

6.12.95

OIL CONSERVATION DIVISION
RECEIVED

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May 19, 1995

Mr. William J. LeMay
Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87504

**Re: Application to Downhole Commingle Gallegos
Gallup and Basin Dakota Gas Production in the
Nassau No. 3, 1500' FNL & 1850' FEL, Unit G
Sec. 23, T-26N, R-11W, San Juan County, New Mexico**

Dear Mr. LeMay:

It is proposed to downhole commingle the Gallup and Dakota zones in this well to maintain economic operation and to maximize the efficient and effective recovery of gas at this location. Economic evaluation of the continued operation of this well as a dual completion has shown that it can only be economically maintained if it can be downhole commingled and operated as a single completion.

The Gallup and Dakota gas producing rates have declined to current marginal levels of 102 and 101 MCFGPD respectively. Elimination of excess operational equipment and operating expense associated with dual operation would contribute to the maximization of the producing lives and recoveries from each pool. Downhole commingling would permit the elimination of one tubing string, one separator and one tank now required for the operation of this dual completion and would eliminate maintenance costs of maintaining isolation of the two completions.

The following attachments are submitted in support of this application:

1. EXHIBIT A is a plat (a) showing all Gallup wells on the lease, (b) indicating the subject well, (c) identifying offset operators, and (d) outlining the current Gallup proration unit.
2. EXHIBIT B is a plat (a) showing all Dakota wells on the lease, (b) indicating the subject well, (c) identifying offset operators, and (d) outlining the current Dakota proration unit.
3. EXHIBIT C is a GOR test form (C-116) with projected producing rates for June 1995 based on past production history data for each completion.
4. EXHIBIT D and E are current decline curves for Gallup gas and oil production.
5. EXHIBIT F and G are current decline curves for Dakota gas and oil production.

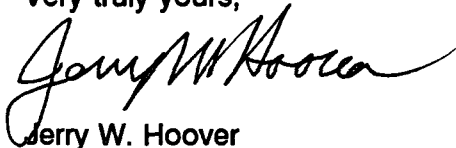
6. Bottom hole pressure at a common datum of 6000 feet are 439 and 503 psia for the Gallup and Dakota, respectively.
7. There is no significant water production associated with either of these completions.
8. Oil gravities for Gallup production is 60.3 °API and for Dakota is 44.3 °API. Since oil prices are the same for gravities over 40 °API, commingling will not result in any change in revenue for the small oil volumes from these completions.
9. WI, RI, and ORRI ownerships are identical for both pools.
10. EXHIBITS H and I are Gallup and Dakota gas analyses. BTU values are very similar for both pools and since sales are based on a \$/BTU rate, revenue for the combined gas stream will be the same as for the separated sales streams of the dual completion. therefore, there will be no revenue or royalty loss due to commingling.
11. Allocation percentages based on the projected 6/95 daily rates shown on the enclosed C-116 are proposed as follows:

	<u>Water</u>	<u>Oil</u>	<u>Gas</u>
Gallegos Gallup	0%	73%	50%
Basin Dakota	0%	27%	50%

Stable production declines have been historically established for both Gallup and Dakota production from this well and the above percentage formula should acheive a reasonably accurate allocation of the remaining reserves from both pools.

12. Copies of this application were sent by certified mail to each of the four offset operator as identified on EXHIBITS A and B and also to the Farmington Office of the Bureau of Land Management for their approval. Copies of the certified mail receipts to the offset operators are included as EXHIBIT J.

