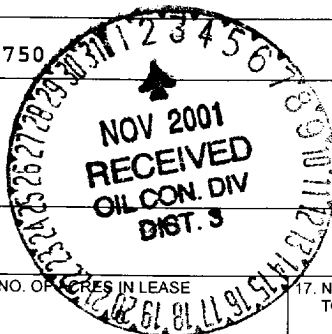


**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF078402	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME 	
2. NAME OF OPERATOR Roddy Production Company, Inc.		7. UNIT AGREEMENT NAME 	
3. ADDRESS AND TELEPHONE NO. P. O. Box 2221, Farmington, NM 87499 (505)325-5750		8. FARM OR LEASE NAME, WELL NO. Raymond Simmons No. 2	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 680' FSL - 1160' FEL, Section 17, T30N, R11W, NMPM At proposed prod. zone Same		9. API WELL NO. 30-045-30859	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 0.5 miles southwest of Aztec, New Mexico		10. FIELD AND POOL, OR WILDCAT Basin Dakota	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 109' <small>(Also to nearest ddg. unit line, if any.)</small>		11. SEC., T., R., M., OR BLK AND SURVEY OR AREA Section 17, T30N, R11W, NMPM	
16. NO. OF ACRES IN LEASE 		12. COUNTY San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 125'		19. PROPOSED DEPTH 6788'	
20. ROTARY OR CABLE TOOLS Rotary		21. APPROX. DATE WORK WILL START* As soon as permit approved	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5691' GL		22. APPROX. DATE WORK WILL START* As soon as permit approved	



**THIS ACTION IS SUBJECT TO TECHNICAL AND
PROCEDURAL REVIEW PURSUANT TO 43 CFR 3160.9
AND APPEAL PURSUANT TO 43 CFR 3160.4.**

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12.250"	8.625", J-55	24#	300' 320'	247.8 cf, circulate to surface
7.875"	5.500", J-55	15.5#	6788'	1755.85 cf in 3 stages, Circ. to surface
				DV1@ 4790' DV2@2200'

The well will be spudded in the Nacimiento formation. A 12 1/4" hole will be drilled to 300' using a fresh water mud. Surface casing will be run and cemented with cement returns to surface. WOC 12 hours. Pressure test BOPE to minimum of 600 psi/15 minutes. Drill 7 7/8" hole to TD using a fresh water LSND mud system. No abnormal pressure or poisonous gas is anticipated. Log well. Run production casing and cement in three stages with sufficient cement to circulate to surface. Mechanical DV tools will be placed at the Lewis top and approximately 50 feet into the Upper Mancos formation. Rig down drilling equipment. Move in completion rig. Run cased hole correlation logs. Pressure test casing to 3000 psi. Perforate select Dakota intervals and stimulate with a 2% KCl water based gel fluid. Test well and connect to gas sales.

Surface is Federal, BLM.

SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Robert E. Fildes TITLE Business Manager DATE September 25, 2001

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ Jim Lovato TITLE _____ DATE OCT 27 2001

District I
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

District II
PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-30859		*Pool Code 71599	*Pool Name BASIN DAKOTA
*Property Code 20956	*Property Name RAYMOND SIMMONS		*Well Number 2
*OGRID No. 36845	*Operator Name RODDY PRODUCTION COMPANY INC.		*Elevation 5691

