



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

September 6, 1989

RECEIVED  
SEP 11 1989

State of Utah  
Division of Oil, Gas & Mining  
355 West N. Temple, Suite 350  
Salt Lake City, Utah 84180-1203

DIVISION OF  
OIL, GAS & MINING

Attention: John Baza

Re: Non-standard Location Rabbit Ears No. 1

Gentlemen:

Chuska Energy Company request an exception to the state wide spacing rule for its Rabbit Ears No. 1. This well is located 1500' FNL & 1200' FWL, S.20-T.43S-R.22E, San Juan County, Utah. The exception to spacing is requested on the bases of geology. We have established a seismic line through the proposed location and have identified a relatively small structure requiring that the well be located at this site.

Attached is a surveyor's plat showing the well and indicating that Chuska owns all off setting acreage. A 660' radius circle around the well is also indicated on this plat.

We ask that this exception be granted administratively.

If you have any questions regarding this application please call me.

Sincerely,

John C. Alexander,  
Production Manager

JCA  
attachments  
FILE:RABITEAR\NSL

Company Chuska Oil and Gas Company

Well Name & No. Rabbit Ears #1

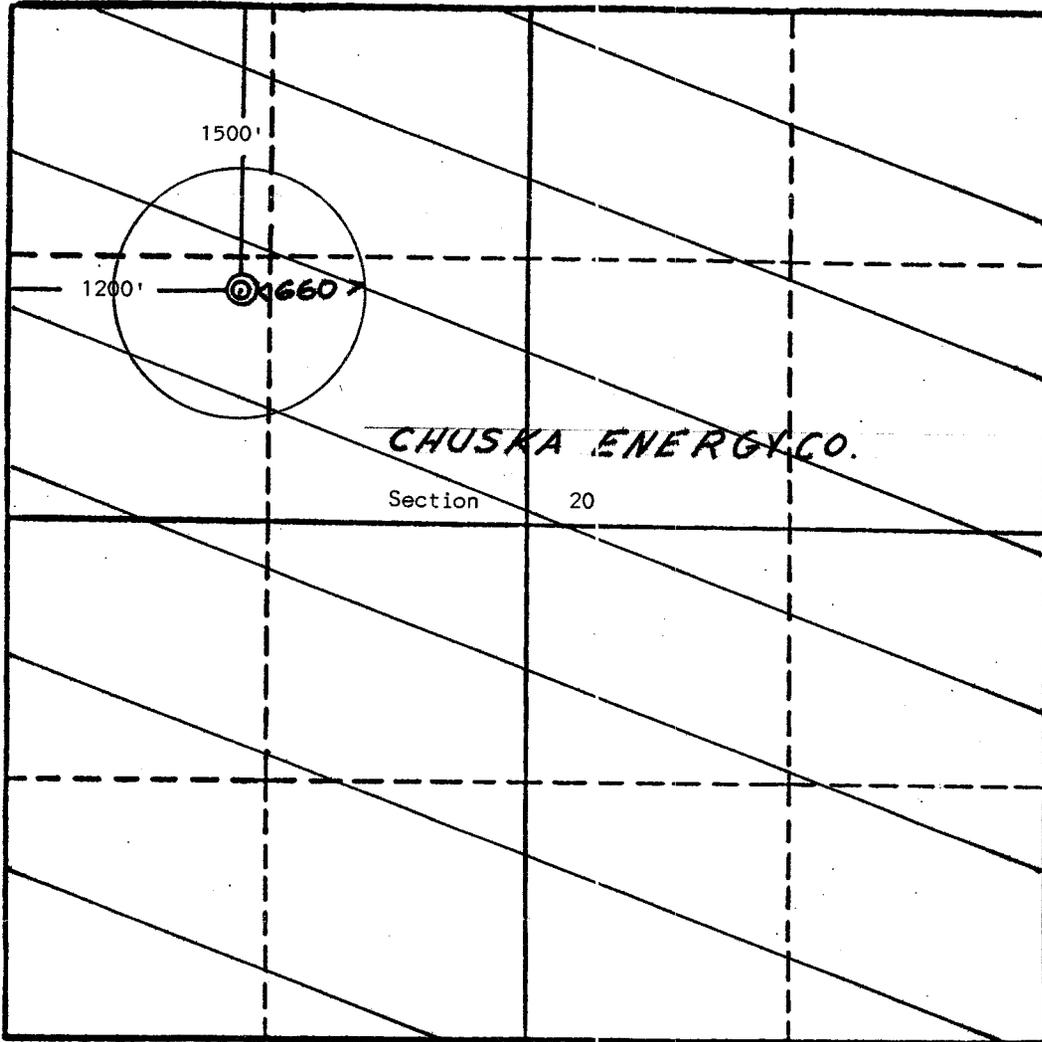
Location 1500' F/NL 1200' F/WL

Sec. 20, T. 43 S., R. 22 E., S. L. M., County San Juan

Ground Elevation 5012

**RECEIVED**  
SEP 11 1989

DIVISION OF  
OIL, GAS & MINING



CHUSKA ENERGY CO.

Section 20

Scale, 1 inch = 1,000 feet

Surveyed August 8, 1989

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

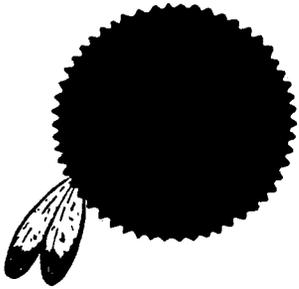
Seal:



*Edgar L. Risenhoover*

Edgar L. Risenhoover,  
Registered Land Surveyor  
New Mexico Reg. No. 5979

Non-resident certification as  
authorized by Utah State Law  
58-22-21(b)



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

September 13, 1989

United States Department of the Interior  
Bureau of Land Management  
Farmington Resource Area  
1235 Laplata Highway  
Farmington, New Mexico 87401

Gentlemen:

Request for Variance - Rabbit Ears 4-20-43S22E Well No. 1

Chuska Energy requests the following variance to our APD for the subject well, submitted 8-30-89:

Section 5 - Blow Out Preventer:

As no abnormal pressures are anticipated, a 2,000 psi BOP system would be sufficient for the drilling of this well. However, due to availability constraints, a 3,000 psi system will be used, as per the attached Exhibits "A" and "B". This will be a double ram preventer, equipped with pipe and blind rams. The accumulator system will have a pressure capacity to close all hydraulics on the BOP stack three complete cycles without rig power.

In addition, the following equipment will either be in use or available:

- : upper kelly cock will be used while drilling the well, with handle available on the rig floor
- : floor (stabbing) valves will be available, on the rig floor, to fit all drill string components
- : BH sub/BHC bored for a drill bit float will be available.

Yours sincerely

Donald S. Barnes  
Operations Manager



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

RECEIVED

September 13, 1989

SEP 18 1989

State of Utah  
Water Rights Division  
P. O. Box 718  
Price, Utah 84501

WATER RIGHTS  
PRICE

Attn: Mr Mark Page

Re: Rabbit Ears 1-4-20-43S22E Well No. 1  
1500' FNL, 1200' FWL  
Section 20, Township 43S, Range 22E  
San Juan County, Utah

Dear Sir

Chuska Energy Company proposes to drill the referenced well in October or November, 1989.

Chuska requests permission to use water from an artesian well permitted to Hay Hot Oil Service, Permit #09-1419 (A60809). Hay will be the transporter of the water from the well to the location. Estimated volume to drill this well will be 9000 bbl.

Please advise if you need any additional information. You can contact me at 505-326-5525 or Chuska Energy Company at 315 North Behrend in Farmington, New Mexico 87401.

Thank you for your assistance in this matter.

Yours sincerely

Donald S. Barnes  
Operations Manager



STATE OF UTAH  
NATURAL RESOURCES  
Water Rights

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Robert L. Morgan, State Engineer

Southeastern Area • 453 S. Carbon Avenue • P.O. Box 718 • Price, UT 84501-0718 • 801-637-1303

RECEIVED  
SEP 25 1989

September 22, 1989

DIVISION OF  
OIL, GAS & MINING

Chuska Energy Company  
Attn: Donald S. Barnes  
315 North Behrend  
Farmington, New Mexico 87401

Re: Rabbit Ears 1-4-20-43S22E Well No. 1

Dear Mr. Barnes:

This letter is written to grant permission to use the water from the artesian well covered by water right 09-1419 (A60809), in the name of Hay Hot Oil Inc. You have indicated that you would use 1.16 acre feet of water for the above referenced well, which is located at a point South 1500 ft. & East 1200 ft. from the NW Cor. Sec. 20, T43S, R22E, SLB&M.

If you have any questions concerning this matter, please feel free to contact me.

Sincerely,

Mark P. Page  
Area Engineer

cc: Kent Jones, Division of Water Rights  
Hay Hot Oil Inc.  
Lisha Romero, Division of Oil, Gas & Mining

MPP/mjk



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

September 27, 1989

RECEIVED  
OCT 02 1989

Department of Natural Resources  
Division of Oil, Gas & Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203

DIVISION OF  
OIL, GAS & MINING

Re: Rabbit Ears 1-4-20-43S22E Well No. 1  
1500' FNL, 1200' FWL  
Section 20, Township 43S, Range 22E  
San Juan County, Utah

Gentlemen

please find attached a copy of the Application for Permit to Drill for the subject well (together with variance details on the BOP proposal), for your approval.

Should you require any further information, please do not hesitate to contact the undersigned.

Yours sincerely

*H. Merle Myers*

H. Merle Myers  
Vice-President, Production

CSWH:CSWH

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL  DEEPEN

b. TYPE OF WELL  
 OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
 Chuska Energy Company

3. ADDRESS OF OPERATOR  
 314 North Behrend, Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface  
 1500' FNL, 1200' FWL SWNW  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE  
 50,000

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH  
 6100' *mssp*

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5012 Gr.

