



# CHUSKA ENERGY COMPANY

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

RECEIVED

FEB 26 1990

WATER RIGHTS  
PRICE

February 21, 1990

State of Utah  
Water Rights Division  
P.O. Box 718  
Price, Utah 84501-0718

Attn: Mr Mark Page

Ref: Water Use Permits: Tower 1I-2 and Black Steer 25E-1 Wells

Dear Mr Page

Chuska Energy Company proposes to drill the subject wells commencing in April/May. We intend to haul water in tank trucks, utilizing Hay Hot Oil Service who will obtain water from their artesian well, details of which are as follows:

1050' FNL, 1575' FWL  
S27 T40S R23E  
San Juan County, Utah

Permit No: 09-1419 (A60809)

Anticipated water requirements are 0.9 acre-feet per well. Site locations are as detailed in the attached topographic map and staking plats.

Please advise if you require any further information.

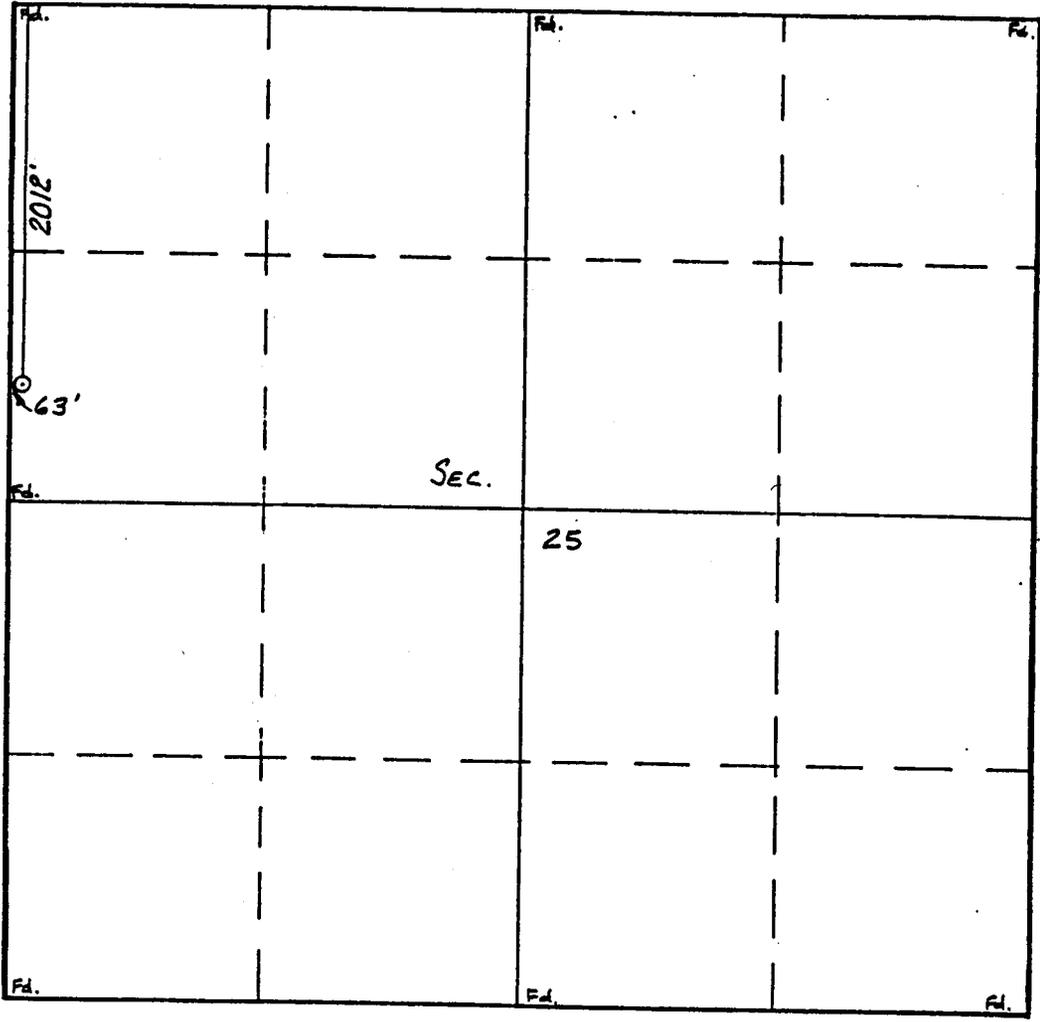
Sincerely yours

Donald S. Barnes  
Operations Manager

DSB/csw  
File: C:\WP\CSWH\TOWER1I2\WATER

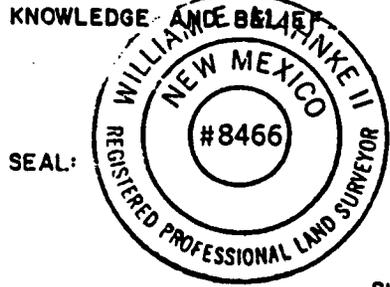
encl.

COMPANY CHUSKA ENERGY COMPANY  
 LEASE BLACK STEER 25-3 WELL NO. 1  
 SEC. 25, T. 39 S, R. 25 E  
 COUNTY San Juan STATE Utah  
 LOCATION 2012'FNL & 63'FWL  
 ELEVATION 5214



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 FEB. 21, 1990

63

64

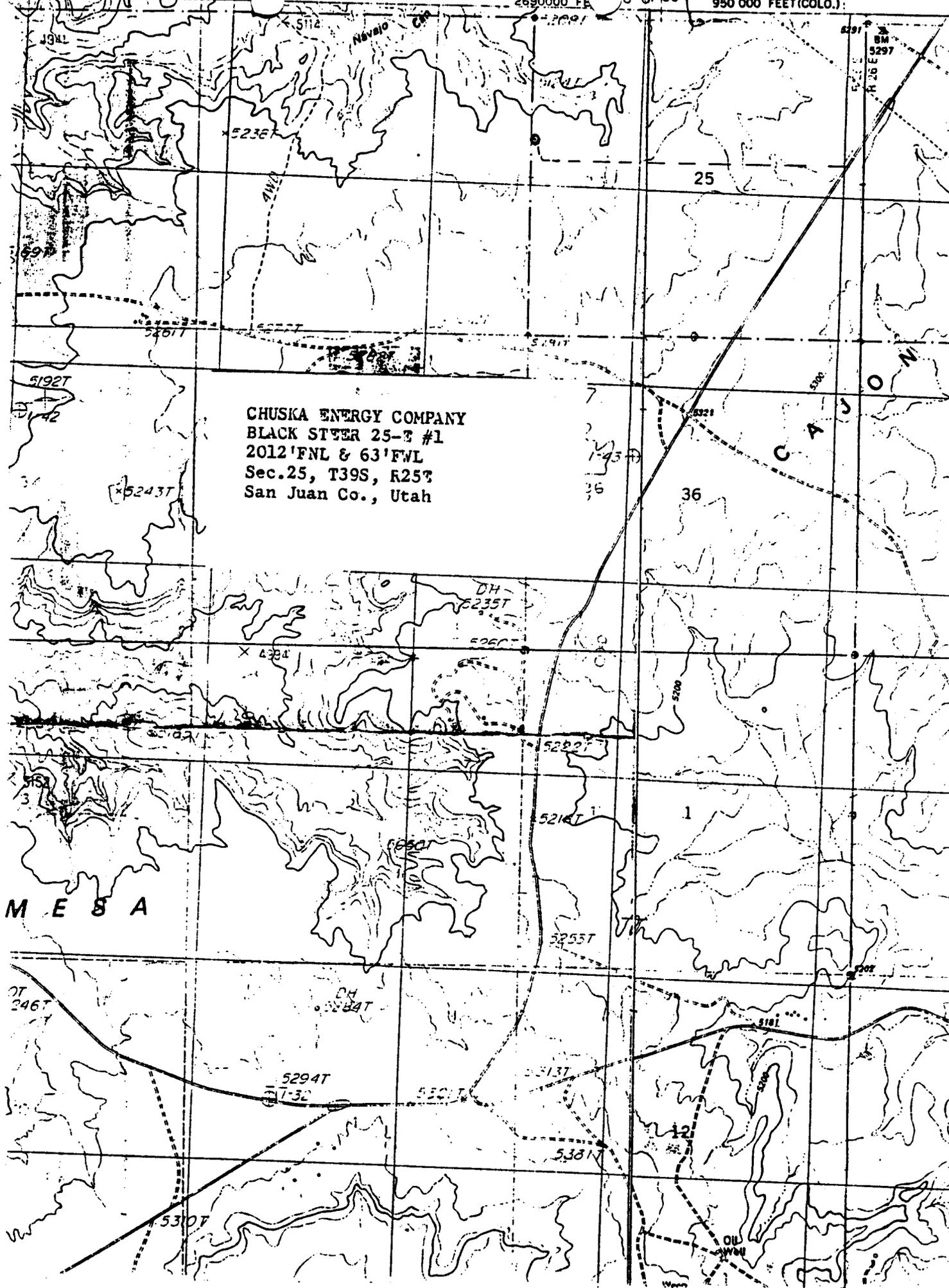
65

2690000 FE

9° 07' 30"

950 000 FEET (COLO.)

CHUSKA ENERGY COMPANY  
 BLACK STEER 25-T #1  
 2012' FNL & 63' FWL  
 Sec. 25, T39S, R25E  
 San Juan Co., Utah





# CHUSKA ENERGY COMPANY

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

RECEIVED  
FEB 23 1990

February 20, 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: Tower 1I-2 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 Tower 1I Well No. 2 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\TOWER1I2\UTAHCOVR

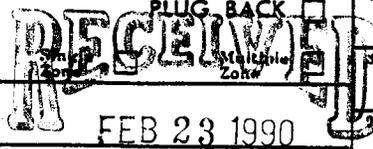
STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work  
 DRILL  DEEPEN  PLUG BACK

1b. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
 Chuska Energy Company



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

6. If Indian, Allottee or Tribe Name  
 Navajo Tribal

7. Unit Agreement Name  
 Tower II

8. Farm or Lease Name  
 Tower II

9. Well No.  
 2

10. Field and Pool, or Wildcat  
 Wildcat Undesignated (0027)

11. 00, Sec., T., R., M., or SW  
 and Survey or Area  
 S1 T40S R25E

12. County or Parrish  
 San Juan

13. State  
 Utah

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 1940' FSL, 689' FEL  
 At proposed prod. zone Same

14. Distance in miles and direction from nearest town or post office\*  
 NESE

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. line, if any)  
 15. Distance from proposed location\* to nearest well, drilling, completed, or applied for, on this lease, ft.

