P. O. BOX 168 (FE CONSER ON DIVISION FARMINGTON, NM 87499 REC. FED

FAX NO (505) 326-6911 '91 MAR 5 AM 9 17

OFFICE NO. (505) 326-2659

March 4, 1991

CERTIFIED MAIL #P 117 129 350 RETURN RECEIPT REQUESTED

State of New Mexico Energy, Minerals & Natural Resources Department New Mexico Oil Conservation Division 310 Old Santa Fe Trail, Room 206 Santa Fe, NM 87503

ATTN: Mr. William J. LeMay, Director

RE: CASE #10264

Application of Robert L. Bayless
Tight Formation Designation
Cabresto Area of the Pictured Cliffs Formation
Rio Arriba County, NM

Gentlemen:

Enclosed please find one copy of a formal Application for the referenced Tight Formation Designation, including one copy of all exhibits to be presented at the hearing scheduled on the March 21, 1991 Docket of the New Mexico Oil Conservation Division Examiner Hearing.

Please advise if you require anything further.

Yours truly,

KEVIN H. McCORD Petroleum Engineer

KHM/eh

xc w/encl: State of New Mexico

Certified #P 117 129 351

Bureau of Land Management Joseph M. Montoya Building 120 South Federal Place Santa Fe, NM 87503

State of New Mexico Certified #P 117 129 352

Office of the Commissioner of Public Lands

State Land Office Building

310 Old Santa Fe Trail, Room 1148

Santa Fe, NM 87503

RECEIVED

MAK 5 1991

OIL CONSERVATION DIVISION

BEFORE THE

OIL CONSERVATION DIVISION

ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

IN THE MATTER OF THE APPLICATION OF ROBERT L. BAYLESS FOR DESIGNATION OF TIGHT FORMATION, RIO ARRIBA COUNTY, NEW MEXICO.

CASE NO. 10264

APPLICATION

Comes Now ROBERT L. BAYLESS, by and through his undersigned attorneys, and as provided in the Oil Conservation Division's Special Rules and Procedures for Tight Formation Designations under Section 107 of the Natural Gas Policy Act of 1978 promulgated by Oil Conservation Division Order No. R-6388 on June 30, 1980, hereby makes application for an order designating certain portions of the Pictured Cliffs formation as a tight formation under Section 107 of the Natural Gas Policy Act of 1978 and in support of its application would show the Division:

Applicant is the owner and operator of certain interests in the Pictured Cliffs formation underlying the following described lands situated in Rio Arriba County, New Mexico:

Township 29 North, Range 2 West, N.M.P.M. - All

Township 29 North, Range 3 West, N.M.P.M. - All

Township 29 North, Range 4 West, N.M.P.M. - All

Township 30 North, Range 2 West, N.M.P.M. - All

Township 30 North, Range 3 West, N.M.P.M. - All

Township 30 North, Range 4 West, N.M.P.M. Sections 1 through 2: All

Sections 11 through 14: All

Sections 23 through 26:

Sections 35 through 36: All

Township 31 North, Range 2 West, N.M.P.M. Sections 2 through 36: All

Township 31 North, Range 3 West, N.M.P.M. - All

Township 32 North, Range 2 West, N.M.P.M.

Sections 7 through 10:

Sections 15 through 22: All

Sections 27 through 35: All

Township 32 North, Range 3 West, N.M.P.M. - All

Containing a total of 193,090 acres, more or less

- The Pictured Cliffs formation is expected to have an estimated average in situ gas permeability throughout the pay section of less than 0.1 millidarcy per foot.
- 3. The average depth of the top of the Pictured Cliffs formation is 3715 feet and the stabilized production rate, against atmospheric pressure, of wells completed for production in said formation, without stimulation, is not expected to exceed 105 mcf of gas per day.
- No well drilled into the Pictured Cliffs formation in the above-described area is expected to produce, without stimulation, more than five barrels of crude oil per day.
- 5. A complete set of Exhibits which applicant proposes to offer or introduce at the hearing on this application,

together with a statement of the meaning and purpose of each exhibit, will be filed with the Division and the Minerals Management Service at least fifteen (15) days prior to the hearing date as required by the Oil Conservation Division's Special Rules and Procedures for Tight Sand Formation Designation under Section 107 of the Natural Gas Policy Act of 1978.

WHEREFORE, Applicant prays that this application be set for hearing before a duly appointed examiner of the Oil Conservation Division on March 21, 1991 and that after notice and hearing as required by law, the Division enter its order recommending to the Federal Energy Regulatory Commission that pursuant to 18 CFR, Section 271.701-705, that the Pictured Cliffs formation underlying the above-described land be designated a tight formation, and making such other and further provisions as may be proper in the premises.

Respectfully submitted,

TANSEY, ROSEBROUGH, GERDING & STROTHER, P.C.

TOMMY ROBERTS

Attorneys for Applicant

P.O. Box 1020

Farmington, New Mexico 87401

(505) 325-1801

OL CONSER N DIVISION RE C :50

SCHALK DEVELOPMENT CO.

P. O. BOX 25825

ALBUQUERQUE, NEW MEXICO 87125 '91 1177 2: 117 8 57

March 20, 1991

State of New Mexico Energy and Minerals Department Oil Conservation Division Post Office Box 2088 Santa Fe. New Mexico

Attention: Mr. William LeMay

Director

Case No. 10264 Re:

Application of Robert L. Bayless for Designation of the Cabresto Area of the Pictured Cliffs Formation as a Tight Formation

Gentlemen:

We have reviewed in detail the Application of Robert L. Bayless for designation of the Cabresto Area of the Pictured Cliffs Formation in Rio Arriba County, New Mexico as a tight formation.

As an operator with a number of wells in the area we are very familiar with the Cabresto Pictured Cliffs formation. Based on that experience we are in full support of the referenced Bayless Application.

Thank you for your consideration.

Yours very truly,

SCHALK DEVELOPMENT CO. JOHN E. SCHALK, OPERATOR

Steve Schalk

Agent

SS/kd

P. O. BOX 168 A DIVISION A DIVISION FARMINGTON, NM 87499

FAX NO (505) 326-6911 11 12 office NO. (505) 326-2659

March 22, 1991

Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87504-2088

ATTENTION: MR. MICHAEL STOGNER

RE: NMOCD Case No. 10264

March 21, 1991

Additional Data on specific

wells

Enclosed please find the data you requested on specific wells within the proposed Robert L. Bayless Cabresto Tight Gas Area, NMOCD Case No. 10264, March 21, 1991. The specific wells you requested data from are as follows:

				Curi	rent Gas
We.	<u>11</u>	Location		Operator Pro	od. Cap.
				(1	MCFD)
1.	Schalk 29-4 #2	SESE Sec.	32 T29N R4W	John E. Schalk	218
2.	Jic. 458 #8	SENW Sec.	7 T30N R3W	Robert L. Bayless	250
з.	Jic. 459 #4	NWNE Sec.	19 T30N R3W	Robert L. Bayless	251
4.	Jic. 459 #2	SWNW Sec.	20 T30N R3W	Robert L. Bayless	182
5.	Jic. 464 #7	NWNW Sec.	29 T30N R3W	Robert L. Bayless	164
6.	Jic. 464 #1	NESE Sec.	30 T30N R3W	Robert L. Bayless	262

For each of the above wells, I have provided a P.I. card, a well completion report, and a daily report of operations on the well. The detail fracture stimulation data for each well is highlighted on the daily report for your convenience. For the Schalk well, daily reports were not available, therefore I have presented a Sundry Notice reporting the fracture stimulation of the well.

I believe this data provides all of the information you requested at the hearing. If you have any questions or need anything further, please call.

Sincerely,

Kevin H. McCord Petroleum Engineer

Enclosures

NEW MEXICO-N RIO ARRIBA CO. CHOZA MESA-PIC CLIFFS (DG)



Twp 29n-4w Section 32 se se 850 fsl 1080 fel

Opr: John E Schalk

Well: 2 Schalk 29-4

Elev: 7329 Gr

Tops: Log

Ojo Alamo Kirtland 3090 3820 Fruitland 4098 Pic Cliffs 4250 Dsts & Cores:

No cores or tests.

Spud: 12/16/75

Comp: 2/2/76

TD: 4550

PB:

Csg: 8 5/8 @ 150 w/150 4½ @ 4548 w/300

Perf: 4383-4420-w/1 of

Prod Zone: Pic Cliffs 4383-4420.

