

EXHIBIT "B"

SAN JUAN 28-7 UNIT

RIO ARriba COUNTY, NEW MEXICO

GEOLOGIC REPORT

DAKOTA PRODUCING INTERVAL

PROPOSED TWENTY-THIRD, TWENTY-FOURTH,

AND TWENTY-FIFTH EXPANSIONS

OF THE DAKOTA PARTICIPATING AREA

EL PASO NATURAL GAS COMPANY

By: R. F. Lemon
R. F. Lemon, Director
Reservoir Engineering Dept.

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INTRODUCTION

The San Juan 28-7 Unit is located in the east central portion of the San Juan Basin and consists of all Township 28 North, Range 7 West and part of Township 27 North, Range 7 West, Rio Arriba County, New Mexico. The unit area is comprised of 31,006.28 acres.

Within the San Juan 28-7 Unit the "Dakota Producing Interval" has been tested by 52 wells of which 49 are considered to be capable of producing gas in commercial quantities. Two wells are noncommercial and one well has been plugged and abandoned in the Dakota formation. The Rincon Unit #203 is on a split drill site with the San Juan 28-7 Unit receiving one-half its production. The "Dakota Producing Interval" as defined by the New Mexico Oil Conservation Commission in Rule 25, Order No. R-1670-C, is ". . . from the base of the Greenhorn limestone to a point 400 feet below the base of the said formation and consisting of the Graneros formation, the Dakota formation and the productive upper portion of the Morrison formation."

Included as part of this report are two maps entitled Exhibit "C". Exhibit "C", Figure No. 1 shows the subsurface structure of the "Dakota Producing Interval" as reflected by using the top of the Graneros formation as the mapping horizon and mean sea level as the datum plane. The overall picture presented by this map is primarily that of gentle, regional northeast dip toward the axis of the San Juan Basin. Exhibit "C", Figure No. 2 is an isopachous map showing the number of feet of net reservoir sandstone which is interpreted to be present within the "Dakota Producing Interval". Detailed discussions of the stratigraphy and lithology of the "Dakota Producing Interval" in the general area of the San Juan 28-7 Unit may be found in geologic reports which have been previously submitted.

Also included with this report as Exhibit "D", Table No. 1 is a tabulation of the San Juan 28-7 Unit Dakota gas production. This tabulation shows by well the absolute open flow potential, date of first delivery into the gathering system, cumulative gas production to January 1, 1974, production by months for 1974 from January through November, 1974 annual production to December 1, 1974, and cumulative production to December 1, 1974. Wells within the Dakota Participating Area have produced a cumulative total of 16,433,149 Mcf as of December 1, 1974.

PROPOSED TWENTY-THIRD EXPANSION
OF THE DAKOTA PARTICIPATING AREA

Effective Date: July 1, 1974

The proposed Twenty-Third Expansion of the Dakota Participating Area is based upon the completion of the San Juan 28-7 Unit Well No. 218, 1,175 feet from the south line, 1,540 feet from the west line Section 12, T-28-N, R-7-W, Rio Arriba County, New Mexico. Only July 9, 1974, the 28-7 Unit No. 218 well was tested for three hours through a 0.75 inch choke on 1.990 inch tubing with the following test results:

Shut-in	15 Days
SIPC	2,641 psia
SIPT	2,638 psia
FPT	337 psia
WPC	535 psia
IP	4,066 Mcf/D
AOF	4,195 Mcf/D

Proposed Expanded Acreage

Township 28 North, Range 7 West

Section 10: East half Southeast Quarter
Section 11: South half except NE/4 SE/4
Section 14: North half

The subject well produces from the sand zone within the Graneros shale and from the Dakota "A" and "B" zones which are the upper and middle sandstone members of the Dakota formation. These producing horizons are correlative with other wells in the unit. The proposed acreage is inferred to be capable of producing unitized substances in commercial quantities from the Dakota "A" and "B" zones and the Graneros sandstone. Exhibit "C", Figure No. 2 illustrates the net reservoir sand which is interpreted to be present under the acreage proposed for admission to the Dakota Participating Area by the Twenty-Third Expansion.

