

# CHUSKA ENERGY COMPANY

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

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

16 November, 1990

RECEIVED

NOV 16 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

Ref: Application for Permit to Drill  
Buckhorn 11L-2 Well, San Juan County, Utah

Gentlemen

Attached for your examination and approval is the original and two copies of an Application for Permit to Drill the Buckhorn 11L Well No. 2 in San Juan County, Utah. This well will be drilled as part of an ongoing exploration and development program.

The location for this well falls outside the guidelines for the State of Utah spacing requirements. However, the topography of the area surrounding the desired location is such as to preclude the well being located in accordance with State requirements and yet remain in a position which will allow the well bore to penetrate geological structures which have been identified by seismic interpretation. We therefore apply for an exception to the General State Spacing requirements on topographic grounds. Chuska Energy controls the acreage surrounding the proposed site, as indicated on the attached land plat.

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

Sincerely,

*Larry G. Sessions*  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP51\BUCKHORN.11L\APDCOVER

encl.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

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

4. Location of Well (Report location clearly and in accordance with any state requirements)  
 At Surface 2100' FSL, 1250' FWL  
 At proposed prod. zone Same

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  
 Buckhorn 11L

9. Well No.  
 2

10. Field and Pool, or Wildcat  
 Wildcat *Aruth 305*

11. 00, Sec., T., R., N., or Blk. and Survey or Area  
 S11 T41S R23E

12. County or Parish  
 San Juan

13. State  
 Utah

14. Distance in miles and direction from nearest town or post office  
 3 1/2 miles WSW of Montezuma Creek, Utah

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)  
 1,250'

16. No. of acres in lease  
 49,997

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.  
 2,335'

19. Proposed depth  
 5,904' GR *AKAH*

20. Rotary or cable tools  
 Rotary

21. Elevations (Show whether DF, RT, GR, etc.)  
 4,529' GR

22. Approx. date work will start  
 4-19-91

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4"	8 5/8"	24 lb	500'	371 sx 'G' + 2% CaCl <sub>2</sub>
7 7/8"	5 1/2"	15.5 lb	5,904'	821 sx 'G', 65:35 Poz + 6% Gel

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NOV 16 1990

DIVISION OF  
OIL, GAS & MINING

— NWSW

Refer to attached 10-Point Drilling Plan etc.

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 *[Signature]* Title Petroleum Engineer Date 16 November, 1990  
 Christopher S. Hill

(This space for Federal or State office use)

API NO. 43-037-31577

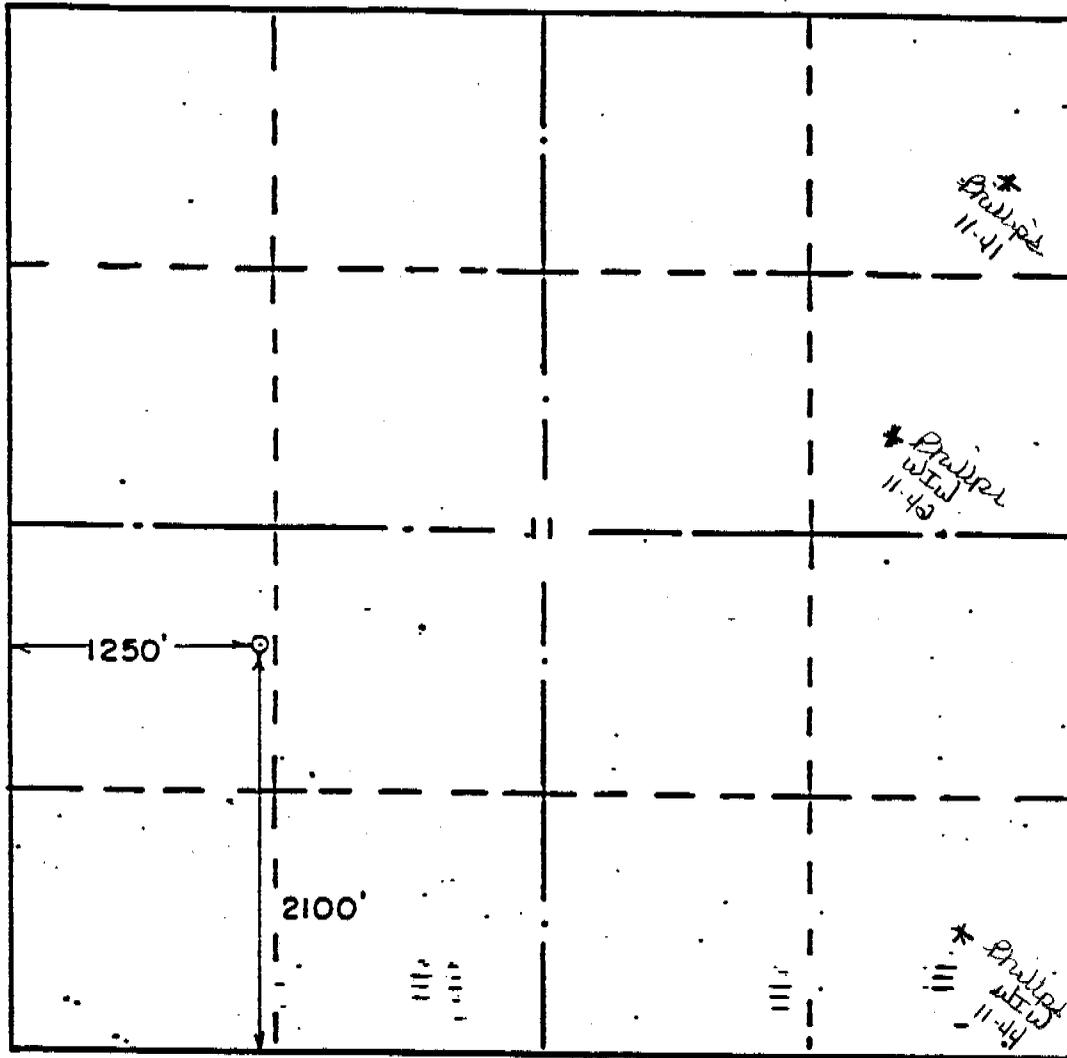
Approval Date APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

Approved by \_\_\_\_\_ Title \_\_\_\_\_  
 Conditions of approval, if any:

DATE 11/21/90  
 BY: *[Signature]*  
 WELL SPACING: R6153-3

\*See Instructions On Reverse Side

WELL LOCATION AND ACREAGE DEDICATION PLAT



WELL LOCATION DESCRIPTION:  
CHUSKA ENERGY COMPANY, Buckhorn 11 - L - 2  
2100'FSL & 1250'FWL  
Section 11, T.41 S., R.23 E., SLM  
San Juan, UT.  
4529' ground elevation  
State plane coordinates from seismic control:  
x = 2,621,909      y = 214,786

The above plat is true and correct to my knowledge and belief.

09 November 1990

*Gerald G. Huddleston*  
No. 15705  
Gerald G. Huddleston, LS  
HUDDLESTON  
REGISTERED LAND SURVEYOR  
STATE OF UTAH

CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Buckhorn 11L Well No. 2  
Section 11, Township 41S, Range 23E  
2100' FSL, 1250' FWL  
San Juan County, Utah

1. SURFACE FORMATION

Geological name of surface formation: Morrison

2. ELEVATION

Surface elevation is 4,529' GR.