16. No. of acres in lease  
 6029'

17. No. of acres assigned to this well  
 Desert Creek

18. Rotary or cable tools  
 Rotary

21. Elevations (Show whether DF, RT, GR, etc.)  
 5112' GR

22. Approx. date work will start\*  
 5-25-90

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 lb	500'	371 sx 'G' + 2% CaCl <sub>2</sub>
7 7/8"	5 1/2"	15.5 lb	6029'	652 sx 'G', 65:35 Poz + 6% Gel

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: 2-20-90

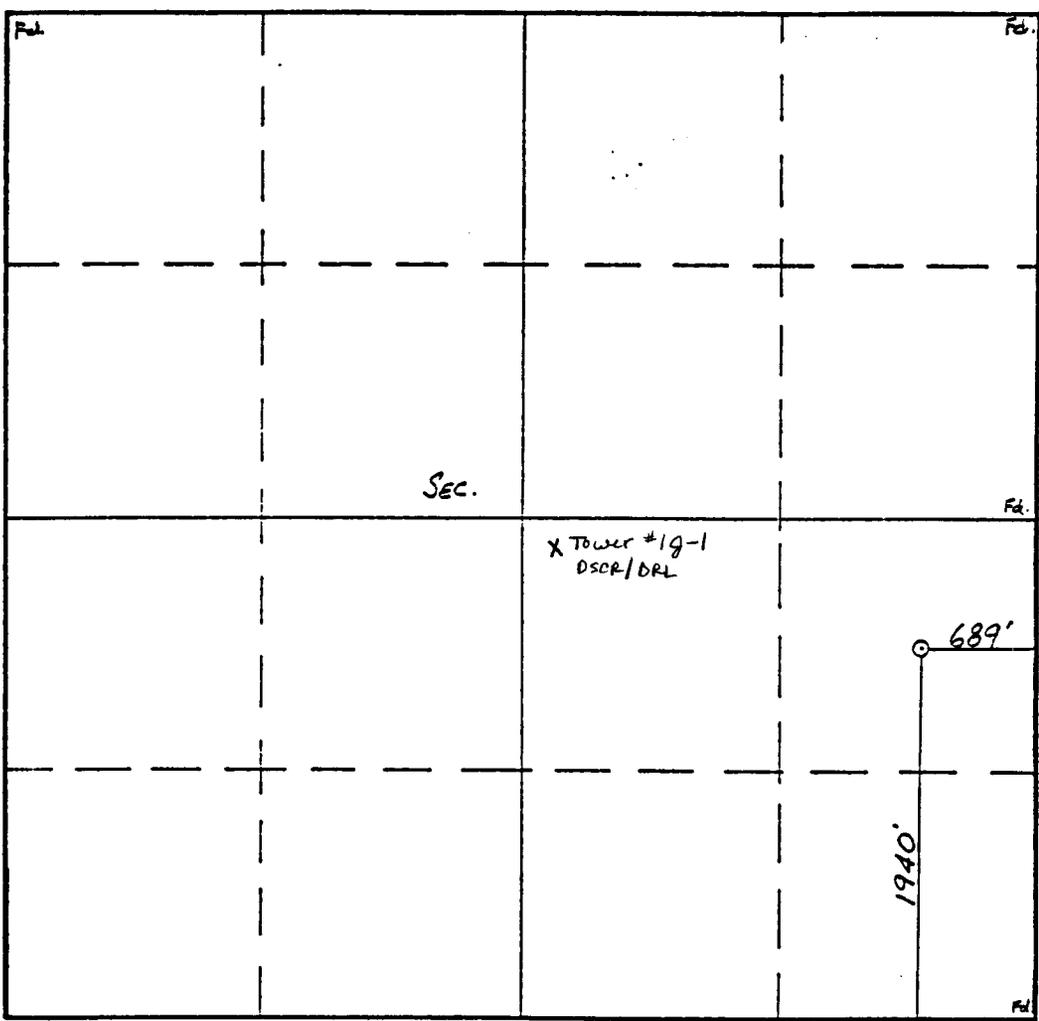
(This space for Federal or State office use)  
 APT NO. 43-037-31507

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

APPROVED BY THE STATE  
 OF UTAH, DIVISION OF  
 OIL, GAS, AND MINING  
 DATE: 3-2-90  
 BY: John R. Baya  
 WELL SPACING: SR615-3-2

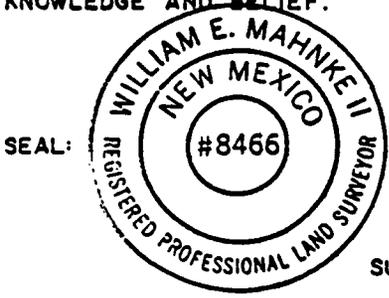
\*See Instructions On Reverse Side

COMPANY CHUSKA ENERGY COMPANY  
 LEASE TOWER 1-I WELL NO. 2  
 SEC. 1, T. 40 S, R. 25 E  
 COUNTY San Juan STATE Utah  
 LOCATION 1940'FSL & 689'F7L  
 ELEVATION 5112



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. N° 8466

SURVEYED FEB. 16, 19 90

CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Tower 1I Well No. 2  
Section 1, Township 40S, Range 25E  
1940' FSL, 689' FEL  
San Juan County, Utah

1. SURFACE FORMATION

Geological name of surface formation: Morrison.

2. ELEVATION

Surface elevation is 5,112' GR.

3. ESTIMATED FORMATION TOPS

<u>Depth</u>	<u>Formation</u>	<u>Sub Sea Elevation</u>
Surface	Morrison	+ 5112'
1797'	Chinle	+ 3315'
2861'	Organ Rock	+ 2251'
3501'	Cedar Mesa	+ 1611'
4681'	Hermosa	+ 431'
5657'	Upper Ismay	- 545'
5795'	Lower Ismay	- 683' Primary Target
5879'	Desert Creek	- 767'
6029'	Total Depth	- 971'

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:	6,029'	5 1/2"	15.5 ppf	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 will be calculated at 100% excess over annular volume.

## Production Cementing:

### First Stage

TD to 3500' (stage collar @  $\pm$  3500'). Lead with 181 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 449 ft<sup>3</sup>.

### 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 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 616 ft<sup>3</sup>.

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. 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 18 days. Anticipated spud date is 5-15-90.

## DETAILED DRILLING PROGRAM

DATE: February 20, 1990

WELL NAME: Tower 1I WELL NO.: 2

LOCATION: Section 1, Township 40S, Range 25E  
1940' FSL, 689' FEL  
San Juan County, Utah

ELEVATION: 5,112' GR

TOTAL DEPTH: 6,029'

PROJECTED HORIZON: Primary target is Lower Ismay at 5,795'

### 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 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. 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 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 lb/ft, 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.

Tower 1I Well No. 2  
Section 1, Township 40S, Range 25E  
1940' FSL, 689' FEL  
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.

Tower 1I Well No. 2  
Section 1, Township 40S, Range 25E  
1940' FSL, 689' FEL  
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 Aneth, following the Hovenweep road. 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. Approximately 3,000' of new road will be required 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 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 north/south trend and will require minimal cut (0.7' to 2.4' on the north side) and fill (0.9' to 1.8' 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

