

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

NOV - 3 1997

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Robert L Bayless
OperatorPO Box 168, Farmington, NM 87499
Address

Helen Hartman

#1

P-08-30N-11W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

OGRID NO. 019418 Property Code 016414 API NO. 30-045-09630

Spacing Unit Lease Types: (check 1 or more)

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	Blanco Mesa Verde 72319		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	4000-4480		6508-6633
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: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 497 b. (Original) 1115	a. b.	a. 420 b. 2256
6. Oil Gravity (° API) or Gas BTU Content	1212		1186
7. Producing or Shut-In?	not completed yet		Producing
Production Marginal? (yes or no)	Yes		Yes
* 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	Date: Rates: N/A	Date: Rates:	Date: Rates: N/A
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Not producing Rates: Production estimates attached	Date: Rates:	Date: Rates: 42 MCFD 8.4 BGPB
8. Fixed Percentage Allocation Formula - % for each zone	Oil: N/A Gas: %	Oil: % Gas: %	Oil: N/A Gas: %

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
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No11. 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 ☐ No13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communited 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 N/A

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 all offset operators.
- * 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 Kevin H. McCord TITLE Petroleum Engineer DATE 10/30/97TYPE OR PRINT NAME Kevin H. McCord TELEPHONE NO. (505) 326-2659

ROBERT L. BAYLESS

**Downhole Commingle Application
Helen Hartman #1**

LIST OF ATTACHMENTS

- Attachment #1 - Well Location and Acreage Dedication Plat (C-102) for the Dakota Formation**
- Attachment #2 - Well Location and Acreage Dedication Plat (C-102) for the Mesa Verde Formation**
- Attachment #3 - Production Decline Curve for the Dakota Formation**
- Attachment #4 - Estimated Future Production Decline Curve for the Mesa Verde Formation**
- Attachment #5 - Estimated Future Production for the Dakota Formation**
- Attachment #6 - Estimated Future Production for the Mesa Verde Formation**
- Attachment #7 - Allocation Method**
- Attachment #8 - Sample Notification Letter**
- Attachment #9 - List of All Offset Operators Notified**
- Attachment #10 - List of All Working, Overriding, and Royalty Interest Owners Notified**

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date 1/11/62

Operator SOUTHWEST PRODUCTION COMPANY Lease Helen Hartman
 Well No. 1 Unit Letter P Section 8 Township 30 NORTH Range 11 WEST, NMPM
 Located 1190 Feet From the SOUTH Line, 1190 Feet From the EAST Line
 County SAN JUAN G. L. Elevation 5571.0 Dedicated Acreage E/320 Acres
 Name of Producing Formation Dakota Pool Basin Dakota

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes X No _____
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes _____ No _____. If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Southwest Production Company

(Operator) Original signed by
 Carl W. Smith

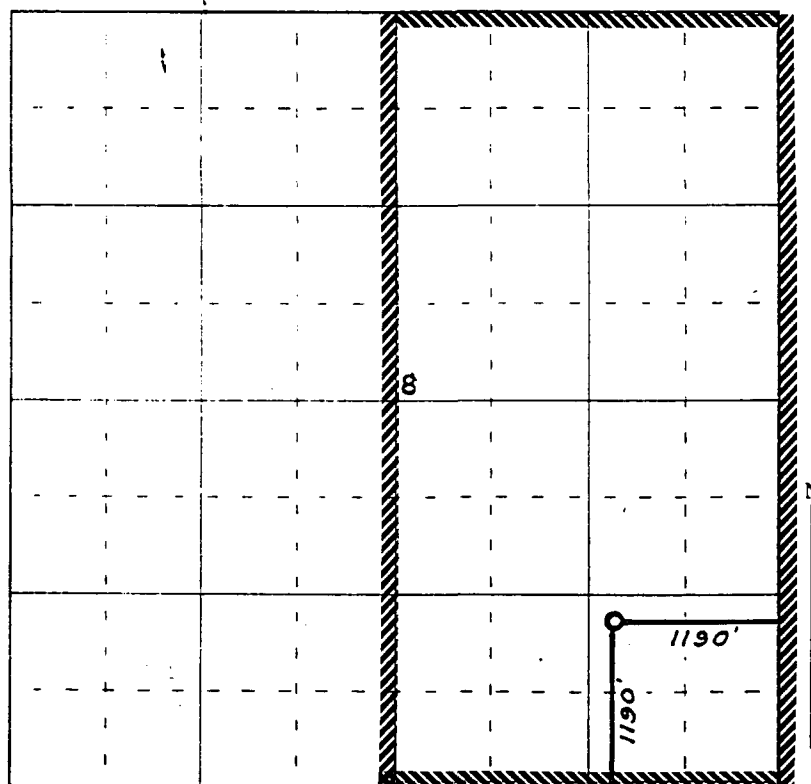
(Representative)

207 Petr. Club Plaza

(Address)

Farmington, New Mexico

Note: All distances must be from outer boundaries of section.



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

Scale 4 inches equal 1 mile

Ref: GLO plat dated 7 April 1881

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed 11 January 1962

James P. Lease
 Registered Professional Engineer and/or Land Surveyor
 James P. Lease N. Mex. Reg. No. 7463

Farmington, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

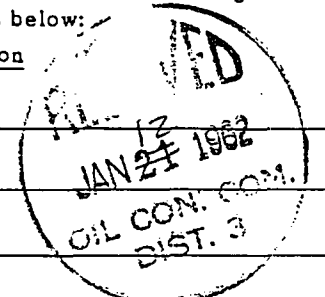
Date 7/7/97
(original plat dated 1/11/62)

Operator Robert L. Bayless Lease Helen Hartman
 Well No. 1 Unit Letter P Section 8 Township 30 NORTH Range 11 WEST, NMPM
 Located 1190 Feet From the SOUTH Line, 1190 Feet From the EAST Line
 County SAN JUAN G. L. Elevation 5571.0 Dedicated Acreage SE/160 Acres
 Name of Producing Formation Mesaverde Pool Blanco/Mesaverde

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes No X
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No . If answer is "yes", Type of Consolidation. Communitization Agreement
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description



Section B.

