

UTAH OIL AND GAS CONSERVATION COMMISSION

FILE NO. FILE **X** WATER SANDS LEASE TYPE

DATE FILED **SEPTEMBER 14, 1994**  
 LAND EFFECTIVED STATE LEASE NO. **ML-43911** PUBLIC LEASE NO. INDIAN  
 DATE LEASE EXPIRES **OCTOBER 31, 1994**  
 DEED NO. **7-7-95**  
 COMPLETED PUT TO PRODUCE  
 NETAL PRODUCTION  
 GRA. TV. API  
 COR  
 PRODUCING ZONES  
 TOTAL DEPTH  
 WELL ELEVATION

*COMPLETED*

DATE ABANDONED LOCATION ABANDONED PER OPER REQUEST REPLACED BY COBRA STATE 12-36 WELL EFF 8-1-95  
 FIELD **WILDCAT**  
 UNIT **JA**  
 COUNTY **MILLARD**  
 WELL NO. **COBRA STATE #1** API NO. **43-027-30032**  
 LOCATION **1320' FSL** FT FROM (N) IS LINE **1320' FEL** FT FROM (E) (W) LINE **C/SE** 14 - 14 SEC **36**

TWP	RGE	SEC	OPERATOR	TWP	RGE	SEC	OPERATOR
				15S	19W	36	EQUIT RES ENERGY CO.



**EQUITABLE RESOURCES  
ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O Box 21017  
Billings MT 59101

Office (406) 259 7860  
FAX (406) 245 1365 [ ]  
FAX (406) 245 1361 [ ]

August 3, 1994

-- VIA FEDERAL EXPRESS --

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Gentlemen:

RE: Cobra State #1  
C/SE Section 36, T15S, R19W  
Millard County, Utah

Enclosed is our Notice of Staking for the referenced proposed wellsite.

After you have had a chance to review this notice, I would appreciate it if you would give me a call at (406) 259-7860 to discuss setting up an onsite.

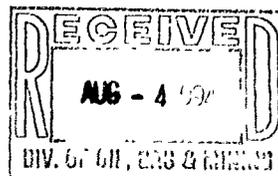
Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Enclosure





**EQUITABLE RESOURCES  
ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O Box 21017  
Billings MT 59104

Office (406) 259 7860  
FAX (406) 245 1365   
FAX (406) 245 1361

August 9, 1994

DARRIL 586 2453 CAPACCO - Y  
MA MAHON

PATRICIA LOCK SIC

W-LANDS HABITAT

BIOLOGIST 535 4864

LYNN ZOOBECK UPLT  
864 3200

Mr. Mike Hebertson  
State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Dear Mike:

RE: Cobra State #1  
C/SE Section 36, T15S, R19W  
Millard County, Utah

For your information, the State of Utah is the surface and mineral owner of the referenced site. Attached is a copy of a memo from our Land Department giving me the pertinent information.

As we discussed last Friday, as soon as I am able to set up onsite on the two Federal locations we have, I'll get in touch with you so we can coordinate times and locations with this State well. As I mentioned, the two Bureau of Land Management people I need to talk with are on leave until August 20.

I notified Gerald C. Bates, the surface grazing permittee, of the staking of the well and the onsite as a matter of courtesy.

If you have any questions, please give me a call at (406) 259-7860.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

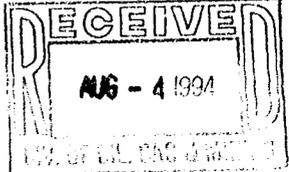
Attachment



NOTICE OF STAKING

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	2. LEASE NUMBER: ML-43911
3. NAME & ADDRESS OF OPERATOR:  Equitable Resources Energy Company, Balcron Oil Division P.O. Box 21017 Billings, MT 59104	4. UNIT AGREEMENT NAME:  n/a
5. NAME OF CONTACT PERSON:  Bobbie Schuman Regulatory and Environmental Specialist (406) 259-7860	6. FARM OR LEASE NAME:  Cobra State
7. SURFACE LOCATION OF WELL SITE:  C/SE Section 36, T15S, R19W 1320' FSL, 1320' FEL	8. WELL NUMBER:  #1  9. FIELD/WILDCAT NAME:  Wildcat
10. LOCATION ELEVATION:  4798.3' GL	11. DISTANCES, SECTION, TOWNSHIP & RANGE:  C/SE Section 36, T15S, R19W 1320' FSL, 1320' FEL
12. FORMATION OBJECTIVE:  Paleozoic	13. ESTIMATED WELL DEPTH:  5,000'
15. SURFACE OWNER'S NAME & ADDRESS:  State of Utah Division of Oil, Gas and Mining 355 West North Temple (3 Triad Center, Suite 350) Salt Lake City, UT 84180-1203	14. COUNTY/STATE:  Millard County, UTAH
16. ADDITIONAL INFORMATION:	

17. SIGNED Bobbie Schuman TITLE Regulatory and Environmental Specialist DATE 8-3-94



EQUITABLE RESOURCES ENERGY COMPANY,  
BALCRON OIL DIVISION  
P. O. Box 21017  
Billings, MT 59104-1017  
Phone: (406) 259-7860  
Fax: (406) 245-1365

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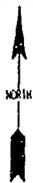
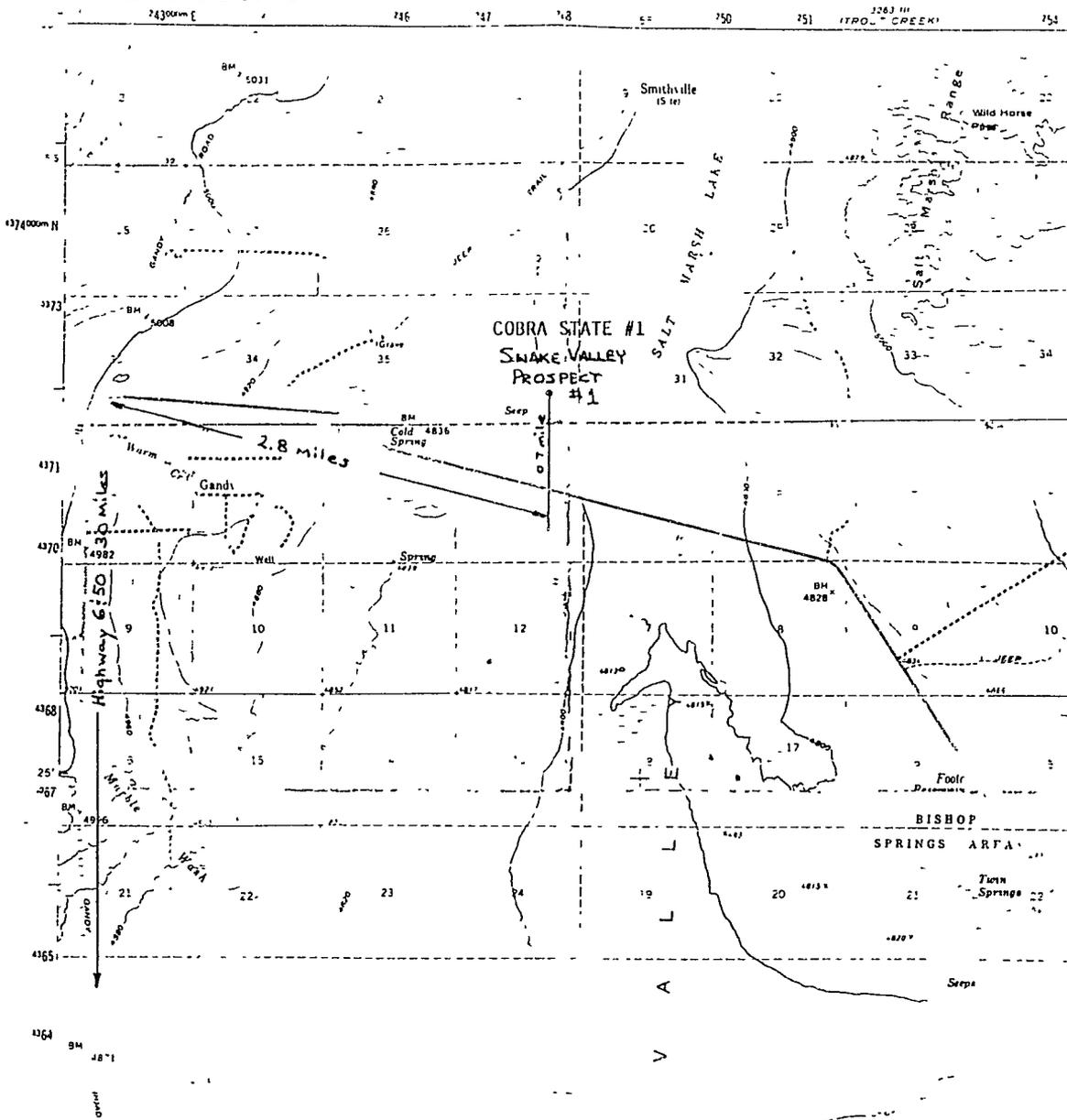
TO: Bobbie Schuman  
FROM: D. Gary Kabeary   
DATE: August 8, 1994  
RE: Cobra State #1  
T15S-R19W Section 36: SE/4

Bobbie: The State of Utah is the surface and mineral owner of Section 36 of Township 15 North, Range 19 West.  
Address: State of Utah  
Division of State Lands and Forestry  
#3 Triad Center, Suite 400  
Salt Lake City, Utah 84180-1204  
Phone: 1-801-538-5508

Also there is a surface grazing lease on this property and we should also contact the permittee before entrance onto the surface.  
Address: Grazing Permit # 21729  
Gerald C. Bates  
HCR Box 340  
Garrison, Utah 84728

Phone: No number available ... tried to obtain one through the phone company, but they have no listing available. I talked to Paula at the district office in Richfield, but their file does not contain a phone number for Mr. Bates, either.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



EQUITABLE RESOURCES ENERGY CO.  
SNAKE VALLEY PROSPECT #1  
MAP "A"





**EQUITABLE RESOURCES**  
**ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O Box 21017  
Billings MT 59104

Office (406) 259 7860  
FAX (406) 245 1365  
FAX (106) 245 1361

September 13, 1994

--- VIA FEDERAL EXPRESS ---

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Gentlemen:

RE: Cobra State #1  
C/SE Section 36, T15S, R19W  
Millard County, Utah

As operator, we hereby request that the status of this well be held tight for the maximum period allowed by Federal and State regulations.

Sincerely,

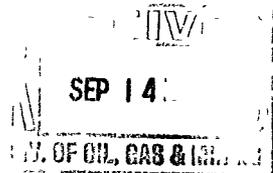
*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Enclosure

*on site  
9/15/94*





**EQUITABLE RESOURCES**  
**ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O Box 21017  
Billings, MT 59104

Office: (406) 259-7860  
FAX: (406) 245-1365   
FAX: (406) 245-1361

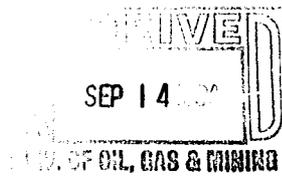
September 13, 1994

-- VIA FEDERAL EXPRESS --

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Gentlemen:

RE: Cobra State #1  
C/SE Section 36, T15S, R19W  
Millard County, Utah



Enclosed is our Application for Permit to Drill (APD) the referenced well. An onsite is scheduled with Mike Hebertson on September 15. At that time choices in the drilling water source will be discussed. As soon as the choice has been made, that will be submitted to become part of this APD. A Federal Right-of-Way is necessary for access to this location and application has been made.

If there are any questions or you need additional information, please let me know.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

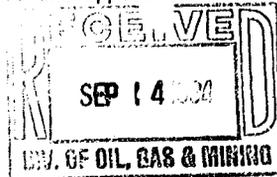
Enclosure

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

<b>APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK</b>						3. Lease Designation and Serial No. <b>ML-43911</b>
1a. Type of Work <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/> <b>PLUG BACK</b> <input type="checkbox"/>						6. If Indian, Allottee or Tribe Name <b>n/a</b>
b. Type of Well <b>Oil Well</b> <input checked="" type="checkbox"/> <b>Gas Well</b> <input type="checkbox"/> <b>Other</b> <input type="checkbox"/> <b>Single Zone</b> <input type="checkbox"/> <b>Multiple Zone</b> <input type="checkbox"/>						7. Unit Agreement Name <b>n/a</b>
2. Name of Operator <b>Equitable Resources Energy Company, Balcron Oil Division</b>						8. Firm or Lease Name <b>Cobra State</b>
3. Address of Operator <b>P.O. Box 21017; Billings, MT 59104</b>						9. Well No. <b>#1</b>
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface <b>C/SE Section 36, T15S, R19W      1320' FSL, 1320' FEL</b> At proposed prod. zone <b>Distance in miles and direction from nearest town or post office*</b> <b>Approximately 2.8 miles east of Warm Creek Ranch.</b>						10. Field and Pool, or Wildcat: <b>Wildcat/Paleozoic</b> 11. 00, Sec., T., R., or Blk., and Survey or Area <b>C/SE Sec. 36, T15S, R19W</b>
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)						12. County or Parish      13. State <b>Millard      Utah</b>
16. No. of acres in lease						17. No. of acres assigned to this well
18. Distance from proposed location to nearest well, drilling, completed, or applied for, on this lease, ft.						19. Proposed depth <b>5,000'</b>
20. Rotary or cable tools <b>Rotary</b>						21. Approx. date work will start* <b>10/15/94</b>
21. Elevations (Show whether DP, RT, GR, etc.) <b>4798.3' GL</b>						
<b>33. PROPOSED CASING AND CEMENTING PROGRAM</b>						
Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement		
<b>12-1/4"</b>	<b>9-5/8"</b>	<b>36#</b>	<b>600'</b>	<b>250 sx</b>		
<b>8-3/4"</b>	<b>7"</b>	<b>20# &amp; 23#</b>	<b>5,000'</b>	<b>300</b>		
<b>See attached Drilling Program/Casing Design for details.</b>						

Operator intends to drill this well in accordance with the attached drilling program/casing design. Also attached are: Geologic Prognosis, survey plat, cut & fill diagram, topo map, rig layout, and BOPE diagram.

A Federal Right-of-Way is necessary for access for this well and application for that has been made.



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: *Bobbie Schuman* Title: Regulatory and Environmental Specialist Date: 9-13-94  
*Bobbie Schuman*

APP NO. 43-027-30032 Approval Date APPROVED BY THE STATE

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

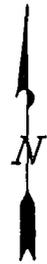
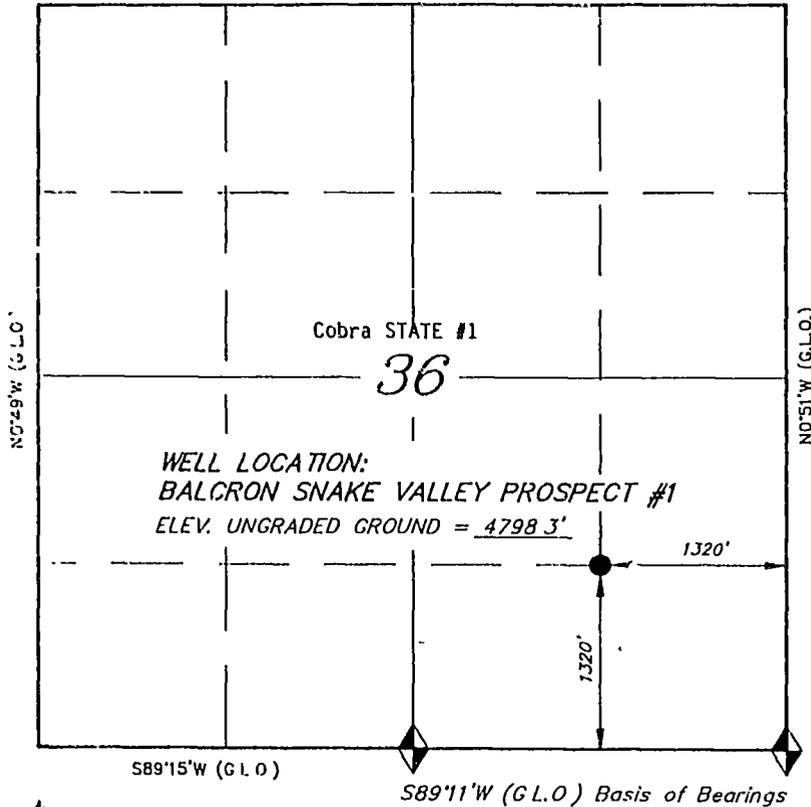
DATE: 10/31/94  
BY: [Signature]  
WELL SPACING: R649-3-3

T15S, R19W, S.L.B.&M.

589'17"W (G.L.O.)

EQUITABLE RESOURCES ENERGY CO.

WELL LOCATION, BALCRON SNAKE VALLEY PROSPECT #1, LOCATED AS SHOWN IN THE SE 1/4 OF SECTION 36, T15S, R19W, S.L.B.&M MILLARD COUNTY, UTAH.



THIS IS TO CERTIFY THAT THE LAND 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.

