District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-140
Originated 11/1/95

Submit Original
Plus 2 Copies
to appropriate
District Office

APPLICATION FOR QUALIFICATION OF WELL WORKOVER PROJECT AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION AND ALL ATTACHMENTS MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

I. Operator: M & G Drilling Company OGRID #: 141852

Address: c/o KM Production Company PO Box 2406 Farmington, NM 87499

Contact Party: Kevin McCord Phone: 505-326-2659

II. Name of Well: Marron #46 API #: 30-045006341
Location of Well: Unit Letter K, 1650 Feet from the South line and 1650 feet from the West line,
Section 23, Township 27N, Range 8W, NMPM, San Juan County

III. Date Workover Procedures Commenced: 6-22-95
Date Workover Procedures were Completed: 6-27-95

IV. Attach a description of the Workover Procedures undertaken to increase the projection from the Well.

V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production) based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.

VI. Pool(s) on which Production Projection is based:

Blanco MV

RECEIVED
APR 26 1996
OIL CON. DIV.
DIST. 3

VII. AFFIDAVIT:

State of New Mexico)
) ss.
County of San Juan)

Kevin McCord, being first duly sworn, upon oath states:

1. I am the Operator or authorized representative of the Operator of the above referenced Well.

2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.

3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

Kevin McCord
(Name)

Petroleum Engineer
(Title)

SUBSCRIBED AND SWORN TO before me this 19th day of April, 19__.

Kamela Westmoreland

Notary Public

My Commission expires: April 8, 2000

FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of Well Workover Project is hereby approved and the above referenced Well is designated as a Well Workover Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). The Oil Conservation Division hereby verifies the Production Projection for the Well Workover Project attached to this application. By copy of this Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project has been completed as of 6/27, 1995

District Supervisor, District 3
Oil Conservation Division

Date: 5/10/96

IX. DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.

DATE: _____

M&G DRILLING COMPANY
MARRON #46
1650 FSL & 1650 FWL
NESW, SECTION 23, T27N R8W
SAN JUAN COUNTY, NEW MEXICO

The workover performed on the Marron #46 well replaced the existing 1¼" tubing with 2 3/8" tubing and lowered this tubing to help enable this well to lift liquids. This workover started on 6/22/95 and was completed on 6/27/95.

M&G DRILLING COMPANY
MARRON #46
1650 FSL & 1650 FWL
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SAN JUAN COUNTY, NEW MEXICO

6-22-95 Move in and rig up Polanco Brothers service unit. Blow well down. Killed well with 30 barrels of water using rig pump. Nipple down wellhead. Nipple up BOP. Trip 1¼" tubing out of hole. Recovered only 99 jts of pipe (3219 ft), tubing was parted. Left approximately 1150 ft of 1¼" tubing fish in hole. Shut down for the night.

6-23-95 Trip in hole with 1¼" tubing. Trip back out of hole laying 1¼" tubing down on ground. Pick up overshot and 104 jts of 2 3/8" tubing. Tripped out of hole with fish. Recovered an additional 36 jts of 1¼" tubing (1170 ft), laying down. Also recovered 2 3/8" slottted tail joint, which was badly corroded. Tripped in hole with 2 3/8" tubing and tagged fill at 4458 ft RKB (12 ft of rathole below bottom perforations). Landed 2 3/8" tubing in well as follows:

Description	Length	Depth
KB to landing point	10.00	0 - 10
141 jts of 2 3/8" 4.7#/ft J55 EUE good used tubing	4386.77	10 - 4397
1 seating nipple	1.00	4397 - 4398
1 2 3/8" landing joint	31.14	4398 - 4429
	4428.91	

note: New tubing landed lower (4429') than original tubing (4369').

Nipple down BOP. Nipple up wellhead. Shut well in. Shut down for the weekend.

6-24-95 Shut down for weekend
6-25-95 Shut down for weekend

6-26-95 Shutin pressures: annulus 0 psi, tubing 0 psi. Rigged to swab. Made 26 swab runs during the day, recovering 72 barrels of water. Well would flow for short periods throughout the day. Shut in well. Shut down for the night.

6-27-95 Overnight pressures: annulus 350 psi, tubing 200 psi. Blew tubing pressure down. Rigged to swab. Made 2 swab runs and well started flowing. Rigged unit down. Released rig. Job complete.