Note: All distances must be from outer boundaries of section.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Robert L. Bayless

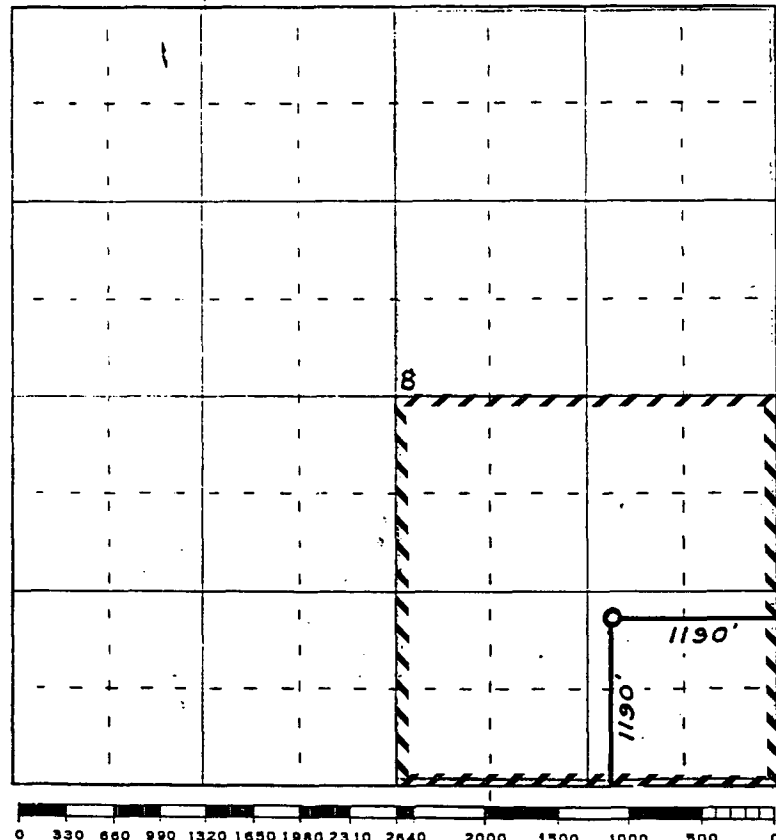
(Operator)

Kevin H. McCord

(Representative)

PO Box 168

(Address)

Farmington, New Mexico 87499

Scale 4 inches equal 1 mile

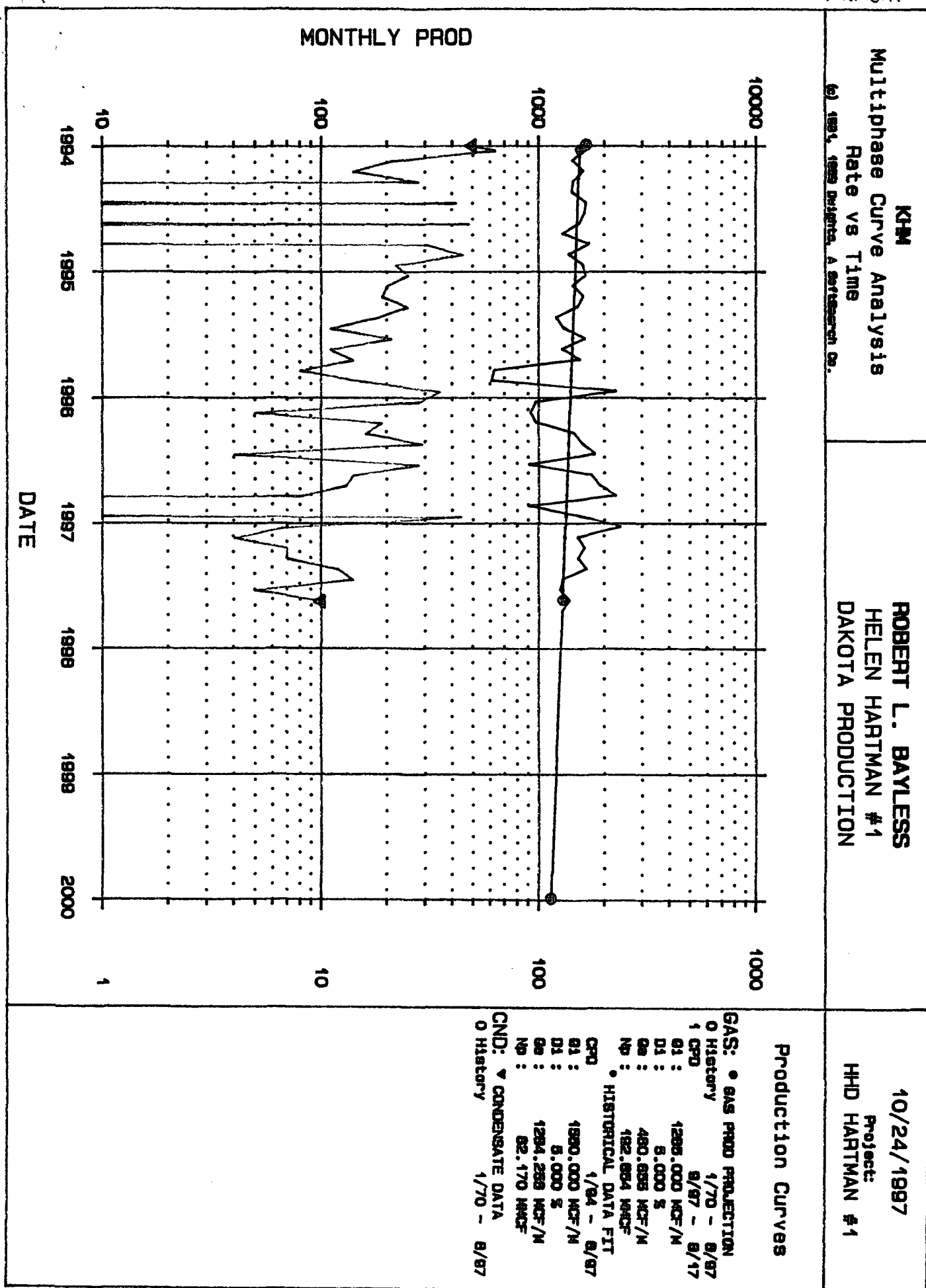
Ref: GLO plat dated 7 April 1881

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed 11 January 1962

James P. Lease
 Registered Professional Engineer and/or Land Surveyor
 James P. Lease N. Mex. Reg. No. 1463