Init. Prod: IPF 1254 MCFGPD

Map: NMB-2A

Contr: Arapahoe

API 30-039-21140

NM-N4-675140

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FORM NO. 327

(1444, 6-15)		UNITED	STA	TES	SU I	BMIT I	N DUPLICA				pproved. Bureau No. 42-R3 5.5.
	DEPART	TMENT C	OF TH	E IN	TERIC	OR .	struct	ther in- tions on 5	. LEASE DE	BIGNAT	ION AND SERIEL NO.
	•	GEOLOGIC	CAL SU	RVEY			ZOFI		JSA N	м 1	8328
	4DI ETIONI	OD DECC	A ADL ET	1/01		7	offici				TTEE OR TRIBE NAME
WELL CON		OR RECC	MPLEI	ION F	KEPOK	<u>' [2]</u>	11PF	7 LU	\		
in. TYPE OF WELL	J: 011. WEI	LL GAR WELL		RT 🗌	Other				. NIT AGR	EEMEN	T NAME
b. TYPE OF COMP		·n =					MAR 23	19/6	1	~~-	
WELL X	OVER LEN	P- PLUG DACK	DIFI RES	vr. 📙	Other	$\pm $	I. CON.	;	SCHAL		
2. NAME OF OPERATO						10	い. しひれ. いたて	IZ	WELL NO		J - T .
3. ADDRESS OF OPER	. SCHALK						-	<u>`</u>	. w <i>ill</i> 30	• !	
	BOX 2668	7 ALRUO	HEROHE	= N.	м. я	712	5	1	O, FIELD A	ND POO	L, OR WILDCAT
4. LOCATION OF WEL									BLANC	0 P	.c.
At surface 8	50' FSL,	1080' F	EL, SE	EC. 3	2, T-	-29N	, R-4W	-		R., M.,	OR BLOCK AND SURVEY
At top prod. Inte	rval reported be	low							OK AREA	•	
	-							1	SEC. 3	32.	T-29N, R-4V
At total depth			(14 pp	RMIT NO.		D.1.	LISSUED		2. COUNTY		13. STATE
			14. 72	KMII NO.		1	LIGSCED	1	PARISH		
15. DATE SPUDDED	16. DATE T.D. R	EACHED 17. DA	TE COMPL.	(Ready to	o prod.)	18 PT	EVATIONS (E		IO ARE		I NM ELEV. CASINGHEAD
12-16-75	1-10-7		2-2-			10. 20	7329		02, 220.,	1	7329'
20. TOTAL DEPTH, MD 4		G, BACK T.D., MD	~~~	. IF MUL	TIPLE CON	PL.,	28. INT	ERVALS	ROTART TO	DLB	CABLE TOOLS
4550				HOW M				LLED BY	X	-	· .
24. PRODUCING INTER	VAL(8), OF THIS	COMPLETION-T	OP, BOTTOM,	NAME ()	T DE DE	(D) *				2	5. WAS DIRECTIONAL SURVEY MADE
PICTU	RED CLIF	FS 4383	TO 44	20 K	B (12	21.)				į	NO
26. TYPE ELECTRIC A		•								1 27 =	AS WELL CORED
DUAL INDUC			OMPEN	SATED	NEU1	ron	FORMA	TION	DENS I 1		NO
25.			SING RECO							1	
CABING SIZE	WEIGHT, LB.		SET (MD)		LE SIZE	1		IENTING RE	CORD		AMOUNT PULLED
8-5/8"	23#		50'	1	1	1	50 SX	CIRCU	ULATED		NO
4-1/2"	10.5#			7-	7/8		00 SX				
	-								·····		
	<u> </u>										<u> </u>
29.		LINER RECOR	_,				30.		BING REC		
SIZE	TOP (MD)	BOTTOM (MD)	SACES C	EMENT*	BCREEN	(MD)	SIZE		L ZOE	MD)	PACKER SET (MD)
DOES NO	T APPLY		_				_ 1 - 1 /	2	4385		
31. PERFORATION REC	OED (Interval, s	ize and number)			1 82.		CID. SHOT	FRACTUE	RE CEMEN	T SOI	EEZE, ETC.
1 HOLE PER	FOOT 47	883-4420					AL (MD)				MATERIAL USED
1		,0520			43	83-4	420	60,	000# 5	SAND	AND WATER
					<u> </u>			<u> </u>			······································
33.* DATE FIRST PRODUCTI	ION PROD	UCTION METHOD	(Floreing		DUCTION		tune of our	me)	(# 7)		B (Producing or
	PROD	FLOW	(riowing, g	,ue 11,11, p	umpiny—	812C UNU	type of pu	p)	ah	ut-in)	IN
SHUT IN	HOURS TESTED	CHOKE BIZ	E PROD	N. FOR	OIL-B	BL.	GAS-M	CF.	WATER-BE		GAS-OIL RATIO
2-2-76	12	5/16	TEST	PERIOD			ı	1254			
FLOW. TUBING PRESS.	CASING PRESEU	RE CALCULATE	D OIL	-BBL.		48MCI	· · · · · · · · · · · · · · · · · · ·	WATER-B	BL.	ore	PRAVITY-API (CORB.)
567 PSIA	686 PS	, ,	- [1	190	0				
34. DISPOSITION OF G.		r fuel, vented, et	c.)		- -			1	TEST WITH	88ED 1	BY
SHUT IN		· · · · · · · · · · · · · · · · · · ·								1	976
35, LIST OF ATTACH	MENTA							_ :			
36. I berebs certife	that the Aller	ng and attached	informat-	n le e	nieto ==3	00224	aa data	ad for ci	l amatichi-	**************************************	<u></u>
I.L)	<i>【、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、、</i>		()	14 COM)				en tiam #1			
signe o = 100	W C (!)	<i>Leux</i>	1	ITLE _	OP <u>I</u>	ERAT	OR		DAT	E _3	-10-76
()-											

Form	9 - 331
+ May	1963)

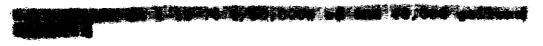
UNITED STATES SUBMIT IN TRIPLICATE.

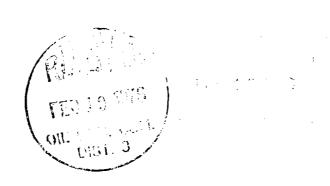
Form approved.

(May 1963)	PARTMENT OF THE INTER	IOR (Other instructions on r	5. LEASE DESIGNATION AND SERIAL NO.
	GEOLOGICAL SURVEY		USA NM / 18328
SUNDR) (Do not use this form Use	6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
OIL GAS WELL	OTHER		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR			8. FARM OR LEASE NAME
3. ADDRESS TO DELLATOR S	ehalk		Schalk 29-4
P.O. Box 26587 Location of well (Report See also space 17 below.) At surface	. Albuquerque, N.M. 8 location clearly and in accordance with an	7125 y State requirements.*	10. FIELD AND POOL, LOR WITHER TO J. Blanco P. C.
850' from S	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA		
Sec 32, T-	29-N, R-4-W		Sec 32: T-29-N, R-4-V
14. PERMIT NO.	15. ELEVATIONS (Show whether I	F, RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE
	7329 GR.		Rio Arriba N. M.
16.	heck Appropriate Box To Indicate I	Nature of Notice, Report, or	Other Data
NOTICE	of intention to:	SUBSI	EQUENT REPORT OF:
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	X ALTERING CASING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONMENT*
REPAIR WELL	CHANGE PLANS	(Other)	
(Other)		(NOTE: Report resu Completion or Recor	lts of multiple completion on Well npletion Report and Log form.)
17. DESCRIBE PROPOSED OR COM- proposed work, If well	PLETED OPERATIONS (Clearly state all pertine is directionally drilled, give subsurface loc	nt details, and give pertinent dat ations and measured and true ver	es, including estimated date of starting any tical depths for all markers and zones perti-

nent to this work.) *

11" hole with 8-5/8 23# casing set at 150' 7-7/8 hole with $4\frac{1}{2}$ 10.5# casing set at 4548, set and cemented on 1-11-76





18. I hereby certify that the foregoing is true and correct	TITLEOperator	DATE February
(This space for Federal or State office use) APPROVED BY CONDITIONS OF APPROVAL, IF ANY:	TITLE	DATE

```
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24264
FIELD: BLANCO E
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                                                                                                                                                                        30N-RGE
DN 7
                                                                                                                                                                      TWP
                                                                                                                                                                       SECTION
SW SE NW
                                                                                                                                                                            2240FNL 1410FWL SEC
STATUS GAS
                                                                                          WELL: 8 JICARILLA 458
DPR: BAYLESS ROBERT L WELL: 8 JICARILLA 458

SPUD: 09/15/88 COMP: 11/08/88 ELEV: 7086 KB 7074 GR
TD: 4075 (09/27/88) FM/TD: PIC CLIF PBTD: 3925
CDNTR: BAYLESS DRLG #5 (R) RIG SUBSTRUCTURE: 12
PROJ DEPTH/FM: 4120 PIC CLIF
COMP 11/8/88, IPF 3510 MCFGPD, 48/64 CK
FTP 212 FCP 620, SITP 1040,
SICP 1040,
CA0F 5135 MCFGPD.
PROD ZONE - PICTURED CLIFFS 3715-3784
(GROSS).
NO CORES OR DSTS
LOC DESCRIPTION: 12 MI NE GOBERNADOR, NM
CASING: 7 5/8 e 138 W/ 75 SACK
TUBING: 1 1/2 AT 3758
LOG TYPES: IES
TYPE FORMATION LTH TOP DEPTH/SUB BSE DEPTH/SUB
LOG OJO ALMO 3138 3948
LOG KIRTLAND 3375 3711
LOG FRUITLND 3400 3686
LOG PIC CLIF 3710 3376
  LOG
LOG
LOG
                                                               3138
3375
3400
3710
4075
                                                                                     3948
3711
3686
3376
  AMMANN BASE MAP NM-5
                                                                                   POMCO MAP NM-14
                                                                                                                                                           NM2-112888 (CONTINUED)
              COPYRIGHT 1988 FETROLEUM INFORMATION CORP.
              CONTINUED NM2- 2 OF 2
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24264
FIELD: BLANCO E
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                                                                                                                                                                   TWP 30N-RGE 3W
SECTION 7
SW SE NW
* 2240FNL 1410FWL SEC
STATUS GAS
                                                                                                         WELL: 8 JICARILLA 458
                                                                                                              W/ 100/IT 3715- 3784 GROSS
3734- 3736 3744- 3750 3752- 3763
3780- 3784
500GALS
                                                       PIC CLIF PERF
PERF 3715-3729
PERF 3766-3776
ACID 3715-3784
7 1/2% HCL
               PROD TESTS:
               GAUGE NOT RPTO.

IP: IPF 3510 MCFD
PIC CLIF PERF 37
TP 212 CP 620 SITP 1040 SICP 1040
                                                                                                                                         48/64CK
3715- 3784 GROSS
                                                                                                                                              CADF
                                                                                                                                                                       5135 MCFD
              PROD ZONE: PIC CLIF 3715- 3784 (GROSS)
OPR ADDRESS BAYLESS ROBERT L
PO BOX 168
FARMINGTON, NM 87499-0168
```

Fürm 3160-4 (November 1983) (formerly 9-330)

.D STATES UNI DEP

SUBMIT IN DUPLICA

(Secothe, in structions on reverse side)

