

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.
Operator El Paso Natural Gas Co. Well Name and No. Texas Pacific Com Well No. 1R
Location: Unit 0 Sec. 16 Twp. 29N Rng. 10W Cty. San Juan

II.

THE DIVISION FINDS:

- (1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.
- (2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.
- (3) That the well for which a finding is sought is completed in the Aztec-Pictured Cliffs Gas Pool, and the standard spacing unit in said pool is 160 acres.
- (4) That a 156.44-acre proration unit comprising the SE/4 of Sec. 16, Twp. 29N, Rng. 10W, is currently dedicated to the Texas Pacific Com Well No. 1 located in Unit I of said section.
- (5) That this proration unit is (X) standard () nonstandard; if nonstandard, said unit was previously approved by Order No. _____.
- (6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.
- (7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 170-200 M MCF of gas from the proration unit which would not otherwise be recovered.
- (8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.
- (9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on this 6th day of February, 19 81.


DIVISION DIRECTOR EXAMINER

OIL CONSERVATION DIVISION
P. O. Box 2088
SANTA FE, NEW MEXICO
87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

ADMINISTRATIVE ORDER

NFL 23

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

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Operator El Paso Natural Gas Co Well Name and No. Texas Pacific Gas Well No 1R
Location: Unit 0 Sec. 16 Twp. 29 N Rng. 10 W Cty. San Juan

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- (3) That the well for which a finding is sought is to be completed in the 172 sec - Pictured
Cliffs Gas Pool, and the standard spacing unit in said pool is 160 acres.
- (4) That a 156.44 -acre proration unit comprising the SE 1/4
of Sec. 16, Twp. 29 N, Rng. 10 W, is currently dedicated to the Texas Pacific Gas
Well No 1 located in Unit I of said section.
- (5) That this proration unit is ☒ standard () nonstandard; if nonstandard, said unit was previously approved by Order No. _____.
- (6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.
- (7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 170-200 M MCF of gas from the proration unit which would not otherwise be recovered.
- (8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.
- (9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

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DONE at Santa Fe, New Mexico, on this 6th day of Feb, 19 81.

DIVISION DIRECTOR _____

EXAMINER _____

El Paso NATURAL GAS
COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

October 14, 1980

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

RECEIVED

OCT 21 1980

Oil Conservation

Attention: Mr. Joe D. Ramey

Dear Mr. Ramey:

Re: El Paso Natural Gas Company
Texas Pacific Com. No. 1R,
SE/4, Section 16, T-29-N, R-10-W,
Aztec Pictured Cliffs Pool,
San Juan County, New Mexico

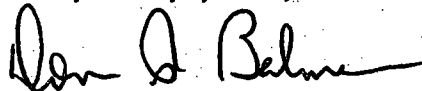
Enclosed you will find both an application for determination under the NGPA and a request for an administrative finding that the drilling and completing of our Texas Pacific Com. No. 1R is necessary to effectively and efficiently drain the proration unit. This well is completed in the Aztec Pictured Cliffs Pool and is the second well on the proration unit.

We send these instruments together and request that upon an affirmative finding that the well is necessary, that you will incorporate said finding with the application for determination and then consider the application for determination.

We think that this will comply with NMOCD Order Nos. R-5878-B and R-6013-A.

Should you feel that we should file these instruments in a different manner, please advise.

Very truly yours,



D. R. Balmer
Reservoir Engineering Dept.

DRB:cc

Enclosures



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

January 19, 1981

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mr. Don Balmer
El Paso Natural Gas Co.
P. O. Box 1492
El Paso, Texas 79978

Re: Request for Infill Findings,
Texas Pacific Com Well No. 1R,
Unit O, Sec. 16, T-29-N, R-10-W,
San Juan County, New Mexico

Dear Mr. Balmer:

The subject application was received on October 21, 1980. It was also the subject of a later meeting between us wherein we attempted to arrive at a set of guidelines for such applications.

This latter process being unsuccessfully completed, we are requesting the following data in order to process the application originally received:

- (1) Any current shut-in pressures on Well No. 1.
- (2) An explanation of the data used to establish the remaining recoverable reserves on the surrounding proration units.
- (3) A volumetric reserves calculation for Well No. 1R showing the data upon which such calculations was based.

Sincerely,

R. L. STAMETS
Technical Support Chief

RLS/dr

*letter to
Dec 15
for relative
to NGP
application*

*1972 lost
Joe
525 million
225 remaining
recoverable*

El Paso NATURAL GAS
COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

January 26, 1981

NGPA

State Of New Mexico
Energy And Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. R. L. Stamets

Dear Sir:

Re: Texas Pacific Com. No. 1R
0-16-29N-10W
Aztec Pictured Cliffs Field
San Juan County, New Mexico

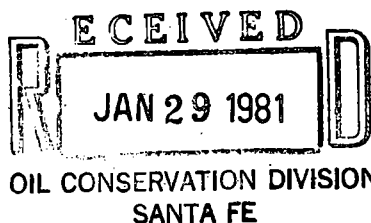
In answer to your recent letter, responses to your three requests are as follows:

Request No. 1: Any current shut-in pressure on Well No. 1.

Response No. 1: This well is classified as exempt marginal, therefore, we have no recent shut-in pressures. The latest shut-in pressure taken was on May 11, 1972 and was 310 psia.

Request No. 2: An explanation of the data used to establish the remaining recoverable reserves on the surrounding proration units.

Response No. 2: Mr. Joe Ramey asked for the same information in an earlier request. We answered him in a letter dated December 15, 1980. A copy of our letter, with attachments, is enclosed.

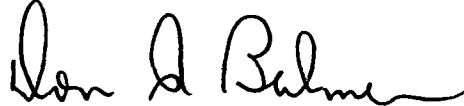


} Section 103
NGPA Act
This well

Request No. 3: A volumetric reserve calculation for Well No. 1R showing the data upon which such calculations was based.

Response No. 3: Attached is a volumetric calculation worksheet showing the various factors used in arriving at an estimated gas in place of 200 MMcf.

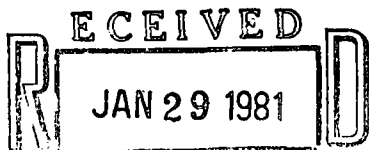
Yours very truly,



D. R. Balmer
Reservoir Engineering Dept.

DRB:cc

Enclosures



OIL CONSERVATION DIVISION
SANTA FE

El Paso NATURAL GAS
COMPANY

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-543-2600

December 15, 1980

NGPA

State Of New Mexico
Energy And Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey

Dear Sir:

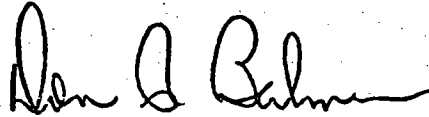
Re: Texas Pacific Com. No. 1R
0-16-29N-10W
Aztec Pictured Cliffs Field
San Juan County, New Mexico

Per your request, attached are copies of pressure-decline curves on wells located on proration units adjacent to the subject well's proration unit. Also attached is a work sheet that shows how we estimated the additional reserves to be recovered as a result of drilling and completing the Texas Pacific Com. No. 1R.

You also inquired as to whether a volumetric determination could be made utilizing information from the new well. We feel that if the volumetric approach is to be used, logs from surrounding wells should be reviewed and an isopach of the pay be constructed so as to determine thickening and thinning within the proration unit. After planimetering the proration unit, a volumetric gas in place estimate could be made. This would be the most desirable approach to the volumetric method. However, a volumetric approach would still require an estimate of a recovery factor which is extremely difficult to determine in the San Juan Basin. But if on the other hand, these same surrounding wells have some pressure-production performance history, then this performance is a more reliable tool to use to estimate additional reserves to be recovered.

Inasmuch as we do have pressure-production performance on the surrounding proration units, we chose to use this method.

Yours very truly,

A handwritten signature in dark ink, appearing to read "D. R. Balmer", with a stylized, flowing script.

D. R. Balmer
Reservoir Engineering Dept.

DRB:cc

Attachments

**CALCULATION WORKSHEET FOR ESTIMATING ADDITIONAL GAS
 TO BE RECOVERED FROM PRORATION UNIT AS A
 RESULT OF DRILLING THE EPNG TEXAS PACIFIC COM. NO. 1R,
 SE/4, SECTION 16, T-29-N, R-10-W,
 AZTEC PICTURED CLIFFS FIELD, SAN JUAN COUNTY, NEW MEXICO**

(Volumes MMcf At 15.025 Psia)

Well Name And Number	Location U-S-T-R	Original ^{1/} Recoverable Reserves	7-1-80 Cumulative Production	7-1-80 Remaining Recoverable Reserves
Schultz Com. A #5	D-16-29-10	690	515	175
Schultz Com. D #8	A-16-29-10	820	637	183
Schultz Com. B #6	M-16-29-10	1,320	977	343
Hare #6	F-15-29-10	1,400	931	469
Albright #1	M-15-29-10	790	571	219
San Jacinto #5	E-21-29-10	1,900	1,388	512
San Jacinto #4	B-21-29-10	1,400	998	402
Albright #2 ^{2/}	D-22-29-10	174	134	40
J. Albright #2 PC ^{2/}	E-22-29-10	300	8	292
Total		8,794	6,159	2,635
Average For Eight Proration Units		1,099	770	329
Texas Pacific Com. #1	I-16-29-10	400	242	158
Texas Pacific Com. #1-R	O-16-29-10	171	-0-	171 ^{3/}

^{1/} Pressure decline curves enclosed.

^{2/} Share common proration unit.

^{3/} 329 MMcf - 158 MM = 171 MM \approx 170 MM = Estimate of additional gas to be recovered from the proration unit.