Very truly yours,

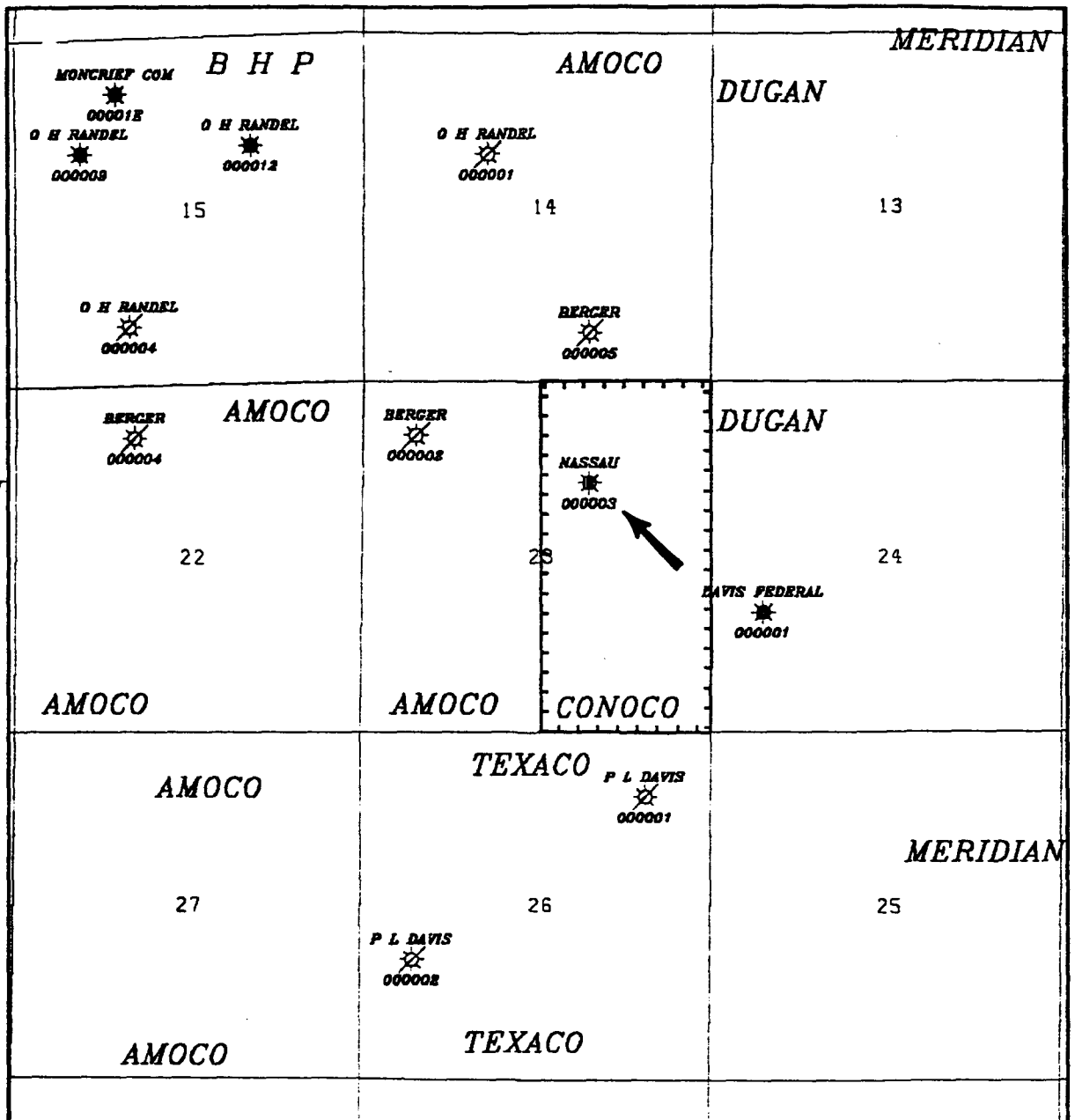


Jerry W. Hoover
Sr. Conservation Coordinator

GALLUP PRODUCERS

R11W

T26N



NASSAU 3

DAKOTA PRODUCERS

R11W

T26N

<p>B H P</p> <p>O H RANDEL 000007</p> <p>O H RANDEL 000006</p> <p>15</p> <p>O H RANDEL 00007E</p> <p>O H RANDEL 00006E</p>	<p>AMOCO</p> <p>O H RANDEL 000001</p> <p>14</p> <p>BERGER 000005</p>	<p>MERIDIAN</p> <p>DUGAN</p> <p>13</p> <p>PLATERO NAVAJO 000002</p> <p>P L DAVIS 000003</p>
<p>BERGER 000004</p> <p>AMOCO</p> <p>22</p> <p>BERGER 000003</p> <p>AMOCO</p>	<p>BERGER 000008</p> <p>BERGER 00002E</p> <p>AMOCO</p> <p>28</p> <p>HARKES NAVAJO 000001</p> <p>NASSAU 000003</p> <p>NASSAU 00003E</p> <p>CONOCO</p>	<p>DUGAN</p> <p>PLATERO NAVAJO 000001</p> <p>DAVIS FEDERAL 000001</p> <p>24</p>
<p>CARTNER 000001</p> <p>AMOCO</p> <p>27</p> <p>CALDWELL A 000001</p> <p>CALDWELL A 000001</p> <p>AMOCO</p>	<p>TEXACO</p> <p>P L DAVIS 00001E</p> <p>P L DAVIS 000001</p> <p>P L DAVIS 000002</p> <p>P L DAVIS 00002E</p> <p>TEXACO</p> <p>26</p>	<p>P L DAVIS 000002</p> <p>MERIDIAN</p> <p>25</p> <p>P L DAVIS 00002E</p>

NASSAU 3

Submit 2 copies to Appropriate District Office.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-116
Revised 1/1/89

GAS - OIL RATIO TEST

Operator Conoco Inc.		Pool Gallegos Gallup / Basin Dakota		County San Juan										
Address 10 Desta Drive West, Ste. 100W		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Scheduled <input type="checkbox"/> Special <input checked="" type="checkbox"/>										
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL.	
		U	S	T						R	WATER BBL.S.	GRAV. OIL		OIL BBL.S.
Nassau No. 3 (Gallup)	3	G	23	26N	11W	6/95 avg.				month	0	60.3	2.4	102
Nassau No. 3 (Dakota)	3	G	23	26N	11W	6/95 avg.				month	0	40	.9	101

NOTES:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which the well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in that well can be assigned increased allowables when authorized by the Division. Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60. Report casing pressure in lieu of tubing pressure for any well producing through casing.

Rule 301, Rule 1116 & appropriate pool rules.)

