

CHUSKA ENERGY COMPANY

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

6 June, 1991

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

Ref: Application for Permit to Drill
Copperhead 15-E Well, San Juan County, Utah

Gentlemen

Attached for your examination and approval is the original and two copies of an Application for Permit to Drill the Copperhead Well No. 15-E in San Juan County, Utah. This well will be drilled as part of an ongoing exploration and development program.

The location for this well falls outside the guidelines for the State of Utah spacing requirements. However, the desired location has been selected so as to allow optimal penetration by the well bore of geological structures which have been identified by seismic interpretation. We therefore apply for an exception to the General State Spacing requirements. Chuska Energy controls the acreage surrounding the proposed site, as indicated on the attached land plat.

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

Sincerely,

Larry G. Sessions

Larry G. Sessions
Operations Manager

LGS/csw
File: C:\WP51\COPPERHD.15E\APDCOVER

encl.

RECEIVED

JUN 10 1991

DIVISION OF
OIL GAS & MINING

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

b. Type of Well
 Oil Well Gas Well Other Single Zone Multiple Zone

2. Name of Operator
 Chuska Energy Company

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

4. Location of Well (Report location clearly and in accordance with any state requirements)
 At Surface 2100' FNL, 1270' FWL
 At proposed prod. zone Same

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

6. If Indian, Allottee or Tribe Name
 Navajo Tribal

7. Unit Agreement Name

8. Farm or Lease Name
 Copperhead

9. Well No.
 15-E

10. Field and Pool, or Wildcat
 Wildcat 001

11. QQ, Sec., T., R., N., or Blk. and Survey or Area
 S15 T43S R26E

12. County or Parish
 San Juan

13. State
 Utah

14. Distance in miles and direction from nearest town or post office
 14 miles SSE of Aneth, Utah

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)
 1,370'

16. No. of acres in lease
 49,997

17. No. of acres assigned to this well

18. Distance from proposed location to nearest well, drilling, completed, or applied for, on this lease, ft.
 23,987'

19. Proposed depth
 7,798' KB *ISMY*

20. Rotary or cable tools
 Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
 4,911' GR/4,924' KB

22. Approx. date work will start
 11-12-91

CONFIDENTIAL
 - SWNW

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4"	8 5/8"	24 lb	500'	371 sx 'G' + 2% CaCl ₂
7 7/8"	5 1/2"	15.5/17.0 lb	7,798'	1,169 sx 'G', 65:35 Poz + 6% Gel

Refer to attached 10-Point Drilling Plan etc.

RECEIVED

JUN 10 1991

DIVISION OF
OIL GAS & MINING

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 *Christopher S. Hill* Title Operations Engineer Date 6 June, 1991

(This space for Federal or State office use)

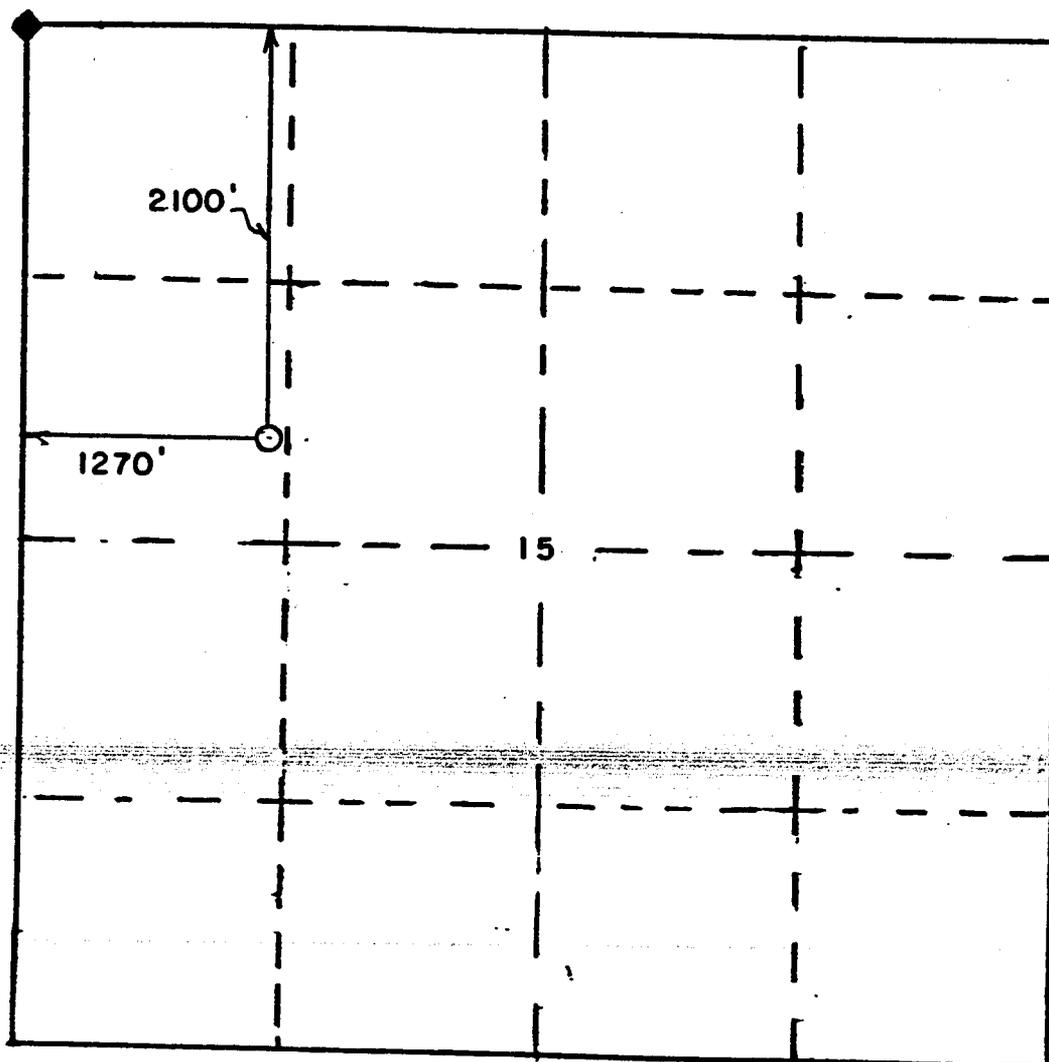
API NO. 43-037-31633 Approval Date APPROVED BY THE STATE

Approved by _____ Title OF UTAH DIVISION OF

Conditions of approval, if any: _____
 DATE: 7-10-91
 BY: *JR Matthews*
 WELL SPACING: 615-8-3

*See Instructions On Reverse Side.

WELL LOCATION PLAT



WELL LOCATION DESCRIPTION:

CHUSKA ENERGY CO., Copperhead 15 - E

2100' FNL & 1270' FWL

Section 15, T.43 S., R.26 E., SLM

San Juan County, UT

4911' ground elevation

State plane coordinates from seismic control:

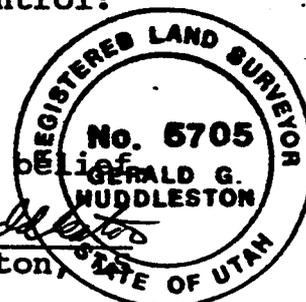
X = 2,713,082 Y = 148,844

SP 536 line 500-49

The above is true and correct to my knowledge and belief

22 May 1991

Gerald G. Huddleston
Gerald G. Huddleston



CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Copperhead Well No. 15-E
Section 15, Township 43S, Range 26E
2100' FNL, 1270' FWL
San Juan County, Utah

1. SURFACE FORMATION

Geological name of surface formation: Morrison

2. ELEVATION

Surface elevation is 4,911' GR/4,924' KB.

3. ESTIMATED FORMATION TOPS

<u>Depth</u>	<u>Formation</u>	<u>Sub Sea Elevation</u>	
Surface	Morrison	+ 4,911'	
1,206'	Navajo	+ 3,705'	
1,886'	Chinle	+ 3,025'	
3,043'	DeChelly	+ 1,868'	
3,309'	Organ Rock	+ 1,602'	
3,997'	Cedar Mesa	+ 914'	
4,950'	Hermosa	- 39'	
5,760'	Upper Ismay	- 849'	
5,860'	Lower Ismay	- 949'	Primary Objective
5,960'	Desert Creek	- 1,049'	
6,066'	Akah	- 1,155'	
6,311'	Barker Creek	- 1,400'	
6,761'	Molas	- 1,850'	
6,871'	Mississippian	- 1,960'	
7,176'	Elbert	- 2,265'	
7,348'	McCracken	- 2,437'	
7,468'	Aneth	- 2,557'	
7,548'	Cambrian	- 2,637'	
7,598'	Pre-Cambrian	- 2,687'	
7,798'	Total Depth	- 2,887'	

4. PROPOSED CASING/CEMENTING PROGRAM

	<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Coupling</u>
Surface	500'	8 5/8"	24 lb	K-55	STC
Production:	7,798'	5 1/2"	Refer to details below		

Production Casing (5 1/2" O.D.) details:

<u>Interval</u>	<u>Weight</u>	<u>Grade</u>	<u>Coupling</u>
0' - 40'	20 lb	N-80	LTC
40' - 5,946'	15.5 lb	K-55	LTC
5,946' - 6,431'	20 lb	N-80	LTC
6,431' - 7,798'	17 lb	K-55	LTC

Surface Cementing:

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

Production Cementing:

First Stage

T.D. to 4,300' (stage collar @ ± 4,300'). Lead with 117 sx Class 'G' cement, 65:35 Pozmix, with 6% gel, and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 500 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 791 ft³. Bring Class 'G' slurry to 500' above top of Upper Ismay. Cement volumes calculated at 30% excess in open hole. W.O.C. 4 hours between stages.

