

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000


APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-079090
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Energen Resources Corporation		7. Unit or CA Agreement Name and No. San Juan 32-5 Unit 21996
3a. Address 2198 Bloomfield Highway Farmington, New Mexico 87401	3b. Phone No. (include area code) (505) 325-6800	8. Lease Name and Well No. San Juan 32-5 Unit 20
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 200' FSL, 45' FEL At proposed prod. zone		9. API Well No. 30-239-26907
14. Distance in miles and direction from nearest town or post office* 17 miles North of Gobernador, New Mexico		10. Field and Pool, or Exploratory Blanco Mesaverde
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 45'		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 22, T32N, R6W, N.M.P.M.
16. No. of Acres in lease 480		12. County or Parish Rio Arriba
17. Spacing Unit dedicated to this well E/2		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 50'		20. BLM/BIA Bond No. on file
19. Proposed Depth 6102'		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6320' GL
22. Approximate date work will start* August 2002		23. Estimated duration 12 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Don Graham	Date 1/21/02
Title Production Superintendent		
Approved by (Signature) David J. Mankiewicz	Name (Printed/Typed)	Date JUN 14
Title Office		

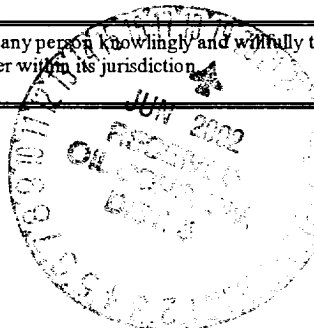
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

*(Instructions on Reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.



ONLINE OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

NMOC

District II
PO Drawer 00, Artesia, NM 88211-0719OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 CopiesDistrict III
1000 Rio Brazos Rd., Aztec, NM 87410District IV
PO Box 2088, Santa Fe, NM 87504-2088☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26907	*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code 21996	*Property Name SAN JUAN 32-5 UNIT	*Well Number 20
*OGRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION	*Elevation 6320'

10 Surface Location

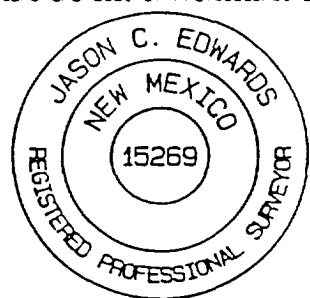
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	32N	6W		200	SOUTH	45	EAST	RIO ARRIBA

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	13 Joint or Infill	14 Consolidation Code	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

16	2691.48'	2619.54'	17 OPERATOR CERTIFICATION
2615.24'	22	2634.72'	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
			<i>Don Graham</i> Signature
			Don Graham Printed Name
			Production Superintendent Title
			1-21-02 Date
2676.30'	22	2599.74'	18 SURVEYOR CERTIFICATION
			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.
			Survey Date: OCTOBER 29, 2001
			Signature and Seal of Professional Surveyor
			
	2683.56'	2681.58'	<i>JASON C. EDWARDS</i> Certificate Number 15269

OPERATIONS PLAN

WELL NAME: San Juan 32-5 Unit #20

LOCATION: 200' FSL, 45' FEL, Section 22, T32N, R6W, Rio Arriba County, NM

FIELD: Blanco Mesaverde

ELEVATION: 6320' GL

FORMATION TOPS:

Surface	San Jose	Huerfanito Benonite	4127
Nacimiento	967	Cliff House	5022
Ojo Alamo	2247	Menefee	5367
Kirtland	2362	Point Lookout	5552
Fruitland	2727	Total Depth	6102
Pictured Cliffs	3047		
Lewis	3407		

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: None

Inter TD to total depth: Temp/HRI/CNT, LDT/GR; MRIL

Mud Logs: None

Coring: None

Natural Gauges: Every 500' from intermediate TD to total depth

MUD PROGRAM: Fresh water low solids mud from surface to intermediate TD (9.0 PPG).
Air/mist from intermediate casing point to total depth.

CASING PROGRAM:

<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CSG SIZE</u>	<u>WT.</u>	<u>GRADE</u>
12 1/4"	200'	9 5/8"	32.3#	J-55 – ST&C
8 3/4"	3607'	7"	20#	J-55 – ST&C
6 1/4"	3457'-6102	4 1/2"	10.5#	J-55 – ST&C

TUBING PROGRAM:

6000'	2 3/8"	4.7#	J-55
-------	--------	------	------

WELLHEAD: 11" 3000 x 9 5/8" casing head. 11" 3000 x 7 1/16" 3000 xmas tree.

BOP SPECIFICATIONS:

An 11" 2000 psi minimum double gate BOP stack (Figure 1) will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. A 2" nominal, 2000 psi minimum choke manifold will be used. An upper Kelly Cock valve with handle available and drill string valve to fit each drill string will be available on the rig floor during drilling operations.

CEMENTING:

9 5/8" surface casing - cement with 110 sks Class B Cement with 1/4" flocele/sk and 2% calcium chloride (130 cu. ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 600# for 30 minutes.

Texas Pattern Guide Shoe on bottom. 3 bow type centralizers spaced throughout the string.

