

WEST LOVINGTON STRAWN FIELD

LEA COUNTY, NEW MEXICO

12

WEST LOVINGTON STRAWN FIELD

FIELD HISTORY

Discovery Date	- May 1992
Number of producing wells	- Eleven
Spacing	- 80 Acres
Current Production	- 32,000 BBLS Oil and 51,700 MCF Per Month
Cumulative Production	- 1,307,854 BBLS Oil and 2,542,512 MCF
Initial Reservoir Pressure	- 4392 psi
Current Reservoir Pressure	- 3363 psi
Bubble Point Pressure	- 4130 psi
Original Oil In Place	- 11,933,400 BBLS OIL (Volumetrics)

WEST LOVINGTON STRAWN FIELD**WELL COMPLETION HISTORY**

<u>WELL NAME</u>	<u>COMPLETION DATE</u>	<u>POTENTIAL</u>
Hamilton Federal #1	06-30-92	408 BO & 1200 MCF
Hamilton Federal #2	01-10-93	492 BO & 1026 MCF
Hamilton Federal #3	11-03-93	484 BO & 958 MCF
Hamilton Federal #4	12-19-93	487 BO & 970 MCF
Earnestine #1	03-03-93	515 BO & 1039 MCF
Earnestine #2	03-23-93	436 BO & 894 MCF
Speight Fee 1	09-09-92	525 BO & 1081 MCF
Snyder "S" Com #1	03-24-94	583 BO & 1117 MCF
Snyder "S" Com #2	04-13-95	308 BO & 564 MCF
Wiley Fee #1	07-31-94	500 BO & 998 MCF
Klein Fee #1	04-02-95	456 BO & 544 MCF

WEST LOVINGTON STRAWN FIELD**CALCULATED PERMEABILITY TO OIL**

<u>WELL NAME</u>	<u>DATE</u>	<u>TEST TYPE</u>	<u>PERMEABILITY</u>
HAMILTON FEDERAL #1	05-13-92	DRILL STEM	87 md *
HAMILTON FEDERAL #1	08-28-92	BUILD-UP	540 md
HAMILTON FEDERAL #1	04-21-94	BUILD-UP	277 md
HAMILTON FEDERAL #1	01-03-95	BUILD-UP	112 md **
HAMILTON FEDERAL #2	11-19-92	DRILL STEM	1204 md
HAMILTON FEDERAL #3	09-15-93	DRILL STEM	337 md
HAMILTON FEDERAL #4	---	NO TESTS	---
EARNESTINE #1	01-18-93	DRILL STEM	1420 md
EARNESTINE #2	02-26-93	DRILL STEM	204 md
SPEIGHT FEE #1	08-12-92	DRILL STEM	383 md
SPEIGHT FEE #1	11-04-92	BUILD-UP	392 md
SPEIGHT FEE #1	04-26-93	BUILD-UP	350 md
SNYDER "S" COM #1	12-03-93	DRILL STEM	392 md
SNYDER "S" COM #2	---	NO TEST	---
WILEY FEE #1	09-09-94	BUILD-UP	68 md **
KLEIN FEE #1	03-15-95	DRILL STEM	642 md

* LOW VALUE DUE TO SKIN DAMAGE FROM DRILLING FLUIDS

** QUESTIONABLE VALUE DUE TO SMALL DRAWN DOWN NEAR WELL BORE
BECAUSE OF LOW PRODUCING RATES

WEST LOVINGTON STRAWN FIELD**BOTTOM HOLE PRESSURE HISTORY**

<u>WELL NAME</u>	<u>TYPE OF MEASUREMENT</u>	<u>DATE</u>	<u>BHP</u>	<u>CUM OIL PRODUCTION</u>
Hamilton Federal #1	Drill Stem Test	05-13-92	4392	0
Speight Fee #1	Drill Stem Test	08-12-92	4308	16100
Hamilton Federal #1	Build-up Test	08-28-92	4342	21400
Speight Fee #1	Build-up Test	11-04-92	4230	71500
Hamilton Federal #2	Drill Stem Test	11-19-92	4224	85400
Earnestine #1	Drill Stem Test	01-18-93	4136	141300
Earnestine #2	Drill Stem Test	02-26-93	4063	189800
Speight Fee #1	Build-up Test	04-26-93	3926	302500
Hamilton Federal #1	Dip-in Test	04-26-93	3926	302500
Hamilton Federal #2	Dip-in Test	04-26-93	3918	302500
Earnestine #1	Dip-in Test	04-26-93	3917	302500
Earnestine #2	Dip-in Test	04-26-93	3918	302500
Field Average	---	04-26-93	3921	302500
Hamilton Federal #3	Drill Stem Test	09-15-93	3629	590000
Snyder "S" Com #1	Drill Stem Test	12-03-93	3615	726200
Hamilton Federal #1	Build-up Test	04-21-94	3448	999500
Hamilton Federal #2	Dip-in Test	04-21-94	3457	999500
Hamilton Federal #3	Dip-in Test	04-21-94	3446	999500
Hamilton Federal #4	Dip-in Test	04-21-94	3448	999500
Speight Fee #1	Dip-in Test	04-21-94	3444	999500
Earnestine #1	Dip-in Test	04-21-94	3444	999500
Earnestine #2	Dip-in Test	04-21-94	3445	999500
Snyder "S" Com #1	Dip-in Test	04-21-94	3451	999500
Field Average	---	04-21-94	3450	999500
Wiley Fee #1	Build-up Test	09-09-94	3390	1147000
Snyder "S" Com #1	Dip-in Test	09-09-94	3393	1147000
Speight Fee #1	Dip-in Test	09-09-94	3392	1147000
Field Average	---	09-09-94	3392	1147000
Hamilton Fedral #1	Build-up Test	01-03-95	3368	1227935
Earnestine #2	Dip-in Test	01-03-95	3350	1227935
Wiley Fee #1	Dip-in test	01-03-95	3412	1227935
Snyder "S" Com #1	Dip-in Test	01-03-95	3407	1227935
Field Average	---	01-03-95	3384	1227935
Klein Fee #1	Drill Stem test	03-15-95	3363	1304900

WEST LOVINGTON STRAWN FIELD

PLAN OF OPERATION

- 1) Convert Speight Fee #1 into a gas injection well isolating the upper perforations.
- 2) Install the necessary compression and gathering lines to deliver injection gas to the Speight Fee #1.
- 3) Mechanically isolate the lower perforations in producing wells (if necessary) so all wells will produce from the bottom 10 to 15 feet of porosity.
- 4) Produce wells (ten) at 175 BOPD.
- 5) Inject approximately 1500 MCFPD of returned produced gas plus an additional 3500 MCFPD of purchased make-up gas into the Speight Fee #1.
- 6) Monitor reservoir pressure and adjust producing and injection rates to maintain reservoir pressure. Gas will be injected in sufficient volume to replace oil and gas withdrawals.
- 7) Monitor and control field GOR by shutting in high GOR wells as needed.