22. APPROX. DATE WORK WILL START\*  
 09-15-89

RECEIVED  
OCT 02 1989

5. LEASE DESIGNATION AND SERIAL NO.  
 NOG 8702-1116

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Rabbit Ears 4-20-43S22E

9. WELL NO.  
 1

10. FIELD AND POOL, OR WILDCAT  
~~Wildcat~~ Rabbit Ears (430)

11. SEC., T., R. M., OR BLK. AND SURVEY OR AREA  
 20-43S-R22E

12. COUNTY OR PARISH  
 San Juan

13. STATE  
 Utah

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	500	500 sx Class G, 2 % CaCl
7 7/8	5 1/2	15.5	6100	50/50 Poz, 140 sx Class G 2 Stage

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 Operations Manager DATE 8-30-89

(This space for Federal or State office use)

PERMIT NO. 43-037-31476 APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE: 10/19/89 DATE: \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 10/19/89  
BY: [Signature]  
WELL SPACING: R615-3-3

\*See Instructions On Reverse Side

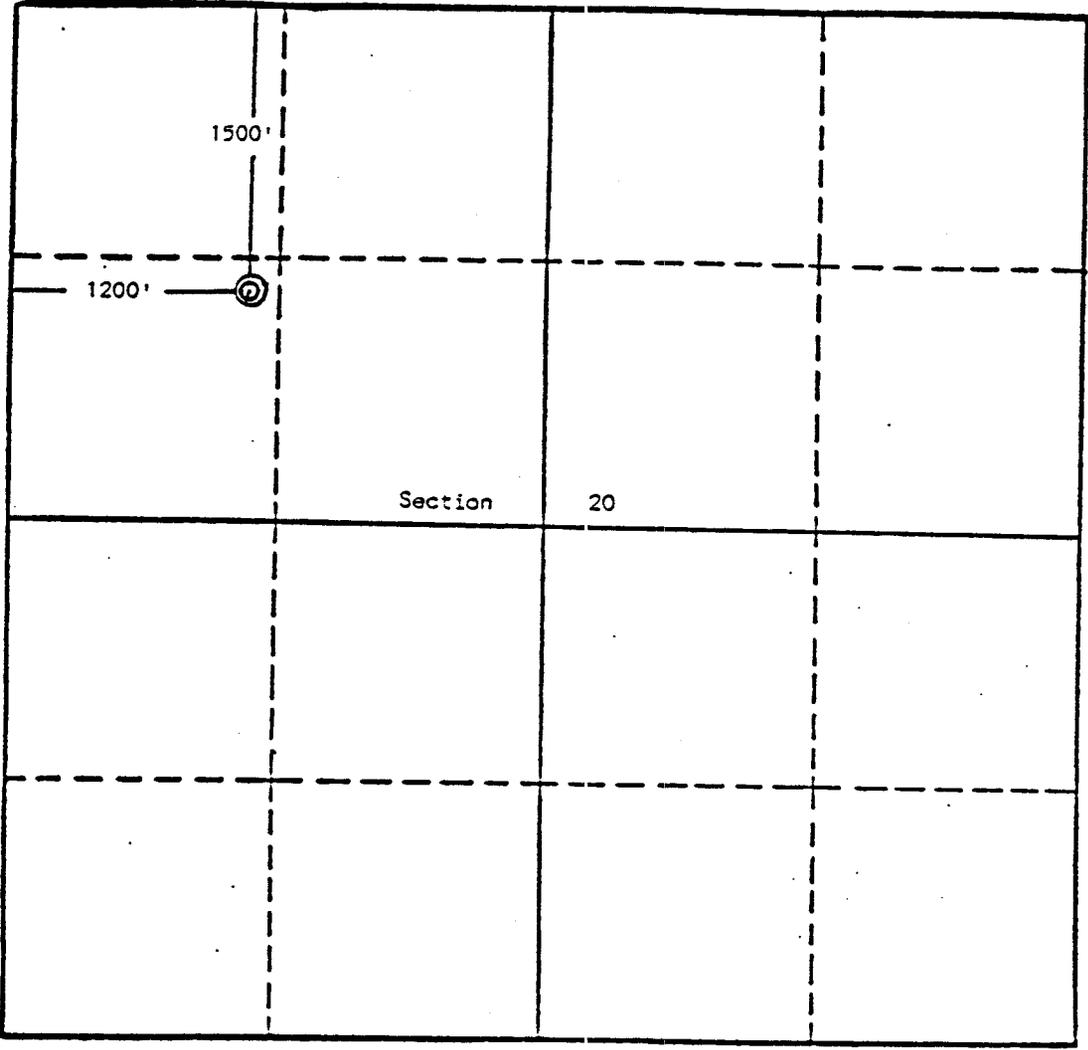
Company Chuska Oil and Gas Company

Well Name & No. Rabbit Ears #1

Location 1500' F/NL 1200' F/WL

Sec. 20, T. 43 S., R. 22 E., S. L. M., County San Juan, Utah

Ground Elevation 5012



Scale, 1 inch = 1,000 feet

Surveyed August 8, 1989

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.



Edgar L. Risenhoover  
Edgar L. Risenhoover.  
Registered Land Surveyor  
New Mexico Reg. No. 5979

Non-resident certification as  
authorized by Utah State Law  
53-22-21(b)

EXHIBIT "A"  
BLOW OUT PREVENTERS

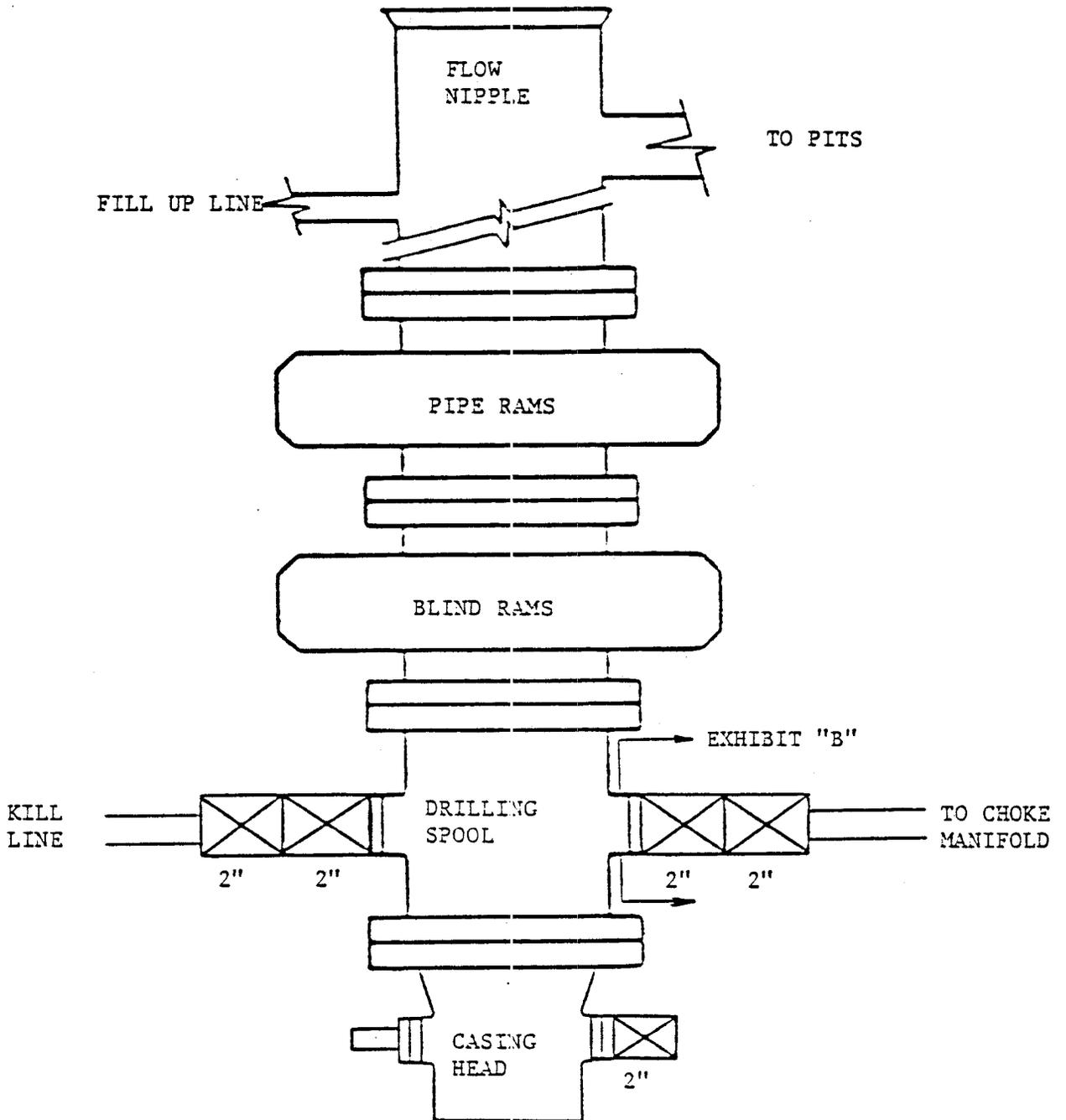
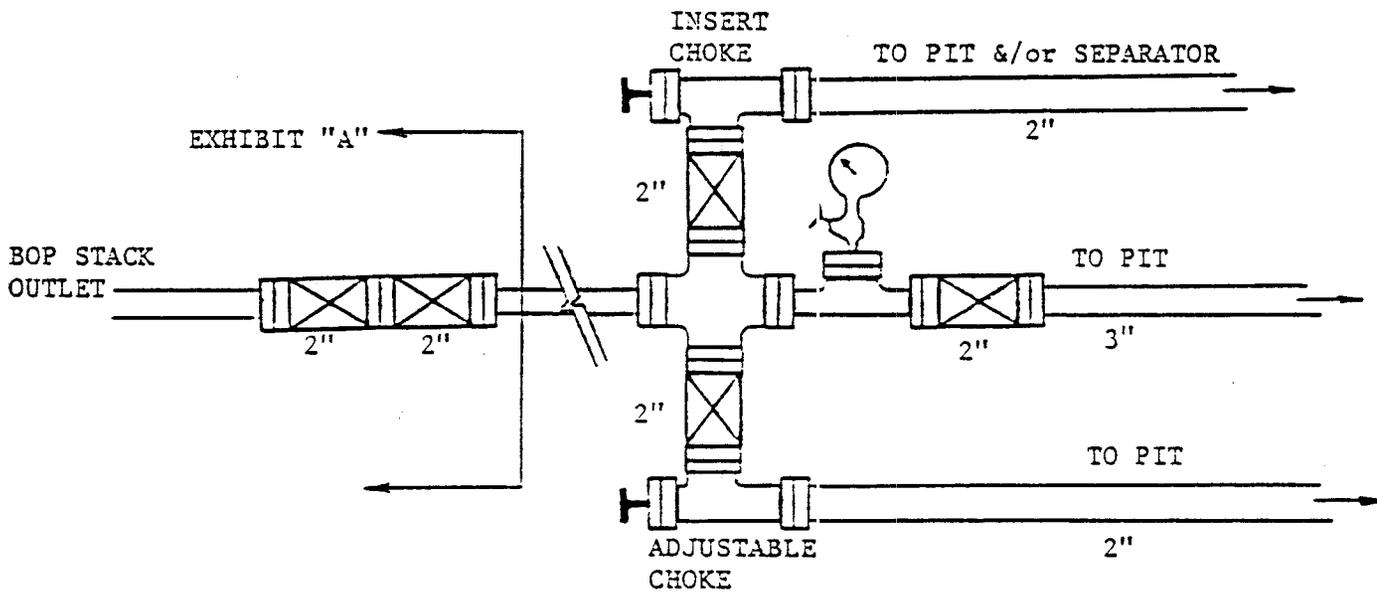


EXHIBIT "B"

CHOKE MANIFOLD



CHUSKA ENERGY COMPANY  
 10 POINT DRILLING PLAN  
 RABBIT EARS 4-20-43S22E WELL 1  
 1500 FNL, 1200 FWL  
 SECTION 20, TOWNSHIP 43S, RANGE 22E  
 SAN JUAN COUNTY, UTAH

1. The geological name of the surface formation is the Navajo Sandstone.
2. The surface elevation is 5012' Gr.
3. ESTIMATED FORMATION TOPS:

DEPTH	FORMATION	SUB	
SURFACE	Navajo Sandstone	SEA E1	
300'	Wingate	+4712	water
1835'	Dechelly SS	+3177	water/oil
2205'	Organ Rock	+2807	
3025'	Cedar Mesa	+1987	
3920'	Hermosa	+1092	oil/gas
4720'	Upper Ismay	+ 292	oil/gas
4730'	Lower Ismay	+ 232	oil/gas
4870'	Desert Creek	+ 142	oil/gas
5025'	Chimney Rock	- 13	
5060'	Aakah	- 48	
5235'	Barker Creek	- 223	oil/gas
5425'	Pinkerton Trail	- 413	oil/gas
5695'	Molas Shale	- 683	
5775'	Mississippian Leadville	- 769	oil/gas
6100	Total Depth	-1088	

4. PROPOSED CASING PROGRAM:

SURFACE: 8 5/8" 24# K-55 ST & C.  
 PRODUCTION: 5 1/2" 15.5 K-55 ST & C.