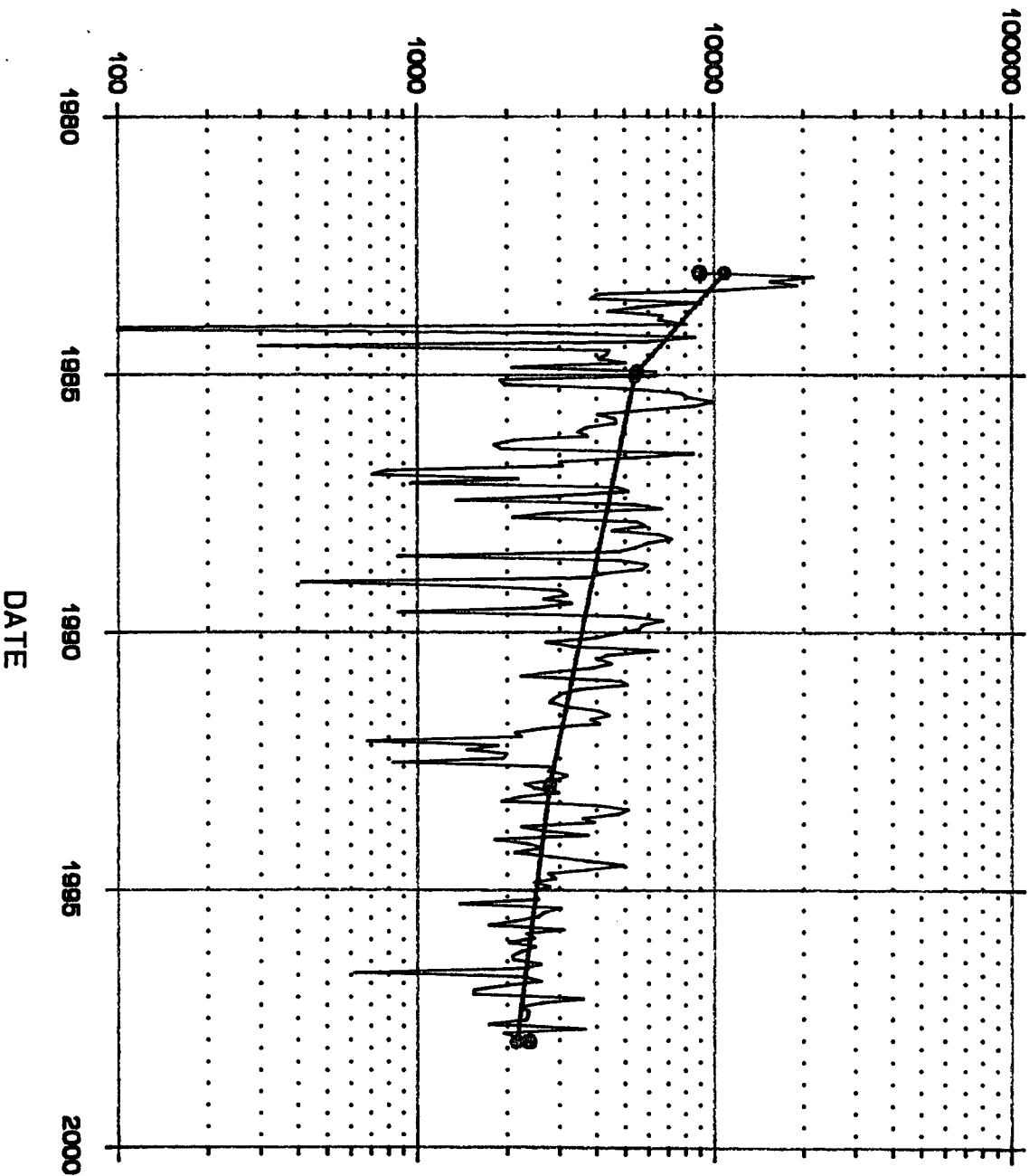


KHM
Multiphase Curve Analysis
Rate vs Time
 (c) 1997, 1999 DuPont, A Surfacecon Co.

ROBERT L. BAYLESS
HELEN HARTMAN #1
OFFSET MV AVG PRODUCTION

10/10/1997
Project:
HHD HARTMAN MV

MONTHLY PROD



Production Curves

GAS: • GAS DATA
 0 History 1/89 - 12/87

CPD 1/89 - 12/84

G1: 11000.000 MCF/M

D1: 30.000 %

G2: 5980.001 MCF/M

N2: 188.738 MCF

CPD 1/89 - 12/82

G1: 8400.000 MCF/M

D1: 8.000 %

G2: 2771.382 MCF/M

N2: 378.301 MCF

CONDENSATE TO GAS RATIO

CPD 1/89 - 12/87

G1: 2770.000 MCF/M

D1: 5.000 %

G2: 2143.378 MCF/M

N2: 146.888 MCF

Historically:

Condensate production
 equals 0.00385 Bbls/MCF
 or a GOR of 260,000 scf/Bbl

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
DAKOTA FORMATION FUTURE PRODUCTION				
FORECAST USING HISTORICAL TREND				
Initial Rate (September 1997):			1285 MCFM	11.9 BCPM*
Effective Decline Rate:			5.0%	
* - Condensate production is projected using GOR of 107,920 SCF/BBL calculated from 1996-1997 actual production				
	YEAR	MONTH	GAS (MCF)	COND* (BBLs)
1	1997	SEP	1,282	12
2	1997	OCT	1,277	12
3	1997	NOV	1,271	12
4	1997	DEC	1,266	12
5	1998	JAN	1,261	12
6	1998	FEB	1,255	12
7	1998	MAR	1,250	12
8	1998	APR	1,244	12
9	1998	MAY	1,239	11
10	1998	JUN	1,234	11
11	1998	JUL	1,229	11
12	1998	AUG	1,223	11
13	1998	SEP	1,218	11
14	1998	OCT	1,213	11
15	1998	NOV	1,208	11
16	1998	DEC	1,203	11
17	1999	JAN	1,197	11
18	1999	FEB	1,192	11
19	1999	MAR	1,187	11
20	1999	APR	1,182	11
21	1999	MAY	1,177	11
22	1999	JUN	1,172	11
23	1999	JUL	1,167	11
24	1999	AUG	1,162	11
25	1999	SEP	1,157	11
26	1999	OCT	1,152	11
27	1999	NOV	1,147	11
28	1999	DEC	1,142	11
29	2000	JAN	1,138	11
30	2000	FEB	1,133	10
31	2000	MAR	1,128	10
32	2000	APR	1,123	10
33	2000	MAY	1,118	10
34	2000	JUN	1,114	10
35	2000	JUL	1,109	10
36	2000	AUG	1,104	10
37	2000	SEP	1,099	10
38	2000	OCT	1,095	10
39	2000	NOV	1,090	10
40	2000	DEC	1,085	10

*Revised Schedule
Added*

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
DAKOTA FORMATION FUTURE PRODUCTION				
FORECAST USING HISTORICAL TREND				
Initial Rate (September 1997):			1285 MCFM	11.9 BCPM*
Effective Decline Rate:			5.0%	
* - Condensate production is projected using GOR of 107,920				
SCF/BBL calculated from 1996-1997 actual production				
	YEAR	MONTH	GAS (MCF)	COND* (BBLs)
41	2001	JAN	1,081	10
42	2001	FEB	1,076	10
43	2001	MAR	1,072	10
44	2001	APR	1,067	10
45	2001	MAY	1,062	10
46	2001	JUN	1,058	10
47	2001	JUL	1,053	10
48	2001	AUG	1,049	10
49	2001	SEP	1,044	10
50	2001	OCT	1,040	10
51	2001	NOV	1,036	10
52	2001	DEC	1,031	10
53	2002	JAN	1,027	10
54	2002	FEB	1,022	9
55	2002	MAR	1,018	9
56	2002	APR	1,014	9
57	2002	MAY	1,009	9
58	2002	JUN	1,005	9
59	2002	JUL	1,001	9
60	2002	AUG	996	9
61	2002	SEP	992	9
62	2002	OCT	988	9
63	2002	NOV	984	9
64	2002	DEC	980	9
65	2003	JAN	975	9
66	2003	FEB	971	9
67	2003	MAR	967	9
68	2003	APR	963	9
69	2003	MAY	959	9
70	2003	JUN	955	9
71	2003	JUL	951	9
72	2003	AUG	947	9
73	2003	SEP	943	9
74	2003	OCT	939	9
75	2003	NOV	935	9
76	2003	DEC	931	9
77	2004	JAN	927	9
78	2004	FEB	923	9
79	2004	MAR	919	9
80	2004	APR	915	8
81	2004	MAY	911	8