PLUT SYMBOLS: WHP
BHP/2 - X

1000

900

800

700

600

500

400

300

200

100

PRESSURE - PSIA

FIELD		AZTEC		RESERVOIR		PICTURED CLIFFS		WELL LOCATION		SITE		RUN DATE	
TEXAS PACIFIC CCM #1		U		SEC.		IMP. RAG.		METER		72015		74 C3 C1	
01		16		29		1C		7201501					
TEST DATE	YR. MO. DA.	SIP	BHP	BHP/2	Q	WELLHEAD FLOW PRESS	STATIC FLOW PRESS	STATIC PRESSURE	WELLHEAD PRESSURE	WELLHEAD PRESSURE	WELLHEAD PRESSURE	WELLHEAD PRESSURE	WELLHEAD PRESSURE
58 01 10		665.0	0	0	0	0.0	0.0	0.0	C.C				
63 07 22		382.0	0	0	0	49	0.0	0.0	231.0				93
64 02 07		375.0	0	0	0	50	249.0	249.0	249.0				101
65 02 01		210.0	0	0	0	30	237.0	237.0	237.0				114
66 02 04		357.0	0	0	0	22	251.0	251.0	251.0				129
67 02 15		352.0	0	0	0	30	245.0	245.0	245.0				138
68 02 02		354.0	0	0	0	30	227.0	227.0	227.0				148
69 02 04		344.0	0	0	0	29	221.0	221.0	221.0				158
70 08 10		322.0	0	0	0	26	176.0	176.0	176.0				174
71 08 13		316.0	0	0	0	26	168.0	168.0	168.0				183
72 05 11		210.0	0	0	0	23	167.0	167.0	167.0				189

7

400

46.5

0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.55 0.60

PLOT SYMBOLS: WHIP = •

BHP/Z = X

1000

900

800

700

600

500

400

300

200

100

0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00 1.10 1.20

PRESSURE - PSIA

FIELD AZTEC										RUN DATE	
RESERVOIR PICTURED CLIFFS										YR. MO. DA.	
WELL NAME & NO.										77-08-23	
SCHULTZ COM A #5										74446	
U										7444601	
D										7444601	
WELL LOCATION										7444601	
SEC. TWP. RNG.										7444601	
16 29N 10W										7444601	
WELLHEAD STATIC METER										7444601	
FLOW PRESS FLOW PRESS PRESSURE										7444601	
TEST DATE	SIP	BHP	BHP/Z	Q	WELLHEAD FLOW	STATIC FLOW	PRESS	PRESS	PRESSURE	INLET	CU'
YR. MO. DA.											
56 07 19	649	0	0	0	0	0	0	0	0	0	0
66 02 04	284	0	0	43	250	251	249	288			
67 02 15	272	0	0	53	242	242	242	310			
68 02 02	263	0	0	58	218	218	217	328			
69 02 04	267	0	0	46	230	231	230	346			
70 08 18	239	0	0	54	190	192	185	373			
71 08 13	184	0	0	56	166	166	166	393			
72 05 11	231	0	0	40	156	157	155	406			
73 06 05	211	0	0	46	151	153	150	424			
75 05 12	204	0	0	38	144	145	142	456			
77 05 09	212	0	0	31	120	121	120	480			

690

1000

FIELD		AZTEC		PICTURED CLIFFS		RUN DATE	
RES. VOIR		WELL NO.		WELL LOCATION		YR. MO. DA	
SCHULTZ COM D #8		U		SEC. TWP. RNG.		SITE	
DATE		U		16. 29N 10W		72035 - 6	
YR.	MO.	DA.	SIP	BHP	BHP/Z	U	WELL NO.
58	02	20	692	0	0	0	0
67	02	15	409	0	0	107	247
68	02	02	393	0	0	104	216
69	02	04	350	0	0	118	241
70	03	11	339	0	0	152	200
71	08	13	308	0	0	115	172
72	05	11	279	0	0	111	166
73	06	05	256	0	0	103	157
75	05	12	247	0	0	84	143
77	05	09	226	0	0	71	123
79	07	10	169	0	0	64	138

OPERATOR - EL PASO NATURAL GAS CO

PRESSURE - PSIA

700

600

500

400

300

200

100

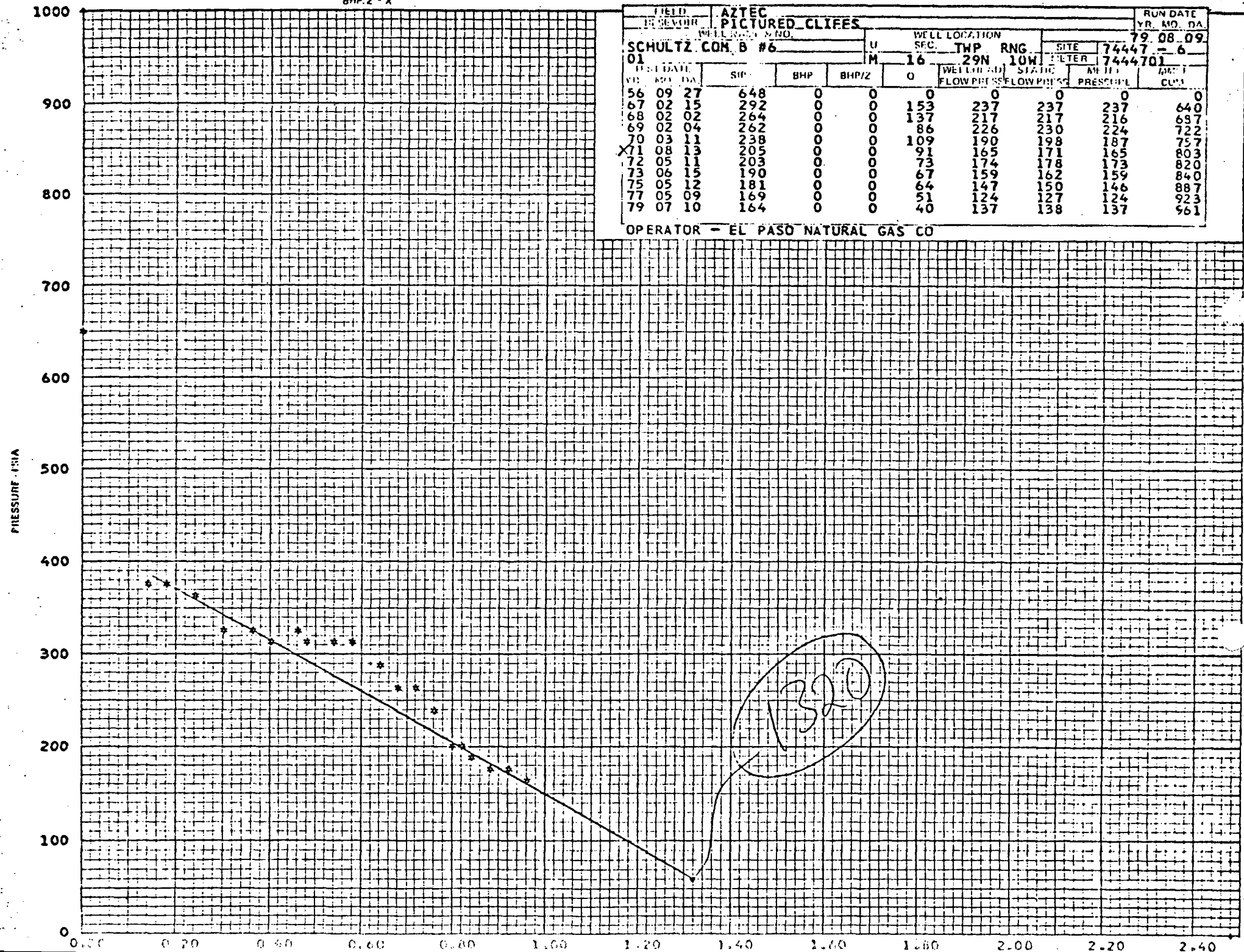
0

0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00 1.10 1.20

820

FIELD		AZTEC		PICTURED CLIFFS		RUN DATE	
REVENUE		WELL NO.		U		YR. MO. DA.	
SCHULTZ COM. B #6		M		16		79 08 09	
DATE		WELL LOCATION		SITE		74447 - 6	
01		SEC. TWP. RNG.		7444701			
DATE		WELL NO.		FLOW PRESS		FLOW PRESS	
56 09 27		0		0		0	
67 02 15		153		237		237	
68 02 02		137		217		216	
69 02 04		86		226		224	
70 03 11		109		190		187	
X 71 08 13		91		165		165	
72 05 11		73		174		173	
73 06 15		67		159		159	
75 05 12		64		147		146	
77 05 09		51		124		124	
79 07 10		40		137		137	