*Stacy W. Stewart*  
**STACY W. STEWART**  
 REGISTERED LAND SURVEYOR  
 REGISTRATION No. 18937  
 STATE OF UTAH

<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b>	
38 EAST 100 NORTH, VERNAL, UTAH 84078 (801) 781-2501	
SCALE: 1" = 1000'	SURVEYED BY: S.S. S.D.
DATE: 7-18-94	WEATHER: HOT
NOTES:	FILE SVPI

◆ = SECTION CORNERS LOCATED  
 BASIS OF BEARINGS, G.L.O. PLAT  
 BASIS OF ELEV, U.S.G.S. 15 min QUAD (GANDY, UTAH)



BALCRON OIL CO.

Operator: BALCRON OIL	Well Name: Cobra State #1
Project ID:	Location: Millard Co., Utah

Design Parameters:

Mud weight ( 9.00 ppg ) : 0.468 psi/ft  
 Shut in surface pressure : 1838 psi  
 Internal gradient (burst) : 0.100 psi/ft  
 Annular gradient (burst) : 0.000 psi/ft  
 Tensile load is determined using air weight  
 Service rating is "Sheet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1.60 (J)  
 Body Yield : 1.50 (B)  
 Overpull : 0 lbs.

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	4,200	7"	20.00	K-55	ST&C	4,200	6.331	
2	800	7"	23.00	K-55	ST&C	5,000	6.250	

	Collapse			Burst			Tension		
	Load (psi)	Strgth (psi)	S.F.	Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load (kips)	Strgth (kips)	S.F.
1	1964	2232	1.136	2258	3740	1.66	102.40	254	2.48 J
2	2338	3270	1.399	2338	4360	1.86	18.40	309	16.79 J

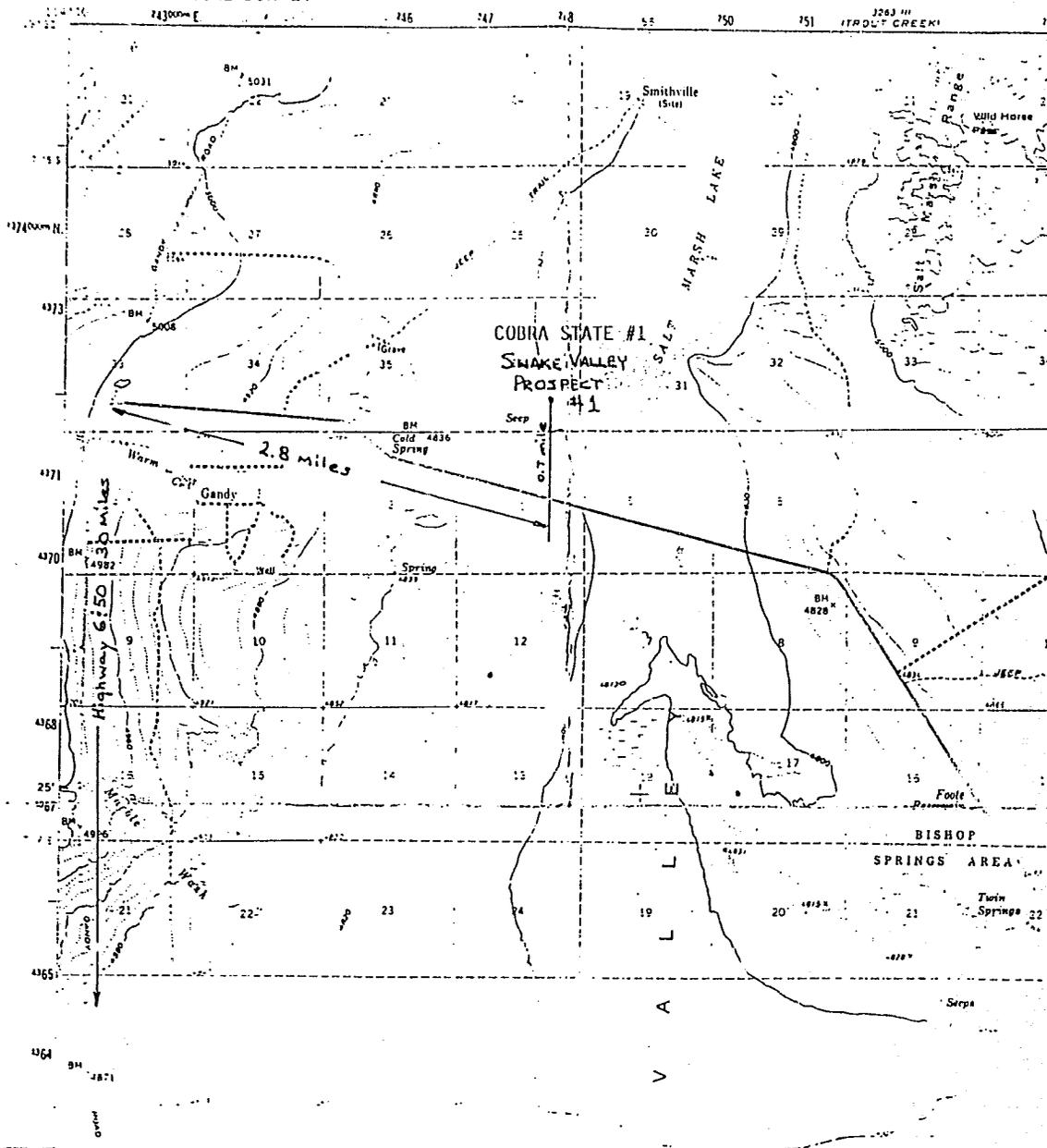
Prepared by : McCoskery, Billings, MT  
 Date : 09-12-1994  
 Remarks :

Minimum segment length for the 5,000 foot well is 1,500 feet.  
 The mud gradient and bottom hole pressures (for burst) are 0.468 psi/ft and 2,338 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.06)



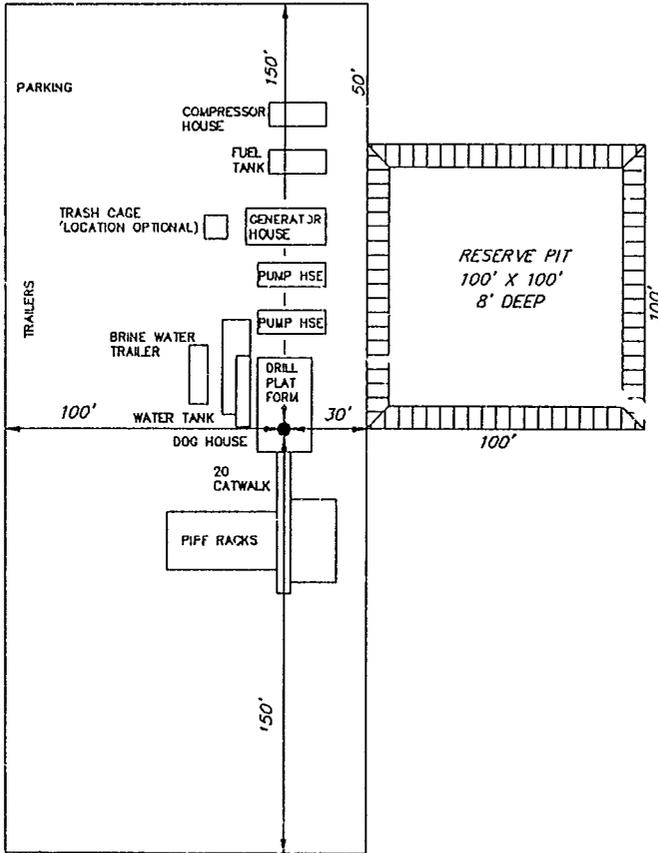


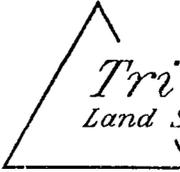


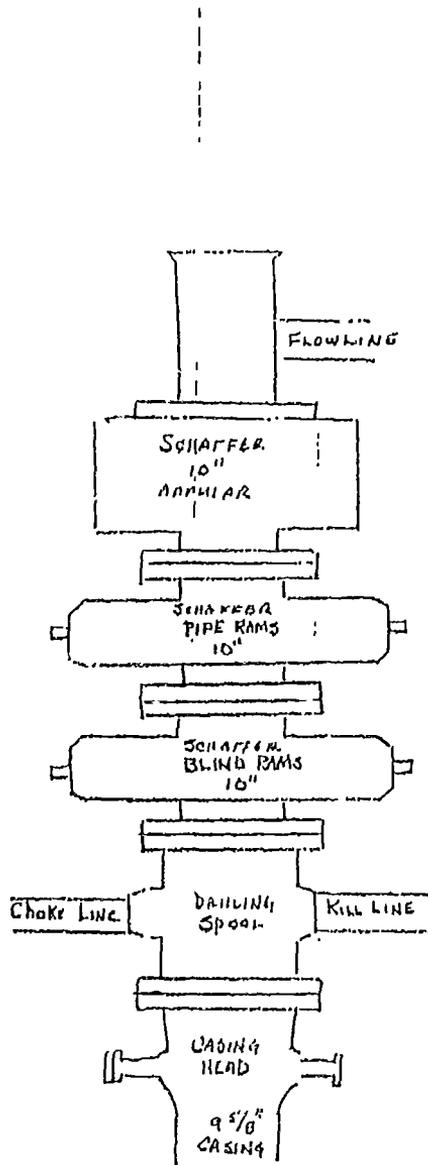
EQUITABLE RESOURCES ENERGY CO.  
SNAKE VALLEY PROSPECT #1  
MAP "A"



**PLAT #2**  
**RIG LAYOUT**  
**BALCRON SNAKE VALLEY PROSPECT #1**  
**COBRA STATE #1**



  
**Tri State**  
*Land Surveying, Inc.*  
 (801) 781-2501  
 38 WEST 100 NORTH, VERNAL, UTAH 84078



Annular preventer optional.

EXHIBIT "G"

BLOW OUT PREVENTER  
EQUIPMENT

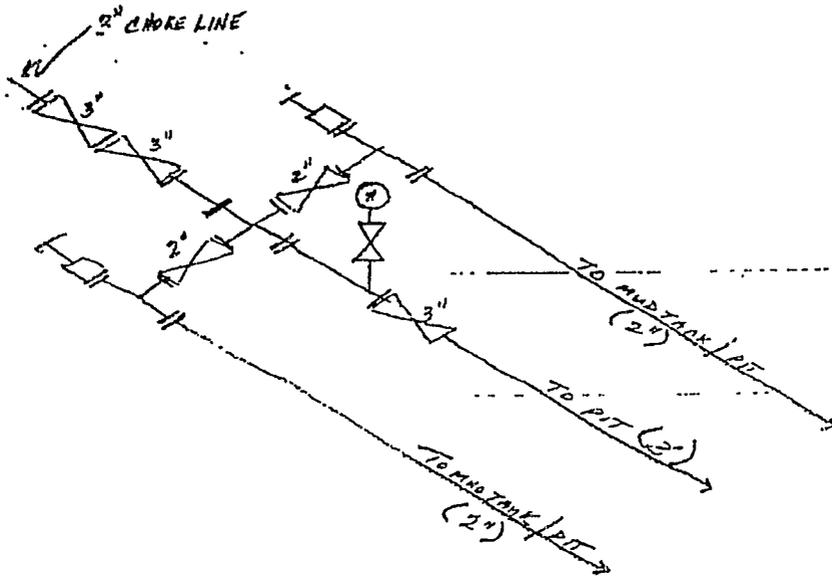


EXHIBIT "D"

CHOKE MANIFOLD EQUIPMENT  
 SKID MOUNTED  
 ENCLOSED IN STEEL BUILDING

## DRILLING LOCATION ASSESSMENT

### State of Utah Division of Oil, Gas and Mining

OPERATOR: EQUITABLE RESOURCES WELL NAME: COBRA STATE #1  
SECTION: 36 TWP: 15S RNG: 19W LOC: 1320 FSL 1320 FEL  
QTR/QTR C SE COUNTY: MILLARD FIELD: WILDCAT  
SURFACE OWNER: STATE OF UTAH  
SURFACE AGREEMENT: BEING SECURED WITH GRAZING RIGHT OWNER  
SPACING: STATE SPACING 40 ACRES  
GEOLOGIST: MICHAEL HEBERTSON DATE AND TIME: SEP. 15, 1993 3:00 PM

PARTICIPANTS: MIKE HEBERTSON, ED BONNER STATE LANDS, LYNN ZUBECK  
WILDLIFE RESOURCES, DAVE MCCOSKERY & BOBBIE SCHUMAN EQUITABLE,  
GERALD BATES FEE GRAZING PERMITTEE.

REGIONAL SETTING/TOPOGRAPHY: WESTERN SIDE OF THE DEEP CREEK  
MOUNTAINS NORTH SIDE OF THE CONFUSION BASIN. LOCATION IS FLAT  
AND LOCATED IN A SALT MARSH BETWEEN TWO MOUNTAIN RANGES.

#### LAND USE:

CURRENT SURFACE USE: WINTER RANGE FOR DEER AND WILDLIFE SOME  
GRAZING OF CATTLE AND SHEEP.

PROPOSED SURFACE DISTURBANCE: 1.5 ACRE LOCATION AND RESERVE PITS  
PLUS ROAD ACCESS 16' WIDE 1.5 ACRES, TOTAL 3 ACRES DISTURBED.

AFFECTED FLOODPLAINS AND/OR WETLANDS: A SALT MARSH TO THE EAST OF  
THE LOCATION IS OF SOME CONCERN AND MUST BE PRESERVED AS CRITICAL  
HABITAT. SEVERAL SINK HOLES ALONG THE ACCESS ROAD WERE LOCATED  
AND THE ROAD WILL BE RE-LOCATED. IF WATER LEVEL WERE TO RISE 4'  
LOCATION WOULD BE UNDER WATER.

FLORA/FAUNA: RABBIT BRUSH, GREASE WOOD, SALT GRASS, BALTIC RUSH,  
ALKALI SACATON. DEER, EAGLES, HAWKS, SMALLER BIRDS, WATERFOWL  
REFUGE, COYOTE, INSECTS.

#### ENVIRONMENTAL PARAMETERS:

##### SURFACE GEOLOGY:

SOIL TYPE AND CHARACTERISTICS: SALT SATURATED CLAYS, VERY  
FINE GRAINED AND POWDERY.

SURFACE FORMATION & CHARACTERISTICS: QUATERNARY ALLUVIUM OF  
CLAY AND SALT FORMATION IS UNKNOWN.

EROSION/SEDIMENTATION/STABILITY: STABILITY ON THIS LOCATION  
IS A PROBLEM THAT WILL NEED TO BE ADDRESSED BY FILLING THE SITE  
WITH ENOUGH MATERIAL TO SUPPORT THE HEAVY EQUIPMENT NEEDED TO

DRILL THE WELL. GRAVEL BASE WILL NEED TO BE APPLIED TO THE LOCATION AND THE ACCESS ROAD.

PALEONTOLOGICAL POTENTIAL: NONE.

SUBSURFACE GEOLOGY:

OBJECTIVES/DEPTHS: THE OBJECTIVE FORMATION IS THE PALEOZOIC WITH A POTENTIAL TO OIL AT 5,000'±.

ABNORMAL PRESSURES-HIGH AND LOW: NO ABNORMAL HIGH PRESSURES ARE EXPECTED.

CULTURAL RESOURCES/ARCHAEOLOGY: NONE.

CONSTRUCTION MATERIALS: LOCATION WILL BE CONSTRUCTED WITH MATERIALS AT THE SITE USING CUT & FILL AS AVAILABLE, AND BUILT UP WITH A GRAVEL BASE TO SUPPORT THE EQUIPMENT.

SITE RECLAMATION: AS REQUIRED BY STATE LANDS.

RESERVE PIT:

CHARACTERISTICS: 150 X 50' CUT IN THE OVER BURDEN AND NOT MORE THAN 4' DEEP DUE TO THE VERY SHALLOW WATER TABLE, SEVERAL ACTIVE SPRINGS ARE NEAR THE LOCATION.

LINING: A 12 MIL PLASTIC LINER WILL BE REQUIRED

MUD PROGRAM: HOLE WILL BE DRILLED WITH FRESH WATER MUD ONLY.

DRILLING WATER SUPPLY: WATER IS BEING PURCHASED FROM A LOCAL RANCHER ABOUT 2 MILES FROM THE WELL SITE.

