

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS _____ WELL LOG _____ FIELD _____ STATE _____ COUNTY _____ **X** WATER _____ LOCATION _____ DISTRICT _____ SUB REPORT NO. _____

DATE FILED **6-3-91**

LAND FEE & PATENTED _____ STATE LEASE NO. _____ PUBLIC LEASE NO. _____ INDIAN **NOG8702-1116**

DRILLING APPROVED **6-10-91 (EXCEPTION LOCATION)**

SPUDDED IN _____

COMPLETED _____

INITIAL PRODUCTION _____ *Commercial*

GRAVITY API _____

GOR _____

PRODUCING ZONES _____

TOTAL DEPTH _____

WELL ELEVATION _____

DATE ABANDON *2/1/92*

FIELD **UNDESIGNATED**

UNIT _____

COUNTY **SAN JUAN**

WELL NO **BAT 8-L** API NO. **43-037-31628**

LOCATION **2110' FSL** FEET FROM SURFACE **115' FWL** FEET FROM SURFACE **NWSW** **14 - 1/4 SEC 8**

TWP	RGE	SEC	EXCEPTOR	TWP	RGE	SEC	OPERATOR
42S	24E	8	CHUSKA ENERGY COMPANY				



CHUSKA ENERGY COMPANY

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

30 May, 1991

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

Ref: Application for Permit to Drill
Bat 8-L 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 Bat Well No. 8-L in San Juan County, Utah. This well will be drilled as part of an ongoing exploration and development program.

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

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

Sincerely,

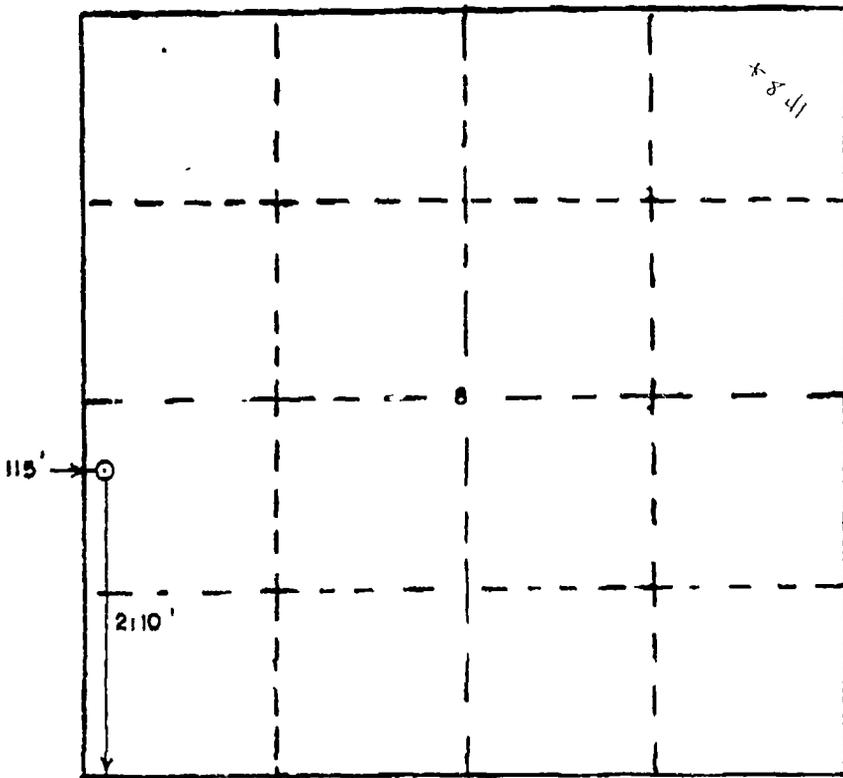
Larry G Sessions
Larry G Sessions
Operations Manager

LGS/csw
File: C:\WP51\BAT.8L\APDCOVER

encl.