Second Stage

4,300' to surface. Lead with 453 sx Class 'G' cement, 65:35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 100 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 952 ft³. Cement volumes calculated at 30% excess in open hole.

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

5. BLOWOUT PREVENTER (See attached schematics)

As abnormal pressure is not anticipated, a 2,000 psi BOP system would be sufficient for the drilling of this well. However, due to availability constraints, a 3,000 psi system will be used, as per the attached Exhibits "A" and "B". This will be a 10" x 900 Series double ram preventer, equipped with a set of pipe and blind rams.

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

6. PROPOSED MUD PROGRAM

Surface to 3,000'

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

3,000' to T.D.

Low solids, non-dispersed polymer system. Weight 8.6 - 9.5 ppg. Gel/lime sweeps as hole conditions dictate for hole cleaning. Fluid loss to be maintained at 15 - 20 cc. Fluid loss to be further reduced to 15 cc or less prior to coring, logging or DSTs.

7. AUXILIARY EQUIPMENT

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

8. WELL EVALUATION

Open hole electric logging program will consist of a minimum program of DLL-MSFL-SP-GR-Cal, FDC-CNL-GR-Lithodensity from T.D. to 4,500'.

Coring and/or drill stem testing will be as per the wellsite geologist's recommendations, based on shows. A mud logging unit will be utilized during drilling operations from at least 500' above the Upper Ismay.

9. ABNORMAL PRESSURES/GAS

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

10. TIMING

The drilling and evaluation of this well is estimated to be 30 days. Anticipated spud date is 11-12-91.

DETAILED DRILLING PROGRAM

DATE: 6 June, 1991

WELL NAME: Copperhead WELL NO.: 15-E

LOCATION: Section 15, Township 43S, Range 26E
2100' FNL, 1270' FWL
San Juan County, Utah

ELEVATION: 4,911' GR/4,924' KB

TOTAL DEPTH: 7,798' KB

PROJECTED HORIZON: Primary target is Lower Ismay at 5,860'.

DRILLING, CASING AND CEMENTING PROGRAM

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

9. If the well is determined to be productive, run 5 1/2" casing to T.D., as per casing program in 10 Point Drilling Plan. Set stage cementing collar at \pm 4,300'. In addition to placing centralizers over potential production zones, they will also be run to cover the aquifer sands of the Navajo and DeChelly formations, as per BLM stipulations. Cement production casing in two stages as per cementing program in 10-point Drilling Plan.
10. Nipple down BOPE. Set 5 1/2" casing slips and cut off casing. Install well head. Release drilling rig and move rig off location.
11. If well is non-productive it will be plugged and abandoned as per State, BLM and Navajo Tribal stipulations.

Overhead Well No. 15-E
15, Township 43S, Range 26E
2100' FNL, 1270' FWL
San Juan County, Utah

E
Page 26E

PROCEDURE

Determined to be productive, move in completion
acidize, and test each productive porosity
work will commence after Sundry Notice
is served. Detailed procedures will follow.

NOTE

Determined not to be productive, the well bore
as per BLM, State and Navajo Tribal

where the existing roads
route to be followed
existing roads will be
repairs are in progress.

attached topographic
constructed 14' in width
to prevent excessive
erosion and will be upgraded if
a new road will need to
be only upgrading of

UTILITIES

utilities facilities in the

UTILITIES

in place. Should the
generator (tank battery etc)
be needed.

River or McElmo Creek
company water trucks,
rights Permit Numbers

materials is not
commercial materials are
from private sources or

an enclosed bin. It
site or burned on
the reserve pit will
7 mil liner, for
also be fenced. All
te will be stored in
will be stored in
ocation to approved
emptied, back filled
upon completion of

l be provided on
operations. No camps

t and fill diagram

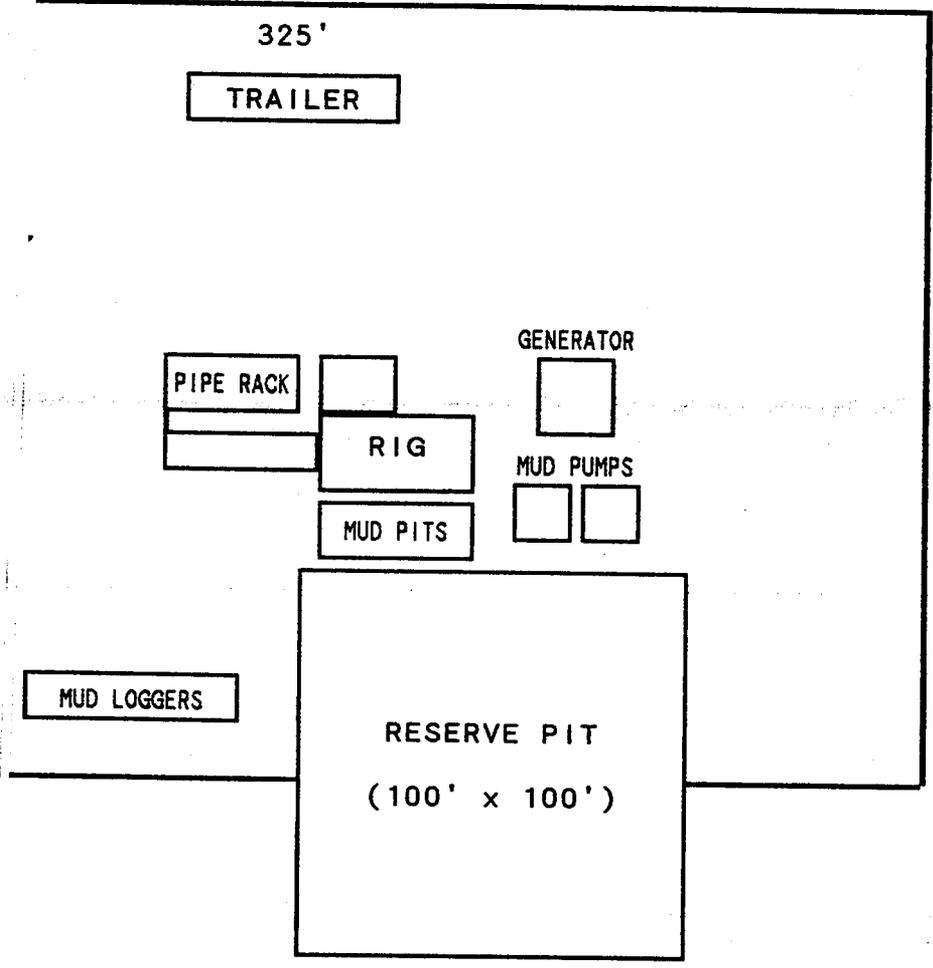
uth west trend and
e pit (up to 13' of
pad) and up to 5'
ion pad. Top soil
the well site. A
ning sparse native
complete, drilling
to evaporate. All
posed of into an
ill remain fenced
The pit will then
to the disturbed
to its original
s, rehabilitation
BIA stipulations.
a of the site.

Y

LOCATION LAYOUT

OPPERHEAD 15-E

2100' FNL, 1270' FWL
ON 15, TOWNSHIP 43S, RANGE 26E
SAN JUAN COUNTY, UTAH



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 as required, with an approved 7 mil liner, for containing drilling fluids. The pit will also be fenced. All drilling fluids, cuttings and chemical waste will be stored in the reserve pit. Liquid hydrocarbons will be stored in temporary storage tanks and hauled from location to approved sales facilities. The reserve pit will be emptied, back filled and restored to natural terrain status upon completion of drilling operations.

8. ANCILLARY FACILITIES

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

9. WELL SITE LAYOUT

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

10. PLANS FOR RESTORATION OF THE SURFACE

The location is laid out on a north east/south west trend and will require up to 10' of cut in the reserve pit (up to 13' of cut in the southern corner of the location pad) and up to 5' of fill in the eastern corner of the location pad. Top soil removed from the pad will be stored at the well site. A reserve pit will be built on terrain containing sparse native vegetation. After drilling operations are complete, drilling fluid in the reserve pit will be allowed to evaporate. All remaining fluid in the pit will be disposed of into an approved disposal site. The reserve pit will remain fenced during the evaporation and disposal process. The pit will then be covered and the topsoil will be returned to the disturbed area. The terrain will be returned as near to its original condition as possible. Following operations, rehabilitation seeding will be in accordance with APD/BLM/BIA stipulations. There are no residents in the immediate area of the site.

11.

OPERATORS REPRESENTATIVE

CHUSKA ENERGY COMPANY
3315 BLOOMFIELD HIGHWAY
FARMINGTON, NEW MEXICO 87401
LARRY G. SESSIONS

12. CERTIFICATION

I hereby certify that either I, or persons under my direct supervision have inspected the proposed drill site and access route: that I am familiar with the conditions which presently exist: that the statements made in this plan are, to the best of my knowledge, true and correct and that the work planned will be performed by Chuska Energy, or its sub-contractors, in conformity with the terms and conditions under which it is approved.