OTHER OBSERVATIONS:

STIPULATIONS FOR APD APPROVAL:

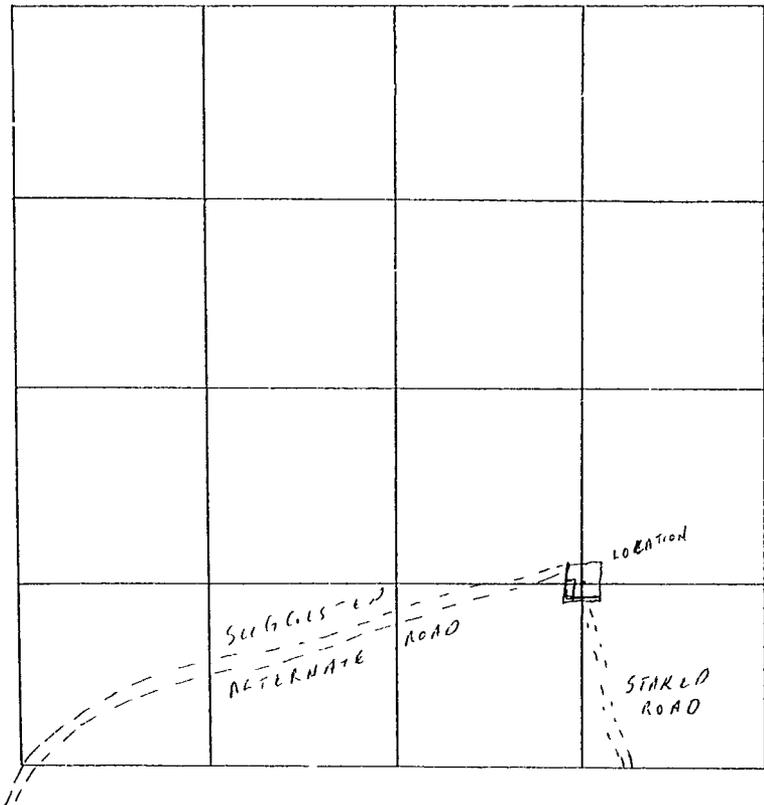
- ✓1. PIT WILL BE LINED WITH A MINIMUM 12 MIL PLASTIC LINER
- ✓2. SURFACE SOILS WILL BE USED TO BUILD A MINIMUM 2 FOOT BERM AROUND THE LOCATION AND THE PIT.
- ✓3. THE ROAD AND LOCATION PAD WILL BE STABILIZED WITH GRAVEL FILL SUFFICIENT TO SUPPORT THE WEIGHT OF THE EQUIPMENT, 8-12 INCHES.
- ✓4. A CULVERT WILL BE INSTALLED AT THE JUNCTION OF THE MAIN DIRT ROAD AND THE ACCESS ROAD LEADING TO LOCATION.
- ✓5. THE ACCESS ROAD TO LOCATION WILL BE KEPT ON HIGH GROUND AND AVOID ANY SPRING OR SINK HOLE THAT WILL GIVE COVER TO WATERFOWL OR OTHER NESTING SITES.

ATTACHMENTS

PHOTOGRAPHS WILL BE PLACED OF FILE.

SECTION \_\_\_\_\_ TOWNSHIP \_\_\_\_\_ RANGE \_\_\_\_\_ COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

SCALE = 1" = 1000'



Evaluation Ranking Criteria and Ranking Score

Site-Specific Factors	Ranking Score	Final Ranking Score
Distance to Groundwater >200' 100 to 200' 75 to 100' 25 to 75' <25' or recharge area	0 5 10 15 20	20
Distance to surface Water >1000' 300 to 1000' 200 to 300' 100 to 200' < 100'	0 2 10 15 20	5
Distance to Nearest Municipal Well >5280' 1320 to 5280' 500 to 1320' <500'	0 5 10 20	<del>5</del> 0
Distance to Other Wells >1320' 300 to 1320' <300'	0 10 20	0
Native Soil Type: Low permeability Mod. permeability High permeability	0 10 20	10

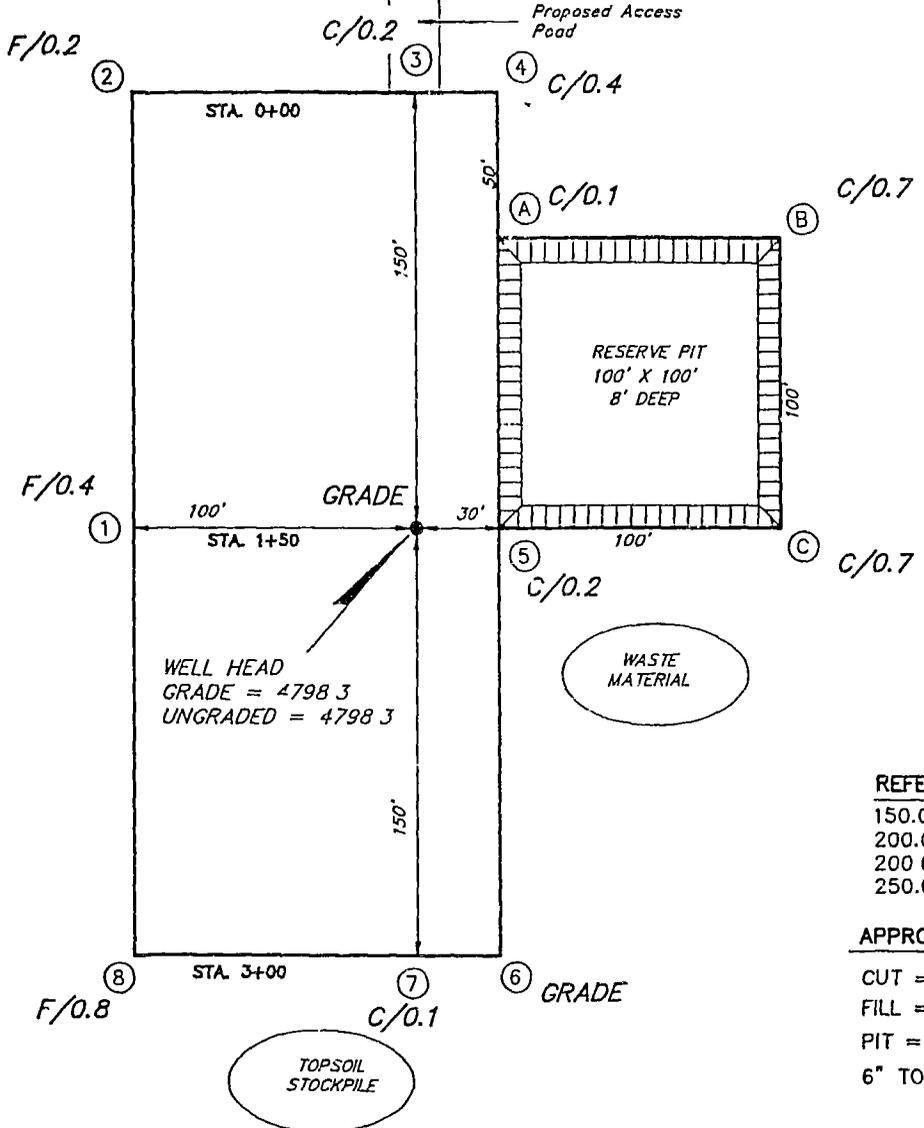
Drilling Fluid Air/mist Fresh Water 5000 < TDS < 10000 TDS > 10000 Oil Based Mud or mud containing hazardous constituents	0 5 10 15 20	5
Drill Cuttings Normal Rock Salt or detrimental	0 10	0
Annual Precipitation <10 10 to 20 >20	0 5 10	0
Affected Populations <10 10 to 30 30 to 50 >50	0 10 15 20	0
Presence of Nearby Utility Conduits Not Present Unknown Present	0 5 15	0

Final Score	40 <del>35</del>
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# EQUITABLE RESOURCES ENERGY CO.

## BALCRON SNAKE VALLEY PROSPECT #1

COBRA STATE #1



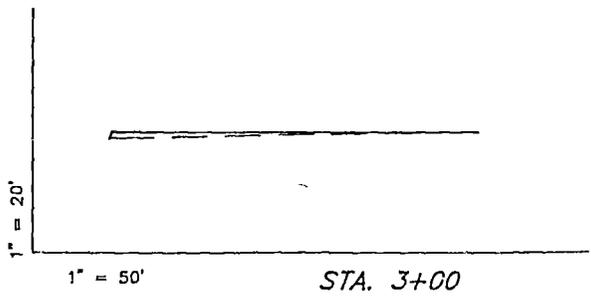
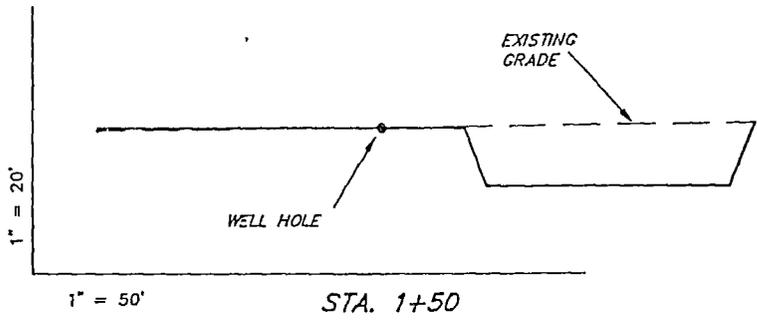
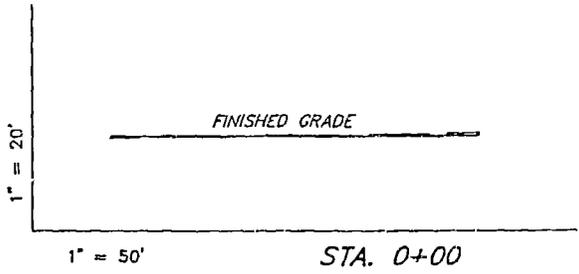
REFERENCE P

- 150.0' EAST
- 200.0' EAST
- 200.0' NORTH
- 250.0' NORTH

APPROXIMATE

- CUT = 232 CU
- FILL = 163 CU
- PIT = 2,725
- 6" TOPSOIL =

PREVIOUS MAP



POINTS

- 797.4'
- 4797.2'
- 4798.6'
- 4798.1'

YARDAGES

- . Yds
- . Yds.
- Cu. Yds.
- 907 Cu. Yds.

**Tri State**  
Land Surveying, Inc.  
(801) 781-2501

FILENAME SVP1

38 WEST 100 NORTH VERNAL, UTAH 84078

**STATE OF UTAH**

<b>Operator: EQUITABLE REBOURCES</b>	<b>Well Name: CORBA STATE 1</b>
<b>Project ID: 43-027-30032</b>	<b>Location: SEC. - T15B - R19W</b>

Design Parameters:

Mud weight ( 9 00 ppg) : 0 468 psi/ft  
 Shut in surface pressure : 2082 psi  
 Internal gradient (burst) : 0.051 psi/ft  
 Annular gradient (burst) : 0 000 psi/ft  
 Tensile load is determined using buoyed weight  
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125  
 Burst : 1.00  
 8 Round : 1.80 (J)  
 Buttress : 1 60 (J)  
 Other : 1 50 (J)  
 Body Yield : 1.50 (B)

Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	4,200	7.000	20.00	K-55	ST&C	4,200	6.331
2	800	7.000	23.00	K-55	ST&C	5,000	6.250

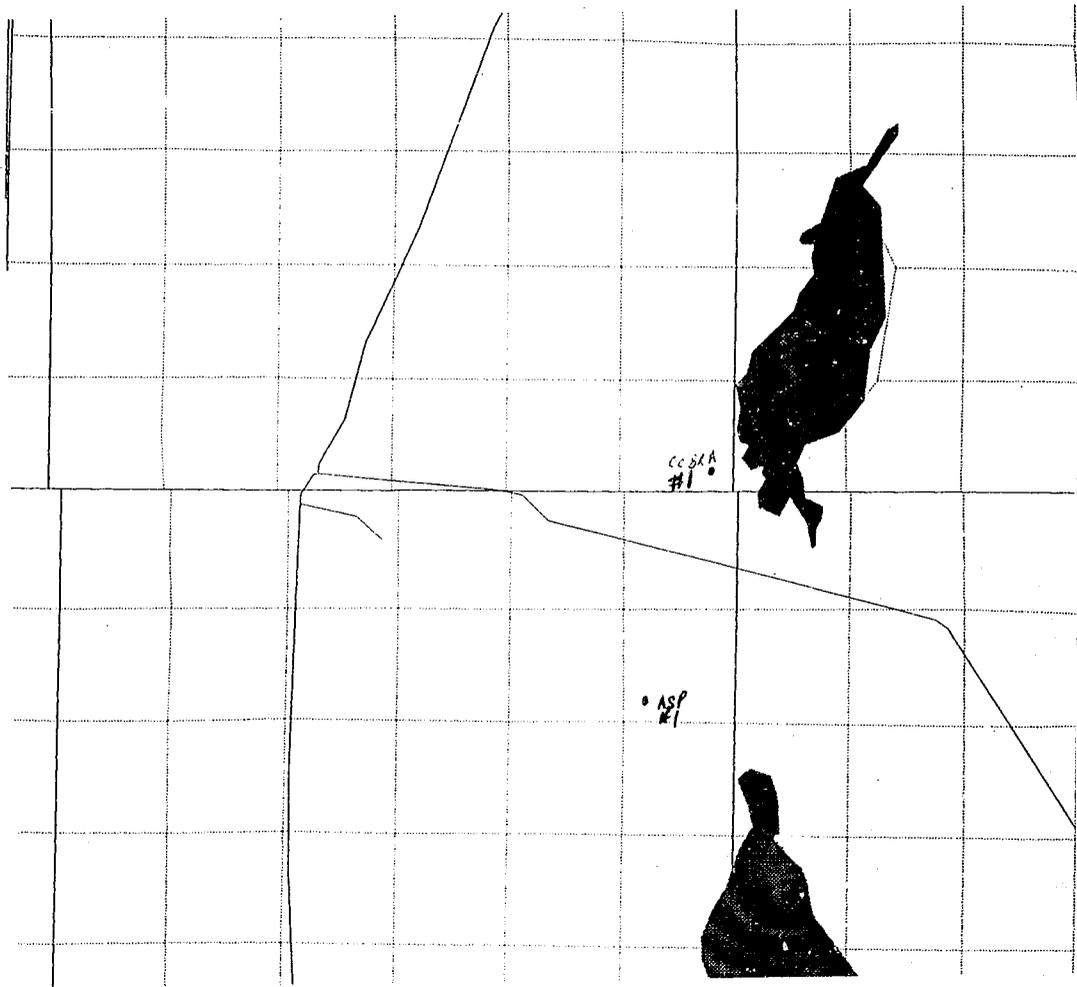
	Collapse			Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension		
	Load (psi)	Strgth (psi)	S.F.				Load (kips)	Strgth (kips)	S.F.
1	1964	2238	1.140	2297	3740	1.63	88.31	254	2.88 J
2	2338	3270	1.399	2338	4360	1.87	15.87	309	19.47 J

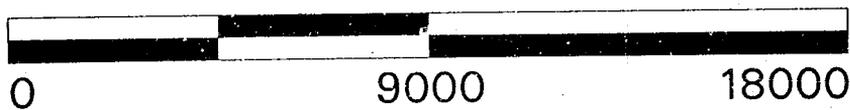
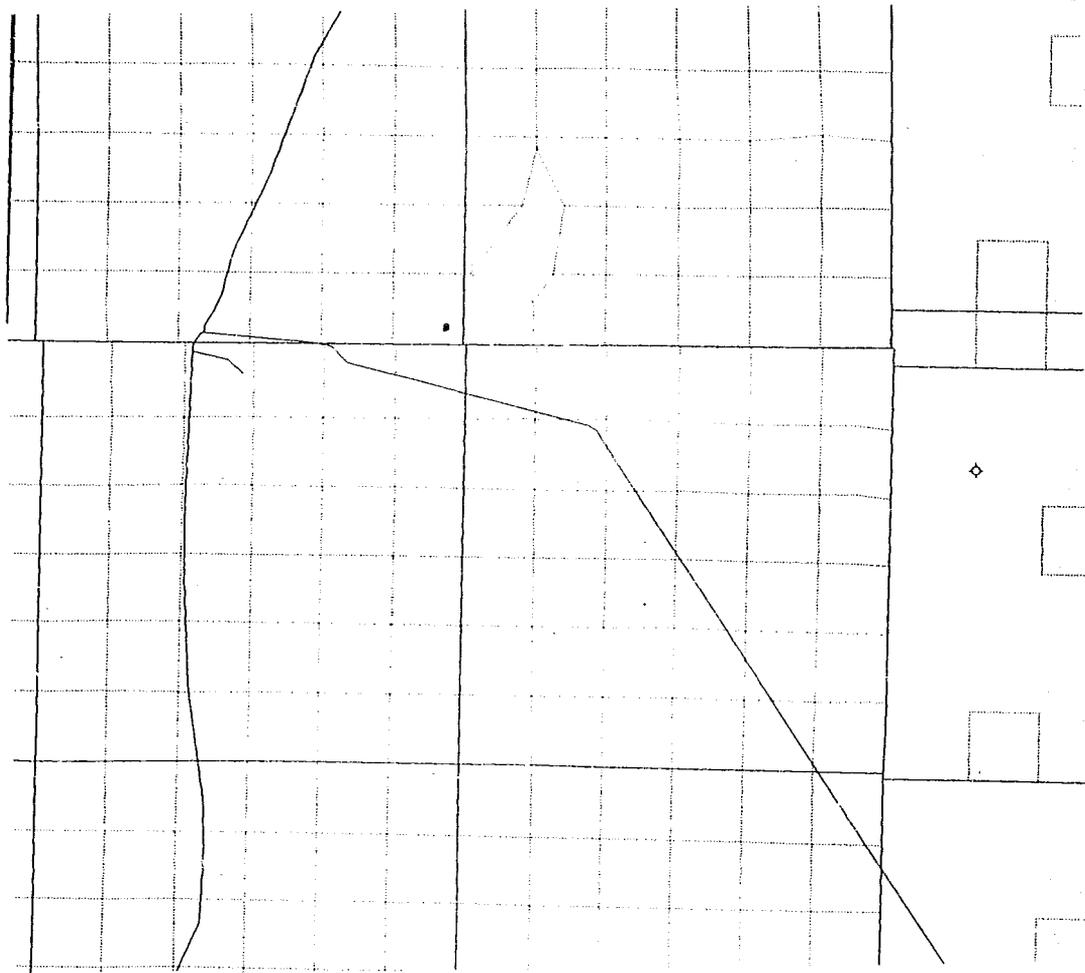
Prepared by : , Salt Lake City, UT  
 Date : 10-31-1994  
 Remarks :

Minimum segment length for the 5,000 foot well is 1,000 feet.  
 SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 99°F (Surface 74°F, BHT 124°F & temp gradient 1 000°/100 ft.)  
 The mud gradient and bottom hole pressures (for burst) are 0 468 psi/ft and 2,338 psi, respectively.

