



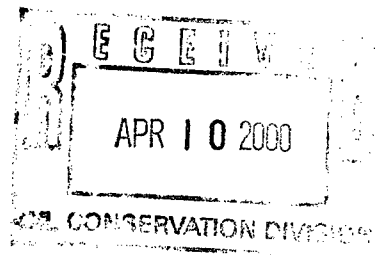
9155 E. Nichols Ave., Suite 350 • Englewood, CO 80112

Bus: 303-925-0542 • Fax: 303-925-0543

DHC 5/11/00
2725

April 5th, 2000

Ms. Lori Wrotenberry
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505



RE: Administrative Approval to Downhole Commingle
Greystone Energy, Inc.
Jicarilla 3E Gallup / Dakota
1800' FNL, 1700' FEL, Sec.8, T26N, R5W, N.M.P.M.
Rio Arriba County, New Mexico

Dear Ms. Wrotenberry:

Greystone Energy, Inc. requests to downhole commingle the Tapacito Gallup and the Basin Dakota pools in the subject well. The well is currently producing as a Dakota / Gallup dual completion. The well does exhibit signs of liquid loading problems and it is felt that downhole commingling will eliminate excessive operational problems. It will allow the energy from both formations to assist in lifting liquids. The removal of liquid accumulation will increase overall gas production. In addition this well has failed a recent packer test.

To comply with the New Mexico Oil Conservation Rules, Greystone Energy, Inc. is submitting the following data for your approval of the proposed commingling:

1. Form C-107A – Application for Downhole Commingling
2. Form C-102 – Location Plat showing each spacing unit and dedicated acreage
3. Production Curves for both the Dakota and Gallup
4. Bottom hole pressure data

If you are an interest holder and require additional information, please contact me at (303) 925-0542 Ext. 223.

Sincerely,

Brian D. Voigt
Vice President

CC: NMOCD-Aztec, BLM – Albuquerque

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
Revised August 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Greystone Energy, Inc.

5802 Highway 64, Farmington, NM 87401

Operator

Address

Jicarilla

3E

F - 8- 26N - 5W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 173252 Property Code 24042 API NO. 30-039-23505 Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Tapacito Gallup / 58090		Basin Dakota / 71599
2. Top and Bottom of Pay Section (Perforations)	6936' - 7300'		7772' - 7996'
3. Type of production (Oil or Gas)	GAS		GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING		FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 700 PSI	a.	a. 750 PSI
	b. (Original) 1700 PSI	b.	b. 1750 PSI
6. Oil Gravity (EAPI) or Gas BTU Content	1222		1222
7. Producing or Shut-In?	PRODUCING		PRODUCING
Production Marginal? (yes or no) * If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	YES		YES
	Date: Rates:	Date: Rates:	Date: Rates:
	Date: 3/15/00 Rates: 50 MCFD / 1 BOPD	Date: Rates:	Date: 3/15/00 Rates: 10 MCFD / 0 BOPD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: 9% Gas: 28 %	Oil: % Gas: %	Oil: 91 % Gas: 72 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No

11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S).

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Brian D. Voigt TITLE VP DATE 4/5/00

TYPE OR PRINT NAME Brian D. Voigt TELEPHONE NO. (505) 632 - 8056 Ext 223

All distances must be from the center line of the well.

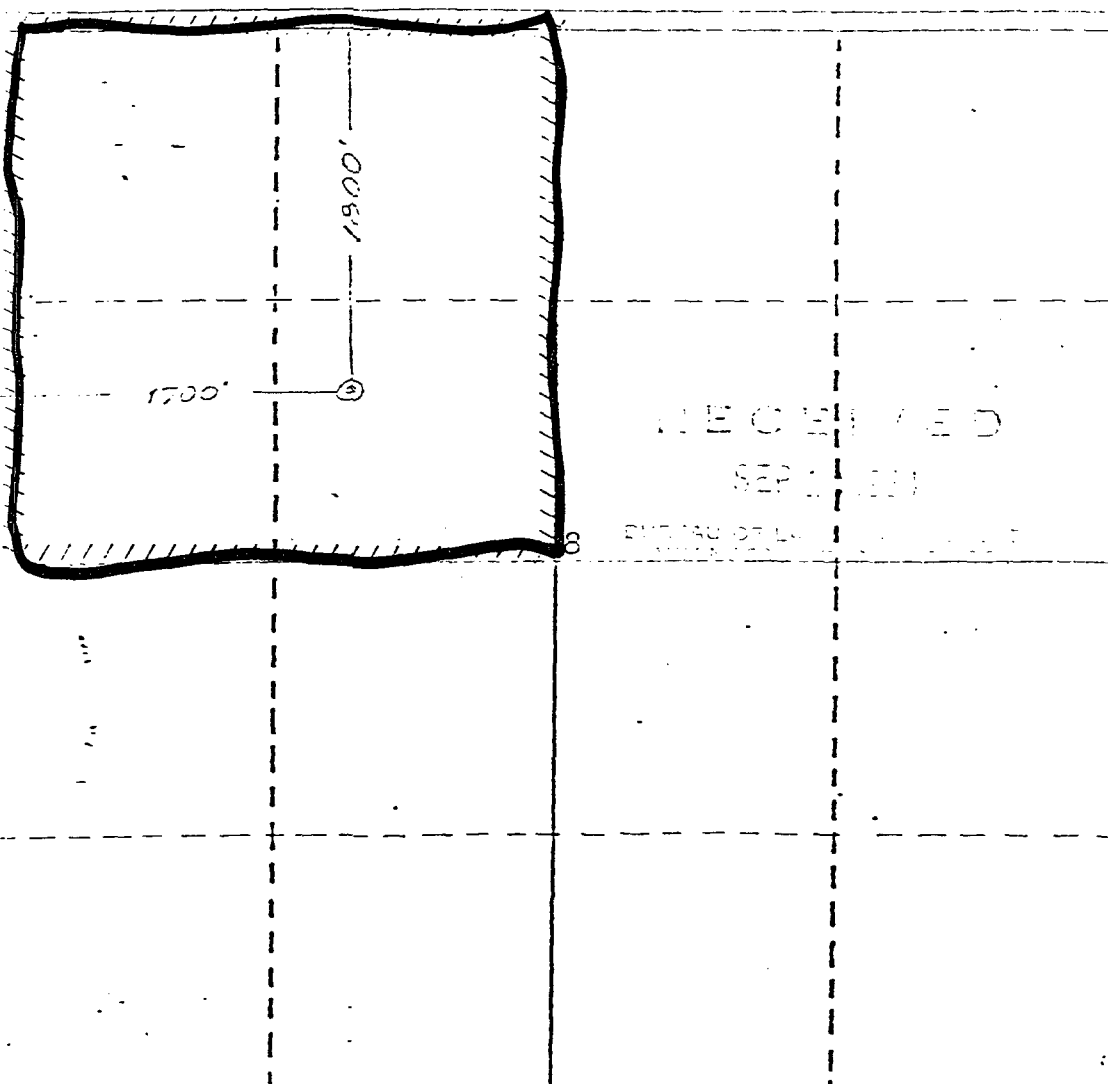
CONSOLIDATED OIL & GAS, INC.			JICARILLA		Well No.
Letter	Section	Township	Range	County	
F	8	26 NORTH	5 WEST	RIO ARriba	3 E
Total Footage Location of Well:					
1800 feet from the		NORTH	line and	1700 feet from the	WEST
Sound Level Elev.	Producing Formation		Pool	Dedicated Acres:	
6975	Gallup		Tabacito Gallup ext.	160	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to work interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Barbara Rex

