SANTA FE, NEW MEXICO 87501

PLANTATETICATIVE ORDER
NFL 61

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

erator C & E Operators, Inc. Well Name and No. Fee Well No. 7-A
ation: Unit E Sec. 7 Twp. 30N Rng. 11W Cty. San Juan
DIVISION FINDS:
That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated suant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify a new onshore production well under Section 103 of said Act, the Division must find that the ill well is necessary to effectively and efficiently drain a portion of the reservoir covered the proration unit which cannot be so drained by any existing well within that unit.
That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative sedure whereby the Division Director and the Division Examiners are empowered to act for the ision and find that an infill well is necessary.
That the well for which a finding is sought is completed in the Aztec-Pictured Cliffs
Pool, and the standard spacing unit in said pool is 160 acres
That a 164.44 -acre proration unit comprising the NW/4
Sec. $\frac{7}{}$, Twp. $\frac{30N}{}$, Rng. $\frac{11W}{}$, is currently dedicated to the $\frac{C}{}$ & $\frac{E}{}$ Operators,
Grath Well No. 1 located in Unit F of said section.
That this proration unit is () standard () nonstandard; if nonstandard, said unit was previously order No. That said proration unit is not being effectively and efficiently drained by the existing 1(s) on the unit.
That the drilling and completion of the well for which a finding is sought should result in
production of an additional 35,000 MCF of gas from the proration unit which would not erwise be recovered.
That all the requirements of Order No. R-6013-A have been complied with, and that the well which a finding is sought is necessary to effectively and efficiently drain a portion of the servoir covered by said proration unit which cannot be so drained by any existing well within the .t.
That in order to permit effective and efficient drainage of said proration unit, the subject plication should be approved.
IS THEREFORE ORDERED:
That the applicant is hereby authorized to drill the well described in Section I above as an fill well on the existing proration unit described in Section II(4) above. The authorization r infill drilling granted by this order is necessary to permit the drainage of a portion of the servoir covered by said proration unit which cannot be effectively and efficiently drained by a existing well thereon.
That jurisdiction of this cause is retained for the entry of such further orders as the vision may deem necessary.
E at Santa Fe, New Mexico, on this 18th day of October , 19 82
Jacob James
DIVISION DIRECTOR L EXAMINER

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

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

	Aug. 17, 1982
Twelay	
ADMIN	STRATIVE ORDER
NFL	(al)

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

Operator	C+.	E Op	erato	is Inc		ell Name	and No.	Fee	We	11 No.	7-1	
Location:	Unit_	E	Sec	<u> </u>	. 30N	Rng	11 W	Cty	San	Juan		
II.									1.5			
THE DIVIS	ION FIN	DS:										
(1) That pursuant as a new infill we by the pro	to the l onshore 11 is n	Natura produ ecessa	l Gas ction ry to	Policy <i>P</i> well und effectiv	Act'of 197 Her Sectio Vely and e	8 provid n 103 of fficient	es that, said Act lv drain	in ord t, the a port	er for Divisi	an inf. on must	ill well find the servoir o	to qualify
(2) That procedure Division	whereby	y the	Divisi	on Direc	tor and t	he Divis	80, the I ion Exami	Divisio iners a	n esta re emp	blished owered t	an admin to act fo	istrative or the
(3) That	the we	ll for	which	a findi	ng is sou	ght is o	ompleted	in the	Aze	ec - Pice	wred C.	1.555
	P	ool, a	nd the	standar	d spacing	unit in	said poo	ol is 🔄	. Political	160		acres
(4) That											e y v e e e	<u> </u>
of Sec	_7	. Twp.	30	<u>v</u> , f	lng//	<u>w</u> , 11	s current	tly ded	icated	to the	C+ E Ope	rators's.T.
Mebrati												
(5) That approved 1	this proper	rorati No	on uni	t is W	standard	() non	standard;	; if no	nstand	ard, sa	d unit w	as previou
(6) That well(s) or	said p	rorati	on uni	t is not	being ef	fectively	y and eff	ficient	ly dra	ined by	the exis	ting
(7) That	the dri	llling	and c	ompletic	n of the	well for	which a	findin	g is s	ought sh	ould res	ult in
the produc				nal	35,000	MCF	of gas fi	rom the	prora	tion uni	t which	would not
(8) That for which reservoir unit.	a find:	ing is	sough	t is nec	essary to	effecti	vely and	effici	ently	drain a	portion	well of the vithin the
(9) That application	in orde	er to	permit approv	effecti ed.	ve and ef	ficient o	irainage	of sai	d pror	ation un	it, the	subject
IT IS THE	REFORE (RDERE	<u>D:</u>	•		•						
(1) That infill well for infill reservoir any existi	ll on the drillicovered	he exi ing gr i by s	sting anted aid pr	proration by this	n unit de order is	scribed : necèssary	in Section to perm	on II(4 nit the	abov drain	e. The age of a	authoriz portion	ation of the
(2) That Division r					is retai	ned for	the entry	of su	ch fur	ther ord	lers as t	he
DONE at Sa	anta Fe	New :	Mexico	, on thi	.s	day of			,	19	•	
	OCD	Aztec			•							
	NMO+	*			<u>ā</u>	IVISION I	DIRECTOR		EXAM	INER	 .	
	OCD								•••			•
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NEV CO

A. R. "Al" Kendrick

P. O. BOX 516 . AZTEC, NEW MEXICO 87410 . (505) 334-2555

OIL CONSERVATION DIVISIONS
SANTA FE

August 16, 1982

Dear Offset Operator:

If you have no objection to the attached Application, please sign the waiver of objection below and send it to the New Mexico Oil Conservation Division office in Santa Fe, New Mexico.

An envelope is enclosed for your convenience.

Yours very truly,

ar Kendrick

A. R. Kendrick

Mr. Joe D. Ramey Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

Dear Mr. Ramey:

We, as offset operator, hereby waive objection to the application of C & E Operators, Inc. for the classification of their Fee #7—A well as a necessary infill well in the Aztec-Pictured Cliffs Pool.