3. ESTIMATED FORMATION TOPS

<u>Depth</u>	<u>Formation</u>	<u>Sub Sea Elevation</u>	
Surface	Morrison	+ 4,529'	
636'	Navajo	+ 3,893'	
1,526'	Chinle	+ 3,003'	
2,551'	DeChelly	+ 1,978'	
2,714'	Organ Rock	+ 1,815'	
3,497'	Cedar Mesa	+ 1,032'	
4,536'	Hermosa	- 7'	
5,478'	Upper Ismay	- 949'	
5,570'	Lower Ismay	- 1,041'	Secondary Objective
5,639'	Desert Creek	- 1,110'	Primary Objective
5,829'	Akah	- 1,300'	
5,904'	Total Depth	- 1,375'	

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 lb	K-55	STC
Production:	5,904'	5 1/2"	15.5 lb	K-55	STC

Surface Cementing:

371 sx (427 ft<sup>3</sup>) Class 'G' cement with 2% CaCl<sub>2</sub> and 1/4 lb/sk Celloflake. Weight = 15.8 ppg, yield = 1.15 ft<sup>3</sup>/sk. Slurry volume calculated at 100% excess over annular volume.

## Production Cementing:

### First Stage

T.D. to 3,500' (stage collar @ + 3,500'). Lead with 180 sx Class 'G' cement, 65:35 Pozmix, with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft<sup>3</sup>/sk. Tail with 186 sx Class 'G' cement with 2% CaCl<sub>2</sub>. Weight = 15.8 ppg, yield = 1.15 ft<sup>3</sup>/sk. Total of 547 ft<sup>3</sup>. Bring Class 'G' slurry to 500' above top of Upper Ismay. Cement volumes calculated at 30% excess in open hole. WOC 4 hours between stages.

### Second Stage

3,500' to surface. Lead with 355 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft<sup>3</sup>/sk. Tail with 100 sx Class 'G' cement with 2% CaCl<sub>2</sub>. Weight = 15.8 ppg, yield = 1.15 ft<sup>3</sup>/sk. Total of 772 ft<sup>3</sup>. Cement volumes calculated at 30% excess in open hole.

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 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 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 4,000'

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

### 4,000' to T.D.

Low solids, non-dispersed polymer system. Weight 8.6 - 9.5 ppg. Gel/lime sweeps as hole conditions dictate for hole cleaning. Fluid loss to be maintained at 15 - 20 cc. Fluid loss to be further reduced to 15 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 T.D. to 4,500'.

Coring and/or 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 at least 500' above the Upper Ismay.

9. ABNORMAL PRESSURES/GAS

Abnormal pressures are not anticipated. Monitoring of gas and hydrocarbon shows will be by wellsite mud logging unit. H<sub>2</sub>S 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 16 days. Anticipated spud date is 4-19-91.

EXHIBIT "A"  
BLOWOUT PREVENTER

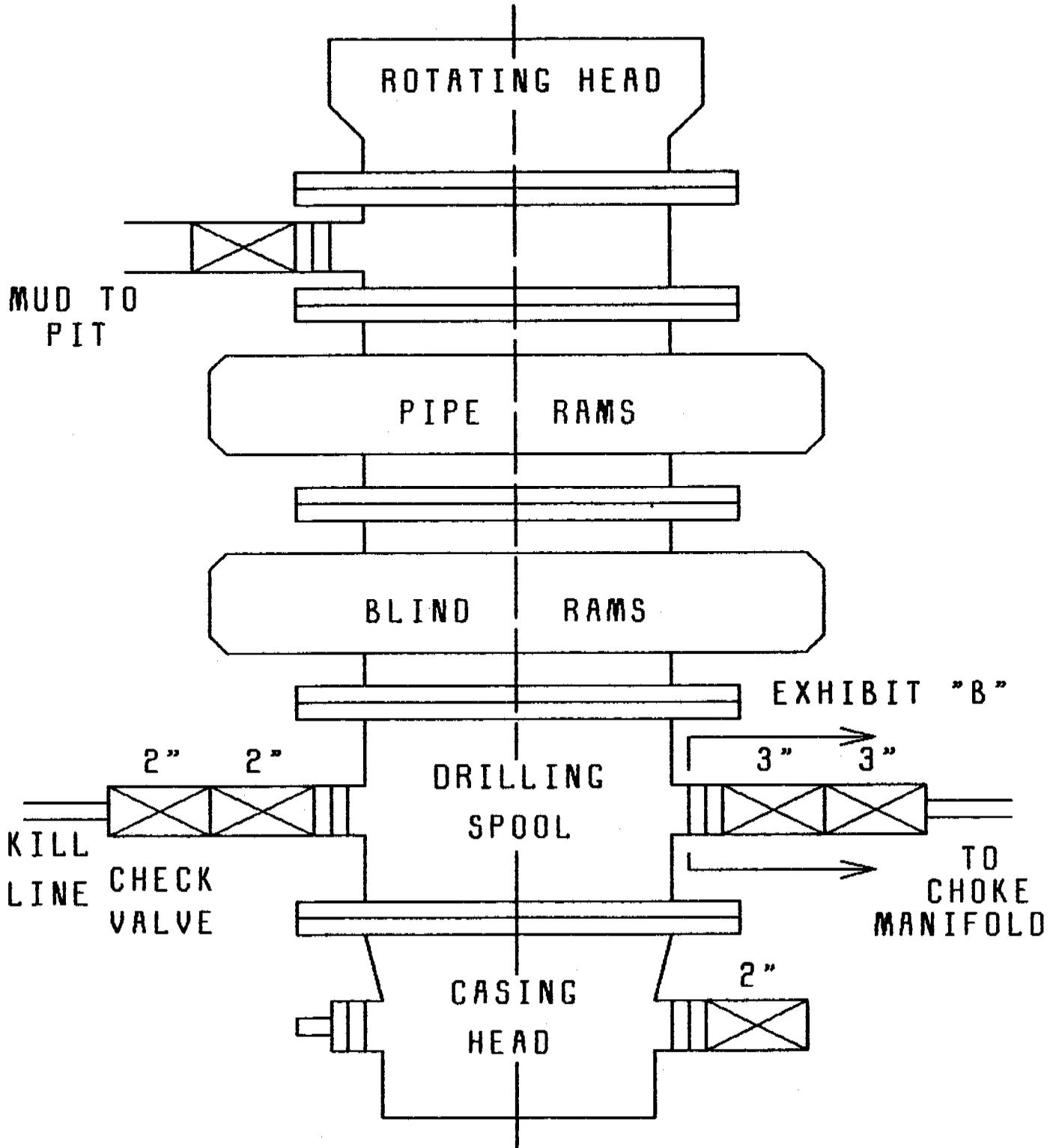
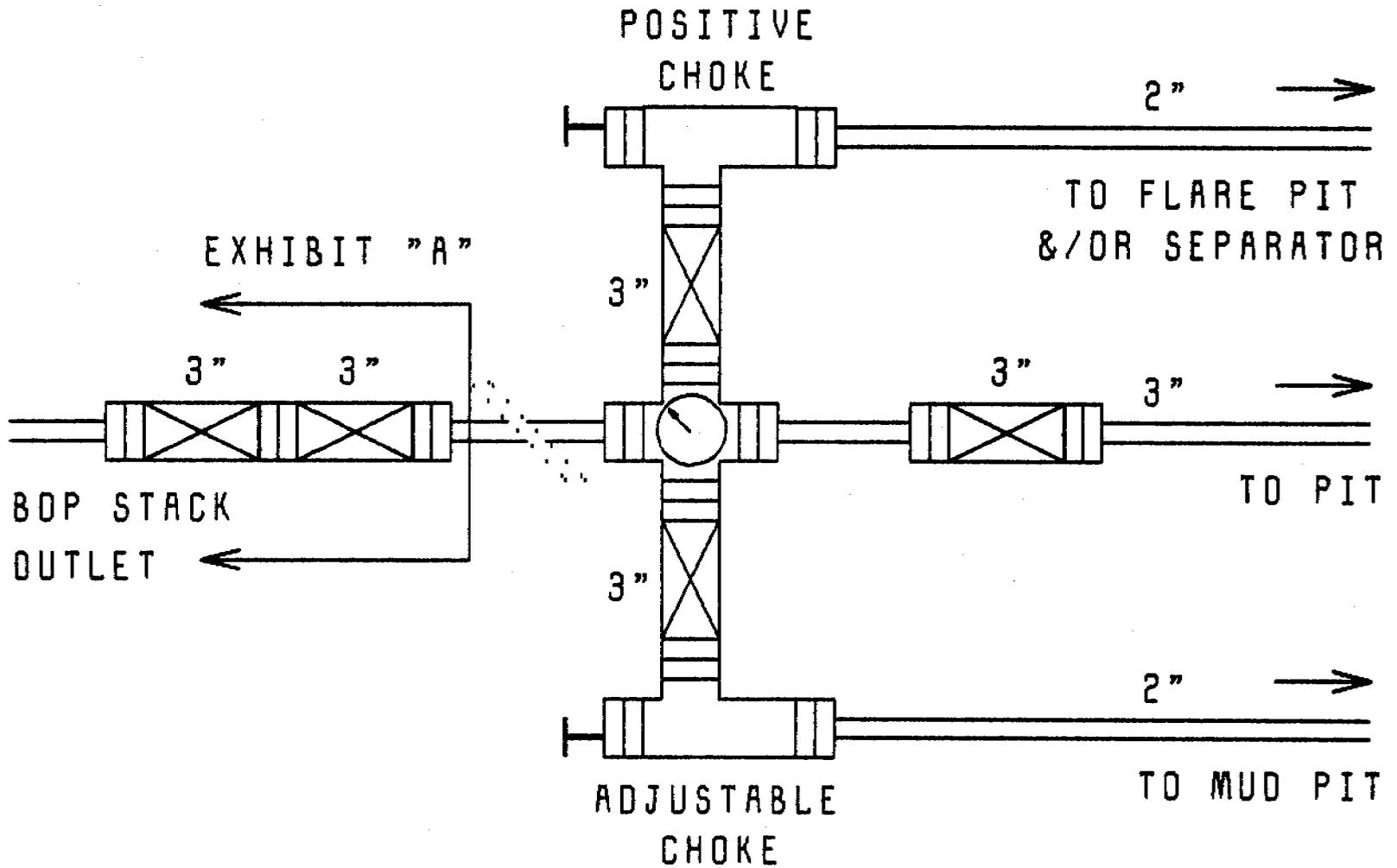


