

CHUSKA ENERGY COMPANY

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

RECEIVED
FEB 20 1990

DIVISION OF
OIL, GAS & MINING

February 15, 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

Ref: Application for Permit to Drill: Big Bend 8E-1 Well, San Juan County, Utah

Gentlemen

Attached for your examination and approval is the original and two copies of an Applications for Permit to Drill the Big Bend 8E Well No. 1 in San Juan County, Utah. This well will be drilled as part of an ongoing exploration program.

Please advise if you require additional information concerning this application. Chuska will greatly appreciate your prompt consideration.

Sincerely,

Donald S. Barnes
Operations Manager

DSB/csw

File: C:\WP\CSWH\BBENDBE1\UTAHCOVR

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

FEB 20 1990

5. Lease Designation and Serial No. NOG 8702-1116

6. If Indian, Allottee or Tribe Name Navajo Tribal

7. Unit Agreement Name _____

8. Farm or Lease Name Big Bend 8E

9. Well No. 1

10. Field and Pool, or Wildcat Wildcat Undesignated (002)

11. 00, Sec., T., R., N., or S. and Survey or Area S8 T40S R26E

12. County or Parish San Juan 13. State Utah

1. Type of Work
 a. Type of Well
 DRILL DEEPEN PLUG BACK
 b. Type of Well
 Oil Well Gas Well Other Single Zone Multiple Zone

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.)
 At surface 1815' FNL, 790' FWL SWNW
 At proposed prod. zone Same

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 driz. line, if any) _____

16. No. of acres in lease _____

17. No. of acres assigned to this well _____

18. Distance from proposed* location to nearest well, drilling, completed, or applied for, on this lease, ft. _____

19. Proposed depth 6089' Desert Creek

20. Rotary or cable tools Rotary

21. Elevations (Show whether DF, RT, GR, etc.) 5023' GR

22. Approx. date work will start* 5-15-90

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' | 371 sx 'G' + 2% CaCl ₂ |
| 7-7/8" | 5-1/2" | 15.5 | 6089' | 657 sx 'G', 65.35 Poz + 6% Ce1 |

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. I hereby certify that this report is true and complete to the best of my knowledge.

Signed: Donald S. Barnes Title: Operations Manager Date: 2-15-90

(This space for Federal or State office use)

APT NO. 43-037-31506 Approval Date _____

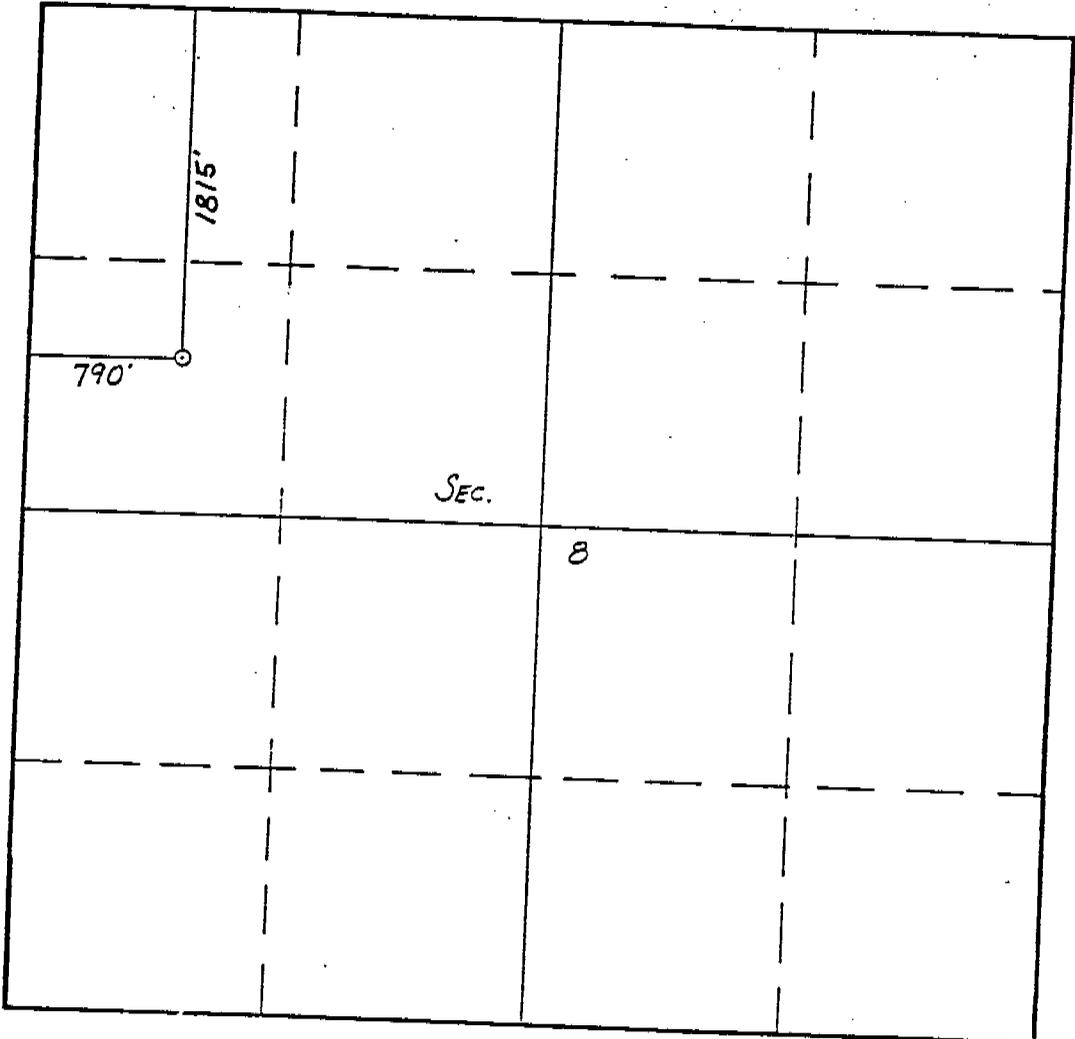
Approved by _____ Title: _____

Conditions of approval, if any: _____

**APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING**

DATE: 2-26-90
 BY: John R. Day
 WELL SPACING: R615 3-2

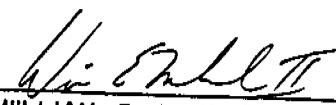
COMPAL BIG BEND 8E-1 305-1-1
 LEASE 8-405-26E
 SEC. 8, T. 40 S, R. 26 E
 COUNTY San Juan STATE Utah
 LOCATION 1815'FNL & 790'FWL
 ELEVATION 5023



SCALE: 1" = 1000'

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.




 WILLIAM E. MAHNKE II
 NEW MEXICO P.L.S. NO 8466

SURVEYED JAN. 26, 19 90

CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Big Bend 8E Well No. 1
Section 8, Township 40S, Range 26E
1815' FNL, 790' FWL
San Juan County, Utah

1. SURFACE FORMATION

Geological name of surface formation: Morrison.

2. ELEVATION

Surface elevation is 5,023' GR.