# TOWER 1 I - 2

1940' FSL, 689' FEL

SECTION 1, TOWNSHIP 40S, RANGE 25E

SAN JUAN COUNTY, UTAH

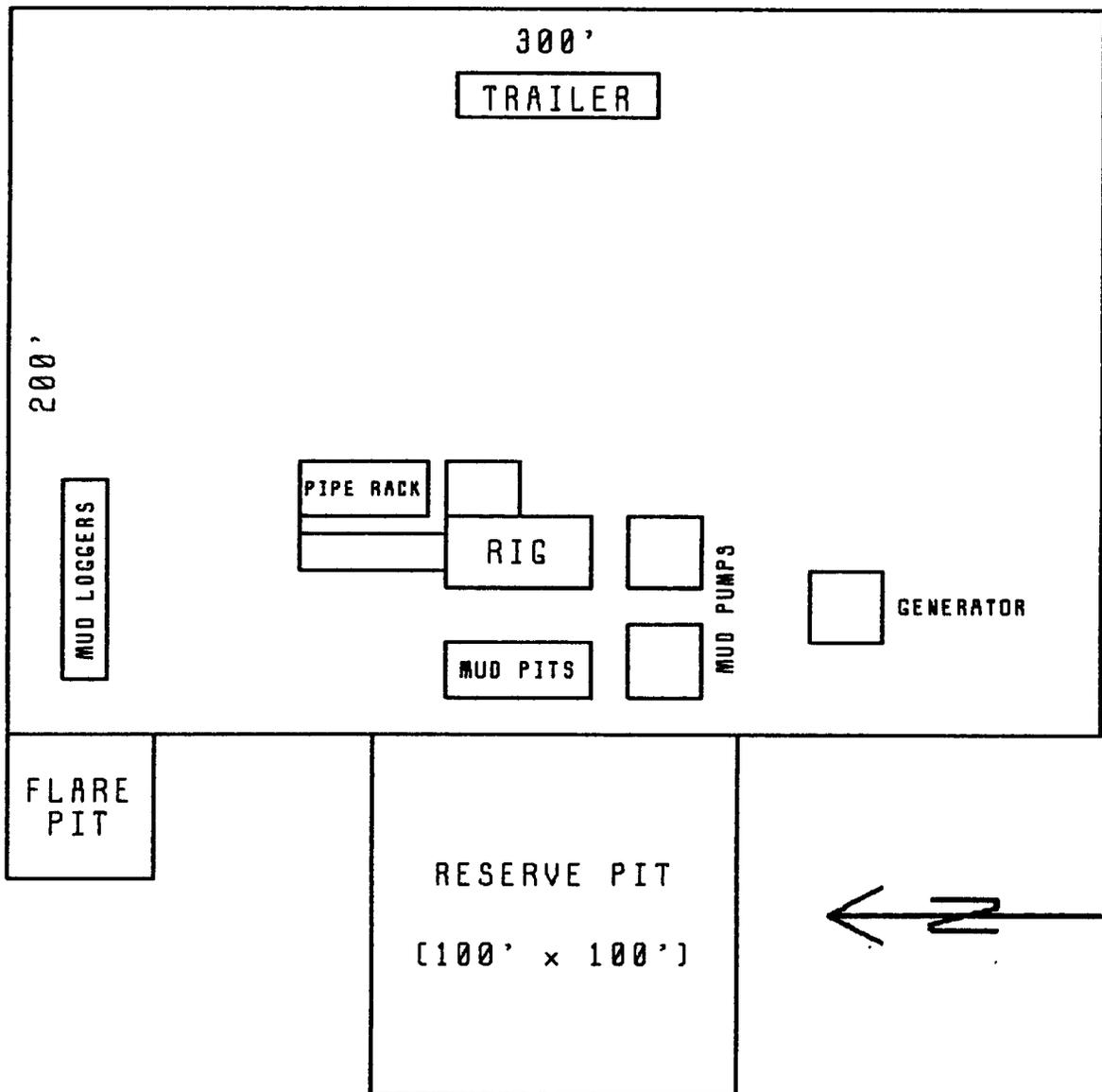


EXHIBIT "A"  
BLOWOUT PREVENTER

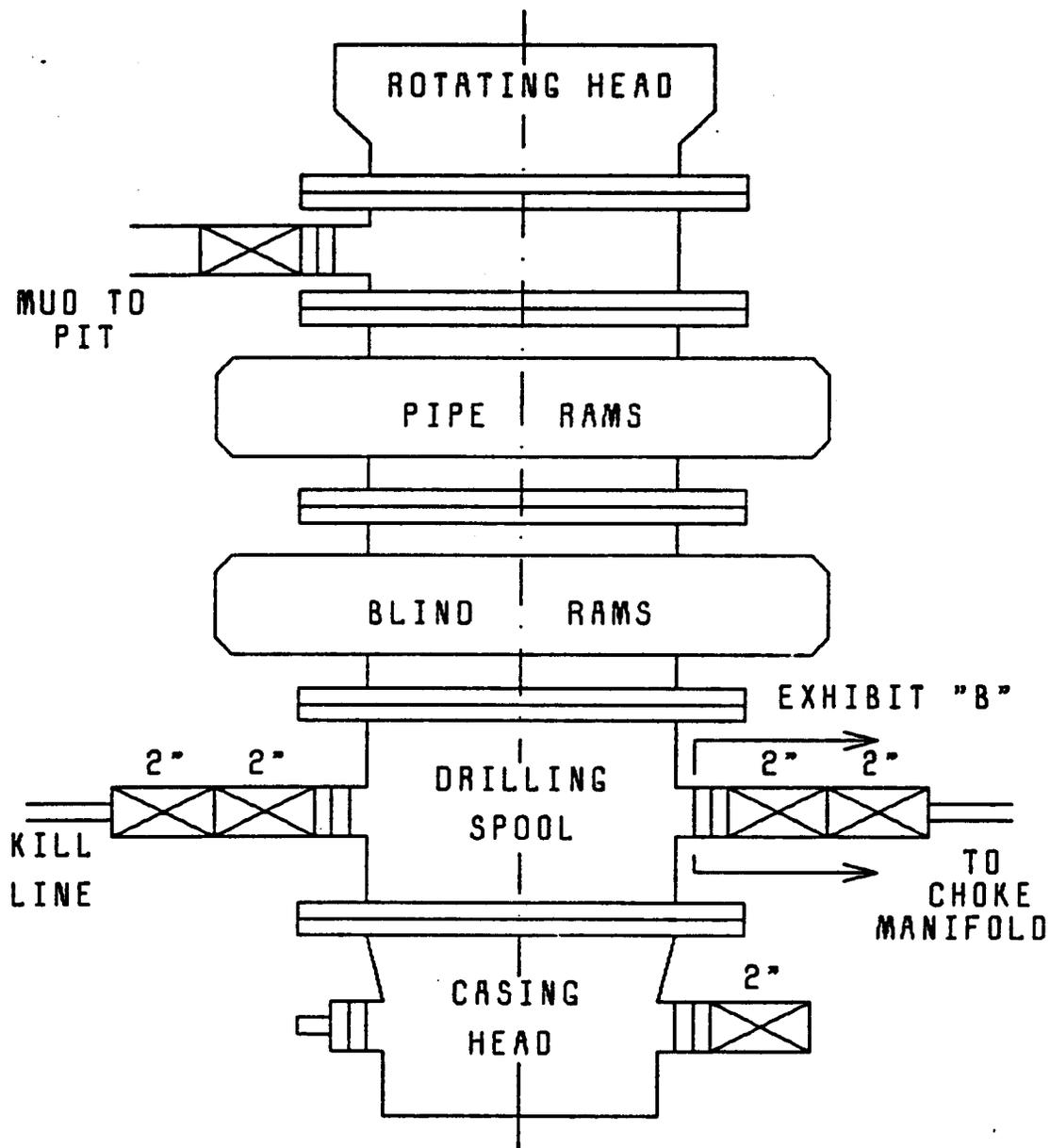
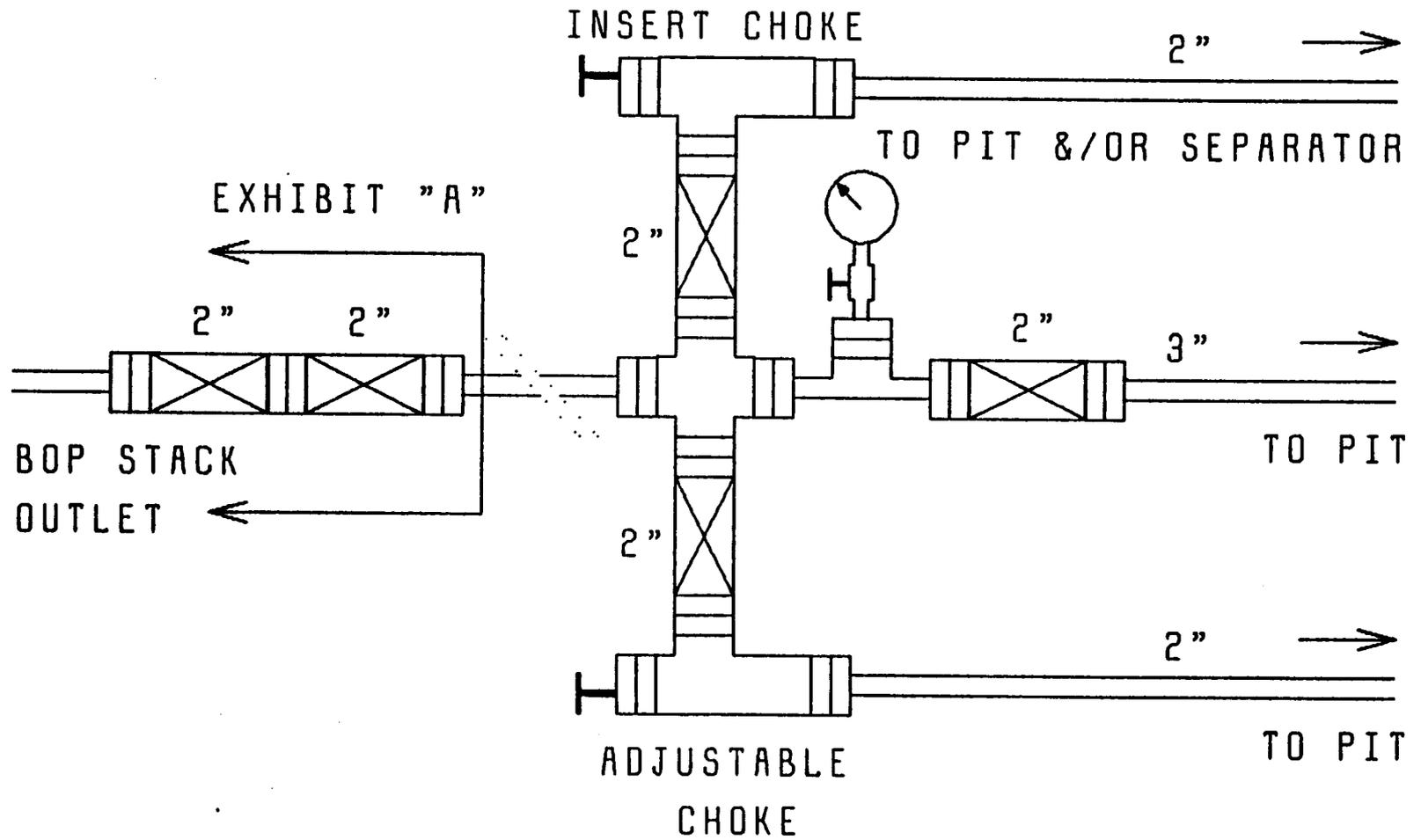


EXHIBIT "B"  
CHOKE MANIFOLD





30 FEET  
(COLO.)  
ANETH 12 AM

T 39 S  
T 40 S

34

20

33

32

4158 1 SW  
(NAVAJO CANYON)

C A S O N

R E S E R V A T I O N

CHUSKA ENERGY COMPANY  
TOWER 1-I 2  
1940' FSL & 689' FSL  
Sec. 1, T40S, R25E  
San Juan Co., Utah

Drill Hole

Mine

OIL Well

5043 Oil Well

Drill Hole

BM  
5165

36

31

30

1

5

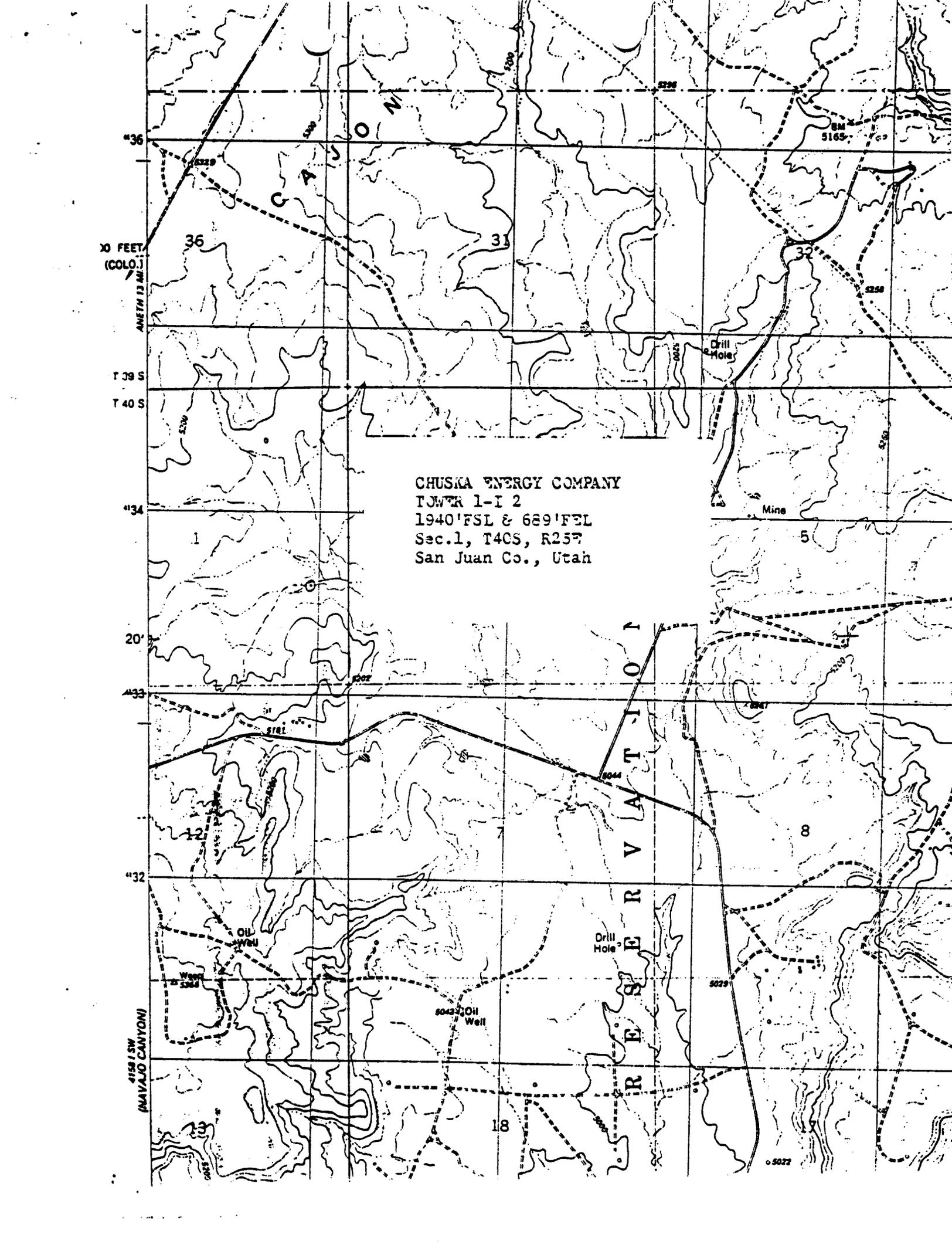
12

8

13

18

5072



OPERATOR Chuska Energy Company (N9290) DATE 2-26-90

WELL NAME Tower #1I-2

SEC NESE 1 T 40S R 25E COUNTY San Juan

43-037-31507  
API NUMBER

Indian (2)  
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well within 920' (sec. 1 & 40S 26E sec. 6)

Water Permit 09-1419 / A60809 (Hay Hot Oil, Inc.)

APPROVAL LETTER:

SPACING:  R615-2-3

N/A  
UNIT

R615-3-2

N/A  
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:

CC: BIA



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 26, 1990

RECEIVED  
FEB 28 1990

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

Re: Tower 1 I-2 - NE4SE4 Sec. 1, T40S, R25E, SLB&M  
Black Steer 25 E-1 - SW4NW4 Sec. 25, T39S, R25E, SLB&M

Dear Mr. Barnes:

This letter will serve as authorization from this Division to proceed with the drilling at the two 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



Norman H. Bangarter  
Governor  
Dee C. Hansen  
Executive Director  
Dianne R. Nielson, Ph.D.  
Division Director

State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

March 2, 1990

Chuska Energy Company  
315 North Behrend  
Farmington, New Mexico 87401

Gentlemen:

Re: Tower #11-2 - NE SE Sec. 1, T. 40S, R. 25E - San Juan County, Utah  
1940' FSL, 0689' FEL

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  
Tower #11-2  
March 2, 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 43-037-31507.

Sincerely,



R. J. Pirth  
Associate Director, Oil & Gas

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



# CHUSKA ENERGY COMPANY

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

**RECEIVED**  
MAR 19 1990

DIVISION OF  
OIL, GAS & MINING

March 13, 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: Sundry Notice - Tower 1I-2: Deepen Proposed TD

43-087-31507

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 application. Chuska will greatly appreciate your prompt consideration.

Sincerely,

Donald S. Barnes  
Operations Manager

DSB/csw  
File: C:\WP\CSWH\TOWER.1I2\INCTDSUN.CVR

encl.

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

RECEIVED

2. LEASE DESIGNATION & SERIAL NO.

NOG 8702-1116

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

SUNDRY NOTICES AND REPORTS ON WELLS 1990  
(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.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Tower 11

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC. T. R. M. OR BLM. AND SURVEY OR AREA

S1 T40S R25E

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 1940' FSL, 689' FEL  
At proposed prod. zone Same

14. AP. NO.  
43-037-31507

15. ELEVATIONS (Show whether OF, RT, GR, etc.)  
5,112' GR

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF  PULL 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)   
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

APPROX. DATE WORK WILL START 4-1-90

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.

Following additional seismic and geological work, Chuska Energy wishes to drill the subject well to a proposed total depth of 6,200' GR.

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

SIGNED Donald S. Barnes TITLE Operations Manager DATE 3-13-90

(This space for Federal or State office use)

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

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 3-23-90  
BY: John R. Bays

(3/89) Federal approval of this action is required before commencing operations. See Instructions On Reverse Side

WATER PERMIT OK

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API NO. 43-037-31507

NAME OF COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: TOWER #1-I-2

SECTION NESE 1 TOWNSHIP 40S RANGE 25E COUNTY SAN JUAN

DRILLING CONTRACTOR AZTEC RIG SERVICE

RIG # 222

SPUDDED: DATE 4/30/90

TIME 6:00 p.m.