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

Jerry W. Hoover
Signature

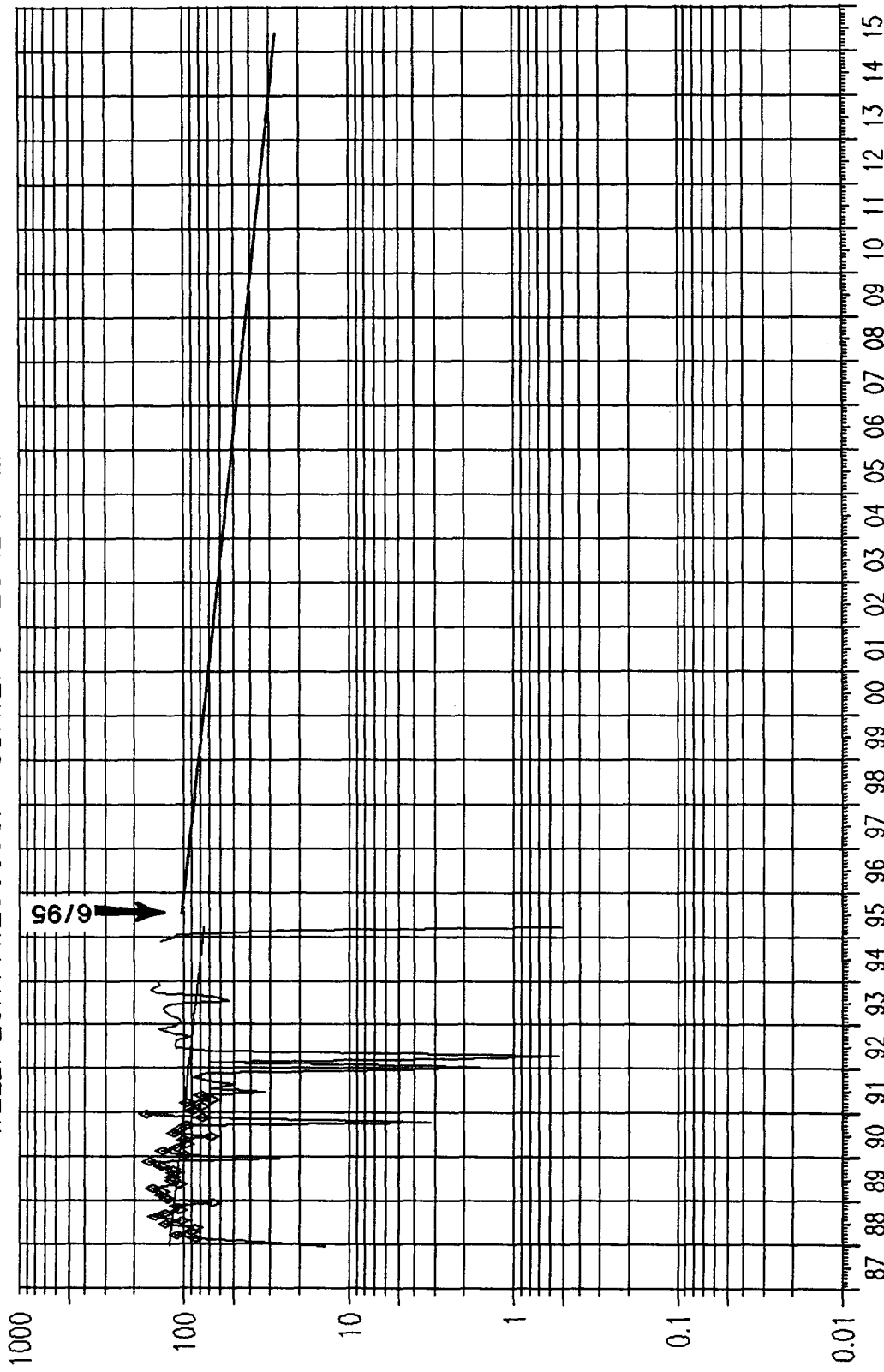
Jerry W. Hoover
Printed name and title

Sr. Conservation Coordinator

Date
Telephone No.

