STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

June 21, 1985

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Energy Reserves Group
P. O. Box 3280
Casper, Wyoming 82602-3280

Attention: William J. Fiant

Amended

Administrative Order NSP-1461

Should be 135.39

Gentlemen:

Reference is made to your application for a 135.93-acre non-standard proration unit consisting of the following acreage in the West Kutz Pictured Cliffs Pool:

SAN JUAN COUNTY, NEW MEXICO
TOWNSHIP 28 NORTH, RANGE 12 WEST, NMPM
Section 10: E/2

It is my understanding that this unit is to be dedicated to your Gallegos Canyon Unit Well No. 351 located 800 feet from the South line and 810 feet from the East line of said Section 10.

By authority granted me under the provisions of Rule 104 D(II), the above non-standard proration unit is hereby approved.

Sincerely,

R. L. STAMETS, DIRECTOR

RLS/DC/dr

cc: Oil Conservation Division - Aztec
Bureau of Land Management - Farmington

Attention: Frank

DAVE Rotanach

NSP-1461

Amoco Production Company

Denver Region
1670 Broadway
P.O. Box 800
Denver, Colorado 80201
303-830-4040

R. J. Criswell
Division Production Manager

May 24, 1985

State of New Mexico
Energy & Minerals Department
Oil Conservation Commission
Post Office Box 2088
Santa Fe, New Mexico 87501

File: JTM-125-WF

Non-Standard Unit, Gallegos Canyon Unit,
San Juan County, New Mexico

In reference to the attached letter dated May 13, 1985, Amoco Production Company has no objections to the non-standard unit.

Very truly yours,

R. J. Criswell

BAM/pjg

Attachment

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82602-3280
307 265 7331

Energy Reserves Group

May 13, 1985

Amoco Production Company
501 Airport Road
Farmington, NM 87401

Amoco Production Company
P. O. Box 800
Denver, CO 80201

RE: Offset Operators Notification, Non-Standard Unit, Gallegos Canyon Unit, San Juan County, New Mexico

Gentlemen:

Energy Reserves Group, Inc. as sub-operator of the Gallegos Canyon Unit, Pictured Cliffs Participating Area, proposes to drill Gallegos Canyon Unit Well No. 351, SE/SE, Section 10, T28N - R12W to test the Pictured Cliffs formations.

Section 10 is a non-standard section due to the public land survey. The SE 1/4 consists of 135.39 acres. (Please see attached letter, survey plat & topographical map).

If there are no objections to the proposed non-standard unit, we would appreciate your signature in the below listed space and forwarding this letter to the New Mexico Oil Conservation Division in Santa Fe.

Very truly yours,
Energy Reserves Group, Inc.

William J. Fiant
Administrator, Field Services

WJF/11

Attachments

Amoco Production Company has no objection to the proposed non-standard unit as planned by Energy Reserves Group, Inc.

Signed: R. J. Cresen Jr

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

NSP-1461

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE 6-18-85

RE: Proposed MC_____
Proposed DHC_____
Proposed NSL_____
Proposed SWD_____
Proposed WFX_____
Proposed PMX_____
NSP X

Gentlemen:

I have examined the application dated 6-3-85

for the Energy Reserves Grp. G.C.U. #351 P-10-28N-12W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approved.

Yours truly,

Leo Lucero

Release Immediately
Variation in U.S. Public
Land Survey
Area occurs in.

By DRC

NSP-1461
RULE-104 D(II)

Energy Reserves Group, Inc.
P.O. Box 3280
Casper, Wyoming 82602-3280
307 265 7331

Energy Reserves Group

June 13, 1985

State of New Mexico
Energy & Minerals Department
Oil Conservation Commission
P.O. Box 2088
Santa Fe, NM 87501
CERTIFIED MAIL - Orig. sent 5-13-85.