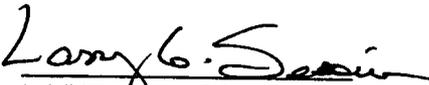

LARRY G. SESSIONS
Operations Manager

EXHIBIT "A"
BLOWOUT PREVENTER

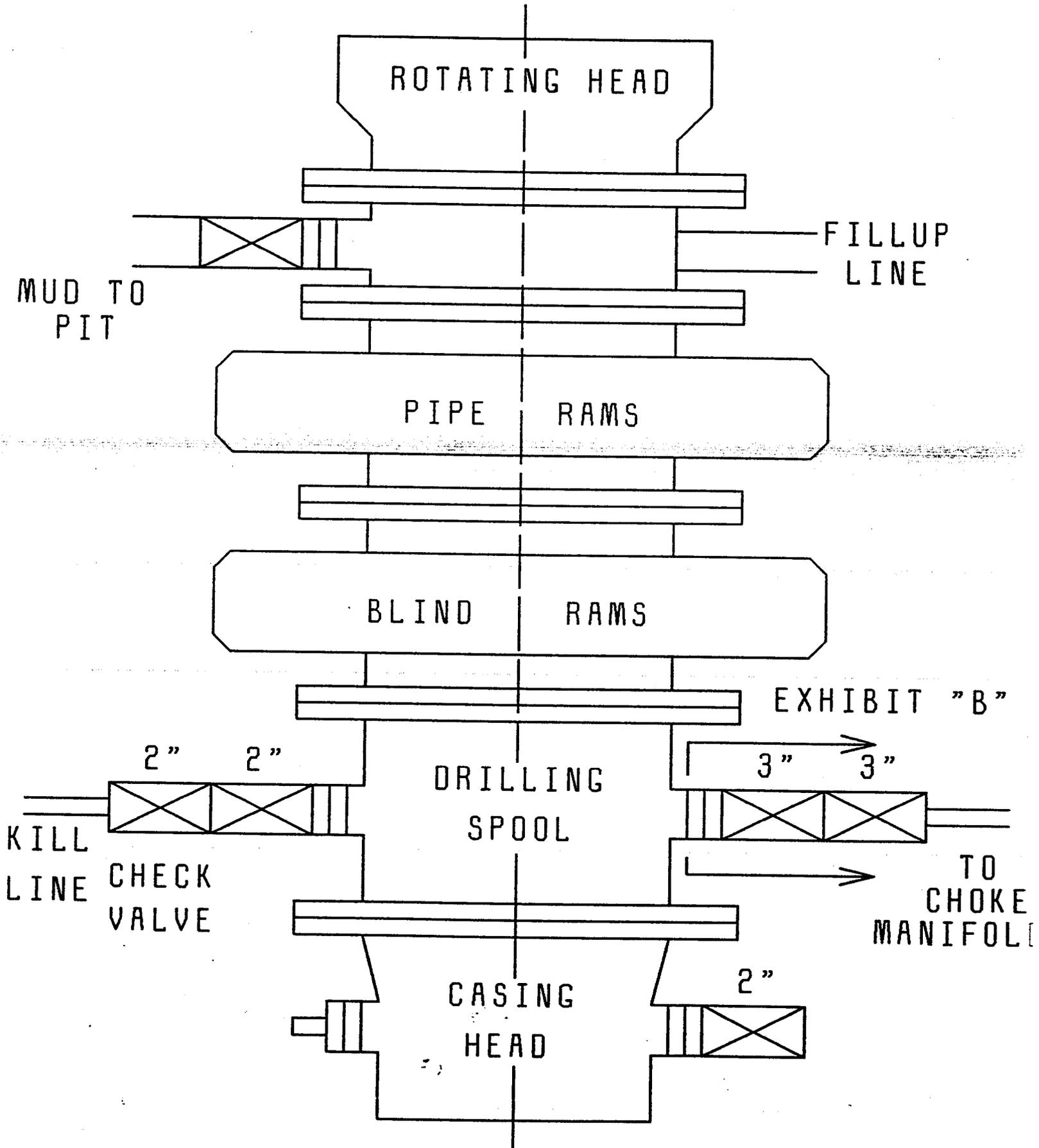
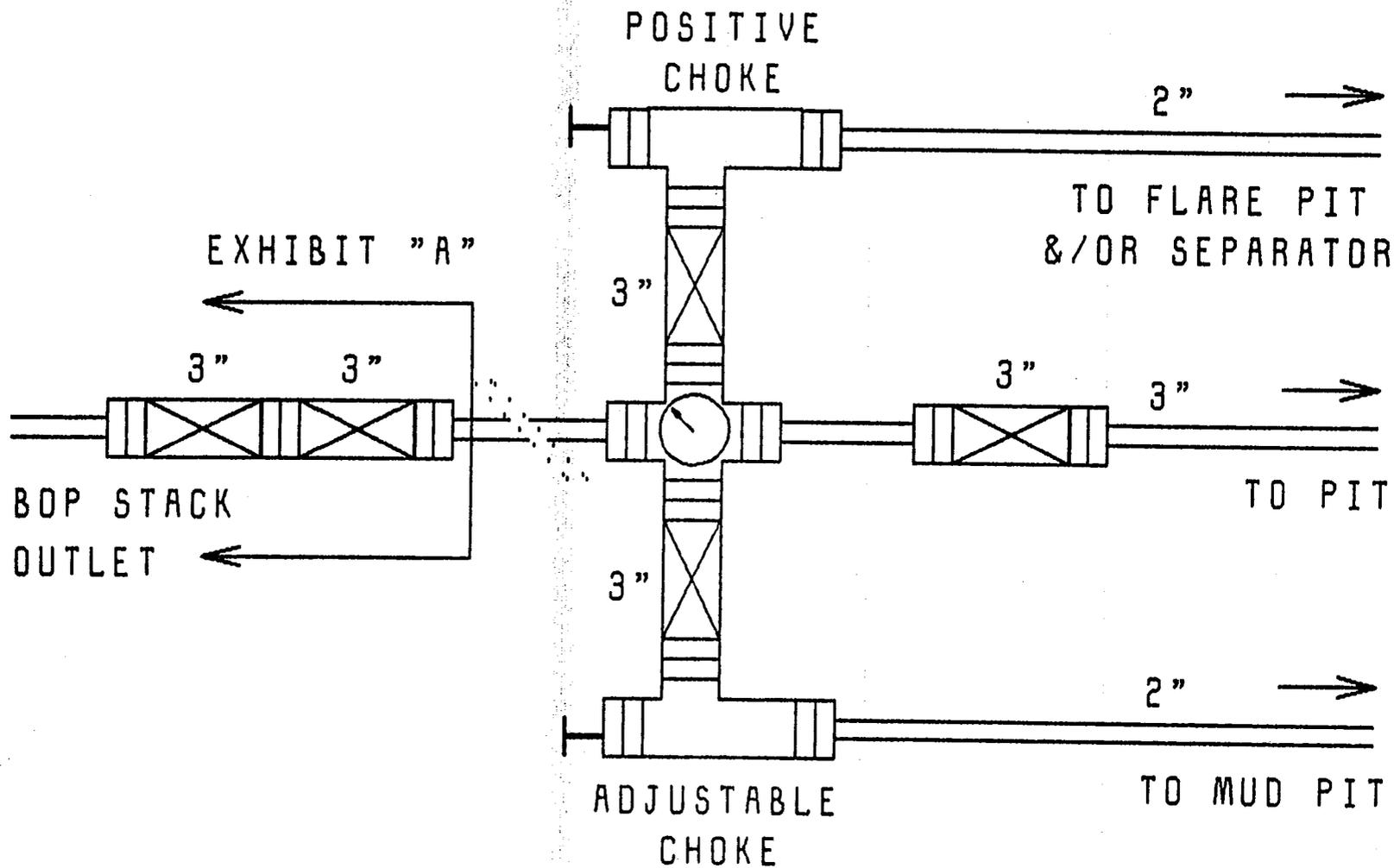