7" intermediate casing - cement with 360 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (814 cu. ft. of slurry, 50% excess to circulate to surface). WOC 12 hrs. If cement does not circulate, run temperature survey in 8 hrs. to determine TOC. Test casing to 1200 psi for 30 minutes.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 10 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

4 1/2" Production Liner

Cement with 325 sks 50/50 Poz with 2% gel, 5 PPS gilsonite, and .4% halad - 9 and 1/4# flocele/sk (408 cu. ft., 50% excess to tie into intermediate casing string). WOC 18 hrs. prior to completion.

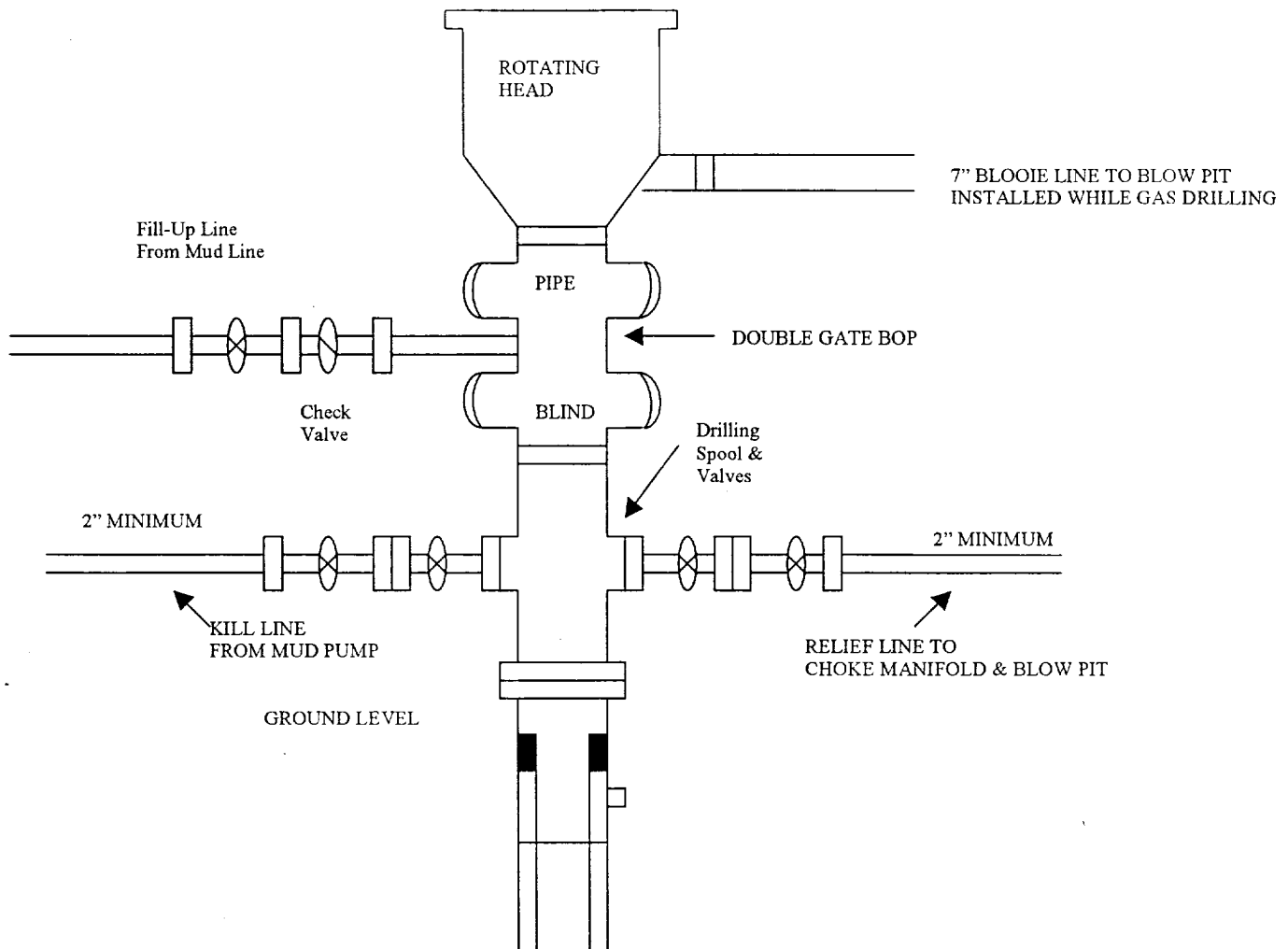
Cement nose guide shoe on bottom with float collar on top of shoe joint. Liner hanger will have neopreme packoff on top.

OTHER INFORMATION:

- 1) The Blanco Mesa Verde will be completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) Anticipated pore pressure for the Mesa Verde is 1000.
- 4) If lost circulation is encountered sufficient LCM will be added to the mud system to maintain well control.
- 5) This gas is dedicated.
- 6) Anticipated pore pressure for the Fruitland is 700 psi and the Pictured Cliffs is 800 psi.