West Kutz Pictured Cliffs Pool
Dedicated Acreage:
135.39 acres
E/2 Section 10

RE: Application for Permit to Drill, Non-Standard Unit

Gentlemen:

Attached is an Application for Permit to drill [redacted] Unit #351, located in the [redacted] of Section 10-T28N-R12W, in San Juan County, New Mexico. The well spacing for this area is 160 acres. Section 10 is a non-standard section as necessitated by a variation in the legal subdivision of the U. S. Public Land Survey (see attached survey plat and U.S.G.S. topographical map). Approval is requested for a non-standard unit for this well. Energy Reserves Group, Inc., is the sub-operator of the Gallegos Canyon Unit which includes the formations from the surface to the base of the Pictured Cliffs formation within the boundary of the offset operator. Amoco Production Company is the Gallegos Canyon Unit operator and is the only other interest owner within the area of concern. Amoco has been notified via certified mail as of this date.

If any additional information is needed, please advise.

Very truly yours,
Energy Reserves Group, Inc.

William J. Fiant
Administrator, Field Services

WJF/cb

Attachments

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Energy Reserves Group, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 3280; Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface

At proposed prod. zone
800' FSL 810' FEL SE/SE

5. LEASE DESIGNATION AND SERIAL NO.
SF-078109

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Gallegos Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
351

10. FIELD AND POOL, OR WILDCAT
West Kutz Pictured Cliffs

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 10, T28N - R12W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 9 miles South East of Farmington, New Mexico

12. COUNTY OR PARISH: San Juan
13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	790	16. NO. OF ACRES IN LEASE	1,801.19
17. NO. OF ACRES ASSIGNED TO THIS WELL	160		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	1,000'	19. PROPOSED DEPTH	1,640
20. ROTARY OR CABLE TOOLS	Rotary		

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,637' GR ungraded

22. APPROX. DATE WORK WILL START*
As soon as approved

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	135'	130 SX
6 1/4"	4 1/2"	10.5#	1640'	250 SX - Cement to surface

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

24.
SIGNED [signature] TITLE Administrator, Field Svcs. DATE 5/13/85

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
ENERGY RESERVES GROUP	GALLEGOS CANYON UNIT	351

Unit Letter	Section	Township	Range	County
P	10	28N	12W	San Juan

Actual Footage Location of Well:
800 feet from the South line and 810 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5637	Pictured Cliffs	West Kutz Pictured Cliffs	160 (135.39) Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

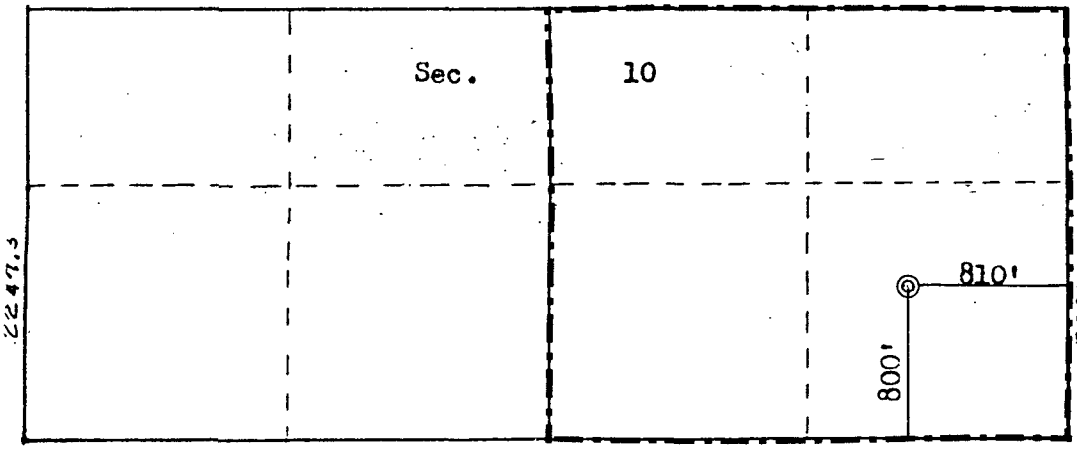
☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

GAS is dedicated to El Paso Natural Gas Company.

135.39 acres



Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: William J. Fiant

Position: Administrator, Field Services

Company: Energy Reserves Group, Inc.

Date: 5/3/85

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 knowledge and belief.

Date Surveyed: April 23, 1985

Registered Professional Engineer and Land Surveyor.

Fred B. Kerr Jr.

