Form 3160-5 (***venber 1983) (Formerly 9-331)	UNITED STATES DEPARTMENT OF THE INTE BUREAU OF LAND MANAGEME		Form approved. Budget Bureau No. 1004-0135 Expires August 31, 1985 5. LEASE DESIGNATION AND SERIAL NO. Contract #34			
SU (Do not use th	NDRY NOTICES AND REPORTS us form for proposals to drill or to deepen or plu Use "APPLICATION FOR PERMIT—" for suc	ON WELLS ug back to a different reservoir.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache			
1.			7. UNIT AGREEMENT NAME			
WELL GAS	. X OTHER					
2. NAME OF OPERATOR		PANALYRD.	8. FARM OR LEASE NAME			
	il Company	*	Jicarilla "C"			
3. ADDRESS OF OPERA		14 14 5 134	9. WELL NO.			
P.O. BO 1. LOCATION OF WELL See also space 17 to At surface	x 3360, Casper, Wyoming 8260 (Report location clearly and in accordance with selow.)	2 any State requirements.	#26E 10. FIELD AND POOL, OR WILDCAT			
	SL and 1190' FWL (NW/SW) of S	ection 21	Basin Dakota 11. smc., t. s., M., or alk. AND BURYBY OR ARMA			
			L. Section 21-T25N-R5W			
14. PERMIT NO.	15. ELEVATIONS (Show whether	er DF, RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE			
	6617' GR		Rio Arriba New Mexico			
16.	CI I A . D. T. I disas	N. (N. D.				
10.	Check Appropriate Box To Indicate	e Nature of Notice, Report, of C	oner Data			
	NOTICE OF INTENTION TO:	Passus	JENT REPORT OF:			
TEST WATER SHUT	r-OFF PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL			
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CASING			
SHOOT OR ACIDIZE	ABANDON®	SHOOTING OR ACIDIZING	ABANDONMENT [®]			
REPAIR WELL	CHANGE PLANS	(Other) Notice of i	ntent to complete			
(Other)		(Note: Report results	of multiple completion on Well letion Report and Log form.)			
proposed work. nent to this work	O OR COMPLETED OPERATIONS (Clearly state all pertification of the subsurface of the	locations and measured and true vertice	ni depths for nil markers and sones perti-			
Getty UII C	ompany proposes to complete t	inis well according to t	ine following procedure.			
Completion	Procedure:		DEGEIVEM			
1. Move in	1. Move in and rig up workover unit. JUN 1 4 1984					
	. Nipple down wellhead, nipple up BOP.					
,						
4. Trip in DV tool	4. Trip in hole with bit, casing scraper, and tubing to cement. Drill out cement to DV tool at 4205' and to float collar (PBTD) at 7130'.					
5. Circula	Circulate hole clean with 1% KCl water.					
6. Trip or	Trip out of hole with tubing, casing scraper, and bit.					
	n rig up wireline unit. Run (ireline unit.		PBTD to surface. Rig			

(OVER)

APPROVED

SIGNED

(This space for Federal or State office use)

APPROVED

APPROVED

TITLE Area Superintenden:

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

(OVER)

APPROVED

APPROVED

APPROVED

APPROVED

AREA MANAGER

FARMINGTON RESOURCE AREA

- 8. Pressure test casing to 3000 psi for 15 minutes. Bleed pressure off casing.
- 9. Trip in with tubing and lower fluid level down with N_2 or swabbing to 5800'.
- 10. Trip out of hole with tubing.
- 11. Move in rig up perforating company. Pick up perforating gun. Perforating gun will be 4" HSC, will have 20 to 22 grams/charge, an effective hole diameter of 0.40 inches, and 180° phasing. Perforate the Dakota with 1 SPF in the following intervals:

Perforation depths are to be correlated with Gearhart's CDL and CNL Log dated April 28, 1984.

