

EXHIBIT "B"
SAN JUAN 28-5 UNIT
RIO ARriba COUNTY, NEW MEXICO
GEOLOGIC REPORT
DAKOTA PRODUCING INTERVAL
PROPOSED SEVENTEENTH AND EIGHTEENTH EXPANSIONS
OF THE DAKOTA PARTICIPATING AREA

EL PASO NATURAL GAS COMPANY

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INTRODUCTION

The San Juan 28-5 Unit is located in the east central portion of the San Juan Basin and consists of all Township 28 North, Range 5 West. The unit area is comprised of 17,399.68 acres.

Within the San Juan 28-5 Unit the "Dakota Producing Interval" has been tested by 47 wells, one of which is non-commercial. 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 28-5 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 28-5 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, 1977, production by months for 1977 from January through November, 1977, annual production to December 1, 1977, and cumulative production to December 1, 1977. Wells within the Dakota Participating Area have produced a cumulative total of 63,709,400 Mcf as of December 1, 1977.

PROPOSED SEVENTEENTH EXPANSION
OF THE DAKOTA PARTICIPATING AREA

Effective Date: November 1, 1977

The proposed Seventeenth Expansion of the Dakota Participating Area is based upon the completion of the San Juan 28-5 Unit well number 94 by El Paso Natural Gas Company, the unit operator. This well is located 1190 feet from the south line and 1480 feet from the east line, Section 25, Township 28 North, Range 5 West, Rio Arriba County, New Mexico. On November 22, 1977 the San Juan Unit 28-5 No. 94 well, on after frac gauge for sizing equipment only, flowed at the rate of 916 Mcf/d. Shut-in pressures were 2325 psia casing and 1557 psia tubing.

Proposed Expanded Acreage

Township 28 North, Range 5 West

Section 25: East half

PROPOSED EIGHTEENTH EXPANSION
OF THE DAKOTA PARTICIPATING AREA

Effective Date: December 1, 1977

The proposed Eighteenth Expansion of the Dakota Participating Area is based upon the completion of the San Juan 28-5 Unit well number 97 by El Paso Natural Gas Company, the unit operator. This well is located 2030 feet from the north line and 885 feet from the east line, Section 14, Township 28 North, Range 5 West, Rio Arriba County, New Mexico. On December 8, 1977 the San Juan Unit 28-5 No. 97 well, on after frac gauge for sizing equipment only, flowed at the rate of 646 Mcf/D. Shut-in pressures were 2714 psia casing and 2053 psia tubing.

Proposed Expanded Acreage

Township 28 North, Range 5 West

Section 14: East half

Section 23: East half and Northwest quarter

The subject wells produce from the Dakota "A" and "B" zones which are the upper and middle sandstone members of the Dakota formation. To a lesser extent, they also produce from the sandstone development within the Graneros shale. These producing sands correlate between the subject wells and other wells in the unit. The proposed expanded acreage is inferred to be capable of producing unitized substances in commercial quantities from the above mentioned sandstones. 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 Seventeenth and Eighteenth Expansions.

EXHIBIT 10011
TABLE NO. 1
SAN JUAN 28-5 DK
RTE ADIRATA COUNTY, NEW MEXICO

VOLUMES IN MCF AT 15.025 PSIA AND 60 DEGREES F.