PROPOSED TWENTY-FOURTH EXPANSION
OF THE DAKOTA PARTICIPATING AREA

Effective Date: November 1, 1974

The proposed Twenty-Fourth Expansion of the Dakota Participating Area is based upon the completions of the San Juan 28-7 Unit Well Nos. 228, 229 and 238 located, respectively, 2,090 feet from the South line, 1,830 feet from the West line Section 8, T-27-N, R-7-W; 800 feet from the South line, 1,850 feet from the East line, Section 32; 1,000 feet from the South line, 1,600 feet from the West line, Section 29, T-28-N, R-7-W, all in Rio Arriba County, New Mexico. On November 21, 1974 the 28-7 Unit No. 228 well was tested for three hours through a 0.75 inch choke on 1.990 inch tubing with the following test results:

Shut-in	19 Days
SIPC	2,342 psia
SIPT	2,227 psia
FPT	382 psia
WPC	594 psia
IP	4,162 Mcf/D
AOF	4,375 Mcf/D

On November 27, 1974 the 28-7 Unit No. 229 well was tested for three hours through a 0.75 inch choke on 1.990 inch tubing with the following test results:

Shut-in	30 Days
SIPC	2,452 psia
SIPT	2,452 psia
FPT	208 psia
WPT	460 psia
IP	1,959 Mcf/D
AOF	2,012 Mcf/D

On November 26, 1974 the 28-7 Unit No. 238 well was tested for three hours through a 0.75 inch choke on 1.990 inch tubing with the following test results:

Shut-in	31 Days
SIPC	2,482 psia
SIPT	2,332 psia
FPT	244 psia
WPC	541 psia
IP	2,848 Mcf/D
AOF	2,954 Mcf/D

Proposed Expanded Acreage

<u>Township 27 North, Range 7 West</u>	<u>Township 28 North, Range 7 West</u>
Section 5: West half	Section 29: All
Section 7: East half	Section 30: East half
Section 18: East half	Section 32: All

The subject wells produce from the sand zone within the Graneros shale and from the Dakota "A" and "B" zones which are the upper and middle sandstone members of the Dakota formation. These producing horizons are correlative with other wells in the unit. The proposed acreage is inferred to be capable of producing unitized substances in commercial quantities from the Dakota "A" and "B" zones and the Graneros sandstone. Exhibit "C", Figure No. 2 illustrates the net reservoir sand which is interpreted to be present under the acreage proposed for admission to the Dakota Participating Area by the Twenty-Fourth Expansion.

PROPOSED TWENTY-FIFTH EXPANSION
OF THE DAKOTA PARTICIPATING AREA

Effective Date: December 1, 1974

The proposed Twenty-Fifth Expansion of the Dakota Participating Area is based upon the completions of the San Juan 28-7 Unit Well Nos. 231 and 232 located, respectively, 1,495 feet from the North line and 875 feet from the West line Section 16, and 1,765 feet from the North line, 1,490 feet from the East line, Section 20; both in T-28-N, R-7-W, Rio Arriba County, New Mexico. On December 6, 1974 the 28-7 Unit No. 231 well was tested for three hours through a 0.75 inch choke on 1.990 inch tubing with the following test results:

Shut-in	23 Days
SIPC	2,697 psia
SIPT	2,127 psia
FPT	90 psia
WPC	337 psia
IP	869 Mcf/D
AOF	879 Mcf/D

On December 9, 1974 the 28-7 Unit No. 232 well was tested for three hours through a 0.75 inch choke on 1.990 inch tubing with the following test results:

Shut-in	22 Days
SIPC	2,592 psia
SIPT	2,509 psia
FPT	105 psia
WPC	490 psia
IP	1,911 Mcf/D
AOF	1,964 Mcf/D

Proposed Expanded Acreage

Township 28 North, Range 7 West

Section 15:	All
Section 16:	All
Section 17:	East half
Section 20:	All
Section 21:	West half

The subject wells produce from the sand zone within the Graneros shale and from the Dakota "A" and "B" zones which are the upper and middle sandstone members of the Dakota formation. These producing horizons are correlative with other wells in the unit. The proposed acreage is inferred to be capable of producing unitized substances in commercial quantities from the Dakota "A" and "B" zones and the Graneros sandstone. Exhibit "C", Figure No. 2 illustrates the net reservoir sand which is interpreted to be present under the acreage proposed for admission to the Dakota Participating Area by the Twenty-Fifth Expansion.