ENERGEN RESOURCES CORPORATION

Mesa Verde / Dakota Well BOP Configuration

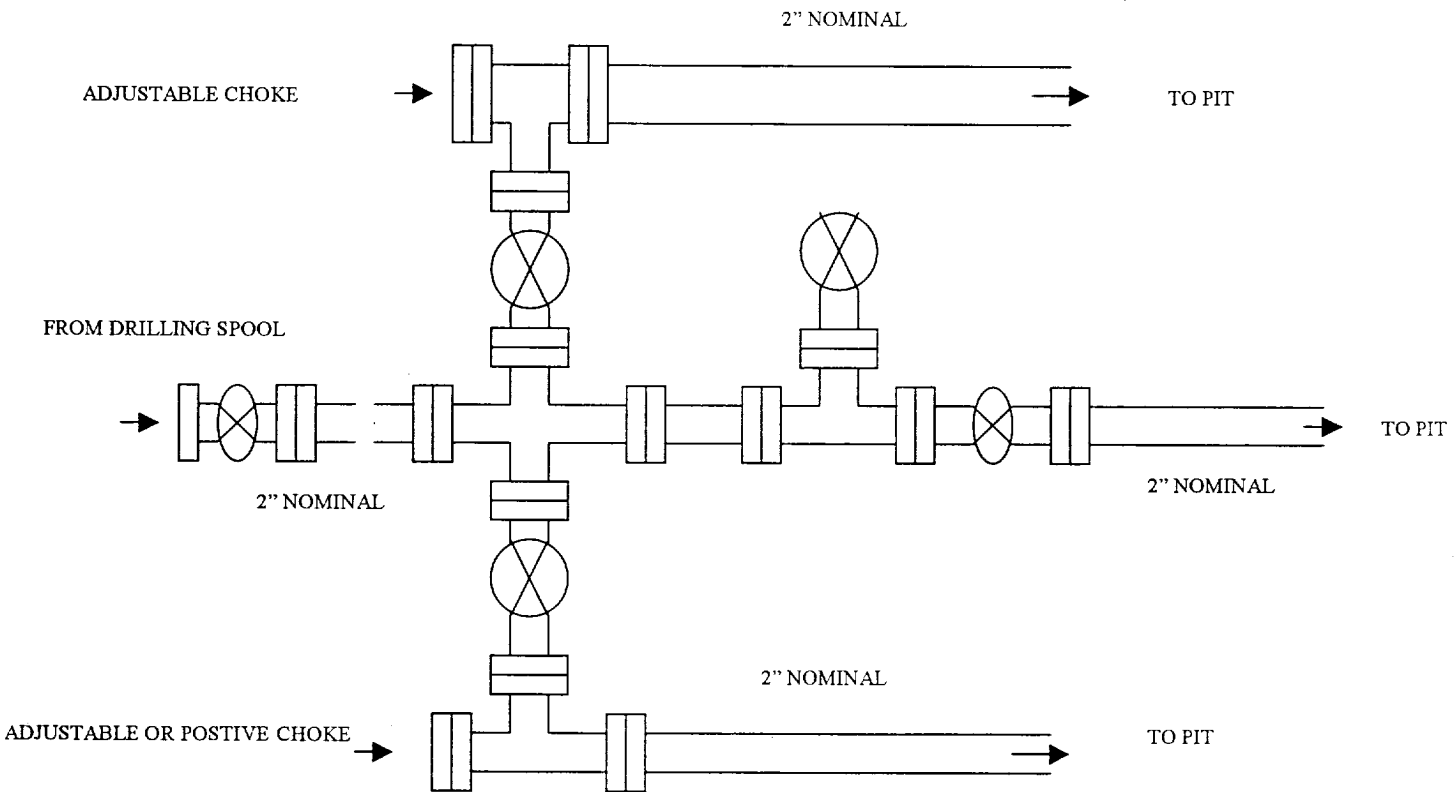


Minimum BOP installation for a Mesaverde well from Surface to Total Depth. 11' Bore, 2000 psi minimum working pressure double Gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of The BOP. All equipment is 2000 psi working pressure or greater.

ENERGEN RESOURCES CORPORATION

Choke Manifold Configuration

2M psi System



Minimum choke manifold installation from surface to Total Depth.
2" minimum, 2000 psi working pressure equipment with two chokes.

ENERGEN RESOURCES CORPORATION

San Juan 32-5 Unit #20

MULTI-POINT SURFACE USE PLAN

1. Existing Road
Please refer to map No.1 which show the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Road - Refer to Map No. 1.
The required new access road is shown on Map No. 1. The gradient, shoulder, crowning and other design elements will meet or exceed those specified by the responsible government agency. The new access road surface will not exceed twenty feet (20') in width. No additional turnarounds or turnouts will be required. Upon completion of the project, the access road will be adequately drained to control soil erosion. Approximately 0' of access road will be constructed. Pipelines are indicated on Map No. 1A.
3. Location of Existing Wells - Refer to Map 1A
4. Location of Existing and/or Proposed Facilities if Well is Productive
 - a. On the Well Pad - Refer to Plat No. 1, anticipated production facilities plat.
 - b. Off the Well Pad - Anticipated facilities off the well pad will be applied for as required.
 - c. Williams Field Service ROW Pipeline Plat is attached.
5. Location and Type of Water Supply
Water for the proposed project will be trucked and obtained from Eul Canyon.
6. Source of Construction Materials
No additional materials will be required to build either the access road or the proposed location.
7. Methods of Handling Waste Materials
All garbage and trash materials will be stored in a trash basket and removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time the reserve pit can be properly covered over to prevent run-off from carrying waste materials into the watershed. No earthen pits will be located on natural drainage. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if so generated.