EXHIBIT "B"  
CHOKE MANIFOLD



## DETAILED DRILLING PROGRAM

DATE: 16 November, 1990

WELL NAME: Buckhorn 11L WELL NO.: 2

LOCATION: Section 11, Township 41S, Range 23E  
2100' FSL, 1250' FWL  
San Juan County, Utah

ELEVATION: 4,529' GR

TOTAL DEPTH: 5,904' GR

PROJECTED HORIZON: Primary target is Desert Creek at 5,639'.  
Secondary target is Lower Ismay at 5,570'.

### 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 lb/ft, K-55, STC casing to T.D. Cement with 371 sx (427 ft<sup>3</sup>) of Class 'G' cement with 2% CaCl<sub>2</sub> 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. Ensure that plug has been down at least 8 hours prior to commencing pressure testing procedures. Pressure test BOP to 2,000 psig for 30 minutes. Pressure test manifold and all related equipment to 2,000 psig. Pressure test casing to 1,500 psig for 30 min.
7. Drill out surface casing with 7 7/8" bit. Drill 7 7/8" hole to T.D. Deviation surveys are to be taken every 500' or on a bit trip, whichever occurs first. Maximum allowable deviation will be 5' at T.D., with the maximum allowable rate of change to be 1°/100'.
8. Run open hole logs and evaluate. Coring and/or drill stem testing will be as per wellsite geologist's recommendation.
9. If the well is determined to be productive, run 5 1/2", 15.5 lb/ft, K-55, STC casing to T.D. Set stage cementing collar at  $\pm$  3,500'. In addition to placing centralizers over potential

production zones, they will also be run to cover the aquifer sands of the Navajo and DeChelly formations, as per BLM stipulations. Cement production casing 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.

Buckhorn 11L Well No. 2  
Section 11, Township 41S, Range 23E  
2100' FSL, 1250' 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.

Buckhorn 11L Well No. 2  
Section 11, Township 41S, Range 23E  
2100' FSL, 1250' 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 from Montezuma Creek. Existing roads will be maintained, as necessary, while operations are in progress.

2. PLANNED ACCESS ROAD

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. Since the access to the location from the main road follows an existing seismic line, it is not anticipated that any new road will need to be constructed to the location pad.

3. LOCATION OF EXISTING WELLS & TANK BATTERIES

There are no other producing wells or facilities in the immediate 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 the San Juan River and will be hauled using Chuska Energy Company water trucks, under State of Utah Division of Water Rights Permit Number 09-1724, (T64796).

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 diagram and a schematic of the proposed rig layout.

10. PLANS FOR RESTORATION OF THE SURFACE

The location is laid out on a north east/south west trend and will require up to 17' of cut in the reserve pit (up to 6' of cut in the northern corner of the location pad) and up to 5' of fill in the southern corner of the location pad. 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  
3315 BLOOMFIELD HIGHWAY  
FARMINGTON, NEW MEXICO 87402  
LARRY G. SESSIONS

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.

