SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

Form approved

UNITED STATES DEPARTMENT OF THE INTERIOR

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				ERIAL NO.	-
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	CFCS Of	SICAL SURVEY					SF 0	787+6-	Λ	
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APPLICATION THE OF WOLK DRIL		DEEPEN []			G BAC		7. USIT	AGREEME	T NAME	·
ATTEL OF WELL			ZONE	X	MULTIFL ZONE	Е 🗌	8. PARM	OR LEASE	NAME	
NAME OF OFERATOR							Hubh			
El Paso Natura	l Gas Company						8			
ADDRESS OF GPERATOR		05/101						D AND PO	OL, OR W	HUCAT
PO FOX 990, Fa LOCATION OF WELL (REP At surface	armington, NM ort location clearly and 990'N, 800'E		any State r	equiremen	its.*)	1	11. SEC.	c Pictor Courses Course	OR BLK.	Cliffs /
							NMP	NTY OF PA	RISH 13	S. STATE
. DISTANCE IN MILES AN	D DESECTION FROM NEAR	EST TOWN OR POST	OFFICE.				1	Juan	1	ew Mexi
6. DISTANCE FROM PLOPOS LOCATION TO NEAREST PROPERTY OF LEASE LE	NE, FT.)6. NO. OF	ACRES IN	LEASE	17. NO.	of acres this well 158.	ASSIGNED		•
(Also to nearest drlg. 8. DISSANCE FROM PEOPO	SED LOCATION*		19. PROPOSE		,	20. ROT.	ARY OR CAT			
OR APPLIED FOR, ON THIS	HAING, COMPLETED, LEASE, FT.		2	2500'		<u> </u>	Rota	-	DE TROUT	WILL START*
1. ELEVATIONS (Show whet	her DF, RT, GR, etc.)						22. A	TYKUX. DA	THOUSE	WIDE STREET
5625'GL										
3.	1	PROPOSED CASING	3 AND CE	MENTING	PROGRA	····	·			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOO	т	SETTING D	EPTH			NTITY OF		
12 1/4"	8 5/8''	24.0#		130'			cu, f			
6 3/4"	2 7/8''	6.4#		2500'		240	cu. f	t. to	cover	Ojo Alar
The NE/4 of S	FORGIONED PROGRAM: If	edicated to the	nis well	l .		DE	:c 1 6	1971	COLUMN AND AND AND AND AND AND AND AND AND AN	
oreventer program, if an Origi SIGNED Carl	rrorosed Program: If drill or deepen direction y. nal signed by E. Mail sws ral or State office use)		Petr	oleum	Engin		oductive z red and tr			new productiv Give blowou
PERMIT NO.			API	PROVAL DAT						
<u>.</u>	.,1	ጥ ደባ	rt. k :				·	DATE		
CONDITIONS OF APPROV	VAL, IF ANY :						1			

HUBERLL (SF-078716-A) EL PASO NATURAL GAS COMPANY SAN JUAN 18 10-W A 29-N 1 3 ...: 800 EAST 990 NORTH **158.8**4 5625 PICTURED CLIFFS AZTEC PICTURED CLIFFS 1 Outline the acreage dedicated to the subject well by colored pencil or hachute marks on the plat below. 2 If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation ____ If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION 0 I hereby certify that the information con-9 tained herein is true and complete to the Original signed by Carl E. Matthews 800 SF-078716-A SECRION 18 I hereby certify that the well location shown on this plat was platted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. DECEMBER 2, 1971 1760