HOW ROTARY

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

REPORTED BY DON BARNES

TELEPHONE # (505) 326-5525

DATE 5/1/90 SIGNED TAS



# 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 07 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: Sundry Notice - Tower 1-I-2- Rig move - spud

Gentlemen:

Please find enclosed original and two copies of the above referenced Sundry Notice for your files.

If anything additional is needed, please advise.

Sincerely,

DONALD S. BARNES  
Operations Manager

DSB:bnp  
Enclosures  
File:DSB/RIGMVTR.1I2

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 proposals.)

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo Tribal

7. UNIT AGREEMENT NAME

4. FARM OR LEASE NAME  
Tower 1 I

5. WELL NO.  
2

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T40S, R25E AND SURVEY OR AREA  
Sec. 1, T40S, R25E

12. COUNTY  
San Juan

13. STATE  
Utah

RECEIVED  
MAY 07 1990

1. 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. See also space 17 below.)  
At surface 1940' FSL, 689' FEL  
At proposed prod. zone

14. API NO.  
43-037-31507

15. ELEVATIONS (Show whether OF, AT, GR, etc.)  
5112' GR

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

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

APPROX. DATE WORK WILL START Rig move - Spud      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.

Chuska Energy Company proposes to drill well. Aztec Well Service (Rig #222) will be the drilling contractor.

Notified BLM's Mark Kelly and Kelvin Schneider of rig move.

OIL AND GAS	
DRN	RJF
JRB	CLH
DTC	SLS
1-TAS	
2- MICROFILM 2-90	
3-	

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

SIGNED Donald C. Barnes TITLE Operations Manager

(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**  
MAY 07 1990

DIVISION OF  
OIL, GAS & MINING

April 28, 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 - Tower 1-I-2

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. We will appreciate your prompt consideration.

Sincerely,

  
DONALD S. BARNES  
Operations Manager

DSB:bnp  
Enclosures  
File:BNP\SPUDTOWR.1I2

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Tower 1 I

9. WELL NO.  
2

10. FIELD AND POOL OR WILDCAT  
Wildcat

11. SEC. T. R. N. OR BLK. AND SURVEY OR AREA  
Sec. 1, T40S, R25E

12. COUNTY  
San Juan

13. STATE  
Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug a well or to alter a reservoir. Use "APPLICATION FOR PERMIT" (Form 10) for such proposals.)

RECEIVED  
MAY 07 1990  
DIVISION OF OIL, GAS & MINING

1. 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. See also space 17 below.)  
At surface 1940' FSL and 689' FEL  
At proposed prod. zone

14. API NO.  
43-037-31507

15. ELEVATIONS (Show whether OF, AT, GR, etc.)  
5112' GR

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

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

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

\* Must be accompanied by a cement verification report.

Spud well at 1800 hours on April 30, 1990.

Aztec Well Service Rig #222 will be drilling contractor for this well.

Notified BLM and the State of Utah of spud on April 30, 1990.

OIL AND GAS	
DRN	
JRB	SLH
DTI	SLS
1-TPS	
2-	MICROFILM
3-	FILE

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

SIGNED Donald S. Penney TITLE Operations Manager DATE 5-1-90

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side



# CHUSKA ENERGY COMPANY

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

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

**RECEIVED**  
MAY 07 1990

DIVISION OF  
OIL, GAS & MINING

May 1, 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: Entity Action Form - Tower 1-I-2

Gentlemen:

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

Please advise if you require any additional information concerning this.

Sincerely,

DONALD S. BARNES  
Operations Manager

DSB:bnp  
Enclosures  
File:SPUDTOWR.1I2

ENTITY ACTION FORM - FORM 6

OPERATOR Chuska Energy Company  
ADDRESS Box 780  
Farmington, New Mexico 87499

OPERATOR ACCT. NO. N 9290

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	11088	43-037-31507	Tower 1 I 2		1	40S	25E	San Juan	4-30-90	

WELL 1 COMMENTS:

Spudded well 1800 hours on April 30, 1990. Using Aztec Well Service Rig #222 as drilling contractor on this well. Notified BLM and the State of Utah of spud on April 30, 1990.

**RECEIVED**  
MAY 07 1990

Indian-Lease  
Field-Undesignated  
Unit-N/A

Proposed zone - DSCR  
(New entity 11088 added 5-11-90 Jec)

DIVISION OF  
OIL, GAS & MINING

WELL 2 COMMENTS:

WELL 3 COMMENTS:

WELL 4 COMMENTS:

WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

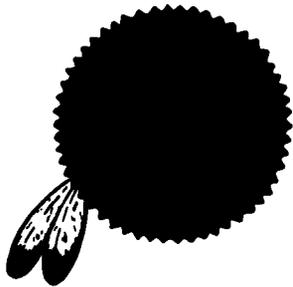
- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (explain in comments section)

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

(3/89)

  
Signature Donald S. Barnes  
Operations Manager 5-1-90  
Title 5-1-90 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

June 19, 1990

**RECEIVED**  
JUN 21 1990

DIVISION OF  
OIL, GAS & MINING

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

ATTENTION: Jim Thompson

RE: Report of Undesirable Event Checklist - Tower 1 I -2

Dear Jim:

Enclosed is "Report of Undesirable Event Checklist" which we discussed.

Please call if you have any questions or need additional information.

Sincerely,

ROBERT R. GRIFFEE  
Operations Engineer

RRG:bnp  
Enclosure  
File:RRG\UNDESEV.TW2

OIL AND GAS	
DFM	RJF
FB	GLM
HS	SLB
1 JLT	
2- MICROPAS	✓
3- PLS	

REPORT OF UNDESIRABLE EVENT CHECKLIST

JUN 21 1990 RECEIVED  
DATE OF OCCURRENCE/DISCOVERY: 6-13-90 TIME OF OCCURRENCE: 9.00P.M.  
10:00P.M. on answering machine

DIVISION OF OIL, GAS & MINING  
DATE REPORTED TO BLM: 6-13-90 & 6-14-90 TIME REPORTED: 9:00A.M. by telephone

BLM OFFICE REPORTED TO (RESOURCE AREA/DISTRICT OFFICE/OTHER): Farmington

LOCATION: SECTION: 1 T. 40S R. 25E MERIDIAN

COUNTY: San Juan STATE: Utah WELL NAME: Tower 11-2 43-037-31507

OPERATOR: Chuska Energy Company

SURFACE OWNERSHIP (FEDERAL/INDIAN/FEE/STATE): Navajo Tribal

MINERAL OWNERSHIP (FEDERAL/INDIAN/FEE/STATE): Navajo Tribal

LEASE NO.: NOG8702-1116 UNIT/CA NO.:  RIGHT-OF-WAY NO.:

TYPE OF EVENT, CIRCLE APPROPRIATE ITEM(S):

BLOWOUT, FIRE, FATALITY, INJURY, PROPERTY DAMAGE, OIL SPILL, SALTWATER SPILL, TOXIC FLUID SPILL, OIL AND SALTWATER SPILL, OIL AND TOXIC FLUID SPILL, SALTWATER AND TOXIC FLUID SPILL, GAS VENTING, UNCONTROLLED FLOW OF WELLBORE FLUIDS, OR OTHER (SPECIFY): Oil and Saltwater Spill

CAUSE OF EVENT: Against clear directions from Chuska, without a Chuska representative on location, Sun Tank Rentals trucker opened valves on tanks and drained them on location in order to move tanks.

CAUSE AND EXTENT OF PERSONAL INJURIES/CAUSE OF DEATH(S):

EFFECTS OF EVENT: Approximately 300 bbl. of water and 40 bbls. of oil were drained on location and ran approximately 3/4 of a mile down adjacent wash.

ACTION TAKEN TO CONTROL THE EVENT: sand containing oil from the wash is being picked up with loader and taken to drilling location for burial.

LENGTH OF TIME TO CONTROL EVENT AND SUBSEQUENT CLEAN-UP: Took approximately 4 hrs. to contain due to nighttime occurrence and estimate several days for complete cleanup and restoration.

VOLUME(S) OF FLUIDS (SPECIFY): Total of 340 bbls. of saltwater & oil.  
DISCHARGED: 300 water, 40 oil ~~COCCOCCOCCO~~ It is estimated up to 40 bbls. of oil  
RECOVERED: In process of recovering. spilled.

OTHER FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES NOTIFIED (INCLUDE NAMES AND DATE/TIME): State of Utah, Jim Thompson @ 9:30A.M. 6-13-90; Randy Cornett, BIA 6-13-90.

ACTION THAT HAS BEEN OR WILL BE TAKEN TO PREVENT RECURRENCE: Responsible individual working for Sun Tank, who showed lack of common working knowledge of oilfield practices, has been fired. Sun Tank Rentals has assumed responsibility for  
SIGNATURE OF OPERATOR (IF REPORT SUBMITTED BY OPERATOR): Robert R. [Signature] this spill.

DATE: 6-18-90 TITLE: Operations Engineer



# CHUSKA ENERGY COMPANY

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

13 June 1990

RECEIVED  
JUN 21 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: Sundry Notice - Tower 1I-2: Set Surface Casing

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 application.

Sincerely,

*Larry G. Sessions*

Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP\CSWH\TOWER.1I\SURFCSG.SUN

OIL AND GAS	
MIN	RJF
PH	GLH
LOS	SLB
1-DMS ✓	
2- MICROFILM ✓	
2- PLE	

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

6. IF INDIAN ALLOTTEE OR TRIBE NAME

**Navajo Tribal**

7. UNIT AGREEMENT NAME

1. OIL WELL  GAS WELL  OTHER

JUN 21 1990

8. FARM OR LEASE NAME

**Tower 11**

9. WELL NO.

**2**

10. FIELD AND POOL, OR WILDCAT

**Wildcat**

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

**S1 T40S R25E**

12. COUNTY

**San Juan**

13. STATE

**Utah**

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. See also space 17 below.)

At surface

**1940' FSL, 689' FEL**

At proposed prod. zone

**Same**

14. API NO.

**43-037-31507**

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

**5112' GR**

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) **Surface Casing**

(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

**5-27-90**

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

\* Must be accompanied by a cement verification report.

Drilled 12-1/4" hole to 504'.

Ran 12 jts 8-5/8", 24 #/ft, K-55, STC casing with shoe and float. Landed at 504'.

Cemented with 350 sx Class 'G' with 2% CaCl2 & 1/4 lb/sk D29.

Plug down 1115 hrs, 5-1-90. Circulated 28 bbl cement to surface.

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

SIGNED

*Christopher SW Hill*

TITLE

**Petroleum Engineer**

DATE

**6-13-90**

(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

RECEIVED  
JUN 21 1990

DIVISION OF  
OIL, GAS & MINING

13 June 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: Sundry Notice - Tower 1I-2; Production Casing

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 application.

Sincerely,

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

LGS/csw  
File: C:\WP\CSWH\TOWER.1I\PRODNCSG.SUN

OIL AND GAS	
GEN	RF
PH	GM
DIS	MS
+ Dave	✓
2-	MICROFILM ✓
2-	PLS

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

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

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

6. IF INDIAN ALLOTTEE OR TRIBE NAME  
**Navajo Tribal**

7. UNIT AGREEMENT NAME  
**Navajo Tribal**

1. OIL WELL  GAS WELL  OTHER  **JUN 21 1990**

8. FARM OR LEASE NAME  
**Tower 1 I**

2. NAME OF OPERATOR  
**Chuska Energy Company**

9. WELL NO.  
**2**

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

10. FIELD AND POOL, OR WILDCAT  
**Wildcat**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface **1940' FSL, 689' FEL**

11. SEC. T. R. M. OR BLK. AND SURVEY OR AREA  
**S1 T40S R25E**

At proposed prod. zone  
**Same**

14. API NO.  
**43-037-31507**

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**5112' GR**

12. COUNTY  
**San Juan**

13. STATE  
**Utah**

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Production Casing</u> <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	
APPROX. DATE WORK WILL START _____		DATE OF COMPLETION <b>5-27-90</b>	

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.