3. ESTIMATED FORMATION TOPS

| <u>Depth</u> | <u>Formation</u> | <u>Sub Sea Elevation</u> |
|--------------|------------------|------------------------------|
| Surface | Morrison | + 5023' |
| 1851' | Chinle | + 3172' |
| 2941' | Organ Rock | + 2082' |
| 3561' | Cedar Mesa | + 1462' |
| 4741' | Hermosa | + 282' |
| 5717' | Upper Ismay | - 694' Primary Target |
| 5855' | Lower Ismay | - 832' Secondary Target |
| 5939' | Desert Creek | - 916' |
| 6089' | Total Depth | - 1066' |

4. PROPOSED CASING/CEMENTING PROGRAM

| | <u>Depth</u> | <u>Size</u> | <u>Weight</u> | <u>Grade</u> | <u>Coupling</u> |
|-------------|--------------|-------------|---------------|--------------|-----------------|
| Surface | 500' | 8 5/8" | 24.0 ppf | K-55 | STC |
| Production: | 5,898' | 5 1/2" | 15.5 ppf | K-55 | STC |

Surface Cementing:

371 sx (427 ft³) Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Slurry volume will be calculated at 100% excess over annular volume.

Production Cementing:

First Stage

TD to 3500' (stage collar @ \pm 3500'). Lead with 186 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 100 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 459 ft³.

Second Stage

3500' to surface. Lead with 271 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 100 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 616 ft³.

Note: Exact slurry volumes for the production string will be adjusted according to the caliper log which will be run prior to cementing. Special adjustments may be necessary if significant amounts of salt are drilled.

5. BLOWOUT PREVENTER (See attached schematics)

As abnormal pressure is not anticipated, a 2000 psi BOP system would be sufficient for the drilling of this well. However, due to availability constraints, a 3000 psi system will be used, as per the attached Exhibits "A" and "B". This will be a 10" x 900 Series double ram preventer, equipped with a set of pipe and blind rams.

An accumulator system, with a pressure capacity sufficient to operate the rams three complete cycles without rig power, will be required as part of the rig equipment.

6. PROPOSED MUD PROGRAM

Surface to 3500'

Fresh water, gel, lime and native solids. Weight 8.3 - 8.7 ppg. Gel/lime sweeps as necessary for hole cleaning.

3500' to Total Depth

Low solids, non-dispersed polymer system. Weight 8.6 - 8.8 ppg. Gel/lime sweeps as hole conditions dictate for hole cleaning. Fluid loss to be maintained at 15 cc or less. Fluid loss to be further reduced to 10 cc or less prior to coring, logging or DSTs.

7. AUXILIARY EQUIPMENT

- A. A kelly cock will be installed during drilling operations, with handle available on the rig floor.
- B. Floor (stabbing) valves will be available, on the rig floor at all times, with necessary subs to fit all of the drilling assemblies.
- C. Mud will be the circulating fluid. No abnormal formation pressures are expected.

8. WELL EVALUATION

Open hole electric logging program will consist of a minimum program of DLL-MSFL-SP-GR-Cal, FDC-CNL-GR-Lithodensity from TD to 4000'.

Drill stem testing will be as per the wellsite geologist's recommendations, based on shows. A mud logging unit will be utilized during drilling operations from 4000' to TD.

9. ABNORMAL PRESSURES/GAS

Abnormal pressures are not anticipated. Monitoring of gas and hydrocarbon shows will be by wellsite mud logging unit. H₂S gas is not anticipated, however regular checks will be made while drilling the well.

10. TIMING

The drilling and evaluation of this well is estimated to be 18 days. Anticipated spud date is 5-15-90.

DETAILED DRILLING PROGRAM

DATE: February 15, 1990

WELL NAME: Big Bend 8E WELL NO.: 1

LOCATION: Section 8, Township 40S, Range 26E
1815' FNL, 790' FWL
San Juan County, Utah

ELEVATION: 5,023' GR

TOTAL DEPTH: 6,089'

PROJECTED HORIZON: Primary target is Upper Ismay at 5,717'
Secondary target is Lower Ismay at 5,855'

DRILLING, CASING AND CEMENTING PROGRAM

1. Move in and rig up rotary tools. Notify BLM of time of spud and intent to run surface casing.
2. Drill mouse hole and rat hole. Mix mud prior to spudding well.
3. Drill 12 1/4" hole to \pm 500'. Use fresh water gel/lime spud mud for drilling surface hole. Well bore inclination is not to exceed 1 at 500'. Deviation surveys will be run at least at 250' and at casing point.
4. Run 8 5/8", 24 ppf, K-55, STC casing to TD. Cement with 371 sx (427 ft³) of Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Celloflake (sufficient slurry volume to circulate cement to surface).
5. W.O.C. a minimum of 4 hours prior to nipping up BOP stack and related equipment. See BOP schematics for details.
6. Pressure test BOP to 2,000 psi for 30 minutes. Pressure test manifold and all related equipment to 2,000 psi. Pressure test casing to 1,500 psi for 30 min.
7. Drill out surface casing with 7 7/8" bit. Drill 7 7/8" hole to TD. Deviation surveys are to be taken every 500' or on a bit trip, whichever occurs first. Maximum allowable deviation will be 5 at TD, with the maximum allowable rate of change to be 1/100'.
8. Run open hole logs and evaluate. Drill stem testing will be as per the wellsite geologist's recommendation.

9. If the well is determined to be productive, run 5 1/2", 15.5 ppf, K-55, STC casing to TD. Set stage cementing collar at \pm 3,500'. Cement in two stages as per cementing program in 10-point Drilling Plan.
10. Nipple down BOPE. Set 5 1/2" casing slips and cut off casing. Install well head. Release drilling rig and move rig off location.
11. If well is non-productive it will be plugged and abandoned as per State, BLM and Navajo Tribal stipulations.

Big Bend 8E Well No. 1
Section 8, Township 40S, Range 26E
1815' FNL, 790' FWL
San Juan County, Utah

GENERAL COMPLETION PROCEDURE

If the well is determined to be productive, move in completion rig. Perforate, acidize, and test each productive porosity zone. Completion work will commence after Sundry Notice approval is received. Detailed procedures will follow.

PLUGGING AND ABANDONMENT

If the well is determined not to be productive, the well bore will be plugged as per BLM, State and Navajo Tribal requirements.

Big Bend 8E Well No. 1
Section 8, Township 40S, Range 26E
1815' FNL, 790' FWL
San Juan County, Utah

SURFACE USE PLAN

1. EXISTING ROADS

Shown on the attached topographic map are the existing roads in the immediate area. Outlined is the route to be followed, on the Hovenweep Road, from Aneth. Existing roads will be maintained, as necessary, while operations are in progress.

2. PLANNED ACCESS ROAD (SHOWN IN RED)

The access road will be as shown on the attached topographic map. The road will be flat bladed, constructed 14' in width and will be maintained as necessary to prevent excessive damage to the existing terrain. The road will be upgraded if commercial production is established. Less than one quarter of a mile of new road will be required to be constructed to the location pad.

3. LOCATION OF EXISTING WELLS & TANK BATTERIES

There are no other wells or facilities in the area.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

No production facilities are presently in place. Should the well prove to be productive, facilities (tank battery etc) will be sited on the drilling location pad.

5. LOCATION & TYPE OF WATER SUPPLY

Water will be acquired from a private source. The water will be hauled from a flowing well permitted to Hay Hot Oil Inc., permitted under Water Right 09-1419, A60809.

