STRATA PRODUCTION COMPANY
NASH DRAW - BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO

SPECIAL POOL RULES - CASE No. 10935
GAS-OIL RATIO LIMITATION

MARCH 17, 1994

BEFORE THE OIL CONSERVATION DIVISION
NEW MEXICO DEPARTMENT OF ENERGY, MINERALS,
AND NATURAL RESOURCES

CASE No. 10935

EXHIBIT No. 6

PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO

STRATA PRODUCTION COMPANY
NASH DRAW - BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO
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The Nash Draw - Brushy Canyon Pool has been subject to standard 40 acre spacing patterns, standard depth bracket allowable of 142 BOPD (6,000' to 6,999') and standard 2,000 to 1 GOR limit. The standard GOR limit results in a casinghead gas allowable of 284 MCF per day. As further evidence will indicate, the Brushy Canyon pool is a solution gas drive reservoir, which through normal depletion has a increasing GOR. An increase in the GOR limit will allow continued production and not result in waste.

The Nash Draw - Brushy Canyon Pool is located in Sections 12 and 13 T23S-R29E and Section 18 T23S-R30E as shown on the Area Map, Exhibit I. The pool is located approximately 10 miles East of the town of Loving in Eddy County, New Mexico. As indicated on the Area Map, the closest Delaware production is in the Forty Niner Ridge Field located 2 miles East of the Nash Draw Field. The largest Brushy Canyon Pool in the area is the E. Loving Brushy Canyon Pool in T23S-R28E, approximately 7 miles West of the Nash Draw field. The E. Loving Brushy Canyon Pool was studied as an analogy to the Nash Draw Brushy Canyon Pool.

Exhibit I-A is a listing of all completions in T23S-R29E and T23S-R30E, which surround The Nash Draw area. There has been 15 wells which have had production from the Delaware formation (Bell Canyon, Cherry Canyon and Brushy Canyon), 10 of these wells have been in the Nash Draw Pools. The list does not include the most recent completion, the Nash Draw #19, which is now being tested after perforating and stimulating the Brushy Canyon.

Exhibit I-B is a tabulation of the wells in these two townships and the production from each completion. The only significant production from the Delaware other than the Nash Draw Pools has been from the 3 wells in the Forty Niner Ridge Pool, which has produced 145,421 BO and 120,820 MCFG.

Exhibit II is an enlargement of the Nash Draw Brushy Canyon Field showing the location of each well and indicating from which Pool the well produced. The Blue colored wells indicate production from the Cherry Canyon Pool, the #1 and #4 have produced from this Pool. The #1, 5, 6, 9, 10, 11, 13, 14 and 19 have produced from the Brushy Draw Pool. The #4 has been abandoned in the Cherry Canyon and converted to SWD and the #1 has squeezed off the Cherry Canyon perfs and has been completed in the Brushy Canyon. The Nash Draw #1, 9 & 10 were the first wells to be completed in the Brushy Canyon Pool in the last part of 1992. Exhibit II-A indicates the perforated intervals in each well and any pertinent comments about the wells.

Reservoir Characterization

Through analysis of the production from the Nash Draw Brushy Canyon Pool, a reservoir characterization can be formulated. As shown in Exhibit III-A the start of production with the completion of the Nash Draw #1, 9 & 10 in October 1992 and the subsequent development of the field, now with a total of 9 wells. Oil production peaked in August 1993 at 22,357 BOPM, and gas production peaked in December 1993 at 58,358 MCFGM. Since December 1993 oil production has been curtailed in an effort to keep gas production below statutory limits.

Exhibit III-B indicates the Gas-Oil Ratio for this pool. Initially the GOR was approximately 1000 to 1, but, after additional production and the drilling of additional wells the average GOR is now approximately 4000 to 1. Individual wells have GOR's as high as 8000 to 1 as shown in Exhibit IV.

Exhibit III-C indicates the percent water cut for the Nash Draw Brushy Canyon Pool. The water cut has decreased from a high of 58% to the present rate of 40%.

Exhibit IV-A indicates the initial GOR and cumulative GOR for each well in the pool. As can be seen on this exhibit the GOR's are not a function of structure, as the lower wells have the higher GOR's. The GOR's are a function of production and well density. The newer wells have lower GOR's. From this we can conclude there is no active gas cap and because the Delaware in this pool has low permeability, .2 to 6 md., the formation of a secondary gas cap is unlikely. Exhibit IV-b is a isopach map for the main pay zone.

Exhibits V are individual well production-GOR curves and the associated data. The data indicates the wells produce with an initial GOR of approximately 1000 to 1 and after a few months the GOR increases to as high as 8000 to 1 in the #1 well.

The decreasing water cut coupled with the increasing GOR indicates the Nash Draw Brushy Canyon Pool is a typical solution gas drive reservoir. There is no indication of a water drive, because water rates are decreasing and the GOR is increasing indicating no water influx and a corresponding drop in reservoir pressure. The GOR is behaving as would be expected in a classic solution gas drive reservoir, with initial GOR's low and increasing as cumulative production increases. Comparing the Nash Draw Brushy Canyon production with a typical solution-gas drive reservoir (Exhibit VI) as depicted in H.C. Slider's "Practical Petroleum Reservoir Engineering Methods"[1] indicates there is a solution-gas drive reservoir in this pool. The graph shows that in a solution-gas drive reservoir, the GOR remains constant until the bubble point pressure is reached then the GOR may decline slightly until the critical gas saturation is reached and the permeability to gas increases. After that point the GOR increases rapidly due to the increasing relative permeability to gas. In late time the GOR levels off and may decrease due to change in formation volume factors.

A recombined sample was taken for PVT analysis and a BHP buildup performed on the recently completed Nash Draw #19, located in unit J, Section 12-T23S-R29E. The analysis by Core Laboratories indicates the "Bubble Point" pressure is 2463 psig and the "Bottom Hole Pressure Build-Up" indicates the reservoir pressure to be 2963 psig. This data is presented in

Exhibit V. The relative closeness of the reservoir pressure to the bubble point pressure indicates that with a small amount of withdrawal from the reservoir the pressure would be reduced and bubble point reached early in the life of the wells in this pool. This was demonstrated in Exhibit V, individual well GOR data. The bubble point pressure in the Loving Brushy Canyon is 2850 psi.

The SPE Petroleum Engineers Handbook[2] discusses in detail solution gas drive reservoirs and simulation studies by Mr. R.L Ridings[3] and his conclusions concerning solution gas drive reservoirs. Mr. Ridings concluded:

1) "Ultimate recovery is essentially independent of rate and spacing, and agrees closely with recovery predicted by the conventional Muskat method."

2) "GOR depends somewhat on rate and spacing. For high rates or close spacing, GOR's initially are higher, but later become lower than a Muskat prediction would indicate. At low rates or wide spacing, GOR behavior approaches a Muskat prediction."

3) Computed depletion time agreed closely with conventional analysis (productivity index method) at low pressure drawdown, but differed more for high drawdowns. This is in qualitative agreement with results obtained by Vogel.

4) "Intermittent operation greatly affects instantaneous GOR behavior, but the cumulative GOR is not affected significantly. Also, oil recovery is not affected." This refers to the cumulative oil recovery, not the amount of oil recovered in a given time period.

These conclusions are substantiated by analysis of the material balance equation Exhibit VIII. All of the variables except the produced gas-oil ration are a function of pressure and the properties of the reservoir fluids. Since the nature of the reservoir fluids are fixed, the recovery is fixed by the PVT properties of the reservoir fluid and produced gas-oil ratio. Since the cumulative GOR is not significantly affected by rate the ultimate recovery will not be significantly affected by the production rate.

Field application of these conclusions involve generating typical decline curves to model the producing history of a typical Delaware well. Typical delaware wells completed from 1986-1990 (Exhibit IX) indicate an initial decline of 50% for the first year, a 25% decline for the next two years and a 12% decline for the remaining life of the well. Using this model we find it fits solution gas drive Delaware reservoirs in this area (Exhibit X). The model was then applied to Loving Brushy Canyon fields, Exhibit XI, with a good match. This confirms that recover from high GOR Delaware fields are not affected by rate or GOR, but are controlled by the reservoir fluid properties. Therefore recovery will not be affected by a higher GOR limit.

A match was made with the Nash Draw Brushy Canyon Pool (Exhibit XII) to demonstrate the expected decline. Because the Nash Draw Brushy Canyon Pool is relatively new, not enough history is available for a conclusive match.

Economics

Without a increase in the GOR limit oil production will have to curtailed to maintain the statutory casinghead gas allowable of 284 MCFGD. This will have the effect of extending the life of the well and increasing the time to payout the cost of drilling. This will result in higher costs to the operator, due to increased operating costs for the additional years the well is produced and the loss of value due to the time value of money.

In the example in Exhibit XIII, the net cash flow is reduced by $288,00 and the revenue discounted at 10% is reduced by $343,000. This is based on the same recoveries but in the first case the GOR is limited to 2000 to 1 and the second case the GOR is maximized at 10,000 to 1. The higher GOR limit reduces the producing life of the well, thus reducing operating costs, while recovering the same amount of reserves.

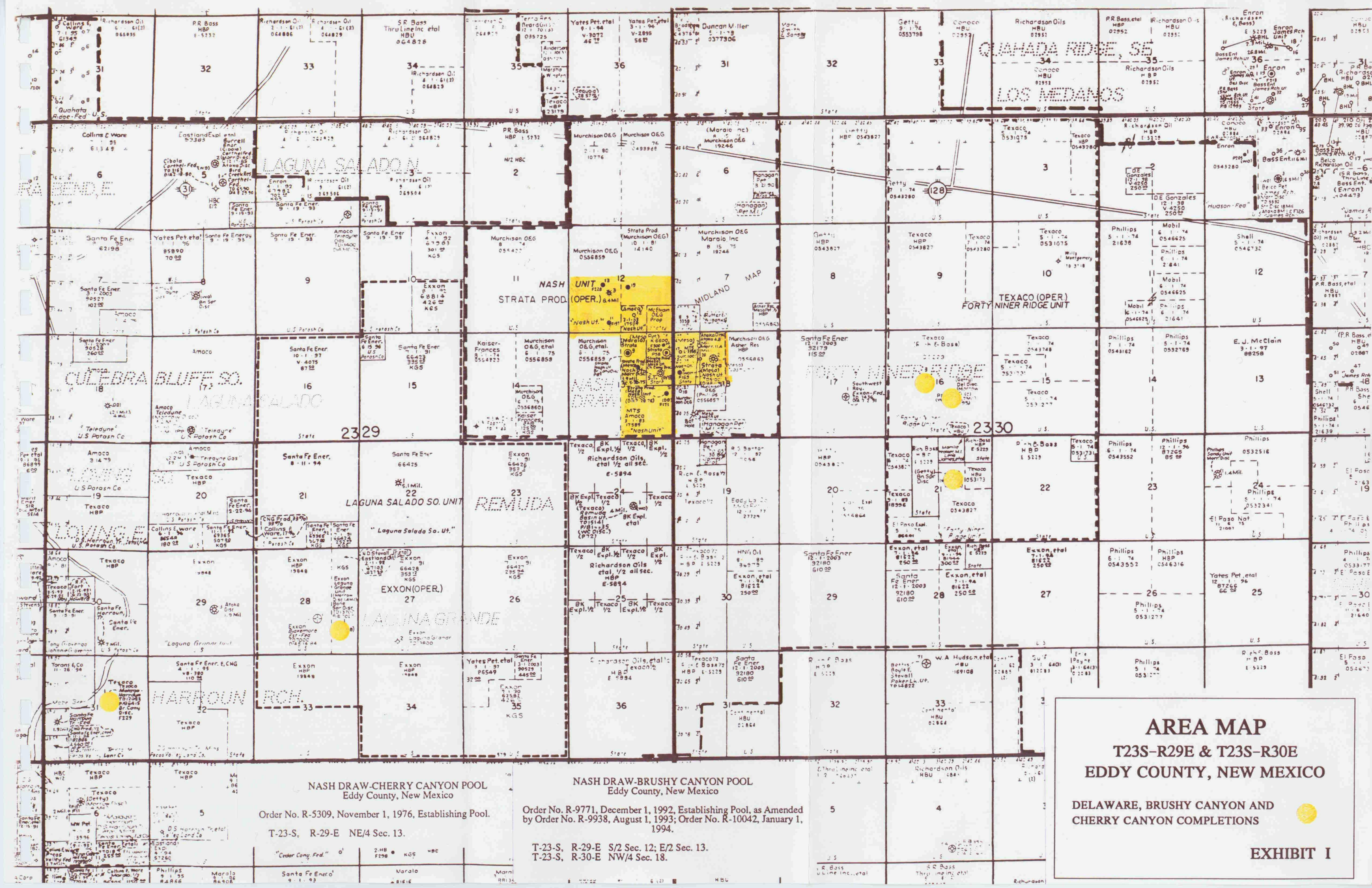
Conclusion

The Delaware formation is not rate sensitive as far as gas production and GOR are concerned. The ultimate recovery is governed by reservoir fluid properties and not production rates. To prevent waste of the operators resources a increase in the GOR limit to 10,00 to 1 should be granted. The time period for temporary field rules should be 18 months to allow additional time to drill wells and acquire additional data. After the 18 month period data will be presented to determine if permanent field rules should be adopted for this pool.

1 Slider, H.C.: Practical Petroleum Reservoir Engineering Methods, Petroleum Publishing Company, Tulsa, Oklahoma (1976), p. 342.

2 Bradley,Harold B.: Petroleum Engineers Handbook, Society of Petroleum Engineers, Richardson, Texas (1987), p. 37-21.

3 Riding, R.L. et al.: "Experimental and Calculated Behavior of Dissolved-Gas-Drive Systems," Society of Petroleum Engineers Journal (March 1963), 41-48: Transactions, AIME, p. 228.


AREA MAP
T23S-R29E & T23S-R30E
EDDY COUNTY, NEW MEXICO
DELAWARE, BRUSHY CANYON AND
CHERRY CANYON COMPLETIONS
EXHIBIT I
NASH DRAW-CHERRY CANYON POOL
Eddy County, New Mexico
Order No. R-5309, November 1, 1976, Establishing Pool.
T-23-S, R-29-E NE/4 Sec. 13.
NASH DRAW-BRUSHY CANYON POOL
Eddy County, New Mexico
Order No. R-9771, December 1, 1992, Establishing Pool, as Amended by Order No. R-9938, August 1, 1993; Order No. R-10042, January 1, 1994.
T-23-S, R-29-E S/2 Sec. 12; E/2 Sec. 13.
T-23-S, R-30-E NW/4 Sec. 18.
23 29
23 30
NASH UNIT (OPER.)
STRATA PROD
TEXACO (OPER.)
FORTY NINER RIDGE UNIT
LAGUNA SALADO SO. UNIT
EXXON (OPER.)
LAGUNA GRANDE
REMUDA
LOS MEDANOS
QUAHADA RIDGE, SE
LAGUNA SALADO N.
CULEBRA BLUFF SO.
HARROUN RCH.
MIDLAND MAP

DWIGHTS CD-ROM PROPERTY LISTING
10-Mar-1994

STATE, COUNTY LOCATION	FIELD RESERVOIR	OPERATOR	WELL/LEASE INFORMATION	
NM EDDY 5G 23S 29E	LAGUNA SALADO NORTH (ATOKA) PA ATOKA	BURRELL ENERGY	CARTHEL FEDERAL COM RCI: 250,015,23S29E05G00PA API: 30-015-23389-00	WELL#:000002 STATUS: ACT LAST PROD DATE: 09/93
NM EDDY 5G 23S 29E	EDDY (MORROW) PM MORROW	CIBOLA ENERGY CORP	CARTHEL FEDERAL RCI: 250,015,23S29E05GPKPM API: 30-015-23389-00	WELL#:000002 STATUS: P&A LAST PROD DATE: 11/82
NM EDDY 8K 23S 29E	EDDY (ATOKA) PA ATOKA	AMOCO PRODUCTION CO	TELESLYNE 8 RCI: 250,015,23S29E08KPKPA API: 30-015-22702-00	WELL#:000001 STATUS: INA LAST PROD DATE: 06/79
NM EDDY 12K 23S 29E	NASH DRAW (BRUSHY CANYON) BR BRUSHY CANYON	STRATA PRODUCTION C	NASH UNIT RCI: 150,015,23S29E12K00BR API: 30-015-27316-00	WELL#:000013 STATUS: ACT LAST PROD DATE: 09/93
NM EDDY 12N 23S 29E	NASH DRAW (BRUSHY CANYON) BR BRUSHY CANYON	STRATA PRODUCTION C	NASH UNIT RCI: 150,015,23S29E12N00BR API: 30-015-00000-00	WELL#:000011 STATUS: ACT LAST PROD DATE: 09/93
NM EDDY 12K 23S 29E	NASH DRAW (ATOKA) PA ATOKA	MURCHISON OIL & GAS	NASH UNIT RCI: 250,015,23S29E12K00PA API: 30-015-21781-00	WELL#:000003 STATUS: ACT LAST PROD DATE: 08/93
NM EDDY 13A 23S 29E	NASH DRAW (BRUSHY CANYON) BR BRUSHY CANYON	STRATA PRODUCTION C	NASH UNIT RCI: 150,015,23S29E13A00BR API: 30-015-27510-00	WELL#:000014 STATUS: ACT LAST PROD DATE: 09/93
NM EDDY 13A 23S 29E	NASH DRAW (CHERRY CANYON) CC CHERRY CANYON	STRATA PRODUCTION C	NASH UNIT RCI: 150,015,23S29E13A00CC API: 30-015-21777-00	WELL#:000004 STATUS: INA LAST PROD DATE: 08/92
NM EDDY 13B 23S 29E	NASH DRAW (BRUSHY CANYON) BR BRUSHY CANYON	STRATA PRODUCTION C	NASH UNIT RCI: 150,015,23S29E13B00BR API: 30-015-26991-00	WELL#:000009 STATUS: ACT LAST PROD DATE: 09/93
NM EDDY 13B 23S 29E	NASH DRAW (CHERRY CANYON) CC CHERRY CANYON	MURCHISON OIL & GAS	NASH DRAW UNIT RCI: 150,015,23S29E13BPKCC API: 30-015-26991-00	WELL#:000009 STATUS: INA LAST PROD DATE: 11/92
NM EDDY 13G 23S 29E	NASH DRAW (BRUSHY CANYON) BR BRUSHY CANYON	STRATA PRODUCTION C	NASH UNIT RCI: 150,015,23S29E13G00BR API: 30-015-06992-00	WELL#:000010 STATUS: ACT LAST PROD DATE: 09/93
NM EDDY 13H 23S 29E	NASH DRAW (CHERRY CANYON) CC CHERRY CANYON	STRATA PRODUCTION C	NASH UNIT RCI: 150,015,23S29E13H00CC API: 30-015-00000-00	WELL#:000001 STATUS: ACT LAST PROD DATE: 09/93

EXHIBIT I-A

DWIGHTS CD-ROM PROPERTY LISTING
10-Mar-1994

TATE, COUNTY LOCATION	FIELD RESERVOIR	OPERATOR	WELL/LEASE INFORMATION	
M EDDY	NASH DRAW (BRUSHY CANYON) BR	STRATA PRODUCTION C	NASH UNIT	WELL#:000005
13I 23S 29E	BRUSHY CANYON		RCI: 150,015,23S29E13I00BR	STATUS: ACT
			API: 30-015-21800-00	LAST PROD DATE: 09/93
M EDDY	NASH DRAW (MORROW) PM	MURCHISON OIL & GAS	NASH UNIT	WELL#:000001
13H 23S 29E	MORROW		RCI: 250,015,23S29E13HPKPM	STATUS: INA
			API: 30-015-21277-00	LAST PROD DATE: 10/83
M EDDY	NASH DRAW (STRAWN) PS	CONOCO INC	NASH UNIT	WELL#:000001
13H 23S 29E	STRAWN		RCI: 250,015,23S29E13HPKPS	STATUS: INA
			API: 30-015-21277-00	LAST PROD DATE: 12/83
..M EDDY	LAGUNA SALADO (ATOKA) PA	AMOCO PRODUCTION CO	TELEDYNE 17	WELL#:000001
17N 23S 29E	ATOKA		RCI: 250,015,23S29E17N00PA	STATUS: ACT
			API: 30-015-22553-00	LAST PROD DATE: 09/93
NM EDDY	LAGUNA SALADO (ATOKA) PA	AMOCO PRODUCTION CO	TELEDYNE 18	WELL#:000001
18J 23S 29E	ATOKA		RCI: 250,015,23S29E18J00PA	STATUS: ACT
			API: 30-015-22650-00	LAST PROD DATE: 01/93
NM EDDY	EDDY (MORROW) PM	AMOCO PRODUCTION CO	TELEDYNE 18	WELL#:000001
18J 23S 29E	MORROW		RCI: 250,015,23S29E18J00PM	STATUS: ACT
			API: 30-015-00000-00	LAST PROD DATE: 04/93
NM EDDY	EDDY (MORROW) PM	AMOCO PRODUCTION CO	TELEDYNE 20 GAS COM	WELL#:000001
20C 23S 29E	MORROW		RCI: 250,015,23S29E20C00PM	STATUS: ACT
			API: 30-015-00000-00	LAST PROD DATE: 09/93
NM EDDY	LAGUNA SALADO (ATOKA) PA	AMOCO PRODUCTION CO	TELEDYNE 20 GAS COM	WELL#:000001
20C 23S 29E	ATOKA		RCI: 250,015,23S29E20CPKPA	STATUS: INA
			API: 30-015-22703-00	LAST PROD DATE: 08/92
NM EDDY	LAGUNA GRANDE (MORROW) PM	SANTA FE ENERGY OPE	LAGUNA SALADO SOUTH UNIT	WELL#:000001
22F 23S 29E	MORROW		RCI: 250,015,23S29E22F00PM	STATUS: ACT
			API: 30-015-26407-00	LAST PROD DATE: 09/93
NM EDDY	REMUDA (WOLFCAMP) WC	TEXACO EXPL & PROD	REMUDA BASIN UNIT	WELL#:000001
24J 23S 29E	WOLFCAMP		RCI: 150,015,23S29E24JPKWC	STATUS: INA
			API: 30-015-03691-00	LAST PROD DATE: 08/91
IM EDDY	NASH DRAW (ATOKA) PA	B K EXPL CORP	REMUDA BASIN UNIT	WELL#:000001
24J 23S 29E	ATOKA		RCI: 250,015,23S29E24J00PA	STATUS: ACT
			API: 30-015-03691-00	LAST PROD DATE: 09/93
IM EDDY	EDDY (GROUP 1)	EASTLAND OIL CO	LAGUNA GRANDE UNIT	WELL#:000001
28I 23S 29E	GROUP 1		RCI: 150,015,23S29E28I00BS	STATUS: ACT
			API: 30-015-00000-00	LAST PROD DATE: 04/93

Bone Spring
6701 - 6986

DWIGHTS CD-ROM PROPERTY LISTING
10-Mar-1994

TATE, COUNTY LOCATION	FIELD RESERVOIR	OPERATOR	WELL/LEASE INFORMATION	
M EDDY	EDDY (GROUP 10) MORROW	EASTLAND OIL CO	LAGUNA GRANDE UNIT	WELL#:000001
28I 23S 29E	GROUP 10 13,107- 13,258'		RCI: 150,015,23S29E28IPKPS	STATUS: INA
			API: 30-015-21636-00	LAST PROD DATE: 08/91
M EDDY	EDDY (GROUP 4)	EXXON CO USA	BLACKMORE ESTATE FEDERAL	WELL#:000001
28J 23S 29E	GROUP 4 Bone Springs		RCI: 150,015,23S29E28J00BS	STATUS: INA
	Delaware 5505-5535, 6482-6496'		API: 30-015-24577-00	LAST PROD DATE: 12/83
M EDDY	LAGUNA GRANDE (MORROW) PM	EXXON CO USA	LAGUNA GRANDE UNIT	WELL#:000001
28I 23S 29E	MORROW		RCI: 250,015,23S29E28IPKPM	STATUS: INA
			API: 30-015-21636-00	LAST PROD DATE: 08/78
..M EDDY	EDDY (STRAWN) PS	EXXON CO USA	LAGUNA GRANDE UNIT	WELL#:000001
28I 23S 29E	STRAWN		RCI: 250,015,23S29E28IPKPS	STATUS: INA
			API: 30-015-21636-00	LAST PROD DATE: 08/79
NM EDDY	LAGUNA SALADO (ATOKA) PA	EXXON CO USA	LAGUNA GRANDE UNIT	WELL#:000003
29J 23S 29E	ATOKA		RCI: 250,015,23S29E29J00PA	STATUS: ACT
			API: 30-015-23414-00	LAST PROD DATE: 09/93
NM EDDY	CULEBRA BLUFF SOUTH (ATOKA) PA	SANTA FE ENERGY OPE	HARROUN TRUST	WELL#:000001
30O 23S 29E	ATOKA		RCI: 250,015,23S29E30000PA	STATUS: ACT
			API: 30-015-26172-00	LAST PROD DATE: 09/93
NM EDDY	HARROUN RANCH (DELAWARE) DL	TEXACO EXPL & PROD	MALAGA HARROUN 31	WELL#:000001
31G 23S 29E	DELAWARE		RCI: 150,015,23S29E31G00DL	STATUS: ACT
			API: 30-015-26414-00	LAST PROD DATE: 09/93
NM EDDY	MALAGA (ATOKA) PA	TEXACO EXPL & PROD	MALAGA HARROUN 31	WELL#:000001
31G 23S 29E	ATOKA		RCI: 250,015,23S29E31G00PA	STATUS: INA
			API: 30-015-26414-00	LAST PROD DATE: 07/91
NM EDDY	MALAGA (ATOKA) PA	TEXACO EXPL & PROD	MALAGA HARROUN 31	WELL#:000001
31G 23S 29E	ATOKA		RCI: 250,015,23S29E31GPKPA	STATUS: INA
			API: 30-015-26414-00	LAST PROD DATE: 07/91
NM EDDY	CULEBRA BLUFF SOUTH (ATOKA) PA	SANTA FE ENERGY OPE	HARROUN TRUST 31 FED. COM	WELL#:000001
31L 23S 29E	ATOKA		RCI: 250,015,23S29E31L00PA	STATUS: ACT
			API: 30-015-26954-00	LAST PROD DATE: 09/93
NM EDDY	LOS MEDANOS (ATOKA) PA	ENRON OIL & GAS CO	HUDSON FEDERAL COM	WELL#:000001
1F 23S 30E	ATOKA		RCI: 250,015,23S30E01F00PA	STATUS: ACT
			API: 30-015-21052-00	LAST PROD DATE: 07/93
NM EDDY	LOS MEDANOS (ATOKA) PA	BASS ENTERPRISES PR	JAMES RANCH UNIT	WELL#:000010
1H 23S 30E	ATOKA		RCI: 250,015,23S30E01H00PA	STATUS: ACT
			API: 30-015-23075-00	LAST PROD DATE: 09/93

DWIGHTS CD-ROM PROPERTY LISTING
10-Mar-1994

TATE, COUNTY LOCATION	FIELD RESERVOIR	OPERATOR	WELL/LEASE INFORMATION	
M EDDY	LOS MEDANOS (MORROW) PM	ENRON OIL & GAS CO	JAMES RANCH UNIT	WELL#:000010
1H 23S 30E	MORROW		RCI: 250,015,23S30E01H00PM	STATUS: INA
			API: 30-015-23075-00	LAST PROD DATE: 10/80
M EDDY	LOS MEDANOS (MORROW) PM	ENRON OIL & GAS CO	JAMES RANCH UNIT	WELL#:000003
1J 23S 30E	MORROW		RCI: 250,015,23S30E01J00PM	STATUS: ACT
			API: 30-015-20232-00	LAST PROD DATE: 09/93
M EDDY	LOS MEDANOS (STRAWN) PS	ENRON OIL & GAS CO	JAMES RANCH UNIT	WELL#:000003
1J 23S 30E	STRAWN		RCI: 250,015,23S30E01JPKPS	STATUS: INA
			API: 30-015-20232-00	LAST PROD DATE: 03/79
M EDDY	FORTY NINER RIDGE (DELAWARE) DL	TEXACO EXPL & PROD	FORTY NINER RIDGE UNIT	WELL#:000003
16F 23S 30E	DELAWARE		RCI: 150,015,23S30E16F00DL	STATUS: ACT
			API: 30-015-25454-00	LAST PROD DATE: 09/93
NM EDDY	FORTY NINER RIDGE (DELAWARE) DL	TEXACO EXPL & PROD	FORTY NINER RIDGE UNIT	WELL#:000001
16J 23S 30E	DELAWARE		RCI: 150,015,23S30E16J00DL	STATUS: ACT
			API: 30-015-20899-00	LAST PROD DATE: 09/93
NM EDDY	FORTY NINER RIDGE (BONE SPRINGS) BS	GETTY OIL CO	FORTY NINER RIDGE UNIT	WELL#:000001
16J 23S 30E	BONE SPRINGS		RCI: 150,015,23S30E16JPKBS	STATUS: INA
			API: 30-015-20899-00	LAST PROD DATE: 08/84
NM EDDY	FORTY NINER RIDGE (MORROW) PM	GETTY OIL CO	FORTY NINER	WELL#:000001
16J 23S 30E	MORROW		RCI: 250,015,23S30E16JPKPM	STATUS: INA
			API: 30-015-20899-00	LAST PROD DATE: 06/82
NM EDDY	NASH DRAW (BRUSHY CANYON) BR	STRATA PRODUCTION C	NASH UNIT	WELL#:000006
18E 23S 30E	BRUSHY CANYON		RCI: 150,015,23S30E18E00BR	STATUS: ACT
			API: 30-015-00000-00	LAST PROD DATE: 09/93
NM EDDY	NASH DRAW (MORROW) PM	MESA OPERATING LTD	NASH UNIT	WELL#:000007
18D 23S 30E	MORROW		RCI: 250,015,23S30E18DPKPM	STATUS: P&A
			API: 30-015-22971-00	LAST PROD DATE: 03/81
NM EDDY	NASH DRAW (ATOKA) PA	MURCHISON OIL & GAS	NASH UNIT	WELL#:000002
18F 23S 30E	ATOKA		RCI: 250,015,23S30E18F00PA	STATUS: ACT
			API: 30-015-21672-00	LAST PROD DATE: 08/93
M EDDY	NASH DRAW (MORROW) PM	MESA PETROLEUM CO	NASH UNIT	WELL#:000002
18F 23S 30E	MORROW		RCI: 250,015,23S30E18FPKPM	STATUS: INA
			API: 30-015-20899-00	LAST PROD DATE: 04/81
M EDDY	FORTY NINER RIDGE (DELAWARE) DL	TEXACO EXPL & PROD	FORTY NINER RIDGE UNIT II	WELL#:000002
21G 23S 30E	DELAWARE		RCI: 150,015,23S30E21G00DL	STATUS: ACT
			API: 30-015-21175-02	LAST PROD DATE: 09/93

WELL/LEASE CUMULATIVE PRODUCTION
10-Mar-1994

FIELD (RESERVOIR)	RESERVOIR NAME	LEASE NAME	WELL	GAS CUM	LIQUID CUM	UPPER PERF	LOWER PERF	1ST PROD DATE	LAST PROD DATE	STATUS
JLEBRA BLUFF SOUTH	ATOKA	HARROUN TRUST	000001	1758659	215	12019	12030	9006	9309	ACT
		HARROUN TRUST 31 FED. COM	000001	240572	21428	11910	11951	9207	9309	ACT
	ATOKA			1999231	21643					
CULEBRA BLUFF SOUTH				1999231	21643					
DDY (ATOKA) PA	ATOKA	TELESLYNE 8	000001	3874	0	0	0	7906	7906	INA
	ATOKA			3874	0					
EDDY (ATOKA) PA				3874	0					
DDY (GROUP 1)	GROUP 1	LAGUNA GRANDE UNIT	000001	0	90	0	0	9110	9304	ACT
	GROUP 1	Bone Springs 6701'-6986'		0	90					
EDDY (GROUP 1)				0	90					
DDY (GROUP 10)	GROUP 10	LAGUNA GRANDE UNIT	000001	8938	196	0	0	8302	9108	INA
	GROUP 10	Morrow 13,107-13,258'		8938	196					
DDY (GROUP 10)				8938	196					
DDY (GROUP 4)	GROUP 4	BLACKMORE ESTATE FEDERAL	000001	0	12	0	0	8312	8312	INA
	GROUP 4	Bone Springs 6482-6496'		0	12					
DDY (GROUP 4)		Delaware 5505-5535'		0	12					
EDDY (MORROW) PM	MORROW	CARTHEL FEDERAL	000002	2878	0	0	0	8204	8211	P&A
		TELEDYNE 18	000001	170259	19	0	0	9301	9304	ACT
		TELEDYNE 20 GAS COM	000001	263227	95	0	0	9211	9309	ACT
	MORROW			436364	114					

EXHIBIT I-B

WELL/LEASE CUMULATIVE PRODUCTION
10-Mar-1994

FIELD (RESERVOIR)	RESERVOIR NAME	LEASE NAME	WELL	GAS CUM	LIQUID CUM	UPPER PERF	LOWER PERF	1ST PROD DATE	LAST PROD DATE	STATUS
,DDY (MORROW) PM				436364	114					
DDY (STRAWN) PS	STRAWN	LAGUNA GRANDE UNIT	000001	1322	0	0	0	7908	7908	INA
	STRAWN			1322	0					
DDY (STRAWN) PS				1322	0					
FORTY NINER RIDGE (B	BONE SPRINGS	FORTY NINER RIDGE UNIT	000001	0	632	0	0	8408	8408	INA
		FORTY NINER RIDGE UNIT II	000001	30899	16920	0	0	7801	8710	INA
	BONE SPRINGS			30899	17552					
ORTY NINER RIDGE (B				30899	17552					
ORTY NINER RIDGE (D	DELAWARE	FORTY NINER RIDGE UNIT	000001	58446	70963	0	0	8206	9309	ACT
		FORTY NINER RIDGE UNIT	000003	30749	12543	0	0	8801	9309	ACT
		FORTY NINER RIDGE UNIT II	000002	31625	61915	0	0	8710	9309	ACT
	DELAWARE			120820	145421					
FORTY NINER RIDGE (D				120820	145421					
ORTY NINER RIDGE (M	MORROW	FORTY NINER	000001	869557	855	0	0	7404	8206	INA
		FORTY NINER RIDGE UNIT	000002	42696	935	13805	14156	7505	7711	INA
		FORTY NINER RIDGE UNIT	000002	699	928	0	0	7701	7711	INA
	MORROW			912952	2718					
ORTY NINER RIDGE (M				912952	2718					
HARROUN RANCH (DELAW	DELAWARE	MALAGA HARROUN 31	000001	81823	11102	0	0	9108	9309	ACT
	DELAWARE			81823	11102					
IARROUN RANCH (DELAW				81823	11102					