Form 9-331 (May 1963)	UNITED ST DEPARTMENT OF T		SUBMIT IN TRIPLICATE* (Other instructions on reverse side)	Form approved. Budget Bureau No. 4 5. LEASE DESIGNATION AND SER	
SUN (Do not use this	GEOLOGICAL DRY NOTICES AND form for proposals to drill or to Use "APPLICATION FOR PERM	REPORTS (ON WELLS back to a different reservoir. roposals.)	SF 078716-A 6. IF INDIAN, ALLOTTEE OR THE	BENAME
1. OIL GAS				7. UNIT AGREEMENT NAME	
WELL WELL 2. NAME OF OPERATOR	A OTHER			8. FARM OR LEASE NAME	
El Paso N	atural Gas Company			Hubbell	
3. ADDRESS OF OPERATOR	0, Farmington, NM 8	27401		9. WELL NO.	
4. LOCATION OF WELL (H	eport location clearly and in acco	rdance with any	State requirements.*	10. FIELD AND POOL, OR WILDO	AT
See also space 17 belo At surface 990'	N, 800'E			Aztec Pictured Cliffs 11. SEC., T., E., M., OB BLK. AND SURVEY OR AREA CO. 18 T. 20 NI	
				Sec. 18, T-29-N, NMPM	K-10-W
14. PERMIT NO.	15. ELEVATIONS	(Show whether Di	F, RT, GR, etc.)	12. COUNTY OR PARISH 13. ST	FATE
		5625'GL			w Mexico
16.	Check Appropriate Box	To Indicate N	Nature of Notice, Report, or (Other Data	
:	NOTICE OF INTENTION TO:		SUBSEQ	UENT REPORT OF:	
TEST WATER SHUT-O	FF PULL OR ALTER CA	SING	WATER SHUT-OFF	REPAIRING WELL	
FRACTURE TREAT	MULTIPLE COMPLE	TE	FRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING CASING ABANDONMENT*	
SHOOT OB ACIDIZE BEPAIR WELL	ABANDON* CHANGE PLANS		(Other)	<u></u>	
(Other) Permit	to Drill Extension	X	(Note: Report results Completion or Recomp	s of multiple completion on Well detion Report and Log form.)	
nent to this work.)	•	•	will expire before this		
Therefore	e, an extension is req	uested.	TILLE .		
		1	MAR 20 1972 MAR 20 COM		•
Void after	60 days from date o	f	MAR 20 COM.	The second secon	東京社会の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の大学の
approva	al if not spudded.		01-03-0	MAR 1 6 1972	B. G. C.
				J. O. PITTLEGICAL SURVEY	: ::::::::::::::::::::::::::::::::::::
				• • • • • • • • • • • • • • • • • • • •	
					•
Origina	t the foregoing is true and correctly Signed F. H. WOOD		Petroleum Engineer	DATE March 16,	1972
SIGNED		TITLE			
(This space for Fed	eral or State office use)				
APPROVED BY CONDITIONS OF A	PPROVAL, IF ANY:	TITLE		DATE	

SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this farm for proposed to didly or in deeple or play hard to a different reservoir. 1. Only Achieved Control of the Control of the Proposed Society of the Control of the Contr	(May 1963) UNITED ST DEPARTMENT OF T GEOLOGICAL	HE INTERIOR (Other instructions on re	5. LEASE DESIGNATION AND SERIAL NO.
The state of the s	SUNDRY NOTICES AND	REPORTS ON WELLS	
El Paso Natural Gas Company 3. Adecade of condation 5. Adecade of condation 5. Adecade of condation 6. Locate of condation 6. Locate of condation 7. Adecade of condation 8. Locate of condatio	1. OIL GAS WELL A OTHER		7. UNIT AGREEMENT NAME