Form approved. Budget Bureau No. 1004-0137 Expires August 31, 1985

ARTMENT OF	F THE INTER	RIOR	Stru-
BUREAU OF LAN	D MANAGEMENT		

5 CHARE DESIGNATION AND BERIAL NO.

	BUKE	AU OF LAN	U MANA	GEMEN			1 - i		Jicari	lla_	Contract 458	
WELL COM	MPLETION C	R RECON	APLETI	ON R	EPOR	T A	ND LO	3 *	1		TTRE OR TRIBE NAME	
Is. TYPE OF WELL		"FLI X					PH 12: 5		_ Jicari	lla EEMENT	Apache Tribe	
b. TYPE OF COM	LETION:											
WELL X	OVER DESER	BACK C	DEFF	• <u> </u>	Hhor 3	- 11	REW MEX	REA	S. PARM OR	LEANE	NAMB	
2. NAME OF OPERATO	on			F	RH.RU	HUN.	KEB HEN				458	
Robert L	. Bayless								9. WELL NO.			
	168, Farmin	aton NM	87/00	1					10. FIELD AT	8 ND P001	L, OR WILDCAT	
4. LOCATION OF WEL	L (Report location c	learly and in a	ccordance	with any	State re	quirem	enta)*		- East E	31anc	o P.C.	
At surface	2240' FNL &	1410' FWL								R., M., (OR BLOCK AND BURVEY	
At top prod. into	erval reported below	same									•	
At total depth		same							Section	on 7,	, T30N, R3W	
		040	14. PEI	MIT NO.		DAT	TE IBSUED		12. COUNTY PARISH	OR	13. STATE	
									Rio Ar	riba	a NM	
5. DATE STUDDED	16. DATE T.D. REAC		COMPL. (Ready to	prod.)	18. E			, RT, GR, ETC.)*	19. 1	ELEV. CASINGHEAD	
9/15/88	9/27/88	ACK T.D., MD A	$\frac{10/31}{10}$	/88 . IF MULT	TPLE COS	4 P.L.	7086	S'R		1.8	CABLE TOOLS	
4075' KB		925' KB		HOW. MA				LED B	1	1		
	VAL(8), OF THIS CO		BOTTOM,	NAME (M	D AND T	VD)*	<u> </u>	<u> </u>	1 0 - TI		5. WAS DIRECTIONAL	
											SURVET MADE	
	liffs 3715								· · · · · · · · · · · · · · · · · · ·		No	
	IND OTHER LOGS RUN CNL; GR-CLL									27. ₩	AS WELL CORED	
1EL, CDL,	CNL, GR-CLL	CASI	NG RECO	RD (Repo	ort all st	rings sc	t in well)				No	
CABING SIZE	WEIGHT, LB./FT.	DEPTH RE			E SIZE			ENTIN	G RECORD		AMOUNT PULLED	
7 5/8"	26.4#/ft	138'	KВ	9	7/8"	_	75 sx (89 f	t ³) Class	Вw	/3% CaCl2	
4 1/2"	10.5#/ft	4033	KB_	6	3/4"	3	00 sx (618	4	1	v/2% eçonolite,	,
		_							• • • • • • • • • • • • • • • • • • • •		70 ft) 50/50	
	LII	VER RECORD		l .		p	OZMÍX W.	/2%_	gel, 10%;		1/4# flocele,	'sx
BIZE	TOP (MD) B	OTTOM (MD)	SACKS CI	*TRAME	SCREEN	(MD)	SIZE	<u>-</u>	DEPTH SET ()	(D)	PACKER BET (MD)	
			_				1 1	/2"	3758' 1	KB	none	
31 PERFORATION PER	ORD (Interval, size	and number)			1			!			<u> </u>	
Pictured Cli	ffs w/3 1/8"	gun - 2	JSPF		32.				CTURE, CEMEN			
3734-3736	- 29 holes - 5 holes				l	5-37		 			weighted HCL ac	
3744-3750 3752-3763	- 13 holes	(.34" di	amete	r)		<u>, , , , , , , , , , , , , , , , , , , </u>	04	1 .			CN ball sealers	
3766-3776	- 21 holes										uality foam	.,
3780-3784	- 9 holes							<u> w/l</u>	00.000# 20	0-40	sand	
33.° DATE FIRST PRODUCT	ION PRODUCT	ION METHOD (lowing, a		TCTION		d type of pu	915		. STATU	ogen * (Producing or	
11/9/88	fi	owing							a A 1	ut∙iπ) ∵nπ∩	ducing	
DATE OF TEST	HOURS TESTED	CHOKE BIZE		N. FOR PERIOD	OIL-B	B1	GAS- N	CF.	WATER-BB		GAS-OIL RATIO	
11/8/88	3	3/4"			-0		11				N/A	
FLOW, TUBING PRIME.	CABING PRESSURE	CALCULATED 24-HOUR RAT	1		۱ (AB MC	1	WATE	.R~ MBL.	DIL	GRAVITY-API (CORR.)	
212 34. DISPOSITION OF G	1 1040 IAB (Bold, used for fu	el, vented, etc.)		-0-		35	10		-0-	RHED I	N/A	
vented										vid		
35. LIST OF ATTACH	MENTS								I.CO		NAME OF THE PROPERTY OF THE PR	
36. I bereby certify	that the foregoing	and attached to	nformation	a le comp	lete aud	correct	as determir	ed fro	m all available			
)/2	1 1/1/	14_()		•							7. 1. 11. 11.11.11.18	
BIGNED Key	vin H. McCor			TLE			Engine		DAT	E	11/11/88	
		nstructions a	nd Spac	HATE	Cadition	nal Do	ita on Rev	ene S	Side) FACE	a.a.		

PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 458 #8
Section 7, T30N, R3W
2240' FNL & 1410' FWL
Rio Arriba County, New Mexico

DAILY REPORT

- 09/16/88 Spud well at 7:00 PM on 9/15/88. Drilled 150 ft. of 9 7/8" surface hole. Circulate and condition hole to run surface casing.
- 09/17/88 Drilling ahead at 460'. Ran 3 jts. of 7 5/8" 26.4#/ft 595 LTC used casing (128.87') and landed at 138' RKB. Rigged up Halliburton. Cemented surface casing with 75 sacks (89 ft³) of Class B cement w/3% CaCl2. Good circulation throughout job. Circulated cement to surface. Plug down at 12:00 noon 9/16/88. Wait on cement 12 hours.
- 09/18/88 Drilling ahead at 1040'.
- 09/19/88 Drilling ahead at 1400'.
- 09/20/88 Drilling ahead at 1750'.
- 09/21/88 Drilling ahead at 2225'.
- 09/22/88 Drilling ahead at 2380'.
- 09/23/88 Drilling ahead at 2885'.
- 09/24/88 Drilling ahead at 3250'.
- 09/25/88 Drilling ahead at 3470'.
- 09/26/88 Drilling ahead at 3820'.
- 09/27/88 TD well at 4075' at 4:00 AM on 9/27/88. Trip out of hole for logs.
- 09/28/88 Finish trip out of hole for logs. Logged with Welex. Ran IEL, CDL, CNL from loggers TD of 4073'. Lay down drillpipe and collars. Run 96 jts. of 4 1/2" casing as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point 95 jts. 4 1/2" 10.5#/ft J-55 new casing	9.00	0- 9
(Domestic-Newport) 1 differential fill float collar 1 jt. 4 1/2" 10.5#/ft casing 1 guide shoe	42.05 85	9-3988 3988-3990 3990-4032 4032-4033
	4032.48	

PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

Jicarilla 458 #8

DAILY REPORT

Page 2

09/28/88 (Continued)

Centralizers: 4012, 3822, 3781, 3738, 3697, and 3654. Rigged up Halliburton. Cemented longstring with 300 sx (618 ft³) of Class B cement containing 2% econolite and 1/4# flocele/sx; tailed with 135 sx (170 ft³) of 50/50 pozmix with 2% gel, 10% salt, and 1/4# flocele/sx. Good circulation throughout job. Circulated cement to surface. Bumped plug to 2000 psi-held OK. Plug down at 11:30 PM on 9/27/88. Release rig. Wait on completion.

10/21/88 Rig up Bayless Rig 2. Nipple up wellhead. Nipple up BOP. Unload tubing. Shut down for night.

10/22/88 Pick up 3 7/8" bit and 1 1/2" tubing. Tag cement at 3925' RKB. Shut down for night.

10/23/88 Shut down--Sunday.

Rigged up the Western Company. Pressure tested casing and wellhead to 3500 psi-held OK. Moved tubing to 3784' RKB. Spotted 250 gallons of 7 1/2% DI HCL acid across perforation interval. Trip tubing out of hole. Rigged up Basin Perforators. Ran GR-CLL from PBTD of 3920' (5' correction) to 3500' RKB. Perforated Pictured Cliffs interval with 3 1/8" casing gun and 2 JSPF as follows:

3715 -	3729	14'	29	holes		
3734 -	3736	2'	5	holes		
3744 -	3750	6,	13	holes		
3752 -	3763	11'	23	holes		
3766 -	3776	10'	21	holes		
3780 -	3784	<u>4</u> ,	9	holes		
		47'	100	holes	(.34"	diameter)

Rigged up the Western Company. Broke down perforations @ 1300 psi. Established injection rate into perforations of 9.0 BPM @ 600 psi, ISIP = 300 psi. Acidized Pictured Cliffs interval with 500 gallons of 7 1/2% DI weighted HCL acid containing 150 1.1 s.g. RCN ball sealers - 8.1 BPM @ 500 psi. Saw very good ball action. Balled off casing to 3500 psi. Surged off balls. Re-established rate into perforations of 8.1 BPM @ 550 psi, ISIP = 300 psi. Ran junk basket in hole on wireline. Recovered 81 ball sealers. Pictured Cliffs interval with 75,000 gallons of 70 quality foam containing 100,000# of 20-40 sand as follows:

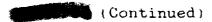
(

PETROLEUM PLAZA BUILDING
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Jicarilla 458 #8

DAILY REPORT

Page 3



15.000 gal. of 70 quality foam pad 30 BPM @ 2000 psi 20.000 gal. of 1 ppg 20-40 sand 30 BPM @ 2100 psi 30 BPM @ 2100-2200 psi 2,481 gal. of 70 quality foam flush 30 BPM @ 2100 psi

ISIP = 1600 psi 5 min. = 1500 psi 10 min. = 1475 psi 15 min. = 1450 psi

All water contained 2% KCL and 1/2 gal/1000 clay stabilization agent. Average rate - 30 BPM. Average pressure - 2100 psi. Maximum pressure - 2200 psi. Minimum pressure - 2000 psi. Average nitrogen rate - 14,000 SCF/min. Total nitrogen pumped - 915,000 SCF. Shut well in for 3 hours to allow fracture to heal. Opened well to atmosphere to clean up after frac. Shut down for night.

10/25/88 Well flowing to clean up after frac.

10/26/88 Well flowing to clean up after frac. Well blowing very hard. Sand had eaten out nipple on wellhead and frac valve. Killed well. Replaced nipple and valve. Left well flowing to clean up. Shut down for night.

10/27/88 Well flowing hard. Killed well. Tripped in hole with hydrostatic bailer on tubing. Tagged sand fill at 3765' RKB. Cleaned out 125' of sand with hydrostatic bailer to 3890' RKB. Trip tubing and bailer out of hole (had to kill well several times on trip). Trip in hole with 111 jts. of 1 1/2" tubing and landed well as follows:

Description	Length	<u>Depth</u>
KB to landing point 110 jts. 1 1/2" 2.9#/ft J-55 EUE tubing 1 seating nipple 1 jt. 1 1/2" 2.9#/ft J-55 EUE tubing		0- 6 6-3723 3723-3724 3724-3758

Nipple down BOP. Nipple up wellhead. Well kicked off flowing. Left well flowing to clean up for AOF. Released rig.

10/28/88 NOTE: Tubing hanger outside diameter is 7 3/8"--WILL NOT PASS THRU BOP!

```
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24307
FIELD: BLANCO E
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                                                                                                                                                                TWP 30N-RGE 3W
SECTION 19
SE NW NE
* 790FNL 1850FEL SEC
STATUS GAS
                                                                                                WELL: 4 JICARILLA 459
SPUD: 10/28/88 COMP: 01/23/89 ELEV: 7155 KB 7143 GR
TD: 4165 (11/03/88) BHT: 135 F FM/TD: PIC CLIF PBTD: 4088
CONTR: BAYLESS DRIG #5 (R)
PROJ DEPTH/FM: 4130 PIC CLIF
COMP 1/23/89, IPF 4378 MCFGPD, 48/64 CK,
SICP 1025,
IPCAOF 8256 MCFGPD.
PROD ZONE - PICTURED CLIFFS 3750-3840
(GROSS)
NO CORES OR DSTS
LOC DESCRIPTION: 11 MI NE GOBERNADOR, NM
CASING: 8 5/8 $ 135 W/ 150 SACK
TUBING: 1 1/2 AT 3782
LOG TYPES: 136-4157 IES 136-4157 CNL 136-4157 FDC
135-4155 SPCT 135-4155 DENL 135-4155 DSN
135-4155 IES 135-4155 GRDL
TYPE FORMATION LTH TOP DEPTH/SUB BSE DEPTH/SUB
                     DJD ALMO
KIRTLAND
                                                                   3182
3431
                                                                                          3973
3724
  AMMANN BASE MAP AM-5
                                                                                       POMCO MAP NM-14
                                                                                                                                                                  NM7-021389 (CONTINUED)
              COPYRIGHT 1989 PETROLEUM INFORMATION CORP.
                                                                                                                                                                                                                    FORM NO. 327
             CONTINUED NM7- 2 OF
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24307
FIELD: BLANCO E
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                               NM7- 2 OF 2
                                                                                                                                                                                           TWP 30N 19
SECTION 19
SE NW NE
* 790FNL 1850FEL SEC
STATUS GAS
                                                                                                             WELL: 4 JICARILLA 459
                                                        ND 3700 345

IF 3748 346

4165 295

PIC CLIF PERF

PERF 3750- 3755

PERF 3818- 3823

ACID 3750- 3840
                                 FRUITLND
PIC CLIF
                                                                                                      3455
3407
                                                                                                                   W/ 2/FT 3750- 3840 GROSS
3760- 3763 3766- 3792 3794- 3802
3837- 3840
750GALS
174 RALL SEALERS
                                                                                                       2990
              PROD TESTS:
```

IPF 4378 MCFGPD W/LITE MIST OF WTR.
PROD ZONE: PIC CLIF 3750- 3840 (GROSS)
OPR ADDRESS BAYLESS ROBERT L
BOX 168
FARMINGTON, NM 87499-0168

8256 MCFD

Form 3160-4

35. LIST OF ATTACHMENTS

Form approved.