WELL/LEASE CUMULATIVE PRODUCTION
10-Mar-1994

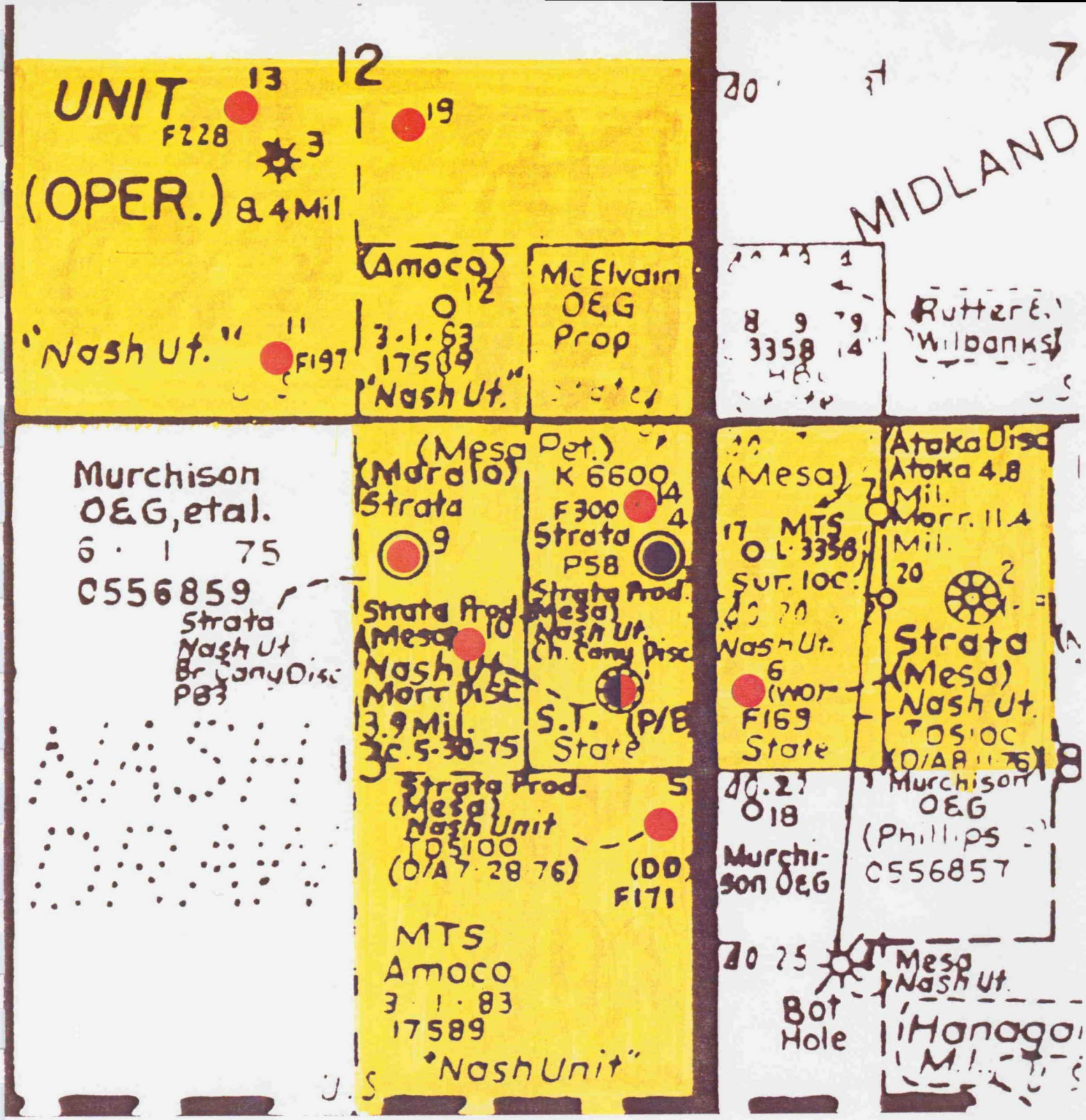
FIELD (RESERVOIR)	RESERVOIR NAME	LEASE NAME	WELL	GAS CUM	LIQUID CUM	UPPER PERF	LOWER PERF	1ST PROD DATE	LAST PROD DATE	STATUS
AGUNA GRANDE (MORRO	MORROW	LAGUNA GRANDE UNIT	000001	197727	0	0	0	7703	7808	INA
		LAGUNA SALADO SOUTH UNIT	000001	460683	460	13158	13186	9101	9309	ACT
	MORROW			658410	460					
LAGUNA GRANDE (MORRO				658410	460					
AGUNA SALADO (ATOKA	ATOKA	LAGUNA GRANDE UNIT	000003	1112968	743	0	0	8102	9309	ACT
		TELEDYNE 17	000001	5384115	6223	0	0	7811	9309	ACT
		TELEDYNE 18	000001	427739	56	0	0	7908	9301	ACT
		TELEDYNE 20 GAS COM	000001	1043237	3381	12040	12060	8109	9208	INA
	ATOKA			7968059	10403					
LAGUNA SALADO (ATOKA				7968059	10403					
AGUNA SALADO NORTH	ATOKA	CARTHEL FEDERAL COM	000002	238291	61	11990	12014	8607	9309	ACT
	ATOKA			238291	61					
AGUNA SALADO NORTH				238291	61					
OS MEDANOS (ATOKA)	ATOKA	HUDSON FEDERAL COM	000001	911766	7182	12989	12995	7408	9307	ACT
		JAMES RANCH UNIT	000010	5660793	37098	12896	12904	8004	9309	ACT
	ATOKA			6572559	44280					
LOS MEDANOS (ATOKA)				6572559	44280					
OS MEDANOS (MORROW)	MORROW	JAMES RANCH UNIT	000003	3244520	26151	13862	14261	7208	9309	ACT
		JAMES RANCH UNIT	000010	623017	5123	0	0	8004	8010	INA
	MORROW			3867537	31274					
LOS MEDANOS (MORROW)				3867537	31274					

WELL/LEASE CUMULATIVE PRODUCTION
10-Mar-1994

FIELD (RESERVOIR)	RESERVOIR NAME	LEASE NAME	WELL	GAS CUM	LIQUID CUM	UPPER PERF	LOWER PERF	1ST PROD DATE	LAST PROD DATE	STATUS
OS MEDANOS (STRAWN)	STRAWN	JAMES RANCH UNIT	000003	1326687	17772	12731	12773	7303	7903	INA
	STRAWN			1326687	17772					
LOS MEDANOS (STRAWN)				1326687	17772					
ALAGA (ATOKA) PA	ATOKA	MALAGA HARROUN 31	000001	16223	3985	0	0	9105	9107	INA
		MALAGA HARROUN 31	000001	16223	3985	0	0	9105	9107	INA
	ATOKA			32446	7970					
MALAGA (ATOKA) PA				32446	7970					
ASH (MORROW) PM	MORROW	SANDY UNIT	000001	613737	65	14494	14650	7501	8802	P&A
	MORROW			613737	65					
NASH (MORROW) PM				613737	65					
ASH DRAW (ATOKA) PA	ATOKA	NASH UNIT	000002	384059	1785	12432	12441	7605	9308	ACT
		NASH UNIT	000003	5884880	9745	12314	12576	7612	9308	ACT
		REMUDA BASIN UNIT	000001	95836	491	0	0	9108	9309	ACT
	ATOKA			6364775	12021					
ASH DRAW (ATOKA) PA				6364775	12021					
NASH DRAW (BRUSHY CA	BRUSHY CANYON	NASH UNIT	000005	5280	5211	6902	6933	9308	9309	ACT
		NASH UNIT	000006	10529	10863	0	0	9306	9309	ACT
		NASH UNIT	000009	28560	21391	6713	6880	9210	9309	ACT
		NASH UNIT	000010	26091	8715	6846	6864	9302	9309	ACT
		NASH UNIT	000011	6874	5777	0	0	9307	9309	ACT
		NASH UNIT	000013	15803	12131	6791	7007	9304	9309	ACT
		NASH UNIT	000014	3857	4675	6870	6889	9308	9309	ACT
	BRUSHY CANYON			96994	68763					
NASH DRAW (BRUSHY CA				96994	68763					

WELL/LEASE CUMULATIVE PRODUCTION
10-Mar-1994

FIELD (RESERVOIR)	RESERVOIR NAME	LEASE NAME	WELL	GAS CUM	LIQUID CUM	UPPER PERF	LOWER PERF	1ST PROD DATE	LAST PROD DATE	STATUS
ASH DRAW (CHERRY CA	CHERRY CANYON	NASH DRAW UNIT	000009	0	1810	0	0	9211	9211	INA
		NASH UNIT	000001	52679	35346	0	0	9201	9309	ACT
		NASH UNIT	000004	87443	51246	0	0	7606	9208	INA
	CHERRY CANYON			140122	88402					
ASH DRAW (CHERRY CA				140122	88402					
NASH DRAW (MORROW) P	MORROW	NASH UNIT	000001	1843383	1319	13175	13609	7506	8310	INA
		NASH UNIT	000002	4146097	30	13416	13654	7605	8104	INA
		NASH UNIT	000007	246950	378	0	0	8007	8103	P&A
	MORROW			6236430	1727					
NASH DRAW (MORROW) P				6236430	1727					
ASH DRAW (STRAWN) P	STRAWN	NASH UNIT	000001	9074	15	0	0	7506	8312	INA
	STRAWN			9074	15					
ASH DRAW (STRAWN) P				9074	15					
REMUDA (WOLFCAMP) WC	WOLFCAMP	REMUDA BASIN UNIT	000001	520797	49731	0	0	0	9108	INA
	WOLFCAMP			520797	49731					
REMUDA (WOLFCAMP) WC				520797	49731					
TOTAL				38242141	531792					



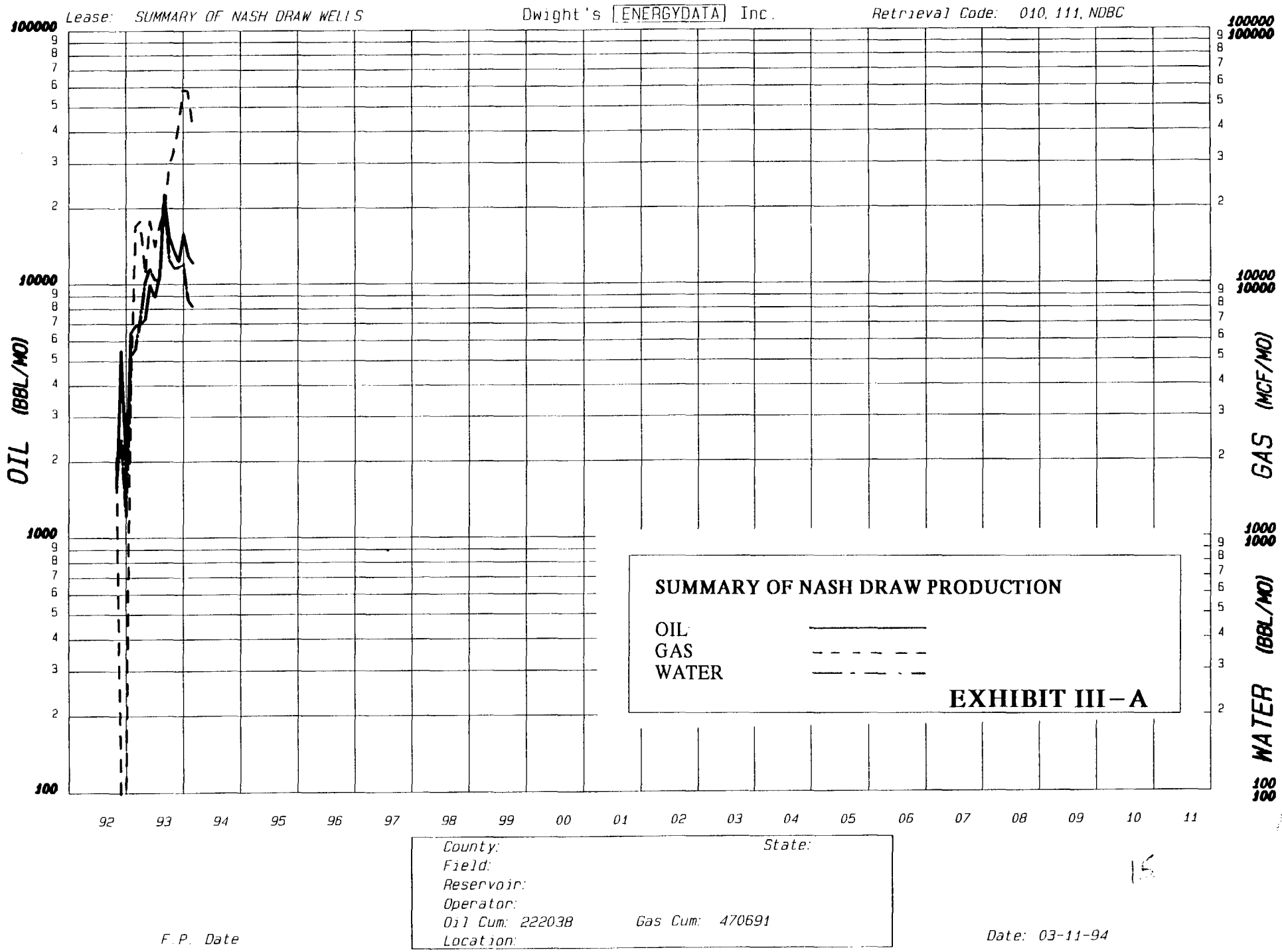
NASH DRAW – BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO

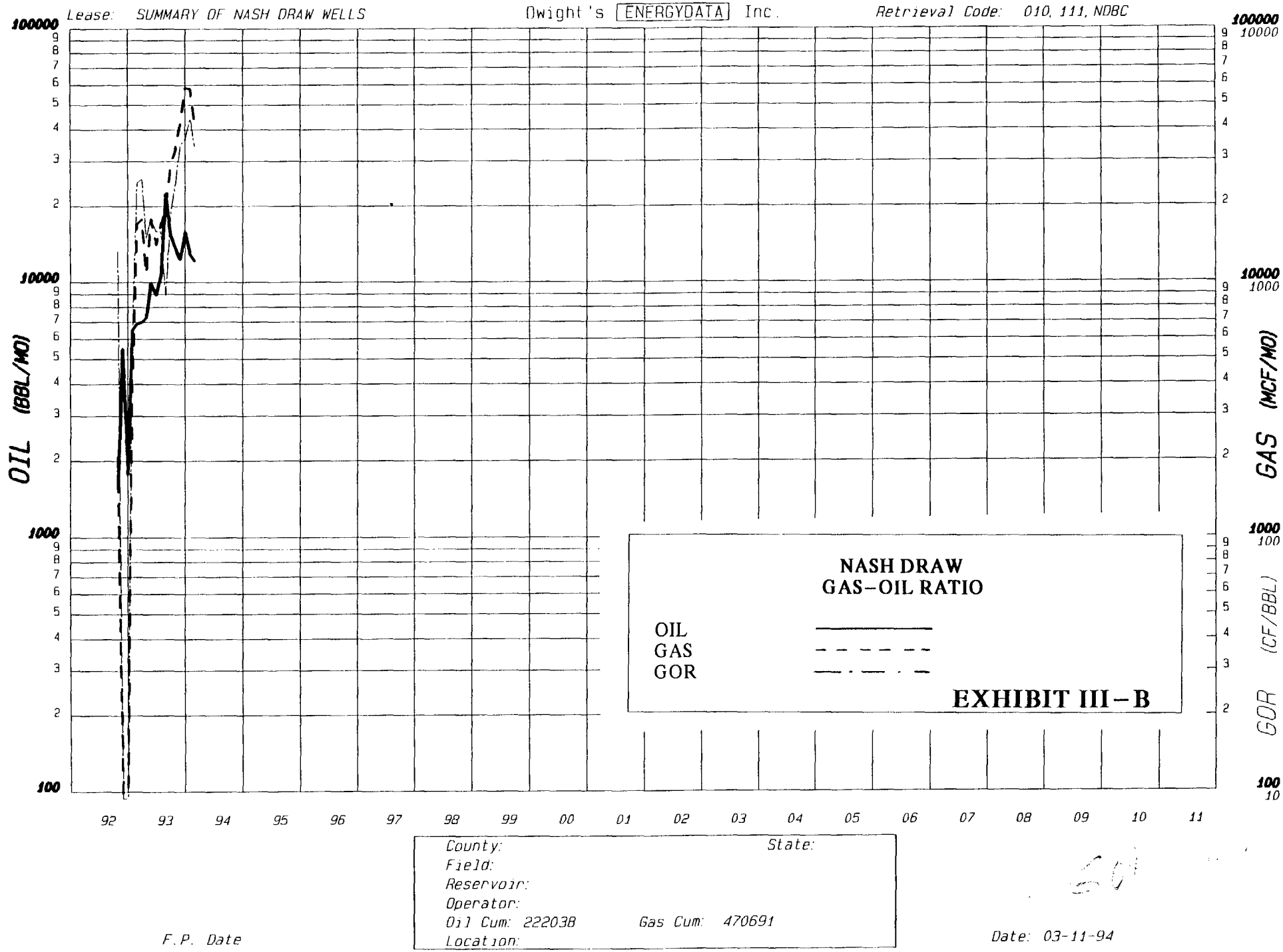
BRUSHY CANYON COMPLETIONS
CHERRY CANYON COMPLETIONS

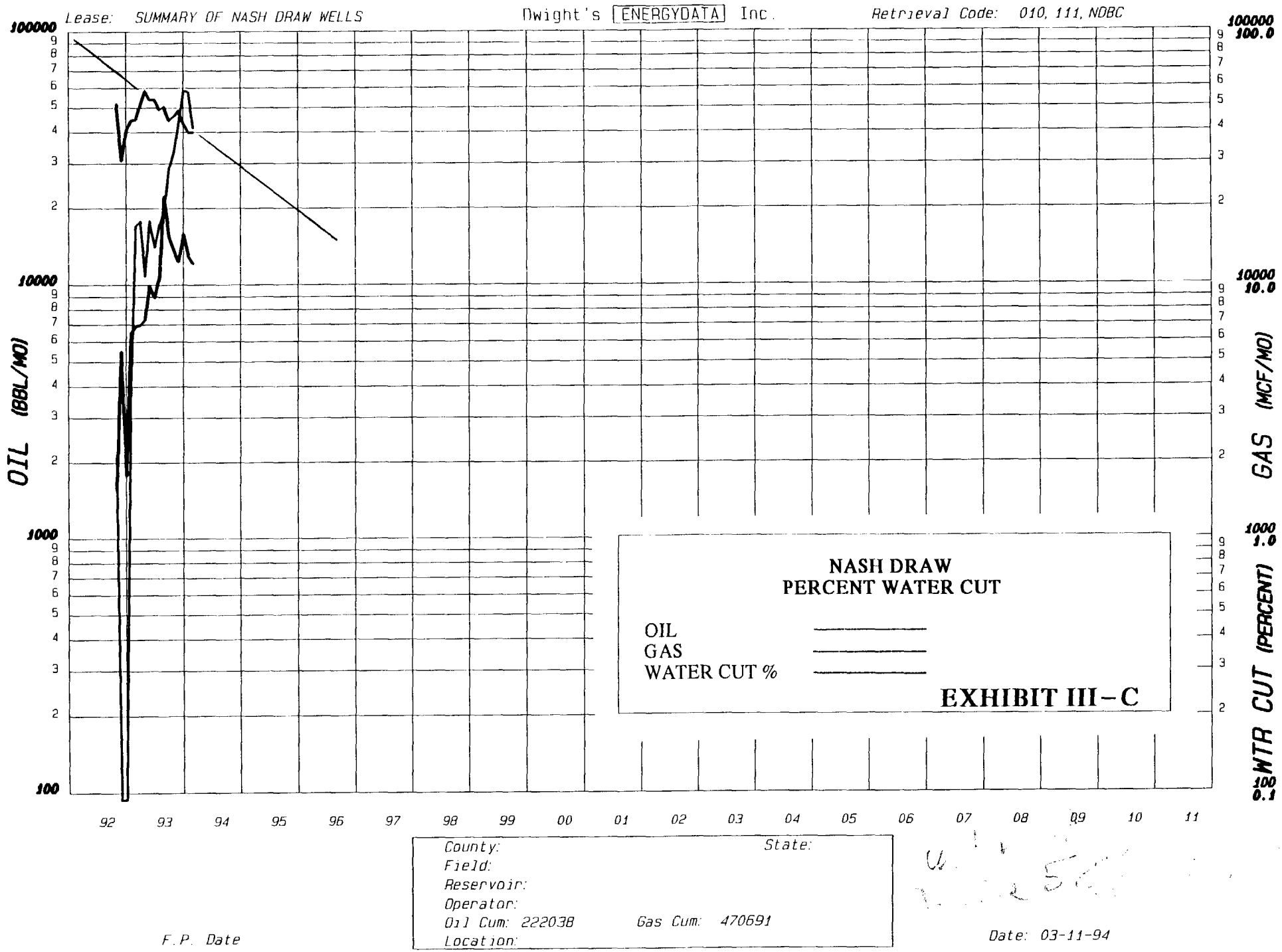
EXHIBIT II

NASH DRAW DELAWARE WELLS

WELL NAME	LOCATION	UPPER PERF.	LOWER PERF.	FORMATION	COMMENTS
NASH DRAW #1	H SEC. 13-T23S-R29E	4780	4784	CHERRY CANYON	SQUEEZED 9/28/92
		4936	4932	CHERRY CANYON	SQUEEZED 9/28/92
		6882	6899	BRUSHY CANYON	266 BO, 176 MCFG, 22 BW
NASH DRAW #4	A SEC. 13-T23S-R29E	4785	4788	CHERRY CANYON	SET CIBP @4738'
		4930	4936	CHERRY CANYON	CONVERT TO DISPOSAL
		4952	4956	CHERRY CANYON	7-30-93
		3240	3734		SWD
NASH DRAW #5	I SEC. 13-T23S-R29E	6902	6933	BRUSHY CANYON	171 BO, 137MCFG, 265 BW
NASH DRAW #6	E SEC. 18-T23S-R30E	6906	6933	BRUSHY CANYON	169 BO, 131 MCFG, 77 BW
NASH DRAW #9	B SEC. 13-T23S-R29E	5432	5440	BRUSHY CANYON	2-19-93
		5838	5843	BRUSHY CANYON	COMPLETE ADDITIONAL PAY
		6318	6373	BRUSHY CANYON	
		6713	6749	BRUSHY CANYON	83 BO, 53 MCFG, 147 BW
		6831	6880	BRUSHY CANYON	7-20-92
NASH DRAW #10	G SEC. 13-T23S-R29E	5858	5864	BRUSHY CANYON	4-10-93
		6319	6329	BRUSHY CANYON	COMPLETE ADDITIONAL PAY
		6767	6779	BRUSHY CANYON	
		6846	6864	BRUSHY CANYON	173 BO, 123 MCFG, 52 BW
NASH DRAW #11	N SEC. 12-T23S-R29E	6795	6821	BRUSHY CANYON	197 BO, 139 MCFG, 277 BW
NASH DRAW #13	K SEC. 12-T23S-R29E	6791	6836	BRUSHY CANYON	228 BO, 123 MCFG, 144 BW
		6879	7007	BRUSHY CANYON	
NASH DRAW #14	A SEC. 13-T23S-R29E	6870	6889	BRUSHY CANYON	300 BO, 143 MCFG, 197 BW
NASH DRAW #19	J SEC. 12-T23S-R29E	6721	6734	BRUSHY CANYON	TESTING 2-28-94
		6812	6830	BRUSHY CANYON	31 BO, 4 BW


Lease: SUMMARY OF NASH DRAW WELLS
Dwight's ENERGYDATA Inc.
Retrieval Code: 010, 111, NDBC
OIL (BBL/MO)
GAS (MCF/MO)
WATER (BBL/MO)
92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11
SUMMARY OF NASH DRAW PRODUCTION
OIL
GAS
WATER
EXHIBIT III-A
County:
State:
Field:
Reservoir:
Operator:
Oil Cum: 222038
Gas Cum: 470691
Location:
F.P. Date
Date: 03-11-94


Lease: SUMMARY OF NASH DRAW WELLS
Dwight's ENERGYDATA Inc.
Retrieval Code: 010, 111, NDBC
OIL (BBL/MO)
GAS (MCF/MO)
GOR (CF/BBL)
100000
10000
1000
100
10
92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11
NASH DRAW
GAS-OIL RATIO
OIL
GAS
GOR
EXHIBIT III-B
County:
State:
Field:
Reservoir:
Operator:
Oil Cum: 222038
Gas Cum: 470691
Location:
F.P. Date
Date: 03-11-94


Lease: SUMMARY OF NASH DRAW WELLS
Dwight's ENERGYDATA Inc.
Retrieval Code: 010, 111, NOBC
OIL (BBL/MO)
GAS (MCF/MO)
WTR CUT (PERCENT)
100000
10000
1000
100
10.0
1.0
0.1
92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11
NASH DRAW
PERCENT WATER CUT
OIL
GAS
WATER CUT %
EXHIBIT III-C
County:
State:
Field:
Reservoir:
Operator:
Oil Cum: 222038
Gas Cum: 470691
Location:
F.P. Date
Date: 03-11-94

Dwight's Energydata, Inc. DLOOK 4.20 Record # 1 Run date: 03/11/94
Property data from file: d:\prod-cd\ndsum.ind Retrieval code: 010,111,NDBC

Operator (#0)	Lease name	Well #
	SUMMARY OF NASH DRAW WELLS	

Ident. #	State	Dist	County	Location	Lse/tax /unit #
NDBC	( )	111			0

API #	Field (#0)	Reservoir
-111-00000		

Total Depth	Perforations Upper	Perforations Lower	Temp Gradient	N-Factor	GOR
0	0	0	0.000	0.000	0

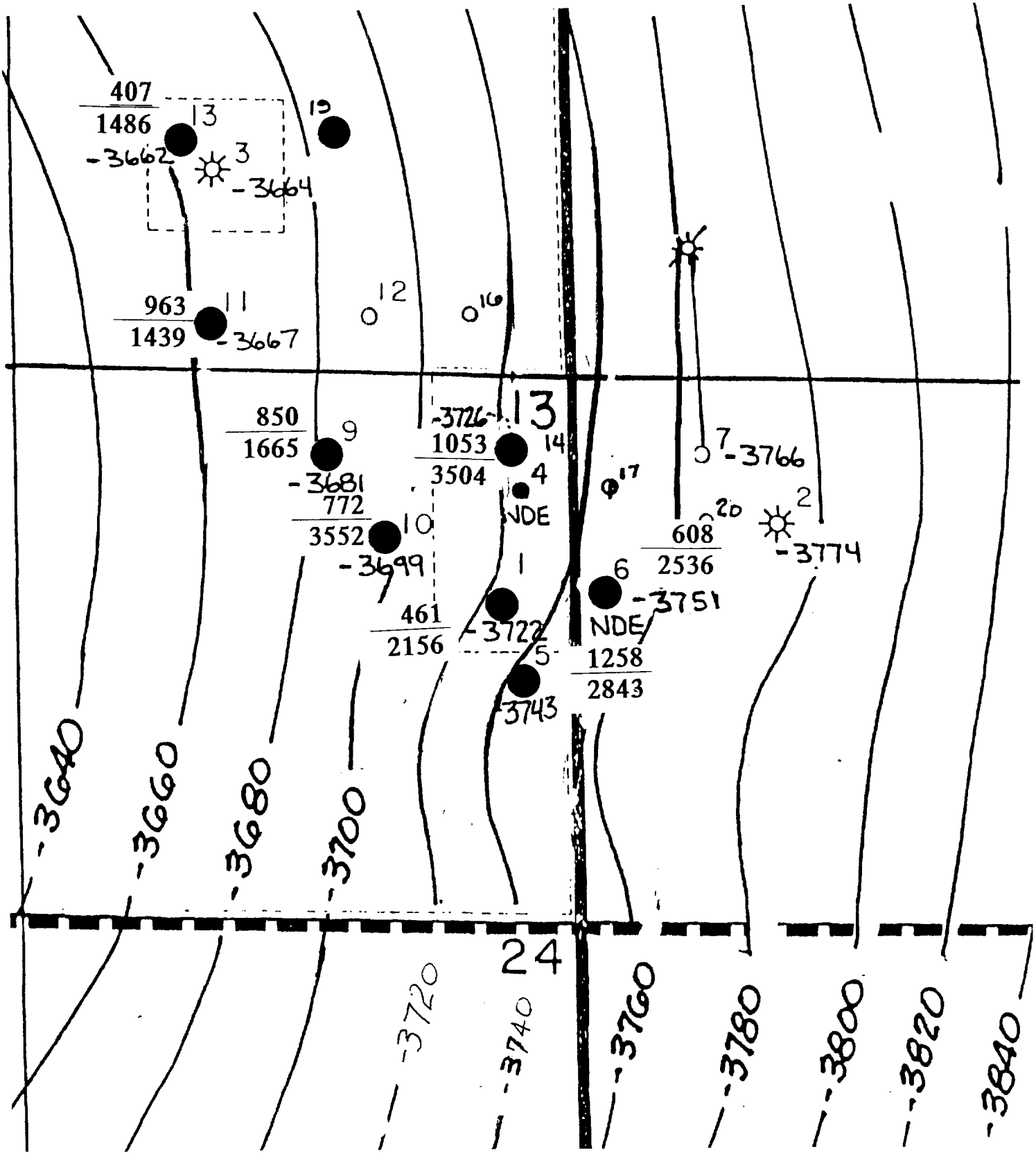
Comp Date	Production Dates First	Production Dates Last	Status Date	Status
0	0	9402	0	

Cumulative gas MCF	Since	Gas Gravity	Gas Gatherer
470691	FP Date	0.00	

Cumulative liquid BBL	Since	Liquid Gravity	Liquid Gatherer
222038	FP Date	0.00	

Dwight's Energydata, Inc. DLOOK 4.20 Record # 1 Run date: 03/11/94
Production data from file: d:\prod-cd\ndsum.in Retrieval code: 010,111,NDBC
Lease: SUMMARY OF NASH DRAW WELLS Well #:

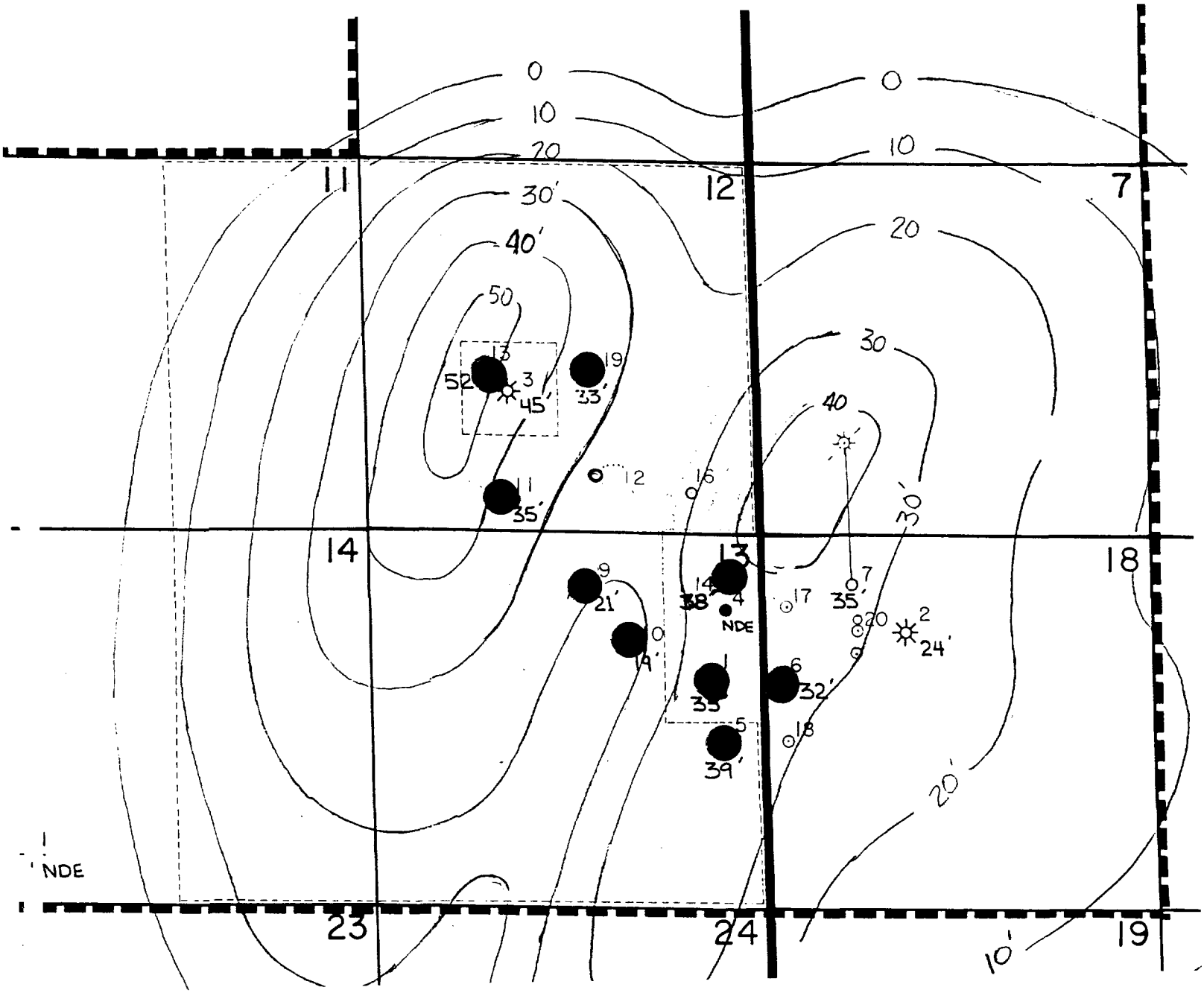
Month	Oil bbls	Cum Oil bbls	Gas mcf	Cum Gas mcf	Water bbls	No.of Wells
January	0	51209	0	86933	0	1
February	0	51209	0	86933	0	1
March	0	51209	0	86933	0	1
April	0	51209	0	86933	0	1
May	0	51209	0	86933	0	1
June	0	51209	0	86933	0	1
July	0	51209	0	86933	0	1
August	0	51209	0	86933	0	1
September	0	51209	0	86933	0	1
October	1571	52780	2086	89019	1682	2
November	5482	58262	0	89019	2447	2
December	1778	60040	0	89019	1221	1
Total 1992	8831	60040	2086	89019	5350	1
January	6514	66554	3735	92754	5232	2
February	6876	73430	17007	109761	5602	3
March	6979	80409	17792	127553	7444	3
April	7291	87700	10884	138437	10176	4
May	9933	97633	17835	156272	11608	4
June	8924	106557	14152	170424	10395	5
July	10742	117299	17110	187534	10418	6
August	22357	139656	19957	207491	22648	8
September	15504	155160	28640	236131	12473	8
October	13520	168680	33701	269832	11610	8
November	12326	181006	42874	312706	11706	8
December	15878	196884	58358	371064	12054	8
Total 1993	136844	196884	282045	371064	131366	8
January	13007	209891	57916	428980	8682	8
February	12147	222038	41711	470691	8111	8
Total 1994	25154	222038	99627	470691	16793	8