EXHIBIT C

LEASE : NASSAU WNUM : 000003 CPD : NONE
WELL: 26N11W23G00GP CDATE: 0 ZONE : GLLP NRI : 0.773333



Decline Rate (frac) Nominal: 0.005503 Effective: 0.005488 Annual: 0.063905

Current Gas rate: 102.00 Mscf/d 6/95

Economic Limit: 1.020 Mscf/d

Cumulative Gas Produced: 227.93 MMscf

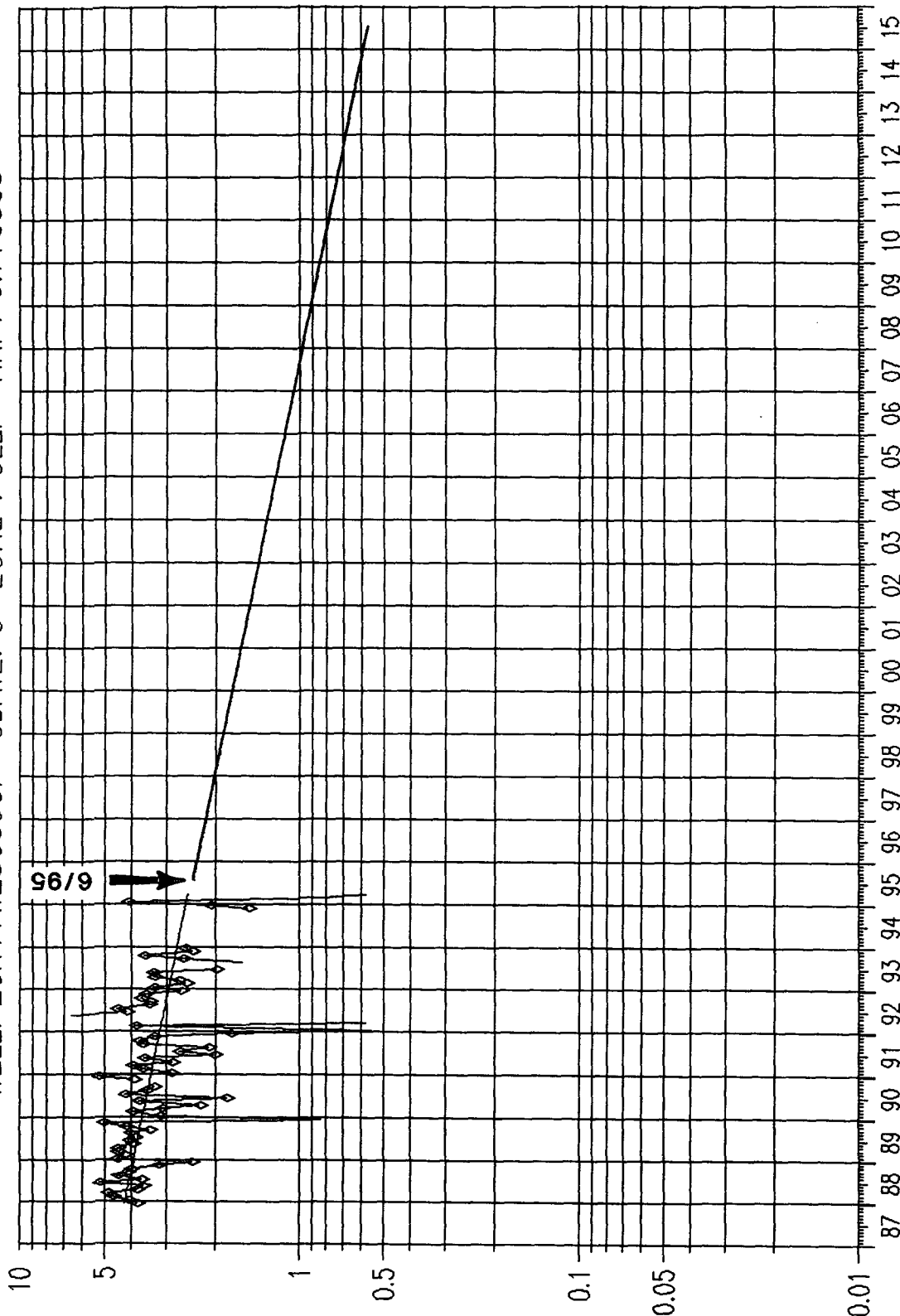
Remaining Reserves: 413.3 MMscf

Total Reserves: 641.2 MMscf - At End of Forecast

NASSAU NO. 3