Name

Barbara Rex

Position

Prod. & Drilg. Technician

Company

Consolidated Oil & Gas, Inc.

Date

June 11, 1984

I hereby certify that the information shown on this plat was plotted from notes of actual survey made by me under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

June 14, 1980

Registered Professional Engineer and/or Land Surveyor

James P. Leese

Certificate No.

1463

All distances must be from the outer boundaries of the Section.

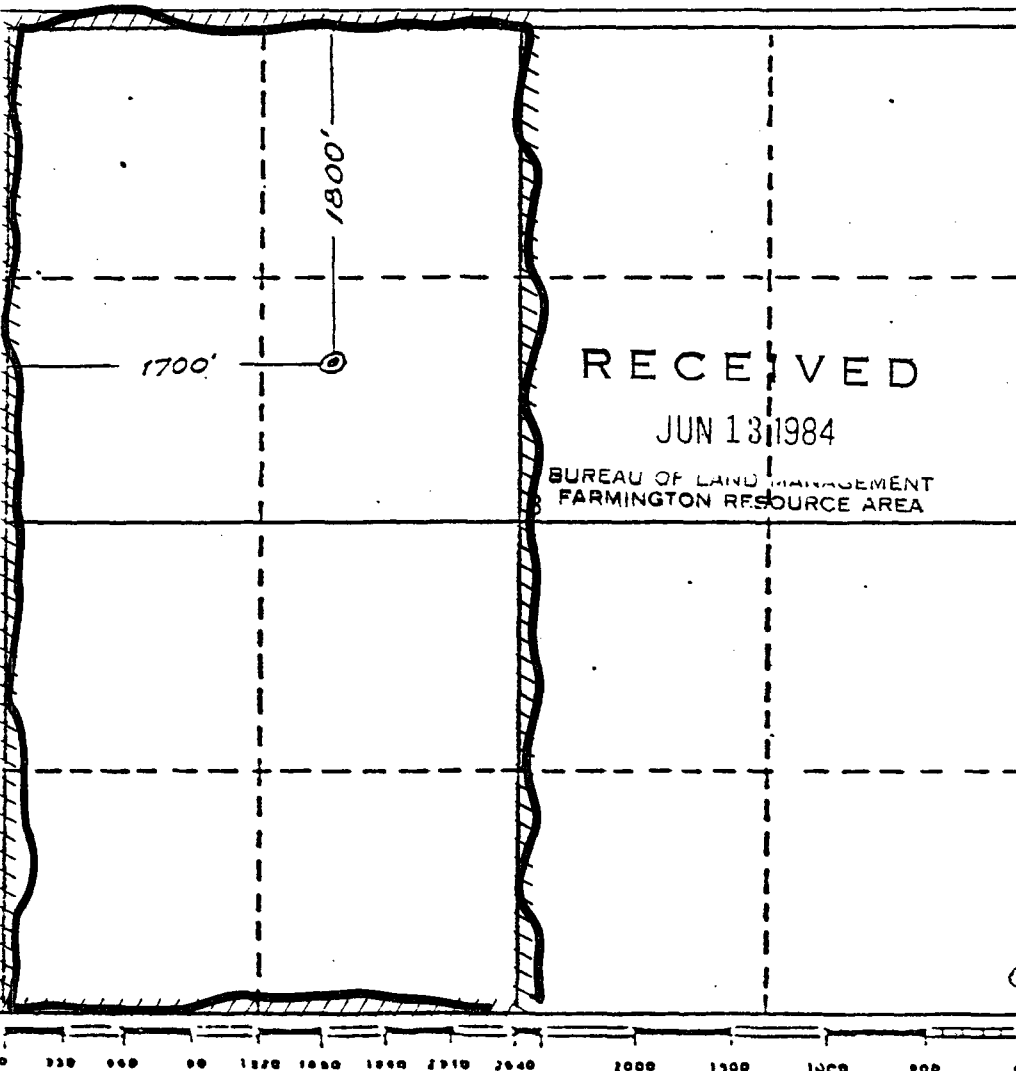
Operator CONSOLIDATED OIL & GAS, INC.		Lease JICARILLA		Well No. 3 E
Tract Letter F	Section 8	Township 26 NORTH	Range 5 WEST	County RIO ARriba
Actual Postage Location of Well: 1800 feet from the NORTH line and 1700 feet from the WEST line				
Ground Level Elev. 6975	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Barbara Rex

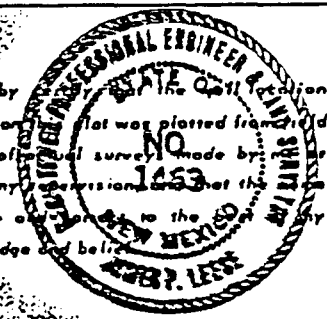
Name
Barbara Rex

Position
Prod. & Drlg. Technician

Company
Consolidated Oil & Gas, Inc.

Date
June 11, 1984

I hereby certify that the information shown on this plat was plotted from field notes of a survey made by me under my supervision and that the same is true and correct to the best of my knowledge and belief.