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* - Condensate production is projected using GOR of 107,920 SCF/BBL calculated from 1996-1997 actual production				
	YEAR	MONTH	GAS (MCF)	COND* (BBLs)
82	2004	JUN	907	8
83	2004	JUL	903	8
84	2004	AUG	899	8
85	2004	SEP	895	8
86	2004	OCT	892	8
87	2004	NOV	888	8
88	2004	DEC	884	8
89	2005	JAN	880	8
90	2005	FEB	877	8
91	2005	MAR	873	8
92	2005	APR	869	8
93	2005	MAY	865	8
94	2005	JUN	862	8
95	2005	JUL	858	8
96	2005	AUG	854	8
97	2005	SEP	851	8
98	2005	OCT	847	8
99	2005	NOV	843	8
100	2005	DEC	840	8
101	2006	JAN	836	8
102	2006	FEB	833	8
103	2006	MAR	829	8
104	2006	APR	826	8
105	2006	MAY	822	8
106	2006	JUN	819	8
107	2006	JUL	815	8
108	2006	AUG	812	8
109	2006	SEP	808	7
110	2006	OCT	805	7
111	2006	NOV	801	7
112	2006	DEC	798	7
113	2007	JAN	794	7
114	2007	FEB	791	7
115	2007	MAR	788	7
116	2007	APR	784	7
117	2007	MAY	781	7
118	2007	JUN	778	7
119	2007	JUL	774	7
120	2007	AUG	771	7
121	2007	SEP	768	7
122	2007	OCT	764	7

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SCF/BBL calculated from 1996-1997 actual production				
	YEAR	MONTH	GAS (MCF)	COND* (BBLs)
123	2007	NOV	761	7
124	2007	DEC	758	7
125	2008	JAN	755	7
126	2008	FEB	752	7
127	2008	MAR	748	7
128	2008	APR	745	7
129	2008	MAY	742	7
130	2008	JUN	739	7
131	2008	JUL	736	7
132	2008	AUG	732	7
133	2008	SEP	729	7
134	2008	OCT	726	7
135	2008	NOV	723	7
136	2008	DEC	720	7
137	2009	JAN	717	7
138	2009	FEB	714	7
139	2009	MAR	711	7
140	2009	APR	708	7
141	2009	MAY	705	7
142	2009	JUN	702	7
143	2009	JUL	699	6
144	2009	AUG	696	6
145	2009	SEP	693	6
146	2009	OCT	690	6
147	2009	NOV	687	6
148	2009	DEC	684	6
149	2010	JAN	681	6
150	2010	FEB	678	6
151	2010	MAR	675	6
152	2010	APR	672	6
153	2010	MAY	670	6
154	2010	JUN	667	6
155	2010	JUL	664	6
156	2010	AUG	661	6
157	2010	SEP	658	6
158	2010	OCT	655	6
159	2010	NOV	653	6
160	2010	DEC	650	6
161	2011	JAN	647	6
162	2011	FEB	644	6

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* - Condensate production is projected using GOR of 107,920 SCF/BBL calculated from 1996-1997 actual production				
			GAS	COND*
	YEAR	MONTH	(MCF)	(BBLs)
163	2011	MAR	642	6
164	2011	APR	639	6
165	2011	MAY	636	6
166	2011	JUN	633	6
167	2011	JUL	631	6
168	2011	AUG	628	6
169	2011	SEP	625	6
170	2011	OCT	623	6
171	2011	NOV	620	6
172	2011	DEC	617	6
173	2012	JAN	615	6
174	2012	FEB	612	6
175	2012	MAR	609	6
176	2012	APR	607	6
177	2012	MAY	604	6
178	2012	JUN	602	6
179	2012	JUL	599	6
180	2012	AUG	597	6
181	2012	SEP	594	6
182	2012	OCT	592	5
183	2012	NOV	589	5
184	2012	DEC	586	5
185	2013	JAN	584	5
186	2013	FEB	581	5
187	2013	MAR	579	5
188	2013	APR	577	5
189	2013	MAY	574	5
190	2013	JUN	572	5
191	2013	JUL	569	5
192	2013	AUG	567	5
193	2013	SEP	564	5
194	2013	OCT	562	5
195	2013	NOV	560	5
196	2013	DEC	557	5
197	2014	JAN	555	5
198	2014	FEB	552	5
199	2014	MAR	550	5
200	2014	APR	548	5
201	2014	MAY	545	5
202	2014	JUN	543	5
203	2014	JUL	541	5

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* - Condensate production is projected using GOR of 107,920 SCF/BBL calculated from 1996-1997 actual production				
	YEAR	MONTH	GAS (MCF)	COND* (BBLs)
204	2014	AUG	538	5
205	2014	SEP	536	5
206	2014	OCT	534	5
207	2014	NOV	532	5
208	2014	DEC	529	5
209	2015	JAN	527	5
210	2015	FEB	525	5
211	2015	MAR	523	5
212	2015	APR	520	5
213	2015	MAY	518	5
214	2015	JUN	516	5
215	2015	JUL	514	5
216	2015	AUG	512	5
217	2015	SEP	509	5
218	2015	OCT	507	5
219	2015	NOV	505	5
220	2015	DEC	503	5
221	2016	JAN	501	5
222	2016	FEB	499	5
223	2016	MAR	496	5
224	2016	APR	494	5
225	2016	MAY	492	5
226	2016	JUN	490	5
227	2016	JUL	488	5
228	2016	AUG	486	5
229	2016	SEP	484	4
230	2016	OCT	482	4
231	2016	NOV	480	4
232	2016	DEC	478	4
233	2017	JAN	476	4
234	2017	FEB	474	4
235	2017	MAR	472	4
236	2017	APR	470	4
237	2017	MAY	468	4
238	2017	JUN	466	4
239	2017	JUL	464	4
240	2017	AUG	462	4