Gallup Gas Production

LEASE : NASSAU WNUM : 000003 CPD : NONE

WELL: 26N11W23G00GP CDATE: 0 ZONE : GLLP NRI : 0.773333



Decline Rate (frac) Nominal: 0.005997 Effective: 0.005979 Annual: 0.069438

Current Oil rate: 2.4 bbls/d 6/95

Economic Limit: 0.0 bbls/d

Cumulative Oil Produced: 7.7 Mbbls

Remaining Reserves: 9.3 Mbbls

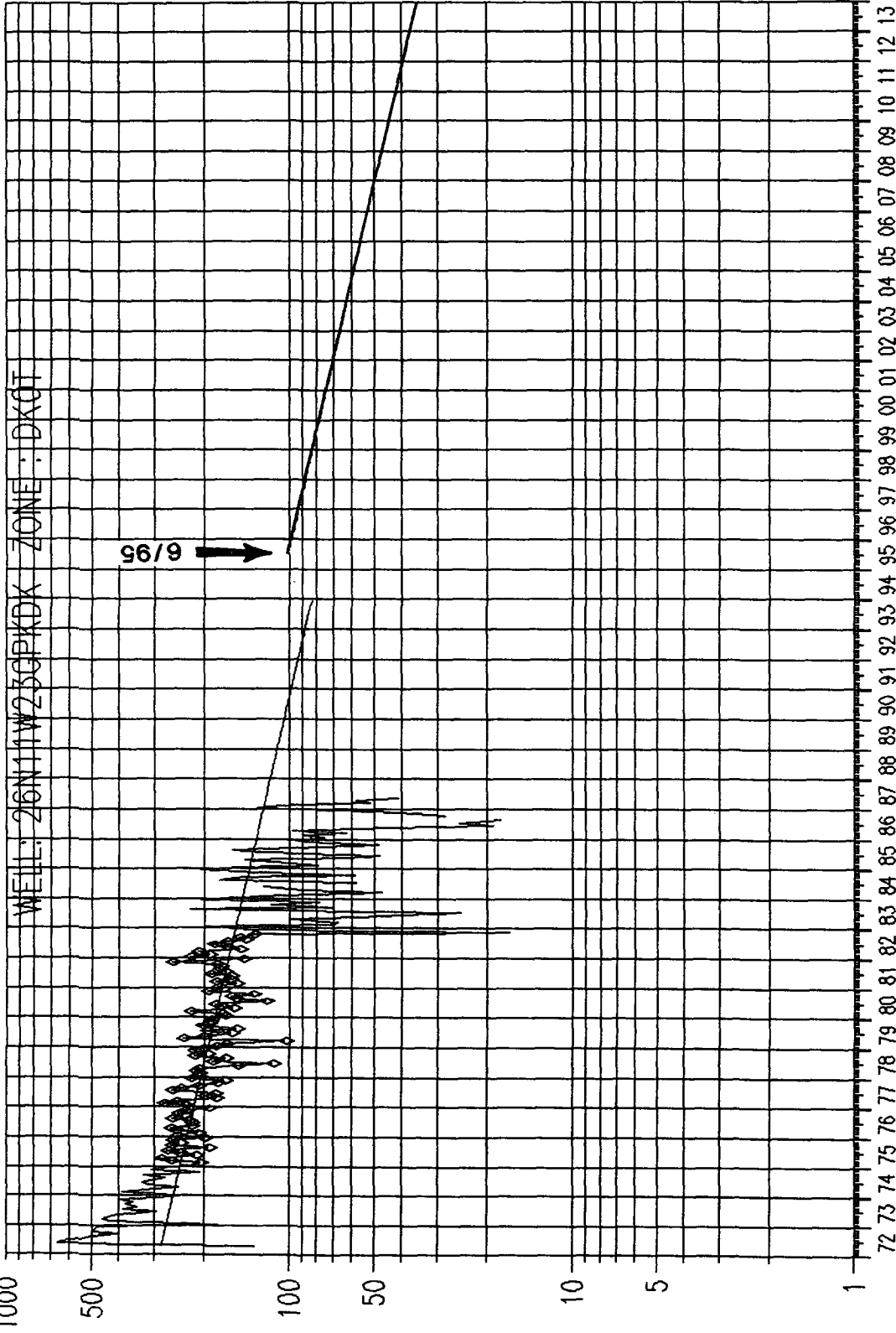
Total Reserves: 16.9 Mbbls - At End of Forecast