STRUCTURE vs. GOR MAP

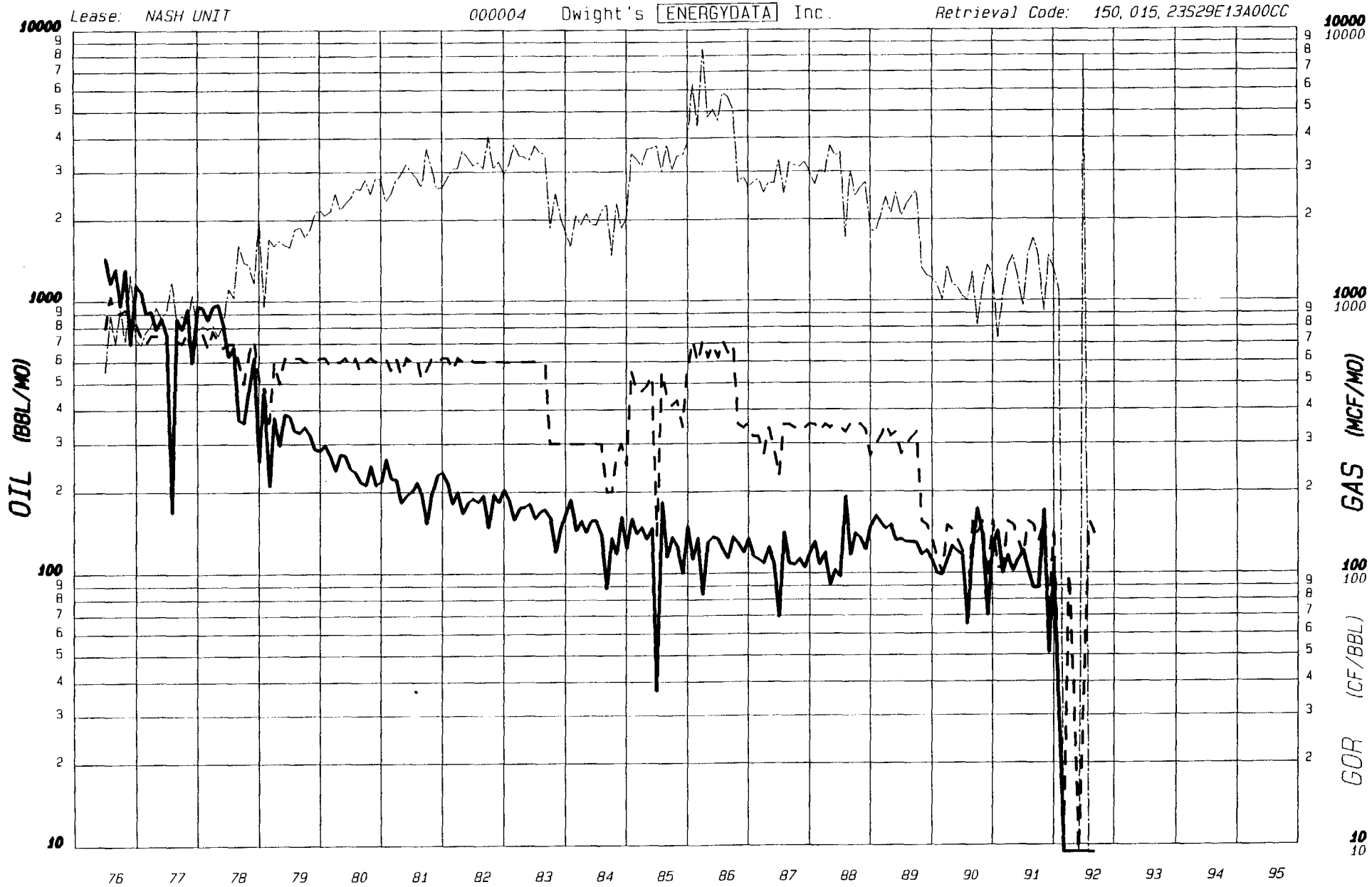
INITIAL GOR/CUM. GOR

EXHIBIT IV–A



ISOPACH MAP
BRUSHY CANYON
MAIN PAY

EXHIBIT IV–B

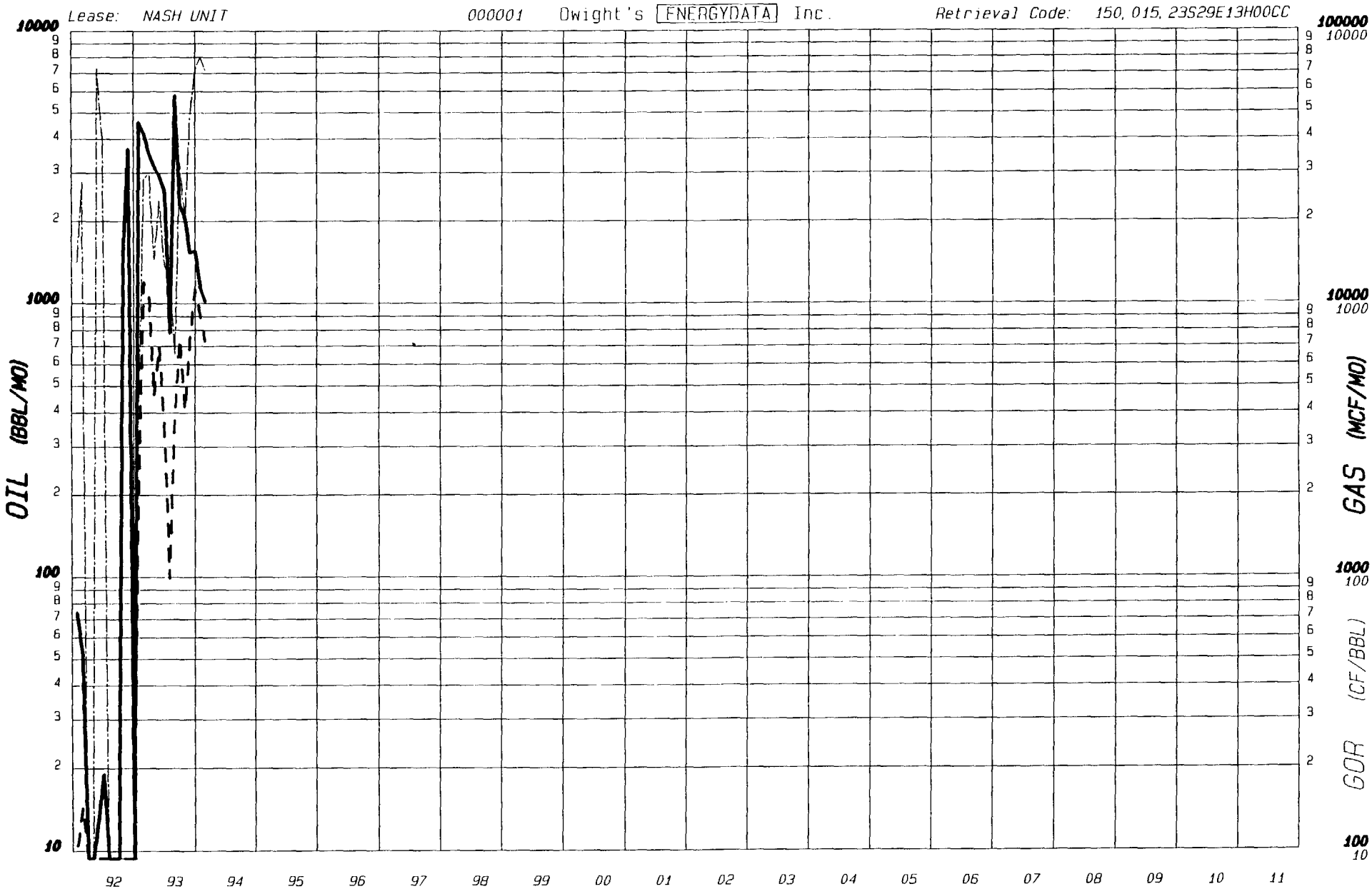


County: EDDY State: NM
Field: NASH DRAW (CHERRY CANYON) CC
Reservoir: CHERRY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 51246 Gas Cum: 87443
Location: 13A 23S 29E

F.P. Date 06-76

Date: 03-10-94

EXHIBIT V-A



County: EDDY State: NM
Field: NASH DRAW (CHERRY CANYON) CC
Reservoir: CHERRY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 42656 Gas Cum: 91995
Location: 13H 23S 29E

F.P. Date 01-92

Date 03-10-94

EXHIBIT V-B-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.1	1/93	4630	2134	461
	2/93	4194	11959	2851
	3/93	3564	10673	2995
	4/93	3166	4591	1450
	5/93	2950	7017	2379
	6/93	2576	3527	1369
	7/93	783	992	1267
	8/93	5651	3783	669
	9/93	2304	7528	3267
	10/93	2054	4095	1994
	11/93	1535	7455	4857
	12/93	1559	11251	7217
	1/94	1146	9179	8010
	2/94	1016	7336	7220

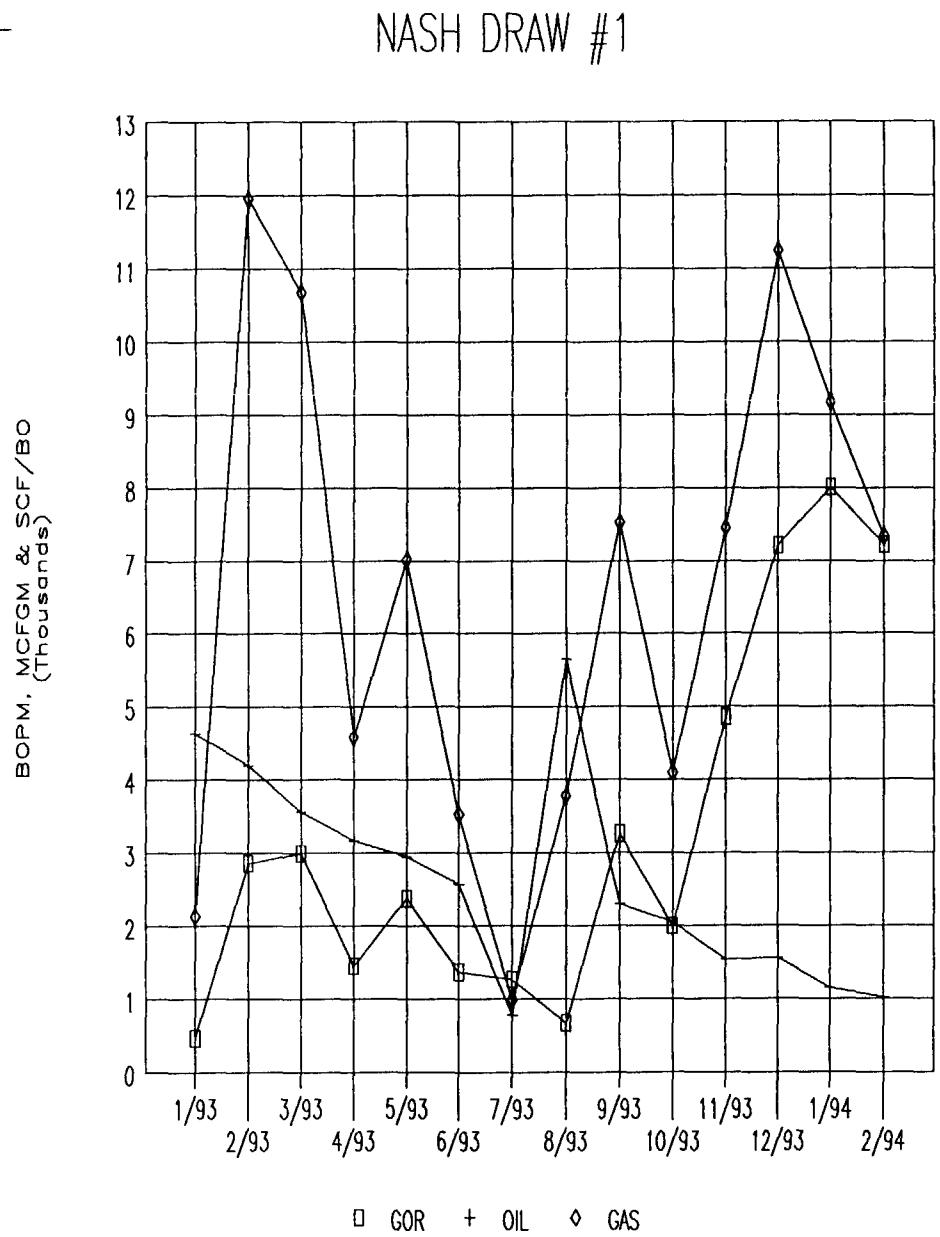
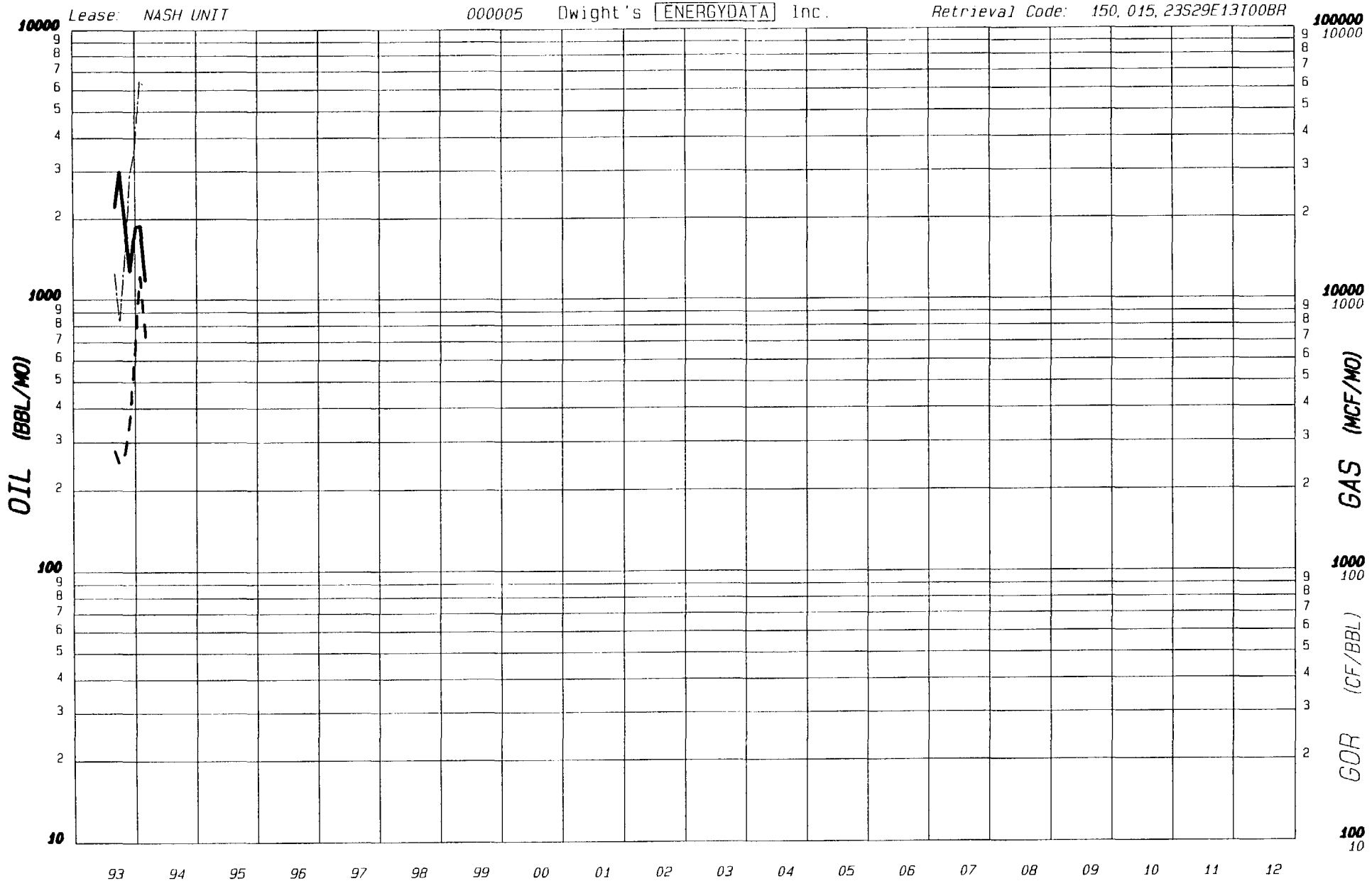


EXHIBIT V-B-2



County: EDDY State: NM
Field: NASH DRAW (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 13361 Gas Cum: 37984
Location: 13I 23S 29E

F.P. Date 08-93

Date: 03-10-94

EXHIBIT V-C-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.5	8/93	2215	2787	1258
	9/93	2996	2493	832
	10/93	1936	2730	1410
	11/93	1278	3661	2865
	12/93	1868	6732	3604
	1/94	1889	12245	6482
	2/94	1179	9074	7696

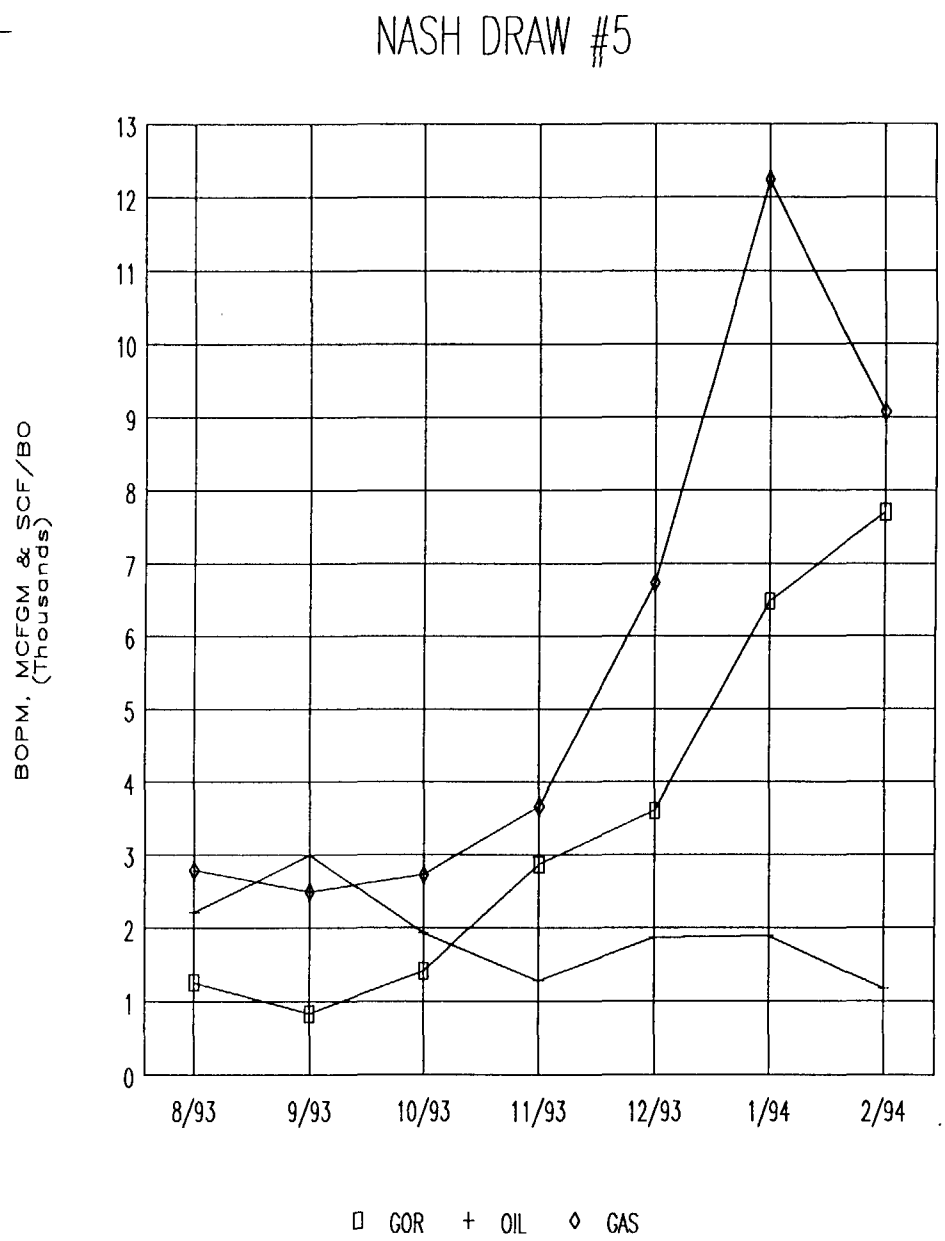
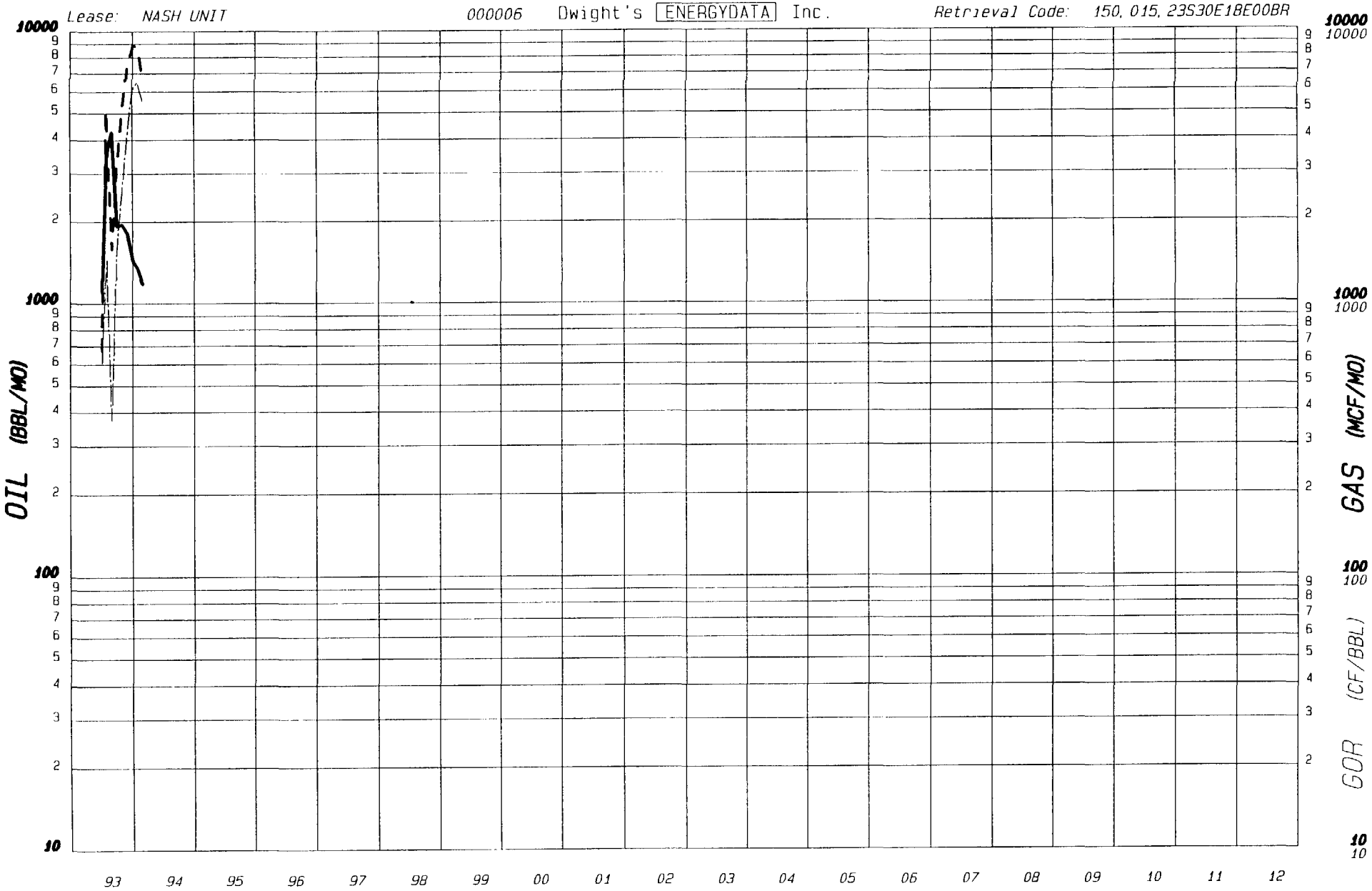


EXHIBIT V-C-2



County: EDDY State: NM
Field: NASH DRAW (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 18624 Gas Cum: 47235
Location: 18E 23S 30E

F.P. Date 06-93

Date: 03-10-94

EXHIBIT V-D-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.6	6/93	1106	672	608
	7/93	3568	5192	1455
	8/93	1519	1593	1049
	9/93	1923	3069	1596
	10/93	1957	4988	2549
	11/93	1825	7535	4129
	12/93	1455	8857	6087
	1/94	1347	8773	6513
	2/94	1177	6553	5568

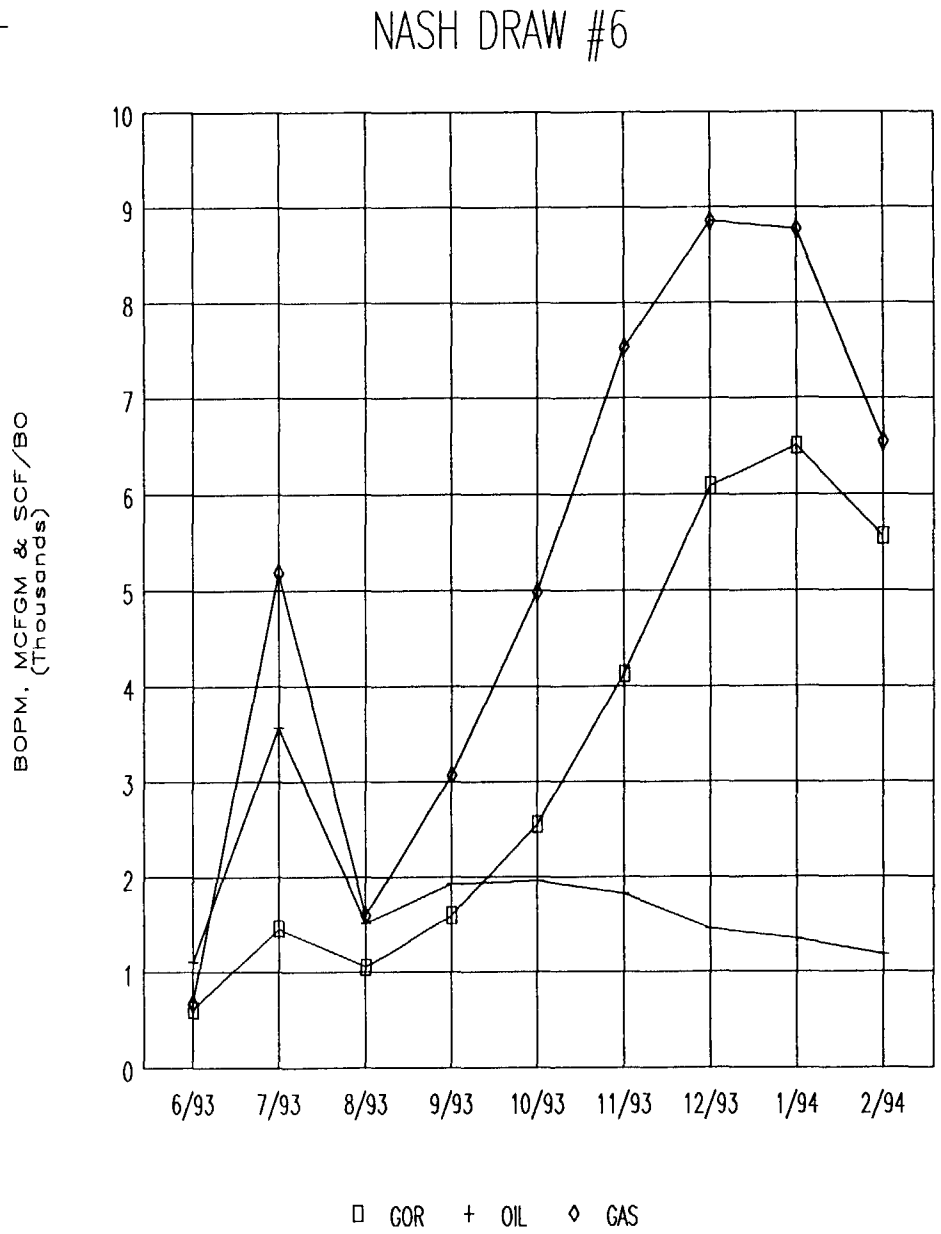
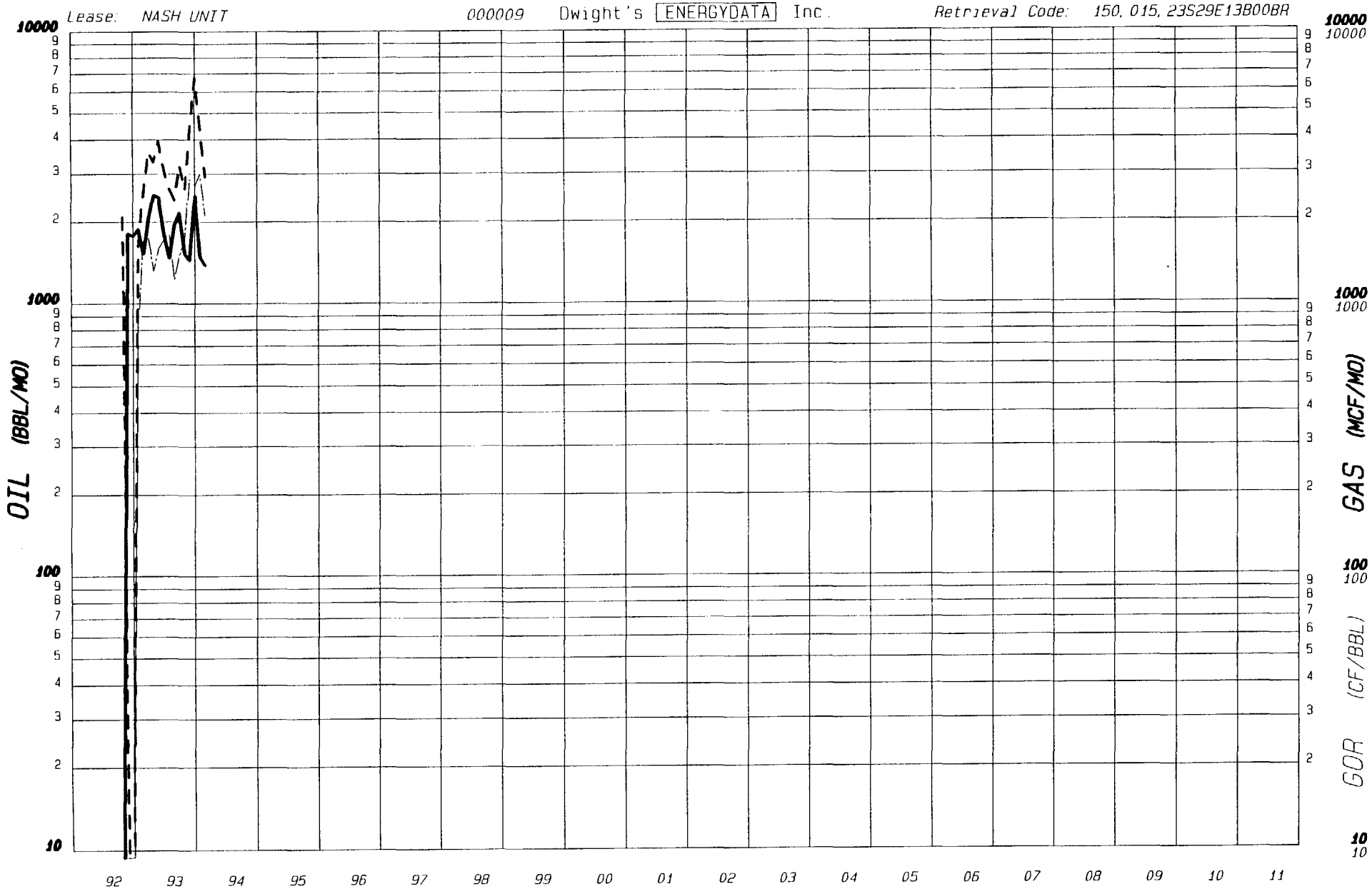


EXHIBIT V-D-2



County: EDDY State: NM
Field: NASH DRAW (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 29731 Gas Cum: 49514
Location: 13B 23S 29E

F.P. Date 10-92

Date: 03-10-94

EXHIBIT V-E-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.9	1/93	1884	1601	850
	2/93	1529	2574	1683
	3/93	2049	3631	1772
	4/93	2508	3317	1323
	5/93	2464	3937	1598
	6/93	1787	3083	1725
	7/93	1473	2663	1808
	8/93	1950	2408	1235
	9/93	2159	3260	1510
	10/93	1528	2606	1705
	11/93	1448	4165	2876
	12/93	2490	6792	2728
	1/94	1486	4464	3004
	2/94	1388	2927	2109