6. SOURCE OF CONSTRUCTION MATERIALS

The need for additional construction materials is not anticipated. In the event that additional materials are required, they will be acquired either from private sources or with the approval of the Navajo Nation.

7. METHODS OF HANDLING WASTE MATERIAL

Trash will be contained on location in an enclosed bin. It will be hauled to an approved disposal site or burned on location if a burning permit is granted. The reserve pit will be lined, with an approved 7 mil liner, for containing drilling fluids. The pit will also be fenced. All drilling fluids, cuttings and chemical waste will be stored in the reserve pit. Liquid hydrocarbons will be stored in temporary storage tanks and hauled from location to approved sales facilities. The reserve pit will be emptied, back filled and restored to natural terrain status upon completion of drilling operations.

8. ANCILLARY FACILITIES

Chemical portable toilet facilities will be provided on location during drilling and completion operations. No camps or air strips are planned for this well.

9. WELL SITE LAYOUT

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

10. PLANS FOR RESTORATION OF THE SURFACE

The location is laid out on a generally north/south trend and will require minimal cut (2-3' on the north side) and fill (0.5-1.5' on the south side). Top soil removed from the pad will be stored at the well site. A reserve pit will be built on terrain containing sparse native vegetation. After drilling operations are complete, drilling fluid in the reserve pit will be allowed to evaporate. All remaining fluid in the pit will be disposed of into an approved disposal site. The reserve pit will remain fenced during the evaporation and disposal process. The pit will then be covered and the topsoil will be returned to the disturbed area. The terrain will be returned as near to its original condition as possible. Following operations, rehabilitation seeding will be in accordance with APD/BLM/BIA stipulations. There are no residents in the immediate area of the site.

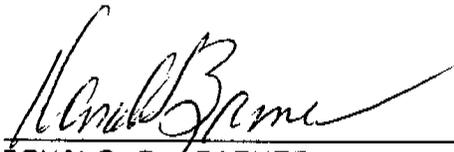
11.

OPERATORS REPRESENTATIVE

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

12. CERTIFICATION

I hereby certify that either 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 planned will be performed by Chuska Energy, or its sub-contractors, in conformity with the terms and conditions under which it is approved.