WEST LOVINGTON STRAWN FIELD

RE -DESIGNATION OF WELL NAMES

Previous Well Name and Number

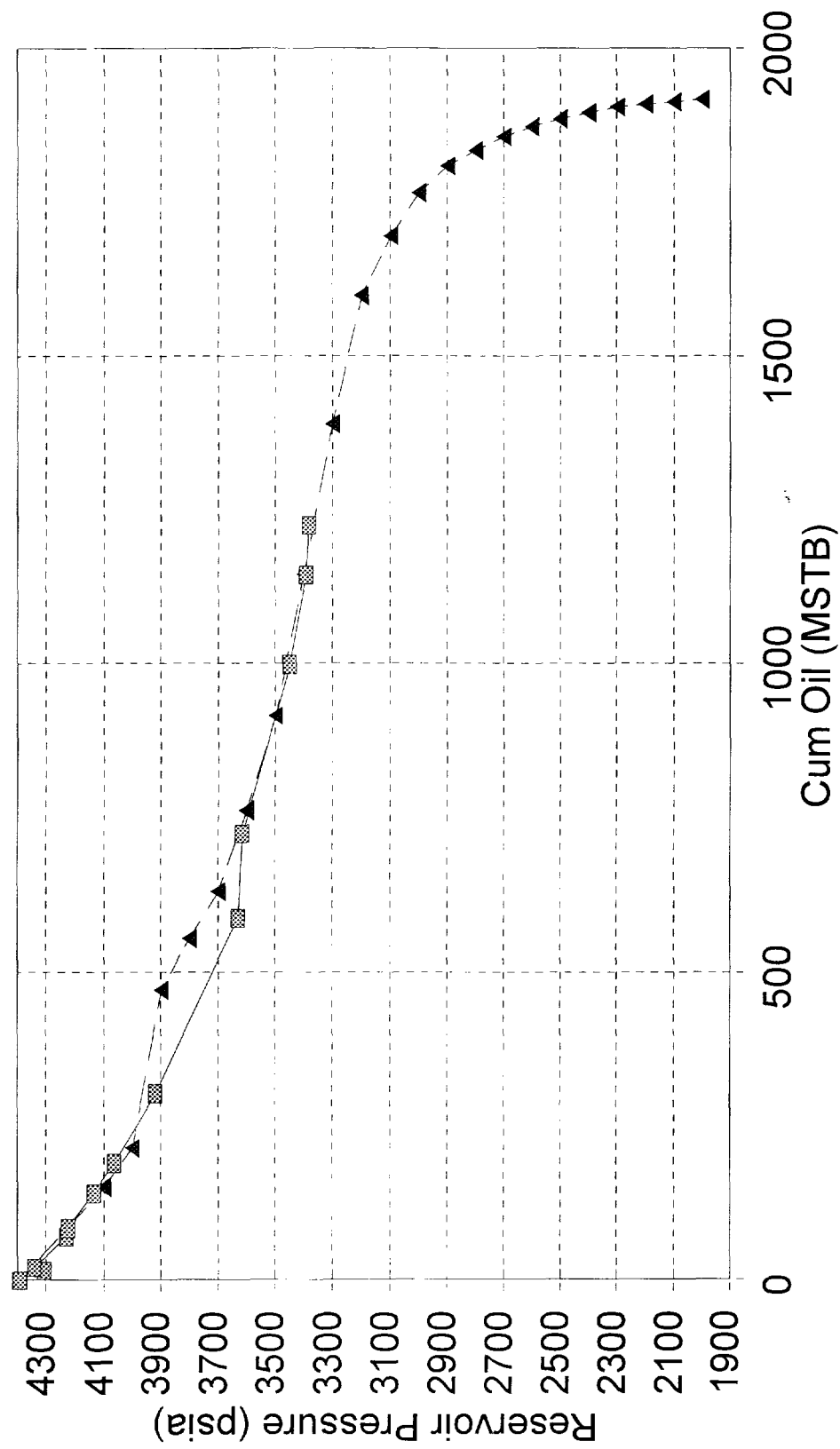
Hamilton #1
Hamilton #2
Hamilton #3
Hamilton #4
Earnestine #1
Earnestine #2
Speight Fee #1
Snyder S Com #1
Snyder S Com #2
Wiley Fee #1
Klein Fee #1

Unit Well Name and Number

West Lovington Strawn Unit #1
West Lovington Strawn Unit #2
West Lovington Strawn Unit #3
West Lovington Strawn Unit #4
West Lovington Strawn Unit #5
West Lovington Strawn Unit #6
West Lovington Strawn Unit #7
West Lovington Strawn Unit #8
West Lovington Strawn Unit #9
West Lovington Strawn Unit #10
West Lovington Strawn Unit #11

Could use "WLSU" to abbreviate for West Lovington Strawn Unit

West Lovington (Strawn) Field



--▲-- Calculated --■-- Measured

WEST LOVINGTON STRAWN TOTAL FIELD PRODUCTION					
MONTH	OIL	GAS	GOR	CUM OIL	CUM GAS
1992					
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	3774	0	0	3774	0
July	8182	10177	1243	11956	10177
August	9751	21347	2189	21707	31524
September	20268	45584	2249	41965	77108
October	26959	58288	2162	68924	135396
November	26017	55951	2150	94941	191347
December	25508	55076	2159	120449	246423
TOTAL	120459	246423		120449	246423
1993					
January	35896	75880	2114	156345	322303
February	36044	77147	2140	192389	399450
March	62039	130016	2095	254428	529466
April	55471	120560	2173	309899	650026
May	66543	147811	2221	376442	797837
June	66996	143249	2203	443438	941086
July	64097	134522	2098	507535	1075608
August	61113	125870	2059	568651	1201478
September	46584	92875	1991	615235	1294273
October	56575	112431	1981	671810	1406704
November	50378	96889	1923	722188	1503593
December	60477	112800	1865	782665	1616393
TOTAL	662213	1369970		782665	1616393
1994					
January	60598	118216	1950	843263	1734609
February	50168	91886	1832	893431	1826495
March	56396	101845	1806	949827	1928340
April	51518	93711	1818	1001345	2022051
May	32512	58210	1790	1033857	2080261
June	26125	47387	1813	1059982	2127648
July	28768	51802	1800	1088750	2179450
August	32113	57588	1793	1120863	2237038
September	25644	46258	1803	1146507	2283296
October	29078	50498	1736	1175585	2333794
November	28362	47176	1663	1203947	2380970
December	23988	37493	1563	1227935	2418463
TOTAL	445270	802070		1227935	2418463
1995					
January	24091	37334	1550	1252486	2454363
February	26870	42089	1566	1279356	2496452
March	28498	46060	1599	1307854	2542512
April					
May					
June					
July					

RESERVES AND ECONOMICS

PRODUCTION HISTORY
WEST LOVINGTON STRAWN FIELD
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE, JR.