OPERATOR - EL PASO NATURAL GAS CO



PLOT SYMBOLS: WHSIP = •
BHP/Z = X

1000

900

800

700

600

500

400

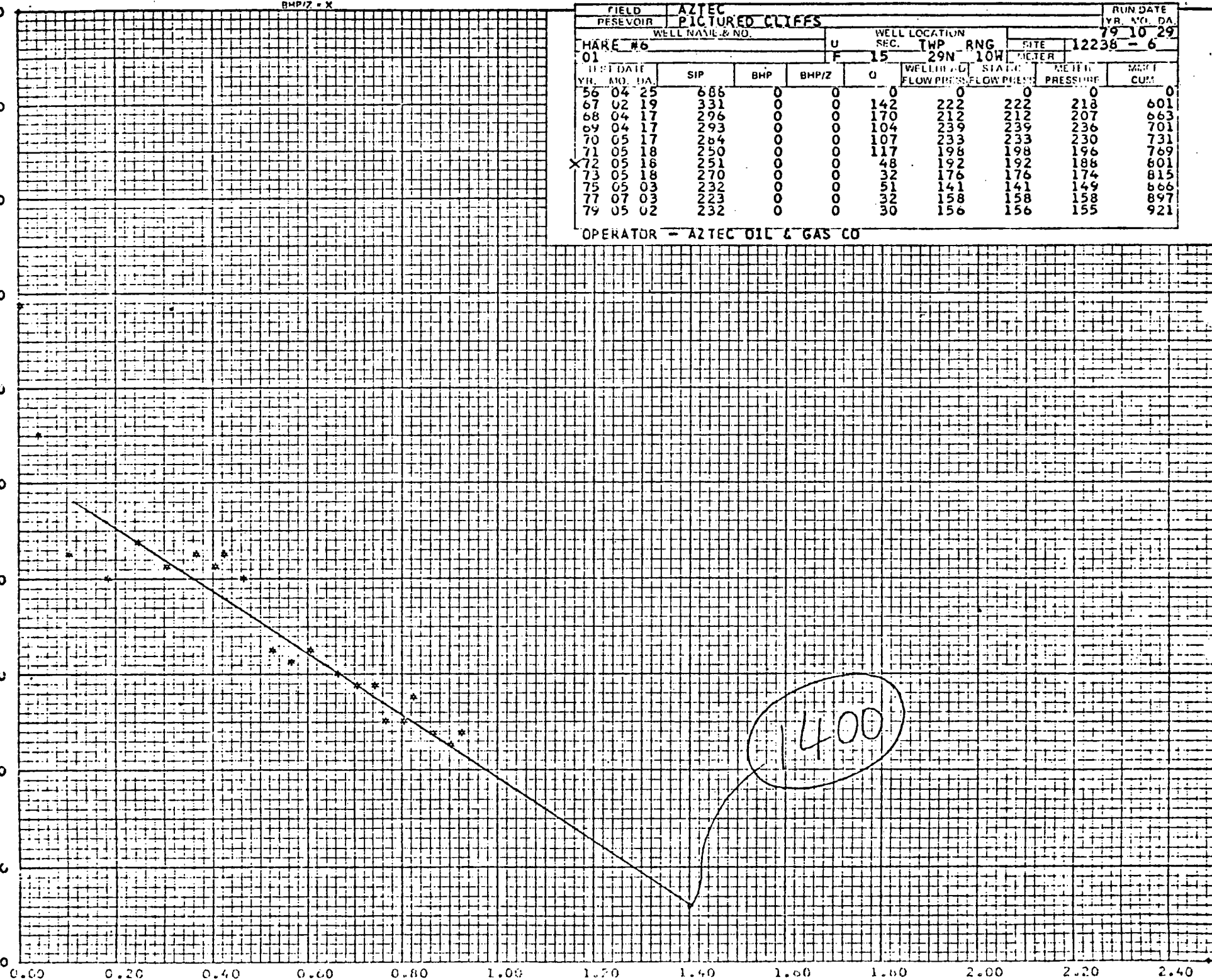
300

200

100

0

PRESSURE - PSIA



FIELD		AZTEC		RUN DATE	
RESERVOIR		PICTURED CLIFFS		YR. MO. DA.	
WELL NAME & NO.		WELL LOCATION		SITE	
HARE #6		SEC. TWP. RNC		12238 - 6	
01		U F 15 29N 10W		METER	
DATE	TIME	SIP	BHP	BHP/Z	Q
YR.	MO.	DA.			
56	04	25	686	0	0
67	02	19	331	0	142
68	04	17	296	0	170
69	04	17	293	0	104
70	05	17	284	0	107
71	05	18	250	0	117
72	05	18	251	0	48
73	05	18	270	0	32
75	05	03	232	0	51
77	07	03	223	0	32
79	05	02	232	0	30
		WELL FLOW	WELL FLOW	WELL FLOW	WELL FLOW
		222	212	212	212
		239	233	233	233
		198	192	192	192
		176	176	176	176
		141	141	141	141
		158	158	158	158
		156	156	156	156

OPERATOR - AZTEC OIL & GAS CO

400

BHP/Z - X

PRESSURE - PSI

800

700

600

500

400

300

300

100

0	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20
---	------	------	------	------	------	------	------	------	------	------	------	------

FIELD		AZTEC										RUN DATE				
BEST VOIR		PICTURED CLIFFS										YR. MO. DA				
WELL NAME & NO.		U				WELL LOCATION				SITE		79 10 17				
ALBRIGHT #1		M				SEC. TWP. RNG.				16001 - 6						
01						15 29N 10W				METER						
TEST DATE			SIP		BHP		BHP/Z		O		WELLHEAD STATIC FLOW PRESS FLOW PRESS		METER PRESSURE		MASC CUM	
YR.	MO.	DA														
55	10	06	689	0	0	0	0	0	0	0	0	0	0	0	0	0
67	06	17	277	0	0	0	79	194	194	193	372					
68	06	17	262	0	0	0	63	218	218	217	397					
69	01	17	291	0	0	0	28	242	242	242	405					
70	09	01	279	0	0	0	36	233	233	233	431					
71	06	17	244	0	0	0	52	184	184	184	447					
72	07	16	243	0	0	0	55	182	182	181	465					
73	06	01	237	0	0	0	45	166	166	165	480					
75	06	16	220	0	0	0	53	140	140	140	513					
77	06	17	209	0	0	0	34	139	139	139	540					
79	04	15	217	0	0	0	33	127	128	126	558					

OPERATOR - SUPRON ENERGY CORP

790

1000

900

800

700

600

500

400

300

200

100

0

0.20

0.40

0.60

0.80

1.00

1.20

1.40

1.60

1.80

2.00

2.20

2.40

FIELD		AZTEC		PICTURED CLIFFS		RUN DATE	
RESERVOIR		WELL NAME & NO.		U		YR. MO. DA.	
SAN JACINTO #5		E		21		79-08-09	
01		E		21		72386-0	
DATE		SHP		BHP		BHP/Z	
VIL. MO. DA.		SHP		BHP		BHP/Z	
58 11 20		612		0		0	
67 02 15		281		0		0	
68 02 02		270		0		0	
69 02 04		263		0		0	
70 08 18		223		0		0	
71 08 13		207		0		0	
72 05 11		207		0		0	
73 06 05		194		0		0	
75 05 12		188		0		0	
77 05 09		174		0		0	
79 07 10		169		0		0	
DATE		SHP		BHP		BHP/Z	
VIL. MO. DA.		SHP		BHP		BHP/Z	
58 11 20		612		0		0	
67 02 15		281		0		0	
68 02 02		270		0		0	
69 02 04		263		0		0	
70 08 18		223		0		0	
71 08 13		207		0		0	
72 05 11		207		0		0	
73 06 05		194		0		0	
75 05 12		188		0		0	
77 05 09		174		0		0	
79 07 10		169		0		0	

OPERATOR - EL PASO NATURAL GAS CO

PRESSURE PSIA

1900

PLOT SYMBOLS: WHSIP = *
BHP/Z = X

1000

900

800

700

600

500

400

300

200

100

0 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.20 2.40

PRESSURE - PSIA

FIELD		AZTEC				RUN DATE			
RESERVOIR		PICTURED CLIFFS				YR. MO. DA.			
WELL NAME & NO.		U		WELL LOCATION		SITE		77 06 14	
SAN JACINTO #4		B		SEC. TWP. RNG.		72-15			
C1		21		29N 10W		172-1561			
TEST DATE	SIP	BHP	BHP/Z	Q	WELLHEAD FLOW PRESS	STATIC FLOW PRESS	MEAS. PRESSURE	MISC. CUM.	
YR. MO. DA.									
57 12 31	662	0	0	0	0	0	0	0	0
66 02 04	304	0	0	121	249	251	246	617	617
67 02 15	295	0	0	105	240	241	240	664	664
68 02 02	277	0	0	106	221	222	221	703	703
69 02 04	277	0	0	42	229	230	226	738	738
70 03 11	266	0	0	79	190	191	188	774	774
71 08 13	219	0	0	90	173	174	172	831	831
72 05 11	226	0	0	88	166	167	166	855	855
73 06 05	215	0	0	66	156	157	155	884	884
75 05 12	213	0	0	51	147	147	145	934	934
77 05 09	186	0	0	65	124	125	124	976	976

1400

1000

900

800

700

600

500

400

300

200

100

0 0.00 0.02 0.04 0.06 0.08 0.10 0.12 0.14 0.16 0.18 0.20 0.22 0.24

FIELD		AZTEC		RESEVOIR		PICTURED CLIFFS		WELL LOCATION		SITE		RUN DATE					
WELL NAME & NO.		U		SEC.		TWP.		RNG.		METER		YR. MO. DA.					
ALBRIGHT #2		0		22		29N		10W		16002 - 4		79 10 17					
TEST DATE		SIP		BHP		BHP/Z		Q		WELLHEAD FLOW PRESS		STATIC FLOW PRESS		METER PRESSURE		MISC CUM	
YR.	MO.	DA.															
56	09	12	679	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	09	26	288	0	0	0	0	26	234	234	234	234	234	234	234	91	91
63	05	01	266	0	0	0	0	31	191	191	190	190	190	190	190	95	95
64	06	24	312	0	0	0	0	27	248	248	248	248	248	248	248	102	102
65	04	08	250	0	0	0	0	14	231	280	230	230	230	230	230	109	109
71	02	01	454	0	0	0	0	36	0	350	349	349	349	349	349	114	114
X72	05	24	214	0	0	0	0	11	176	176	176	176	176	176	176	121	121
73	06	01	185	0	0	0	0	6	161	161	161	161	161	161	161	124	124
75	06	16	154	0	0	0	0	6	136	136	136	136	136	136	136	128	128
77	06	17	152	0	0	0	0	3	140	140	140	140	140	140	140	131	131
79	04	15	150	0	0	0	0	6	145	145	125	125	125	125	125	133	133

