18. I hereby certify to SIGNED (This space for F	U SE	office use)	TITLERe	egulatory Affairs	5	NOV1 51988 OIL CON. D DIST. 3	
18. I hereby certify t	PANNAGE RESSERVED	<u> </u>	TITLE Re	egulatory Affairs		NOV1 51988  OIL CON. D  DIST. 3	committee of the control of the cont
	PASHINGTON NEW PIECE LINES. PASHINGTON NEW PIECE.					NOV1 51988 OIL CON. D	
	FANNINGTON, NEW PREXICO					NOV1 51988 OIL CON. D	
	OR NEW PREATON					NOV1 51988	
\$6.65 \$6.65 \$6.65	N. W. Co.				֧֧֝֟֟֟ <del>֚</del>	ECEIV	The second secon
					•		
11-09-88	Operation	ons have change	d as per at	ttached revised o	perati	ons plan.	
17. DESCRIBE PROPOSED proposed work, nent to this work	ir weir is dir	ectionally drilled, give su	insurface locations	etails, and give pertinent di and measured and true ve	rtical depti	as for all markers and t	tarting any tones perti-
(Other)		CHANGE PLANS		Completion or Rec	ompletion 8	itiple completion on We leport and Log form.)	
SHOOT OR ACIDIZE	-	ABANDON*		SHOOTING OR ACIDIZING		ABANDONMENT <sup>a</sup>	
TEST WATER SHU	T-057	PULL OR ALTER CASIN MULTIPLE COMPLETE	g	WATER SHUT-OFF FRACTURE TREATMENT		REPAIRING WELL ALTERING CASING	_
	NOTICE OF IN				SEQUENT E		
16.	Check	Appropriate Box To	Indicate Nati	re of Notice, Report, o		····	11.
14. PERMIT NO.		15. ELEVATIONS (Sh	iow witcher DF, RT,	GR. etc.)		o Arriba N	M M
					<u>N</u> I	ec.23, T32N, Ro	
At surface	1765	5'S, 1485'W				asin Fruitland	
P.O. Box 42  4. LOCATION OF WELL See also space 17	(Report location	gton, New Mexicon clearly and in accorda	co 87499 ince with any Sta	te requirements.*		OOL, OR WILD	CAT
3. ADDRESS OF OPERA	TOR					BLL NO.	11.0
2. NAME OF OPERATOR	_	Company Méir	din ceil			an Juan 32-5 Ur	
OIL GAS WELL WEL	L X OTHE	t			S	an Juan 32-5 Ur	nit
	his form for pro Um "APPI	oposais to drill or to dec LICATION FOR PERMIT	epen or plug back —" for such propo	to a different reservoir.			
	INDKY NO	OTICES AND RE	PORTS ON	WELLS		INDIAN, ALLOTTER OR TI	SKAN BEI
SU	1 1 1 D D V A 1 C					F-079011	BRIAL NO.
(Formerly 9–331)	BUR	RTMENT OF THE EAU OF LAND MAN	_	/ verse mide)	D. LI		

# Operations Plan San Juan 32-5 Unit #100

## Revised 11/9/88

I. Location: 1765'S, 1485'W, Sec. 23, T-32-N, R-6-W, Rio Arriba Co., NM

Field: Basin Fruitland Coal Elevation: 6342' GL

## II. Geology:

A. Foramtion Tops: Surface San Jose Fruitland Top 2962'
Ojo Alamo 2257' Fruitland Base 3052'
Kirtland 2372' Total Depth 2980'TVD
Fruitland Sand 2757'

B. Logging Program: Mud logs from 2000' to TD Gamma ray from 2389' to TD

C. Coring: none

### III. Drilling:

A. Mud Program: Mud from surface to total depth. The well will be drilled vertically to a kick off point of 2389'. The well will be kicked off at  $12^{\rm O}/100^{\rm I}$  build rate to allow a high angle penetration of the Fruitland Coal interval.

## B. Wellbore location table:

Measured Depth(Ft)				Horizontal Displacement	Hole Size		Notes	
	0.0	0.0	<del></del>		12	 1/4"		
	700.0	700.0			12	1/4"	Set 9 5/8", 32.3# H-40 csg. Drill out w/8 3/4"	
	2389.0	2389.0			8	3/4"	bit KOP	
	2764.0	2727.0	180°	140.0			Build 12°/ 100' to 45°	
	2899.0	2822.0	180°	235.0	8	3/4"		
	3266.0	2962.0	180°	565.0	8	3/4"	Intersect coal top @ 89°	
	4301.0	2980.0	180°	1600.0	8	1/2"	End of lateral	

Operations Plan - San Juan 32-5 Unit #100 Page Two

#### IV. Materials:

Α.	Csg. Program:	Hole Size	Meas.Depth	Csg.Size	Wt.	Grade
	Liner	12 1/4" 8 3/4" 8 1/2"	700' 3266' 3100'-4301'	9 5/8" 7" 5"	32.3# 20.0# 15.0#	K-55

- B. Float Equipment: 9 5/8" surface casing Saw Tooth guide shoe
  - 7" intermediate csg guide shoe on bottom centralizers every joint from 3266' MD to 2389' MD. External csg packer, landing collar and stage tool set @ 3266' MD. Drop plug, inflate external csg. packer, open stage tool and cement 7" casing. 5" production liner cement nose float shoe.
- C. Tubing: 4301' of 2 7/8", 6.5#, J-55 8rd EUE tbg with a seating nipple one joint off bottom and expendable check valve on bottom.
- D. Wellhead Equipment: 9 5/8" x 11" 3000 psi xmas tree assembly.

## V. Cementing:

- 9 5/8 surface casing use 400 sx. Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (472 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 1000 psi/30 minutes.
- 7" intermediate casing use 300 sx. 65/35 Class "B" Poz with 6% gel, 2% calcium chloride and 1/4 cu.ft. Perlite/sx, followed by 230 sx. Class "B" with 2% calcium chloride (986 cu.ft. of slurry, 100% excess to circulate surface). Run temperature survey at 8 hours. WOC 18 hours.