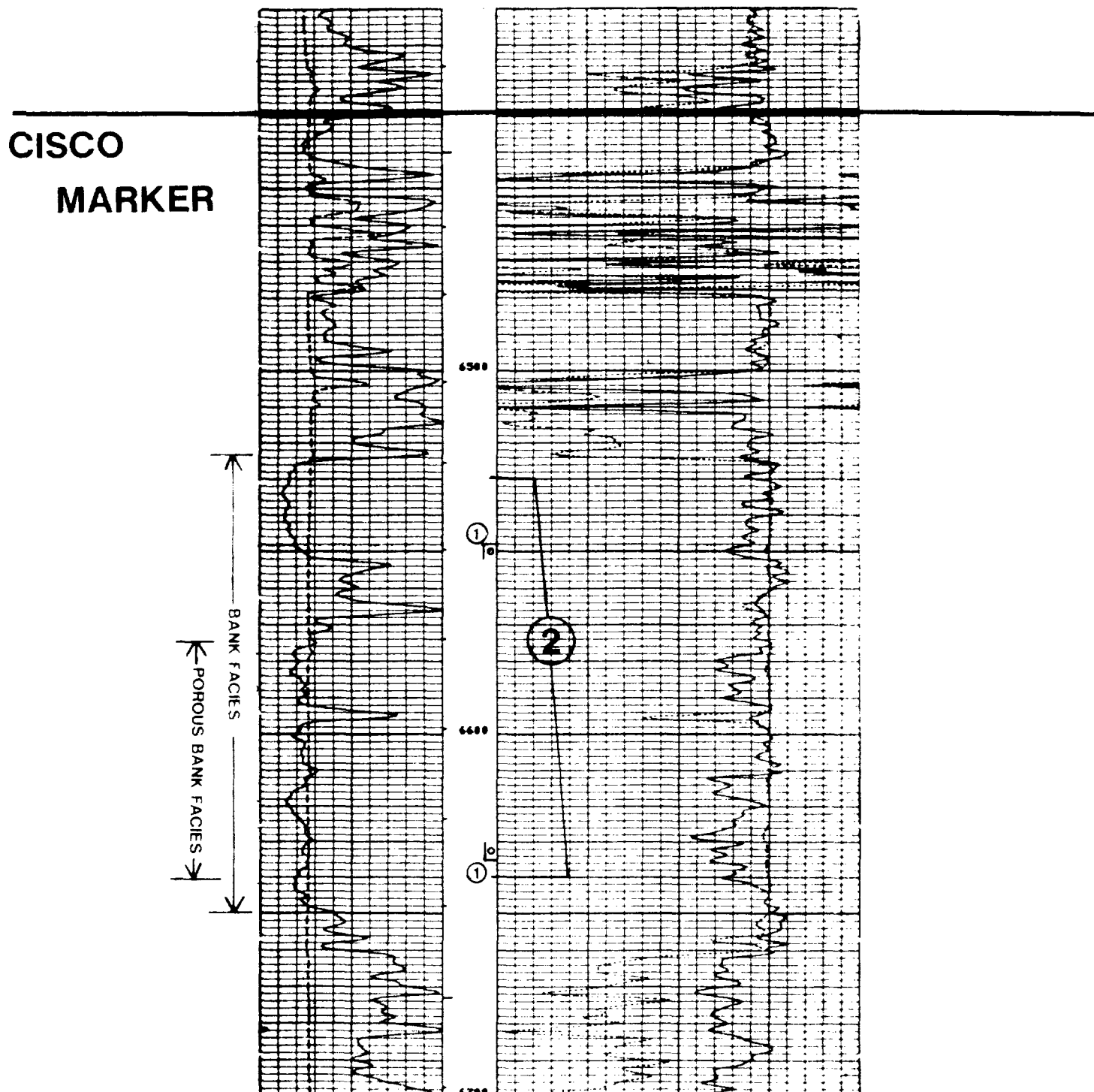


YATES PETROLEUM CORPORATION

IRISH HILLS "KW" ST. # 2

1980' FNL & 1980 FEL
SEC 2 T19S - R24E
EDDY COUNTY, NEW MEXICO