EXHIBIT "B"
CHOKE MANIFOLD

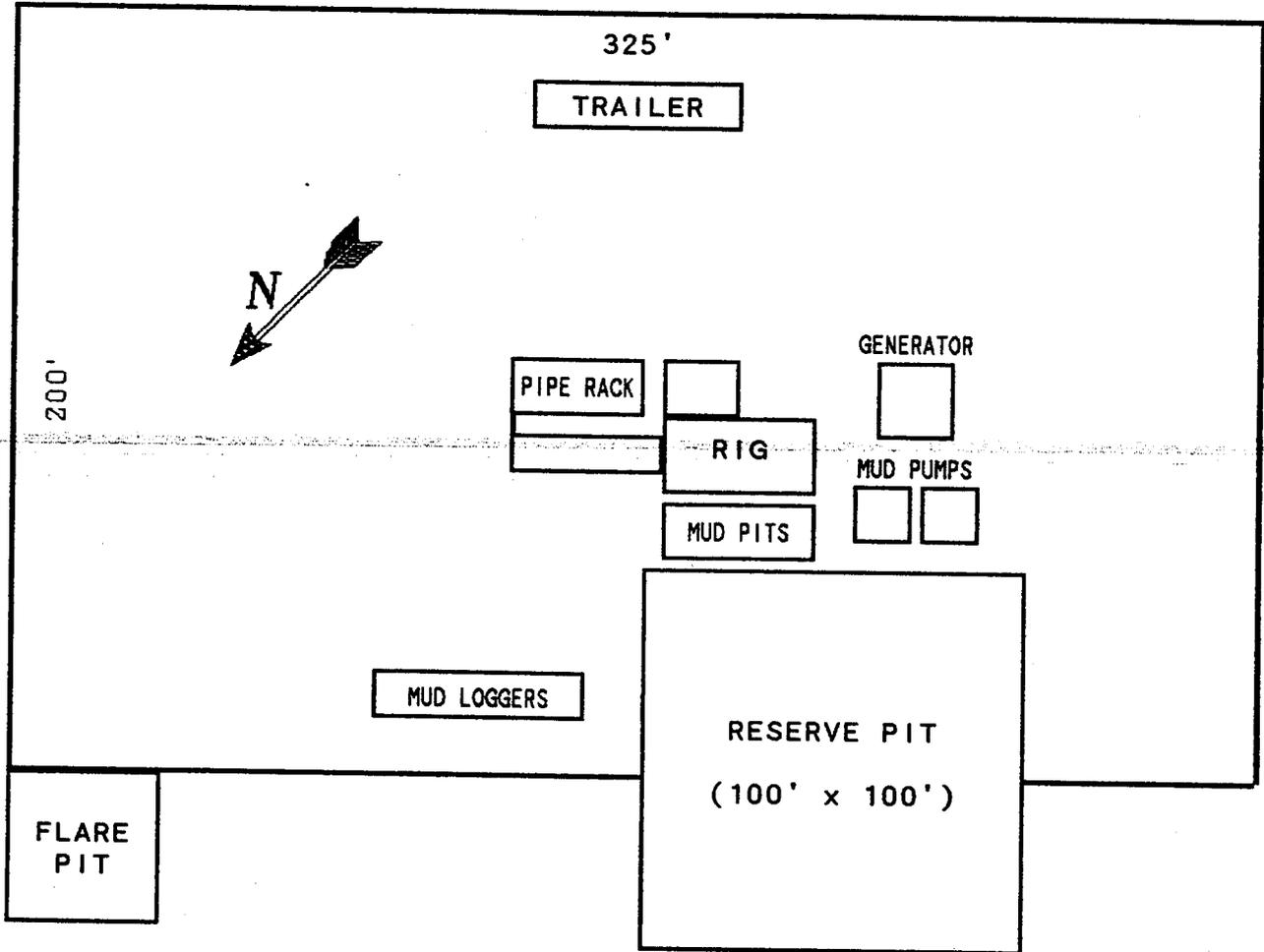


COPPERHEAD 15-E

2100' FNL, 1270' FWL

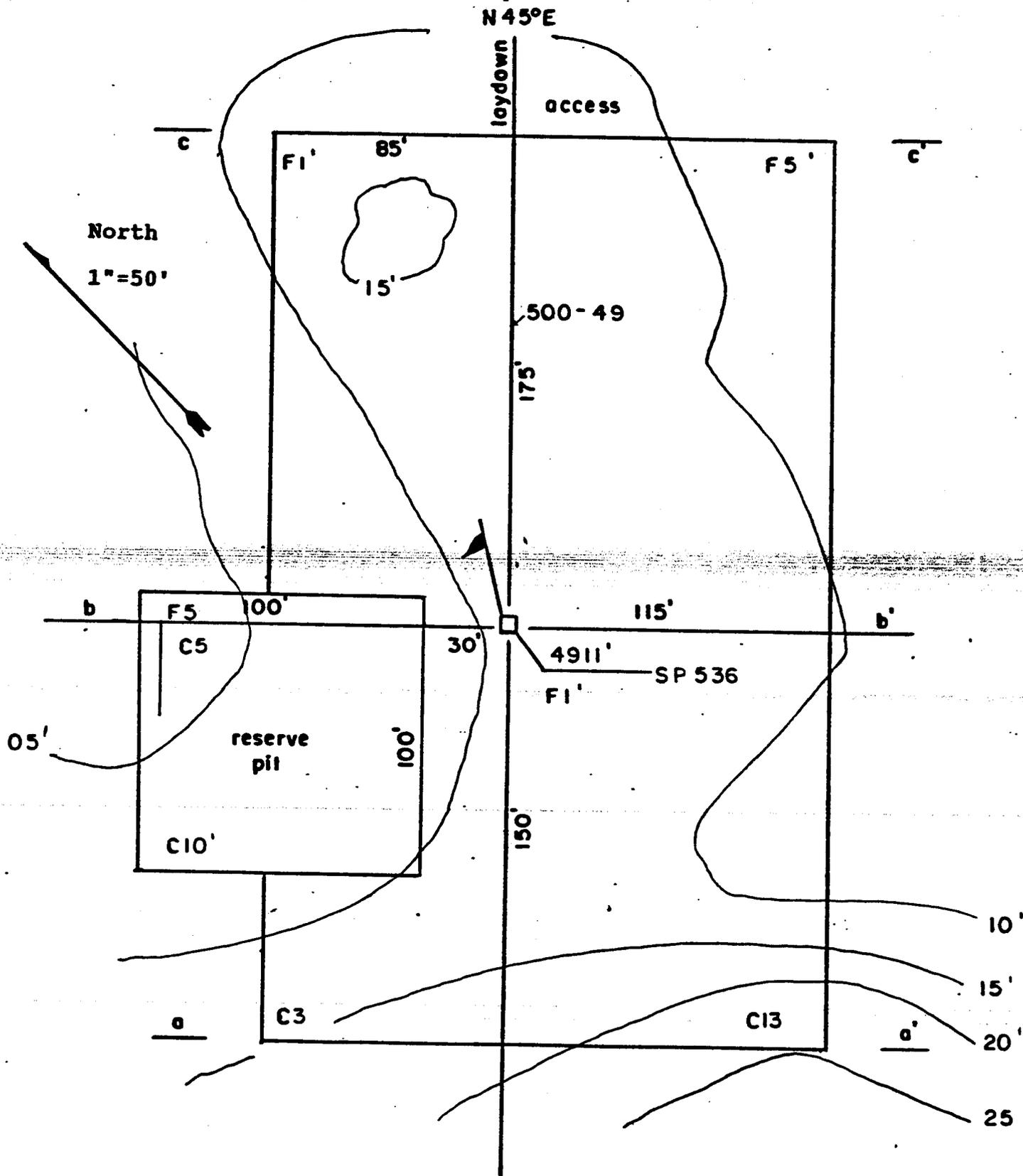
SECTION 15, TOWNSHIP 43S, RANGE 26E

SAN JUAN COUNTY, UTAH



PLANVIEW SKETCH

Copperhead 15 - E



CROSS SECTION

Copperhead 15 - E

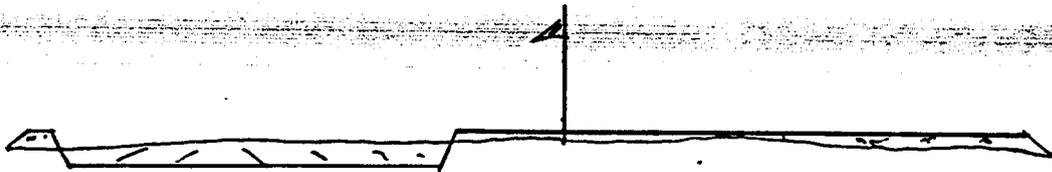
Cut //
Fill 

1"=50' vert. & horz.



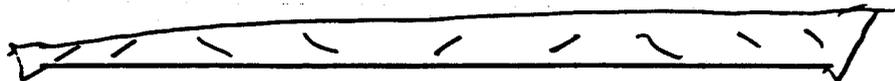
c

c'



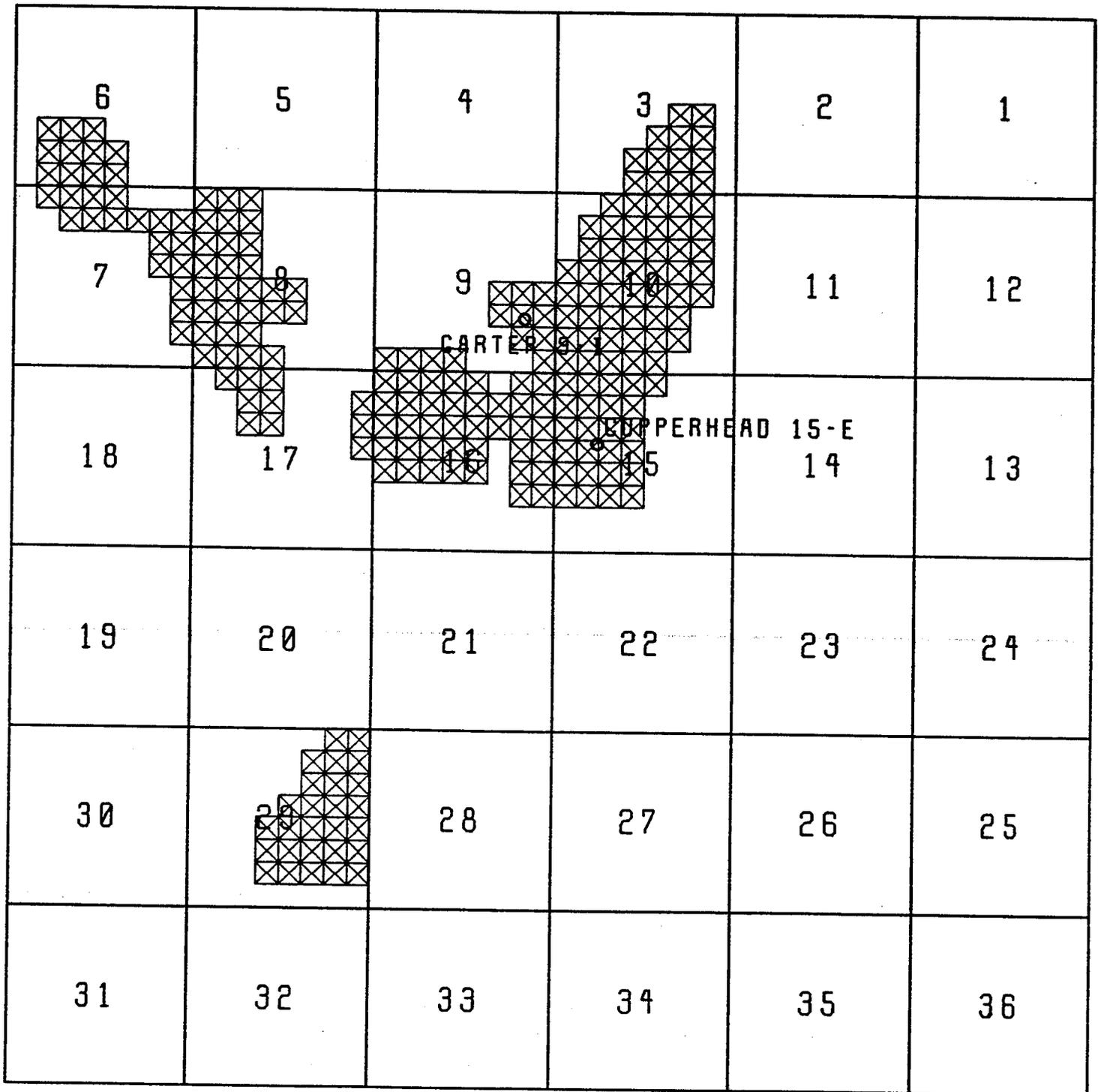
b

b''



o

o''