Box 990, Farmington, New Mexico 10. Fills and road, on william Arteriae 10. Fills and road, on william Arteriae 11. Fills and road, on william Arteriae 12. Colific and Interior of Partition of Marteriae 13. Fills and road, on william Arteriae 14. Fills and road, on william Arteriae 15. Fills and road, on william New Mexico 16. Check Appropriate Box To Indicole Nature of Notice, Report, or Other Data Notice of Interior portions of Interior of Partice Caling Practice Theat are successful and any of the Partice Caling Practice Theat are all pertinent details, and give give and give give give give give give give give	El Paso Natural Gas Company		Hubbell
Sec. 18, 7-29-N, R-10-B 16. PREMIT NO. 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data NOTICE OF INVESTIGN 70: SCIENCE TREAT MULTIPLE COMPLETE PELL OR ALTER CASINO MAPPEN SHUT-OFF PRACTICE TREATMENT SHOOTON OR ACTIONS (Check Appropriate Completion or Science Treatment of Completion or Recompletion for State of Stating any need to this work.) 3-22-72: Spudded well, drilled surface hole and ran 4 joints 8 5/8", 24#, J-55 surface casing, 129' set at 141'. Cemented with 107 cu. ft. cement circulated to surface. W. O. C. 12 hours, held 600#/30 minutes.	Box 990, Farmington, New Mexico 4. LOCATION OF WELL (Report location clearly and in account of the second s	ordance with any State requirements.*	10. FIELD AND POOL, OR WILDCAT
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION VO: SUBSECUENT REPORT OF: 1EST WATER SHUT-OFF PLLL OR ALTER CASING MULTIPLE COMPLETE SHOOT OR ACTOLIER SHOOT OR ACTOLIER SHOOT OR ACTOLIER ARANDON' CHANGE FLANS (Other) (Other	990' North, 800' East		Sec. 18, T-29-N, R-10-W
NOTICE OF INTENTION VO: TEST WATER SHUT-OFF FRACTURE TREAT AREADON* COLLEGE OCHOCI		· · · · · · · · · · · · · · · · · · ·	Nov. Marrian
TISH WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE SHOT OR ACIDIZE SHOOT		To Indicate Nature of Notice, Report, or	
11. DESCRIBE PROPOSED OR COMPLETED OFERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) 3-22-72: Spudded well, drilled surface hole and ran 4 joints 8 5/8", 24#, J-55 surface casing, 129' set at 141'. Cemented with 107 cu. ft. cement circulated to surface. W. O. C. 12 hours, held 600#/30 minutes. MAR 30 1572 MAR 30 1572 MAR 30 1572 MAR 2 1072 11. 18. 1 hereby corety that the foregoing is true and correct signed. Signed Advanced by the foregoing is true and correct signed. Title Petroleum Engineer DATE March 28, 1972	TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL PULL OR ALTER CA MULTIPLE COMPLE ABANDON* CHANGE PLANS	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other)	REPAIRING WELL ALTERING CASING ABANDONMENT*
18. I hereby coptify that the foregoing is true and correct SIGNED 10.000 TITLE Petroleum Engineer DATE March 28, 1972	3-22-72: Spudded well, drilled su surface casing, 129' set	rface hole and ran 4 joints 8 at 141'. Cemented with 107 c	5/8", 24#, J-55
18. I hereby coptify that the foregoing is true and correct SIGNED 10.000 TITLE Petroleum Engineer DATE March 28, 1972			
SIGNED HOWDOW TITLE Petroleum Engineer DATE March 28, 1972		MAR 30 1972 OIL CON. COM. OIL DIST. 3	i de la companya de
	1 H (1 h . ()	Petroleum Engineer	_{DATE} March 28, 1972