SURFACE: 360 CuFt, Class G cement containing 2% CaCl, 0.25#/Sx D-29 cell-c-flake per sx.

PRODUCTION: FIRST STAGE: 6100' to 4800'; 315 CuFt. Class G with 8% D-60 (flac), 1 % CaCl.

SECOND STAGE: 4800' TO 500'; 1043 CuFt 50/50 Pozmix, with 2 % gel, 10% salt(BWOW), 0.75% d-65 tic, 0.25% cell-o-flake, followed by 315 CuFt Class G with d-60 (flac), plus 1% CaCl.

5. BLOWOUT PREVENTOR: (SEE ATTACHED SCHEMATIC)

A 10" X 900 Series double ram preventor, equipped with a set pipe and blind rams will be used for drilling this well.

A complete set of hydraulic closing unit, equipped with enough supply to operate the rams three complete cycles without rig power will be required by the contractor.(See attachment)

6. MUD PROGRAM: (SEE ATTACHED MUD PROGRAM)

SURFACE TO 500'

MUD TYPE: Native solids, Mud weight 8.3-8.7 ppg, with sufficient viscosity to clean the hole (26-29) while drilling. Use mud sweeps as necessary to clean the hole.

500' to TOTAL DEPTH:

MUD TYPE: Poly plus G, polymer, mud weight 8.6-8.8 ppg, 35-50 sec/qt, with fluid loss additives 15cc for drilling less than 10 for logging and testing.

7. AUXILIARY EQUIPMENT:

- A. Kelly cock will be utilized while drilling this well.
- B. Floor (stabbing) valve will be present on floor at all times, with necessary subs to fill all of the drilling assemblies.
- C. Mud will be used to drill this well. No abnormal pressures are expected. A mud logging unit will be utilized while drilling this hole.

8. WELL EVALUATION:

A. Open Hole Logging Program will consist of Dual Lateral w/ MFSL-Sp- from Total Depth to surface; FDC-CNL-Litho Density- Gr Cal.- TD to 4000' and a Sonic log from TD to Surface if the well is deemed to have commercial potential.

9. No abnormal pressures will be anticipated. Monitoring of gas & hydrocarbon shows will be by wellsite logging unit. H<sub>2</sub>S gas is not anticipated, however checks will be made while drilling this well.

10. The drilling and evaluation of this well will be 17 days.

DETAILED DRILLING PROGAAM  
RABBIT EARS 1

DATE: 08-27-89

WELL NAME: RABBIT EARS 4-20-43S24E

WELL NUMBER: 1

LOCATION; 1200' FWL, 1500' FNL  
SEC. 20- TWN. 43S - RGE. 22 W  
SAN JUAN COUNTY, UTAH

ELEVATION: 5012' Gr

TOTAL DEPTH: 6100'

PROJECTED HORIZION: Mississippian Leadville

DEPTH	NAME OF THE HORIZION	SUB/SEA	TYPE OF RECOVERY
SURFACE	NAVAJO SANDSTONE		
300'	WINGATE	+4712	WATER
1835'	DeCHELly SS	+3177	WATER/OIL
2205'	ORGAN ROCK	+2807	
3025'	CEDAR MESA	+1987	
3920'	HERMOSA	+1092	OIL/GAS
4720'	UPPER ISMAY	+ 292	CIL/GAS
4780'	LOWER ISMAY	+ 232	OIL/GAS
5025'	DESERT CREEK	+ 142	CIL/GAS
5060'	AKAH	- 13	
5235'	BARKER CREEK	- 223	OIL/GAS
5425'	PINKERTON TRAIL	- 413	CIL/GAS
5695'	MOLAS SHALE	- 683	
5775'	MISSISSIPPIAN LEADVILLE	- 769	OIL/GAS
6100'	TOTAL DEPTH	-1088	

## DRILLING, CASING AND CEMENT PROGRAM

1. Move in rotary tools. Notify the BLM of intent and time of spud.
2. Rig up rotary tools. Drill mouse hole and rat hole. Mix mud prior to spudding the well.
3. Drill 12 1/4" hole to 500 +/- . Use cellar jet to remove mud and cuttings from the hole. Surveys will be taken on wire line to insure deviation control. Use fresh water gel chemical mud for drilling surface hole.
4. Run 8 5/8" surface casing to T.D. Displace casing with mud prior to cementing. Recirculate casing prior to cementing.
5. Cement with sufficient volume to circulate cement to surface, using Class G Cement, with 2 % CaCl<sub>2</sub>, .25#/sx D-29 celloflake per sack. Weight 15.8 ppg, 1.15 ft<sup>3</sup>/sx.
6. W.O.C. a minimum of 4 hours. prior to Nippling up BCP stack and related equipment. See BCP schematic for details)
7. Pressure testing of the BCP and casing will be to 600 psig for 30 minutes. Pressure test the manifold, all related equipment prior to drilling shoe joint.
8. Reduce the hole to 7 7/8". Drill to T.D.
9. Drill stem test will be as per the well site geologist recommendations based on shows. A mud logging unit will be utilized during the drilling of the well/
10. Open hole logs will be run and evaluated. If the well is commercial 5 1/2" casing will be run to T.D.
11. Cement will be in two stages with the stage at 4800' +/- . The first stage will be cemented with Class G with 3 % d-60 (flac) plus 1 % cacl<sub>2</sub>. Volumes will be determined from the caliper logs. Weight 15.8 ppg, yeild 1.15 ft<sup>3</sup>/sx.
12. W.O.C. and circulate between stages 4 hours.
13. Cement the second stage using 50/50 Pozmix, with 2 % gel, 10% salt (BWOW), .75% d-65 TIC, .25% celloflake per sx. (Weight 14.2 #/gal, yeild 1.32 ft<sup>3</sup>/sx), followed with 140 sx class G with .6% d-60 (flac) plus 1% CaCl<sub>2</sub>.
14. Remove BOP. set slips, cut off casing, install well head and release the drilling rig.

(2)

15. If the well is non-productive, the well will be plugged and abandoned as per the State, BLM and Navajo Tribal stipulations.

EXHIBIT "C"

BLOWOUT PREVENTER SCHEMATIC  
(ALL FLANGES 10" 3000 psi)