**NOTE:** The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)

EQUITABLE RESOURCES ASP FEDERAL #1  
SEC. 12 16 SOUTH, 19 WEST,  
MILLARD COUNTY, UTAH







# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT HOUSE RANGE RESOURCE AREA

35 East 500 North  
P.O. Box 778  
Fillmore, Utah 84631

IN REPLY REFER TO

2800  
(U-054)  
UTU-072963

RECEIVED

February 24, 1995

RJ FIRTH  
DIVISION OF OIL GAS & MINING  
355 WEST NORTH TEMPLE  
3 TRIAD CENTER SUITE 350  
SALT LAKE CITY UT 84180-1203

FEB 27 1995

Dear Mr. Firth:

On November 4, 1994, House Range Resource Area received an application from Equitable Resources Energy Company, Balcron Oil Division (Balcron) for an access road right-of-way (ROW) in Sec. 1, T. 16 S., R. 19 W., SLM, Millard County, Utah. The ROW would allow access to the site approved for Cobra State #1 Well, located in the C/SE, Sec 36, T. 15 S., R. 19 W., SLM, Millard County, Utah. This well is assigned API number 43-027-30032.

The approved location is adjacent to the Gandy Area of Critical Environmental Concern (refer to the enclosed map), which contains proposed Critical Least Chub Habitat. The least chub (*Notichthys phlegathontis*) is proposed for listing as an endangered species, and its listing package is under final review in Washington D.C.

After an analysis of the proposed ROW, the U.S. Fish and Wildlife Service suggests that an alternate location, approximately 1/4 mile to the west, would have less potential impact on sensitive species. We have enclosed a copy of their memorandum for your review. Balcron has stated they might consider an alternative location for the Cobra State #1 Well, their decision may depend on the interpretation of recent geophysical data.

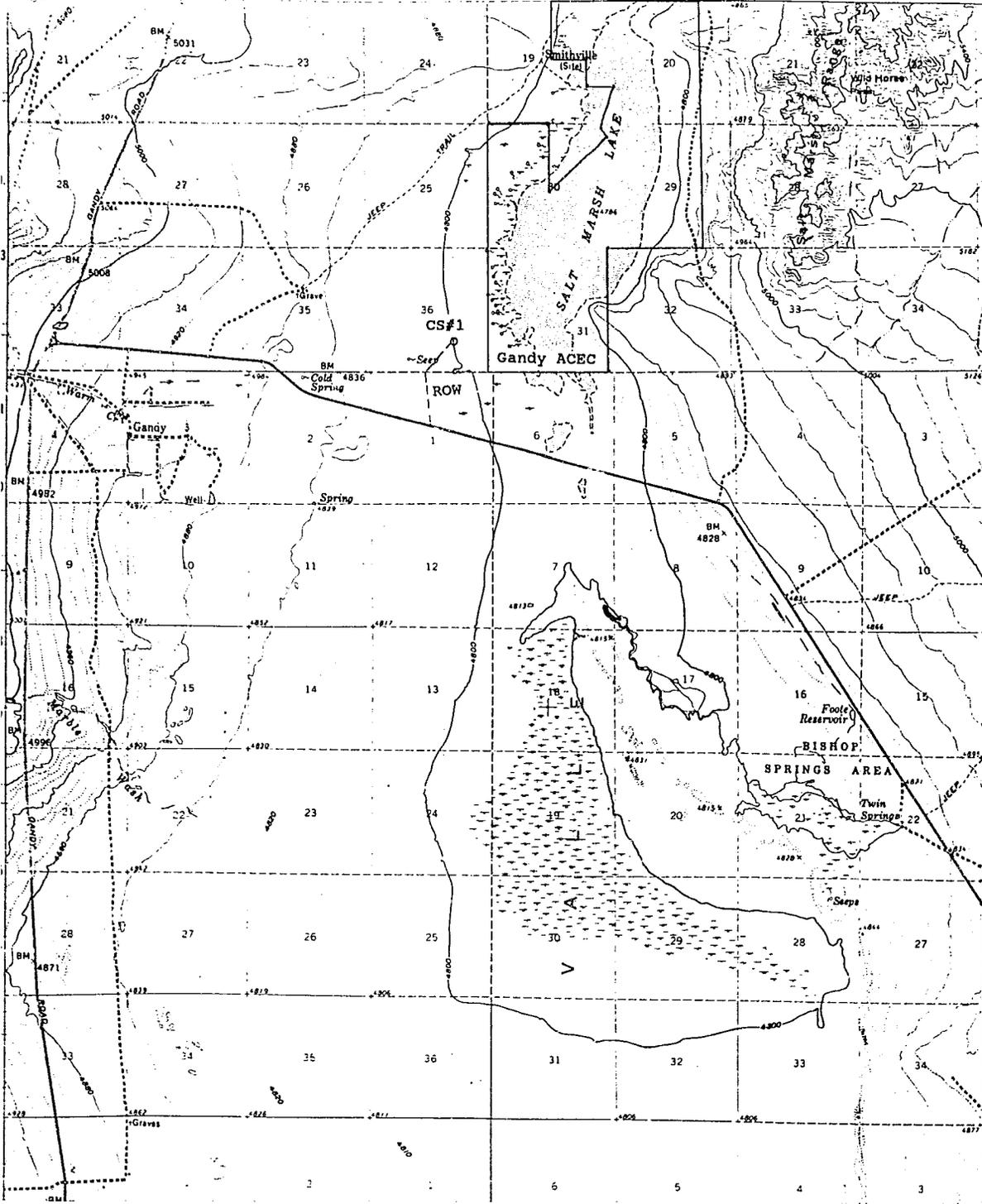
In consideration of recent events, would you be willing to discuss with the applicant, the possibility of relocating the drill site.

Sincerely,

Rex Rowley  
Area Manager

Enclosures

1. Map (1 p )
2. Memorandum (2 p )



Location map for Gandy ACEC and access ROW to Cobra State #1 Well.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

UTAH FIELD OFFICE  
LINCOLN PLAZA  
145 EAST 1300 SOUTH, SUITE 404  
SALT LAKE CITY, UTAH 84115

BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 3 1995

In Reply Refer To

January 31, 1995

Nancy D  
Mark

SPR. ACTION INITIAL

Wm George A.M. \_\_\_\_\_

\_\_\_\_\_  
P.P.

House Range A.M. \_\_\_\_\_

Operations Division \_\_\_\_\_

MEMORANDUM

TO Area Manager, Bureau of Land Management, House Range Resource Area, Fillmore, Utah

FROM Assistant Field Supervisor, Fish and Wildlife Service, Ecological Services, Salt Lake City Field Office, Salt Lake City, Utah

SUBJECT Balcron Oil Division Right-of-Way Access Across Section 1 of Township 16 South, Range 19 West

This is in response to your letter of January 4, 1995 concerning a right-of-way to allow access to Sec 36, T 15 S, R 19 W, where the Equitable Resources Company, Balcron Oil Division, has obtained a permit from the State of Utah to drill a test well.

The Fish and Wildlife Service (Service) appreciates the opportunity to comment on this issue and we understand the Bureau of Land Management's (BLM) direction under the District Court decision allowing the right of access to State school trust lands. However, as the Endangered Species Act (Act), section 7(1)(a), articulates, the BLM also has an obligation to "utilize its authorities by carrying out programs for the conservation of endangered species and threatened species." Additionally, the Act, in section 7(a)(2), mandates the BLM to consult with the Service to insure against the likelihood of jeopardy for species listed under the Act. Although there are no endangered or threatened species in the project area, the least chub (*Notemigonus crysoleucas*), a species with a listing package under final review in Washington D C, is present and BLM has previously agreed to treat this species as endangered and allow the Service to comment on activities which may affect them. Another species of concern, the western spotted frog (*Rana pretiosa*), occurs in the proposed project's area of influence.

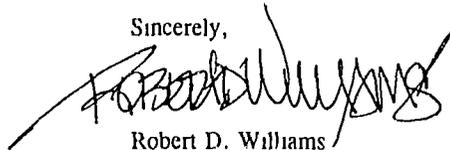
BLM indicates the right of access "is subject to Federal regulation when its exercise requires the crossing of Federal property. Such regulation cannot, however, prohibit access or be so restrictive as to make economic development competitively unprofitable." BLM has determined that granting the right-of-way would not adversely affect the least chub, however, it is the Service's opinion that indirect and interdependent effects, not addressed by BLM, may occur to least chub due to the proximity of springs inside or adjacent to the Gandy Salt Marsh Area of Critical Environmental Concern (ACEC) to the proposed drill pad location. BLM's provision of a right-of-way permit allows the applicant access to a location that is

immediately adjacent to a high percentage of the few remaining occupied least chub habitats.

The Service understands the difficulty in denying or conditioning permits under the District Court's stipulations. However, the Act requires that indirect, interdependent impacts from a federal action, be addressed and minimized. In an effort to assist BLM in achieving fulfillment of its District Court and Act responsibilities, the Service suggests the following actions. The BLM should negotiate with the applicant to move the drill pad to a location approximately 1/4 mile further from the sensitive ACEC area. This action would not be overly restrictive nor should the project be economically less feasible, and would provide the least chub and spotted frog populations a greater degree of protection. Additionally, following completion of exploration activities, the access road should be reclaimed to historic conditions, thereby precluding increased access to sensitive areas.

If you have any questions or desire clarification, please contact Doug Young (801-524-5001 ext 134)

Sincerely,

A handwritten signature in black ink, appearing to read "Robert D. Williams", written over a horizontal line.

Robert D. Williams  
Assistant Field Supervisor



EQUITABLE RESOURCES  
ENERGY COMPANY

BALCRON OIL DIVISION

1601 Lewis Avenue  
P.O. Box 21017  
Billings, MT 59104

Office (406) 259-7860  
FAX (406) 245-1365 ( )  
FAX (406) 245-1361 (M)

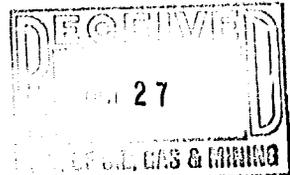
October 26, 1994

-- VIA FEDERAL EXPRESS --

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Gentlemen:

RE: Cobra State #1 *43-027-30022*  
C/SE Section 36, T15S, R19W  
Millard County, Utah



Enclosed is the Cultural Resource Evaluation of the referenced wellsite. This includes an evaluation of two proposed access routes. One of those is through Section 2 which is privately owned and we are negotiating with the landowner. That is the preferred route by both the State and the Bureau of Land Management (BLM). However, we are finding that the landowner may not be willing to allow access on his land. Therefore, we have also restaked a possible access route going through Section 1 which is BLM surface and are submitting the cultural evaluation on that access. We will reapply for Federal right-of-way.

If there are any questions or you need additional information, please let me know.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Enclosure



# ARCHEOLOGICAL - ENVIRONMENTAL RESEARCH CORPORATION

P. O. Box 853 Bountiful, Utah 84011-0853  
Tel: (801) 292-7061, 292-9668

October 21, 1994

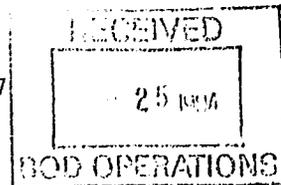
*Subject:* **Addendum to CULTURAL RESOURCE EVALUATION OF  
PROPOSED COBRA STATE UNIT NO. 1 IN THE SNAKE  
VALLEY LOCALITY OF MILLARD COUNTY, UTAH**

*Project:* Balcron Oil -- 1994 Snake Valley Development

*Project No.:* BLCR-94-8B

*Permit No.:* Dept. of Interior -- UT-94-54937

*State Project No:* UT-94-AF-599sb



*To:* Balcron Oil Division, Attn: Ms. Bobbie Schuman, P.O. Box 21017, Billings,  
Montana 59104

Utah Department of State Lands and Forestry, Attn: Kenny Wintch, 3 Triad  
Center, Suite 400, 355 West North Temple, Salt Lake City, Utah 84180-1204

Bureau of Land Management, Attn: Ms. Nancy Shearin, P.O. Box 778,  
Fillmore, Utah 84631

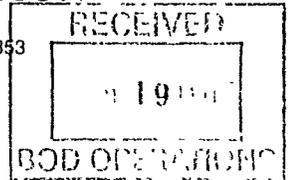
*Info:* Antiquities Section, Division of State History, 300 Rio Grande, Salt Lake City,  
Utah 84101



# ARCHEOLOGICAL - ENVIRONMENTAL RESEARCH CORPORATION

P O Box 853 Bountiful, Utah 84011-0853  
Tel (801) 292-7061, 292-9668

October 15, 1994



*Subject:* **CULTURAL RESOURCE EVALUATION OF PROPOSED  
COBRA STATE UNIT NO. 1 IN THE SNAKE VALLEY  
LOCALITY OF MILLARD COUNTY, UTAH**

*Project:* Balcron Oil -- 1994 Snake Valley Development

*Project No.:* BLCR-94-8A

*Permit No.:* Dept of Interior -- UT-94-54937

*State Project No:* UT-94-AF-599s

*To:* ✓ Balcron Oil Division, Attn Ms Bobbie Schuman, P.O. Box 21017, Billings,  
Montana 59104

Utah Department of State Lands and Forestry, Attn Kenny Wintch, 3 Triad  
Center, Suite 400, 355 West North Temple, Salt Lake City, Utah 84180-1204

Bureau of Land Management, Attn Ms Nancy Shearin, P.O. Box 778,  
Fillmore, Utah 84631

*Info:* Antiquities Section, Division of State History, 300 Rio Grande, Salt Lake City,  
Utah 84101

ADDENDUM TO: BLCR-94-8A

On October 20, 1994, AERC archaeologist F. Richard Hauck returned to the Snake Valley locality to conduct an evaluation for Balcron Oil Division. This evaluation was associated with the initial BLCR-94-8A project that was reported on October 15, 1994 (AERC project 1455, State Project No.: UT-94-AF-599bs) and referenced the cultural resource evaluation of proposed Cobra State Unit No. 1 and its original access route which originated in Section 2. Evaluation of a new access corridor was deemed necessary following an on-site examination.

The new access route begins near the center of Section 2, Township 16 South, Range 19 West as shown on the attached map. That access continues north into adjacent Section 36, Township 15 South, Range 19 West, to terminate at the site for Cobra State Unit No. 1.

This project is situated in the Snake Valley locality of Millard County, Utah. Section 1 is situated on federal lands administered by the Bureau of Land Management, Fillmore Office. Section 36 is Utah State Land administered by the Utah Department of State Lands and Forestry.