P.O. B	MPLETION: WORK DOOR L. Bay RATOR SOX 168,	ARTM BUREA ON OI WELL THE TOTAL TOTA	ngton, 1	MPLETI	ON R	EPORT SHINGTON	RES N. R	PLUS NEX	ther Index sole)	Jicari 6 IF INDIAN Jicari 7 INIT AGRE N PARM OR Jicari 9 WELL NO.	ALLOTT LEMENT LEASE N 11a 4	459) e
At surface			1850' FI	5L						31. SEC. T. 1 OR AREA	R., M., OK	BLOCK AND BURVEY	
At top prod. int	terval repor	ted below	same										
At total depth			same	14. PE	RMIT NO.	1	DATE	ISSUED		12. COUNTY (DR	13. STATE	
15. DATE SPUDDED	16. DATE	T.D. REACH	ED 17. DAT	E COMPL.	(Ready to	prod.) 18	ELEV	ATIONS (D	F. RKB.	Rio A1		EV. CABINGHEAD	
10/28/88	1	1/2/88		1/14	/89	1		3' GL		55' RKB			
20. TOTAL DEPTH. MD 4165	4 TYD 2		CK T.D., MD &	TVD 22	HOW M	TIPLE COMPL.		23. INTE	RVALS	ROTARY TOO		CABLE TOOLS	
24. PRODUCING INTER	EVAL(S). OF			, BOTTOM,	NAME (M	D AND TVD)			<u>→</u>) 0 - TI		WAS DIRECTIONAL	
											-	SURVET MADE	
Pictured			- 3840	•								No	
26. TYPE ELECTRIC											27. WAI	WELL CORED	
IEL-CNL-	-FDC-GR-	-CCL	CASI	NC PECO	PD (Per	ort all strings		- 40.0173				No	
CABING BIZE	WEIGH	T. LB./FT.	DEPTH RE			LE SIZE	1		ENTING	RECORD	1	AMOUNT PULLED	
8 5/8"	24.0	0#/ft	135	' KB	12	1/4"	150) sx (177	ft ³) Class	s B w	/2% CaCl2	
4 1/2"		5#/ft	4146			3/4"						/2% Econoli	te,
			_		.							21 ft ³) 50/	
29.	1	T.IN	ER RECORD		<u>!</u>		l poz	zmix w 30.	/2%_	gel. 10%;		1/4# floce	le/s>
81ZE	TOP (MD		TON (ND)	BACKS C	EMENT*	SCREEN (M	D)	SIZE	-	DEPTH SET (N		PACKER SET (MD)	
								1 1	/2"	3782 K	B -	none	
31. PERFORATION RE Pic. Cliff	cord (Inter Es w/3	val, size a: 1/8" gi	nd number) in - 2 J	SPF		82.				TURE, CEMEN			
3750-375 3760-376	55 - 11	holes				DEPTH IN				MOUNT AND KIN			. .
3766-379	92 - 53	holes	(.34"	diamet	er)	3750	- 30	340				hted HCL ac N ball seal	•
3794-380 3813-382												uality foam	
3837-384										00,000# 2			,
33.*				C.L.		OUCTION				15,381 SC			
DATE FIRST PRODUCT		_	ON METHOD (i iowing, g	ue isji, pi	-mpiny—8126	una I	spe of pul	- P)	ahs	st-in)	(Producing or	
1/24/89	HOURS T		CHOKE SIZE		N. FOR	OIL-BBL.		GAS- M	CF.	WATER-BB	•	ducing	
1/23/89	3		3/4"	TEST	PERIOD	-0-		54	7	-0-		N/A	
FLOW, TUBING PRING.	CARING P	RESS'RE	CALCULATED 24-HOUR RAT	O11	DB1	GAR-	MCP.		WATLE	IMBL.	OIL GR	AVITY-API (CORE.)	
266		25			-0-	4	378			-0-		N/A	
84. DISPOSITION OF	WAR (5016, W	ecu jor jue	, venica, eic.	,						TEST WITNE		• •	
vented										i Dav	id Ba	11	

36. I hereby certify that the foregoing and attyched information is complete and correct as determined from all available records 0.1989 OPER Petroleum Engineer 1/25/89 SIGNED . DATE __ Kevin H

*(See Instructions and Spaces for Additional Data on Revene Side)

THEOMINGTON RESPUBLIE LAKEA

PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 459 #4
Section 19, T30N, R3W
790' FNL & 1850' FEL
Rio Arriba County, New Mexico

DAILY REPORT

10/29/88 Spud well at 5:30 PM on 10/28/88. Drilled 138' of 12 1/4" surface hole. Ran 3 jts. of 8 5/8" 24#/ft J-55 casing (122.52 ft.) and landed at 135' RKB. Rigged up Cementers, Inc. Cemented surface with 150 sx of Class B cement with 2% CaCl2. Good circulation throughout job. Circulated cement to surface. Plug down at 11:00 PM on 10/28/88. Wait on cement.

10/30/88 Drilling ahead at 1795'.

10/31/88 Drilling ahead at 2457'.

11/01/88 Drilling ahead at 3327'.

11/02/88 Drilling ahead at 3957'.

11/03/88 TD well at 4165' at 3:15 PM on 11/2/88. Circulate 1 hour. Short trip. Trip out of hole for logs. Rigged up Welex. Ran IEL-CNL-FDC logs from loggers TD of 4157 ft. RKB. Trip in hole with drillpipe. Lay down drillpipe.

11/04/88 Finish laying down drillpipe and collars. Ran 4 1/2" casing as follows:

Description	Length	<u>Depth</u>
KB to landing point 120 jts. 4 1/2" 10.5#/ft J-55 new casing	12.00	0- 12
(Domestic-Maverick) 1 DFFC 1 jt. 4 1/2" 10.5#/ft casing 1 cement filled guide shoe	4088.68 1.60 42.60 .85 4145.73	12-4101 4101-4102 4102-4145 4145-4146

Centralizers at 4126, 3848, 3805, 3762, 3720 and 3678. Rigged up Halliburton. Cemented longstring with 200 sx (412 ft³) of Class B cement with 2% Econolite and 1/4# flocele/sx, tailed by 175 sx (221 ft³) of 50/50 pozmix with 2% gel, 10% salt and 1/4# flocele/sx. Good circulation throughout job. Bumped plug. Float held OK. Plug down at 12:30 PM on 11/3/88. Released rig. Wait on completion.

PETROLEUM PLAZA BUILDING
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FARMINGTON, NEW MEXICO 87499
(505) 326-2659

Jicarilla 459 #4

DAILY REPORT

Page 2

1/06/89 Move in Bayless Rig 3 and rig up. Make up wellhead and nipple up BOP. Pick up 124 jts. of 1 1/2" 2.9# J-55 EUE tubing and clean out to PBTD of 4087.94' RKB. Shut and lock rams for

pressure test.

Pressure test BOP to 3500 psi-held OK. Roll hole w/2% KCL water. Pull tubing to 3845'. Spot 250 gallons of 7 1/2% DI HCL acid. Trip tubing out of hole. Rig up Basin Well Logging and run GR-CCL from PBTD to 3400'. Perforate Pictured Cliffs interval as follows:

3750 -	3755	5'	11	holes		
3760 -	3763	3'	7	holes		
3766 -	3792	26'	53	holes		
3794 -	3802	8'	17	holes		
3813 -	3823	10'	21	holes		
3837 -	3840	<u>3'</u>	7	holes		
		55'	116	holes	(.34"	diameter)

Broke down perforations @ 1500 psi. Established an injection rate into perforations of 7.4 BPM @ 400 psi, ISIP = 150 psi. Acidized perforations with 750 gallons of 7 1/2% weighted HCL acid containing 174 1.1 s.g. RCN ball sealers. Pump acid away @ 7.0 BPM. Good ball action. Still pumping 2.0 BPM @ 3400 psi. Surged balls off perforations. Pumped into perfs w/7.0 BPM @ 450 psi. ISIP = 325 psi. Ran junk basket and recovered 9 RCN ball sealers.

gallons of 70 quality foam containing 200,000 of 20-40 sand as follows:

30,000	gal.	of	70 quality foam pad	30	BPM @	2100	psi
40,000	gal.	of	1 ppg 20-40 sand	30	BPM @	2060	psi
80,000	gal.	$\circ f$	2 ppg 20-40 sand	30	BPM @	1950	psi
2,504	gal.	of	70 quality foam flush	30	BPM @	2000	psi

All fluid contained 2% KCL and 1/2 gal/1000 clay stabilization agent. Average rate - 30 BPM. Average pressure - 2000 psi. Minimum pressure - 1900 psi. Maximum pressure - 2200 psi. Average nitrogen rate - 14,900 SCF/min. Total nitrogen pumped - 1,815,381 SCF. Total fluid to recover - 1239 bbls. Shut well in for 3 hours. Open well to pit through tapped bull plug to clean up.