DONALD S. BARNES
Operations Manager

CHUSKA ENERGY COMPANY

LOCATION LAYOUT

BIG BEND 8E-1

1815' FNL. 790' FWL

SECTION 8, TOWNSHIP 40S, RANGE 26E

SAN JUAN COUNTY, UTAH

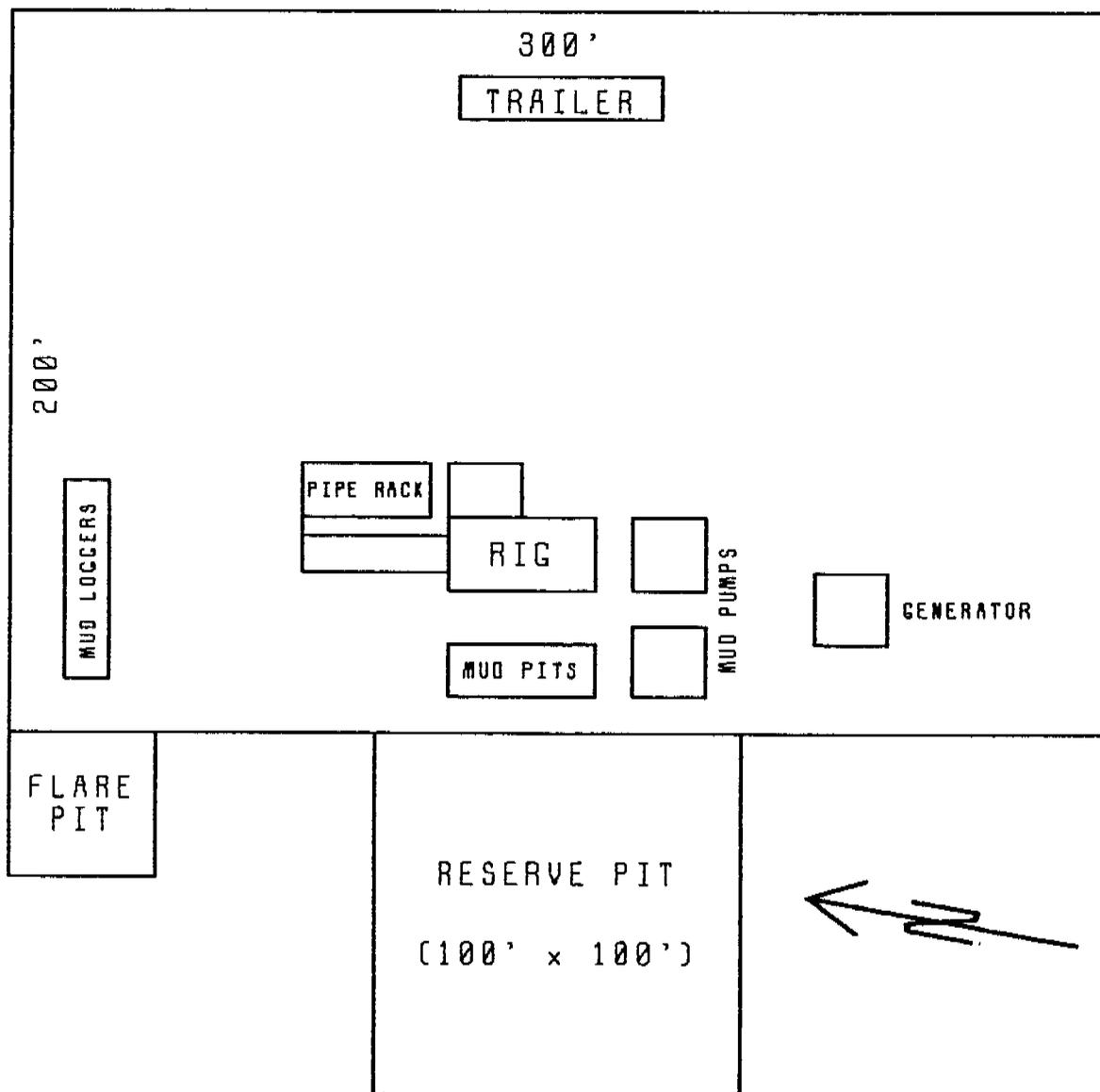


EXHIBIT "A"
BLOWOUT PREVENTER

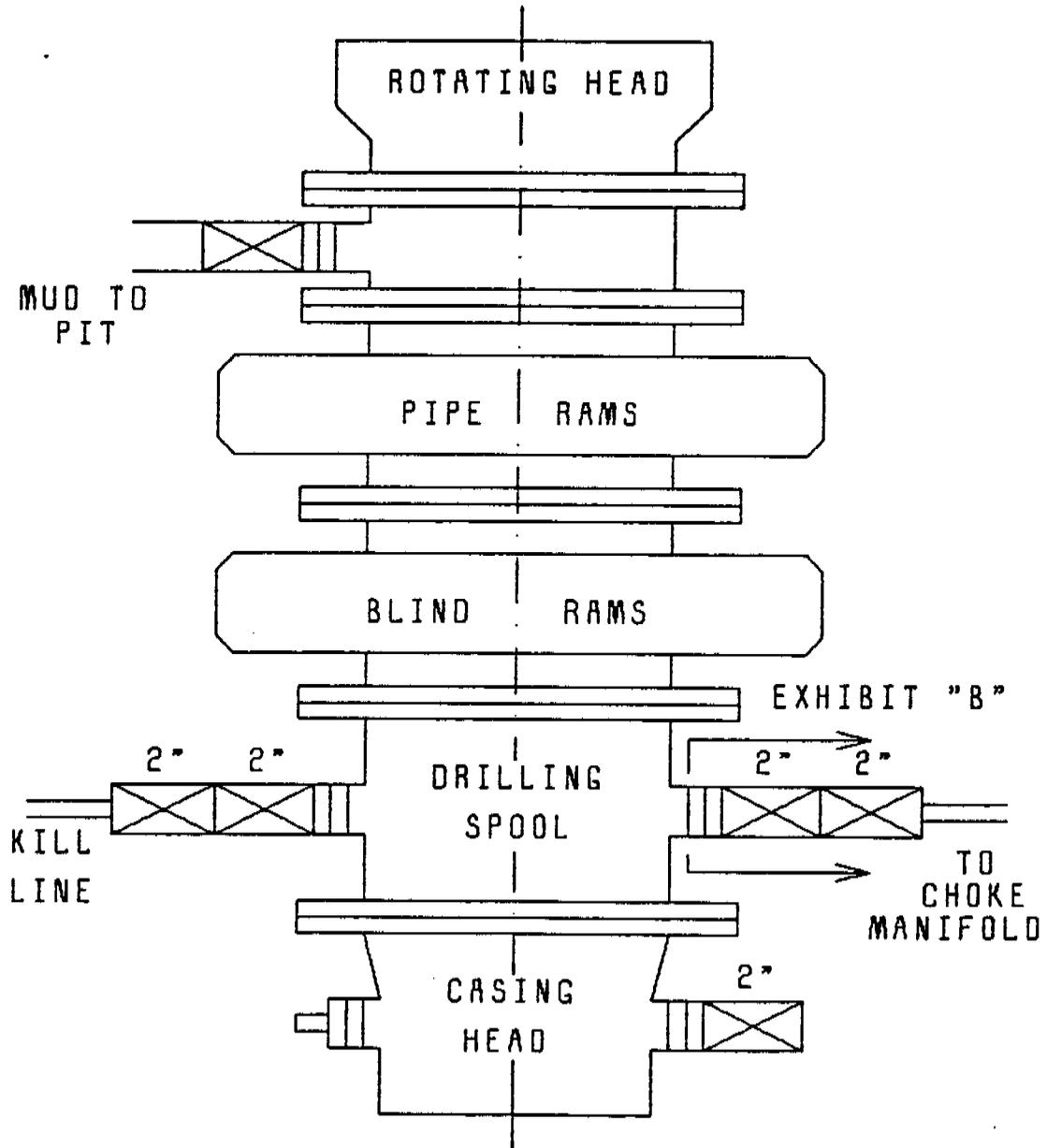
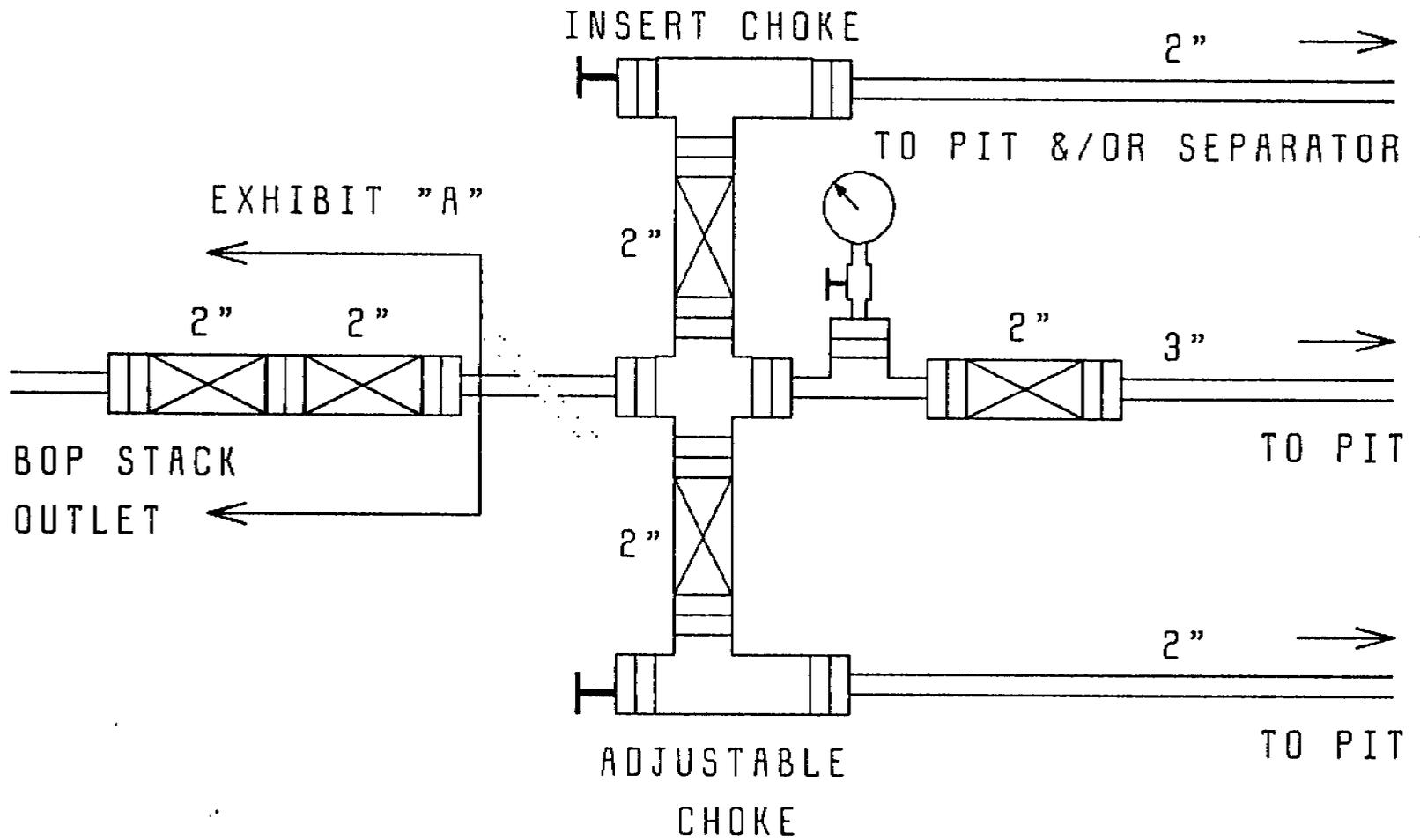
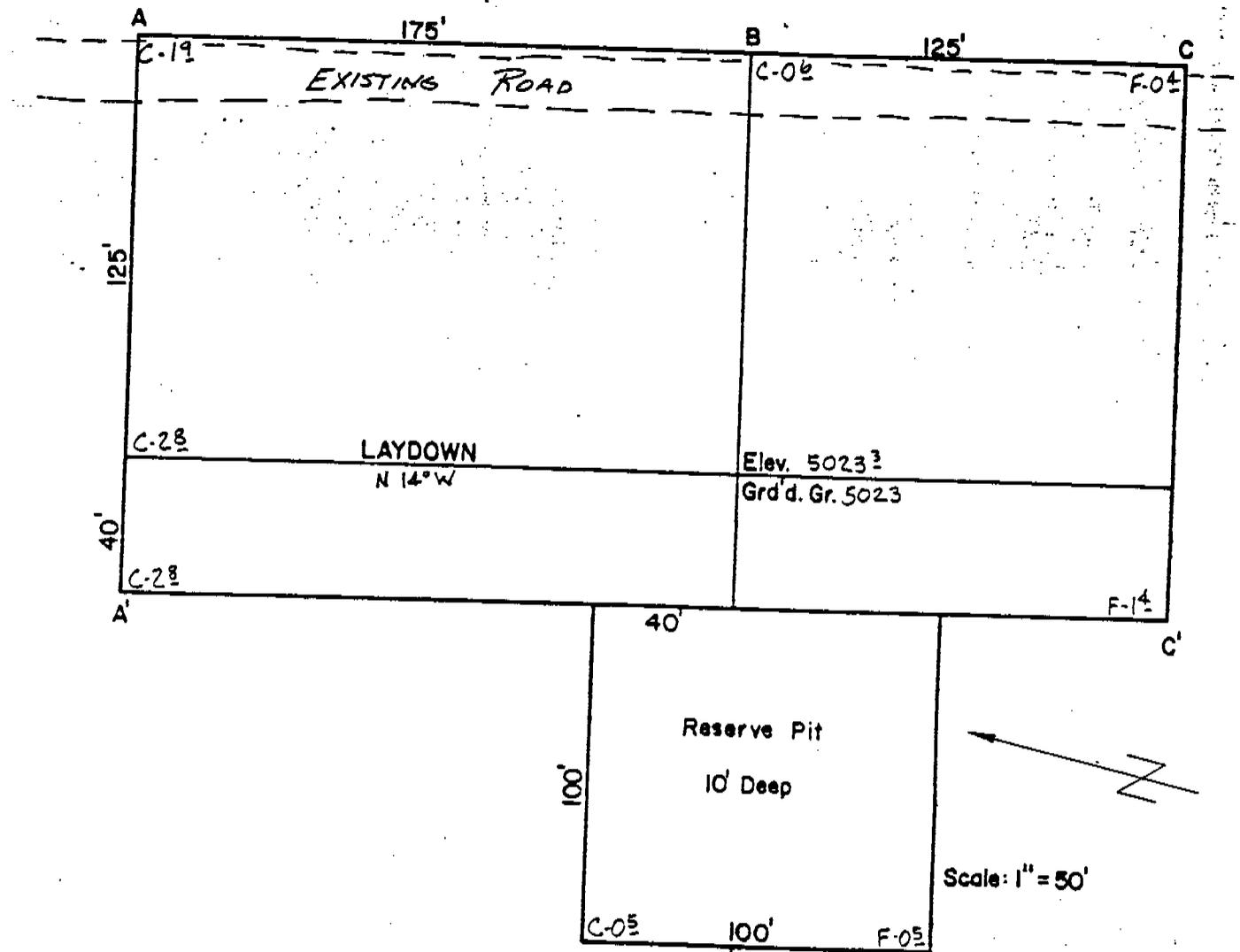


