINERALS CORP.	358,55A	17791.24	NOT PERFORMED	NONE
25495	GEODYNE OPERATING COMPANY	97,101,105,106,119,100	88795.31	NOT PERFORMED	NONE
25964	GRAHAM ENERGY LTD.	35,156,157,160,163	151862.28	NOT PERFORMED	NONE
26083	GREAT WESTERN RESOURCES	38,77,362,398	113293.69	NOT PERFORMED	NONE
37193	MALLON OIL COMPANY	434,435	14162.22	NOT PERFORMED	NONE
31405	OKLAHOMA AND NORTHWESTERN	119	21017.33	NOT PERFORMED	NONE
44445	PETROCORP	55A,358	13881.94	NOT PERFORMED	NONE
44725	PHILLIPS PETROLEUM COMPANY	83,90	21927.96	NOT PERFORMED	NONE
36175	RIFE OIL PROPERTIES INC.	10,115,119	34173.36	NOT PERFORMED	NONE
48800	SAMSON PRODUCTION SERVICES	97,101,119	2893.27	NOT PERFORMED	NONE
50150	SOUTHERN UNION EXPL.	6 LEASES	3 MILLION	NOT PERFORMED	NONE
41352	TENNECO OIL CO.-C/O AMOCO PR	109	65205.00	NOT PERFORMED	NONE
73820	UNION TEXAS PETROLEUM CORPC	100,150	97105.00	NOT PERFORMED	NONE
77090	WESTERN OIL AND MINERALS LTD	35	11983.53	NOT PERFORMED	NONE
11110	APACHE CORP.	129,127,15,47,71,126	1842689.70	PERFORMED	NONE
11270	ARCO OIL & GAS COMPANY	108,109,110,111	917828.42	PERFORMED	NONE
21910	BHP	35	2274.34	11/88, 12/88	NONE
16480	CHACE OIL COMPANY, INC. (GOLD	15,47,54,70,71,361,363	623732.80	PERFORMED	NONE
20150	DUGAN PRODUCTION COMPANY	8 LEASES	193371.24	PERFORMED	ALLOW
22201	EXXON	104	239936.99	PERFORMED	NONE
25115	GAS COMPANY OF NEW MEXICO	124,125	85733.07	PERFORMED	NONE
37312	MARATHON OIL COMPANY	154	1587331.99	no bill	ALLOW
21625	MERIDIAN OIL INCORPORATED	126	7853.78	PERFORMED	NONE
50210	MERIDIAN OIL INCORPORATED	60 LEASES	MILLIONS	PERFORMED	NONE
38083	MERIT ENERGY COMPANY	100,101,105,106,145	1356018.02	PERFORMED	NONE
38100	MERRION OIL & GAS CORP.	7 LEASES	524025.45	PERFORMED	ALLOW
29248	MW PETROLEUM CORP.	77,118,124,125,358,300	1201121.82	PERFORMED	ALLOW
31070	NORTHWEST PIPELINE CORP.		483808.54	PERFORMED	ALLOW
31398	OKIE CRUDE COMPANY	77,358,360,362,398	5525.24	PERFORMED	NONE
40115	SNYDER OIL CORP.	8 LEASES	1890734.00	PERFORMED	ALLOW 93/94
50405	TEXACO EXPL. AND PRODUCT	463	7065.65	APPEALED	NONE
73725	UNICON PRODUCING COMPANY	7 LEASES	2194454.00	APPEALED	NONE
11274	VASTAR RESOURCES, INC.	108,109,110	188914.03	PERFORMED	NONE

PAYORNAME

PAYOR	NAME	LEASE GASPAY		DUAL ACCT. RESP.	ALLOW FILED
21910	BHP	35	2274.34	11/88, 12/88	NONE
50405	TEXACO EXPL. AND PRODUCT	463	7065.65	APPEALED	NONE
73725	UNICON PRODUCING COMPANY	7 LEASES	2194454.00	APPEALED	NONE
37312	MARATHON OIL COMPANY	154	1587331.99	no bill	ALLOW
10860	AMOCO	32 LEASES	30 MILLION	NOT PERFORMED	ALLOW
12923	BANNON ENERGY INC.	360	10932.91	NOT PERFORMED	NONE
13190	BAYLESS, ROBERT L.	32 LEASES	1240086.00	NOT PERFORMED	ALLOW
23315	FAMCOR	156	159.19	NOT PERFORMED	NONE
23619	FLOYD OIL COMPANY	69	128094.26	NOT PERFORMED	NONE
23708	FORCENERGY GAS EXPL.	77,122,358,360,390	78938.71	NOT PERFORMED	NONE
23710	FORCENERGY GAS EXPL.	77,122,358,360,390	26804.43	NOT PERFORMED	NONE
25435	GENERAL MINERALS CORP.	358,55A	17791.24	NOT PERFORMED	NONE
25495	GEODYNE OPERATING COMPANY	97,101,105,106,119,100	88795.31	NOT PERFORMED	NONE
25964	GRAHAM ENERGY LTD.	35,156,157,160,163	151862.28	NOT PERFORMED	NONE
26083	GREAT WESTERN RESOURCES	38,77,362,398	113293.69	NOT PERFORMED	NONE
28450	GIANT EXPL. & PROD. COMP	117	176940.86	NOT PERFORMED	ALLOW
31405	OKLAHOMA AND NORTHWESTERN	119	21017.33	NOT PERFORMED	NONE
36175	RIFE OIL PROPERTIES INC.	10,115,119	34173.36	NOT PERFORMED	NONE
37193	MALLON OIL COMPANY	434,435	14162.22	NOT PERFORMED	NONE
41352	TENNECO OIL CO.-C/O AMOCO PR	109	65205.00	NOT PERFORMED	NONE
44445	PETROCORP	55A,358	13881.94	NOT PERFORMED	NONE
44725	PHILLIPS PETROLEUM COMPANY	83,90	21927.96	NOT PERFORMED	NONE
48800	SAMSON PRODUCTION SERVICES	97,101,119	2893.27	NOT PERFORMED	NONE
50150	SOUTHERN UNION EXPL.	6 LEASES	3 MILLION	NOT PERFORMED	NONE
73820	UNION TEXAS PETROLEUM CORPC	100,150	97105.00	NOT PERFORMED	NONE
77090	WESTERN OIL AND MINERALS LTD	35	11983.53	NOT PERFORMED	NONE
11110	APACHE CORP.	129,127,15,47,71,126	1842689.70	PERFORMED	NONE
11270	ARCO OIL & GAS COMPANY	108,109,110,111	917828.42	PERFORMED	NONE
11274	VASTAR RESOURCES, INC.	108,109,110	188914.03	PERFORMED	NONE
16480	CHACE OIL COMPANY, INC. (GOLD	15,47,54,70,71,361,363	623732.80	PERFORMED	NONE
20150	DUGAN PRODUCTION COMPANY	8 LEASES	193371.24	PERFORMED	ALLOW
21625	MERIDIAN OIL INCORPORATED	126	7853.78	PERFORMED	NONE
22201	EXXON	104	239936.99	PERFORMED	NONE
25115	GAS COMPANY OF NEW MEXICO	124,125	85733.07	PERFORMED	NONE

29248	MW PETROLEUM CORP.	77,118,124,125,358,300	1201121.82	PERFORMED	ALLOW
31070	NORTHWEST PIPELINE CORP.		483808.54	PERFORMED	ALLOW
31398	OKIE CRUDE COMPANY	77,358,360,362,398	5525.24	PERFORMED	NONE
38083	MERIT ENERGY COMPANY	100,101,105,106,145	1356018.02	PERFORMED	NONE
38100	MERRION OIL & GAS CORP.	7 LEASES	524025.45	PERFORMED	ALLOW
40115	SNYDER OIL CORP.	8 LEASES	1890734.00	PERFORMED	ALLOW 93/94
50210	MERIDIAN OIL INCORPORATED	60 LEASES	MILLIONS	PERFORMED	NONE
37790	NASSAU/MCHUGH	83			

to use:
enter new price in H5
compare value in cell h12
with actual value (h3)

Jicarilla Bond
Rate 9.125%
Payment: $ 25,172,000

price bump $ 1.6360

	NW MCF	EP MCF	TTL mcf	TTL MMBtu	Price MMBtu	Projected Revenue	contract prices	contract receipts
NPV 1988						$25,175,234		
1989	2,184,166	664,154	2,848,320	3,297,880	$1.636	$ 5,395,331	1.227	$ 4,046,499
1990	2,000,396	1,231,551	3,231,947	3,742,056	$1.636	$ 6,122,004	1.276	$ 4,774,863
1991	1,838,459	1,134,485	2,972,944	3,442,174	$1.636	$ 5,631,396	1.327	$ 4,567,764
1992	1,694,483	1,047,835	2,742,318	3,175,147	$1.636	$ 5,194,541	1.380	$ 4,381,703
1993	1,565,509	969,717	2,535,226	2,935,369	$1.636	$ 4,802,264	1.435	$ 4,212,255
1994	1,449,542	898,891	2,348,433	2,719,094	$1.636	$ 4,448,438	1.493	$ 4,059,607
1995	898,551	420,466	1,319,017	1,527,202	$1.636	$ 2,498,502	1.553	$ 2,371,744

Average heating value
source: Gas Research Institute

frtInd	1,123
pc	1,117
chacra	1,147
mv	1,149
glp	1,199
dk	1,212
average	1,157.83

	Price $/MMBtu	Price Bump	Psuedo -major portion price
1989	$1.227	$ 1.6360	$2.863
1990	$1.276	$ 1.6360	$2.912
1991	$1.327	$ 1.6360	$2.963
1992	$1.380	$ 1.6360	$3.016
1993	$1.435	$ 1.6360	$3.071
1994	$1.493	$ 1.6360	$3.129
1995	$1.553	$ 1.6360	$3.189

6 (3 of)

multiple NGPA

	103b1 new gas	103b2 new gas	105b3 contract	107c5 Tight gas	stripper	108 other	109	104 replacement small	104 flowing small
Dec-88	3.358		4.909	6.716	5.453	2.781		1.32	0.666

	NW MCF	EP MCF	TTL mcf	TTL MMBtu 1157.833333	103 vol 0.25	104 vol 0.25	108 vol 0.5	103 value $ 0.90	104 value $ (0.40)	108 value $ 3.10		EP Contract Price
NPV 1988								$3,462,364	-$1,538,828	$23,851,841	$25,775,377	
1989	2,184,166	664,154	2,848,320	3,297,880	824,470	824,470	1,648,940	$742,023	-$329,788	$5,111,714		1.227
1990	2,000,396	1,231,551	3,231,947	3,742,056	935,514	935,514	1,871,028	$841,963	-$374,206	$5,800,187		1.276
1991	1,838,459	1,134,485	2,972,944	3,442,174	860,543	860,543	1,721,087	$774,489	-$344,217	$5,335,369		1.327
1992	1,694,483	1,047,835	2,742,318	3,175,147	793,787	793,787	1,587,574	$714,408	-$317,515	$4,921,478		1.380
1993	1,565,509	969,717	2,535,226	2,935,369	733,842	733,842	1,467,685	$660,458	-$293,537	$4,549,822		1.435
1994	1,449,542	898,891	2,348,433	2,719,094	679,774	679,774	1,359,547	$611,796	-$271,909	$4,214,596		1.493
1995	898,551	420,466	1,319,017	1,527,202	381,800	381,800	763,601	$343,620	-$152,720	$2,367,163		1.553

	NW MCF	EP MCF	TTL mcf	TTL MMBtu	Jicarilla Bond Rate Payment: Price MMBtu
NPV 1988					
1989	2,184,166	664,154	2,848,320	3,297,880	$1.636
1990	2,000,396	1,231,551	3,231,947	3,742,056	$1.636
1991	1,838,459	1,134,485	2,972,944	3,442,174	$1.636
1992	1,694,483	1,047,835	2,742,318	3,175,147	$1.636
1993	1,565,509	969,717	2,535,226	2,935,369	$1.636
1994	1,449,542	898,891	2,348,433	2,719,094	$1.636
1995	898,551	420,466	1,319,017	1,527,202	$1.636

Average heating value
source: Gas Research Institute

frtlnd	1,123
pc	1,117
chacra	1,147
mv	1,149
glp	1,199
dk	1,212
average	1,157.83

el paso			14,722,000	
				14,720,828
			2.739	
	664,154	768,980	2.739	2,106,235
	1,231,551	1,425,931	2.739	3,905,624
	1,134,485	1,313,545	2.739	3,597,799
	1,047,835	1,213,218	2.739	3,323,005
	969,717	1,122,771	2.739	3,075,269
	898,891	1,040,766	2.739	2,850,658
	420,466	486,830	2.739	1,333,426
nw			10,450,000	
				10,454,364
			1.044	
	2,184,166	2,528,900	1.044	2,640,172
	2,000,396	2,316,125	1.044	2,418,035
	1,838,459	2,128,629	1.044	2,222,289
	1,694,483	1,961,929	1.044	2,048,254
	1,565,509	1,812,599	1.044	1,892,353
	1,449,542	1,678,328	1.044	1,752,174

working

898,551	1,040,372	1.044	1,086,149

	9.125%	$ 1.6360
$	25,172,000	

	Projected Revenue	contract prices	contract receipts
	$25,175,234		
$	5,395,331	1.227	$ 4,046,499
$	6,122,004	1.276	$ 4,774,863
$	5,631,396	1.327	$ 4,567,764
$	5,194,541	1.380	$ 4,381,703
$	4,802,264	1.435	$ 4,212,255
$	4,448,438	1.493	$ 4,059,607
$	2,498,502	1.553	$ 2,371,744

	Price $/MMBtu	Psuedo -major portion price
1989	$1.227	$2.863
1990	$1.276	$2.912
1991	$1.327	$2.963
1992	$1.380	$3.016
1993	$1.435	$3.071
1994	$1.493	$3.129
1995	$1.553	$3.189

	Price $/MMBtu	Psuedo -major portion price
1989	$1.227	$3.966
1990	$1.276	$4.015
1991	$1.327	$4.066
1992	$1.380	$4.119
1993	$1.435	$4.174
1994	$1.493	$4.232
1995	$1.553	$4.292

	Price $/MMBtu	Psuedo -major portion price
1989	$1.227	$2.271
1990	$1.276	$2.320
1991	$1.327	$2.371
1992	$1.380	$2.424
1993	$1.435	$2.479
1994	$1.493	$2.537

1995	$1.553	$2.597

	EP	NW	NW spot	
1984	NGPA + tax	NGPA + tax		
1985	NGPA + tax	NGPA + tax		
1986	NGPA + tax	NGPA + tax		
1987 - jan-jun	$2.50	NGPA + tax		
1987 - jul-dec	NGPA + tax	1.59/bunker c/NGPA		
1988 - jan-jun	NGPA + tax	1.59/bunker c/NGPA		
1988 - jul -dec	NGPA + tax	NGPA + tax	$1.63	
1989 - jan-jun	NGPA + tax		$1.73	NW signed 2/1/89, $10.45 million, Jan price < of $1.70 or NGPA
1989 - jul -dec	$1.227		$1.73	EP signed 7/1/89, $14.7 million
1990	$1.276		$1.82	
1991	$1.327		$1.91	
1992	$1.380		$2.01	
1993	$1.435		$2.11	wellhead price controls eliminated 1/1/93
1994	$1.493		$2.22	
1995	$1.553		$2.34	

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Weighted Average Pricing Calculation
for Temporary Price Reduction Period

Attachment 2

Total Reserve Estimate 18,089,205

	102 NGPA Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	102 Wtd Avg Price[4]	103 NGPA Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	103 Wtd Avg Price[4]	104 POST 74 Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	104P74 Wtd Avg Price[4]	104 BIEN Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	104 73/74 Wtd Avg Price[4]
Jan-87	$4.711	15,917,745	55,224,065	$3.933	$3.354	15,917,745	39,319,135	$3.054	2.786	15,917,745	32,653,289	2.685	$2.363	15,917,745	27,702,902	2.411
Feb-87	$4.735	15,917,745	55,502,817	$3.948	$3.360	15,917,745	39,388,354	$3.057	2.791	15,917,745	32,716,916	$2.689	$2.367	15,917,745	27,750,131	2.414
Mar-87	$4.755	15,917,745	55,735,817	$3.961	$3.363	15,917,745	39,425,138	$3.059	2.794	15,917,745	32,753,712	$2.691	$2.369	15,917,745	27,774,653	2.415
Apr-87	$4.775	15,917,745	55,968,829	$3.974	$3.366	15,917,745	39,461,934	$3.061	2.797	15,917,745	32,790,496	$2.693	$2.372	15,917,745	27,799,188	2.417
May-87	$4.804	15,917,745	56,312,217	$3.993	$3.377	15,917,745	39,584,571	$3.068	2.806	15,917,745	32,888,610	$2.698	$2.379	15,917,745	27,885,029	2.421
Jun-87	$4.833	15,917,745	56,655,592	$4.012	$3.387	15,917,745	39,707,207	$3.075	2.814	15,917,745	32,986,712	$2.704	$2.386	15,917,745	27,970,881	2.426
Jul-87	$4.863	30,960,141	18,638,150	$2.742	$3.398	21,634,380	18,638,150	$2.226	2.822	17,970,688	18,638,150	$2.024	$2.393	15,239,573	18,638,150	1.873
Aug-87	$4.894	31,159,979	18,638,150	$2.753	$3.408	21,700,993	18,638,150	$2.230	2.832	18,030,641	18,638,150	$2.027	$2.401	15,286,199	18,638,150	1.875
Sep-87	$4.925	31,359,817	18,638,150	$2.764	$3.419	21,767,605	18,638,150	$2.234	2.841	18,090,594	18,638,150	$2.030	$2.408	15,332,832	18,638,150	1.878
Oct-87	$4.957	31,559,655	18,638,150	$2.775	$3.430	21,840,878	18,638,150	$2.238	2.851	18,150,540	18,638,150	$2.034	$2.415	15,379,458	18,638,150	1.881
Nov-87	$4.983	31,726,186	18,638,150	$2.784	$3.438	21,887,511	18,638,150	$2.240	2.857	18,190,512	18,638,150	$2.036	$2.421	15,412,764	18,638,150	1.882
Dec-87	$5.009	31,892,717	18,638,150	$2.793	$3.445	21,934,137	18,638,150	$2.243	2.863	18,230,479	18,638,150	$2.038	$2.426	15,446,070	18,638,150	1.884
Jan-88	$5.035	32,059,249	18,638,150	$2.803	$3.452	21,980,763	18,638,150	$2.245	2.870	18,270,445	18,638,150	$2.040	$2.431	15,479,377	18,638,150	1.886
Feb-88	$5.071	32,289,827	17,524,550	$2.754	$3.466	22,068,565	17,524,550	$2.189	2.880	18,339,006	17,524,550	$1.983	$2.440	15,536,827	17,524,550	1.828
Mar-88	$5.100	32,469,965	17,524,550	$2.764	$3.474	22,121,941	17,524,550	$2.192	2.887	18,379,036	17,524,550	$1.985	$2.445	15,570,191	17,524,550	1.830
Apr-88	$5.128	32,650,109	14,558,857	$2.610	$3.483	22,175,316	14,558,857	$2.031	2.893	18,419,066	14,558,857	$1.823	$2.451	15,603,548	14,558,857	1.667
May-88	$5.155	32,823,574	14,558,857	$2.619	$3.490	22,222,019	14,558,857	$2.033	2.899	18,459,096	14,558,857	$1.825	$2.456	15,636,905	14,558,857	1.669
Jun-88	$5.182	32,997,046	14,552,996	$2.629	$3.497	22,268,722	14,552,996	$2.036	2.905	18,499,126	14,552,996	$1.827	$2.461	15,670,269	14,552,996	1.671

	104REP SMALL Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	104 RS Wtd Avg Price[4]	104 Flowing Small Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	104 ES Wtd Avg Price[4]	105 Intrastate Price[6]	108 NGPA Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	108 Wtd Avg Price[4]	109 NGPA Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	109 Wtd Avg Price[4]
Jan-87	1.347	15,917,745	15,792,585	1.753	0.708	15,917,745	8,293,496	1.338	1.753	5.042	15,917,745	59,108,396	4.148	2.786	15,917,745	32,653,289	2.685
Feb-87	1.349	15,917,745	15,817,577	1.754	0.709	15,917,745	8,312,216	1.339	1.754	5.068	15,917,745	59,402,656	4.164	2.791	15,917,745	32,716,916	2.689
Mar-87	1.350	15,917,745	15,829,850	1.755	0.710	15,917,745	8,324,478	1.340	1.755	5.088	15,917,745	59,647,930	4.177	2.794	15,917,745	15,829,850	1.755
Apr-87	1.351	15,917,745	15,842,111	1.756	0.711	15,917,745	8,336,739	1.341	1.756	5.109	15,917,745	59,893,203	4.191	2.797	15,917,745	15,842,111	1.756
May-87	1.356	15,917,745	15,891,168	1.758	0.713	15,917,745	8,361,273	1.342	1.758	5.141	15,917,745	60,261,113	4.211	2.806	15,917,745	15,891,168	1.758
Jun-87	1.360	15,917,745	15,940,213	1.761	0.715	15,917,745	8,385,796	1.344	1.761	5.172	15,917,745	60,629,023	4.232	2.814	15,917,745	15,940,213	1.761
Jul-87	1.364	(5)	(5)	1.364	0.717	(5)	(5)	0.717	1.364	5.204	33,131,710	18,638,150	2.862	2.822	17,970,688	18,638,150	2.024
Aug-87	1.368			1.368	0.720			0.720	1.368	5.237	33,344,874	18,638,150	2.874	2.832	18,030,641	18,638,150	2.027
Sep-87	1.372			1.372	0.722			0.722	1.372	5.271	33,558,032	18,638,150	2.885	2.841	18,090,594	18,638,150	2.030
Oct-87	1.377			1.377	0.724			0.724	1.377	5.304	33,771,190	18,638,150	2.897	2.851	18,150,540	18,638,150	2.034
Nov-87	1.380			1.380	0.725			0.725	1.380	5.332	33,951,047	18,638,150	2.907	2.857	18,190,512	18,638,150	2.036
Dec-87	1.383			1.383	0.726			0.726	1.383	5.361	34,130,899	18,638,150	2.917	2.863	18,230,479	18,638,150	2.038
Jan-88	1.386			1.386	0.727			0.727	1.386	5.389	34,310,757	18,638,150	2.927	2.870	18,270,445	18,638,150	2.040
Feb-88	1.391			1.391	0.730			0.730	1.391	5.427	34,551,579	17,524,550	2.879	2.880	18,339,006	17,524,550	1.983
Mar-88	1.394			1.394	0.732			0.732	1.394	5.457	34,745,069	17,524,550	2.890	2.887	18,379,036	17,524,550	1.985
Apr-88	1.398			1.398	0.734			0.734	1.398	5.487	34,938,553	14,558,857	2.736	2.893	18,419,066	14,558,857	1.823
May-88	1.401			1.401	0.735			0.735	1.401	5.517	35,125,363	14,558,857	2.747	2.899	18,459,096	14,558,857	1.825
Jun-88	1.404			1.404	0.736			0.736	1.404	5.546	35,312,174	14,552,996	2.757	2.905	18,499,126	14,552,996	1.827

(1) Includes Tax Reimbursement
(2) From 1/87 - 6/87 this is the contract negotiated price x the volume estimate
For the remainder of the time this is the NGPA category price x the volume estimate

(3) From 1/87 - 6/87 this is the NGPA category price x the volume estimate
For the remainder of the time this is the contract negotiated price x the volume estimate
(4) This is the weighted average price
(5) The contract terms provided for the lessor of the contract price or the NGPA price
(6) This price is equivalent to the Category 104 replacement price for small producers

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Attachment 2

Weighted Average Pricing Calculations
for Temporary Price Reduction Period

TABLE 1 - EXAMPLE CALCULATIONS FOR SELECTED CATEGORIES

Reserve Estimate	
Company X	10,000,000
Company Y	18,000,000
Total Reserve Estimate	28,000,000

NOTE: The Reserve Estimate and Contract Price numbers shown in the example calculations are not the actual values. Actual values cannot be released in order to protect confidential commercial and financial information of the Jicarilla Apache Tribe and their purchasers.