SAN JUAN 28-7 DK
HIO. ARTHA COUNTY, NEW MEXICO

VOLUMES IN MCF AT 15,025 PSIA AND 60 DEGREES F.

WELL NAME AND NO.	DATE OF FIRST DELIVERY	1-1-74 CUM PROD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	1974 PROD	12-1-74 CUM PROD
SJ 28-7 UNIT #98 DK	2/27/70	349271	2019	1935	2218	2085	2422	1970	1869	2136	2183	2078	1584	22479	371750
SJ 28-7 UNIT #109 DK	10/93	213957	0	0	0	0	0	0	237	0	0	0	0	237	214194
SJ 28-7 UNIT #125	6/30/70	1354025	6735	4993	7335	8054	8040	5390	5340	5369	5183	6295	8429	71161	1425188
SJ 28-7 UNIT #126	6/11/70	1139721	6430	3760	6421	3212	7811	6714	6380	4804	7502	4663	7719	69536	1208272
SJ 28-7 UNIT #130	3/16/70	1130600	8426	4111	7068	6380	7007	6892	6490	3040	6277	4742	6199	72672	1203272
SJ 28-7 UNIT #128	4/333	63701725	8045	5689	7432	7501	7362	5866	7420	7188	5297	4288	7193	72281	1175791
SJ 28-7 UNIT #133	2/26/70	1008558	5281	1458	2253	6832	1845	8891	7860	5949	7805	7545	7198	72907	1081465
SJ 28-7 UNIT #132	4/6/70	668786	3841	2517	3369	3140	2108	3228	3228	3169	3077	3812	3514	34502	703288
SJ 28-7 UNIT #136	3/315	65704708	5546	3825	4833	4730	5135	3896	3632	6177	6177	6896	5771	58518	817834
SJ 28-7 UNIT #124	6/318	66703714	8213	6129	7193	8141	7872	7191	6692	6406	6671	6710	7706	78194	1081288
SJ 28-7 UNIT #145	3/950	68701116	4191	4006	4388	5023	4861	4877	6258	6147	5549	5696	4667	57203	562666
SJ 28-7 UNIT #147	2/569	69711114	4979	1459	6103	1285	3823	3716	4727	4606	5003	4654	2181	42536	333029
SJ 28-7 UNIT #158	2/842	71709724	3983	3363	3937	3387	3033	3763	3763	3970	3584	3537	4095	40555	220524
SJ 28-7 UNIT #159	3/662	71710708	3374	2355	3740	3097	2586	3034	3087	3299	3117	3499	3096	33874	185725
SJ 28-7 UNIT #153	3/958	71712709	3359	9005	8432	8531	7326	5988	6724	6854	7459	7890	9108	80456	292543
SJ 28-7 UNIT #151	1/682	71712709	134329	2622	3134	2986	3103	2539	2614	3140	664	2849	2435	29753	164082
SJ 28-7 UNIT #156	5/621	71712712	13116	9363	11066	10418	11998	8188	10425	10445	11061	8339	6701	108620	495159
SJ 28-7 UNIT #129	5/314	72701720	396303	12950	11903	10981	10981	9405	11940	12111	10200	11655	7175	116277	512660
SJ 28-7 UNIT #157	6/371	72701722	9300	6726	8124	8591	7591	6191	7455	6232	7265	7491	7238	82604	342904
SJ 28-7 UNIT #154	1/667	72701725	3456	2348	3034	2739	2740	2037	2419	2354	327	1438	3376	26288	121203
SJ 28-7 UNIT #152	3/377	72701728	5526	4828	5975	5242	5163	3577	3413	7354	4811	5286	5117	55999	242272
SJ 28-7 UNIT #155	2/732	72701729	222448	186293	186293	186293	186293	186293	186293	186293	186293	186293	186293	186293	293891
SJ 28-7 UNIT #165	4/448	72709701	171918	4564	5732	5888	5742	5899	5671	6110	6299	7789	8865	71443	293891
SJ 28-7 UNIT #164	4/233	72709713	152346	6011	7733	4186	7024	4714	145	4339	6385	9385	7840	66572	228117