M&G DRILLING COMPANY
MARRON #46

HISTORICAL PRODUCTION

	YEAR	MONTH	GAS (MCF)	OIL (BBLS)	PROD DAYS
1	1992	MAR	1552	0	31
2	1992	APR	1580	0	30
3	1992	MAY	1445	0	28
4	1992	JUN	1200	0	30
5	1992	JUL	1490	0	31
6	1992	AUG	1487	0	31
7	1992	SEP	1003	0	27
8	1992	OCT	1494	0	31
9	1992	NOV	1628	0	22
10	1992	DEC	853	1	31
11	1993	JAN	1328	13	31
12	1993	FEB	1308	0	28
13	1993	MAR	1194	0	24
14	1993	APR	1635	0	30
15	1993	MAY	1580	0	31
16	1993	JUN	1685	2	30
17	1993	JUL	1413	3	25
18	1993	AUG	1539	2	31
19	1993	SEP	1363	0	30
20	1993	OCT	1628	0	31
21	1993	NOV	1193	0	30
22	1993	DEC	1383	0	31
23	1994	JAN	1364	0	28
24	1994	FEB	344	0	26
25	1994	MAR	2612	0	31
26	1994	APR	0	0	0
27	1994	MAY	3330	0	31
28	1994	JUN	2003	0	21
29	1994	JUL	3215	5	31
30	1994	AUG	0	0	0
31	1994	SEP	0	0	0
32	1994	OCT	0	0	0
33	1994	NOV	1473	2	30
34	1994	DEC	309	21	31
35	1995	JAN	2494	7	31
36	1995	FEB	1999	9	28
37	1995	MAR	2568	4	31
38	1995	APR	2427	10	30
39	1995	MAY	1563	8	30
	TOTAL		56,682	87	

HISTORICAL PRODUCTION DECLINE FIT CHECK

Initial Rate (March 1992):	1645 MCFM
Final Rate (May 1995):	1277 MCFM
Effective Decline Rate:	7.5%
Gas Reserves:	56,672 MCF

M&G DRILLING COMPANY
MARRON #46
1650 FSL & 1650 FWL
NESW, SECTION 23, T27N R8W
SAN JUAN COUNTY, NEW MEXICO

DECLINE CURVE ANALYSIS

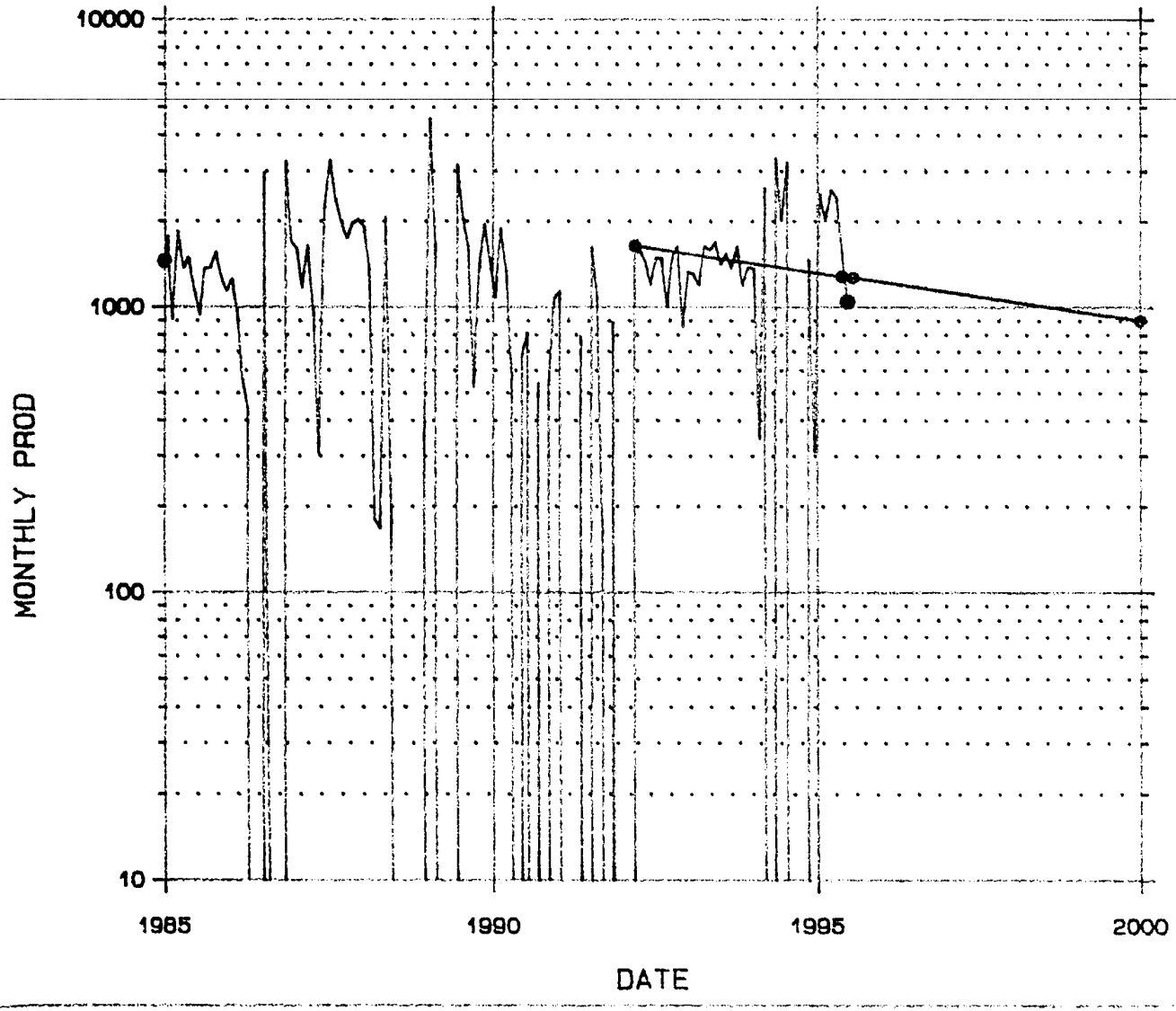
The Marron #46 well produces from the Blanco Mesaverde pool. It is apparent from the gas production decline curve from this well that a 7.5% annual decline existed between March of 1992 and May of 1995 (39 months). The total production calculated from a 7.5% decline fit through the monthly production during this period compares very nicely to the actual total production from the well during this period (56,672 MCF calculated vs 56,682 MCF actual). The decline curve from the condensate production from this well is not defined enough for analysis. Given this, a feasible way of examining condensate production is from a GOR analysis based on actual production.