OPERATOR - SUPRON ENERGY CORP
 Disc. 1966, Reconnect 1-21-71

174

1600

FIELD	AZTEC			STATE	NEW MEXICO		METER			RUN DATE	80 08 19							
RESERVOIR	PICTURED CLIFFS			COUNTY	SAN JUAN					YR. MO. DA.								
WELL NAME & NO.	J ALBRIGHT #2 PC			SURV.	U	SEC. TWP	22	RNG	29N	WELL STATUS	PRODUCING							
				NEWME	E					RRID NO.	16002-4-02							
										SUPRON ENERGY CORP	SITE							
										PICTURED CLIFFS SYSTEM								
TEST DATE	YR.	MO.	DA.	SIP	HRS	SI	BHP	BHP/Z	Q	WELLHEAD FLOW PRESS	STATIC FLOW PRESS	METER PRESSURE	H2O Bbls/D	H2O Bbls/MMCF	COND Bbls/D	COND Bbls/MMCF	MMCF CUM	
80 01 31				291			0	0	0	72	129	129	125	3	0.0	0.0	0.0	4
80 04 23				297	✓		0	0	0	31	128	128	125	0	0.0	0.0	0.0	8

PRESSURE - PSIA

900

800

700

600

500

400

300

200

100

0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.55 0.60

C
300

operator: EPNGwell Name: TEXAS PACIFIC 1-R

**CALCULATION SHEET
ASSOCIATED OR NON-ASSOCIATED GAS RESERVES
PORE VOLUME METHOD**

Location: 016-29-10
Sec 16, 29N, 10WLD AZtecRESERVOIR Picture Cliff Perfs: 1957-2017COUNTY San JuanSTATE NMITEM RESERVOIR DATASOURCE OF DATA

1. Fractional porosity, $f = 0.163$
2. Interstitial Water Saturation, $S_w = 0.552$
3. Net pay thickness, $h = 18$ ft. Map
4. Area of gas zone, $A = 1$ acres
5. Reservoir volume, $Ah = 1$ ac. ft. +460
6. Gas Gravity = .642; Reservoir Temp. 92 °F = 552 °R
 Orig. reservoir press. = 339.52 psia; Terminal res. press. = 60 psia
 Pseudo-critical pressure, $P_0 =$ psia
 Pseudo-critical temp., $T_0 =$ °R; $T_r =$
7. Original conditions: $P_r =$; $Z_0 = .948$
8. Terminal conditions: $P_r =$; $Z_a = .996$

9. Vol. of gas zone, $V_1 = 43,560 f (1 - S_w) Ah = 43,560 (0.163) (0.448) (1) = 3181$ cu. ft.

$$\text{Orig. gas-in-place} = V_1 \times \frac{P_0}{14.73} \times \frac{520}{T_{Z_0}}$$

WHP 324 PSIAI.P. AOF 217 Mcf/DRw .2

$$= (\text{Item 9}) \times \frac{P_0 (\text{from Item 6})}{14.73} \times \frac{520}{T_{Z_0}}$$

$$= (3181) \cdot \frac{(339.52)}{14.73} \cdot \frac{520}{(552)(.948)}$$

71.4 M cf/Ac-FT

$$11. \text{ Gas-in-place @ abd.} = V_1 \times \frac{P_a}{14.73} \times \frac{520}{T_{Z_a}}$$

$$= () \cdot \frac{()}{14.73} \cdot \frac{520}{() ()}$$

$$= \text{M of /Ac-FT}$$

$$12. \text{ Orig. gas reserves} = \text{Item 10} - \text{Item 11} = \text{M of /Ac-FT}$$

$$\frac{71.4}{1000} \times 156 \text{ acres} \times 18' = 200 \text{ M}^2 \text{CFGIP}$$

October 14, 1980

RECEIVED

OCT 21 1980

Oil Conservation

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

Re: Request For An Administrative Finding
That The Drilling Of The El Paso Nat-
ural Gas Company Texas Pacific Com.
No. 1R, Located In Unit O, Section 16,
T-29-N, R-10-W, Aztec Pictured Cliffs
Field, San Juan County, New Mexico,
Was Necessary To Effectively And Ef-
ficiently Drain A Portion Of The Res-
ervoir Covered By The Proration Unit
Which Could Not Be Effectively And
Efficiently Drained By Any Existing
Well Within The Proration Unit.

Pursuant to New Mexico Oil Conservation Division Order No. R-6013-A dated February 8, 1980 and §271.305(b) of the final regulations of the Natural Gas Policy Act of 1978 (NGPA), we respectfully request a finding from your office that the drilling of the El Paso Natural Gas Company Texas Pacific Com. No. 1R was necessary to effectively and efficiently drain a portion of the Aztec Pictured Cliffs Field covered by the proration unit which could not be effectively and efficiently drained by any existing well within the proration unit. The proration unit is described as SE/4, Section 16, T-21-N, R-10-W, San Juan County, New Mexico.

The standard proration (spacing) unit for the Aztec Pictured Cliffs Field is 160 acres. We have included a copy of the field rules applicable to the subject proration unit.

The support for this finding is attached and described below.

1. NMOCC Forms C-101 and C-102 - Copies of approved application to drill and proration unit dedicated.

2. NMOCC Form C-103 - Copy of sundry notice advising that all reports filed on subject well should reflect Aztec Pictured Cliffs Field.
3. NMOCC Form C-105 - Copy of well completion report filed on the EPNG Texas Pacific Com. No. 1R.
4. Well Status Report - Current status of the two wells drilled and completed in the Aztec Pictured Cliffs Field within the subject proration unit.
5. Formation Structure Map - Structure map showing the subject proration unit and the eight adjacent proration units of that portion of the Aztec Pictured Cliffs Field. Contours are on the top of the Pictured Cliffs formation. Also depicted on the map are all Pictured Cliffs wells within the proration units showing their completion dates and estimated remaining reserves as of July 1, 1980. The reserves were estimated by pressure-cumulative production decline curves.

Based on offset wells, it is estimated that approximately 170 MMcf of additional gas can be recovered by the drilling of the Texas Pacific Com. No. 1R and that absent the drilling of the subject well, this volume of gas could not be effectively and efficiently recovered.

Operators, other than El Paso Natural Gas Company, of proration units offsetting the unit for which this finding is sought are listed below:

Supron Energy Corporation
Building V, Fifth Floor
10300 North Central Expressway
Dallas, Texas 75231

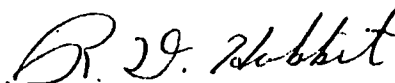
Southland Royalty Company
Cadillac - Fairview Building
Suite 1000
410 - 17th Street
Denver, Colorado 80202

The above parties have been notified by registered mail of this request for a finding.

Upon the issuance of an affirmative finding regarding this well, we request that you consider our application for well classification under Section 103 of the NGPA of 1978. Said application for determination is being filed in conjunction with this request for a finding.

Should you have any questions concerning this request for a finding, please contact the undersigned.

Very truly yours,



R. D. Habbit, Manager
Reservoir Engineering Dept.

DRBalmer:cc

Attachments

AZTEC-PICTURED CLIFFS GAS POOL
Rio Arriba and San Juan Counties, New Mexico

Order No. R-1670, Adopting Special Rules and Regulations, in Addition to the General Rules and Regulations for Northwestern New Mexico, for the Aztec-Pictured Cliffs Gas Pool, Rio Arriba and San Juan Counties, New Mexico, May 20, 1960, as Amended by Order No. R-2307, August 28, 1962.

(Order No. R-1670 Supersedes Order No. R-46, Adopting Rules for the Aztec-Pictured Cliffs and other Gas Pools, Rio Arriba and San Juan Counties, New Mexico, December 29, 1950, as Amended by Order No. R-397, December 17, 1953; Order No. R-565, December 23, 1954; Order No. R-565-A, January 7, 1955; Order No. R-614, April 20, 1955; Order No. R-620, April 20, 1955; Order No. R-565-C, October 13, 1955; Order No. R-565-D, March 29, 1956; and Order No. R-967, April 23, 1957.)

(The Aztec-Pictured Cliffs Gas Pool was created March 15, 1950 and gas prorationing was instituted March 1, 1955)

See separate Order No. R-1670-R, discontinuing gas prorationing as of 7:00 a.m. April 1, 1974.

A. WELL LOCATION AND ACREAGE REQUIREMENTS

RULE 5 (A). A standard gas proration unit in the Aztec-Pictured Cliffs Gas Pool shall be 160 acres.

C. ALLOCATION AND GRANTING OF ALLOWABLES

RULE 11. (As Added by Order No. R-2307, August 28, 1962.) A minimum allowable of 1000 MCF per month per proration unit will be assigned in order to prevent the premature abandonment of wells.

G. GENERAL

RULE 22. No gas, either dry gas or casinghead gas, produced from the Aztec-Pictured Cliffs Gas Pool, except that gas used for "drilling-in" purposes, shall be flared or vented unless specifically authorized by order of the Commission after notice and hearing.