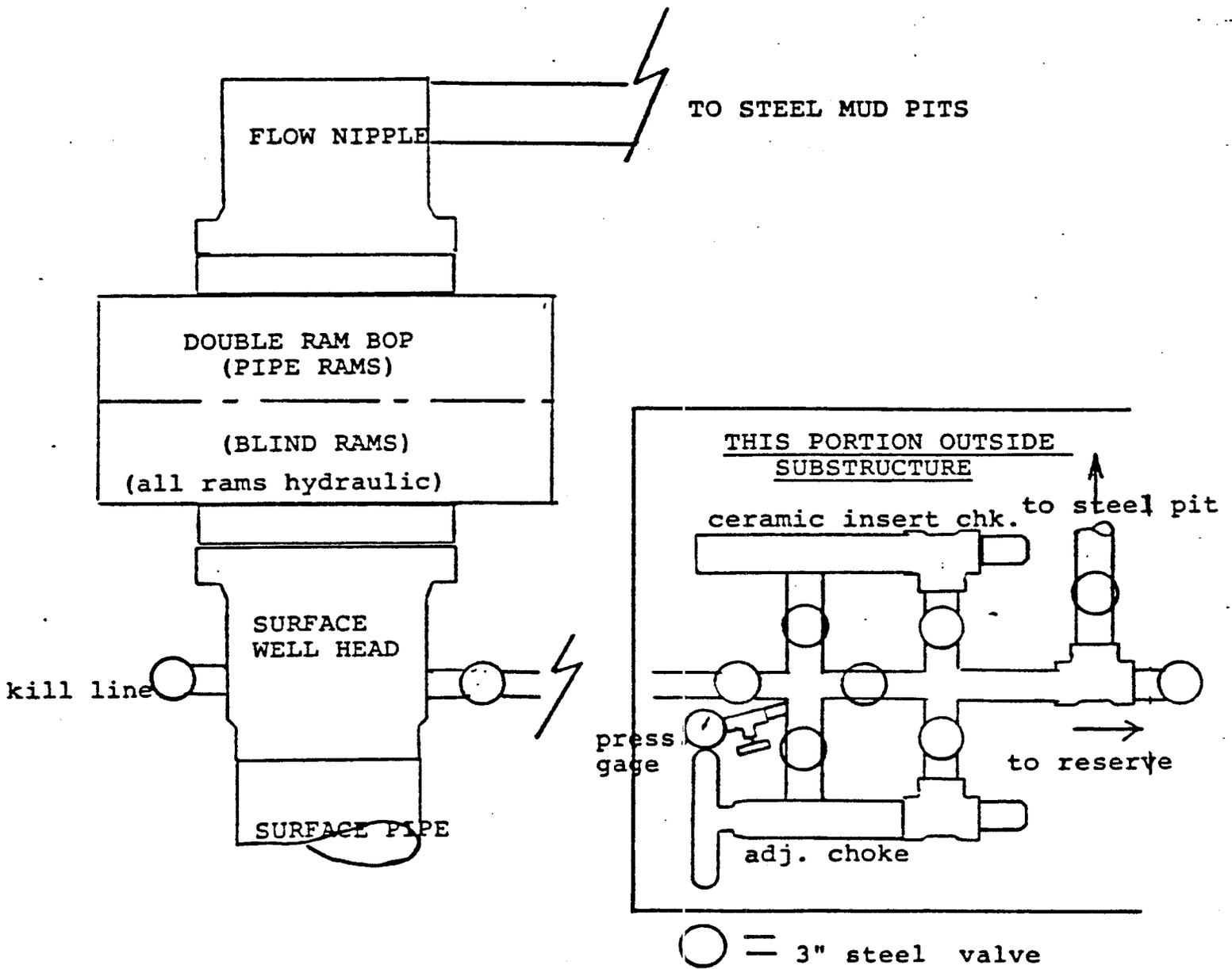
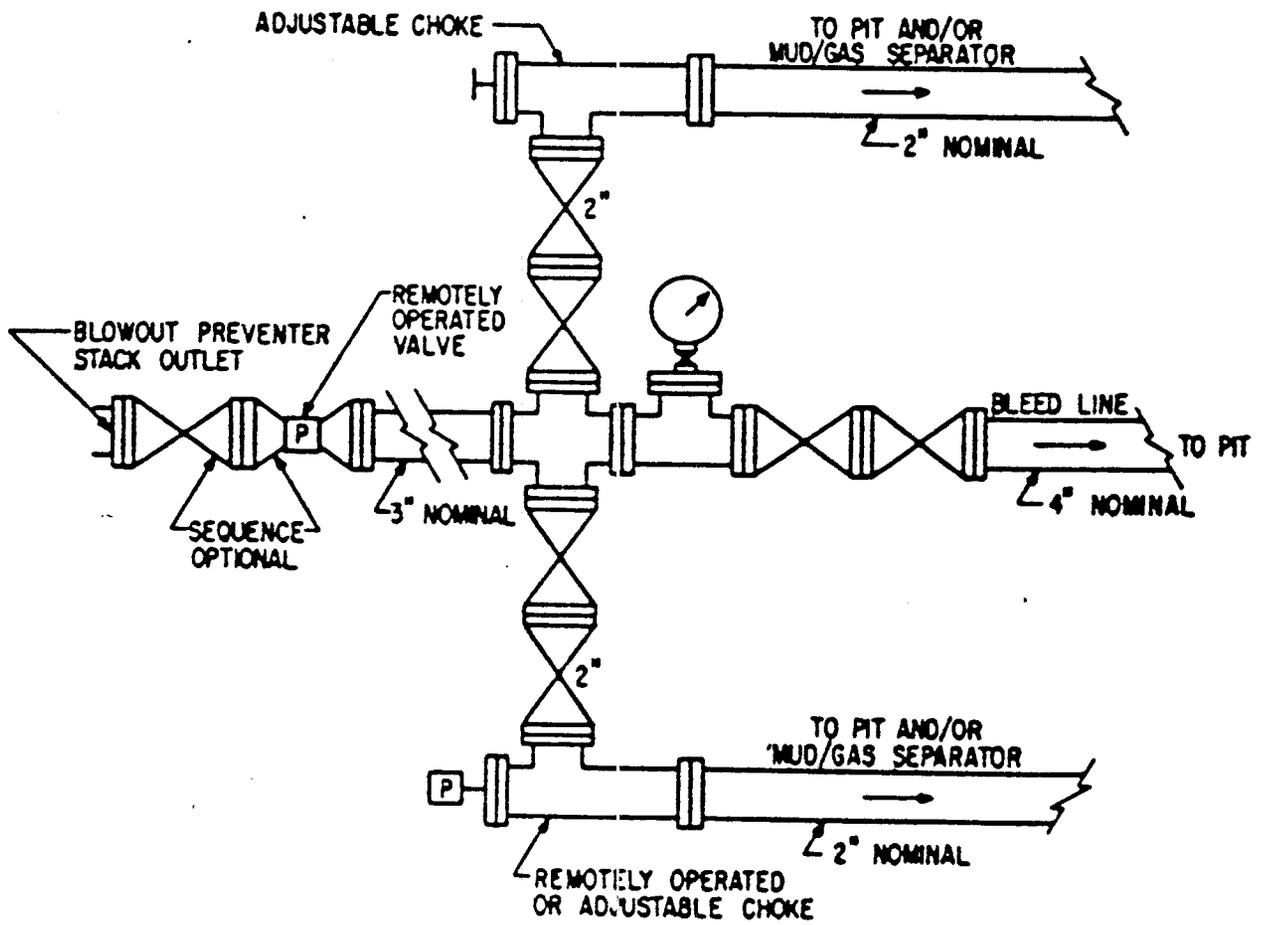


EXHIBIT "C"



TYPICAL CHOKE MANIFOLD ASSEMBLY FOR 3M RATED WORKING PRESSURE SERVICE - SURFACE INSTALLATION

RABBIT EARS 1  
DRILLING PROGNOSIS  
SURFACE USE PLAN

1. EXISTING ROADS:

The attached topographic map shows all of the existing roads in the area. The main access road will exit from highway 191 from Red Mesa Trading Post to Bluff, Utah.

2. PLANNED ACCESS ROAD (SHOWN IN RED):

The access road will exit highway 191 to the south. This existing road will be upgraded and maintained as necessary to prevent excessive damage to the existing terrain. An estimated 0.25 miles of road will be constructed to the location pad. The road base will 12' wide to allow two way traffic. Disturbance will be kept to a minimum until commercial production is established.

3. LOCATION OF EXISTING WELLS & TANK BATTERIES:

The existing wells and facilities are shown on the topographic map.

4. LOCATION OF TANK BATTERIES, PRODUCTION FACILITIES, AND GATHERING SYSTEMS:

All production facilities will be contained within the proposed location site. Chuska has no other facilities in the immediate area.

5. LOCATION & TYPE OF WATER SUPPLY:

Water will be hauled from a private source. ~~Hay Hot Oil Service of Montezuma Creek, Utah~~ will haul from an existing well premitted for their use. Permit # ~~09-1419 (A-60809)~~.

6. SOURCE OF CONSTRUCTION MATERIALS:

No additional construction materials are anticipated. In the event road plateing materials are required, they will be obtained from a private source.

7. METHODS OF HANDLING WASTE MATERIAL:

All trash will be contained in trash receptacles. They will be hauled to an approved disposal or burned on location if we can obtain a burning permit. The reserve pit will be lined with an approved liner of 7 mil for containing drilling fluids. All drilling fluids, cuttings and chemical waste will be stored in the reserve pit.

8. ANCILLARY FACILITIES:

No camps or air strips are planned for this well.

9. WELL SITE LAYOUT:

Attached is a surveyors staking plat, cut and fill requirements and a schematic of the proposed rig layout.

10. PLANS FOR RESTORATION OF THE SURFACE:

Final restoration of the location will depend if the well is productive. In the event the well is commercial, the location pad not used for the permanent production facilities will be restored as near as possible to the original terrain. In the event the well is a "Dry Hole" the pit will be fenced, and the fluid allowed to evaporate until the winter months are passed. Color coding and seeding requirement will be in accordance with the BIA/BLO stipulations.

All remaining fluid will be disposed of into an approved disposal site, the reserve will be covered and restored to the normal terrain.

11. SURFACE OWNERSHIP:

A. The well is located near Boundry Butte Mesa in San Juan County, Utah. The proposed well location and access road can be located on the Bluff 4 SE Utah (Advanced Sheet), 1962.

The surface disturbance will involve clearing of vegetation consisting of snakeweed, rabbitbrush, Mormon Tea, saltbrush cliffrose, narrow leaf yucca prickly pear cactus and various types of grass.

B. There are no known water sources in the area.

C. The surface is Navajo Tribal Lease NAG 3702 1116.

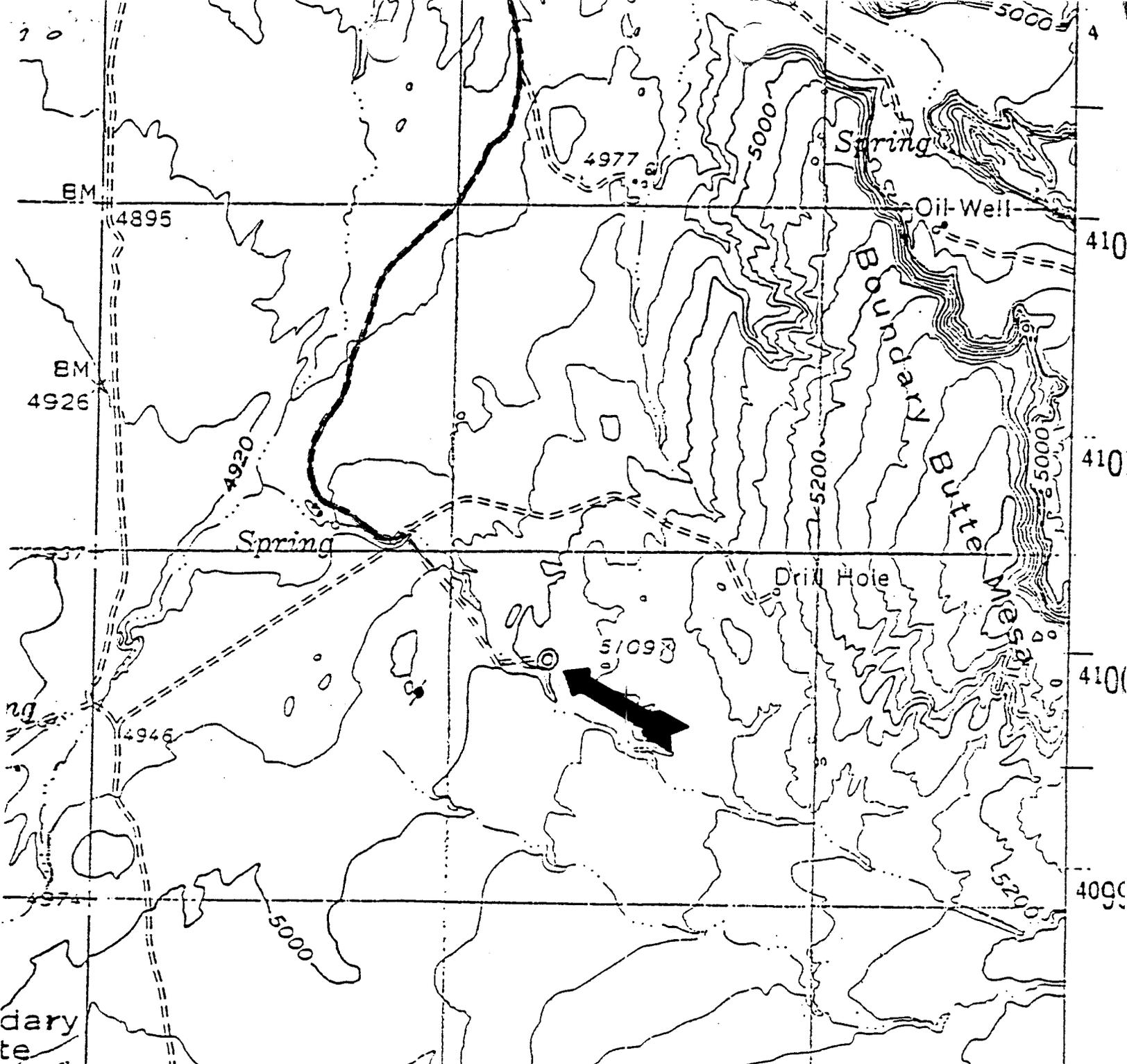
12. OPERATORS REPRESENTATIVE:

CHUSKA ENERGY COMPANY  
315 NORTH BREHREND AVENUE  
FARMINGTON, NEW MEXICO 87401  
DONALD S. BARNES

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite 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 the work planned will be performed by Chuska Energy or its sub contractors, in conformity with the terms and conditions under which is is approved.