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
MESA VERDE FORMATION FUTURE PRODUCTION				
FORECAST USING AVERAGE PRODUCTION				
FROM OFFSETS				
Initial Rate (January 1998):		11000 MCFM	42.4 BCPM*	
Effective Declines Used:		30% for 2 years		
		8% for 8 years		
		5% thereafter		
* - Condensate production is projected from GOR of 260,000				
SCF/BBL historical average from offset wells				
			GAS	COND*
	YEAR	MONTH	(MCF)	(BBLs)
1	1998	JAN	10,838	42
2	1998	FEB	10,520	41
3	1998	MAR	10,212	39
4	1998	APR	9,913	38
5	1998	MAY	9,623	37
6	1998	JUN	9,341	36
7	1998	JUL	9,067	35
8	1998	AUG	8,802	34
9	1998	SEP	8,544	33
10	1998	OCT	8,294	32
11	1998	NOV	8,051	31
12	1998	DEC	7,815	30
13	1999	JAN	7,586	29
14	1999	FEB	7,364	28
15	1999	MAR	7,149	28
16	1999	APR	6,939	27
17	1999	MAY	6,736	26
18	1999	JUN	6,539	25
19	1999	JUL	6,347	24
20	1999	AUG	6,161	24
21	1999	SEP	5,981	23
22	1999	OCT	5,806	22
23	1999	NOV	5,636	22
24	1999	DEC	5,471	21
25	2000	JAN	5,381	21
26	2000	FEB	5,344	21
27	2000	MAR	5,307	20
28	2000	APR	5,270	20
29	2000	MAY	5,234	20
30	2000	JUN	5,198	20
31	2000	JUL	5,162	20
32	2000	AUG	5,126	20
33	2000	SEP	5,090	20
34	2000	OCT	5,055	19
35	2000	NOV	5,020	19
36	2000	DEC	4,985	19

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
MESA VERDE FORMATION FUTURE PRODUCTION				
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FROM OFFSETS				
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Effective Declines Used:			30% for 2 years	
			8% for 8 years	
			5% thereafter	
* - Condensate production is projected from GOR of 260,000				
SCF/BBL historical average from offset wells				
			GAS	COND*
	YEAR	MONTH	(MCF)	(BBLS)
37	2001	JAN	4,951	19
38	2001	FEB	4,916	19
39	2001	MAR	4,882	19
40	2001	APR	4,849	19
41	2001	MAY	4,815	19
42	2001	JUN	4,782	18
43	2001	JUL	4,749	18
44	2001	AUG	4,716	18
45	2001	SEP	4,683	18
46	2001	OCT	4,651	18
47	2001	NOV	4,618	18
48	2001	DEC	4,586	18
49	2002	JAN	4,555	18
50	2002	FEB	4,523	17
51	2002	MAR	4,492	17
52	2002	APR	4,461	17
53	2002	MAY	4,430	17
54	2002	JUN	4,399	17
55	2002	JUL	4,369	17
56	2002	AUG	4,338	17
57	2002	SEP	4,308	17
58	2002	OCT	4,279	16
59	2002	NOV	4,249	16
60	2002	DEC	4,220	16
61	2003	JAN	4,190	16
62	2003	FEB	4,161	16
63	2003	MAR	4,133	16
64	2003	APR	4,104	16
65	2003	MAY	4,075	16
66	2003	JUN	4,047	16
67	2003	JUL	4,019	15
68	2003	AUG	3,991	15
69	2003	SEP	3,964	15
70	2003	OCT	3,936	15
71	2003	NOV	3,909	15
72	2003	DEC	3,882	15

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
MESA VERDE FORMATION FUTURE PRODUCTION				
FORECAST USING AVERAGE PRODUCTION				
FROM OFFSETS				
Initial Rate (January 1998):		11000 MCFM	42.4 BCPM*	
Effective Declines Used:		30% for 2 years		
		8% for 8 years		
		5% thereafter		
* - Condensate production is projected from GOR of 260,000				
SCF/BBL historical average from offset wells				
			GAS	COND*
	YEAR	MONTH	(MCF)	(BBLs)
73	2004	JAN	3,855	15
74	2004	FEB	3,828	15
75	2004	MAR	3,802	15
76	2004	APR	3,776	15
77	2004	MAY	3,749	14
78	2004	JUN	3,723	14
79	2004	JUL	3,698	14
80	2004	AUG	3,672	14
81	2004	SEP	3,647	14
82	2004	OCT	3,621	14
83	2004	NOV	3,596	14
84	2004	DEC	3,571	14
85	2005	JAN	3,547	14
86	2005	FEB	3,522	14
87	2005	MAR	3,498	13
88	2005	APR	3,474	13
89	2005	MAY	3,449	13
90	2005	JUN	3,426	13
91	2005	JUL	3,402	13
92	2005	AUG	3,378	13
93	2005	SEP	3,355	13
94	2005	OCT	3,332	13
95	2005	NOV	3,309	13
96	2005	DEC	3,286	13
97	2006	JAN	3,263	13
98	2006	FEB	3,240	12
99	2006	MAR	3,218	12
100	2006	APR	3,196	12
101	2006	MAY	3,174	12
102	2006	JUN	3,152	12
103	2006	JUL	3,130	12
104	2006	AUG	3,108	12
105	2006	SEP	3,087	12
106	2006	OCT	3,065	12
107	2006	NOV	3,044	12
108	2006	DEC	3,023	12

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
MESA VERDE FORMATION FUTURE PRODUCTION				
FORECAST USING AVERAGE PRODUCTION				
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Effective Declines Used:		30% for 2 years		
		8% for 8 years		
		5% thereafter		
* - Condensate production is projected from GOR of 260,000				
SCF/BBL historical average from offset wells				
			GAS	COND*
	YEAR	MONTH	(MCF)	(BBLs)
109	2007	JAN	3,002	12
110	2007	FEB	2,981	11
111	2007	MAR	2,960	11
112	2007	APR	2,940	11
113	2007	MAY	2,920	11
114	2007	JUN	2,899	11
115	2007	JUL	2,879	11
116	2007	AUG	2,859	11
117	2007	SEP	2,840	11
118	2007	OCT	2,820	11
119	2007	NOV	2,800	11
120	2007	DEC	2,781	11
121	2008	JAN	2,764	11
122	2008	FEB	2,752	11
123	2008	MAR	2,741	11
124	2008	APR	2,729	11
125	2008	MAY	2,717	10
126	2008	JUN	2,706	10
127	2008	JUL	2,694	10
128	2008	AUG	2,683	10
129	2008	SEP	2,671	10
130	2008	OCT	2,660	10
131	2008	NOV	2,648	10
132	2008	DEC	2,637	10
133	2009	JAN	2,626	10
134	2009	FEB	2,615	10
135	2009	MAR	2,604	10
136	2009	APR	2,592	10
137	2009	MAY	2,581	10
138	2009	JUN	2,570	10
139	2009	JUL	2,559	10
140	2009	AUG	2,548	10
141	2009	SEP	2,538	10
142	2009	OCT	2,527	10
143	2009	NOV	2,516	10
144	2009	DEC	2,505	10