H. MISCELLANEOUS SPECIAL POOL RULES

RULE 25. The vertical limits of the Aztec-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

(General Pool Rules also apply unless in conflict with these Special Pool Rules)

30-045-24408

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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

5A. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
5. State Oil & Gas Lease No. E-2940

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. Unit Agreement Name
2. Name of Operator El Paso Natural Gas Company		8. Farm or Lease Name Texas Pacific Com.
3. Address of Operator Box 990, Farmington, New Mexico 87401		9. Well No. 1R
4. Location of Well UNIT LETTER 0 LOCATED 875' FEET FROM THE South LINE AND 1800 FEET FROM THE East LINE OF SEC. 16 TWP. 29N RGE. 10W NMPM		10. Field and Pool, or Wildcat Blanco PC
12. County San Juan		
19. Proposed Depth 2070		19A. Formation Pictured Cliffs
20. Rotary or C.T. Rotary		
21. Elevations (Show whether DF, RT, etc.) 5604' GL	21A. Kind & Status Plug. Bond Statewide	21B. Drilling Contractor 7
22. Approx. Date Work will start		

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	120'	106 cu.ft.	Surface
6 3/4"	2 7/8"	6.9	2070	410 cu.ft.	Cover OJO Alamo Sufficient to circulate

Selectively perforate and sand water fracture the Pictured Cliffs formation.

A 3000 psi WP & 6000 psi test double gate preventor equipped with blind and pipe rams will be used for blow out prevention on this well.

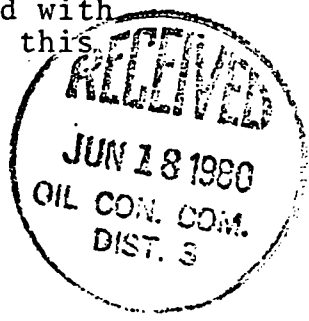
This gas is dedicated.

The SE/4 of Section 16 is dedicated to this well.

APPROVAL VALID

DRILLING COMMENCED,

EXPIRES 9-16-80



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed W. G. Lisco Title Drilling Clerk Date June 16, 1980

(This space for State Use)

SUPERVISOR PRINTED NAME

APPROVED BY Frank T. Dwyer TITLE Supervisor DATE JUN 18 1980

CONDITIONS OF APPROVAL, IF ANY:

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

1980

Form C-102
Supersedes C-128
Effective 1-1-85

All distances must be from the outer boundaries of the Section.

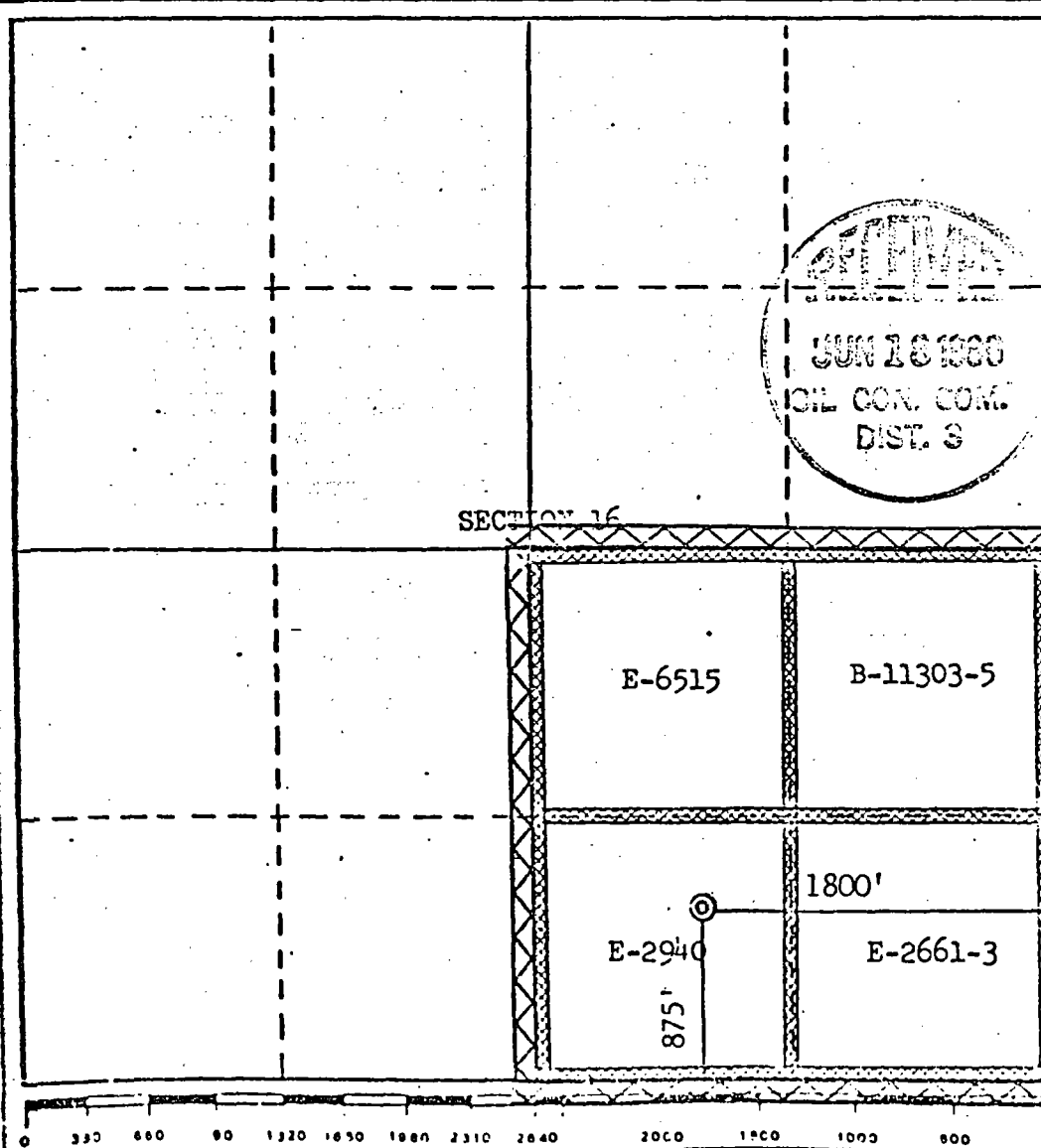
Operator EL PASO NATURAL GAS COMPANY			Lease TEXAS PACIFIC COM (E-2940)		Well No. 1R
Unit Letter 0	Section 16	Township 29N	Range 10W	County SAN JUAN	
Actual Footage Location of Well: 875 feet from the SOUTH line and 1800 feet from the EAST line					
Ground Level Elev. 5604	Producing Formation PICTURED CLIFFS	Pool BLANCO PICTURED CLIFFS		Dedicated Acreage: 156.44 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

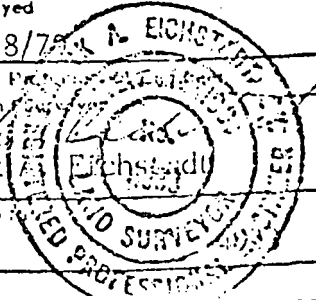
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

A. P. Luises

Name
Drilling Clerk
Position
El Paso Natural Gas
Company
June 16, 1980
Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
10/8/78
Registered Professional Engineer
Mark A. Eichstadt
Mark
Certificate No. **1-10107**



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OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
E-2940	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER-		7. Unit Agreement Name
2. Name of Operator El Paso Natural Gas Company		8. Farm or Lease Name Texas Pacific Co
3. Address of Operator PO Box 289, Farmington, NM 87401		9. Well No. 1R
4. Location of Well UNIT LETTER <u>O</u> FEET FROM THE <u>875'</u> <u>South</u> LINE AND <u>1800'</u> FEET FROM <u>East</u> <u>16</u> <u>29N</u> <u>10W</u> THE <u>LINE, SECTION</u> <u>TOWNSHIP</u> <u>RANGE</u> <u>NMPM.</u>		10. Field and Pool, or Wildcat Aztec Pictured Cl
15. Elevation (Show whether DF, RT, GR, etc.) 5604' GL		12. County San Juan

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/> Correct Pool Name

SUBSEQUENT REPORT OF:

REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
CASING TEST AND CEMENT JOB <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

The pool name for this pool should be corrected to be Aztec Pictured Cliffs. This should apply to all reports filed on this well.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Peggy Bradford

TITLE Drilling Clerk

DATE 9-25-80

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form C-105
Revised 1-1-65

5a. Indicate Type of Lease
State ☒ Fee ☐
5. State Oil & Gas Lease No.
E-2940

1a. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/>						7. Unit Agreement Name	
b. TYPE OF COMPLETION NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>						8. Farm or Lease Name Texas Pacific Com	
2. Name of Operator El Paso Natural Gas Company						9. Well No. 1R	
3. Address of Operator P.O. Box 289, Farmington, NM 87401						10. Field and Pool, or Wildcat Blanco PC	
4. Location of Well UNIT LETTER 0 LOCATED 875 FEET FROM THE South LINE AND 1800 FEET FROM THE E LINE OF SEC. 16 TWP. 29-N RGE. 10-W NMPM						12. County San Juan	
15. Date Spudded 7-18-80		16. Date T.D. Reached 7-21-80		17. Date Compl. (Ready to Prod.) 8-26-80		18. Elevations (DF, RKB, RT, GR, etc.) 5604' GL	
19. Elev. Casinghead		20. Total Depth 2072'		21. Plug Back T.D. 2061'		22. If Multiple Compl., How Many	
23. Intervals Drilled By 0-2072'		24. Producing Interval(s), of this completion -- Top, Bottom, Name 1957-2017' (PC)		25. Was Directional Survey Made No		26. Type Electric and Other Logs Run IES, DBC/ GRS, Temp. Survey	
27. Was Well Cored No		28. CASING RECORD (Report all strings set in well)					
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE	
8 5/8"		24#		138'		12 1.4"	
2 3/8"		6.4#		2072'		6 3/4"	
CEMENTING RECORD		AMOUNT PULLED		100 cu. ft.		864 cu. ft.	
29. LINER RECORD		30. TUBING RECORD		SIZE		DEPTH SET	
SIZE		TOP		BOTTOM		SACKS CEMENT	
SCREEN		PACKER SET		Tubingless Completion			
31. Perforation Record (Interval, size and number) 1957, 1966, 1972, 1978, 1988, 1993, 1999, 2011, 2017' W/1 SPZ.				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED		1957-2017'		49,000# sd. 54,000 gal. wtr.	
33. PRODUCTION				Date First Production			
Production Method (Flowing, gas lift, pumping -- Size and type pump) After Rrac Gauge 217 MCF/D				Well Status (Prod. or Shut-in) Shut-In			
Date of Test 8-26-80		Hours Tested		Choke Size		Prod'n. For Test Period	
Oil -- Bbl.		Gas -- MCF		Water -- Bbl.		Gas -- Oil Ratio	
Flow Tubing Press.		Casing Pressure		Calculated 24-Hour Rate		Oil Gravity -- API (Corr.)	
310							
34. Disposition of Gas (Sold, used for fuel, vented, etc.)						Test Witnessed By H. E. McAnally	
35. List of Attachments							
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.							
SIGNED Reggie Bradfield				TITLE Drilling Clerk		DATE 9-22-80	