NASSAU NO. 3

Gallup Oil Production

NASSAU 000003

STDATE : 7204 STATUS : INA LEASE : NASSAU WNUM : 000003



Decline Rate (frac) Nominal: 0.004708 Effective: 0.004697 Annual: 0.054928

Current Gas rate: 101.00 Mscf/d 6/95

Economic Limit: 1.010 Mscf/d

Cumulative Gas Produced: 1088.47 MMscf

Remaining Reserves: 441.7 MMscf

Total Reserves: 1530.2 MMscf - At End of Forecast

NASSAU NO. 3

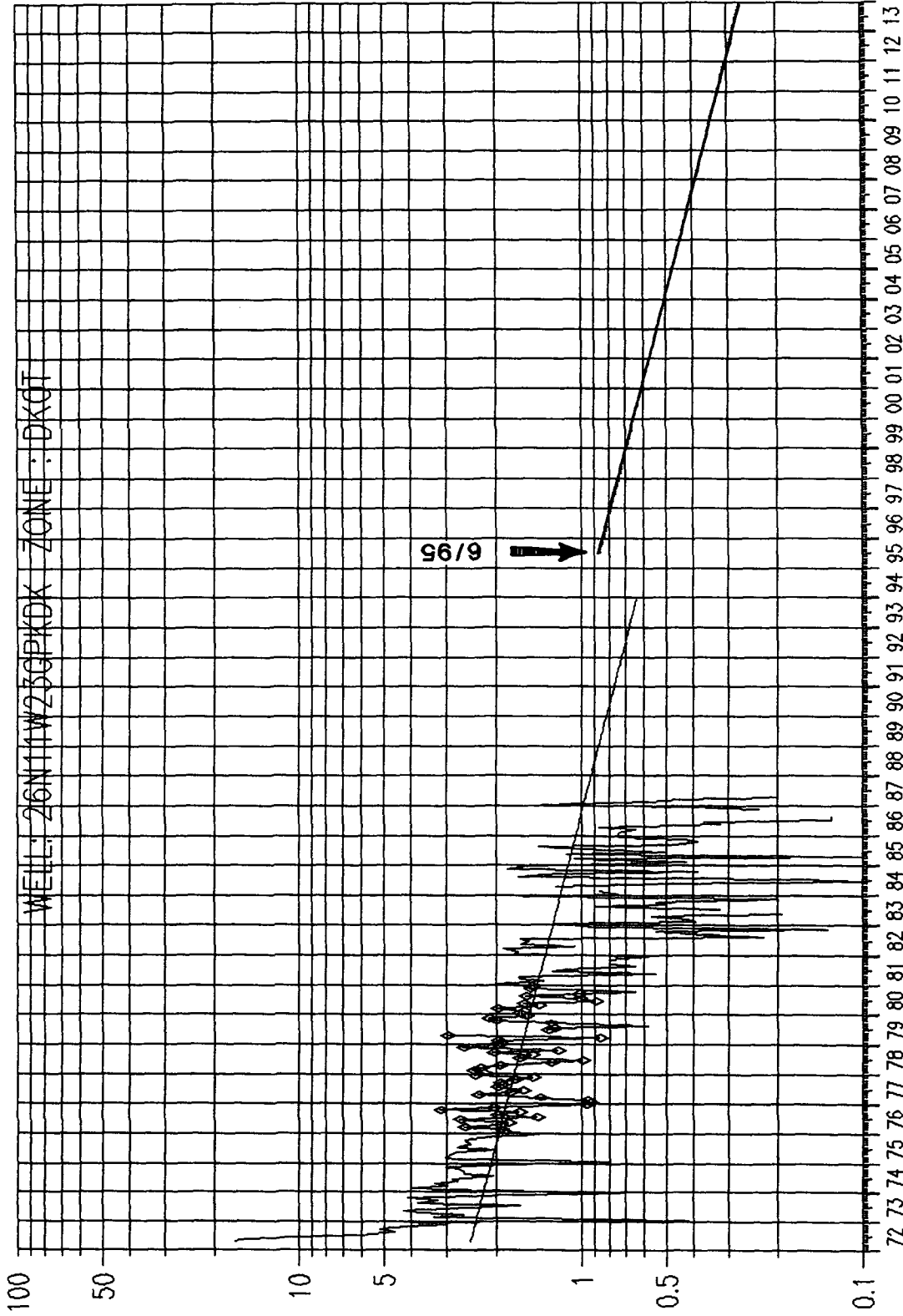
Dakota Gas Production

NASSAU 000003

STDATE : 7204 STATUS : INA LEASE : NASSAU WNUM : 000003

WELL: 26N11W23QPKDK ZONE: DKQT

Oil Rate (Calendar Day) (bbls)



Decline Rate (frac) Nominal: 0.005211 Effective: 0.005198 Annual: 0.060621

Current Oil rate: 0.9 bbls/d 6/95

Economic Limit: 0.0 bbls/d

Cumulative Oil Produced: 10.0 Mbbls

Remaining Reserves: 3.6 Mbbls

Total Reserves: 13.6 Mbbls - At End of Forecast

NASSAU NO. 3

Dakota Oil Production

EL PASO NATURAL GAS COMPANY
VOLUME ACCOUNTING DEPARTMENT
MEASUREMENT DIVISION
POST OFFICE BOX 1492
EL PASO, TEXAS 79878
PHONE: (915) 541-5287