The future production projection before the workover on the Marron #46 was performed by extending the historical production decline trend. This projection has a starting rate of 1275 MCF per month in July of 1995 and continues at a 7.5% annual decline. The monthly tabular production is presented for a 10 year period of time. The condensate production projection is calculated from the GOR of 290,815 SCF/BBL seen from this well in January to May 1995 actual production. This projection is also presented in tabular form.

KHM
Multiphase Curve Analysis
Rate vs Time

M&G DRILLING COMPANY
MARRON #46
GAS PRODUCTION

4/19/1996
Project:
MG MARRON 46



Production Curves

GAS: * GAS DATA
O History 1/70 - 6/95
* HISTORICAL DECLINE FIT
CPD 3/92 - 5/95
Qi : 1645.000 MCF/M
Di : 7.500 %
Qe : 1276.811 MCF/M
Np : 56.672 MMCF
* FUTURE PROD HIST TREND
CPD 7/95 - 12/06
Qi : 1275.000 MCF/M
Di : 7.500 %
Qe : 520.164 MCF/M
Np : 116.186 MMCF

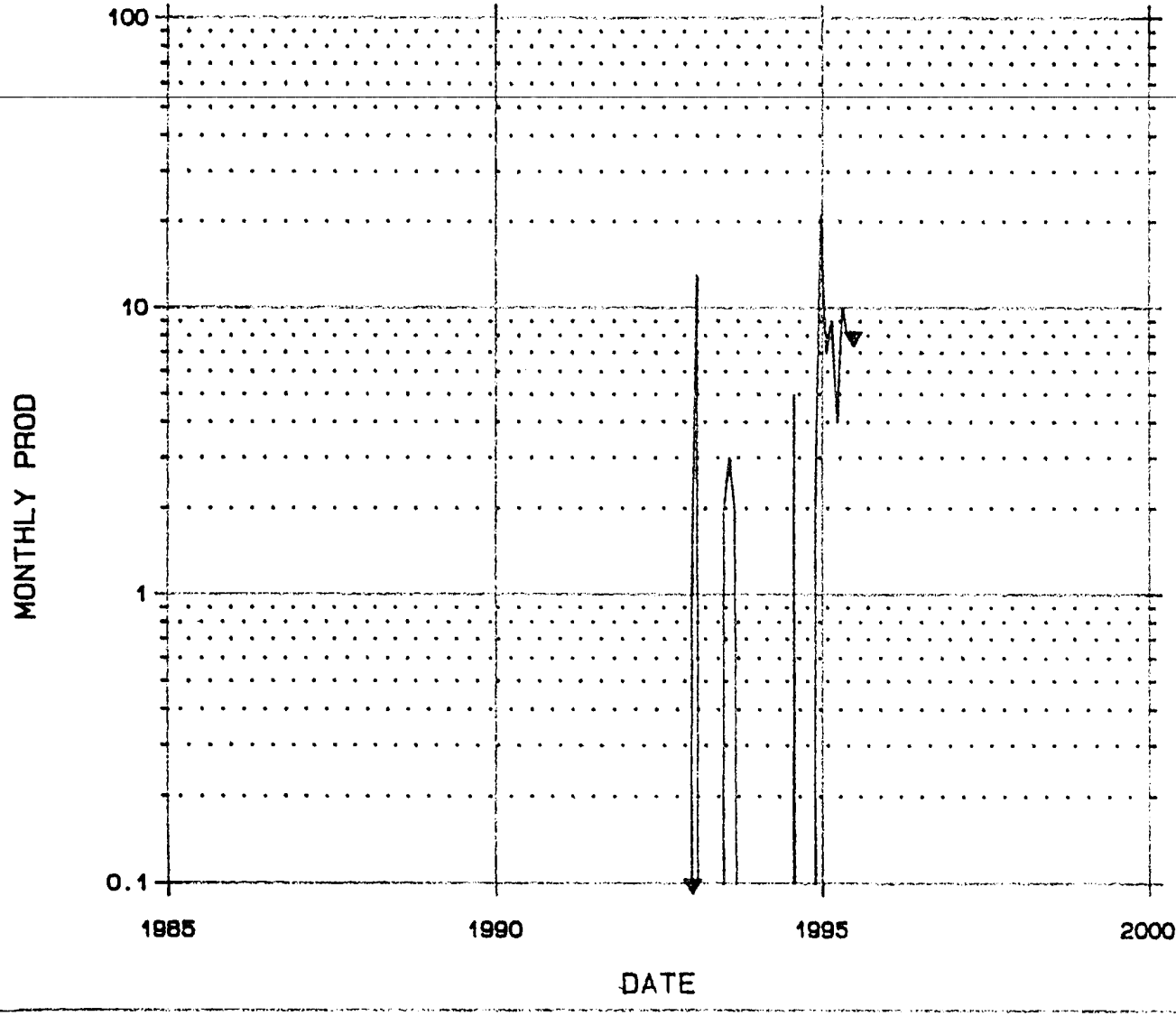
KHM
Multiphase Curve Analysis
Rate vs Time

M&G DRILLING COMPANY
MARRON #46
CONDENSATE PRODUCTION

4/19/1996
Project:
MG MARRON 46

Production Curves