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo	738'	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland	874'	T. Penn. "C"
B. Salt	T. Atoka	T. Fruitland	1634'	T. Penn. "D"
T. Yates	T. Miss	T. P.C.	1950'	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee		T. Madison
T. Queen	T. Silurian	T. Point Lookout		T. Elbert
T. Grayburg	T. Montoya	T. Mancos		T. McCracken
T. San Andres	T. Simpson	T. Gallup		T. Ignacio Qtzte
T. Glorieta	T. McKee	Base Greenhorn		T. Granite
T. Paddock	T. Ellenburger	T. Dakota		T.
T. Blinebry	T. Gr. Wash	T. Morrison		T.
T. Tubb	T. Granite	T. Todilto		T.
T. Drinkard	T. Delaware Sand	T. Entrada		T.
T. Abo	T. Bone Springs	T. Wingate		T.
T. Wolfcamp	T.	T. Chinle		T.
T. Penn.	T.	T. Permian		T.
T. Cisco (Bough C)	T.	T. Penn. "A"		T.

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
738	874	136	Ojo Alamo				
874	1634'	760'	Kirtland				
1634'	1950'	316	Fruitland				
1950'	2072'	122	Pictured Cliffs				

WELL STATUS REPORT

I. Well Name & Number: Texas Pacific Com. No. 1

Location: 1,650' FSL & 790' FEL, Section 16, T-29-N,
R-10-W, San Juan County, New Mexico

Pool Name & Formation: Aztec Pictured Cliffs

Spud Date: 12-7-57

Completion Date: 1-10-58

Current Rate of Production: 14 Mcf/D (August, 1980)

II. Status:

As stated above, the well was completed in early 1958 and had an initial open flow of 814 Mcf/D. Production continually declined and is currently producing 14 Mcf/D. Initial treatment consisted of 40,000 pounds of sand and 38,800 gallons of water.

This well's 5 1/2" casing was perforated from 2,170' - 2,180', 2,186 - 2,200' and 2,204' - 2,214' with two shots per foot. It was felt that a successful retreatment could not be accomplished due to the large perforated interval which would not allow selective stimulation of the pay zone. Considering this, it was felt that a new well with a limited entry type completion would produce the most desirable results.

Estimated remaining recoverable reserves as of 7-1-80 are 158 MMcf. A review of proration units surrounding this well indicates an average proration unit 7-1-80 remaining recoverable reserves of 329 MMcf. Based on this review, it is estimated that approximately 170 MMcf of additional reserves can be recovered by the completion of the additional well.

WELL STATUS REPORT

I. Well Name & Number: Texas Pacific Com. No. 1R

Location: 875' FSL & 1,800 FEL, Section 16, T-29-N,
R-10-W, San Juan County, New Mexico

Pool Name & Formation: Aztec Pictured Cliffs

Spud Date: 7-18-80

Completion Date: 8-26-80

Current Rate of Production: Has not commenced production.

II. Status:

This well was drilled and completed in an effort to recover additional reserves that would not otherwise be recovered. The initial well on this proration unit was reflecting a 7-1-80 remaining recoverable reserve of 158 MMcf. Adjacent proration units indicate an average 7-1-80 remaining reserve of 329 MMcf. For this reason, an additional well was drilled and we feel that an additional reserve of approximately 170 MMcf can be recovered.

This well is a tubingless completion using 2 3/8", 6.4 #/ft. pipe as casing. The limited entry completion method was utilized with the casing being perforated with nine holes. The well was then treated with 49,000 pounds of sand and 54,000 gallons of water.

This completion resulted in an after frac gauge of 217 Mcf/D and a shut-in pressure of 310 psi.

E.P.N.G.

3620'

E.P.N.G.

SOUTHLAND ROYALTY

7-19-56
175

3630'

2-20-58
183

3640'

3650'

4-25-56
469

SCHULTZ COM A

E.P.N.G.

SCHULTZ COM D

E.P.N.G.

HARE

SUPRON ENERGY

3660'

1-10-58
158

3670'

9-27-56
343156 ACRE
PRORATION UNIT10-6-55
219

T

29
N

SCHULTZ COM B

E.P.N.G.

TEXAS PACIFIC COM

E.P.N.G.

ALBRIGHT

SUPRON ENERGY

3700'

12-31-57
402

3680'

3690'

9-12-56
4011-20-58
512

3710'

10-3-79
292

SAN JACINTO

SAN JACINTO

ALBRIGHT

R 10 W

STRUCTURE MAP
SUBSEA TOP OF PICTURED CLIFFS FORMATION
CONTOUR INTERVAL = 10'

El Paso Natural Gas Company

AZTEC FIELD
PICTURED CLIFFS RESERVOIR
SAN JUAN COUNTY, NEW MEXICO



GAS WELL



DUAL GAS WELL



P & A GAS WELL



DRY HOLE



REPLACEMENT WELL



XX-XX-XX COMPLETION DATE



XXX REMAINING RESERVES



AS OF JULY 1, 1980, MMCF

1000' 500' 0 1000'

SCALE IN FEET

October 14, 1980

RECEIVED

OCT 21 1980

Oil Conservation

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

Re: Request For An Administrative Finding
That The Drilling Of The El Paso Nat-
ural Gas Company Texas Pacific Com.
No. 1R, Located In Unit O, Section 16,
T-29-N, R-10-W, Aztec Pictured Cliffs
Field, San Juan County, New Mexico,
Was Necessary To Effectively And Ef-
ficiently Drain A Portion Of The Res-
ervoir Covered By The Proration Unit
Which Could Not Be Effectively And
Efficiently Drained By Any Existing
Well Within The Proration Unit.

Pursuant to New Mexico Oil Conservation Division Order No. R-6013-A dated February 8, 1980 and §271.305(b) of the final regulations of the Natural Gas Policy Act of 1978 (NGPA), we respectfully request a finding from your office that the drilling of the El Paso Natural Gas Company Texas Pacific Com. No. 1R was necessary to effectively and efficiently drain a portion of the Aztec Pictured Cliffs Field covered by the proration unit which could not be effectively and efficiently drained by any existing well within the proration unit. The proration unit is described as SE/4, Section 16, T-21-N, R-10-W, San Juan County, New Mexico.

The standard proration (spacing) unit for the Aztec Pictured Cliffs Field is 160 acres. We have included a copy of the field rules applicable to the subject proration unit.

The support for this finding is attached and described below.

1. NMOCC Forms C-101 and C-102 - Copies of approved applica-
tion to drill and proration unit dedicated.

2. NMOCC Form C-103 - Copy of sundry notice advising that all reports filed on subject well should reflect Aztec Pictured Cliffs Field.
3. NMOCC Form C-105 - Copy of well completion report filed on the EPNG Texas Pacific Com. No. 1R.
4. Well Status Report - Current status of the two wells drilled and completed in the Aztec Pictured Cliffs Field within the subject proration unit.
5. Formation Structure Map - Structure map showing the subject proration unit and the eight adjacent proration units of that portion of the Aztec Pictured Cliffs Field. Contours are on the top of the Pictured Cliffs formation. Also depicted on the map are all Pictured Cliffs wells within the proration units showing their completion dates and estimated remaining reserves as of July 1, 1980. The reserves were estimated by pressure-cumulative production decline curves.

Based on offset wells, it is estimated that approximately 170 MMcf of additional gas can be recovered by the drilling of the Texas Pacific Com. No. 1R and that absent the drilling of the subject well, this volume of gas could not be effectively and efficiently recovered.

Operators, other than El Paso Natural Gas Company, of proration units offsetting the unit for which this finding is sought are listed below:

Supron Energy Corporation
Building V, Fifth Floor
10300 North Central Expressway
Dallas, Texas 75231

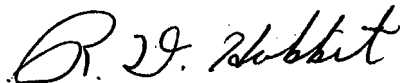
Southland Royalty Company
Cadillac - Fairview Building
Suite 1000
410 - 17th Street
Denver, Colorado 80202

The above parties have been notified by registered mail of this request for a finding.

Upon the issuance of an affirmative finding regarding this well, we request that you consider our application for well classification under Section 103 of the NGPA of 1978. Said application for determination is being filed in conjunction with this request for a finding.

Should you have any questions concerning this request for a finding, please contact the undersigned.