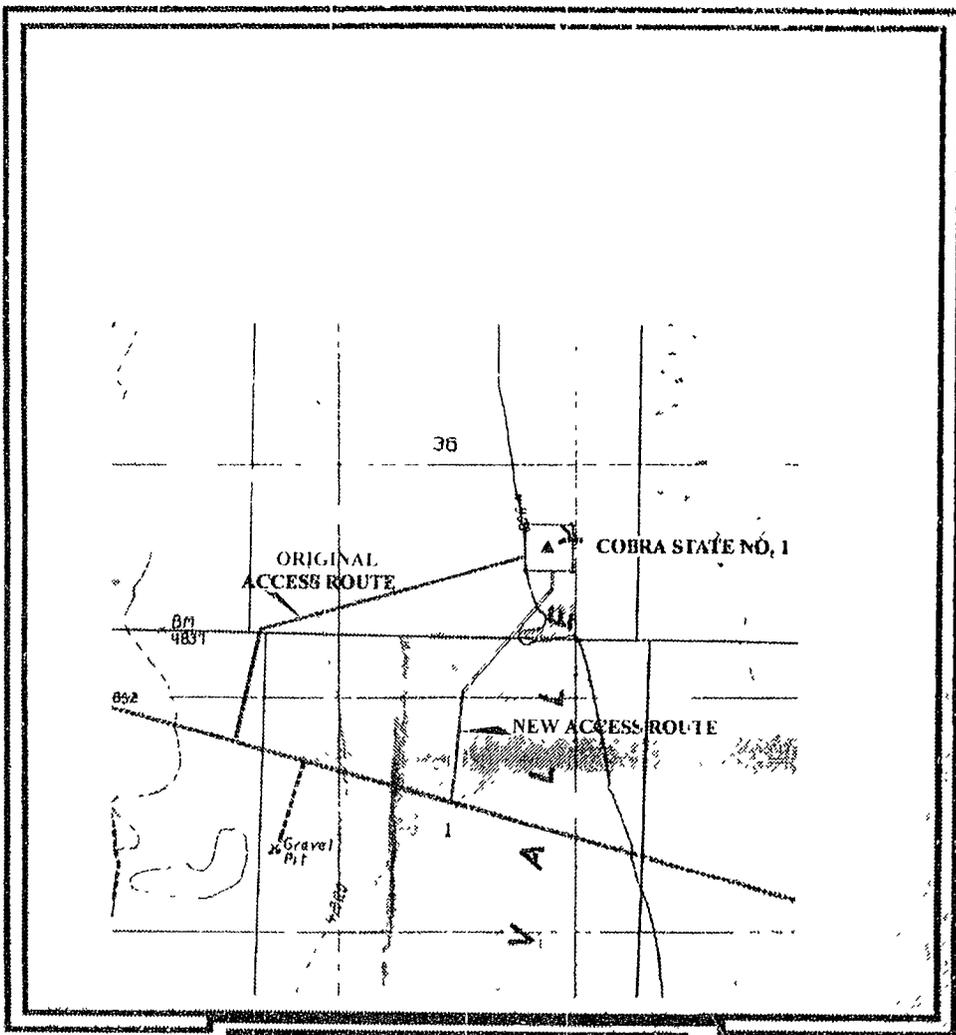
The intensive evaluation consisted of the archaeologist walking a pair of 15 meter wide transects on each side of the proposed access route right of way. Thus, a 30 to 35 meter-wide or 100 foot-wide corridor (8.5 acres) was examined for the total ca. .7 mile length of the proposed access road.

No cultural resource loci or isolated artifacts of either historic or prehistoric affiliation were observed within the access route corridor.

All recommendations defined within the original report are pertinent to the new access route.

A handwritten signature in black ink, appearing to read 'F. Richard Hauck', written in a cursive style.

F. Richard Hauck, Ph.D.  
Principal Investigator



T. 15 and 16 South

R. 18 and 19 West

Date: 10-21-94



Meridian: Salt Lake  
B and M

MAP: CULTURAL RESOURCE SURVEY  
OF PROPOSED COBRA STATE UNIT  
NO. 1 IN THE SNAKE VALLEY LOCALITY  
OF MILLARD COUNTY, UTAH

PROJECT: BLCR-94-8B

SCALE: 1:24,000

QUAD: Gandy 7.5 min.



Utah

LEGEND:

Well Center



Ten Acre  
Survey Area



Access  
Corridor



**CULTURAL RESOURCE EVALUATION  
OF PROPOSED COBRA STATE UNIT NO. 1  
IN THE SNAKE VALLEY  
LOCALITY OF MILLARD COUNTY, UTAH**

Report Prepared for Balcron Oil Company

Dept. of Interior Permit No.: UT-94-54937  
AERC Project 1455 (BLCR-94-8A)

Utah State Project No. UT-94-AF-599b

Principal Investigator  
F. Richard Hauck, Ph.D

Author of the Report  
F. Richard Hauck



**ARCHEOLOGICAL-ENVIRONMENTAL RESEARCH  
CORPORATION (AERC)**

181 North 200 West, Suite 5  
P.O. Box 853  
Bountiful, Utah 84011-0853

October 15, 1994

## ABSTRACT

An intensive cultural resource evaluation has been conducted for Balcron Oil Company of proposed Cobra Unit No. 1 in the Snake Valley locality of Millard County, Utah. This evaluation involved a total of 23.3 acres. This acreage includes a ten acre parcel surrounding the proposed well location and a 1.1 mile-long access corridor which involves an additional 13.3 acres. These evaluations were conducted by F. R. Hauck of AERC on October 12, 1994.

No previously recorded significant or National Register eligible cultural resources will be adversely affected by the proposed development.

No newly identified cultural resource activity loci or isolated artifacts were discovered or recorded during the examination.

AERC recommends project clearance based on adherence to the stipulations noted in the final section of this report.

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## GENERAL INFORMATION

On October 12, 1994, AERC archaeologist F. R. Haucek conducted an intensive cultural resource evaluation for Balceron Oil Company of Billings, Montana. This examination involved proposed Cobra State Unit No. 1 located in the Snake Valley area of western Utah. Some 1.1 miles of access right of way (13.3 acres) were examined as was a ten acre parcel associated with the well pad. The well pad and about 8 miles of access route (19.66 acres) are situated on Utah State Lands. The remaining .3 mile of access (3.64 acres) is situated on federal lands administered by the Bureau of Land Management, Fillmore Area Office.

The purpose of the field study and this report is to identify and document cultural site presence and assess National Register potential significance relative to established criteria (cf., Title 36 CFR 60.6). The proposed development of this well location and its access route requires archaeological evaluations in compliance with U.C.A. 9-8-404, the Federal Antiquities Act of 1906, the Reservoir Salvage Act of 1960-as amended by P.L. 93-291, Section 106 of the National Historic Preservation Act of 1966-as amended, the National Environmental Policy Act of 1969, the Federal Land Policy and Management Act of 1979, the Archaeological Resources Protection Act of 1979, the Native American Religious Freedom Act of 1978, the Historic Preservation Act of 1980, Executive Order 11593, and various Utah State regulations.

In addition to documenting cultural identity and significance, mitigation recommendations relative to the preservation of cultural data and materials can be directed to the Bureau of Land Management Richfield District Office, to the Utah State Division of State Lands and Forestry, and to the Utah State Antiquities Section. This work was done under U.S. Department of Interior Permit for Utah UT-94-54937 which expires on January 31, 1995.

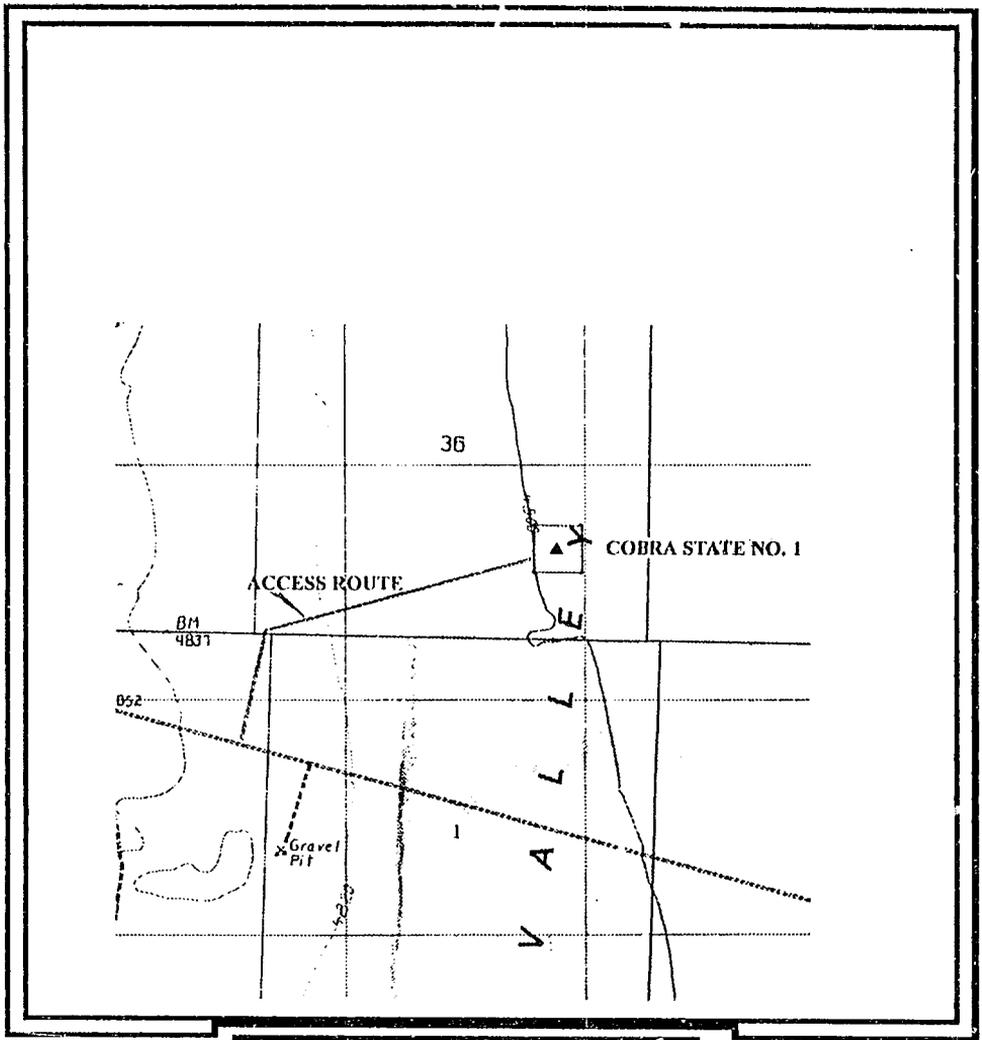
## Project Location

The project location is in the Snake Valley locality of Millard County, Utah. It is situated on the Gandy 7.5 minute topographic quad.

The proposed 100 foot-wide access corridor begins at the existing roadway ca. 1.75 miles east of Gandy. That location is in the NE quarter of Section 2, Township 16 South, Range 19 West, Salt Lake Meridian. It extends to the north crossing into the SW corner of Section 36. The access then extends eastward through the SW quarter of State Section 36 to connect with the well location in the SE quarter of that section (see Map).

## Environmental Description

The project area is within the 4800 foot elevation zone above sea level. Open rangeland terrain is associated with the project area.



T. 15 and 16 South

R. 18 and 19 West

Date: 10-15-94



Meridian: Salt Lake  
B and M

MAP: CULTURAL RESOURCE SURVEY  
OF PROPOSED COBRA STATE UNIT  
NO. 1 IN THE SNAKE VALLEY LOCALITY  
OF MILLARD COUNTY, UTAH

PROJECT: BLCR-94-8A

SCALE: 1: 24,000

QUAD: Gandy 7.5 min.



Utah

LEGEND:

Well Center



Ten Acre  
Survey Area



Access  
Corridor



The sparse vegetation in the general project area includes *Chrysothamnus spp.*, *Artemisia spp.*, *Sarcobatus vermiculatus*, *Ephedra viridis*, *Atriplex canescens*, and a variety of grasses and alkali resistant sedges.

The geological associations within the project area consist of Quaternary fluvial and lake deposits which correlate with the post-Pleistocene recession of Lake Bonneville.

#### PREVIOUS RESEARCH IN THE LOCALITY

##### File Search

A records search of the site files and maps at the Antiquities Section of the State Historic Preservation Office in Salt Lake City was conducted on October 5, 1994. A similar search was conducted in the Fillmore Area Office of the BLM on October 12, 1994. The National Register of Historic Places has been consulted and no registered historic or prehistoric properties will be affected by the proposed development.

Few known cultural sites are situated in the Snake Valley locality. During the years, several of these prehistoric resources in the Gandy locality (cf., 42Md 66 and 42Md 68) have been identified and recorded by archaeologists conducting surface evaluations in this valley.

##### Prehistory and History of the Cultural Region

Currently available information indicates that the Great Basin Cultural Area has been occupied by a variety of cultures beginning perhaps as early as 10,000 B.C. These cultures, as identified by their material remains, demonstrate a cultural developmental process that begins with the earliest identified Paleoindian peoples (10,000 -- 7,000 B.C.) and extends through the Archaic (ca. 7,000 B.C. -- A.D. 300), and Formative (ca. A.D. 400 -- 1100) Stages, and the Late Prehistoric-Protohistoric periods (ca. A.D. 1200 -- 1850) to conclude in the Historic-Modern period which was initiated with the incursion of the Euro-American trappers, explorers, and settlers. Basically, each cultural stage -- with the exception of the Late Prehistoric hunting and gathering Shoshonean bands -- features a more complex life-way and social order than occurred during the earlier stage of development (cf., Jennings 1978, 1980).

##### Site Potential in the Project Development Zone

Previous archaeological evaluations in the general project area have resulted in the identification and recording of few cultural resource sites having eligibility for potential nomination to the National Register of Historic Places (NRHP). These sites include occupations sometimes containing ceramic scatters, and lithic scatters containing reduction materials.

## FIELD EVALUATIONS

### Methodology

The intensive evaluation of the access route and ten acre parcel consisted of the archaeologist walking a 15 - 20 meter transect on each side of the staked right-of-way center line. Similar parallel transects were walked within the ten acre parcel . Thus, a 30 to 35 meter-wide or 100 foot-wide corridor (ca. 13.3 acres) was examined for the total ca. 5808 foot length of the proposed access route.

Observation of cultural materials results in intensive examinations to determine the nature of the resource (isolate or activity locus). The analysis of each specific cultural site results in its subsequently being sketched, photographed, and appropriately recorded on standard IMACS forms. Cultural sites are then evaluated for significance utilizing the standards described below and mitigation recommendations are considered as a means of preserving significant resources which may be situated within the development zone.

### Site Significance Criteria

Prehistoric and historic cultural sites which can be considered as eligible for nomination to the National Register of Historic Places have been outlined as follows in the National Register's Criteria for Evaluation as established in Title 36 CFR 60.6:

*The quality of significance in American ... archeology ... and culture is present in ... sites ... that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:*

- a. That are associated with events that have made a significant contribution to the broad patterns of our history; or*
- b. that are associated with the lives of persons significant in our past; or*
- c. that embody the distinctive characteristics of a type, period, or method of construction ... ; or*
- d. that have yielded, or may be likely to yield, information important in prehistory or history.*

In addition to satisfying one or more of these general conditions, a significant cultural resource site in Utah will generally be considered as being eligible for inclusion in the National Register if it should advance our current state of knowledge relating to chronology, cultural relationships, origins, and cultural life ways of prehistoric or historic groups in the area.

In a final review of any site's cultural significance, the site must possess integrity and at least one of the above criteria to be considered eligible for nomination to the National Record of Historic Places.

### Results of the Inventory

No prehistoric cultural resource activity loci were observed or recorded during the archaeological evaluations.

No previously recorded sites are located within the proposed development zone.

No significant or National Register sites were noted or recorded during the survey.

No isolated artifacts were recorded or collected during the evaluation.

No paleontological loci were observed or recorded during the evaluation.

### CONCLUSION AND RECOMMENDATIONS

No known significant cultural or paleontological resources will be adversely impacted during the development and operation of the Balcron Oil Company's Cobra State Unit No. 1 as evaluated during this project.

AERC recommends that a cultural resource clearance be granted to Balcron Oil Company relative to the proposed development of this well location and its access corridor based upon adherence to the following stipulations:

1. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the flagged areas and corridors examined as referenced in this report, and to the existing roadways.
2. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
3. The authorized official should be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the location of the development area.



F. Richard Hauck, Ph.D.  
President and Principal  
Investigator

## REFERENCES

Jennings, Jesse D.

- 1978 "Prehistory of Utah and the Eastern Great Basin." University of Utah Anthropological Papers, No. 98, University of Utah Press, Salt Lake City.
- 1980 "Cowboy Cave." University of Utah Anthropological Papers, No. 104, University of Utah Press, Salt Lake City.

U.S.  
Department of the Interior  
Bureau of Land Management  
Utah State Office  
(AERC FORMAT)

Project  
Authorization No .U.9.4.A.F.5.9.9.b.

Report Acceptable Yes \_\_\_ No \_\_\_

Mitigation Acceptable Yes \_\_\_ No \_\_\_  
Comments: \_\_\_\_\_

Summary Report of  
Inspection for Cultural Resources

PROPOSED COBRA STATE UNIT NO. 1  
IN THE SNAKE VALLEY LOCALITY  
OF MILLARD COUNTY UTAH

1. Report Title . . . . .

Balcron Oil Company (BLCR-94-8A)

2. Development Company \_\_\_\_\_

1 0 1 5 1 9 9 4 UT-94-54937

3. Report Date . . . . . 4. Antiquities Permit No. \_\_\_\_\_

A E R C B L C R - 9 4 - 8 A Millard

5. Responsible Institution . . . . . County \_\_\_\_\_

6. Fieldwork 1 6 S 1 9 W 0 2  
Location: TWN . . . . . RNG . . . . . Section. . . | . . . | . . . | . . . |

TWN . . . . . RNG . . . . . Section. . . | . . . | . . . | . . . |  
7. Resource Area: .W S.

8. Description of Examination Procedures: The archeologist, F. R. Hauck intensively examined the proposed access route by walking a pair of 15 to 20 meter-wide transects flanking the flagged center-line stakes.

9. Linear Miles Surveyed . . . . . Inventory Type . . . I  
and/or  
Definable Acres Surveyed . . . . . R = Reconnaissance  
and/or I = Intensive  
Legally Undefinable 3 . 6 4 S = Statistical Sample  
Acres Surveyed . . . . .

11. Description of Findings: 12. Number Sites Found .0. . . . .  
No sites were found during (No sites = 0)  
this evaluation.

13. Collection: .N.  
Y = Yes, N = No)

14. Actual/Potential National Register Properties Affected:  
The National Register of Historic Places (NRHP) has been consulted and no registered properties will be affected by the proposed development.