9. Wellsite Layout

Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent liquids in the blow pit.

10. Plans for Restoration of the Surface

After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible governmental agency. The permanent location, facilities will be painted as designated by the responsible governmental agency.

11. Surface Ownership

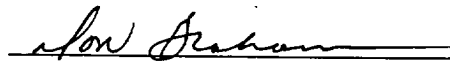
Bureau of Land Management

12. Other Information

Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.

13. Operator=s Representative and Certification

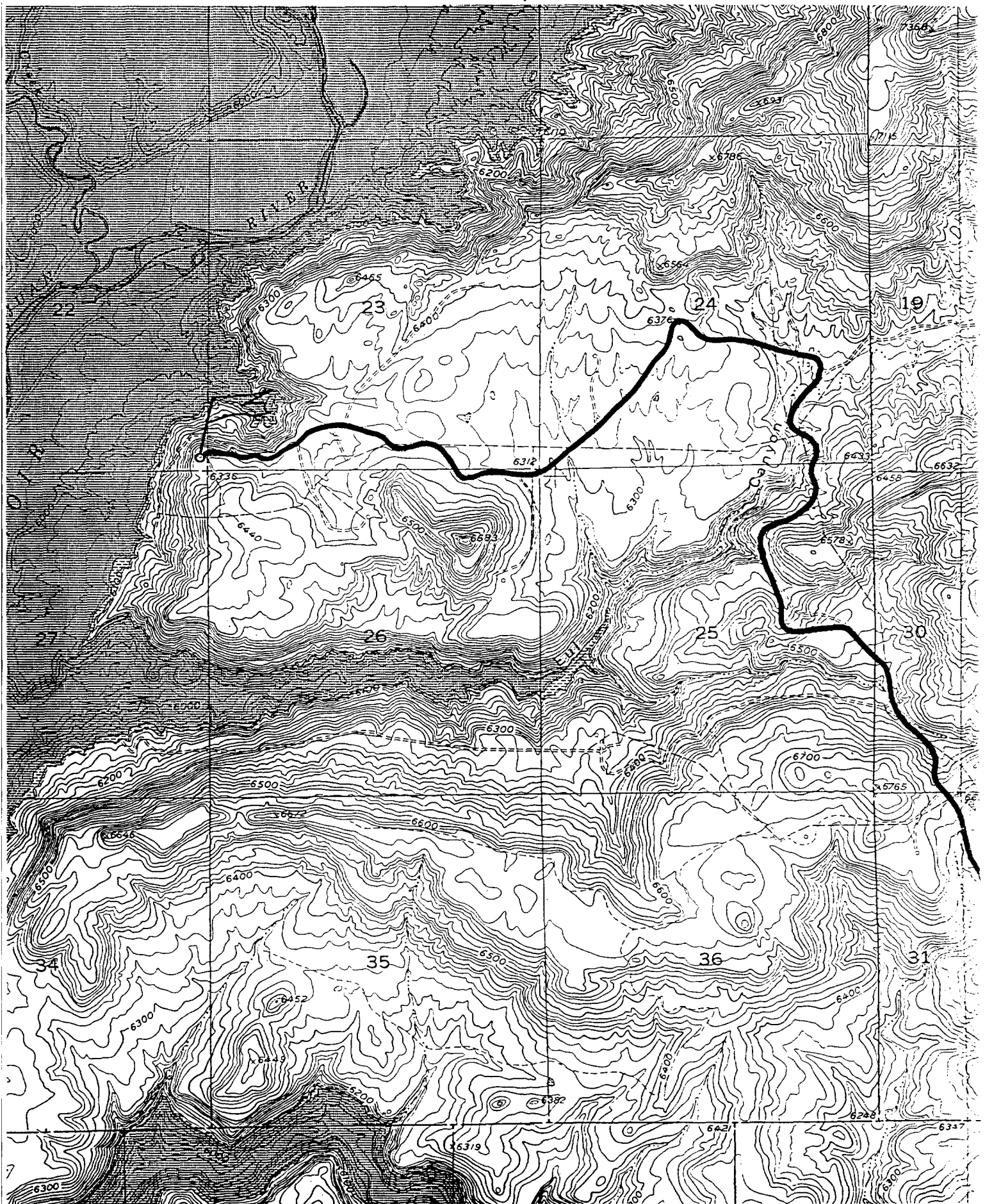
Joe D. Niederhofer, General Manager - San Juan, 2198 Bloomfield Highway, Farmington, New Mexico 87401, telephone (505)325-6800. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan, are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Energen Resources Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