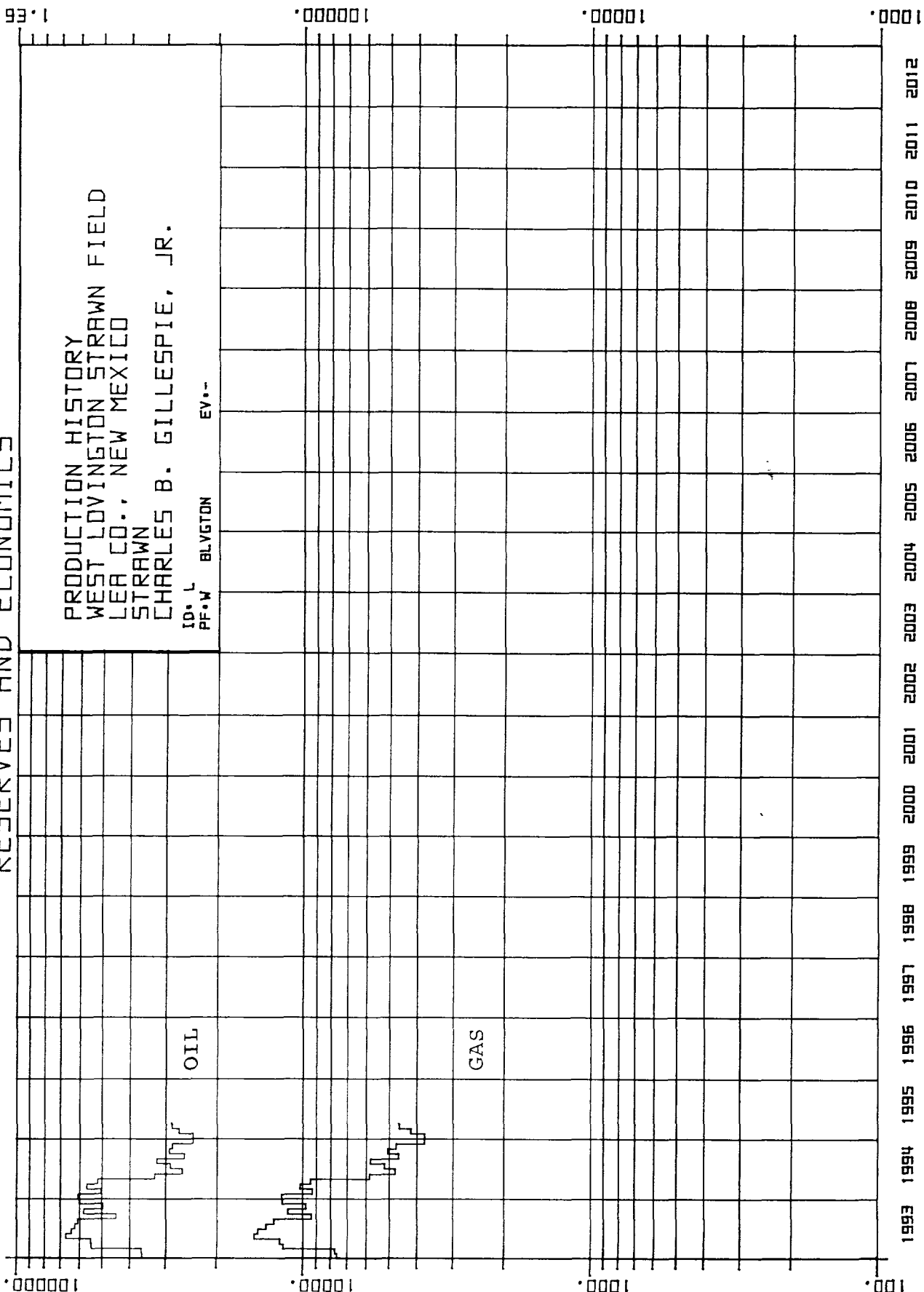
ID. L BLYSTON EV.--
PF. W

OIL

GAS

GROSS OIL PROD (BOPM)

GROSS GAS PROD (MCFPM)



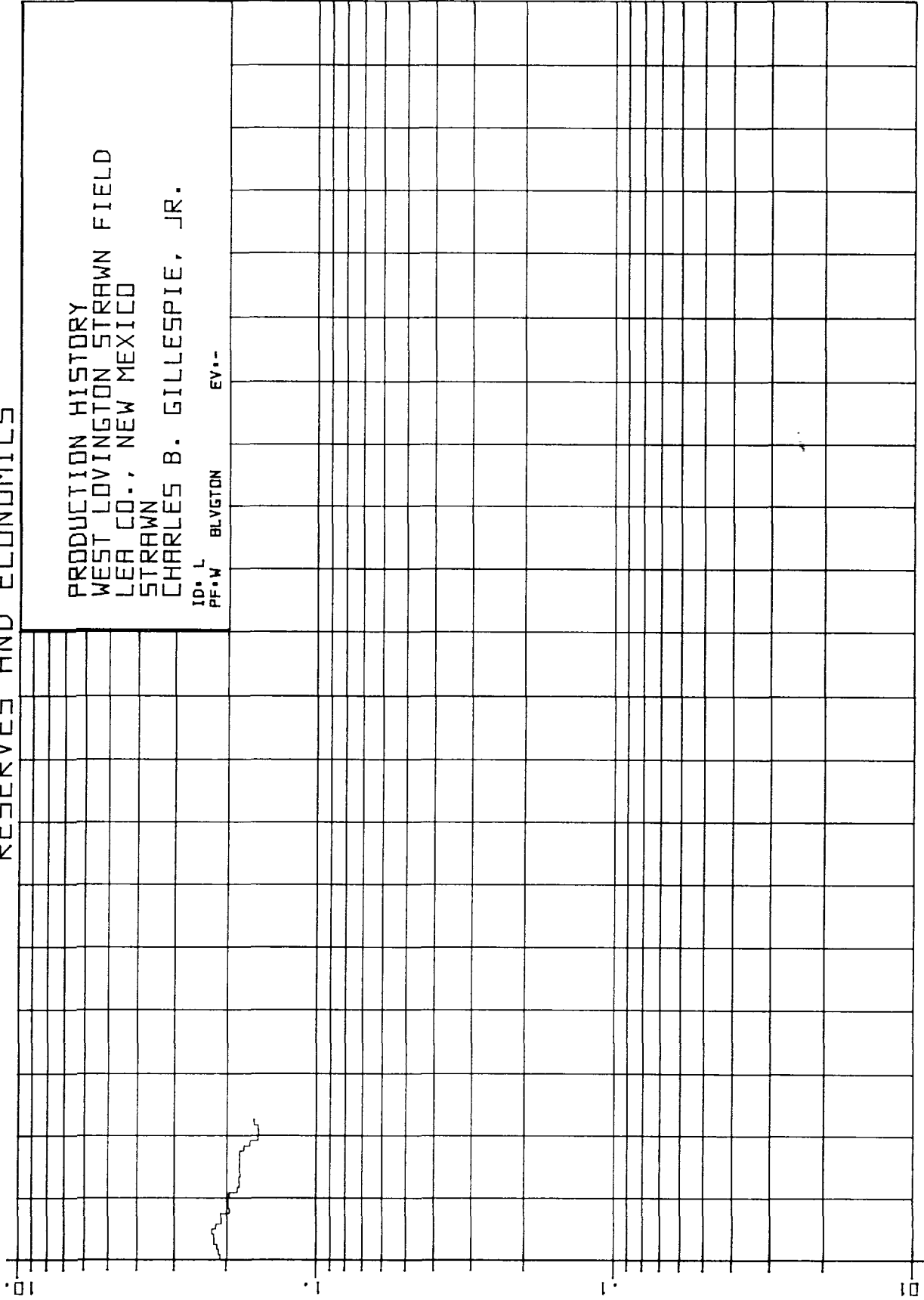
RESERVES AND ECONOMICS

PRODUCTION HISTORY
 WEST LOVINGTON STRAWN FIELD
 LEA CO., NEW MEXICO
 STRAWN
 CHARLES B. GILLESPIE, JR.