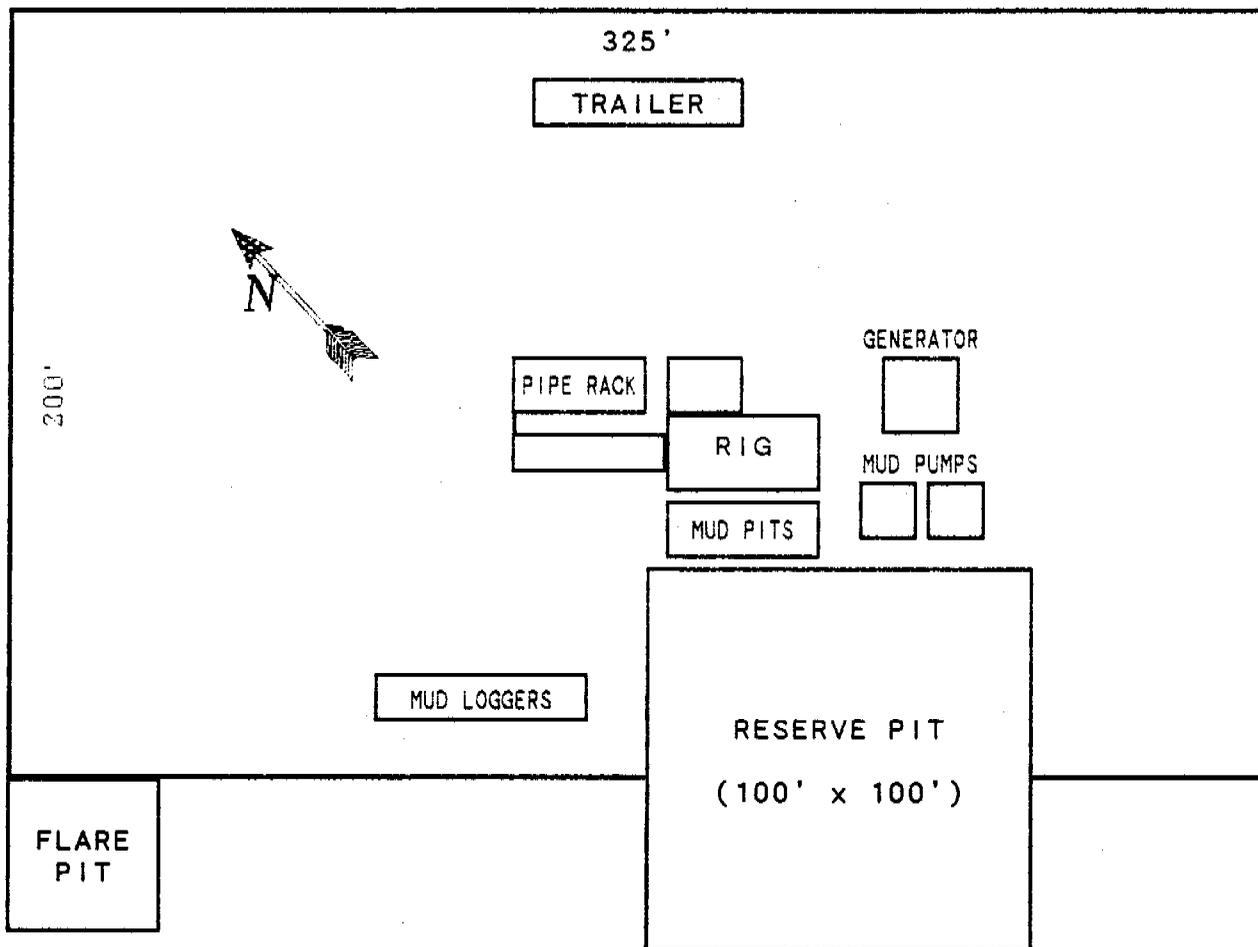
  
LARRY G. SESSIONS  
Operations Manager

# BUCKHORN 11L-2

2100' FSL, 1250' FWL

SECTION 11, TOWNSHIP 41S, RANGE 23E

SAN JUAN COUNTY, UTAH



6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

SAGUARO 2E-1

OCATILLA 11D-1

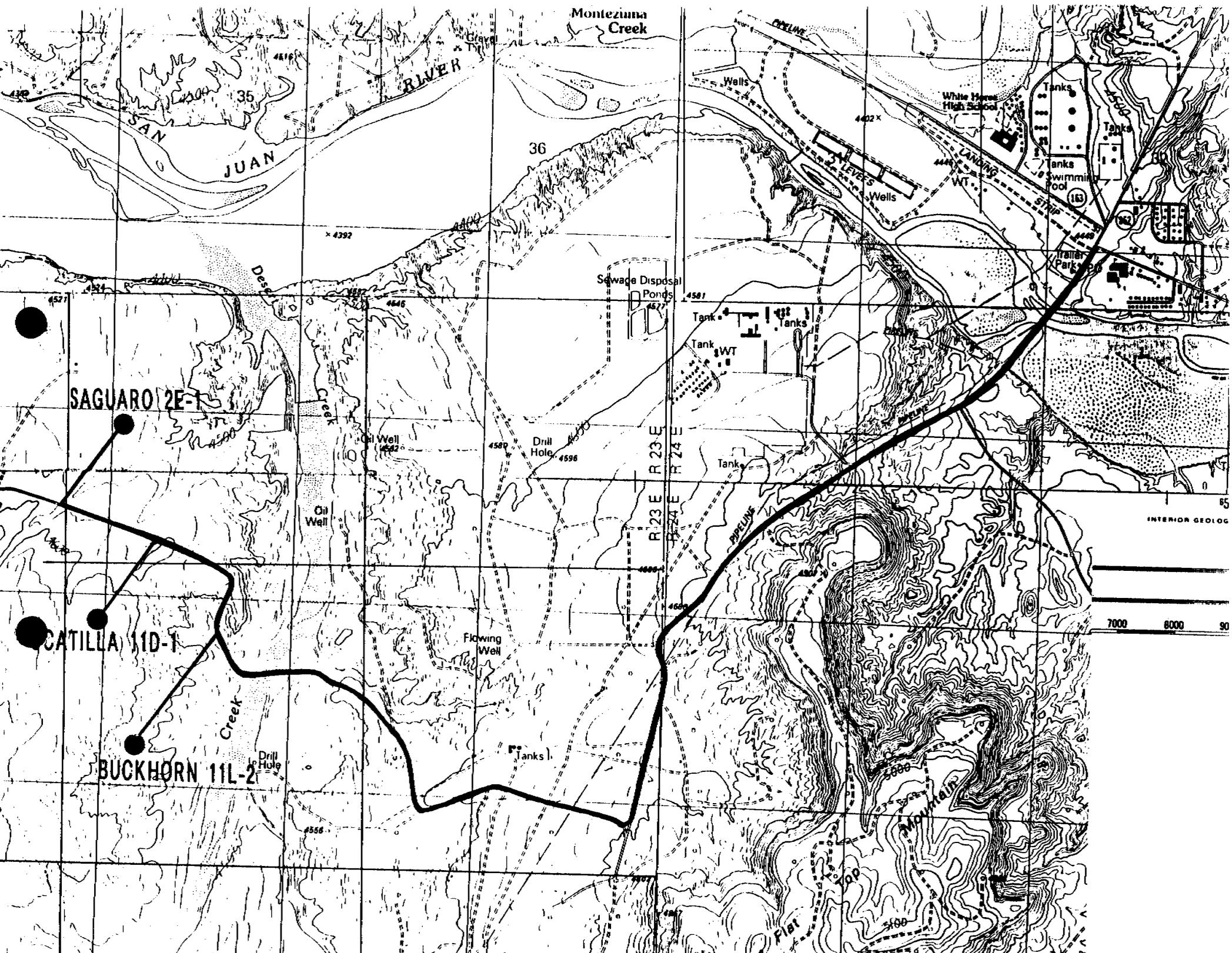
BUCKHORN 11L-2

**CHUSKA ENERGY COMPANY**

ACREAGE POSITION UNDER THE 1987 OPERATING AGREEMENT

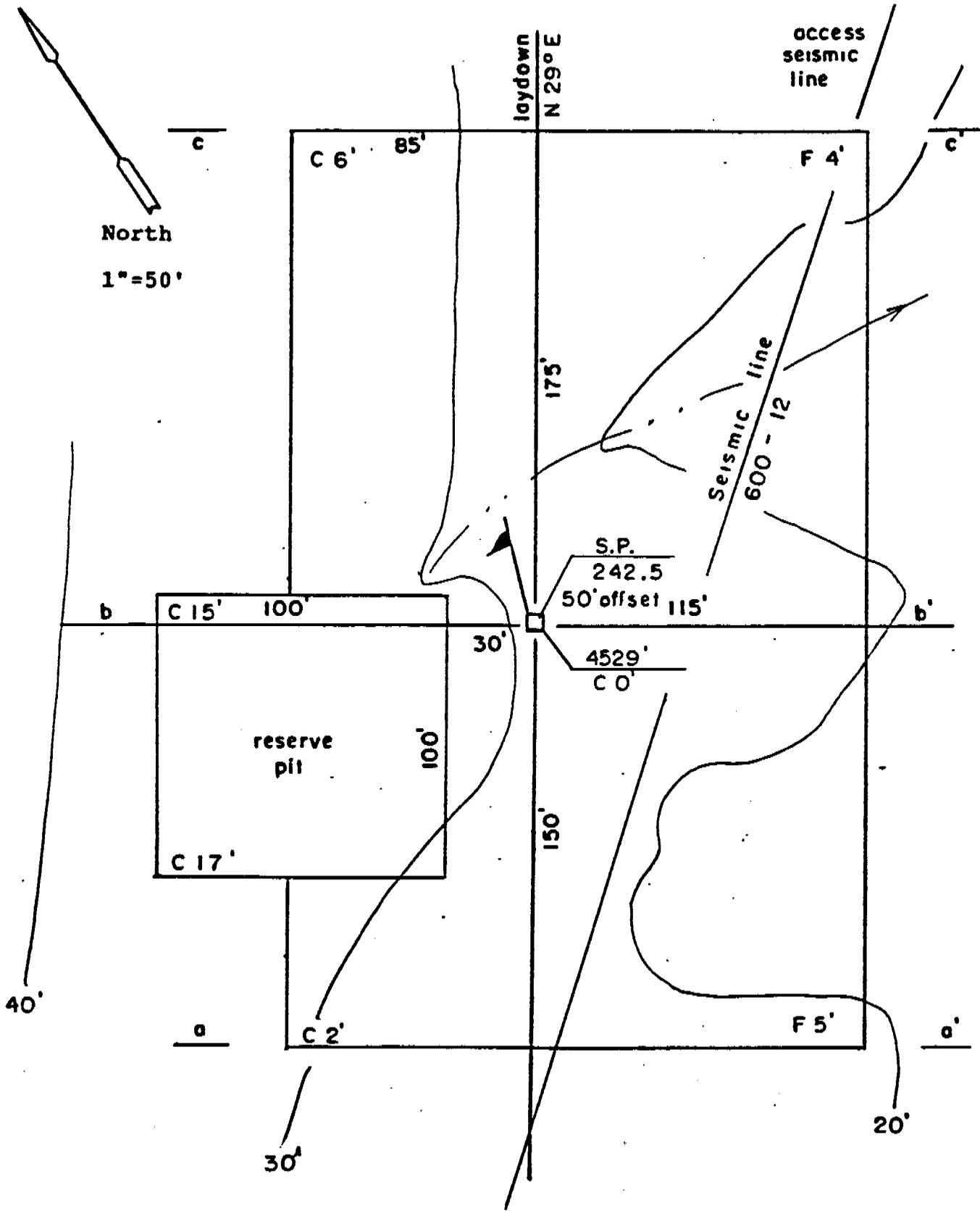


CHUSKA: T41S-R23E, SAN JUAN COUNTY, UTAH



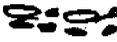
PLANVIEW SKETCH

Buckhorn 11 - L . 2



CROSS SECTION

Buckhorn 11-L-2

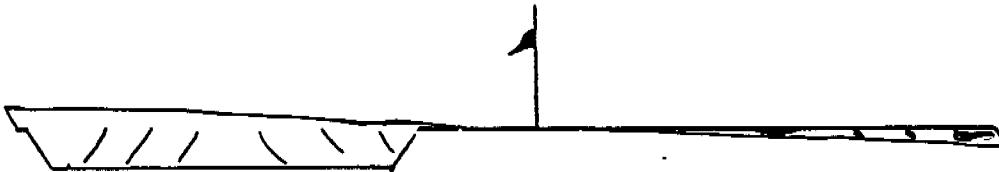
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Fill 

1"=50' vert. & horz.



c

c'



b

b'



a

a'

OPERATOR Chuska Energy Co N-9090 DATE 11-07-90  
WELL NAME Buckhorn 11 L #0  
SEC NW 1/4 T 11 R 41S COUNTY San Juan

43-037-31577  
API NUMBER

Indian (0)  
TYPE OF LEASE

CHECK OFF:

- |                                           |                                                |                                                         |
|-------------------------------------------|------------------------------------------------|---------------------------------------------------------|
| <input checked="" type="checkbox"/> PLAT. | <input checked="" type="checkbox"/> BOND       | <input checked="" type="checkbox"/> NEAREST WELL        |
| <input checked="" type="checkbox"/> LEASE | <input checked="" type="checkbox"/> FIELD SLOM | <input checked="" type="checkbox"/> POTASH OR OIL SHALE |

PROCESSING COMMENTS:

Water Permit 09-1704 (T04796)  
Exemption Location Requested

APPROVAL LETTER:

SPACING:  R615-2-3 N/A UNIT  R615-3-2 (2) Adm. Authority Adjacent to Unitized Area  
 N/A CAUSE NO. & DATE  R615-3-3

STIPULATIONS:

CC: BIA

**CONFIDENTIAL PERIOD EXPIRED ON 7-18-90**



# 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

November 29, 1990

Chuska Energy Company  
P. O. Box 780  
Farmington, New Mexico 87499

Gentlemen:

Re: Buckhorn 11L #2 - NW SW Sec. 11, T. 41S, R. 23E - San Juan County, Utah  
2100' FSL, 1250' 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 R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, 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.

Page 2  
Chuska Energy Company  
Buckhorn 11L #2  
November 29, 1990

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.
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.

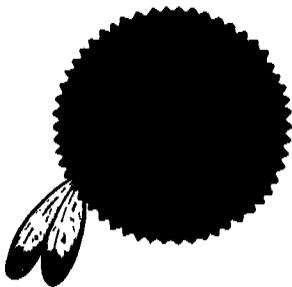
The API number assigned to this well is 43-037-31577.

Sincerely,



R. J. Eirth  
Associate Director, Oil & Gas

tas  
Enclosures  
cc: Bureau of Land Management  
Bureau of Indian Affairs  
J. L. Thompson  
we14/1-8



# CHUSKA ENERGY COMPANY

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

**RECEIVED**

**MAR 25 1991**

**DIVISION OF  
OIL GAS & MINING**

22 March, 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

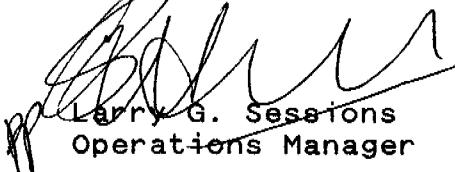
Ref: Sundry Notice: Buckhorn 11L-2 Well  
Change of Plans

Gentlemen

Attached for your examination and approval is the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,

  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP51\BUCKHORN.11L\CHCSGSUN.CVR

encl.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number NOG 8702-1116
7. Indian Allottee or Tribe Name Navajo Tribal
8. Unit or Communization Agreement