DATE:

El Paso Natural Gas Company

8-24-82



P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

August 16, 1982

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OPERATOR:	Manana Gas, Inc.	
BY:	Ed Hartman	1 8 1
DATE:	8/17/8~	

P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

August 16, 1982

Mr. Joe D. Ramey Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501



RE: Application for well to be Classified as an Infill Well

Dear Mr. Ramey:

We respectfully request that the C & E Operators, Inc. Fee #7-A well located 1770' FNL 1180' FWL of Section 7, T30N, R11W be approved as a necessary infill well in the Aztec-Pictured Cliffs Pool to effectively and efficiently drain the spacing unit shared with the McGrath #1 well.

The standard spacing unit in the Aztec-Pictured Cliffs Pool is 160 acres.

Enclosed for your consideration are copies of the Permit to Drill, Acreage Dedication Plat, Data Sheet, and Structure Map.

A copy of this application is being sent by certified mail to the operator of each developed offset spacing unit at the time of this mailing.

If further information is desired, please contact us.

Yours very truly,

A. R. Kendrick

Enclosures

xc: Offset operators

7	•	•					
PHD. OF COPIES RECEIVED							
DISTRIBUTION		NEW	MEXICO OIL CON	SERVATION COMMIS	иоп	Form C-101	
SANTA FE				·		Revised 1-1-	
FILE							e Type of Lease
U.S.G.S.					_	STATE	
LAND OFFICE				30 <i>-045-2</i> ,	5388	J.S. State Oil	6 Gus Lease No.
OPERATOR			`	30 0 70 = 5		mm	mmm
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APPLICATION APPLIC	JN FUR PE	ERMIT TO	DRILL, DEEPER	N, OR PLUG BACK	· · · · · · · · · · · · · · · · · · ·	7 11011 401	pement Name
	_		· · ·	•		7. Unit Agre	
b. Type of Well DRILL X	_		DEEPEN IN 15	GIBTWIB!	BACK [B. Farm or L	.aase Name
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						San Juan	
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23.		,		TOURS DITE. U		1 on app	10141
		PR	OPOSED CASING A	ND CEMENT PROGRAM		•	•
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8-3/4	7		23 K	4850	*300 sx	. lst.St	g. 3000'
	*:	Stage col	llar below Pi	ctured Cliffs	350 sx	. 2nd. S	tg. Surface
	l	1			١ .		_
'Propose to set 9	9-5/8" ca	asing wit	th spud mud.	Cement back to	surface a	and WOC	l6 hrs.
Install BOP's ar	nd bleed	-off mani	ifold and pre	ssure test to	600 psi. fo	or 30 mi	n.
Drill 8-3/4" ho:	le with :	light gel	l-chemical mu	d to TD. Run	IES & GRD/1	N logs.	Run 7"
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ENERGY AND MINERALS DEPARTMENT	NT	. /
5 (OIL CONSERVATION DIVISION	
DISTAIDUTION SANTA FE	P. O. BOX 2088	form £-103 Revised 10-1
716	SANTA FE; NEW MEXICO 87501	
U.3.G.3.		Sa. Indicate Type of Lease
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OPERATOR		5. State Oil & Gas Lease No.
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1.	74 700 PERMIT (FORM C-101) FOR 30CH PROPOSICS.	7, Unit Agreement ligne
est Sect X	OTHER-	
2. Name of Operator		8. Farm or Lease Name
C & E Operators, I	nc.	Fee
Address of Operator	7520/	9. Well No. 7-A
	ergy Square, Dallas, Texas 75206	
Location of Well F 17	70 North 1180	¹⁰ Aztec Protured thiffs
UNIT LETTER	70 North 1180	° Blanco-Mesaverde
THE WEST LINE, SECTION	7 TOWNSHIP 30N RANCE 11W	~ (
	15. Elevation (Show whether DF, RT, GR, etc.)	12. County
	5701 GR	San Juan
6. Check A	ppropriate Box To Indicate Nature of Notice, Report or C	Other Data
NOTICE OF INT		NT REPORT OF:
PERFORM REMEDIAL WORK	PLUE AND ABANDON REMEDIAL WORK	ALTERING CASING
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	ations (Clearly state all pertinent details, and give pertinent dates, includir	ng estimated date of starting any proposed
work) SEE RULE 1103.	•	
It is intended to	multiple complete this well in the Mesaverde ar	nd Pictured Cliffs
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10 X	Agent Agent	July 19, 1982
ino MAX Well	//Coll title right	
Original Signed by FRANK T. CHAV	EZ SUPERVISOR DISTRICT # 3	JUL 1982

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Operator		*		Lease				Well I	
	erators,			Fee					7 – A
nii Leiler E	Section 7	Township	? 30N	Nange	1W ·	County Sa	an Juan		•
tual Fostage Loc	ation of Well;								
1770	feet from th	North	line and	1180	feet fr	om the	West	line	
5701		cing Formation tured Cliffs		P∞1 • Aztec-	Pictured	Clif	s ;	Dedicated Ac	• •
1. Outline th	e acreage	dedicated to th	e subject we	ell by colored	pencil or h	achure	marks on th	e plat belov	
2. If more the interest ar	ian one leand royalty).	ise is dedicate	d to the well	, outline each	and identi	fy the o	wnership th	iereof (both	as to wor
3. If more the dated by c	in one leas ommunitiza	e of different o	wnership is o n, force-pooli	ledicated to the	e well, hav	ve the i	nterests of	all owners	been cons
Yes	☐ No	If answer is	'yes;' type o	consolidation	· ·			 ,	
If answer i	s "no;" lis	t the owners ar	nd tract descr	iptions which	have actua	ally bee	n consolida	ted. (Use ro	verse sid
No allowab	le will be a	ssigned to the v	well until all non-standard	interests have unit, eliminat	been consing such is	solidate nterests	d (by comm	nunitization approved by	, unitizat
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DATA SHEET

ORIGINAL WELL:

Operator: C & E Operators, Inc.

Lease: McGrath #1

Location: 1760' FNL 1786' FWL Section 7, T30N, R11W

Spud: 7/22/54 Completed: 8/25/54

Stimulation: Shot w/230 quarts of solidified nitroglycerin

Mechanical problems: None

Retreatment: Sand/Oil fractured w/7986 gallons of diesel oil

and 7500 pounds of sand with 2520 gallon flush.

Current production rate: 1192 MCF during 1981.

<u>REASON</u> that the existing well cannot effectively and efficiently drain the drill tract is because of the narrow radius of effective stimulation by the shot and low-volume fracture treatments. A high-volume fracture treatment is not feasible at this time due to the possibility of casing rupture.

