

FILING FOR WATER IN THE STATE OF UTAH

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APPLICATION TO APPROPRIATE WATER

TEMPORARY

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Title 73, Chapter 3 of the Utah Code Annotated (1953, as amended).

* WATER RIGHT NO. 99 — 104 * APPLICATION NO. A T64317

1. *PRIORITY OF RIGHT: November 17, 1989 * FILING DATE: November 17, 1989

2. OWNER INFORMATION
Name(s): Ampol Exploration (USA) Inc. * Interest: 100 %
Address: Seventeenth Street Plaza Suite 3000 1225 17th Street
City: Denver State: Colorado Zip Code: 80202
Is the land owned by the applicant? Yes No X
(If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: cfs and/or 6.0 ac-ft

4. SOURCE: Colorado River (Lake Powell) DRAINAGE:
which is tributary to
which is tributary to
POINT(S) OF DIVERSION: COUNTY: San Juan
S. 5950 ft. & W. 1900 ft. from NW Cor. Sec. 9, T34S, R14E, SLB&M.

Description of Diverting Works: Portable truck pump & tank trucks to place of use
* COMMON DESCRIPTION: Farley Canyon/Lake Powell Hite South Quad

5. POINT(S) OF REDIVERSION
The water will be rediverted from at a point:

Description of Rediverting Works:

6. POINT(S) OF RETURN
The amount of water consumed will be cfs or 6.0 ac-ft
The amount of water returned will be cfs or ac-ft
The water will be returned to the natural stream/source at a point(s):

7. STORAGE
Reservoir Name: Storage Period: from to
Capacity: ac-ft. Inundated Area: acres
Height of dam: feet
Legal description of inundated area by 40 acre tract(s):

* These items are to be completed by the Division of Water Rights

8. List any other water rights which will supplement this application _____

9. NATURE AND PERIOD OF USE

Irrigation:	From _____	to _____
Stockwatering:	From _____	to _____
Domestic:	From _____	to _____
Municipal:	From _____	to _____
Mining:	From _____	to _____
Power:	From _____	to _____
Other: Drilling	From <u>Dec. 1, 1989</u>	to <u>Nov. 30, 1990</u>

10. PURPOSE AND EXTENT OF USE

Irrigation: _____ acres. Sole supply of _____ acres.
 Stockwatering (number and kind): _____
 Domestic: _____ Families and/or _____ Persons
 Municipal (name): _____
 Mining: _____ Mining District in the _____ Mine
 Ores mined: _____
 Power: Plant name: _____ Type: _____ Capacity: _____
 Other (describe): Dust suppression, Drilling fluid for (10) Wells

11. PLACE OF USE

Legal description of place of use by 40 acre tract(s): See attached sheet

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of same size if necessary):
The water will be hauled to each location by Able Trucking from Moab, Utah for Ampol Exploration.

 The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

Ampol Expl. Inc.
 Signature of Applicant(s)

Billy B. ... agent

TEMPORARY

STATE ENGINEER'S ENDORSEMENT

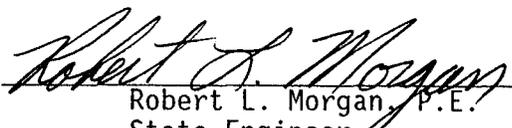
WATER RIGHT NUMBER: 99 - 104

APPLICATION NO. T64317

1. November 17, 1989 Application received by MP.
 2. November 20, 1989 Application designated for APPROVAL by MP and KLJ.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated December 29, 1989, subject to prior rights and this application will expire on December 29, 1990.


Robert L. Morgan, P.E.
State Engineer



AMPOL EXPLORATION (U.S.A.) INC.

SEVENTEENTH STREET PLAZA, SUITE 3000
1225 17TH STREET
DENVER, CO 80202 U.S.A.

Phone: (303) 297-1000

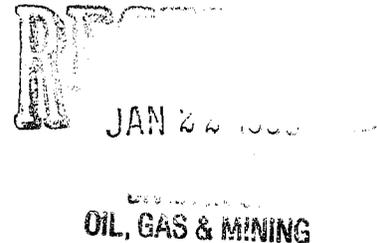
Telecopy: (303) 297-2050

Subsidiaries:

Ampolex (California), Inc.
Ampolex (Orient), Inc.
Ampolex (Texas), Inc.
Ampolex (Wyoming), Inc.