EXHIBIT "B"
CHOKE MANIFOLD



CHUSKA ENERGY COMPANY
~~ISMAV EXTENSION 8-3 #1~~ Big Bend 8E-1
 1815' FNL & 790' FWL
 Sec. 8, T40S, R26E
 San Juan Co., Utah

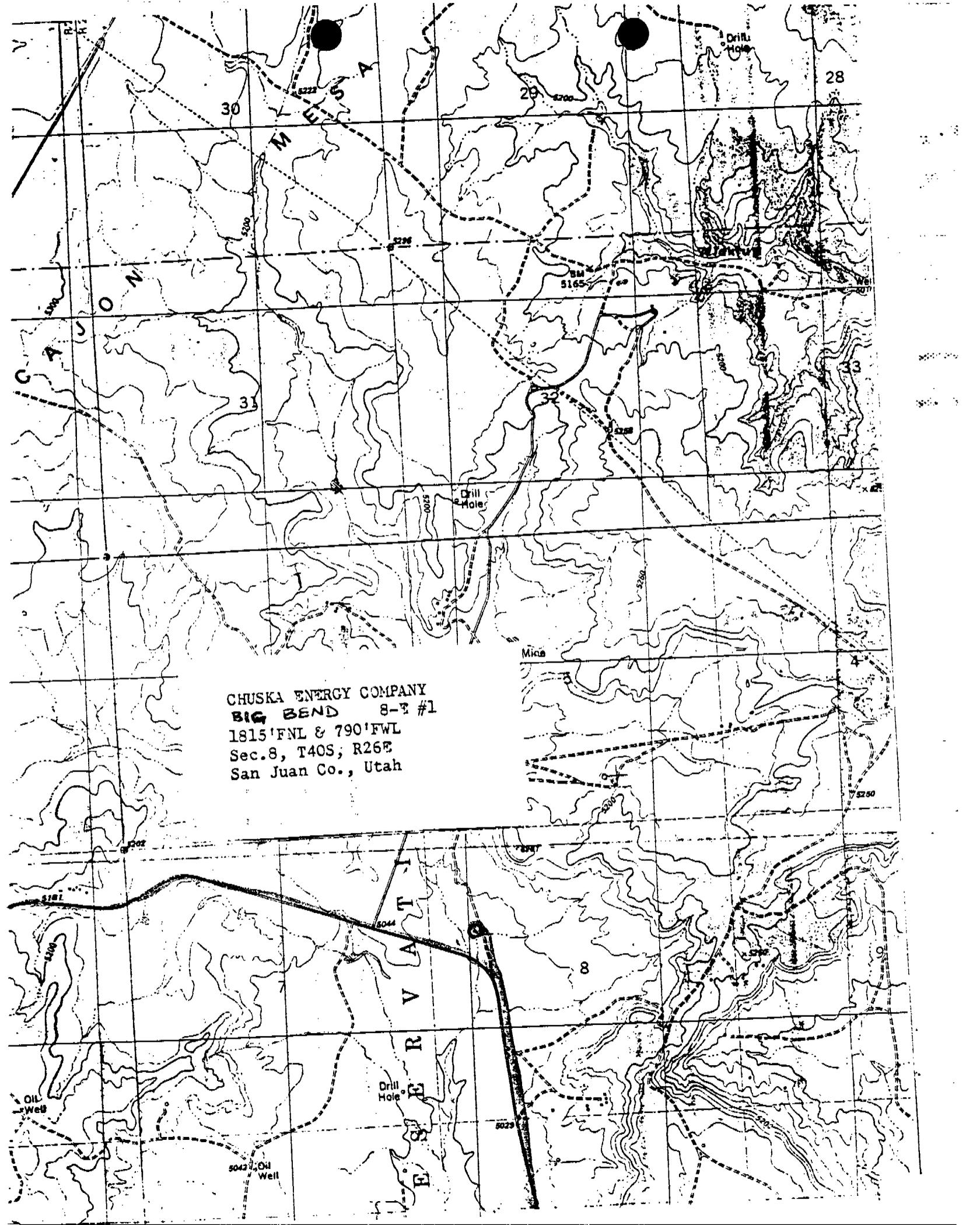


Vert.: 1" = 30' Horiz.: 1" = 100'

| A-A' | B' | | | | | | C/L |
|------|-------|--|--|--|--|--|-------|
| 5020 | ----- | | | | | | ----- |
| 5010 | ----- | | | | | | ----- |
| | ----- | | | | | | ----- |

| B-B' | B' | | | | | | C/L |
|------|-------|--|--|--|--|--|-------|
| 5020 | ----- | | | | | | ----- |
| 5010 | ----- | | | | | | ----- |
| | ----- | | | | | | ----- |

| C-C' | B' | | | | | | C/L |
|------|-------|--|--|--|--|--|-------|
| 5020 | ----- | | | | | | ----- |
| 5010 | ----- | | | | | | ----- |
| | ----- | | | | | | ----- |