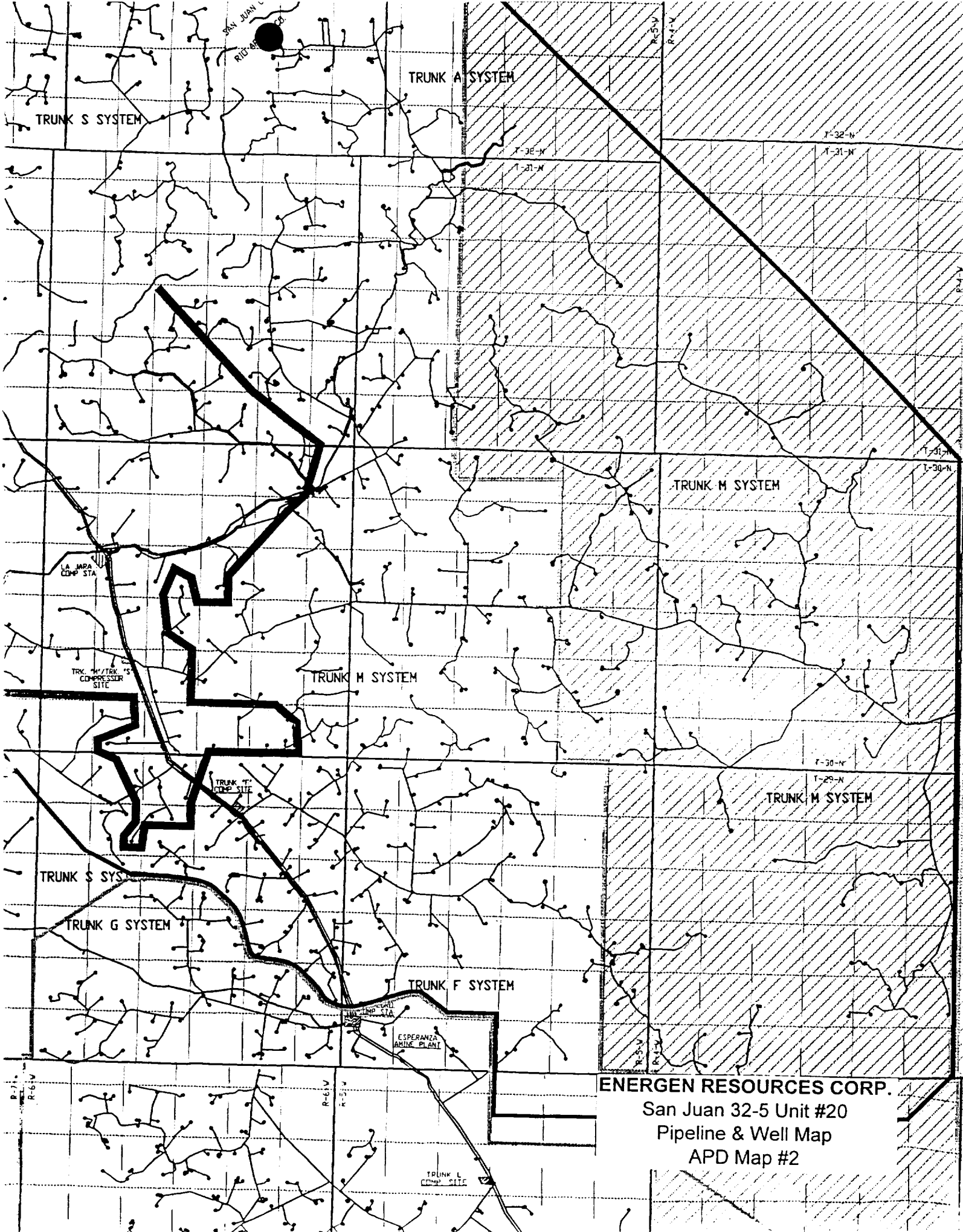


Don Graham
Production Superintendent

ENERGEN RESOURCES CORPORATION SAN JUAN 32-5 UNIT #20

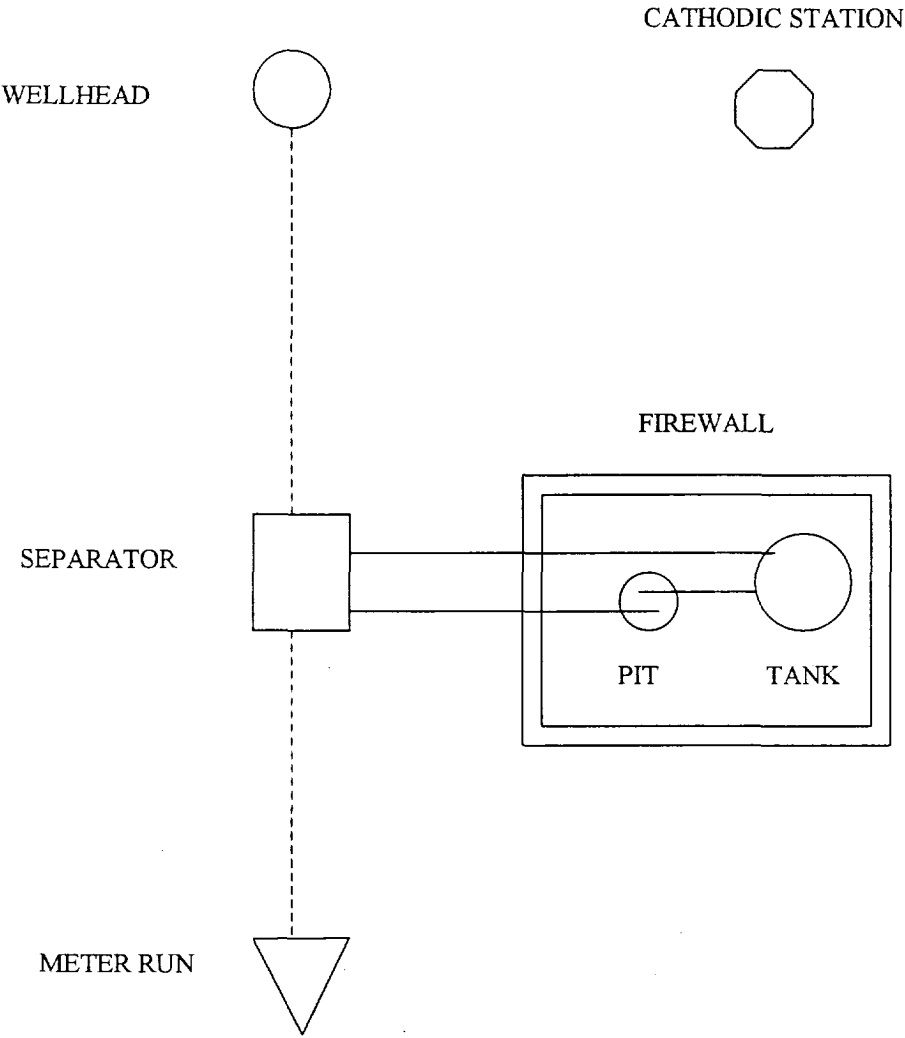
200' FSL & 45' FEL, SECTION 22, T32N, R6W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO





ENERGEN RESOURCES CORPORATION

Well Pad Boundary

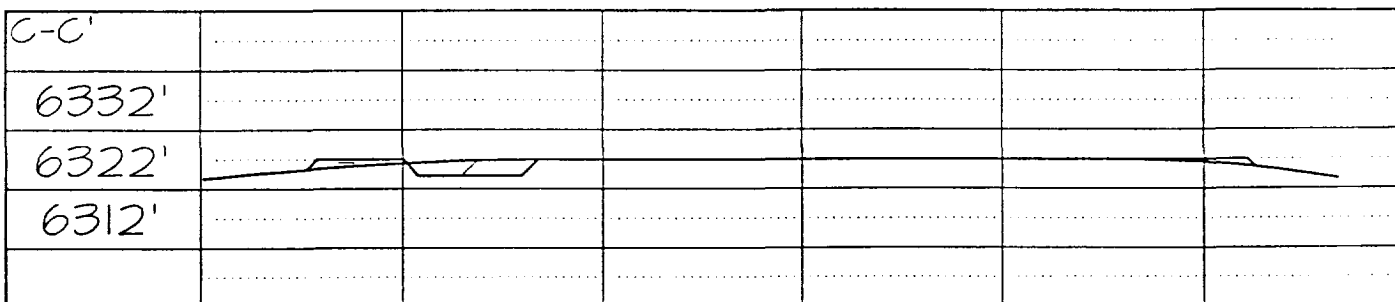