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
MESA VERDE FORMATION FUTURE PRODUCTION				
FORECAST USING AVERAGE PRODUCTION				
FROM OFFSETS				
Initial Rate (January 1998):		11000 MCFM	42.4 BCPM*	
Effective Declines Used:		30% for 2 years		
		8% for 8 years		
		5% thereafter		
* - Condensate production is projected from GOR of 260,000				
SCF/BBL historical average from offset wells				
	YEAR	MONTH	GAS (MCF)	COND* (BBLs)
145	2010	JAN	2,495	10
146	2010	FEB	2,484	10
147	2010	MAR	2,473	10
148	2010	APR	2,463	9
149	2010	MAY	2,452	9
150	2010	JUN	2,442	9
151	2010	JUL	2,431	9
152	2010	AUG	2,421	9
153	2010	SEP	2,411	9
154	2010	OCT	2,400	9
155	2010	NOV	2,390	9
156	2010	DEC	2,380	9
157	2011	JAN	2,370	9
158	2011	FEB	2,360	9
159	2011	MAR	2,350	9
160	2011	APR	2,340	9
161	2011	MAY	2,330	9
162	2011	JUN	2,320	9
163	2011	JUL	2,310	9
164	2011	AUG	2,300	9
165	2011	SEP	2,290	9
166	2011	OCT	2,280	9
167	2011	NOV	2,271	9
168	2011	DEC	2,261	9
169	2012	JAN	2,251	9
170	2012	FEB	2,242	9
171	2012	MAR	2,232	9
172	2012	APR	2,223	9
173	2012	MAY	2,213	9
174	2012	JUN	2,204	8
175	2012	JUL	2,194	8
176	2012	AUG	2,185	8
177	2012	SEP	2,176	8
178	2012	OCT	2,166	8
179	2012	NOV	2,157	8
180	2012	DEC	2,148	8

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
MESA VERDE FORMATION FUTURE PRODUCTION				
FORECAST USING AVERAGE PRODUCTION				
FROM OFFSETS				
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Effective Declines Used:		30% for 2 years		
		8% for 8 years		
		5% thereafter		
* - Condensate production is projected from GOR of 260,000				
SCF/BBL historical average from offset wells				
	YEAR	MONTH	GAS (MCF)	COND* (BBLs)
181	2013	JAN	2,085	8
182	2013	FEB	2,024	8
183	2013	MAR	1,965	8
184	2013	APR	1,907	7
185	2013	MAY	1,851	7
186	2013	JUN	1,797	7
187	2013	JUL	1,744	7
188	2013	AUG	1,693	7
189	2013	SEP	1,644	6
190	2013	OCT	1,596	6
191	2013	NOV	1,549	6
192	2013	DEC	1,504	6
193	2014	JAN	1,460	6
194	2014	FEB	1,417	5
195	2014	MAR	1,375	5
196	2014	APR	1,335	5
197	2014	MAY	1,296	5
198	2014	JUN	1,258	5
199	2014	JUL	1,221	5
200	2014	AUG	1,185	5
201	2014	SEP	1,151	4
202	2014	OCT	1,117	4
203	2014	NOV	1,084	4
204	2014	DEC	1,052	4
205	2015	JAN	1,022	4
206	2015	FEB	992	4
207	2015	MAR	963	4
208	2015	APR	935	4
209	2015	MAY	907	3
210	2015	JUN	881	3
211	2015	JUL	855	3
212	2015	AUG	830	3
213	2015	SEP	805	3
214	2015	OCT	782	3
215	2015	NOV	759	3
216	2015	DEC	737	3

ROBERT L. BAYLESS				
HELEN HARTMAN #1				
MESA VERDE FORMATION FUTURE PRODUCTION				
FORECAST USING AVERAGE PRODUCTION				
FROM OFFSETS				
Initial Rate (January 1998):			11000 MCFM	42.4 BCPM*
Effective Declines Used:			30% for 2 years	
			8% for 8 years	
			5% thereafter	
* - Condensate production is projected from GOR of 260,000				
SCF/BBL historical average from offset wells				
			GAS	COND*
	YEAR	MONTH	(MCF)	(BBLs)
217	2016	JAN	715	3
218	2016	FEB	694	3
219	2016	MAR	674	3
220	2016	APR	654	3
221	2016	MAY	635	2
222	2016	JUN	616	2
223	2016	JUL	598	2
224	2016	AUG	581	2
225	2016	SEP	564	2
226	2016	OCT	547	2
227	2016	NOV	531	2
228	2016	DEC	516	2
229	2017	JAN	501	2
230	2017	FEB	486	2
231	2017	MAR	472	2
232	2017	APR	458	2
233	2017	MAY	445	2
234	2017	JUN	431	2
235	2017	JUL	419	2
236	2017	AUG	407	2
237	2017	SEP	395	2
238	2017	OCT	383	1
239	2017	NOV	372	1
240	2017	DEC	361	1

ROBERT L BAYLESS

**Downhole Commingle Application
Helen Hartman #1**

ALLOCATION METHOD

Robert L. Bayless proposes to allocate production from the Helen Hartman #1 well by a difference method. Presented as Attachment #5 is a tabular listing of expected future production from the Dakota formation in this well. This future production was calculated from the current production trend that exists in the Dakota formation. This trend is shown graphically in the production decline curve for the Dakota formation presented in Attachment #3.

Once the Mesa Verde formation is completed in this well and it's production is commingled downhole with the Dakota formation, the total well production for a given month will be compared to the expected Dakota formation production for that month. The amount of actual production above the expected Dakota formation production will be the production allocated to the Mesa Verde formation. If for any reason the total well production for a given month is less than the expected Dakota formation production, all of the actual production will be allocated to the Dakota formation and none will be allocated to the Mesa Verde formation.

EXAMPLE:

Assume actual production for the Helen Hartman #1 well for March 1998 is 16,500 MCF of gas and 70 Bbls of condensate. From Attachment #5, the expected Dakota gas production is 1,250 MCF with 12 Bbls of condensate. Therefore, allocation will be as follows:

	<u>Gas (MCF)</u>	<u>Condensate (Bbls)</u>
Total Production:	16,500	70
Dakota Allocation:	1,250	12
Mesa Verde Allocation:	15,250	58

ROBERT L. BAYLESS

P. O. BOX 168
FARMINGTON, NM 87499FAX NO.
(505) 326-6911OFFICE NO.
(505) 326-2659

October 30, 1997

Certified Mail - Return Receipt Requested

TO: All Interested Parties Entitled To Notice

RE: Application for Downhole Commingling
Robert L. Bayless
Helen Hartman #1
1190' FSL and 1190' FEL
Section 8, T30N R11W
San Juan County, New Mexico

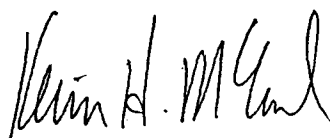
Gentlemen:

Attached you will find Robert L. Bayless' Application to Downhole Commingle the Dakota and Mesa Verde formations in the Helen Hartman #1 well referenced above. Notice of this application is being sent to you in fulfillment of New Mexico Oil Conservation Division Rules requiring notification to all offset operators as well as working, royalty, and overriding royalty interest owners of this well.