January 18, 1990

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
3 Triad Center, Suite #350
Salt Lake City, Utah 84180-1203



RE: Federal #43-1
Section 1-T37S-T25E
San Juan County, Utah

Gentlemen:

Ampolex (Texas), Inc. requests administrative approval for a permit to drill the captioned well as an exception to R615-3-2 and as a directionally drilled well under R615-3-2. In this regard we enclose three (3) copies of the APD as submitted to the Bureau of Land Management.

Since the location of the borehole at the top of the producing horizon will be some 1,300' from the nearest lease and/or spacing unit line, and thus encompasses a 460' radius around the wellbore, we have not obtained written consent from any adjacent owners.

If you have any questions in this regard, please contact the undersigned at your earliest convenience.

Sincerely,

For and on behalf of
AMPOLEX (TEXAS), INC.

Robert C. Arceneaux
Senior Petroleum Engineer
AMPOL EXPLORATION (U.S.A.) INC.

RCA/dc
Enclosures

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN **REPLICATE***
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
 Ampolex (Texas), Inc.

3. ADDRESS OF OPERATOR
 1225 17th Street, Suite #3000, Denver, Colorado

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface
 198' FSL, 176' FEL
 At proposed prod. zone
 2,320' FSL, 1,300' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 + 20 miles SW of Dove Creek, Colorado

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 1,300' @ T.D.

16. NO. OF ACRES IN LEASE
 1116.50

17. NO. OF ACRES ASSIGNED TO THIS WELL
 40.00

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 N/A

19. PROPOSED DEPTH
 MD - 6,600' Akah
 TVD - 5,800'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6,310' GR

22. APPROX. DATE WORK WILL START*
 02/15/90

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JAN 22 1990

DIVISION OF OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.
 U-64068

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 N/A

7. UNIT AGREEMENT NAME
 N/A

8. FARM OR LEASE NAME
 Federal

9. WELL NO.
 #43-1

10. FIELD AND POOL, OR WILDCAT
 Wildcat (001)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Section 1-T37S-R25E

12. COUNTY OR PARISH
 San Juan

13. STATE
 Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	1,500'	To Surface
8-3/4"	5-1/2"	15.5#	6,600' MD	+ 400 sx

This application requests approval of an exception to State of Utah R615-3-2. The bottom hole location of the well was selected in order to penetrate the Lower Desert Creek Formation at the optimum structural position as determined from geological and seismic control information. Due to the extreme topographical features in the area and the associated surface access problems to the desired wellsite, it will be necessary to directionally drill and control the wellbore to reach the objective zone of interest. In addition, due to the presence of cultural resource materials on the surface in the area that an accessible wellsite could be placed under R615-3-2, the surface location of the wellsite had to be moved and also does not conform to R615-3-2.

The well plan calls for setting 1,500' of 9-5/8" surface casing. At approximately 1,600' the wellbore will be deviated in a northwesterly direction. The maximum hole angle anticipated is approximately 36°. Upon reaching the top of the objective Lower Desert Creek Formation, the bottom hole location of the wellbore will be approximately 2,320' FSL and 1,300' FEL of Section 1-T37S-R25E. At that point, the estimated measured depth (NEXT PAGE)

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. SIGNED Robert C. Greenaway TITLE Senior Petroleum Engineer DATE 01/17/90

(This space for Federal or State office use)

PERMIT NO. 43-037-31494 APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 2-13-90

CONDITIONS OF APPROVAL, IF ANY: _____

BY John R. Bay DATE _____

WELL SPACING: R615-3-3

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE 2-13-90
BY John R. Bay
WELL SPACING: R615-3-3

*See Instructions On Reverse Side

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN ~~DUPLICATE~~
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
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b. TYPE OF WELL
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2. NAME OF OPERATOR
 Ampolex (Texas), Inc.

3. ADDRESS OF OPERATOR
 1225 17th Street, Suite #3000, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
 At surface 198' FSL, 176' FEL
 At proposed prod. zone 2,320' FSL, 1,300' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 ± 20 miles SW of Dove Creek, Colorado

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 1,300' @ T.D.