9. Well Name and Number Buckhorn 11L 2
10. API Well Number 43-037-31577 <i>dil</i>
11. Field and Pool, or Wildcat Wildcat

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT-- for such proposals

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)	
2. Name of Operator Chuska Energy Company	
3. Address of Operator 3315 Bloomfield Highway, Farmington, New Mexico 87401	4. Telephone Number 505-326-5525
5. Location of Well Footage : 2100' FSL, 1250' FWL QQ, Sec, T., R., M.: NW/4 SW/4 S11 T41S R23E County: San Juan State: UTAH	

**CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

<p><b>NOTICE OF INTENT</b> (Submit in Duplicate)</p> <table border="0"> <tr> <td><input type="checkbox"/> Abandonment</td> <td><input type="checkbox"/> New Construction</td> </tr> <tr> <td><input type="checkbox"/> Casing Repair</td> <td><input type="checkbox"/> Pull or Alter Casing</td> </tr> <tr> <td><input checked="" type="checkbox"/> Change of Plans</td> <td><input type="checkbox"/> Recompletion</td> </tr> <tr> <td><input type="checkbox"/> Conversion to Injection</td> <td><input type="checkbox"/> Shoot or Acidize</td> </tr> <tr> <td><input type="checkbox"/> Fracture Treat</td> <td><input type="checkbox"/> Vent or Flare</td> </tr> <tr> <td><input type="checkbox"/> Multiple Completion</td> <td><input type="checkbox"/> Water Shut-Off</td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td></td> </tr> </table> <p>Approximate Date Work Will Start <u>4-4-91</u></p>	<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input checked="" type="checkbox"/> Change of Plans	<input type="checkbox"/> Recompletion	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____		<p><b>SUBSEQUENT REPORT</b> (Submit Original Form Only)</p> <table border="0"> <tr> <td><input type="checkbox"/> Abandonment *</td> <td><input type="checkbox"/> New Construction</td> </tr> <tr> <td><input type="checkbox"/> Casing Repair</td> <td><input type="checkbox"/> Pull or Alter Casing</td> </tr> <tr> <td><input type="checkbox"/> Change of Plans</td> <td><input type="checkbox"/> Recompletion</td> </tr> <tr> <td><input type="checkbox"/> Conversion to Injection</td> <td><input type="checkbox"/> Vent or Flare</td> </tr> <tr> <td><input type="checkbox"/> Fracture Treat</td> <td><input type="checkbox"/> Water Shut-Off</td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td></td> </tr> </table> <p>Date of Work Completion _____</p> <p>Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form. * Must be accompanied by a cement verification report.</p>	<input type="checkbox"/> Abandonment *	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Recompletion	<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> Other _____	
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<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Water Shut-Off																										
<input type="checkbox"/> Other _____																											

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Due to possibility of shallow water sands (encountered in offset wells), casing program has been altered to increase setting depth of surface casing. Revised surface casing and cementing program is as follows:

Drill 12 1/4" hole to ± 750'. RU and run 8 5/8", 24 lb/ft, K-55, STC casing, with guide shoe and float collar, to TD. Cement with 560 sx Class G cement with 2% CaCl<sub>2</sub> and 1/4 lb/sk Celloflake.