Certificate No. 3950

TEN POINT PROGRAM

1) SURFACE FORMATION: Nacimiento

2 & 3) ESTIMATED TOPS:

Ojo Alamo	-	200' Water
Kirtland	-	385' Possible Gas
Fruitland	-	1,245' Gas
Pictured Cliffs	-	1,520' Primary-Gas
T.D.	-	1,640'

4) CASING PROGRAM: Drill 12 1/4" hole to 135'. Set 130' of 8 5/8" 24# K-55 ST&C new casing and cmt to the surface w/100 sx Class "B" w/2% $CaCl_2$ and 1/4#/sx Flocele. Drill 6 1/4" hole to 1640'. Set 1640' of 4 1/2" 10.5# K-55 ST&C new casing and cmt to the surface w/250 sx 50-50 Pozmix w/2% gel.

5) PRESSURE CONTROL EQUIPMENT: (See attached schematic diagram) BOE will consist of an 8" Regan "K" 3000# annular preventor w/rotating head. Annular type preventor will be tested to 50% of its rated working pressure.

6) MUD PROGRAM: Fresh water base gel mud will be used from surface to T.D. Anticipated maximum mud weight is 10.0 ppg. Sufficient mud materials will be available at the well site in order to maintain mud properties to control lost circulation, and to control any kicks.

7) AUXILIARY EQUIPMENT: Equipment will include Kelly cock and a sub on the rig floor with a full opening valve with drill pipe thread.

8) LOGGING: SP-IEL & GR-FDC-CNL from T.D. to surface casing shoe.

CORING: None

TESTING: None

STIMULATION: 25,000 gals 70 Q foam frac containing 30,000# 10-20 sand.

9) ABNORMAL PRESSURE: None

ESTIMATED BOTTOMHOLE PRESSURE: 300 psi

10) ANTICIPATED STARTING DATE: Early June, 1985

DURATION OF OPERATION: 3 days drilling; 3 days completing.

SURFACE USE & OPERATIONS PLAN

LEASE: Gallegos Canyon Unit Well No. 351

LOCATION: 800' FSL 810' FEL (SE/SE) Section 10 T28N-R12W

DATE: 5-13-85

1) EXISTING ROADS:

A. See attached map.

B. Proceed from Farmington east to the Lee Acres turn off, turn right and proceed south across the San Juan River for approximately 1/4 mile, turn right and follow main road for 1 1/2 miles. Turn right and proceed westerly for approximately 1,800' to the proposed well.

C. Access Roads to Location: Color coded.

D. Exploratory Well: N/A

E. Development Well: For all applicable access roads within a one (1) mile radius, see attached map.

F. Plans for Improvement and/or Maintenance: Energy Reserves Group, Amoco, and El Paso Natural Gas Company currently maintain the non-county, state or Irrigation Project roads. Maintenance is conducted on an as-needed basis.

2) PLANNED ACCESS ROADS:

1. Width: Approximately 150' of new road will be required, 20' running surface.

2. Maximum Grade: 5%

3. Turnouts: None

4 & 5. Drainage Design - Location & Size of Culverts: It is customary in the unit area to not use culverts unless crossing a very large drainage. Experience has shown that the culverts silt in rapidly when sufficient moisture is experienced.

6. Surface Materials: Most soil in the area is sandy. It is not necessary to surface any roads or locations.

7. Gates: N/A

Cattleguards: N/A

Fence Cuts: N/A

8. Center-line Road Flagging: The proposed road route is flagged as necessary.

3) LOCATION OF EXISTING WELLS:

1. Water Wells: None

2. Abandoned Wells: None

3. Temporarily Abandoned Wells: None

4. Disposal Wells: Gallegos Canyon Unit #328

5. Drilling Wells: None Presently

6. Producing Wells: See map-the nearest well is proposed Amoco well approximately 1,000' east.

7. Shut-in Wells: None

8. Injection Wells: None

9. Monitoring or Observation Wells: None

4) LOCATION OF EXISTING and/or PROPOSED FACILITIES OWNED and/or CONTROLLED BY E.R.G.:

A. Existing Facilities: Energy Reserves Group currently operates the Pictured Cliffs participating area within the Gallegos Canyon Unit.