INFILL WELL:

Operator: C & E Operators, Inc.

Lease: Fee #7-A

Location: 1770' FNL 1180' FWL Section 7, T30N, R11W

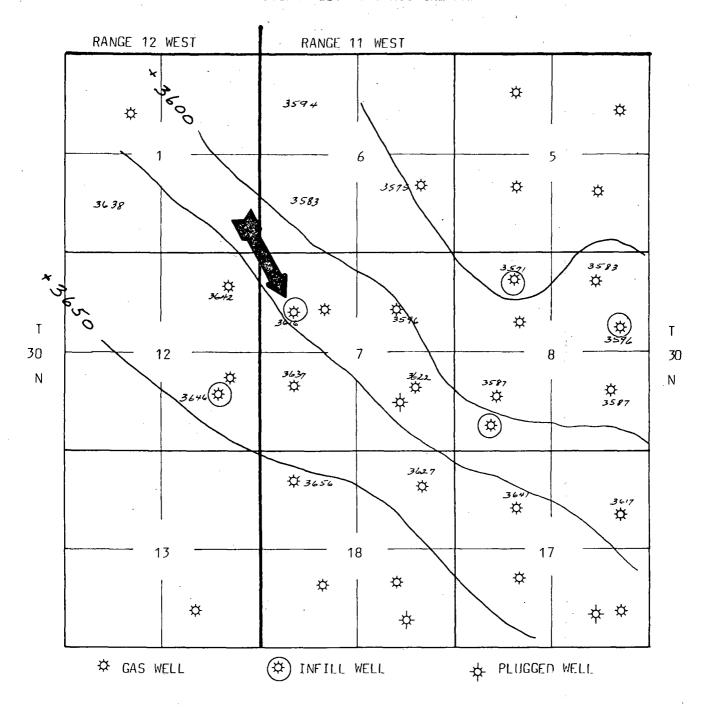
Spud: 6/25/82 Completed: 8/4/82

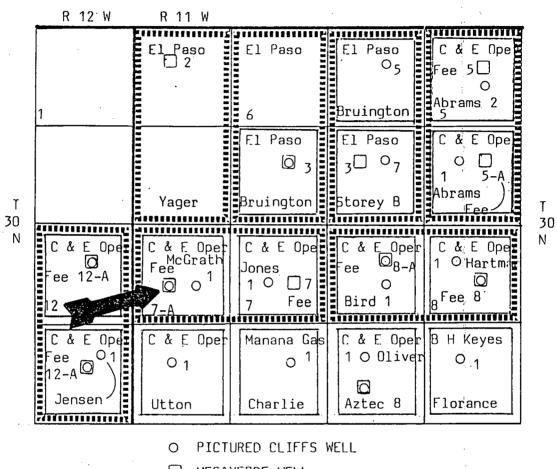
Stimulation: Sand/Foam fractured with 65,000 pounds of sand

and 70 quality foam.

VOLUME of expected additional recovery: 35 MMCF.

BASED on Boyle's Law, if the initial shut-in pressure of 649 psi represented 100% of the recoverable reserves, and if the shut-in pressure of 151 psi measured 8/12/82 represented the remaining recoverable reserves, and considering the production of 142,558 MCF having been produced through 5/31/82; then, the remaining recoverable reserves were 22 MMCF at an abandonment pressure of 50 psi. The shut-in pressure of 310 psi measured 8/4/82 on the infill well indicates recoverable reserves of 57 MMCF at an abandonment pressure of 50 psi. Therefore, the additional recoverable reserves will be 35 MMCF.





- MESAVERDE WELL
- PICTURED CLIFFS / MESAVERDE WELL
- --- PICTURED CLIFFS DRILL TRACT

****** MESAVERDE DRILL TRACT

A. R. "AL" KENDRICK

P. O. BOX 516 AZTEC, NEW MEXICO 87410 PHONE (505) 334-2555

8/16/82

Mike Stogner;

I do not wish to bury you with paper, but I lost my note which told

me the number of copies

that you needed.

Dispose of any that you do not need.

al

P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

August 16, 1982

Mr. Joe D. Ramey Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

RE: Application for well to be Classified as an Infill Well

Dear Mr. Ramey:

We respectfully request that the C & E Operators, Inc. Fee #7-A well located 1770' FNL 1180' FWL of Section 7, T30N, R11W be approved as a necessary infill well in the Aztec-Pictured Cliffs Pool to effectively and efficiently drain the spacing unit shared with the McGrath #1 well.

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A copy of this application is being sent by certified mail to the operator of each developed offset spacing unit at the time of this mailing.

If further information is desired, please contact us.