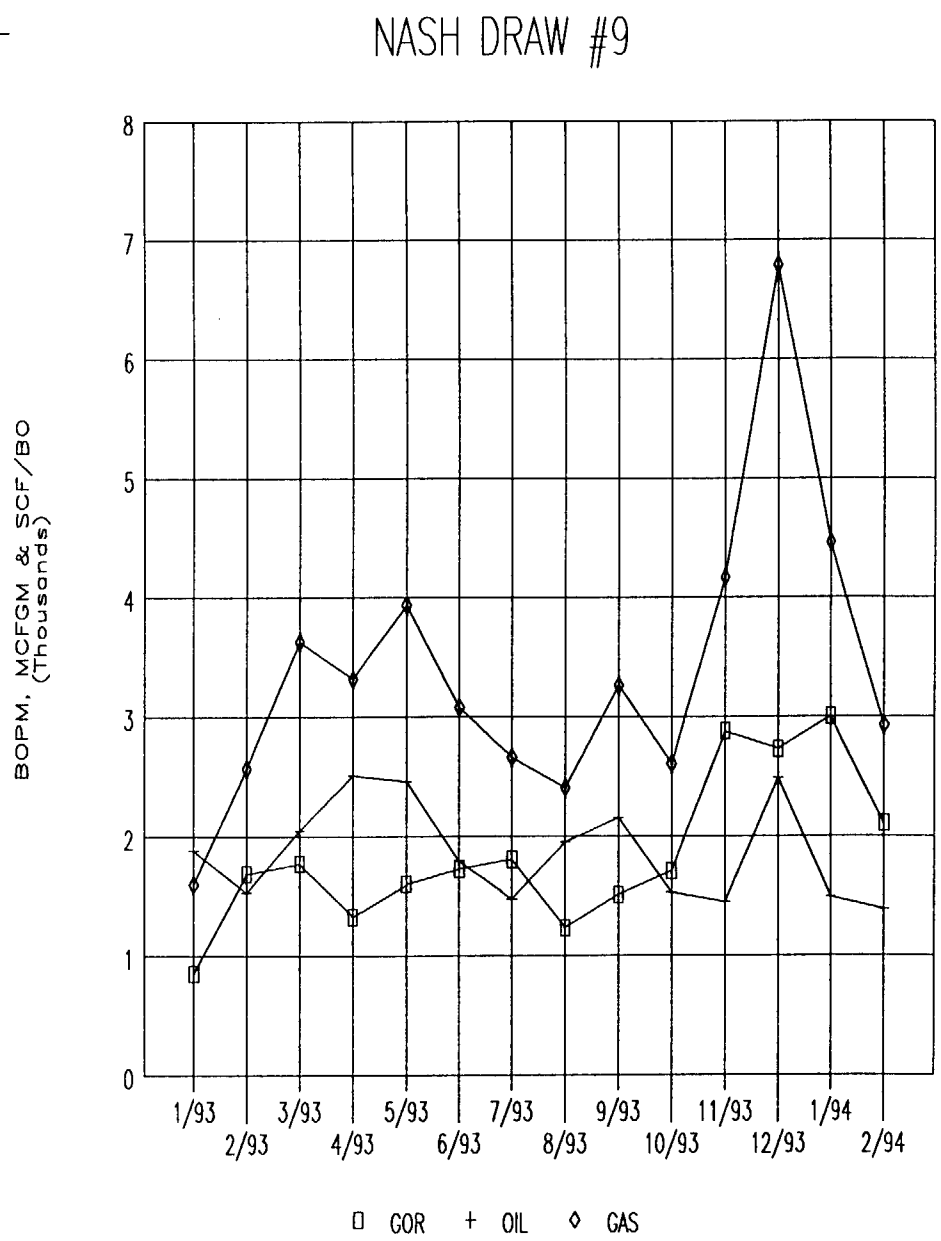
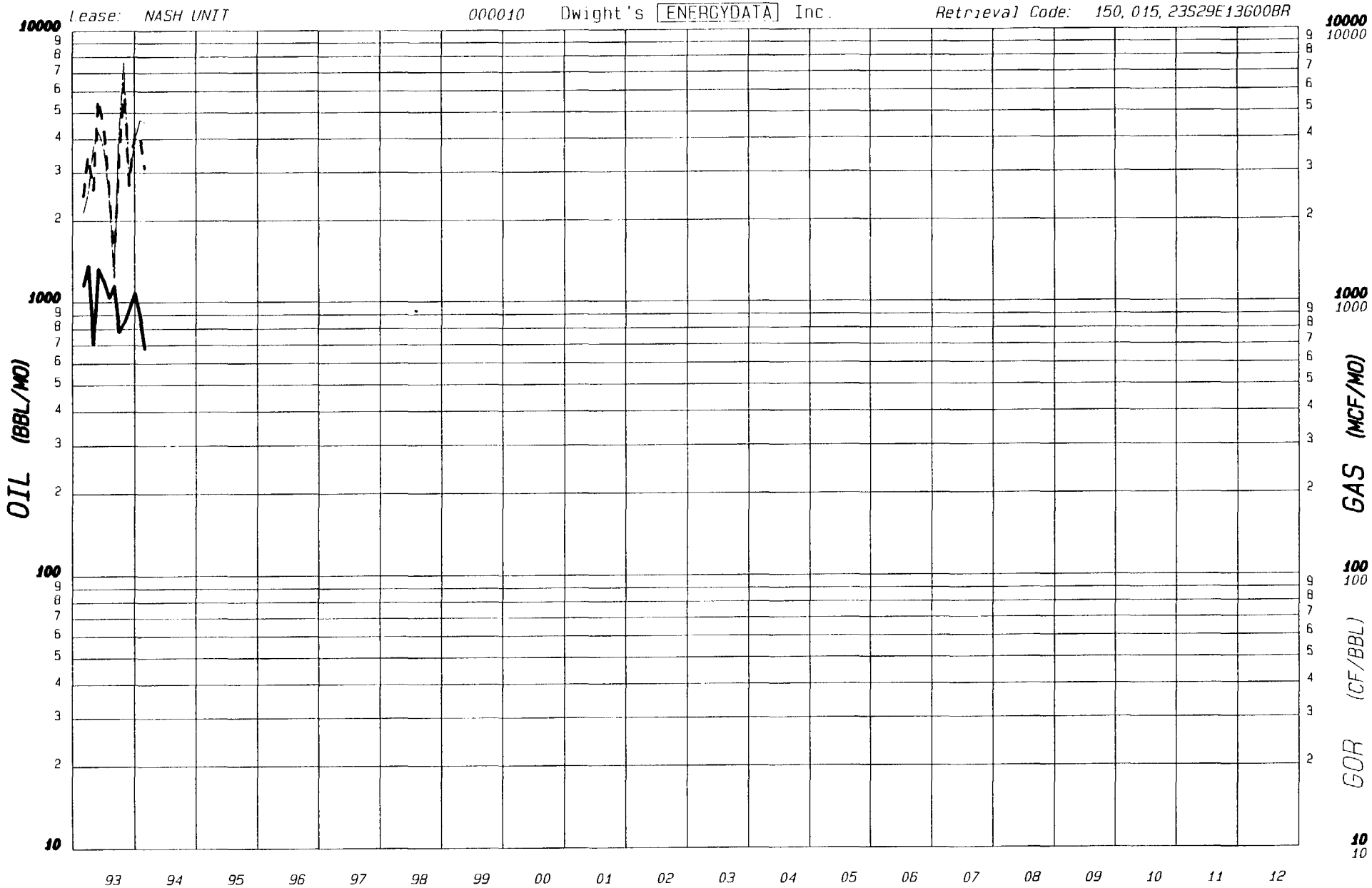


EXHIBIT V-E-2



County: EDDY State: NM
Field: NASH DRAW (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 13165 Gas Cum: 46757
Location: 13G 23S 29E

F.P. Date 02-93

Date: 03-10-94

EXHIBIT V-F-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.10	1/93	2075	1601	772
	2/93	1153	2474	2146
	3/93	1366	3488	2553
	4/93	707	2606	3686
	5/93	1326	5666	4273
	6/93	1191	4437	3725
	7/93	1039	2593	2496
	8/93	1152	1423	1235
	9/93	781	3404	4359
	10/93	845	6452	7636
	11/93	945	2706	2863
	12/93	1085	4170	3843
	1/94	898	4216	4695
	2/94	677	3122	4612

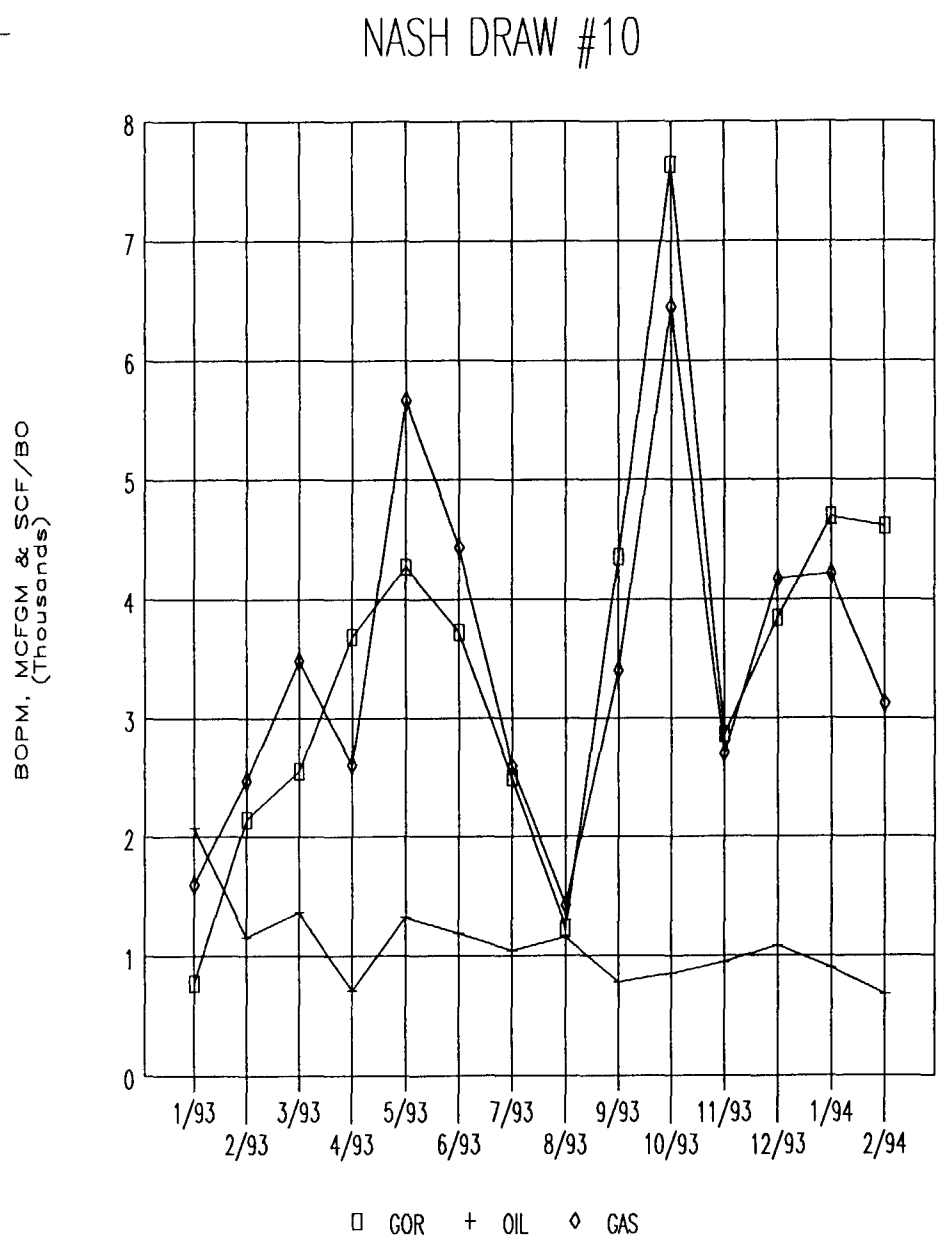
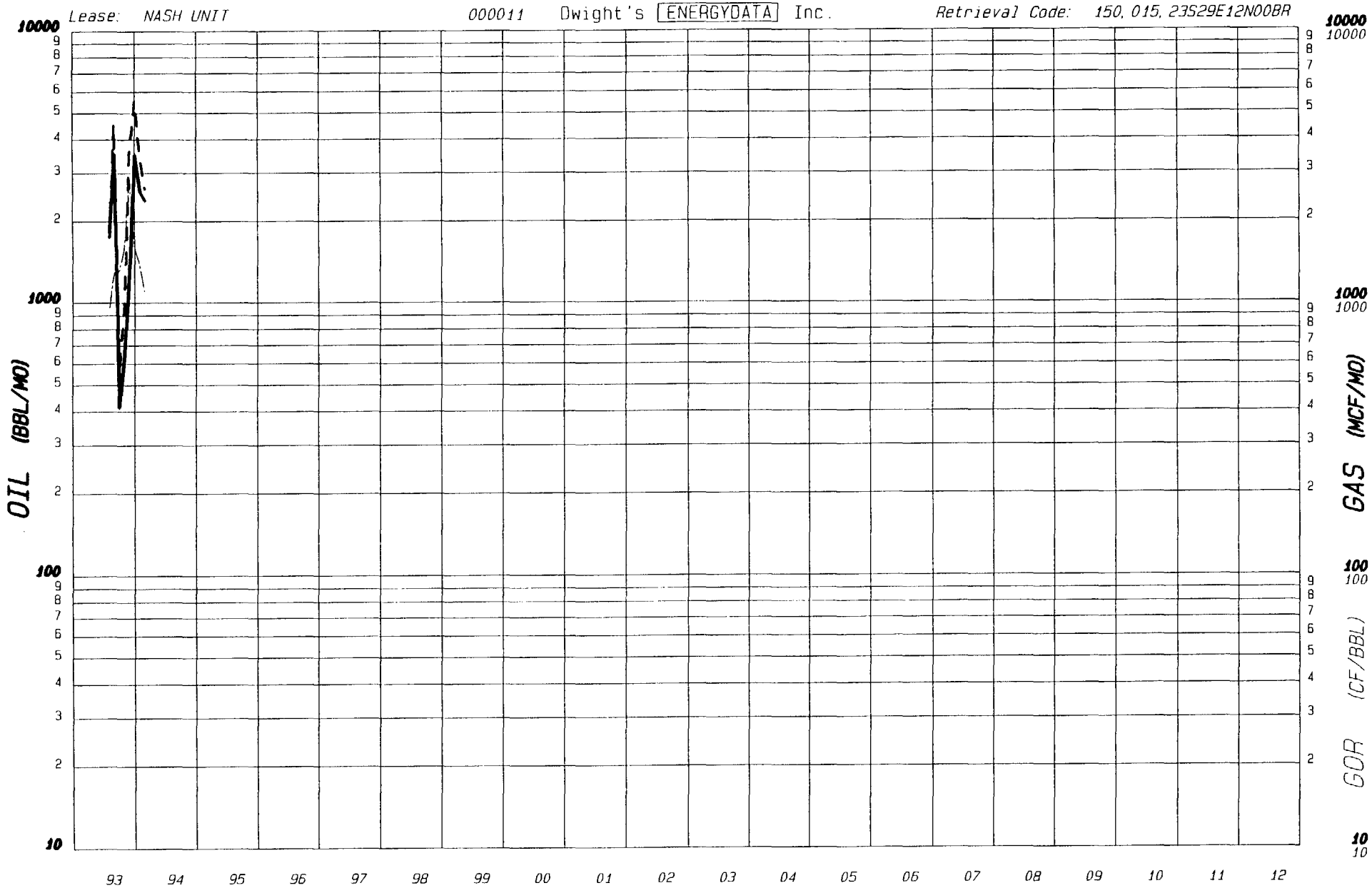


EXHIBIT V-F-2



County: EDDY State: NM
Field: NASH DRAW (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 16130 Gas Cum: 2320B
Location: 12N 23S 29E

F.P. Date 07-93

Date: 03-10-94

EXHIBIT V-G-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.11	7/93	1819	1752	963
	8/93	3545	4579	1292
	9/93	413	543	1315
	10/93	633	1018	1608
	11/93	1250	3582	2866
	12/93	3517	5565	1582
	1/94	2570	3534	1375
	2/94	2383	2635	1106

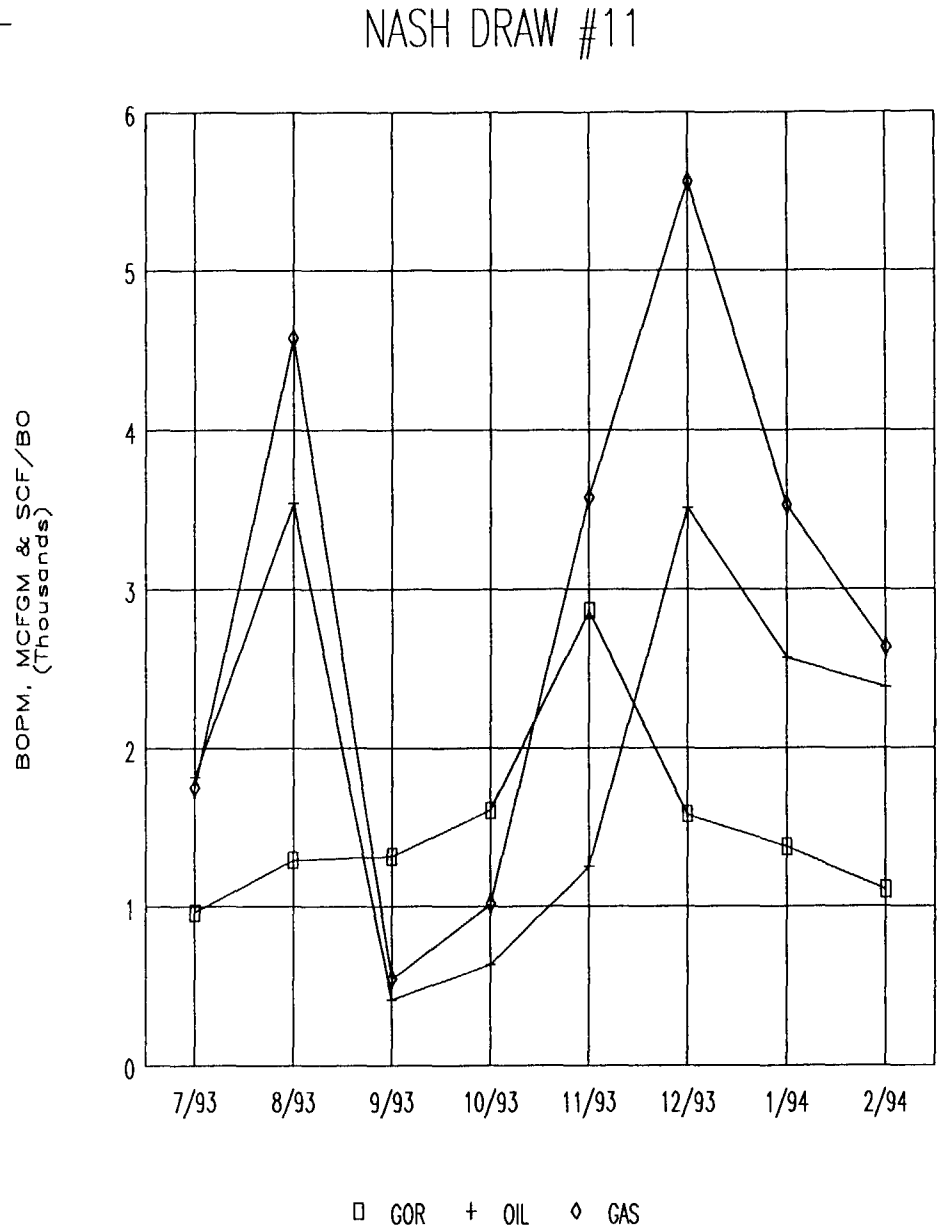
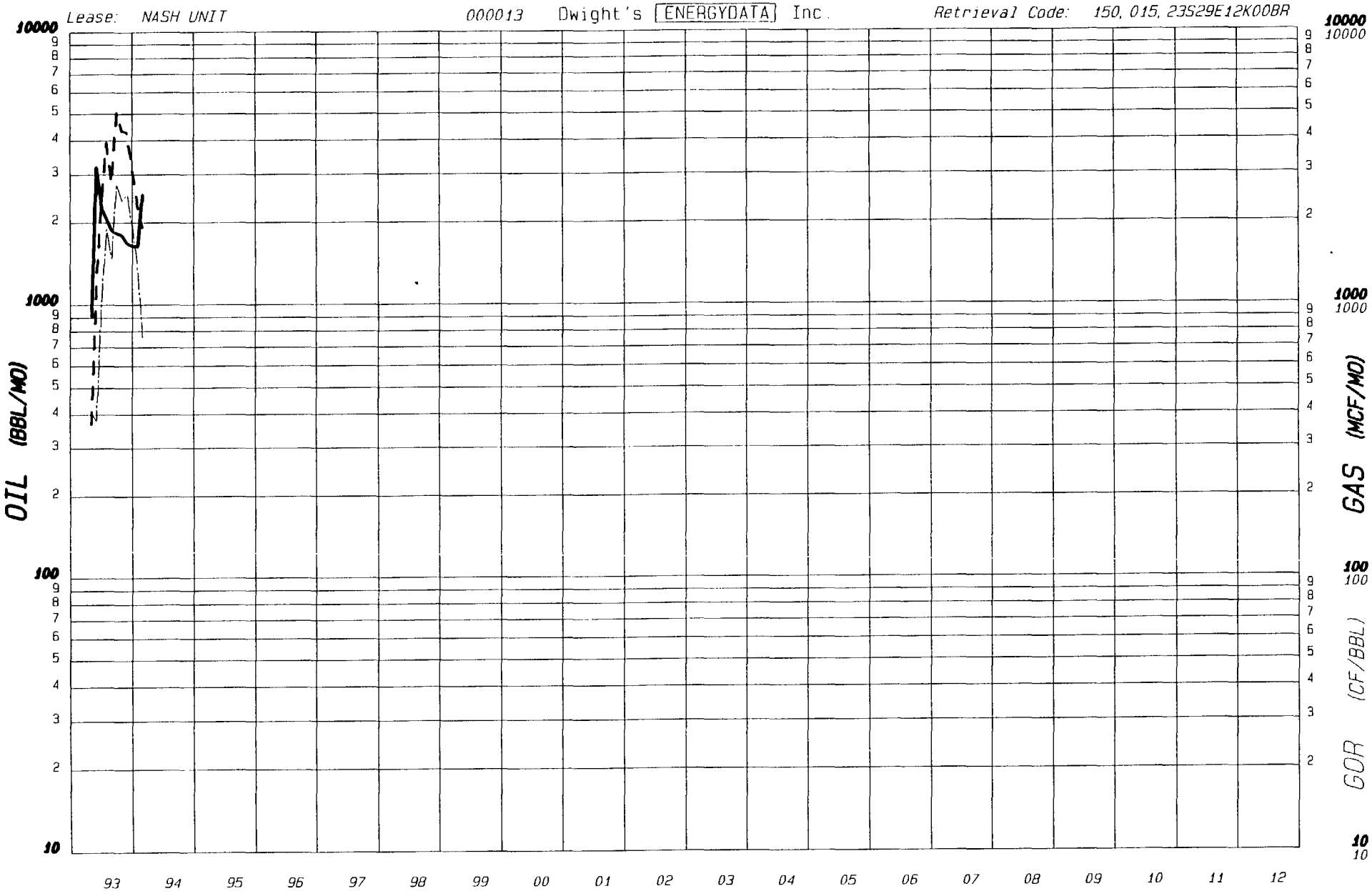


EXHIBIT V-G-2



County: EDDY State: NM
Field: NASH DRAW (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 21427 Gas Cum: 31846
Location: 12K 23S 29E

F.P. Date 04-93

Date: 03-10-94

EXHIBIT V-H-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.13	4/93	910	370	407
	5/93	3193	1215	381
	6/93	2264	2433	1075
	7/93	2060	3915	1900
	8/93	1873	2787	1488
	9/93	1831	5083	2776
	10/93	1802	4343	2410
	11/93	1682	4272	2540
	12/93	1644	3202	1948
	1/94	1635	2299	1406
	2/94	2533	1927	761

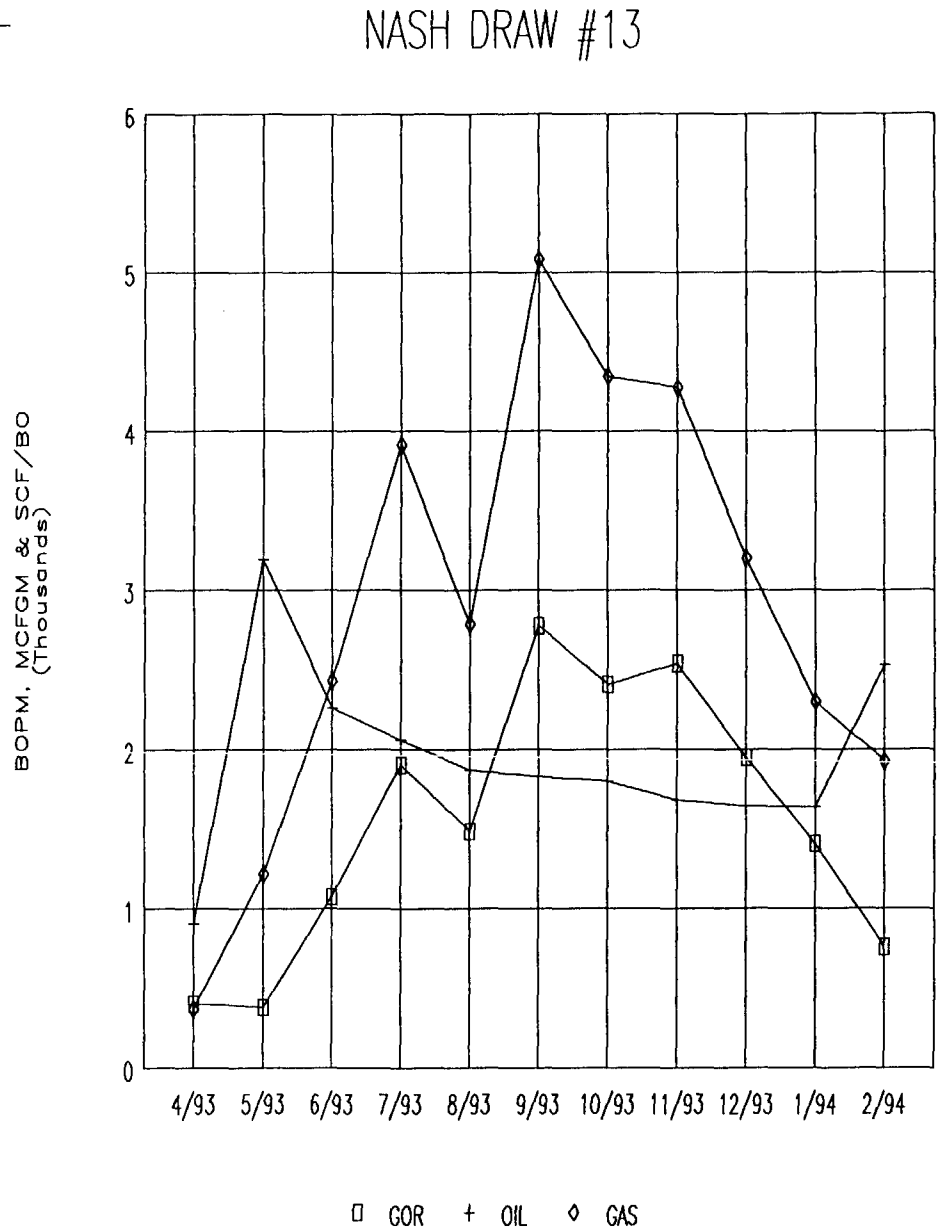
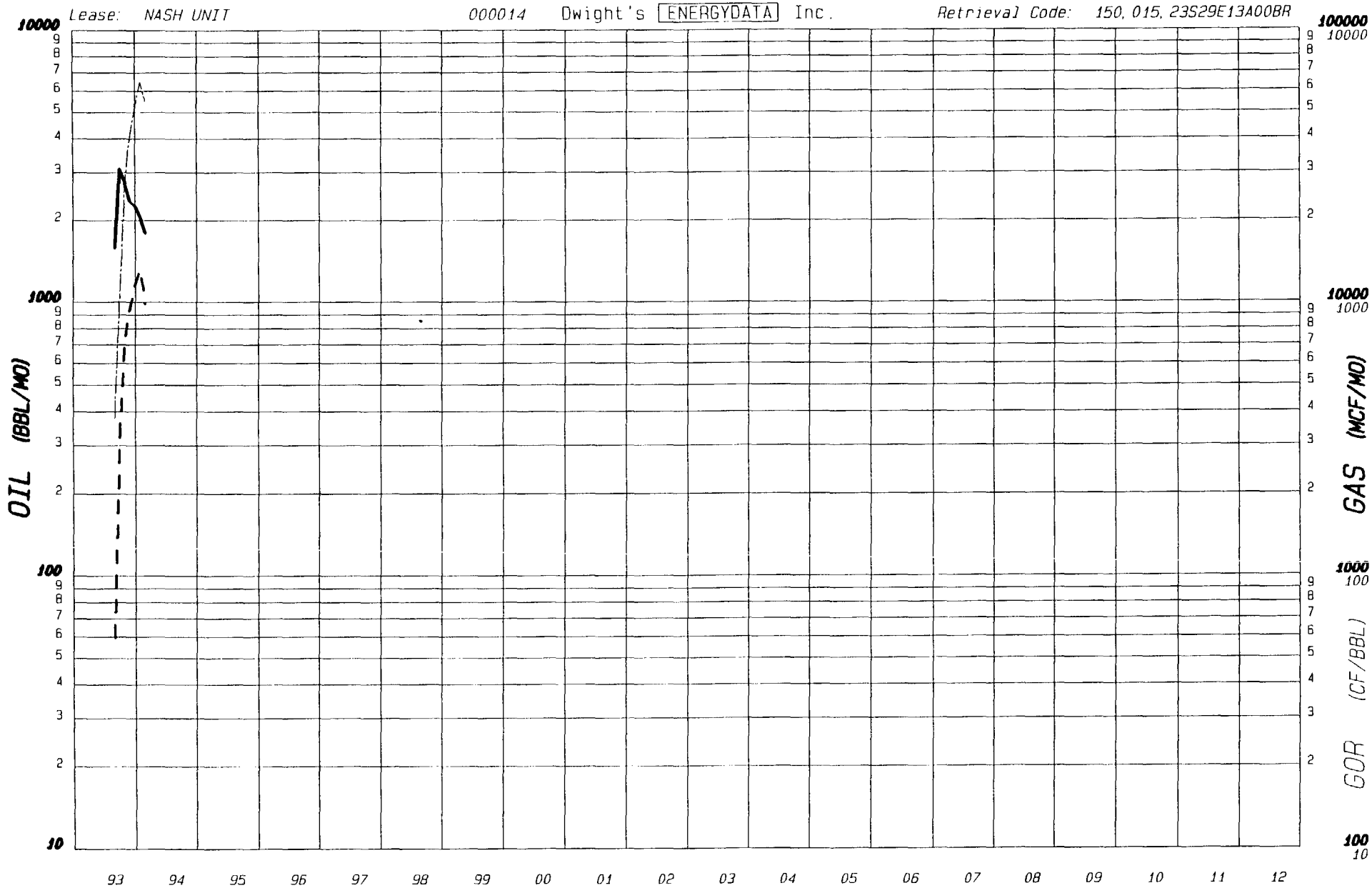


EXHIBIT V-H-2



County: EDDY State: NM
Field: NASH DRAW (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator: STRATA PRODUCTION CO
Oil Cum: 15893 Gas Cum: 55694
Location: 13A 23S 29E

F.P. Date 08-93

Date: 03-10-94

EXHIBIT V-1-1

WELL NAME & NO.	MONTH/YR.	OIL	GAS	GOR
NASH NO.14	8/93	4469	597	134
	9/93	3097	3260	1053
	10/93	2765	7469	2701
	11/93	2363	9498	4019
	12/93	2260	11789	5216
	1/94	2036	13206	6486
	2/94	1794	9875	5504

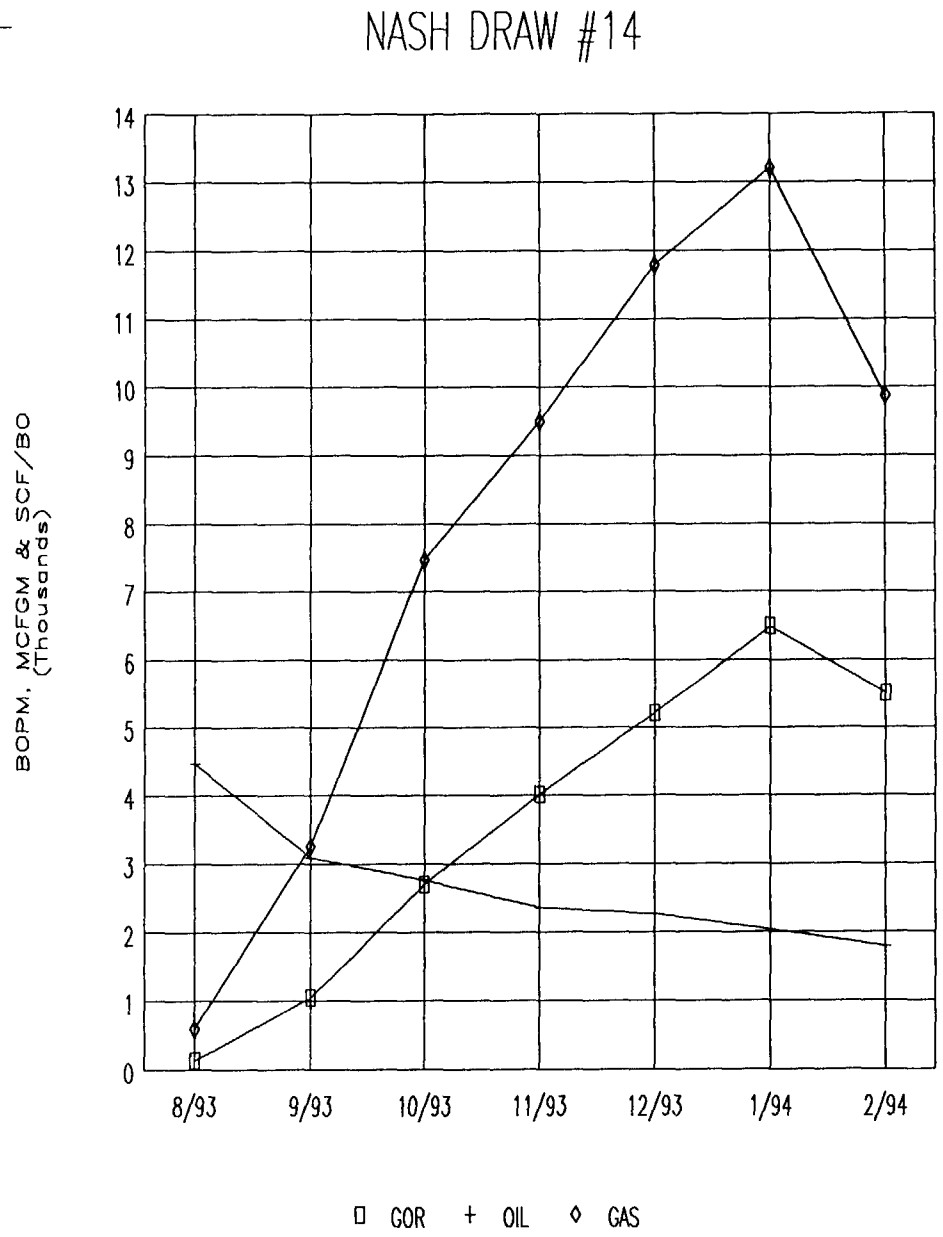


EXHIBIT V-I-2

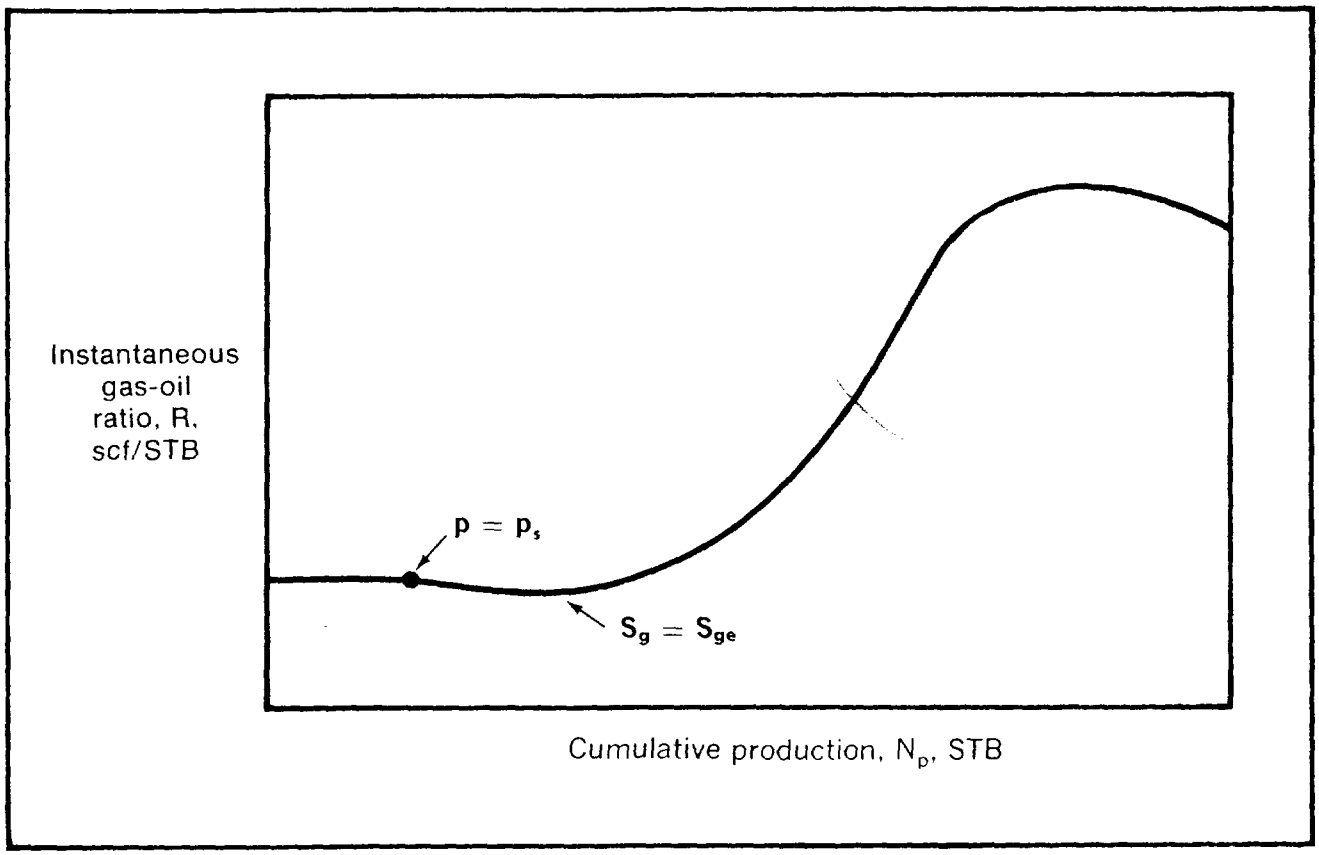


FIG. 6.8 Gas-oil ratio history for a solution-gas-drive reservoir.