1. Tank Batteries: No oil or condensate is currently produced from ERG wells in the unit.

2. Production: Facilities: All wells produce natural gas. Some wells are equipped with rod pumps to remove excess water. Wells are normally equipped with a two (2) phase separator. El Paso Natural Gas Company has a glycol dehy unit upstream of the sales meter.

3. Oil Gathering Lines: N/A

4. Gas Gathering Lines: El Paso Natural gas Company purchases all gas produced by ERG in this unit. There are two (2) systems in which our wells are introduced depending on the initial wellhead pressure.

5. Injection Lines: N/A

6. Disposal Lines: Each well which produces in excess of 5 bbls/water/day is tied into one of three (3) disposal systems. Wells producing less than 5 bbls/day are pitted.

B. New Production Facilities:

1. Proposed Tank Battery: None

2. Dimensions of Facilities: All new facilities are restricted to the existing pad area. New facilities will consist of a separator, dehy unit, meter house and 2 small earthen pits, unless the well requires a disposal line to remove excess water in which case a pumping unit will be installed and the separator pit eliminated. All surface equipment to be painted brown. If water disposal pipelines are needed, they will be applied for at a later date.

3. Construction Methods & Materials: The site will be leveled with a crawler type dozer. Native soils will be used. Any needed foundation material will be purchased and trucked to the site such as gravel if a pumping unit is needed.

4. Protective Measures and Devices: Any pits will be fenced to prevent entry by livestock or wildlife.

5) LOCATION AND TYPE OF WATER SUPPLY:

A. Location: Hammon Ditch 1 1/4 miles to the north.

B. Method of Transportation: Water will be hauled by truck over existing roads.

C. Water Wells to be Drilled: N/A

6) SOURCE OF CONSTRUCTION MATERIALS:

A. Location: Only native materials are necessary for the construction of drill site and related facilities.

B. From Federal or Indian Lands: N/A

C. Additional Materials: It may be necessary to haul gravel for a pumping unit base. If needed it will be hauled from Farmington.

D. Access Roads on Federal or Indian Lands: Only existing authorized roads will be used.

7) METHODS OF HANDLING WASTE DISPOSAL:

1 & 2. Cutting and drilling fluids will be placed in the reserve pit.

3. Produced fluids (water) will be placed in the reserve pit during testing.

4. Sewage will be contained in a portable chemical toilet.

5. Garbage and other water material will be placed in a small trash pit and burned.

6. Upon completion of the well the reserve pit will be backfilled. No fencing is planned unless livestock is grazing in the area.

8) ANCILLARY FACILITIES:

1. None are planned.

9) WELL SITE LAY OUT:

1. Cuts & Fills: See attached diagram.

2. Location & Pits & Stock Piles: For location of mud tanks, reserve pit, and piperack, see attached diagram.

3. Pad Orientation: For rig orientation and access roads, see attached diagram.

4. Lining of Pits: It is not planned to line the reserve pit.

5. O.S.H.A. Requirements: The disturbed area requested is sufficient to allow fracturing operations in a safe manner and in accordance with O.S.H.A. standards.

10) PLAN FOR RESTORATION OF THE SURFACE:

Revegetation will be in accordance with BLM stipulations.

11) OTHER INFORMATION:

1. Topography, Soil Characteristics, Geologic Features, Flora & Fauna:

The Gallegos Canyon Unit area topography varies considerably throughout the participating area. The southwest portion is primarily highly eroded sandstone with deep channels and rock outcroppings. The southeast portion is separated by the Gallegos Wash and is mostly within the NAPI farming area. The north portion is separated by the San Juan River. Most all of the area north of the river is private land consisting of rural business and small farms and residences.

The well site is located on sandy soil on a westerly sloping hill. Vegetation consists of Pinion Pine and Juniper trees, scattered sage bush, other small shrubs and grasses. Wildlife consists of mule deer, coyotes, rabbits and other small rodents and birds.

2. Surface Use & Ownership: Surface ownership is BLM.

3. Proximity of Water, Dwellings, Archaeological, Historical Sites:

Water: Hammon Ditch 1 1/4 miles north
Gallegos Wash 1 1/2 miles west

The nearest dwelling is approximately one mile north east, an archaeological inspection has been completed and will be forwarded when received.