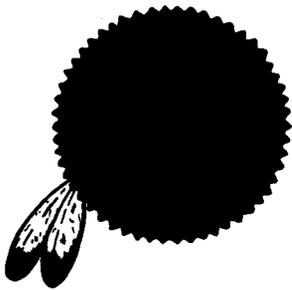
Ran 141 jts 5-1/2", 15.5 #/ft, K-55 LTC casing and landed at 6020'.  
(Casing equipped with shoe, float collar and stage collar at 3487')

Cemented 1st stage:  
Lead: 480 sx 65:35 Poz with 6% Gel and 0.25% D29  
Tail: 305 sx Class 'G' with 1/4 lb/sk Celloflake  
Plug down at 0728 hrs, 5-17-90. Did not hold. Held pressure on plug until 0930 hrs - held OK.

Cemented 2nd stage:  
Lead: 1000 sx 65:35 Poz with 6% Gel and 1/4 lb/sk Celloflake  
Tail: 100 sx Class 'G' with 2% CaCl2 and 1/4 lb/sk Celloflake  
Plug down at 1635 hrs, 5-18-90. Circulated 50 bbl slurry to pit.

18. I hereby certify that the foregoing is true and correct  
SIGNED Christopher SW Hill TITLE Petroleum Engineer DATE 6-13-90

(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**  
JUL 09 1990

5 July 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

Ref: Completion Report: Tower 11-2

Gentlemen

attached for your examination and approval is the original and two copies of the subject Completion Report.

Please advise if you require additional information concerning this submission.

Sincerely,

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

LGS/csw  
File: C:\WP\TOWER.11\COMPLETE.SUN

OIL AND GAS	
DFN	RJF
1- JPB ✓	GLH
DTS	SLS
2-DME	
3- MICROFILM ✓	
4- FLE	

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NO.

NOG 8702-1116

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

Lower 1 I

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 1, T40S, R25E

12. COUNTY

San Juan

13. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESRV.

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 1940' FSL, 689' FEL  
At top prod. interval reported below Same  
At total depth Same

14. API NO. DATE ISSUED

43-037-31507

JUL 09 1990

DIVISION OF OIL, GAS & MINING

15. DATE SPUNDED 4-30-90 16. DATE T.D. REACHED 5-13-90 17. DATE COMPL. (Ready to prod.) 6-21-90 18. ELEVATIONS (DF, REB, RT, GR, ETC.) 5112' GR 19. ELEV. CASINGHEAD 5112' GR

20. TOTAL DEPTH, MD & TVD 6020' MD 21. PLUG BACK T.D., MD & TVD 5975' MD 22. IF MULTIPLE COMPL., HOW MANY N/A 23. INTERVALS DRILLED BY Rotary 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN

DLI/MSFL/GR/Cal. LDT/CNL. Sonic. MSCT

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

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24	504'	12 1/4"	350 sx 'G' + 2% CaCl <sub>2</sub> Circulated cement to surface	
5 1/2"	15.5	6020'	7 7/8"	Stage 1: Lead 480 sx 65.35 Poz + 6% gel. Tail 305 sx 'G'. Stage 2: Lead 1000 sx 65:35 Poz + 6% gel 305 sx 'G' + 2% CaCl <sub>2</sub>	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	5803'	

31. PERFORATION RECORD (Interval, size and number)

5790' - 5822': 0.46" : 4 spf, 128 holes  
5764' - 5766': 0.46" : 4 spf, 8 holes  
5791' - 5803': 0.46" : 4 spf, 48 holes\*  
\* Reperforate after squeeze

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

DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED

See reverse side

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
5-29-90	Flowing	Suspended					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5-31-90	24	18/64	→	160	687	165	4295
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
630	1230	→	160	687	165	45.2	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

TEST WITNESSED BY  
Kiva Measurement

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 Petroleum Engineer

DATE 7-6-90

See Spaces for Additional Data on Reverse Side

## INSTRUCTIONS

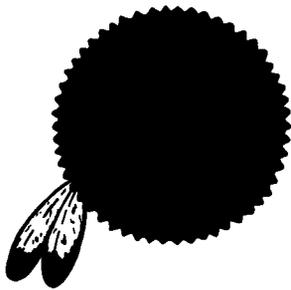
This form should be completed in compliance with the Utah Oil and Gas Conservation General Rules. If not filed prior to this time, all logs, tests, and directional surveys as required by Utah Rules should be attached and submitted with this report.

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 instruction for items 22 and 24 above)

37. SUMMARY OF POROUS ZONES:			38. GEOLOGIC MARKERS		
Formation	Top	Bottom	Description, contents, etc.	Name	Top
					Meas. Depth True Vert. Depth
Upper Ismay	5764'	5766'	Dolomite & Limestone/minor Anhydrite & Shale Trace intercrystalline porosity.	Navajo Chinle DEChelly Cutler Hermosa Upper Ismay Lower Ismay Desert Creek Akah	1127 1748 1222 2891 4692 5654 5782 5887 5990
Upper Ismay	5790'	5822'	Limestone and Dolomite. Vugular, fracture & intercrystalline, porosity		
Drill Stem Test #1:	5784'-5806'		IHP: 3005 psig, IFP: 10 min/41-54 psig. ISIP: 60 min/2035 psig. FFP: 60 min/41-67 psig. FSIP: 180 min/2278 psig. FHP: 2975 psig. Rec 70 ft v sl gcm from pipe & 300 cc gcm with trace oil and 8.35 cfg (1600 psig) from sample chamber.		
Acid Treatments:	5764'-5766'/5780'	5822'	6800 gal 28% MSR-100 acid		
	5791'-5803'	5200 gal	28% MSR-100 acid		
Squeeze Cementing:	5764'-5822'	200 sx	Class 'G'		



# CHUSKA ENERGY COMPANY

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

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

**RECEIVED**  
JUL 09 1990

DIVISION OF  
OIL, GAS & MINING

5 July 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: Sundry Notice - Tower 11-2: First Sale of Oil

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*  
Larry G. Sessions  
Operations Manager

LGS/csw  
File: C:\WP\TOWER.11\1STSALE.SUN

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <small>(Do not use this form for proposals to drill or to deepen or to recomplete a well or to change the location of a well. Use "APPLICATION FOR PERMIT" form for such proposals.)</small>		3. LEASE DESIGNATION & SERIAL NO. <b>NOG 8702-1116</b>
6. IF INDIAN ALLOTTEE OR TRIBE NAME <b>Navajo Tribal</b>		7. UNIT AGREEMENT NAME
1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		8. FARM OR LEASE NAME <b>Tower 11</b>
2. NAME OF OPERATOR <b>Chuska Energy Company</b>		9. WELL NO. <b>2</b>
3. ADDRESS OF OPERATOR <b>P. O. Box 780, Farmington, New Mexico 87499</b>		10. FIELD AND POOL, OR WILDCAT <b>Wildcat</b>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: <b>1940' FSL, 689' FEL</b> At proposed prod. zone: <b>Same</b>		11. SEC. T. R. M. OR BLK. AND SURVEY OR AREA <b>S1 T40S R25E</b>
14. API NO. <b>43-037-31507</b>	15. ELEVATIONS (Show whether DF, AT, GR, etc.) <b>5112' GR</b>	12. COUNTY <b>San Juan</b>
		13. STATE <b>Utah</b>

RECEIVED  
JUL 09 1990

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <b>First Sale of Oil</b> <input checked="" type="checkbox"/>	
<small>(Other)</small>		<small>(Note: Report results of multiple completion or Well Completion or Recompletion Report and Log form.)</small>	
APPROX. DATE WORK WILL START _____		DATE OF COMPLETION <b>5-30-90</b>	

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.

Report of first sale of oil to Giant Refining Company on May 30, 1990.  
 Pretest of Upper Ismay zone.  
 Test, through 18/64" choke, at 160 BOPD, 687 Mcfd. FTP = 630 psig.  
 Oil gravity = 45.2° API corrected to 60°F.

OIL AND GAS	
DFN	R/F
J/PB	GLH
D/S	BLS
1-JLT	
2- MICROFILM	<input checked="" type="checkbox"/>
3- P/E	
7-5-90	

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

SIGNED Christopher SW Hill TITLE Petroleum Engineer DATE \_\_\_\_\_

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

See Instructions On Reverse Side

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

<b>BRIEF NOTICE AND REPORT ON WELLS</b> <small>Use this form for proposals to drill new wells, complete existing wells or otherwise plug or abandon wells. Use APPLICATION FOR PERMIT for such proposals.</small>		6. Lease Designation and Serial Number NOG 8702-1116
		7. Indian Allottee or Tribe Name Navajo Tribal
		8. Unit or Communitization Agreement
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other (specify)	9. Well Name and Number Tower 11 2	
2. Name of Operator Chuska Energy Company	10. API Well Number 43-037-31507 <i>POW</i>	
3. Address of Operator 3315 Bloomfield Highway, Farmington, New Mexico 87401	4. Telephone Number 505-326-5525	11. Field and Pool, or Wildcat Ismay
5. Location of Well Footage : 1940' FSL, 689' FEL CG. Sec. T., R., M.: NE/4 SE/4 S1 T40S R25E County: San Juan State: UTAH		

<p style="text-align: center;"><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 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 checked="" type="checkbox"/> Other <u>Application to Vent</u></td> <td></td> </tr> </table> <p>Approximate Date Work Will Start <u>2-28-91</u></p>	<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Pull or Alter Casing	<input 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 checked="" type="checkbox"/> Other <u>Application to Vent</u>		<p style="text-align: center;"><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><small>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.</small></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 _____	
<input type="checkbox"/> Abandonment	<input type="checkbox"/> New Construction																										
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<input type="checkbox"/> Other _____																											

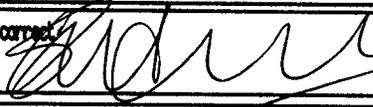
13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Under the provisions of NTL-4A, Chuska Energy hereby applies for authority to vent gas from the subject well. Refer to attached justification

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

DATE: 3-4-91  
BY: J.A. Matthews

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

Name & Signature Christopher S.W. Hill  Title Operations Engineer Date 26 Feb 91

(State Use Only)

## TOWER 11-2

### APPLICATION FOR AUTHORITY TO VENT GAS

The subject exploratory well was drilled in June, 1990. Initial completion results were disappointing and the well was suspended pending further review and evaluation. In January, 1991, it was decided to re-test the well to determine if it could be made into an economic producer. To this end, artificial lift equipment was installed on the well it was placed on test on 2-1-91. Since that time, various pump and engine problems have resulted in significant downtime.

Since being put on test, production has averaged 52 bbl/day of oil and 125 bbl/day of water, with an average wellhead pressure of 40 psig. Gas production from the well averages 80-85 Mcf/day.

In order to connect the well to a pipeline grid, it would be necessary to construct a buried line to the nearest Elkhorn line to the Aneth plant, a distance of approximately 11,000 feet.

From an economic standpoint, the estimated cost of constructing such a line, including right of way payments, is \$167,000. At current production rates, the payout period for the line would be close to 5 years.

More importantly, any attempt to connect the well to a pipeline system would impose severe operational restraints. There is insufficient pressure to enable gas to be transported over the distance required to the nearest tie-in point. To attempt to compress the small amount of gas would be prohibitively expensive.

Under these circumstances, Chuska Energy Company applies for authority to vent gas production from the subject well.



1115 Farmington Ave. - Farmington, NM 87401

(505) 325-6622

ANALYSIS NO. CHU10014

WELL/LEASE INFORMATION

COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: TOWER 1-I-2

LINE PRESSURE: 50 PSIG

LOCATION:

SAMPLE TEMP.: 45 DEG.F

LEASE:

WELL FLOWING: YES

FORMATION:

DATE SAMPLED: 2/15/91

METER NO.:

SAMPLED BY: LARRY A. CHAMBERS

REMARKS: SAMPLE OFF SEPARATOR

ANALYSIS

COMPONENT	MOLE%	GPM	
NITROGEN	1.383	0.000	
CO2	0.973	0.000	
METHANE	72.248	0.000	
ETHANE	12.554	3.356	4.57
PROPANE	6.991	1.923	2.27
I-BUTANE	0.979	0.320	} 1.22
N-BUTANE	2.842	0.896	
I-PENTANE	0.595	0.218	
N-PENTANE	0.712	0.258	
HEXANE+	0.723	0.315	
TOTAL	100.000	7.286	9.06
COMPRESSIBILITY FACTOR	(1/Z)	1.00440	
BTU/CU.FT. (DRY) CORRECTED FOR (1/Z)		1350.56	
BTU/CU.FT. (WET) CORRECTED FOR (1/Z)		1327.19	
REAL SPECIFIC GRAVITY		0.80072	

ANALYSIS RUN AT 14.73 PSIA & 60 DEGREES F

CYLINDER PRESSURE 50 PSIG

DATE RUN: 2/18/91

ANALYSIS RUN BY: CHELLE DURBIN



# CHUSKA ENERGY COMPANY

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

26 February, 1991

**RECEIVED**  
MAR 01 1991

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

DIVISION OF  
OIL, GAS & MINING

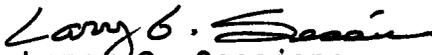
Ref: Sundry Notice: Tower 11-2 Well  
Application for Authority to Vent

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\TOWER.11\VENTSUN.CVR

encl.