Date Surveyed
June 14, 1980

Registered Professional Engineer and/or Land Surveyor
James P. Leese
James P. Leese

Certificate No.
1463

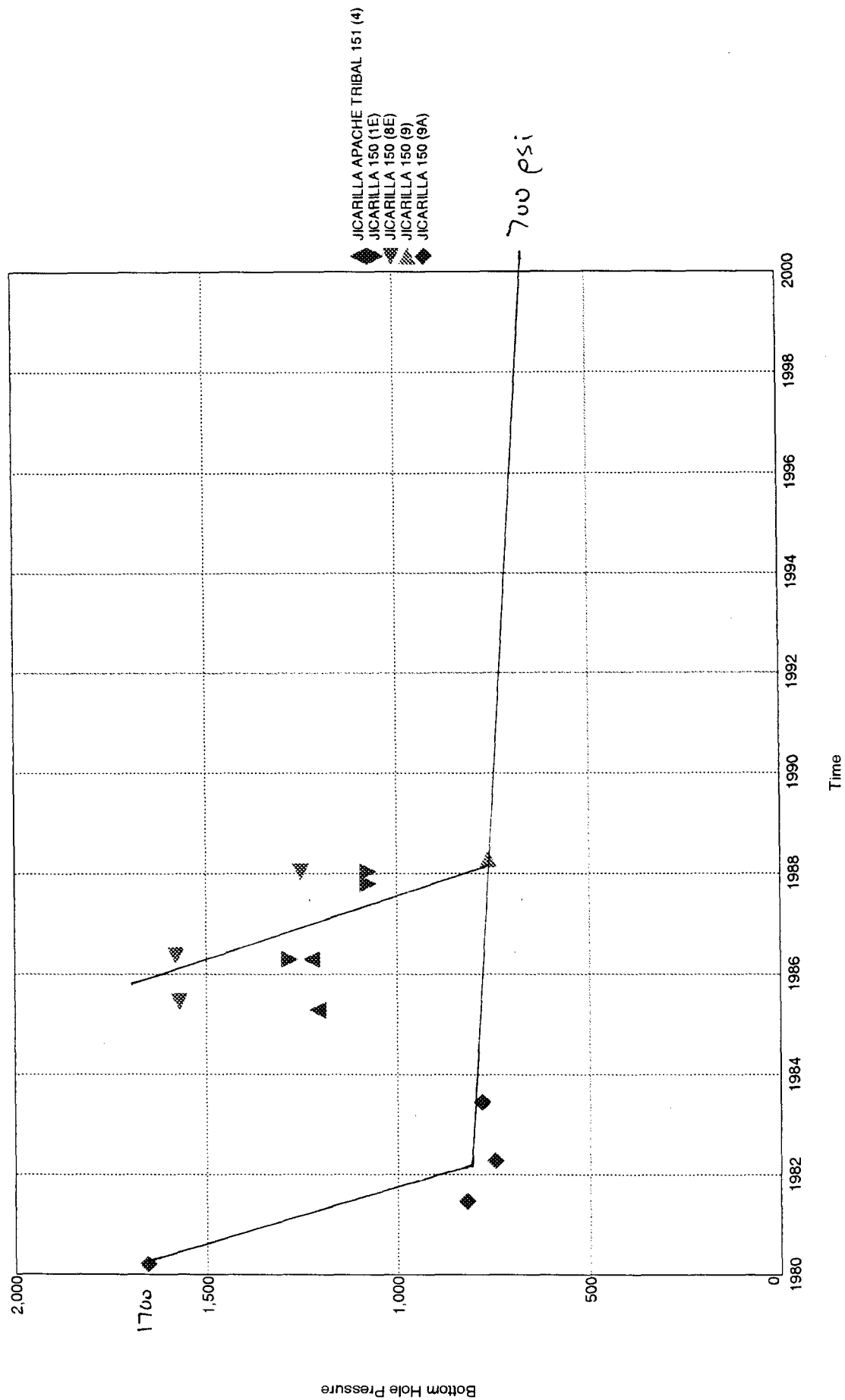
Pressure/Time Graph

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Comingles\Payne-Jicarilla.mdb