	Contract Price	102 NGPA Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	102 Wtd Avg Price[4]	104REP SMALL Price[1]	Contract Negotiated Value[2]	Contract Negotiated Value[3]	104 RS Wtd Avg Price[4]
Jan-87	$2.750	$4.711	27,500,000	84,799,872	$4.011	1.347	27,500,000	24,250,464	$1.848
Feb-87	$2.750	$4.735	27,500,000	85,227,912	$4.026	1.349	27,500,000	24,288,840	$1.850
Mar-87	$2.750	$4.755	27,500,000	85,585,698	$4.039	1.350	27,500,000	24,307,686	$1.850
Apr-87	$2.750	$4.775	27,500,000	85,943,502	$4.052	1.351	27,500,000	24,326,514	$1.851
May-87	$2.750	$4.804	27,500,000	86,470,794	$4.070	1.356	27,500,000	24,401,844	$1.854
Jun-87	$2.750	$4.833	27,500,000	86,998,068	$4.089	1.360	27,500,000	24,477,156	$1.856
Jul-87	$2.050	$4.863	48,625,200	36,900,000	$3.054	1.364	(5)	(5)	$1.364
Aug-87	$2.050	$4.894	48,939,060	36,900,000	$3.066	1.368			$1.368
Sep-87	$2.050	$4.925	49,252,920	36,900,000	$3.077	1.372			$1.372
Oct-87	$2.050	$4.957	49,566,780	36,900,000	$3.088	1.377			$1.377
Nov-87	$2.050	$4.983	49,828,330	36,900,000	$3.097	1.380			$1.380
Dec-87	$2.050	$5.009	50,089,880	36,900,000	$3.107	1.383			$1.383
Jan-88	$2.050	$5.035	50,351,430	36,900,000	$3.116	1.386			$1.386
Feb-88	$1.600	$5.071	50,713,570	28,800,000	$2.840	1.391			$1.391
Mar-88	$1.600	$5.100	50,996,490	28,800,000	$2.850	1.394			$1.394
Apr-88	$1.450	$5.128	51,279,420	26,100,000	$2.764	1.398			$1.398
May-88	$1.450	$5.155	51,551,860	26,100,000	$2.773	1.401			$1.401
Jun-88	$1.450	$5.182	51,824,310	26,100,000	$2.783	1.404			$1.404

TABLE 2 - CALCULATED PRICES USED FOR MAJOR PORTION

	102 Wtd Avg Price[4]	103 Wtd Avg Price[4]	104 Post 74 Wtd Avg Price[4]	104 73/74 Wtd Avg Price[4]	104 RS[6] Wtd Avg Price[4]	104 FS[6] Wtd Avg Price[4]	105 Intrastate Price[7]	108 Wtd Avg Price[4]	109 Wtd Avg Price[4]
Jan-87	$3.933	$3.054	$2.685	$2.411	$1.753	$1.338	$1.753	$4.148	$2.685
Feb-87	$3.948	$3.057	$2.689	$2.414	$1.754	$1.339	$1.754	$4.164	$2.689
Mar-87	$3.961	$3.059	$2.691	$2.415	$1.755	$1.340	$1.755	$4.177	$1.755
Apr-87	$3.974	$3.061	$2.693	$2.417	$1.756	$1.341	$1.756	$4.191	$1.756
May-87	$3.993	$3.068	$2.698	$2.421	$1.758	$1.342	$1.758	$4.211	$1.758
Jun-87	$4.012	$3.075	$2.704	$2.426	$1.761	$1.344	$1.761	$4.232	$1.761
Jul-87	$2.742	$2.226	$2.024	$1.873	$1.364	$0.717	$1.364	$2.862	$2.024
Aug-87	$2.753	$2.230	$2.027	$1.875	$1.368	$0.720	$1.368	$2.874	$2.027
Sep-87	$2.764	$2.234	$2.030	$1.878	$1.372	$0.722	$1.372	$2.885	$2.030
Oct-87	$2.775	$2.238	$2.034	$1.881	$1.377	$0.724	$1.377	$2.897	$2.034
Nov-87	$2.784	$2.240	$2.036	$1.882	$1.380	$0.725	$1.380	$2.907	$2.036
Dec-87	$2.793	$2.243	$2.038	$1.884	$1.383	$0.726	$1.383	$2.917	$2.038
Jan-88	$2.803	$2.245	$2.040	$1.886	$1.386	$0.727	$1.386	$2.927	$2.040
Feb-88	$2.754	$2.189	$1.983	$1.828	$1.391	$0.730	$1.391	$2.879	$1.983
Mar-88	$2.764	$2.192	$1.985	$1.830	$1.394	$0.732	$1.394	$2.890	$1.985
Apr-88	$2.610	$2.031	$1.823	$1.667	$1.398	$0.734	$1.398	$2.736	$1.823
May-88	$2.619	$2.033	$1.825	$1.669	$1.401	$0.735	$1.401	$2.747	$1.825
Jun-88	$2.629	$2.036	$1.827	$1.671	$1.404	$0.736	$1.404	$2.757	$1.827

(1) Includes Tax Reimbursement.
(2) From 1/87 - 6/87 this is the company X contract negotiated price x the volume estimate.
For the remainder of the time this is the NGPA category price x the volume estimate.
(3) From 1/87 - 6/87 this is the NGPA category price x the volume estimate.
For the remainder of the time this is the company Y contract negotiated price x the volume estimate.
(4) This is the weighted average price.
(5) The contract terms provided for the lessor of the contract price or the NGPA price for 104 replacement small producer and 104 flowing small producer.
(6) RS: Replacement Small Producer; FS: Flowing Small Producer.
(7) This price is equivalent to the Category 104 replacement price for small producers.

(3D)

EL PASO Calculations

STRATA VALUE AMOUNT	16,907,964
SETTLEMENT VALUE	14,722,000
PERCENTAGE DIFFERENCE	0.8707

EL PASO PRICE

A	B	C	D	E	F	G	H	I	J
	Value Estimate Of Reserves	Strata Discount @10% Value	Actual Amount Settled Value	Discount Factor	El Paso Buy Down Price	102 Strata Estimate Price	Strata Estimate Price Differential	Settled Price Differential	102 Settled Plus Actual
1989	$1,987,322	$1,938,255	$1,687,666	0.8492	1.227	5.447	4.220	3.584	4.811
1990	$3,795,791	$3,434,574	$2,990,532	0.7879	1.276	5.775	4.499	3.545	4.821
1991	$3,747,294	$3,068,025	$2,671,372	0.7129	1.327	6.243	4.916	3.505	4.832
1992	$3,713,983	$2,751,386	$2,395,670	0.6450	1.380	6.748	5.368	3.463	4.843
1993	$3,689,172	$2,472,926	$2,153,211	0.5837	1.435	7.295	5.860	3.420	4.855
1994	$3,671,816	$2,227,069	$1,939,140	0.5281	1.493	7.886	6.393	3.376	4.869
1995	$1,850,780	$1,015,729	$884,409	0.4779	1.553	8.525	6.972	3.332	4.885
TTL	$22,456,158	$16,907,964	$14,722,000						

5.447-**1.227** = 4.22
4.22* .8492 = 3.584
3.584 + **1.227** = 4.811

Yes, that is a problem. This needs to be discussed with David. Hopefully, he will agree that the buy down price will have to be left in. Let me know if you want to talk with him or if you want to do a telecon and include me.

Reply Separator Subject: Jicarilla MP FOIA
Author: Joseph Cornellisson at ~mms-denver-gh-4 Date: 02/18/98 10:08 AM

Greg

I was working on Attachment 4 (Major Portion Pricing calculation; It's att 5 in your version) of the Methodology report.

I've included an excerpt from the spreadsheet. The markouts are shown in yellow

David had marked out all of column F - the buy down price. However those numbers are used in several subsequent calculations - as follows:

the estimate price - buy down price = price differential

price differential x discount factor = settled price differential

settled price differential + buy down price = category price

The category price for each pipeline is then used to develop a weighted average major portion price.

My question is that if I remove the prices in column F, the other numbers in the spreadsheet can be used to back calculate the price. I.E. columr

Does not providing the "FOIA number" but providing other numbers that you can calculate the "FOIA number" violate the FOIA act?

Thanks

Joe
275-7239

ı G - column H equals col F

EL PASO Calculations

STRATA VALUE AMOUNT	$ 16,907,964
SETTLEMENT VALUE	$ 14,722,000
PERCENTAGE DIFFERENCE	0.8707

NORTHWEST Calculations

STRATA VALUE AMOUNT	14,983,867
SETTLEMENT VALUE	10,450,000
PERCENTAGE DIFFERENCE	0.6974

TABLE 1

A	B	C	D	E	F	G	H	I	J	G	H	I	J	G
	Value Estimate Of Reserves	Discount @10% Value	Estimated Amount Settled Value	Discount Factor	Negotiated Price	102 Estimated Price	Estimated Price Differential	Settled Price Differential	102 Settled Plus Actual	103 Estimated Price	Estimated Price Differential	Settled Price Differential	103 Settled Plus Actual	104 Post 74 Estimated Price
1989	$1,987,322	$1,938,255	$1,687,666	0.8492	1.227	5.447	4.220	3.584	4.811	3.481	2.254	1.914	3.141	2.881
1990	$3,795,791	$3,434,574	$2,990,532	0.7879	1.276	5.775	4.499	3.545	4.821	3.587	2.311	1.821	3.097	2.969
1991	$3,747,294	$3,068,025	$2,671,372	0.7129	1.327	6.243	4.916	3.505	4.832	3.734	2.407	1.716	3.043	3.091
1992	$3,713,983	$2,751,386	$2,395,670	0.6450	1.380	6.748	5.368	3.463	4.843	3.887	2.507	1.617	2.997	3.217
1993	$3,689,172	$2,472,926	$2,153,211	0.5837	1.435	7.295	5.860	3.420	4.855	4.047	2.612	1.525	2.960	3.349
1994	$3,671,816	$2,227,069	$1,939,140	0.5281	1.493	7.886	6.393	3.376	4.869	4.212	2.719	1.436	2.929	3.487
1995	$1,850,780	$1,015,729	$884,409	0.4779	1.553	8.525	6.972	3.332	4.885	4.385	2.832	1.353	2.906	3.630
TTL	$22,456,158	$16,907,964	$14,722,000											

	G	H	I	J	K	L	G	H	I	J	G	H	I	J
	104 73/74 Estimated Price	Estimated Price Differential	Settled Price Differential	104 73/74 Settled Plus Actual	Settled Price 104 All Other	Settled Price 105	108 Estimated Price	Estimated Price Differential	Settled Price Differential	108 Settled Plus Actual	109 Estimated Price	Estimated Price Differential	Settled Price Differential	109 Settled Plus Actual
1989	2.432	1.205	1.023	2.250	1.227	1.227	5.832	4.605	3.911	5.138	2.881	1.654	1.405	2.632
1990	2.506	1.230	0.969	2.245	1.276	1.276	6.183	4.907	3.866	5.142	2.969	1.693	1.334	2.610
1991	2.608	1.281	0.913	2.240	1.327	1.327	6.684	5.357	3.819	5.146	3.091	1.764	1.258	2.585
1992	2.715	1.335	0.861	2.241	1.380	1.380	7.225	5.845	3.770	5.150	3.217	1.837	1.185	2.565
1993	2.826	1.391	0.812	2.247	1.435	1.435	7.810	6.375	3.721	5.156	3.349	1.914	1.117	2.552
1994	2.942	1.449	0.765	2.258	1.493	1.493	8.443	6.950	3.670	5.163	3.487	1.994	1.053	2.546
1995	3.062	1.509	0.721	2.274	1.553	1.553	9.127	7.574	3.619	5.172	3.630	2.077	0.993	2.546

******* Indicates confidential commercial and financial information of the Jicarilla Tribe

TABLE 2

A	B	C	D	E	F	G	H	I	J	G	H	I	J	G
	Value Estimate Of Reserves	Discount @10% Value	Estimated Amount Settled Value	Discount Factor	Negotiated Price	102 Estimated Price	Estimated Price Differential	Settled Price Differential	102 Settled Plus Actual	103 Estimated Price	Estimated Price Differential	Settled Price Differential	103 Settled Plus Actual	104 Post 74 Estimated Price
1989	$3,163,813	$3,024,597	$2,109,405	0.6667	1.730	5.311	3.581	2.388	4.118	3.448	1.718	1.145	2.875	2.881
1990	$3,057,140	$2,671,072	$1,862,851	0.6093	1.820	5.774	3.954	2.409	4.229	3.606	1.786	1.088	2.908	2.969
1991	$2,983,228	$2,382,156	$1,661,356	0.5569	1.910	6.279	4.369	2.433	4.343	3.772	1.862	1.037	2.947	3.091
1992	$2,912,477	$2,125,493	$1,482,355	0.5090	2.010	6.827	4.817	2.452	4.462	3.945	1.935	0.985	2.995	3.217
1993	$2,867,524	$1,912,572	$1,333,860	0.4652	2.110	7.423	5.313	2.471	4.581	4.126	2.016	0.938	3.048	3.349
1994	$2,826,568	$1,722,994	$1,201,645	0.4251	2.220	8.071	5.851	2.487	4.707	4.316	2.096	0.891	3.111	3.487
1995	$2,055,235	$1,144,983	$798,531	0.3885	2.340	8.776	6.436	2.501	4.841	4.514	2.174	0.845	3.185	3.630
TTL	$19,865,985	$14,983,867	$10,450,003											

	G	H	I	J	K	L	G	H	I	J	G	H	I	J
	104 73/74 Estimated Price	Estimated Price Differential	Settled Price Differential	104 73/74 Settled Plus Actual	Settled Price 104 All Other	Settled Price 105	108 Estimated Price	Estimated Price Differential	Settled Price Differential	108 Settled Plus Actual	109 Estimated Price	Estimated Price Differential	Settled Price Differential	109 Settled Plus Actual
1989	2.432	0.702	0.468	2.198	1.730	1.730	5.686	3.956	2.638	4.368	2.842	1.112	0.741	2.471
1990	2.506	0.686	0.418	2.238	1.820	1.820	6.182	4.362	2.658	4.478	2.967	1.147	0.699	2.519
1991	2.608	0.698	0.389	2.299	1.910	1.910	6.722	4.812	2.680	4.590	3.098	1.188	0.662	2.572
1992	2.715	0.705	0.359	2.369	2.010	2.010	7.309	5.299	2.697	4.707	3.234	1.224	0.623	2.633
1993	2.826	0.716	0.333	2.443	2.110	2.110	7.947	5.837	2.715	4.825	3.377	1.267	0.589	2.699
1994	2.942	0.722	0.307	2.527	2.220	2.220	8.641	6.421	2.730	4.950	3.525	1.305	0.555	2.775
1995	3.062	0.722	0.281	2.621	2.340	2.340	9.396	7.056	2.742	5.082	3.681	1.341	0.521	2.861

******* Indicates confidential commercial and financial information of the Jicarilla Tribe

nw generated

NORTHWEST Calculations

STRATA VALUE AMOUNT	14,983,867
SETTLEMENT VALUE	10,450,000
PERCENTAGE DIFFERENCE	0.6974

	Value Estimate Of Reserves	annual distrib	Discount @10% Value	pv/val est	Estimated Amount Settled Value	Discount Factor
1989	$3,163,813	0.15926	$3,024,597	95.600%	$2,109,405	0.6667
1990	$3,057,140	0.15389	$2,671,072	87.372%	$1,862,851	0.6093
1991	$2,983,228	0.15017	$2,382,156	79.852%	$1,661,356	0.5569
1992	$2,912,477	0.14661	$2,125,493	72.979%	$1,482,355	0.5090
1993	$2,867,524	0.14434	$1,912,572	66.698%	$1,333,860	0.4652
1994	$2,826,568	0.14228	$1,722,994	60.957%	$1,201,645	0.4251
1995	$2,055,235	0.10345	$1,144,983	55.711%	$798,531	0.3885
	$19,865,985		$14,983,867	75.425%	$10,450,004	

actual vol	11.7	actual val	19.8000	
new vol	18		54% increase =	
% chng	54	fake val	30.5000	

1989	$4,857,363	$4,643,626	$3,482,720	0.71699805
1990	$4,693,589	$4,100,864	$3,075,648	0.655286968
1991	$4,580,113	$3,657,295	$2,742,971	0.598887179
1992	$4,471,490	$3,263,243	$2,447,432	0.547341576
1993	$4,402,474	$2,936,348	$2,202,261	0.500232605
1994	$4,339,595	$2,645,291	$1,983,968	0.457178281
1995	$3,155,377	$1,757,878	$1,318,409	0.417829226
	$30,500,000	$23,004,545	$17,253,409	

Major Portion Pricing Methodology 1989 - 1995
Example Calculation

TABLE 1 - Example Calculation

Discounted Value Estimate	$26,352,626
Settlement Value	$22,399,732
Settlement Factor (Negotiated Reduction)	85.00%

NOTE: All Values and Prices shown in the example calculations are not the actual values. Actual values cannot be released in order to protect confidential commercial and financial information of the Jicarilla Apache Tribe and their purchasers.

A	B	C	D	E	F	G	H	I	J
	Value Estimate Of Reserves	Reserve Estimate Discount @10%	Estimated Amount Settled Value	Discount Factor	Negotiated Price	Estimated Price	Estimated Price Differential	Settled Price Differential	Settled Plus Actual
1989	$3,097,425	$3,020,950	$2,567,807	0.8290	$1.200	$5.350	$4.150	$3.440	$4.640
1990	$5,916,091	$5,353,101	$4,550,136	0.7691	$1.300	$6.100	$4.800	$3.692	$4.992
1991	$5,840,504	$4,781,801	$4,064,531	0.6959	$1.400	$6.350	$4.950	$3.445	$4.845
1992	$5,788,586	$4,288,290	$3,645,046	0.6297	$1.500	$6.750	$5.250	$3.306	$4.806
1993	$5,749,916	$3,854,284	$3,276,141	0.5698	$1.600	$7.350	$5.750	$3.276	$4.876
1994	$5,722,865	$3,471,093	$2,950,429	0.5156	$1.700	$8.200	$6.500	$3.351	$5.051
1995	$2,884,612	$1,583,108	$1,345,641	0.4665	$1.800	$8.550	$6.750	$3.149	$4.949
TTL	$35,000,000	$26,352,626	$22,399,732						

TABLE 2 - Example Calculation

Discounted Value Estimate	$23,004,545
Settlement Value	$17,253,409
Settlement Factor (Negotiated Reduction)	75.00%

NOTE: All Values and Prices shown in the example calculations are not the actual values. Actual values cannot be released in order to protect confidential commercial and financial information of the Jicarilla Apache Tribe and their purchasers.

A	B	C	D	E	F	G	H	I	J
	Value Estimate Of Reserves	Reserve Estimate Discount @10%	Estimated Amount Settled Value	Discount Factor	Negotiated Price	Estimated Price	Estimated Price Differential	Settled Price Differential	Settled Plus Actual
1989	$4,857,363	$4,643,626	$3,482,720	0.7170	$1.500	$5.000	$3.500	$2.509	$4.009
1990	$4,693,589	$4,100,864	$3,075,648	0.6553	$1.650	$5.550	$3.900	$2.556	$4.206
1991	$4,580,113	$3,657,295	$2,742,971	0.5989	$1.800	$6.300	$4.500	$2.695	$4.495
1992	$4,471,490	$3,263,243	$2,447,432	0.5473	$1.950	$6.800	$4.850	$2.655	$4.605
1993	$4,402,474	$2,936,348	$2,202,261	0.5002	$2.200	$7.650	$5.450	$2.726	$4.926
1994	$4,339,595	$2,645,291	$1,983,968	0.4572	$2.350	$8.300	$5.950	$2.720	$5.070
1995	$3,155,377	$1,757,878	$1,318,409	0.4178	$2.450	$9.050	$6.600	$2.758	$5.208
TTL	$30,500,000	$23,004,545	$17,253,409						

TABLE 3 - Example Calculation

NET GAS PRODUCTION ESTIMATE	
VOLUME ESTIMATE	10,000,000
VOLUME ESTIMATE	18,000,000
TOTAL RESERVE VOLUME ESTIMATE	28,000,000

NOTE: The Gas Production and Reserve *Estimates are not the actual values.* The actual values cannot be released in order to protect confidential commercial and financial data of the Jicarilla Apache Tribe and their *purchasers.*

Gas Category	ESTIMATED PRICE	ESTIMATED PRICE	(1) ESTIMATED VALUE	(2) ESTIMATED VALUE	WEIGHTED AVERAGE PRICE (3)
1989	$4.640	$4.009	$46,404,040	$72,170,874	$4.235
1990	$4.992	$4.206	$49,917,380	$75,701,142	$4.486
1991	$4.845	$4.495	$48,448,090	$80,909,856	$4.620
1992	$4.806	$4.605	$48,058,990	$82,882,962	$4.676
1993	$4.876	$4.926	$48,761,890	$88,672,860	$4.908
1994	$5.051	$5.070	$50,510,820	$91,263,762	$5.063
1995	$4.949	$5.208	$49,488,080	$93,738,078	$5.115

(1) PURCHASER A VOLUME TIMES PUCHASER A PRICE.
(2) PURCHASER B VOLUME TIMES PUCHASER B PRICE.
(3) PURCHASER A VALUE PLUS PURCHASE B VALUE DIVIDED BY TOTAL VOLUME ESTIMATE.

Column

B VALUE ESTIMATE OF RESERVES.

C ESTIMATED VALUE OF THE RESERVES AT A 10% NET PRESENT VALUE DISCOUNT.

D ESTIMATE FOR EACH YEAR AT THE 10% NET PRESENT VALUE DISCOUNT TIMES THE PERCENTAGE OF SETTLEMENT.

E NET PRESENT VALUE DISCOUNT FACTOR. COLUMN D DIVIDED BY COLUMN B.

F NEGOTIATED PRICE.

G *NGPA ESTIMATE PRICE FROM THE SUMMARY REPORT.*

H NGPA ESTIMATED PRICE MINUS THE NEGOTIATED PRICE.

I ESTIMATED PRICE DIFFERENTIAL TIMES THE DISCOUNT FACTOR.

J SETTLED PRICE DIFFERENTIAL PLUS THE NEGOTIATED PRICE.