SJ 28-7 UNIT #166	4/104	72711709	70423	9723	7287	5742	7836	6379	6178	6712	6802	5176	7191	90558	127685
SJ 28-7 UNIT #189	4/226	73706719	9811	6756	10174	11468	7836	6379	7649	8509	7590	7704	6482	90558	192330
SJ 28-7 UNIT #190	4/263	73707702	94311	8549	7898	7659	6329	5897	7433	7072	5122	6779	6655	75900	170211
SJ 28-7 UNIT #131	4/442	73707703	16296	9241	9163	10716	10802	11129	3454	4016	13302	12251	5881	106251	242636
SJ 28-7 UNIT #135	4/501	73707703	113221	10166	12676	11494	8968	7720	9621	9598	7400	9266	8749	109558	222789
SJ 28-7 UNIT #191	2/676	73707705	79093	12954	10599	12205	439	7409	11174	7357	6349	7841	10049	95338	174431
SJ 28-7 UNIT #193	3/634	73707706	69969	5605	4514	7606	4946	4238	4533	5155	4436	1504	514	47455	117424
SJ 28-7 UNIT #194	2/737	73707714	60278	6143	7047	6844	5669	4812	5509	5898	4910	5254	4674	65748	160026
SJ 28-7 UNIT #186	5/553	73709721	139294	4991	32557	27135	20768	18782	19648	15015	22073	20119	18965	232349	371643
SJ 28-7 UNIT #187	2/446	73709725	12778	8960	11387	10592	9172	8641	7367	10408	10085	9656	9037	107983	161488
SJ 28-7 UNIT #168	4/979	74702726	0	0	40527	21874	21796	14142	14796	10497	14038	15648	13378	166896	166896
SJ 28-7 UNIT #163	4/256	74703704	0	0	27937	20663	24261	18914	11553	7619	17058	11596	12706	152327	152327
SJ 28-7 UNIT #182	1/818	74703705	0	0	4826	18922	24883	26875	13031	9278	23211	18660	14173	152659	152659
SJ 28-7 UNIT #203	5/528	74703707	0	0	27535	13057	10513	23867	27377	26319	20872	19773	12445	181758	181758
SJ 28-7 UNIT #184	2/388	74703715	0	0	11984	18907	3468	0	20376	15286	12879	11304	8322	102726	102726
SJ 28-7 UNIT #181	2/020	74703721	0	0	4979	20190	29755	17088	17031	652	23526	20985	3180	137386	137386
SJ 28-7 UNIT #185	2/663	74706725	0	0	0	0	0	0	19748	11202	10745	6654	8247	58796	58796
SJ 28-7 UNIT #214	4/249	74711705	0	0	0	0	0	0	0	0	0	0	32395	32395	32395
SJ 28-7 UNIT #220	4/109	74711706	0	0	0	0	0	0	0	0	0	0	34523	34523	34523
SJ 28-7 UNIT #215	4/494	74712709	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #229	2/012	75701709	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #230	2/554	75701728	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #231	879	75702704	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #232	1/964	75702704	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #216	2/226	75702706	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #218	4/195	75702707	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #238	2/954	75702707	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-7 UNIT #228	4/375	75703725	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTALS 12999413 271767 180791 370661 352181 332960 292277 331212 284850 339534 334600 343103 3433736 16433149