16. NO. OF ACRES IN LEASE
 1116.50

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 40.00

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 N/A

19. PROPOSED DEPTH
 MD - 6,600'
 TVD - 5,800'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6,310' GR

22. APPROX. DATE WORK WILL START*
 02/15/90

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 SINGLE ZONE MULTIPLE ZONE
 JAN 22 1990

5. LEASE DESIGNATION AND SERIAL NO.
 U-64068

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 N/A

7. UNIT AGREEMENT NAME
 N/A

8. FARM OR LEASE NAME
 Federal

9. WELL NO.
 #43-1

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Section 1-T37S-R25E

12. COUNTY OR PARISH
 San Juan

13. STATE
 Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	1,500'	To Surface
8-3/4"	5-1/2"	15.5#	6,600' MD	± 400 sx

will be 6,412' and the TVD 5,676'. The well will have a measured total depth of 6,566' and a TVD of 5,800'. If commercial production is indicated by drill stem test, cores and open hole logs, 5-1/2" casing will be run to total depth for completion purposes.

EXHIBITS ATTACHED:

- EXHIBIT A - Location and Elevation Plat
- EXHIBIT B - Ten Point Plan
- EXHIBIT C - Blowout Preventer Equipment
- EXHIBIT D - Multipoint Requirements for A.P.D.
- EXHIBIT E - Existing Roads & Other Facilities
- EXHIBIT E-1 - Pertinent Wellsite Information
- EXHIBIT F - Existing Wells within a 2 mile Radius
- EXHIBIT G - Cut and Fill Plat with Cross-Section
- EXHIBIT H - Drilling & Production Equipment Layout
- EXHIBIT I - Cultural Resource Survey Report
- EXHIBIT J - Directional Drilling Plan
- EXHIBIT K - Utah Bond
- EXHIBIT L - Federal Bond

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. SIGNED Robert C. Arceenaux Senior Petroleum Engineer DATE 01/17/90

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

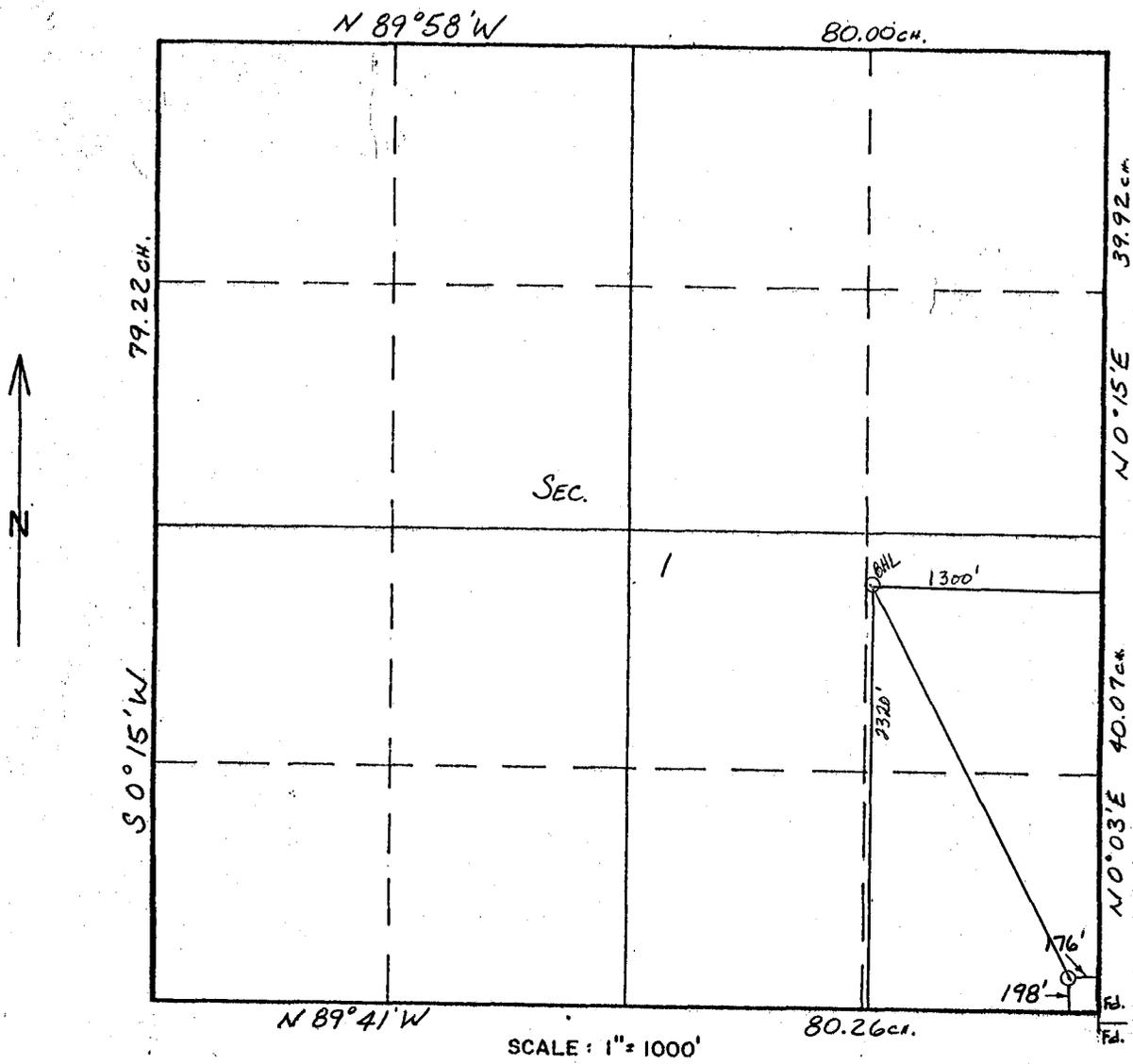
APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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