NGPA PRICES 1/84 THROUGH 12/88

	102	102+tax	103b1 new gas	103+tax	104 post 74	104+tax post 74	104 73/74 Bien	104+tax 73/74 Bien	Replac. small 104R	104+tax small replaceme	flowing small 104F	104+tax small flowing	105	105+tax	108 stripper	108+tax	109 other	109+tax
Jan-84	3.586	3.636000	2.849	2.899000	2.359	2.409000	1.997	2.047000	1.120	1.170000	0.566	0.616000	1.120	1.170000	3.841	3.891000	2.359	2.409000
Feb-84	3.609	3.659000	2.859	2.909000	2.367	2.417000	2.004	2.054000	1.124	1.174000	0.568	0.618000	1.124	1.174000	3.866	3.916000	2.367	2.417000
Mar-84	3.632	3.682000	2.869	2.919000	2.375	2.425000	2.011	2.061000	1.128	1.178000	0.570	0.620000	1.128	1.178000	3.891	3.941000	2.375	2.425000
Apr-84	3.656	3.706000	2.879	2.929000	2.383	2.433000	2.018	2.068000	1.132	1.182000	0.572	0.622000	1.132	1.182000	3.916	3.966000	2.383	2.433000
May-84	3.680	3.730000	2.889	2.939000	2.391	2.441000	2.025	2.075000	1.136	1.186000	0.574	0.624000	1.136	1.186000	3.942	3.992000	2.391	2.441000
Jun-84	3.705	3.755000	2.899	2.949000	2.399	2.449000	2.032	2.082000	1.140	1.190000	0.576	0.626000	1.140	1.190000	3.968	4.018000	2.399	2.449000
Jul-84	3.730	3.780000	2.909	2.959000	2.407	2.457000	2.039	2.089000	1.144	1.194000	0.578	0.628000	1.144	1.194000	3.994	4.044000	2.409	2.459000
Aug-84	3.752	3.802000	2.917	2.967000	2.414	2.464000	2.045	2.095000	1.147	1.197000	0.580	0.630000	1.147	1.197000	4.018	4.068000	2.414	2.464000
Sep-84	3.774	3.824000	2.925	2.975000	2.421	2.471000	2.051	2.101000	1.150	1.200000	0.582	0.632000	1.150	1.200000	4.042	4.092000	2.421	2.471000
Oct-84	3.797	3.847000	2.933	2.983000	2.428	2.478000	2.057	2.107000	1.153	1.203000	0.584	0.634000	1.153	1.203000	4.066	4.116000	2.428	2.478000
Nov-84	3.821	3.871000	2.942	2.992000	2.436	2.486000	2.063	2.113000	1.157	1.207000	0.586	0.636000	1.157	1.207000	4.092	4.142000	2.436	2.486000
Dec-84	3.845	3.895000	2.951	3.001000	2.444	2.494000	2.069	2.119000	1.161	1.211000	0.588	0.638000	1.161	1.211000	4.118	4.168000	2.444	2.494000
Jan-85	3.869	3.919000	2.960	3.010000	2.452	2.502000	2.075	2.125000	1.165	1.215000	0.590	0.640000	1.165	1.215000	4.144	4.194000	2.452	2.502000
Feb-85	3.890	3.940000	2.966	3.016000	2.457	2.507000	2.079	2.129000	1.167	1.217000	0.591	0.641000	1.167	1.217000	4.166	4.216000	2.457	2.507000
Mar-85	3.911	3.961000	2.972	3.022000	2.462	2.512000	2.083	2.133000	1.169	1.219000	0.592	0.642000	1.169	1.219000	4.188	4.238000	2.462	2.512000
Apr-85	3.932	3.982000	2.978	3.028000	2.467	2.517000	2.087	2.137000	1.172	1.222000	0.593	0.643000	1.172	1.222000	4.210	4.260000	2.467	2.517000
May-85	3.962	4.012000	2.991	3.041000	2.478	2.528000	2.096	2.146000	1.177	1.227000	0.596	0.646000	1.177	1.227000	4.242	4.292000	2.478	2.528000
Jun-85	3.992	4.216650	3.004	3.185425	2.489	2.647894	2.105	2.247094	1.182	1.283713	0.599	0.675206	1.182	1.283713	4.274	4.510988	2.409	2.564394
Jul-85	4.022	4.247963	3.017	3.198994	2.500	2.659375	2.114	2.256488	1.187	1.288931	0.602	0.678338	1.187	1.288931	4.306	4.544388	2.500	2.659375
Aug-85	4.045	4.271969	3.024	3.206300	2.506	2.665638	2.119	2.261706	1.190	1.292063	0.603	0.679381	1.190	1.292063	4.330	4.569438	2.506	2.665638
Sep-85	4.068	4.295975	3.031	3.213606	2.512	2.671900	2.124	2.266925	1.193	1.295194	0.604	0.680425	1.193	1.295194	4.354	4.594488	2.512	2.671900
Oct-85	4.091	4.319981	3.038	3.220913	2.518	2.678163	2.129	2.272144	1.196	1.298325	0.605	0.681469	1.196	1.298325	4.379	4.620581	2.518	2.678163
Nov-85	4.116	4.346075	3.047	3.230306	2.525	2.685469	2.135	2.278406	1.199	1.301456	0.607	0.683556	1.199	1.301456	4.405	4.647719	2.525	2.685469
Dec-85	4.141	4.372169	3.056	3.239700	2.532	2.692775	2.141	2.284669	1.202	1.304588	0.609	0.685644	1.202	1.304588	4.432	4.675900	2.532	2.692775
Jan-86	4.166	4.398263	3.065	3.249094	2.539	2.700081	2.147	2.290931	1.205	1.307719	0.611	0.687731	1.205	1.307719	4.459	4.704081	2.539	2.700081
Feb-86	4.191	4.430957	3.074	3.263329	2.546	2.711397	2.153	2.300585	1.208	1.312753	0.613	0.690784	1.208	1.312753	4.486	4.739328	2.546	2.711397
Mar-86	4.216	4.457090	3.083	3.272737	2.553	2.718715	2.159	2.306857	1.211	1.315889	0.615	0.692875	1.211	1.315889	4.513	4.767552	2.553	2.718715
Apr-86	4.241	4.483223	3.092	3.282145	2.560	2.726032	2.165	2.313129	1.214	1.319025	0.617	0.694966	1.214	1.319025	4.540	4.795776	2.560	2.726032
May-86	4.264	4.507266	3.099	3.289462	2.566	2.732304	2.170	2.318355	1.217	1.322161	0.618	0.696011	1.217	1.322161	4.565	4.821909	2.566	2.732304
Jun-86	4.287	4.531308	3.106	3.296779	2.572	2.738576	2.175	2.323582	1.220	1.325297	0.619	0.697056	1.220	1.325297	4.590	4.848042	2.572	2.738576
Jul-86	4.310	4.555351	3.113	3.304097	2.578	2.744848	2.180	2.328809	1.223	1.328432	0.620	0.698102	1.223	1.328432	4.615	4.874175	2.578	2.744848
Aug-86	4.332	4.578348	3.119	3.310369	2.583	2.750074	2.184	2.332990	1.225	1.330523	0.621	0.699147	1.225	1.330523	4.639	4.899263	2.583	2.750074
Sep-86	4.354	4.601345	3.125	3.316641	2.588	2.755301	2.188	2.337171	1.227	1.332614	0.622	0.700192	1.227	1.332614	4.663	4.924350	2.588	2.755301
Oct-86	4.376	4.624342	3.131	3.322913	2.593	2.760528	2.192	2.341352	1.229	1.334704	0.623	0.701237	1.229	1.334704	4.687	4.949438	2.593	2.760528
Nov-86	4.403	4.652566	3.141	3.333366	2.601	2.768890	2.199	2.348670	1.233	1.338886	0.625	0.703328	1.233	1.338886	4.716	4.979753	2.601	2.768890
Dec-86	4.431	4.681835	3.151	3.343819	2.609	2.777253	2.206	2.355987	1.237	1.343067	0.627	0.705419	1.237	1.343067	4.746	5.011112	2.609	2.777253
Jan-87	4.459	4.711104	3.161	3.354272	2.617	2.785616	2.213	2.363304	1.241	1.347248	0.629	0.707509	1.241	1.347248	4.776	5.042472	2.617	2.785616
Feb-87	4.478	4.734884	3.164	3.360177	2.620	2.791044	2.215	2.367333	1.242	1.349380	0.630	0.709106	1.242	1.349380	4.796	5.067575	2.620	2.791044
Mar-87	4.497	4.754761	3.167	3.363315	2.623	2.794183	2.217	2.369425	1.243	1.350427	0.631	0.710152	1.243	1.350427	4.816	5.088499	2.623	2.794183
Apr-87	4.516	4.774639	3.170	3.366454	2.626	2.797321	2.219	2.371518	1.244	1.351473	0.632	0.711198	1.244	1.351473	4.836	5.109423	2.626	2.797321
May-87	4.544	4.803933	3.180	3.376916	2.634	2.805691	2.226	2.378841	1.248	1.355658	0.634	0.713291	1.248	1.355658	4.866	5.140809	2.634	2.805691
Jun-87	4.572	4.833226	3.190	3.387378	2.642	2.814060	2.233	2.386165	1.252	1.359842	0.636	0.715383	1.252	1.359842	4.896	5.172195	2.642	2.814060
Jul-87	4.600	4.862520	3.200	3.397840	2.650	2.822430	2.240	2.393488	1.256	1.364027	0.638	0.717476	1.256	1.364027	4.926	5.203581	2.650	2.822430
Aug-87	4.630	4.893906	3.210	3.408302	2.659	2.831846	2.247	2.400811	1.260	1.368212	0.640	0.719568	1.260	1.368212	4.958	5.237060	2.659	2.831846
Sep-87	4.660	4.925292	3.220	3.418764	2.668	2.841262	2.254	2.408135	1.264	1.372397	0.642	0.721660	1.264	1.372397	4.990	5.270538	2.668	2.841262
Oct-87	4.690	4.956678	3.231	3.430272	2.677	2.850677	2.261	2.415458	1.268	1.376582	0.644	0.723753	1.268	1.376582	5.022	5.304016	2.677	2.850677
Nov-87	4.715	4.982833	3.238	3.437596	2.683	2.856955	2.266	2.420689	1.271	1.379720	0.645	0.724799	1.271	1.379720	5.049	5.332264	2.683	2.856955
Dec-87	4.740	5.008988	3.245	3.444919	2.689	2.863232	2.271	2.425920	1.274	1.382859	0.646	0.725845	1.274	1.382859	5.076	5.360511	2.689	2.863232
Jan-88	4.765	5.035143	3.252	3.452242	2.695	2.869509	2.276	2.431151	1.277	1.385997	0.647	0.726891	1.277	1.385997	5.103	5.388759	2.695	2.869509
Feb-88	4.792	5.071357	3.260	3.466032	2.701	2.880277	2.281	2.440174	1.280	1.391264	0.649	0.730063	1.280	1.391264	5.131	5.426582	2.701	2.880277
Mar-88	4.819	5.099649	3.268	3.474415	2.707	2.886564	2.286	2.445414	1.283	1.394408	0.651	0.732158	1.283	1.394408	5.160	5.456971	2.707	2.886564
Apr-88	4.846	5.127942	3.276	3.482798	2.713	2.892851	2.291	2.450653	1.286	1.397551	0.653	0.734254	1.286	1.397551	5.189	5.487359	2.713	2.892851
May-88	4.872	5.155186	3.283	3.490133	2.719	2.899138	2.296	2.455892	1.289	1.400695	0.654	0.735302	1.289	1.400695	5.217	5.516699	2.719	2.899138
Jun-88	4.898	5.182431	3.290	3.497468	2.725	2.905425	2.301	2.461132	1.292	1.403838	0.655	0.736350	1.292	1.403838	5.245	5.546039	2.725	2.905425
Jul-88	4.924	5.209675	3.297	3.504803	2.731	2.911712	2.306	2.466371	1.295	1.406982	0.656	0.737398	1.295	1.406982	5.273	5.575379	2.731	2.911712
Aug-88	4.957	5.244254	3.309	3.517377	2.741	2.922191	2.314	2.474754	1.300	1.412221	0.658	0.739494	1.300	1.412221	5.308	5.612054	2.741	2.922191
Sep-88	4.990	5.278834	3.321	3.529951	2.751	2.932670	2.322	2.483137	1.305	1.417461	0.660	0.741589	1.305	1.417461	5.343	5.648729	2.751	2.932670
Oct-88	5.023	5.313413	3.333	3.542526	2.761	2.943148	2.330	2.491520	1.310	1.422700	0.662	0.743685	1.310	1.422700	5.379	5.686452	2.761	2.943148
Nov-88	5.058	5.350089	3.345	3.555100	2.771	2.953627	2.339	2.500950	1.315	1.427939	0.664	0.745781	1.315	1.427939	5.416	5.725223	2.771	2.953627
Dec-88	5.093	5.386764	3.358	3.568722	2.781	2.964106	2.348	2.510381	1.320	1.433179	0.666	0.747876	1.320	1.433179	5.453	5.763994	2.781	2.964106

(3 I)

List of Jicarilla Apache Payor Numbers

PAYOR NAME	PAYOR CODE
Amoco Production Company	10860
Apache Corporation	11110
Arco Oil & Gas Company, Vastar Resources	11270, 11274
Bayless, Robert L.	13190
BHP	21910
Chace Oil Company	16480
Dugan Production Company	20150
Exxon	22201
Enre Corporation	21938
Famcor	23315
Forcenergy Gas Exploration	23708, 23710
Gas Company of New Mexico	25115
General Minerals Corp.	25435
Geodyne Operating Company	25495
Giant Exploration & Prod.	28450
Graham Energy LTD.	25964
Great Western Resources	26083
Mallon Oil Company	37193
Marathon Oil Company	37312
Meridian Oil Inc.	21625, 50210
Merit Energy Company	38083
Merrion Oil & Gas Corp.	38100
Mobil Exploration & Production U.S. Inc.	38554
MW Petroluem Corp.	29248
Northwest Pipeline Corp.	31070
Okie Crude Company	31398
Oklahoma and Northwestern	31405
Oxy U.S.A. Inc.	16922
Petrocorp	44445
Phillips Petroleum Company	44725
Rife Oil Properties Inc.	36175
Samson Resources Company	48800
Snyder Oil Corporation	40115
Southern Union Exploration	50150
Tenneco Oil Co. C/O Amoco	41352
Texaco Exploration Company	50405
Unicon Producing Company	73725
Union Texas Petroleum Company	73820
Western Oil and Minerals	77090

EL PASO Calculations

STRATA VALUE AMOUNT	16,907,964
SETTLEMENT VALUE	14,722,000
PERCENTAGE DIFFERENCE	*0.8707*

EL PASO PRICE

A	B	C	D	E	F	G	H	I	J	G	H	I	J	G	H	I	J
	Value Estimate Of Reserves	Strata Discount @10% Value	Actual Amount *Settled* Value	Discount *Factor*	El Paso Buy Down *Price*	102 Strata *Estimate* Price	Strata Estimate *Price* Differential	Settled *Price* Differential	102 Settled Plus Actual	103 Strata Estimate Price	Strata Estimate Price Differential	Settled Price Differential	103 Settled Plus Actual	104 Post 74 Strata Estimate Price	Strata Estimate Price Differential	Settled Price Differential	104 Post 74 Settled Plus Actual
1989	$1,987,322	$1,938,255	$1,687,666	0.8492	1.227	5.447	4.220	3.584	4.811	3.481	2.254	1.914133	3.141133	2.881	1.654	1.405	2.632
1990	$3,795,791	$3,434,574	$2,990,532	0.7879	1.276	5.775	4.499	3.545	4.821	3.587	2.311	1.820733	3.096733	2.969	1.693	1.334	2.610
1991	$3,747,294	$3,068,025	$2,671,372	0.7129	1.327	6.243	4.916	3.505	4.832	3.734	2.407	1.715902	3.042902	3.091	1.764	1.258	2.585
1992	$3,713,983	$2,751,386	$2,395,670	0.6450	1.380	6.748	5.368	3.463	4.843	3.887	2.507	1.617118	2.997118	3.217	1.837	1.185	2.565
1993	*$3,689,172*	*$2,472,926*	*$2,153,211*	*0.5837*	1.435	7.295	5.860	3.420	4.855	4.047	2.612	1.524512	2.959512	3.349	1.914	1.117	2.552
1994	$3,671,816	$2,227,069	$1,939,140	0.5281	1.493	7.886	6.393	3.376	4.869	4.212	2.719	1.435945	2.928945	3.487	1.994	1.053	2.546
1995	$1,850,780	$1,015,729	$884,409	0.4779	1.553	8.525	6.972	3.332	4.885	4.385	2.832	1.353291	2.906291	3.630	2.077	0.993	2.546
TTL	$22,456,158	$16,907,964	$14,722,000														

	G *104* 73/74 Strata Estimate Price	H Strata Estimate Price Differential	I Settled Price Differential	J 104 73/74 Settled Plus Actual	K Settled Price 104 All Other	L Settled Price 105	G 108 Strata Estimate Price	H Strata Estimate Price Differential	I Settled Price Differential	J 108 Settled Plus Actual	G 109 Strata Estimate Price	H Strata Estimate Price Differential	I Settled Price Differential	J 109 Settled Plus Actual
1989	2.432	1.205	1.023	2.250	1.227	1.227	5.832	4.605	3.910640	5.137640	2.881	1.654	1.405	2.632
1990	2.506	1.230	0.969	2.245	1.276	1.276	6.183	4.907	3.866004	5.142004	2.969	1.693	1.334	2.610
1991	2.608	1.281	0.913	2.240	1.327	1.327	6.684	5.357	3.818898	5.145898	3.091	1.764	1.258	2.585
1992	2.715	1.335	0.861	2.241	1.380	1.380	7.225	5.845	3.770265	5.150265	3.217	1.837	1.185	2.565
1993	2.826	1.391	0.812	2.247	1.435	1.435	7.810	6.375	3.720813	5.155813	3.349	1.914	1.117	2.552
1994	2.942	1.449	0.765	2.258	1.493	1.493	8.443	6.950	3.670399	5.163399	3.487	1.994	1.053	2.546
1995	3.062	1.509	0.721	2.274	1.553	1.553	9.127	7.574	3.619289	5.172289	3.630	2.077	0.993	2.546

NORTHWEST Calculations

STRATA VALUE AMOUNT	14,983,867
SETTLEMENT VALUE	10,450,000
PERCENTAGE DIFFERENCE	0.6974

NORTHWEST

A	B	C	D	E	F	G	H	I	J	G	H	I	J	G	H	I	J
	Value Estimate Of Reserves	Strata Discount @10% Value	Actual Amount Settled Value	Discount Factor	Northwest Buy Out Price	102 Strata Estimate Price	Strata Estimate Price Differential	Settled Price Differential	102 Settled Plus Actual	103 Strata Estimate Price	Strata Estimate Price Differential	Settled Price Differential	103 Settled Plus Actual	104 Post 74 Strata Estimate Price	Strata Estimate Price Differential	Settled Price Differential	104 Post 74 Settled Plus Actual
1989	$3,163,813	$3,024,597	$2,109,405	0.6667	1.730	5.311	3.581	2.388	4.118	3.448	1.718	1.145	2.875	2.881	1.151	0.767	2.497
1990	$3,057,140	$2,671,072	$1,862,851	0.6093	1.820	5.774	3.954	2.409	4.229	3.606	1.786	1.088	2.908	2.969	1.149	0.700	2.520
1991	$2,983,228	$2,382,156	$1,661,356	0.5569	1.910	6.279	4.369	2.433	4.343	3.772	1.862	1.037	2.947	3.091	1.181	0.658	2.568
1992	$2,912,477	$2,125,493	$1,482,355	0.5090	2.010	6.827	4.817	2.452	4.462	3.945	1.935	0.985	2.995	3.217	1.207	0.614	2.624
1993	$2,867,524	$1,912,572	$1,333,860	0.4652	2.110	7.423	5.313	2.471	4.581	4.126	2.016	0.938	3.048	3.349	1.239	0.576	2.686
1994	$2,826,568	$1,722,994	$1,201,645	0.4251	2.220	8.071	5.851	2.487	4.707	4.316	2.096	0.891	3.111	3.487	1.267	0.539	2.759
1995	$2,055,235	$1,144,983	$798,531	0.3885	2.340	8.776	6.436	2.501	4.841	4.514	2.174	0.845	3.185	3.630	1.290	0.501	2.841
TTL	$19,865,985	$14,983,867	$10,450,003														

	G 104 73/74 Strata Estimate Price	H Strata Estimate Price Differential	I Settled Price Differential	J 104 73/74 Settled Plus Actual	K Settled Price 104 All Other	L Settled Price 105	G 108 Strata Estimate Price	H Strata Estimate Price Differential	I Settled Price Differential	J 108 Settled Plus Actual	G 109 Strata Estimate Price	H Strata Estimate Price Differential	I Settled Price Differential	J 109 Settled Plus Actual
1989	2.432	0.702	0.468	2.198	1.73	1.73	5.686	3.956	2.638	4.368	2.842	1.112	0.741	2.471
1990	2.506	0.686	0.418	2.238	1.82	1.82	6.182	4.362	2.658	4.478	2.967	1.147	0.699	2.519
1991	2.608	0.698	0.389	2.299	1.91	1.91	6.722	4.812	2.680	4.590	3.098	1.188	0.662	2.572
1992	2.715	0.705	0.359	2.369	2.01	2.01	7.309	5.299	2.697	4.707	3.234	1.224	0.623	2.633
1993	2.826	0.716	0.333	2.443	2.11	2.11	7.947	5.837	2.715	4.825	3.377	1.267	0.589	2.699
1994	2.942	0.722	0.307	2.527	2.22	2.22	8.641	6.421	2.730	4.950	3.525	1.305	0.555	2.775
1995	3.062	0.722	0.281	2.621	2.34	2.34	9.396	7.056	2.742	5.082	3.681	1.341	0.521	2.861

STRATA NET GAS PRODUCTION

ELPASO STRATA VOLUME	6367098
NORTHWEST STRATA VOLUME	11722107
TOTAL RESERVE VOLUME	18089205

	EL PASO PRICES	NW PRICES	(1) EL PASO VALUE	(2) NW VALUE	WEIGHTED AVERAGE PRICE (3)
102 NEW NATURAL GAS					
1989	4.811	4.118	30,630,147	48,266,444	4.362
1990	4.821	4.229	30,692,978	49,576,846	4.437
1991	4.832	4.343	30,762,749	50,910,189	4.515
1992	4.843	4.462	30,833,181	52,300,454	4.596
1993	4.855	4.581	30,913,725	53,703,661	4.678
1994	4.869	4.707	31,002,922	55,180,717	4.764
1995	4.885	4.841	31,100,848	56,742,160	4.856
103 NEW ONSHORE PRODUCTION WELLS					
1989	3.141	2.875	19,999,902	33,706,215	2.969
1990	3.097	2.908	19,717,202	34,091,263	2.975
1991	3.043	2.947	19,374,455	34,544,416	2.981
1992	2.997	2.995	19,082,944	35,105,964	2.996
1993	2.960	3.048	18,843,503	35,726,227	3.017
1994	2.929	3.111	18,648,880	36,468,202	3.047
1995	2.906	3.185	18,504,640	37,331,101	3.087
104 POST 74					
1989	2.632	2.497	16,755,674	29,274,849	2.545
1990	2.610	2.520	16,617,101	29,541,304	2.552
1991	2.585	2.568	16,455,892	30,098,831	2.574
1992	2.565	2.624	16,331,224	30,762,595	2.603
1993	2.552	2.686	16,249,592	31,489,495	2.639
1994	2.546	2.759	16,211,020	32,336,991	2.684
1995	2.546	2.841	16,207,505	33,304,968	2.737
104 73/74 BIENNIUM					
1989	2.250	2.198	14,327,912	25,765,707	2.216
1990	2.245	2.238	14,294,530	26,234,193	2.240
1991	2.240	2.299	14,263,567	26,945,795	2.278
1992	2.241	2.369	14,269,494	27,767,585	2.324
1993	2.247	2.443	14,306,022	28,637,752	2.374
1994	2.258	2.527	14,378,429	29,621,061	2.432
1995	2.274	2.621	14,479,328	30,718,039	2.499

	EL PASO PRICES	NW PRICES	(1) EL PASO VALUE	(2) NW VALUE	WEIGHTED AVERAGE PRICE (3)
104 ALL OTHER CATEGORIES					
1989	1.227	1.730	7,812,429	20,279,245	1.553
1990	1.276	1.820	8,124,417	21,334,235	1.629
1991	1.327	1.910	8,449,139	22,389,224	1.705
1992	1.380	2.010	8,786,595	23,561,435	1.788
1993	1.435	2.110	9,136,786	24,733,646	1.872
1994	1.493	2.220	9,506,077	26,023,078	1.964
1995	1.553	2.340	9,888,103	27,429,730	2.063
105 EXISTING INTRASTATE CONTRACTS					
1989	1.227	1.730	7,812,429	20,279,245	1.553
1990	1.276	1.820	8,124,417	21,334,235	1.629
1991	1.327	1.910	8,449,139	22,389,224	1.705
1992	1.380	2.010	8,786,595	23,561,435	1.788
1993	1.435	2.110	9,136,786	24,733,646	1.872
1994	1.493	2.220	9,506,077	26,023,078	1.964
1995	1.553	2.340	9,888,103	27,429,730	2.063
108 STRIPPER GAS					
1989	5.138	4.368	32,711,857	51,197,240	4.639
1990	5.142	4.478	32,739,643	52,491,115	4.712
1991	5.146	4.590	32,764,437	53,802,103	4.786
1992	5.150	4.707	32,792,242	55,176,145	4.863
1993	5.156	4.825	32,827,567	56,560,866	4.942
1994	5.163	4.950	32,875,867	58,021,241	5.025
1995	5.172	5.082	32,932,471	59,565,922	5.113
109 OTHER					
1989	2.632	2.471	16,755,674	28,970,050	2.528
1990	2.610	2.519	16,617,101	29,527,026	2.551
1991	2.585	2.572	16,455,892	30,144,523	2.576
1992	2.565	2.633	16,331,224	30,864,026	2.609
1993	2.552	2.699	16,249,592	31,642,175	2.648
1994	2.546	2.775	16,211,020	32,526,362	2.694
1995	2.546	2.861	16,207,505	33,537,241	2.750

(1) EL PASO STRATA VOLUME TIMES EL PASO PRICE
(2) NW STRATA VOLUME TIMES NW PRICE
(3) EL PASO VALUE PLUS NW VALUE DIVIDED BY TOTAL STRATA VOLUMES

B VALUE ESTIMATE OF RESERVES FROM THE JICARILLA STRATA SETTLEMENT FIGURES

C JICARILLA STRATA ESTIMATE VALUE OF THE RESERVES AT A 10% NET PRESENT VALUE DISCOUNT.