Date: 3/31/2000
Time: 11:19 AM

Summary Lease Report

Jicarilla 3E Offset Gallup Wells



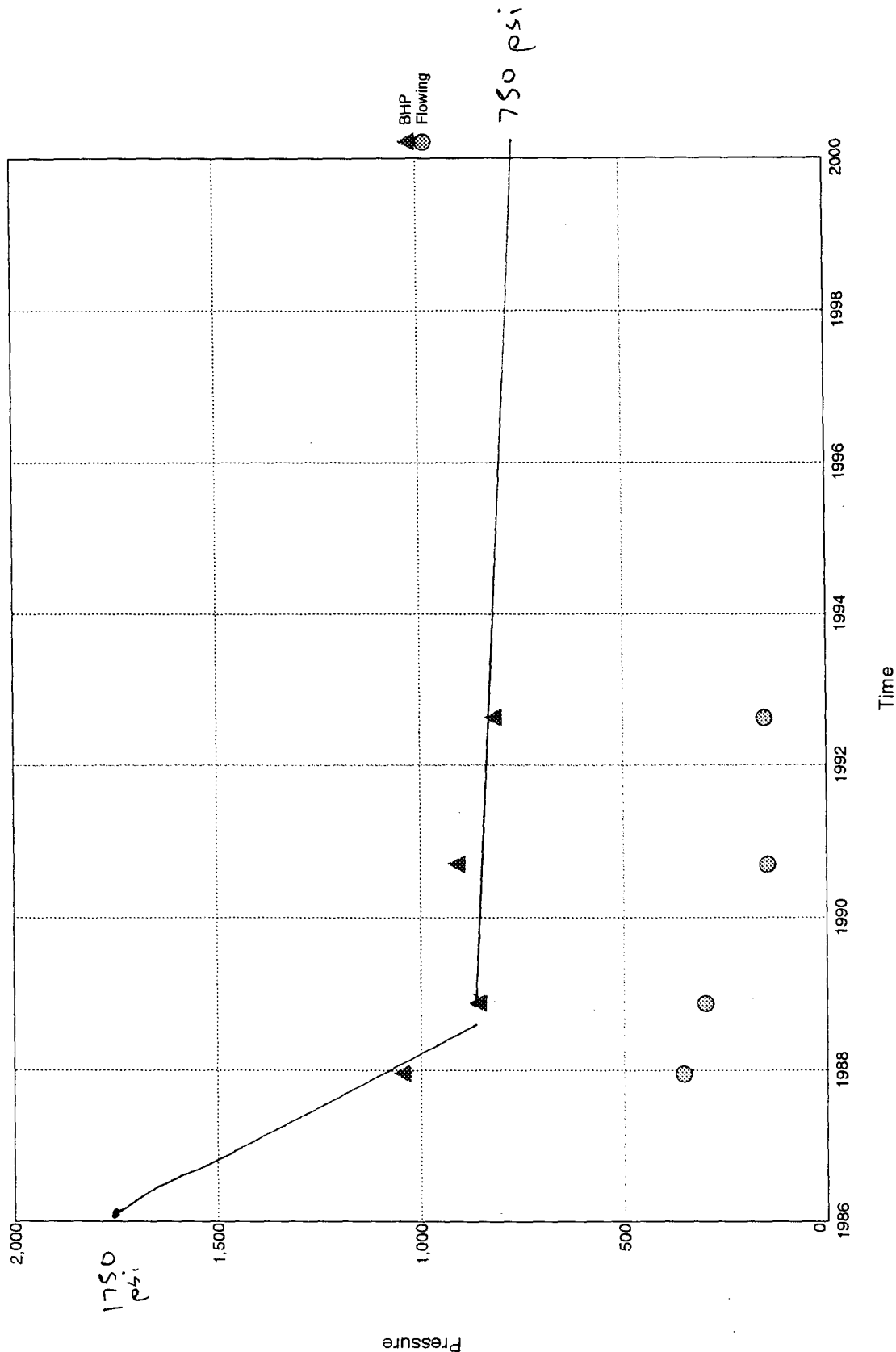
Pressure/Time Graph

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\Babase.mdb

Date: 3/31/2000
Time: 11:34 AM

Lease Name: JICARILLA (3E)
County, ST: RIO ARriba, NM (Jicarilla)
Location: 26N-5W-8

Field Name: BASIN (DAKOTA) DK
Operator: GREYSTONE ENERGY INC



Jicarilla 3E GP / DK

Based on cum production through December - 1998
(Prior to development of a tubing leak in Dakota String in January of 1999)

Fixed Percentage Allocation Formula

	Oil (Barrels)	%
Gallup Formation	925	9%
Dakota Formation	9,569	91%
	10,494	100%

Decline Forecast

Using a decline forecast looking forward using the years leading up to a tubing leak around December 1998

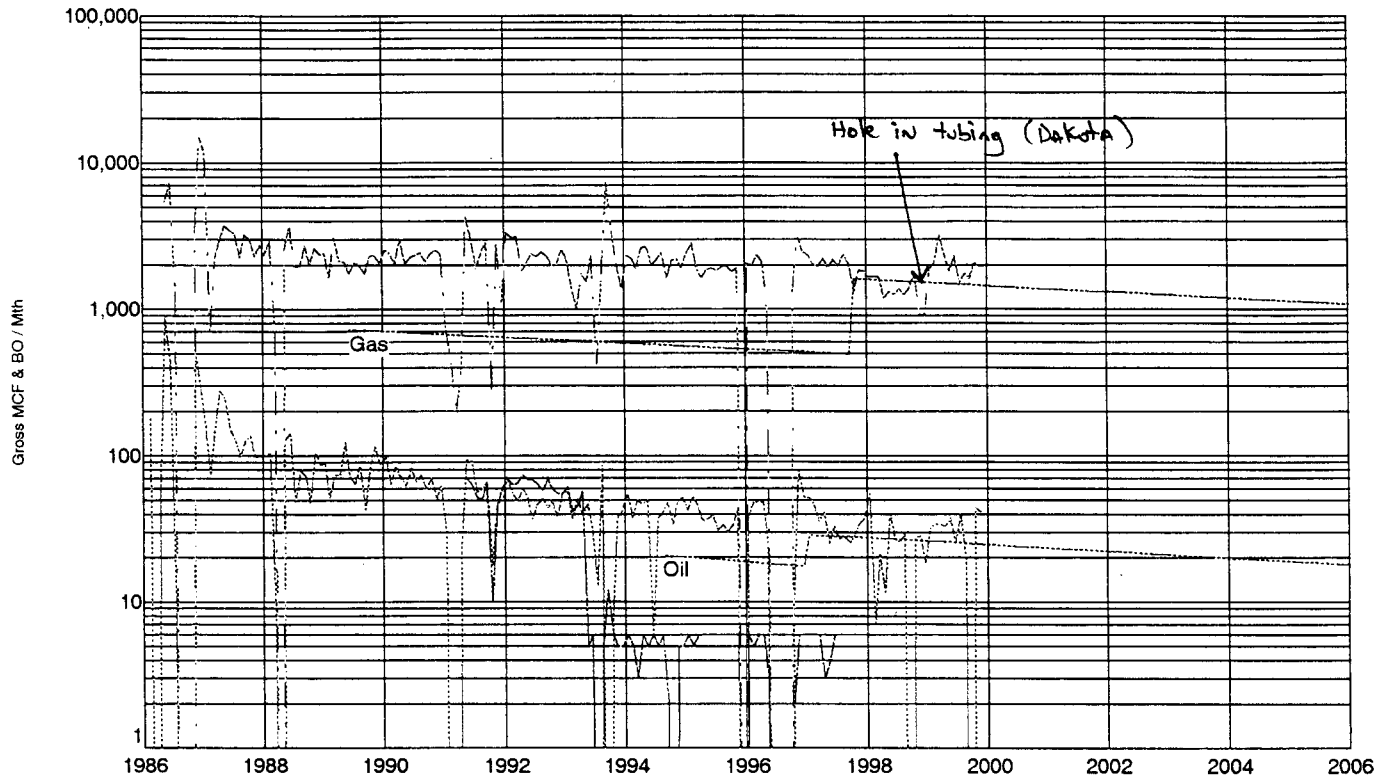
	2000 monthly average		2001 monthly average	
	Gas (MCF)	%	Gas (MCF)	%
Gallup Formation	440	28%	425	28%
Dakota Formation	1122	72%	1091	72%
	1,562	100%	1,516	100%