**RECEIVED**

MAR 25 1991

DIVISION OF  
OIL GAS & MINING

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

Name & Signature <i>Christopher S.W. Hill</i>	Title Operations Engineer	Date 22 Mar 91
--------------------------------------------------	------------------------------	-------------------

(State Use Only)

WATER PERMIT OK

DIVISION OF OIL, GAS AND MINING

API NO. 43-037-31577 *del*

SPUDDING INFORMATION

NAME OF COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: BUCKHORN 11L-2

SECTION NWSW 11 TOWNSHIP 41S RANGE 23E COUNTY SAN JUAN

DRILLING CONTRACTOR AZTEC

RIG # 184

SPUDDED: DATE 4-2-91

TIME 12:00 midnight

HOW ROTARY

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

REPORTED BY CHRIS HILL

TELEPHONE # 505-326-5525

DATE 4-2-91

SIGNED TAS TAKEN BY: JLT

ENTITY ACTION FORM - FORM 6

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	11213	43-037-31577 <i>del</i>	Buckhorn 11L-2	NW/SW	11	41S	23E	San Juan		
<p>WELL 1 COMMENTS: MIRU Aztec Rig 184. Spudded 2100 hrs, 4-2-91. <i>Indian-Lease Field - Greater Aneth Unit - N/A</i> <i>Proposed Zone - Akah (New entity 11213 added 4-10-91) per</i></p>											
WELL 2 COMMENTS:											
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.

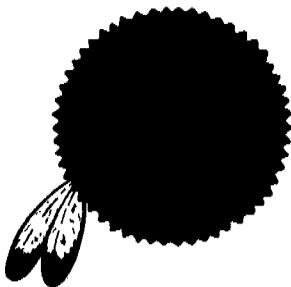
(3/89)

**RECEIVED**

APR 08 1991

DIVISION OF  
OIL GAS & MINING

*[Signature]*  
Signature  
Operations Engineer  
Title  
Phone No. 505-326-5525  
Date 4-4-91



# CHUSKA ENERGY COMPANY

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

4 April, 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

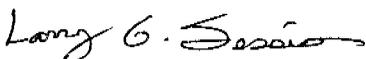
Ref: Sundry Notice: Buckhorn 11L-2 Well  
Spud/Surface Casing

Gentlemen

Attached for your examination and approval are the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,

  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP51\BUCKHORN.11L\SPUDSUN.CVR

encl.

**RECEIVED**  
APR 08 1991  
DIVISION OF  
OIL GAS & MINING

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT--" for such proposals

SUBMIT IN TRIPLICATE

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

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

6. If Indian, Allottee or Tribe Name  
**Navajo Tribal**

7. If Unit or CA, Agreement Designation

8. Well Name and No.  
**Buckhorn 11L 2**

9. API Well No.  
**43-037-31577**

10. Field and Pool, or Exploratory Area  
**Wildcat**

11. County or Parish, State  
**San Juan, Utah**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
**Chuska Energy Company**

3. Address and Telephone No.  
**3315 Bloomfield Highway, Farmington, NM 87401    505-326-5525**

4. Location of Well (Footage, Sec., T., R., N., or Survey Description)  
**2100' FSL, 1250' FWL, S11, T41S, R23E**

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> other <u>Spud/Surface Casing</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-off
	<input type="checkbox"/> Conversion to injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

MIRU Aztec Rig 184. Spudded 2100 hrs, 4-2-91. Drilled to 780'. RU and ran 18 jts 8 5/8", 24 lb/ft, K-55, STC casing with guide shoe and float collar and landed at 780'. Cemented with 600 sx Class 'G' cement with 2% CaCl<sub>2</sub> and 1/4 lb/sk Celloflake. Began displacement. Pumped 1 barrel when cement locked up. RIH and circulated casing clean to 700'. RIH 1" pipe down annulus. Tagged up at 145'. Topped up with 100 sx Class 'G'. Returns to surface. Procedure witnessed by Kevin Snyder, BLM.

**RECEIVED**  
APR 08 1991  
DIVISION OF  
OIL GAS & MINING

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

Signed [Signature] Title Operations Engineer Date 4 Apr 91

(This space for Federal or State Office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any \_\_\_\_\_

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instructions On Reverse Side

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number NOG 8702-1116
7. Indian Allottee or Tribe Name Navajo Tribal
8. Unit or Communitization Agreement
9. Well Name and Number Buckhorn 11L 2
10. API Well Number 43-037-31577 <i>del</i>
11. Field and Pool, or Wildcat Wildcat

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT-- for such proposals

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)	
2. Name of Operator Chuska Energy Company	
3. Address of Operator 3315 Bloomfield Highway, Farmington, NM 87401	4. Telephone Number 505-326-5525
5. Location of Well Footage : 2100' FSL, 1250' FWL QQ, Sec. T., R., M.: NW/4 SW/4 S11 T41S R23E County : San Juan State : UTAH	

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandonment <input type="checkbox"/> Casing Repair <input type="checkbox"/> Change of Plans <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Multiple Completion <input type="checkbox"/> Other _____	<input type="checkbox"/> Abandonment * <input type="checkbox"/> Casing Repair <input type="checkbox"/> Change of Plans <input type="checkbox"/> Conversion to Injection <input type="checkbox"/> Fracture Treat <input checked="" type="checkbox"/> Other <u>Spud/Surface Casing</u>
<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recompletion <input type="checkbox"/> Shoot or Acidize <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off	<input type="checkbox"/> New Construction <input type="checkbox"/> Pull or Alter Casing <input type="checkbox"/> Recompletion <input type="checkbox"/> Vent or Flare <input type="checkbox"/> Water Shut-Off
Approximate Date Work Will Start _____	Date of Work Completion <u>4-4-91</u>
	Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form. * Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

MIRU Aztec Rig 184. Spudded 2100 hrs, 4-2-91. Drilled to 780'. RU and ran 18 jts 8 5/8", 24 lb/ft, K-55, STC casing with guide shoe and float collar and landed at 780'. Cemented with 600 sx Class 'G' cement with 2% CaCl<sub>2</sub> and 1/4 lb/sk Celloflake. Began displacement. Pumped 1 barrel when cement locked up. RIH and circulated casing clean to 700'. RIH 1" pipe down annulus. Tagged up at 145'. Topped up with 100 sx Class 'G'. Returns to surface. Procedure witnessed by Kevin Snyder, BLM.

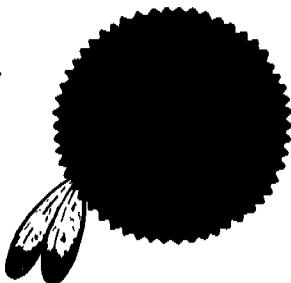
14. I hereby certify that the foregoing is true and correct.  
Name & Signature Christopher S.W. Hill  Title Operations Engineer Date 4 Apr 91

(State Use Only)

**RECEIVED**

APR 08 1991

DIVISION OF  
OIL GAS & MINING



# CHUSKA ENERGY COMPANY

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

8 April, 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

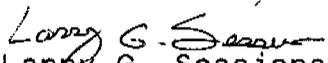
Ref: Buckhorn 11L-2 Well  
Report of Water Encountered During Drilling

Gentlemen

Attached for your examination and approval are the original and two copies of the subject report.