Very truly yours,



R. D. Habbit, Manager
Reservoir Engineering Dept.

DRBalmer:cc

Attachments

AZTEC-PICTURED CLIFFS GAS POOL
Río Arriba and San Juan Counties, New Mexico

Order No. R-1670, Adopting Special Rules and Regulations, in Addition to the General Rules and Regulations for Northwestern New Mexico, for the Aztec-Pictured Cliffs Gas Pool, Río Arriba and San Juan Counties, New Mexico, May 20, 1960, as Amended by Order No. R-2307, August 28, 1962.

(Order No. R-1670 Supersedes Order No. R-46, Adopting Rules for the Aztec-Pictured Cliffs and other Gas Pools, Río Arriba and San Juan Counties, New Mexico, December 29, 1950, as Amended by Order No. R-397, December 17, 1953; Order No. R-565, December 23, 1954; Order No. R-565-A, January 7, 1955; Order No. R-614, April 20, 1955; Order No. R-620, April 20, 1955; Order No. R-565-C, October 13, 1955; Order No. R-565-D, March 29, 1956; and Order No. R-967, April 23, 1957.)

(The Aztec-Pictured Cliffs Gas Pool was created March 15, 1950 and gas prorationing was instituted March 1, 1955)

See separate Order No. R-1670-R, discontinuing gas prorationing as of 7:00 a.m. April 1, 1974.

A. WELL LOCATION AND ACREAGE REQUIREMENTS

RULE 5 (A). A standard gas proration unit in the Aztec-Pictured Cliffs Gas Pool shall be 160 acres.

C. ALLOCATION AND GRANTING OF ALLOWABLES

RULE 11. (As Added by Order No. R-2307, August 28, 1962.) A minimum allowable of 1000 MCF per month per proration unit will be assigned in order to prevent the premature abandonment of wells.

G. GENERAL

RULE 22. No gas, either dry gas or casinghead gas, produced from the Aztec-Pictured Cliffs Gas Pool, except that gas used for "drilling-in" purposes, shall be flared or vented unless specifically authorized by order of the Commission after notice and hearing.

H. MISCELLANEOUS SPECIAL POOL RULES

RULE 25. The vertical limits of the Aztec-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

(General Pool Rules also apply unless in conflict with these Special Pool Rules)

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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

5A. Indicate Type of Lease	
STATE <input checked="" type="checkbox"/>	FEE <input type="checkbox"/>
5. State Oil & Gas Lease No.	
E-2940	

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		7. Unit Agreement Name	
b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		8. Farm or Lease Name	
OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		Texas Pacific Com.	
2. Name of Operator		9. Well No.	
El Paso Natural Gas Company		1R	
3. Address of Operator		10. Field and Pool, or Wildcat	
Box 990, Farmington, New Mexico 87401		Blanco PC	
4. Location of Well		12. County	
UNIT LETTER 0 LOCATED 875' FEET FROM THE South LINE		San Juan	
AND 1800 FEET FROM THE East LINE OF SEC. 16 TWP. 29N RGE. 10W NMPM			
19. Proposed Depth		19A. Formation	
2070		Pictured Cliffs	
20. Rotary or C.T.		Rotary	
21. Elevations (Show whether DF, RT, etc.)		21A. Kind & Status Plug. Bond	
5604' GL		Statewide	
21B. Drilling Contractor		22. Approx. Date Work will start	

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	120'	106 cu.ft.	Surface
6 3/4"	2 7/8"	6.9	2070	410 cu.ft.	Cover OJO Alamo
					Sufficient to circulate

Selectively perforate and sand water fracture the Pictured Cliffs formation.

A 3000 psi WP & 6000 psi test double gate preventor equipped with blind and pipe rams will be used for blow out prevention on this well.

This gas is dedicated.

The SE/4 of Section 16 is dedicated to this well.

APPROVAL VALID
DRILLING COMMENCED,

EXPIRES 9-16-80

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

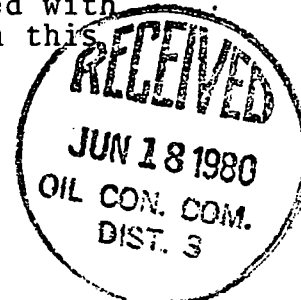
Signed W. B. Lisco Title Drilling Clerk Date June 16, 1980

(This space for State Use)

SUPERVISOR DISTRICT 3

APPROVED BY Frank J. Lisco TITLE Drilling Clerk DATE JUN 18 1980

CONDITIONS OF APPROVAL, IF ANY:



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

1980

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

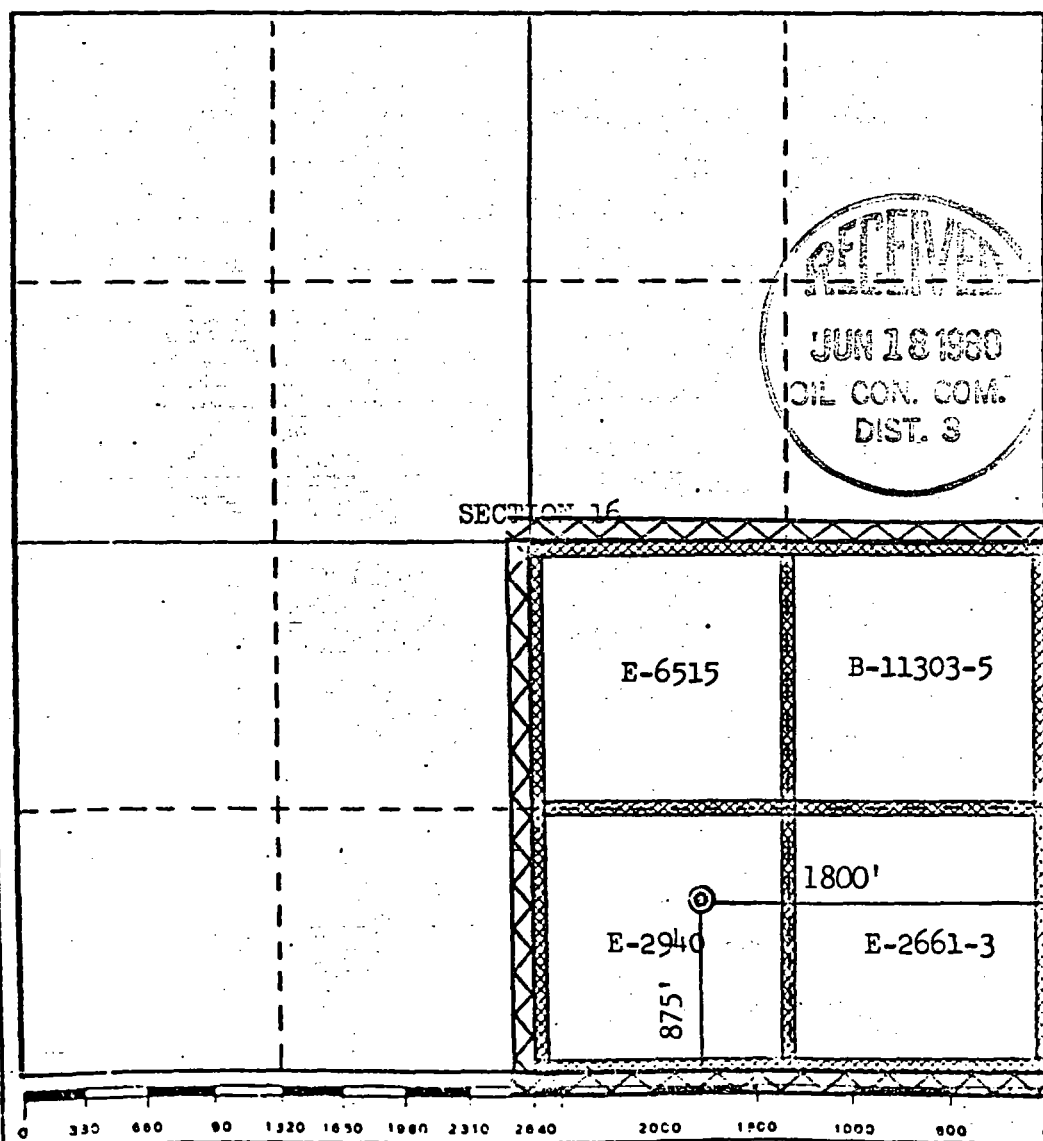
Operator EL PASO NATURAL GAS COMPANY			Lease TEXAS PACIFIC COM (E-2940)		Well No. 1R
Unit Letter 0	Section 16	Township 29N	Range 10W	County SAN JUAN	
Actual Footage Location of Well: 875 feet from the SOUTH line and 1800 feet from the EAST line					
Ground Level Elev. 5604	Producing Formation PICTURED CLIFFS	Pool BLANCO PICTURED CLIFFS	Dedicated Acreage: 156.44 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name <i>A. P. Guises</i>	Drilling Clerk
Position El Paso Natural Gas	Company
Date June 16, 1980	Date
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed 10/8/79	Marked by <i>Mark A. Eichstadt</i>
Certificate of Survey	

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LAND OFFICE		
OPERATOR		

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	
E-2940	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		7. Unit Agreement Name
2. Name of Operator El Paso Natural Gas Company		8. Farm or Lease Name Texas Pacific Com
3. Address of Operator PO Box 289, Farmington, NM 87401		9. Well No. 1R
4. Location of Well UNIT LETTER <u>O</u> , <u>875'</u> FEET FROM THE <u>South</u> LINE AND <u>1800'</u> FEET FROM <u>East</u> LINE, SECTION <u>16</u> TOWNSHIP <u>29N</u> RANGE <u>10W</u> NMPM.		10. Field and Pool, or Wildcat Aztec Pictured Cli
15. Elevation (Show whether DF, RT, GR, etc.) 5604' GL		12. County San Juan

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER <u>Correct Pool Name</u> <input type="checkbox"/>	OTHER <input type="checkbox"/>
PLUG AND ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
CHANGE PLANS <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

The pool name for this pool should be corrected to be Aztec Pictured Cliffs. This should apply to all reports filed on this well.