D STRATA ESTIMATE FOR EACH YEAR AT THE 10% NET PRESENT VALUE DISCOUNT.
TIMES THE PERCENTAGE OF SETTLEMENT 87.0714%
(EXAMPLE 1989. 1938255 X 0.870714 = 1687666)

STRATA VALUE AMOUNT	16,907,964
SETTLEMENT VALUE	14,722,000
PERCENTAGE DIFFERENCE	0.870714

E NET PRESENT VALUE DISCOUNT
COLUMN C DIVIDED BY COLUMN B
ACTUAL AMOUNT RECEIVED DIVIDED BY THE STRATA 100% ESTIMATE.

F STRATA NGPA ESTIMATE PRICE FROM THE JICARILLA STRATA SUMMARY REPORT AND VALUE ESTIMATE

G SETTLED PRICE
STRATA NGPA ESTIMATE PRICE TIMES THE NET PRESENT VALUE DISCOUNT
COLUMN E

H SETTLED PRICE AMOUNT PLUS THE ACTUAL MARKET OUT PRICE RECEIVED.
(EXAMPLE: 1989 102 SETTLED AMOUNT MARKET OUT PRICE RECEIVED
3.583692 + 1.227 = 4.810692

3K

EL PASO PRICE

A	B VALUE ESTIMATE OF RESERVES	C STRATA DISCOUNT @10% VALUE	D ACTUAL AMOUNT SETTLED VALUE	E NET PRESENT VALUE DISCOUNT	F STRATA ESTIMATE PRICE 102	G SETTLED PRICE DIFF	H 102 SETTLED PLUS ACTUAL	I STRATA ESTIMATE PRICE 103	J SETTLED PRICE 103
1989		1987322	1938255	1687666	0.849216	4.220	3.583692	4.810692	2.254	1.914133
1990		3795791	3434574	2990532	0.787855	4.499	3.544560	4.820560	2.311	1.820733
1991		3747294	3068025	2671372	0.712880	4.916	3.504518	4.831518	2.407	1.715902
1992		3713983	2751386	2395670	0.645041	5.368	3.462580	4.842580	2.507	1.617118
1993		3689172	2472926	2153211	0.583657	5.860	3.420230	4.855230	2.612	1.524512
1994		3671816	2227069	1939140	0.528115	6.393	3.376239	4.869239	2.719	1.435945
1995		1850780	1015729	884409	0.477857	6.972	3.331619	4.884619	2.832	1.353291
		22456158	16907964	14722000						
	STRATA VALUE AMOUNT				16,907,964					
	SETTLEMENT VALUE				14,722,000					
	PERCENTAGE DIFFERENCE				0.870714					

NORTHWEST

	VALUE ESTIMATE OF RESERVES	STRATA DISCOUNT @10% VALUE	ACTUAL AMOUNT SETTLED VALUE	NET PRESENT VALUE DISCOUNT	STRATA ESTIMATE PRICE 102	SETTLED PRICE 102	102 SETTLED PLUS ACTUAL	STRATA ESTIMATE PRICE 103	SETTLED PRICE 103
1989		3163813	3024597	2109405	0.666729	3.581	2.387557	4.117557	1.718	1.14544
1990		3057140	2671072	1862851	0.609344	3.954	2.409346	4.229346	1.786	1.088288
1991		2983228	2382156	1661356	0.556899	4.369	2.433092	4.343092	1.862	1.036946
1992		2912477	2125493	1482355	0.508967	4.817	2.451694	4.461694	1.935	0.984851
1993		2867524	1912572	1333860	0.465161	5.313	2.4714	4.5814	2.016	0.937765
1994		2826568	1722994	1201645	0.425125	5.851	2.487406	4.707406	2.096	0.891062
1995		2055235	1144983	798531	0.388535	6.436	2.500611	4.840611	2.174	0.844675
		19865985	14983867	10450003						
			14722000							
	STRATA VALUE AMOUNT				14,983,867					
	SETTLEMENT VALUE				10,450,000					
	PERCENTAGE DIFFERENCE				0.697417					

STRATA NET GAS PRODUCTION

ELPASO STRATA VOLUME	6367098
NORTHWEST STRATA VOLUME	11722107
TOTAL RESERVE VOLUME	18089205

	EL PASO PRICES	NW PRICES	(1) EL PASO VALUE	(2) NW VALUE	WEIGHTED AVERAGE PRICE (3)
102					
1989	4.810692	4.117557	30630147.41	48266444	4.361529
1990	4.820560	4.229346	30692977.93	49576846	4.437443
1991	4.831518	4.343092	30762748.59	50910189	4.515010
1992	4.842580	4.461694	30833181.43	52300454	4.595760
1993	4.855230	4.581400	30913725.22	53703661	4.677784
1994	4.869239	4.707406	31002921.9	55180717	4.764369
1995	4.884619	4.840611	31100847.87	56742160	4.856101
103					
1989	3.141133	2.875440	19999901.64	33706215	2.968959
1990	3.096733	2.908288	19717202.49	34091263	2.974617
1991	3.042902	2.946946	19374455.24	34544416	2.980721
1992	2.997118	2.994851	19082944.02	35105964	2.995649
1993	2.959512	3.047765	18843502.94	35726227	3.016701
1994	2.928945	3.111062	18648879.85	36468202	3.046960
1995	2.906291	3.184675	18504639.61	37331101	3.086688
104 POST 74					
1989	2.631603	2.497405	16755674.2	29274849	2.544640
1990	2.609839	2.520136	16617100.68	29541304	2.551710
1991	2.584520	2.567698	16455892.12	30098831	2.573619
1992	2.564940	2.624323	16331224.34	30762595	2.603421
1993	2.552119	2.686334	16249591.78	31489495	2.639093
1994	2.546061	2.758633	16211019.9	32336991	2.683811
1995	2.545509	2.841210	16207505.26	33304968	2.737128
104 73/74 BIENNIUM					
1989	2.250305	2.198044	14327912.46	25765707	2.216439
1990	2.245062	2.238010	14294529.77	26234193	2.240492
1991	2.240199	2.298716	14263566.57	26945795	2.278119
1992	2.241130	2.368822	14269494.34	27767585	2.323877
1993	2.246867	2.443055	14306022.38	28637752	2.374000
1994	2.258239	2.526940	14378429.02	29621061	2.432362
1995	2.274086	2.620522	14479328.42	30718039	2.498582
104 ALL OTHER CATEGORIES					
1989	1.227000	1.730000	7812429.246	20279245	1.552952
1990	1.276000	1.820000	8124417.048	21334235	1.628521
1991	1.327000	1.910000	8449139.046	22389224	1.704794
1992	1.380000	2.010000	8786595.24	23561435	1.788251
1993	1.435000	2.110000	9136785.63	24733646	1.872411
1994	1.493000	2.220000	9506077.314	26023078	1.964108
1995	1.553000	2.340000	9888103.194	27429730	2.062989
105 EXISTING INTRASTATE CONTRACTS					
1989	1.227000	1.730000	7812429.246	20279245	1.552952

G SETTLED PRICE
STRATA NGPA ESTIMATE PRICE TIMES THE NET PRESENT VALUE DISCOUNT
COLUMN E

H SETTLED PRICE AMOUNT PLUS THE ACTUAL MARKET OUT PRICE RECEIVED.
(EXAMPLE: 1989 102 SETTLED AMOUNT

		MARKET OUT		PRICE RECEIVED
3.583692	+		1.227 =	4.810692

	1990	1.276000	1.820000	8124417.048	21334235	1.628521
	1991	1.327000	1.910000	8449139.046	22389224	1.704794
	1992	1.380000	2.010000	8786595.24	23561435	1.788251
	1993	1.435000	2.110000	9136785.63	24733646	1.872411
	1994	1.493000	2.220000	9506077.314	26023078	1.964108
	1995	1.553000	2.340000	9888103.194	27429730	2.062989
108 STRIPPER GAS						
	1989	5.137640	4.367580	32711857.37	51197240	4.638628
	1990	5.142004	4.477959	32739643.38	52491115	4.711692
	1991	5.145898	4.589798	32764436.86	53802103	4.785536
	1992	5.150265	4.707016	32792241.98	55176145	4.863032
	1993	5.155813	4.825145	32827566.64	56560866	4.941535
	1994	5.163399	4.949728	32875867.45	58021241	5.024937
	1995	5.172289	5.081503	32932470.95	59565922	5.113458
109 OTHER						
	1989	0.000000	0.000000	0	0	0.000000
	1990	0.000000	0.000000	0	0	0.000000
	1991	0.000000	0.000000	0	0	0.000000
	1992	0.000000	0.000000	0	0	0.000000
	1993	0.000000	0.000000	0	0	0.000000
	1994	0.000000	0.000000	0	0	0.000000
	1995	0.000000	0.000000	0	0	0.000000

(1) EL PASO STRATA VOLUME TIMES EL PASO PRICE
(2) NW STRATA VOLUME TIMES NW PRICE
(3) EL PASO VALUE PLUS NW VALUE DIVIDED BY TOTAL STRATA VOLUMES

B VALUE ESTIMATE OF RESERVES FROM THE JICARILLA STRATA SETTLEMENT FIGURES

C JICARILLA STRATA ESTIMATE VALUE OF THE RESERVES AT A 10% NET PRESENT VALUE DISCOUNT.

D STRATA ESTIMATE FOR EACH YEAR AT THE 10% NET PRESENT VALUE DISCOUNT.
TIMES THE PERCENTAGE OF SETTLEMENT 87.0714%
(EXAMPLE 1989. 1938255 X 0.870714 = 1687666)

STRATA VALUE AMOUNT 16,907,964
SETTLEMENT VALUE 14,722,000
PERCENTAGE DIFFERENCE 0.870714

E NET PRESENT VALUE DISCOUNT
COLUMN C DIVIDED BY COLUMN B
ACTUAL AMOUNT RECEIVED DIVIDED BY THE STRATA 100% ESTIMATE.

F STRATA NGPA ESTIMATE PRICE FROM THE JICARILLA STRATA SUMMARY REPORT
AND VALUE ESTIMATE

K							L	M	N	O	P	Q	R
103 SETTLED PLUS ACTUAL	STRATA ESTIMATE PRICE POST 74	SETTLED PRICE POST 74	POST 74 SETTLED PLUS ACTUAL	STRATA ESTIMATE PRICE 73/74	SETTLED PRICE 73/74	73/74 SETTLED PLUS ACTUAL	SETTLED PRICE 104 ALL OTHER	SETTLED PRICE 105	STRATA ESTIMATE PRICE 108	SETTLED PRICE 108	108 SETTLEM PLUS ACTUAL	STRATA ESTIMATE PRICE 109	SETTLED PRICE 109
3.141133	1.654	1.404603	2.631603	1.205	1.023305	2.250305	1.227	1.227	4.605	3.910640	5.137640	1.654	1.405
3.096733	1.693	1.333839	2.609839	1.230	0.969062	2.245062	1.276	1.276	4.907	3.866004	5.142004	1.693	1.334
3.042902	1.764	1.257520	2.584520	1.281	0.913199	2.240199	1.327	1.327	5.357	3.818898	5.145898	1.764	1.258
2.997118	1.837	1.184940	2.564940	1.335	0.861130	2.241130	1.380	1.380	5.845	3.770265	5.150265	1.837	1.185
2.959512	1.914	1.117119	2.552119	1.391	0.811867	2.246867	1.435	1.435	6.375	3.720813	5.155813	1.914	1.117
2.928945	1.994	1.053061	2.546061	1.449	0.765239	2.258239	1.493	1.493	6.950	3.670399	5.163399	1.994	1.053
2.906291	2.077	0.992509	2.545509	1.509	0.721086	2.274086	1.553	1.553	7.574	3.619289	5.172289	2.077	0.993

103 SETTLED PLUS ACTUAL	STRATA ESTIMATE PRICE POST 74	SETTLED PRICE POST 74	POST 74 SETTLED PLUS ACTUAL	STRATA ESTIMATE PRICE 73/74	SETTLED PRICE 73/74	73/74 SETTLED PLUS ACTUAL	SETTLED PRICE 104 ALL OTHER	SETTLED PRICE 105	STRATA ESTIMATE PRICE 108	SETTLED PRICE 108	108 SETTLEM PLUS ACTUAL	STRATA ESTIMATE PRICE 109	SETTLED PRICE 109
2.875440	1.151	0.767405	2.497405	0.702	0.468044	2.198044	1.73	1.73	3.956	2.63758	4.36758	1.112	0.741403
2.908288	1.149	0.700136	2.520136	0.686	0.418010	2.238010	1.82	1.82	4.362	2.657959	4.477959	1.147	0.698918
2.946946	1.181	0.657698	2.567698	0.698	0.388716	2.298716	1.91	1.91	4.812	2.679798	4.589798	1.188	0.661596
2.994851	1.207	0.614323	2.624323	0.705	0.358822	2.368822	2.01	2.01	5.299	2.697016	4.707016	1.224	0.622976
3.047765	1.239	0.576334	2.686334	0.716	0.333055	2.443055	2.11	2.11	5.837	2.715145	4.825145	1.267	0.589359
3.111062	1.267	0.538633	2.758633	0.722	0.306940	2.526940	2.22	2.22	6.421	2.729728	4.949728	1.305	0.554788
3.184675	1.29	0.501210	2.841210	0.722	0.280522	2.620522	2.34	2.34	7.056	2.741503	5.081503	1.341	0.521025

(1) EL PASO STRATA VOLUME TIMES EL PASO PRICE
(2) NW STRATA VOLUME TIMES NW PRICE
(3) EL PASO VALUE PLUS NW VALUE DIVIDED BY TOTAL STRATA VOLUMES

B VALUE ESTIMATE OF RESERVES FROM THE JICARILLA STRATA SETTLEMENT FIGURES

C JICARILLA STRATA ESTIMATE VALUE OF THE RESERVES AT A 10% NET PRESENT VALUE DISCOUNT.

D STRATA ESTIMATE FOR EACH YEAR AT THE 10% NET PRESENT VALUE DISCOUNT.
TIMES THE PERCENTAGE OF SETTLEMENT 87.0714%
(EXAMPLE 1989. 1938255 X 0.870714 = 1687666)

STRATA VALUE AMOUNT	16,907,964
SETTLEMENT VALUE	14,722,000
PERCENTAGE DIFFERENCE	0.870714

E NET PRESENT VALUE DISCOUNT
COLUMN C DIVIDED BY COLUMN B
ACTUAL AMOUNT RECEIVED DIVIDED BY THE STRATA 100% ESTIMATE.

F STRATA NGPA ESTIMATE PRICE FROM THE JICARILLA STRATA SUMMARY REPORT AND VALUE ESTIMATE

G SETTLED PRICE
STRATA NGPA ESTIMATE PRICE TIMES THE NET PRESENT VALUE DISCOUNT COLUMN E

H SETTLED PRICE AMOUNT PLUS THE ACTUAL MARKET OUT PRICE RECEIVED.
(EXAMPLE: 1989 102 SETTLED AMOUNT 3.583692 + MARKET OUT 1.227 = PRICE RECEIVED 4.810692

Aug-87	1.87461	1.179	1.59
Sep-87	1.97955	1.245	1.59
Oct-87	1.99227	1.253	1.59
Nov-87			1.59
Dec-87			1.59

104		104	104	104
POST 74 PRICE	SPOT	POST 74 DIFF	73/74 PRICE	73/74 DIFF
2.881	1.73	1.151	2.432	0.702
2.969	1.82	1.149	2.506	0.686
3.091	1.91	1.181	2.608	0.698
3.217	2.01	1.207	2.715	0.705
3.349	2.11	1.239	2.826	0.716
3.487	2.22	1.267	2.942	0.722
3.63	2.34	1.29	3.062	0.722

WEIGHTED AVERAGE PRICING CALCULATION FOR THE MARKET OUT PERIOD

	Reserve Estimate (Strata)	
El Paso	6,367,098	35%
Northwe	11,722,107	65%
Total	18,089,205	

	Pipeline[1]	MARKET OUT PRICE	102 NGPA Price[2]	ELPASO VALUE[3]	NW VALUE[4]	102 Wtd Avg Price[5]	103 NGPA Price[2]	ELPASO VALUE[3]	NW VALUE[4]	103 Wtd Avg Price[5]	104 POST 74 Price[2]	104P74 ELPASO VALUE[3]	104P74 NW VALUE[4]	104P74 Wtd Avg Price[5]	104 BIEN Price[2]	ELPASO VALUE[3]	NW VALUE[4]	104 73/74 Wtd Avg Price[5]
Jan-87	E	$2.500	$4.711	15,917,745	55,224,065	$3.933	$3.354	15,917,745	39,319,135	$3.054	2.786	15,917,745	32,653,289	2.685	$2.363	15,917,745	27,702,902	2.411
Feb-87	E	$2.500	$4.735	15,917,745	55,502,817	$3.948	$3.360	15,917,745	39,388,354	$3.057	2.791	15,917,745	32,716,916	$2.689	$2.367	15,917,745	27,750,131	2.414
Mar-87	E	$2.500	$4.755	15,917,745	55,735,817	$3.961	$3.363	15,917,745	39,425,138	$3.059	2.794	15,917,745	32,753,712	$2.691	$2.369	15,917,745	27,774,653	2.415
Apr-87	E	$2.500	$4.775	15,917,745	55,968,829	$3.974	$3.366	15,917,745	39,461,934	$3.061	2.797	15,917,745	32,790,496	$2.693	$2.372	15,917,745	27,799,188	2.417
May-87	E	$2.500	$4.804	15,917,745	56,312,217	$3.993	$3.377	15,917,745	39,584,571	$3.068	2.806	15,917,745	32,888,610	$2.698	$2.379	15,917,745	27,885,029	2.421
Jun-87	E	$2.500	$4.833	15,917,745	56,655,592	$4.012	$3.387	15,917,745	39,707,207	$3.075	2.814	15,917,745	32,986,712	$2.704	$2.386	15,917,745	27,970,881	2.426
Jul-87	N	$1.590	$4.863	30,960,141	18,638,150	$2.742	$3.398	21,634,380	18,638,150	$2.226	2.822	17,970,688	18,638,150	$2.024	$2.393	15,239,573	18,638,150	1.873
Aug-87	N	$1.590	$4.894	31,159,979	18,638,150	$2.753	$3.408	21,700,993	18,638,150	$2.230	2.832	18,030,641	18,638,150	$2.027	$2.401	15,286,199	18,638,150	1.875
Sep-87	N	$1.590	$4.925	31,359,817	18,638,150	$2.764	$3.419	21,767,605	18,638,150	$2.234	2.841	18,090,594	18,638,150	$2.030	$2.408	15,332,832	18,638,150	1.878
Oct-87	N	$1.590	$4.957	31,559,655	18,638,150	$2.775	$3.430	21,840,878	18,638,150	$2.238	2.851	18,150,540	18,638,150	$2.034	$2.415	15,379,458	18,638,150	1.881
Nov-87	N	$1.590	$4.983	31,726,186	18,638,150	$2.784	$3.438	21,887,511	18,638,150	$2.240	2.857	18,190,512	18,638,150	$2.036	$2.421	15,412,764	18,638,150	1.882
Dec-87	N	$1.590	$5.009	31,892,717	18,638,150	$2.793	$3.445	21,934,137	18,638,150	$2.243	2.863	18,230,479	18,638,150	$2.038	$2.426	15,446,070	18,638,150	1.884
Jan-88	N	$1.590	$5.035	32,059,249	18,638,150	$2.803	$3.452	21,980,763	18,638,150	$2.245	2.870	18,270,445	18,638,150	$2.040	$2.431	15,479,377	18,638,150	1.886
Feb-88	N	$1.495	$5.071	32,289,827	17,524,550	$2.754	$3.466	22,068,565	17,524,550	$2.189	2.880	18,339,006	17,524,550	$1.983	$2.440	15,536,827	17,524,550	1.828
Mar-88	N	$1.495	$5.100	32,469,965	17,524,550	$2.764	$3.474	22,121,941	17,524,550	$2.192	2.887	18,379,036	17,524,550	$1.985	$2.445	15,570,191	17,524,550	1.830
Apr-88	N	$1.242	$5.128	32,650,109	14,558,857	$2.610	$3.483	22,175,316	14,558,857	$2.031	2.893	18,419,066	14,558,857	$1.823	$2.451	15,603,548	14,558,857	1.667
May-88	N	$1.242	$5.155	32,823,574	14,558,857	$2.619	$3.490	22,222,019	14,558,857	$2.033	2.899	18,459,096	14,558,857	$1.825	$2.456	15,636,905	14,558,857	1.669
Jun-88	N	$1.242	$5.182	32,997,046	14,552,996	$2.629	$3.497	22,268,722	14,552,996	$2.036	2.905	18,499,126	14,552,996	$1.827	$2.461	15,670,269	14,552,996	1.671