RECEIVED
JUN 03 1991
DIVISION OF
OIL GAS & MINING

WELL LOCATION PLAT



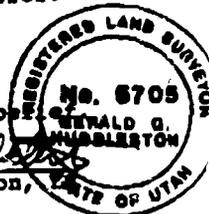
WELL LOCATION DESCRIPTION:

CHUSKA ENERGY CO., Bat 8 - L
 2110' FSL & 115' FWL
 Section 8, T.42 S., R.24 E., S1M
 San Juan County, UT
 5207' ground elevation
 State plane coordinates from seismic control:
 X = 2,637,326 Y = 183,439
 N45° W 50' from SP 289 line 400-7

The above is true and correct to my knowledge and belief

27 May 1991

Gerald G. Huddlestone
 Gerald G. Huddlestone,



CHUSKA ENERGY COMPANY

10 POINT DRILLING PLAN

Bat Well No. 8-L
Section 8, Township 42S, Range 24E
2110' FSL, 115' FWL
San Juan County, Utah

1. SURFACE FORMATION

Geological name of surface formation: Morrison

2. ELEVATION

Surface elevation is 5,207' GR.

3. ESTIMATED FORMATION TOPS

<u>Depth</u>	<u>Formation</u>	<u>Sup Sea Elevation</u>	
Surface	Morrison	+ 5,220'	
1,039'	Navajo	+ 4,181'	
1,843'	Chinle	+ 3,377'	
2,938'	DeChelly	+ 2,282'	
3,228'	Organ Rock	+ 1,992'	
3,773'	Cedar Mesa	+ 1,447'	
4,926'	Hermosa	+ 292'	
5,804'	Upper Ismay	- 534'	
5,925'	Lower Ismay	- 705'	
5,973'	Desert Creek	- 753'	Primary Objective
6,158'	Akah	- 938'	
6,220'	Total Depth	- 1,000'	

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:	6,220'	5 1/2"	15.5 lb	K-55	STC

Surface Cementing:

371 sx (427 ft³) Class 'G' cement with 2% CaCl₂ and 1/4 lb/sk Cellulose. 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 3,500' (stage collar @ ± 3,500') Lead with 220 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 182 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 616 ft³. Bring Class 'G' slurry to 500' above top of Upper Ismay. Cement volumes calculated at 30% excess in open hole. WOC 4 hours between stages.

Second Stage

3,500' to surface. Lead with 355 sx Class 'G' cement, 65.35 Pozmix with 6% gel and 1/4 lb/sk Celloflake. Weight = 12.7 ppg, yield = 1.85 ft³/sk. Tail with 100 sx Class 'G' cement with 2% CaCl₂. Weight = 15.8 ppg, yield = 1.15 ft³/sk. Total of 772 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

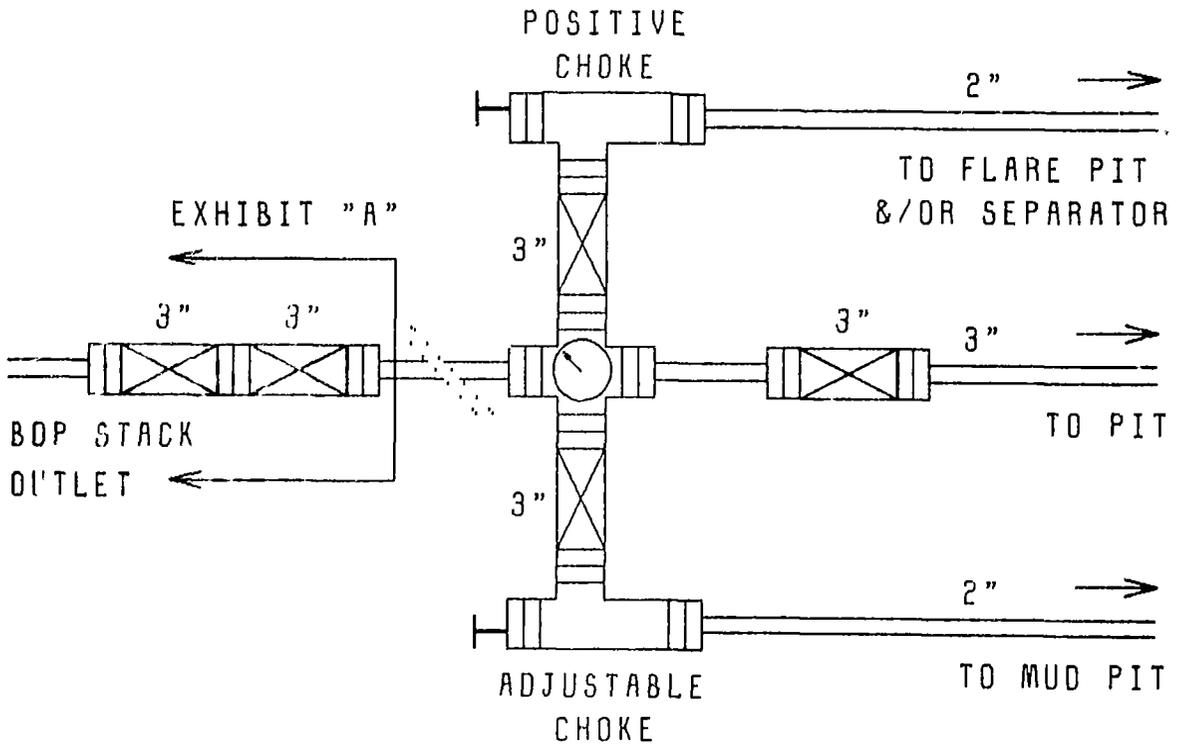
The drilling and evaluation of this well is estimated to be 19 days. Anticipated spud date is 10-16 '91.