12) LESSEE'S OR OPERATORS FIELD REPRESENTATIVE:

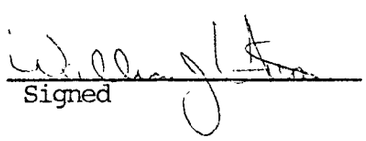
Energy Reserves Group, Inc.
P. O. Box 977
Farmington, New Mexico

(505) 327-1639 (24 hour answering service)

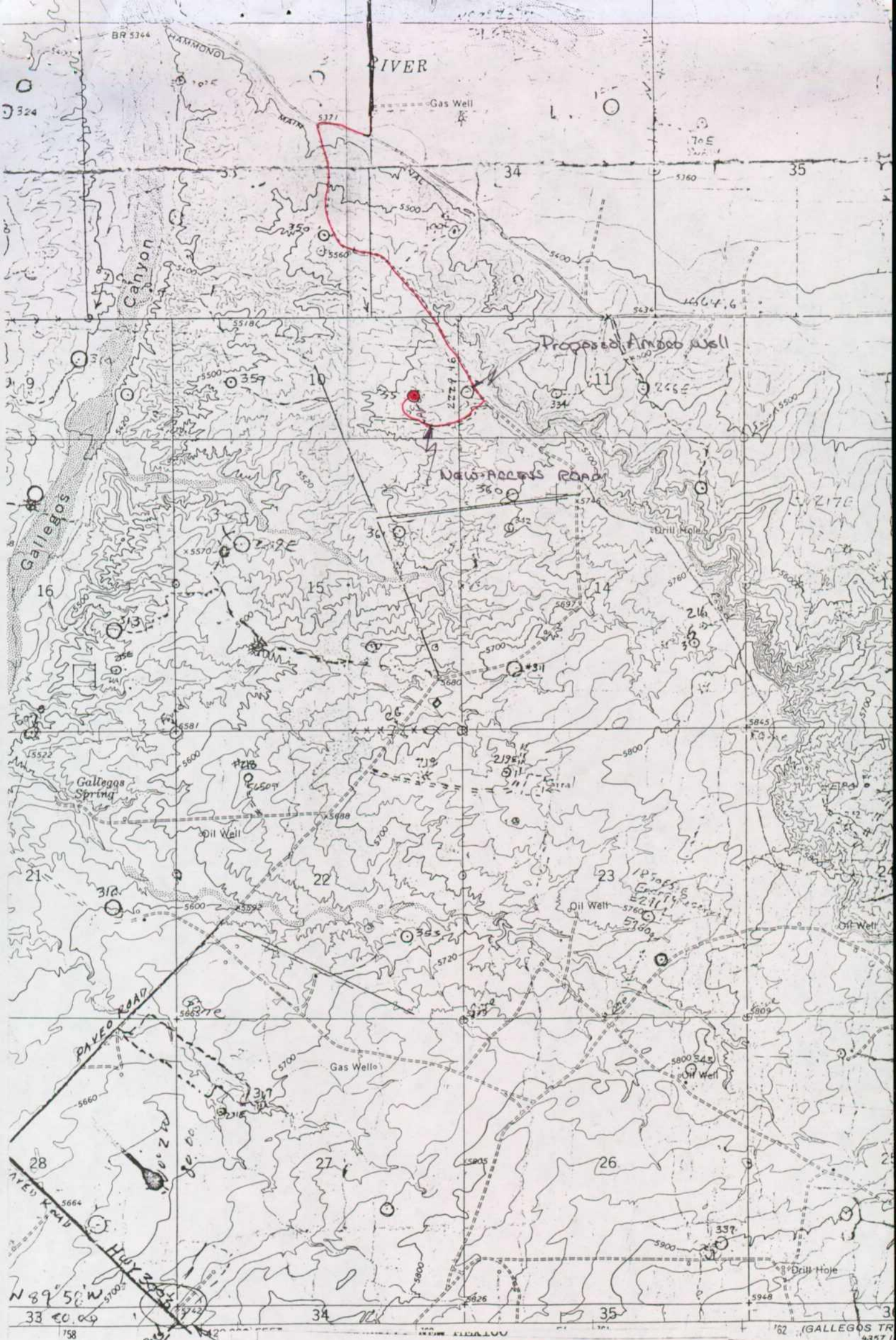
c/o Mr. T.C. Durham

13) CERTIFICATION:

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 Energy Reserves Group, Inc. and its contractors in conformity with this plan and the terms and conditions under which it is approved.