			104REP SMALL Price[2]	ELPASO VALUE[3]	NW VALUE[4]	104 RS Wtd Avg Price[5]	104 Flowing Small Price[2]	ELPASO VALUE[3]	NW VALUE[4]	104 FS Wtd Avg Price[5]	105 Intrastate Price[7]	108 NGPA Price[2]	ELPASO VALUE[3]	NW VALUE[4]	108 Wtd Avg Price[5]	109 NGPA Price[2]	ELPASO VALUE[3]	NW VALUE[4]	109 Wtd Avg Price[5]
Jan-87	E	2.500	1.347	15,917,745	15,792,585	1.753	0.708	15,917,745	8,293,496	1.338	1.753	5.042	15,917,745	59,108,396	4.148	2.786	15,917,745	32,653,289	2.685
Feb-87	E	2.500	1.349	15,917,745	15,817,577	1.754	0.709	15,917,745	8,312,216	1.339	1.754	5.068	15,917,745	59,402,656	4.164	2.791	15,917,745	32,716,916	2.689
Mar-87	E	2.500	1.350	15,917,745	15,829,850	1.755	0.710	15,917,745	8,324,478	1.340	1.755	5.088	15,917,745	59,647,930	4.177	2.794	15,917,745	15,829,850	1.755
Apr-87	E	2.500	1.351	15,917,745	15,842,111	1.756	0.711	15,917,745	8,336,739	1.341	1.756	5.109	15,917,745	59,893,203	4.191	2.797	15,917,745	15,842,111	1.756
May-87	E	2.500	1.356	15,917,745	15,891,168	1.758	0.713	15,917,745	8,361,273	1.342	1.758	5.141	15,917,745	60,261,113	4.211	2.806	15,917,745	15,891,168	1.758
Jun-87	E	2.500	1.360	15,917,745	15,940,213	1.761	0.715	15,917,745	8,385,796	1.344	1.761	5.172	15,917,745	60,629,023	4.232	2.814	15,917,745	15,940,213	1.761
Jul-87	N	1.590	1.364	(6)	(6)	1.364	0.717	(6)	(6)	0.717	1.364	5.204	33,131,710	18,638,150	2.862	2.822	17,970,688	18,638,150	2.024
Aug-87	N	1.590	1.368			1.368	0.720			0.720	1.368	5.237	33,344,874	18,638,150	2.874	2.832	18,030,641	18,638,150	2.027
Sep-87	N	1.590	1.372			1.372	0.722			0.722	1.372	5.271	33,558,032	18,638,150	2.885	2.841	18,090,594	18,638,150	2.030
Oct-87	N	1.590	1.377			1.377	0.724			0.724	1.377	5.304	33,771,190	18,638,150	2.897	2.851	18,150,540	18,638,150	2.034
Nov-87	N	1.590	1.380			1.380	0.725			0.725	1.380	5.332	33,951,047	18,638,150	2.907	2.857	18,190,512	18,638,150	2.036
Dec-87	N	1.590	1.383			1.383	0.726			0.726	1.383	5.361	34,130,899	18,638,150	2.917	2.863	18,230,479	18,638,150	2.038
Jan-88	N	1.590	1.386			1.386	0.727			0.727	1.386	5.389	34,310,757	18,638,150	2.927	2.870	18,270,445	18,638,150	2.040
Feb-88	N	1.495	1.391			1.391	0.730			0.730	1.391	5.427	34,551,579	17,524,550	2.879	2.880	18,339,006	17,524,550	1.983
Mar-88	N	1.495	1.394			1.394	0.732			0.732	1.394	5.457	34,745,069	17,524,550	2.890	2.887	18,379,036	17,524,550	1.985
Apr-88	N	1.242	1.398			1.398	0.734			0.734	1.398	5.487	34,938,553	14,558,857	2.736	2.893	18,419,066	14,558,857	1.823
May-88	N	1.242	1.401			1.401	0.735			0.735	1.401	5.517	35,125,363	14,558,857	2.747	2.899	18,459,096	14,558,857	1.825
Jun-88	N	1.242	1.404			1.404	0.736			0.736	1.404	5.546	35,312,174	14,552,996	2.757	2.905	18,499,126	14,552,996	1.827

(1) E: El Paso ; N:Northwest
(2) Includes Tax Reimbursement
(3) For El Paso from 1/87 - 6/87 this is the market out price x the Strata volume estimate
For the remainder of the time this is the NGPA category price x the Strata volume estimate
(4) For Northwest from 1/87 - 6/87 this is the NGPA category price x the Strata volume estimate
For the remainder of the time this is the Northwest market out price x the Strata volume estimate
(5) This is the weighted average price
(6) The NW contract terms provided for the lessor of the contract price or the NGPA price
(7) This price is equivalent to the Category 104 replacement price for small producers

3N

EL PASO 2/88		6,367,098	35%	
NORTHWEST 2/88		11,722,107	65%	
TOTAL		18,089,205		

		M/O PRICE	102 +TAX	ELPASO	NW	102 w/a	103 +TAX	ELPASO	NW	103 w/a	104REP SMALL +TAX	ELPASO	NW	RS w/a	104	104FL SMALL +TAX	ELPASO	NW	SF w/a	RS w/a	105	107 +TAX	ELPASO	NW	107 w/a	108 STRIPPER +TAX	ELPASO	NW	108 other w/a	109 +TAX	ELPASO	NW	109 w/a
E	Jan-87	2.50	4.71	15,917,745	39,319,135	3.05	3.35	15,917,745	39,319,135	3.05	1.35	15,917,745	15,792,585	1.75	0.71	15,917,745	8,293,496	1.34	1.61	6.66	15,917,745	78,052,177	5.19	5.04	15,917,745	59,108,396	4.15	2.79	15,917,745	32,653,289	2.69
E	Feb-87	2.50	4.73	15,917,745	39,388,354	3.06	3.36	15,917,745	39,388,354	3.06	1.35	15,917,745	15,817,577	1.75	0.71	15,917,745	8,312,216	1.34	1.61	6.67	15,917,745	78,190,603	5.20	5.07	15,917,745	59,402,656	4.16	2.79	15,917,745	32,716,916	2.69
E	Mar-87	2.50	4.75	15,917,745	39,425,138	3.06	3.36	15,917,745	39,425,138	3.06	1.35	15,917,745	15,829,850	1.76	0.71	15,917,745	8,324,478	1.34	1.61	6.68	15,917,745	78,264,183	5.21	5.09	15,917,745	59,647,930	4.18	2.79	15,917,745	15,829,850	1.76
E	Apr-87	2.50	4.77	15,917,745	39,461,934	3.06	3.37	15,917,745	39,461,934	3.06	1.35	15,917,745	15,842,111	1.76	0.71	15,917,745	8,336,739	1.34	1.61	6.68	15,917,745	78,337,763	5.21	5.11	15,917,745	59,893,203	4.19	2.80	15,917,745	15,842,111	1.76
E	May-87	2.50	4.80	15,917,745	39,584,571	3.07	3.38	15,917,745	39,584,571	3.07	1.36	15,917,745	15,891,168	1.76	0.71	15,917,745	8,361,273	1.34	1.61	6.70	15,917,745	78,583,036	5.22	5.14	15,917,745	60,261,113	4.21	2.81	15,917,745	15,891,168	1.76
E	Jun-87	2.50	4.83	15,917,745	39,707,207	3.08	3.39	15,917,745	39,707,207	3.08	1.36	15,917,745	15,940,213	1.76	0.72	15,917,745	8,385,796	1.34	1.62	6.72	15,917,745	78,828,309	5.24	5.17	15,917,745	60,629,023	4.23	2.81	15,917,745	15,940,213	1.76
N	Jul-87	1.59	4.86	21,634,380	18,638,150	2.23	3.40	21,634,380	18,638,150	2.23	1.36			1.36	0.72			0.72	1.36	6.75	42,950,406	18,638,150	3.40	5.20	33,131,710	18,638,150	2.86	2.82	17,970,688	18,638,150	2.02
N	Aug-87	1.59	4.89	21,700,993	18,638,150	2.23	3.41	21,700,993	18,638,150	2.23	1.37			1.37	0.72			0.72	1.37	6.77	43,083,631	18,638,150	3.41	5.24	33,344,874	18,638,150	2.87	2.83	18,030,641	18,638,150	2.03
N	Sep-87	1.59	4.93	21,767,605	18,638,150	2.23	3.42	21,767,605	18,638,150	2.23	1.37			1.37	0.72			0.72	1.37	6.79	43,216,856	18,638,150	3.42	5.27	33,558,032	18,638,150	2.89	2.84	18,090,594	18,638,150	2.03
N	Oct-87	1.59	4.96	21,840,878	18,638,150	2.24	3.43	21,840,878	18,638,150	2.24	1.38			1.38	0.72			0.72	1.38	6.81	43,363,401	18,638,150	3.43	5.30	33,771,190	18,638,150	2.90	2.85	18,150,540	18,638,150	2.03
N	Nov-87	1.59	4.98	21,887,511	18,638,150	2.24	3.44	21,887,511	18,638,150	2.24	1.38			1.38	0.72			0.72	1.38	6.83	43,456,660	18,638,150	3.43	5.33	33,951,047	18,638,150	2.91	2.86	18,190,512	18,638,150	2.04
N	Dec-87	1.59	5.01	21,934,137	18,638,150	2.24	3.44	21,934,137	18,638,150	2.24	1.38			1.38	0.73			0.73	1.38	6.84	43,549,919	18,638,150	3.44	5.36	34,130,899	18,638,150	2.92	2.86	18,230,479	18,638,150	2.04
N	Jan-88	1.59	5.04	21,980,763	18,638,150	2.25	3.45	21,980,763	18,638,150	2.25	1.39			1.39	0.73			0.73	1.39	6.85	43,643,178	18,638,150	3.44	5.39	34,310,757	18,638,150	2.93	2.87	18,270,445	18,638,150	2.04
N	Feb-88	1.50	5.07	22,068,565	17,524,550	2.19	3.47	22,068,565	17,524,550	2.19	1.39			1.39	0.73			0.73	1.39	6.88	43,818,776	17,524,550	3.39	5.43	34,551,579	17,524,550	2.88	2.88	18,339,006	17,524,550	1.98
N	Mar-88	1.50	5.10	22,121,941	17,524,550	2.19	3.47	22,121,941	17,524,550	2.19	1.39			1.39	0.73			0.73	1.39	6.90	43,925,520	17,524,550	3.40	5.46	34,745,069	17,524,550	2.89	2.89	18,379,036	17,524,550	1.98
N	Apr-88	1.24	5.13	22,175,316	14,558,857	2.03	3.48	22,175,316	14,558,857	2.03	1.40			1.40	0.73			0.73	1.40	6.92	44,032,271	14,558,857	3.24	5.49	34,938,553	14,558,857	2.74	2.89	18,419,066	14,558,857	1.82
N	May-88	1.24	5.16	22,222,019	14,558,857	2.03	3.49	22,222,019	14,558,857	2.03	1.40			1.40	0.74			0.74	1.40	6.93	44,125,676	14,558,857	3.24	5.52	35,125,363	14,558,857	2.75	2.90	18,459,096	14,558,857	1.83
N	Jun-88	1.24	5.18	22,268,722	14,552,996	2.04	3.50	22,268,722	14,552,996	2.04	1.40			1.40	0.74			0.74	1.40	6.94	44,219,082	14,552,996	3.25	5.55	35,312,174	14,552,996	2.76	2.91	18,499,126	14,552,996	1.83

	18008.00	0.77
	5254.00	0.23
	23262.00	

Basedata

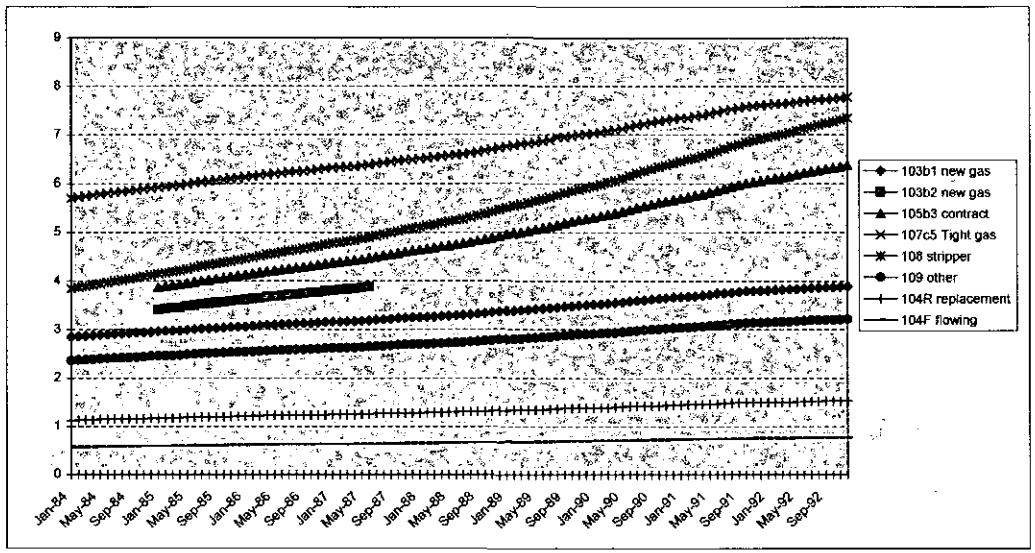
	103b1 new gas	103b2 new gas	105b3 contract	107c5 Tight gas	108 stripper	109 other	replacemei small	flowing small	El Paso Contract	Inside FERC El Paso	103	105	108	109
Jan-84	2.849			5.698	3.841	2.359	1.12	0.566						
Feb-84	2.859			5.718	3.866	2.367	1.124	0.568						
Mar-84	2.869			5.738	3.891	2.375	1.128	0.57						
Apr-84	2.879			5.758	3.916	2.383	1.132	0.572						
May-84	2.889			5.778	3.942	2.391	1.136	0.574						
Jun-84	2.899			5.798	3.968	2.399	1.14	0.576						
Jul-84	2.909			5.818	3.994	2.407	1.144	0.578						
Aug-84	2.917			5.834	4.018	2.414	1.147	0.58						
Sep-84	2.925			5.850	4.042	2.421	1.15	0.582						
Oct-84	2.933			5.866	4.066	2.428	1.153	0.584						
Nov-84	2.942			5.884	4.092	2.436	1.157	0.586						
Dec-84	2.951			5.902	4.118	2.444	1.161	0.588						
Jan-85	2.960	3.415	3.869	5.920	4.144	2.452	1.165	0.59						
Feb-85	2.966	3.428	3.887	5.932	4.166	2.457	1.167	0.591						
Mar-85	2.972	3.442	3.905	5.944	4.188	2.462	1.169	0.592						
Apr-85	2.978	3.455	3.923	5.956	4.210	2.467	1.172	0.593						
May-85	2.991	3.477	3.950	5.982	4.242	2.478	1.177	0.596						
Jun-85	3.004	3.498	3.977	6.008	4.274	2.489	1.182	0.599						
Jul-85	3.017	3.520	4.004	6.034	4.306	2.500	1.187	0.602						
Aug-85	3.024	3.535	4.023	6.048	4.330	2.506	1.19	0.603						
Sep-85	3.031	3.550	4.043	6.062	4.354	2.512	1.193	0.604						
Oct-85	3.038	3.565	4.063	6.076	4.379	2.518	1.196	0.605						
Nov-85	3.047	3.582	4.084	6.094	4.405	2.525	1.199	0.607						
Dec-85	3.056	3.599	4.105	6.112	4.432	2.532	1.202	0.609						
Jan-86	3.065	3.616	4.127	6.130	4.459	2.539	1.205	0.611						
Feb-86	3.074	3.633	4.149	6.148	4.486	2.546	1.208	0.613						
Mar-86	3.083	3.650	4.171	6.166	4.513	2.553	1.211	0.615						
Apr-86	3.092	3.667	4.193	6.184	4.540	2.560	1.214	0.617						
May-86	3.099	3.682	4.212	6.198	4.565	2.566	1.217	0.618						
Jun-86	3.106	3.697	4.232	6.212	4.590	2.572	1.22	0.619						
Jul-86	3.113	3.712	4.252	6.226	4.615	2.578	1.223	0.62						
Aug-86	3.119	3.726	4.270	6.238	4.639	2.583	1.225	0.621						
Sep-86	3.125	3.740	4.288	6.250	4.663	2.588	1.227	0.622						
Oct-86	3.131	3.754	4.306	6.262	4.687	2.593	1.229	0.623						
Nov-86	3.141	3.772	4.330	6.282	4.716	2.601	1.233	0.625						
Dec-86	3.151	3.791	4.354	6.302	4.746	2.609	1.237	0.627						
Jan-87	3.161	3.810	4.378	6.322	4.776	2.617	1.241	0.629						
Feb-87	3.164	3.821	4.393	6.328	4.796	2.620	1.242	0.63						
Mar-87	3.167	3.832	4.408	6.334	4.816	2.623	1.243	0.631						

	103b1 new gas	103b2 new gas	105b3 contract	107c5 Tight gas	108 stripper	109 other	replacemei small	flowing small	El Paso Contract	Inside FERC El Paso	103	105	108	109
Apr-87	3.170	3.843	4.423	6.340	4.836	2.626	1.244	0.632						
May-87	3.180	3.862	4.447	6.360	4.866	2.634	1.248	0.634						
Jun-87	3.190	3.881	4.471	6.380	4.896	2.642	1.252	0.636						
Jul-87	3.200		4.495	6.400	4.926	2.650	1.256	0.638						
Aug-87	3.210		4.520	6.420	4.958	2.659	1.26	0.64						
Sep-87	3.220		4.546	6.440	4.990	2.668	1.264	0.642						
Oct-87	3.231		4.572	6.462	5.022	2.677	1.268	0.644						
Nov-87	3.238		4.593	6.476	5.049	2.683	1.271	0.645						
Dec-87	3.245		4.614	6.490	5.076	2.689	1.274	0.646						
Jan-88	3.252		4.635	6.504	5.103	2.695	1.277	0.647						
Feb-88	3.260		4.657	6.520	5.131	2.701	1.28	0.649						
Mar-88	3.268		4.679	6.536	5.160	2.707	1.283	0.651						
Apr-88	3.276		4.701	6.552	5.189	2.713	1.286	0.653						
May-88	3.283		4.722	6.566	5.217	2.719	1.289	0.654						
Jun-88	3.290		4.743	6.580	5.245	2.725	1.292	0.655						
Jul-88	3.297		4.765	6.594	5.273	2.731	1.295	0.656						
Aug-88	3.309		4.793	6.618	5.308	2.741	1.3	0.658						
Sep-88	3.321		4.821	6.642	5.343	2.751	1.305	0.66						
Oct-88	3.333		4.849	6.666	5.379	2.761	1.31	0.662						
Nov-88	3.345		4.879	6.690	5.416	2.771	1.315	0.664						
Dec-88	3.358		4.909	6.716	5.453	2.781	1.32	0.666						
Jan-89	3.371		4.939	6.742	5.491	2.791	1.325	0.688	$1.227	$1.97	2.97	1.55	4.64	2.53
Feb-89	3.384		4.970	6.768	5.530	2.802	1.33	0.671	$1.227	$1.65	2.97	1.55	4.64	2.53
Mar-89	3.398		5.002	6.796	5.569	2.813	1.335	0.674	$1.227	$1.50	2.97	1.55	4.64	2.53
Apr-89	3.412		5.034	6.824	5.609	2.824	1.34	0.677	$1.227	$1.57	2.97	1.55	4.64	2.53
May-89	3.423		5.063	6.846	5.646	2.833	1.344	0.679	$1.227	$1.66	2.97	1.55	4.64	2.53
Jun-89	3.434		5.092	6.868	5.683	2.842	1.349	0.681	$1.227	$1.66	2.97	1.55	4.64	2.53
Jul-89	3.446		5.121	6.892	5.72	2.852	1.354	0.683	$1.227	$1.62	2.97	1.55	4.64	2.53
Aug-89	3.460		5.154	6.948	5.762	2.864	1.36	0.686	$1.227	$1.64	2.97	1.55	4.64	2.53
Sep-89	3.474		5.188	6.948	5.804	2.876	1.366	0.689	$1.227	$1.55	2.97	1.55	4.64	2.53
Oct-89	3.488		5.222	6.976	5.846	2.888	1.372	0.692	$1.227	$1.55	2.97	1.55	4.64	2.53
Nov-89	3.497		5.248	6.995	5.879	2.895	1.375	0.694	$1.227	$1.71	2.97	1.55	4.64	2.53
Dec-89	3.506		5.274	7.012	5.913	2.902	1.379	0.696	$1.227	$2.10	2.97	1.55	4.64	2.53
Jan-90	3.515		5.300	7.03	5.947	2.909	1.383	0.698	$1.276	$2.65	2.97	1.63	4.71	2.55
Feb-90	3.526		5.329	7.052	5.984	2.918	1.387	0.700	$1.276	$1.80	2.97	1.63	4.71	2.55
Mar-90	3.537		5.358	7.074	6.021	2.927	1.391	0.702	$1.276	$1.43	2.97	1.63	4.71	2.55
Apr-90	3.548		5.387	7.096	6.058	2.936	1.395	0.704	$1.276	$1.43	2.97	1.63	4.71	2.55
May-90	3.565		5.425	7.13	6.106	2.95	1.402	0.707	$1.276	$1.44	2.97	1.63	4.71	2.55
Jun-90	3.582		5.464	7.164	6.154	2.964	1.409	0.710	$1.276	$1.47	2.97	1.63	4.71	2.55