EXHIBIT "A"
REQUIRE PREVENTER

APPEARING HEAD

[Illegible text and markings, possibly a list or table with faint lines and some handwritten notes.]

EXHIBIT "B"
CHOKE MANIFOLD



DETAILED DRILLING PROGRAM

DATE · 30 May, 1991

WELL NAME · Bat WELL NO.: 8-L

LOCATION Section 8, Township 42S, Range 24E
2110' FSL, 115' FwL
San Juan County, Utah

ELEVATION · 5,207' GR

TOTAL DEPTH 6,220' AB

PROJECTED HORIZON. Primary target is Desert Creek at 5,973'.

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 1 hour prior to nipping up BOP stack and related equipment. See BOP schematics for details.
6. Ensure that plug has been down at least 8 hours prior to commencing pressure testing procedures. Pressure test BOP to 2,000 psig for 30 minutes. Pressure test manifold and all related equipment to 2,000 psig. Pressure test casing to 1,500 psig for 30 min.
7. Drill out surface casing with 7 7/8" bit. Drill 7 7/8" hole to T.D. Deviation surveys are to be taken every 500' or on a bit trip, whichever occurs first. Maximum allowable deviation will be 5° at T.D., with the maximum allowable rate of change to be 1"/100'.
8. Run open hole logs and evaluate. Coring and/or drill stem testing will be as per wellsite geologist's recommendation.

9. If the well is determined to be productive, run 5 1/2", 15.5 lb/ft, K-55, STC casing to T.D. Set stage cementing collar at \pm 3,500'. In addition to placing centralizers over potential production zones, they will also be run to cover the aquifer sands of the Navajo and DeChelly formations, as per BLM stipulations Cement production casing in two stages as per cementing program in 10-point Drilling Plan
10. Nipple down BOPE. Set 5 1/2" casing slips and cut off casing. Install well head. Release drilling rig and move rig off location.
11. If well is non-productive it will be plugged and abandoned as per State, BLM and Navajo Tribal stipulations

1947 10/11/47 10:30
100 101 110 120
100 101 110 120
100 101 110 120

CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

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CONFIDENTIAL

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

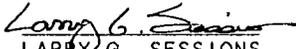
The location is laid out on a north east/south west trend and will require up to 38' of cut in the reserve pit (up to 12' of cut in the western corner of the location pad) and up to 26' of fill in the southern corner of the location pad. Top soil removed from the pad will be stored at the well site. A reserve pit will be built on terrain containing sparse native vegetation. After drilling operations are complete, drilling fluid in the reserve pit will be allowed to evaporate. All remaining fluid in the pit will be disposed of into an approved disposal site. The reserve pit will remain fenced during the evaporation and disposal process. The pit will then be covered and the topsoil will be returned to the disturbed area. The terrain will be returned as near to its original condition as possible. Following operations, rehabilitation seeding will be in accordance with APD/BLM/BIA stipulations. There are no residents in the immediate area of the site.