As an party whose interest may be affected by this application, Robert L. Bayless is notifying you of your right to support or oppose this action to the New Mexico Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87504. Your participation in this case must be noted within 20 days of receipt of this notice. Failure to respond within this time frame may preclude you from any involvement in this application at a later date.

If you have any questions concerning this application, please contact me at the above letterhead address.

Sincerely,

Kevin H. McCord
Petroleum Engineer

Attachments

ROBERT L. BAYLESS**Downhole Commingle Application
Helen Hartman #1****List of All Offset Operators Notified**

<u>NAME</u>	<u>ADDRESS</u>	<u>CITY & STATE</u>	<u>ZIP CODE</u>	<u>DATE MAILED</u>	<u>CERTIFIED MAIL RECEIPT #</u>
1 . Amoco Production Company	P.O. Box 800	Denver, CO	80201	10/30/97	P 386 810 323
2 . Burlington Resources Oil and Gas Company	P.O. Box 4229	Farmington, NM	87401	10/30/97	P 386 810 324
3 . Conoco, Inc.	10 Desta Drive, Suite 100W	Midland, TX	79705-4500	10/30/97	P 386 810 325
4 . Taurus Exploration USA, Inc.	2198 Bloomfield Highway	Farmington, NM	87401	10/30/97	P 386 810 326

ROBERT L. BAYLESS

Downhole Commingle Application
Helen Hartman #1List of All Well Interest Owners Notified

NAME	ADDRESS	CITY & STATE	ZIP CODE	DATE MAILED	CERTIFIED MAIL RECEIPT #
1 . Ira & Viola Alleman	1505 Riverview Ave.	Aztec, NM	87410	10/30/97	P 416 793 191
2 . George Anison	PO Box 73	Sandia Park, NM	87047	10/30/97	Z 164 296 381
3 . R L & I Atchison	PO Box 4540	Farmington, NM	87499	10/30/97	P 386 810 523
4 . Lee Atchison	6200 Quail Run	Farmington, NM	87402	10/30/97	Z 164 296 376
5 . City of Aztec	201 West Chaco	Aztec, NM	87410	10/30/97	Z 164 296 374
6 . Lanell & Evelyn Baird	1425 Riverview	Aztec, NM	87410	10/30/97	P 416 793 182
7 . Bayless Drilling Company	P.O. Box 2669	Farmington, NM	87499	10/30/97	Z 164 296 146
8 . Burlington Resources	PO Box 4289	Farmington, NM	87499	10/30/97	Z 164 296 386
9 . Charles & LaVaon Cable	1517 Riverview Dr	Aztec, NM	87410	10/30/97	P 416 793 190
10 . Stanley & Nadine Campbell	416 Road 3000	Aztec, NM	87410	10/30/97	P 416 793 166
11 . Lela Mae Reed Campbell	4025 Pineridge Drive	Garland, TX	75042	10/30/97	Z 164 296 163
12 . W.H. & Marguerite Cantrell	No Address (Deceased)				
13 . Raymond & Mazi Chapman	309 S Lightplant Rd	Aztec, NM	87410	10/30/97	P 386 810 538
14 . Church of Christ c/o Alex Moore	P.O. Box 1374	Aztec, NM	87410	10/30/97	P 416 793 170
15 . Ralph & Linda Collett	Mancos Creek Trading Post	Cortez, CO	81321	10/30/97	P 416 793 192
16 . Ethel E. Conroy, Trustee	PO Box 537	Aztec, NM	87410	10/30/97	Z 164 296 378
17 . Della Cox	No Address				
18 . George Haynes Crozier	No Address				
19 . Estate of Myra K. Cummins c/o Louis Cummins, Personal Representative	PO Box 1495	Durango, CO	81302	10/30/97	Z 164 296 382
20 . Theda Cynova	1505 E Blanco Blvd	Bloomfield, NM	87413	10/30/97	P 386 810 529
21 . R.L. Dacus	107 North Hickory	Sallisaw, OK	74955	10/30/97	P 416 793 178
22 . Charles and Delores Dacus	PO Box 223	Crawford, CO	81415	10/30/97	P 416 793 185
23 . L. Gayle & Merlene Dacus	3381 W 147th CT	Broomfield, CO	80020	10/30/97	P 416 793 187
24 . Evelyn Dacus	#87 3600 E 88th Ave	Thornton, CO	80229	10/30/97	Z 164 296 383
25 . J.J. & Ira Dell Irrevocable Family Trust c/o First National Bank, Trustee	PO Box 4540	Farmington, NM	87499	10/30/97	Z 164 296 139
26 . John Dick	No Address				
27 . Edward Diefel	No Address				
28 . Carr & Erwin	8333 Douglas, Suite 950	Dallas, TX	75225	10/30/97	Z 164 296 377
29 . F.A. Florance Trust #02-112800 c/o Northern Trust Bank of Texas	PO Box 226270	Dallas, TX	75222	10/30/97	Z 164 296 131
30 . M.J. Florance Trust c/o Northern Trust Bank of Texas	PO Box 226270	Dallas, TX	75222	10/30/97	Z 164 296 375
31 . Carl V. & Alma M. Gardner	307 Ridge Place Northeast	Albuquerque, NM	87106	10/30/97	P 386 810 535
32 . Winnie Phillips or Geneva	Seeger POA 3667 Robin Lane	Kingman, AZ	86401	10/30/97	Z 164 296 142
33 . Clayton Graves	No Address				
34 . JJ & Stella Greenleaf	1404 West Aztec Blvd	Aztec, NM	87410	10/30/97	P 386 810 536
35 . DL & Lucille Greer	641 East Boca Raton	Phoenix, AZ	85022	10/30/97	P 416 793 188
36 . William & Mabel Hallon	No Address				
37 . Virgil M. & Zella Harris	3908 Hickory Stick	Chickasha, OK	73018	10/30/97	Z 164 296 370
38 . Lane D. Harwell	709 California Street	Albuquerque, NM	87108	10/30/97	P 416 793 200
39 . Roy C. & Cora Hays	3804 N. Dustin Ave	Farmington, NM	87401	10/30/97	P 386 810 526
40 . Inabel Henry Estate	No Address				
41 . Edna Ruth Henry	200 Mesa Drive	Aztec, NM	87410	10/30/97	Z 164 296 133
42 . Hollenbeck Home Trustees	573 South Boyle Avenue	Los Angeles, CA	90033	10/30/97	Z 164 296 134
43 . Clayton L. Hough	No Address				