- 12. Pull out of hole with perforating gun. Lay down gun, rig down perforating company.
- 13. Pick up 5 1/2" packer. Trip in hole with packer, tubing and set packer at 6800'.
- 14. Move in rig up service company and acidize well according to the attached acid breakdown procedure.
- 15. Shut well in for 1 hour.
- 16. Flow back spent acid. Rig down service company.
- 17. Release packer. Lower packer past perfs. Trip out of hole with tubing and packer. Lay down packer.
- 18. Trip in hole with 2 3/8" tubing to 6500'. A blast joint will be set below the wellhead.
- 19. Rig up service company and frac the Dakota as per attached frac schedule.
- 20. Shut well in overnight to allow frac to heal. Rig down service company.
- 21. Gradually open well to pit and flow back frac fluid.
- 22. After the Dakota is cleaned up, move in and rig up wireline unit. Trip in hole with GR log to the PBTD and log well to 6900'.

Adaptive Commence

- 23. Trip out of hole with GR. Rig down wireline unit.
- 24. Trip out of hole with blast joint. Lay down blast joint.
- 25. Set tubing at 7070'.
- 26. Nipple down BOP, nipple up wellhead.

inter,

- 27. Flow test Dakota.
- 28. Connect well to sales line.

ACID TREATMENT

Breakdown Jicarilla "C" 26E perfs from 7028' to 7090' with 1400 gals of 15% HCl acid containing 2 gallons of Clay Sta II, 34 lbs citric acid flakes, 2 gallons Lo Surf 259, 3 gallons HAI-55, and 500 SCF/bbl Nitrogen. Drop 2 - 7/8" RCN ball sealers per barrel during the last 28 bbls of the 15% HCL acid. Flush acid with 1400 gallons of 1% KCl water containing 2 gallons of Clay Sta II and 500 SCF per bbl Nitrogen.

Pump rate for acid breakdown should be kept at 6 BPM.

All water that will come into contact with the Dakota formation should be 1% KCl water containing 1 gal/1000 gals Clay Sta II.

Water that is used in the acid treatment and frac treatment should be as clean as possible.

All chemicals being used in the well should be tested for compatibility and concentrations needed.

FRAC TREATMENT PROCEDURE

Procedure

Frac the Dakota by a manifold of 2 3/8" tubing and 5 1/2", 14.0 1b/ft K-55 casing. The fracturing fluid will consist of 70 Q foam which will be generated downhole. The liquid and sand phase with 20% of the nitrogen being pumped down the tubing casing annulus. The remaining nitrogen will be pumped down 2 3/8" tubing. The pump rates for the 70 Q foam will be 25 BPM. The nitrogen rate will be 23,550 scf/min.

The liquid phase will consist of 1% KCl water containing 20 lbs/1000 gals WG-12, 5 gals/1000 gals Pen-5, 1 gal/1000 gals Clay Sta II, and 1 gal/1000 gals Lo Surf 259. Buffers and breakers are to be added as needed. A maximum of 10 hours for breakdown for the gel will be required. The pad portion will contain 25 lbs/1000 gals WAC-11 per gal of foam in addition to the liquid phase and components.

The proppant phase will consist of a 20-40 mesh sand or either Ottowa sand or Heart of Texas sand. All sand will be tagged with 1 millicurie per 3000 lbs for determination of frac height and growth tendencies.

Pumping Schedule

Foam (gal)	1% KC1 Water (gal)	Sand Concentration (1bs/gals)	Proppant (1bs)
14,000	4,200	Pad	0
7,000	2,100	1/2	3,500
6,000	1,800	1	6,000
5,000	1,500	1 1/2	7,500
9,000	2,700	2 :	18,000
11,000	3,300	3	33,000
10,000	3,000	3 1/2	35,000
7,000	2,100	4	28,000
	7,300	Flush	20,000
69,000	28,000	- 23011	131,000

Lab tests should be run on all chemicals and fluids to determine their compatibility with the formation fluids.