 • • • 					イハーハル	1/001
Form 3160-3 (November 1983)			SUBMIT IN '	LICATE	rom approved	26883
(formerly 9-331C)	UNI	TED STATES	(Other instru	CLIODS OD	Budget Bureau	No. 1004-0136
	DFPARTMEN	T OF THE INTE	NA OLS CONS. CO	MMISSIO	N Expires Augus	it 31, 1985
			Draver DD		5. LEASE DESIGNATION	N AND BEBIAL NO.
		LAND MANAGEME		210	LC-065014	
APPLICATI	ON FOR PERMIT	TO DRILL, DEEP	EN, OR PLUG I	BACK	6. IF INDIAN, ALLOTT	EB OR TRIBE NAME
1a. TUPE OF WORK		· · · · · · · · · · · · · · · · · · ·			50 00	
	DRILL 🛛	DEEPEN 🗌	PLUG BA	СК 🗌	7. UNIT AGREEMENT	NAMB
b. TIPE OF WELL						
WELL X		N-FILL WELL	INGLE X MULTH		S. FARM OR LEASE N.	AMB
2. NAME OF OPERATOR		/	Ph. 505-827-3	223	Max Friess	"MA"
	AVON ENERGY COR	PORATION	KELEI	VED	9. WELL NO.	
3. ADDRESS OF OPERAT	OR P.O. Box 38	· · ·	NO.14	6 :004	7	
	Loco Hills, New	Mexico 88255	NOV <u>1</u>	0 1991	10. FIELD AND POOL,	OR WILDCAT
4. LOCATION OF WELL At surface	(Report location clearly and	in accordance with any	State requirements.)	. D.	Grayburg-Ja	ckson(SA)
2610'FNL, 1460'FEL, Sec.30-17S-31E At proposed prod. zone			(UNIS'AG	PIFICE	11. SEC., T., E., M., OF AND SURVEY OF	BLK. NBEA
•	Same		(SWNE)		Sec.30-17S-	31 8
14. DISTANCE IN MIL	ES AND DIRECTION FROM NEA	REST TOWN OR POST OFFIC	2 E +		12. COUNTY OF PARIS	
4.5 miles	southeast of Loco	Hills, New Mex	ico		T-2	N M
15. DISTANCE FROM PE LOCATION TO NEAR	OPUSED*		O. OF ACRES IN LEASE	17. NO. 0	Eddy F ACRES ASSIGNED	<u>N.M.</u>
PROPERTY OR LEAS		30'	160	TO TH	IIS WELL	
18. DISTANCE FROM P	BOPOSED LOCATIONS		ROPOSED DEPTH	20. BOTAL	40	
TO NEAREST WELL OR APPLIED FOR, ON	, DRILLING, COMPLETED, THIS LEASE, FT.		·9 00 700 -'			
21. ELEVATIONS (Show	whether DF, RT, GR, etc.)		700-	Rot	ary 22. Approx. DATE W	
3605' GR						
23.		······			As Soon As P	ossible
		PROPOSED CASING AN	D CEMENTING PROGRA	м		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT		NT
17-1/2"	12-1/4" 13%8"	48#	350'±	500 sx	Class C (Cir	culate)
11-7/8-105	8" 8-5/8"	24#	`1400'±		IW+200 ev C1	

Propose to drill to 3700'± and complete as an in-fill non-standard Grayburg-San Andres producer in the Turner "B" Waterflood Project.

3700 / 4900 /

Circulate cement on above casing strings to isolate all porosity zones. Selectively perforate favorable zones. Run 2-7/8" tubing and treat formation with 15% NeFe. Sand frac formation and test to tank.

See attached Drilling data and Surface Use Plan.

5-1/2"

7-7/8"

PotID-2 11-22-9.1 Newboc & API

1250 sx LW+1000 sx Cl. C (Circ).