TYPICAL GAS–OIL RATIO HISTORY FOR A SOLUTION–GAS–DRIVE RESERVOIR

SLIDER, H.C.; PRACTICAL PETROLEUM RESERVOIR ENGINEERING METHODS; PETROLEUM PUBLISHING COMPANY, TULSA, OKLAHOMA (1976, P. 342.

EXHIBIT VI

PANSYSTEM V1.6 (C) EPOS 1989.

NASH UNIT #19 - CARTESIAN PLOT

File.....: STRATA.OIL
Analyst name.....: KENT WILLIAMS-TEFTELLER, INC.
Company.....: STRATA PRODUCTION COMPANY
Well.....: NASH UNIT #19

Field.....: WILDCAT
Formation.....: DELAWARE
Date.....: MARCH 10-14, 1994
Test.....: 90.5 HOUR BHPBU

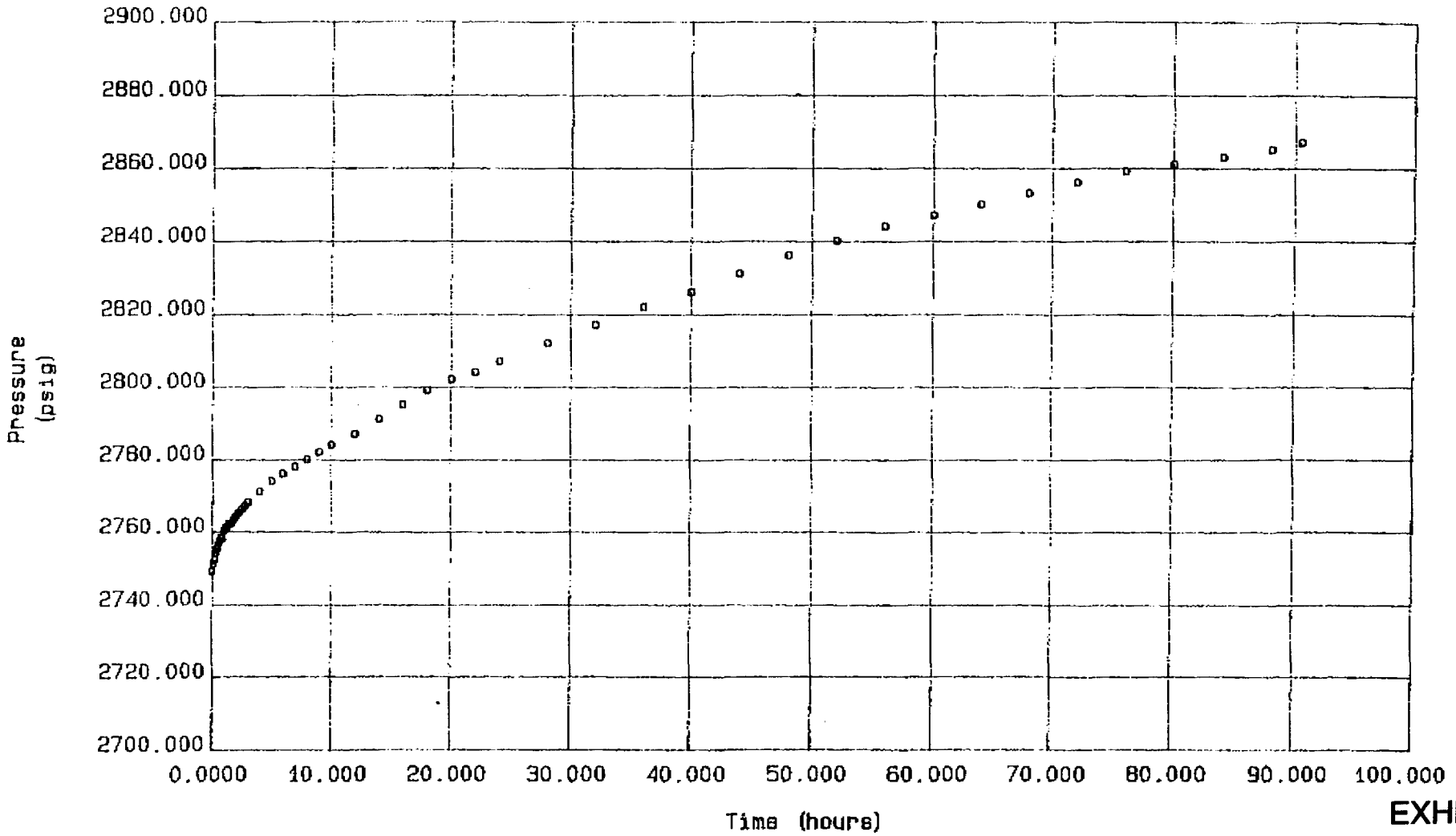


EXHIBIT VII-A

PANSYSTEM V1.6 (C) EPOS 1989.

NASH UNIT #19 - HORNER PLOT

File	STRATA.OIL	Field	WILDCAT	Slope	-130.555
Analyst name	KENT WILLIAMS-TEFTELLER, INC.	Formation	DELAWARE	Intercept	2963.492
Company	STRATA PRODUCTION COMPANY	Date	MARCH 10-14, 1994	Permeability	
Well	NASH UNIT #19	Test	90.5 HOUR BHPBU	Skin	

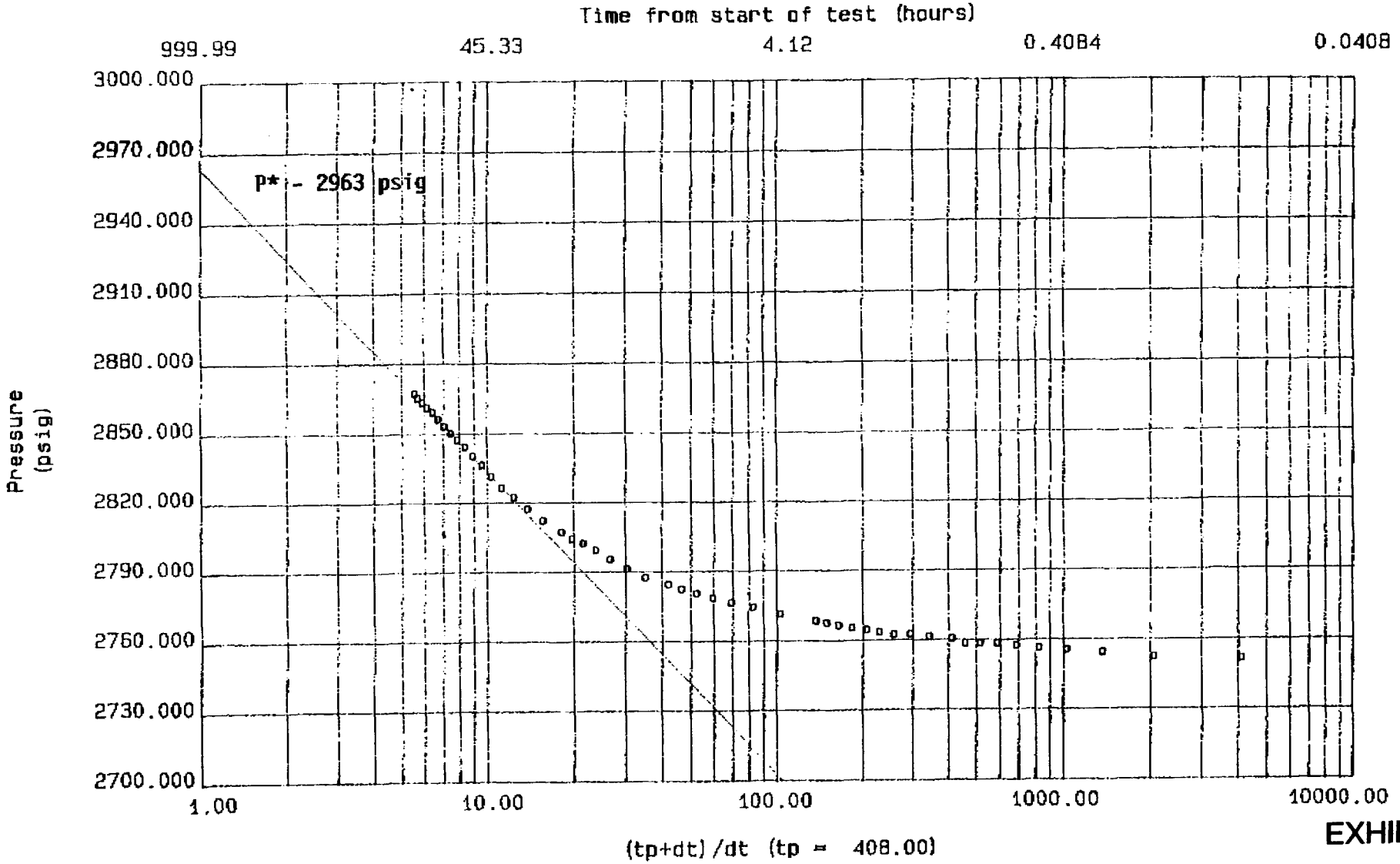


EXHIBIT VII-B

Western Atlas International

CORE LABORATORIES

15 March 1994

Strata Production Company
700 Petroleum Building
Roswell, New Mexico 88201

Subject: Saturation Pressure Estimate
Well: Nash Unit No.19
Formation: Delaware
County: Eddy

Gentlemen:

Given the following:

Laboratory Values:	
Specific gas gravity	0.8338
API liquid gravity	42.5
Reservoir Temperature	117°F
Producing Gas/Oil Ratio	approx. 995 scf/STbbl

Standings correlation predicts a saturation pressure of 2463 psig.

Sincerely,

Tom Coleman

Thomas R. Coleman
Supervisor
Reservoir Fluids Laboratory - Midland,Texas

EXHIBIT VII-C

THE GENERAL MATERIAL BALANCE EQUATION

$$N = \frac{N_p B_o + (G_p - N_p R_s) B_g + (W_p - W_i - W_e) B_w - G_i B_g}{(B_o - B_{oi}) + (R_{si} - R_s) B_g + m B_{oi}\left[\frac{B_g - B_{gi}}{B_{gi}}\right] + \frac{B_{oi}}{1 - S_w}(1+m)(S_w c_w + c_f)(p_{ir} - p_r)}$$

B_g	GAS FORMATION VOLUME FACTOR
B_{gi}	INITIAL GAS FORMATION VOLUME FACTOR
B_o	OIL FORMATION VOLUME FACTOR
B_{oi}	INITIAL OIL FORMATION VOLUME FACTOR
B_w	WATER FORMATION VOLUME FACTOR
c_f	FORMATION COMPRESSIBILITY
c_w	WATER COMPRESSIBILITY
G_i	CUMMULATIVE GAS INJECTION
G_p	CUMMULATIVE GAS PRODUCED
m	PV OF GAS CAP/PV OF OIL ZONE
N	INITIAL OIL IN PLACE
N_p	CUMMULATIVE OIL PRODUCTION
p_{ir}	INITIAL RESERVOIR PRESSURE
p_r	RESERVOIR PRESSURE
R_s	SOLUTION GOR
R_{si}	INITIAL SOLUTION GOR
S_w	WATER SATURATION
W_e	CUMMULATIVE WATER INJECTION
W_i	CUMMULATIVE WATER INFLUX
W_p	CUMMULATIVE WATER PRODUCED

EXHIBIT VIII

Bradley, H.B., Petroleum Engineering Handbook, Society of Petroleum Engineers, Richardson, Texas, (1987), P.37-5.

Since there is no injection, water drive, gas cap and the effects of compressibility are negligible the equation reduces to:

$$N = \frac{N_p B_o + (G_p - N_p R_s) B_g}{(B_o - B_{oi}) + (R_{si} - R_s) B_g}$$

Rewriting this equation to arrive at r, fractional recovery of oil in place, yields:
(substitute $R_p \times N_p$ for G_p, R_p cummulative produced gas–oil ratio)

$$r = \frac{N_p}{N} = \frac{(B_o - B_{oi}) + (R_{si} - R_s) B_g}{B_o - (R_p - R_s) B_g}$$

Analysis of this equation indicates that all the terms except the produced gas–oil ratio, R_p, are a function of pressure only, and are the properties of the reservoir fluids. As the nature of the fluid is fixed, it follows that the recovery, r, is fixed by the PVT properties of the reservoir fluid and produced gas–oil ratio.

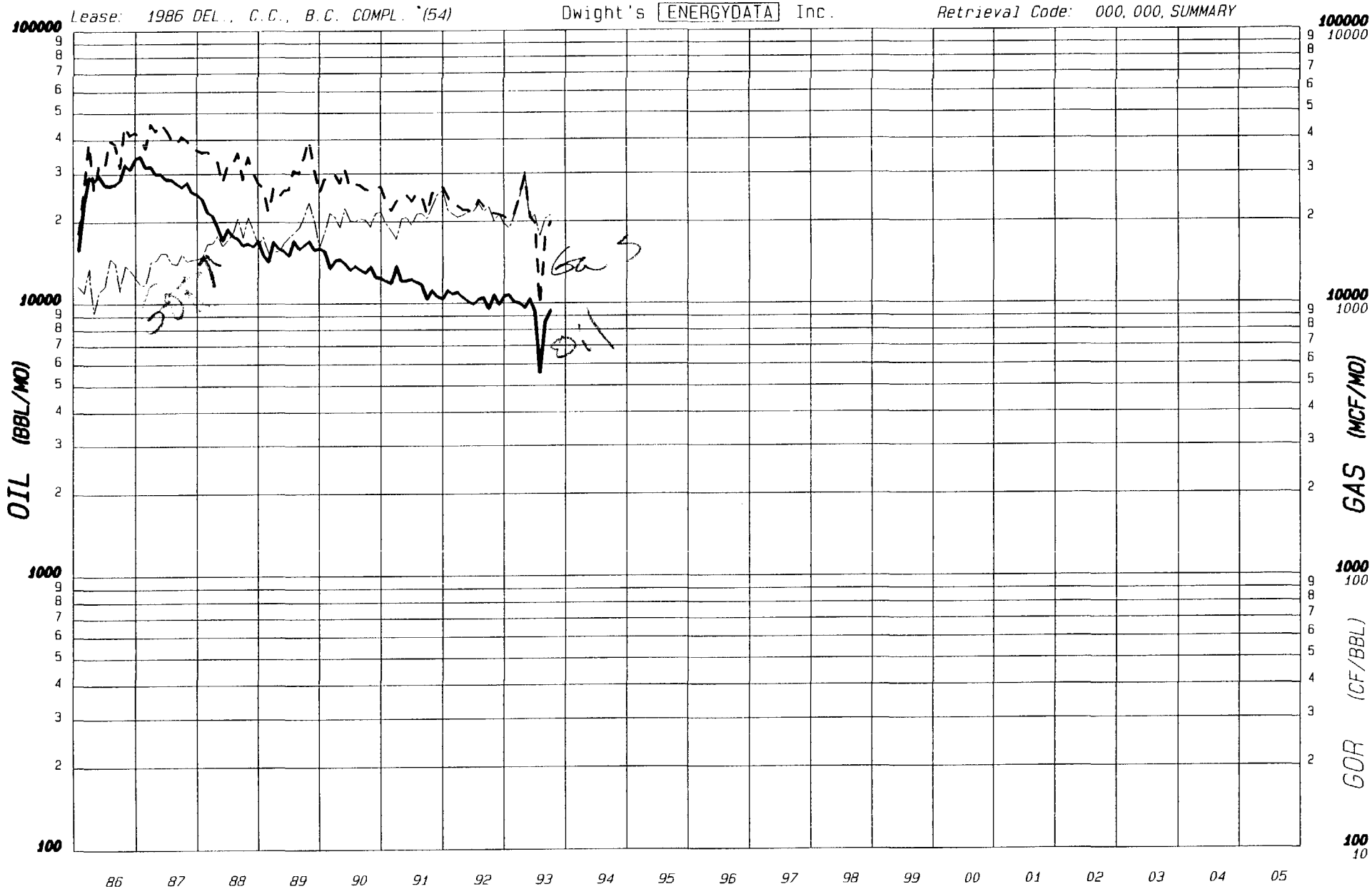
EXHIBIT VIII

STRATA PRODUCTION COMPANY
NASH DRAW - BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO

TYPICAL DELAWARE DECLINE CURVES
NEW MEXICO DELAWARE COMPLETIONS
1986 TO 1990

EXHIBIT IX

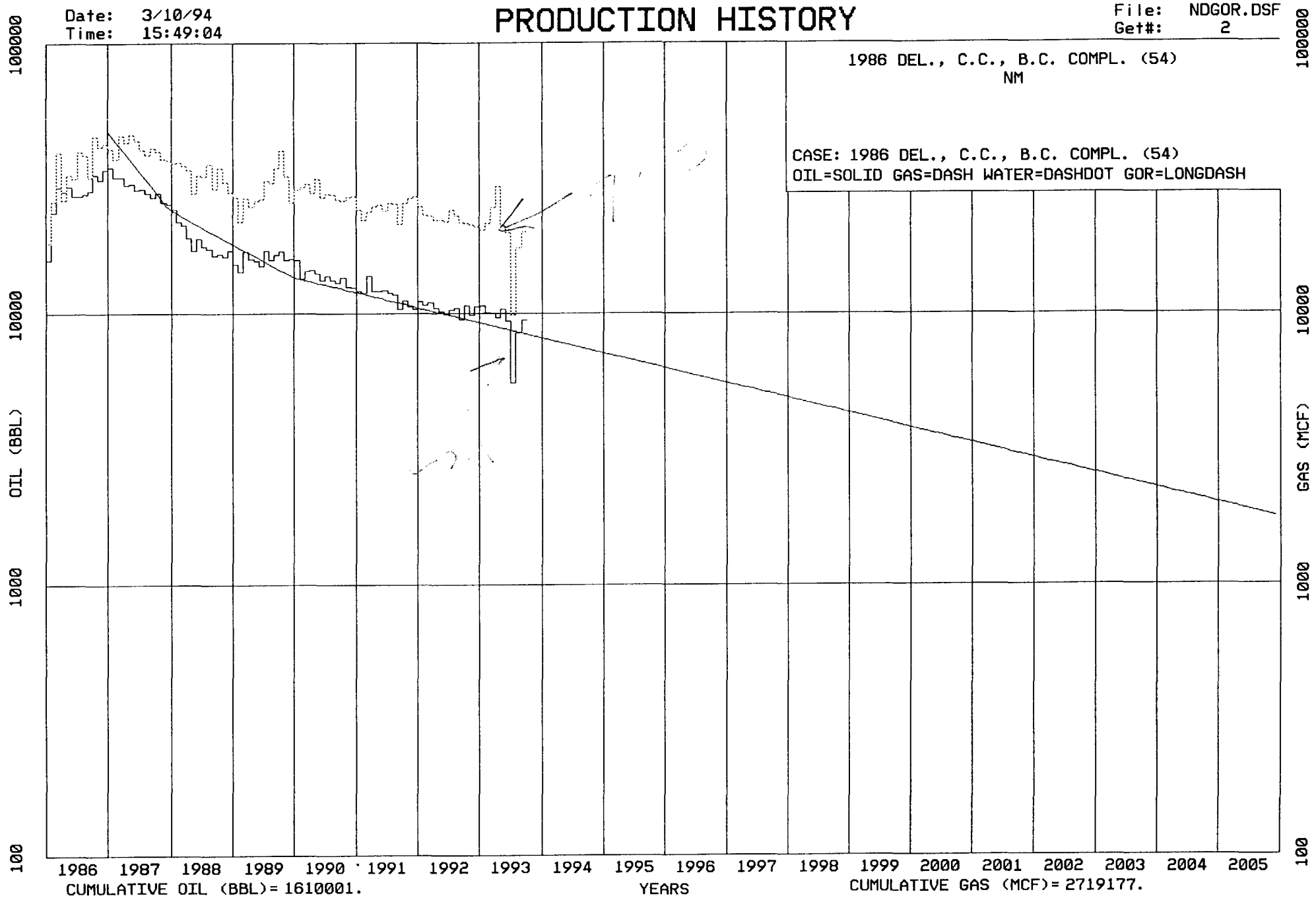
PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO

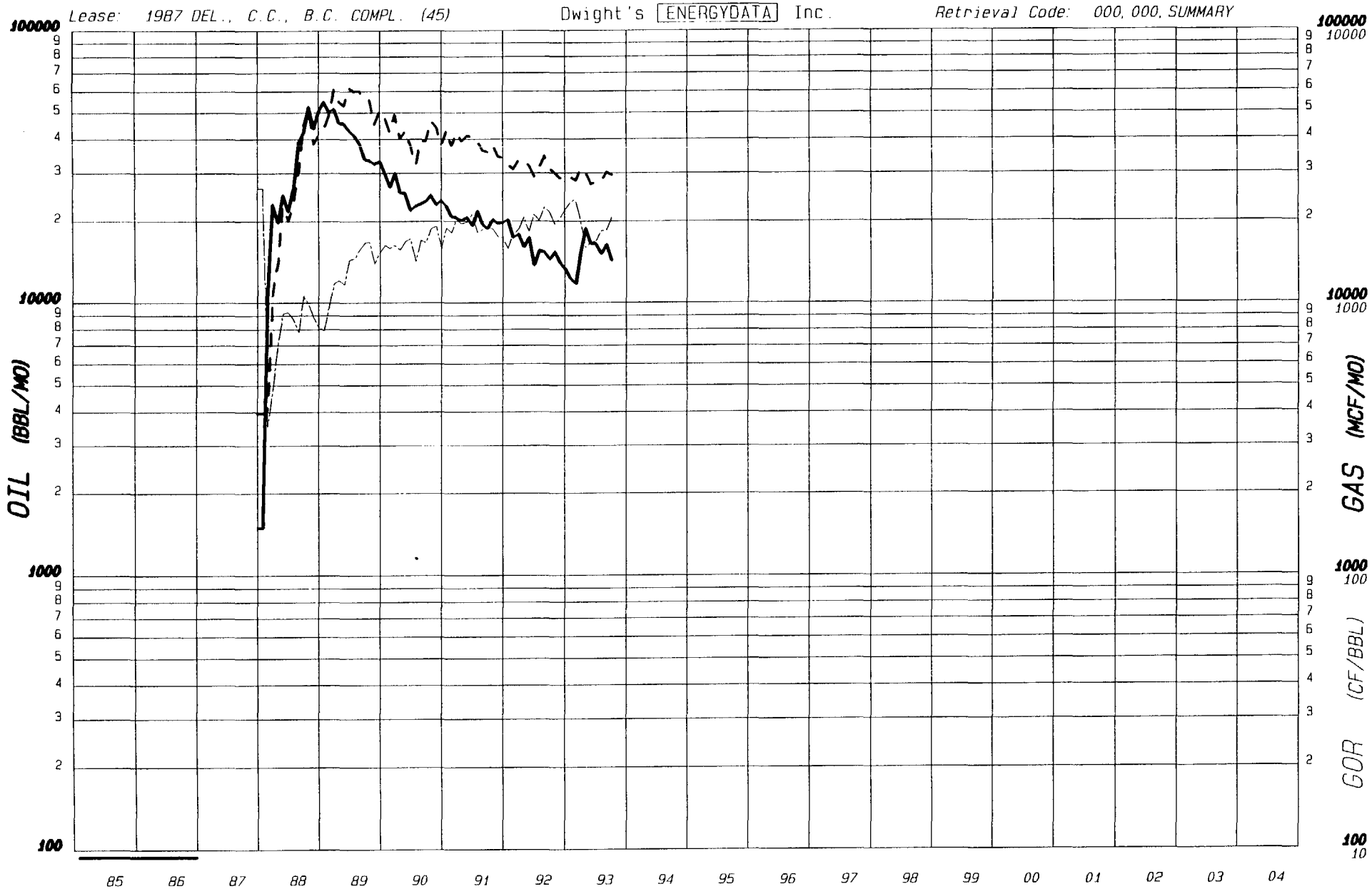


County: State: NM
Field:
Reservoir:
Operator:
Oil Cum: 1610001 Gas Cum: 2719177
Location:

F.P. Date 01-86

Date: 03-09-94

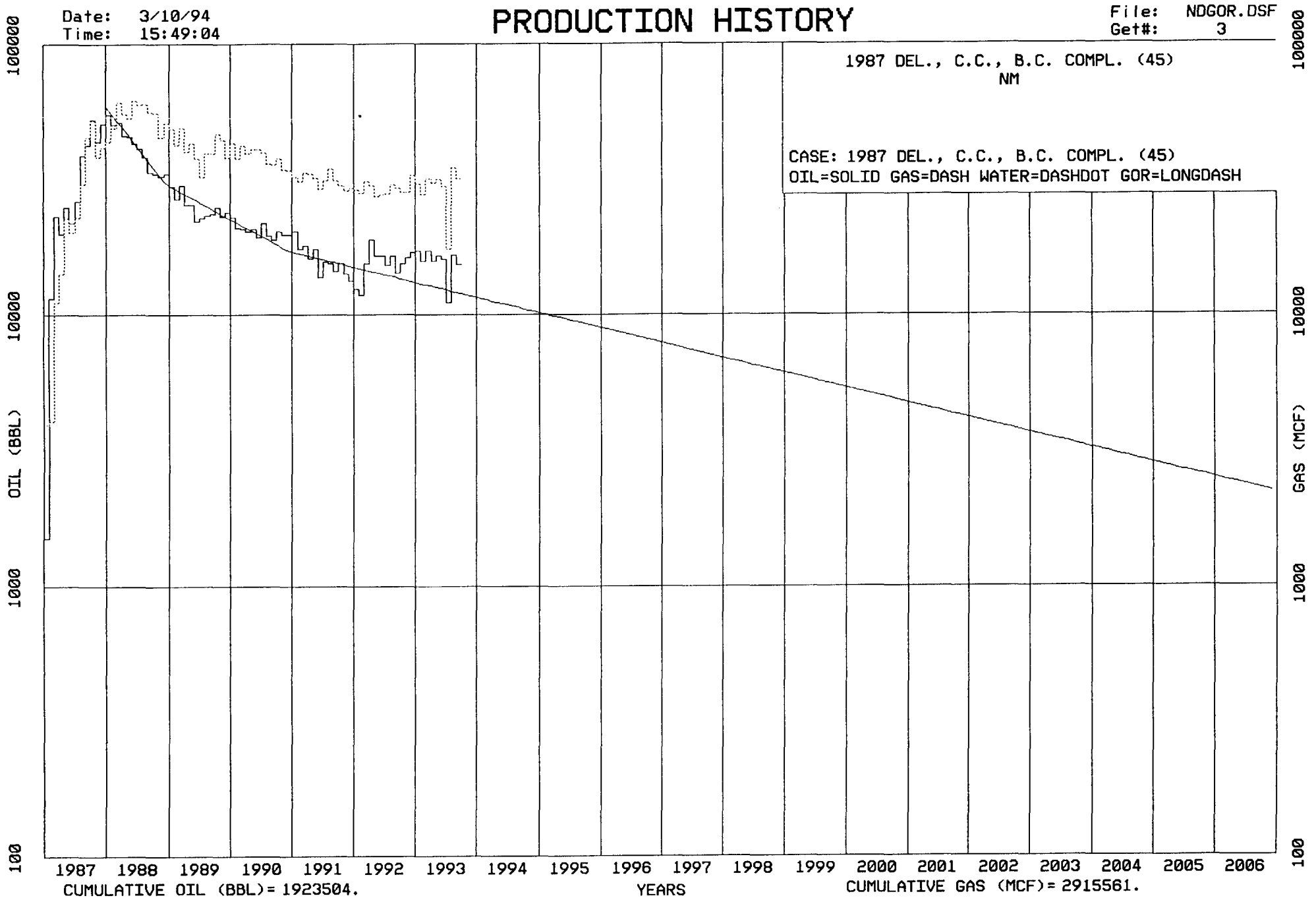

Date: 3/10/94
Time: 15:49:04
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 2
1986 DEL., C.C., B.C. COMPL. (54)
NM
CASE: 1986 DEL., C.C., B.C. COMPL. (54)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
OIL (BBL)
GAS (MCF)
100000
10000
1000
100
1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005
YEARS
CUMULATIVE OIL (BBL)= 1610001.
CUMULATIVE GAS (MCF)= 2719177.