¹⁰ Surface Location

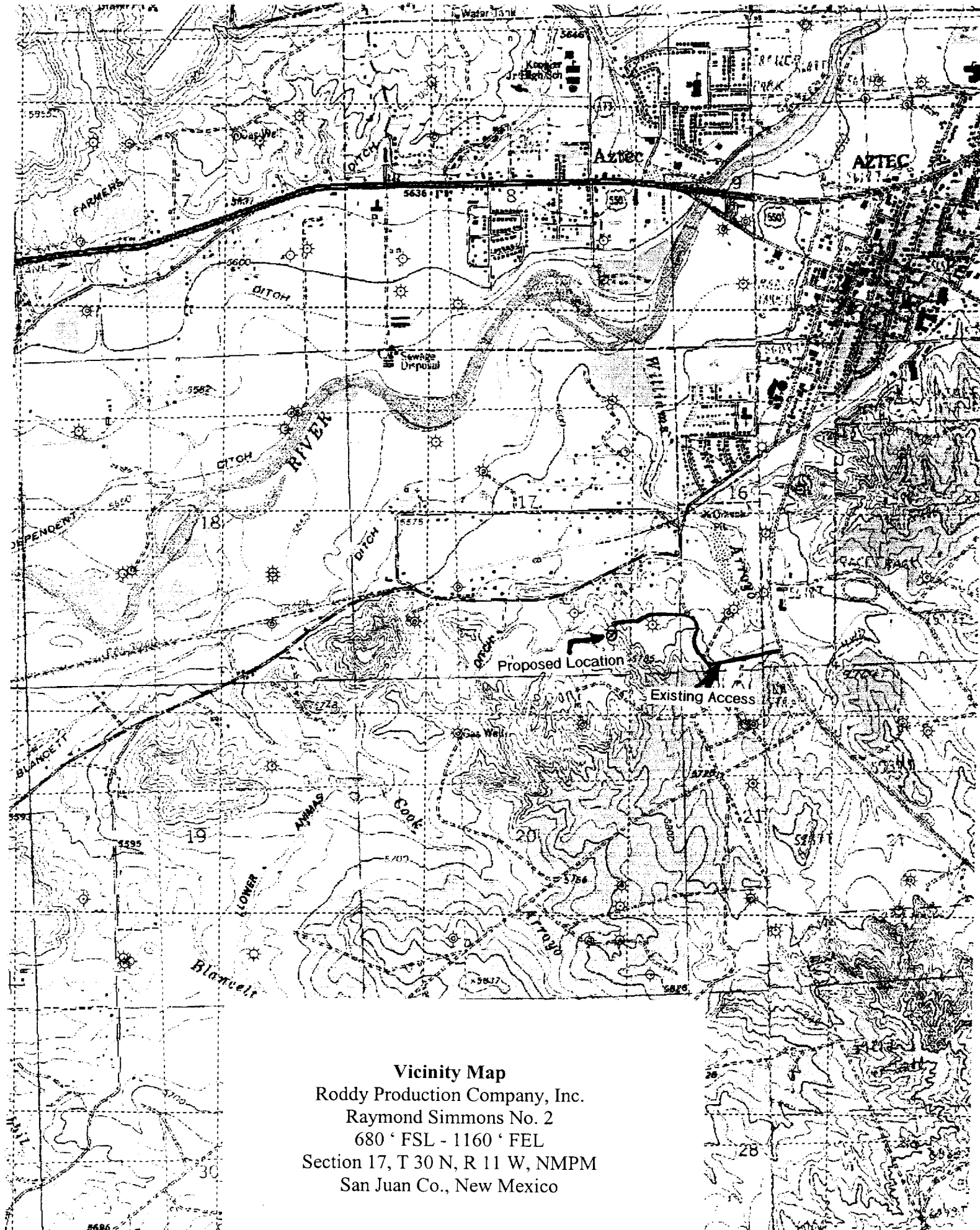
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	17	30N	11W		680	SOUTH	1160	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320.00					¹³ Joint or Infill Y	¹⁴ Consolidation Code C	¹⁵ Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div><p>¹⁶</p><p>5235.12'</p><p>2676.30'</p><p>2638.68'</p><p>2621.52'</p><p>2537.70'</p><p>2655.18'</p><p>2654.52'</p><p>NOV 2001 RECEIVED OIL CON. DIV DIST. 3</p><p>Raymond Simmons #1</p><p>SF078402</p><p>1160'</p><p>680'</p><p>17</p></div>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Robert E. Fielder</i></p> <p>Signature</p> <p>Robert E. Fielder</p> <p>Printed Name</p> <p>Business Manager</p> <p>Title</p> <p>September 25, 2001</p> <p>Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted 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 belief.</p> <p>Date of Survey: AUGUST 28, 2001</p> <p>Signature and Seal of Professional Surveyor</p> <div><p>JASON C. EDWARDS</p><p>NEW MEXICO</p><p>REGISTERED PROFESSIONAL SURVEYOR</p><p>15269</p></div> <p>JASON C. EDWARDS</p> <p>Certificate Number 15269</p>