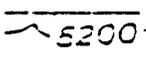
  
\_\_\_\_\_  
DONALD S. BARNES  
Operations Manager



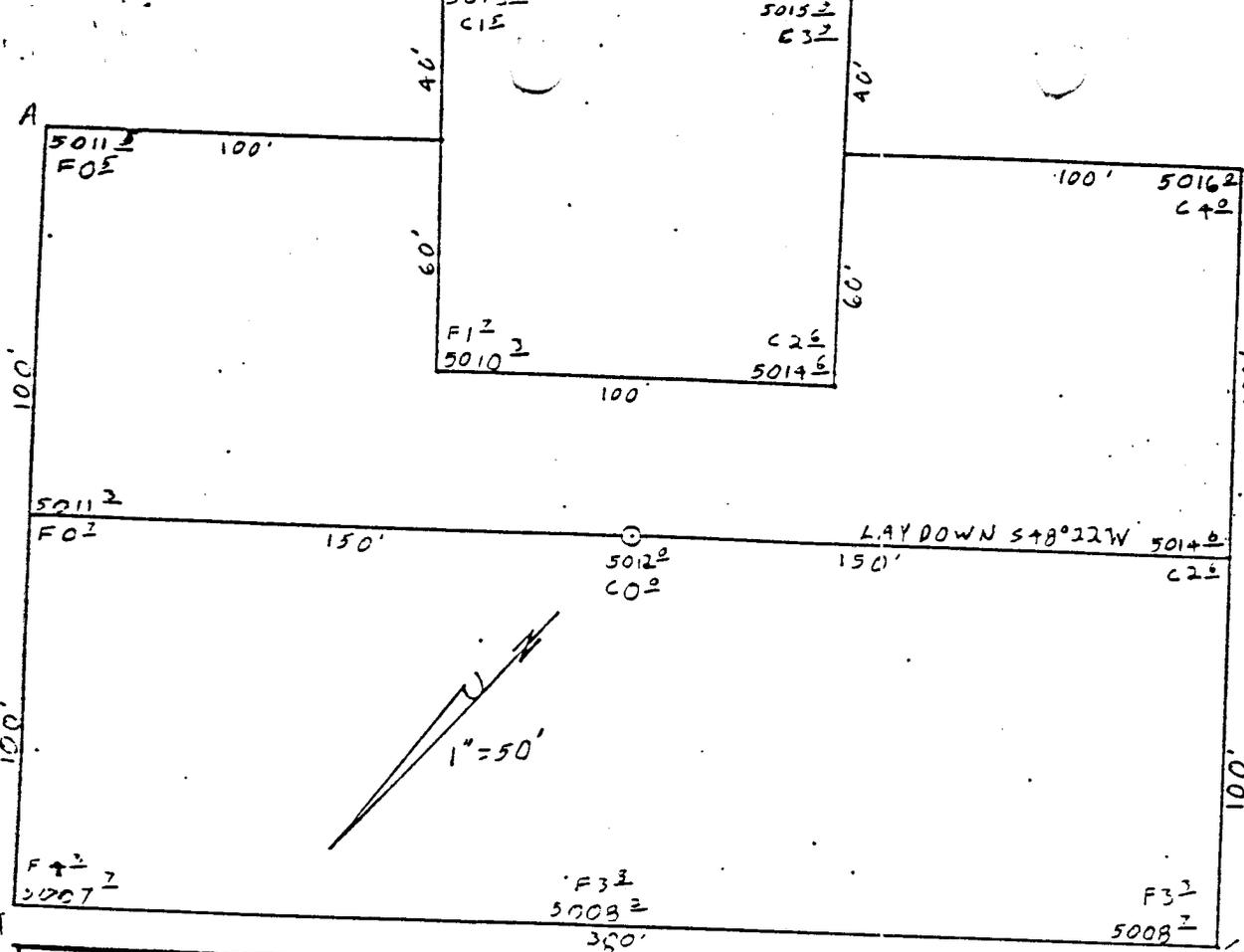
**CHUSKA ENERGY COMPANY**  
 315 N. BEHREND  
 FARMINGTON, NEW MEXICO 87401

RABBIT EARS PROSPECT  
 1500' FNL 1200' FWL  
 Section 20, Township 43S, Range 22E  
 San Juan County, Utah

TOPOGRAPHIC MAP  
 1" = 2000'  
 C.I. = 40'



4  
410  
410  
410  
4090  
4090  
4090  
4097



Chuska Oil and Gas Compa  
**OPERATOR**

Rabbit Ears #1

**WELL NAME & NO.**

1500' F/NL 1200' F/NL

**FOOTAGES**

20 43S 22E

**SEC. TWP. RGE.**

San Juan, Utah

**COUNTY**

August 8, 1989

**DATE**

SCALES:  
 HORIZ: 1" = 50'  
 VERT: 1" = 30'

50120	-----	-----	-----	-----	-----
5010	-----	-----	-----	-----	-----
5000	-----	-----	-----	-----	-----
4990	-----	-----	-----	-----	-----

FG = 5012 1/2

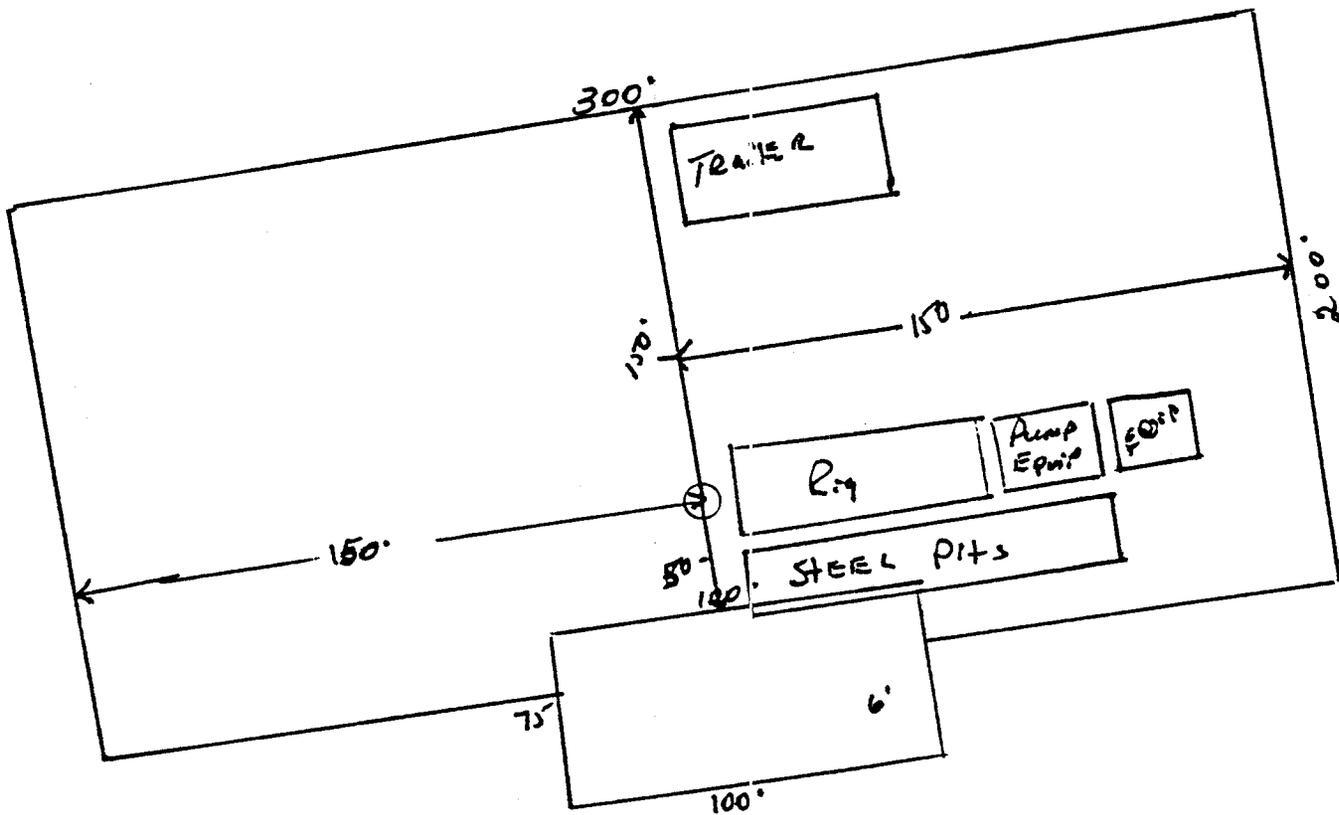
50120	-----	-----	-----	-----	-----
5010	-----	-----	-----	-----	-----
5000	-----	-----	-----	-----	-----
4990	-----	-----	-----	-----	-----

FG = 5012 1/2

50120	-----	-----	-----	-----	-----
5010	-----	-----	-----	-----	-----
5000	-----	-----	-----	-----	-----
4990	-----	-----	-----	-----	-----

FG = 5012 1/2

HUSKA ENERGY COMPANY  
Rabbit Ears No. 1  
1500' FNL & 1200' FWL  
20 - 43S - 22E  
San Juan County, Utah



OPERATOR Chuska Energy Co. (19290) DATE 10-4-89

WELL NAME Rabbit Ears #1

SEC SWNW 20 T 43S R 22E COUNTY San Juan

43-037-31476  
API NUMBER

Indian  
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well within 920'  
Water Permit A60809 / 09-1419 (Hay Hot Oil Service)  
Need request for exception spacing. / Received 9-11-89

APPROVAL LETTER:

SPACING:  R615-2-3 N/A  R615-3-2  
UNIT

N/A  R615-3-3  
CAUSE NO. & DATE

STIPULATIONS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

October 9, 1989

Chuska Energy Company  
314 North Behrend  
Farmington, New Mexico 87401

Gentlemen:

Re: Rabbit Ears #1 - SW NW Sec. 20, T. 43S, R. 22E - San Juan County, Utah  
1500' FNL, 1200' FWL

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-3, Oil and Gas Conservation General Rules.