ROBERT L. BAYLESS

Downhole Commingle Application
Helen Hartman #1List of All Well Interest Owners Notified

NAME	ADDRESS	CITY & STATE	ZIP CODE	DATE MAILED	CERTIFIED MAIL RECEIPT #
44 . Bernice Hum Trustee	PO Box 5326	Farmington, NM	87499	10/30/97	P 386 810 525
45 . Imerca Group Inc.	7733 Forsyth Blvd	St Louis, MO	63105	10/30/97	P 386 810 524
46 . Barbara B. Johnson	1413 Martin Ave	Aztec, NM	87410	10/30/97	P 416 792 949
47 . CE & Cleo Johnson	No Address				
48 . Ted Kerkelis Jr.	8210 Tyrone Ave	Aztec, NM	87410	10/30/97	Z 164 296 136
49 . Veral V & Erma Killgore	501 West 3rd Street	Winslow, AZ	86047	10/30/97	P 416 793 171
50 . KM Production	P.O. Box 2406	Farmington, NM	87499	10/30/97	Z 164 296 384
51 . Midd & Margery Kranovich	14791 White Pine Way	LA Pine, OR	97739	10/30/97	P 416 793 184
52 . William & Allana Lowman	PO Box 752	Aztec, NM	87410	10/30/97	Z 164 296 137
53 . Clarice Mariner	3014 Betz Road	Wheatland, CA	95692	10/30/97	P 386 810 530
54 . Frances Cisco McCormick	7011 Del Oso Court Northeast	Albuquerque, NM	87109	10/30/97	P 386 810 532
55 . Elizabeth Townsend Miller c/o Hazel T. Brawley Perm Guardian	2847 Marilyn Road	Colorado Springs, CO	80909	10/30/97	Z 164 296 138
56 . Irena Mockry	No Address				
57 . R.C. Montgomery	928 Mountain View Dr.	Aztec, NM	87410	10/30/97	P 386 810 531
58 . John J & Helen Moya	PO Box 1700	Farmington, NM	87499	10/30/97	Z 164 296 149
59 . The Joy & Anne Noel Living Trust c/o Anne Noel, Trustee	511 McDonald Road	Farmington, NM	87401	10/30/97	P 416 793 198
60 . A.Y. & Doris Old	No Address				
61 . Palo Production Corp.	621 17 St, Suite 1640	Denver, CO	80293	10/30/97	Z 164 296 385
62 . Thomas H. & Violet Peace	1205 Parkland Drive	Aztec, NM	87410	10/30/97	P 416 793 180
63 . Frank Pecoraro	1316 Glorietta Northeast	Albuquerque, NM	87124	10/30/97	Z 164 296 140
64 . Petroleum Facilities	No Address				
65 . Ralph G. Phelps	3636 County Road 330	Ignacio, CO	81137	10/30/97	P 416 792 948
66 . Carl R. & Veronica Phelps	604 E. Murray Drive	Farmington, NM	87401	10/30/97	P 416 793 189
67 . Ira E. & Evelyn Rayburn	PO Box 574	Talbottan, GA	31827	10/30/97	P 416 793 195
68 . Jesse C. Roberts	No Address				
69 . Tommy or Cindy Roberts	PO Box 129	Farmington, NM	87499	10/30/97	Z 164 296 143
70 . Jeannette & William E Rose JT	PO Box 1025	Conchas Dam, NM	88416	10/30/97	Z 164 296 144
71 . Kathryn V. Schreck, Trustee	PO Box 1563	Aztec, NM	87410	10/30/97	P 386 810 522
72 . Sandy & Iola Scott, Trustees	PO Box 1149	Aztec, NM	87410	10/30/97	P 386 810 528
73 . Williams P. Shryock	300 Rio Pecos	Aztec, NM	87410	10/30/97	P 386 810 527
74 . Gladys L. Simmons, LT	551 South Racine Street	Mesa, AZ	85206	10/30/97	P 386 810 533
75 . LA & Marjorie Simonds	101 Simonds Road	Aztec, NM	87410	10/30/97	P 416 793 168
76 . SJ County Board - County Commissioners	112 South Mesa Verde	Aztec, NM	87410	10/30/97	Z 164 296 373
77 . Earnest D. & Robbie Smith	PO Box 1404	Aztec, NM	87410	10/30/97	P 416 793 179
78 . Cleo & Nellie Stevens	19750 E. 118th Ave	Commerce City, CO	80022	10/30/97	P 416 793 183
79 . Glenn & Mamie Swire, Trustees	418 South Church Avenue	Aztec, NM	87410	10/30/97	P 386 810 534
80 . Elmer Thompson	No Address				
81 . Thell E & Beatrice Thompson	No Address				
82 . R.J. Trahan	No Address				
83 . Jose G. & Cleoti Ulibarri	No Address				
84 . Lucille Wells	105 Simonds Road	Aztec, NM	87410	10/30/97	P 416 793 169
85 . Bill Wells	PO Box 310	Aztec, NM	87410	10/30/97	P 416 793 172
86 . Wayne & Lois Willett	No Address				
87 . Jerry & Sue Winget, Trustees	371 Venture Out	Mesa, AZ	85205	10/30/97	P 386 810 521
88 . Helen E. Wolfe - c/o Phillip T. Pitz, Guardian	201 Kenney Drive	Sewickley, PA	15143	10/30/97	Z 164 296 145

1205 Parkland Drive
Apt. 2, N. M. 87410
November 24, 1997

New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, N. M. 87504

Gentlemen:

In reference to Robert L. Bayless' Application
to Downhole Commingle the Dakota and
Mesa Verde formations in the Helen
Hartman #1 well, we do not oppose their
procedure.

Sincerely,

Mr. and Mrs. Thomas Peace

NOV 26 1997

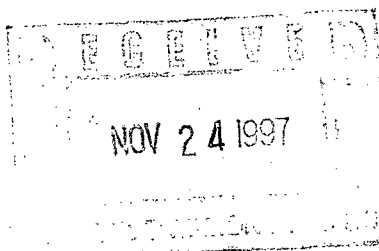
November 20, 1997

New Mexico Oil Conservation Div.
2040 South Pacheco
Santa Fe, New Mexico 87504

I Gladys L. Simmons, LT do support the application to Downhole Commingle the Dakota and Mesa Verde formations in the Helen Hartman #1 well with the ammended attachments by Robert L. Bayless in San Juan Co., New Mexico.

Gladys L. Simmons

Gladys L. Simmons
551 S. Racine St.
Mesa, Arizona 85206



W. S. Racine
Mesa, AZ 85206



New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

87504/3472