Yours very truly,

A. R. Kendrick

Enclosures

xc: Offset operators

DISTRIBUTION	NEV	MEXICO OIL CON	SERVATION COMMISSIO	М	Form C-101	
SANTA FE FILE	+-1	,			SA. Indica	10 Type of Lease
U.S.G.S.			70 0.1- 0.5		STATE	I & Gus Leone No.
OPERATOR	+		30-045-25	388	3. Sidie Oi	i a Cda Leone No.
					TITTE	
APPLICATION	N FOR PERMIT TO	DRILL, DEEPEN	I, OR PLUG BACK	·	7. Unit Agr	cement Name
DRILL X		DEEPEN	PLUG	BACK		-
b. Type of Well OIL WELL WELL WELL X	O/HER	O	15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15			Louse Name ee
2. Name of Operator	7				9, Well No.	
C. & E. Operator 3. Address of Operator	s, Inc.	}	AUG 17 1982	 	7	- A nd Pool, or Wildeat
Suite 1100, Two	Energy Square,	Dallas, Otka	UIVS 75206		ii .	co MV
			SANTA . FE North	1LINC		
AND 1180 PEST PROM T	THE West LIN	7	140. 30N ACE. 13	w	114113	*
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			4850	Mesave	rde	Rotary
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5701 Ungraded Gr	ound Blant	ket	Young Drlg. Co.	· · · · · · · · · · · · · · · · · · ·	On app	roval
23.	P	ROPOSED CASING A	ND CEMENT PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOO	T SETTING DEPTH	SACKS OF	CEMENT	EST. TOP
13-3/4	9-5/8	36 J	250	T		. Surface
8-3/4	7	23 K	4850 ctured Cliffs			g. 3000' tg. Surface
Drill 8-3/4" hole casing and cement intervals of the test well.	-5/8" casing wi d bleed-off mar e with light ge t in two stages Mesaverde. Ru	ith spud mud. nifold and pre el-chemical mu s. Perforate un 2-3/8" or 1	Cement back to ssure test to 60 d to TD. Run IE and stimulate th -1/2" tubing to	surface a O psi. fo S & GRD/I e indicat complete	and WOC or 30 mi N logs. ted prod . Clean	16 hrs. .n. Run 7" luctive up and
Note: On approva anodes and check conductor through to 12-1/4".	for boulders. h boulders and	If they are	e. Surface hole	ive and s	set 13-3	/8"
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DISTRIBUTION	P. O. BOX 2088	•		Form £-103 Revised 10-1
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OPERATOR			S. Stole Oil & Co	
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SUNDRY NOTICES	AND REPORTS ON WELLS	DIFFERENT RESERVOIR.		
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2. Name of Operator			8. Farm or Lease	1.ame
C & E Operators, Inc.			Fee	·
. Address of Operator			9. Well No.	
Suite 1100, Two Energy Squ	are, Dallas, Texas 752	06 ·	7-A	
. Location of Well			10 AFIELD COS POR	tured Cliffs
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THE LINE, SECTION	TOWNSHIP RAN	6C HMPI	·/////////////////////////////////////	
	Elevation (Show whether DF, RT, C	R. esc.)	12. County	///////////
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Check Appropriate	Box To Indicate Nature of			
NOTICE OF INTENTION T	·O:	SUBSEQUEN	IT REPORT OF:	
		<u>~</u>		
PERFORM REMEDIAL WORK	PLUG AND ABANDON REMEDIAL	WORK	ALTERI	MC CASING
PEMPORARILY ABANDON	COMMENC	C DRILLING OPHS.	PLUG AN	O ABANDONMENT
PULL ON ALTER CASING	CHANGE PLANS CASING TE	ST AND CEMENT JOB		
•	OTHER			
OTHER Multiple Complete	X			
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 Describe Proposed or Completed Operations (Clear) work) SEE RULE 1103. 	ly state all pertinent details, and giv	ve persinent dates, includin	g estimated date of st	arting any proposed
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18. I hereby certify that the information above is true and complete to the beat of my knowledge and belief.

July 19, 1982

I am		All distances m	ust be from th	he outer houndarte	of the Section	on.	
C & E Operat	ors, Inc.		Lea	Fee			well No. 7-A
Unit Letter Sect	ion 7	Township 30	IN	Range 11W	County	San Juan	•
Actual Footage Location 1770		rth _{lie}	ne and	180	feet from the	West	
Ground Level Elev. 5701	Producing Form Pictured	ation	Pool	Aztec-Pict		ffs	Dedicated Acreage: 164.44 Acres
interest and roy 3. If more than on dated by commu	ne lease is oralty). e lease of difinitization, un No If ans	ferent ownershi itization, force- wer is "yes;" t	e well, out p is dedic pooling.e	line each and in ated to the well to?	identify the	ownership th	e plat below. ereof (both as to working all owners been consoli- ted. (Use reverse side of
this form if nece No allowable wi	essary.) ll be assigned	to the well unt	il all inter	ests have been	consolida	ted (by comm	nunitization, unitization, approved by the Division
Fee #7-A o	*		JUL 191	1992 3		Name Position Agent Company C & E Op Date July 19 I hereby a shown on the notes of ac under my su is true and knowledge a Date Surveyed	ertify that the well location is plot was plotted from field tual surveys made by me or pervision, and that the same correct to the best of my nd belief.

DATA SHEET

ORIGINAL WELL:

Operator: C & F. Operators, Inc.

Lease: McGrath #1

Location: 1760' FNL 1786' FWL Section 7, T30N, R11W

Spud: 7/22/54 Completed: 8/25/54

Stimulation: Shot w/230 quarts of solidified nitroglycerin

Mechanical problems: None

Retreatment: Sand/Oil fractured w/7986 gallons of diesel oil

and 7500 pounds of sand with 2520 gallon flush.

Current production rate: 1192 MCF during 1981.

<u>REASON</u> that the existing well cannot effectively and efficiently drain the drill tract is because of the narrow radius of effective stimulation by the shot and low-volume fracture treatments. A high-volume fracture treatment is not feasible at this time due to the possibility of casing rupture.

INFILL WELL:

Operator: C & E Operators, Inc.

Lease: Fee #7-A

Location: 1770' FNL 1180' FWL Section 7, T30N, R11W

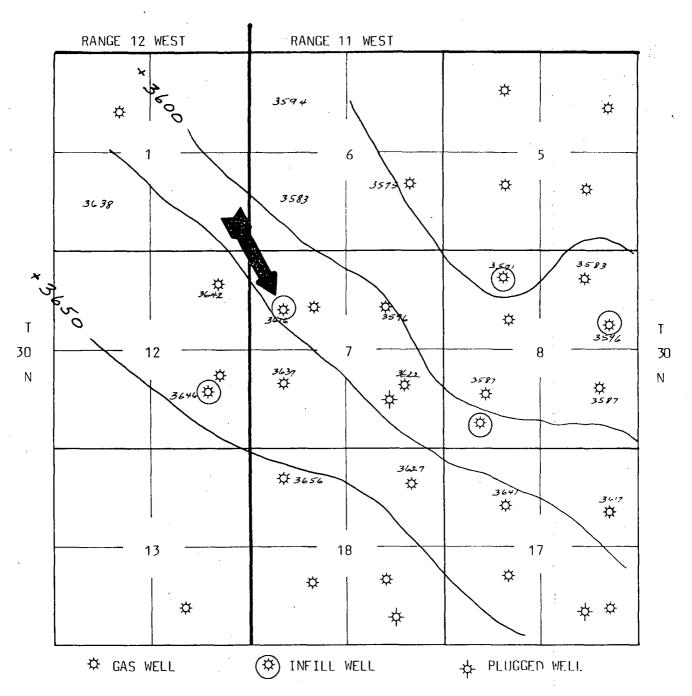
Spud: 6/25/82 Completed: 8/4/82

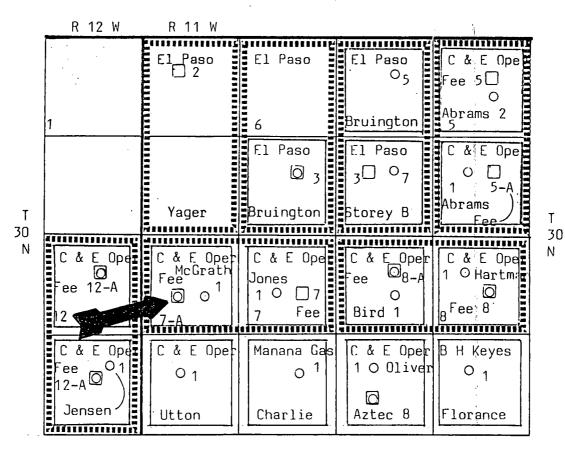
Stimulation: Sand/Foam fractured with 65,000 pounds of sand

and 70 quality foam.