* Note: All changes as per 3160-5 Rec'd. 11/12/91. 535

15.5#

IN ABOVE SPACE DESCRIBE PROFOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. BIGNED JERRY W/ LONG	Permit Agent	DATE October 10, 1991
(This space for Federal of State office use)	APPROVAL DATE	······································
APPROVED BY	ANDA MENANDALA DARISEN DENDERE APUA TITLE	DATE 11-15 91
APPRUVAL SOBJECT. TOMY:		
GENERAL REQUIREMENTS AND		
SPECIAL STIPULATIONS		
*See	Instructions On Reverse Side	

Title 13 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5 (June 1990)	UNI DEPARTMEN BUREAU OF	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No.	
Do not use thi	LC-065014 6. If Indian, Allottee or Tribe Name 		
	SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
	Gas Well X Other Drill	ing Well	Turner "B" Waterflood 8. Well Name and No.
 Name of Operator Address and Teleph 	AVON ENERGY C		Max Friess "MA" No.7 9. API Well No.
3. Address and Telephone No. P.O. Box 38 Ph.505-677-3223 Loco Hills, New Mexico 88255 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2610'FNL, 1460'FEL, Sec.30-17S-31E			10. Field and Pool, or Exploratory Area Grayburg-Jackson 11. County or Parish, State
I2. CHEC	CK APPROPRIATE BOX	s) TO INDICATE NATURE OF NOTICE, REPOR	Eddy County, N.M.
TYPE OF SUBMISSION TYPE OF ACTION			
X Not	tice of Intent	Abandonment Recompletion	X Change of Plans
	osequent Report	Plugging Back Casing Repair	Non-Routine Fracturing Water Shut-Off
	al Abandonment Notice	Altering Casing Other	Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
give subsurface	e locations and measured and true vertic	l pertinent details, and give pertinent dates, including estimated date of starting al depths for all markers and zones pertinent to this work.)*	any proposed work. If well is directionally drilled,
	se to change depth f e Casing Program, as		

<u></u>		
14. I hereby certify that the foregoing is the and correct		
Signed Lerry . Long	Title Permit Agent	Date November 9, 1991
(This space for Federal or State office use)	International Activity of the second sec	·
Approved by Conditions of approval, if any:	Title	Date11/15/91

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

District Office State Lease - 4 copie		F rgy,	Minerals a	nd Natur		ources Dep	artme -			ed 1-1-89
Fcc Lease - 3 copies DISTRICT I P.O. Box 1980, Hob	5	OIL CONSERVATION DIVISION P.O. Box 2088								
DISTRICT II P.O. Drawer DD, AJ	nesia, NM 85210	S	anta Fe, N	lew Mer	xico 8	7504-208	8			
DISTRICT III 1000 Rio Brazos Rd	I., Адес, NN 87410	WELL LOC	ATION AI ces must be					.AT		
Avon E	nergy Corpora	ation		Lease Ma	v Fr	iess "M	Λ.ΙΙ		Well No.	~
Unit Letter	Section	Township		Range		· · ·		County]	1
G Actual Footage Loc	30 ation of Well:	17 S	outh		31	East	NN	up <u>m </u>	Eddy	•
2610	feet from the NOT		line and			146	0 fect f	rom the East	line	<u>.</u>
Ground level Elev. 3605		Formation rg – San And	dres	Pool	Gravl	ourg-Ja	ckson		Dedicated A	•
1. Outlin	e the acreage dedicated									Acres
3. If mor unitiza If answer this form No allow	te than one lease is dedi SINGLE LEASE te than one lease of diffu- ation, force-pooling, etc. Yes r is "no" list the owners a if neccessary. yable will be assigned to	erent ownership is dee ? No If answe and tract description: the well until all inte	dicated to the er is "yes" typ s which have erests have be	well, have e of consol actually be	the inte lidation en conse dated (b)	lest of all ow l Nidated. (Us	eners been ee NA e reverse sie	onsolidated by con	mmunitization,	
Or until a	non-standard unit, elim	unating such interes.	, has been app	roved by t	he Divis	ion.				
				2610'				I herel contained he best of my bu Signature Printed Name JERR' Position Perm. Company AVON El Date	rein in true and owledge and beli	the information d complete to the ef.
			3601			1460)'	SURV	EYOR CERT	IFICATION
			3604	.5		509 . 6		on this play actual surv supervison, correct to belief. Date Survey	i was plotied f eys made by and that the the best of m	ell location shown rom field notes o me or under m same is true an ny knowledge an
										Address and a second se
0 330 660	990 1320 1650	1980 2310 2640	0 2(i x10 11	500 1	1000	500	0		

SUPPLEMENTAL DRILLING DATA

AVON ENERGY CORPORATION No.7 Max Friess "MA" SWNE Sec.30-17S-31E Eddy County, N.M.