	103b1 new gas	103b2 new gas	105b3 contract	107c5 Tight gas	108 stripper	109 other	replacemer small	flowing small	El Paso Contract	Inside FERC El Paso	103	105	108	109
Jul-90	3.599		5.503	7.198	6.203	2.978	1.416	0.713	$1.276	$1.42	2.97	1.63	4.71	2.55
Aug-90	3.612		5.537	7.224	6.246	2.989	1.421	0.716	$1.276	$1.40	2.97	1.63	4.71	2.55
Sep-90	3.626		5.571	7.252	6.289	3.000	1.426	0.719	$1.276	$1.40	2.97	1.63	4.71	2.55
Oct-90	3.640		5.605	7.280	6.332	3.011	1.431	0.722	$1.276	$1.68	2.97	1.63	4.71	2.55
Nov-90	3.651		5.635	7.302	6.371	3.020	1.435	0.724	$1.276	$1.92	2.97	1.63	4.71	2.55
Dec-90	3.662		5.665	7.324	6.410	3.029	1.439	0.726	$1.276	$1.95	2.97	1.63	4.71	2.55
Jan-91	3.673		5.695	7.346	6.449	3.038	1.443	0.728	$1.327	$1.74	2.98	1.70	4.79	2.58
Feb-91	3.682		5.723	7.346	6.485	3.046	1.447	0.730	$1.327	$1.26	2.98	1.70	4.79	2.58
Mar-91	3.691		5.751	7.382	6.522	3.054	1.451	0.732	$1.327	$1.05	2.98	1.70	4.79	2.58
Apr-91	3.700		5.779	7.400	6.559	3.062	1.455	0.734	$1.327	$1.05	2.98	1.70	4.79	2.58
May-91	3.717		5.819	7.434	6.610	3.076	1.462	0.737	$1.327	$1.05	2.98	1.70	4.79	2.58
Jun-91	3.751		5.86	7.468	6.661	3.090	1.469	0.740	$1.327	$1.06	2.98	1.70	4.79	2.58
Jul-91	4		5.901	7.502	6.713	3.104	1.476	0.743	$1.327	$0.99	2.98	1.70	4.79	2.58
Aug-91	3.764		5.935	7.528	6.757	3.114	1.481	0.745	$1.327	$1.05	2.98	1.70	4.79	2.58
Sep-91	3.777		5.969	7.554	6.801	3.124	1.486	0.747	$1.327	$1.17	2.98	1.70	4.79	2.58
Oct-91	3.790		6.000	7.580	6.845	3.134	1.491	0.750	$1.327	$1.30	2.98	1.70	4.79	2.58
Nov-91	3.796		6.027	7.592	6.878	3.139	1.493	0.751	$1.327	$1.57	2.98	1.70	4.79	2.58
Dec-91	3.802		6.052	7.604	6.911	3.144	1.495	0.752	$1.327	$1.83	2.98	1.70	4.79	2.58
Jan-92	3.808		6.077	7.616	6.945	3.149	1.497	0.753	$1.380	$1.66	3.00	1.79	4.86	2.61
Feb-92	3.814		6.101	7.628	6.978	3.154	1.499	0.754	$1.380	$1.00	3.00	1.79	4.86	2.61
Mar-92	3.820		6.125	7.640	7.011	3.159	1.501	0.755	$1.380	$1.14	3.00	1.79	4.86	2.61
Apr-92	3.826		6.149	7.652	7.045	3.164	1.503	0.756	$1.380	$1.27	3.00	1.79	4.86	2.61
May-92	3.836		6.180	7.672	7.086	3.173	1.507	0.758	$1.380	$1.42	3.00	1.79	4.86	2.61
Jun-92	3.846		6.212	7.692	7.128	3.182	1.511	0.760	$1.380	$1.54	3.00	1.79	4.86	2.61
Jul-92	3.856		6.244	7.712	7.170	3.191	1.515	0.762	$1.380	$1.38	3.00	1.79	4.86	2.61
Aug-92	3.861		6.267	7.722	7.203	3.195	1.517	0.763	$1.380	$1.85	3.00	1.79	4.86	2.61
Sep-92	3.866		6.291	7.732	7.236	3.199	1.519	0.764	$1.380	$1.92	3.00	1.79	4.86	2.61
Oct-92	3.871		6.315	7.742	7.269	3.203	1.521	0.765	$1.380	$2.45	3.00	1.79	4.86	2.61
Nov-92	3.879		6.343	7.758	7.307	3.210	1.524	0.767	$1.380	$2.11	3.00	1.79	4.86	2.61
Dec-92	3.887		6.371	7.774	7.345	3.217	1.527	0.769	$1.380	$2.04	3.00	1.79	4.86	2.61
Jan-93									$1.435	$2.10	3.02	1.87	4.94	2.65
Feb-93									$1.435	$1.58	3.02	1.87	4.94	2.65
Mar-93									$1.435	$1.84	3.02	1.87	4.94	2.65
Apr-93									$1.435	$1.89	3.02	1.87	4.94	2.65
May-93									$1.435	$2.20	3.02	1.87	4.94	2.65
Jun-93									$1.435	$1.65	3.02	1.87	4.94	2.65
Jul-93									$1.435	$1.76	3.02	1.87	4.94	2.65
Aug-93									$1.435	$1.84	3.02	1.87	4.94	2.65
Sep-93									$1.435	$2.01	3.02	1.87	4.94	2.65

	103b1 new gas	103b2 new gas	105b3 contract	107c5 Tight gas	108 stripper	108 other	109 replaceme small	109 flowing small	El Paso Contract	Inside FERC El Paso	103	105	108	109
Oct-93									$1.435	$1.76	3.02	1.87	4.94	2.65
Nov-93									$1.435	$1.76	3.02	1.87	4.94	2.65
Dec-93									$1.435	$2.24	3.02	1.87	4.94	2.65
Jan-94									$1.493	$1.94	3.05	1.96	5.02	2.69
Feb-94									$1.493	$1.82	3.05	1.96	5.02	2.69
Mar-94									$1.493	$1.98	3.05	1.96	5.02	2.69
Apr-94									$1.493	$1.73	3.05	1.96	5.02	2.69
May-94									$1.493	$1.74	3.05	1.96	5.02	2.69
Jun-94									$1.493	$1.48	3.05	1.96	5.02	2.69
Jul-94									$1.493	$1.58	3.05	1.96	5.02	2.69
Aug-94									$1.493	$1.54	3.05	1.96	5.02	2.69
Sep-94									$1.493	$1.43	3.05	1.96	5.02	2.69
Oct-94									$1.493	$1.20	3.05	1.96	5.02	2.69
Nov-94									$1.493	$1.46	3.05	1.96	5.02	2.69
Dec-94									$1.493	$1.63	3.05	1.96	5.02	2.69
Jan-95									$1.553	$1.45	3.09	2.06	5.11	2.75
Feb-95									$1.553	$1.09	3.09	2.06	5.11	2.75
Mar-95									$1.553	$1.08	3.09	2.06	5.11	2.75
Apr-95									$1.553	$1.09	3.09	2.06	5.11	2.75
May-95									$1.553	$1.17	3.09	2.06	5.11	2.75
Jun-95									$1.553	$1.17	3.09	2.06	5.11	2.75

Graphs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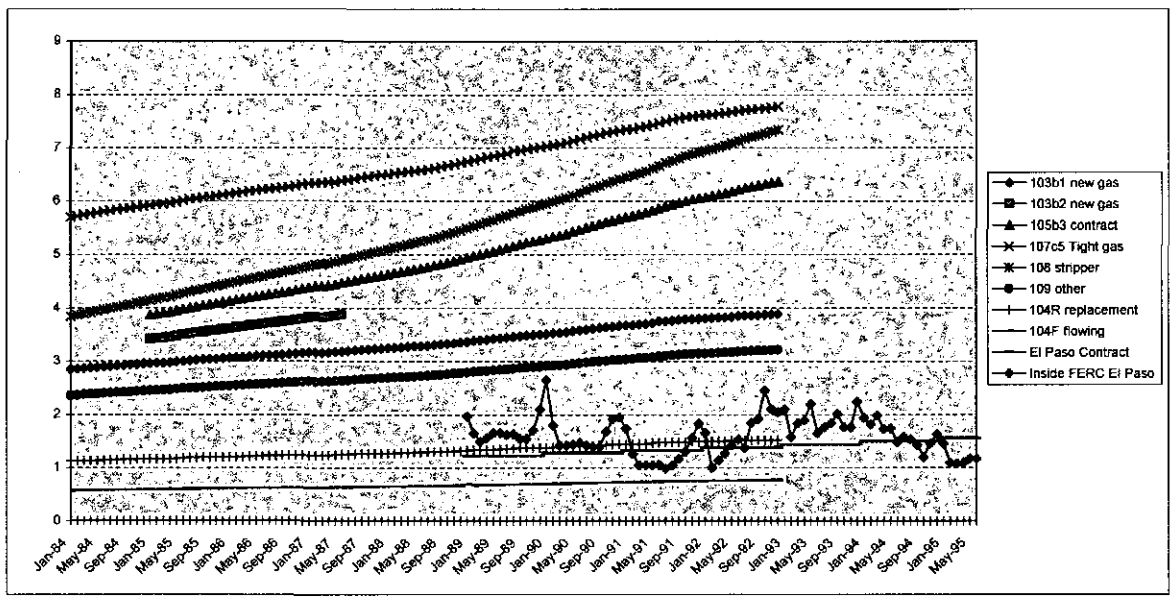
103b2 new gas
105b3 contract
107c5 Tight gas
108 stripper
109 other
104R replacement
104F flowing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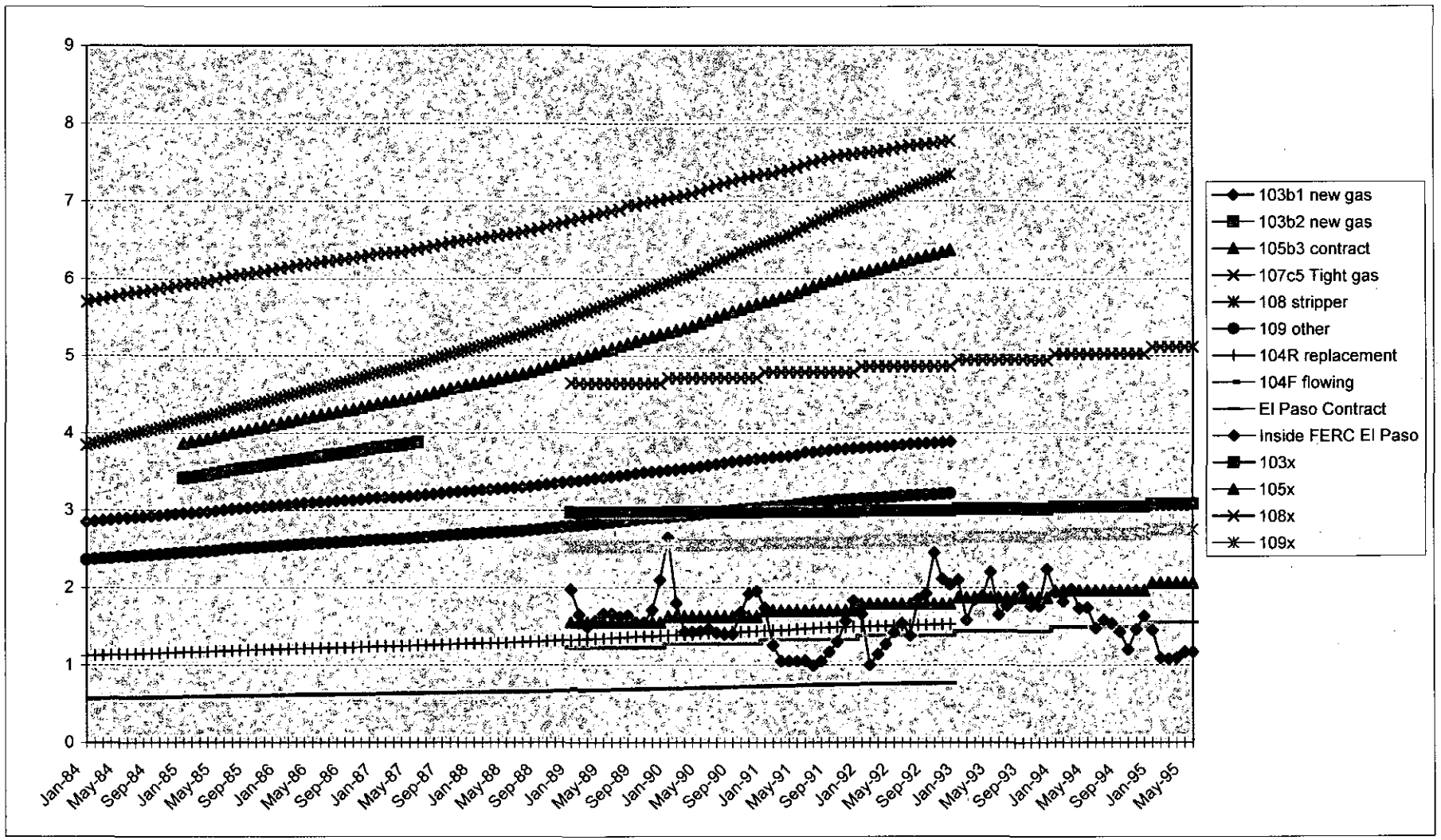
103b1 new gas
103b2 new gas
105b3 contract
107c5 Tight gas
108 stripper
109 other
104R replacement
104F flowing
El Paso Contract
Inside FERC El Paso

Graphs2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103b1 new gas
103b2 new gas
105b3 contract
107c5 Tight gas
108 stripper
109 other
104R replacement
104F flowing
El Paso Contract
Inside FERC El Paso
103x
105x
108x
109x

4.D

87-88

			103b1	105b3	107c5	108	109	replacemei	flowing
			new gas	contract	Tight gas	stripper	other	small	small
E	Jan-87	2.50	3.161	4.378	6.322	4.776	2.617	1.241	0.629
E	Feb-87	2.50	3.164	4.393	6.328	4.796	2.620	1.242	0.63
E	Mar-87	2.50	3.167	4.408	6.334	4.816	2.623	1.243	0.631
E	Apr-87	2.50	3.170	4.423	6.340	4.836	2.626	1.244	0.632
E	May-87	2.50	3.180	4.447	6.360	4.866	2.634	1.248	0.634
E	Jun-87	2.50	3.190	4.471	6.380	4.896	2.642	1.252	0.636
N	Jul-87		3.200	4.495	6.400	4.926	2.650	1.256	0.638
N	Aug-87		3.210	4.520	6.420	4.958	2.659	1.26	0.64
N	Sep-87		3.220	4.546	6.440	4.990	2.668	1.264	0.642
N	Oct-87		3.231	4.572	6.462	5.022	2.677	1.268	0.644
N	Nov-87		3.238	4.593	6.476	5.049	2.683	1.271	0.645
N	Dec-87		3.245	4.614	6.490	5.076	2.689	1.274	0.646
N	Jan-88		3.252	4.635	6.504	5.103	2.695	1.277	0.647
N	Feb-88		3.260	4.657	6.520	5.131	2.701	1.28	0.649
N	Mar-88		3.268	4.679	6.536	5.160	2.707	1.283	0.651
N	Apr-88		3.276	4.701	6.552	5.189	2.713	1.286	0.653
N	May-88		3.283	4.722	6.566	5.217	2.719	1.289	0.654
N	Jun-88		3.290	4.743	6.580	5.245	2.725	1.292	0.655