11. OPERATORS REPRESENTATIVE

CHUSKA ENERGY COMPANY
3315 BLOOMFIELD HIGHWAY
FARMINGTON, NEW MEXICO 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.

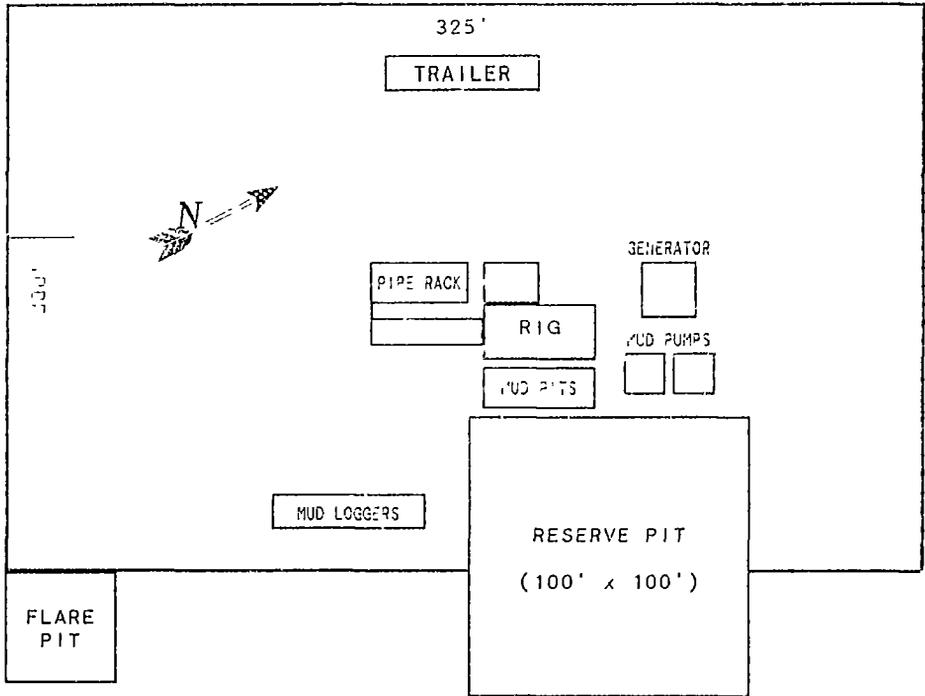

LARRY G. SESSIONS