Field Names Advisory Committee Meeting

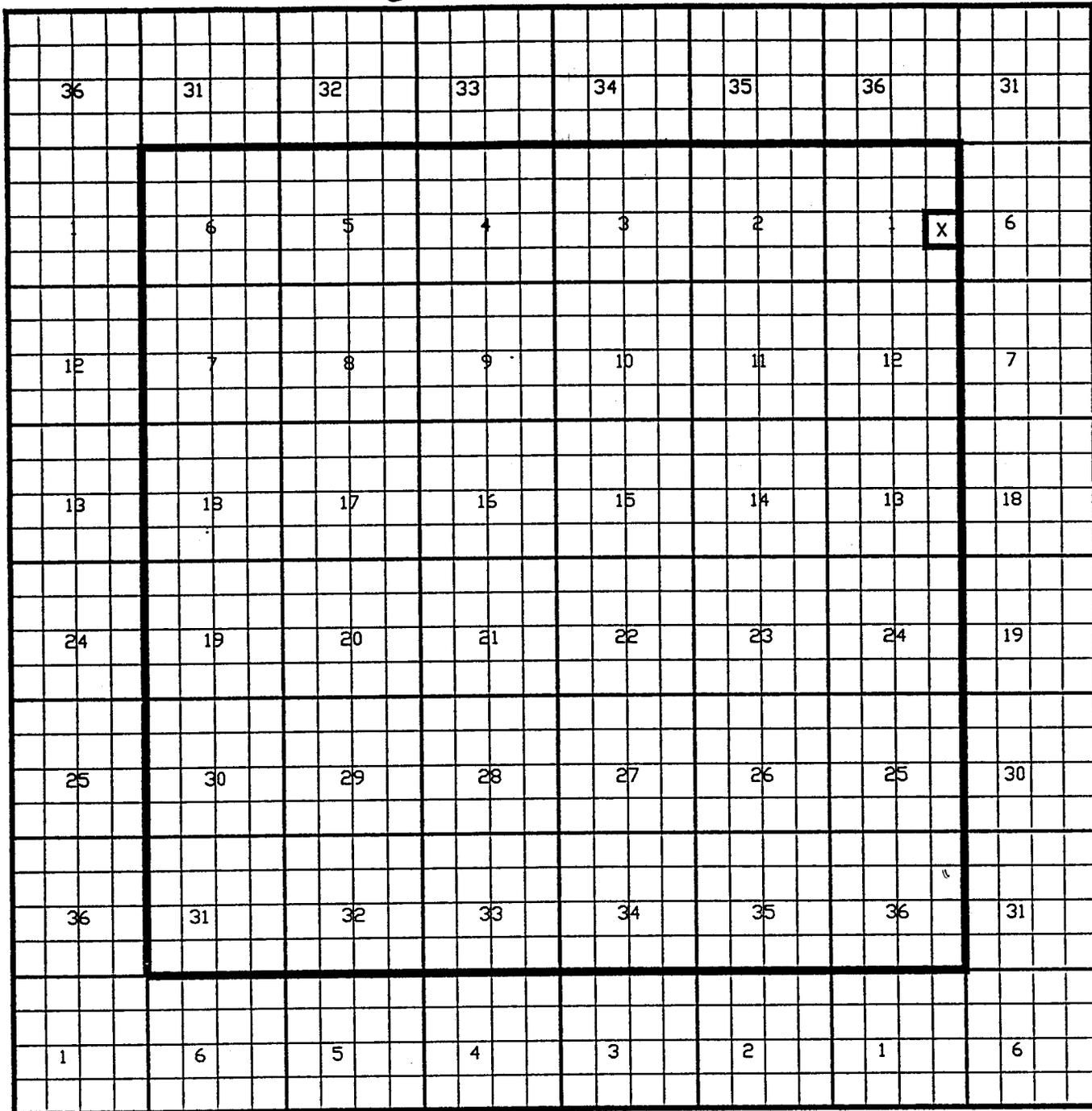
- X Reinstated Flat Canyon Field - to include all of Section 23-16S-6E, Emery County, East Mountain Unit 32-23 Well, Ferron Sandstone. 43-015-31031 FERRON
- X Extended Duchesne Field - to include SE SE, Section 3-4S-4W, Duchesne County, Ute Tribal 1-3D Well, Green River Pool. 43-013-31040 GARV
- X New Field - Unnamed 24-4S-5W to include NW NW, Section 24-4S-5W, Duchesne County, CC Ute 1-24D Well, Green River Pool. 43-013-31034 BERRY
- X New Field - Ten Mile to include SW SW, Section 26-24S-17E, Grand County, Federal #1-26, Paradox Pool. 43-019-30028 PAROX
- X New Field - Tower to include NE SE, Section 1-40S-25E, San Juan County, Tower #11-2, Desert Creek Pool. 43-037-31507 TSMY
- X New Field - Cajon Mesa to include NW NW, Section 8-40S-25E, San Juan County, Cajon Mesa #8-D-1, Desert Creek Pool. 43-037-31497 DSCR
- X New Field - Monument to include SE SW, Section 8-40S-25E, San Juan County, Monument #8-N-2, Desert Creek Pool. 43-037-31509 DSCR
- X New Field - Runway to include SW NE, Section 10-40S-25E, San Juan County, Runway 10G #1, Desert Creek Pool. 43-037-31515 DSCR
- X Extended Rock House Field - to include SE SE, Section 18-11S-23E, Uintah County, Marble Mansion Unit #1, Wasatch Pool. 43-047-31805 WSTC

Also, Sandy Hunt, made a recommendation, based on research completed on all fields in Utah, that certain revisions to the field categories be made.

The committee approved the new field categories and made a recommendation that the categories be updated and kept current on a yearly basis. The following field categories should be recognized:

1. Active Field: Area that includes currently producing wells.
2. Inactive Field: Area that includes shut in well(s) that have produced in the past and may be capable of producing in the future.
3. Terminated Field: Area that includes wells that have never produced and areas that have been included in other fields.

After discussion of all agenda items, Mr. Firth indicated that the next meeting would be scheduled for some time in April 1991. There being no other business, the meeting adjourned at approximately 3:30 p.m.



T. 40S

R. 25E

✓ TOWNSHIP 40 SOUTH, RANGE 25 EAST - SAN JUAN COUNTY - 470

SECTION 1: NE/4 SE/4

OCTOBER 1990  
DESERT CREEK POOL



# 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,

*Herb*

Herbert P. Mosca  
Chuska Staff Geologist

**RECEIVED**

MAY 20 1991

DIVISION OF  
OIL GAS & MINING

**STATE OF UTAH**  
**DIVISION OF OIL, GAS AND MINING**  
 355 West North Temple, 3 Triad, Suite 350, Salt Lake City, UT 84180-1203

## MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

LARRY G SESSIONS  
 CHUSKA ENERGY COMPANY  
 3315 BLOOMFIELD HWY  
 FARMINGTON NM 87401

UTAH ACCOUNT NUMBER: N9290

REPORT PERIOD (MONTH/YEAR): 12 / 93

AMENDED REPORT  (Highlight Changes)

Well Name			Producing Zone	Well Status	Days Oper	Production Volumes		
API Number	Entity	Location				OIL(BBL)	GAS(MCF)	WATER(BBL)
116-1	NAVAJO TRIBAL							
✓4303715390	00545	41S 25E 31	DSCR					
	NAVAJO TRIBAL 23-13							
✓4303730971	09420	40S 24E 13	DSCR					
	NAVAJO TRIBAL 42-2							
✓4303731017	09425	42S 24E 2	DSCR					
	NAVAJO TRIBAL 24-13							
✓4303730970	09435	40S 24E 13	DSCR					
	NAVAJO TRIBAL 41-2							
✓4303731041	09437	42S 24E 2	DSCR					
	NAVAJO TRIBAL #32-26							
✓4303731060	09990	40S 22E 26	DSCR					
	VAJO TRIBAL 14-10							
✓4303730977	10130	40S 24E 10	DSCR					
	SAHGZIE NO. 1							
✓4303731472	11032	42S 24E 5	DSCR					
	ANASAZI #1							
✓4303731478	11042	42S 24E 5	DSCR					
	CAJON MESA 8-D-1							
✓4303731497	11074	40S 25E 8	DSCR					
	MONUMENT #8-N-2							
✓4303731509	11087	40S 25E 8	DSCR					
	TOWER #1 I-2							
✓4303731507	11088	40S 25E 1	ISMY					
	RUNWAY 10G #1							
✓4303731515	11105	40S 25E 10	DSCR					
<b>TOTALS</b>								

COMMENTS: \_\_\_\_\_

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

Date: \_\_\_\_\_

Name and Signature: \_\_\_\_\_

Telephone Number: \_\_\_\_\_



# HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

We are pleased to announce that effective January 18, 1994, Chuska Energy Company, has changed its name to Harken Southwest Corporation. This is in line with the February 1993 merger with Harken Exploration Company.

Harken Southwest Corporation is still located at 3315 Bloomfield Highway, Farmington, New Mexico, 87401. You may still contact us at (505) 326-5525.

Please reflect this name change as necessary on all future correspondence.

Thank you for your assistance in this matter and we look forward to working with you as Harken Southwest Corporation.

Sincerely,

Barry A. Wieland  
Operations Manager

RECEIVED

FEB 07 1994

DIVISION OF  
OIL, GAS & MINING

Division of Oil, Gas and Mining  
**PHONE CONVERSATION DOCUMENTATION FORM**

Route original/copy to:

Well File \_\_\_\_\_

Suspense  
(Return Date) \_\_\_\_\_  
(To - Initials) \_\_\_\_\_

Other  
*Oper. Nm. Change*

(Location) Sec \_\_\_\_\_ Twp \_\_\_\_\_ Rng \_\_\_\_\_  
(API No.) \_\_\_\_\_

1. Date of Phone Call: 2-9-94 Time: 12:29

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

Name Wayne Townsend (Initiated Call ) - Phone No. (505) 599-8900  
*(or Ken Townsend)*  
of (Company/Organization) Btm / Farmington N.M.

3. Topic of Conversation: Chuska Energy Co. to Harken Southwest Corp.

4. Highlights of Conversation:

They have not rec'd doc. of name change. When they do receive doc. they will most likely keep "Chuska" as operator yet mail any correspondence % Harken, until BIA approval. (BIA approval may take a while!)

\* 940210 Per Admin. OK to change.

Division of Oil, Gas and Mining  
**OPERATOR CHANGE WORKSHEET**

Routing:

1-VLC	7-SJ
2-DTS	8-FILE
3-VLC	
4-RJF	
5-IEC	
6-PL	

Attach all documentation received by the division regarding this change.  
 Initial each listed item when completed. Write N/A if item is not applicable.