COMPANY Ampol Exploration (USA) Inc.
 LEASE Federal WELL NO. 43-1
 SEC. 1, T. 37 S, R. 25 E
 COUNTY San Juan STATE Utah
 LOCATION 198'FSL & 176'FEL
 ELEVATION 6311



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD
 NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION
 AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY
 KNOWLEDGE AND BELIEF.

SEAL:

WILLIAM E. MAHNKE II
 NEW MEXICO P.L.S. NO 8466

SURVEYED DEC. 21, 1989

EXHIBIT A
 Location Plat

EXHIBIT B
TEN-POINT COMPLIANCE PROGRAM
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 3160-3
Ampolex (Texas), Inc.
Federal #43-1
NE SE Section 1-T37S-R25E
2,320' FSL & 1,300' FWL (Bottom-hole Location)
San Juan County, Utah

1. THE GEOLOGIC SURFACE FORMATION

The Surface formation is the Morrison.

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

<u>FORMATION</u>	<u>MD, KB</u>	<u>TVD, KB</u>
Morrison	Surface	--
Summerville	520'	520'
Entrada SS	550'	550'
Carmel	710'	710'
Navajo SS	745'	745'
Kayenta	1,055'	1,055'
Wingate SS	1,200'	1,200'
Chinle	1,415'	1,415'
Shinarump	2,195'	2,190'
Cutler	2,319'	2,310'
Upper Hermosa	4,594'	4,210'
Upper Ismay	6,049'	5,383'
Hovenweep Sh.	6,173'	5,483'
Lower Ismay	6,265'	5,557'
Gothic Sh.	6,325'	5,607'
Upper Desert Creek	6,358'	5,632'
Lower Desert Creek	6,412'	5,676'
Chimney Rock Sh.	6,477'	5,728'
Akah	6,502'	5,748'
Total Depth	6,566'	5,800'

3. ESTIMATED MEASURED DEPTHS OF ANTICIPATED WATER, OIL OR GAS BEARING ZONES

Navajo	745' KB	Water
Wingate	1,200' KB	Water
Upper Hermosa	4,594' KB	Gas
Upper Ismay	6,049' KB	Oil & Gas
Lower Desert Creek	6,412' KB	Oil & Gas

4. PROPOSED CASING AND CEMENTING PROGRAM

Hole Size	Interval	Interval Length	Size O.D.	Weight, Grade and Joint	New or Used
18"	0 - 40'±	40'±	16"	--	NEW
12-1/4"	0 - 1,500'	1,500'	9-5/8"	36#, K-55, ST&C	NEW
8-3/4"	1,500'- T.D.	6,600'	5-1/2"	15.5#, K-55, LT&C	NEW

Cement Program:

- Conductor: 100 sacks, Class "A", cement to surface.
- Surface Casing: 450 sacks Light cement followed by 100 sacks Class "G" + 2% CaCl₂, cement to surface
- Prod. Casing: 200 sacks of 50/50 Pozmix followed by 200 sacks Class "G"

5. THE OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Exhibit C is a schematic diagram of the blowout preventer equipment. The ram type BOP's will be hydraulically tested using a test plug to the rated working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period, as will blind rams each time pipe is pulled out of the hole. Such checks of the BOP's will be noted on daily drilling reports. The annular BOP will be hydraulically tested to one-half of the rated working pressure after installation. Accessories to the BOP will include an upper kelly cock, floor safety valve, and choke manifold with pressure rating equivalent to the BOP stack.