ID: L
 PF: W BLVGTON EV: -

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

GAS OIL RATIO



LEASE: HAMILTON FEDERAL					
MONTH	OIL	GAS	GOR	CUM OIL	CUM GAS
1992					
January					
February					
March					
April					
May					
June	3774			3774	
July	8182	10177	1243	11956	10177
August	9751	21347	2189	21707	31524
September	10591	23309	2128	32298	54833
October	12293	25502	2074	44591	80335
November	13435	27184	2023	58026	107519
December	12298	24886	2023	70324	132405
TOTAL	70324	132405		70324	132405
1993					
January	22503	46635	2072	92827	190040
February	22128	47627	2152	114955	226667
March	25797	52700	2042	140752	279367
April	21553	46183	2142	162305	325550
May	25619	56979	2223	187924	382529
June	25946	56793	2188	213870	439322
July	23347	48223	2065	237217	487545
August	25401	50916	2004	262618	538461
September	18084	37492	2073	280702	575953
October	23356	45770	1959	304058	621723
November	28176	53515	1899	332234	675238
December	36066	65671	1821	368300	740909
TOTAL	297976	608504		368300	740909
1994					
January	36250	67648	1866	404550	808557
February	28289	50029	1768	432839	858586
March	27903	49856	1786	460742	908422
April	23946	42193	1762	484688	950635
May	15986	28433	1778	500674	979068
June	13432	24411	1817	514106	1003479
July	13612	24243	1781	527718	1027722
August	13288	22842	1718	541006	1050564
September	11984	21160	1765	552990	1071724
October	13084	21872	1671	566074	1093596
November	12890	20266	1572	578964	1113862
December	10792	15659	1451	589756	1126521
TOTAL	221456	388612		589756	1126521
1995					
January	9733	15636	1606	599489	1145065
February	12111	18428	1522	611600	1163493
March	13246	20914	1579	624846	1184407
April					
May					
June					
July					

RESERVES AND ECONOMICS

HAMILTON FEDERAL
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE, JR

ID.
PF.W 1LVGTON EV.-

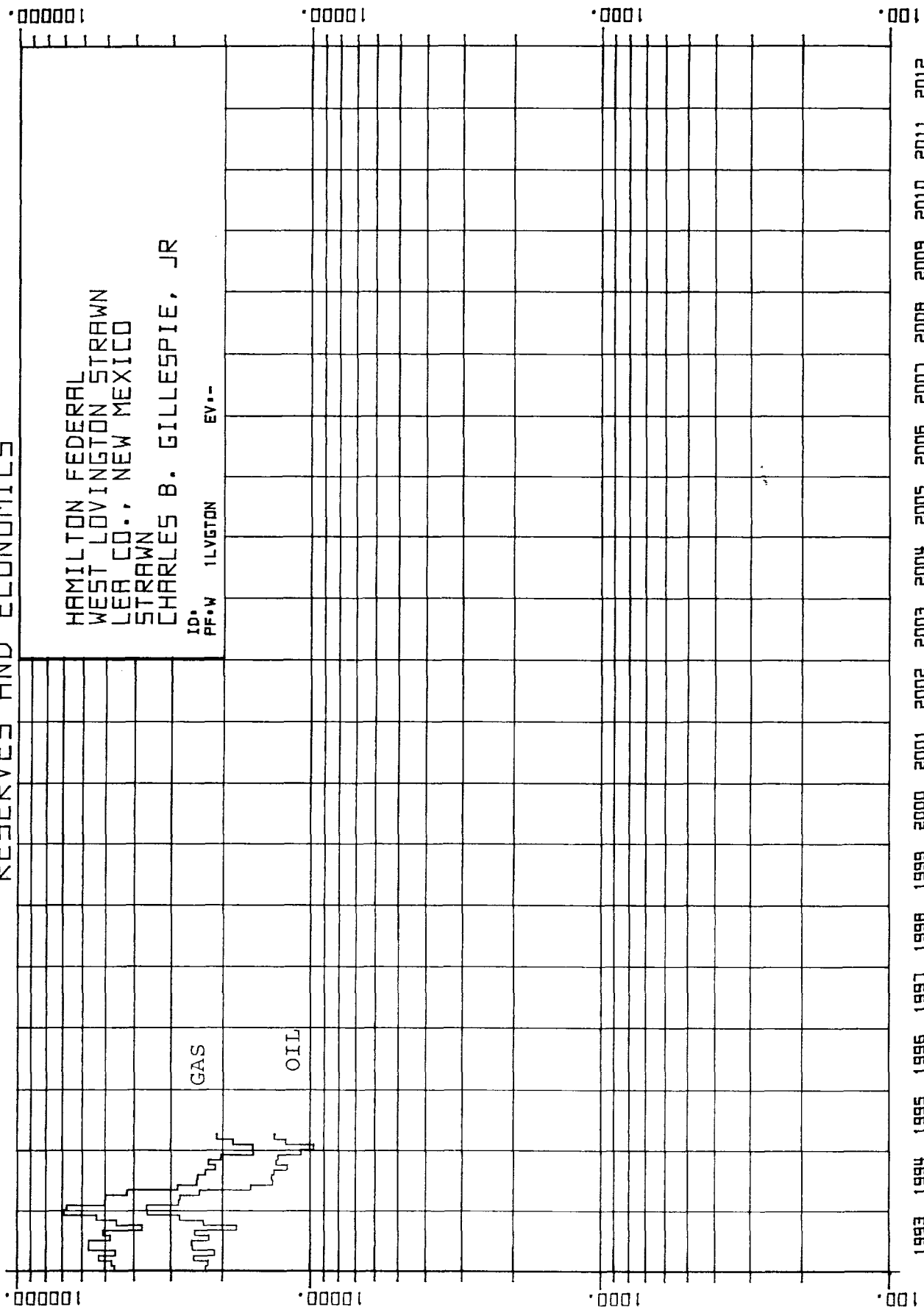
GAS

OIL

GROSS OIL PRODD (BOPM)

GROSS GAS PRODD (MCFPM)