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Deputy Sheriff TITLE Drilling Clerk DATE 9-25-80

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form C-105
Revised 1-1-65

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. E-2940	

1a. TYPE OF WELL				7. Unit Agreement Name			
OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER _____ b. TYPE OF COMPLETION NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____				8. Farm or Lease Name Texas Pacific Com			
2. Name of Operator El Paso Natural Gas Company				9. Well No. 1R			
3. Address of Operator P.O. Box 289, Farmington, NM 87401				10. Field and Pool, or Wildcat Blanco PC			
4. Location of Well							
UNIT LETTER <u>0</u> LOCATED <u>875</u> FEET FROM THE <u>South</u> LINE AND <u>1800</u> FEET FROM							
THE <u>E</u> LINE OF SEC. <u>16</u> TWP. <u>29-N</u> RGE. <u>10-W</u> NMPM				12. County San Juan			
15. Date Spudded 7-18-80	16. Date T.D. Reached 7-21-80	17. Date Compl. (Ready to Prod.) 8-26-80	18. Elevations (DF, RKB, RT, GR, etc.) 5604' GL		19. Elev. Casinghead		
20. Total Depth 2072'	21. Plug Back T.D. 2061'	22. If Multiple Compl., How Many	23. Intervals Drilled By →	Rotary Tools 0-2072'	Cable Tools		
24. Producing Interval(s), of this completion - Top, Bottom, Name 1957-2017' (PC)					25. Was Directional Survey Made No		
26. Type Electric and Other Logs Run IES, DRC/ GRS, Temp Survey					27. Was Well Cored No		
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED	
8 5/8"	24#	138'	12 1.4"	100 cu. ft.			
2 3/8"	6.4#	2072'	6 3/4"	864 cu. ft.			
29. LINER RECORD							
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	30. TUBING RECORD		
					Tubingless Completion		
31. Perforation Record (Interval, size and number) 1957, 1966, 1972, 1978, 1988, 1993, 1999, 2011, 2017' W/1 SPZ.				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
				DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED	
				1957-2017'		49,000# sd. 54,000 gal. wtr.	
33. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump) After Frac Gauge 217 MCF/D				Well Status (Prod. or Shut-in) Shut-In	
Date of Test 8-26-80	Hours Tested	Choke Size	Prod'n. For Test Period →	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure 310	Calculated 24-Hour Rate →	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
34. Disposition of Gas (Sold, used for fuel, vented, etc.)						Test Witnessed By H. E. McAnally	
35. List of Attachments							
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.							
SIGNED <u>Gregory Headfield</u>				TITLE <u>Drilling Clerk</u>		DATE <u>9-22-80</u>	

WELL STATUS REPORT

I. Well Name & Number: Texas Pacific Com. No. 1

Location: 1,650' FSL & 790' FEL, Section 16, T-29-N,
R-10-W, San Juan County, New Mexico

Pool Name & Formation: Aztec Pictured Cliffs

Spud Date: 12-7-57

Completion Date: 1-10-58

Current Rate of Production: 14 Mcf/D (August, 1980)

II. Status:

As stated above, the well was completed in early 1958 and had an initial open flow of 814 Mcf/D. Production continually declined and is currently producing 14 Mcf/D. Initial treatment consisted of 40,000 pounds of sand and 38,800 gallons of water.

This well's 5 1/2" casing was perforated from 2,170' - 2,180', 2,186 - 2,200' and 2,204' - 2,214' with two shots per foot. It was felt that a successful retreatment could not be accomplished due to the large perforated interval which would not allow selective stimulation of the pay zone. Considering this, it was felt that a new well with a limited entry type completion would produce the most desirable results.

Estimated remaining recoverable reserves as of 7-1-80 are 158 MMcf. A review of proration units surrounding this well indicates an average proration unit 7-1-80 remaining recoverable reserves of 329 MMcf. Based on this review, it is estimated that approximately 170 MMcf of additional reserves can be recovered by the completion of the additional well.

WELL STATUS REPORT

I. Well Name & Number: Texas Pacific Com. No. 1R

Location: 875' FSL & 1,800 FEL, Section 16, T-29-N,
R-10-W, San Juan County, New Mexico

Pool Name & Formation: Aztec Pictured Cliffs

Spud Date: 7-18-80

Completion Date: 8-26-80

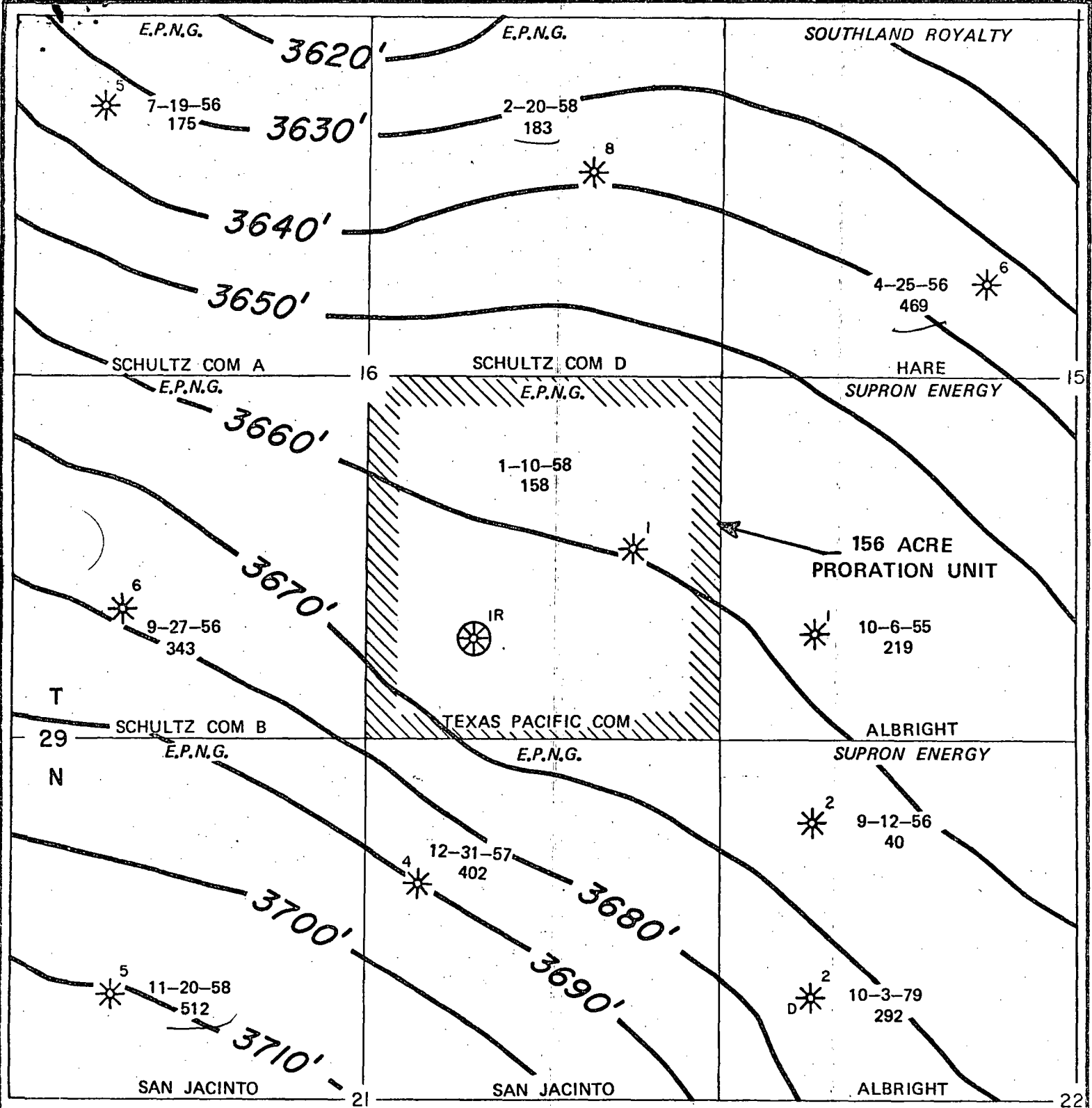
Current Rate of Production: Has not commenced production.

II. Status:

This well was drilled and completed in an effort to recover additional reserves that would not otherwise be recovered. The initial well on this proration unit was reflecting a 7-1-80 remaining recoverable reserve of 158 MMcf. Adjacent proration units indicate an average 7-1-80 remaining reserve of 329 MMcf. For this reason, an additional well was drilled and we feel that an additional reserve of approximately 170 MMcf can be recovered.

This well is a tubingless completion using 2 3/8", 6.4 #/ft. pipe as casing. The limited entry completion method was utilized with the casing being perforated with nine holes. The well was then treated with 49,000 pounds of sand and 54,000 gallons of water.

This completion resulted in an after frac gauge of 217 Mcf/D and a shut-in pressure of 310 psi.



STRUCTURE MAP
SUBSEA TOP OF PICTURED CLIFFS FORMATION
CONTOUR INTERVAL = 10'

El Paso Natural Gas Company

AZTEC FIELD
PICTURED CLIFFS RESERVOIR
SAN JUAN COUNTY, NEW MEXICO

* GAS WELL	⊗ REPLACEMENT WELL
* _D DUAL GAS WELL	XX-XX-XX COMPLETION DATE
* _P P & A GAS WELL	XXX REMAINING RESERVES
* _D DRY HOLE	AS OF JULY 1, 1980, MMCF

1000' 500' 0 1000'
SCALE IN FEET

✓

10

10