Operations Manager

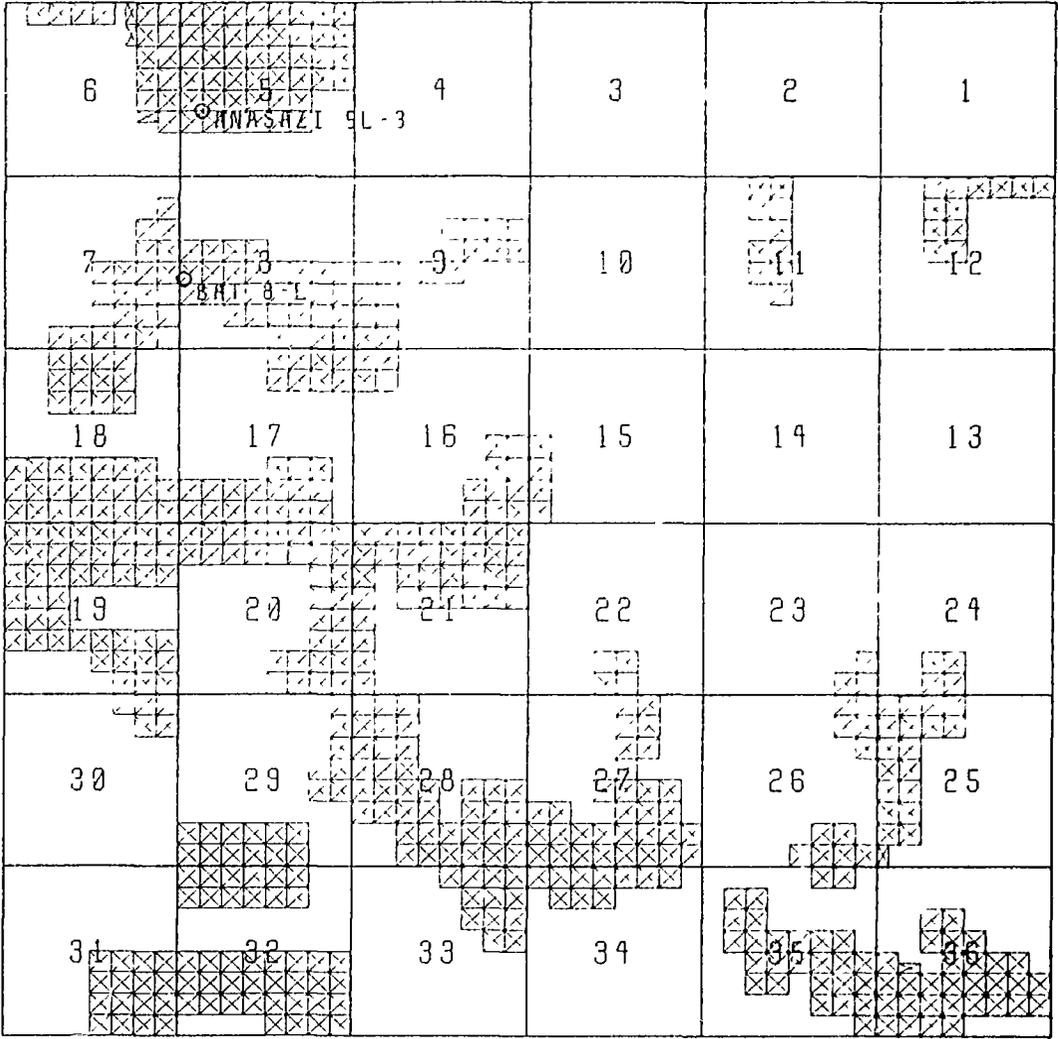
BAT 8-L

2110' FSL, 115' FWL

SECTION 8, TOWNSHIP 42S, RANGE 24E

SAN JUAN COUNTY, UTAH

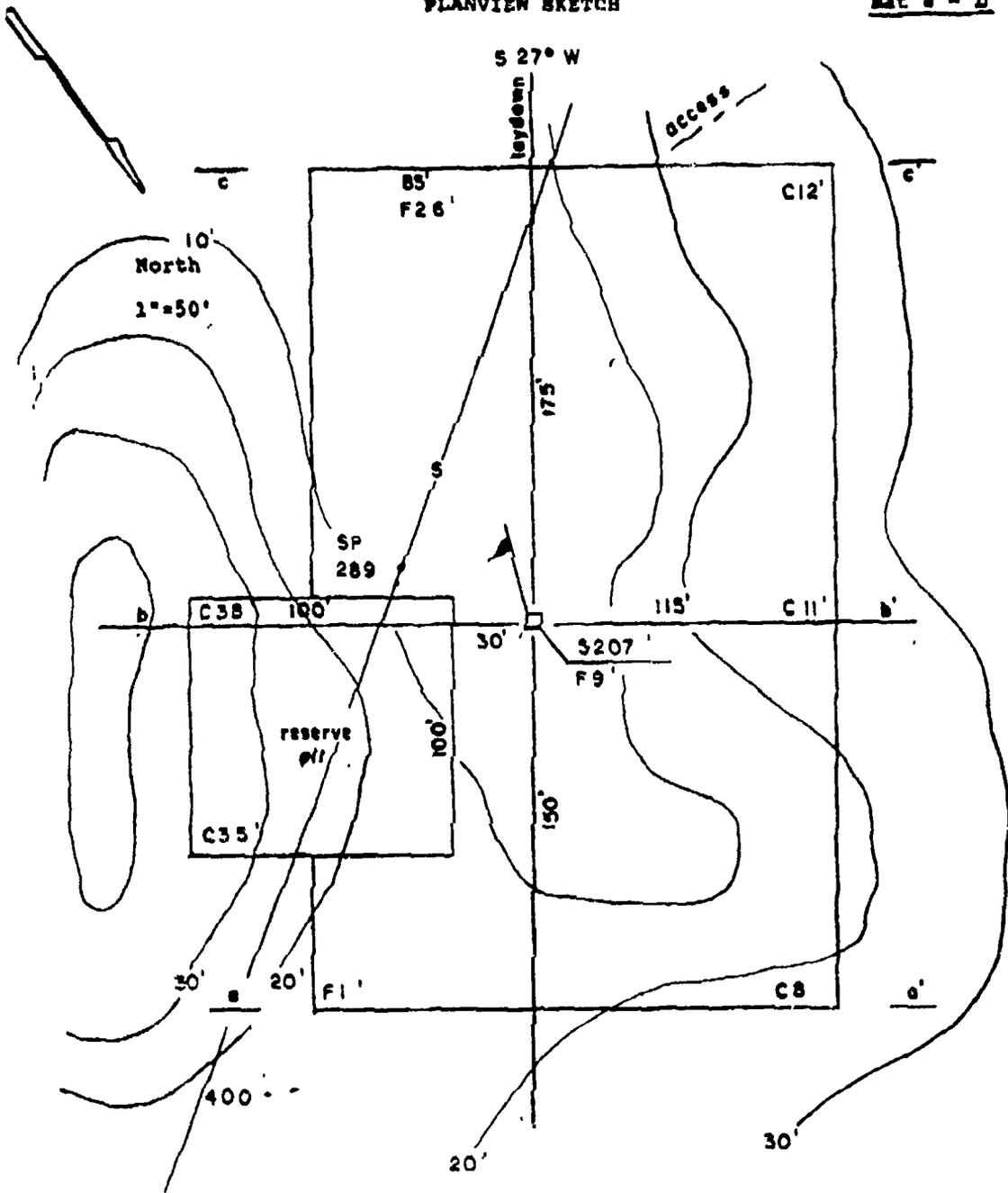