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012



RESERVES AND ECONOMICS

HAMILTON FEDERAL
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE, JR

ID:
PF-W EV--
11VGTGN



1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

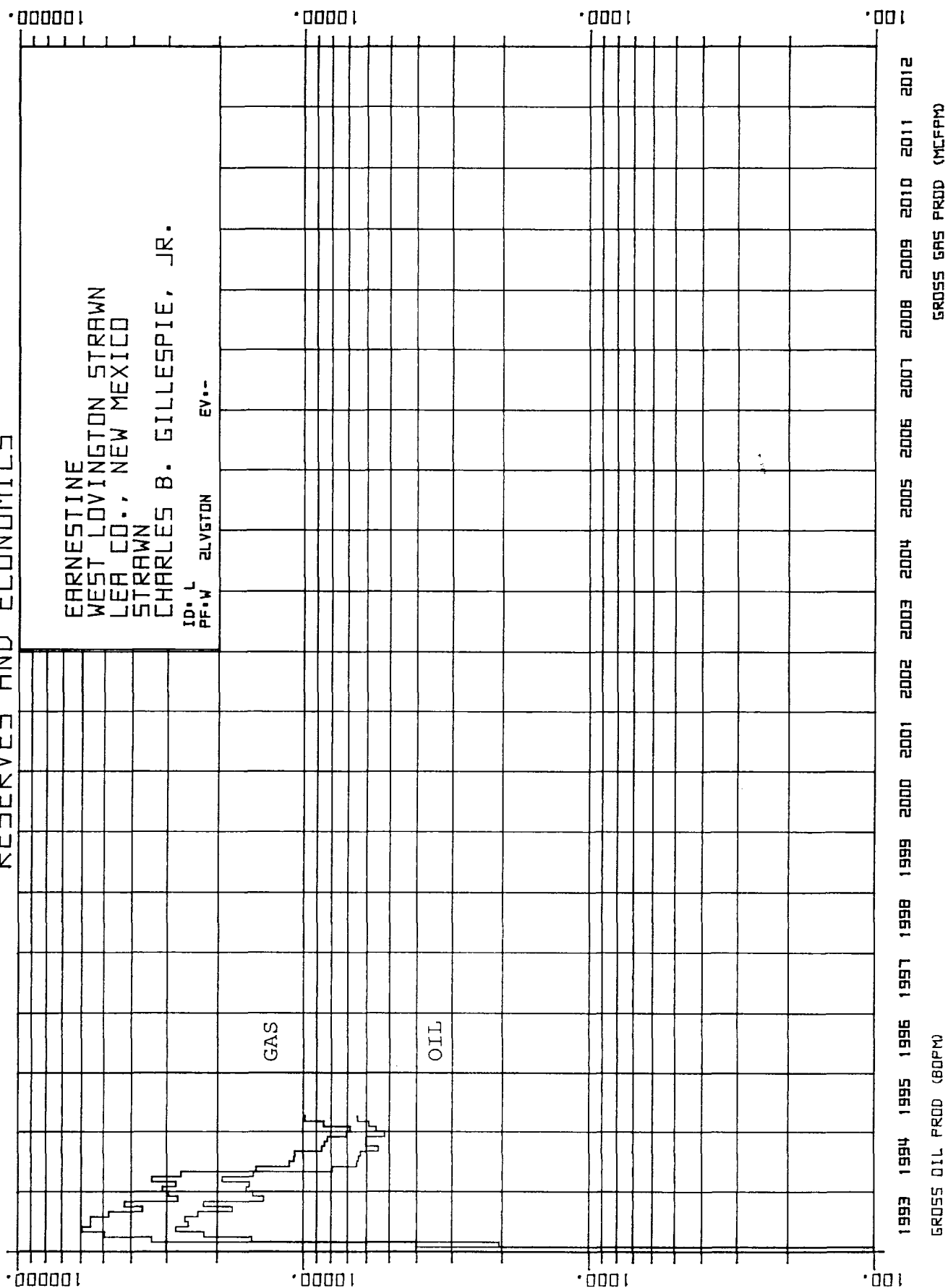
GAS OIL RATIO

LEASE: EARNESTINE					
MONTH	OIL	GAS	GOR	CUM OIL	CUM GAS
1993					
January					
February	2129	4014	1885	2129	4014
March	21673	46715	2155	23802	50729
April	22581	49601	2196	46383	100330
May	27246	59543	2185	73629	159873
June	25680	55343	2155	99309	215216
July	26570	55514	2089	125879	270730
August	23210	47982	2067	149089	318712
September	19066	36403	1909	168155	355115
October	22191	42279	1905	190346	397394
November	14313	27364	1911	204569	424758
December	15319	28821	1881	219978	453579
TOTAL	219978	453579		219978	453579
1994					
January	15806	31139	1970	235784	484718
February	15412	27888	1809	251196	512606
March	19295	33877	1755	270491	546483
April	14947	26766	1790	285438	573249
May	7895	14588	1847	293333	587837
June	6507	11174	1717	29984	599011
July	6423	10764	1675	306263	609755
August	6287	10667	1696	312550	620442
September	5443	8608	1581	317993	629050
October	6042	8411	1392	324035	637461
November	6013	8218	1366	330048	645679
December	5177	7028	1356	335225	652707
TOTAL	115247	199128		335225	652707
1995					
January	5550	6832	1231	340775	659616
February	5901	8493	1439	346647	668109
March	6480	9903	1528	353156	678012
April					
May					
June					
July					
August					
September					
October					
November					
December					
TOTAL					

RESERVES AND ECONOMICS

ERNESTINE
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE, JR.

ID: L PF:W ZLVGTGN EV:--



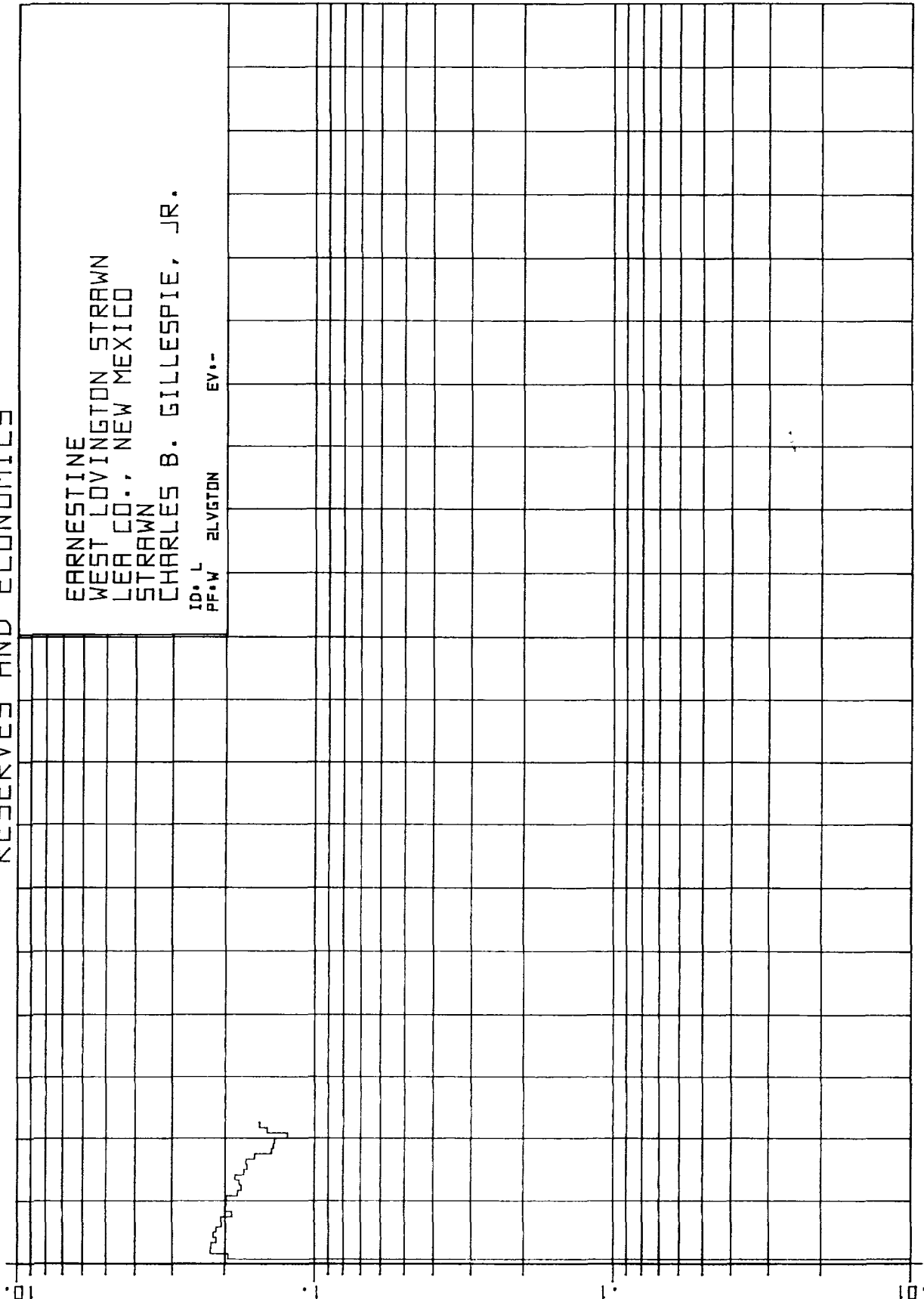
RESERVES AND ECONOMICS

ERNESTINE
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE, JR.