VOLUME of expected additional recovery: 35 MMCF.

BASED on Boyle's Law, if the initial shut-in pressure of 649 psi represented 100% of the recoverable reserves, and if the shut-in pressure of 151 psi measured 8/12/82 represented the remaining recoverable reserves, and considering the production of 142,558 MCF having been produced through 5/31/82; then, the remaining recoverable reserves were 22 MMCF at an abandonment pressure of 50 psi. The shut-in pressure of 310 psi measured 8/4/82 on the infill well indicates recoverable reserves of 57 MMCF at an abandonment pressure of 50 psi. Therefore, the additional recoverable reserves will be 35 MMCF.





- O PICTURED CLIFFS WELL
- MESAVERDE WELL
- D PICTURED CLIFFS / MESAVERDE WELL
- PICTURED CLIFFS DRILL TRACT

****** MESAVERDE DRILL TRACT

P. O. BOX.516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

August 16, 1982

Mr. Joe D. Ramey Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

RE: Application for well to be Classified as an Infill Well

Dear Mr. Ramey:

We respectfully request that the C & E Operators, Inc. Fee #7-A well located 1770' FNL 1180' FWL of Section 7, T30N, R11W be approved as a necessary infill well in the Aztec-Pictured Cliffs Pool to effectively and efficiently drain the spacing unit shared with the McGrath #1 well.

The standard spacing unit in the Aztec-Pictured Cliffs Pool is 160 acres.

Enclosed for your consideration are copies of the Permit to Drill, Acreage Dedication Plat, Data Sheet, and Structure Map.

A copy of this application is being sent by certified mail to the operator of each developed offset spacing unit at the time of this mailing.

If further information is desired, please contact us.

Yours very truly,

A. R. Kendrick

Enclosures

xc: Offset operators

HO. OF COPIES RECEIVED							
DISTRIBUTION		NEV	MEXICO OIL CON	SERVATION COMMISS	SION	Form C-101	
SANTA FE		,			Revised 1-1-	65	
FILE						SA. Indicate	e Type of Lease
U.S.G.S.				BTATE	, rec [X]		
LAND OFFICE				30-045-23	5388	.5. State Oil	& Gus Lease No.
OPERATOR				90 0 70 Q			
	<u>.</u>						
	N FOR PE	RMIT TO	DRILL, DEEPE	N, OR PLUG BACK	· · · · · · · · · · · · · · · · · · ·		
la. Type of Work			*			7. Unit Agre	ement Name
DRILL X]		DEEPEN	- And Marines Published	G-BACK		
b. Type of Well)		17 1			B. Farm or L	oase Name
well Well X	0:не	ER		- 1.1.0.1. X	2.113pts	Fe	<u>e</u>
2. Name of Operator			1111	AUG 17 1982		9. Well No.	
C. & E. Operato	rs, inc.			AUG 17 1302	→Ы		- A
· ·	F	~aa.		00575206	•	1	d Pool, or Wildcat
Suite 1100, Two	Energy a	square,	Dallas, 19Ma	SANTA FINA-	+h	RIanc	o NV
4. Location of Well UNIT LETTE	CR	Loc	1770	, SANTA FENOR	CIT LINE		MAXXIIIII
AND 1180 FEST FROM	THE West		7	TAP. 30N MCE.	11W www	KKIIIX	IIIIIIIII
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23.		P	ROPOSED CASING A	ND CEMENT PROGRAM			
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8-3/4	* * \$	tage co		ictured Cliffs			g. 3000' tg. Surface
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ENERGY AND MINERALS DEPARTMENT	/
OIL CONSERVATION DIVISION	
P. O. BOX 2088	Form £-103
SANTA FE, NEW MEXICO 87501	Revixed 10-1
FILE	
U.S.C.S.	Sa. Indicate Type of Lease
LAND OFFICE	State Fee X
OPERATOR	5. State Oil & Gas Lease No.
SHADDY MOTICES AND DEDODTS ON WELLS	Milliani
SUNDRY NOTICES AND REPORTS ON WELLS	
USE "APPLICATION FOR PERMIT _" (FORM C-101) FOR SUCH PHOPOSALS.)	- <i>dilli</i>
. OIL	7. Unit Agreement Name
OIL GAS X OTHER-	
. Name of Operator	8. Farm or Lease liame
C & E Operators, Inc.	Fee
. Address of Operator	9. Well No.
Suite 1100, Two Energy Square, Dallas, Texas 75206	7-A
. Location of Well	10 Aztec-Pictured tiffs
E 1770 North 1180	Dianas Magayanda
The same state and state a	
THE West SINC SECTION 7 TOWNSHIP BANGE 11W	Millillillilli
THE West LINE, SECTION 7 TOWNSHIP 30N RANGE 11W	~ <i>((((((((((((((((((((((((((((((((((((</i>
15. Elevation (Show whether DF, RT, GR, etc.)	12. County
5701 GR	San Juan
6. Check Appropriate Pay To Indiana Nature of Notice Pages of O	that Data
Check Appropriate Box To Indicate Nature of Notice, Report or O	
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PULL OR ALTER CASING CASING TEST AND CEMENT JOB	
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7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including work) SEE RULE 1703.	g estimated date of starting any proposed
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It is intended to multiple complete this well in the Mesaverde an	d Pictured Cliffs
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Oir	19 1902 CON. COM. DIST. 3
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Original Signed by FRANK T. CHAVEZ