Please advise if you require additional information concerning this submission.

Sincerely,

  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP51\BUCKHORN.11L\WATER.UT

encl.

**RECEIVED**

APR 11 1991

DIVISION OF  
OIL GAS & MINING

**RECEIVED**

APR 11 1991

REPORT OF WATER ENCOUNTERED DURING DRILLING - FORM 7 (1/89)

DIVISION OF  
OIL GAS & MINING

1. Well name and number: Buckhorn 11L-2  
API number: 43-037-31577 del
2. Well location: QQ NW/SW section 11 township 41S range 23E county San Juan
3. Well operator: Chuska Energy Company  
Address: 3315 Bloomfield Highway, Farmington, NM 87401 phone: 505 326 5525
4. Drilling contractor: Aztec Well Servicing (Rig 184)  
Address: S of Aztec, NM, 87410 phone: 505 334 6194

5. Water encountered (continue on reverse side if necessary)

Depth		Volume (flow rate or head)	Quality (fresh or salty)
from	to		
697		4" stream	Fresh. 4,000 ppm Cl <sup>-</sup>
1290		2" stream	Fresh. 4,000 ppm Cl <sup>-</sup>

6. Formation tops: Navajo 649'  
Chinle 1539'

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

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

Name Christopher S.W. Hill Signature [Signature]  
Title Operations Engineer Date 4-8-91

Comments:

ORAL APPROVAL TO PLUG AND ABANDON WELL

31577

dl

BUREAU OF LAND MANAGEMENT

Operator Chuspa  
 Representative Chris Hill Telephone No. \_\_\_\_\_  
 Well Name and No. Buckham 11K 2  
 Location NW 1/4 SW 1/4, Sec. 11 T. 41S R. 23E County San Juan  
 Lease Type (Federal, Tribal, State or Private) Tribal  
 Has operator obtained proper Federal or Tribal approval? \_\_\_\_\_  
 T. D. 5904 Open hole from 780 to 5904

Hole Size	Casing Size	Set at	TOC	Pull Casing?
<u>12 1/4</u>	<u>8 1/8</u>	<u>780</u>	<u>Surf</u>	<u>No</u>
<u>7 7/8</u>	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Formation	Top	Base	Shows?
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Plugging procedure:

5904-5440 280 sh CB 50' <sup>above</sup> Top of Sammy  
4464-4364 60 sh CB Sammy  
2614-2514 60 sh CB Alshay  
1589-1489 60 sh CB Chenle  
830-730 60 sh CB 2% cells Surf  
50' Surf 20 sh CB 2% cells

Remarks: (DST's, LCZ's, Water flows, etc.)

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

Approved by JM Mathis Date 4-18-91 Time 8:00 AM

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

del

COMPANY: Chuska Energy COMPANY MAN: Bobby Wright  
WELL NAME: Buckhorn 11 L-2 API #: 43-037-31577  
QTR/QTR: NW/SE SECTION: 11 TWP: 41S RANGE: 23E  
CONTRACTOR: Aspec 184 PUSHER/DRLR: \_\_\_\_\_  
INSPECTOR: Glenn DATE: 4/2/91 OPERATIONS: Rigging up  
SPUD DATE: 4/2/91 TOTAL DEPTH: \_\_\_\_\_

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
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

PERFORATIONS: \_\_\_\_\_

CASING SIZE: \_\_\_\_\_ PULLED: YES / NO                      CUT AT: \_\_\_\_\_

PLUGS TESTED: \_\_\_\_\_ HOW: \_\_\_\_\_                      WOC: \_\_\_\_\_

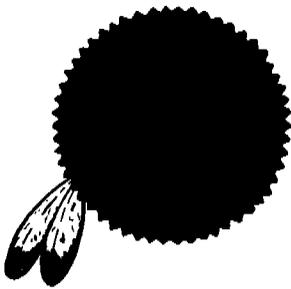
MARKER: \_\_\_\_\_ SURFACE: \_\_\_\_\_                      PLATE: \_\_\_\_\_

RECLAMATION:

CONTOURED: \_\_\_\_\_ RIPPED: \_\_\_\_\_ REHAB'D: \_\_\_\_\_

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

REMARKS: Rigging up



# CHUSKA ENERGY COMPANY

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

RECEIVED

APR 22 1991

DIVISION OF  
OIL GAS & MINING

19 April, 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

Ref: Sundry Notice: Buckhorn 11L 2 Well  
Subsequent Notice of Abandonment

Gentlemen

Attached for your examination and approval are the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,

*Larry G. Sessions*  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP51\BUCKHORN.11L\2PASUN.CVR

encl.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

6. Lease Designation and Serial Number  
NCG 8702-1116

7. Indian Allottee or Tribe Name  
Navajo Tribal

8. Unit or Communitization Agreement

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  
Use APPLICATION FOR PERMIT-- for such proposals

1. Type of Well  
 Oil Well  Gas Well  Other (specify)

2. Name of Operator  
Chuska Energy Company

3. Address of Operator  
3315 Bloomfield Highway, Farmington, NM 87401

4. Telephone Number  
505-326-5525

5. Location of Well  
Footage : 2100' FSL, 1250' FWL  
County : San Juan  
QQ, Sec. T., R., M.: NW/4 SW/4 S11 T41S R23E  
State : UTAH

9. Well Name and Number  
Buckhorn 11L 2

10. API Well Number  
43-037-31577

11. Field and Pool, or Wildcat  
Wildcat

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
<input type="checkbox"/> Abandonment	<input checked="" type="checkbox"/> Abandonment *
<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Casing Repair
<input type="checkbox"/> Change of Plans	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Conversion to Injection	<input type="checkbox"/> Conversion to Injection
<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Fracture Treat
<input type="checkbox"/> Multiple Completion	<input type="checkbox"/> Other
<input type="checkbox"/> New Construction	<input type="checkbox"/> New Construction
<input type="checkbox"/> Pull or Alter Casing	<input type="checkbox"/> Pull or Alter Casing
<input type="checkbox"/> Recompletion	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Shoot or Acidize	<input type="checkbox"/> Vent or Flare
<input type="checkbox"/> Vent or Flare	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Water Shut-Off	

Approximate Date Work Will Start \_\_\_\_\_

Date of Work Completion 4-18-91

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.  
\* Must be accompanied by a cement verification report.

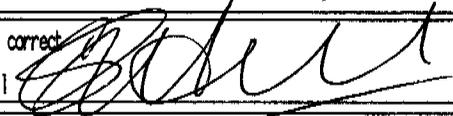
13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

DRILLED TO 5,904', TD. LOGGED. PLUGGED AND ABANDONED WELL AS FOLLOWS:

PLUG	FROM	TO	SX	ZONES COVERED
1	5,904	5,440	280	DESERT CREEK, L ISMAY, U ISMAY
2	4,464	4,364	60	HERMOSA
3	2,614	2,514	60	DE CHELLY
4	1,589	1,489	60	CHINLE
5	830	730	60	SURFACE CASING SHOE
6	50	0	20	SURFACE

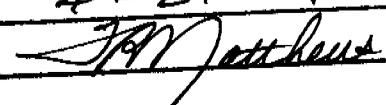
ALL PLUGS CLASS 'G' NEAT CEMENT. PLUGS 5 AND 6 CONTAINED 2% CALCIUM CHLORIDE. ALL PLUGS DISPLACED WITH MUD. VERBAL APPROVAL FROM FRANK MATTHEWS, STATE OF UTAH, AT 1440 HRS, 4-17-91. PROCEDURE WITNESSED BY KEVIN SCHNEIDER, BLM. RIG RELEASED 2400 HRS, 4-18-91.