B. & R. SERVICE, INC. TEMPERATURE SURVEY

COMPANY EL PASO NATUR	AL GAS COMPANI	(
WELL HUBBELL #8.	FIELD		
COUNTY SAN JUAN	STATE	NEW MEXICO)
SEC18 TWF			•
APPROX. TOP CEMENT	•		
Survey Begins at 500 Approx. Fill-Up			
Log Measured From K.B.		_	
Casing Size Casing De	epth Di	am of Hole	Depth
27" from to 205	_		_
from to		from	to
Date of Cementing3			
Date of Survey 3			
Amount of Cement 135 SKS. 412 CU.F.Y			
Recorded by BEAN & SMITH	Witnesse	d by	FIVE
	S OR OTHER	DATÁ	1
		APR	7 1972
		OIL CO	ON. COM.
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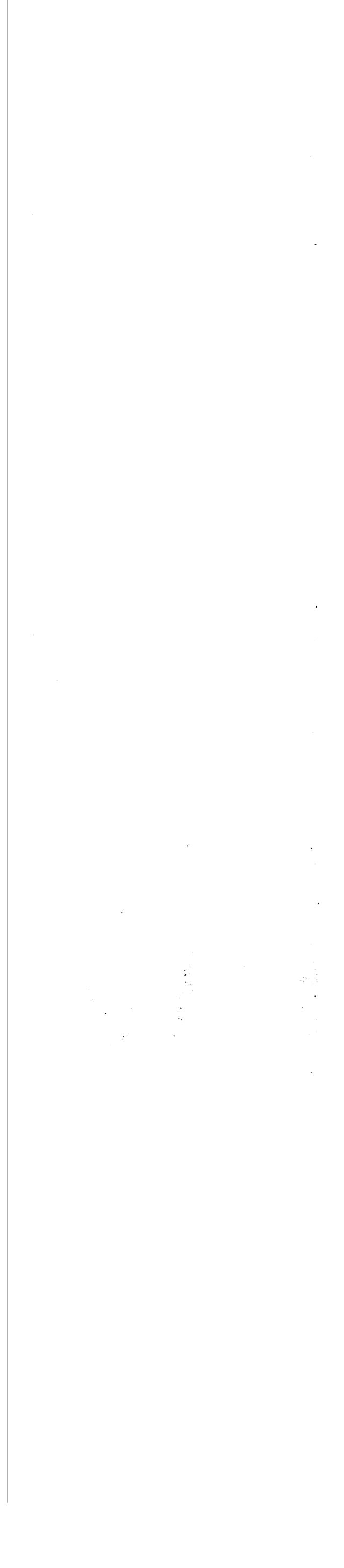
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Trm 5-331 (May 1963)	UNITED STATES PEPARTMENT OF THE IN		Budget Bureau No. 42-R1424. 5. LEASE DESIGNATION AND SERIAL NO. SF 078716-A
SUNDR	GEOLOGICAL SURVE N NOTICES AND REPOR n for proposals to drill or to deciden of the "APPLICATION FOR PERMIT—" for	TS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1.		idea proposediny	7. UNIT AGREEMENT NAME
WELL WELL 2. NAME OF OPERATOR	1 Gas Company		8. FARM OR LEASE NAME Hubbell
3. ADDRESS OF OPERATOR PO Box 990, Fa	armington, NM 87401		9. WELL NO.
4. LOCATION OF WELL (Repo See also space 17 below.) At surface 990 N,	rt location clearly and in accordance wi		Aztec Pictured Cliffs 11. SEC., T., E., M., OR ELR. AND SURVEY OR AREA Sec. 18, T-29-N, R-10-W NMPM 12. COUNTY OR PARISH 13. STATE
14. PERMIT NO.	13. PENATIONS (PHON WIR	5625'GL	San Juan New Mexico
16.	Check Appropriate Box To India	ate, Nature of Notice, Report, or C	Other Data
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other) 17. DESCRIBE PROPOSED OR CO proposed work. If we nent to this work.) * 3-24-72 T. Baffle s at 620' 5-31-72 PB 10/20 s	D. 2068'. Ran 66 joints 2 set at 2058'. Cemented with TD 2058'. Perf'd 1976-19	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other) (NOTE: Report results Completion or Recompl ertineut details, and give pertinent dates, ee locations and measured and true vertice	n casing, 2058' set at 2068'. 218 hours. Top of cement Fraced with 20,000#
SIGNED #	e foregoing is true and correct TITL	JUN U. S. GEOL FARMIN Petroleum Engineer	6 1972 OGICAL SURVEY GTON, N. M. June 5, 1972 DATE
(This space for Federal APPROVED BY CONDITIONS OF APPI	TITL	Е	DATE

OPEN FLOW TEST DATA

DATE _____ June 16, 1972

Operator El Paso Natur	al Gas Company	Hubbell No. 8	
Location 990/N, 800/E, Sec. 18-29N-10W		County San Juan	State New Mexico
Formation Pictured Clif		Pool Aztec	
Cosing: Diameter 2.875	Set At: Feet 2068	Tubing: Diameter No Tubing	Sot At: Feet
Pay Zone: From 1976	To 1984	Total Depth: 2068	Shut In 6-6-72
Stimulation Method SWF		Flow Through Casing XX	Flow Through Tubing

Choke Size, Inches 0/750		Choke Constant: 12.365	C	Tubingless Comp	letion	
Shut-in Pressure, Casing, 387	PSIG	+ 12 = PSIA 399	Days Shut-In	Shut-In Pressure, Tubing No Tubing	PSIG	+ 12 = PSIA
Flowing Pressure: P	PSIG	+ 12 = PSIA 52		Working Pressure: Pw Calculated	PSIG	+ 12 = PSIA 61
Temperature:	.9981	n = .85		Fpv (From Tables) 1.003		Gravity .635 Fg = .9721

CHOKE VOLUME = Q = C × P₁ × F₂ × F₂ × F₂ × F₂
$$Q = (12.365)(52)(.9981)(.9721)(1.003) = 626 MCF/D$$

OPEN FLOW = Aof = Q
$$\begin{pmatrix} \frac{2}{P_c} \\ \frac{2}{P_c} P_w^2 \end{pmatrix}$$
 NOTE: Light fog of water and distillate in approximately five minutes.

Aof =
$$\left(\begin{array}{c} 159201 \\ \hline 155480 \end{array}\right)^{n}$$
 = (626)(1.0239) $\cdot 85$ = (626)(1.0203)

TESTED BY ______ Don Norton

OIL COM. COM. DIST. 3

L. E. Mabe, Jr.