(

PETROLEUM PLAZA BUILDING P. O. BOX 168 FARMINGTON, NEW MEXICO 87499 (505) 326-2659

Jicarilla 459 #4

DAILY REPORT

Page 3

- 1/11/89 Well still cleaning up to pit. Flowing casing pressure at 220 psi through tapped bull plug. Leave well flowing.
- 1/12/89 Well still flowing with 140 psi on casing through tapped bull plug. Open well through 2" line and blow down. Pump 20 bbls. to kill well. Trip in hole with tubing. Tag sand at 3988' RKB (100 ft. of sand fill). Pull tubing to landing point and land tubing as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point 113 jts. 1 1/2" 2.9#/ft J-55 EUE tubing 1 seating nipple 1 jt. 1 1/2" 2.9#/ft J-55 EUE tubing		

Land tubing at 3781.80' RKB. Nipple down BOP and make up wellhead. Bring well around. Leave well flowing to clean up for test. Rig down unit. Move off location.

```
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24157
FIELD: UNNAMED
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                                                                                    TWP 30N-RGE
SECTION 20
NE SW NW
                                                                                                       1650FNL 790FWL SEC
STATUS GAS
                                                     WELL: 2 JICARILLA 459
AMMANN BASE MAP NM-9
                                                 POMCO MAP NM-14
                                                                                            NM9-122387 (CONTINUED)
        COPYRIGHT 1987 PETROLEUM INFORMATION CORP
                                                                                                                        FORM NO. 327
              CONTINUED NM9- 2 OF 2
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24157
FIELD: UNNAMED
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                                                                                               TWP SUN 20
SECTION 20
NE SW NW * 1650FNL 790FWL SEC
STATUS GAS
                                                                   WELL: 2 JICARILLA 459
              LOG TYPES: 3150-4148 DENL 3150-4148 DSN 3550-4084 GRL 3550-4084 CCL TYPE FORMATION LTH TOP DEPTH/SUB BSE DEPTH/SUB
                                      DJD ALMO
FRUITLND
PIC CLIF
TD
                                                                3960
3732
3422
3014
              LOG
LOG
LOG
                                                                      W/ 2/FT 3743- 3796 GROSS
3750- 3754 3764- 3772 3778- 3796
500GALS
ATP 1200 ISP 550
7 1/2% HCL, 111 BALLS
              PROD TESTS:
               GAUGE NOT RPTD

SPTD HOLE W/250 GALS(7 1/2% DI-HCL).

IP: IPF 3505 MCFD 48/64CK
PIC CLIF PERF 3743- 3796 GROSS
TP 211 CP 588 SITP 1087 SICP 1087
                                                                                           CAOF
                                                                                                         4735 MCFD
               PROD ZONE: PIC CLIF 3743- 3796 (GROSS)
OPR ADDRESS BAYLESS ROBERT L
BOX 168
FARMINGTON, NM 87499
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FORM NO. 327

Form 3160-4 (November 1983) (farmerly 9-330)	D.C.		מרואם "ס						ther in	Expire	t Bure	ed. Pau No. 1004—0137 Pust 31, 1985
	DEF		MENT O				JK .		un zule)		BIGNAT	TUN APP BERIAL NO.
		BUR	EAU OF LAN	ID MAN	AGEMEN	iT .				Jicari	lla	Cont. #459
WELL CO	MPI FI	ION (OR RECO	API FT	ION P	FPÂD	T-AN	D LO		1		BMAN BRIRT SO SETT
IN TYPE OF WEL		- 1011		-					· + + + + + + + + + + + + + + + + + + +			Apache Tribe
		W KI.L	WELL C	۲J ۱	, L 484	PARMIX	Grana	ESOURCE NELY ME	13	7. INIT AURI	EEMEN	EMAK T
NEW TO	PLETION	: Toper			, —	FARM	INGTON	NETA ME	EARE	·		·
NEW WELL X	OVER L		Nok [ova L.J. (Other	- 10/1,	11-11-11-	XICO			
	_	i				-				Jicari		159
Robert I		less		_						- V. WELL NO.		
					_					1 70 505 5 7	#2	L, OS WILDCAT
P.O. BOX			ngton, NM			State re	Quircmen	70)*		-		t, us willers
44	. •		790' FWL		• • • • • • • •		•	•• ,		Wildca		OR BLOCK AND BURYEY
										OR AREA		
At top prod. in	terval repo	oried belo	♥ same									
At total depth			same					•		Sec.	20,	T30N, R3W
				14. P	ERMIT NO.		DATE	ISSUED		12. COUNTY	OR	13. STATE
										Rio Ari	riba	New Mexico
15. DATE STUDDED	16. DAT	E T.D. REA	CHED 17. DAT	E COMPL.	(Ready to	prod.)	18. ELEV	VATIONS (D	F, RKB,	RT, GR, ETC.)*	19.	ELEV. CASINGHEAD
11/3/87	1 13	1/10/8	7	11/30	/87	1	716	2' GL;	717	4' KB	İ	
20. TOTAL DEPTH, MD	A TVD	21. PLUG.	BACK T.D., MD &	TVD 2	2. IF MULT		PL.	23. INTE	RVALS	ROTARY TOO	LS	CABLE TOOLS
4150' H	CB	4	098' KB		11	•			→	0 - TI)	
24. PRODUCING INTE	RVAL(S). C	F THIS C	OMPLETION - TOP	, BOTTOM	, NAME (M	D AND TO	(D) *				2	5. WAS DIRECTIONAL SURVEY MADE
Picture	ed Cli	ffs 3	743' - 37	96'								No
26. TYPE ELECTRIC	AND OTHE	LOGS RI	N					-		1	27.	AN WELL CORED
Induct	ion, D	ensity	, Neutron	, GR-0	CLL							No
28.	· · · · · ·				ORD (Repo	rt all str	ings set i	n well)		<u> </u>		
CABINO BIZE	WEIG	RT, LB./FT	. DEPTH RE	T (MD)	1101.	E SIZE	1	CEN	ENTING	RECORD		AMOUNT PULLED
7-5/8"	26	.4#/ft	. 145	' KB	9-7	/8"	6	0 sx,	71 f	t. ³ Class	B w	/3% CaCl ₂
4-1/2"	11	.6#/ft	. 4144	' KB	6-3	3/4"						w/2% D-79, 1/4#
												50 pozmix w/2%
					1					t, 1/4# f		
29.		L	INER RECORD					3 0.		TUBING REC	ORD	
SIZE	TOP (M	ا (۵	DOTTOM (MD)	BACKE C	EMENT*	SCREEN	(MD)	SIZE		DEPTH BET (N	(D)	PACEER SET (MD)
								1-1	/2"	3767'	КВ	None
				1								
31. PERPORATION RE	•			CDE -		82.	AC	ID. SHOT	FRAC	TURE, CEMEN	T SQU	EEZE ETC.
Pic. Clif:	3748 -		-	SPF:		DEPTH	INTERVA	L (MD)		MOUNT AND KIE	D OF	MÄTERIAL TSED
-	3754 -		loc			3743	3 <mark>-3796</mark>		<u>750</u>	qal. 718	wei	ghted HCL acid
	3772 -		1 2/1"	diame	eter)				<u>w/1</u>	<u>11 1.1 s.</u>	g. F	CN ball sealers;
	3796 -]			. — — —			uality foam
						1						mesh sand:
33.º DATE FIRST PRODUCT	200	1 manus	TION METHOD (Flancia		CTION				,100 SCF		
	108			riowing,	pus min, pu	mping	erse and s	ype of pur	np)		st-in}	8 (Producing or
None	I HOURS		ut-in	1 2200	'N. FOR	OIL-BI		648- N		WATER-BB		Shut-in
					PERIOD	1 .		1		1 _	٠.	
12/4/87	1 648180	PRESSURE	3/4"	-	-BBI	<u>(</u>	II—NCF.	43		0 1HBL.		N/A
	1		24 BOUR RAT			1		1	- 4151		0.2	
211 34. DISPOSITION OF 6	58		nel pented etc		0		3505	1		O I TEST WITHE	1000	N/A
Vented	\0000	/4. /	, venite, tit.,	,						David	AC(EPTED FOR RECOF
35. LIST OF ATTACH	MENTS									<u> </u>		DEC 1 0 1987
36. 1 hereby certify	Thet the	former's	mad minches)	n le sono	ata and	Antrost :	a deter-1-	•4 *	n all analishin	.FAB	Mington resour ce are <i>i</i>
SIGNED _	m		Maril		ITLE							12/9/87
K	cvin H	McCc	ord							UAF	- -	

(

PETROLEUM PLAZA BUILDING
P. O. BOX 16B
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 459 #2 Sec. 20, T30N, R3W 1650' FNL & 790' FWL Rio Arriba County, NM

DAILY REPORT

- 11/04/87 Spud well at 9:00 a.m. on 11/03/87. Drill 150 feet of 9 7/8" surface hole. Run three (3) joints of 7 5/8" 26.4 #/ft S-95 LTC used casing (133.38 feet) and land at 145 feet RKB. Rig up Cementers, Inc. Cement surface casing with 60 sacks of Class B cement with 3% CaCl2 (71 ft3). Good circulation throughout job. Circulate cement to the surface. Plug down at 12:30 p.m. 11/03/87. Wait on cement 8 hours.
- 11/05/87 Drilling ahead at 1802'.
- 11/06/87 Lost one (1) cone in hole on Bit #3, remaining cones looked very good. Trip in hole with magnet. Recover metal shavings and chips, no cone. Trip in hole with Bit #4. Work junk in hole and drilling ahead at 2227'.
- 11/07/87 Bit #4 will not drill properly. Trip out of hole to look at bit #4. Bit #4 has a piece of cone missing. Trip in hole with magnet. Recover lost cone from bit #3 and cone from bit #4. Drilling ahead at 2783'.
- 11/08/87 Drilling ahead at 3429'.
- 11/09/87 Drilling ahead at 3822'.
- 11/10/87 TD well at 4150' at 2:15 a.m. on 11/10/87. Circulate for 3/4 hours. Trip out of hole for logs. Rig up loggers.

PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 459 #2 Section 20, T30N, R3W 1650' FNL & 790' FWL Rio Arriba County, New Mexico

DAILY REPORT

11/11/87 Log with Welex. Run 1EL, CDL, and CNL logs. Trip in hole with drillpipe. Lay down drillpipe and collars. Run 4 1/2" casing as follows:

DESCRIPTION	<u>LENGTH</u>	<u>DEPTH</u>
KB to landing point 96 joints of 4 1/2" 11.6#/ft J-55	12.00	0 - 12
LTC Casing	4091.64	12 - 4104
1 - 4 1/2" Differential fill float collar	1.85	4104 - 4105
1 joint of 4 1/2" 11.6#/ft J-55 LTC Casing		4105 - 4143
1 - 4 1/2" Cement filled guide shoe	$\frac{.67}{4143.70}$	4143 - 4144

Centralizers at: 4124, 3805, 3763, and 3720. Rig up Dowell. Pump five (5) bbls of water ahead of cement. Cement longstring with 300 sacks of class B cement with 2% D-79 and 1/4# celeflake per sack tailed by 150 sacks of 50/50 pozmix with 2% gel, 10% salt, and 1/4# flocele per sack. Good circulation throughout job. Circulate cement to surface. Bump plug to 2000 PSI. Held okay. Plug down at 6:30 p.m. 11/10/87. Rig down, release rig at 12:00 a.m. 11/11/87. Wait on completion.

- 11/25/87 Move in and rig up Bayless Rig #4. Nipple up wellhead. Nipple up BOP. Picked up 3 7/8" bit and 1 1/2" tubing. Tagged cement at 4098' RKB. Shut down for night.
- 11/26/87 Shut down for Thanksgiving.
- 11/27/87 Rigged up the Western Company. Pressure tested casing to 3500 psi-held OK. Circulated hole clean with 2% KCL water. Moved tubing to 3796' RKB. Spotted 250 gallons of 7 1/2% DI HCL acid. Tripped tubing out of hole. Rigged up Basin Perforators. Ran GR-CLL from PBTD of 4084' to 3550'.

PETROLEUM PLAZA BUILDING
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FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 459 #2 Section 20, T30N, R3W 1650' FNL & 790' FWL Rio Arriba County, New Mexico

DAILY REPORT

(Continued)

sand as follows:

Perforated Pictured Cliffs interval with 3 1/8" casing gun and 2 JSPF as follows:

3743-3748	5'	11 holes	
3750-3754	4'	9 holes	
3764-3772	8'	17 holes	
3778-3796	<u>18'</u>	37 holes	
	35'	74 holes	(.34" diameter)

Broke down perforations at 2200 psi. Established an injection rate of 7 1/2 BPM @ 800 psi, ISIP = 500 psi. Acidized the Pictured Cliffs interval with 500 gallons of 7 1/2% weighted HCL acid containing 111 1.1 s.g. RCN ball sealers--7 1/2 BPM @ 650 psi. Saw good ball action. Balled off casing to 3500 psi. Surged off ball sealers. Established injection rate into perforations of 7 1/2 BPM @ 1200 psi, ISIP = 550 psi. Ran junk basket on wireline. Recovered 107 ball sealers. interval with 62,500 gallons of 70 quality foam containing 85,000# of 20-40 mesh

12,500	gal.	of	70 quality foam pad	30	BPM	@	2050	psi
15,000	gal.	of	1 ppg 20-40 sand	30	BPM	@	2150	psi
35,000	gal.	of	2 ppg 20-40 sand	30	BPM	@	2150	psi
2,437	gal.	\mathbf{of}	foam flush	30	BPM	@	2100	psi

ISIP = 1450 psi 5 min = 1450 psi 10 min = 1450 psi 15 min = 1400 psi

All water contained 2% KCL and 1/2 gal/1000 clay stabilizer. Average rate 30 BPM, average pressure 2150 psi, maximum pressure 2150 psi, minimum pressure 2050 psi, average nitrogen rate 15,200 SCF/min. Total nitrogen pumped 783,100 SCF. Total fluid to recover 559 barrels. Shut in well for 3 hours. Opened well to flow to atmosphere through 1/2" tapped bullplug. Shut down for night.

11/28/87 Well flowing to clean up after frac.

11/29/87 Well flowing to clean up after frac.

PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 459 #2 Section 20, T30N, R3W 1650' FNL & 790' FWL Rio Arriba County, New Mexico

DAILY REPORT

11/30/87 Well blowing dry burnable gas. Killed well. Trip in hole with hydrostatic bailer on tubing. Tagged sand fill at 3944'. Cleaned out 95 ft. of sand to 4039' (243' of rathole). Trip tubing and bailer out of hole. Trip in hole with 1 1/2" tubing and landed as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point 110 jts. 1 1/2" 2.9#/ft J-55 EUE tubing 1 seating nipple		0- 10 10-3732 3732-3733
1 jt. 1 1/2" 2.9#/ft J-55 EUE tubing	$\frac{34.25}{3767.24}$	3733-3767

Nipple down BOP. Nipple up wellhead. Well kicked off flowing. Left well flowing to the atmosphere to clean up. Released rig.