Last Twelve Months Historic Production Report

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\BAFeb10.MDB

Summary Lease Report

Jicarilla 3E Gallup AND Dakota



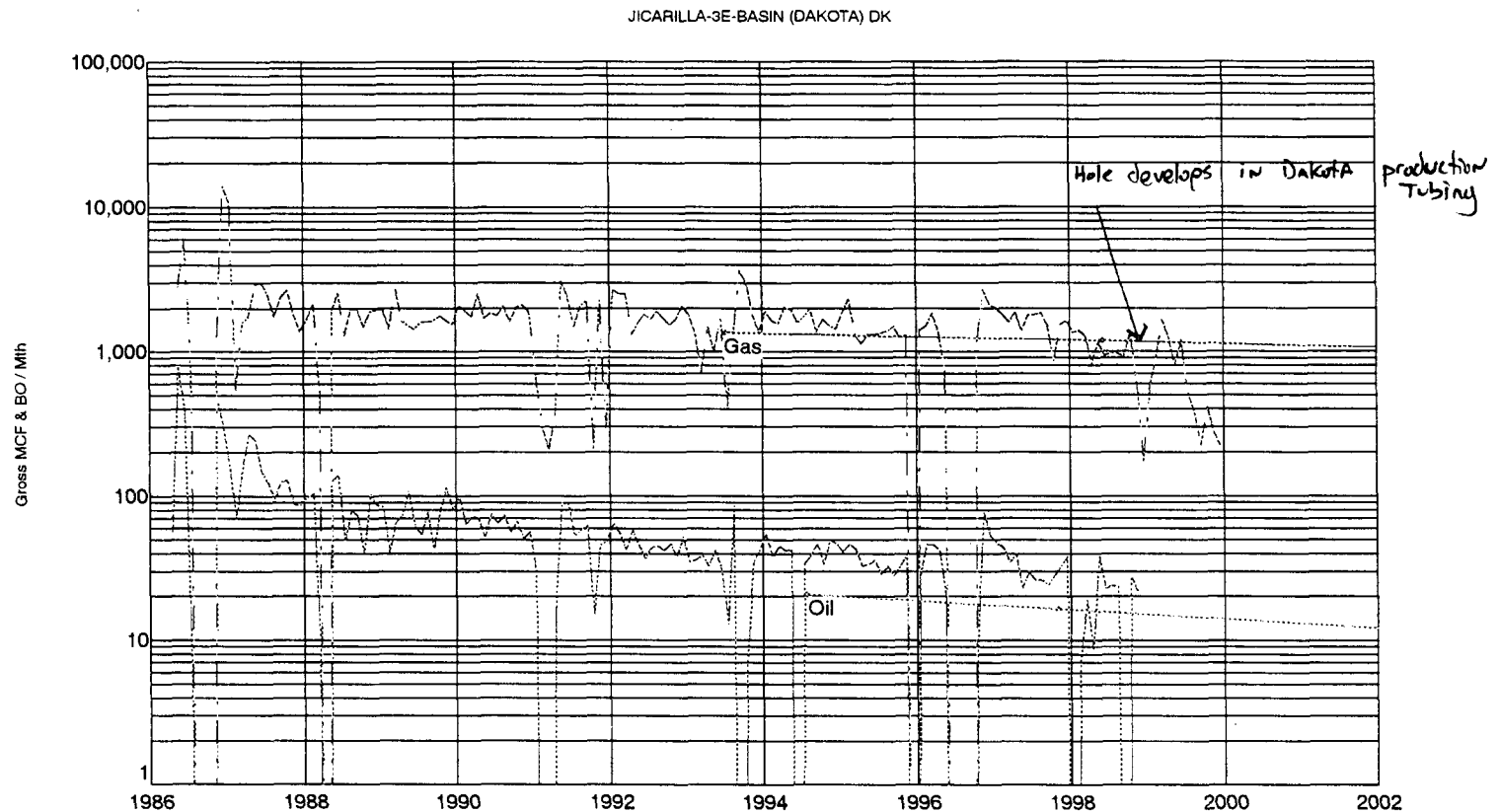
Date	Well Count	Oil (bbl)	Gas (mcf)	Water (bbl)	Injection (bbl)
Previous		10,493	337,169	1,663	5,231
01/1999	2	33	1,825	0	1,252
02/1999	2	34	2,125	0	0
03/1999	2	34	3,211	0	0
04/1999	2	33	2,393	0	0
05/1999	2	38	1,837	0	0
06/1999	2	25	2,310	0	0
07/1999	2	40	1,526	0	0
08/1999	2	20	1,785	0	0
09/1999	2	0	1,628	0	0
10/1999	2	44	2,084	0	0
11/1999	2	42	1,960	0	0
12/1999	2	0	1,968	0	0
Total:		10,836	361,821	1,663	6,483

Lifetime Monthly Production Forecast Report

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\BAFeb10.MDB

Lease Name: JICARILLA (3E)
 County, ST: RIO ARRIBA, NM (Jicarilla)
 Location: 26N-5W-8

Field Name: BASIN (DAKOTA) DK
 Operator: GREYSTONE ENERGY INC



Date	Oil (bbl)	Gas (mcf)	Water (bbl)	Total Oil (bbl)	Total Gas (mcf)	Total Water (bbl)
01/2000	14	1,137	1	14	1,137	1
02/2000	14	1,134	1	28	2,271	1
03/2000	14	1,132	1	42	3,403	2
04/2000	14	1,129	1	56	4,532	3
05/2000	14	1,126	1	69	5,658	3
06/2000	14	1,124	1	83	6,781	4
07/2000	14	1,121	1	97	7,902	4
08/2000	13	1,118	1	110	9,020	5
09/2000	13	1,116	1	123	10,136	5
10/2000	13	1,113	1	137	11,249	6
11/2000	13	1,110	0	150	12,359	6
12/2000	13	1,108	0	163	13,467	7
01/2001	13	1,105	0	176	14,572	7
02/2001	13	1,102	0	189	15,675	8
03/2001	13	1,100	0	202	16,775	8
04/2001	13	1,097	0	215	17,872	9
05/2001	13	1,095	0	228	18,966	9
06/2001	13	1,092	0	240	20,059	9
07/2001	13	1,090	0	253	21,148	10
08/2001	13	1,087	0	265	22,235	10
09/2001	12	1,084	0	278	23,319	10
10/2001	12	1,082	0	290	24,401	11