Signed

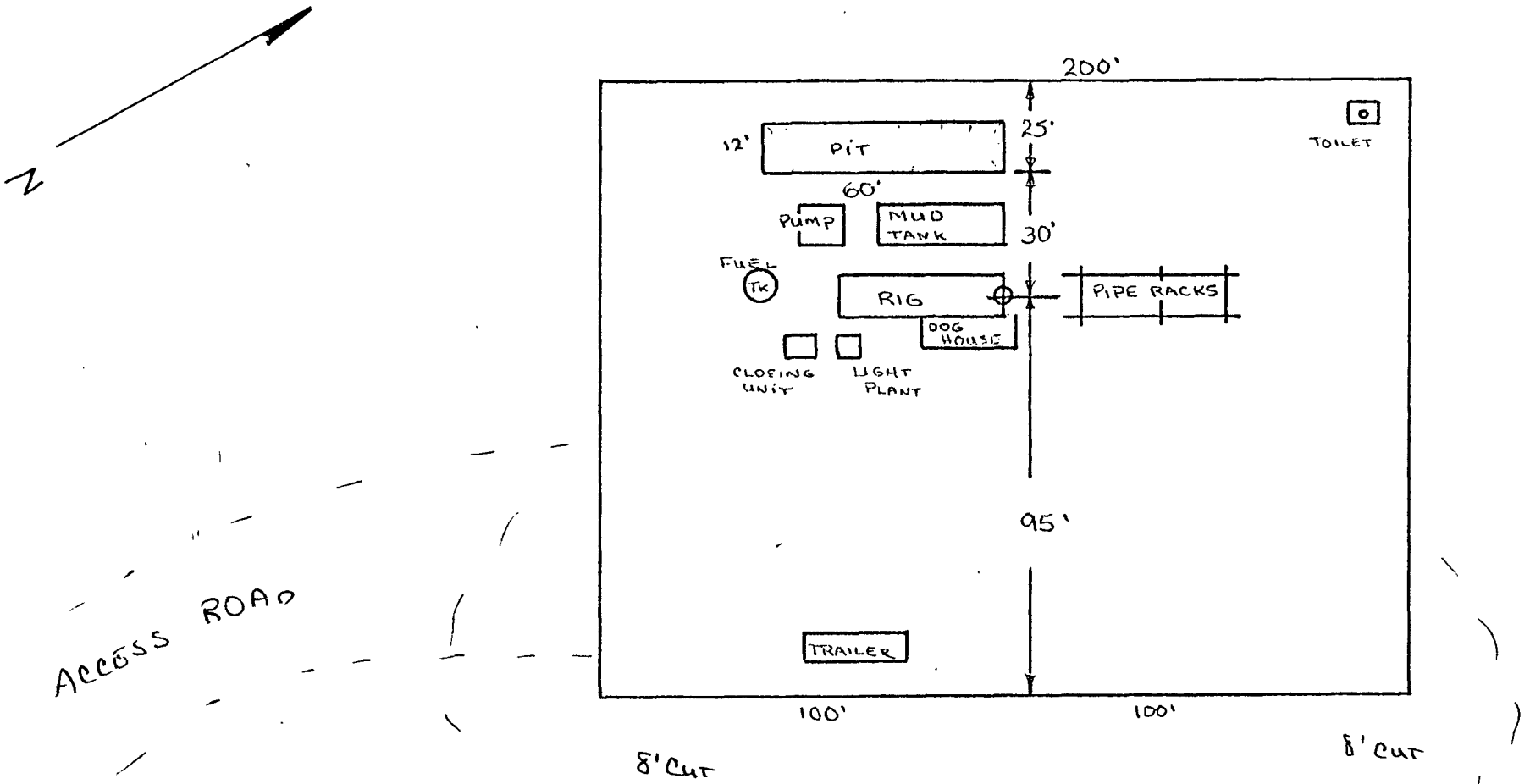


Vicinity Map for
ENERGY RESERVES GROUP #351 GALLEGOS CANYON UNIT
800'FSL 810'FEL Sec. 10-T28N-R12W
SAN JUAN COUNTY, NEW MEXICO

and published by the Geological
USC&GS, and U. S. Bureau of Reclam
grammetric methods from aerial
and by planetable surveys of the
Field checked by USGS 19
American datum
rdinate system,