ACREAGE POSITION UNDER THE 1987 OPERATING AGREEMENT
 TOWNSHIP 42S, RANGE 24E
 SAN JUAN COUNTY, UTAH
 ▨ CHUSKA ACREAGE

PLANVIEW SKETCH

Mat 8 - L

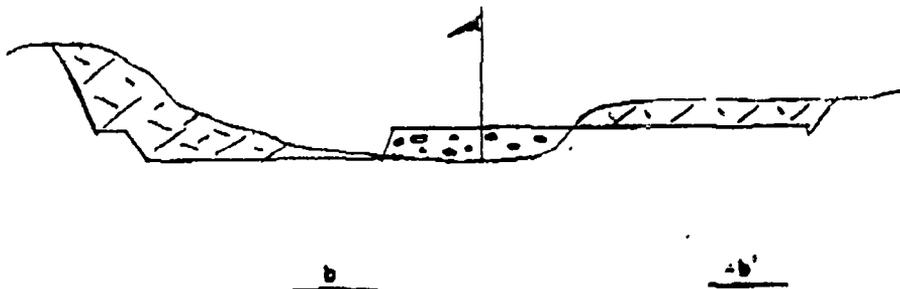
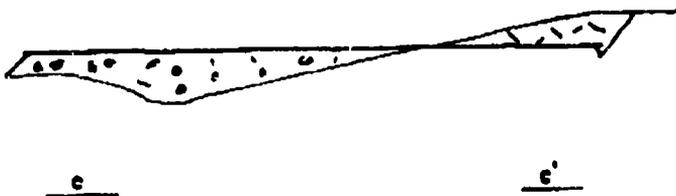