6. THE TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATING MUDS

The mud system will be fresh water gel-chemical with adequate stocks of all materials on site to handle any downhole condition that may be encountered as well as any spills of fuel or oil on the surface.

MEASURED DEPTH INTERVAL	TYPE	WEIGHT	Vis.	FLUID LOSS
0' - 1,500'	Water/Native Mud	8.3-8.6	28-50	No control
1,500' - 4,300'	Water w/viscous sweeps	8.4-8.6	28-30	No control

6. THE TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATING MUDS (Cont.)

<u>MEASURED DEPTH INTERVAL</u>	<u>TYPE</u>	<u>WEIGHT</u>	<u>Vis.</u>	<u>FLUID LOSS</u>
4,300' - 6,200'	Gel/Polymer	8.8-9.0	30-35	10-15cc
6,200' - T.D.	Gel/Polymer	11.5-12.0	40-45	10-12cc

7. AUXILIARY EQUIPMENT TO BE USED

- a. An upper kelly cock will be kept in the drill string.
- b. A mud logging unit will monitor the mud system from 4,500' M.D. to T.D. Mud will also be monitored daily by a mud engineer.
- c. A stabbing valve will be on the rig floor to be stabbed into the drill pipe when the Kelly is not in the drill string.

8. TESTING, LOGGING AND CORING PROGRAMS TO BE FOLLOWED

- a. Drill stem tests may be conducted across the Upper Hermosa, Upper Ismay and Lower Desert Creek Formations.
- b. The logging program will consist of the following:
 - DLL/MSFL TD - Base of Surface Casing
 - FDC/CNL TD - 4,500' Measured Depth
 - Sonic/GR TD - Base of Surface Casing
- c. One 60' core is planned in the Lower Desert Creek Formation.
- d. Completion program may require acid treatment. An appropriate Sundry Notice will be submitted for approval.

9. ABNORMAL PRESSURE OR TEMPERATURES

Abnormal pressure in the range of 3,400 - 3,600 psi is expected to be encountered in the Lower Desert Creek Formation.