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

SUPERVISOR DISTRICT # 3

July 19, 1982

•		All dieten	ices must be	from the out	er boundaries ef-	the Sectio	n .	•		
Operator Lease Well No.'										
C & E Operators, Inc. Fee								· 7.–A		
Unit Letter	Section	Township		Rang		County			•	
j E j	7		30N		11W	,	San Juan			
Actual Footage Location of Well:										
1770	feet from the	orth	line and	1180	feet	I from the	West	line		
Ground Level Elev.	Producing For	mation		Pool				Dedicoled Ac		
5701 Pictured Cliffs Aztec-Pictured Cliffs						ffs	164.44			
								Acres		
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat helow.										
			_							
2. If more tha	n one lease is	dedicated	to the well	l, outline	each and ider	ntify the	ownership th	nereof (both	as to wo	rking
interest and	l royalty).		-							•
						•				
3. If more than	one lease of di	Iferent own	ocrship is o	dedicated	to the well, h	ave the	interests of	all owners	been con	soli-
dated by co	mmunitization, u	nitization,	force-pooli	ng. etc?						
		•			•					
Yes [No II an	swer is "y	es;' type o	f consolic	lation				 	
If answer is	"no," list the o	wners and	tract desci	riptions w	hich have act	ually be	en consolida	ted. (Use re	verse sid	de ol
this form if	necessary.)				·			· · · · · · · · · · · · · · · · · · ·		
No allowable	e will be assigne	d to the we	ll until all	interests	have been co	onsolidat	ed (by com	nunitization	unitiza	tion.
	ng, or otherwise)									
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DATA SHEET

ORIGINAL WELL:

Operator:

C & E Operators, Inc.

Lease:

McGrath #1

Location:

1760' FNL 1786' FWL Section 7, T30N, R11W

Spud:

7/22/54 8/25/54

Completed:

Shot w/230 quarts of solidified nitroglycerin

Stimulation:
Mechanical problems:

None

Retreatment:

Sand/Oil fractured w/7986 gallons of diesel oil

and 7500 pounds of sand with 2520 gallon flush.

Current production rate: 1192 MCF during 1981.

<u>REASON</u> that the existing well cannot effectively and efficiently drain the drill tract is because of the narrow radius of effective stimulation by the shot and low-volume fracture treatments. A high-volume fracture treatment is not feasible at this time due to the possibility of casing rupture.

INFILL WELL:

Operator:

C & E Operators, Inc.

Lease:

Fee #7-A

Location:

1770' FNL 1180' FWL Section 7, T30N, R11W

Spud:

6/25/82

Completed:

8/4/82

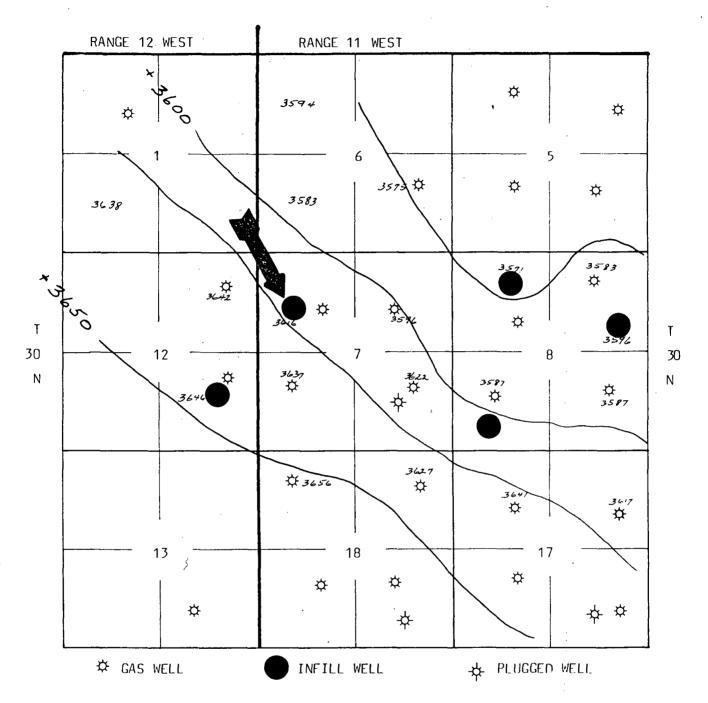
Stimulation:

Sand/Foam fractured with 65,000 pounds of sand

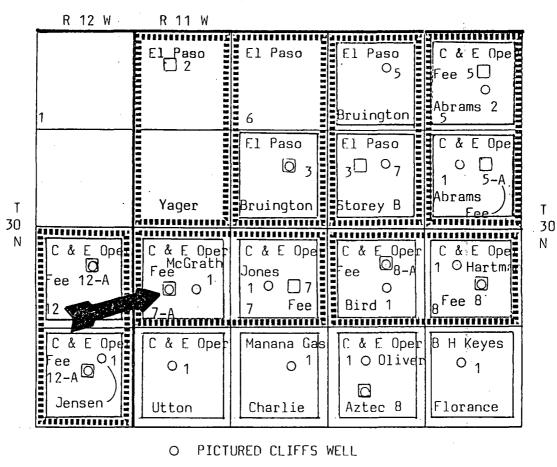
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C & E Operators, Inc. Fee #7-A E-7-30N-11W



- MESAVERDE WELL
- PICTURED CLIFFS / MESAVERDE WELL
- ---- PICTURED CLIFFS DRILL TRACT

****** MESAVERDE DRILL TRACT

P. O. BOX 516 • AZTEC, NEW MEXICO 87410 • (505) 334-2555

August 16, 1982

Mr. Joe D. Ramey Oil Conservation Division P.O. Box 2088 Santa Fe. New Mexico 87501

RE: Application for well to be Classified as an Infill Well

Dear Mr. Ramey:

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A copy of this application is being sent by certified mail to the operator of each developed offset spacing unit at the time of this mailing.

If further information is desired, please contact us.