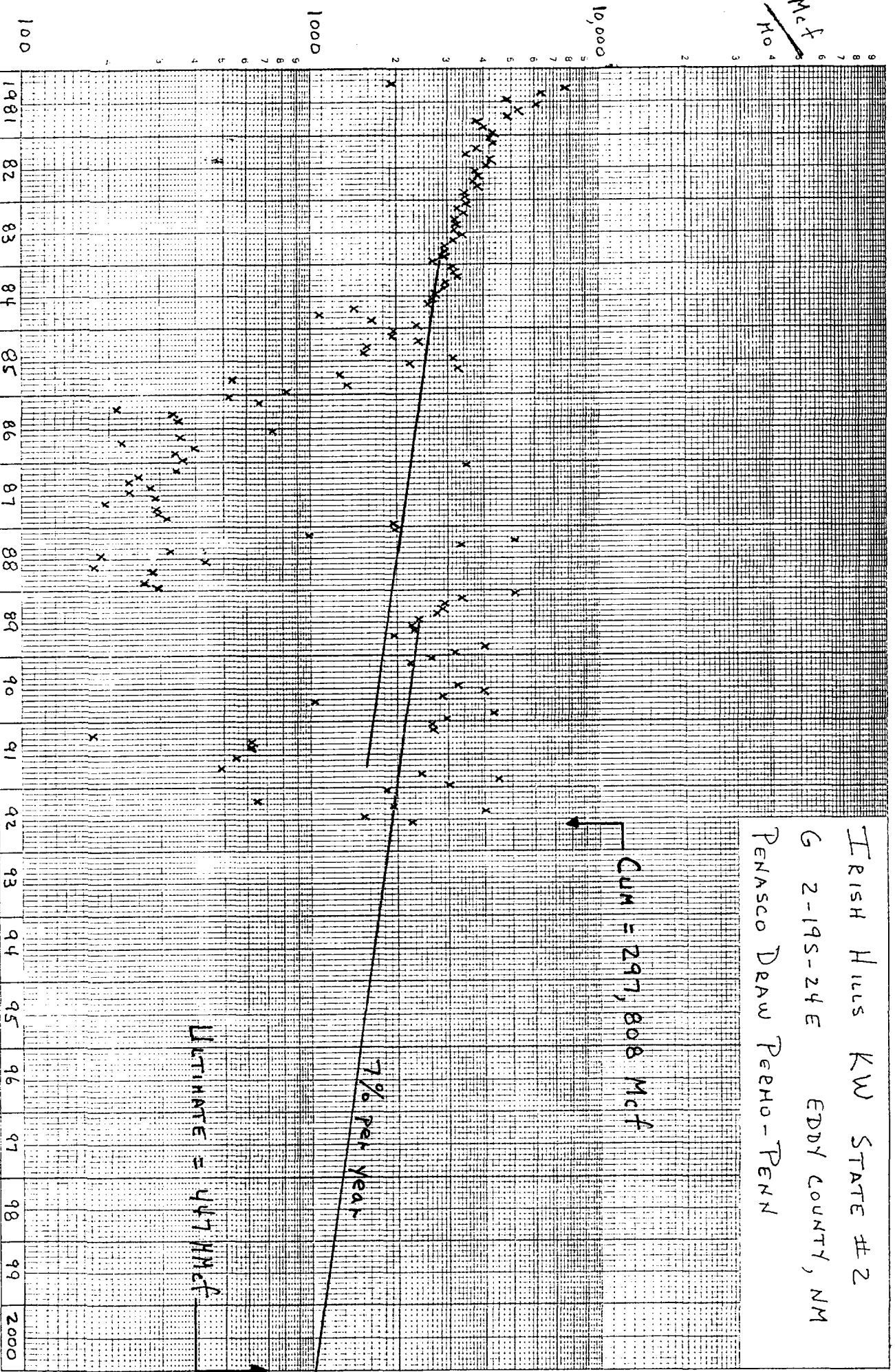
SP - DST #2 6530 - 6640
OP 90"
GTS 6"
80 MCFPD DECREASED TO TSTM
REC 180' DF
FP 92 - 82
90" SIP 1490 - 180" SIP 2189