- Change of Operator (well sold)       Designation of Agent  
 Designation of Operator       Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 1-18-94)

TO (new operator)	<u>HARKEN SOUTHWEST CORPORATION</u>	FROM (former operator)	<u>CHUSKA ENERGY COMPANY</u>
(address)	<u>3315 BLOOMFIELD HWY</u>	(address)	<u>3315 BLOOMFIELD HWY</u>
	<u>FARMINGTON NM 87401</u>		<u>FARMINGTON NM 87401</u>
	phone <u>( 505 ) 326-5525</u>		phone <u>( 505 ) 326-5525</u>
	account no. <u>N 9290</u>		account no. <u>N9290</u>

Well(s) (attach additional page if needed):

Name: <b>**SEE ATTACHED**</b>	API: <u>037-31507</u>	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____	Twp _____	Rng _____	Lease Type: _____

**OPERATOR CHANGE DOCUMENTATION**

- See 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). *(Rec'd 2-7-94)*
- N/A 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form).
- See 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) \_\_\_\_ If yes, show company file number: #096704.
- See 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.
- See 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. *(2-10-94)*
- See 6. Cardex file has been updated for each well listed above. *(2-10-94)*
- See 7. Well file labels have been updated for each well listed above. *(2-10-94)*
- See 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission.
- See 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

**ENTITY REVIEW**

- See 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) \_\_\_\_ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

**BOND VERIFICATION (Fee wells only)**

- N/A See 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- \_\_\_\_ 2. A copy of this form has been placed in the new and former operators' bond files.
- \_\_\_\_ 3. The former operator has requested a release of liability from their bond (yes/no) \_\_\_\_ . Today's date \_\_\_\_\_ 19\_\_\_\_. If yes, division response was made by letter dated \_\_\_\_\_ 19\_\_\_\_.

**LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY**

- N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated \_\_\_\_\_ 19\_\_\_\_, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

**FILMING**

1. All attachments to this form have been microfilmed. Date: March 7 1994.

**FILING**

- See 1. Copies of all attachments to this form have been filed in each well file.
- See 2. The original of this form and the original attachments have been filed in the Operator Change file.

**COMMENTS**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**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**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. NOG 8707-1169
2. Name of Operator HARKEN SOUTHWEST CORPORATION	6. If Indian, Allottee or Tribe Name NAVAJO
3. Address and Telephone No. P. O. BOX 612007, DALLAS, TX 75261-2007 214/753-6900	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SEC 1-40S-25E (NE/SE) 1940' FSL & 689' FEL	8. Well Name and No. TOWER 1I-2
	9. API Well No. 43-037-31507
	10. Field and Pool, or Exploratory Area
	11. County or Parish, State SAN JUAN CO., UTAH

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

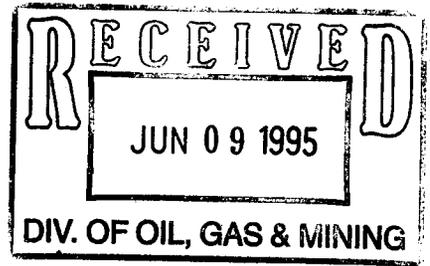
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other _____
	<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.)\*

Harken Southwest anticipates plugging and abandonment of the subject wellbore by year-end.

CC: State of Utah  
Navajo Nation - Minerals Dept  
BIA - Gallup, NM



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

Signed Rachelle Montgomery Title PRODUCTION ADMINISTRATOR Date 6/08/95

(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.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**RECEIVED**  
OCT 5 1995  
DIV. OF OIL, GAS & MINING

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

5. Lease Designation and Serial No.  
NOG 8707-1169

6. If Indian, Allottee or Tribe Name  
Navajo

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry wells. Use "APPLICATION FOR PERMIT—" for such proposals.

**SUBMIT IN TRIPLICATE**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
Harken Southwest Corporation

3. Address and Telephone No.  
P.O. Box 612007 Dallas, Texas 75261 (214) 753-6900

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
NE/SE Sec 1-40S-25E  
1940' FSL & 689' FEL

7. If Unit or CA, Agreement Designation  
N/A

8. Well Name and No.  
Tower 11-2

9. API Well No.  
43-037-31507

10. Field and Pool, or Exploratory Area

11. County or Parish, State  
San Juan, Utah

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Abandonment
<input 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 type="checkbox"/> Other
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
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	<input type="checkbox"/> Water Shut-Off
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	<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.)\*

Attached please find the following information regarding the plugging and abandonment on the subject wellbore:

- Current Well Information
- Schematic of Current Wellbore Configuration
- Abandonment Procedures
- Schematic of Proposed P&A Configuration

Harken will permanently abandon the wellbore during the 1995 P&A program, scheduled to be completed prior to 12/31/95. Location reseeded will take place during 1996 as stipulated on the original APD.

Should any questions arise, please contact Mr. Richard Cottle in the Farmington, NM office at telephone (505) 327-5531 or the undersigned at the address/telephone number above.

CC: State of Utah  
Navajo Nation - Minerals Dept  
Bureau of Indian Affairs - Gallup, NM

14. I hereby certify that the foregoing is true and correct  
Signed [Signature] Title Production Administrator Date 10/4/95

(This space for Federal or State office use)

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

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**

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.

**FOR RECORD ONLY**

\*See Instruction on Reverse Side

**PLUG and ABANDONMENT**  
**Tower #1 I**  
 1940' FSL & 689' FWL, Sec 1 - T40S - R25E  
 San Juan County, Utah  
 September 26, 1995

Present Status: Shut-In Uneconomic Oil Well

Elevation: 5112' GL Reference Elevation: 5112' GL

Total Depth: 6020' MD PBTD: 5975'

Casing Program:

8 5/8", 24#, Surface csg @ 504' to surface w/350 sacks cmt  
 5 1/2", 15.5#, Production csg @ 6020' w/ 2,090 sacks cmt in two stages

Production Equipment: 183 joints of 2 7/8" tubing (5757'), SN @ 5757', 6' perf sub  
 16' Gas Anchor, 1 jnt 2 7/8", capped bull plug.

Tubing Anchor @ 5659'

PBTD @ 5798'

**Casing and Tubing Detail**

Depth	Size (in)	Wt. #/ft	Grade Thread	Burst (psi)	Collapse (psi)	Yield M#	Drift (in)	Capacity (bbls/ft)
Surf 6020'	5 1/2	15.5	K-55 STC	4810	4040	222	4.825	0.0238
Surf 5757'	2 7/8"	6.5	J-55 EUE	7260	7680	99.7	2.347	0.00579

# HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

TOWER 1-I-2

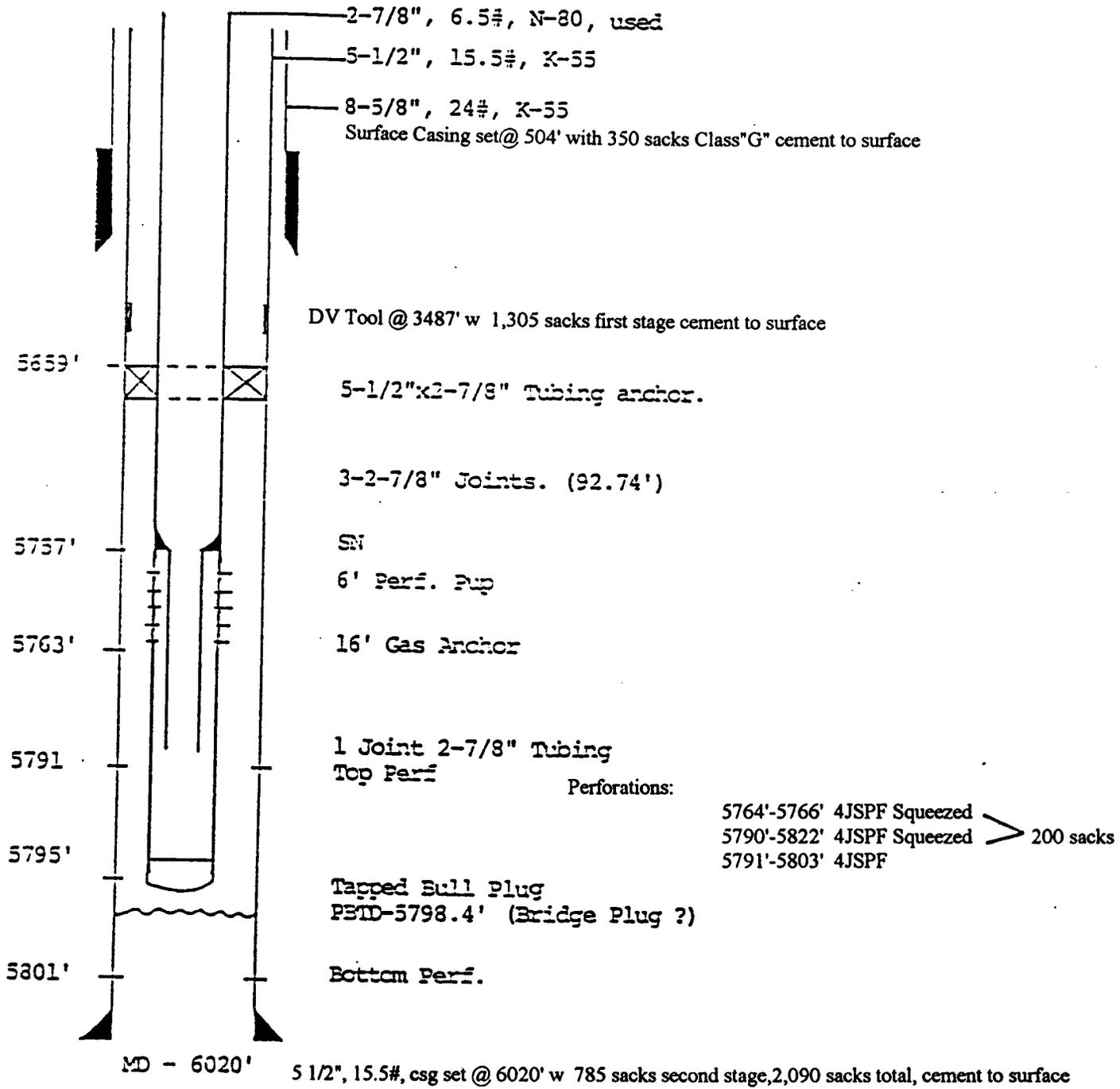
Present Wellbore

NE/SE Sec. 1-T.40S-R.24E

San Juan County, Utah

G.L. 5112'

Well completed 6-21-90



**Tower #1 I Plug and Abandonment**  
1940' FSL & 689' FEL, Sec 1 - T40S - R25E  
San Juan County, Utah  
NOG-8707-1169

9/26/95 ROC

**P & A Procedures**

1. MIRU, Blow Down, hold safety meeting, ND wellhead, NU BOPs.
2. Unset tubing anchor and POH with 2 7/8" tubing and anchor. PU 4 3/4" bit, RIH on tbg to tag bottom@ ~ 5798'. POH.
3. PU cement retainer and RIH on tbg to 5714'.
4. Set retainer at 5714', mix up and circulate Plug #1, 25 sacks (5.0 bbl) of Class "B" cement to the end of the tubing, sting into cmt retainer, pump cement thru retainer to squeeze Lower Ismay & Desert Creek perforations @ 5791'-5803', 5790'-5822' & 5764'-5766'. *NOTE:* Perforations from 5798' to 5822' already below bridge plug and cement.
5. Pull off retainer and circulate 105 Bbls of 9.0 lb/gal mud from 5714' to 1272'.
6. Mix up and circulate Plug #2, 15 sacks (3.0 bbl) of Class "B" cement to the end of the tubing and balance the plug from 1285' to 1160' (125').
7. Circulate 14 bbls of 9.0 lb/gal mud from 1160' to 554'.
8. Mix up and circulate Plug #3, 12 sacks (2.4 bbl) of Class "B" cement to the end of the tubing, balance the plug from 554' to 454' (100').
9. Circulate 10 Bbls of 9.0 lb/gal mud from 454' to 50'.
10. Mix up and circulate, Plug #4, 6 sacks ( 1.2 bbl) of Class "B" cement to surface while pulling out of the hole.
11. ND BOPs, cut off wellhead flange and csg 4' below ground level and install P&A surface marker.
12. Restore location.