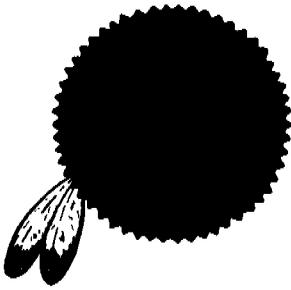
14. I hereby certify that the foregoing is true and correct

Name & Signature Christopher S.W. Hill  Title Operations Engineer Date 19 Apr 91

(State Use Only)

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

DATE: 4-26-91  
BY: 



# CHUSKA ENERGY COMPANY

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

18 April, 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

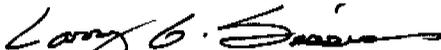
Ref: Sundry Notice: Buckhorn 11L 2 Well  
Intent to Plug and Abandon

Gentlemen

Attached for your examination and approval are the original and two copies of the subject Sundry Notice.

Please advise if you require additional information concerning this submission.

Sincerely,

  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP51\BUCKHORN.11L\1PASUN.CVR

encl.

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APR 22 1991

DIVISION OF  
OIL GAS & MINING

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number  
NOG 8702-1116

7. Indian Allottee or Tribe Name

Navajo Tribal

8. Unit or Communitization Agreement

9. Well Name and Number  
Buckhorn 11L 2

10. API Well Number  
43-037-31577

11. Field and Pool, or Wildcat  
Wildcat

1. Type of Well  
 Oil Well  Gas Well  Other Specify

2. Name of Operator  
Chuska Energy Company

3. Address of Operator  
3315 Bloomfield Highway, Farmington, NM 87401

4. Telephone Number  
505-326-5525

5. Location of Well  
Footage : 2100' FSL, 1250' FWL  
QQ, Sec. T, R, M.: NW/4 SW/4 S11 T41S R23E

County : San Juan  
State : UTAH

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12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT  
(Submit in Duplicate)

- Abandonment
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Multiple Completion
- Other
- New Construction
- Pull or Alter Casing
- Recompletion
- Shoot or Acidize
- Vent or Flare
- Water Shut-Off

Approximate Date Work Will Start 4-18-91

SUBSEQUENT REPORT  
(Submit Original Form Only)

- Abandonment \*
- Casing Repair
- Change of Plans
- Conversion to Injection
- Fracture Treat
- Other
- New Construction
- Pull or Alter Casing
- Recompletion
- Vent or Flare
- Water Shut-Off

Date of Work Completion \_\_\_\_\_

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

\* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

PLUG	FROM	TO	SX	ZONES COVERED
1	5,904	5,440	280	DESERT CREEK, L ISMAY, U ISMAY
2	4,464	4,364	60	HERMOSA
3	2,614	2,514	60	DE CHELLY
4	1,589	1,489	60	CHINLE
5	830	730	60	SURFACE CASING SHOE
6	50	0	20	SURFACE

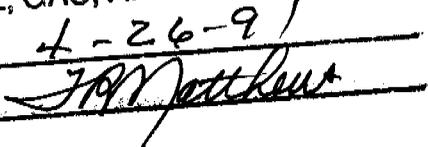
ALL PLUGS WILL BE CLASS 'G' NEAT CEMENT. PLUGS 5 AND 6 WILL CONTAIN 2% CALCIUM CHLORIDE. ALL PLUGS WILL BE DISPLACED WITH MUD. VERBAL APPROVAL FROM FRANK MATTHEWS, STATE OF UTAH, AT 1440 HRS, 4-17-91.

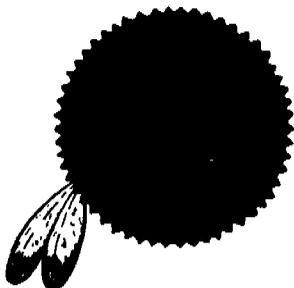
14. I hereby certify that the foregoing is true and correct.

Name & Signature Christopher S.W. Hill  Title Operations Engineer Date 18 Apr 91

(State Use Only)

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

DATE: 4-26-91  
BY: 



# 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

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MAY 20 1991

DIVISION OF  
OIL GAS & MINING

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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  
Buckhorn 11L

9. WELL NO.  
2

10. FIELD AND POOL, OR WILOCAT  
Wildcat

11. SEC., T., R., N., OR BLOCK AND SURVEY OR AREA  
S11 T41S R23E

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  other \_\_\_\_\_  
b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESV.  other \_\_\_\_\_

2. NAME OF OPERATOR  
Chuska Energy Company

3. ADDRESS OF OPERATOR  
3315 Bloomfield Highway, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At Surface 2100' FSL, 1250' FWL  
At top prod. interval reported below Same  
At total depth Same

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12. COUNTY San Juan  
13. STATE Utah  
DATE ISSUED 11-29-90  
43-037-31577

15. DATE SPUDDED 4-2-91  
16. DATE T.O. REACHED 4-17-91  
17. DATE COMPL. (Ready to prod.) 4-18-91 (Plug & Abd.)  
18. ELEVATIONS (OF, BHD, RT, OR ETC.) 4,529' GR / 4,541' KB  
19. ELEV. CASINGHEAD 4,529' GR

20. TOTAL DEPTH, HD & 5,904'  
21. PLUG BACK T.D., HD & TVD Surface  
22. IF MULTIPLE COMPL., HOW MANY  
23. INTERVALS DRILLED BY Rotary  
ROTARY TOOLS  
CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (HD AND TVD)  
25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN  
DLL/MSFL/GR/CAL, LDT/CNL/GR/CAL, BHCS/GR/CAL, CYBERLOOK 4-26-91  
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 (HD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24	780	12 1/4"	600 SX 'G' + 2% CaCl <sub>2</sub> Locked up after 1 bbl displacement Circulated cement to surface Top job, 100 sx 'G', thru 1" pipe, to 145'	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (HD)	PACKER SET (HD)

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (HD)	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) PA'd

DATE OF TEST	HOURS TESTED	CHOKE 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 Christopher S.W. Hill TITLE Operations Engineer DATE 22 MAY 91

See Spaces for Additional Data on Reverse Side

## INSTRUCTIONS

This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

ITEM 18: Indicate which elevation is used as reference for depth measurements given in other spaces on this form and on any attachments.

ITEMS 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

ITEM 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

ITEM 33: Submit a separate completion report on this form for each interval to be separately produced (see instructions for items 22 and 24 above).

### 37. SUMMARY OF POROUS ZONES

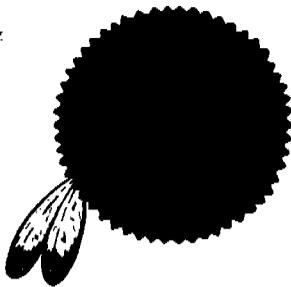
Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut in pressures, and recoveries.

### 38. GEOLOGIC MARKERS

Formation	Top	Bottom	Description, contents, etc.	Name	Meas. Depth	True Vert. Depth
				Hermosa	4398	4398
				Upper Ismay	5478	5478
				Hovenweep Shale	5611	5611
				Lower Ismay	5623	5623
				Gothic Shale	5661	5661
				Desert Creek	5681	5681
				Chimney Rock Shale	5840	5840
				Akah	5864	5864

MAY 28 1991

DIVISION OF  
OIL GAS & MINING



# CHUSKA ENERGY COMPANY

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

22 May, 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

Ref: Dry Hole Completion Report: Buckhorn 11L-2 Well

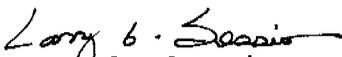
Gentlemen

Attached for your examination and approval is the original and two copies of the subject Dry Hole Completion Report.

Chuska requests that the information contained in this report be kept confidential.

Please advise if you require additional information concerning this submission.

Sincerely,

  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP51\BUCKHORN.11L\CRCOVER

encl.

**CONFIDENTIAL**

**RECEIVED**

**MAY 28 1991**

**DIVISION OF  
OIL GAS & MINING**