CHUSKA ENERGY COMPANY
BIG BEND 8-T #1
1815'FNL & 790'FWL
Sec.8, T40S; R26E
San Juan Co., Utah

5042 Oil Well

Drill Hole

Drill Hole

Drill Hole

Mica

30

29

28

31

33

8

9

5044

5029

5200

BM 5165

5222

5296

5288

5280

5022

5047

5182

5000

5280

5280

OIL Well

5042

5000

5200

5000

R26E

T40S

MUSKOGEE

CAYON

SEVERTI

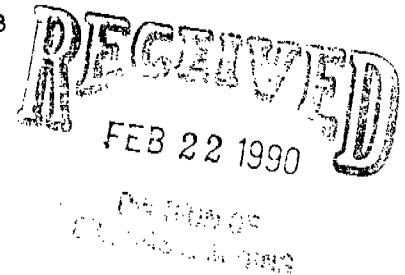


STATE OF UTAH
NATURAL RESOURCES
Water Rights

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

February 21, 1990



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

Re: Lightning Rock 2J-1 (NW4SE4 Sec. 2, T42S, R25E, SLB&M)
Lightning Rock 2L-3 (NW4SW4 Sec. 2, T42S, R25E, SLB&M)
Big Bend 8E-1 (SW4NW4 Sec. 8, T40S, R26E, SLB&M)

Dear Mr. Barnes:

This letter will serve as authorization from this Division to proceed with the drilling at the three noted locations. It is understood that the drilling and maintenance water will be hauled to the sites by Hay Hot Oil Inc. under their existing water right 09-1419 (A60809). It is also noted on your request that 0.90 acre feet of water will be required at each location.

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

Sincerely,

Mark P. Page
Area Engineer

cc: Lisha Romero, Div. of Oil, Gas & Mining
Jerry Howell, Hay Hot Oil Inc.

MPP/mjk

OPERATOR Chuska Energy Company (N9290) DATE 2-22-90

WELL NAME Big Bend #8E-1

SEC SWNW 8 T 40S R 26E COUNTY Sanguan

43-037-31506
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' (sections 7 & 8)

Water Permit 09-1419 / AL 0809 (Hay Hot Oil, Inc)

APPROVAL LETTER:

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

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

STIPULATIONS:

cc: BIA

CONFIDENTIAL
PERIOD
EXPIRED
ON 7-26-91



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter

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

February 26, 1990

Chuska Energy Company
315 North Behrend
Farmington, New Mexico 87401

Gentlemen:

Re: Big Bend #8E-1 - SW NW Sec. 8, T. 40S, R. 26E - San Juan County, Utah
1815' FNL, 790' FWL

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-2, Oil and Gas Conservation General Rules.

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

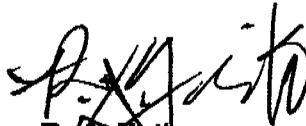
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During 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
Big Bend #8E-1
February 26, 1990

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 43-037-31506.

Sincerely,



R. O. Firth
Associate Director, Oil & Gas

lcr
Enclosures
cc: Bureau of Land Management
Bureau of Indian Affairs
D. R. Nielson
J. L. Thompson
WE14/7-8

DIVISION OF OIL, GAS AND MINING

API NO. 43-037-31506

SPUDDING INFORMATION

NAME OF COMPANY: CHUSKA ENERGY

WELL NAME: BIG BEND 8E #1

SECTION SNNW 8 TOWNSHIP 40S RANGE 26E COUNTY SAN JUAN

DRILLING CONTRACTOR AZTEC DRILLING

RIG # 222

SPUDDED: DATE 4/9/90

TIME 2:00 p.m.

HOW ROTARY

DRILLING WILL COMMENCE _____

REPORTED BY GLENN GOODWIN

TELEPHONE # 587-2561

DATE 4/12/90 SIGNED TAS

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
DRILLING AND WELL PLUGGING INSPECTION FORM

17
COMPANY: Chuska Energy Co COMPANY MAN: Kenny Hays
WELL NAME: Big Bend 8-E-1 API #: 43-037-31506
QTR/QTR: SW/NW SECTION: 8 TWP: 40S RANGE: 24E
CONTRACTOR: Aztec? PUSHER/DRLR: _____
INSPECTOR: Glenn DATE: 4/3/90 OPERATIONS: Loc Built
SPUD DATE: soon? TOTAL DEPTH: 0

DRILLING AND COMPLETIONS

APD WELL SIGN BOPE RESERVE PIT
 FLARE PIT BURN PIT _____ H2S BLOOIE LINE
 SANITATION HOUSEKEEPING _____ VENTED/FLARED

PLUGGING AND ABANDONMENT

PRODUCING FM(S): _____

PLUGS:

TYPE/SIZE

INTERVAL

| PLUGS: | TYPE/SIZE | INTERVAL |
|--------|-----------|----------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

PERFORATIONS: _____

CASING SIZE: _____ PULLED: YES / NO CUT AT: _____

PLUGS TESTED: _____ HOW: _____ WOC: _____

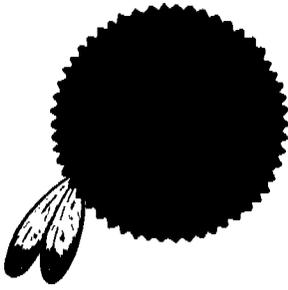
MARKER: SURFACE: _____ PLATE: _____

RECLAMATION:

CONTOURED: _____ RIPPED: _____ REHAB'D: _____

LEGEND: (Y)-YES (P)-PROBLEM (U)-UNKNOWN (BLANK)-NOT APPLICABLE

REMARKS: Loc is Built Aztec Drlg. will move in
The next few days when protest is over



CHUSKA ENERGY COMPANY

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

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

APR 20 1990

DIVISION OF
OIL, GAS & MINING

April 12, 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

RE: Sundry Notice, Big Bend 8E 1, Spud/Surface Casing

Gentlemen:

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

Very truly yours,

DONALD S. BARNES
Operations Manager

DSB:bnp
Enclosures
File:DSB\BB8E1SPU

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.)

4. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

UNIT AGREEMENT NAME

5. FARM OR LEASE NAME

Big Bend 8 E

6. WELL NO.

7

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., N. OR S. AND SURVEY OR AREA
Sec. 8, T40S, R26E

12. COUNTY

San Juan

13. STATE

Utah

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

1815' FNL and 790' FWL

At proposed prod. cone

14. API NO.

43-02P-01500

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

5023 GR

5037 KB

16.