DATE 9/08/94

CHROMATOGRAPHIC GAS ANALYSIS REPORT

MAILEE
55300

NASSAU RESOURCES INCORPORATED
SUITE 1225
650 SOUTH CHERRY STREET
DENVER, CO 80222-9999

Gallup Gas

METER NUMBER 92178 - NASSAU #3
OPERATOR 8302 - NASSAU RESOURCES INC

ANALYSIS DATE 8/09/94 TYPE CODE 2 - ACTUAL
SAMPLE DATE 8/05/94 H2S GRAINS 0
EFFECTIVE DATE 9/01/94 LOCATION D - DANIELS FM
EFFECTIVE FOR 6 MONTHS

COMPONENTS	NORMALIZED MOL %	GPM
CO2	.98	.000
H2S	.00	.000
N2	.79	.000
METHANE	72.03	.000
ETHANE	13.21	3.534
PROPANE	8.22	2.285
ISO-BUTANE	.81	.265
NORM-BUTANE	2.39	.754
ISO-PENTANE	.51	.187
NORM-PENTANE	.54	.196
HEXANE PLUS	.52	.227
	100.00	7.428

SPECIFIC GRAVITY .794
MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1350
RATIO OF SPECIFIC HEATS .000
NO TEST SECURED FOR H2S CONTENT

EXHIBIT H

06/29/84

EL PASO NATURAL GAS COMPANY
MEASUREMENT DEPARTMENT
POST OFFICE BOX 1492
EL PASO, TEXAS 79999

CHROMATOGRAPHIC GAS ANALYSIS REPORTS

Dakota Gas

JEROME P. MCHUGH & ASSOC.
650 SOUTH CHERRY ST.
SUITE 1225
DENVER, COLORADO 80222

		METER STA	87361			
ANAL DATE 00 00 00	METER STATION NAME	OPER	5954			
NASSAU #3						
TYPE CODE	SAMPLE DATE	EFF. DATE	USE MOS.	SCALE	H2S GRAINS	LOCATION
40 ***	06 17 81	06 25 84	06	1		4 F 02

	NORMAL MOL%	GPM
C O 2	.70	.000
H 2 S	.00	.000
N2	1.21	.000
METHANE	78.67	.000
ETHANE	11.35	3.034
PROPANE	5.09	1.400
ISO-BUTANE	.86	.281
NORM-BUTANE	1.06	.334
ISO-PENTANE	.42	.154
NORM-PENTANE	.34	.123
HEXANE PLUS	.30	.131

TOTALS	*	*
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SPECIFIC GRAVITY .723

MIXTURE HEATING VALUE

(BTU/CF AT 14.73 PSIA, 60 DEGREES, DRY) 1,238

RATIO OF SPECIFIC HEATS 1.281

NO TEST SECURED FOR H2S CONTENT

*** TYPE CODE EXPLANATION: VALUES FROM PREVIOUS ANALYSIS

EXHIBIT I

Z 111 000 179

**Receipt for
Certified Mail**No Insurance Coverage Provided
Do not use for International MailDugan Production Corp.
P.O. Box 420
Farmington, NM 87499

PS Form 3800, March 1993

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date 5/19/95	

Z 111 000 178

**Receipt for
Certified Mail**

No Insurance Coverage Provided

Amoco
P.O. Box 3092
Houston, Texas 77253

PS Form 3800, March 1993

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date 5/19/95	

Z 111 000 201

**Receipt for
Certified Mail**No Insurance Coverage Provided
Do not use for International MailTexaco Prod. Inc.
P.O. Box 3109
Midland, Texas 77702

PS Form 3800, March 1993

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date 5/19/95	

Z 111 000 200

**Receipt for
Certified Mail**No Insurance Coverage Provided
Do not use for International MailMeridian Oil Inc.
3300 N. "A" Street
Midland, TX 79705

PS Form 3800, March 1993

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date 5/19/95	

EXHIBIT J