```
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24301
FIELD: BLANCO E
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                                                                                                                                                                       TWP 30N-RGE 3W
SECTION 29
SE NW NW
* 1190FNL 1190FWL SEC
STATUS GAS
OPR: BAYLESS ROBERT L WELL: 7 JICARILLA 464

SPUD: 11/26/88 COMP: 02/14/89 ELEV: 7250 KB 7238 GR
TD: 4215 (12/02/88) BHT: 135 F FM/TD: PIC CLIF PBTD: 4116
CONTR: BAYLESS DRLG #5 (R)
PROJ DEPTH/FM: 4265 PIC CLIF
COMP 2/14/89, IPF 2428 MCFGPD, 48/64 CK
FTP 144, FCP 441, SITP 1095,
SICP 1100,
CADF 2833 MCFGPD.
PROD ZONE - PICTURED CLIFFS 3815-3897
(GROSS).

NO CORES OR DSTS
LOC DESCRIPTION: 11 MI NE GOBERNADOR, NM
CASING: 8 5/8 6 139 W 130 SACK
TUBING: 1 1/2 AT 3868
LOG TYPES: 139-4210 DI 139-4210 GRDL 3200-4210 CDL
TYPE FORMATION LTH TOP DEPTH/SUB BSE DEPTH/SUB
LOG OJD ALMO 3278 3972
LOG KIRTLAND 3518 3732
LOG FRUITLND 3760 3490
                                                                                                    WELL: 7 JICARILLA 464
  AMMANN BASE MAP NM-5
                                                                                         POMCO MAP NM-14
                                                                                                                                                                   NM7-031389 (CONTINUED)
             COPYRIGHT 1989 PETROLEUM INFORMATION CORP.
                                                                                                                                                                                                                            FORM NO. 327
                           CONTINUED NM7- 2 OF 2
STATE: NMEX
COUNTY: RIO ARBA
API: 30-039-24301
FIELD: BLANCO E
WELL CLASS: DG
OPR: BAYLESS ROBERT L
                                                                                                                                                                                                                 TWP 30N-RGE 3W
SECTION 29
SE NW NW
* 1190FNL 1190FWL SEC
STATUS GAS
                                                                                                                         WELL: 7 JICARILLA 464
                            TYPE FORMATION LTH TOP DEPTH/SUB BSE DEPTH/SUB

LOG PIC CLIF 3814 3436

4215 3035

PROD TESTS: PIC CLIF PERF W/ 99/IT 3815- 3897 GROSS
PERF 3815- 3818 3821- 3821 3831- 3841 3843- 3848
PERF 3851- 3858 3868- 3876 3891- 3897
ACID 3815- 3897 500GALS
7 1/2% DI HCL 149 BALL SEALERS
                             GAUGE NOT RPTD.