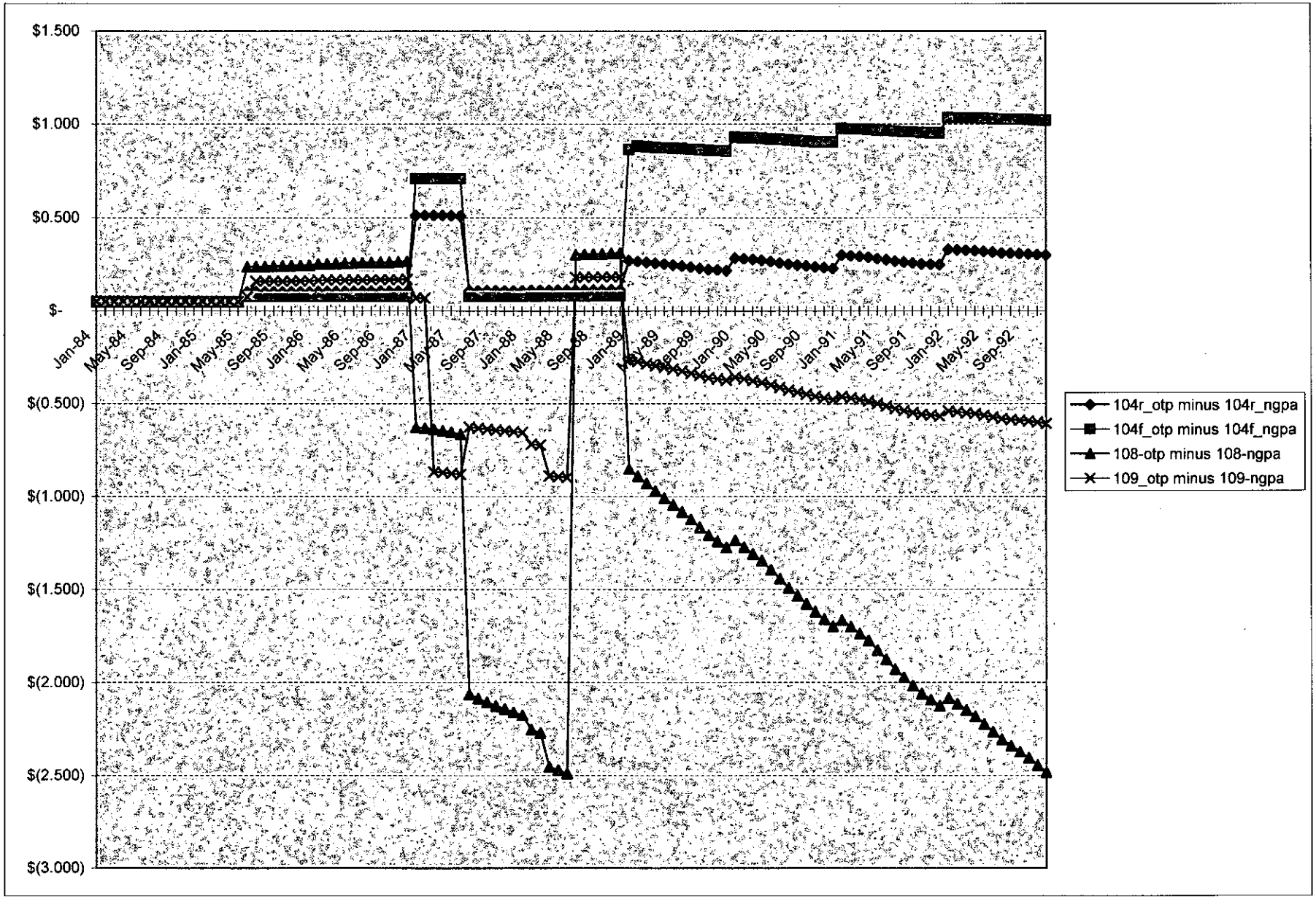
4E

	103b1 new gas	103b2 new gas	105b3 contract	107c5 Tight gas	108 stripper	109 other	104R replaceme	104F flowing	El Paso Contract	Inside FEF El Paso	102 otp	103 otp	104p74 otp	104b otp	104r otp	104f otp	105 otp	108 otp	109 otp
Jan-84	2.849			5.698	3.841	2.359	1.12	0.566			$ -	$ 2.899	$ 2.409	$ 2.047	$ 1.170	$ 0.616	$ 1.170	$ 3.891	$ 2.409
Feb-84	2.859			5.718	3.866	2.367	1.124	0.568			$ -	$ 2.909	$ 2.417	$ 2.054	$ 1.174	$ 0.618	$ 1.174	$ 3.916	$ 2.417
Mar-84	2.869			5.738	3.891	2.375	1.128	0.57			$ -	$ 2.919	$ 2.425	$ 2.061	$ 1.178	$ 0.620	$ 1.178	$ 3.941	$ 2.425
Apr-84	2.879			5.758	3.916	2.383	1.132	0.572			$ 1.170	$ 2.929	$ 2.433	$ 2.068	$ 1.182	$ 0.622	$ 1.182	$ 3.966	$ 2.433
May-84	2.889			*5.778*	3.942	2.391	1.136	0.574			$ 1.174	$ 2.939	$ 2.441	$ 2.075	$ 1.186	$ 0.624	$ 1.186	$ 3.992	$ 2.441
Jun-84	2.899			5.798	3.968	2.399	1.14	0.576			$ 1.178	$ 2.949	$ 2.449	$ 2.082	$ 1.190	*$ 0.626*	$ 1.190	*$ 4.018*	$ 2.449
Jul-84	2.909			5.818	3.994	2.407	1.144	0.578			$ 1.182	$ 2.959	$ 2.457	$ 2.089	$ 1.194	$ 0.628	$ 1.194	$ 4.044	$ 2.459
Aug-84	2.917			5.834	4.018	2.414	1.147	0.58			$ 1.186	$ 2.967	$ 2.464	$ 2.095	$ 1.197	$ 0.630	$ 1.197	$ 4.068	$ 2.464
Sep-84	2.925			5.850	4.042	2.421	1.15	0.582			$ 1.190	$ 2.975	$ 2.471	$ 2.101	$ 1.200	$ 0.632	$ 1.200	$ 4.092	$ 2.471
Oct-84	2.933			5.866	4.066	2.428	1.153	0.584			$ 1.194	$ 2.983	$ 2.478	$ 2.107	$ 1.203	$ 0.634	$ 1.203	$ 4.116	$ 2.478
Nov-84	2.942			5.884	4.092	2.436	1.157	0.586			$ 1.197	$ 2.992	$ 2.486	$ 2.113	$ 1.207	$ 0.636	$ 1.207	$ 4.142	$ 2.486
Dec-84	2.951			5.902	4.118	2.444	1.161	0.588			$ 1.200	$ 3.001	$ 2.494	$ 2.119	$ 1.211	$ 0.638	$ 1.211	$ 4.168	$ 2.494
Jan-85	2.960	3.415	3.869	5.920	4.144	2.452	1.165	0.59			$ 1.203	$ 3.010	$ 2.502	$ 2.125	$ 1.215	$ 0.640	$ 1.215	$ 4.194	$ 2.502
Feb-85	2.966	3.428	3.887	5.932	4.166	2.457	1.167	0.591			$ 1.207	$ 3.016	$ 2.507	$ 2.129	$ 1.217	$ 0.641	$ 1.217	$ 4.216	$ 2.507
Mar-85	2.972	3.442	3.905	5.944	4.188	2.462	1.169	0.592			$ 1.211	$ 3.022	$ 2.512	$ 2.133	$ 1.219	$ 0.642	$ 1.219	$ 4.238	$ 2.512
Apr-85	2.978	3.455	3.923	5.956	4.210	2.467	1.172	0.593			$ 1.215	$ 3.028	$ 2.517	$ 2.137	$ 1.222	$ 0.643	$ 1.222	$ 4.260	$ 2.517
May-85	2.991	3.477	3.950	5.982	4.242	2.478	1.177	0.596			$ 1.217	$ 3.041	$ 2.528	$ 2.146	$ 1.227	$ 0.646	$ 1.227	$ 4.292	$ 2.528
Jun-85	3.004	3.498	3.977	6.008	4.274	2.489	1.182	0.599			$ 1.219	$ 3.185	$ 2.648	$ 2.247	$ 1.284	$ 0.675	$ 1.284	$ 4.511	$ 2.564
Jul-85	3.017	3.520	4.004	6.034	4.306	2.500	1.187	0.602			$ 1.222	$ 3.199	$ 2.659	$ 2.256	$ 1.289	$ 0.678	$ 1.289	$ 4.544	$ 2.659
Aug-85	3.024	3.535	4.023	6.048	4.330	2.506	1.19	0.603			$ 1.227	$ 3.206	$ 2.666	$ 2.262	$ 1.292	$ 0.679	$ 1.292	$ 4.569	$ 2.666
Sep-85	3.031	3.550	4.043	6.062	4.354	2.512	1.193	0.604			$ 1.284	$ 3.214	$ 2.672	$ 2.267	$ 1.295	$ 0.680	$ 1.295	$ 4.594	$ 2.672
Oct-85	3.038	3.565	4.063	6.076	4.379	2.518	1.196	0.605			$ 1.289	$ 3.221	$ 2.678	$ 2.272	$ 1.298	$ 0.681	$ 1.298	$ 4.621	$ 2.678
Nov-85	3.047	*3.582*	*4.084*	*6.094*	*4.405*	2.525	1.199	0.607			$ 1.292	$ 3.230	$ 2.685	$ 2.278	$ 1.301	$ 0.684	$ 1.301	$ 4.648	$ 2.685
Dec-85	3.056	3.599	4.105	6.112	4.432	2.532	1.202	0.609			$ 1.295	$ 3.240	$ 2.693	*$ 2.285*	*$ 1.305*	*$ 0.686*	$ 1.305	*$ 4.676*	$ 2.693
Jan-86	3.065	3.616	4.127	6.130	4.459	2.539	1.205	0.611			$ 1.298	$ 3.249	$ 2.700	$ 2.291	$ 1.308	$ 0.688	$ 1.308	$ 4.704	$ 2.700
Feb-86	3.074	3.633	4.149	6.148	4.486	2.546	1.208	0.613			$ 1.301	$ 3.263	$ 2.685	$ 2.301	$ 1.313	$ 0.691	$ 1.313	$ 4.739	$ 2.711
Mar-86	3.083	3.650	4.171	6.166	4.513	2.553	1.211	0.615			$ 1.305	$ 3.273	$ 2.689	$ 2.307	$ 1.316	$ 0.693	$ 1.316	$ 4.768	$ 2.719
Apr-86	3.092	3.667	4.193	6.184	4.540	2.560	1.214	0.617			$ 1.308	$ 3.282	$ 2.691	$ 2.313	$ 1.319	$ 0.695	$ 1.319	$ 4.796	$ 2.726
May-86	3.099	3.682	4.212	6.198	4.565	2.566	1.217	0.618			$ 1.313	$ 3.289	$ 2.693	$ 2.318	$ 1.322	$ 0.696	$ 1.322	$ 4.822	$ 2.732
Jun-86	3.106	3.697	4.232	6.212	4.590	2.572	1.22	0.619			$ 1.316	$ 3.297	$ 2.698	$ 2.324	$ 1.325	$ 0.697	$ 1.325	$ 4.848	$ 2.739
Jul-86	3.113	3.712	4.252	6.226	4.615	2.578	1.223	0.62			$ 1.319	$ 3.304	$ 2.704	$ 2.329	$ 1.328	$ 0.698	$ 1.328	$ 4.874	$ 2.745
Aug-86	3.119	3.726	4.270	6.238	4.639	2.583	1.225	0.621			$ 1.322	$ 3.310	$ 2.024	$ 2.333	$ 1.331	$ 0.699	$ 1.331	$ 4.899	$ 2.750
Sep-86	3.125	3.740	4.288	6.250	4.663	2.588	1.227	0.622			$ 1.325	$ 3.317	$ 2.027	$ 2.337	$ 1.333	$ 0.700	$ 1.333	$ 4.924	$ 2.755
Oct-86	3.131	3.754	4.306	6.262	4.687	2.593	1.229	0.623			$ 1.328	$ 3.323	$ 2.030	$ 2.341	$ 1.335	$ 0.701	$ 1.335	$ 4.949	$ 2.761
Nov-86	3.141	3.772	4.330	6.282	4.716	2.601	1.233	0.625			$ 1.331	$ 3.333	$ 2.034	$ 2.349	$ 1.339	$ 0.703	$ 1.339	$ 4.980	$ 2.769
Dec-86	3.151	3.791	4.354	6.302	4.745	2.609	1.237	0.627			$ 1.333	$ 3.344	$ 2.036	$ 2.356	$ 1.343	$ 0.705	$ 1.343	$ 5.011	$ 2.777
Jan-87	3.161	3.810	4.378	6.322	4.776	2.617	1.241	0.629			$ 3.933	$ 3.054	$ 2.685	$ 2.411	$ 1.753	$ 1.338	$ 1.753	$ 4.148	$ 2.685
Feb-87	3.164	3.821	4.393	6.328	4.796	2.620	1.242	0.63			$ 3.948	$ 3.057	$ 2.689	$ 2.414	$ 1.754	$ 1.339	$ 1.754	$ 4.164	$ 2.689
Mar-87	3.167	3.832	4.408	6.334	4.816	2.623	1.243	0.631			$ 3.961	$ 3.059	$ 2.691	$ 2.415	$ 1.755	$ 1.340	$ 1.755	$ 4.177	$ 1.755
Apr-87	3.170	3.843	4.423	6.340	4.836	2.626	1.244	0.632			$ 3.974	$ 3.061	$ 2.693	$ 2.417	$ 1.756	$ 1.341	$ 1.756	$ 4.191	$ 1.756
May-87	*3.180*	*3.882*	4.447	6.360	4.866	2.634	1.248	0.634			$ 3.993	$ 3.068	$ 2.698	$ 2.421	$ 1.758	$ 1.342	$ 1.758	$ 4.211	$ 1.758
Jun-87	3.190	3.881	4.471	6.380	4.896	2.642	1.252	0.636			*$ 4.012*	*$ 3.075*	*$ 2.704*	*$ 2.426*	*$ 1.761*	$ 1.344	$ 1.761	$ 4.232	$ 1.761
Jul-87	3.200		4.495	6.400	4.926	2.650	1.256	0.638			$ 2.742	$ 2.226	$ 2.024	$ 1.873	$ 1.364	$ 0.717	$ 1.364	$ 2.862	$ 2.024
Aug-87	3.210		4.520	6.420	4.958	2.659	1.26	0.64			$ 2.753	$ 2.230	$ 2.027	$ 1.875	$ 1.368	$ 0.720	$ 1.368	$ 2.874	$ 2.027
Sep-87	3.220		4.546	6.440	4.990	2.668	1.264	0.642			$ 2.764	$ 2.234	$ 2.030	$ 1.878	$ 1.372	$ 0.722	$ 1.372	$ 2.885	$ 2.030
Oct-87	3.231		4.572	6.462	5.022	2.677	1.268	0.644			$ 2.775	$ 2.238	$ 2.034	$ 1.881	$ 1.377	$ 0.724	$ 1.377	$ 2.897	$ 2.034
Nov-87	3.238		4.593	6.476	5.049	2.683	1.271	0.645			$ 2.784	$ 2.240	$ 2.036	$ 1.882	$ 1.380	$ 0.725	$ 1.380	$ 2.907	$ 2.036
Dec-87	3.245		4.614	6.490	5.076	2.689	1.274	0.646			$ 2.793	$ 2.243	$ 2.038	$ 1.884	$ 1.383	$ 0.726	$ 1.383	$ 2.917	$ 2.038
Jan-88	3.252		4.635	6.504	5.103	2.695	1.277	0.647			$ 2.803	$ 2.245	$ 2.040	$ 1.886	$ 1.386	$ 0.727	$ 1.386	$ 2.927	$ 2.040
Feb-88	3.260		4.657	6.520	5.131	2.701	1.28	0.649			$ 2.754	$ 2.189	$ 1.983	$ 1.828	$ 1.391	$ 0.730	$ 1.391	$ 2.879	$ 1.983
Mar-88	3.268		4.679	6.536	5.160	2.707	1.283	0.651			$ 2.764	$ 2.192	$ 1.985	$ 1.830	$ 1.394	$ 0.732	$ 1.394	$ 2.890	$ 1.985
Apr-88	3.276		4.701	6.552	5.189	2.713	1.286	0.653			$ 2.610	$ 2.031	$ 1.823	$ 1.667	$ 1.398	$ 0.734	$ 1.398	$ 2.738	$ 1.823
May-88	3.283		4.722	6.566	5.217	2.719	1.289	0.654			$ 2.619	$ 2.033	$ 1.825	$ 1.669	$ 1.401	$ 0.735	$ 1.401	$ 2.747	$ 1.825
Jun-88	3.290		4.743	6.580	5.245	2.725	1.292	0.655			$ 2.629	$ 2.036	$ 1.827	$ 1.671	$ 1.404	$ 0.736	$ 1.404	$ 2.757	$ 1.827
Jul-88	3.297		4.765	6.594	5.273	2.731	1.295	0.656			$ 5.210	$ 3.505	$ 2.912	$ 2.466	$ 1.407	$ 0.737	$ 1.407	$ 5.575	$ 2.912
Aug-88	3.309		4.793	6.618	5.308	2.741	1.3	0.658			$ 5.244	$ 3.517	$ 2.922	$ 2.475	$ 1.412	$ 0.739	$ 1.412	$ 5.612	$ 2.922
Sep-88	3.321		4.821	6.642	5.343	2.751	1.305	0.66			$ 5.279	$ 3.530	$ 2.933	$ 2.483	$ 1.417	$ 0.742	$ 1.417	$ 5.649	$ 2.933
Oct-88	3.333		4.849	6.666	5.379	2.761	1.31	0.662			$ 5.313	$ 3.543	$ 2.943	$ 2.492	$ 1.423	$ 0.744	$ 1.423	$ 5.686	$ 2.943
Nov-88	3.345		4.879	6.690	5.416	2.771	1.315	0.664			$ 5.350	$ 3.555	$ 2.954	$ 2.501	$ 1.428	$ 0.746	$ 1.428	$ 5.725	$ 2.954
Dec-88	3.358		4.909	6.716	5.453	2.781	1.32	0.666			*$ 5.397*	*$ 3.569*	$ 2.964	$ 2.510	$ 1.433	$ 0.748	$ 1.433	$ 5.764	$ 2.964
Jan-89	3.371		4.939	6.742	5.491	2.791	1.325	0.668	$1.227	$1.97	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Feb-89	3.384		4.970	6.768	5.530	2.802	1.33	0.671	$1.227	$1.65	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Mar-89	3.398		5.002	6.796	5.569	2.813	1.335	0.674	$1.227	$1.50	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Apr-89	3.412		5.034	6.824	5.609	2.824	1.34	0.677	$1.227	$1.57	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
May-89	3.423		5.063	6.846	5.646	2.833	1.344	0.679	$1.227	$1.66	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Jun-89	3.434		5.092	6.868	5.683	2.842	1.349	0.681	$1.227	$1.66	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Jul-89	3.446		5.121	6.892	5.72	2.852	1.354	0.683	$1.227	$1.62	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Aug-89	3.460		5.154	6.948	5.762	2.864	1.36	0.686	$1.227	$1.64	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Sep-89	3.474		5.188	6.948	5.804	2.876	1.366	0.689	$1.227	$1.55	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Oct-89	3.488		5.222	6.976	5.846	2.888	1.372	0.692	$1.227	$1.55	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Nov-89	3.497		5.248	6.995	5.879	2.895	1.375	0.694	$1.227	$1.71	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Dec-89	3.506		5.274	7.012	5.913	2.902	1.379	0.696	$1.227	$2.10	$ 4.362	$ 2.969	$ 2.545	$ 2.216	$ 1.595	$ 1.553	$ 1.553	$ 4.639	$ 2.528
Jan-90	3.515		5.300	7.03	5.947	2.909	1.383	0.698	$1.276	$2.65	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Feb-90	3.526		5.329	7.052	5.984	2.918	1.387	0.700	$1.276	$1.80	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Mar-90	3.537		5.358	7.074	6.021	2.927	1.391	0.702	$1.276	$1.43	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Apr-90	3.548		5.387	7.096	6.058	2.936	1.395	0.704	$1.276	$1.43	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
May-90	3.565		5.425	7.13	6.106	2.95	1.402	0.707	$1.276	$1.44	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Jun-90	3.582		5.464	7.164	6.154	2.964	1.409	0.710	$1.276	$1.47	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551

	minus 104r_ngpa	minus 104f_ngpa	minus 108-ngpa	minus 109-ngpa
Jan-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Feb-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Mar-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Apr-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
May-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Jun-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Jul-84	$ 0.050	$ 0.050	$ 0.050	$ 0.052
Aug-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Sep-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Oct-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Nov-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Dec-84	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Jan-85	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Feb-85	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Mar-85	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Apr-85	$ 0.050	$ 0.050	$ 0.050	$ 0.050
May-85	$ 0.050	$ 0.050	$ 0.050	$ 0.050
Jun-85	$ 0.102	$ 0.076	$ 0.237	$ 0.075
Jul-85	$ 0.102	$ 0.076	$ 0.238	$ 0.159
Aug-85	$ 0.102	$ 0.076	$ 0.239	$ 0.160
Sep-85	$ 0.102	$ 0.076	$ 0.240	$ 0.160
Oct-85	$ 0.102	$ 0.076	$ 0.242	$ 0.160
Nov-85	$ 0.102	$ 0.077	$ 0.243	$ 0.160
Dec-85	$ 0.103	$ 0.077	$ 0.244	$ 0.161
Jan-86	$ 0.103	$ 0.077	$ 0.245	$ 0.161
Feb-86	$ 0.105	$ 0.078	$ 0.253	$ 0.165
Mar-86	$ 0.105	$ 0.078	$ 0.255	$ 0.166
Apr-86	$ 0.105	$ 0.078	$ 0.256	$ 0.166
May-86	$ 0.105	$ 0.078	$ 0.257	$ 0.166
Jun-86	$ 0.105	$ 0.078	$ 0.258	$ 0.167
Jul-86	$ 0.105	$ 0.078	$ 0.259	$ 0.167
Aug-86	$ 0.106	$ 0.078	$ 0.260	$ 0.167
Sep-86	$ 0.106	$ 0.078	$ 0.261	$ 0.167
Oct-86	$ 0.106	$ 0.078	$ 0.262	$ 0.168
Nov-86	$ 0.106	$ 0.078	$ 0.264	$ 0.168
Dec-86	$ 0.106	$ 0.078	$ 0.265	$ 0.168
Jan-87	$ 0.512	$ 0.709	$ (0.628)	$ 0.068
Feb-87	$ 0.512	$ 0.709	$ (0.632)	$ 0.069
Mar-87	$ 0.512	$ 0.709	$ (0.639)	$ (0.868)
Apr-87	$ 0.512	$ 0.709	$ (0.645)	$ (0.870)
May-87	$ 0.510	$ 0.708	$ (0.655)	$ (0.876)
Jun-87	$ 0.509	$ 0.708	$ (0.664)	$ (0.881)
Jul-87	$ 0.108	$ 0.079	$ (2.064)	*$ (0.626)*
Aug-87	$ 0.108	$ 0.080	$ (2.084)	$ (0.632)
Sep-87	$ 0.108	$ 0.080	$ (2.105)	$ (0.638)
Oct-87	$ 0.109	$ 0.080	$ (2.125)	$ (0.643)
Nov-87	$ 0.109	$ 0.080	$ (2.142)	$ (0.647)
Dec-87	$ 0.109	$ 0.080	$ (2.159)	$ (0.651)
Jan-88	$ 0.109	$ 0.080	$ (2.176)	$ (0.655)
Feb-88	$ 0.111	$ 0.081	$ (2.252)	$ (0.718)
Mar-88	$ 0.111	$ 0.081	$ (2.270)	$ (0.722)
Apr-88	$ 0.112	$ 0.081	$ (2.453)	$ (0.890)
May-88	$ 0.112	$ 0.081	$ (2.470)	$ (0.894)
Jun-88	$ 0.112	$ 0.081	$ (2.488)	$ (0.898)
Jul-88	$ 0.112	$ 0.081	$ 0.302	$ 0.181
Aug-88	$ 0.112	$ 0.081	$ 0.304	$ 0.181
Sep-88	$ 0.112	$ 0.082	$ 0.306	$ 0.182
Oct-88	$ 0.113	$ 0.082	$ 0.307	$ 0.182
Nov-88	$ 0.113	$ 0.082	$ 0.309	$ 0.183
Dec-88	$ 0.113	$ 0.082	$ 0.311	$ 0.183
Jan-89	*$ 0.270*	*$ 0.865*	*$ (0.952)*	*$ (0.263)*
Feb-89	$ 0.265	$ 0.882	$ (0.891)	$ (0.274)
Mar-89	$ 0.260	$ 0.879	$ (0.930)	$ (0.285)
Apr-89	$ 0.255	$ 0.876	$ (0.970)	$ (0.296)
May-89	$ 0.251	$ 0.874	$ (1.007)	$ (0.305)
Jun-89	$ 0.246	$ 0.872	$ (1.044)	$ (0.314)
Jul-89	$ 0.241	$ 0.870	$ (1.081)	$ (0.324)
Aug-89	$ 0.235	$ 0.867	$ (1.123)	$ (0.336)
Sep-89	$ 0.229	$ 0.864	$ (1.165)	$ (0.348)
Oct-89	$ 0.223	$ 0.861	$ (1.207)	$ (0.360)
Nov-89	$ 0.220	$ 0.859	$ (1.240)	$ (0.367)
Dec-89	$ 0.216	$ 0.857	$ (1.274)	$ (0.374)
Jan-90	$ 0.284	$ 0.931	$ (1.235)	$ (0.358)
Feb-90	$ 0.280	$ 0.929	$ (1.272)	$ (0.367)
Mar-90	$ 0.276	$ 0.927	$ (1.309)	$ (0.376)
Apr-90	$ 0.272	$ 0.925	$ (1.346)	$ (0.385)
May-90	$ 0.265	$ 0.922	$ (1.394)	$ (0.399)
Jun-90	$ 0.258	$ 0.919	$ (1.442)	$ (0.413)

Jul-90	3.599	5.503	7.198	6.203	2.978	1.416	0.713	$1.276	$1.42	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Aug-90	3.612	5.537	7.224	6.246	2.989	1.421	0.716	$1.276	$1.40	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Sep-90	3.626	5.571	7.252	6.289	3.000	1.426	0.719	$1.276	$1.40	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Oct-90	3.640	5.605	7.280	6.332	3.011	1.431	0.722	$1.276	$1.68	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Nov-90	3.651	5.635	7.302	6.371	3.020	1.435	0.724	$1.276	$1.92	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Dec-90	3.662	5.665	7.324	6.410	3.029	1.439	0.726	$1.276	$1.95	$ 4.437	$ 2.975	$ 2.552	$ 2.240	$ 1.667	$ 1.629	$ 1.629	$ 4.712	$ 2.551
Jan-91	3.673	5.695	7.346	6.449	3.038	1.443	0.728	$1.327	$1.74	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Feb-91	3.682	5.723	7.346	6.485	3.046	1.447	0.730	$1.327	$1.26	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Mar-91	3.691	5.751	7.382	6.522	3.054	1.451	0.732	$1.327	$1.05	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Apr-91	3.700	5.779	7.400	6.559	3.062	1.455	0.734	$1.327	$1.05	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
May-91	3.717	5.819	7.434	6.610	3.076	1.462	0.737	$1.327	$1.05	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Jun-91	3.751	5.86	7.468	6.661	3.090	1.469	0.740	$1.327	$1.06	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Jul-91	4	5.901	7.502	6.713	3.104	1.476	0.743	$1.327	$0.99	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Aug-91	3.764	5.935	7.528	6.757	3.114	1.481	0.745	$1.327	$1.05	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Sep-91	3.777	5.969	7.554	6.801	3.124	1.486	0.747	$1.327	$1.17	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Oct-91	3.790	6.000	7.580	6.845	3.134	1.491	0.750	$1.327	$1.30	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Nov-91	3.796	6.027	7.592	6.878	3.139	1.493	0.751	$1.327	$1.57	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Dec-91	3.802	6.052	7.604	6.911	3.144	1.495	0.752	$1.327	$1.83	$ 4.515	$ 2.981	$ 2.574	$ 2.278	$ 1.743	$ 1.705	$ 1.705	$ 4.786	$ 2.576
Jan-92	3.808	6.077	7.616	6.945	3.149	1.497	0.753	$1.380	$1.66	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Feb-92	3.814	6.101	7.628	6.978	3.154	1.499	0.754	$1.380	$1.00	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Mar-92	3.820	6.125	7.640	7.011	3.159	1.501	0.755	$1.380	$1.14	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Apr-92	3.826	6.149	7.652	7.045	3.164	1.503	0.756	$1.380	$1.27	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
May-92	3.836	6.180	7.672	7.086	3.173	1.507	0.758	$1.380	$1.42	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Jun-92	3.846	6.212	7.692	7.128	3.182	1.511	0.760	$1.380	$1.54	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Jul-92	3.856	6.244	7.712	7.170	3.191	1.515	0.762	$1.380	$1.38	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Aug-92	3.861	6.267	7.722	7.203	3.195	1.517	0.763	$1.380	$1.85	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Sep-92	3.866	6.291	7.732	7.236	3.199	1.519	0.764	$1.380	$1.92	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Oct-92	3.871	6.315	7.742	7.269	3.203	1.521	0.765	$1.380	$2.45	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Nov-92	3.879	6.343	7.758	7.307	3.210	1.524	0.767	$1.380	$2.11	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Dec-92	3.887	6.371	7.774	7.345	3.217	1.527	0.769	$1.380	$2.04	$ 4.596	$ 2.996	$ 2.603	$ 2.324	$ 1.826	$ 1.788	$ 1.788	$ 4.863	$ 2.609
Jan-93								$1.435	$2.10	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Feb-93								$1.435	$1.58	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Mar-93								$1.435	$1.84	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Apr-93								$1.435	$1.89	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
May-93								$1.435	$2.20	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Jun-93								$1.435	$1.65	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Jul-93								$1.435	$1.76	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Aug-93								$1.435	$1.84	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Sep-93								$1.435	$2.01	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Oct-93								$1.435	$1.76	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Nov-93								$1.435	$1.76	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Dec-93								$1.435	$2.24	$ 4.678	$ 3.017	$ 2.639	$ 2.374	$ 1.910	$ 1.872	$ 1.872	$ 4.942	$ 2.648
Jan-94								$1.493	$1.94	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Feb-94								$1.493	$1.82	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Mar-94								$1.493	$1.98	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Apr-94								$1.493	$1.73	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
May-94								$1.493	$1.74	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Jun-94								$1.493	$1.48	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Jul-94								$1.493	$1.58	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Aug-94								$1.493	$1.54	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Sep-94								$1.493	$1.43	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Oct-94								$1.493	$1.20	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Nov-94								$1.493	$1.46	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Dec-94								$1.493	$1.63	$ 4.764	$ 3.047	$ 2.684	$ 2.432	$ 2.001	$ 1.964	$ 1.964	$ 5.025	$ 2.694
Jan-95								$1.553	$1.45	$ 4.856	$ 3.087	$ 2.737	$ 2.499	$ 2.099	$ 2.063	$ 2.063	$ 5.113	$ 2.750
Feb-95								$1.553	$1.09	$ 4.856	$ 3.087	$ 2.737	$ 2.499	$ 2.099	$ 2.063	$ 2.063	$ 5.113	$ 2.750
Mar-95								$1.553	$1.08	$ 4.856	$ 3.087	$ 2.737	$ 2.499	$ 2.099	$ 2.063	$ 2.063	$ 5.113	$ 2.750
Apr-95								$1.553	$1.09	$ 4.856	$ 3.087	$ 2.737	$ 2.499	$ 2.099	$ 2.063	$ 2.063	$ 5.113	$ 2.750
May-95								$1.553	$1.17	$ 4.856	$ 3.087	$ 2.737	$ 2.499	$ 2.099	$ 2.063	$ 2.063	$ 5.113	$ 2.750
Jun-95								$1.553	$1.17	$ 4.856	$ 3.087	$ 2.737	$ 2.499	$ 2.099	$ 2.063	$ 2.063	$ 5.113	$ 2.750

