Form 3160-5 (June 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

_	5. Lease Designation and Serial No.				
Do not use this for Us	6. If Indian. Allottee or Tribe Name reservoir.				
	JICARILIA APACHE 7. If Unit or CA, Agreement Designation				
		IT IN TRIPLICATE			
Type of Well Oil X Gas Well X Well	Other			JICARILLA APACHE F  8. Well Name and No.	
Name of Operator	C Ouler			16	
AMERADA HESS	CORPORATION;	ATTN: MIKE JUM	PER	9. API Well No.	
Address and Telephone No	0.			30-039-25256	
P.O. BOX 2040	), HOUSTON, TEX	AS 77252		10. Field and Pool, or Exploratory Area	
Location of Well (Footage	Sec., T., R., M., or Survey	Description)	] \ \	DAKOTA SAND  11. County or Parish, State	
0701 777 6 00	00 BBI		ţ	,,,	
970' FNL & 80	JO FEL			17-25N-5W	
CHECK A	APPROPRIATE BO	X(s) TO INDICATE	NATURE OF NOTIC	CE, REPORT, OR OTHER DATA	
TYPE OF S	TYPE OF SUBMISSION TYPE OF ACTION				
X Notice of	latant		Abandonment	X Change of Plans	
TO SOLION, LEE	men		lecompletion	New Construction	
Subseque	nt Report		lugging Back	Non-Routine Fracturing	
			Casing Repair	Water Shut-Off	
Final Abs	andonment Notice		Altering Casing	Conversion to Injection	
Other				Dispose Water (Note: Report results of multiple completion on Wi	
		l and aire	naminant dates including actimat	Completion or Recompletion Report and Log form ed date of starting any proposed work. If well is directionally dril	
Describe Proposed or Con give subsurface locat	npleted Operations (Clearly sta- tions and measured and true v	ertical depths for all markers a	nd zones pertinent to this work.	e	
		PROPOSED CASING AND	CEMENTING PROGRAM		
	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	
SIZE OF HOLE	SIZE OF CASING			290 SX	
12-1/4"	8-5/8"	24	350'		
		24 15.5#	7300'	1580 SX	

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14. I hereby certify that the foregoing is true and correct		
Signed Milso Jumpar	Title SUPERVISOR DRLG. SVS.	Date
(This space for Federal or State Office use)	Acting Chief, Lands and Mineral Resources	SEP 1 0 1994
Approved by	Title Title	

# EXHIBIT C Page 1 DRILLING PROGRAM

COMPANY:

AMERADA HESS CORPORATION

WELL:

JICARILLA APACHE #F-16

WELL LOCATION:

SECTION 17-T25N-R5W

RIO ARRIBA CO., NEW MEXICO

1. Geological name of surface formation: Dakota Sand

#### ANTICIPATED FORMATION TOPS

	<u>Formation</u>	<u>Depth</u>
Α.	Fruitland	2,450
В.	Pictured Cliffs	2,810
c.	Chacra	3,700
D.	Mesa Verde	4,480
Ε.	Gallup	6,200
F.	Graneros	7,040
G.	Dakota	7,200

2. Estimated depths of anticipated water, oil, gas or other mineral bearing formations that are expected to be encountered:

	Formation	<u>Depth</u>	Remarks
Α.	Freshwater	Above 300'	
В.	Ojo Alamo	1,556'	Gas
С.	Fruitland	2,450'	Gas
D.	Dakota	7,200'	Gas

DRILLING PROGRAM
Jicarilla Apache #F-16
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## 3. The operator's minimum specifications for pressure:

Operator's minimum specification for pressure control, Exhibit H. is a schematic diagram of the BOP stack. Ram type preventers will be tested to the rated working pressure of the stack of to 70% of the minimum internal yield of the casing, whichever is less. Annular-type preventers will be tested to 50% of their working pressure. Tests will be run at the time of installation, prior to drilling out of each casing shoe and at least every 14 days or first trip out of hole after 14 days since previous pressure test. Pipe rams will be operationally checked each 24 hour period and blind rams with annular preventer each time pipe is pulled out of hole. Accessories to the BOP's include an upper and lower kelly valve with handle. floor safety valve, remote control panel, accumulator (Exhibit G), drill string and choke manifold (Exhibit J) with pressure rating equivalent to the The accumulator shall have sufficient capacity to open the BOP stack. hydraulically-controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above the precharge on the closing manifold without the use of the closing unit pumps. There will be a fill up line above the annular preventer which is the uppermost preventer into the drilling nipple. BHP at T.D. is ±2000 psi.

### 4. The proposed Casing and Cementing Program:

#### A. CASING PROGRAM

CASING	HOLE SIZE	CSG SIZE	WT/FT	<u>GRADE</u>	<u>CPLG</u>	SETTING DEPTH	COND
Surface	12-1/4"	8-5/8"	24	K-55	8RS	350'±	New
Prod.	7-7/8"	5-1/2"	15.5	K-55	8RS	7300'±	New

Both surface and production casing will be cemented back to surface and both strings of casing will be tested to 1000 psi.

Surface casing cement will be circulated back to surface. (100% excess) Production casing will be cemented from TD to surface. (30% excess over caliper log)

#### B. CEMENTING PROGRAM

Surface Casing: 8-5/8" @  $350'\pm$  Class "H" + 2% CaCl<sub>2</sub> + 1/4#/sx celloflake, 12-1/4" x 8-5/8" (0.4127 cu ft/ft) (350')(100% excess)=290 sx.

Production Casing: 5-1/2" @ 7300'±, two stage w/DV tool @ 3500'

Both stages will be cemented as follows: Lead = 450 sxs 50/50 POZMIX + 6% Ge1 + 0.6% Retarder Tail in = 340 sxs Class "H" + 10% CaCl<sub>2</sub>

7-7/8" x 5-1/2" (0.1733 cu ft/ft)(6900')(30% excess) = 1580 sxs

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## 5. Type and characteristics of the proposed circulating mud:

#### A. Mud Characteristics

<u>Depth</u>	Mud Wt.	<u>Vis</u>	<u>Ph</u>	Weighting <u>API STD</u>	Material
0'-350'	8.5-8.8	45	8-10	NC	Barite
350'-7,3900'	8.8-9.2	40-45	8-10	5-10	Barite

B. Mud Types

Fresh water gel mud will be used from surface to TD.

Auxiliary equipment to be used:

- A. A flow sensor will be in use to monitor circulating mud volumes from 350' to TD.
- B. There will be a fill up line above the annular preventer which is the uppermost preventer.
- 6. Testing, Logging and Coring programs to be followed:
  - A. DST: None anticipated
  - B. Cores: None anticipated
  - C. Electric Logs: DUAL INDUCTION W/GAMMA RAY, SP BHC SONIC W/GAMMA RAY & CALIPER, COMPENSATED NEUTRON AND FORMATION DENSITY
- 7. Any anticipated abnormal pressures or temperatures expected:

There are no over pressured formations anticipated in this wellbore.

8. Anticipated starting date and duration of the operations:

09-01-94 Anticipated starting date:

Estimated duration of operation: 19 days for drilling

12 days for completion