LC-065014

The following items supplement Form 3160-3 in accordance with instructions contained in Onshore Oil and Gas Order No.1:

1. SURFACE FORMATION: Recent

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Salt	575'	Queen	2550'
Yates	1550'	Grayburg	2950'
Seven Rivers	1900'	San Andres	3350 '

3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATION:

Water - Possible groundwater from 0' to 300'

Oil - 1900' to TD

Gas - None anticipated

4. PROPOSED CASING PROGRAM:

12-1/4" Casing	-	Set 350' of 42#, H740, Conductor Pipe Set 1400' of 24# 5755, Intermediate Casing Set 3700' of 15 #, J-55, Production Casing
8-5/8" Casing	-	Set 1400' of 24# 55, Intermediate Casing
5-1/2" Casing	-	Set 3700' of 15 +, J-55, Production Casing

See Form 3160-3 SJS

SJS

Intermediate and Production casing will be satisfactorily tested to 1000 psi.

- 5. PRESSURE CONTROL EQUIPMENT: Install a 2M, Series 900, Type "E" Shaffer Double Hydraulic BOP on the 8-5/8" Intermediate casing prior to drilling into the Queen. Due to depleted nature of the reservoir, it is requested that a waiver be granted to test pressure control equipment to 1000 psi using rig pump, instead of the normal 2000 psi. test. Exhibit D is a diagramatic sketch of the BOP equipment.
 - 6. <u>CIRCULATING MEDIUM</u>: Drill with fresh water from surface to setting depth of Conductor pipe. Drill remainder of hole with brine water, using additives to control water loss, viscosity and mud weight.

-1-

- 7. <u>AUXILIARY EQUIPMENT</u>: Equipment will include pit level monitor and a full-opening safety valve.
- 8. TESTING, LOGGING AND CORING PROGRAM:

Samples:	Samples will be caught at 10' intervals from below the conductor pipe to total depth.
DST and Cores:	None anticipated
Logging:	Density-Neutron log Gamma Ray-Neutron log

- 9. <u>ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE</u>: No abnormal pressures or temperatures anticipated. Precautions will be taken to monitor possible traces hydrogen sulfide gas in the Grayburg.
- 10. <u>ANTICIPATED STARTING DATE</u>: Drilling will commence upon approval. Drilling and completion will require about 30 days.

PERTINENT INFORMATION

For

AVON ENERGY CORPORATION No.7 Max Friess "MA" SWNE Sec.30-17S-31E Eddy County, N.M.

LOCATED:	4.5 air miles southeast of Loco Hills, New Mexico
FEDERAL LEASE NUMBER:	LC-065014
LEASE ISSUED:	December 31, 1938 HBP
ACRES IN LEASE:	160 Ac.
RECORD LESSEE:	Soccoro Petroleum Company
BOND COVERAGE:	Alta Corporation Statewide Bond
AUTHORITY TO OPERATE:	Assignment of Operating Rights
SURFACE OWNERSHIP:	State
GRAZING PERMITTEE:	Williams & Son Cattle Co. Box 30 Maljamar, New Mexico 88264 Phone 505-676-2293
POOL RULES:	General Oil Rules - 40 Ac. Spacing
EXHIBITS:	A. Road and Contour Map B. Lease and Well Map C. Rig Layout D. BOP Diagram

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

AVON ENERGY CORPORATION No.7 Max Friess "MA" SWNE Sec.30-17S-31E Eddy County, N.M.