In addition, the following actions are necessary to fully comply with this approval:

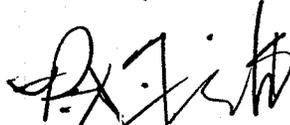
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.

Page 2  
Chuska Energy Company  
Rabbit Ears #1  
October 9, 1989

7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31476.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

lcr  
Enclosures  
cc: Bureau of Land Management  
Bureau of Indian Affairs  
D. R. Nielson  
J. L. Thompson  
WE14/1-2



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

**RECEIVED**  
NOV 08 1989

November 6, 1989

DIVISION OF  
OIL, GAS & MINING

State of Utah  
Department of Natural Resources  
Division of Oil, Gas & Mining  
355 W. North Temple  
3 Triad Bldg., Suite 350  
Salt Lake City, Utah 84180-1203

Re: Rabbit Ears Well No. 1  
Section 20, Township 43  
South, Range 22 East  
1500' FNL & 1200' FWL  
San Juan County, Utah

Dear Sir:

Enclosed you will find a Sundry Notices and Reports on Wells for plans to construct a gas pipeline.

If you have any questions please feel free to call.

Sincerely,

Donald S. Barnes,  
Operations Manager

DSB/bc

Attachments

file:dsb\pipeRE1.451

OIL AND GAS	
DRN	RJF
✓ JRB ✓	GLH
DTS	SLS
2-TAS	
MICROFILM	
4-	FILE

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

NOV 08 1989

DIVISION OF  
OIL, GAS & MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> WILDCAT		5. LEASE DESIGNATION & SERIAL NO. NOG 8702-1116	
2. NAME OF OPERATOR CHUSKA ENERGY COMPANY		6. IF INDIAN ALLOTTEE OR TRIBE NAME NAVAJO TRIBAL	
3. ADDRESS OF OPERATOR 315 N. BEHREND AVENUE, FARMINGTON, NEW MEXICO 87401		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1500' FNL & 1200' FWL At proposed prod. zone		8. FARM OR LEASE NAME RABBIT EARS	
14. API NO. 43-037-31476		9. WELL NO. 1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.)		10. FIELD AND POOL, OR WILDCAT WILDCAT	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 20 - 43S - 22E	
		12. COUNTY SAN JUAN	13. STATE UTAH

18. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) _____	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
(Other) Build Pipeline		DATE OF COMPLETION _____	
APPROX. DATE WORK WILL START 1/01/90			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

\* Must be accompanied by a cement verification report.

If the Rabbit Ears #1 is a oil well discovery, Chuska plans to construct a gas pipeline as shown on the attached plat.

18. I hereby certify that the foregoing is true and correct  
SIGNED Donald S. Barnes TITLE Operations Manager DATE 11-06-89

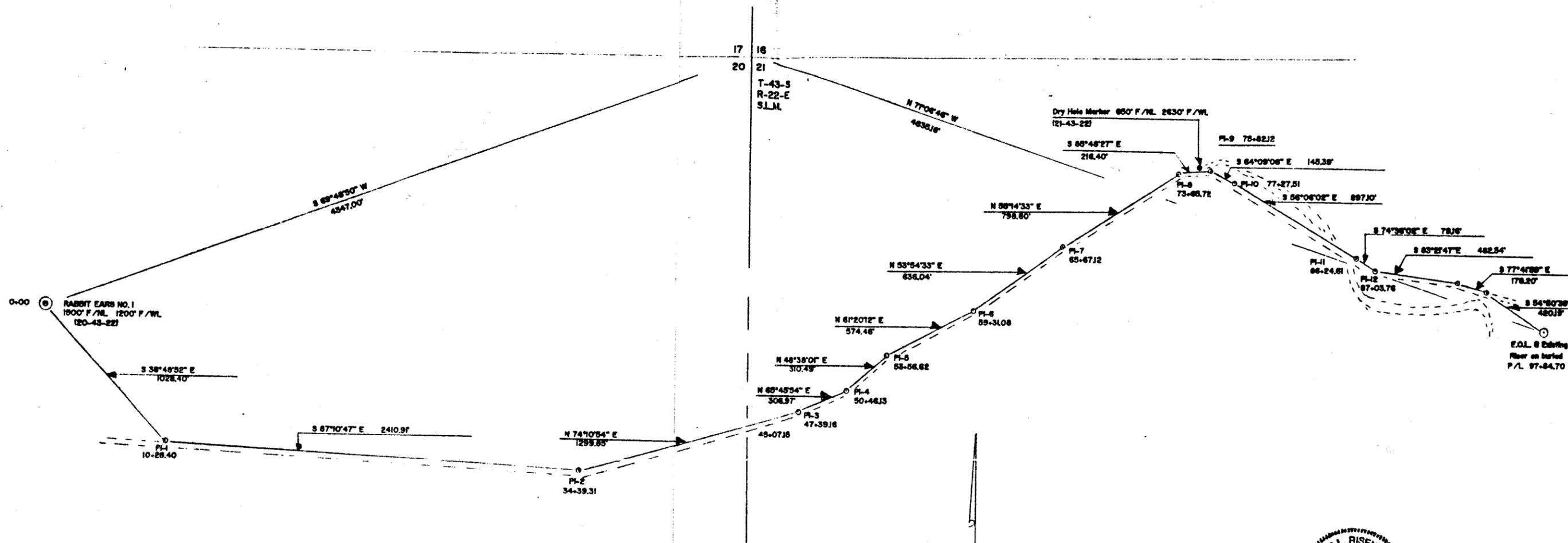
(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

(3/789) Federal approval of this action is required before commencing operations. See Instructions On Reverse Side

DATE 4-20-89  
BY [Signature]



Length in Section 20 = 4,507.15 feet = 273.160 rods = 0.854 miles  
 Length in Section 21 = 5,277.55 feet = 319.852 rods = 0.999 miles  
 -----  
 TOTAL LENGTH = 9,784.70 feet = 593.012 rods = 1.853 miles



EDGAR L. RISENHOFER  
 NEW MEXICO  
 5979  
 Edgar L. Risenhofer  
 Professional Land Surveyor  
 New Mexico License No. 5979  
 Non-residential certification as  
 authorized by Utah State Law  
 58-22-2(f)

<b>CHUSKA ENERGY CO.</b>		
RABBIT EARS NO. 1	SCALE 1" = 400'	DRAWN BY ELR
PROPOSED PIPELINE		REVISED
Sections 20 & 21, T-43-S, R-22-E, S.L.M., N.L.R., San Juan County, Utah		
DATE	APPROVED BY	DRAWING NUMBER

DIVISION OF OIL, GAS AND MINING

API NO. 43-037-31476

SPUDDING INFORMATION

NAME OF COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: RABBIT EARS #1

SECTION SWNW 20 TOWNSHIP 43S RANGE 22E COUNTY SAN JUAN

DRILLING CONTRACTOR FOUR CORNERS DRILLING COMPANY

RIG # 3

SPUDDED: DATE 12/29/89

TIME 4:00 p.m.

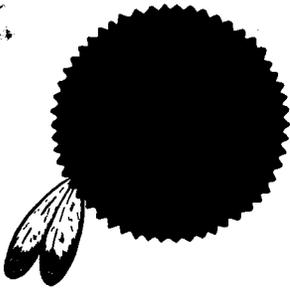
HOW ROTARY

DRILLING WILL COMMENCE \_\_\_\_\_

REPORTED BY DON BARNES

TELEPHONE # 505-326-5526

DATE 12/29/89 SIGNED TAS TAKEN BY: AWS



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

January 2, 1990

**RECEIVED**  
JAN 05 1990

**DIVISION OF  
OIL, GAS & MINING**

Division of Oil, Gas and Mining  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Entity Action Form on spudding of Rabbit Ears #1

Gentlemen:

Enclosed you will find original and six copies of the above-referenced Entity Action Form.

Very truly yours,

DONALD S. BARNES  
DSB:bnp

enclosures  
File:DSB\ENTACTRE





# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

RECEIVED  
JAN 05 1990

January 2, 1990

DIVISION OF  
OIL, GAS & MINING

Division of Oil, Gas and Mining  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Sundry Notice of spud of Rabbit Ears #1

Gentlemen:

Enclosed you will find original and six copies of the above-referenced Sundry Notice.

Very truly yours,

DONALD S. BARNES  
DSB: bnp

Enclosures  
File:DSB\RE1SUNSP

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION & SERIAL NO.  
NOG - 8701-1116

6. IF INDIAN ALLOTTEE OR TRIBE NAME  
Navajo Tribal

UNIT AGREEMENT NAME

7. FARM OR LEASE NAME  
Rabbit Ears

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 20, T43S, R22E

12. COUNTY  
San Juan

13. STATE  
Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back into a different reservoir.)

Use "APPLICATION FOR PERMIT—" for such proposals.

RECEIVED  
JAN 05 1990  
DIVISION OF OIL, GAS & MINING

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Chuska Energy Company

3. ADDRESS OF OPERATOR  
315 N. Behrend, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface 1500' FNL, 1200' FWL  
At proposed prod. zone

14. API NO.  
43-037-31470

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

18. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	
(Other) Spud <input checked="" type="checkbox"/>		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	
APPROX. DATE WORK WILL START _____		DATE OF COMPLETION _____	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

\* Must be accompanied by a cement verification report.

Notify BLM of anticipated spud @ 4:00 o'clock, P.M. on 11-19-89.  
Conversation between Donald S. Barnes and Arlene Sollis.

OIL AND GAS	
DRN	RF
JRB	CLH
DTS	SLS
1-TAS	
MICROFILM	
2-	FILE

18. I hereby certify that the foregoing is true and correct

SIGNED Donald S. Barnes TITLE Operations Manager DATE 12-29-89  
DONALD S. BARNES

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

RECEIVED  
JAN 18 1990

DIVISION OF  
OIL, GAS & MINING

January 16, 1990

Division of Oil, Gas and Mining  
State of Utah  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Sundry Notice, Rabbit Ears #1 - Plug and Abandon

Gentlemen:

Enclosed you will find the original and six copies of the subject Sundry Notice.