Lifetime Monthly Production Forecast Report

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\BAFeb10.MDB

Date	Oil (bbl)	Gas (mcf)	Water (bbl)	Total Oil (bbl)	Total Gas (mcf)	Total Water (bbl)
11/2001	12	1,079	0	303	25,481	11
12/2001	12	1,077	0	315	26,557	11
01/2002	12	1,074	0	327	27,631	12
02/2002	12	1,072	0	339	28,703	12
03/2002	12	1,069	0	351	29,772	12
04/2002	12	1,067	0	363	30,839	12
05/2002	12	1,064	0	375	31,903	13
06/2002	12	1,062	0	387	32,964	13
07/2002	12	1,059	0	398	34,023	13
08/2002	12	1,057	0	410	35,080	13
09/2002	12	1,054	0	422	36,134	14
10/2002	12	1,052	0	433	37,185	14
11/2002	11	1,049	0	445	38,235	14
12/2002	11	1,047	0	456	39,281	14
01/2003	11	1,044	0	467	40,325	14
02/2003	11	1,042	0	479	41,367	14
03/2003	11	1,039	0	490	42,406	15
04/2003	11	1,037	0	501	43,443	15
05/2003	11	1,034	0	512	44,477	15
06/2003	11	1,032	0	523	45,509	15
07/2003	11	1,029	0	534	46,538	15
08/2003	11	1,027	0	545	47,565	15
09/2003	11	1,025	0	556	48,590	15
10/2003	11	1,022	0	566	49,612	16
11/2003	11	1,020	0	577	50,632	16
12/2003	11	1,017	0	588	51,649	16
01/2004	11	1,015	0	598	52,664	16
02/2004	10	1,012	0	609	53,676	16
03/2004	10	1,010	0	619	54,686	16
04/2004	10	1,008	0	629	55,694	16
05/2004	10	1,005	0	640	56,699	16
06/2004	10	1,003	0	650	57,702	16
07/2004	10	1,001	0	660	58,703	17
08/2004	10	998	0	670	59,701	17
09/2004	10	996	0	680	60,697	17
10/2004	10	994	0	690	61,691	17
11/2004	10	991	0	700	62,682	17
12/2004	10	989	0	710	63,671	17
01/2005	10	986	0	720	64,657	17
02/2005	10	984	0	729	65,641	17
03/2005	10	982	0	739	66,623	17
04/2005	10	980	0	749	67,603	17
05/2005	10	977	0	758	68,580	17
06/2005	10	975	0	768	69,555	17
07/2005	9	973	0	777	70,527	17
08/2005	9	970	0	787	71,498	17
09/2005	9	968	0	796	72,466	18
10/2005	9	966	0	805	73,431	18
11/2005	9	963	0	815	74,395	18
12/2005	9	961	0	824	75,356	18
01/2006	9	959	0	833	76,315	18
02/2006	9	957	0	842	77,271	18
03/2006	9	954	0	851	78,226	18
04/2006	9	952	0	860	79,178	18
05/2006	9	950	0	869	80,128	18
06/2006	9	948	0	878	81,075	18
07/2006	9	945	0	886	82,021	18

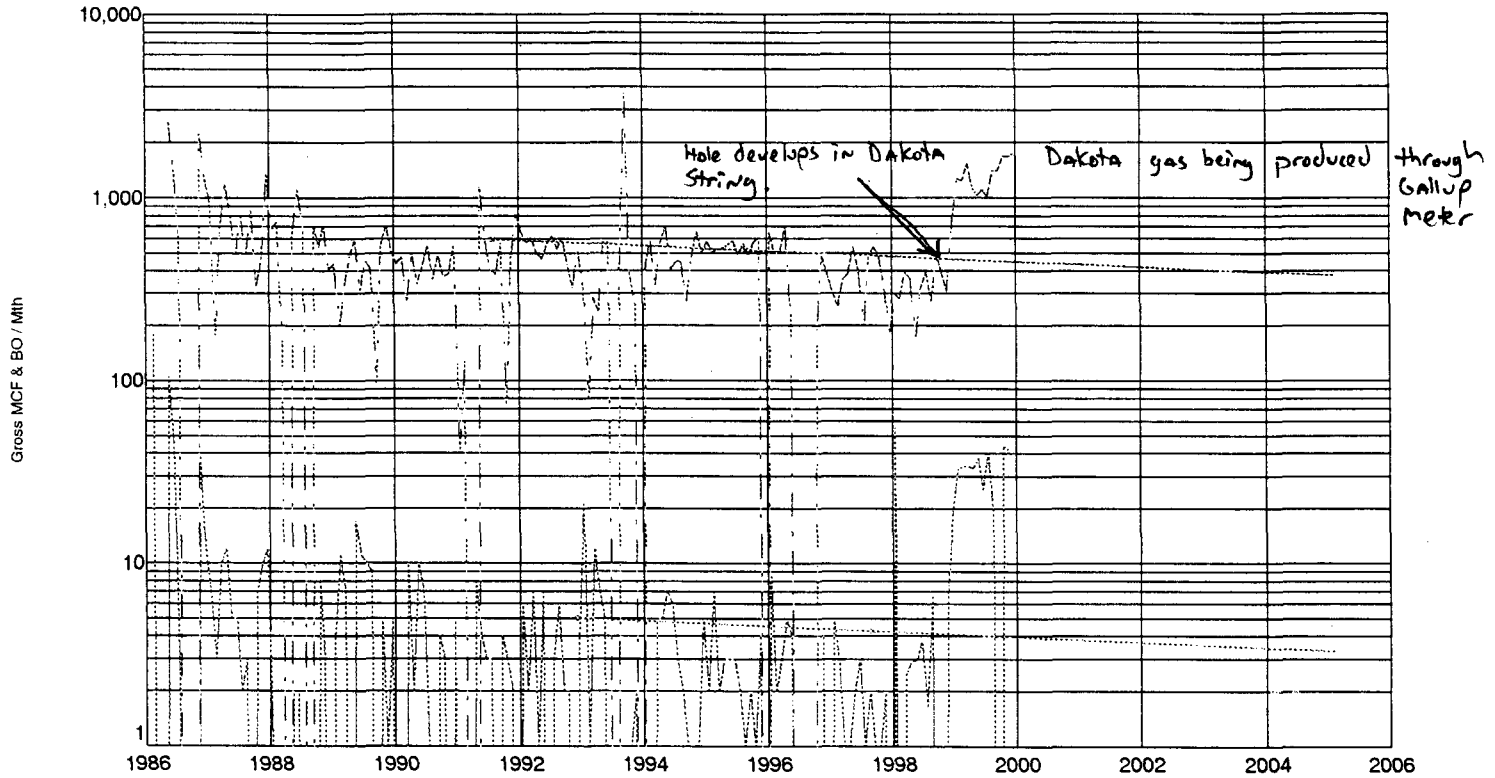
Lifetime Monthly Production Forecast Report