15. Literature Search, Location/ Date: Utah SHPO 10-5-94 Fillmore BLM 10-12-94

16. Conclusion/ Recommendations:  
AERC recommends that a cultural resource clearance be granted to Balcron Oil Company for this proposed development based on the following stipulations:  
(see reverse)

1. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the flagged areas and corridors examined as referenced in this report, and to the existing roadways.

2. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

3. The authorized official should be consulted should cultural remains from subsurface deposits be exposed during construction work or if the need arises to relocate or otherwise alter the location of the exploration area.

---

17. Signature of Administrator & Field Supervisor

Administrator: 

Field  
Supervisor: 

---

UT 8100-3 (2/85)

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/05/94

API NO. ASSIGNED: 43-027-30032

WELL NAME: COBRA STATE 1  
OPERATOR: EQUITABLE RESOURCES (N9890)

PROPOSED LOCATION:  
CSE 36 - T15S - R19W  
SURFACE: 1320-FSL-1320-FEL  
BOTTOM: 1320-FSL-1320-FEL  
MILLARD COUNTY  
WILDCAT FIELD (001)

INSPECT LOCATION BY: 09/15/94		
TECH REVIEW	Initials	Date
Engineering	JRM	10/31/94
Geology	J.	10/13/94
Surface	JA	9/15/93

LEASE TYPE: STA  
LEASE NUMBER: ML-43911

PROPOSED PRODUCING FORMATION: PRCAM

RECEIVED AND/OR REVIEWED:

Flat

Bond: Federal  State  Fee   
(Number 567 83/4)

Potash (Y/N)

Oil shale (Y/N)

Water permit  
(Number \_\_\_\_\_)

RDCC Review (Y/N)  
(Date: \_\_\_\_\_)

LOCATION AND SITING:

R649-2-3. Unit: \_\_\_\_\_

R649-3-2. General.

R649-3-3. Exception.

Drilling Unit.  
Board Cause no: \_\_\_\_\_  
Date: \_\_\_\_\_

COMMENTS: THIS WELL SITE IS LOCATED IN AN ESTABLISHED WETLAND AREA. SITE STABILITY MAY BE A PROBLEM H2S CONTINGENCY AND ARCHEOLOGICAL TO FOLLOW

STIPULATIONS: 1. SEE THE ATTACHED PEG SITE EVALUATION

1. The reserve pit will be constructed so as to prevent avoid leakage and not allow for discharge of fluid. The reserve pit will be lined with a 12 mil reinforced plastic liner.
2. The topsoil will be used to construct a berm surrounding the location and reserve pit.
3. Sufficient gravel should be used at the location and roadway to provide adequate stabilization.



EQUITABLE RESOURCES  
ENERGY COMPANY

BALCRON OIL DIVISION

1601 Lewis Avenue  
P O Box 21017  
Billings MT 59104

Office (406) 259 7860  
FAX (406) 245 1365 [ ]  
FAX (406) 245 1361 [X]

OCT 5 1994

October 4, 1994

-- VIA FEDERAL EXPRESS --

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Gentlemen:

RE: Cobra State #1  
C/SE Section 36, T15S, R19W  
Millard County, Utah

Enclosed is our sundry notice changing the proposed access route and the reserve pit diagram for the referenced well. These were discussed with Mike Hebertson at the onsite on September 15. Please consider these revisions as part of our Application for Permit to Drill. A Federal Right-of-Way is no longer necessary for access to this location and I am notifying them that we withdraw our application. A right of Entry Permit Application is being applied for the new proposed access which is now on State Lands.

If there are any questions or you need additional information, please let me know.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Enclosure

STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING

51001

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 TO DRILL OR DEEPEN form for such proposals.

3. Lease Designation and Serial Number:  
**ML-43911**

6. If Indian, Allottee or Tribe Name:  
**n/a**

7. Unit Agreement Name:  
**n/a**

8. Well Name and Number:  
**Cobra State #1**

9. API Well Number:

10. Field and Pool, or Wildcat:  
**Wildcat**

1. Type of Well: OIL  GAS  OTHER:

2. Name of Operator:  
**Equitable Resources Energy Company, Balcron Oil Division**

3. Address and Telephone Number:  
**P.O. Box 21017; Billings, MT 59104 (406) 259-7860**

4. Location of Well  
Footages: **1320' FSL, 1320' FEL**  
County: **Millard**  
CG, Sec., T., R., M.: **C/SE Section 36, T15S, R19W**  
State: **UTAH**

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

**NOTICE OF INTENT**  
(Submit in Duplicate)

Abandon  New Construction  
 Repair Casing  Pull or Alter Casing  
 Change of Plans  Recomplete  
 Convert to Injection  Reperforate  
 Fracture Treat or Acidize  Vent or Flare  
 Multiple Completion  Water Shut-Off  
 Other \_\_\_\_\_

Approximate date work will start \_\_\_\_\_

**SUBSEQUENT REPORT**  
(Submit Original Form Only)

Abandon  New Construction  
 Repair Casing  Pull or Alter Casing  
 Change of Plans  Reperforate  
 Convert to Injection  Vent or Flare  
 Fracture Treat or Acidize  Water Shut-Off  
 Other revisions to APD

Date of work completion \_\_\_\_\_

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

12. 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.)

Based on the onsite inspection of this proposed wellsite and access, the reserve pit diagram was modified and an alternate access was surveyed. Attached are revised exhibits for those two changes.

An archeological survey has been scheduled and that report will be sent to you as soon as possible.

A Right of Entry Permit Application is being applied for for the new proposed access. The access is now on State Lands rather than BLM lands.

13. Name & Signature: **Bobbie Schuman** *Bobbie Schuman* Title: **Regulatory and Environmental Specialist** Date: **10/4/94**

(This space for State use only)

43-027-30032

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 10/31/94  
BY: [Signature]  
WELL SPACING: R649-3-3

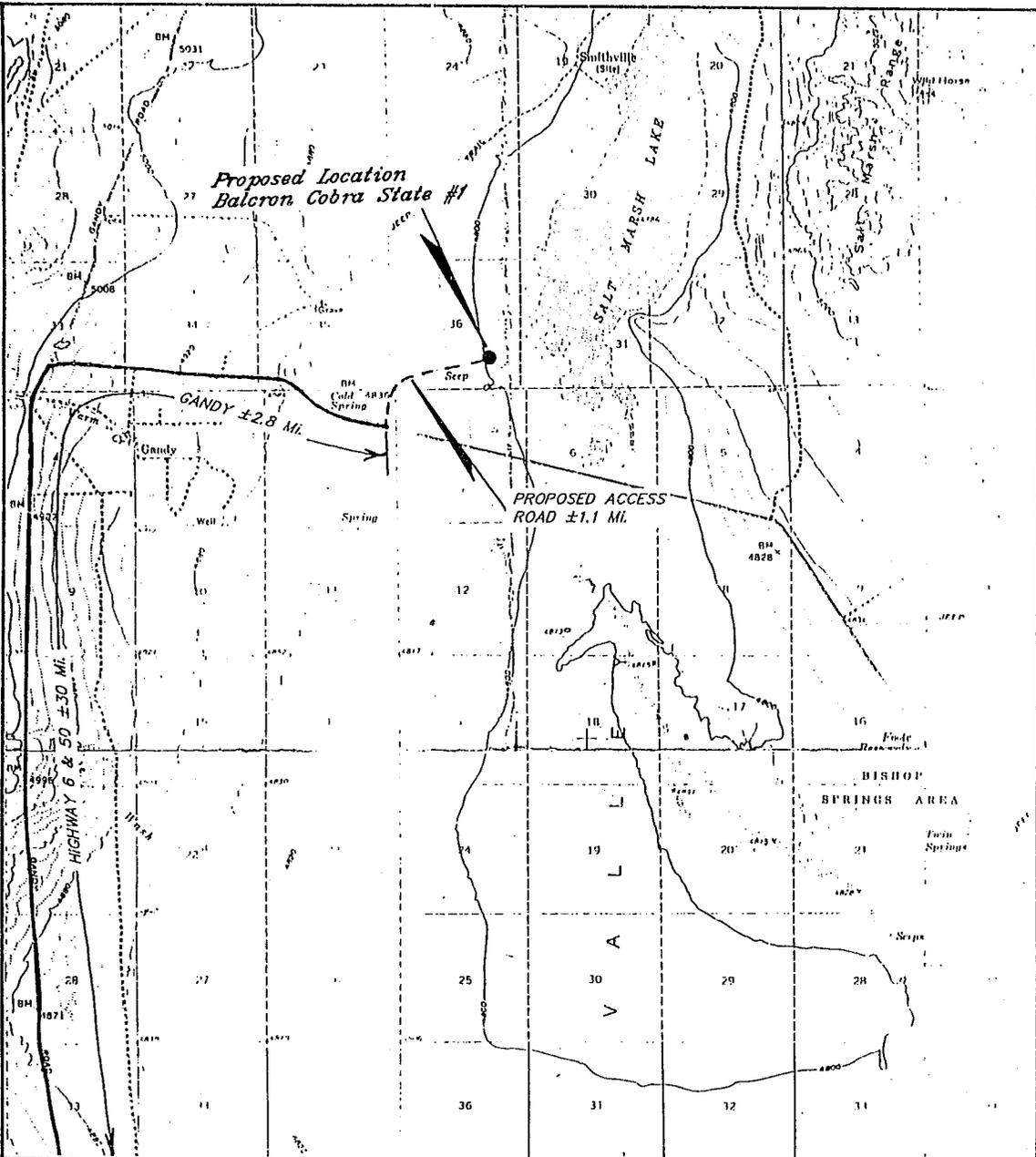
4. A culvert of sufficient size will be placed at the point that the access road leaves the main road.
5. The access road should be constructed on high ground and so as to avoid any springs or sink hole which might provide cover to waterfowl or other nesting sites.

*Proposed Location  
Balcron Cobra State #1*

*GANDY ±2.8 Mi.*

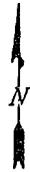
*PROPOSED ACCESS  
ROAD ±1.1 Mi.*

*HIGHWAY 6 & 50 ±30 Mi.*



**EQUITABLE RESOURCES ENERGY CO.**

**BALCRON COBRA STATE #1  
SECTION 36, T15S, R19W, S.L.B.&M.  
TOPO "A"**

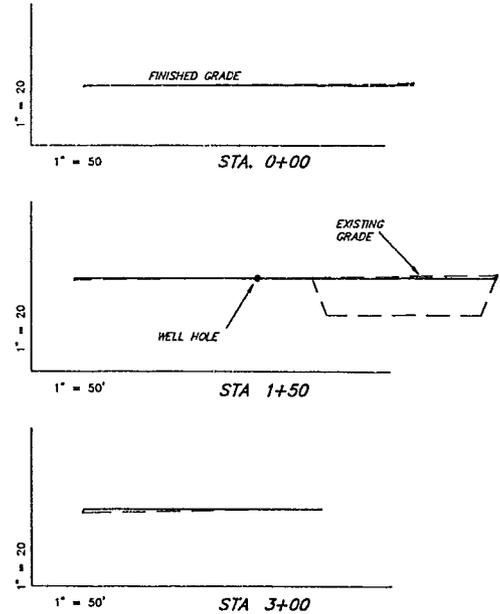
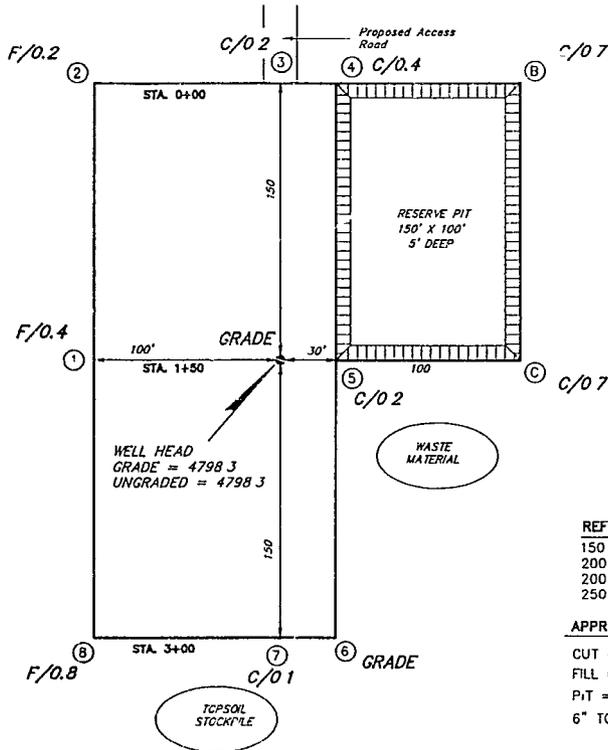


**Tri State  
Land Surveying, Inc.**  
(801) 781-2501

38 WEST 100 NORTH VERNAL, UTAH 84078

# EQUITABLE RESOURCES ENERGY CO.

## BALCRON COBRA STATE #1



### REFERENCE POINTS

150 0' EAST 4797 4'  
200 0' EAST 4797 2'  
200 0' NORTH 4798 6'  
250 0' NORTH 4798 1'

### APPROXIMATE YARDAGE'S

CUT = 232 Cu Yds  
FILL = 163 Cu Yds  
PIT = 3,170 Cu Yds  
6" TCPSOIL = 950 Cu Yds

**Tri State**  
Land Surveying, Inc.  
(801) 781-2501  
38 WEST 100 NORTH VERNAL, UTAH 84078

REVISED 9-28-94  
FILENAME: 5.P1



**EQUITABLE RESOURCES  
ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O. Box 21017  
Billings, MT 59104

Office: (406) 259-7860  
FAX: (406) 245-1365   
FAX: (406) 245-1361

October 13, 1994

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Gentlemen:

RE: Cobra State #1 *47-027-30032*  
C/SE Section 36, T15S, R19W  
Millard County, Utah

We hereby request an Exception to Location for the referenced well due to geological reasons.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

## 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:  
Upon approval
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Six County Commissioners Organization
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:  
Equitable Resources Energy Company, Balcron Oil Division proposes to drill the Cobra State #1 well (wildcat) on state lease ML-43911, Millard County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The Division of Oil, Gas and Mining is the primary administrative agency in this action and must issue approval before operations commence.
8. LAND AFFECTED (site location map required) (indicate county)  
C/SE, Section 36, Township 15 South, Range 19 West, Millard County, Utah
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
Degree of impact is based on the discovery of oil or gas in commercial quantities.
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: 8-31-94  
  
Petroleum Engineer



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

Michael O. Leavitt  
Governor

Trid Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center Suite 350  
Salt Lake City Utah 84180 1203  
801 538 5340  
801 359 3940 (Fax)  
801 538 5319 (TDD)

October 31, 1994

Equitable Resources Energy Company  
Balcron Oil Division  
P.O. Box 21017,  
Billings, Montana 59104

Re: Cobra State #1 Well, 1320' FSL, 1320' FEL, C/SE, Sec. 36, T. 15 S., R. 19 W.,  
Millard County, Utah

Gentlemen:

Pursuant to Utah Admin. R. 649-3-3, Exception to Location and Siting of Wells and Utah Admin. R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

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

1. The reserve pit will be constructed so as to avoid leakage and not allow for discharge of fluid. The reserve pit will be lined with a 12 mil reinforced plastic liner.
2. The topsoil will be used to construct a berm surrounding the location at the reserve pit.
3. Sufficient gravel should be used on the location and roadway to provide adequate surfacing and stabilization.
4. A culvert of sufficient size will be placed at the point that the access road leaves the main road.
5. The access road should be constructed on high ground and so as to avoid any spring or sink hole which might provide cover to waterfowl or other nesting sites.

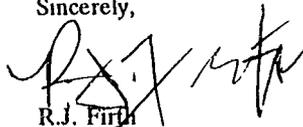
Page 2

Equitable Resources Energy Company  
Cobra State #1 Well  
October 31, 1994

6. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules
7. Notification to the Division within 24 hours after drilling operations commence.
8. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
9. Submittal of the Report of Water Encountered During Drilling, Form 7.
10. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.
11. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-027-30032.

Sincerely,



R.J. Firth  
Associate Director

ldc

Enclosures

cc: Millard County Assessor

Bureau of Land Management, Richfield District Office

WO11



**EQUITABLE RESOURCES  
ENERGY COMPANY**

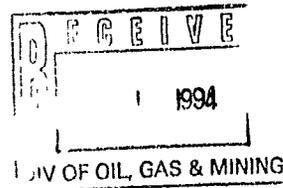
**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O Box 21017  
Billings MT 59104

Office (406) 259 7860  
FAX (406) 245 1365   
FAX (406) 245 1361

November 8, 1994

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180



Gentlemen:

RE: Cobra State #1  
C/SE Section 36, T15S, R19W  
Millard County, Utah

Enclosed is the H<sub>2</sub>S contingency plan which has been developed for drill the referenced well.