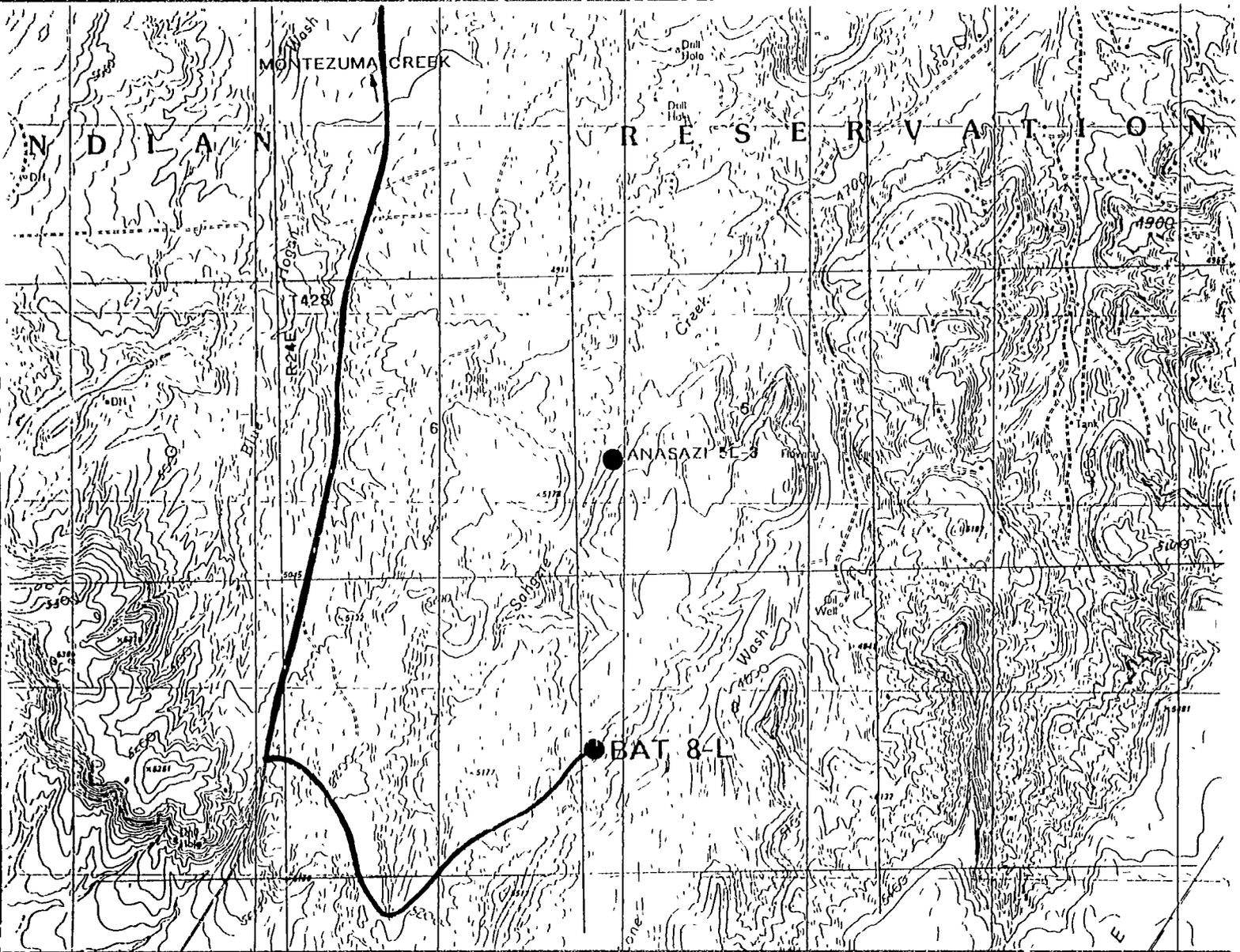
CROSS SECTION

Bat 8 - L

Cut *1/1/1/1*
Fill *2/2/2/2*

1"=50' vert. & horz.





OPERATOR Crescent Energy Co N-9090 DATE 6 6 91

WELL NAME Beat 8-L

SEC N1/2W 8 T 40S R 04E COUNTY San Juan

43 037 3160X
API NUMBER

Indian (w)
TYPE OF LEASE

CHECK OFF

PLAT

BOND

NEAREST WELL

LEASE

FIELD SLOM

POTASH OR OIL SHALE

PROCESSING COMMENTS

One well producing in Sec 8 of above township - Range
Water Permit 09-1704 (T64796) 09 1703 (T64795)
Exception location requested

APPROVAL LETTER

SPACING R615-2-2 N/A
UNIT

R515-3-2

N/A
CAUSE NO & DATE

P615-3-2

STIPULATIONS

CC BIA



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84100-1203

801 538 5340

June 10, 1991

Chuska Energy Company
3315 Bloomfield Highway
Farmington, New Mexico 87401

Gentlemen:

Re Bat 8-L Well, 2110 feet from the South line, 115 feet from the West line, NW 1/4 SW 1/4 Section 8, Township 42 South, Range 24 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.