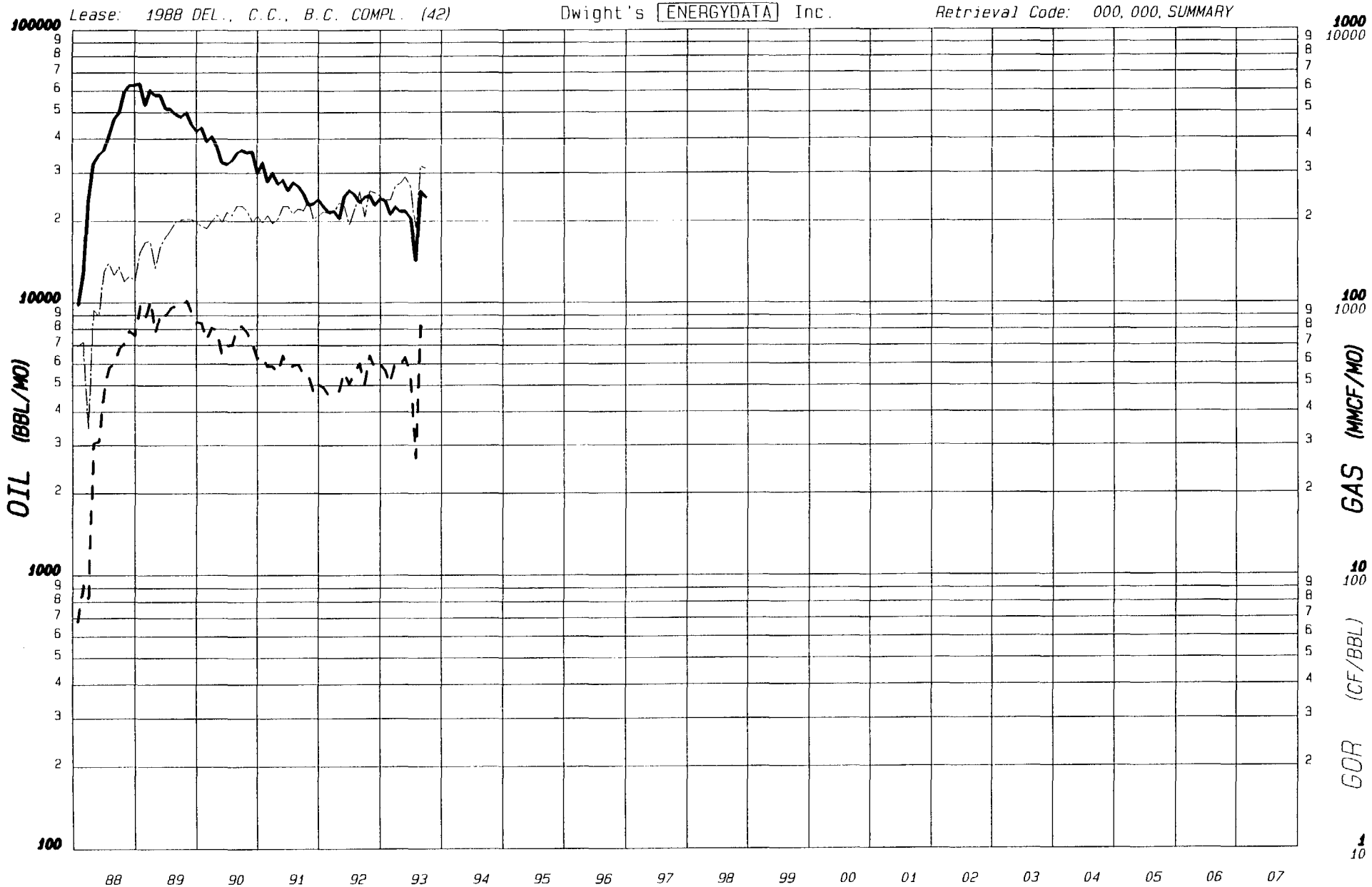


County: State: NM
Field:
Reservoir:
Operator:
Oil Cum: 1923504 Gas Cum: 2915561
Location:

F.P. Date 01-87

Date: 03-09-94

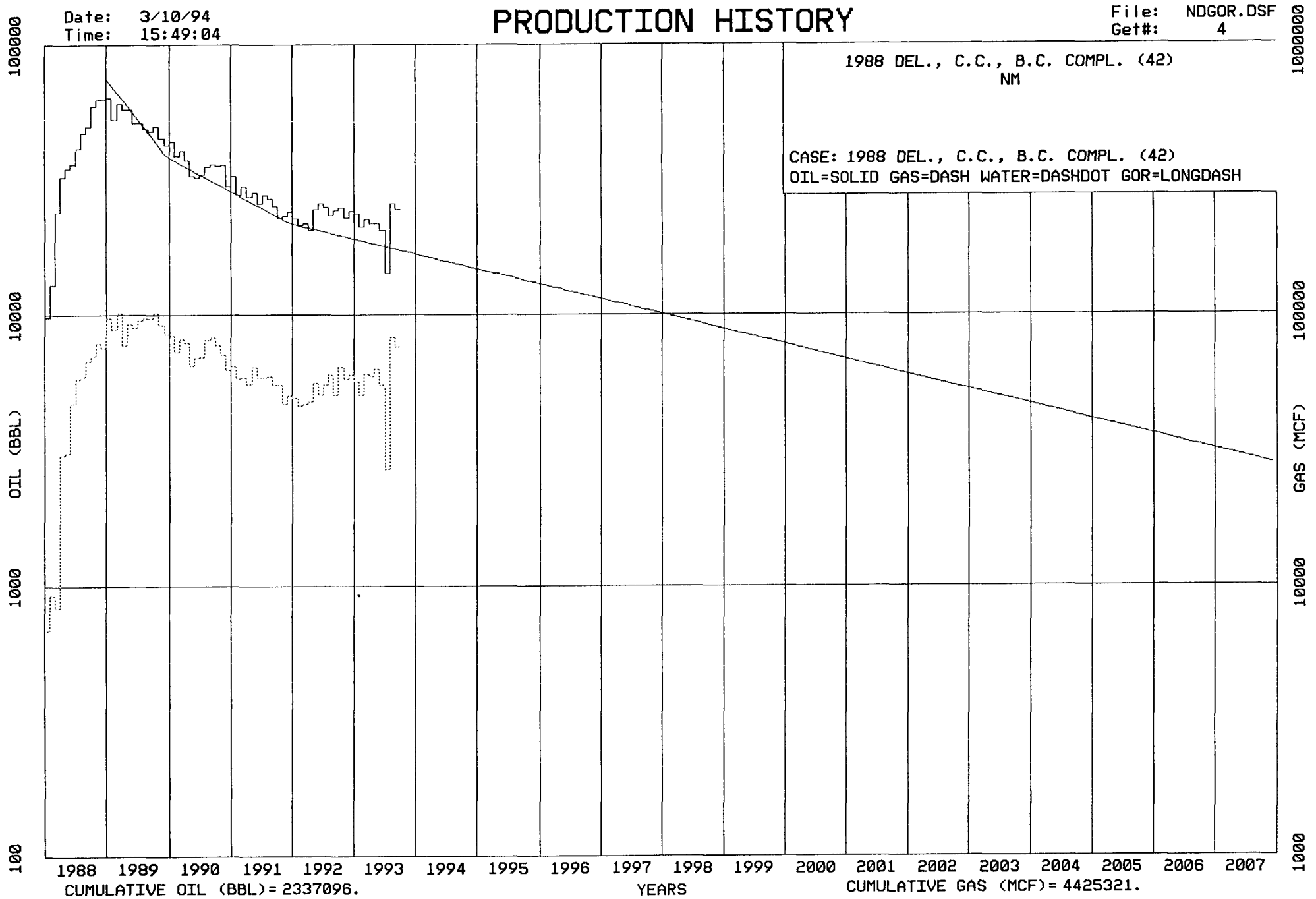

Date: 3/10/94
Time: 15:49:04
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 3
1987 DEL., C.C., B.C. COMPL. (45)
NM
CASE: 1987 DEL., C.C., B.C. COMPL. (45)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
100000
10000
1000
100
OIL (BBL)
GAS (MCF)
1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006
YEARS
CUMULATIVE OIL (BBL)= 1923504.
CUMULATIVE GAS (MCF)= 2915561.

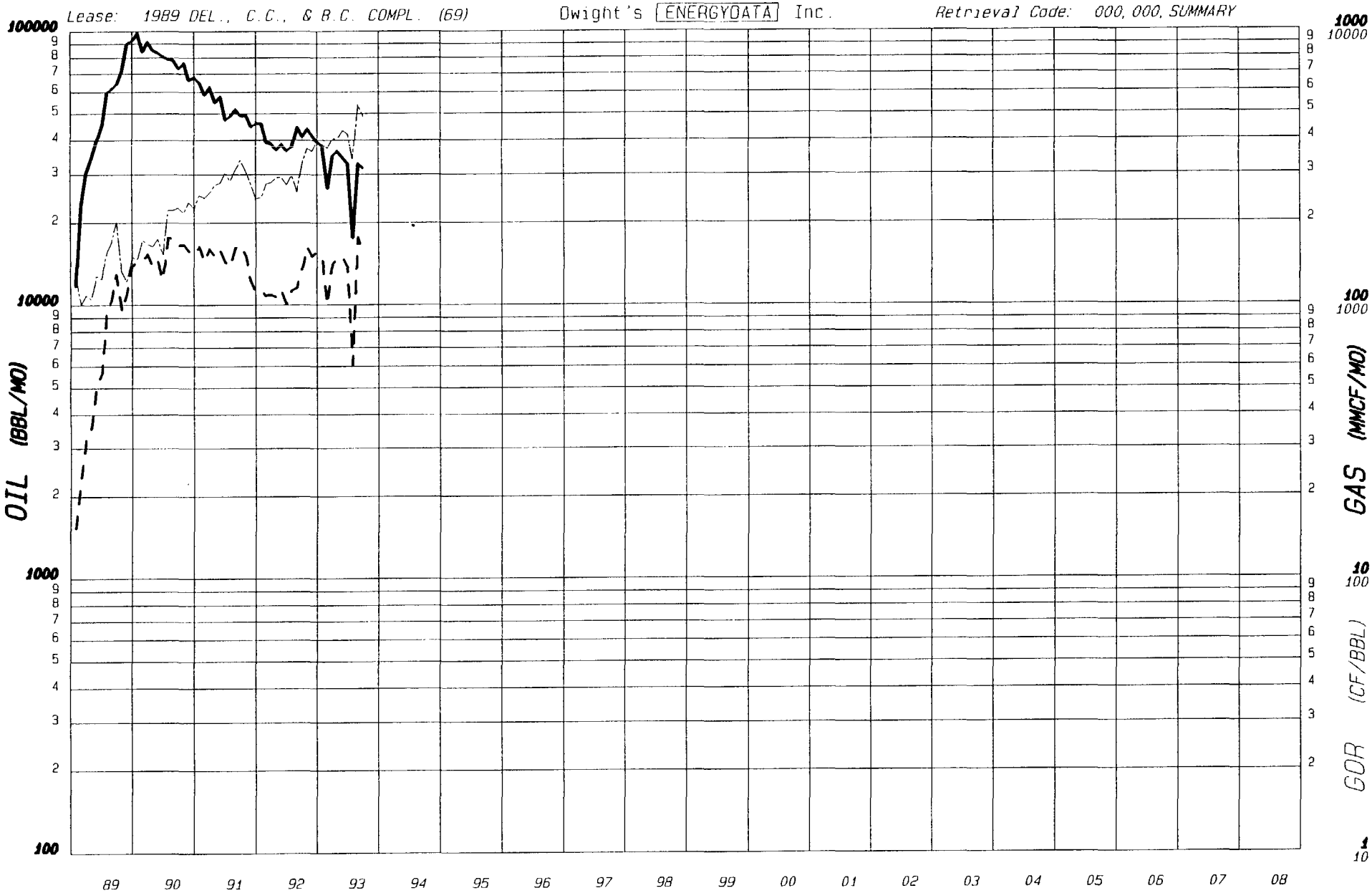


County: State: NM
Field:
Reservoir:
Operator:
Oil Cum: 2337096 Gas Cum: 4425320
Location:

F.P. Date 01-88

Date: 03-09-94

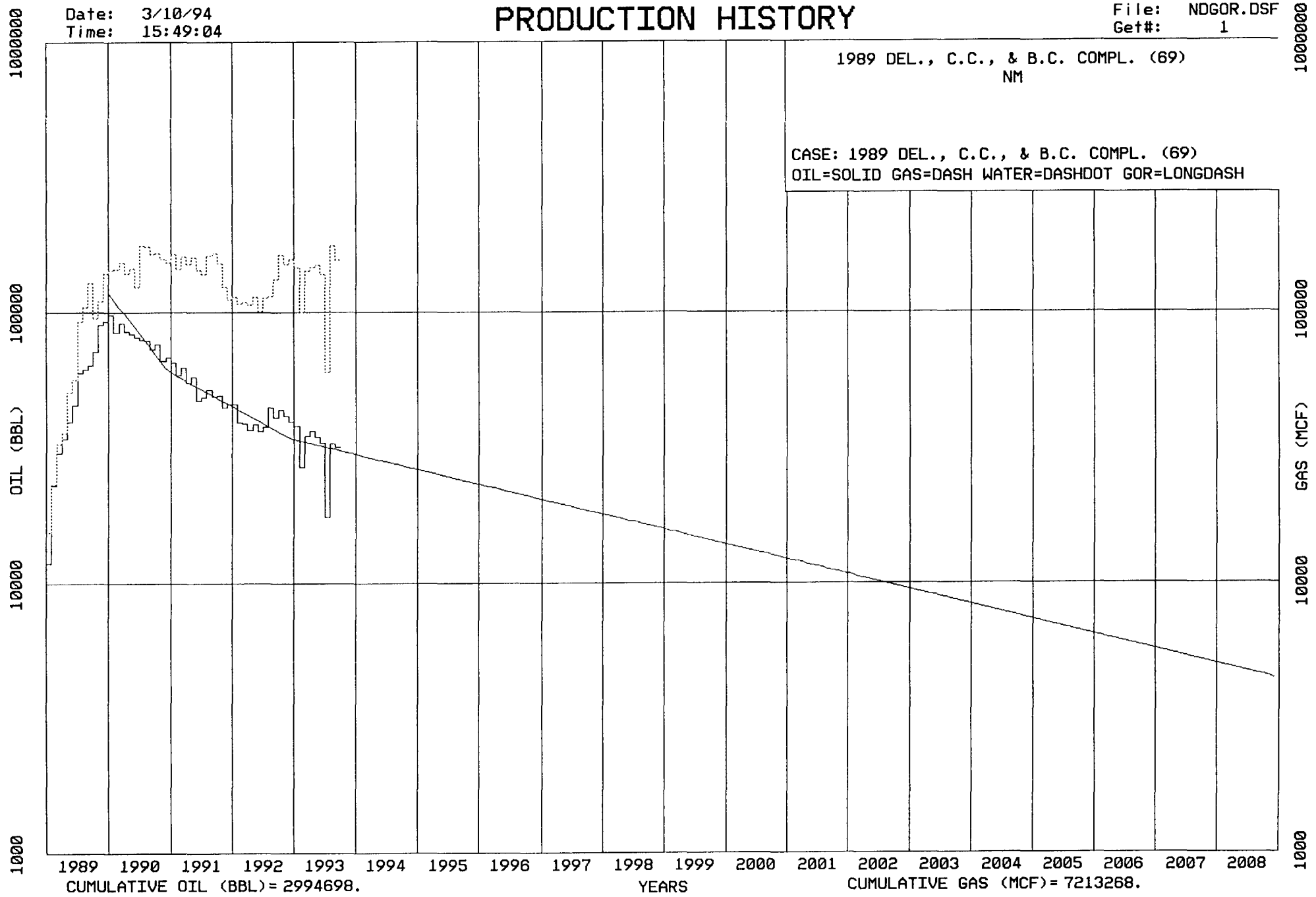

Date: 3/10/94
Time: 15:49:04
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 4
1988 DEL., C.C., B.C. COMPL. (42)
NM
CASE: 1988 DEL., C.C., B.C. COMPL. (42)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
OIL (BBL)
GAS (MCF)
100000
10000
1000
100
1000000
100000
10000
1000
1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007
YEARS
CUMULATIVE OIL (BBL)= 2337096.
CUMULATIVE GAS (MCF)= 4425321.



County: State: NM
Field:
Reservoir:
Operator:
Oil Cum: 2994698 Gas Cum: 7213267
Location:

F.P. Date 01-89

Date: 03-09-94

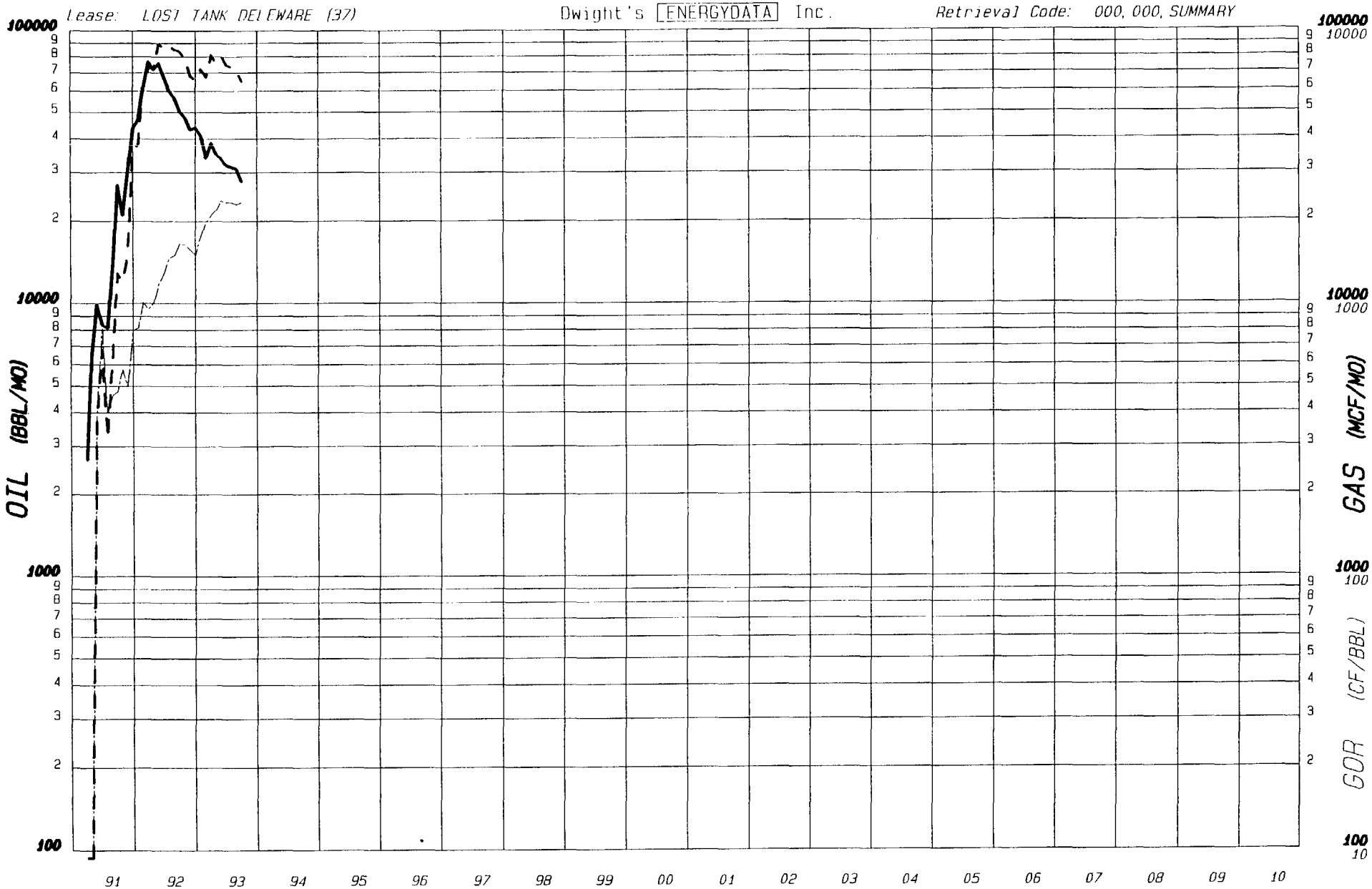

Date: 3/10/94
Time: 15:49:04
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 1
1989 DEL., C.C., & B.C. COMPL. (69)
NM
CASE: 1989 DEL., C.C., & B.C. COMPL. (69)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
1000000
100000
10000
1000
OIL (BBL)
GAS (MCF)
1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008
YEARS
CUMULATIVE OIL (BBL)= 2994698.
CUMULATIVE GAS (MCF)= 7213268.

STRATA PRODUCTION COMPANY
NASH DRAW - BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO

TYPICAL DELAWARE FIELD CURVES
WITH MODEL MATCHES

EXHIBIT X

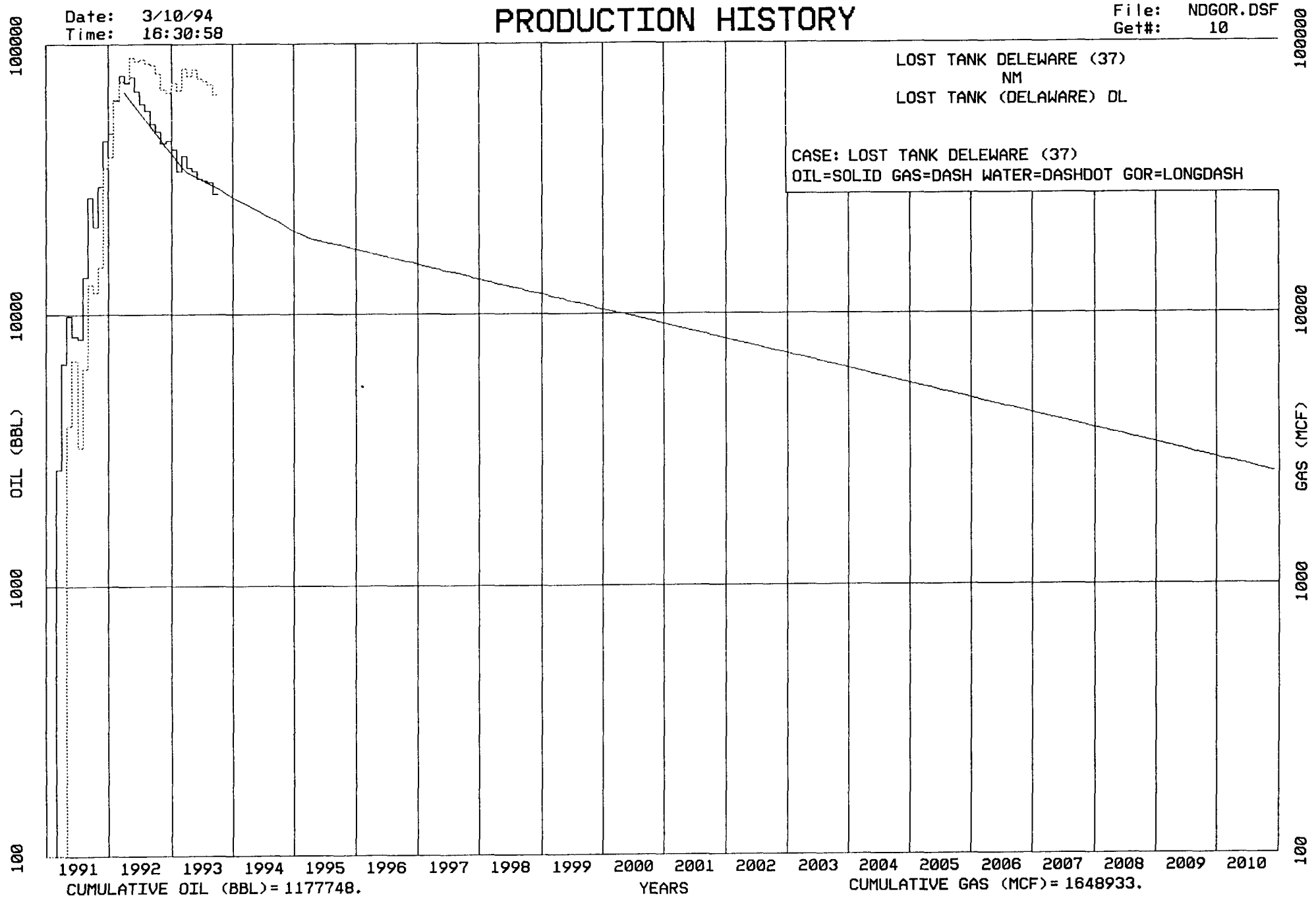
PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO

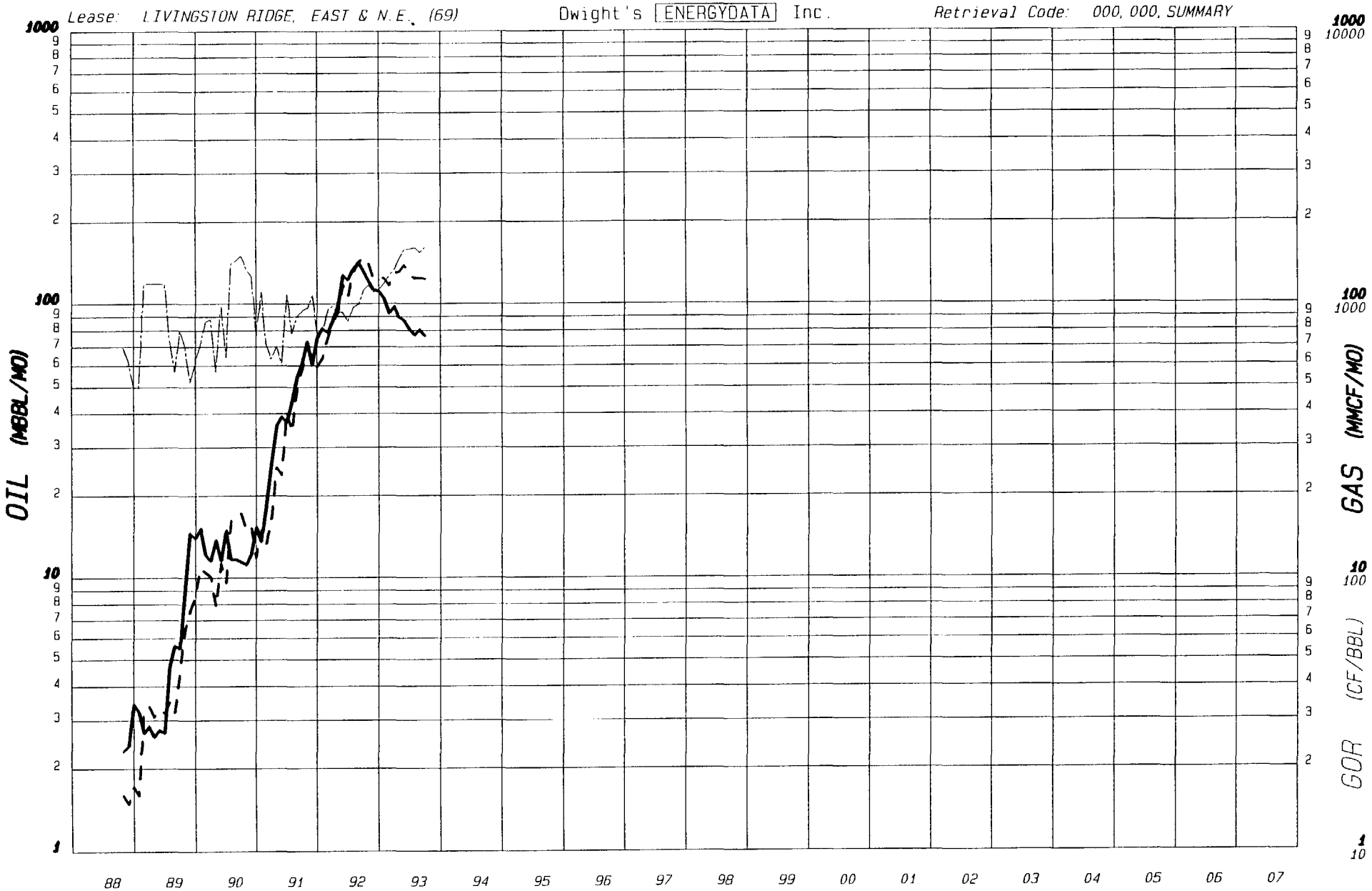


County: State: NM
Field: LOST TANK (DELAWARE) DL
Reservoir: DELAWARE
Operator:
Oil Cum: 1177748 Gas Cum: 1648933
Location: 21S+22S - 31E

F.P. Date 03-91

Date: 03-09-94

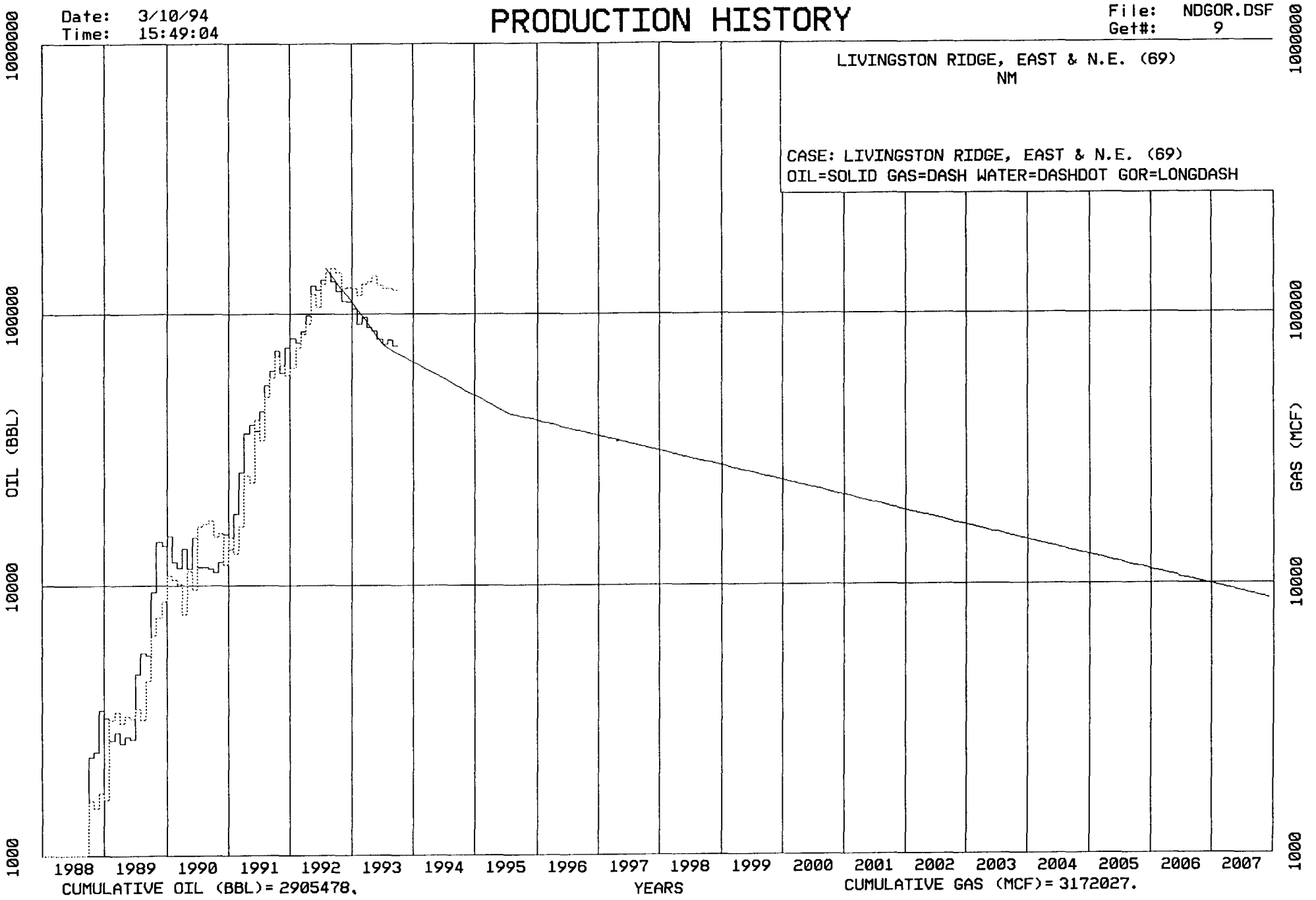

Date: 3/10/94
Time: 16:30:58
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 10
LOST TANK DELEWARE (37)
NM
LOST TANK (DELAWARE) DL
CASE: LOST TANK DELEWARE (37)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
100000
10000
1000
100
OIL (BBL)
GAS (MCF)
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010
YEARS
CUMULATIVE OIL (BBL)= 1177748.
CUMULATIVE GAS (MCF)= 1648933.