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\BAFeb10.MDB

Lease Name: JICARILLA (3E)
 County, ST: RIO ARRIBA, NM (Jicarilla)
 Location: 26N-5W-8

Field Name: TAPACITO (GALLUP) GP
 Operator: GREYSTONE ENERGY INC

JICARILLA-3E-TAPACITO (GALLUP) GP



Date	Oil (bbl)	Gas (mcf)	Water (bbl)	Total Oil (bbl)	Total Gas (mcf)	Total Water (bbl)
01/2000	4	447	0	4	447	0
02/2000	4	446	0	8	893	0
03/2000	4	444	0	12	1,337	1
04/2000	4	443	0	16	1,780	1
05/2000	4	442	0	20	2,222	1
06/2000	4	441	0	23	2,662	1
07/2000	4	439	0	27	3,102	1
08/2000	4	438	0	31	3,540	1
09/2000	4	437	0	35	3,977	2
10/2000	4	436	0	39	4,412	2
11/2000	4	434	0	43	4,847	2
12/2000	4	433	0	46	5,280	2
01/2001	4	432	0	50	5,712	2
02/2001	4	431	0	54	6,142	2
03/2001	4	429	0	58	6,572	2
04/2001	4	428	0	61	7,000	2
05/2001	4	427	0	65	7,427	3
06/2001	4	426	0	69	7,853	3
07/2001	4	425	0	73	8,277	3
08/2001	4	423	0	76	8,701	3
09/2001	4	422	0	80	9,123	3
10/2001	4	421	0	84	9,544	3

Lifetime Monthly Production Forecast Report

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\BAFeb10.MDB

Date	Oil (bbl)	Gas (mcf)	Water (bbl)	Total Oil (bbl)	Total Gas (mcf)	Total Water (bbl)
11/2001	4	420	0	87	9,964	3
12/2001	4	419	0	91	10,382	3
01/2002	4	417	0	95	10,800	3
02/2002	4	416	0	98	11,216	3
03/2002	4	415	0	102	11,631	3
04/2002	4	414	0	106	12,045	3
05/2002	4	413	0	109	12,457	3
06/2002	4	411	0	113	12,869	4
07/2002	4	410	0	116	13,279	4
08/2002	4	409	0	120	13,688	4
09/2002	4	408	0	124	14,096	4
10/2002	4	407	0	127	14,503	4
11/2002	4	406	0	131	14,909	4
12/2002	4	405	0	134	15,313	4
01/2003	4	403	0	138	15,716	4
02/2003	4	402	0	141	16,119	4
03/2003	4	401	0	145	16,520	4
04/2003	4	400	0	148	16,920	4
05/2003	3	399	0	152	17,318	4
06/2003	3	398	0	155	17,716	4
07/2003	3	397	0	159	18,113	4
08/2003	3	395	0	162	18,508	4
09/2003	3	394	0	166	18,902	4
10/2003	3	393	0	169	19,295	4
11/2003	3	392	0	173	19,688	4
12/2003	3	391	0	176	20,078	4
01/2004	3	390	0	179	20,468	4
02/2004	3	389	0	183	20,857	4
03/2004	3	388	0	186	21,245	4
04/2004	3	386	0	190	21,631	4
05/2004	3	385	0	193	22,016	4
06/2004	3	384	0	196	22,401	4
07/2004	3	383	0	200	22,784	4
08/2004	3	382	0	203	23,166	4
09/2004	3	381	0	206	23,547	4
10/2004	3	380	0	210	23,927	4
11/2004	3	379	0	213	24,306	4
12/2004	3	378	0	216	24,684	4
01/2005	3	377	0	220	25,060	4
Total:	220	25,060	4			

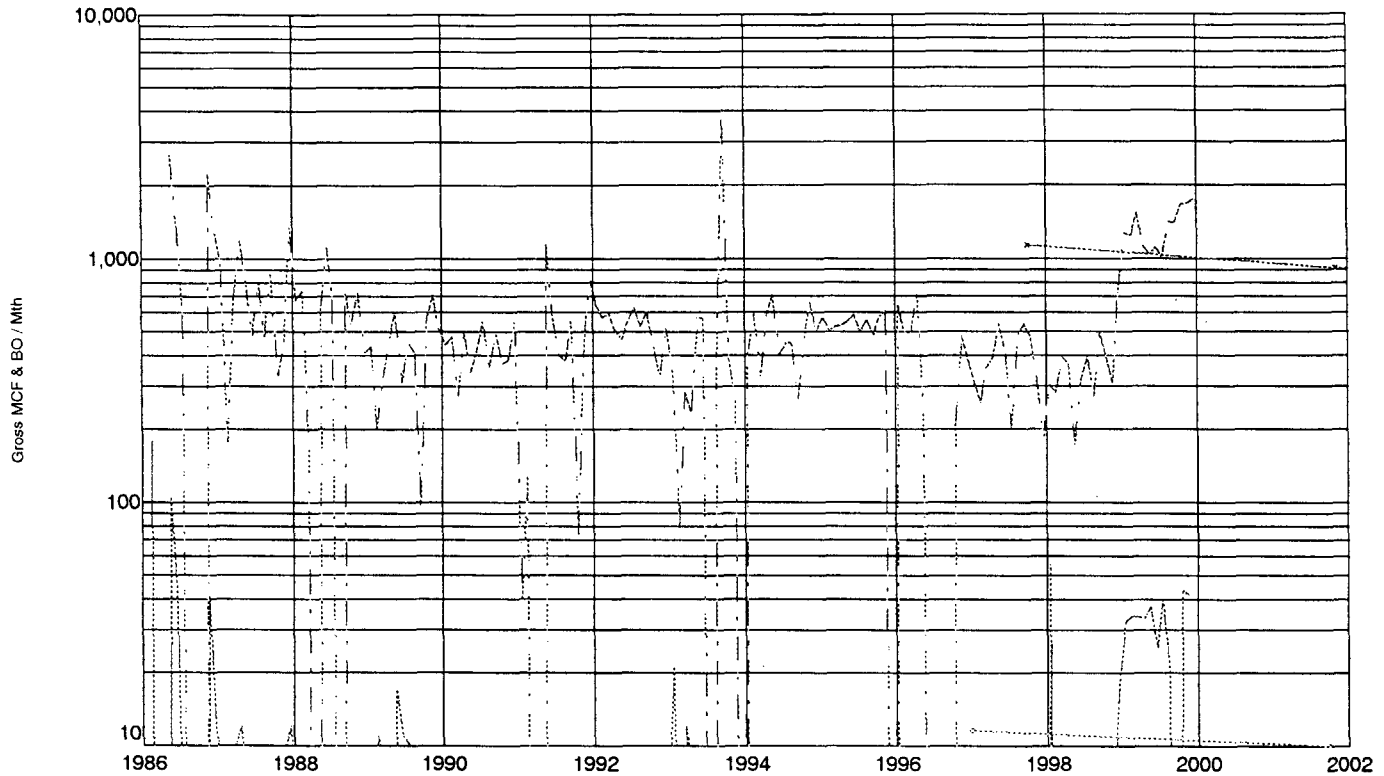
Last Twelve Months Historic Production Report