CND: ▼ CONDENSATE DATA
O History 6/75 - 6/95



M&G DRILLING COMPANY

MARRON #46

FUTURE PRODUCTION PROJECTION BEFORE WORKOVER USING HISTORICAL TREND

Initial Rate (July 1995):	1275 MCFM
Effective Decline Rate:	7.5%

* - Oil production is projected at GOR of 290,815 SCF/BBL calculated from Jan-May 1995 actual production

	YEAR	MONTH	GAS (MCF)	OIL* (BBLS)
1	1995	JUL	1,263	4
2	1995	AUG	1,254	4
3	1995	SEP	1,246	4
4	1995	OCT	1,238	4
5	1995	NOV	1,230	4
6	1995	DEC	1,222	4
7	1996	JAN	1,214	4
8	1996	FEB	1,206	4
9	1996	MAR	1,199	4
10	1996	APR	1,191	4
11	1996	MAY	1,183	4
12	1996	JUN	1,176	4
13	1996	JUL	1,168	4
14	1996	AUG	1,160	4
15	1996	SEP	1,153	4
16	1996	OCT	1,145	4
17	1996	NOV	1,138	4
18	1996	DEC	1,131	4
19	1997	JAN	1,123	4
20	1997	FEB	1,116	4
21	1997	MAR	1,109	4
22	1997	APR	1,102	4
23	1997	MAY	1,094	4
24	1997	JUN	1,087	4
25	1997	JUL	1,080	4
26	1997	AUG	1,073	4
27	1997	SEP	1,066	4
28	1997	OCT	1,059	4
29	1997	NOV	1,053	4
30	1997	DEC	1,046	4
31	1998	JAN	1,039	4
32	1998	FEB	1,032	4
33	1998	MAR	1,026	4
34	1998	APR	1,019	4
35	1998	MAY	1,012	3
36	1998	JUN	1,006	3
37	1998	JUL	999	3
38	1998	AUG	993	3
39	1998	SEP	986	3
40	1998	OCT	980	3