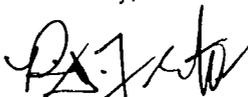
- 1 Spudding notification within 24 hours after drilling operations commence.
- 2 Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During 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
Bat 8-L
June 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 43-037-31628

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

tas
Enclosures
cc Bureau of Land Management
Bureau of Indian Affairs
J. L. Thompson
we14/1-2

STATE OF UTAH
 DIVISION OF OIL, GAS AND MINING
 ENTITY ACTION FORM

OPERATOR CHUSKA ENERGY COMPANY

OPERATOR ACCT. NO. H 9290

ADDRESS _____

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	11558	43-037-31548	<i>Hand</i> OAK 11G #1	SWNE	11	41S	25E	SAN JUAN		10-19-93
WELL 1 COMMENTS:											
A	99999	11559	43-037-31516	<i>Hand</i> SAND DUNE 2N #1	SESW	2	42S	23E	SAN JUAN		10-19-93
WELL 2 COMMENTS:											
A	99999	11560	43-037-31519	<i>Hand</i> DESERT CREEK 2G #2	SWNE	2	42S	23E	SAN JUAN		10-19-93
WELL 3 COMMENTS:											
A	99999	11561	43-037-31571	<i>Hand</i> ANASAZI 6H #1	SENE	6	42S	24E	SAN JUAN		10-19-93
WELL 4 COMMENTS:											
A	99999	11562	43-037-31628	<i>Hand</i> BAT 8-L	NWSW	8	42S	24E	SAN JUAN		10-19-93
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.

Hand
L. CORDOVA (DOGMI)

Signature _____

ADMIN. ANALYST 10-19-93

Title _____ Date _____

Phone No. () _____

FEBRUARY 8, 1994

TO: WELL FILE

FROM: K. M. HEBERTSON

RE: Status, Bat 8-L 43-037-31628 7-42S-24E

Per telephone conversation with the operator concerning the status of this well, it was determined that the well will not be drilled and the operator has acknowledged that the APD has expired. The operator has been informed that the APD will need to be refiled in order to drill this well at a future date.

As of the above date the APD has been rescinded and the file sent to the LA archives.

KMH

STATE OF UTAH
 DIVISION OF OIL, GAS AND MINING
 OIL AND GAS INSPECTION RECORD

WELL NAME: BAT 8-L LEASE:
 API: 4303731628 WELL NO:
 QTR/QTR: NWSW SECTION: 08 TWP: S420 RANGE: E240
 LOCATION: 2110S0115W FIELD:
 OPERATOR: CHUSKA ENERGY COMPANY

CONTRACTOR:

DRILLING / COMPLETION / Y APD SAFETY OPERATIONS	WORKOVER WELL SIGN POLL. CONTROL OTHER	HOUSEKEEPING SURFACE USE	ROPE PITS
SHUT-IN / TA: WELL SIGN SHUT-IN	HOUSEKEEPING TA	EQUIPMENT OTHER	SAFETY
ABAND. NED: MARKER	HOUSEKEEPING	REHAB	OTHER
PRODUCTION: WELL SIGN METERING SECURITY	HOUSEKEEPING POLL. CONTROL SAFETY	EQUIPMENT PITS OTHER	FACILITIES DISPOSAL
GAS DISPOSITION: VENTED/FLARED	SOLD	LEASE USE	

LEGEND: Y - YES OR SATISFACTORY
 N - NO OR UNSATISFACTORY
 A - NOT APPLICABLE

FACILITIES INSPECTED:

REMARKS:
 NO GROUND DISTURBED

ACTION:

INSPECTOR: GLENN GOODWIN

DATE: 93/05/05