IP: IPF 2428 MCFD
PIC CLIF PERF W/ 99/IT 38
TP 144 CP 441 SITP 1095 SICP 1100
                                                                                                                                                                  48/64CK
3815- 3897 GROSS
                                                                                                                                                                         CADF 2833 MCFD
                             IPF W/LITE MIST.
PROD ZONE: PIC CLIF 3815- 3897 (GROSS)
OPR ADDRESS BAYLESS ROBERT L
BOX 158
FARMINGTON, NM 87499-0168
```

Form 3160-4 (November 1983) (formerly 9-330)

UNI. ZD STATES

SUBMIT IN DUPLICA

PLICA (Secother inForm approved. Budget Bureau No. 1004-0137 Expires August 31, 1985

ONI. ED STATES											
DEPARTMENT O	F THE INTERIOR										
BUREAU OF LAN	ID MANAGEMENT										

(New other Instructions on texes some) 5. Frame DEBIGNATION AND BERIAL NO.

	BURE	AU OF LAND	MANAGEMEN	· · · · · · · · · · · · · · · · · · ·			Jicari	lla Co	ontract 464
WELL CON	APLETION O	R RECOMP	PLETION R	EPORT A	AND LOC	3 *	6. IF INDIAN.	ALI.OTTE	I OR TRIBE NAME
1a. TYPE OF WELL		WELL X					Jicari	lla Ap	pache Tribe
b. TYPE OF COMP	LETION:		_	Other					
NEW WELL	OVER DESCRIPTION	BYCK []	DIFF. (Other			S. I'ARY OR	LEARE NAS	12
2. NAME OF OPERATO							Jicari	11a 40	54
Robe	ert L. Bayle	ss					9. WELL NO.	_	
	Box 168, F	armington,	NM 87499				10. FIELD AN	7 D POOL, O	8 WILDCAT
4. LOCATION OF WELL	=	-	ordance with any	State require	mente)*		East Bla	nco P	ictured Cliffs
At surface	1190' FNL &	1190' FWL					11. BEC., T., I OR AREA	k., M., OK B	FOCK WAS BREAKA
At top prod. inte	rval reported below	same							
At total depth		same_							T30N, R3W
			14. PERMIT NO.	D I	ATE ISSUED		12. COUNTY C	DR	13. STATE
15. DATE STUDDED	16. DATE T.D. REAC	HED 1 17 DATE C	Our (Ready to	ered)] an			Rio Ar	riba	NM v. cabinghead
11/26/88	12/1/88	1	/25/89	****	ELEVATIONS (D		o' RKB	10. 222	. (1814851)
20. TOTAL DEPTH, MD 4		ACK T.D., MD & TVD	22. IF MULT	TIPLE COMPL.	23. INT	ERVALS	ROTARY TOO	LS	CABLE TOOLS
4215'		4116'	HOM. 217	rn A.	DRIL	LED BY	0 - TI) I	
24. PRODUCING INTER	VAL(8), OF THIS CO	I'LETION-TOP, B	OTTOM, NAME (M	D AND TVD)*		<u> </u>			AS DIRECTIONAL URVEY MADE
Pictured (Cliffs 3815	' - 3897'						İ	No
26. TYPE ELECTRIC A							· · · · · · · · · · · · · · · · · · ·	27. WAS	WELL CORED
IEL-CNL-F	DC-GR-CLL						ŀ	1	No
28.		CASING	RECORD (Repo	ort all strings	set in well)				
CABING SIZE	WEIGHT, LB./FT.	DEPTH SET	(MD) HOI	E SIZE		IENTING			MOUNT PULLED
8 5/8"	24.0#/ft	139'		2 1/4"					2% CaCl ₂
4 1/2"	10.5#/ft	4176'	<u>KB 7</u>	7 7/8"					2% Econolite
									1 ft ³) 50/50
29.	LIN	ER RECORD	<u>_</u>		30.		el. 10% s		<u>l/4# floce</u> le/s
# IZE	TOP (MD) BO	TTOM (MD) 8	ACKE CEMENT	SCREEN (MD	BIZE		DEPTH SET (M	(D) P	ACKER BET (MD)
					1 1	/2"	3868'		none
31. PERFORATION REC		1		 					
Pic. Clif	fs w 3-1/8"	gun – 2 JS	PF	32.			TURE, CEMEN		
3815-3818 -	7 holes 3	851-3858 -		3815-	ERVAL (MD)		MOUNT AND KIN		
3821-3828 -		868-3876 -		3013-	-3091				ted DI HCL aci ball sealers;
3831-3841 -	-	891-3897 -							lity foam
3843-3848 -	11 holes	(.34" di	ameter)				00,000# 20		
33.•				Ol'CTION		873,	300 SCF 1	nitrog	en
DATE FIRST PRODUCTS	ON PRODUCT	ION METHOD (Flo	wing, gas lift, ps	umping—eize (and type of pur	mp)	MELL	it-in)	Producing or
2/17/89 DATE OF TRET	HOURS TESTED	flowing CHOKE BIZE	PROD'N. FOR	OIL-BBL.	GASN	Cr -	WATER-BB	produ	Cing B-OIL BATIO
2/14/89	3	3/4"	TEST PERIOD	-0-	1	04	-0-	.	N/A
FLOW. TUBING PROSS.	CARING PRESSURE	CALCULATED	011,881	GAS-1	<u>'</u>	WATER		OIL GRAV	VITT-API (CORR.)
144	1100	24-HOUR RATE	-0-		2428		-0-		N/A on the contract
34. DISPOSITION OF G	AB (Bold, used for fu	el, vented, etc.)					TEST WITEE	SEED BY	
vented							Dav	id Bal	
35. LIST OF ATTACM	MERTS							111	7.6 (3.)
36. I bereby certify	that the foregoing	and attached last	THOD Is tomp	lete and corre	et as determin	ed from	all available		* 12 T
SIGNED	1/1	V	TITLE	Operato	r) '. Th.4 Th	vilientetie z	2/22/89
Roll	ert L. Bayle	ess					i C		<u> </u>
ſ	*(See I	nstructions and	Spoces Ici A	Additional [Data on Rev	erse Si	de)	,	

PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 464 #7
Section 29, T30N, R3W
1190' FNL & 1190' FWL
Rio Arriba County, New Mexico

DAILY REPORT

11/27/88 Spud well at 2:00 PM on 11/26/88. Drilled 145' of 12 1/4" surface hole. Ran 3 jts. (126.48 ft.) of 8 5/8" 24.0#/ft J-55 casing and landed at 139 ft. RKB. Rigged up Cementers, Inc. Cemented surface with 130 sx (153 ft3) Class B cement w/2% CaCl2. Good circulation throughout job. Circulated cement to surface. Plug down at 8:00 PM on 11/26/88. Wait on cement.

11/28/88 Drilling ahead at 1826'.

11/29/88 Drilling ahead at 2686'.

11/30/88 Drilling ahead at 3433'.

12/01/88 Drilling ahead at 4018'.

12/02/88 TD well at 4215' RKB at 4:00 PM on 12/01/88. Short trip. Trip out of hole for logs. Rigged up Welex. Logs stopped at 1247' RKB. Pulled very tight, almost pulled out of rope socket before logging tool came free. Trip in hole with collars and drillpipe. Hit small bridges from 550' to 1700'. Had 11' of fill on bottom. Trip out of hole for logs. Rigged up Welex. Ran IEL, CNL, and FDC logs from loggers TD of 4212'. Finish logging. Start trip in hole.

12/03/88 Trip in hole with drillpipe. Lay down drillpipe and collars. Ran 97 jts. of 4 1/2" casing as follows:

<u>Description</u>	Length	<u>Depth</u>
KB to landing point 97 jts. 4 1/2" 10.5#/ft J-55 new casing	12.00	0- 12
(Domestic-Maverick) 1 DFFC		12-4131 4131-4133
1 jt. 4 1/2" 10.5#/ft J-55 new casing 1 guide shoe	42.27	4133-4175 4175-4176

Centralizers at 4155, 4048, 3963, 3877, 3793, 3707, 3622 and 3536. Rig up Halliburton. Cement longstring casing with 200 sacks (412 ft³) of Class B cement with 2% Econolite and 1/4# flocele/sx; tailed by 175 sacks (221 ft³) of 50/50 pozmix w/2% gel, 10% salt and 1/4# flocele/sx. Good circulation throughout job. Bumped plug-held OK. Plug down at 3:15 PM on 12/02/88. Released rig. Wait on completion.

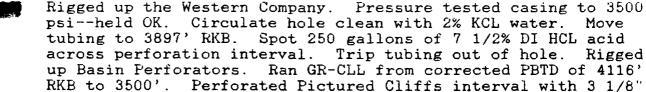
PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

Jicarilla 464 #7

DAILY REPORT

Page 2

1/19/89 Move in and rig up Bayless Rig 3. Nipple up wellhead. Nipple up BOP. Pick up 3 7/8" bit, casing scraper, and 1 1/2" tubing. Tag fill at 4128' RKB. Shut down for night.



casing gun and 2 JSPF as follows:

3815	_	3818	3	3' 7	holes		
3821	_	3828	7	" 15	holes	ř	
3831	-	3841	10), 21	holes		
3843	_	3848	5	5 11	holes		
3851	-	3858	7	15	holes		
3868		3876	8	3 17	holes		
3891	-	3897	_6	3' 13	holes		
			46	3' 99	holes	(.34"	diameter)

Broke down perforations @ 1200 psi. Established an injection rate into perforations down casing of 7.0 BPM @ 425 psi, ISIP = 275 psi (F.G. = .51). Acidized Pictured Cliffs interval with 500 gallons of 7 1/2% DI HCL weighted acid containing 149 1.1 s.g. RCN ball sealers. 7.0 BPM @ 425 psi. Saw a little ball action. Balled off casing to 3500 psi. Surged balls off of perforations. Re-established injection rate of 7.0 BPM @ 400 psi, ISIP = 250 psi (F.G. = .50). Ran junk basket in hole on wireline. Recovered 141 ball sealers.

quality foam containing 100,000# of 20-40 sand as follows:

15,000 gal. of 70 quality foam pad 30 BPM @ 1750-1850 psi 20,000 gal. of 1 ppg 20-40 sand 30 BPM @ 1850 psi 40,000 gal. of 2 ppg 20-40 sand 30 BPM @ 1850-1750-2000 psi 2,548 gal. of 70 quality foam flush 30 BPM @ 1900 psi

ISIP = 1900 psi 10 min. = 1800 psi 5 min. = 1850 psi 15 min. = 1800 psi

(

PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

Jicarilla 464 #7

DAILY REPORT

Page 3

1/20/89 (Continued)

Average rate - 30 BPM. Average pressure - 1850 psi. Maximum pressure - 2050 psi. Minimum pressure - 1700 psi. Average nitrogen rate 14,200 SCF/min. Total nitrogen pumped 873,300 SCF. Total fluid to recover 645 bbls. All water contained 2% KCL and 1/2 gal/1000 clay stabilization agent. Shut well in for 3 hours to allow fracture to heal. Opened well to flow through 1/2" tapped bull plug. Well flowing to clean up after frac.

1/21/89 to 1/22/89 Well flowing to clean up after frac.

1/23/89 Well flowing. Kill well. Trip in hole with 1 1/2" tubing. Tag sand fill at 3895' RKB. Cleaned out 166 ft. of sand to 4061' RKB. Landed 1 1/2" tubing as follows:

<u>Description</u> <u>Le</u>	ength <u>Depth</u>
116 jts. 1 1/2" 2.9#/ft J-55 EUE new tbg. 382 1 seating nipple 1 jt. 1 1/2" 2.9#/ft J-55 EUE tubing	.0.00 0- 10 24.87 10-3835 .85 3835-3836 31.95 3836-3868

Nipple down BOP. Nipple up wellhead. Blow well around. Well flowing from tubing to clean up for AOF. Released rig.

NEW MEXICO RIO ARRIBA

HOTLINE Energy Reports

30N - 3W - 30 ne se 1800 fsl 965 fel Compl: 12/8/86 SI

NM

WILDCAT

(WG)

HISTORICAL DATA

Well: JICARILLA #464-1

Spud: 10/28/86

TD: 4,136

PB: 4,083

API# 30-039-24088

H# 407601

Oper: BAYLESS, ROBERT L

Ei: 7.149 KB Form. Test: 4,150 Pictured Cliffs Contr: Bayless #1
Casing: 7 5/8 @ 127 w/48 CF - 4 1/2 @ 4128 w/150
Legs: Ind Neu Dens
Tubing: 1 1/2 @ 3754
Perfs: 3741-3746 3748-3757 3759-3767 3774-3780 3792-3798 3823-3826 (Pictured Cliffs) w/80 holes total - acid w/500 gals 7 1/2%

HCI 120 ball sealers

PZone: Pictured Cliffs 3741-3820

IP: CAOF 10.926 MCFGPD - F 3923 MCFGPD on 3/4 ck; no oil; no wtr rptd; SICP 1003

CBN 94

(Copyright 9-FEB-87

Form 3160-4 (November 1983) (formerly 9-330)

UN ID STATES

SUBMIT IN DUPLICA

Form approved. Budget Bureau No. 1004-0137 Expires August 31, 1985

DEPARTMENT OF THE INTERIOR

(Secother in-

		IENT OF TH AU OF LAND MAN			?	structi reverse		5 CLASE DES	RIGNATE	UN AND BERIAL NO.
WELL COA	APLETION O	R RECOMPLET	ION R	EPORT A	AND	LOG	*	Jic. Cor	LE4 . ALLOT	THE OR THIRD NAME
IA. TYPE OF WELL			<u> </u>	Other				Jic. Apa	che	Tribe
b. TYPE OF COMP	LETION:		** (Uther						
NEW X	WORK DEEP DEEP OVER	BYCK BES	VR.	Other				S PARN OR	LEARE	NAMB
2. NAME OF OPERATO								Tio /6/		
Robert L. B	avlees							Jic. 464 9. WELL NO.	*	
3. AUDRERS OF OPER	ATOR							#1		
P.O. Box 16	8. Farmingto	n. NM 87499		RECE	VE	D		10, FIELD AN	D POOL	OB WILDCAT
4. LOCATION OF WEI. At surface	i. (Report location cl	early and in accordance	c with any	State requir	ements	10		Wildcat		
1800' FSL &	965' FEL			FEB 04	t 19 8	Ĭ		11. SFC., T., OR AREA		H BLOCK AND BURYEY