Yours very truly,

A. R. Kendrick

Enclosures

xc: Offset operators

HO. OF COPIES RECEIVED									
DISTRIBUTION		NEW	MEXICO OIL CONS	ERVATION COM	MISSIO	N	Form C-101		
SANTA FE							Revised 1-1-65		
FILE							SA. Indical	• Type of Lease	
U.S.G.S.					•		BTATE		
LAND OFFICE	·					288	.5. State Oll & Gus Lease No.		
OPERATOR			. 0	070	ω	500			
							77777	THI THE	
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK									
1a. Type of Work		 	<u></u>				7. Unit Agre	ement Name	
5-11.	٦		C						
b. Type of Well PLUG BACK B, Farm of Loase Name									
OIL GAS X O.NER SINCLE MULTIPLE Fee									
2. Name of Operator	<u></u>	O.HER		TONE (C.)		TONE	9. Well No.	<u>c</u>	
C. & E. Operat	ore Ir	20						A	
3. Address of Operator	013, 11							- A Id Pool, or Wildcai	
	0 Enore		Dall M	75206			Blanco MU		
Suite 1100, Two	o Fuera	y square,	Dallas, lexas	/3206	· N = 51		RIanc	m_{m}	
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+++++++++++++++++++++++++++++++++++++++	77777	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	<i>}</i>	7,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4	7777	777777	San Juan		
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	77777)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	77/77/77/7	77777		7777777		
				19, Proposed Dopt	" 1'	A. Formation	ſ	20, Itotary or C.T.	
	777777	77777777	7711111111	4850		Mesave		Rotary	
21. Unvational Show whether D.			& Blotos Plug, Bond				22, Approx.	Dinte Work will atort -	
5701 Ungraded (Ground	Blanl	cet	Young Drlg	. Co.		On app	roval	
23.		6		S CENENT BOOK					
			ROPOSED CASING AN		K A M				
SIZE OF HOLE	SIZE	OF CASING	WEIGHT PER FOOT	SETTING D	ЕРТН	SACKS OF	CEMENT	EST. TOP	
13-3/4	9-5	/8	36 J	250		250 sx	2% CaCl	. Surface	
8-3/4	7		23 K	4850		*300 sx	lst.St	g. 3000'	
		*Stage co	llar below Pic		fs			tg. Surface	
	l	0 1			_		7 7	-6	
Propose to set	9-5/8"	casing wi	th soud mud.	Cement back	c to s	surface a	and WOC	l6 hrs.	
Install BOP's a	and ble	ed-off mar	ifold and pres	sure test t	0 600) psi. fo	or 30 mi	n .	
Drill 8-3/4" ho	ole wit	h light ge	l-chemical mud	to TD. Ru	in TES	& GRD/N	l logs	Run 7"	
casing and ceme	nt in	two stages	Perforate a	nd stimulat	e the	indicat	ed produ	nctive	
intervals of th									
test well.	ic nesa	verde. Re	III 2-3/0 OL 1-	1/2 CUDINE	3 60 6	.omprece.	Clean	up and	
test well.									
Note: On appoint		THE STATE	iontion to dr	ill a bala	for	athodia	Drotost	ion	
Note: On approval this application, to drill a hole for cathodic protection									
anodes and idea through bouldings. If they are prevalent, to drive and set 13-3/8"									
conductor through boulders and leave in place. Surface hole would then be reduced to APPROVAL VALID FOR 50 UNIESS									
to IMITAUGI	1 1900	- 1 PO	R SO WAYS UNLESS			•	100	对 有用 為入	
		العم الأزادان	LING COMMENCE					District Control	
OIL CONSLINY	411000	TVIOI- DKI	•				<i>:</i>	$r_{ij} = r_{ij}$	
SAN	TA FE	=======================================	1)ovember	12.1980			140	1 march	
		EXPIRES	1000100	1, 100				4 () () () ()	
I A BUY A BLOWOUT PREVENTER PROCHAM, IF ANY, If toke, dive slowout preventer procham, if any,									
hereby certify that the information above is true and complete to the heat of my knowledge and helief.									
(/ N. M. Reg. Eng. #4361, Box 1507, Durango, Colo. 81301									
land John 127	1126	Perl	Tille Consultant				urMax		
John M. Hell	CP		The second second		***			The second livery was a second livery with the second	
17 hla aprica for	Since Car)					ΜΔΥ.	1 2 1982	
(1)	7 (W.		SUPERVI	SOR DISTRICT # 3	•	•	1111.11	. •	
PPROVED BY	<u>/</u>	<u>~~</u>	*IT4E	·		<u> </u>	. T K		
DEDITIONS OF APPROVAL, IS	PANTI (sos cledi	cated		•				

to the state of th	1 25
ENERGY 4110 MINERALS DEPARTMENT	/
OIL CONSERVATION DIVISION	
P. O. BOX 2088	form £-103
SANTA FE, NEW MEXICO 87501	Revixed 19-1
PILE .	Sa. Indicate Type of Leose
U.S.G.S.	State Fee X
LAND OFFICE OPERATOR	5. Stote Oil & Cas Lease No.
O-FRATOR -	5. STORE ON & GOA E4030 178.
SUNDRY NOTICES AND REPORTS ON WELLS	
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL ON TO DECETE OF PLUC SACA TO'A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)	
OIL GAT X OTHER-	7, Unit Agreement licine
2. Name of Operator	8. Farm or Lease liame
C & E Operators, Inc.	Fee
, Address of Operator	9. Well No.
Suite 1100, Two Energy Square, Dallas, Texas 75206	7-A
i. Location of Well	10 Aztec-pictured Cliffs
E 1770 North 1180	Blanco-Mesaverde
VIII LETTER LINE AND TELT FROM	
THE West LINE, SECTION 7 TOWNSHIP 30N RANGE 11W	
THE LINE, SECTION TOWNSHIP RANGE NMPM.	
15. Elevation (Show whether DF, RT, GR, etc.) 5701 GR	12. County San Juan
Check Appropriate Box To Indicate Nature of Notice, Report or Oth NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK TEMPORABILY ABANDON PULL OR ALTER CAZING OTHER Multiple Complete 7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including a work) SEE RULE 1103.	REPORT OF: ALTERING CASING PLUG AND ABANDONMENT
It is intended to multiple complete this well in the Mesaverde and zones.	Pictured Cliffs
OIL CUINSCINCTION FE JUL 1	9 1982 ON. COM.