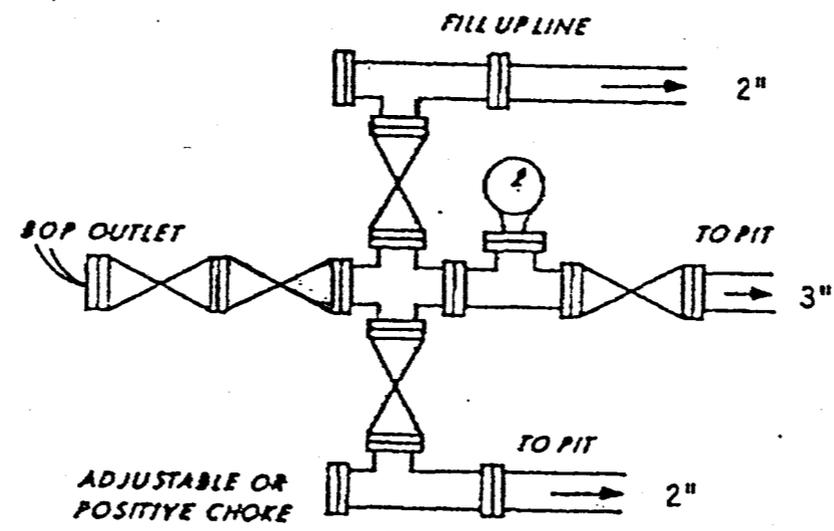
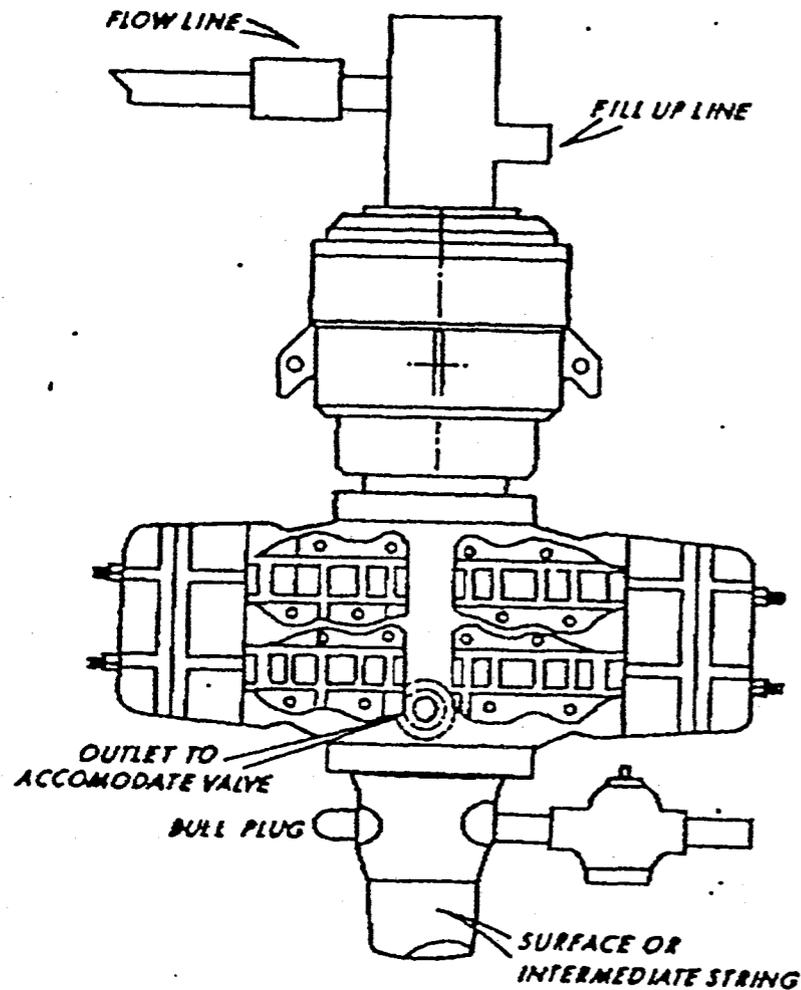
No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS

The anticipated starting date is set for mid-February, 1990 or as soon as possible after approval of drilling permits. Operations should be completed within forty-five (45) days after spudding the well.

EXHIBIT C

TYPICAL BLOW OUT PREVENTER EQUIPMENT



1. BOP VALVES AND ALL WORKING FITTINGS SHOULD BE IN GOOD WORKING CONDITION.
2. ALL BOLTS TO BE INSTALLED AND TIGHT.
3. ALL VALVES TO BE 3000# W.P. OR BETTER.
4. AFTER NIPPLING UP TEST RAMS AND PRESSURE UP TO 3000# FOR 10 MINUTES AND CHECK FOR POSSIBLE LEAKS.
5. ALL CREW MEMBERS TO BE FAMILIAR WITH BOP AND ACCUMULATORS.
6. KEEP HOLE FULL ON TRIPS.
7. USE ONLY FLANGE TYPE FITTINGS.
8. RECHECK BOLTS FOR TIGHTNESS BEFORE 5000 FT. OR ENTERING PRODUCTION ZONES.
9. WHEN DRILLING USE,
TOP PREVENTER - DRILL PIPE RAMS
BOTTOM PREVENTER BLIND RAMS
10. WHEN RUNNING CASING USE,
TOP PREVENTER - CASING RAMS
BOTTOM PREVENTER BLIND RAMS

EXHIBIT D

MULTI-POINT REQUIREMENTS TO ACCOMPANY A.P.D.