	same		-			05115113				
At total depth		1 14 75	_	AU OF LAND MINGTON RE				Sec. 3	0, T	30N, R3W
	same	14. 14	KM1# END	1	B #12 18	18H 190 - 1		PARISH	OK	
5. DATE SPUDDED	16. DATE TO REACT	HED 17. DATE COMPL.	(Ready to	prod) !				Rio Arr	iba	NM ELEV. CASINGHEAD
- (18	7136		, mmB, I	ni, uz, sit.)"		
10/28/86 10. TOTAL DEPTH, MD	11/05/86 TVD 21. PLUG. BA	12/0 ACK T.D., MD & TVD 2:	2. IF MUL:	TIPLE COMPL.		23. INTE		ROTARY TOO	LS	CABLE TOOLS
4136' RKB	4017'	RKB	HOW M.	ANT®		DRILL	LED BY	0 - TD	1	
4. PRODUCING INTER		PLETION-TOP, BOTTOM	NAME (M	ID AND TVD)*						. WAS DIRECTIONAL SURVEY MADE
									-	SURVEI MADA
3741 - 3820	5 P.C.							•		No
6. TYPE ELECTRIC A	ND OTHER LOGS RUN		1					<u> </u>	27. ₩	AS WELL CORED
Induction -	- Neutron Der	nsity								No
9.		CASING REC			set in					
CABINO BIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	-[LE SIZE				RECORD	,	AMOUNT PULLED
7 5/8"	26.4#	127' RKB		7/8"				B" cement 50/50 pc		Laci2
4 1/2"	11.6#	4128' RKB	3	3/4"	1303	X(109	<u> </u>	30/30 pc	21117	·
	-	_	-							
9.	LIN	ER RECORD	<u>'</u>		<u>' </u>	30.		TUBING REC	ORD	
8125	TOP (Mp) BO	TTOM (MD) SACKS (EMENT*	SCREEN (M	(d	SIZE		DEPTH BET ()	(D)	PACKER SET (MD)
					-	1 1/	2	3754' RKI	3	None
							_			
1. PERFORATION REC	ORD (Interval, size a	nd number)		82.	ACI	D. SHOT.	FRACT	TURE, CEMEN	T SQU	EEZE, ETC.
3741 - 374		- 3826		DEPTH IN	TERVAL	(MD)		IOUNT AND KI		···
3748 - 375		80 holes		3741	- 382	26				L weighted ac
3759 - 376		DE								lers; 85,000 g
3774 - 378		PF							oam v	v/100,000# 20/
3792 - 379 3.*	<u>v</u>		PRO	DICTION		!	sand			
ATE FIRST PRODUCT	ION PRODUCTI	ION METHOD (Flowing,			and ty	pe of pum	ip)			a (Producing or
iting on hoo	kun flowi	ng						· · ·	ut-in)	SI
ATE OF THET	HOURS TESTED	CHOKE SIZE PROD	'N. FOR PERIOD	OIL-BEL.	1	GAS-MC	r.	WATER-BB	L.	GAS-OIL BATIO
12/08/86	3	3/4 -		0-			90	-0		
LOW. TUBING PROSE.	CASING PRESSURE	CALCULATED OIL 24-HOUR RATE	-BB(GAS-	MCF.	1	WATER	HBL.	OIL O	RAVITT-API (CORR.)
308	860		-0-	39	23	ct	OKn-	0-		
_	AB (Bold, used for fu	n, ventea, etc.)			ام	UK KE	-	TEST WITH		
Vented St. List of Attach	MENTA			GAS— GAS— 39 CCEP Correct fund correct for a page 1 pa	O L		<u></u>	Davi	u ba	11
				JUSEP,	14.	_ 1	$\partial_{\mathcal{B}_I}$	410.		
36. I hereby certify	that the foregoing a	nd stylched igformatic	on is com	plete lud cori	rect and	Branch Branch	4,000	all available	records	
VI.	min II II	14m.11	_	n .	GE.	, RE	Son		_	
BIGNED	1 KA 1 1 - 11	I WWW I	TITLE _	Engineer		"HOP		DAT	TE _01	2/02/87

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PETROLEUM PLAZA BUILDING
P. O. BOX 168
FARMINGTON, NEW MEXICO 87499
(505) 326-2659

JICARILLA 464 #1

Section 30, T30N, R3W 1800' FSL & 965' FEL Rio Arriba County, NM

- 10-29-86 Spud well at 10:30 p.m. 10/28/86. Drilled 130 ft. of 9-7/8" surface hole. Ran 3 jts. (115') of 7-5/8" 26.43#/ft. S-95 used casing. Landed @ 127' RKB. Rigged up Dowell. Cemented surface casing with 48 ft. Class B cement w/3% CaCl₂. Good circulation throughout job. Circulated cement to surface. Plug down @ 3:00 a.m. 10/29/86. Wait on cement.
- 11-05-86 TD @ 4136' RKB @ 2:30 a.m. 11/5/86. Circulate for 1-1/2 hrs. Short trip 10 stands. Had 4 ft. of fill. Circulate 1/2 hr. Trip out of hole for logs.
- 11-06-86 Finish trip out of hole for logs. Rigged up Welex. Ran Induction Neutron, Density logs from loggers TD of 4134' RKB to surface. Trip in hole with drillpipe. Lay down drillpipe and collars. Ran 4-1/2" casing as follows:

DESCRIPTION	LENGTH	DEPTH
KB to landing point	12.00 ft.	0-12
101 jts. 4-1/2" 11.6#/ft. J55 new casing	4074.88	12-4087
1 - 4-1/2" insert baffle	0.00	4087
l jt. 4-1/2" shoe joint	40.36	4087-4127
1 - 4-1/2" cement filled guide shoe	1.00	4127-4128
	4128.24 ft.	

centralizers at: 4108, 4007, 3927, 3846, 3765, 3684, 3604, and 3523.

Rigged up Dowell. Cemented 4-1/2" casing with 150 sacks 50/50 pozmix w/2% gel, 10% salt and 1/4# celeflake/sack. Good circulation throughout job. Bumped plug to 1250 psi - held OK. Plug down at 9:30 p.m. 11/5/86. Ran temperature survey - top of cement @ 3000 ft. RKB. Released rig. Waiting on completion.

ROBERT L. BAYLESS Jicarilla 464 #1 Daily Report Page 2

11-24-86 Move in and rig up Bayless Rig 6. Nipple up wellhead. Nipple up BOP. Picked up 1-1/2", 29#/ft. EUE tubing. Tagged PBTD @ 4083 ft. RKB. SDFN.

Rigged up the Western Company. Pressure tested casing to 3500 psi; held okay for 5 minutes. Circulated hole clean with 2% KCL water. Moved tubing to 3826 ft. RKB. Spotted 250 gallons of 7-1/2% DI HCL acid. Trip tubing out of hole. Rig up Basin Perforators and ran GR-CLL from log corrected PBTD of 4056 ft. to 3500 ft. Perforated Pictured Cliffs interval with 3-1/8" casing gun and 2JSPF as follows:

3741-3746	5'	ll holes	
3748-3757	9'	19 holes	
3759-3767	8'	17 holes	
3774-3780	6 '	13 holes	
3792-3798	6 '	13 holes	
3823-3826	3'	7 holes	
	37'	80 holes	.34" diameter

Broke down perforations @ 1400 psi. Established injection rate of 9.0 BPM @ 600 PSI, ISIP=350 psi. Acidized the Pictured Cliffs interval with 500 gallons of 7-1/2% DI HCL weighted acid containing 120 1.1 s.g. RCN ball sealers @ 8.1 BPM @ 500 psi. Had two pressure breaks as balls hit perforations. Balled off casing to 3500 psi. Surged balls off perforations. Final injection rate into perfs of 8.0 BPM @ 700 psi, ISIP=400 psi. Ran junk basket to recover ball sealers. Recovered 117 balls.

with 85,000 gallons of 70 quality foam with 100,000# of 20-40 mesh sand as follows:

20,000 gallons of 70 quality foam pad 30 BPM @ 2050 psi 30,000 gallons of 70 quality foam with 1 ppg 20-40 30 BPM @ 2000 psi 35,000 gallons of 70 quality foam with 2 ppg 20-40 30 BPM @ 2000-2100 psi 2,435 gallons of foam flush 30 BPM @ 2100 psi

ISIP=1500 psi, 5 min. shutin = 1400 psi 10 min. shutin = 1400 psi 15 min. shutin = 1350 psi

All water contained 2% KCL and 1/2 gallon/1000 clay stabilization agent. Average rate 30 BPM, average pressure 2050 psi, maximum pressure 2100 psi, minimum pressure 2000 psi. Nitrogen injection rate was 15,200 SCF/min., total nitrogen pumped was 1,056,000 SCF. Total fluid pumped was 606 bbls. Shut well in for 3 hours. Open up well to the atmosphere through 1/2" tapped bullplug. SDFN.

Robert L. Bayless Jicarilla 464 #1 Daily Report Page 3

- 11-26-86 Checked well was flowing very strong. Gas was burnable. Shut in well for ten minutes; built pressure to 1075 psi. Opened well to flow to cleanup.
- 11-27-86 Well flowing to cleanup.
- 11-28-86 Well flowing strong through 1/2" tapped bullplug. Opened well to atmosphere through 2" opening. Well had 125 psi flowing pressure through 2" opening. Rigged up the Western Company. Killed well. Tripped in hole with 1-1/2" tubing. Tagged sand fill at 3817' RKB. Well has 266 ft. of sand fill, 2,483 lbs. of sand. Shut well in. SDFN.
- 11-29-86 Overnight tubing pressure was 725 psi, annulus pressure 900 psi.
 Opened well to blow down. Cleaned out 200 ft. of sand to 4017' RKB using gas pressure and volume from well. Landed tubing as follows:

DESCRIPTION	LENGTH	DEPTH
KB to landing point	8.00	0-8
110 jts. of 11" 2.9#/ft. J55 EUE tbg.	3711.06	8-3719
l seating nipple	.75	3719-3720
l jt. of limud anchor	34.05	3720-3754
	3753.86	

Nipple down BOP, nipple up wellhead. Rig down completion unit. Well started flowing through the tubing. Left flowing through ½" tapped bullplug to cleanup for AOF. SDFN.

- 11-30-86 Well flowing.
- 12-01-86 Well flowing 175 psi through ½" tapped bullplug. Shut well in for 7-day buildup for AOF. Initial shutin pressures: tubing 850 psi, annulus 850 psi.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT



OIL CONSERVATION DIVISION

BRUCE KING

May 6, 1991

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

U.S. Bureau of Land Management Albuquerque District Office 435 Montano Road, N.E. Albuquerque, New Mexico 87107

Attention: Allen Buckingham

Re: Division Case No. 10264

Application of Robert L. Bayless for Designation of a Tight Formation, Rio Arriba County, New Mexico

Dear Mr. Buckingham:

Pursuant to our telephone conversation yesterday, Monday May 6, 1991, enclosed is a copy of Division Order No. R-9495, issued in said Case No. 10264 and dated May 6, 1991, recommending to the Federal Energy Regulatory Commission that the Pictured Cliffs formation underlying the proposed Cabresto Tight Gas Area in Rio Arriba County, New Mexico be designated as a "tight formation" under Section 107 of the Natural Gas Policy Act of 1978.

Enclosed please find a copy of the March 21, 1991, hearing transcript and copies of Exhibits presented by the applicant.

Should you require additional information, please contact me at (505) 827-5811.

Sincerely

MICHAEL E. STOGNER, Examiner/Engineer

MES/dr

cc: Case File 10264

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

May 7, 1991

RODEY, DICKASON, SLOAN AKIN & ROBB, P.A. Attorneys at Law P. O. Box 1357 Santa Fe, New Mexico 87504

RE: CASE NO. 10264

ORDER NO. R-9495

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

Florene Davidson

OC Staff Specialist

FD/sl

cc: BLM Farmington Office

OCD Aztec Office
H. L. Kendrick
Alan Buckingham
William F. Carr
Bill Hawkins

Florene Davidson

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT



OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

July 11, 1991

Federal Energy Regulatory Commission 823 N. Capitol Street NE Washington, D.C. 20426

ATTN:

Marilyn Rand, Director

Division of Producer Resolution

Dear Ms. Rand:

I am writing to you to confirm our telephone conversation on Thursday July 11, 1991, it is my understanding that a recommendation from the N.M. Oil Conservation Division on a proposed "Tight Formation" application recently considered by this agency will not be required since all the acreage involved is on Federally controlled lands (193,090 acres total, 30,720 acres Carson National Forest and 162,370 acres Jicarilla Apache Indian Reservation).

Thank you for your assistance in this matter.

Sincerely,

MICHAEL E. STOGNER

Chief Hearing Officer/Engineer

MES/jc

cc: OCD - Aztec

Kevin McCord - Farmington Robert L. Bayless - Farmington Tommy Roberts - Farmington

Case File: 10264

U.S. Forest Service - Blanco, NM

U.S. BLM - Albuquerque