ID: L
PF:W 2LVGTON EV:-

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

GAS OIL RATIO



LEASE: SPEIGHT					
MONTH	OIL	GAS	GOR	CUM OIL	CUM GAS
1992					
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	9667	22275	2301	9667	22275
October	14666	32786	2235	24332	55061
November	12582	28767	2286	36915	83828
December	13210	30190	2285	50125	114018
TOTAL	50125	114018		50125	114018
1993					
January	13393	29245	2183	63518	143263
February	11787	25506	2164	75305	168769
March	14569	30601	2100	89874	199370
April	11337	24777	2185	101211	224147
May	13678	21289	2288	114889	245436
June	13370	31113	2327	128259	276549
July	14180	30785	2171	142439	307314
August	12505	26972	2157	154944	334286
September	9434	18900	2003	164378	353186
October	11210	24382	2175	175588	377568
November	7889	16010	2029	183477	393578
December	9092	18308	2013	192569	411886
TOTAL	142444	411886		192569	411886
1994					
January	8542	19429	2274	201111	431315
February	6467	13969	2160	207578	445284
March	5055	10531	2083	212633	455815
April	4278	9550	2232	216911	465365
May	3900	6224	1595	220811	471589
June	3012	5570	1849	223823	477159
July	3373	5464	1619	227196	482623
August	3504	7008	2000	230700	489631
September	2702	5821	2154	233402	495452
October	3106	7493	2448	236508	502945
November	3414	7988	2339	239922	510933
December	2986	5917	1981	242908	516850
TOTAL	50339	104964		242908	516850
1995					
January	2716	4830	1778	245624	521488
February	2702	4666	1727	248326	526154
March	2984	5527	1852	251310	531681
April					
May					
June					
July					