M&G DRILLING COMPANY
MARRON #46

FUTURE PRODUCTION PROJECTION BEFORE WORKOVER USING HISTORICAL TREND

Initial Rate (July 1995):	1275 MCFM
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* - Oil production is projected at GOR of 290,815 SCF/BBL calculated from Jan-May 1995 actual production

	YEAR	MONTH	GAS (MCF)	OIL* (BBLS)
41	1998	NOV	974	3
42	1998	DEC	967	3
43	1999	JAN	961	3
44	1999	FEB	955	3
45	1999	MAR	949	3
46	1999	APR	943	3
47	1999	MAY	936	3
48	1999	JUN	930	3
49	1999	JUL	924	3
50	1999	AUG	918	3
51	1999	SEP	912	3
52	1999	OCT	907	3
53	1999	NOV	901	3
54	1999	DEC	895	3
55	2000	JAN	889	3
56	2000	FEB	883	3
57	2000	MAR	878	3
58	2000	APR	872	3
59	2000	MAY	866	3
60	2000	JUN	861	3
61	2000	JUL	855	3
62	2000	AUG	850	3
63	2000	SEP	844	3
64	2000	OCT	839	3
65	2000	NOV	833	3
66	2000	DEC	828	3
67	2001	JAN	822	3
68	2001	FEB	817	3
69	2001	MAR	812	3
70	2001	APR	806	3
71	2001	MAY	801	3
72	2001	JUN	796	3
73	2001	JUL	791	3
74	2001	AUG	786	3
75	2001	SEP	781	3
76	2001	OCT	776	3
77	2001	NOV	771	3
78	2001	DEC	766	3
79	2002	JAN	761	3

M&G DRILLING COMPANY
MARRON #46

FUTURE PRODUCTION PROJECTION BEFORE WORKOVER USING HISTORICAL TREND

Initial Rate (July 1995):	1275 MCFM
Effective Decline Rate:	7.5%

* - Oil production is projected at GOR of 290,815 SCF/BBL calculated from Jan-May 1995 actual production

	YEAR	MONTH	GAS (MCF)	OIL* (BBLS)
80	2002	FEB	756	3
81	2002	MAR	751	3
82	2002	APR	746	3
83	2002	MAY	741	3
84	2002	JUN	736	3
85	2002	JUL	732	3
86	2002	AUG	727	2
87	2002	SEP	722	2
88	2002	OCT	717	2
89	2002	NOV	713	2
90	2002	DEC	708	2
91	2003	JAN	704	2
92	2003	FEB	699	2
93	2003	MAR	695	2
94	2003	APR	690	2
95	2003	MAY	686	2
96	2003	JUN	681	2
97	2003	JUL	677	2
98	2003	AUG	672	2
99	2003	SEP	668	2
100	2003	OCT	664	2
101	2003	NOV	659	2
102	2003	DEC	655	2
103	2004	JAN	651	2
104	2004	FEB	647	2
105	2004	MAR	642	2
106	2004	APR	638	2
107	2004	MAY	634	2
108	2004	JUN	630	2
109	2004	JUL	626	2
110	2004	AUG	622	2
111	2004	SEP	618	2
112	2004	OCT	614	2
113	2004	NOV	610	2
114	2004	DEC	606	2
115	2005	JAN	602	2
116	2005	FEB	598	2
117	2005	MAR	594	2
118	2005	APR	590	2
119	2005	MAY	587	2

M&G DRILLING COMPANY

MARRON #46

FUTURE PRODUCTION PROJECTION BEFORE WORKOVER USING HISTORICAL TREND

Initial Rate (July 1995):	1275 MCFM
Effective Decline Rate:	7.5%

* - Oil production is projected at GOR of 290,815 SCF/BBL calculated from Jan-May 1995 actual production

	YEAR	MONTH	GAS (MCF)	OIL* (BBLS)
120	2005	JUN	583	2
121	2005	JUL	579	2
122	2005	AUG	575	2
123	2005	SEP	572	2
124	2005	OCT	568	2
125	2005	NOV	564	2
126	2005	DEC	561	2
127	2006	JAN	557	2
128	2006	FEB	553	2
129	2006	MAR	550	2
130	2006	APR	546	2
131	2006	MAY	543	2
132	2006	JUN	539	2
133	2006	JUL	536	2
134	2006	AUG	532	2
135	2006	SEP	529	2
136	2006	OCT	525	2
137	2006	NOV	522	2
138	2006	DEC	518	2