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

TITLE Agent

July 19, 1982

All distances must be from the outer boundaries of the Section.								
Operator			Lease		Well No.			
C & E Op	erators, "Inc.		Fee		7 - A			
Unit Letter E	Section Township 7	30N	Range 11W	County San Juan				
Actual Footage Loc	ation of Well: feet from the North	• •	1180	West				
Ground Level Elev.	Producing Formation	line and	P∞1	Icet from the	line Dedicated Acreage:			
5701	Pictured Cliffs	•	· Aztec-Pict	ured Cliffs	164.44 Acres			
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.								
2. If more th interest an	an one lease is dedicate d royalty).	d to the well	, outline each and in	dentify the ownership t	thereof (both as to working			
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 II answer is	"yes," type o	consolidation	· · · · · · · · · · · · · · · · · · ·				
If answer i	s "no," list the owners a	nd tract desci	riptions which have a	actually been consolid	ated. (Use reverse side of			
this form if	necessary.)	·	·		·			
No allowab	le will be assigned to the	well until all	interests have been	consolidated (by com	munitization, unitization,			
forced-pool	ing, or otherwise) or until a	non-standard	unit, eliminating su	ich interests, has been	approved by the Division			
	<u> </u>							
	1	1	ı		CERTIFICATION			
4 I	1		.	<u> </u>				
	1			I hereby	certify that the information con-			
	l i	Ì	•	4 1	rein is true and complete to the			
	1			1 1	y knowledge and belief.			
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	_ +	52		Name	1 ~ 0 . 1			
		101	المرابع الجرابي الجرا	1 (A)	Dendrick			
F ο 0 4/7_Δ	McGrath #1		/-	Position	1			
	o ;		AUG 17 1982	Agent				
		الإلل	1104	Company	<u> </u>			
	i 1	OIL	CONS-KVALE	C & E	Operators, Inc.			
11 .			SANTA FE	i 1 .	40.00			
			l I	July 1	9, 1982			
1								
					certify that the well location			
		ا میسمب در است	and the same of th	11	this plat was platted from field			
	i	والمقاولة المقاولة		1 1	ictual surveys made by me or			
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			l l	and/or Land	rolessional Engineer Surveyor			
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				Certificate N				
		7		7				

DATA SHEET

ORIGINAL WELL:

Operator:

C & E Operators, Inc.

Lease:

McGrath #1

Location:

1760' FNL 1786' FWL Section 7, T30N, R11W

Spud:

7/22/54

Completed:

8/25/54

Stimulation:

Shot w/230 quarts of solidified nitroglycerin

Mechanical problems:

s: None

Retreatment:

Sand/Oil fractured w/7986 gallons of diesel oil

and 7500 pounds of sand with 2520 gallon flush.

Current production rate: 1192 MCF during 1981.

<u>REASON</u> that the existing well cannot effectively and efficiently drain the drill tract is because of the narrow radius of effective stimulation by the shot and low-volume fracture treatments. A high-volume fracture treatment is not feasible at this time due to the possibility of casing rupture.

INFILL_WELL:

Operator:

C & E Operators, Inc.

Lease:

Fee #7-A

Location:

1770' FNL 1180' FWL Section: 7, T30N, R11W

Spud:

6/25/82

Completed:

8/4/82

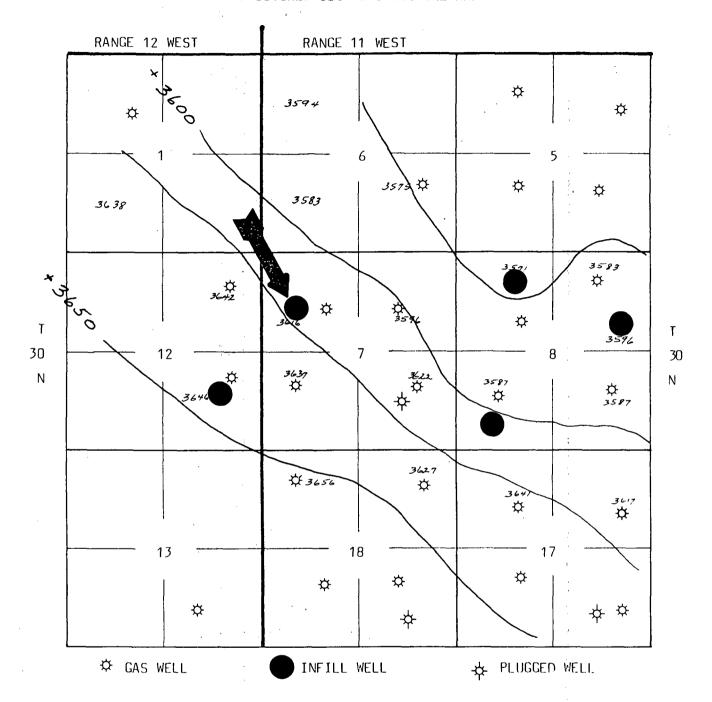
Stimulation:

Sand/Foam fractured with 65,000 pounds of sand

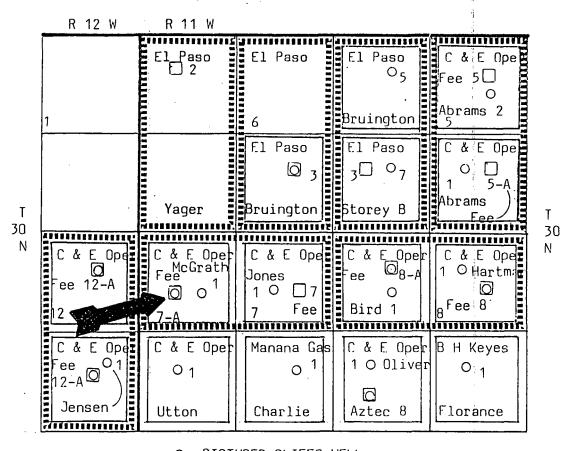
and 70 quality foam.

VOLUME of expected additional recovery: 35 MMCF.

BASED on Boyle's Law, if the initial shut-in pressure of 649 psi represented 100% of the recoverable reserves, and if the shut-in pressure of 151 psi measured 8/12/82 represented the remaining recoverable reserves, and considering the production of 142,558 MCF having been produced through 5/31/82; then, the remaining recoverable reserves were 22 MMCF at an abandonment pressure of 50 psi. The shut-in pressure of 310 psi measured 8/4/82 on the infill well indicates recoverable reserves of 57 MMCF at an abandonment pressure of 50 psi. Therefore, the additional recoverable reserves will be 35 MMCF.



C & E Operators, Inc. Fee #7-A E-7-30N-11W



- O PICTURED CLIFFS WELL
- O PICTURED CLIFFS / MESAVERDE WELL
- PICTURED CLIFFS DRILL TRACT

****** MESAVERDE DRILL TRACT