RESERVES AND ECONOMICS

SPEIGHT
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE, JR

ID. L
PF. W
ELVGTON
EV. --

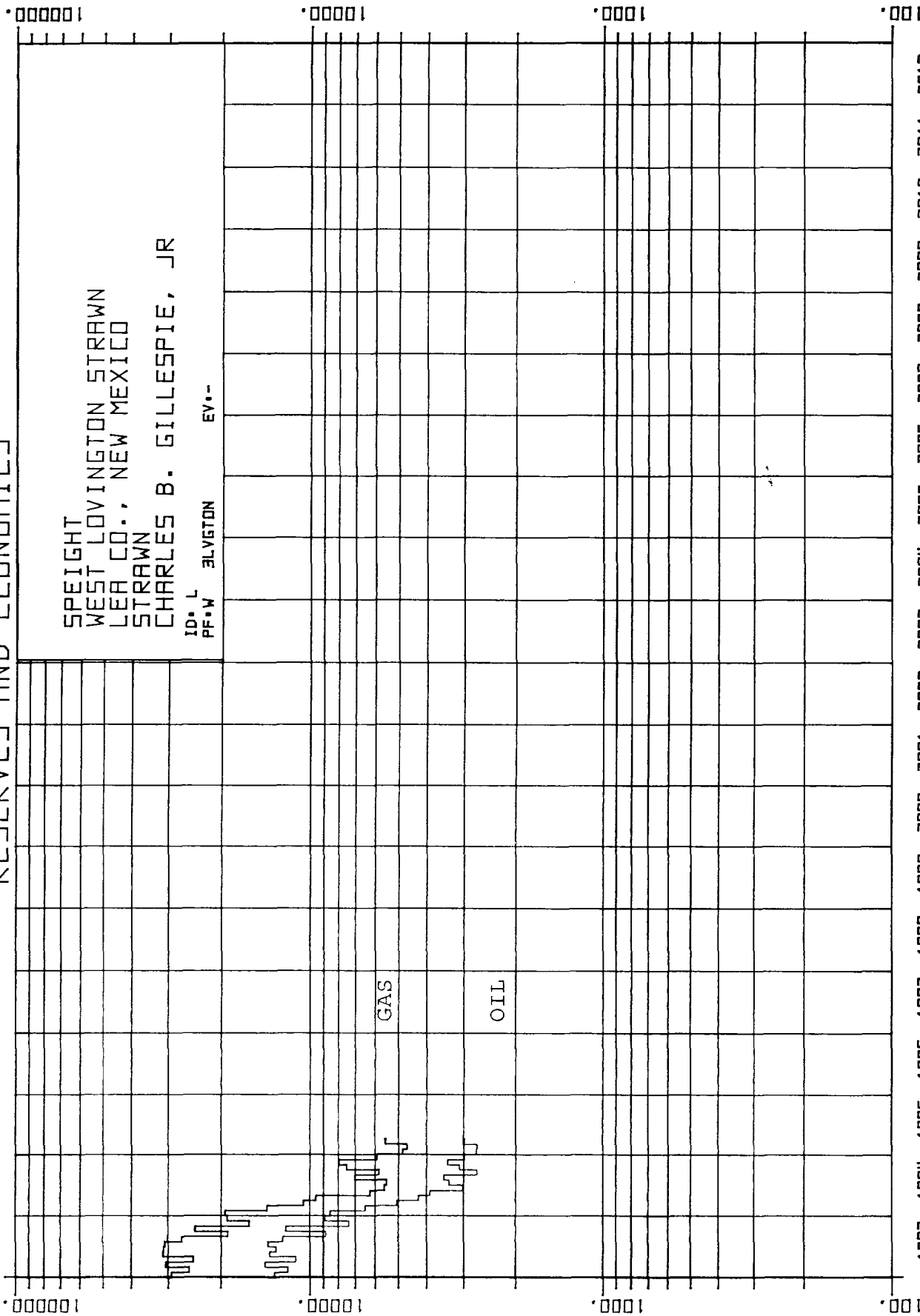
GAS

OIL

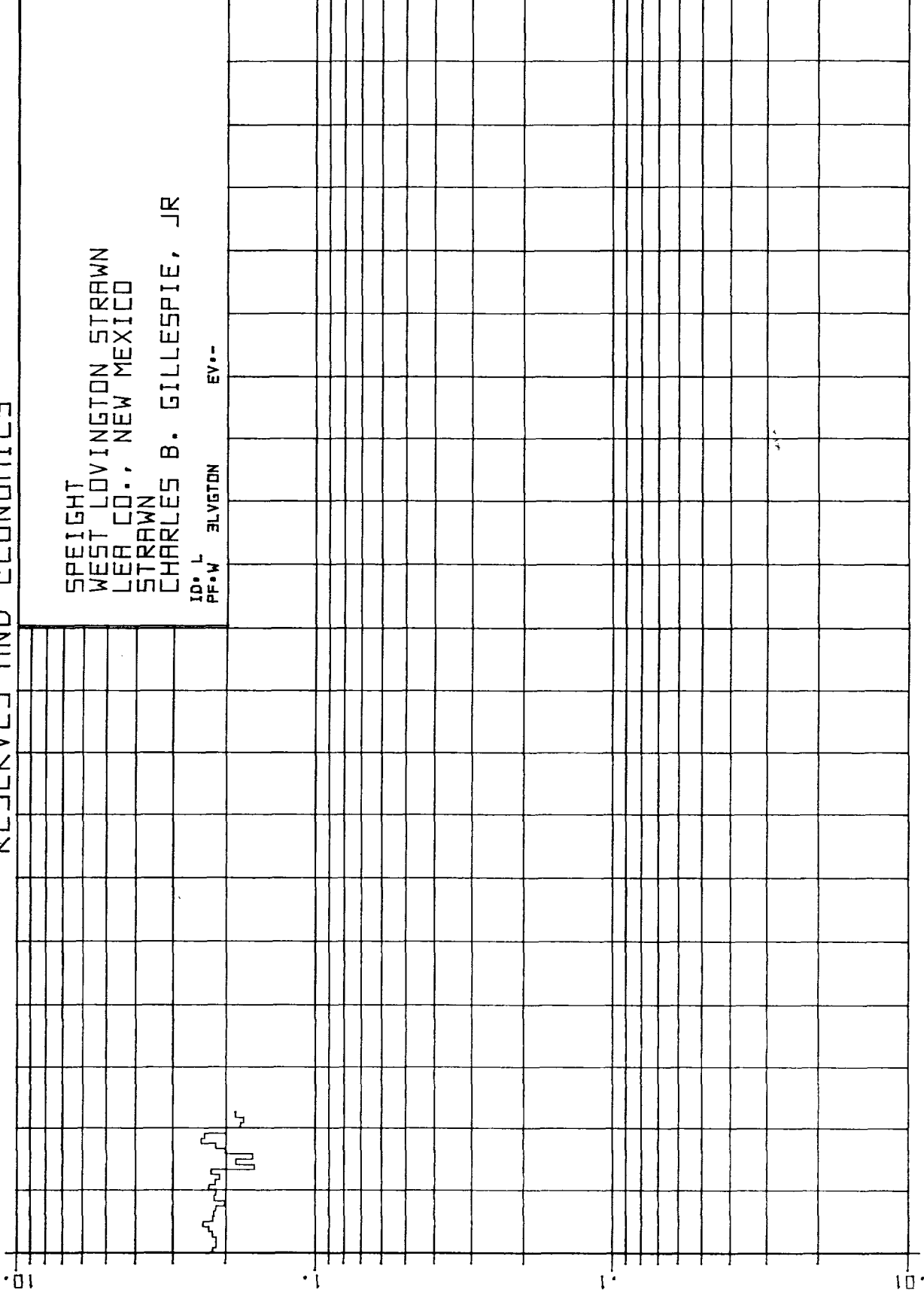
GROSS OIL PRDD (BOPM)

GROSS GAS PRDD (MCFPM)

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012



RESERVES AND ECONOMICS



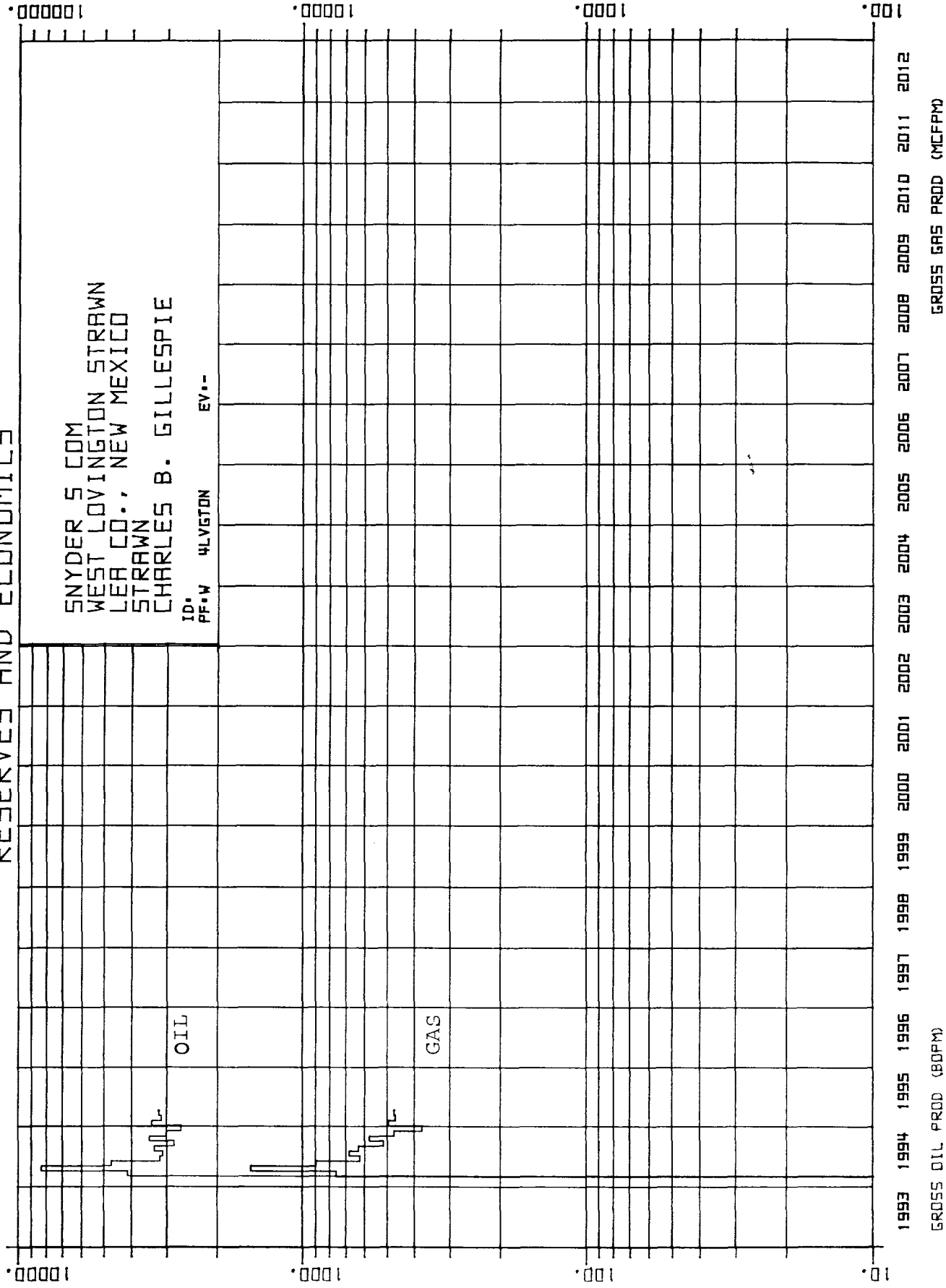
SPEIGHT
 WEST LOVINGTON STRAWN
 LEA CO., NEW MEXICO
 STRAWN
 CHARLES B. GILLESPIE, JR
 ID: L
 PF: W
 EV: --