Jul-90	$ 0.251	$ 0.916	$ (1.491)	$ (0.427)
Aug-90	$ 0.246	$ 0.913	$ (1.534)	$ (0.438)
Sep-90	$ 0.241	$ 0.910	$ (1.577)	$ (0.449)
Oct-90	$ 0.236	$ 0.907	$ (1.620)	$ (0.460)
Nov-90	$ 0.232	$ 0.905	$ (1.659)	$ (0.469)
Dec-90	$ 0.228	$ 0.903	$ (1.698)	$ (0.478)
Jan-91	$ 0.300	$ 0.977	$ (1.663)	$ (0.462)
Feb-91	$ 0.296	$ 0.975	$ (1.699)	$ (0.470)
Mar-91	$ 0.292	$ 0.973	$ (1.736)	$ (0.478)
Apr-91	$ 0.288	$ 0.971	$ (1.773)	$ (0.486)
May-91	$ 0.281	$ 0.968	$ (1.824)	$ (0.500)
Jun-91	$ 0.274	$ 0.965	$ (1.875)	$ (0.514)
Jul-91	$ 0.267	$ 0.962	$ (1.927)	$ (0.528)
Aug-91	$ 0.262	$ 0.960	$ (1.971)	$ (0.538)
Sep-91	$ 0.257	$ 0.958	$ (2.015)	$ (0.548)
Oct-91	$ 0.252	$ 0.955	$ (2.059)	$ (0.558)
Nov-91	$ 0.250	$ 0.954	$ (2.092)	$ (0.563)
Dec-91	$ 0.248	$ 0.953	$ (2.125)	$ (0.568)
Jan-92	$ 0.329	$ 1.035	$ (2.082)	$ (0.540)
Feb-92	$ 0.327	$ 1.034	$ (2.115)	$ (0.545)
Mar-92	$ 0.325	$ 1.033	$ (2.148)	$ (0.550)
Apr-92	$ 0.323	$ 1.032	$ (2.182)	$ (0.555)
May-92	$ 0.319	$ 1.030	$ (2.223)	$ (0.564)
Jun-92	$ 0.315	$ 1.028	$ (2.265)	$ (0.573)
Jul-92	$ 0.311	$ 1.026	$ (2.307)	$ (0.582)
Aug-92	$ 0.309	$ 1.025	$ (2.340)	$ (0.586)
Sep-92	$ 0.307	$ 1.024	$ (2.373)	$ (0.590)
Oct-92	$ 0.305	$ 1.023	$ (2.406)	$ (0.594)
Nov-92	$ 0.302	$ 1.021	$ (2.444)	$ (0.601)
Dec-92	$ 0.299	$ 1.019	$ (2.482)	$ (0.608)
Jan-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Feb-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Mar-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Apr-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
May-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Jun-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Jul-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Aug-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Sep-93	$ 1.910	$ 1.872	$ 4.942	$ 2.646
Oct-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Nov-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Dec-93	$ 1.910	$ 1.872	$ 4.942	$ 2.648
Jan-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Feb-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Mar-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Apr-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
May-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Jun-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Jul-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Aug-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Sep-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Oct-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Nov-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Dec-94	$ 2.001	$ 1.964	$ 5.025	$ 2.694
Jan-95	$ 2.099	$ 2.063	$ 5.113	$ 2.750
Feb-95	$ 2.099	$ 2.063	$ 5.113	$ 2.750
Mar-95	$ 2.099	$ 2.063	$ 5.113	$ 2.750
Apr-95	$ 2.099	$ 2.063	$ 5.113	$ 2.750
May-95	$ 2.099	$ 2.063	$ 5.113	$ 2.750
Jun-95	$ 2.099	$ 2.063	$ 5.113	$ 2.750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104f_otp minus 104f_ngpa
108-otp minus 108-ngpa
109_otp minus 109-ngpa

	102	103	104	104	108	109
	New Gas	New Onshore	Old Gas	Old Flowing	Stripper	Other
			Replace. Cont. - Small	Flowing gas Small Producer		
Factor	1.007	1.00375	1.00375	1.003	1.007	1.0036
Nov-88	5.058	3.345	1.315	0.664	5.416	2.771
Dec-88	5.093	3.358	1.32	0.666	5.453	2.781
Jan-89	5.128	3.371	1.325	0.668	5.491	2.791
Feb-89	5.164	3.384	1.330	0.670	5.529	2.801
Mar-89	5.200	3.396	1.335	0.672	5.568	2.811
Apr-89	5.236	3.409	1.340	0.674	5.607	2.821
May-89	5.273	3.422	1.345	0.676	5.646	2.831
Jun-89	5.310	3.435	1.350	0.678	5.686	2.842
Jul-89	5.347	3.448	1.355	0.680	5.726	2.852
Aug-89	5.385	3.460	1.360	0.682	5.766	2.862
Sep-89	5.422	3.473	1.365	0.684	5.806	2.872
Oct-89	5.460	3.486	1.370	0.686	5.847	2.883
Nov-89	5.498	3.500	1.376	0.688	5.888	2.893
Dec-89	5.537	3.513	1.381	0.690	5.929	2.904
Jan-90	5.576	3.526	1.386	0.692	5.970	2.914
Feb-90	5.615	3.539	1.391	0.695	6.012	2.924
Mar-90	5.654	3.552	1.396	0.697	6.054	2.935
Apr-90	5.694	3.566	1.402	0.699	6.097	2.946
May-90	5.733	3.579	1.407	0.701	6.139	2.956
Jun-90	5.774	3.592	1.412	0.703	6.182	2.967
Jul-90	5.814	3.606	1.417	0.705	6.226	2.977
Aug-90	5.855	3.619	1.423	0.707	6.269	2.988
Sep-90	5.896	3.633	1.428	0.709	6.313	2.999
Oct-90	5.937	3.647	1.433	0.711	6.357	3.010
Nov-90	5.979	3.660	1.439	0.714	6.402	3.021
Dec-90	6.020	3.674	1.444	0.716	6.447	3.031
Jan-91	6.063	3.688	1.450	0.718	6.492	3.042
Feb-91	6.105	3.702	1.455	0.720	6.537	3.053
Mar-91	6.148	3.716	1.460	0.722	6.583	3.064
Apr-91	6.191	3.729	1.466	0.724	6.629	3.075
May-91	6.234	3.743	1.471	0.726	6.675	3.086
Jun-91	6.278	3.758	1.477	0.729	6.722	3.098
Jul-91	6.322	3.772	1.482	0.731	6.769	3.109
Aug-91	6.366	3.786	1.488	0.733	6.817	3.120
Sep-91	6.410	3.800	1.494	0.735	6.864	3.131
Oct-91	6.455	3.814	1.499	0.737	6.912	3.142
Nov-91	6.501	3.828	1.505	0.740	6.961	3.154
Dec-91	6.546	3.843	1.510	0.742	7.009	3.165
Jan-92	6.592	3.857	1.516	0.744	7.058	3.176
Feb-92	6.638	3.872	1.522	0.746	7.108	3.188
Mar-92	6.684	3.886	1.528	0.749	7.158	3.199
Apr-92	6.731	3.901	1.533	0.751	7.208	3.211
May-92	6.778	3.915	1.539	0.753	7.258	3.222
Jun-92	6.826	3.930	1.545	0.755	7.309	3.234
Jul-92	6.874	3.945	1.551	0.758	7.360	3.246

	102	103	104	104	108	109
	New Gas	New Onshore	Old Gas	Old Flowing	Stripper	Other
			Replace. Cont. - Small	Flowing gas Small Producer		
Aug-92	6.922	3.960	1.556	0.760	7.412	3.257
Sep-92	6.970	3.975	1.562	0.762	7.464	3.269
Oct-92	7.019	3.989	1.568	0.764	7.516	3.281
Nov-92	7.068	4.004	1.574	0.767	7.568	3.293
Dec-92	7.118	4.019	1.580	0.769	7.621	3.305
Jan-93	7.167	4.034	1.586	0.771	7.675	3.316
Feb-93	7.218	4.050	1.592	0.774	7.729	3.328
Mar-93	7.268	4.065	1.598	0.776	7.783	3.340
Apr-93	7.319	4.080	1.604	0.778	7.837	3.352
May-93	7.370	4.095	1.610	0.781	7.892	3.364
Jun-93	7.422	4.111	1.616	0.783	7.947	3.377
Jul-93	7.474	4.126	1.622	0.785	8.003	3.389
Aug-93	7.526	4.142	1.628	0.788	8.059	3.401
Sep-93	7.579	4.157	1.634	0.790	8.115	3.413
Oct-93	7.632	4.173	1.640	0.792	8.172	3.425
Nov-93	7.685	4.188	1.646	0.795	8.229	3.438
Dec-93	7.739	4.204	1.652	0.797	8.287	3.450
Jan-94	7.793	4.220	1.659	0.800	8.345	3.463
Feb-94	7.848	4.236	1.665	0.802	8.403	3.475
Mar-94	7.903	4.252	1.671	0.804	8.462	3.488
Apr-94	7.958	4.267	1.677	0.807	8.521	3.500
May-94	8.014	4.283	1.684	0.809	8.581	3.513
Jun-94	8.070	4.300	1.690	0.812	8.641	3.525
Jul-94	8.126	4.316	1.696	0.814	8.702	3.538
Aug-94	8.183	4.332	1.703	0.816	8.762	3.551
Sep-94	8.240	4.348	1.709	0.819	8.824	3.564
Oct-94	8.298	4.364	1.715	0.821	8.886	3.576
Nov-94	8.356	4.381	1.722	0.824	8.948	3.589
Dec-94	8.415	4.397	1.728	0.826	9.010	3.602
Jan-95	8.474	4.414	1.735	0.829	9.073	3.615
Feb-95	8.533	4.430	1.741	0.831	9.137	3.628
Mar-95	8.593	4.447	1.748	0.834	9.201	3.641
Apr-95	8.653	4.464	1.754	0.836	9.265	3.654
May-95	8.713	4.480	1.761	0.839	9.330	3.667
Jun-95	8.774	4.497	1.768	0.841	9.396	3.681
Jul-95	8.836	4.514	1.774	0.844	9.461	3.694
Aug-95	8.898	4.531	1.781	0.846	9.528	3.707
Sep-95	8.960	4.548	1.788	0.849	9.594	3.721
Oct-95	9.023	4.565	1.794	0.851	9.661	3.734
Nov-95	9.086	4.582	1.801	0.854	9.729	3.747
Dec-95	9.149	4.599	1.808	0.857	9.797	3.761
Escalation factors from Northwest settlement						

				Factor	Nov-88	Dec-88	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89
	102	New Gas		1.007	5.058	5.093	5.128	5.164	5.200	5.236	5.273	5.310	5.347	5.385	5.422	5.460	5.498
	103	New Onshore		1.00375	3.345	3.358	3.371	3.384	3.396	3.409	3.422	3.435	3.448	3.460	3.473	3.486	3.500
	104	Old Gas	Replace. Cont. - Small	1.00375	1.315	1.32	1.325	1.330	1.335	1.340	1.345	1.350	1.355	1.360	1.365	1.370	1.376
	104	Old Flowing	Flowing gas Small Producer	1.003	0.664	0.666	0.668	0.670	0.672	0.674	0.676	0.678	0.680	0.682	0.684	0.686	0.688
	108	Stripper		1.007	5.416	5.453	5.491	5.529	5.568	5.607	5.646	5.686	5.726	5.766	5.806	5.847	5.888
	109	Other		1.0036	2.771	2.781	2.791	2.801	2.811	2.821	2.831	2.842	2.852	2.862	2.872	2.883	2.893

		Dec-89	Jan-90	Feb-90	Mar-90	Apr-90	May-90	Jun-90	Jul-90	Aug-90	Sep-90	Oct-90	Nov-90	Dec-90	Jan-91	Feb-91	Mar-91
102	New Gas	5.537	5.576	5.615	5.654	5.694	5.733	5.774	5.814	5.855	5.896	5.937	5.979	6.020	6.063	6.105	6.148
103	New Onshore	3.513	3.526	3.539	3.552	3.566	3.579	3.592	3.606	3.619	3.633	3.647	3.660	3.674	3.688	3.702	3.716
104	Old Gas	1.381	1.386	1.391	1.396	1.402	1.407	1.412	1.417	1.423	1.428	1.433	1.439	1.444	1.450	1.455	1.460
104	Old Flowing	0.690	0.692	0.695	0.697	0.699	0.701	0.703	0.705	0.707	0.709	0.711	0.714	0.716	0.718	0.720	0.722
108	Stripper	5.929	5.970	6.012	6.054	6.097	6.139	6.182	6.226	6.269	6.313	6.357	6.402	6.447	6.492	6.537	6.583
109	Other	2.904	2.914	2.924	2.935	2.946	2.956	2.967	2.977	2.988	2.999	3.010	3.021	3.031	3.042	3.053	3.064

		Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92
102	New Gas	6.191	6.234	6.278	6.322	6.366	6.410	6.455	6.501	6.546	6.592	6.638	6.684	6.731	6.778	6.826	6.874
103	New Onshore	3.729	3.743	3.758	3.772	3.786	3.800	3.814	3.828	3.843	3.857	3.872	3.886	3.901	3.915	3.930	3.945
104	Old Gas	1.466	1.471	1.477	1.482	1.488	1.494	1.499	1.505	1.510	1.516	1.522	1.528	1.533	1.539	1.545	1.551
104	Old Flowing	0.724	0.726	0.729	0.731	0.733	0.735	0.737	0.740	0.742	0.744	0.746	0.749	0.751	0.753	0.755	0.758
108	Stripper	6.629	6.675	6.722	6.769	6.817	6.864	6.912	6.961	7.009	7.058	7.108	7.158	7.208	7.258	7.309	7.360
109	Other	3.075	3.086	3.098	3.109	3.120	3.131	3.142	3.154	3.165	3.176	3.188	3.199	3.211	3.222	3.234	3.246

		Aug-92	Sep-92	Oct-92	Nov-92	Dec-92	Jan-93	Feb-93	Mar-93	Apr-93	May-93	Jun-93	Jul-93	Aug-93	Sep-93	Oct-93	Nov-93
102	New Gas	6.922	6.970	7.019	7.068	7.118	7.167	7.218	7.268	7.319	7.370	7.422	7.474	7.526	7.579	7.632	7.685
103	New Onshore	3.960	3.975	3.989	4.004	4.019	4.034	4.050	4.065	4.080	4.095	4.111	4.126	4.142	4.157	4.173	4.188
104	Old Gas	1.556	1.562	1.568	1.574	1.580	1.586	1.592	1.598	1.604	1.610	1.616	1.622	1.628	1.634	1.640	1.646
104	Old Flowing	0.760	0.762	0.764	0.767	0.769	0.771	0.774	0.776	0.778	0.781	0.783	0.785	0.788	0.790	0.792	0.795
108	Stripper	7.412	7.464	7.516	7.568	7.621	7.675	7.729	7.783	7.837	7.892	7.947	8.003	8.059	8.115	8.172	8.229
109	Other	3.257	3.269	3.281	3.293	3.305	3.316	3.328	3.340	3.352	3.364	3.377	3.389	3.401	3.413	3.425	3.438

		Dec-93	Jan-94	Feb-94	Mar-94	Apr-94	May-94	Jun-94	Jul-94	Aug-94	Sep-94	Oct-94	Nov-94	Dec-94	Jan-95	Feb-95	Mar-95
102	New Gas	7.739	7.793	7.848	7.903	7.958	8.014	8.070	8.126	8.183	8.240	8.298	8.356	8.415	8.474	8.533	8.593
103	New Onshore	4.204	4.220	4.236	4.252	4.267	4.283	4.300	4.316	4.332	4.348	4.364	4.381	4.397	4.414	4.430	4.447
104	Old Gas	1.652	1.659	1.665	1.671	1.677	1.684	1.690	1.696	1.703	1.709	1.715	1.722	1.728	1.735	1.741	1.748
104	Old Flowing	0.797	0.800	0.802	0.804	0.807	0.809	0.812	0.814	0.816	0.819	0.821	0.824	0.826	0.829	0.831	0.834
108	Stripper	8.287	8.345	8.403	8.462	8.521	8.581	8.641	8.702	8.762	8.824	8.886	8.948	9.010	9.073	9.137	9.201
109	Other	3.450	3.463	3.475	3.488	3.500	3.513	3.525	3.538	3.551	3.564	3.576	3.589	3.602	3.615	3.628	3.641

		Apr-95	May-95	Jun-95	Jul-95	Aug-95	Sep-95	Oct-95	Nov-95	Dec-95
102	New Gas	8.653	8.713	8.774	8.836	8.898	8.960	9.023	9.086	9.149
103	New Onshore	4.464	4.480	4.497	4.514	4.531	4.548	4.565	4.582	4.599
104	Old Gas	1.754	1.761	1.768	1.774	1.781	1.788	1.794	1.801	1.808
104	Old Flowing	0.836	0.839	0.841	0.844	0.846	0.849	0.851	0.854	0.857
108	Stripper	9.265	9.330	9.396	9.461	9.528	9.594	9.661	9.729	9.797
109	Other	3.654	3.667	3.681	3.694	3.707	3.721	3.734	3.747	3.761

1	Adobe Chacra	24N	4W
2	Ballard Picture Cliffs	22,23,24N	2,3,4,5W
3	Basin Dakota	Many	
4	Blanco Mesa Verde	Many	
5	BS Mesa Gallup Gas	26-27N	4-5W
6	Choza Mesa Pictured Cliffs	28-29N	3-4W
7	Choza Mesa Gallup	28N	3W
8	Companero-Gallup	27N	3W
9	Dike Rock Mancos	27N	2W
10	East Blanco Pictured Cliffs	29,30,31N	2,3,4 W
11	East Puerto Chiquito Mancos	24-27N	1E-1W
12	Five Lakes Dakota	22N	3W
13	Gallo Canyon Gallup Dakota	23N	5W
14	Gallo Dakota	24N	5W
15	Gavilan Pictured Cliffs	24-28N	1-4W
16	Gavilan Nacimiento	24N	1-2W
17	Lindrith Gallup	24N	2W
18	Northeast Ojito Gallup Dakota	26N	2-3W
19	Otero Chacra	24-29	4-12W
20	Otero Gallup	24-25N	5-6W
21	Otero Point Lookout	23N	4W
22	Otero Sanostee	22N	4-5W
23	Parley MesaVerde	22N	3W
24	Regina Gallup	24N	1W
25	Sleeper Pictured CLiffs	26N	3W
26	South Blanco Pictured Cliffs	23-29	1-9W
27	South Lindrith Gallup	23-24N	2-5W
28	Tapaacito Gallup	26N	4-6W
29	Tapacito Pictured Cliffs	25-28N	3-5W
30	Vanando Mesa Verde	22N	5W
31	West Lindrith Gallup Dakota	22-26N	2-5W
32	Wild Horse Dakota	26N	4W
33	Wild Horse Gallup	26N	2-4W

JICARILLA MAJOR PORTION PRICES

MAJOR PORTION PRICES JANUARY 1989 THROUGH JUNE 1995

EL PASO PRICE

A	B NET GAS PRODUCTION ESTIMATE MCF	C RIK AVERAGE BTU	D NET GAS PRODUCTION ESTIMATE MMBTU	E STRATA DISCOUNT @10% VALUE	F ACTUAL AMOUNT SETTLED VALUE	G SETTLED PRICE PER MMBTU	H ACTUAL CONTRACT PRICE BUYDOWN	I TOTAL BUYDOWN PLUS SETTLEM.
1989	664154	1221	810932.03	1938255	1687666	2.081	1.227	3.308
1990	1231551	1221	1503723.77	3434574	2990532	1.989	1.276	3.265
1991	1134485	1221	1385206.19	3068025	2671372	1.929	1.327	3.256
1992	1047835	1221	1279406.54	2751386	2395670	1.872	1.380	3.252
1993	969717	1221	1184024.46	2472926	2153211	1.819	1.435	3.254
1994	898891	1221	1097545.91	2227069	1939140	1.767	1.493	3.260
1995	420466	1221	513388.99	1015729	884409	1.723	1.553	3.276
	6367099			16907964	14722000			

STRATA VALUE AMOUNT	16,907,964
SETTLEMENT VALUE	14,722,000
PERCENTAGE DIFFERENCE	0.870714

NORTHWEST

	NET GAS PRODUCTION ESTIMATE	RIK AVERAGE BTU	NET GAS PRODUCTION ESTIMATE MMBTU	STRATA DISCOUNT @10% VALUE	ACTUAL AMOUNT SETTLED VALUE	SETTLED PRICE PER MMBTU	ESTIMATE MARKET OUT PRICE	SETTLEM. PLUS ESTIMATE
1989	2184166	1221	2666866.69	3024597	2109405	0.791	1.73	2.521
1990	2000396	1221	2442483.52	2671072	1862851	0.763	1.82	2.583
1991	1838459	1221	2244758.44	2382156	1661356	0.740	1.91	2.650
1992	1694483	1221	2068963.74	2125493	1482355	0.716	2.01	2.726
1993	1565509	1221	1911486.49	1912572	1333860	0.698	2.11	2.808
1994	1449542	1221	1769890.78	1722994	1201645	0.679	2.22	2.899
1995	989551	1221	1208241.77	1144983	798531	0.661	2.34	3.001
	11722106			14983867	10450003			
				14722000				

STRATA VALUE AMOUNT	14,983,867
SETTLEMENT VALUE	10,450,000
PERCENTAGE DIFFERENCE	0.697417

STRATA NET GAS PRODUCTION

ELPASO STRATA VOLUME	6367098
NORTHWEST STRATA VOLUME	11722107
TOTAL RESERVE VOLUME	18089205

	EL PASO PRICES	NW PRICES	(1) EL PASO VALUE	(2) NW VALUE	WEIGHTED AVERAGE PRICE (3)
1989	3.308144	2.520968	21063274.47	29551051	2.798040
1990	3.264751	2.582687	20786988.92	30274536	2.822762
1991	3.255501	2.650105	20728096.1	31064809	2.863194
1992	3.252485	2.726472	20708892.95	31959999	2.911620
1993	3.253553	2.807813	20715689.54	32913484	2.964706
1994	3.259796	2.898937	20755442.2	33981654	3.025954
1995	3.275688	3.000903	20856625.86	35176910	3.097623

LISTING OF JICARILLA APACHE TRIBAL ROYALTY-IN-KIND LEASES

609-000009-0	609-000067-0	609-000162-0
609-000010-0	609-000068-0	609-000163-0
609-000011-0	609-000069-0	609-000167-0
609-000012-0	609-000070-0	609-000168-0
609-000013-0	609-000071-0	609-000183-0
609-000013-A	609-000078-0	609-000317-A
609-000015-0	609-000083-0	609-000317-B
609-000034-0	609-000102-0	609-000358-0
609-000035-0	609-000108-0	609-000360-0
609-000035-A	609-000109-0	609-000361-0
609-000036-0	609-000110-0	609-000362-0
609-000037-A	609-000111-0	609-000363-0
609-000037-B	609-000118-0	609-000390-0
609-000040-0	609-000146-0	609-000392-0
609-000040-A	609-000147-0	609-000393-0
609-000041-0	609-000148-0	609-000396-0
609-000042-0	609-000149-0	609-000398-0
609-000044-0	609-000152-0	609-000412-0
609-000045-0	609-000154-0	609-000413-0
609-000047-0	609-000155-0	609-000418-0
609-000054-0	609-000156-0	609-000443-0
609-000055-0	609-000157-0	
609-000055-A	609-000158-0	
609-000064-0	609-000159-0	
609-000065-0	609-000160-0	
609-000066-0	609-000161-0	

received from Tom Schafer (DCD) May 1997