Vicinity Map
Roddy Production Company, Inc.
Raymond Simmons No. 2
680' FSL - 1160' FEL
Section 17, T 30 N, R 11 W, NMPM
San Juan Co., New Mexico

Roddy Production Company, Inc.
 Raymond Simmons No. 2
 680' FSL & 1160' FEL
 Section 17, T30N, R11W, NMPM
 San Juan County, New Mexico

TEN POINT DRILLING PROGRAM

1. Surface Formation: Nacimientto
2. Surface Elevation: 5691' GL.
3. Estimated Formation Tops:

<u>Formation</u>	<u>Top - feet</u>	<u>Expected Production</u>
Nacimientto	surface	
Ojo Alamo	567	
Kirtland	691	
Fruitland	1632	
Fruitland Coal	1998	
Pictured Cliffs	2036	GAS
Lewis	2209	
Huerfanito	2794	
Chacra	2988	
Mesa Verde	3544	
Cliff House	3605	GAS
Menefee	3789	GAS
Pt. Lookout	4366	GAS
Upper Mancos	4740	
Gallup	5612	GAS
Lower Mancos	6153	
Greenhorn	6353	
Graneros	6409	GAS
Dakota	6538	GAS
TOTAL DEPTH	6788	

4. Surface Hole Program:

Bit: Drill a 12 1/4" hole to 300' using a retip mill tooth, IADC Class 115 or 116, bit. WOB: all. RPM: 70 - 100.

Mud: Use a fresh water base spud mud with the following properties:

<u>Interval (ft)</u>	<u>Weight (ppg)</u>	<u>Ph</u>	<u>Vis(sec/qt)</u>	<u>Water Loss</u>
0 - 300 370 min	8.6 or less	9.0-9.5	40 - 50	No Control

Drilling Program
Roddy Production Company, Inc.
Raymond Simmons No. 2
Page Two

4. Surface Hole Program: - continued

Casing and Cementing: A string of 8 $\frac{3}{4}$ " 24# J-55 or K-55 ST&C casing will be set and cemented to the surface in a single stage with 210 sacks of Class "B" cement (yield = 1.18 cf/sk) containing 3% CaCl₂ and 1/4 lb/sack celloflake. Slurry volume assumes 100% excess over calculated hole volume. If cement does not circulate to surface, cement will be topped off using 1" pipe down the 12 1/4" by 8 5/8" annulus. Minimum clearance between couplings and hole is 1.3125". Prior to drilling out the shoe, casing and BOPE will be tested to a minimum of 600 psig. Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb overpull, whichever is greater.

WOC 12 HOURS. Nipple up 11" 2000# BOPE. Pressure test surface casing and BOPE to 600 psi for 15 minutes.

Centralizers: Run three (3) 8 $\frac{3}{4}$ " X 12 $\frac{1}{4}$ " regular bowspring centralizers. Install first one on stop ring in middle of shoe joint.

Float Equipment: Cement nose guide shoe thread locked. Also thread lock connection between first and second joint run.

5. Intermediate Hole Program:

No intermediate casing is planned for this well.

6. Production Hole Program:

Bits: Drill an 7 7/8" hole to 4790' feet using TCI, IADC class 447, bits. WOB: 40 - 45K. RPM: 65-75. Slow RPM through Ojo Alamo, Cliff House, and Pt. Lookout. Drill to 6538' with PDC. WOB: 15 - 25K. RPM: 60 - 70. Drill to Total Depth with TCI, IADC class 637.