SCALE 1
2000
CONTOUR INTE
DOTTED LINES REPRESE
DATUM IS ME

Typical Location Plat for Gallegos Canyon Unit P.C. Wells



GCU #351

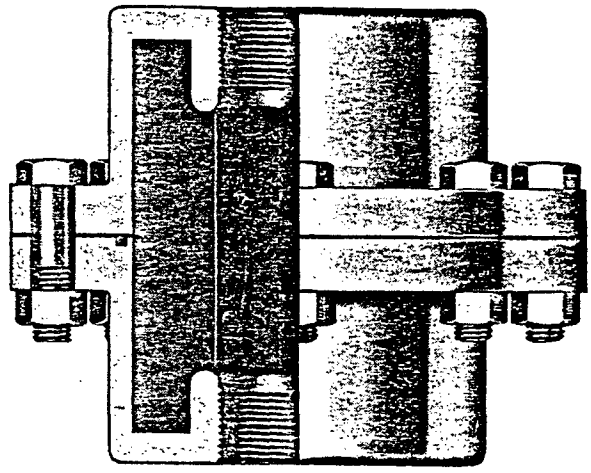
Cut drainage around both ends of location to drain West

REGAN TYPE 'K' STRIPPER BLOWOUT PREVENTER

Patented

The Regan Type 'K' Stripper Blowout Preventer is for production workover operations where minimum cost and weight are important factors. The strippers are being used for medium high pressure stripping jobs of tubing and sucker rods. Type 'K' Stripper bodies are furnished for either 3,000 lb. or 6,000 lb. test depending on requirements.

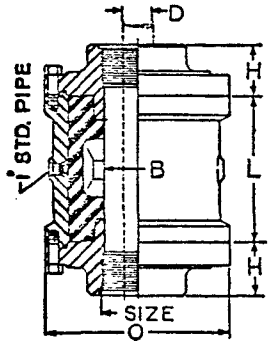
The Regan Type 'K' Stripper Blowout Preventer in the 3" size is also used in connection with the Regan High Pressure Lubricator Stuffing Box and the Regan High Pressure Lubricator for complete automatic control of any wire line operations. A special hour-glass-shaped packer is available for use when a 2" bore is sufficient.



Size	Test Pressure	Part No.	Weight	O.D.	Height	Bore	Standard Connection
3"	3000	12108	70	10¾	9	3	3" Line Pipe
3"	6000	16171	134	11½	10¼	3	3" Line Pipe
4"	3000	12488	215	14½	15	4	4" Line Pipe

REGAN TYPE K BLOWOUT PREVENTER

This preventer is no longer being manufactured and has been replaced by the Type KFL & Torus. The information listed below is for replacement packers for existing preventers only.



Model 3—Body assembled with Model 3 flanges (Blank or threaded). When the Blowout Preventer is assembled with Model 3 flanges at both ends, it presents the standard hook-up which may be placed in any position in the cellar by employing nipples of suitable length. Conventional practice in this hook-up, calls for a welded mud line connection, either above or below the Blowout Preventer.

DATA CHART FOR REGAN TYPE K BLOWOUT PREVENTER HOUSINGS

Nom. Size BOP	B Bore	PACKOFF RANGE Max.	PACKOFF RANGE Min.	O 3000#	O 6000#	L Body Lgth.	H Flg. Ht.	Packer Part No.
6⅝-7	6¼	6¼	2⅜	17	19	14	6¼	5516
8⅝	7⅛	7⅛	2⅜	21¼	22	17	6	5042
9⅝	8⅛	8⅛	2⅜	24¼	25¼	19½	6¾	5067
10¾	10	10	2⅜	27¼	29½	21	6¾	5686
11¾	11⅛	11⅛	2⅞	30	33½	25	6¾	8294
13⅜	12⅜	12⅜	2⅞	32	36½	28	7¾	5043
13¾	13⅜	13⅜	2⅞	34½	36½	30	7¾	7101