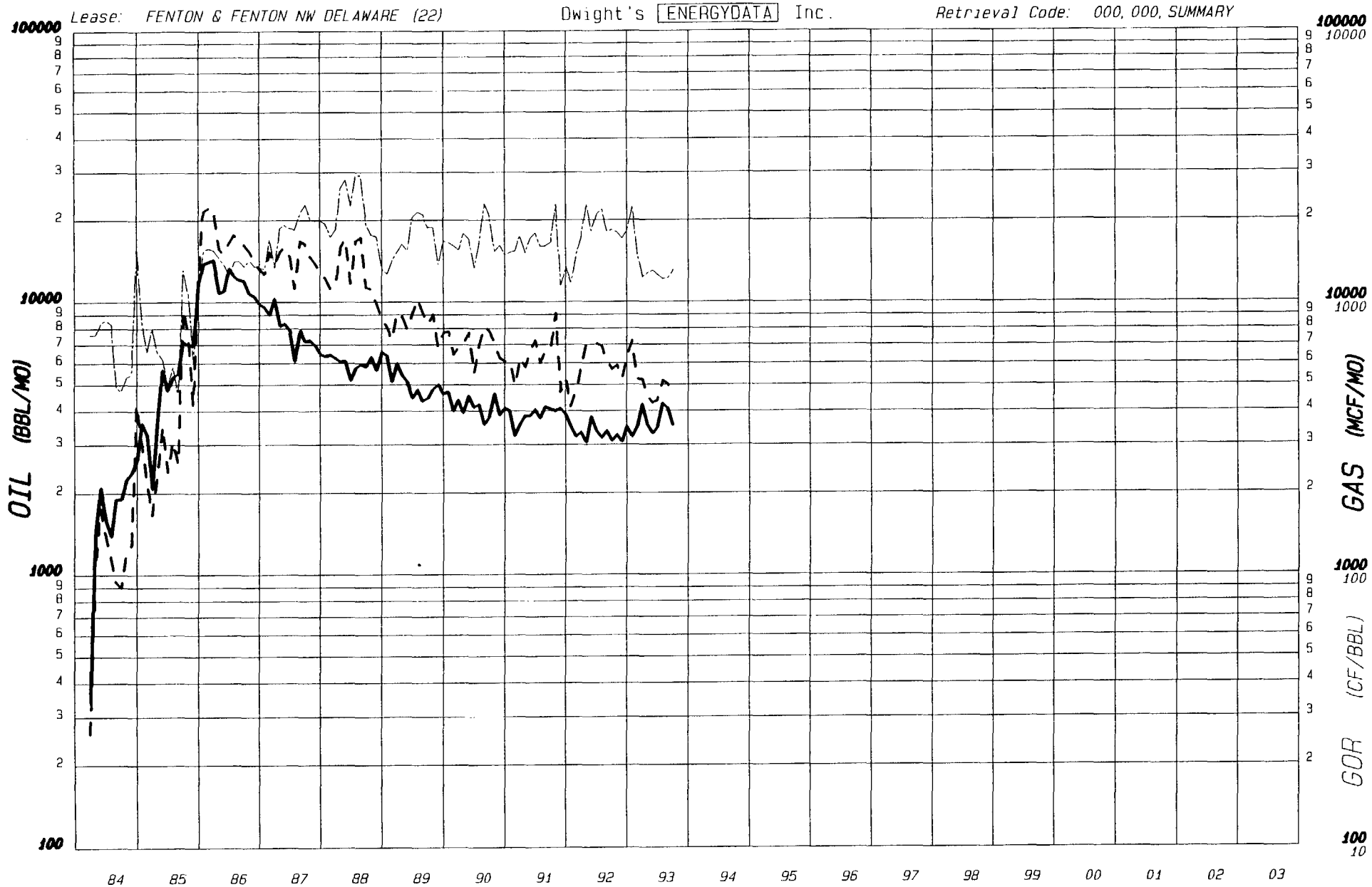


County: State: NM
Field:
Reservoir: DELAWARE
Operator:
Oil Cum: 2905478 Gas Cum: 3172027
Location: 22S - 31E 4 32E

F.P. Date 10-88

Date: 03-09-94

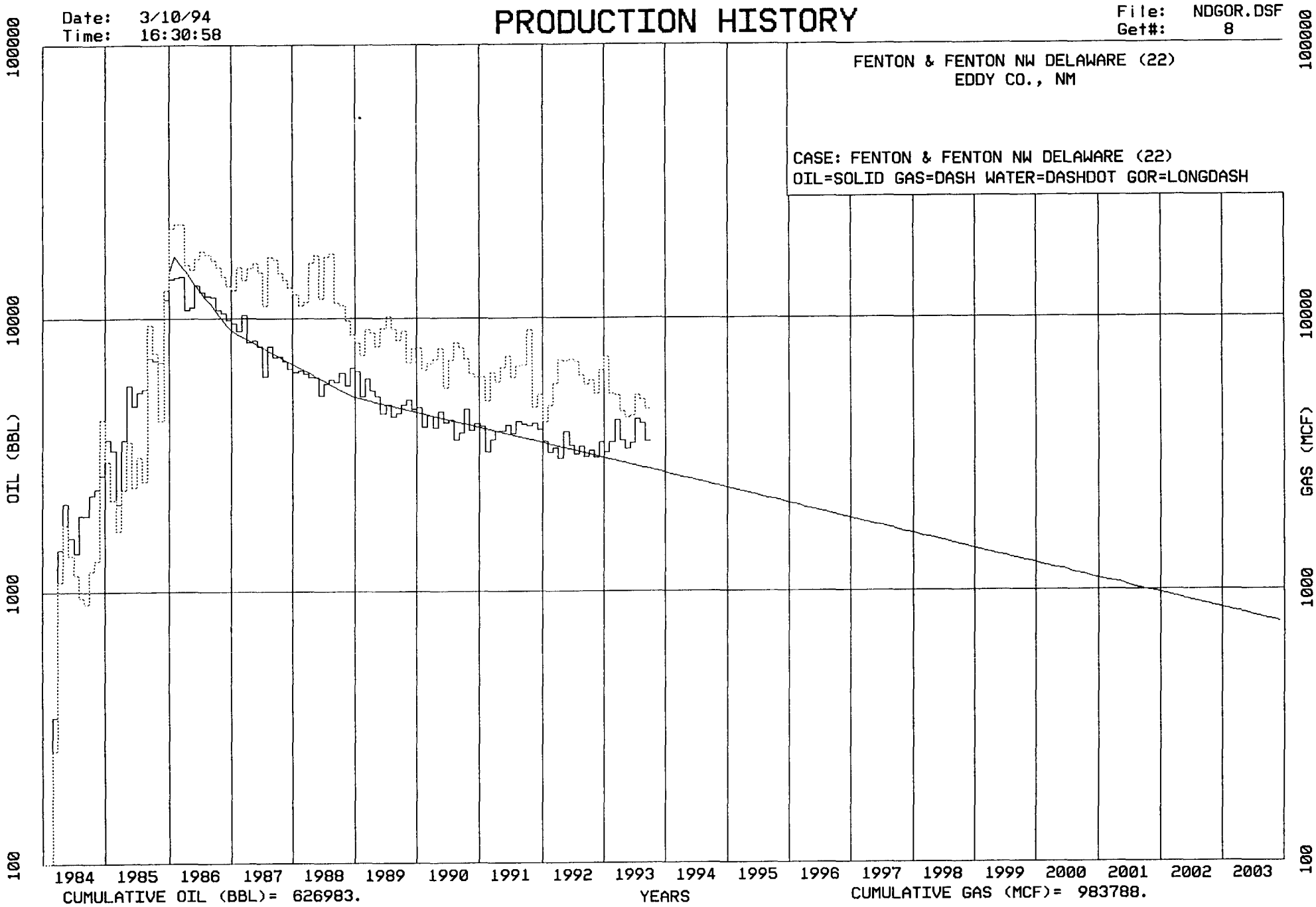

Date: 3/10/94
Time: 15:49:04
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 9
LIVINGSTON RIDGE, EAST & N.E. (69)
NM
CASE: LIVINGSTON RIDGE, EAST & N.E. (69)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
OIL (BBL)
GAS (MCF)
1000000
100000
10000
1000
1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007
YEARS
CUMULATIVE OIL (BBL)= 2905478.
CUMULATIVE GAS (MCF)= 3172027.

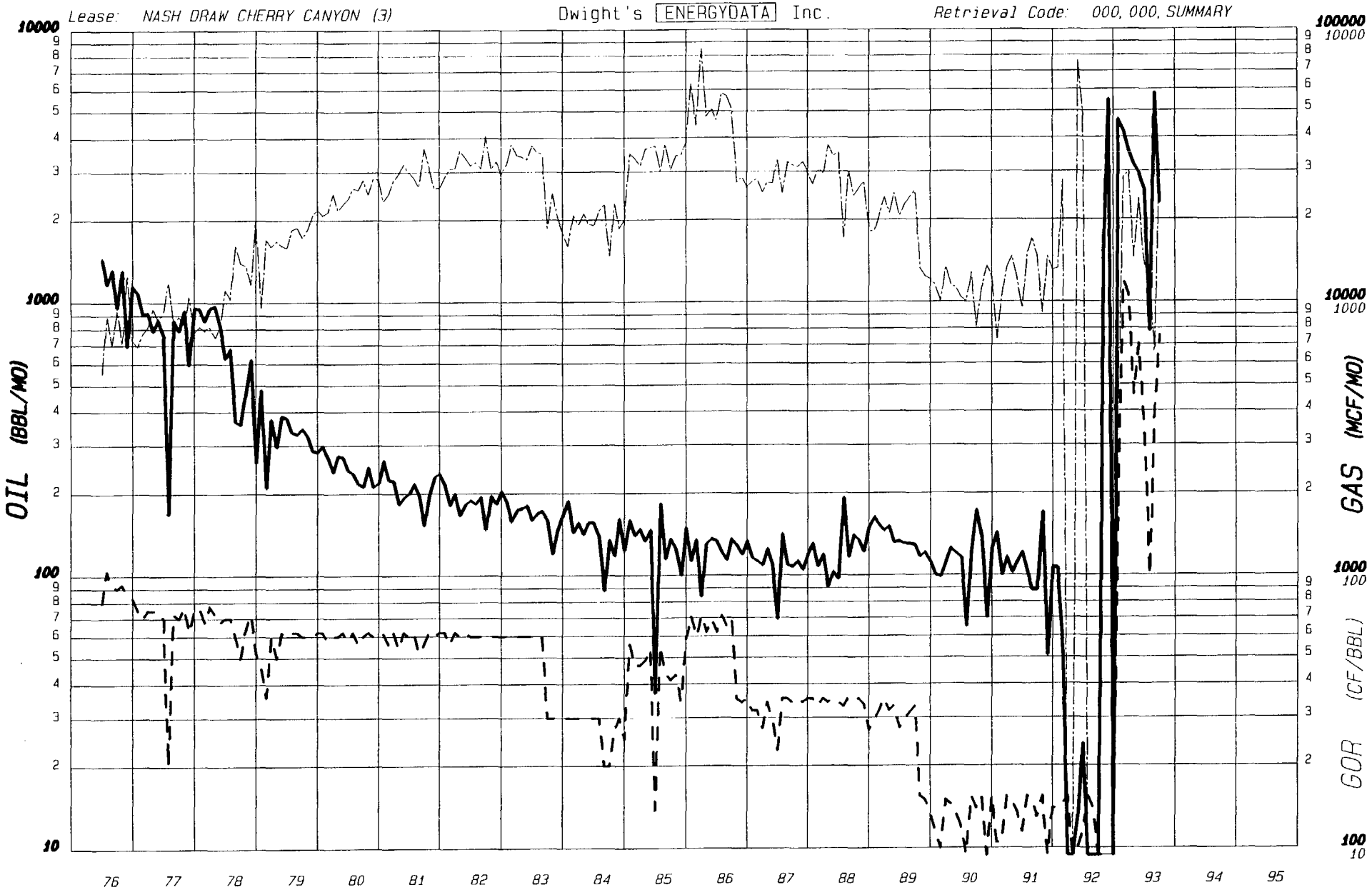


County: EDDY State: NM
Field:
Reservoir: DELAWARE
Operator:
Oil Cum: 628003 Gas Cum: 983788
Location: 21s - 27E + 28E

F.P. Date 03-84

Date: 03-09-94

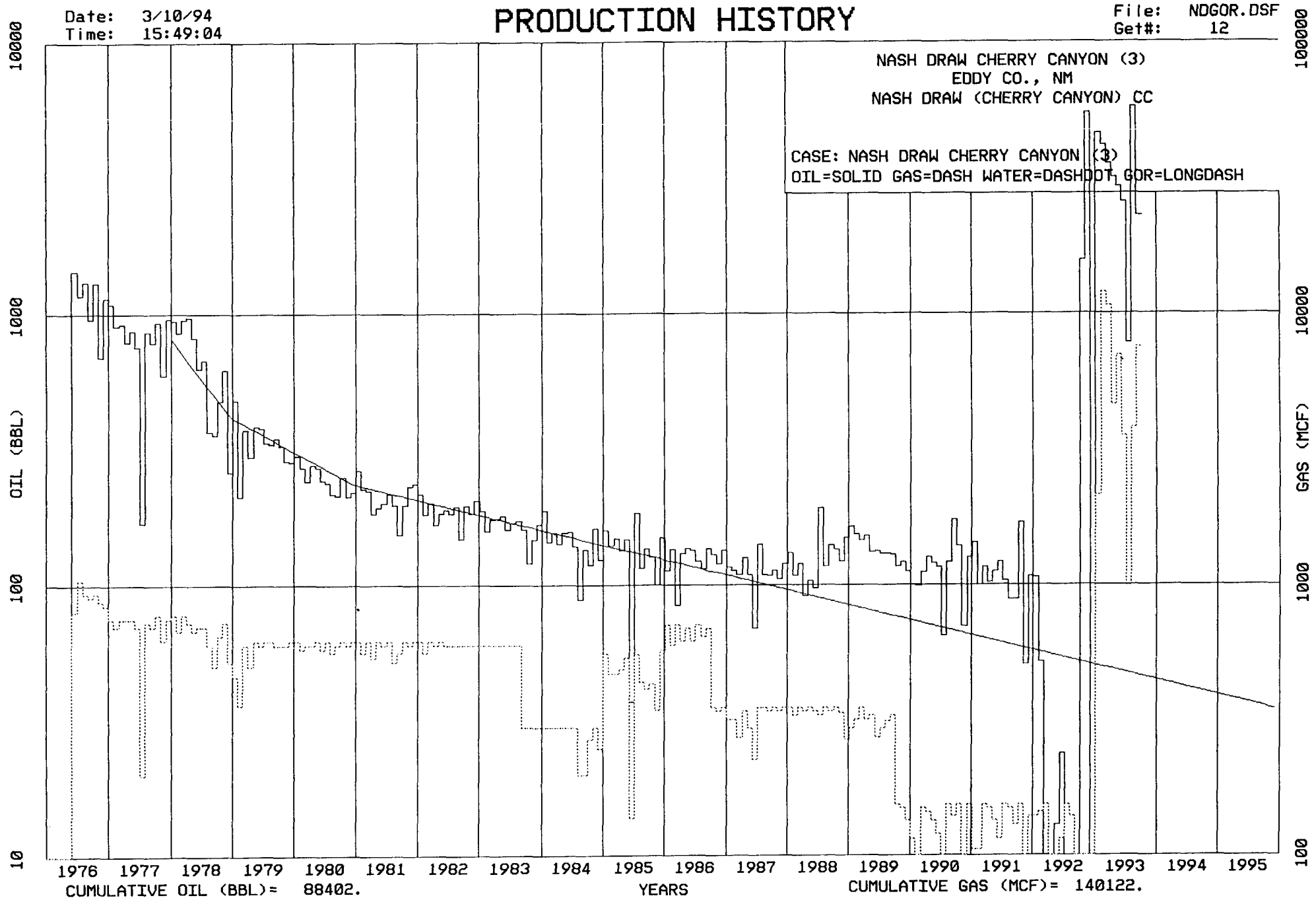

Date: 3/10/94
Time: 16:30:58
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 8
FENTON & FENTON NW DELAWARE (22)
EDDY CO., NM
CASE: FENTON & FENTON NW DELAWARE (22)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
100000
10000
1000
100
OIL (BBL)
GAS (MCF)
1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003
YEARS
CUMULATIVE OIL (BBL)= 626983.
CUMULATIVE GAS (MCF)= 983788.



County: EDDY State: NM
Field: NASH DRAW (CHERRY CANYON) CC
Reservoir: CHERRY CANYON
Operator:
Oil Cum: 88402 Gas Cum: 140122
Location: 13H 23S 29E

F.P. Date 06-76

Date: 03-09-94

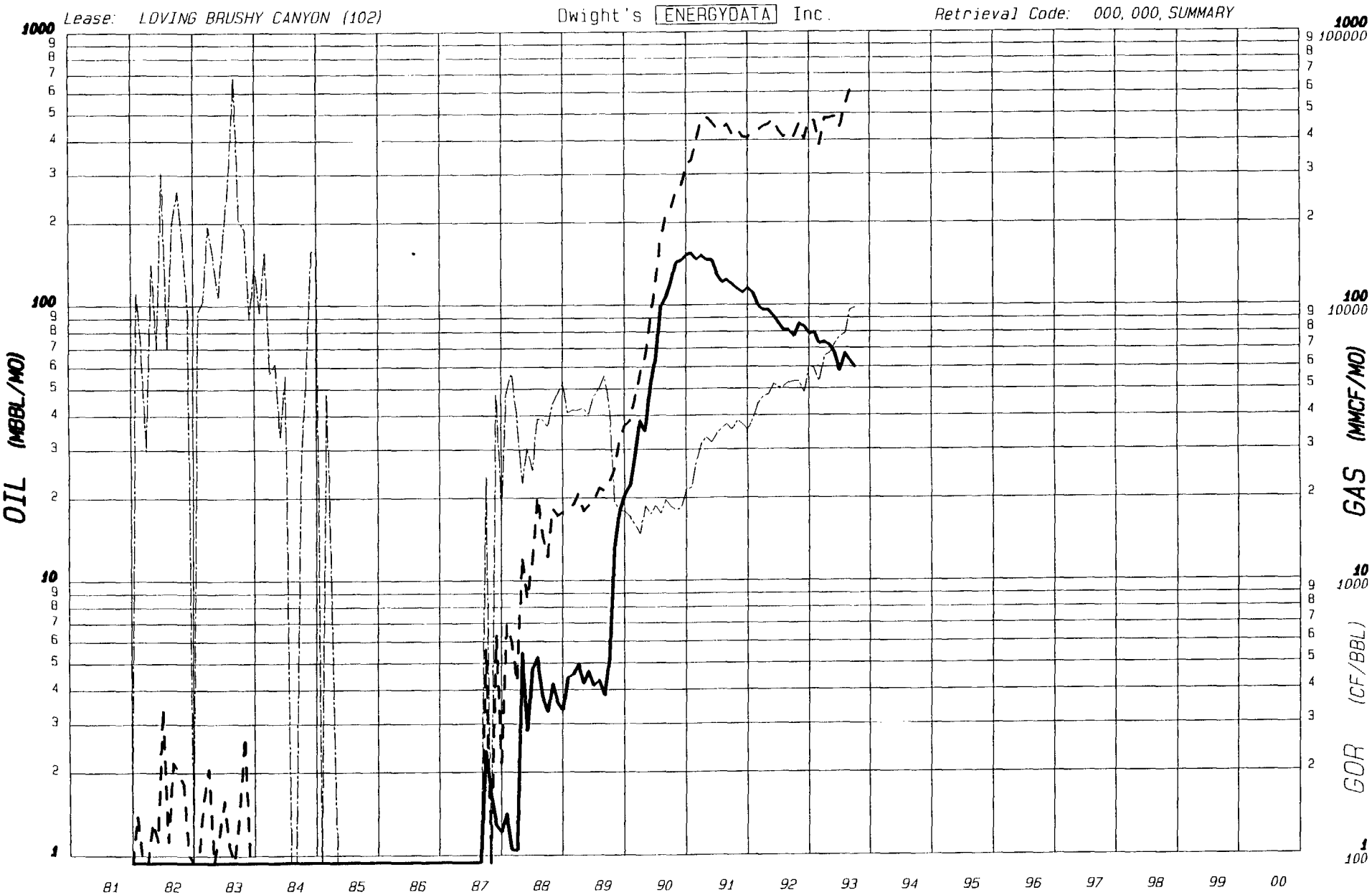

Date: 3/10/94
Time: 15:49:04
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 12
NASH DRAW CHERRY CANYON (3)
EDDY CO., NM
NASH DRAW (CHERRY CANYON) CC
CASE: NASH DRAW CHERRY CANYON (3)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
OIL (BBL)
GAS (MCF)
10000
1000
100
10
100000
10000
1000
100
1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995
YEARS
CUMULATIVE OIL (BBL)= 88402.
CUMULATIVE GAS (MCF)= 140122.

STRATA PRODUCTION COMPANY
NASH DRAW - BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO

LOVING BRUSHY CANYON FIELD CURVES
WITH MODEL MATCHES

EXHIBIT XI

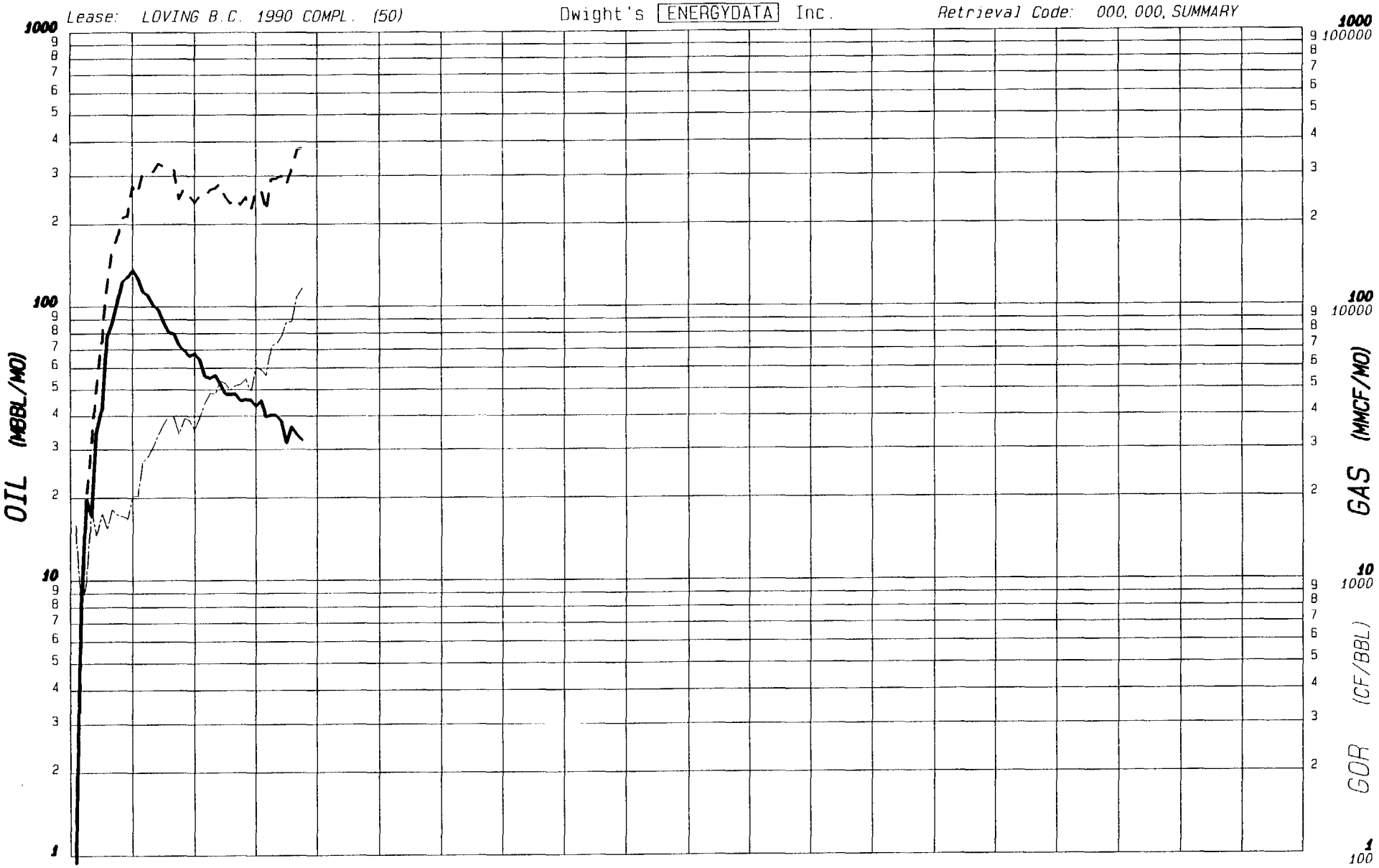
PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO


Lease: LOVING BRUSHY CANYON (102)
Dwight's ENERGYDATA Inc.
Retrieval Code: 000, 000, SUMMARY
OIL (MBBL/MO)
GAS (MMCF/MO)
GOR (CF/BBL)
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00
County: EDDY
State: NM
Field: LOVING (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator:
Oil Cum: 440977B
Gas Cum: 17242678
Location:
F.P. Date 12-81
Date: 03-09-94

Lease: LOVING B.C. 1990 COMPL. (50)

Dwight's ENERGYDATA Inc.

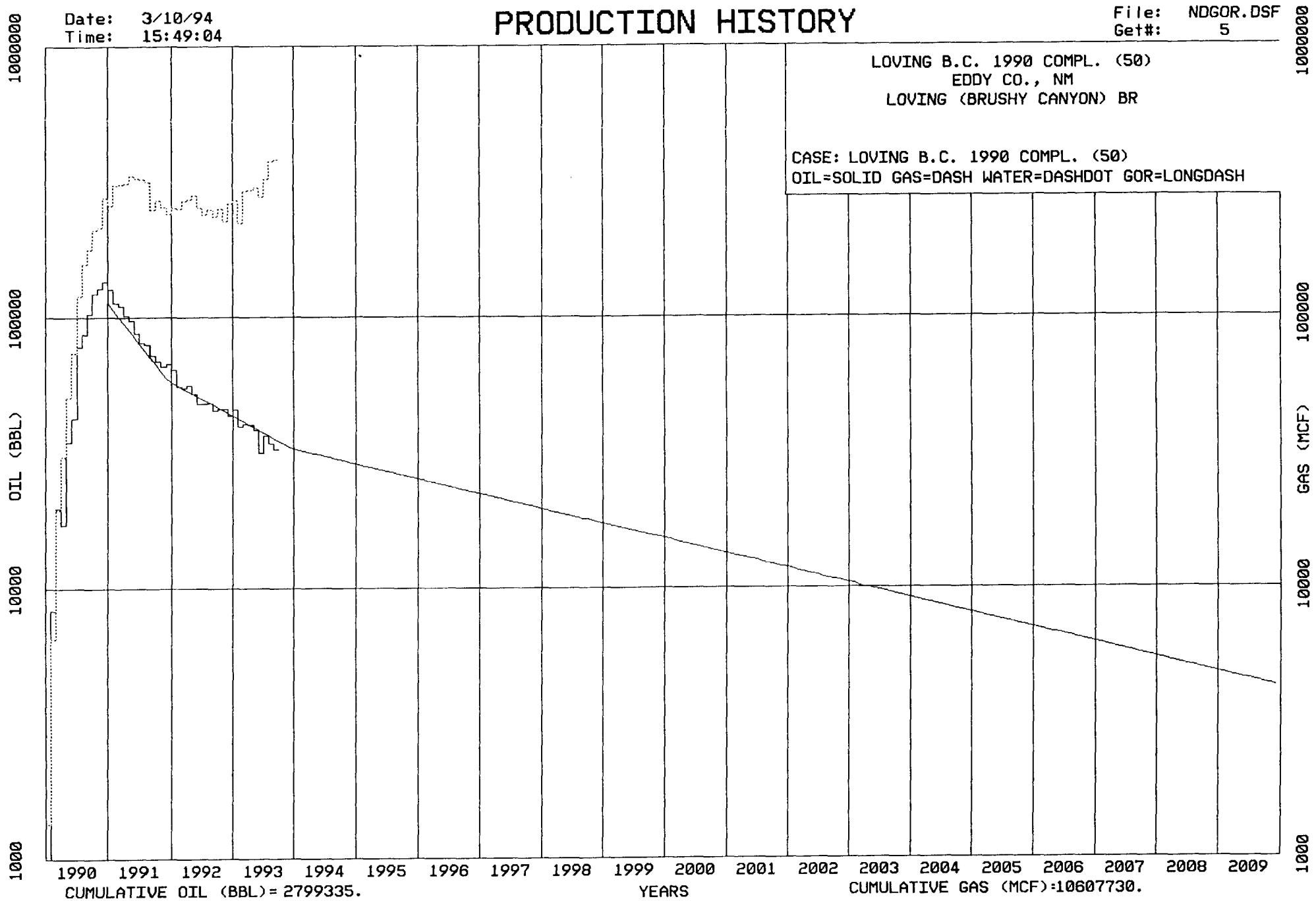
Retrieval Code: 000, 000, SUMMARY



County: EDDY State: NM
Field: LOVING (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator:
Oil Cum: 2799335 Gas Cum: 10607726
Location: 23S 28E

F.P. Date 01-90

Date: 03-09-94


Date: 3/10/94
Time: 15:49:04
PRODUCTION HISTORY
File: NDGOR.DSF
Get#: 5
LOVING B.C. 1990 COMPL. (50)
EDDY CO., NM
LOVING (BRUSHY CANYON) BR
CASE: LOVING B.C. 1990 COMPL. (50)
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
1000000
100000
10000
1000
OIL (BBL)
GAS (MCF)
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
YEARS
CUMULATIVE OIL (BBL)= 2799335.
CUMULATIVE GAS (MCF):10607730.

Lease: LOVING B.C. 1991 COMPL. (29)

Dwight's ENERGYDATA Inc.

Retrieval Code: 000, 000, SUMMARY

County: EDDY State: NM
Field: LOVING (BRUSHY CANYON) BR
Reservoir: BRUSHY CANYON
Operator:
Oil Cum: 788442 Gas Cum: 3424588
Location: 23S 28E

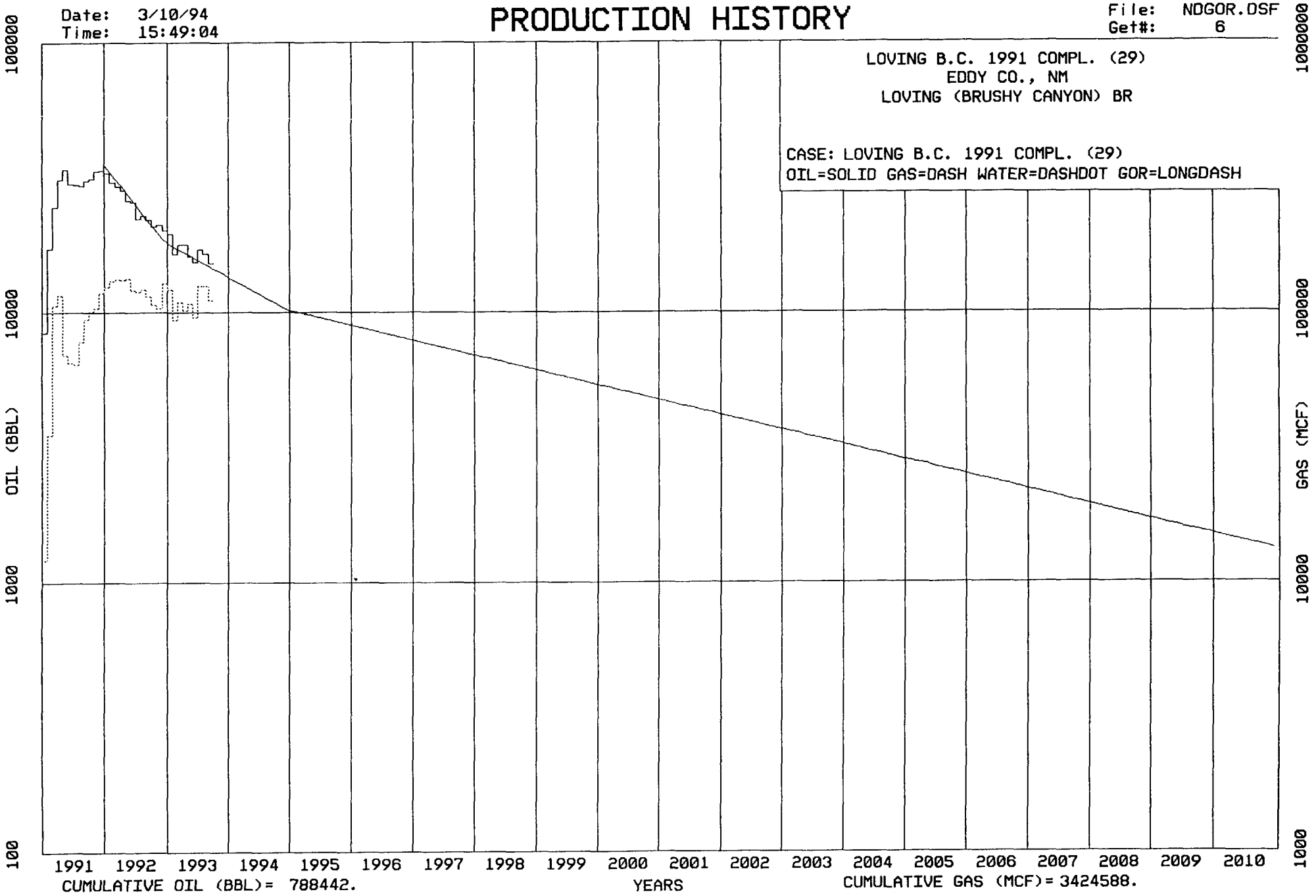
F.P. Date 01-91

Date: 03-09-94

Date: 3/10/94
Time: 15:49:04

PRODUCTION HISTORY

File: NDGOR.DSF
Get#: 6



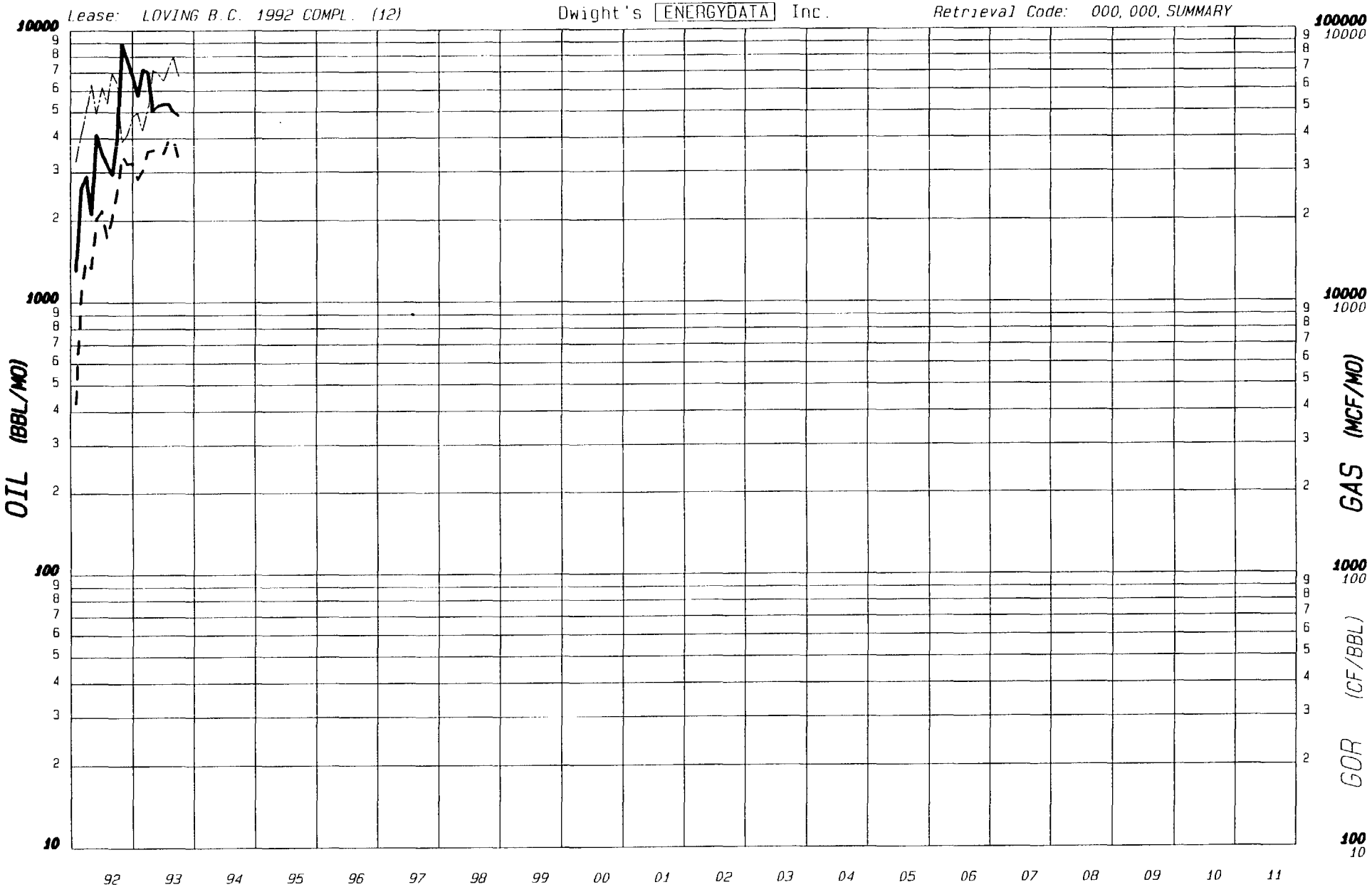
CUMULATIVE OIL (BBL)= 788442.