ACREAGE POSITION: 1987 OPERATING AGREEMENT

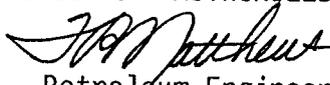
TOWNSHIP 43S, RANGE 26E

SAN JUAN COUNTY, UTAH

☒ CHUSKA ACREAGE

STATE ACTIONS

Mail to:
RDCC Coordinator
116 State Capitol
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY
OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:
(assigned by State Clearinghouse)
3. APPROXIMATE DATE PROJECT WILL START:
November 12, 1991
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:
(to be sent out by agency in block 1)
Southeastern Utah Association of Governments
5. TYPE OF ACTION: Lease Permit License Land Acquisition
 Land Sale Land Exchange Other
6. TITLE OF PROPOSED ACTION:
Application for Permit to Drill
7. DESCRIPTION:
Chuska Energy Company proposes to drill a wildcat well, the Copperhead #15-E well on Navajo Tribal lease number NOG 8702-1116 in San Juan County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S Bureau of Land Management or the Bureau of Indian Affairs is the primary administrative agency in this case and must issue approval to drill before operations can commence.
8. LAND AFFECTED (site location map required) (indicate county)
SW/4, NW/4, Section 15, Township 43 South, Range 26 East, San Juan County, Utah
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?
Unknown
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:
No significant impacts are likely to occur
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:
12. FOR FURTHER INFORMATION, CONTACT: 13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL
Frank R. Matthews
PHONE: 538-5340
DATE: 6-17-91

Petroleum Engineer

WOI186

CONFIDENTIAL

OPERATOR Chuska Energy Co N-9090 DATE 6-17-91

WELL NAME Copperhead 15-E

SEC S15 T 435 R 01W COUNTY San Juan

43-037-31633
API NUMBER

Indian (0)
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD SLBM

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well within sec 15 of above township. Range
Water Permit

ROCC 6-17-91

Ejection location requested

APPROVAL LETTER:

SPACING:

R615-2-3

N/A
UNIT

R615-3-2

N/A
CAUSE NO. & DATE

R615-3-3

STIPULATIONS:

cc: BIA

CONFIDENTIAL
PERIOD
EXPIRED
ON 12-2-92



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

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

July 10, 1991

Chuska Energy Company
3315 Bloomfield Highway
Farmington, New Mexico 87401

Gentlemen:

Re: Copperhead 15-E Well, 2100 feet from the North line, 1270 feet from the West line, SW NW, Section 15, Township 43 South, Range 26 East, San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Utah Admin. R.615-3-3.

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

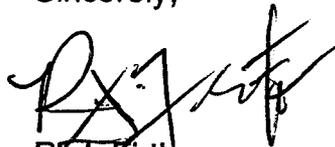
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification in the event it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or J. L. Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Utah Admin. R.615-3-20, Gas Flaring or Venting.

Page 2
Chuska Energy Company
Copperhead 15-E
July 10, 1991

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 Drinking Water/Sanitation, telephone (801) 538-6159.
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 43-037-31633.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

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

DIVISION OF OIL, GAS AND MINING

WATER PERMIT OK

SPUDDING INFORMATION

API NO. 43-037-31633

NAME OF COMPANY: CHUSKA ENERGY COMPANY

WELL NAME: COPPERHEAD 15-E

SECTION SWNW 15 TOWNSHIP 43S RANGE 26E COUNTY SAN JUAN

DRILLING CONTRACTOR AZTEC

RIG # 222

SPUDDED: DATE 10-11-91

TIME 8:15 a.m.

HOW ROATRY

CONFIDENTIAL

DRILLING WILL COMMENCE _____

REPORTED BY GLENN GOODWIN

TELEPHONE # _____

DATE 10-17-91 SIGNED TAS/JLT

Copy

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

COMPANY: Chaska Energy COMPANY MAN: AWS Footage
 WELL NAME: Copperhead 15-E API #: 43-037-31633
 QTR/QTR: _____ SECTION: 15 TWP: 43S RANGE: 26E
 CONTRACTOR: AWS 222 PUSHER/DRLR: Don Lockhart
 INSPECTOR: Glenr DATE: 10/10/91 OPERATIONS: Drilling
 SPUD DATE: 10/11/91 8:15 AM TOTAL DEPTH: 3550

DRILLING AND COMPLETIONS

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

PLUGGING AND ABANDONMENT

PRODUCING FM(S): _____

PLUGS:	TYPE/SIZE	INTERVAL
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

PERFORATIONS: _____

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

PLUGS TESTED: _____ HOW: _____ WOC: _____

MARKER: _____ SURFACE: _____ PLATE: _____

RECLAMATION:

CONTOURED: _____ RIPPED: _____ REHAB'D: _____

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

REMARKS: _____

PETROLEUM INFORMATION ROCKY MOUNTAIN REGION REPORT
SECTION IV - 02/26/92

UTAH DRILLING PROGRESS
SAN JUAN COUNTY CONTINUED

<p>CHUSKA ENERGY 2L-3 LIGHTNING ROCK API 43-037-31505</p>	<p>2-42S-25E SE NW SW 1340 FSL 1160 FWL IC 430377002690</p>	<p>WILDCAT; 5896 DESERT CREEK, (FR 02/23/90DN) OPER ADD: 315 NORTH BEHREND, FARMINGTON, NM, 87401 PHONE (505) 326-5525; EL: 4596 GR; LOCATION DATA: 4 1/4 MI E ANETH GREATER FLD(DESERT CREEK/PARADOX) 23 1/4 MI SE BLUFF, UT; AMMANN BASE MAP UT-9, POMCO MAP U-84, PERMIT REISSUED: 07/23/91</p>	<p>WF</p>
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LOC;

<p>CHUSKA ENERGY 4-D WEST CLAY HILL IC 43-037-70045-91</p>	<p>4-42S-25E NW NW NW 617 FNL 121 FWL</p>	<p>WILDCAT; 5520, (FR 07/24/91DN) OPER ADD: 3315 BLOOMFIELD HWY, FARMINGTON, NM, 87401 PHONE (505) 326-5525; EL: 4607 GR; LOCATION DATA: 1 1/2 MI SW CLAY HILL FLD(DESERT CREEK) 3 MI S ANETH, UT; AMMANN BASE MAP UT-9,</p>	<p>WF</p>
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LOC;

<p>CHUSKA ENERGY 5F BOX CANYON IC 43-037-70065-91</p>	<p>5-42S-25E SW SE NW 2390 FNL 1390 FWL</p>	<p>WILDCAT; CONFIDENTIAL, (FR 12/25/91DN) OPER ADD: 1775 SHERMAN, STE 1880, DENVER, CO, 80203 PHONE (303) 863-7021; EL: 4690 GR; LOCATION DATA: 1 1/2 MI E ANETH GREATER FLD(PARADOX/DESERT CREEK) 3 1/2 MI S ANETH, UT; AMMANN BASE MAP UT-102,</p>	<p>WF</p>
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LOC;

<p>DUNCAN RAYMOND T INC 1-6 MESA TOP IC 43-037-70078-90</p>	<p>6-42S-25E NE SW NE 1445 FNL 1640 FEL</p>	<p>ANIDO CREEK; 5600 DESERT CREEK, (FR 08/29/90DN) OPER ADD: 1777 S HARRISON ST PH 1, DENVER, CO, 80210 PHONE (303) 759-3303; EL: 5303 GR; LOCATION DATA: 20 MI E-SE BLUFF, UT; AMMANN BASE MAP UT-9, POMCO MAP U-84, WELL ID CHANGES: WELL NAME CHGD FROM BIA 14-20-603-373.</p>	<p>D D&A</p>
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CONTR: VECO DRLG, RIG #5; SPUD: 12/11/90 (EST), LOG TYPES: BHCS, CNL, CWL, DISF, LDT; 5600 TD, (TD REACHED: 01/ 01/91); 5600 TD(APPROX). COMP 1/2/91(EST), D&A. HOLDING FOR DATA . . (LDIR 02/04/92)