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012
 GAS OIL RATIO

RESERVES AND ECONOMICS

SNYDER 5 COM
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE

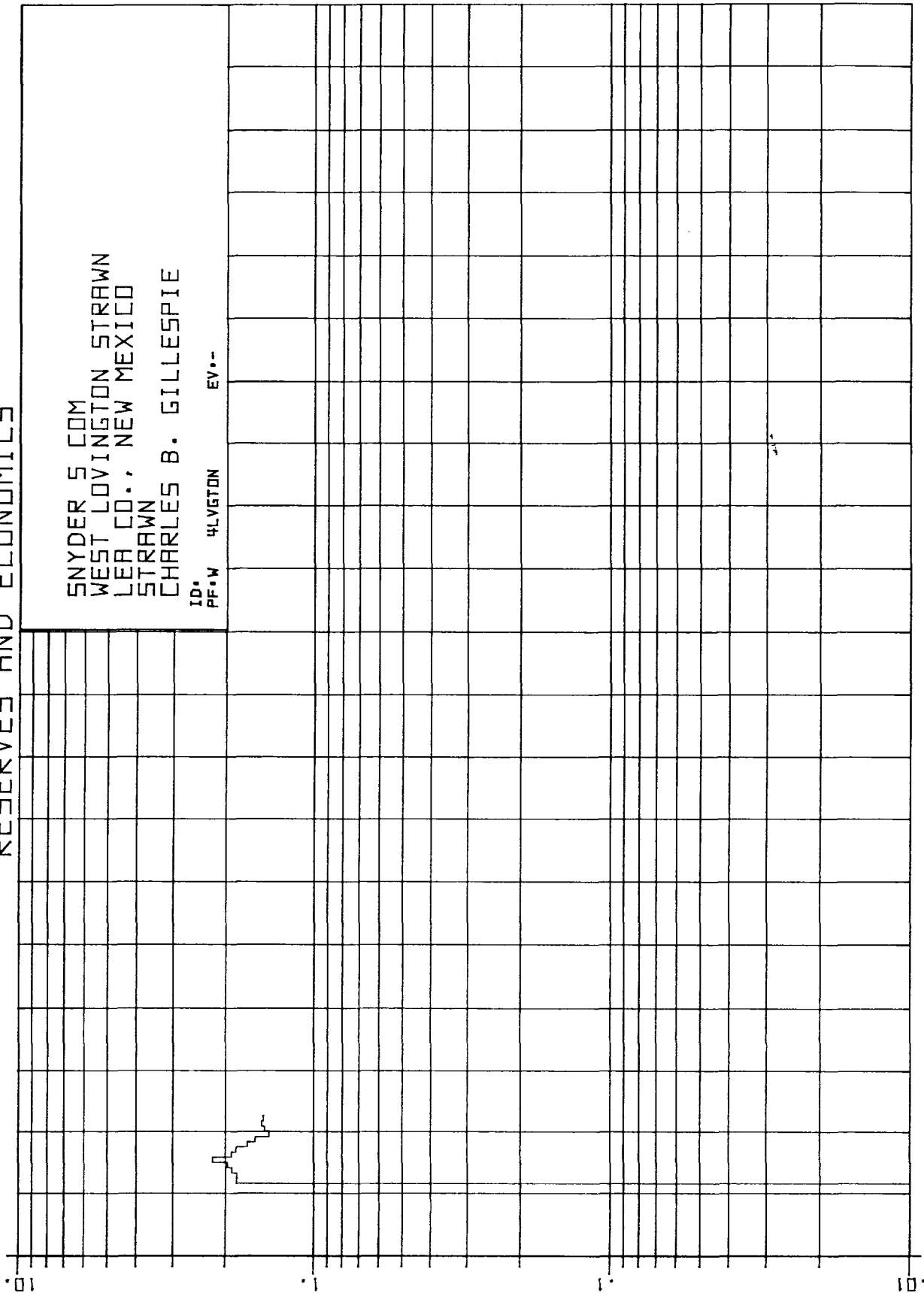
ID: PF:W 4LVGTGN EV:-



RESERVES AND ECONOMICS

SNYDER S COM
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE

ID: PF-W 4LVGTON EV:-



GAS OIL RATIO

LEASE: WILEY FEE

[illegible]

RESERVES AND ECONOMICS

WILEY FEE
 WEST LOVINGTON STRAWN
 LEA CO., NEW MEXICO
 STRAWN
 CHARLES B. GILLESPIE, JR.

ID: L
 PF: W SLVSTON EV: -

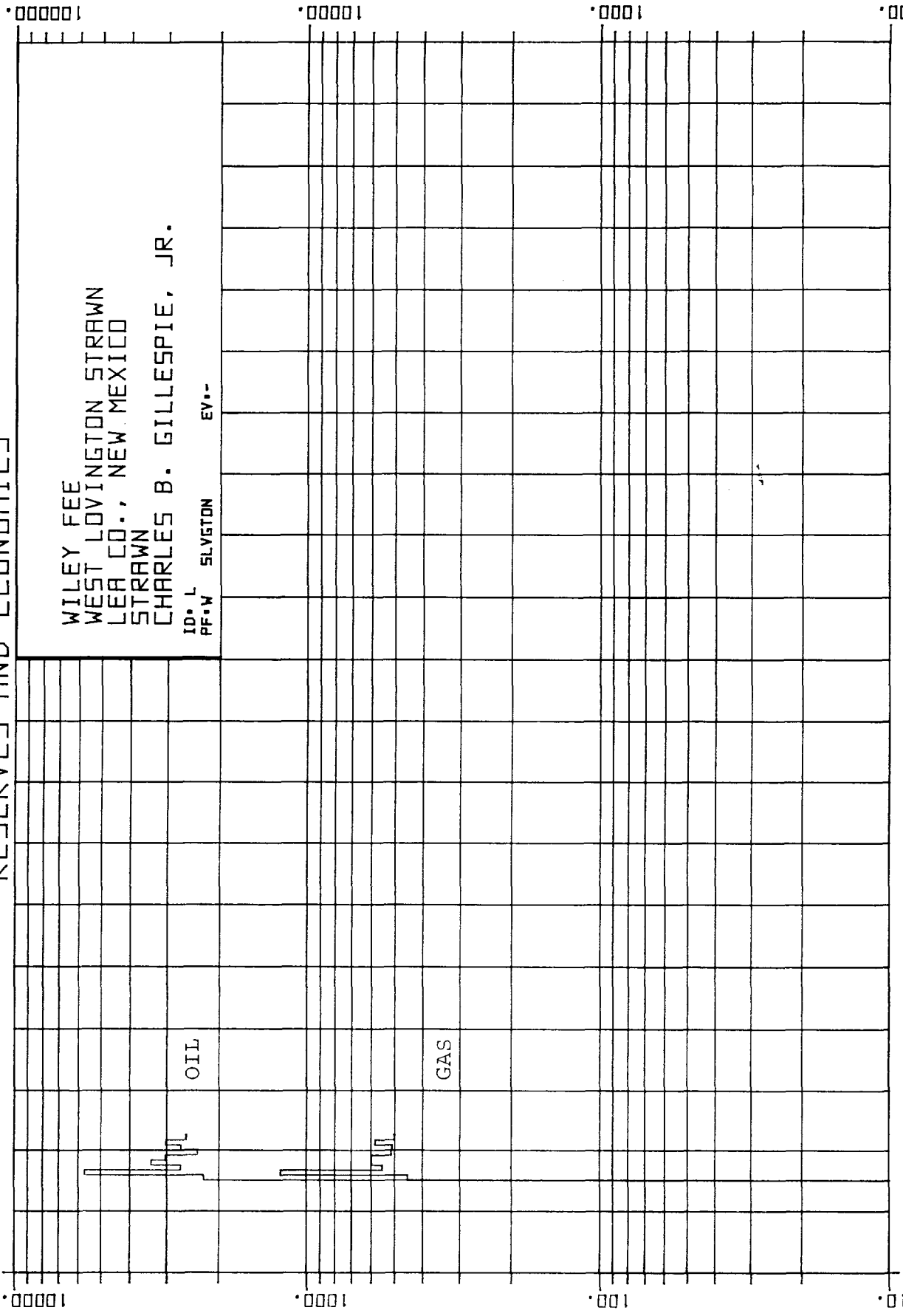
OIL

GAS

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

GROSS OIL PROD (BOPM)

GROSS GAS PROD (MCFPM)



RESERVES AND ECONOMICS

WILEY FEE
WEST LOVINGTON STRAWN
LEA CO., NEW MEXICO
STRAWN
CHARLES B. GILLESPIE, JR.

ID: L
PF: W SLVGTON EV: -

1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

GAS OIL RATIO