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other) Spud/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 cones pertinent to this work.)

Well spud 1430 hours on April 10, 1990. 12 1/4" hole was drilled to 505'. 8 5/8" 24# K-55 casing set at 505' and cemented to surface. Notified J. Keller and BLM office of spud 1600 hours on April 9, 1990. BLM representatives witnessed cementing procedures. Aztec Well Service Rig #222 is drilling contractor.

* Must be accompanied by a cement verification report.

1-TAS
3-
3-

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

SIGNED

DEONALD S. BARNES

TITLE

Operations Manager

DATE

4-12-90

(This space for Federal or State office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - FORM 6

OPERATOR Chuska Energy Company

OPERATOR ACCT. NO. N9290

ADDRESS P. O. Box 780

Farmington, New Mexico 87499

| ACTION CODE | CURRENT ENTITY NO. | NEW ENTITY NO. | API NUMBER | WELL NAME | WELL LOCATION | | | | | SPUD DATE | EFFECTIVE DATE |
|-------------|--------------------|----------------|--------------|-----------------|---------------|----|-----|-----|----------|----------------------------|----------------|
| | | | | | QQ | SC | TP | RG | COUNTY | | |
| A | 99999 | 11077 | 43-037-31506 | Big Bend #8 E-1 | | 8 | 40S | 26E | San Juan | 4-9-90 Ret Hole 4-10-90 | |

WELL 1 COMMENTS:

Spudded well 1430 hours. Drilling 12 1/4" hole. Using Aztec Well Service Rig. #222

WELL 2 COMMENTS:

Indian Lease
Field - Undesignated
Unit - N/A

Proposed zone - Desert Creek
(New entity 11077 added 4-23-90) JCF

WELL 3 COMMENTS:

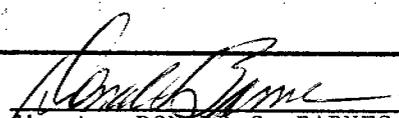
WELL 4 COMMENTS:

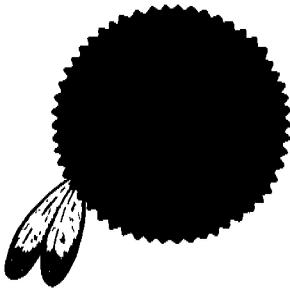
WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.


Signature DONALD S. BARNES
Operations Manager 4-16-90
Title Date
Phone No. (505) 326-5525



CHUSKA ENERGY COMPANY

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

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

April 16, 1990

RECEIVED
APR 20 1990

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

DIVISION OF
OIL, GAS & MINING

RE: Entity Action Form, Big Bend #8-E-1 and Cajone Mesa #8-D-1

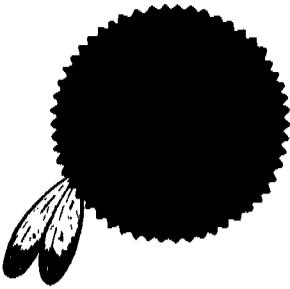
Gentlemen:

Please find enclosed original and six copies of the above-referenced Entity Action Form for your files.

Sincerely,


DONALD S. BARNES
Operations Manager

DSB:bnp
Enclosures
File:DSB\ENTACTFM.BBC



CHUSKA ENERGY COMPANY

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

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

RECEIVED
APR 30 1990

April 25, 1990

DIVISION OF
OIL, GAS & MINING

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

RE: Sundry Notice: Big Bend 8 E 1
Plug and abandon

Gentlemen:

Enclosed you will find for your examination and approval the original and two copies of the above-referenced Sundry Notice.

Please advise if you require any additional information concerning this Sundry. We will appreciate your prompt consideration.

Sincerely,

DONALD S. BARNES
Operations Manager

DSB:bnp
Enclosures
File:DSB\BBPLAB.8E1

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.)

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

2. IF INDIAN ALLOTTEE OR TRIBE NAME Navajo Tribal

3. UNIT AGREEMENT NAME _____

4. FARM OR LEASE NAME Big Bend 8 E

5. WELL NO. 1

6. FIELD AND POOL, OR WILDCAT Wildcat

7. SEC. T. R. AND OR BLK. AND SURVEY OR AREA Sec. 8, T40S, R26E

8. COUNTY San Juan STATE Utah

9. NAME OF OPERATOR Chuska Energy Company

10. ADDRESS OF OPERATOR P. O. Box 780, Farmington, New Mexico 87499

11. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface 1815' FNL, 790' FWL
At proposed prod. zone _____

12. API NO. 43-037-31506 13. ELEVATIONS (Show whether DF, RT, GR, etc.) 6089'

APR 30 1990
DIVISION OF OIL GAS & MINING

14. 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"/> | FULL OR ALTER CASING <input type="checkbox"/> | WATER SHUT-OFF <input type="checkbox"/> | REPAIRING WELL <input type="checkbox"/> |
| FRACTURE TREAT <input type="checkbox"/> | MULTIPLE COMPLETION <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) _____ | | DATE OF COMPLETION _____ | |

APPROX. DATE WORK WILL START _____

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.

To plug and abandon well as per verbal with Steve Mason to Donald S. Barnes. 1100 on 04-25-90. Plugs to be as follows:

| | | | | | |
|---------|--------------|-----------|------|------|--------------|
| Plug #1 | Desert Creek | 5832-5732 | 100' | Plug | 40 cu. ft. |
| Plug #2 | Ismay | 5730-5512 | 218' | Plug | 90 cu. ft. |
| Plug #3 | Hermosa | 4654-4554 | 100' | Plug | 55 cu. ft. ✓ |
| Plug #4 | DeChelly | 2660-2560 | 100' | Plug | 95 cu. ft. |
| Plug #5 | Chinle | 1666-1566 | 100' | Plug | 65 cu. ft. |
| Plug #6 | Shoe | 555-450 | 105' | Plug | 60 cu. ft. |
| Plug #7 | Surface | 60-0 | 60' | Plug | 52 cu. ft. |

Cut off well head 4' below ground level.

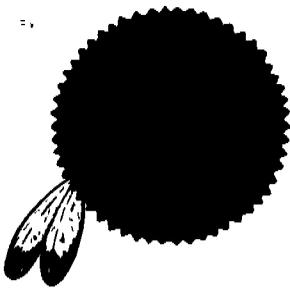
F-TTS ✓
2-
3- ✓

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

SIGNED Donald S. Barnes TITLE Operations Manager DATE 4-25-90
DONALD S. BARNES

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY: _____



CHUSKA ENERGY COMPANY

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

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

RECEIVED
APR 30 1990

April 27, 1990

DIVISION OF
OIL, GAS & MINING

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

RE: Sundry Notice: Big Bend 8 E 1
Subsequent Report of Abandonment

Gentlemen:

Enclosed you will find for your examination and approval the original and two copies of the above-referenced Sundry Notice.

Please advise if you require any additional information concerning this Sundry. We will appreciate your prompt consideration.

Sincerely,

DONALD S. BARNES
Operations Manager

DSB:bnp
Enclosures
File:DSB\SUBRPTBB.8E1

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 into a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

4. INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

5. PERMIT AGREEMENT NAME

APR 30 1990

6. OIL WELL GAS WELL OTHER

7. NAME OF OPERATOR

Chuska Energy Company

DIVISION OF
OIL, GAS & MINING

8. FARM OR LEASE NAME

Big Bend 8 E

9. ADDRESS OF OPERATOR

P. O. Box 780, Farmington, New Mexico 87499

9. WELL NO.

1

10. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also issue 17 below.)