Mud: Use a fresh water based low solids non dispersed system with the following properties:

<u>Interval (ft)</u>	<u>Weight (ppg)</u>	<u>pH</u>	<u>Vis(sec/qt)</u>	<u>Water Loss</u>
300 330 - 4500	8.6 - 9.0	9.0-9.5	28 - 35	10 - 15 cc
4500 - TD	8.6 - 9.0	9.0-9.5	28 - 35	8 - 10 cc

Fresh water will be used for dilution and building volume. Sufficient materials will be on location at all times to maintain mud properties and to control any lost circulation problem or unforeseen abnormal pressures. The mud volume in the rig pits will be visually monitored and recorded on a routine basis.

Note: Raise **viscosity** to 55 - 60 for logging. Thin to 40 - 45 viscosity to run casing.

Drilling Program
Roddy Production Company, Inc.
Raymond Simmons No. 2
Page Three

6. Production Hole Program: - continued

pH is to be maintained with lime or caustic soda at the recommended levels to assure drill pipe corrosion protection. Drispac will be used for control of fluid loss. Hole will be drilled through majority of Mesa Verde interval using polymer and drispac additions to water. Mud up before trip for PDC. Lost Circulation is expected and can occur anywhere from the Pictured Cliffs formation to TD. Mud weights should be controlled as low as possible with solids control equipment then as low as practical with water dilution.

Pressure Control: A 2M psi BOP well control system will be utilized. BOP's and choke manifold will be installed and pressure tested to a minimum of 600 psig before drilling out from under surface casing. Mechanical operation of pipe rams will be checked daily and blind rams will be checked on each trip out of hole. 4 1/2" rams will be installed before running production casing. A full opening internal blowout preventor or drill pipe safety Valve will be on the drill floor at all times and will be capable of fitting all connections.

Logging Program: Induction and Compensated density/Epithermal neutron logs from TD to surface casing shoe.

Casing and Cementing Program: Run 5 1/2" 15.5# J-55 production casing from surface to Total Depth and cement in 3 stages with mechanical DV tools installed fifty feet ± below the Upper Mancos top and fifty feet ± below the Lewis top. **Stage 1** (6788' TD - 4790') will be cemented with 380 sacks (520.6 cf) of 50/50 Class B POZ containing 2% gel, 5 pps Gilsonite, 1/4 pps Flocele, 0.3% Halad 344 FLA, and 0.3% Versaset mixed at 13.5 PPG to yield 1.37 cf/sk. **Stage 2** (4790' - 2200') will be cemented with 125 sacks (360.0 cf) of Class B with 3% Econolite, 0.5 pps flocele, 10 pps Gilsonite mixed at 11.4 PPG to yield 2.88 cf/sk. Followed with 225 sacks (308.25 cf) of 50/50 Class B POZ with 2 % gel, 5 pps Gilsonite, 1/4 pps Flocele, .3% Halad 344 and .3% Versaset mixed at 13.5 PPG, yield 1.37. **Stage 3** (2200' - surface) will be cemented with 150 sacks (432.0 cf) of Class B with 3% Econolite, 0.5 pps flocele, 10 pps Gilsonite mixed at 11.4 PPG to yield 2.88 cf/sk. Followed with 100 sacks (135.0 cf) of Class B with 0.5 pps flocele and 10 pps gilsonite mixed at 15.6 PPG to yield 1.35 cf/sk.

Circulate and WOC between stages for four (4) hours.

Slurry volumes assume a 50% excess over gauge hole volume. Cement volume is subject to change after review of open hole caliper log to caliper volume + 30%. Minimum clearance between couplings and hole is 0.9125".

Safety factors utilized in the design of this casing string were: burst = 1.1; collapse = 1.125; and tension = 1.8 or 100,000 lb over pull, whichever is greater.

Drilling Program
Roddy Production Company, Inc.
Raymond Simmons No. 2
Page Four

6. Production Hole Program: - continued

Centralizers: 21 - 5 1/2" X 7 7/8" bowspring centralizers will be run across all prospective pays and 5 - 5 1/2 " X 7 7/8" turbolizers will be spaced such that one (1) is just below the Basal Fruitland Coal, three (3) across the Fruitland and one (1) into the Ojo Alamo.

Float Equipment: Cement nose float shoe, 1 jt 5 1/2" csg, float collar, and 2 - mechanical DV tools with 2 cement baskets below each DV.