CUMULATIVE GAS (MCF)= 3424588.

Lease: LOVING B.C. 1992 COMPL. (12)

Dwight's ENERGYDATA Inc.

Retrieval Code: 000, 000, SUMMARY



County: EDDY State: NM

Field: LOVING (BRUSHY CANYON) BR

Reservoir: BRUSHY CANYON

Operator:

Oil Cum: 101020 Gas Cum: 561390

Location:

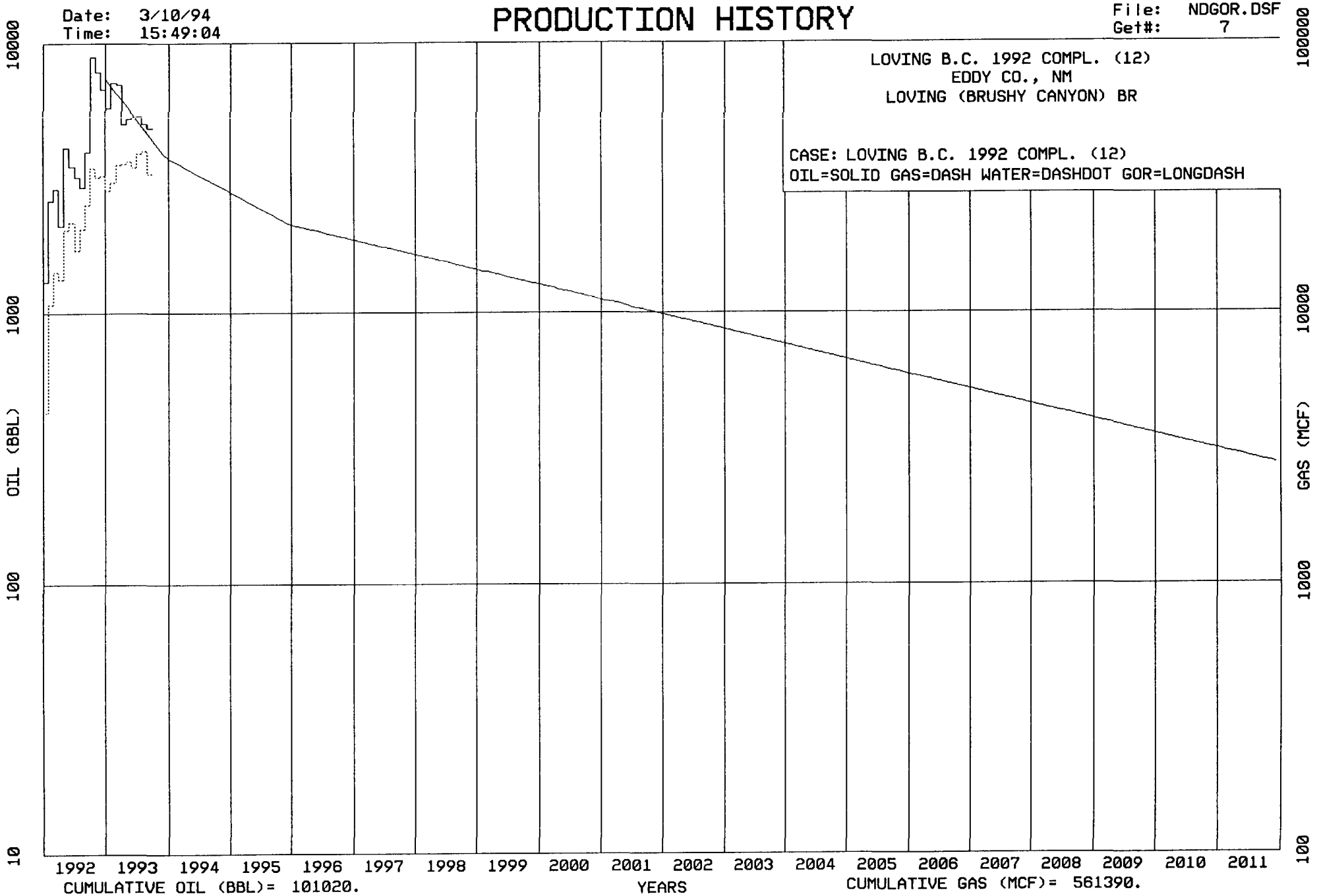
F.P. Date 01-92

Date: 03-09-94

Date: 3/10/94
Time: 15:49:04

PRODUCTION HISTORY

File: NDGOR.DSF
Get#: 7



CUMULATIVE OIL (BBL)= 101020.

CUMULATIVE GAS (MCF)= 561390.

STRATA PRODUCTION COMPANY
NASH DRAW - BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO

NASH DRAW BRUSHY CANYON FIELD CURVE
WITH MODEL MATCH

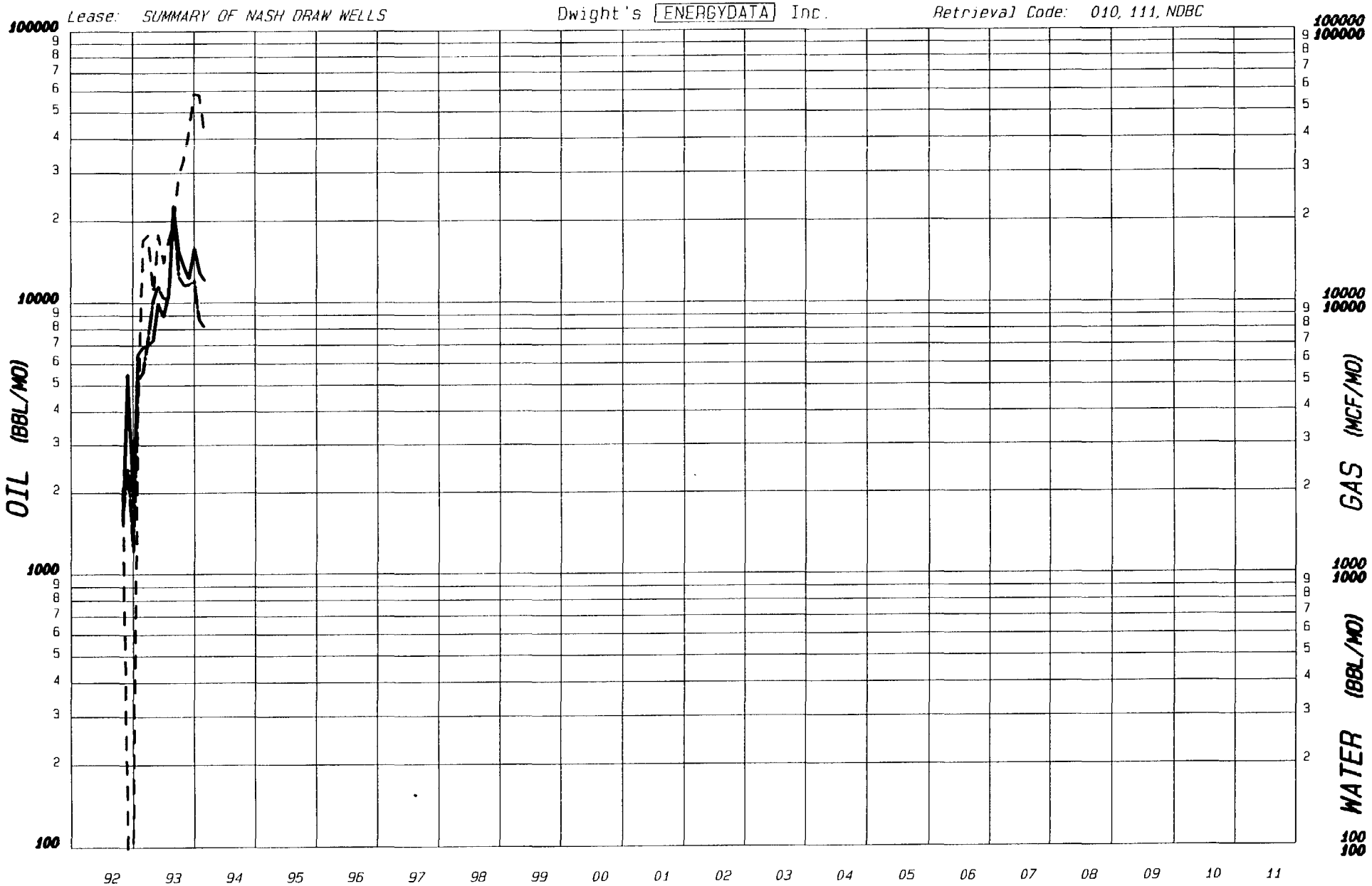
EXHIBIT XII

PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO

Lease: SUMMARY OF NASH DRAW WELLS

Dwight's ENERGYDATA Inc.

Retrieval Code: 010, 111, NDBC



County: State:

Field:

Reservoir:

Operator:

Oil Cum: 222038 Gas Cum: 470691

Location:

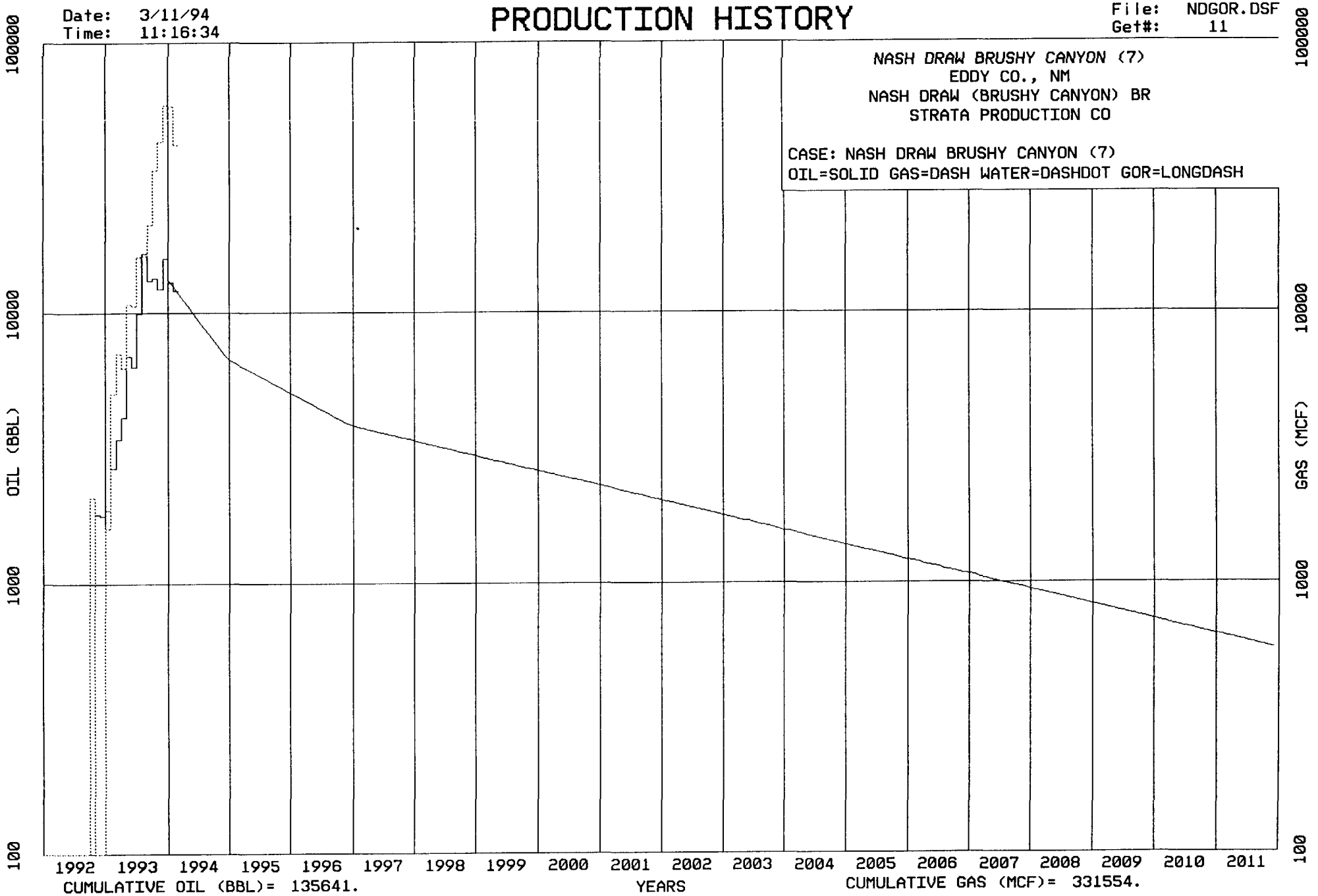
F.P. Date

Date: 03-11-94

Date: 3/11/94
Time: 11:16:34

PRODUCTION HISTORY

File: NDGOR.DSF
Get#: 11



CUMULATIVE OIL (BBL)= 135641.

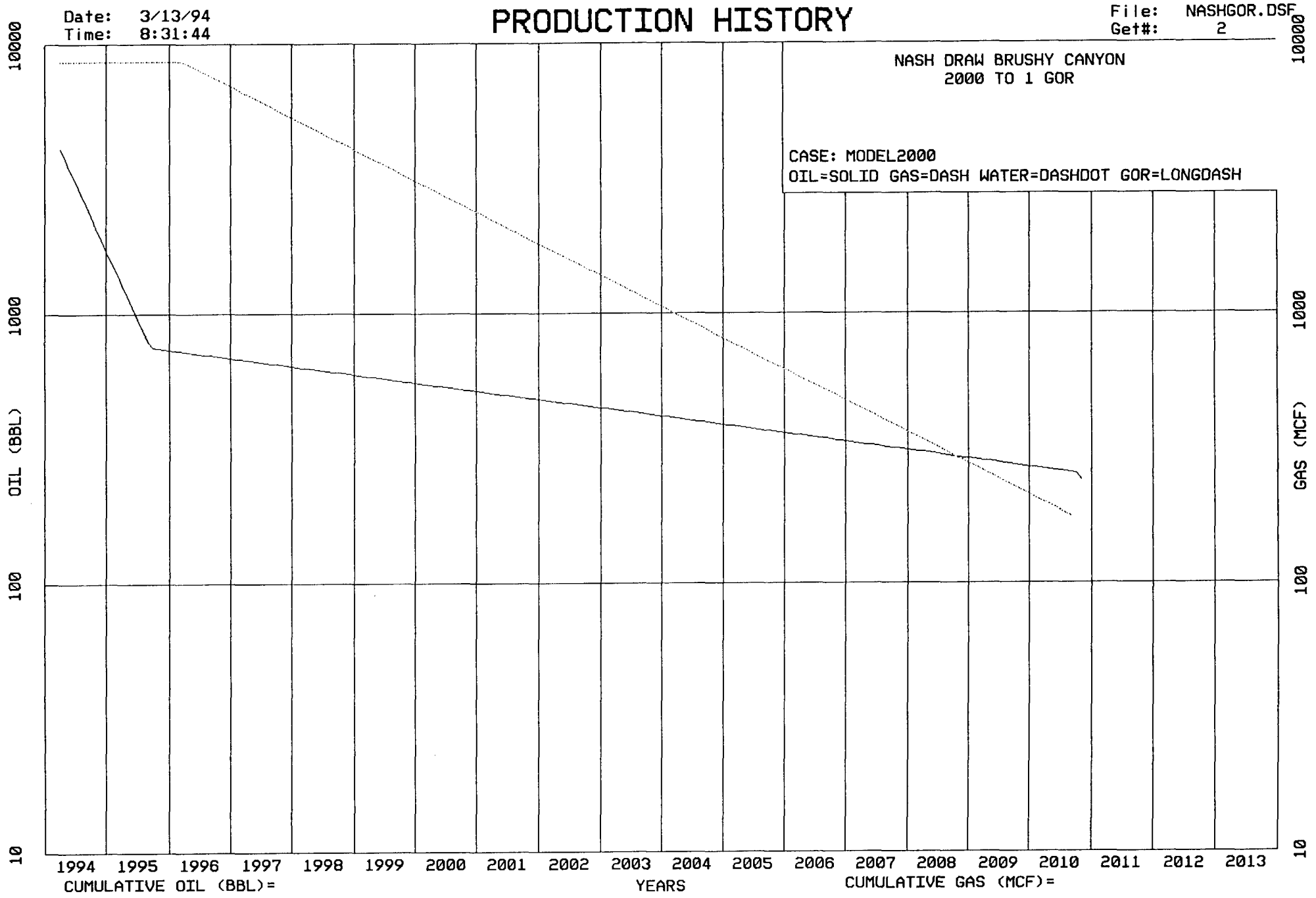
CUMULATIVE GAS (MCF)= 331554.

STRATA PRODUCTION COMPANY
NASH DRAW - BRUSHY CANYON POOL
EDDY COUNTY, NEW MEXICO

ECONOMIC MODEL
2000 TO 1 GOR
VS.
10,000 TO 1 GOR

EXHIBIT XIII

PECOS PETROLEUM ENGINEERING, INC.
ROSWELL, NEW MEXICO


Date: 3/13/94
Time: 8:31:44
PRODUCTION HISTORY
File: NASHGOR.DSF
Get#: 2
NASH DRAW BRUSHY CANYON
2000 TO 1 GOR
CASE: MODEL2000
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
10000
1000
100
10
OIL (BBL)
GAS (MCF)
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013
CUMULATIVE OIL (BBL)=
YEARS
CUMULATIVE GAS (MCF)=

```
101 NASH DRAW BRUSHY CANYON
102 2000 TO 1 GOR

117 CASE $CASE
120 4 94 12 4 1 94 10 2
```

	W.I. FRACTION	OP. COST ($/W/MO)	OP. COST ($/MO.)	ADV. TAX (PCT)	MAJOR PH. NAME	PROD DATE (MO/DY/YR)
210	1.00000000	2410.00	.00	.500	GAS	4/ 1/94

	PHASE NAME	CUM PROD (MUNITS)	REV. INT FRACTION	PRICE ($/UNIT)	SEV. TAX (PCT)	NO. OF WELLS	RATIO TO MAJOR PH
221	OIL	.000	.80000000	15.000	8.000	.0	
222	GAS	.000	.80000000	2.350	8.000	1.0	

	PH. NAME	CURVE TP	DECLINE%	QI RATE	QT RATE	CUM. LIMIT		(M OR Y)	CALC VALUE	
410	GAS	FLAT	.000	284.000	284.000	2.000	YRS	D		
CALC	GAS	FLAT	END= .000	284.000	284.000	2.000	YRS	D	207.320	MMCF
412	GAS	EXP	23.600	284.000	X	16.500	YRS	D		
CALC	GAS	EXP	END= 23.600	284.000	5.730	16.500	YRS	D	584.635	MMCF
415	OIL	EXP	X	142.000	24.800	1.500	YRS	D		
CALC	OIL	EXP	END= 68.755	142.000	24.800	1.500	YRS	D	36.772	MBBL
416	OIL	EXP	7.000	LAST	X	120.000	MB			
CALC	OIL	EXP	END= 7.000	24.800	8.252	16.662	YRS	D	120.000	MBBL

	INV NAME	INV. POINT		(G OR N)	TANG-M$	INTANG-M$	LSEHLD-M$	RISK FRAC	OVHD FLAG
802	INVEST	.000	MOS	G	250.000	250.000	.000		

NASH DRAW BRUSHY CANYON
)00 TO 1 GOR

DATE: 03/12/94
TIME: 17:08.53
FILE: NASHGOR
GET#: 2

R E S E R V E S A N D E C O N O M I C S

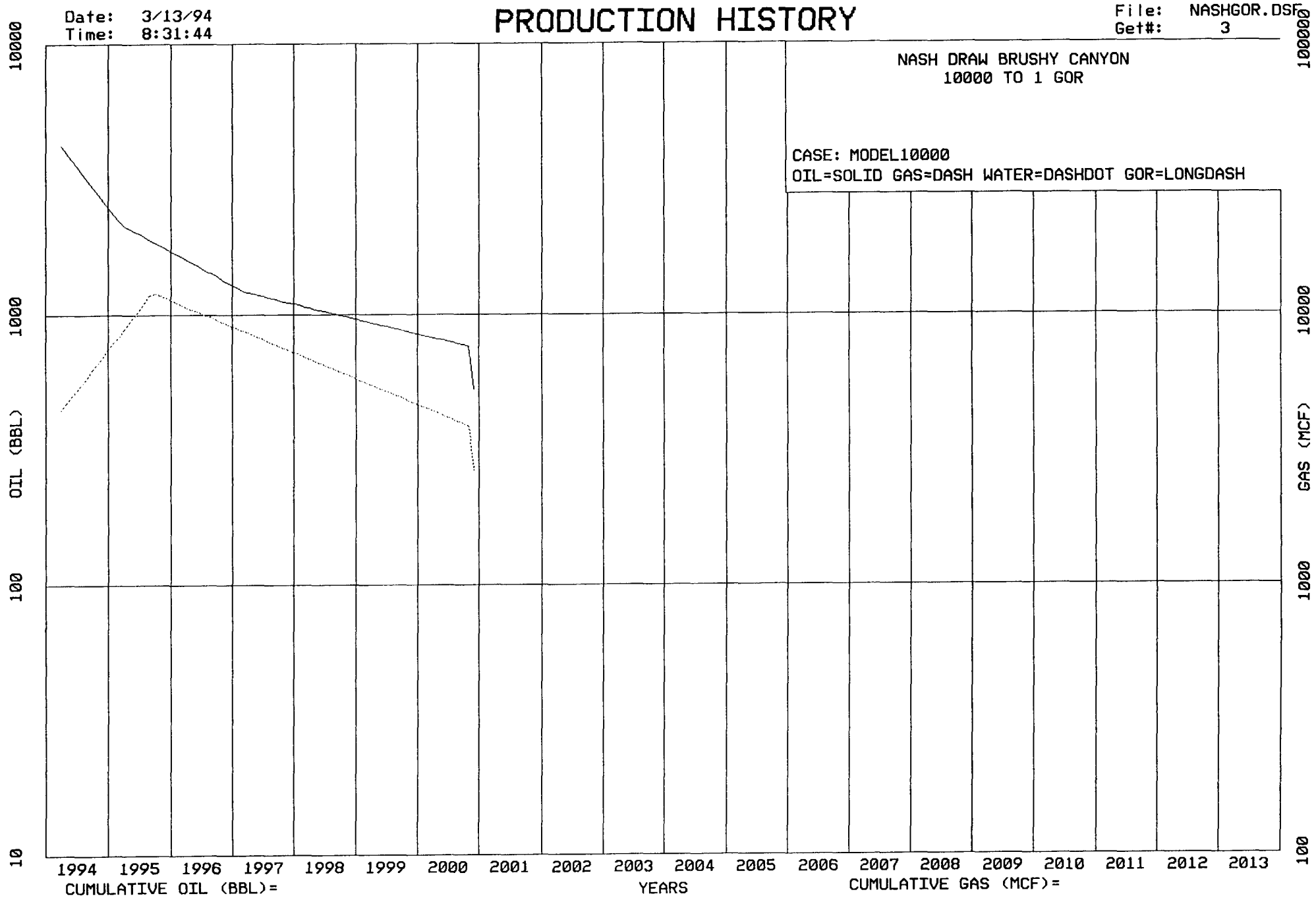
AS OF APRIL 1, 1994

END-	---GROSS PRODUCTION---		----NET PRODUCTION----		--PRICES---		--------OPERATIONS, M$--------					10.00 PCT
MO-YR	OIL, MBBL	GAS, MMCF	OIL, MBBL	GAS, MMCF	OIL $/B	GAS $/M	NET OPER REVENUES	SEV+ADV TAXES	NET OPER EXPENSES	CAPITAL COSTS, M$	CASH FLOW BTAX, M$	CUM. DISC BTAX, M$
2-94	25.934	77.745	20.747	62.196	15.00	2.35	457.366	38.693	21.690	500.000	-103.017	-116.955
12-95	13.081	103.660	10.465	82.928	15.00	2.35	351.856	29.767	28.920	.000	293.169	143.287
12-96	8.574	96.315	6.859	77.052	15.00	2.35	283.957	24.023	28.920	.000	231.014	329.712
2-97	7.974	74.265	6.379	59.412	15.00	2.35	235.303	19.906	28.920	.000	186.477	466.516
2-98	7.416	56.739	5.933	45.391	15.00	2.35	195.664	16.554	28.920	.000	150.190	566.682
12-99	6.897	43.349	5.518	34.679	15.00	2.35	164.266	13.898	28.920	.000	121.448	640.316
2- 0	6.414	33.118	5.131	26.494	15.00	2.35	139.226	11.778	28.920	.000	98.528	694.623
2- 1	5.965	25.303	4.772	20.242	15.00	2.35	119.149	10.080	28.920	.000	80.149	734.784
12- 2	5.548	19.331	4.438	15.465	15.00	2.35	102.913	8.706	28.920	.000	65.287	764.524
12- 3	5.159	14.769	4.127	11.815	15.00	2.35	89.670	7.585	28.920	.000	53.165	786.540
12- 4	4.798	11.283	3.838	9.026	15.00	2.35	78.781	6.665	28.920	.000	43.196	802.802
12- 5	4.462	8.621	3.570	6.897	15.00	2.35	69.758	5.902	28.920	.000	34.936	814.759
12- 6	4.150	6.586	3.320	5.269	15.00	2.35	62.182	5.261	28.920	.000	28.001	823.471
2- 7	3.860	5.031	3.088	4.025	15.00	2.35	55.779	4.720	28.920	.000	22.139	829.733
12- 8	3.589	3.845	2.871	3.076	15.00	2.35	50.294	4.254	28.920	.000	17.120	834.135
2- 9	3.338	2.937	2.670	2.350	15.00	2.35	45.573	3.856	28.920	.000	12.797	837.126
2-10	2.841	1.738	2.273	1.390	15.00	2.35	37.362	3.161	26.387	.000	7.814	838.793
S TOT	120.000	584.635	95.999	467.707	15.00	2.35	2539.099	214.809	481.877	500.000	1342.413	838.793
EM.	.000	.000	.000	.000	15.00	2.35	.000	.000	.000	.000	.000	838.793
TOTAL	120.000	584.635	95.999	467.707	15.00	2.35	2539.099	214.809	481.877	500.000	1342.413	838.793
UM.	.000	.000										
LT.	120.000	584.635										

		NET OIL REVENUES (M$)	1439.985		
		NET GAS REVENUES (M$)	1099.114		
		TOTAL REVENUES (M$)	2539.099		
BTAX RATE OF RETURN (PCT)	100.00	PROJECT LIFE (YEARS)	16.662		
BTAX PAYOUT YEARS	1.10	DISCOUNT RATE (PCT)	10.000		
TAX PAYOUT YEARS (DISC)	1.20	GROSS OIL WELLS	.000		
TAX NET INCOME/INVEST	3.68	GROSS GAS WELLS	1.000		
BTAX NET INCOME/INVEST (DISC)	2.68	GROSS WELLS	1.000		
NITIAL W.I. FRACTION	1.000000	INITIAL NET OIL FRACTION	.800000		
INAL W.I. FRACTION	1.000000	FINAL NET OIL FRACTION	.800000		
PRODUCTION START DATE	4- 1-94	INITIAL NET GAS FRACTION	.800000		
MONTHS IN FIRST LINE	9.00	FINAL NET GAS FRACTION	.800000		

---PRESENT WORTH PROFILE---

DISC RATE	PW OF NET BTAX, M$	DISC RATE	PW OF NET BTAX, M$
.0	1342.413	30.0	408.960
2.0	1209.833	35.0	348.922
5.0	1045.761	40.0	298.548
8.0	913.442	45.0	255.633
10.0	838.793	50.0	218.588
12.0	772.879	60.0	157.752
15.0	687.395	70.0	109.716
18.0	614.818	80.0	70.691
20.0	572.251	90.0	38.261
25.0	481.840	100.0	10.809


Date: 3/13/94
Time: 8:31:44
PRODUCTION HISTORY
File: NASHGOR.DSF
Get#: 3
NASH DRAW BRUSHY CANYON
10000 TO 1 GOR
CASE: MODEL10000
OIL=SOLID GAS=DASH WATER=DASHDOT GOR=LONGDASH
10000
1000
100
10
OIL (BBL)
100000
10000
1000
100
GAS (MCF)
1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013
CUMULATIVE OIL (BBL)=
YEARS
CUMULATIVE GAS (MCF)=

OGRE(R) V5.11 BTAX — D A T A R E P O R T — DATE: 03/12/94
FILE NAME: NASHGOR (3) — TIME: 17:08.53
CASE NAME: MODEL10000
CMD NAME: ogre (140)

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101 NASH DRAW BRUSHY CANYON
102 10000 TO 1 GOR

117 CASE $CASE
*  120 4 94 12 4 1 94 10 2
```

	W.I. FRACTION	OP. COST ($/W/MO)	OP. COST ($/MO.)	ADV. TAX (PCT)	MAJOR PH. NAME	PROD DATE (MO/DY/YR)
210	1.00000000	2410.00	.00	.500	OIL	4/ 1/94

	PHASE NAME	CUM PROD (MUNITS)	REV. INT FRACTION	PRICE ($/UNIT)	SEV. TAX (PCT)	NO. OF WELLS	RATIO TO MAJOR PH
221	OIL	.000	.80000000	15.000	8.000	.0	
222	GAS	.000	.80000000	2.350	8.000	1.0	

	PH. NAME	CURVE TP	DECLINE%	QI RATE	QT RATE	CUM. LIMIT		(M OR Y)	CALC VALUE	
410	OIL	EXP	50.000	142.000	X	1.000	YRS	D		
CALC	OIL	EXP	END= 50.000	142.000	71.000	1.000	YRS	D	37.387	MBBL
411	OIL	EXP	25.000	LAST	X	3.000	YRS	D		
CALC	OIL	EXP	END= 25.000	71.000	39.938	3.000	YRS	D	76.798	MBBL
412	OIL	EXP	12.000	LAST	X	120.000	MB	D		
CALC	OIL	EXP	END= 12.000	39.938	24.807	6.725	YRS	D	120.000	MBBL
415	GAS	EXP	-99.000	142.000	X	1.500	YR	D		
CALC	GAS	EXP	END= -99.000	142.000	398.628	1.500	YRS	D	136.121	MMCF
416	GAS	EXP	20.000	LAST	X	412.000	LINE			
CALC	GAS	EXP	END= 20.000	398.628	124.224	6.725	YRS	D	584.968	MMCF

	INV NAME	INV. POINT		(G OR N)	TANG-M$	INTANG-M$	LSEHLD-M$	RISK FRAC	OVHD FLAG
802	INVEST	.000	MOS	G	250.000	250.000	.000		

NASH DRAW BRUSHY CANYON
)000 TO 1 GOR

DATE: 03/12/94
TIME: 17:08.53
FILE: NASHGOR
GET#: 3

R E S E R V E S A N D E C O N O M I C S

AS OF APRIL 1, 1994

END-	---GROSS PRODUCTION---		----NET PRODUCTION----		--PRICES---		--------OPERATIONS, M$--------					10.00 PCT
MO-YR	OIL, MBBL	GAS, MMCF	OIL, MBBL	GAS, MMCF	OIL $/B	GAS $/M	NET OPER REVENUES	SEV+ADV TAXES	NET OPER EXPENSES	CAPITAL COSTS, M$	CASH FLOW BTAX, M$	CUM. DISC BTAX, M$
2-94	30.313	50.877	24.250	40.702	15.00	2.35	459.400	38.865	21.690	500.000	-101.155	-115.159
12-95	24.557	120.622	19.646	96.498	15.00	2.35	521.460	44.116	28.920	.000	448.424	282.900
12-96	18.150	123.333	14.520	98.666	15.00	2.35	449.665	38.041	28.920	.000	382.704	591.737
2-97	14.204	98.667	11.363	78.934	15.00	2.35	355.940	30.113	28.920	.000	296.907	809.555
2-98	12.432	78.933	9.946	63.146	15.00	2.35	297.583	25.175	28.920	.000	243.488	971.945
12-99	10.941	63.146	8.753	50.517	15.00	2.35	250.010	21.151	28.920	.000	199.939	1093.168
2- 0	9.403	49.390	7.522	39.512	15.00	2.35	205.683	17.400	28.199	.000	160.084	1181.508
S TOT	120.000	584.968	96.000	467.975	15.00	2.35	2539.741	214.861	194.489	500.000	1630.391	1181.508
EM.	.000	.000	.000	.000	.00	.00	.000	.000	.000	.000	.000	1181.508
TOTAL	120.000	584.968	96.000	467.975	15.00	2.35	2539.741	214.861	194.489	500.000	1630.391	1181.508
UM.	.000	.000		NET OIL REVENUES (M$)			1440.000					
				NET GAS REVENUES (M$)			1099.741					
ULT.	120.000	584.968		TOTAL REVENUES (M$)			2539.741					

						---------PRESENT WORTH PROFILE---------			
						DISC RATE	PW OF NET BTAX, M$	DISC RATE	PW OF NET BTAX, M$
TAX RATE OF RETURN (PCT)		100.00	PROJECT LIFE (YEARS)		6.725	.0	1630.391	30.0	684.585
BTAX PAYOUT YEARS		.98	DISCOUNT RATE (PCT)		10.000	2.0	1523.295	35.0	605.313
BTAX PAYOUT YEARS (DISC)		1.04	GROSS OIL WELLS		.000	5.0	1380.521	40.0	537.076
TAX NET INCOME/INVEST		4.26	GROSS GAS WELLS		1.000	8.0	1255.946	45.0	477.812
TAX NET INCOME/INVEST (DISC)		3.36	GROSS WELLS		1.000	10.0	1181.508	50.0	425.918
						12.0	1113.089	60.0	339.484
NITIAL W.I. FRACTION		1.000000	INITIAL NET OIL FRACTION		.800000	15.0	1020.362	70.0	270.493
INAL W.I. FRACTION		1.000000	FINAL NET OIL FRACTION		.800000	18.0	937.917	80.0	214.207
PRODUCTION START DATE		4- 1-94	INITIAL NET GAS FRACTION		.800000	20.0	887.915	90.0	167.429
MONTHS IN FIRST LINE		9.00	FINAL NET GAS FRACTION		.800000	25.0	777.593	100.0	127.927