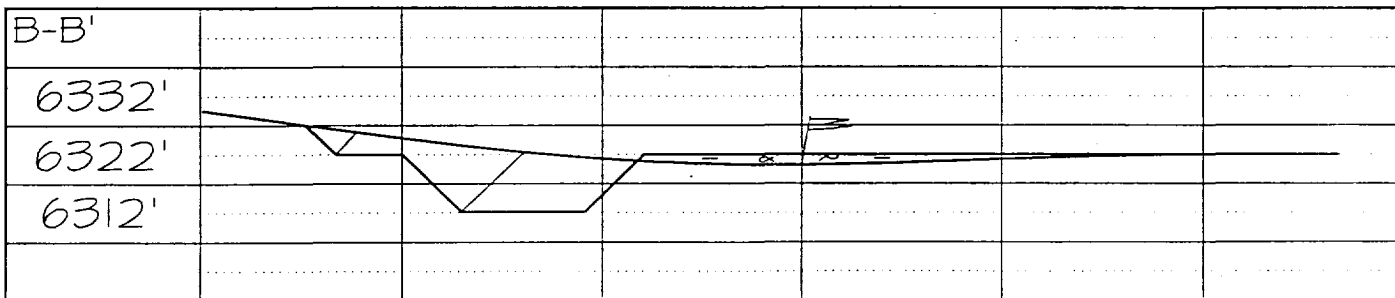
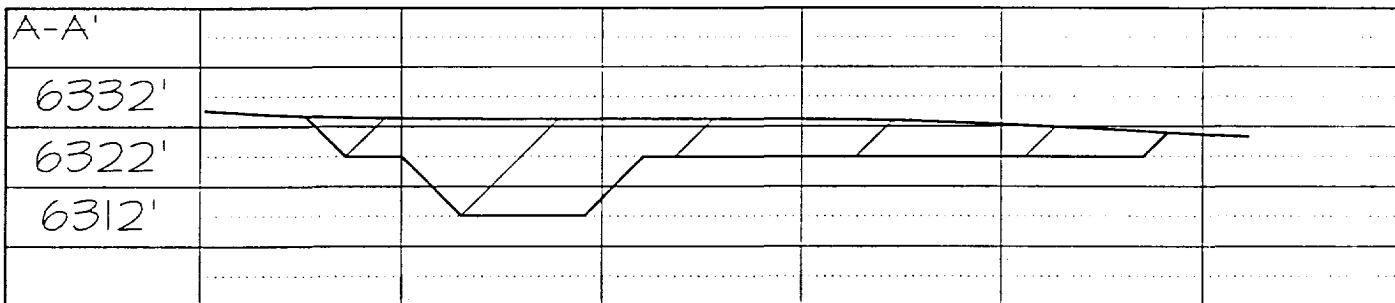
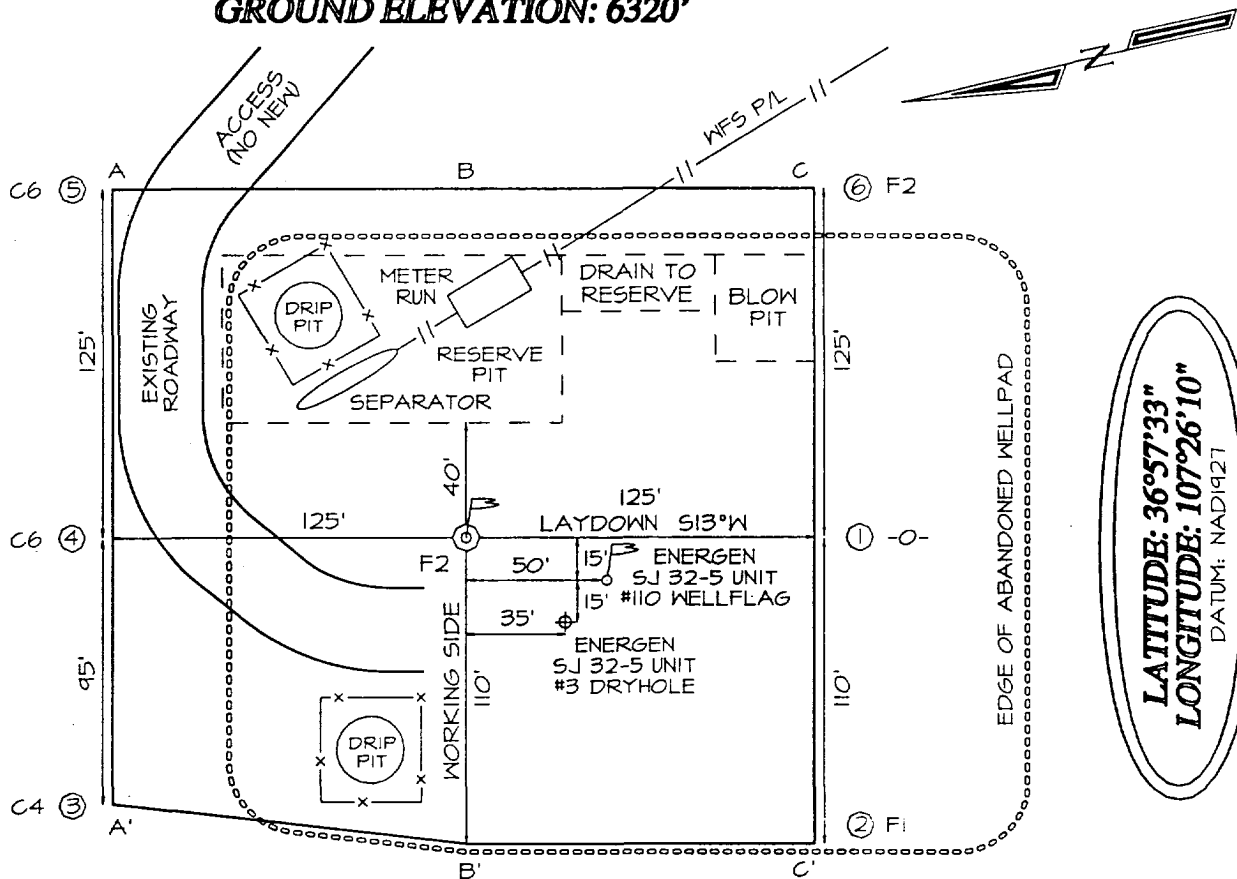