7. Auxiliary Equipment:

An upper kelly cock will be utilized. The handle will be available on rig floor at all times

8. Logging Program:

Dual Induction with GR and Epithermal Neutron / Formation Density will be run from TD to surface casing shoe. Bulk density will be presented on a 5 " scale through the coals. Deep induction curve will be merged onto the porosity log.

Coring and Testing Program:

No cores or drill stem tests are planned.

9. Abnormal Pressure:

Although not expected, abnormal pressures are possible in the Fruitland formation.

Estimated Bottom Hole Pressure:

1500 - 2000 psig.

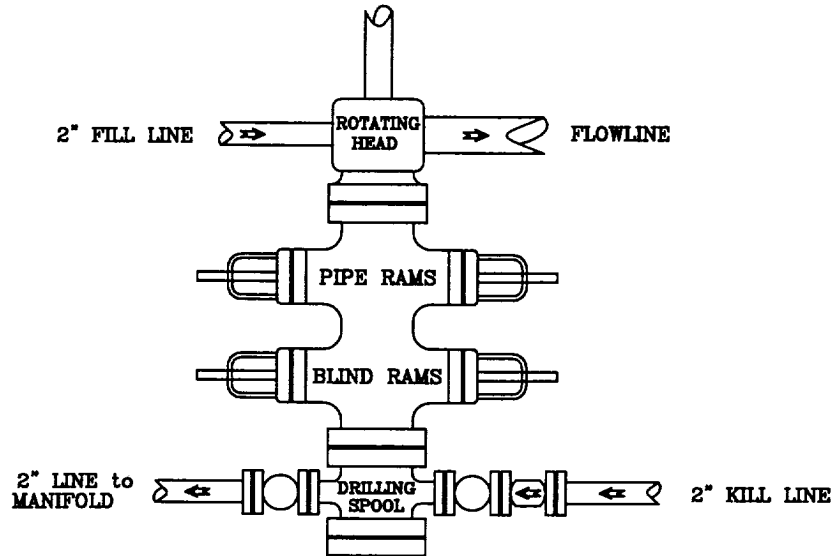
10. Anticipated Starting Date:

September 20, 2001.

Duration of Operations: It is estimated a total of 15 days will be required for drilling operations and 10 days for the completion operation.

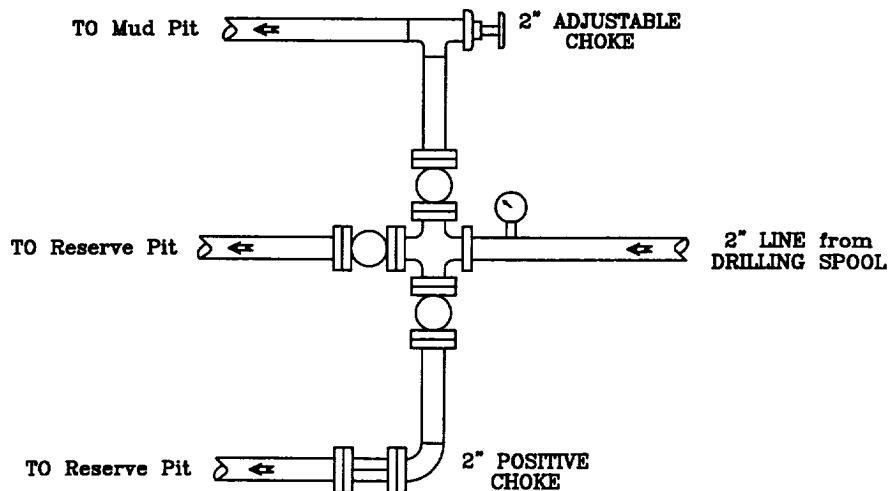
PRESSURE CONTROL

Wellhead Assembly



Preventer and Spools are to have a
6" Bore or larger and a 2000 PSI
or higher Pressure Rating

Choke Manifold



Roddy Production Company, Inc.

Raymond Simmons No. 2

680'FSL - 1160'FEL

Section 17, T30N, R11W, NMPM
San Juan County, New Mexico