<p>CHUSKA ENERGY 9-1 GARTER API 43-037-31632</p>	<p>9-43S-26E SW NE SE 1545 FSL 915 FEL IC 430377003891</p>	<p>WILDCAT; 6301, (FR 06/11/91DN) OPER ADD: 3315 BLOOMFIELD HWY, FARMINGTON, NM, 87401; EL: 4851 GR; LOCATION DATA: 2 1/2 MI S-SE YELLOW ROCK FLD(ISMAY) 8 MI E ANIDO CREEK FLD(ISMAY/DESERT CREEK/PARADOX) 12 1/2 MI SE ANETH, UT; AMMANN BASE MAP UT-9,</p>	<p>WF</p>
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LOC;

<p>CHUSKA ENERGY 15-E COPPERHEAD API 43-037-31633</p>	<p>15-43S-26E SE SW NW 2100 FNL 1270 FWL IC 430377003991</p>	<p>WILDCAT; 7700, (FR 06/11/91DN) OPER ADD: 3315 BLOOMFIELD HWY, FARMINGTON, NM, 87401; EL: 4911 GR; LOCATION DATA: 3 1/2 MI SE YELLOW ROCK FLD(ISMAY) 9 MI E ANIDO CREEK FLD(ISMAY/DESERT CREEK/PARADOX) 13 1/2 MI SE ANETH, UT; AMMANN BASE MAP UT-9, WELL ID CHANGES: PROJ DEPTH CHGD FROM 7798.</p>	<p>WF D&A</p>
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CONTR: AZTEC WELL SRVCG, RIG #222; SPUD: 10/12/91 (EST), CSG: RAN SURF CSG; LOG TOPS: MORRISON (SURF), HERMOSA 5751, ISMAY U 5857, ISMAY L 5896, GOTHIC 5938, DESERT CREEK 6046, AKAH 6327; DRLG COMMENTS: LOCAL CALLS(LOG): CHIMNEY ROCK 6057. 7700 TD, (AKAH) (TD REACHED: 11/ 02/91); 7700 TD(APPROX). COMP 11/2/91, D&A. HOLDING FOR DATA. . . (LDIR 02/21/92)

SUMMIT COUNTY

<p>AMOCO PROD 1 UPRC 1-27 API 43-043-30296</p>	<p>27-3N-13E SW NE SW 1800 FSL 1780 FWL IC 430437000390</p>	<p>WILDCAT; 16300 DAKOTA, (FR 07/17/90DN) OPER ADD: BOX 800 RM 1844, DENVER, CO, 80201 PHONE (303) 830-4900; EL: 9754 KB; LOCATION DATA: 7 1/2 MI W-SW BRIDGER LAKE FLD(DAKOTA) 55 MI N DUCHESNE, UT; AMMANN BASE MAP UT-7, POMCO MAP U-130,</p>	<p>WF D&A</p>
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CONTR: NOBLE DRLG, RIG #N-132; SPUD: 09/21/90, LOG TYPES: CORL 30-9014, DILL 30-9014; 16300 TD, (TD REACHED: 12/ 15/90); 16300 TD(APPROX). COMP 12/20/90, D&A. HOLDING FOR DATA(TITE HOLE) . . (LDIR 01/14/92)

<p>EXXON CORP 1 STEEL CREEK UNIT API 43-043-30297</p>	<p>34-3N-13E SE SE SE 596 FSL 446 FEL IC 430437000491</p>	<p>WILDCAT; 16500 DAKOTA, (FR 10/17/91DN) OPER ADD: BOX 1600, MIDLAND, TX, 79702 PHONE (915) 683-0101; EL: 9724 GR; LOCATION DATA: 6 1/2 MI W-SW BRIDGER LAKE FLD(DAKOTA) 35 MI SE EVANSTON, WY; AMMANN BASE MAP UT-17, WELL ID CHANGES: PROJ FM CHGD FROM MORRISON, PROJ DEPTH CHGD FROM 19000, PROJ FM CHGD FROM NUGGET.</p>	<p>WF D&A</p>
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CONTR: NORTON DRLG, RIG #9; SPUD: 11/08/91, CSG: 13 3/8 @ 649, 9 5/8 @ 9200; 16600 TD, (TD REACHED: 02/ 01/92); 16600 TD(APPROX). COMP 2/1/92, D&A. HOLDING FOR DATA. . . (LDIR 02/18/92)

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Copperhead 15E.1

9. WELL NO.
#1

10. FIELD AND POOL OR WILDCAT
Wildcat

11. SEC. T. R. M. OR BLOCK AND SURVEY OR AREA
S15-T43S-R26E

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

1b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RELEV. Other _____

2. NAME OF OPERATOR
Chuska Energy Company

3. ADDRESS OF OPERATOR
3315 Bloomfield Highway, Farmington, N.M. 87401 505-326-5525

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
At surface
2100' FNL 1270' FWL
At top prod. Interval reported below
At total depth

14. API NO. 43-037-31633 DATE ISSUED 10-1-91

12. COUNTY San Juan 13. STATE Utah

15. DATE SPUDDED 10-11-91 16. DATE T.D. REACHED 11-2-91 17. DATE COMPL. (Revey to prod.) N/A
(Plug & Abd.)

13. ELEVATIONS (OP. SUR. BT. OR ETC.) 4911 gr / 4924 kb 19. ELEV. CASINGHEAD N/A

21. TOTAL DEPTH, MD & TVR 7494' 22. PLUG BACK T.D. MD & TVR N/A 23. IF MULTIPLE COMPL. HOW MANY N/A

24. INTERVALS DRILLED BY Rotary 25. ROTARY TOOLS Cable Tools No

26. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVR)
N/A

27. WAS DIRECTIONAL SURVEY MADE No

28. TYPE ELECTRIC AND OTHER LOGS LOG
CNL/FDC/GR/DLL/MSFL/GR/CAL/BHC/GR/CAL

29. GAS WELL CORED YES NO (See remarks page)
DRILL STEM TEST YES NO (See remarks page) No

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

CASING SIZE	WEIGHT, LBS/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8 H-40	48#	498	17 1/2	1575 Sx 'G' & 2% CaCl2 & 1/4#/sx Celloflake	

31. LINER RECORD 32. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

33. PERFORATION RECORD (Briefly, size and number)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

SEP 10 1993

35. PRODUCTION

DATE FIRST PRODUCTION _____ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) _____ WELL STATUS (Producing or abandoned) _____

DATE OF TEST	HOURS TESTED	CHOKED SIZE	PROD. FOR TEST PERIOD	OIL—BSL	GAS—MCF	WATER—BSL	GAS-OIL RATIO

36. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) _____ TEST WITNESSED BY _____

37. LIST OF ATTACHMENTS

38. I Survey
SIGNED _____
(3/89)
WCR shows well as Dry but does not give any plugging data. Based on an intent to PA submitted w/cr, it is assumed that the well is plugged.

Information is complete and correct as determined from all available records

TITLE — Operations Manager DATE 5-26-93

See for Additional Data on Reverse Side

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

3. LEASE DESIGNATION AND SERIAL NO.

NOG 8702-1116

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Tribal

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Copperhead 15E.1

9. WELL NO.

#1

10. FIELD AND POOL OR WILDCAT

Wildcat

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

S15-T43S-R26E

12. COUNTY

San Juan

12. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1. TYPE OF WELL:

OIL WELL GAS WELL DRY Other _____

1. TYPE OF COMPLETION:

NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESV. Other _____

2. NAME OF OPERATOR

Chuska Energy Company

3. ADDRESS OF OPERATOR

3315 Bloomfield Highway, Farmington, N.M. 87401 505-326-5525

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

At surface

2100' FNL 1270' FWL

At top prod. Interval reported below

At total depth

14. API NO.

DATE ISSUED

43-037-31633

10-1-91

12. COUNTY

San Juan

12. STATE

Utah

11. DATE SPUDDED

10-11-91

16. DATE T.D. REACHED

11-2-91

17. DATE COMPL. (Ready to prod.)

N/A

13. ELEVATIONS (DP, SR, ST, CR, ETC.)

4911 gr / 4924 kb

13. ELEV. CASINGHEAD

N/A

18. TOTAL DEPTH, MD & TVD

7494'

19. PLUG BACK T.D. MD & TVD

N/A

20. IF MULTIPLE COMPL. HOW MANY

N/A

21. INTERVALS DRILLED BY

ROTARY TOOLS

Rotary

CABLE TOOLS

No

22. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)

N/A

23. WAS DIRECTIONAL SURVEY MADE

No

24. TYPE ELECTRIC AND OTHER LOGS LOG

CNL/FDC/GR/DLL/MSFL/GR/CAL/BHC/GR/CAL

25. WAS WELL CORED YES NO (Specify intervals)

DRILL STEM TEST YES NO (See remarks page)

No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT POLLED
13 3/8 H-40	48#	498	17 1/2	575 Sx 'G' & 2% CaCl2 & 1/4#/sx Celloflake	

LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	PACKER CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PERFORATION RECORD (Interval, size and number)

SEP 10 1993

ACID, SHOT, FRACTURE CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

PRODUCTION

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

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

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

27. DISPOSITION OF GAS (Sold, used for well, vented, etc.)

TEST WITNESSED BY

28. LIST OF ATTACHMENTS

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

SIGNED _____

TITLE — Operations Manager

DATE 5-26-93

INSTRUCTIONS

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

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

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

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

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

37. SUMMARY OF POROUS ZONES

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

Formation	Top	Bottom	Description, contents, etc.
Core #1	5858'	5904'	Recovered 100%

38. GEOLOGIC MARKERS

Name	Meas. Depth	Top True Vert. Depth
Hermosa	5751'	
U. Ismay	5857'	
L. Ismay	5896'	
Gothic Shale	5938'	
Desert Creek	6046'	
Chimney Rock	6057'	
Akah	6327'	