If there are any questions or you need additional information, please let me know.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Enclosure

43-027-30032





**H2S CONTINGENCY PLAN**  
for

**Equitable Resources Energy Co**  
**Balcron Oil Division**

**Cobra State #1**

**Township 15S, Range 19W**  
**C/SE Section 36**

**Millard County, Utah**

**Balcron Oil Co**  
**1601 Lewis Avenue**  
**P.O. Box 21017**  
**Billings, Montana 59104**

## PURPOSE OF PROGRAM

It is the policy of Balcron Oil CO to provide for the safety of its employees as well as contractor's employees at the job site, and to provide for the protection of the environment and the public within a two mile radius of this well site. The primary purpose of this contingency plan is to guide location personnel in the responses expected of them in the event that hydrogen sulfide (H<sub>2</sub>S) is released to the atmosphere during the drilling program.

Due to its capability of endangering life at very low concentrations and of potentially causing instantaneous failure of high strength metals, hydrogen sulfide is extremely hazardous to field operations. Drilling and production operations of hydrocarbons containing toxic gases, however, are routinely performed safely and without incident when the necessary precautions are taken and the outlined safety procedures are followed. It is imperative that sulfide resistant materials be used, that the appropriate support safety equipment be readily available, and that this equipment be properly maintained to provide an effective safety program during the drilling of this well.

**DIRECTIONS TO LOCATION - Cobra State #1**

From Highway 6 & 50, go east one mile and take the Gandy road north 30 miles. At the Warm Creek Ranch turn right and follow the dirt road for approximately 4.2 miles to left hand turn onto new gravel road. Follow this road .7 miles to location.

## CHARACTERISTICS OF HYDROGEN SULFIDE

Hydrogen sulfide is a highly toxic gas which, when inhaled in relatively low concentrations, can rapidly cause death. It is also highly flammable, being classified by the U.S. Department of Transportation as a flammable compressed gas. Certain concentrations in the air can burn upon ignition.

Although at lower concentrations it has a characteristic odor of rotten eggs, at higher concentrations it cannot be smelled at all. Therefore, odor cannot be depended upon as a means of detection of the gas.

Hydrogen sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure according to the ACGIH and government standards is 10 PPM, which is .001 percent by volume.

Hydrogen sulfide is heavier than air (specific gravity = 1.19) and colorless. It forms flammable mixture with air between 4.3 and 46.0 percent by volume, and burns to produce Sulfur Dioxide (SO<sub>2</sub>). SO<sub>2</sub> is considered by NIOSH to be a hazard to humans. It is a colorless, very irritating gas with a pungent odor and taste. It does not inhibit the sense of smell, but causes irritation to nose and throat which may result in choking and gagging. These symptoms are sufficiently disagreeable that most persons will not tolerate them for more than short periods. Exposure to higher concentrations of SO<sub>2</sub> may lead to chemical pneumonia. The government standard for exposure to sulfur dioxide is 2 PPM for an 8-hour period. Whenever exposure to any concentration of these gases exceeding ACGIH or government standards is anticipated, the use of protective breathing equipment is required.

## **RESPIRATORY PROTECTIVE EQUIPMENT**

When the H<sub>2</sub>S concentration in the work environment exceeds a minimum of 10 PPM during an 8-hour period of continuous exposure, respiratory protective equipment must be worn. If the H<sub>2</sub>S concentration reaches damage levels shown in the table, respiratory equipment is necessary to prevent injury for whatever exposure time. At higher concentration levels, a self-contained air breathing apparatus and a life line should be used.

## **TESTING FOR HYDROGEN SULFIDE**

**NEVER** rely on the sense of smell to guess what the H<sub>2</sub>S concentration may be. A relatively small amount of H<sub>2</sub>S quickly impairs the sense of smell. Always use an approved H<sub>2</sub>S detector to test for H<sub>2</sub>S concentrations, and respiratory protection should always be used when testing for the presence of H<sub>2</sub>S.

## FIRST AID TREATMENT OF HYDROGEN SULFIDE VICTIMS

A person who is overcome by hydrogen sulfide must be removed to an area clear of gas immediately and artificial respiration started at once. Any delay in the start of artificial respiration appreciably reduces the chance of recovery. Four minutes of delay reduces the chance for recovery to 50-50. The recommended method of artificial respiration is mouth-to-mouth using current techniques and barriers when available. Additional rescue procedures and first aid will be further described during the individual safety training of all personnel on location.

### TREATMENT FOR HYDROGEN SULFIDE POISONING

#### Inhalation

As hydrogen sulfide in the blood oxidizes rapidly, symptoms of acute poisoning pass off when inhalation of the gas ceases. It is important, therefore, to get the victim of poisoning to fresh air as quickly as possible. He should be kept at rest and chilling should be prevented. If respiration is slow, labored, or impaired, artificial respiration may become necessary. Most persons overcome by hydrogen sulfide may be revived if artificial respiration is applied before the heart action ceases. Victims of poisoning should be under the care of a physician as soon as possible. Irritation due to subacute poisoning may lead to serious complications such as pneumonia. Under those conditions, treatment by a physician necessarily would be automatic. The patient should be kept in fresh air and hygienic conditions should be watched carefully.

#### Contact with Eyes

Eye contact with liquid and/or gas containing hydrogen sulfide will cause painful irritation (conjunctivitis). Keep patient in a darkened room, apply ice compresses to eyes, put ice on forehead, and send for a physician. Eye irritation caused by exposure to hydrogen sulfide requires treatment by a physician, preferably an eye specialist. The progress to recovery in these cases is usually good.

#### Contact with Skin

Skin absorption is very low. Skin discoloration is possible after contact with liquids containing hydrogen sulfide. If such skin contact is suspected, the area should be thoroughly washed.

## TOXICITY OF HYDROGEN SULFIDE TO MAN

The following table describes the toxicity of H<sub>2</sub>S concentrations, expressed as parts of H<sub>2</sub>S per million parts of air (PPM).

- 10 PPM** Obvious and obnoxious odor; has the characteristic odor of rotten eggs. Eye irritation begins in the range of 10 to 30 PPM. Safe for 8 hours exposure. Everyone must wear respiratory protective equipment at concentrations above this level.
- 20 PPM** Former TLV or Safe Working Level
- 100 PPM** Impairs the sense of smell after 2 to 15 minutes exposure; alters respiration, causes pain in eyes, and drowsiness after 15 to 30 minutes, and throat irritation after 1 hour.
- 200 PPM** Quickly eliminates the sense of smell; may result in death after 8 to 48 hours of continuous exposure.
- 500 PPM** Causes loss of sense of reasoning and balance produces respiratory paralysis in 30 to 45 minutes exposure, and death in exposures of 1 to 4 hours. Victim: requires prompt artificial resuscitation.
- 600 PPM** Causes death within 30 to 60 minutes, if not rescued and given immediate artificial resuscitation.
- 1000 PPM** Causes immediate loss of consciousness; permanent brain damage may result if not rescued promptly and resuscitated.

RESUSCITATION CHART

DID YOU KNOW ?

THERE IS NOT TIME TO WASTE  
WHEN BREATHING STOPS!

ARTIFICIAL RESUSCITATION MUST BE STARTED IMMEDIATELY!!!

After Breathing is Stopped for:

The Chances for Life are:

1 Minute	98 out of 100
2 Minutes	92 out of 100
3 Minutes	72 out of 100
4 Minutes	50 out of 100
5 Minutes	25 out of 100 *
6 Minutes	11 out of 100 *
7 Minutes	8 out of 100 *
8 Minutes	5 out of 100 *
9 Minutes	2 out of 100 *
10 Minutes	1 out of 100 *
11 Minutes	1 out of 1,000 *
12 Minutes	1 out of 10,000 *

\* Irreparable brain damage starts at about the fifth minute.

**COOL-HEADED ACTION IN RESCUE IS CRITICAL !!!!**

## OPERATIONS

1) All respiratory protective equipment and H2S monitoring equipment will be rigged up after setting the surface casing. All personnel will be fully trained in H2S safety procedures at this time.

2) A 4 channel continuous H2S monitoring system will be used to constantly monitor for hydrogen sulfide. The monitor console will be located in an area that is easily accessible and controlled, with 1 alarm light and 1 siren situated so that they can be observed from any point on the location. Additional alarms and buzzers may be installed around the location as needed to ensure that everyone is cognizant of any H2S alarms. The monitor heads will be placed at the following areas- 1) on the rig floor near the driller's console 2) in the substructure near the bell nipple, 3) at the shale shaker 4) in the mud mixing area. The sensor heads will be calibrated to activate a revolving red beacon should 10+ PPM H2S be detected by any single monitor head. Should 15+ PPM or higher H2S be detected, a loud siren will alarm. Personnel will be trained to take action to protect themselves, and for non-essential personnel to proceed to the upwind briefing area when alarms sound.

3) 2 Gastec/ Sensidyne pump-type hand-held gas detectors will be available on the drilling location. These detectors use colorimetric tubes to detect the presence of H2S and SO2 at specific areas.

4) 3 windsocks will be strategically placed around the location to ensure that wind direction is easily determined by all personnel. One wind indicator will be mounted on or near the rig floor to be readily visible to rig crews when tripping. Windsocks will be in illuminated areas to be visible 24 hours a day.

5) At least two (2) Safe Briefing Areas (SBA) will be located on the location. These areas will be situated to ensure that at least one area will always be upwind. Each Safe Briefing Area will include 3-300 cu. ft. bottles of compressed breathing air cascaded together, 1-filler hose, and 1-Scott 30 minute rescue air pack.

6) No smoking areas will be established and "No Smoking" signs posted.

7) Reliable 24-hour radio communication will be established from the drilling rig and emergency call lists and contacts will be near this communication system.

8) Chalk-boards and writing markers will be provided for emergency communication purposes.

9) A well condition warning sign will be posted on the location entrance road and a three color flag system will be used to indicate current location status and potential hazard. Additionally, standby barricades will be placed at the location access road to control road access if needed

10) Ten (10) Scott Ska-Paks (5 minute egress bottle) will be provided for the operation and placed to assure that all personnel have an emergency air mask available.

- a) At least five (5) units on the rig floor
- b) One (1) unit in the derrick with airline
- c) One (1) unit at the shale shaker with airline
- d) The remainder to be strategically placed around the location to provide emergency breathing air for service personnel.

11) Ten (10) Scott 30 minute rescue packs will be located for key personnel involved in emergency operations, including:

- a) Two (2) on the rig floor or adjacent doghouse.
- b) One (1) at each safe briefing area.
- c) One (1) at rig toolpusher's quarters.
- d) One (1) in Balcron drilling representative's quarters.
- e) The remainder to be placed around the rig at stairway access areas

12) Spectacle kits will be available for the Scott airpaks for personnel that require corrective lenses for adequate vision.

13) Battery powered voice mikes will be available for communication when wearing breathing equipment

14) Safety meetings and training sessions will be held at frequent intervals. All persons required to work on location will be thoroughly familiar with the use, care and servicing of the safety equipment on location.

## H2S SAFETY EQUIPMENT ON LOCATION

1. 1 electronic continuous H2S detector with 4 sensors, 1 light alarm and 1 siren alarm.
2. Ten (10) Scott Ska-Paks (5 minute egress units)
3. Ten (10) Scott 30 minute rescue SCBAs (positive pressure, NIOSH and MSHA approved)
4. Two Gastec/ Sensidyne portable hand operated pump type detectors with low and high range H2S detector tubes and SO2 detection tubes.
5. Three wind socks with poles.
6. At least two high pressure compressed air refill hoses.
7. One H2S well condition sign w/ three flag system
8. One battery powered bullhorn and writing board.
9. Three 300 cu. ft. refill cylinders with each Briefing Area station
10. Four battery powered voice mikes

NOTE: Additional equipment will be added if conditions require.

## H2S SAFETY TRAINING

All personnel on the drilling rig, all support personnel, visitors will be trained in H2S safety procedures.

This training will include, but not be limited to:

- 1) The potential hazards and characteristics of H2S and SO2.
- 2) The effects of these gases on man and materials.
- 3) Operation and limitations of all types of respiratory protective equipment available on the location with thorough hands-on practice both for routine and emergency donning.
- 4) The different types of H2S and SO2 detection and alarm equipment available on the drill site and how to interpret this equipment.
- 5) Prevailing winds and safe briefing areas.
- 6) Rescue and H2S first aid procedures.
- 7) Working with the buddy system
- 8) Emergency procedures to follow including company preferred well shut in procedures

## ACTION PLAN FOR H2S EMERGENCY

Should the H2S monitor alarms sound indicating the presence of hydrogen sulfide on location, the following actions will be taken:

1) All personnel on location must don protective breathing equipment and immediately follow the "buddy system" as prescribed during H2S training drills.

2) The Balcron drilling foreman will provide direction as to duties of drilling personnel depending on the current rig activity.

3) Monitor for hydrogen sulfide with portable gas detection equipment while following the directions of the Balcron drilling foreman.

4. Verify the drill site "head count" and search out and assist any missing or distressed personnel.

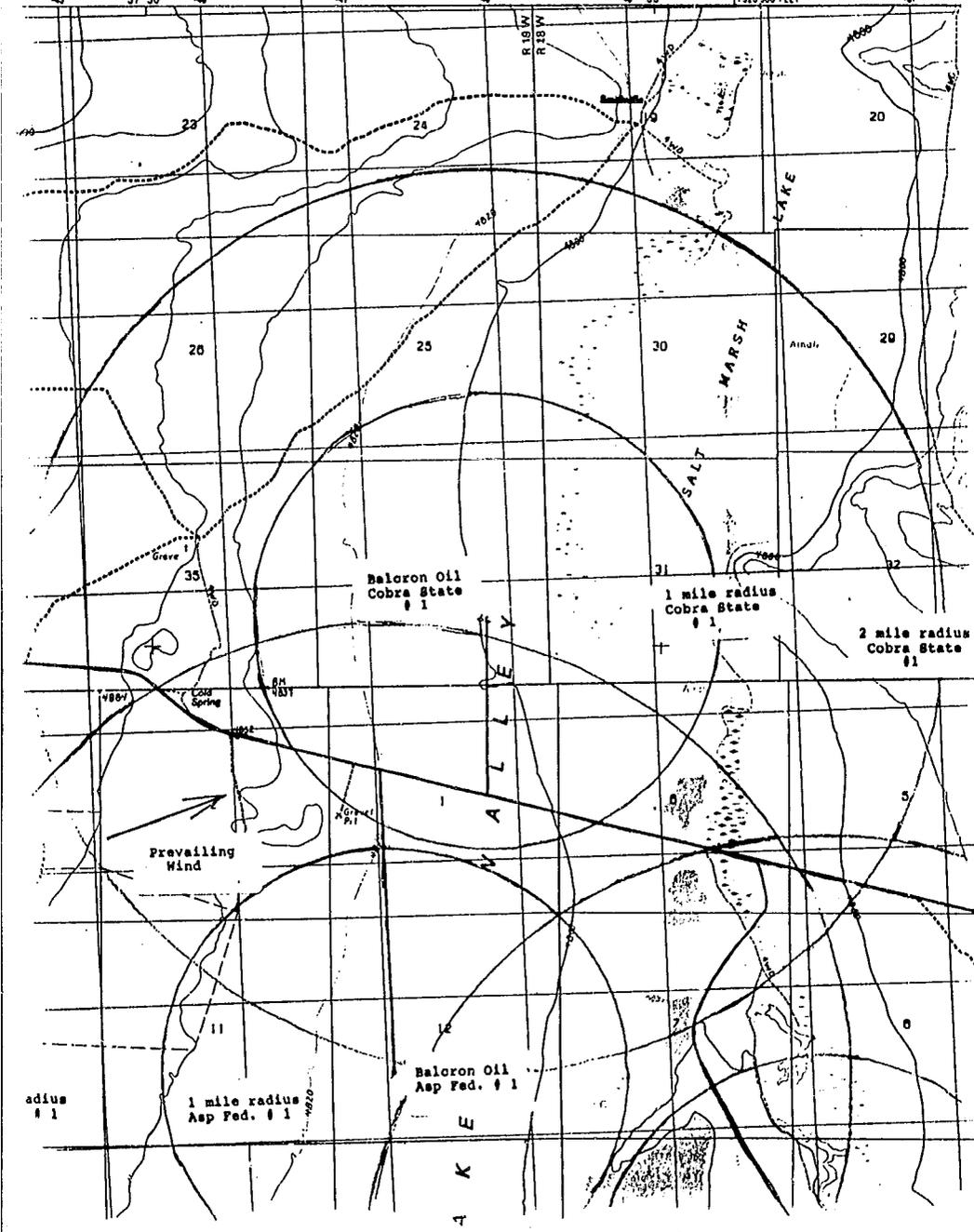
5. Ensure that all non-essential personnel are in a safe upwind briefing area and that no new visitors are allowed on location.

**Public in Roa**

There are no permanent residents within a 2 mile area of the proposed well. Several ranch operations may be in this area as well as a federal agency. There are no identifying labels on the map for these groups as there is no defined area where they would be working.