Very Truly Yours

Donald S. Barnes  
Operations Manager

DSB:csw  
Encl.  
File:DSB\SUNREPA

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

3. LEASE DESIGNATION & SERIAL NO.  
NOG 8702-1116

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

6. IF INDIAN ALLOTTEE OR TRIBE NAME  
NAVAJO TRIBAL

7. UNIT AGREEMENT NAME

FARM OR LEASE NAME  
Rabbit Ears

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
S20-T43S-R22E

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Chuska Energy Company

3. ADDRESS OF OPERATOR  
315 North Behrend, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface 1500' FNL, 1200' FWL  
At proposed prod. zone

14. API NO.  
N3-037-31470

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5012' GR

12. COUNTY San Juan  
13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Other)   
PULL OR ALTER CASING   
MULTIPLE COMPLETE   
ABANDON   
CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other)   
REPAIRING WELL   
ALTERING CASING   
ABANDONMENT\*

APPROX. DATE WORK WILL START \_\_\_\_\_

DATE OF COMPLETION 01-12-90

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

\* Must be accompanied by a cement verification report.

The Rabbit Ears #1 well was plugged as follows:

Plug #1: Mississippian @ 5,826'. 35 sx (40 cu. ft.), 6,100' to 5,982'.

Plug #2: Desert Creek @ 4,910'/Lower Ismay @ 4,829'. 70 sx (81 cu. ft.), 4,910' to 4,674'.

Plug #3: DeChelly @ 1,855'. 35 sx (40 cu.ft.), 1,855' to 1,755'.

Plug #4: Shoe (8-5/8") @ 504'. 35 sx (40 cu.ft.), 551' to 450'.

Plug #5: Surface 100'. 35 sx (40 cu.ft.), 100' to surface.

All plugs were mixed using Class 'G' cement mixed at 15.8 lb/gallon.

An abandonment marker is in place.

Well plugged and abandoned 4:00 p.m., January 12th, 1990.

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
1-TAS	
MICROFILM	
2- FILE	

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE Operations Manager

DATE 1-16-90

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

CEMENTING SERVICE REPORT



TREATMENT NUMBER 1567-2187 DATE 1-12-90  
 STAGE DS DISTRICT 1367

DS-496 PRINTED IN U.S.A.

DOWELL SCHLUMBERGER INCORPORATED

WELL NAME AND NO. <u>Rabbit Ears No.1</u>		LOCATION (LEGAL) <u>Sec. 20, T. 43-S. R. 22-E</u>		RIG NAME:																	
FIELD-POOL <u>Wildcat</u>		FORMATION		WELL DATA: BIT SIZE <u>8 5/8</u> BOTTOM TOP																	
COUNTY/PARISH <u>San Juan</u>		STATE <u>Utah</u>	API. NO.	TOTAL DEPTH WEIGHT <u>24</u>																	
NAME <u>Chuska Enemy</u>				MUD TYPE GRADE																	
AND				MUD DENSITY <u>11.8</u> LESS FOOTAGE SHOE JOINT(S)																	
ADDRESS				MUD VISC. <u>42</u> Disp. Capacity																	
ZIP CODE				NOTE: Include Footage From Ground Level To Head In Disp. Capacity																	
SPECIAL INSTRUCTIONS				<table border="1"> <tr> <td>TYPE</td> <td></td> <td>TYPE</td> <td><u>N/A</u></td> </tr> <tr> <td>DEPTH</td> <td></td> <td>DEPTH</td> <td></td> </tr> <tr> <td>TYPE</td> <td></td> <td>TYPE</td> <td></td> </tr> <tr> <td>DEPTH</td> <td></td> <td>DEPTH</td> <td></td> </tr> </table>		TYPE		TYPE	<u>N/A</u>	DEPTH		DEPTH		TYPE		TYPE		DEPTH		DEPTH	
TYPE		TYPE	<u>N/A</u>																		
DEPTH		DEPTH																			
TYPE		TYPE																			
DEPTH		DEPTH																			

Head & Plugs	<input type="checkbox"/> TBG <input checked="" type="checkbox"/> D.P.	SQUEEZE JOB	
<input type="checkbox"/> Double	SIZE <u>4 1/2 x 4</u>	TYPE	<u>N/A</u>
<input type="checkbox"/> Single	WEIGHT <u>11.6</u>	DEPTH	<u>N/A</u>
<input type="checkbox"/> Swage	GRADE	TAIL PIPE: SIZE	DEPTH
<input type="checkbox"/> Knockoff	THREAD	TUBING VOLUME	Bbls
IS CASING/TUBING SECURED?	<input type="checkbox"/> YES <input type="checkbox"/> NO	TOP <input type="checkbox"/> R <input type="checkbox"/> W	<input type="checkbox"/> NEW <input checked="" type="checkbox"/> USED
LIFT PRESSURE	PSI	CASING WEIGHT	SURFACE AREA (3.14 x R <sup>2</sup> )
PRESSURE LIMIT	PSI	BUMP PLUG TO	PSI
ROTATE	RPM	RECIPROCATATE	FT
			No. of Centralizers

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME:	DATE:	TIME:	DATE:	TIME:	DATE:	
0001 to 2400											
0735	340		0		4.5	H <sub>2</sub> O	8.3				
0738	340		7		4.5	cmf	15.8				
0739	90		4		4.5						
0740			80.4		0	mod	9.2				
0757			110		5						
0855	200		138		5.5						
0935	200		138		5.5	H <sub>2</sub> O	8.3				
0900	70		14		5.5	cmf	15.8				
0904	0		14		6	H <sub>2</sub> O	8.3				
0904	90		52		6	mod	9.2				
0917											
1115	200		23	L	6						
1115	200		23		6	H <sub>2</sub> O	8.3				
1120	50		7		5	cmf	15.8				
1133	70		2		6	H <sub>2</sub> O	8.3				
1133	0		2		6						

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	35	115	Class G 1st Plug @ 6100				7	15.8
2.	70	115	Class G 2nd Plug @ 1010-4650				14	15.8
3.	35	115	Class G 3th 1855 37ft Plug				7	15.8
4.	35	115	Class G 4th 501 130ft				7	15.8
5.								
6.								

BREAKDOWN FLUID TYPE		VOLUME		DENSITY	PRESSURE	MAX.	MIN.
<input type="checkbox"/> HESITATION SQ.	<input type="checkbox"/> RUNNING SQ.	CIRCULATION LOST		<input type="checkbox"/> YES <input type="checkbox"/> NO	Cement Circulated To Surf. <input type="checkbox"/> YES <input type="checkbox"/> NO Bbls.		
BREAKDOWN	PSI	FINAL	PSI	DISPLACEMENT VOL.	Bbls	TYPE OF WELL	<input type="checkbox"/> OIL <input type="checkbox"/> GAS <input type="checkbox"/> STORAGE <input type="checkbox"/> INJECTION <input type="checkbox"/> BRINE WATER <input type="checkbox"/> WILDCAT
Washed Thru Perfs	<input type="checkbox"/> YES <input type="checkbox"/> NO	TO	FT	MEASURED DISPLACEMENT	<input type="checkbox"/> WIRELINE		
PERFORATIONS	TO	TO	CUSTOMER REPRESENTATIVE		DS SUPERVISOR		
			<u>M. M. M. M. M.</u>		<u>Albert D. Martinez</u>		





# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

January 12, 1990

RECEIVED  
JAN 19 1990

DEPARTMENT OF  
OIL, GAS & MINES

State of Utah  
Division of Oil, Gas, and Mining  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Sundry Notice, Rabbit Ears #1, Abandon

Gentlemen:

Enclosed you will find original and six copies of Sundry Notice for the above-referenced well.

Very truly yours,

DONALD S. BARNES  
Operations Manager

DSB:bnp  
Enclosures  
File:DSB\SNABRE

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <small>(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)</small>		<b>3. LEASE DESIGNATION &amp; SERIAL NO.</b> NOG 8702-1116
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b> Navajo Tribal
<b>1. OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		<b>7. UNIT AGREEMENT NAME</b>
<b>2. NAME OF OPERATOR</b> Chuska Energy Company		<b>8. FARM OR LEASE NAME</b> Rabbit Ears
<b>3. ADDRESS OF OPERATOR</b> 315 North Behrend, Farmington, New Mexico 87401		<b>9. WELL NO.</b> #1
<b>4. LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1500' FNL x 1200' FWL At proposed prod. zone		<b>10. FIELD AND POOL, OR WILDCAT</b> Wildcat
		<b>11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA</b> Sec. 20, T43S, R22E
<b>14. API NO.</b> 43-037-31476	<b>15. ELEVATIONS</b> (Show whether DF, RT, GR, etc.) 5012 GR	<b>12. COUNTY</b> San Juan <b>13. STATE</b> Utah

JAN 19 1990

**16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data**

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
(Other) _____			

APPROX. DATE WORK WILL START \_\_\_\_\_ DATE OF COMPLETION \_\_\_\_\_

**17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

\* Must be accompanied by a cement verification report.

As per telephone conversation with Earl Beecher at 3:50 P.M. on 1-11-1990, relayed the following formation tops: DE Chelly @ 1855', Lower Ismay 4829', Desert Creek 4910' Mississippian 5829'.

BLM plugging requirements as per Mr. Beecher, 100' plug @ 5829, 100' plug @ 4910', 100' plug @ 4829', 100' plug @ 1855', 100' plug @ base of surface casing (500'), 10 sks. @ surface.

OIL AND GAS	
DRN	RJF
<del>1-JBB</del>	GLH
DTS	SLS
<del>2-TAS</del>	

**18. I hereby certify that the foregoing is true and correct**

SIGNED Donald S. Barnes TITLE Operations Manager DATE 1-12-90  
DONALD S. BARNES 3 MICROFILM   
(This space for Federal or State office use) 4 FILE

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

See Instructions On Reverse Side DATE: 1-24-90  
BY: John R. Bays



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

**RECEIVED**  
JAN 22 1990

**DIVISION OF  
OIL, GAS & MINING**

January 17, 1990

State of Utah  
Division of Oil, Gas, and Mining  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Sundry Notice, Rabbit Ears #1, Operations - Surface Casing, and  
Sundry Notice, Rabbit Ears #1, Operations - Summary

Gentlemen:

Enclosed you will find original and two copies of each of the above-referenced Sundry Notices.

Very truly yours,

*Donald S. Barnes*  
DONALD S. BARNES *BNP*  
Operations Manager

DSB:bnp  
Enclosures  
File:DSB\SUNRE1

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
1-TAS	
2-	MICROFILM
3.	FILE

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

3. LEASE DESIGNATION & SERIAL NO.

NOG 8702 - 1116

4. IF INDIAN ALLOTTEE OR TRIBE NAME

Navajo Tribal

UNIT AGREEMENT NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

JAN 22 1990

1. OIL WELL  GAS WELL  OTHER  Wildcat

2. NAME OF OPERATOR  
3. ADDRESS OF OPERATOR  
Chuka Energy Company

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface 1500' FNL, 1200' FWL  
At proposed prod. zone

8. FARM OR LEASE NAME

Rabbit Ears

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 20, T43S, R22E

14. API NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5012' GR

12. COUNTY

San Juan

13. STATE

Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF  FULL OR ALTER CASING   
FRACTURE TREAT  MULTIPLE COMPLETE   
SHOOT OR ACIDIZE  ABANDON   
REPAIR WELL  CHANGE PLANS   
(Other)

WATER SHUT-OFF  REPAIRING WELL   
FRACTURE TREATMENT  ALTERING CASING   
SHOOTING OR ACIDIZING  ABANDONMENT\*   
(Other) Operations - Surface Casing   
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

APPROX. DATE WORK WILL START \_\_\_\_\_

DATE OF COMPLETION \_\_\_\_\_

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

\* Must be accompanied by a cement verification report.