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\Babase.mdb

Lease Name: JICARILLA (3E)
 County, ST: RIO ARRIBA, NM (Jicarilla)
 Location: 26N-5W-8

Field Name: TAPACITO (GALLUP) GP
 Operator: GREYSTONE ENERGY INC

JICARILLA-3E-TAPACITO (GALLUP) GP



Date	Well Count	Oil (bbl)	Gas (mcf)	Water (bbl)	Injection (bbl)
Previous		925	75,499	445	3,106
01/1999	1	33	1,274	0	1,252
02/1999	1	34	1,241	0	0
03/1999	1	34	1,542	0	0
04/1999	1	33	1,127	0	0
05/1999	1	38	1,036	0	0
06/1999	1	25	1,116	0	0
07/1999	1	40	1,015	0	0
08/1999	1	20	1,409	0	0
09/1999	1	0	1,404	0	0
10/1999	1	44	1,674	0	0
11/1999	1	42	1,682	0	0
12/1999	1	0	1,743	0	0
Total:		1,267	91,762	445	4,358

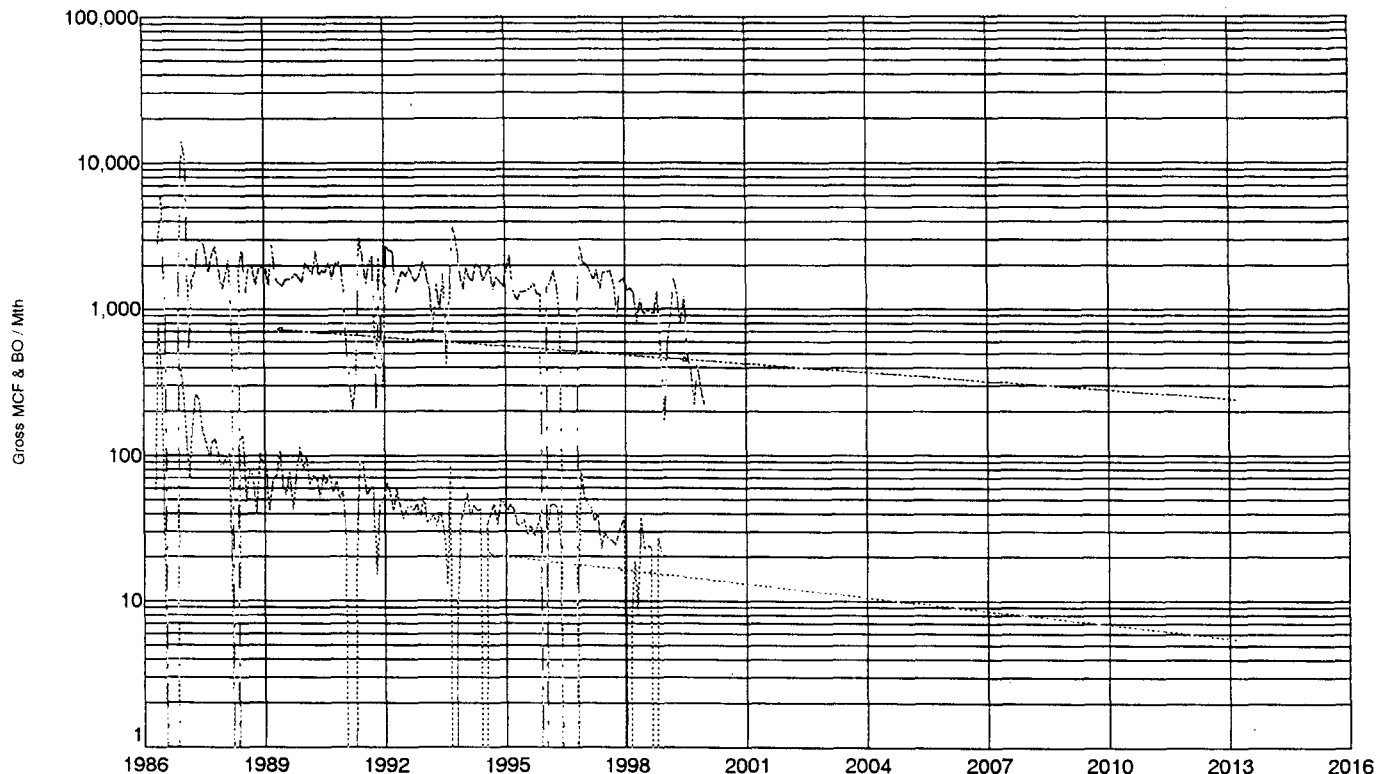
Last Twelve Months Historic Production Report

Project: C:\Program Files\IHS Energy\PTools35\PROJECTS\Reserves\2000\Babase.mdb

Lease Name: JICARILLA (3E)
 County, ST: RIO ARRIBA, NM (Jicarilla)
 Location: 26N-5W-8

Field Name: BASIN (DAKOTA) DK
 Operator: GREYSTONE ENERGY INC

JICARILLA-3E-BASIN (DAKOTA) DK



Date	Well Count	Oil (bbl)	Gas (mcf)	Water (bbl)	Injection (bbl)
Previous		9,569	261,670	1,218	2,125
01/1999	1	0	551	0	0
02/1999	1	0	884	0	0
03/1999	1	0	1,669	0	0
04/1999	1	0	1,266	0	0
05/1999	1	0	801	0	0
06/1999	1	0	1,194	0	0
07/1999	1	0	511	0	0
08/1999	1	0	376	0	0
09/1999	1	0	224	0	0
10/1999	1	0	410	0	0
11/1999	1	0	278	0	0
12/1999	1	0	225	0	0
Total:		9,569	270,059	1,218	2,125