- 1. Warm Springs Ranch.....(801) 693-3144
- 2. Gerald Bates Ranches.....(801) 693-3145
- 3. Brian Allred Ranches.....(801) 445-3528
- 4. U.S. Fish & Wildlife Service.... Doug Young - Mgr.....(801) 524-5001

445 57° 30' 446 447 448 449 55' 1:320,000 FEET 451



**EMERGENCY CALL LIST - OPERATIONS**

**A. Equitable Resources Energy Co**  
Balcron Oil Division (406) 259-7860  
1601 Lewis Avenue  
P.O. Box 21017  
Billings, MT. 59104

**Operations Manager**  
Dave McCoskery  
Office.....(406) 259-7860  
Home.....(406) 248-3864  
Mobil .....(406) 698-6630

**Production Engineer**  
John Zellitti  
Office.....(406) 259-7860  
Home.....(406) 652-5784

**B. Drilling Contractor**  
To Be Determined

**C. Safety Contractor**  
Inter-Mountain Safety Co, Inc.  
66 Walker Rd.  
Evanston, WY. 82930

**Manager**  
Frank Kaunitz  
Office.....(307) 789-3882  
Home.....(307) 789-3882

**Safety Supervisor**  
Ed Johannessen  
Office.....(307) 789-3882  
Home.....(307) 789-0341

## **Emergency Call List**

### **Local Officials and Medical Contacts**

Local Services are from Delta, Utah unless otherwise noted. There is a central emergency services for Millard County in Delta, Utah. (801)-864-2755. All emergency services are contacted from this number.

SHERIFF.. Millard County, Utah ... ..(801)-864-2755  
AMBULANCE....Delta, UT.....(801) 864-2755  
HOSPITAL.....Delta Community Hospital .....(801) 864-5591  
DOCTOR... ..On Call At Hospital Emergency Room  
HIGHWAY PATROL... ..Utah.....Dial 0  
FIRE.....Delta, UT .... ..(801) 864-2755

### Additional Notification Numbers

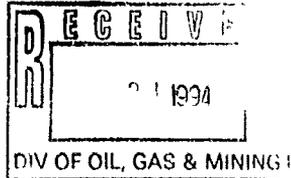
1. Bureau of Land Management.....(801) 896-8221  
Michael Jackson  
150 East 900 N  
Richfield, UT 84701
  
2. Bureau of Land Management .....Range office.....(801) 743-6811  
Rex Rowley Area Manager  
Filmore, Utah



**EQUITABLE RESOURCES  
ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O Box 21017  
Billings MT 59104



Office (406) 259 7860  
FAX (406) 245 1365   
FAX (406) 245 1361

November 18, 1994

Mr. Mike Hebertson  
State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Dear Mike:

RE: Cobra State #1 *143-027-3003D*  
C/SE Section 36, T15S, R19W  
Millard County, Utah

Attached is an original of the Designation of Agent or Operator from Paho Group for State lease #ML-43911 which covers the referenced well. I wasn't sure if Paho also sent the State an original so thought I'd better forward this to you.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Attachment

DESIGNATION OF AGENT OR OPERATOR - FORM 5

The undersigned is, on record, the holder of oil and gas lease

LEASE NAME: \_\_\_\_\_

LEASE NUMBER: ML-43911

and hereby designates

NAME: Equitable Resources Energy Company, Balcron Oil Division

ADDRESS: 1601 Lewis Ave., P. O. Box 21017, Billings, MT 59104

as his agent/operator, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the Division Director or Authorized Agent may serve written or oral instructions in securing compliance with the Oil and Gas Conservation General Rules and Procedural Rules of the Board of Oil, Gas and Mining of the State of Utah with respect to (describe acreage to which this designation is applicable):

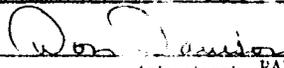
Township 15 South, Range 19 West  
Sec. 36: All  
Millard County, Utah

It is understood that this designation of agent/operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Oil and Gas Conservation General Rules and Procedural Rules of the Board of Oil, Gas and Mining of the State of Utah. It is also understood that this designation of agent or operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated agent/operator, the lessee will make full and prompt compliance with all rules, lease terms or orders of the Board of Oil, Gas and Mining of the State of Utah or its authorized representative.

The lessee agrees promptly to notify the Division Director or Authorized Agent of any change in this designation.

Effective Date of Designation 10/17/94

By:   
(signature) PAHO, INC.

Company PAHO GROUP

Title: President, Managing Gen Partner

Address P.O. Box 3385

Flagstaff, AZ 86003

Phone: (602) 526-6890



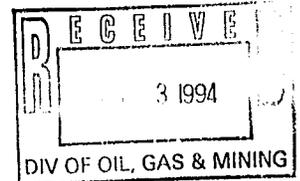
EQUITABLE RESOURCES  
ENERGY COMPANY

BALCRON OIL DIVISION

1601 Lewis Avenue  
P O. Box 21017  
Billings, MT 59104

Office: (406) 259-7860  
FAX: (406) 245-1365   
FAX: (406) 245-1361

December 12, 1994



-- VIA FEDERAL EXPRESS --

State of Utah  
Division of Oil, Gas & Mining  
355 West North Temple  
Salt Lake City, UT 84180

Gentlemen:

RE: Cobra State #1 *43-027-30032*  
C/SE Section 36, T15S, R19W  
Millard County, Utah

Enclosed is a replacement page for the Cultural Resource Evaluation of the referenced wellsite. This is being submitted because of a typographical error in the second paragraph.

If there are any questions or you need additional information, please let me know.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Enclosure

cc: Bureau of Land Management, Fillmore District (Utah)

ADDENDUM TO: BLCR-94-8A

On October 20, 1994, AERC archaeologist F. Richard Hauck returned to the Snake Valley locality to conduct an evaluation for Balcron Oil Division. This evaluation was associated with the initial BLCR-94-8A project that was reported on October 15, 1994 (AERC project 1455, State Project No.: UT-94-AF-599bs) and referenced the cultural resource evaluation of proposed Cobra State Unit No. 1 and its original access route which originated in Section 2. Evaluation of a new access corridor was deemed necessary following an on-site examination.

The new access route begins near the center of Section 1, Township 16 South, Range 19 West as shown on the attached map. That access continues north into adjacent Section 36, Township 15 South, Range 19 West, to terminate at the site for Cobra State Unit No. 1.

This project is situated in the Snake Valley locality of Millard County, Utah. Section 1 is situated on federal lands administered by the Bureau of Land Management, Fillmore Office. Section 36 is Utah State Land administered by the Utah Department of State Lands and Forestry.

The intensive evaluation consisted of the archaeologist walking a pair of 15 meter wide transects on each side of the proposed access route right of way. Thus, a 30 to 35 meter-wide or 100 foot-wide corridor (8.5 acres) was examined for the total ca. .7 mile length of the proposed access road.

No cultural resource loci or isolated artifacts of either historic or prehistoric affiliation were observed within the access route corridor.

All recommendations defined within the original report are pertinent to the new access route.

A handwritten signature in cursive script, appearing to read 'F. Richard Hauck', written in dark ink.

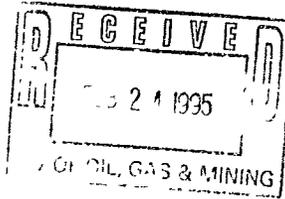
F. Richard Hauck, Ph.D.  
Principal Investigator



**EQUITABLE RESOURCES  
ENERGY COMPANY**

**BALCRON OIL DIVISION**

1601 Lewis Avenue  
P O Box 21017  
Billings MT 59104



Office (406) 259 7860  
FAX (406) 245 1365   
FAX (406) 245 1361

February 21, 1995

Ms. Nancy DeMille  
Realty Specialist  
Bureau of Land Management  
P.O. Box 778  
Fillmore, UT 84631

Dear Ms. DeMille:

RE: Cobra State #1 *43-027-30032*  
C/SE Section 36, T15S, R19W  
Millard County, Utah

As requested, attached is a copy of the Conditional Use Permit from the Millard County Planning and Zoning Commission allowing use of the roads for the referenced project.

If there are any questions or you need additional information, please give me a call at (406) 259-7860). Thank you for your help in getting this Right-of-Way processed in a timely manner.

Sincerely,

*Bobbie Schuman*

Bobbie Schuman  
Regulatory and Environmental Specialist

/hs

Attachment

cc: Utah Division of Oil, Gas and Mining

MILLARD COUNTY PLANNING AND ZONING COMMISSION  
CONDITIONAL USE PERMIT

Applicant: Equitable Resources Energy Company,  
Balcron Oil Division

Case # C-94-078

The Millard County Planning and Zoning Commission, pursuant to the authority and procedures provided in Chapter 17 of the Millard County Zoning Ordinance Number 78, hereby grants a conditional use permit to Equitable Resources Energy Company, Balcron Oil Division, hereafter referred to as the "GRANTEE", for the purpose of well projects described as ASP Federal # 1 and Cobra State # 1. The property to which this permit is issued is located in Section 12, T16S, R19W. This permit includes:

1. The right to drill two wells under the guidelines and permits established by the Bureau of Land Management and the Division of Oil, Gas and Mining.
2. The right to install equipment necessary for oil or gas production at this location and service such equipment.

This conditional use permit is subject to the GRANTEE'S compliance with the terms and conditions stated below:

The facility shall be maintained in a clean and orderly manner. Areas around operating equipment, ponds and other areas that may impose danger to humans or livestock shall be fenced for safety.

A. RIGHT OF WAY

1. The GRANTEE shall undertake and have proper right of ways, easements, and other property interests obtained for the project located in Millard County.
2. All roads listed on the submitted plats located in Millard County that may be damaged due to heavy loads used by the GRANTEE shall be reported to the Millard County Road Department. Restitution for costs of road repair shall be negotiated with the Millard County Road Department Superintendent.

B. CHANGES

1. The GRANTEE shall promptly notify the Millard County Planning Commission of any substantial deviations from previously submitted application.

2. The project shall be completed within the parameter set forth by the Bureau of Land Management and the Division of Oil, Gas and Mining.

C. LAW ENFORCEMENT AND PROJECT SITE SECURITY

The GRANTEE shall be responsible for its own security. Any incidents requiring Law Enforcement services shall be reported to the Millard County Sheriff's Office. (Phone 911)

D. FIRE PREVENTION AND CONTROL

- 1 Fire prevention and control shall be the responsibility of the GRANTEE.
- 2 The GRANTEE shall notify the Millard County Fire District Division nearest their location to apprise them of the operation.

E. PRODUCTION WATER

In the event that wells come into production, the operation of the facility shall be subject to the directives established by the Division of Oil, Gas and Mining and the Bureau of Land Management

F. EFFECTIVE DATES

This conditional use permit shall be published immediately upon approval and shall take effect fifteen (15) day thereafter, and shall remain in full force and effect for as long as the property subject to this permit is used for the purposes permitted therein, unless the permit is revoked for the failure of the GRANTEE to comply with the conditions stated herein

G. FEES

The GRANTEE shall pay fees charged by Millard County based upon time to prepare the permit at \$25.00 per hour.

MILLARD COUNTY PLANNING  
COMMISSION:

Leon Smith 2-14-95  
Chairman of the Board Date

EQUITABLE RESOURCES ENERGY  
COMPANY, BALCRON OIL DIVISION

Bobbe Schuman 1-23-95  
Representative, or Agent Date

Commissioner Warren E. Jensen  
Commissioner Michael R. Styler  
Commissioner Abner B. Johnson

**COURTHOUSE - FILLMORE**

60 South Main  
P.O. Box 226  
Fillmore, Utah 84631

(801) 743-6223

©



Robyn H. Pearson  
Millard County Administrator

COUNTY OFFICE - DELTA  
71 South 200 West  
P.O. Box 854  
Delta, Utah 84624  
(801) 864-2068

## APPLICATION FOR CONDITIONAL USE PERMIT

This application is designed to help in the planning stages for a Conditional Use Permit. The application will also be used to substantiate the Conditional Use Permit. Please keep in mind, when filling out this application, to fill in as much detail as possible. When the Planning and Zoning Commission review this application, it will speed up the permit process. The Millard County Planning and Zoning Commission require this application to be completed and submitted to the Administrative Officer one (1) week prior to the scheduled meeting of the Millard County Planning and Zoning Commission.

---

**BUSINESS NAME:** Equitable Resources Energy Company,  
Balcron Oil Division **PHONE:** (406) 259-7860

**ADDRESS:** P.O. Box 21017 Billings MT 59104  
**STREET CITY STATE ZIP**

**NAME OF MANAGER OR CONTACT PERSON:** Bobbie Schuman  
Regulatory and Environmental Specialist

**ADDRESS:** Same as above  
**STREET CITY STATE ZIP**

**PHONE:** (406) 259-7860 **FAX:** (406) 245-1361

---

**This application to be accompanied by:**

1. Two copies of Plot Plan with legal description
2. Names and addresses of all property owners within 300 feet of the proposed project.
3. Some items which are indicated below may not apply to your particular project. Leave them blank or put N/A in the space.
4. There is a fee for the administration cost for all Conditional Use Permits based upon valuation. See attached form

5. ZONE: \_\_\_\_\_ TOTAL AREA: \_\_\_\_\_

ACRES: \_\_\_\_\_ SQ. FEET: \_\_\_\_\_

Describe location, using plat maps, showing township, range, section and the amount of land to be utilized

Map attached. This is use of an existing county road.

This is to access our Cobra State #1 in the Center of the SE Section 36, T15S, R19W. This is a proposed oil well.

6 Describe project and use of the land.

Travel on an existing county road to drill an oil well. If it is a

producer it will be necessary for a pumper to travel to the wellsite daily and for oil trucks to haul the oil on as as-needed basis. If it is not a producer the wellsite will be reclaimed and travel will no longer be necessary.

7 Size of project, anticipated number of employees, type of equipment and buildings. Please indicate total project valuation.

This is a one-well project. Plat attached showing size of pad. Drilling operations will consist of approximately 15 crew members and possibly 8-10 additional personnel. There will be a drilling rig and 2-3 trailers on location for approximately 25 days. If a producer, there may be 2-4 oil and water tanks and a pumping unit and will be visited daily by one contract pumper. Approximate cost to drill and complete is \$250,000.

8 Construction of project Will project be completed in one phase? \_\_\_\_\_ YES \_\_\_\_\_ X \_\_\_\_\_ NO.  
IF NOT PLEASE LIST PHASES:

Drilling

Completion

Reclamation

**9 Estimate time in months or years that project will be in operation after completion of construction**

If this well is a producer it may be in production 30 years.

**10. All roads to be used during construction should be platted on a County Map ( See also # 12)**

See attached.

**11 Will the project provide local jobs and support businesses in the County? Describe Will local job service be used?**

Water will be provided locally. If available in the area services will be used. Crews will most likely stay and eat locally - closest area is the Border Inn on the state line. It is probable that many of the services will be provided out of Vernal, Utah as the closest area containing necessary services (drilling rig, logging company, pipe company, etc.)

**12. What impact will be imposed upon Millard County? (Roads, utilities, housing etc.)**

An existing county road will be used. Pumper will contract personnel who lives in the vicinity. No permanent housing is necessary. County will most likely receive tax benefit from a producing oil well.

13. County roads to be used after construction is completed, for purposes of maintenance, transportation and/or other uses. ( Plat these roads on a County Map also) Also needed is size of trucks, loads per day, weight of loads, and a statement of what you expect from the County on road maintenance

If the well is a producer a contract pumper would visit the location once a day most likely driving a pickup truck. Oil haulers would need to haul loads of produced oil on an as-needed basis. Trucks would average about 240 bbls oil per load (42 gallons per barrel) Produced water may also need to be hauled away from location. It is estimated that 2-3 loads of oil and water may need to be hauled per month.

14. List permits required by State and Federal agencies. As permits are completed, send copies to Millard County Planning Commission

An approved Application for Permit to Drill (APD) is necessary from the State of Utah, Division of Oil, Gas and Mining. This has been obtained and a copy is attached. A Federal Right-of-Way is necessary for approximately 0.8 miles of new access. Application has been made to the Bureau of Land Management in Fillmore, Utah. A copy of the map showing the proposed access is attached. May need U.S. Army Corps of Engineers permit for wetlands area

15. List utilities which will be in place before or during construction

May lay a land line for phone service during drilling and completion operations only if not possible to use cellular power in the area. No permanent utilities are anticipated. Portable sanitary facilities will be on site during drilling and completion operations.

16. If there is pertinent information that you wish to submit, please feel free to attach it

17. There may be pertinent information which is not available for the public Such information shall be submitted to the Administrative Officer Do you concur?

YES  NO  If no please explain

This company typically does not release information about our wells. The APDs and other information are protected for a period of one year by State regulations. We would ask that the county honor this.

SIGNED: Bobbie Schuman  
Company Representative

DATE December 28, 1994



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

Michael O Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Trad Center Suite 220  
Salt Lake City Utah 84180 1203  
801 538 5340  
801 359 3940 (fax)  
801 539 5319 (TDD)

August 1, 1995

Ms. Bobbie Schuman  
Equitable Resources Energy Company  
1601 Lewis Avenue  
Billings, Montana 59102

Re: Cobra State 1 Well, Sec 36, T 15 S, R 19 W, Millard County, Utah  
API No 43-027-30032

Dear Ms Schuman

Per your request, the permit for the above referenced well was replaced by the permit for the Cobra State 12-36 well (API No 43-027-30034) Approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval, prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately

Sincerely,

A handwritten signature in black ink that reads "Don Staley".

Don Staley  
Administrative Manager  
Oil and Gas

ldc  
cc R J Firth  
Well file  
WO1103