1 PERF 6548 - 6635 OA
A 3500 G
AOF 85+MCFPD ON 3-26-'81

PENASCO DRAW PERMO - PENN FEILD
CUM. THRU 8 - 92: 300,748MCF +
1758 BC + 16 BW

YATES PETROLEUM CORPORATION
Case No. 10543
09/17/92 Examiner Hearing
Exhibit No. 7

YATES PETROLEUM CORPORATION
Case No. 10543
09/17/92 Examiner Hearing
Exhibit No. 8



IRISH HILLS KW STATE #2
 G 2-19S-24E
 PENASCO DRAW PERMO PENN

DEPTH	h	POROSITY	PHIh
6528-6530	2	0.013	0.026
6536-6538	2	0.014	0.028
6540-6548	8	0.013	0.104
6548-6552	4	0.018	0.072
6568-6574	6	0.008	0.048
6578-6584	6	0.026	0.156
6584-6592	8	0.015	0.120
6604-6607	3	0.008	0.024
6611-6619	8	0.022	0.176
6620-6626	6	0.017	0.102
6626-6630	4	0.035	0.140
6630-6637	7	0.025	0.175
6637-6642	5	0.020	0.100
	---		-----
	69		1.271

HERE, $\langle S_g \rangle = 0.78$
 $R_f = 0.85$
 $T = 125 \text{ deg F} = 585 \text{ R}$

GAS PRODUCED

$G_p = R_f * OGIP$
 $G_p = R_f * (43560) * A * h * \phi * S_g * B_g$ where $B_g = 35.35 * P / zT$

$B_g = 35.35 * 2172 / (0.825 * 585)$
 $B_g = 159 \text{ Scf/cf}$

$G_p = 0.85 * (43560) * A * (1.271) * (0.78) * (159)$

$G_p = 5836387 * A$

AND $A = G_p \text{ in MMcf} / 5.84$

AREA DRAINED

=====

Cumulative to date = 297808 Mcf

$A = 298 / 5.84 = 51 \text{ Acres}$

Ultimate production = 447 MMcf

$A = 447 / 5.84 = 77 \text{ Acres}$

GAS DEVIATION FACTOR

WELL : IRISH HILLS KW STATE #2
 DATE : DEC 13, 1982
 SAMPLE : TW - JIM GREER

RESERVOIR TEMP = 125 F
 RESERVOIR PRESSURE = 2172 psia

	MOLE PERCENT	MOLECULAR WEIGHT	CRITICAL PRESSURE psia	CRITICAL TEMP deg R	SAMPLE MOLECULAR WEIGHT	SAMPLE CRITICAL PRESSURE psia	SAMPLE CRITICAL TEMP deg R
CARBON DIOXIDE	0.090	44.01	1070.2	547.5	0.04	0.96	0.49
NITROGEN	1.190	28.02	492.2	227.0	0.33	5.86	2.70
HYDROGEN SULFIDE	0.000	34.08	1306.5	672.4	0.00	0.00	0.00
METHANE	88.120	16.04	673.1	343.2	14.13	593.14	302.43
ETHANE	6.590	30.07	708.3	549.9	1.98	46.68	36.24
PROPANE	2.270	44.09	617.4	666.0	1.00	14.01	15.12
ISO-BUTANE	0.370	58.12	529.1	734.6	0.22	1.96	2.72
N-BUTANE	0.680	58.12	550.1	765.7	0.40	3.74	5.21
ISO-PENTANE	0.210	72.15	483.5	829.6	0.15	1.02	1.74
N-PENTANE	0.190	72.15	489.8	846.2	0.14	0.93	1.61
HEXANE	0.160	86.17	440.1	914.2	0.14	0.70	1.46
HEPTANE	0.130	100.20	395.9	972.4	0.13	0.51	1.26
	100.000				18.66	669.51	370.98

SPECIFIC GRAVITY = 0.644
 PSEUDOREDUCED PRESSURE = 3.244
 PSEUDOREDUCED TEMP = 1.577
 GAS DEVIATION FACTOR (Z) = 0.825

**DRAINAGE AREA
IRISH HILLS KW STATE #2
2-19S-24E
EDDY COUNTY, NEW MEXICO**