Form approved. Budget Bureau No. 1004-0137 Expires August 31, 1985

RECEIVED FEB 12 1992 UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Submit in Duplicate

(See other instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: OIL WELL [] GAS WELL [] DRY [X] Other []

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

6. IF INDIAN ALLOTTEE OR TRIBE NAME Navajo Tribal

7. UNIT AGREEMENT NAME

2. TYPE OF COMPLETION: NEW WELL [] WORK OVER [X] DEEP-EN [] PIG BACK [] DIFF. RENVR. [] Other []

8. FARM OR LEASE NAME

Copperhead 15E-1

9. WELL NO. #1

2. NAME OF OPERATOR Chuska Energy Company

3. ADDRESS OF OPERATOR 3315 Bloomfield Highway, Farmington, NM 87401 505-326-5525

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2100' FNL 1270' FWL

10. FIELD AND POOL, OR WILDCAT Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA S15-T43S-R26E

At top prod. interval reported below

At total depth

14. PERMIT NO. 43-037-31633 DATE ISSUED 10-1-91

12. COUNTY OR PARISH San Juan 13. STATE Utah

15. DATE SPUNDED 10-11-91 16. DATE T.D. REACHED 11-2-91 17. DATE COMPL. (Ready to prod.) N/A 18. ELEVATIONS (DF. RKB, RT, GR, ETC.)* 4911 gr / 4924 kb 19. ELEV. CASINGHEAD N/A

20. TOTAL DEPTH, MD & TVD 7494' 21. PLUG. BACK T.D., MD & TVD N/A 22. IF MULTIPLE COMPL., HOW MANY* N/A 23. INTERVALS DRILLED BY Rotary 24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* N/A 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN CNL/FDC/GR/CAL/DLL/MSFL/GR/CAL/BHC/GR/CAL 27. WAS WELL CORED No

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

Table with columns: CASING SIZE, WEIGHT, LB./FT., DEPTH SET (MD), HOLE SIZE, CEMENTING RECORD, AMOUNT PULLED. Includes handwritten entries like 13 3/8 H-40, 48#, 500' 498, 17 1/2, 575, 600 Sx 'G' & 2% CaCl2 & 1/4#/sx Celloflake.

Table with columns: LINER RECORD (SIZE, TOP (MD), BOTTOM (MD), SACKS CEMENT*, SCREEN (MD)) and TUBING RECORD (SIZE, DEPTH SET (MD), PACKER SET (MD)).

Table with columns: PERFORATION RECORD (Interval, size and number) and ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. (DEPTH INTERVAL (MD), AMOUNT AND KIND OF MATERIAL USED). Includes handwritten date SEP 10 1993.

Table with columns: PRODUCTION (DATE FIRST PRODUCTION, PRODUCTION METHOD, WELL STATUS, DATE OF TEST, HOURS TESTED, CHOKER SIZE, PROD'N. FOR TEST PERIOD, OIL-BBL., GAS-MCF., WATER-BBL., GAS-OIL RATIO) and FLOW, TUBING PRESS. (CASING PRESSURE, CALCULATED 24-HOUR RATE, OIL-BBL., GAS-MCF., WATER-BBL., OIL GRAVITY-API (CORR.)).

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

35. LIST OF ATTACHMENTS ACCEPTED FOR RECORD

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records. SIGNED Gary A. Chubben TITLE Operations Eng. DATE 1-30-92

(See Instructions and Spaces for Additional Data on Reverse Side) OPERATOR Sun

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.

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Core #1	5858'	5904'	Recovered 100%

38. GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Hermosa	5751'		
U. Ismay	5857'		
L. Ismay	5896'		
Gothic Shale	5938'		
Desert Creek	6046'		
Chimney Rock	6057'		
Akah	6327'		

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

DEPARTMENT OF THE INTERIOR
UNITED STATES

(2011-2012)

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

6. Lease Designation and Serial Number

NOG 8702-1116

7. Indian Allottee or Tribe Name

Navajo Tribal

8. Unit or Communitization Agreement

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.
Use APPLICATION FOR PERMIT for such proposals

1. Type of Well

- Oil Well Gas Well Other (specify)

9. Well Name and Number

Copperhead 15E 1

2. Name of Operator

10. API Well Number

Chuska Energy Company

43-037-31633

3. Address of Operator

3315 Bloomfield Hwy, Farmington, N.M. 87401

4. Telephone Number

505-326-5525

11. Field and Pool, or Wildcat

Wildcat

5. Location of Well

Footage : 2100' FNL 1270' FWL
QQ, Sec, T., R., M. : S15-T43S-R26E

County : San Juan
State : UTAH

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

NOTICE OF INTENT
(Submit in Duplicate)

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

Approximate Date Work Will Start _____

SUBSEQUENT REPORT
(Submit Original Form Only)

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

Date of Work Completion _____

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

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

PLUG	MD FROM	MD TD	#SX	ZONES COVERED
1	6909'	6809'	75	Mississippian
2	6100'	5700'	260	Akah, Desert Creek & Ismay
3	4900'	4797'	90	Hermosa
4	3150'	3050'	94	DeChelly
5	2190'	2090'	74	Chinle
6	550'	450'	87	Surface Csg Shoe @ 498'
7	0	50'	45	Surface

All plugs will be Class 'G' Neat cement. Plugs 6 & 7 will contain 2% CaCl2. All plugs will be displaced with mud. Verbal approval from Steve Mason, 3:00 p.m., 11-1-91.

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

Name & Signature Barry A. Wieland Title Operations Manager Date 5-26-93
(State Use Only)

MAY 10 1993

RECEIVED
FEB 12 1992

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

5. Lease Designation and Serial No.

NOG 8702-1116

6. If Indian, Allottee or Tribe Name

Navajo Tribal

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Copperhead 15E

9. API Well No.

43-037-31633

10. Field and Pool, or Exploratory Area

Wildcat

11. County or Parish, State

San Juan County, Utah

SUBMIT IN TRIPLICATE

1. Type of Well

Oil Well Gas Well Other

2. Name of Operator

Chuska Energy Company

3. Address and Telephone No.

3315 Bloomfield Highway, Farmington, NM 87401 505-326-5525

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

2100' FNL 1270' FWL
S15-T435-R26E

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

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent
 Subsequent Report
 Final Abandonment Notice

Abandonment
 Recompletion
 Plugging Back
 Casing Repair
 Altering Casing
 Other

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.)*

PLUG	MD FROM	MD TD	#SX	ZONES COVERED
1	6909'	6809'	75	Mississippian
2	6100'	5700'	260	Akah, Desert Crk and Ismay
3	4900'	4797'	90	Hermosa
4	3150'	3050'	94	DeChelly
5	2190'	2090'	74	Chinle
6	550'	450'	87	Surface Csg Shoe @ 498'
7	0	50'	45	Surface

All plugs will be Class 'G' Neat cement. Plugs 6&7 will contain 2% Cag. All plugs will be displaced with mud. Verbal approval from Steve Mason, 3:00pm, 11/19/91.

SEP 10 1993

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVED

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

Signed Gay A. Schuber

Title Production Eng.

Date 11/19/91

(This space for Federal or State office use)

Approved by _____
Conditions of approval, if any: _____

Title _____

Date NOV 27 1991

AREA MANAGER

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

*See instruction on Reverse Side

OPERATOR

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

9. WELL NO.

Copperhead 15E

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC. T. R. M. OR BLM. AND SURVEY OR AREA
Sec.15, T43S, R26E

12. COUNTY
San Juan

13. STATE
Utah

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Chuska Energy Company

3. ADDRESS OF OPERATOR
3315 Bloomfield Highway, Farmington, N.M. 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface 2100' FNL, 1270' FWL
At proposed prod. zone

5. API NO.
43-037-31633

6. ELEVATIONS (Show whether OF, AT, GR, etc.)
4911' GR/ 4924 KB

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>Spud/Surface Casing</u> <input type="checkbox"/>	
(Other) <input type="checkbox"/>		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

APPROX. DATE WORK WILL START _____ DATE OF COMPLETION _____

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

* Must be accompanied by a cement verification report.

MIRU Aztec Well Service Rig #222. Spudded 8:30 AM on 10-11-91. Drilled 17 1/2" hole to 500' KB. RU & ran 12 jts 13 3/8" 54.50# & 48# k-55 STC csg. Landed @ 498' KB. Cemented with 575 sxs class 'G' + 2% CaCl2 + 1/4#/sx celloflake. Circulated 20 bbls cement slurry to surface. Notification of spud to Steve Mason of BLM @ 3:00 P.M., 10-10-91, by Larry Chambers

SEP 10 1993

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

SIGNED [Signature] TITLE Operations Manager DATE 5-26-93

(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

John Murray

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

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

6. If Indian, Allottee or Tribe Name
Navajo Tribal

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Copperhead 15E

9. API Well No.
43-037-31633

10. Field and Pool, or Exploratory Area
Wildcat

11. County or Parish, State
San Juan, Utah

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
 Chuska Energy Company

3. Address and Telephone No.
 3315 Bloomfield Hwy Farmington, N.M. 87401

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 2100' FNL, 1270' FWL
 Sec 15-T43S-R26E

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

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

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

MIRU Aztec Well Service Rig #222. Drilled 8:30 AM on 10-11-91. Drilled 17 1/2" hole to 500' KB. RU & ran 12 jts 13 3/4" 50# & 48# K-55 STC csg. Landed @ 498' KB. Cemented with 575 sxs class 'G' + 2% ca + 1/4#/sx celloflake. Circulated 20 bbls cement slurry to surface. Notification of spud to Steve Mason of BLM @ 3:00 PM, 10-10-91, by Larry Chambers.