WELL NAME AND NO.	DATE UP MCF/D	1-1-77 CUM PROD	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	1977 PROD	12-1-77 CUM PROD
SJ 28-5 UNIT 94	916*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-5 UNIT 97	606*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ 28-5 UNIT #33	617	59709/26	2855	5821	6125	7958	8004	3313	8108	4820	7180	4150	3687	62665	2253400
SJ 28-5 UNIT #34	5279	59709/26	4886	4870	4954	2620	7230	4575	5953	6054	4041	6297	4043	62691	2045707
SJ 28-5 UNIT #35	4694	60709/21	3226	5570	4977	2789	2789	2831	4226	2895	3041	3297	4043	38770	1102406
SJ 28-5 UNIT #41	3991	60709/16	4442	5030	6392	5607	4168	4116	5865	5512	3785	3710	5103	53220	2154134
SJ 28-5 UNIT #42	9226	60710/14	5029	6790	6838	5041	5511	4845	7351	6154	4807	5094	5587	65100	2509080
SJ 28-5 UNIT #44	4833	60712/04	14233	11952	8806	12590	12289	9002	11151	12130	10775	11643	9439	120014	3933006
SJ 28-5 UNIT #46	5800	63702/14	15669	6131	4856	5834	6093	5901	5578	6159	4005	5692	62757	82757	1674404
SJ 28-5 UNIT #48	6194	63702/15	4181	6577	4130	4952	4952	2923	6965	6152	5190	5150	1780	53691	1321307
SJ 28-5 UNIT #59	6617	63702/19	1947443	7381	7733	6877	5669	5428	7241	9317	8535	3658	6150	72889	2076332
SJ 28-5 UNIT #63	5822	63703/27	6872	8961	8816	8282	6337	6207	9031	8000	8263	7939	6150	85991	1667612
SJ 28-5 UNIT #63	6406	63703/27	3492221	18292	19862	20230	19786	10859	18657	19185	18071	17874	17260	185034	3679655
SJ 28-5 UNIT #66	7939	63703/28	3495646	16941	20904	13852	20800	6906	120	13703	998	10843	9985	137063	3679655
SJ 28-5 UNIT #60	6375	63703/28	271231	6889	8071	7762	5044	5157	7833	11868	10119	7703	9647	88992	3679655
SJ 28-5 UNIT #60	4455	63704/01	3228	1700	253	2428	3661	3368	3934	3208	2505	2693	2601	32069	2805123
SJ 28-5 UNIT #61	5483	63704/02	5869	3863	4678	4866	4808	3087	4374	4919	5130	4978	4139	51681	1140087
SJ 28-5 UNIT #65	12592	63704/03	38140	37280	28319	20631	3535	26038	18035	4554	4588	4426	3620	208893	4900849
SJ 28-5 UNIT #62	3030	63704/03	3936	4830	4635	3411	3484	3273	4441	15720	10837	14638	14008	18838	9523358
SJ 28-5 UNIT #64	4417	63704/10	18502	17461	12955	11984	12045	13176	13477	15720	10837	14638	14008	156307	3013289
SJ 28-5 UNIT #67	6618	67708/16	7406	4921	6791	6972	7453	4673	6615	6645	6085	5211	4953	67945	1304504
SJ 28-5 UNIT #72	4098	67708/17	9879	9278	6776	8924	8259	5765	5907	7215	4121	10987	9236	88347	1354627
SJ 28-5 UNIT #71	5008	67709/22	1250883	8800	6604	8261	6386	5717	4923	5040	5463	7091	7712	76267	1348950
SJ 28-5 UNIT #73	3300	67709/22	60503	5104	3876	3741	4601	4305	3023	4814	3123	3392	4689	45066	690349
SJ 28-5 UNIT #74	5782	67709/23	1038025	7424	8784	7687	7704	7673	5392	6924	6576	7406	7914	79073	1117898
SJ 28-5 UNIT #70	3433	67711/01	533566	3411	2624	3500	3476	2536	2164	3115	2205	2858	2700	32222	567788
SJ 28-5 UNIT #68	6184	67711/02	1036510	4534	1734	1657	1835	2530	2709	3929	2980	3670	3503	4031	1076901
SJ 28-5 UNIT #45	2601	67711/02	350550	2624	2624	1657	1835	2530	2709	3929	2980	3670	3503	4031	1076901
SJ 28-5 UNIT #69	4908	67711/01	326590	2555	3892	4904	4588	3925	3045	3472	4130	4182	5479	48303	1324587
SJ 28-5 UNIT #78	2944	68711/01	326590	2555	3892	4904	4588	3925	3045	3472	4130	4182	5479	48303	1324587
SJ 28-5 UNIT #76	4309	68711/08	1094573	2886	4821	4266	4959	2163	2270	2238	1663	2159	3181	25313	352103
SJ 28-5 UNIT #77	3178	68711/08	362354	2340	1266	2624	2300	1937	1555	1804	1573	1779	2007	21151	1158787
SJ 28-5 UNIT #75	4773	68711/08	828341	3221	4629	5330	5608	3400	4602	4788	4867	3685	4559	50560	876905
SJ 28-5 UNIT #80	2198	69708/18	471514	3091	4155	3193	3370	4496	3126	3188	3882	3490	3664	40785	512301
SJ 28-5 UNIT #81	2608	69709/08	259578	2031	2345	1644	1848	1450	669	1183	621	802	470	14913	274901
SJ 28-5 UNIT #82	4428	69709/12	580362	5359	4176	4924	2617	2294	5773	3980	4674	3158	3140	4131	622103
SJ 28-5 UNIT #79	4179	69709/16	1091785	9716	7178	9896	9388	5092	10091	9700	9422	8900	8800	98321	1190108
SJ 28-5 UNIT #83	5970	69710/08	1192380	9370	7037	9398	9297	8988	10091	9700	9422	8900	8800	98321	1190108
SJ 28-5 UNIT #85	3403	71706/08	1395183	12622	11735	14922	14284	6157	10173	7912	12048	10350	10023	10063	1294052
SJ 28-5 UNIT #84	4192	71706/09	1156975	10372	11149	13907	13907	7920	13778	13213	12833	12016	12016	143021	1538604
SJ 28-5 UNIT #87	3305	71706/13	429070	4010	4854	5331	13954	9271	16412	13323	13740	13870	13024	140188	1301163
SJ 28-5 UNIT #87	2734	72708/15	437878	6640	5030	5204	4431	4280	7583	6885	8412	6097	6475	85251	4805008
SJ 28-5 UNIT #88	533	72708/19	660917	14907	8953	12660	10773	6893	11797	10462	10990	11164	11375	127097	788014
SJ 28-5 UNIT #89	332	72708/19	360834	6378	4247	4635	5205	2802	4987	4460	5031	4775	4865	51800	412434
SJ 28-5 UNIT #92	2374	73710/20	70087	1813	2033	1070	1007	1051	995	1390	1154	980	955	13660	84107
SJ 28-5 UNIT #91	2905	73710/24	309841	6378	7361	8300	7769	4400	7974	8028	7820	7450	6869	79878	428519
SJ 28-5 UNIT #93	1208	75701/14	288045	10810	7057	10714	10622	6201	11231	10580	10599	10205	9431	109342	397787
TOTALS			342983	330361	326716	314329	303182	242963	303207	301804	276662	294620	292554	3322073	63708000

*After Frac Gauge
For Sizing Equipment Only