12-29-89 to 12-30-89

Drilled 12 1/4" hole to 504'. Ran 11 jts. 8 5/8" O.D., 24#/ft, K-55, STC casing and landed at 504'. Cemented with 360 sx. Class "G" cement with 2% CaCl<sub>2</sub> and 1/4 #/sx Celloflake. Cement to surface and W.O.C. (Cement in place 3:30 A.M. 12-30-89).

18. I hereby certify that the foregoing is true and correct

SIGNED Donald S. Barnes TITLE Operations Manager DATE 1-17-90

DONALD S. BARNES

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

RABBIT EARS #1

DRILL STEM TEST #1. INTERVAL 5529' - 5559'  
INITIAL FLOW 15 MINS. INITIAL SHUT IN 60 MINS. FINAL FLOW  
60 MINS. FINAL SHUT IN 120 MINS.

TOP CHART	5508'	BOTTOM CHART	5553'
IHDYP	2623 psig	IHDYP	2680 psig
IFP	107/321 psig	IFP	158/382 psig
ICIP	1794 psig	ICIP	1825 psig
FFP	415/813 psig	FFP	500/1012 psig
FCIP	1833 psig	FCIP	1877 psig
FHP	2597 psig	FHP	2588 psig
BHT	148°F		

MFE CHAMBER:

2500cc: 100cc Oil, 2150cc H<sub>2</sub>O, 40 ft<sup>3</sup> Gas @ 620 psig

RECOVERY:

1980' oil cut brackish water. Water/gas, recorded 5% H<sub>2</sub>S

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT" for such proposals.)

3. LEASE DESIGNATION & SERIAL NO.  
NOG - 8702- 1116

5. IF INDIAN ALLOTTEE OR TRIBE NAME  
Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Rabbit Ears #1

9. WELL NO.  
#1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M. OR BLK. AND SURVEY OR AREA  
Sec. 20, T43S, R22E

12. COUNTY  
San Juan

13. STATE  
Utah

1. OIL WELL  GAS WELL  OTHER  Wildcat JAN 22 1990

2. NAME OF OPERATOR  
Chuska Energy Company

3. ADDRESS OF OPERATOR  
315 N. Behrend, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface 1500' FNL, 1200' FWL  
At proposed prod. zone

14. API NO.  
43-037-31470

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5012' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Operations-Summary</u> <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	
APPROX. DATE WORK WILL START _____		DATE OF COMPLETION _____	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

- 11-29-89 Spudded 4:00 P.M. 12-29-89. Drilled 12 1/4" hole to 504'.
- 12-30-89 Circulated. Ran and cemented 11 jts. 8 5/8" 24#, K-55 casing at 504'. Cement to surface. NU BOP. Tested BOP. Drilled out shoe. Drilling 7 7/8" hole.
- 12-31-89: Drill and survey.
- 01-01-90: Drill and survey.
- 01-02-90: Drill and survey. Trip for new bit. Drill and survey. Mud up @ 3900'.
- 01-03-90: Drill and survey.
- 01-04-90: Drill and survey.
- 01-05-90: Drill and survey. Trip for new bit. Drill and survey.
- 01-06-90: Drill and survey.
- 01-07-90: Drill and survey.
- 01-08-90: Drill and survey to 5626'. Circulate.
- 01-09-90: Circulate. DST #1 (See attached report). Resumed drilling.
- 01-10-90: Drill and survey.
- 01-11-90: Drill to TD @6100'. Circulate. POOH. Logged.
- 01-12-90: Completed logs. P & A. Rig released 4:00 P.M. 01-12-90.

\* Must be accompanied by a cement verification report.

18. I hereby certify that the foregoing is true and correct.

SIGNED Donald S. Barnes TITLE Operations Manager DATE 01-17-90  
DONALD S. BARNES

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side



# CHUSKA ENERGY COMPANY

315 N. BEHREND • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

February 2, 1990

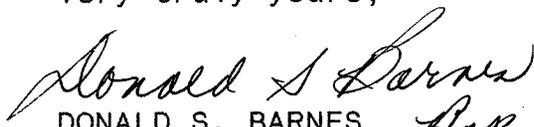
State of Utah  
Division of Oil, Gas & Mining  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Well Completion Report and Log on the Rabbit Ears #1

Gentlemen:

Please find enclosed original and six copies of the above-referenced Well Completion Report and Log.

Very truly yours,

  
DONALD S. BARNES  
Operations Manager

DSB:bnp  
Enclosures  
File:DSB\WCOMPRI

OIL AND GAS	
DRN	INF
JRB	GLH
DTS	SLS
1-TAS	
2-	MICROFILM ✓
3-	FILE ✓

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5

**RECEIVED**  
P&A  
FEB 05 1990  
DTS

DIVISION OF  
OIL, GAS & MINING

WELL COMPLETION OR RECOMPLETION REPORT

5. LEASE DESIGNATION AND SERIAL NO.  
NOG 8702-1116

8. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo Tribal

UNIT AGREEMENT NAME

9. NAME OR LEASE NAME  
Rabbit Ears

10. WELL NO.  
#1

11. FIELD AND POOL, OR WILDCAT  
Wildcat

12. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec. 20, T43S, R22E

1. TYPE OF WELL: OIL WELL  GAS WELL  DRY  OTHER

2. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other

3. NAME OF OPERATOR  
Chuska Energy Company

4. ADDRESS OF OPERATOR  
315 North Behrend, Farmington, New Mexico 87401

6. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface  
1500; FNL and 1200' FWL  
At top prod. interval reported below  
At total depth

14. API NO. 43-037-314710 DATE ISSUED

12. COUNTY San Juan 13. STATE Utah

15. DATE SPUDDED 12-29-89 16. DATE T.D. REACHED 01-13-90 17. DATE COMPL. (Ready to prod.) N/A (Plug & Abd.) 18. ELEVATIONS (OF. RES. RT. CR. ETC.) 5012 GR 19. ELEV. CASINGHEAD N/A

20. TOTAL DEPTH, MD & TVD 6100 MD 21. PLUG BACK T.D., MD & TVD N/A 22. IF MULTIPLE COMPL. HOW MANY N/A 23. INTERVALS DRILLED BY Rotary 24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)

25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DIPMETER COMPUTED RESULTS BNC SONIC ✓  
DLI - MSEL - LDT - CNL - GR - SP - CAL - SHOT

27. WAS WELL CORED YES  NO  (Submit analysis)  
DRILL STEM TEST YES  NO  (See reverse side)

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8	24	504	12 1/4	360 SX "G" 2% CaCl	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

33. PRODUCTION

DATE FIRST PRODUCTION \_\_\_\_\_ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) \_\_\_\_\_ WELL STATUS (Producing or shut-in) \_\_\_\_\_

DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) \_\_\_\_\_ TEST WITNESSED BY \_\_\_\_\_

35. LIST OF ATTACHMENTS \_\_\_\_\_

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Donald S. Barnes TITLE OPERATIONS MANAGER DATE 2-1-90

See Spaces for Additional Data on Reverse Side



Division of Oil, Gas and Mining  
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

Well File Rabbit Ears #1

Suspense

Other

(Location) Sec 20 Twp 43S Rng 22E

(Return Date) 2/28/90

(API No.) 43-037-31476

(To - Initials) VLC

1. Date of Phone Call: \_\_\_\_\_ Time: \_\_\_\_\_

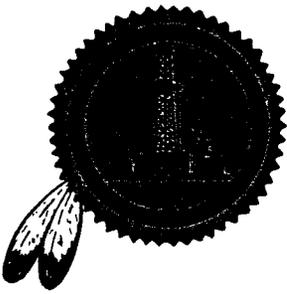
2. DOGM Employee (name) Adlene (Initiated Call   
Talked to:

Name Donald Barnes (Initiated Call  - Phone No. ( )

of (Company/Organization) Caduska Energy

3. Topic of Conversation: Well completion report.

4. Highlights of Conversation: WCR has been mailed to us as  
per Donald Barnes.



# CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

DEC 26 1990

DIVISION OF  
12 December 1990

DEC 26 1990

State of Utah Department of Natural Resources  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

DIVISION OF  
OIL, GAS & MINING

Attn: Vicki Carney

Ref: Electric Logs

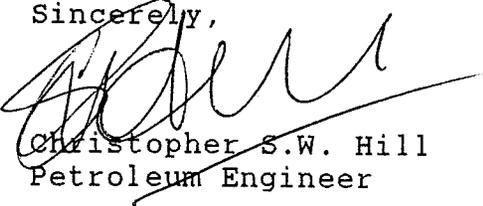
Dear Ms Carney

please find copies of the logs which you requested on the following wells:

Rabbit Ears #1 ✓ 435 22E 20 PAID  
Anasazi #1 ✓  
Sahzie #1 ✓  
Big Bend 8E-1 ✓  
Cajon Mesa 8D-1 ✓  
Monument 8N-2 ✓

Please excuse the delay in sending these to you, but we had to get new prints made from existing films, and due to a shortage of logging trucks, with printing equipment, this took some time.

Sincerely,

  
Christopher S.W. Hill  
Petroleum Engineer

encl.



# CHUSKA ENERGY COMPANY

3315 BLOOMFIELD HIGHWAY • FARMINGTON, NEW MEXICO 87401 • PHONE: (505) 326-5525

P.O. BOX 780 • FARMINGTON, NEW MEXICO 87499

15 January, 1991

State of Utah Department of Natural Resources  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Building, Suite 350  
Salt Lake City, Utah 84180-1203

DIVISION OF  
OIL, GAS & MINING

RECEIVED  
JAN 18 1991

Attn: Vicki Carney

Ref: Electric Logs

Dear Ms Carney

Further to your telephone call of yesterday afternoon, please find enclosed copies of the logs you requested for the Rabbit Ears #1 well. As I mentioned on the phone, this well was logged before I came to work for Chuska and, regrettably, the log films have been mislaid. I have therefore had to make the copies off the prints. I trust that this will be satisfactory for your requirements.

Sincerely,

Christopher S.W. Hill  
Operations Engineer

encl.

- DUAL LATEROLOG  
MICRO-SSC
- COMPENSATED NEUTRON  
LITHO-DENSITY