CONFIDENTIAL

SEP 10 1992

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

Signed George A. Chambers Title Production Engineer

(This space for Federal or State office use)

Approved by _____ Title _____
Conditions of approval, if any:

ACCEPTED FOR RECORD

Date 10/29/91

FEB 10 1992

Date

FARMINGTON RESOURCE AREA

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.

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

b. Type of Well
 Oil Well Gas Well other Single Zone Multiple Zone

2. Name of Operator
 Chuska Energy Company

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

4. Location of Well (Report location clearly and in accordance with any state requirements.)
 At Surface 2100' FNL, 1270' FWL
 At proposed prod. zone Same

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

6. If Indian, Allottee or Tribe Name
 Navajo Tribal

7. Well Agreement Name

8. Farm or Lease Name
 Copperhead

9. Well No.
 15-E 43-037-31633

10. Field and Pool, or Wildcat
 Wildcat

11. 08, Sec., T., R., N., or S1k. and Survey or Area
 S15 T43S R26E

12. County or Parish
 San Juan

13. State
 Utah

14. Distance in miles and direction from nearest town or post office
 14 miles SSE of Aneth, Utah

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) 1,370'

16. No. of acres in lease 49,997

17. No. of acres assigned to this well

18. Distance from proposed location to nearest well, drilling, completed, or applied for, on this lease, ft. 23,987'

19. Proposed depth 7,798' KB

20. Rotary or cable tools
 Rotary

21. Elevations (Show whether DF, BT, 08, etc.)
 4,911' GR/4,924' KB

22. Approx. date work will start
 11-12-91

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 ₂
7 7/8"	5 1/2"	15.5/17.0 lb	7,798'	1,169 sx 'G', 65:35 Poz + 6% Gel

Refer to attached 10-Point Drilling Plan etc.

NOTE:
 APD Approved by LOM on 7-10-91

SEP 10 1991

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

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

Signed [Signature] Title Operations Engineer Date 6 June, 1991

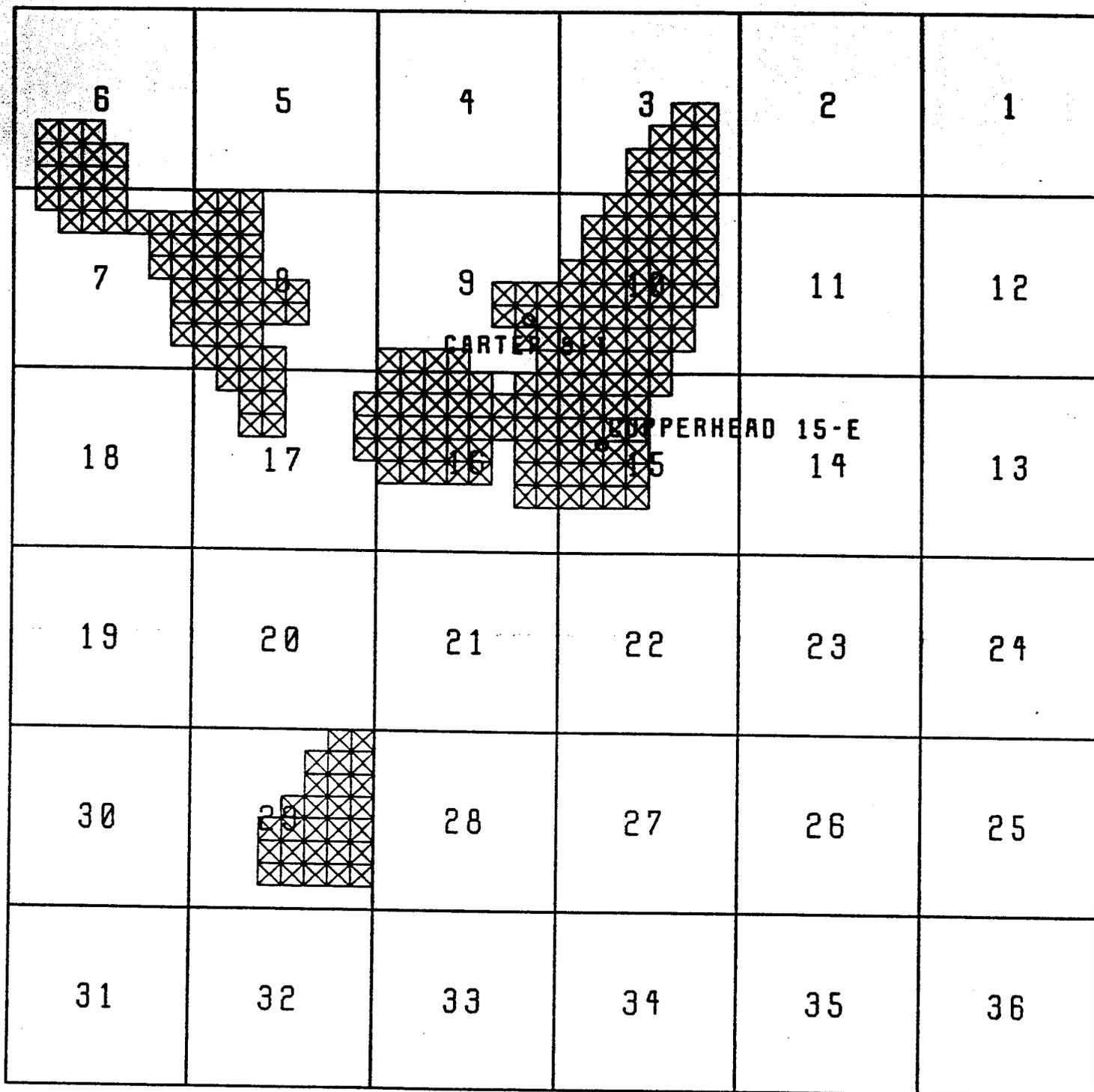
(This space for Federal or State office use)

API NO. 43-037-31633 Approval Date _____

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

*See Instructions On Reverse Side



ACREAGE POSITION: 1987 OPERATING AGREEMENT

TOWNSHIP 43S, RANGE 26E

SAN JUAN COUNTY, UTAH

☒ CHUSKA ACREAGE

SEP 10 1988



CHUSKA ENERGY COMPANY

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

September 7, 1993

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

Attn: Mr. R.J. Firth
Associate Director

RE: Utah Division of Oil, Gas and Mining's
Reporting Requirements

RECEIVED

SEP 10 1993

DIVISION OF
OIL, GAS & MINING

Dear Mr. Firth:

Enclosed please find the following reports and well logs run on wells drilled by Chuska Energy Company during the period January 1, 1992 forward. The Production Reports were filed in June under a separate cover letter by our home office, Harken Energy Company, out of Dallas. We have received conflicting statements as to whether or not the data was received. Therefore, a second set of Production reports from January 1992 forward are also forwarded to your office under this cover letter.

APD(S), SUNDRY NOTICES AND ENTITY ACTION FORMS

Barnes 18M
Barnes 18M(N)
Brown Hogan 1A-2
Burro 33I
Clay Hill 33-0
Crane 35H
Copperhead 15E
D.C. Anticline 35K
Heron 35H
Heron 35H(A)
Jack 31G
Kokopelli 29I
Lark 19B
Lark 19B(G)
Lighting Rock 2E
Lizard 4M
Lone Mountain Creek 12F-1

RECEIVED

SEP 10 1993

DIVISION OF
OIL, GAS & MINING

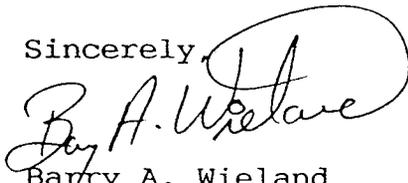
Monument 17E-2
Mule 31K
Mule 31K(N)
Mule 31M
NW Cajon 1I-1
North Heron 35C
Northwest Cajon 6E
North Cajon Mesa 5E-1
North Ruins 16K
Red Lake 25B
Tower 1F
Box Canyon 5F
Shalene 11K
South Triangle 7I
West Clay Hill 5B(A)

LOGS

Barnes 18M(N)
Brown Hogan 1A-2
Burro 33I
Clay Hill 33-0
Copperhead 15E
D.C. Anticline 35K
Heron 35H
Jack 31G
Kokopelli 29I
Lark 19B(G)
Lighting Rock 2E
Lone Mountain Creek 12F-1
Mule 31K(N)
Mule 31M
North Cajon Mesa 5E-1
North Heron 35C
N.W. Cajon 1I-1
N.W. Cajon 6E
Red Lake 25B
West Clay Hill 5B(A)

If you should have any further questions, please don't hesitate to contact me, or Nell Lindenmeyer, at 505-326-5525.

Sincerely,



Barry A. Wieland
Operations Manager

Enclosures
cc: Well File

OPERATOR Chuska Energy Company

OPERATOR ACCT. NO. N 9290

ENTITY ACTION FORM - FORM 6

ADDRESS 3315 Bloomfield Highway
Farmington, N.M. 87401

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99998	→	43-037-31633	Copperhead 15E	SWNW	15	43S	26E	San Juan	10-11-91	
WELL 1 COMMENTS: Spudded 8:30 A.M. Drilled to 500'. Ran and cemented surface @498'. <i>Well PA'd 11-2-91. Lic</i>											
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.

Signature _____
Operations Manager

Title _____ Date _____

Phone No. 505) 326-5525

SEP 10 1991