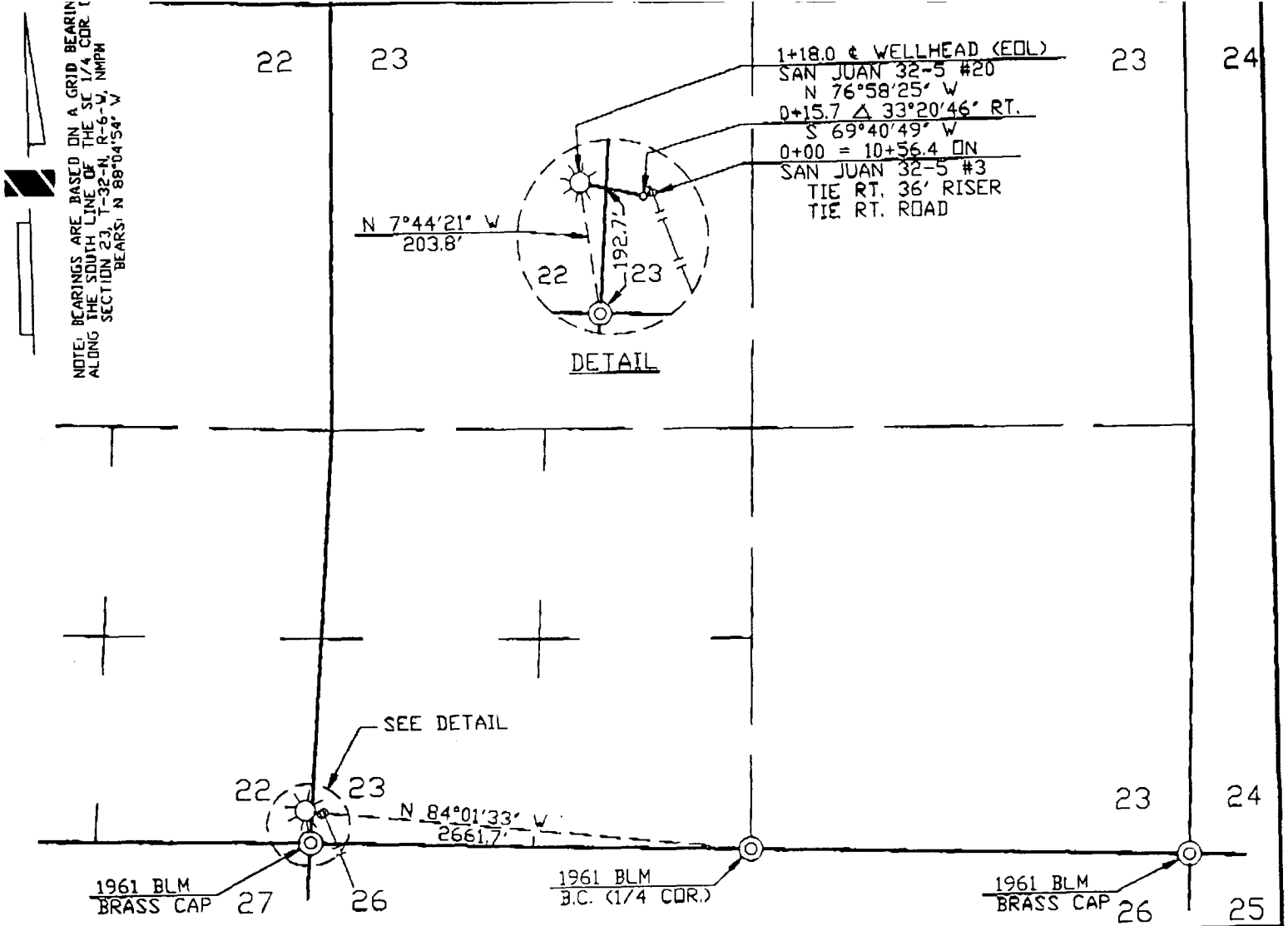
ANTICIPATED PRODUCTION FACILITIES
FOR A MESA VERDE OR DAKOTA WELL

PLAT #1

ENERGEN RESOURCES CORPORATION SAN JUAN 32-5 UNIT #20
200' FSL & 45' FEL, SECTION 22, T32N, R6W, NMPM
RIO ARriba COUNTY, NEW MEXICO
GROUND ELEVATION: 6320'

PLAT NOTE:
 ALL ABANDONED PRODUCTION EQUIPMENT
 AND WFS P/L WILL NEED TO BE REMOVED AND
 REPOSITIONED FOLLOWING DRILLING OPERATIONS





PIPE DATA									
OWNERSHIP									
SUBDIVISION		OWNER		FEET	MILES	ACRES	RODS		
0+00 TO 1+18.0		BUREAU OF RECLAMATION		118.0	0.022	0.108	7.152		
REVISION									
NO.	DATE	BY	DESCRIPTION	V.O. NO.	CHK.	APP.	NO.	DATE	BY
1	11/29/01	SRB	ISSUED FOR REVIEW		PB				
WILLIAMS GAS PROCESSING									
ONE OF THE WILLIAMS COMPANIES									
INFO		DRAFTING	BY	DATE	STATE: NEW MEXICO				
R/W #:	05098	DRAWN BY	SRB	11/29/01	COUNTY: RIO ARriba				
METER #:		CHECKED BY	PB	11/30/01	SAN JUAN GATHERING SYSTEM				
SURVEYED:	11/15/01	APPROVED BY			ENERGEN - SAN JUAN 32-5 #20				
		ENGINEER	BY	DATE	0+00 = 10+56.4 ON SAN JUAN 32-5 #3				
		DESIGNED BY			(REF DWG. 47A765.0-9-1)				
		PROJ. APPROVED			SEC. 22 & 23, T-32-N, R-6-W, NMPM				
					SCALE: 1" = 1000'				
					V.O. NO. 16725				
					DWG NO. 47A765.0-31-1				
					SHEET 1 OF 1				
					REV 1				

T:\DRA\DRAWINGS\DRAWINGS\SANJUAN\765\00\47A765.0-31-1_R01.DWG 11/30/2001 11:43AM PAUL