At surface

1815' FNL, 790' FWL

At proposed prod. zone

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC. T. R. NE. OR SW. AND SURVEY OR AREA

Sec. 8, T40S, R26E

14. API NO.

43-037-31506

15. ELEVATIONS (Show whether OF, AT, GR, etc.)

6089'

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)

FULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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.

Well plugged using Class E Cement, 10.4#/gallon mud used to displace plugs. Plugs were set as follows:

- Plug #1 5832-5512, 320', 130 cu. ft. (113 sx.) to cover the Desert Creek (5782') Lower Ismay (5680') and Upper Ismay (5562')
- Plug #2 Hermosa (4604'); 4654 to 4554, 100', 55 cu. ft. (48 sx.)
- Plug #3 DeChelly (2610'); 2660 to 2560, 100', 100 cu. ft. (87 sx.)
- Plug #4 Chinle (1616'); 1660-1560, 100', 65 cu. ft. (57 sx.)
- Plug #5 Shoe (505'); 555 to 450', 105', 60 cu. ft. (52 sx.)
- Plug #6 Surface; 60' to 0', 60', 23 cu. ft. (20 sx.)

Cut off head 4' below ground level.

Plugged as per verbal approval with Steve Mason, BLM

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

SIGNED

DONALD S. BARNES

TITLE

Operations Manager

DATE

4-28-90

(This space for Federal or State office use)

APPROVED BY _____

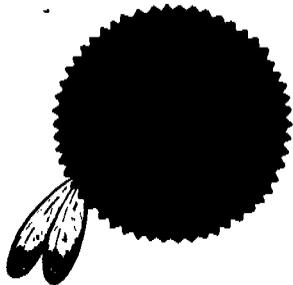
TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

1-17-90

See Instructions On Reverse Side



CHUSKA ENERGY COMPANY

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

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

May 2, 1990

RECEIVED
MAY 10 1990

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

DIVISION OF
OIL, GAS & MINING

RE: Well Completion - Big Bend 8 E 1

Gentlemen:

Enclosed you will find the original and two copies of the above-referenced Well Completion Report.

If anything additional is needed, please advise.

Sincerely,


DONALD S. BARNES
Operations Manager

DSB:bnp
Enclosures
File:DSB\WELLCOMB.8E1

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

| | | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------|-------------------------|----------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| WELL COMPLETION OR RECOMPLETION REPORT AND LOG | | | | | | 3. LEASE DESIGNATION AND SERIAL NO. NOG 8702-1116 | |
| 1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> | | | | | | 8. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo Tribal | |
| 1b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> | | | | | | 7. UNIT AGREEMENT NAME | |
| 2. NAME OF OPERATOR Chuska Energy Company | | | | | | 5. FARM OR LEASE NAME Big Bend 8 E | |
| 3. ADDRESS OF OPERATOR P. O. Box 780, Farmington, New Mexico 87499 | | | | | | 9. WELL NO. L | |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State Requirements) At surface 1815' ENL 790' FWL At top prod. interval reported below At total depth | | | | | | 10. FIELD AND POOL OR WILDCAT Wildcat | |
| 14. API NO. DATE ISSUED API 43-037-31506 | | | | | | 12. COUNTY 13. STATE San Juan Utah | |
| 15. DATE SPUNDED 04-09-90 | | 16. DATE T.D. REACHED 04-26-90 | | 17. DATE COMPL. (Ready to prod.) N/A (Plug & Abd.) | | 18. ELEVATIONS (OF, BEH, BT, CE, ETC.) 5023 GR | |
| 19. ELEV. CASING/HEAD N/A | | 20. TOTAL DEPTH, MD & TVD 5925' | | 21. PLUS BACK T.D., MD & TVD N/A | | 22. IF MULTIPLE COMPL. HOW MANY N/A | |
| 23. INTERVALS DRILLED BY Rotary | | | | | | 24. ROTARY TOOLS CABLE TOOLS | |
| 25. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) | | | | | | 26. WAS DIRECTIONAL SURVEY MADE No | |
| 27. TYPE ELECTRIC AND OTHER LOGS RUN Micro Log -LTD-CNL; DLL-MSFL; Sonic, MSCT (sidewall cores) V.S.P. Cyberlook 12-19-90 | | | | | | 28. WAS WELL CORED YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> (Submit analysis) DRILL STEM TEST YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> (See reverse side) See Logging Prog. | |
| 29. 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 | 505 | 12 1/4 | 350 sx. Class G w/2% CaCl | N/A | | |
| 29. LINER RECORD | | | | 30. TUBING RECORD | | | |
| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT | SCREEN (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
| 31. PERFORATION RECORD (Interval, size and number) | | | | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. | | | |
| 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 | CHOCK SIZE | PROD'N. FOR TEST PERIOD | OIL—BSL. | GAS—MCF. | WATER—BSL. | GAS-OIL RATIO |
| FLOW. TUBING PRESS. | CASING PRESSURE | CALCULATED 24-HOUR RATE | OIL—BSL. | GAS—MCF. | WATER—BSL. | OIL GRAVITY-API (CORR.) L-TAS | |
| 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) | | | | | | TEST WITNESSED BY 2 3 | |
| 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 5-2-90 | |

RECEIVED
MAY 10 1990

DIVISION OF
OIL, GAS & MINING

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);

38. GEOLOGIC MARKERS

| FORMATION | TOP | BOTTOM | DESCRIPTION, CONTENTS, ETC. | NAME | TOP | |
|----------------------------------------|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|
| | | | | | MEAS. DEPTH | TRUE VERT. DEPTH |
| DeChelly Upper Ismay Lower Ismay | 2610 5562 5680 | 2810 5680 5680 | Water DST failed. Formation tight DST IF 10 min; ISI 60 min; FF 64 min; FSI 130 min. Recovered 85' oil, 668' water IFP 74-133 PSI; ISI 2529 PSI; FFP 165-269 PSI; FSI 2528 PSI | DE Chelly Organ Rock Hermosa Ismay Lower Ismay Gothic Desert Creek Chimney Rock Akah | 2610 2810 4604 5562 5680 5746 5782 5878 5899 | 2610 2810 4604 5562 5680 5746 5782 5878 5899 |



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

12 December 1990
DIVISION OF OIL, GAS & MINING

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 ✓
- Anasazi #1 ✓
- Sahgzie #1 ✓
- Big Bend 8E-1 ✓ 405 26E 8 PA'd
- 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

1775 SHERMAN STREET - SUITE 1800 • DENVER, COLORADO 80203 • PHONE: (303) 863-7021
FAX #: (303) 863-7210

May 17, 1991

Ms. Vicki Kearney
Utah Oil & Gas Commission
355 West North Temple
Three Triad Center
Suite 350
Salt Lake City, Utah
84180-1203

Dear Ms. Kearney:

Please keep all Chuska Energy Company data confidential until further notice.

Thanks,

Herbert P. Mosca
Chuska Staff Geologist

RECEIVED

MAY 20 1991

DIVISION OF
OIL GAS & MINING