LC-065014

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The well is approximately 4.5 miles southeast of Loco Hills, New Mexico.
- B. <u>Directions</u>: Go east from Loco Hills, N.M. on U.S. 82 a distance of 4.9 miles. Go south on lease road for 0.8 mile. Turn west and go 0.5 mile. Go 0.1 mile south to location.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new road will be about 200' long and about 20' wide.
- B. <u>Surfacing Material</u>: The new road and well pad will be surfaced with 6" of caliche.
- C. Maximum Grade: Less than 1%
- D. Turnouts: No traffic turnouts are necessary.
- E. <u>Drainage Design</u>: The existing lease road will be maintained with a 6" crown and appropriate water turnouts to provide proper drainage.
- F. Culverts: None necessary

- G. <u>Cuts and Fills</u>: Construction of the drill pad will require about 3' of fill over the entire drill pad to prevent erosion during heavy rains.
- H. Gates, Cattle Guards: None necessary
- 3. LOCATION OF EXISTING WELLS:

A. See Exhibit B

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Temporary test facilities will be located on the well pad.
- B. An application for permanent flow lines will be filed at a later date, if the well is commercial.
- C. Power for production facilities will be obtained from an existing power line which is adjacent to the well pad.
- 5. LOCATION AND TYPE OF WATER SUPPLY:
 - A. Water for drilling and completion will be obtained from a commercial source and trucked over existing roads.
- 6. SOURCE OF CONSTRUCTION MATERIALS:
 - A. Caliche for surfacing the road and pad will be purchased from a Federal pit located in the SESW Sec.20-17S-31E.
- 7. METHODS OF HANDLING WASTE DISPOSAL:
 - A. Drill cuttings will be disposed of in the drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
 - C. Water produced during test will be disposed of in the drilling pits. Oil produced during test will be stored in test tanks until sold.
 - D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
 - E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on <u>Exhibit "C"</u>.

- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.
- 8. ANCILLARY FACILITIES:
 - A. None required
- 9. WELL SITE LAYOUT:
 - A. The wellsite, surrounded by a 400' X 400' area has been surveyed and flagged.
 - B. Dimensions and relative location of the drill pad and pit are shown on Exhibit C.
- 10. PLANS FOR RESTORATION OF THE SURFACE:
 - A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.
 - B. Any unguarded pits containing fluids will be fenced until they are filled.
 - C. If the well is non-productive the disturbed area will be rehabilitated to surface owner requirements and will be accomplished as expeditously as possible.

11. OTHER INFORMATION:

- A. <u>Topography</u>: The wellsite and access road are located in a sheet washed area below the Nimenim escarpment. The area is interlaced with shallow sandy washes. The project area drains to the west toward Cedar Lake Draw.
- B. <u>Soil</u>: The surface soil is sand with caliche and chert inclusions.
- C. Flora and Fauna: Vegetation consists of mesquite, sagebrush, yucca, and various weeds and grasses. Ground cover is about 10%. Wildlife in the area is that typical of semi-arid desert land, such as coyotes, rodents, reptiles and birds.
- D. Ponds or Streams: Cedar Lake is located 2 miles southwest of the well pad.

- E. Residences and Other Structures: None
- F. Archaeological, Historical and Other Cultural Sites: A previously recorded site is located east of the well pad. An Archaeological report will be prepared by ASC of Roswell, New Mexico and furnished to BLM.
- G. Land Use: The surface is used for cattle grazing.
- H. Surface Ownership: The drillsite and 200' of new road are located on State surface. The Operator has posted a Blanket Surface Damage Bond with the New Mexico State Land Office. The grazing lessee for all of the disturbed area is Williams & Son Cattle Company, Box 30, Maljamar, New Mexico.

12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use Plan:

Mr. Robert Setzler P.O. Box 38 Loco Hills, New Mexico 88255 Phone 505-677-2360

13. CERTIFICATION:

I hereby certify that I, or person under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; that the work associated with the operations proposed herein will be performed by AVON ENERGY CORPORATION and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

October 10, 1991	Serry H. Jong
Date:	JERRY W. LONG, Permit Agent for:
	AVON ENERGY CORPORATION



AVON ENERGY CORPORATION No.7 Max Friess "MA" SWNE Sec.30-175-31E Eddy County, N.M.

LC-065014



AVON ENERGY CORPORATION No.7 Max Friess "MA" SWNE Sec.30-17S-31E Eddy County, N.M.





EXHIBIT C

DRILL PAD LAYOUT



LC-065014





BOP DIAGRAM

2000# Working Pressure Rams Operated Daily