**TOTAL CEMENT:**

Plug #1	25 sacks (100% excess)
Plug #2	15 sacks
Plug #3	12 sacks
Plug #4	6 sacks to surface
-----	
<b>TOTAL</b>	<b>58 sacks</b>

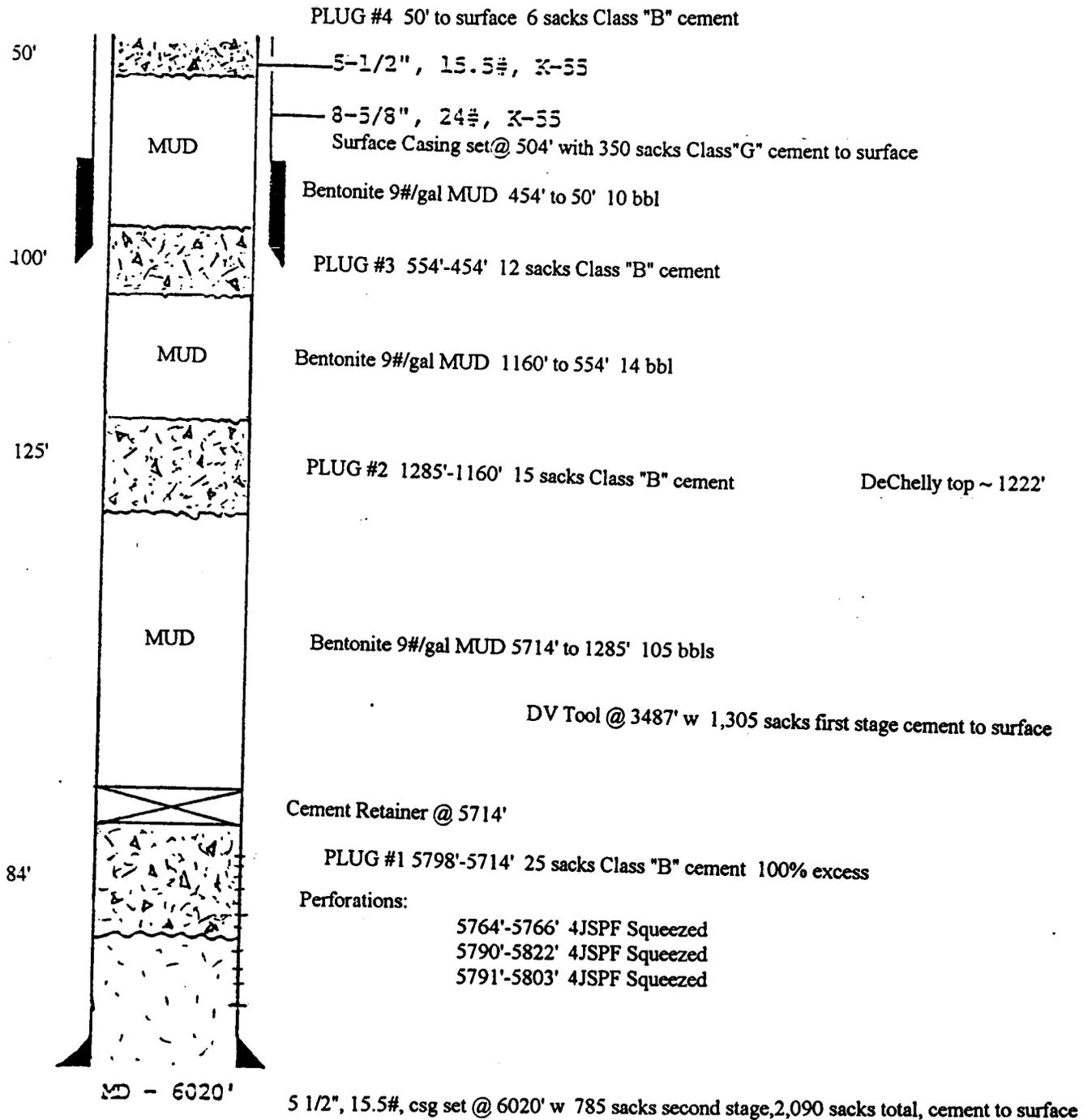
# HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

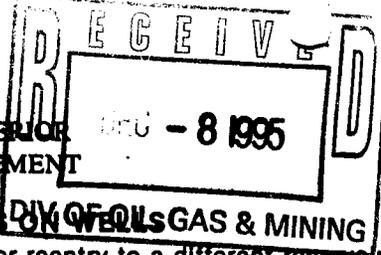
## TOWER 1-I-2

P & A WELLBORE  
CONFIGURATION

NE/SE Sec. 1-T.40S-R.24E  
San Juan County, Utah  
G.L. 5112'  
Well completed 6-21-90



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT



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

**SUNDRY NOTICES AND REPORTS ON OIL, GAS & MINING**

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

5. Lease Designation and Serial No.  
NOG 8707-1169

6. If Indian, Allottee or Tribe Name  
Navajo

7. If Unit or CA, Agreement Designation  
N/A

8. Well Name and No.  
Tower II-2

9. API Well No.  
43-037-31507

10. Field and Pool, or Exploratory Area

11. County or Parish, State

San Juan, Utah

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

Harken Southwest Corporation

3. Address and Telephone No.

P.O. Box 612007 Dallas, Texas 75261-2007 (214) 753-6900

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NE/SE Sec. 1-40S-25E  
1940' FSL & 689' FEL

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 checked="" 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 type="checkbox"/> Other _____
	<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.)\*

The subject well was plugged and abandoned on December 4, 1995. BLM representative Ron Snow was on location and witnessed all plugs. Abandonment operations were as follows:

RU, unstung from retainer, press tested csg to 700 psig, held 5 min-ok. Stung into retainer, pumped 25 sxs Cl "B" to squeeze Ismay perms, 1-2 BPM, < 100 psig. Circ 17 sxs on top of retainer from 5705-5555' KB. Plug #1 5803-5555' KB (248") - 42 sxs. Top of Ismay @ 5605' KB. Balanced Plug #2 4771-4621' KB (150') - 17 sxs. Top of Hermosa @ 4709' KB. Balanced Plug #3 2967-2817' KB (150') - 17 sxs. Top of De Chelly @ 2899' KB. Plug #4 1807-1657' KB (150') - 17 sxs. Top of Chinle @ 1749' KB. Balanced Plug #5 551-401' KB (150') - 17 sxs. Surface csg shoe @ 504' KB. Circ cmt to surface. Plug #6 50' - surface - 10 sxs. Cut off csg below surface and weld on regulation subsurface P&A marker.

**TOWER II-2 PERMANENTLY ABANDONED 12/4/95**

cc: State of Utah  
Navajo Nation  
BIA - Gallup, NM

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

Signed Rachelle D. Montgomery Title Production Administrator Date 12/05/95

(This space for Federal or State office use)

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FEB - 5 1996

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

Harken Southwest Corporation

3. Address and Telephone No.

P.O. Box 612007 Dallas, Texas 75261-2007 (214) 753-6900

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NE/SE Section 1 -40S -25E  
1940' FSL & 689' FEL

5. Lease Designation and Serial No.  
NOG 8707-1169

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation

N/A

8. Well Name and No.

Tower 1 I-2

9. API Well No.

43-037-31507

10. Field and Pool, or Exploratory Area

11. County or Parish, State

San Juan Co., Utah

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

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other Surface Restoration  
 Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 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.)\*

The subject well was plugged and abandoned on December 4, 1995. Following well plugging, surface rehabilitation operations and location reseeding operations were concluded on January 4, 1996. Verbal reseeding notification was given to Don Ellsworth, BLM, on December 1, 1995. Required surface restoration stipulations are complete.

CC: State of Utah  
Navajo Nation  
BIA - Gallup

Attachments: 3

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

Signed Richard D. Lewis Title Operations Manager

Date February 1, 1996

(This space for Federal or State office use)

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



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Farmington District Office  
1235 La Plata Highway  
Farmington, New Mexico 87401

cc: R. Cottle

IN REPLY REFER TO:  
3162.3-4 (07600)  
NOG-8707-1146 NOG-8707-1240 NOG-8708-1033  
NOG-8707-1216 NOG-8707-1169 (WC)

001 : 0 1095

Harken Southwest Corp.  
Attn: R. Montgomery  
P.O. Box 612007  
Dallas, TX 75261

Dear Ms. Montgomery:

The following surface rehabilitation stipulations must be complied with as applicable, before wells in San Juan County, nos.

Well No. & Name	Lease No.	Footages	S	T	R	
1. 1 Beclabito 3	NOG-8707-1146	1695' FNL/1980 FEL	13	30N	21W	NM
2. 4M Lizard	NOG-8707-1240	1100' FSL/ 160' FWL	4	41S	23E	UT
3. 2 Navajo Tribal 42	NOG-8308-1033	2140' FNL/ 590' FEL	2	42S	24E	UT
4. 33-0 Clay Hill	NOG-8707-1216	370' FSL/1750' FEL	33	41S	25E	UT
5. 2 Tower L.I.	NOG-8707-1169	1940' FSL/ 689' FEL	1	40S	25E	UT

can be approved for final abandonment (see 43 CFR 3162.3-4).

1. A permanent monument must be cemented in the wellbore. It must be labeled with the operators name, well name and number, legal location and lease number (see CFR 3162.6).
2. All fences, production equipment, purchaser's equipment, concrete slabs, deadman (anchors), flowlines, risers, debris and trash must be removed from the location.
3. Production pits will be closed according to the Unlined Surface Impoundment Closure Guidelines, as approved in the Environmental Assessment of December 1993. Any oil stained soils may be remediated on-site according to these guidelines or disposed of in an approved disposal facility.
4. Pads must be leveled, dressed up by a maintainer, ripped and disked. The edge of the pads will be shaped to conform to the natural terrain.
5. Access roads must be leveled, waterbarred, ripped, disked and blocked off with earthen berms at the junction with the main road and at the entrance to the well pad. Waterbars should be spaced as shown below:

<i>% Slopes</i>	<i>Spacing Interval</i>
Less than 2%	200'
2 to 5%	150'
6 to 9 %	100'
10 to 15%	50'
Greater than 15%	30"

All water bars should divert water to the downhill side of the road.

6. All disturbed areas will be seeded between July 1 and September 15 with the prescribed seed mix (reseeding may be required).

7. Notify Surfacing Managing Agency (SMA) seven (7) days prior to seeding so they may be present for that option.

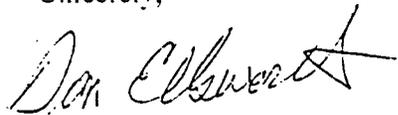
Other SMA's may vary slightly in their restoration requirements. It is your responsibility, as the operator, to obtain surface restoration requirements from other SMA's. We need to be provided with a copy of these requirements. Any problems concerning stipulations received from other SMA's should be brought to us.

On private land, we should be provided with a letter from the fee owner stating that the surface restoration is satisfactory.

If the surface restoration has not yet been completed, notify us by Sundry Notice upon completion. We will schedule an inspection to check the well site after we receive notice from you that the vegetation has become established.

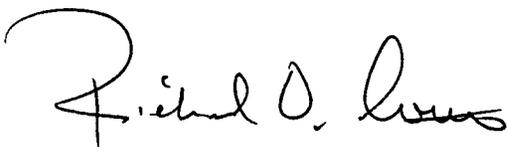
If you have any questions, please contact the Environmental Compliance Staff at (505) 599-8900.

Sincerely,



Don W. Ellsworth  
Senior Technical Specialist  
Environmental Compliance

*All work is complete*



1-4-96

SOUTHWEST SEED INC  
13260 C.R. 29  
DOLORIS, CO 81323  
(303) 565-8702

CALL FOR ALL NEEDS  
SEED CONSULTING SERVICE

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LN	SPECIES / VARIETY	LOT #	ORIG	P. PE	INERT	CROP	NEED	R/N	NOX	GERM	PLS %	DATE	PLS lbs	BULK #	% OF MIX
1	INDIAN RICEGRASS MEZPAR	04762	CA	99.93	0.01	0.00	0.06	HF	HF	98.00	97.93	08/15/95	6.00	6.13	33.33
2	GRASS K: DROPSEED SAND 05034	TX	92.12	6.86	0.01	0.01	0.01	HF	HF	88.00	81.95	12/13/95	2.00	2.44	11.11
3	RYEGRASS: WILD-MAMMOTH VOLGA RC 03340	CO	77.75	1.89	3.27	0.09	0.09	HF	HF	87.00	85.04	03/08/95	4.00	7.96	33.33
4	SHRUB: FOUR KING SALTBUSH WA 04335	WA	1.50	4.16	3.04	0.00	0.00	HF	HF	93.00	69.35	04/14/95	4.00	6.63	22.22
													18	22.25	100.00

MO5041 BWR-TOWER MIX

E DATE IS 12/18/95  
E TIME IS 13:41:45