Attached to Form 3160-3
Ampolex (Texas), Inc.
Federal #43-1
NE SE Section 1-T37S-R25E
2,320' FSL & 1,300' FEL (Bottom-hole Location)
San Juan County, Utah

1. EXISTING ROADS

- a. Access roads to the proposed drillsite are shown on Exhibit E.
- b. The majority of existing roads are graveled and will not require any maintenance. The last two (2) miles of access road are unimproved roads and may require minor improvements and maintenance such as grading smoother, leveling, and snow plowing during drilling operations.
- c. If production is established, the last two (2) miles of road will be upgraded sufficiently to allow year round travel by automobile and oilfield trucks. Upgrading may include construction of drainage ditches for water drainage or diversion, installation of culverts, crowning and surfacing with gravel.
- d. The distance from Dove Creek, Colorado to the drillsite is approximately 20 miles in a southwesterly direction. From Dove Creek, go .8 mile west on County Road H; Turn south on County Road 6 and go 6.7 miles to intersection with County Road P; Turn west and go 3.2 miles; turn south and go 1 mile; turn south and go 1 mile; turn west and go 1 mile; turn south and go 1 mile; turn west and go 1.3 miles to Colorado/Utah stateline; continue west .8 mile, turn south and go 2 miles; turn west and go .3 mile; turn south and go 1.1 mile; turn west and go .6 mile to junction with unimproved road (improved road veers to the southwest); continue west on unimproved road .6 mile to plowed field; continue on past plowed field in southwesterly direction along canyon rim for 1.5 miles to drillsite. (All distances are approximate)

2. ACCESS ROAD TO BE CONSTRUCTED

- a. A new access road will be constructed from the existing unimproved road to the wellsite, a distance of approximately 500' as follows:
 1. Flat blade 20' wide.
 2. The road will be sloped to conform to the graded wellsite (See Exhibit G).

2. ACCESS ROAD TO BE CONSTRUCTED (Cont.)

a. (Cont.)

3. There will be no turnouts.
4. One culvert may be required.
5. There are no other facilities to be located on the access road.
6. See Exhibit E-1.

3. LOCATION OF EXISTING WELLS WITHIN A TWO MILE RADIUS

- a. There are 5 abandoned wells (See Exhibit F).
- b. There are no known active water wells.
- c. There are no temporarily abandoned wells.
- d. There are no disposal wells.
- e. There are no wells presently being drilled.
- f. There are no producing wells.
- g. There are no shut-in wells.
- h. There are no injection wells.
- i. There are no monitoring or observation wells for other uses.

4. LOCATION OF PROPOSED FACILITIES

- A. If production is obtained, new facilities will be as follows:
 1. Production facilities will be located on solid ground of cut area of drill pad, as tentatively shown on Exhibit H.
 2. All permanent above-ground facilities (6 months or longer) would be painted a neutral, nonreflected (Juniper Green) color to blend into the surrounding area, except for those required to comply with the Occupational Safety and Health Act or written company safety manual or documents.

4. LOCATION OF PROPOSED FACILITIES (Cont.)

2. (Cont.)
If a tank battery is constructed on this location it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the largest tank; all load lines and valves will be placed inside the dike surrounding the tank battery.
3. All flow lines will be buried and will be on the well site and battery site.
4. Production facilities site will be approximately 300 feet long and 165 feet wide. Areas of drill pad not required for production facilities will be rehabilitated. All dirt work will attempt to conform with the natural topography of the area. Cut and fill areas will be kept to a minimum.
5. All construction materials for battery site and pad will be obtained from site. No additional material from outside sources is anticipated. If extra materials are needed, they will be supplied by local contractors.
6. Any necessary pits will be fenced and flagged to protect livestock and wildlife. The location, access road, and vicinity will be kept clean and free of trash at all times.
7. Rehabilitation whether well is productive or dry, will be made on all unused areas in accordance with BLM stipulations.

5. LOCATION AND TYPE OF WATER SOURCE

- A. Water for drilling will be obtained from the following sites:
 1. Pond located on private owned surface in Section 27, T37S, R26E, San Juan County, Utah.
 2. The City of Dove Creek, Colorado.
 3. There are no plans to drill a water well on this lease.

6. CONSTRUCTION MATERIALS

- a. Topsoil will be removed to a depth of at least 6" and will be placed on the NW and SW sides of the location.
- b. It is not anticipated that any offsite construction materials will be needed. The surface soil materials should be sufficient. In the event that additional construction materials are needed, they will be provided by local contractors.
- c. Surface is owned by the United States of America.
- d. All surface soil materials for construction of access roads for drilling are sufficient. If the well is productive, and material from road and pad is not sufficient, surfacing materials will be provided by local construction contractors.
- e. All major access roads presently exist as shown on Exhibit E and E-1.

7. HANDLING OF WASTE MATERIALS AND DISPOSAL

- a. Drilling fluids, and cuttings will be contained in the reserve pit. The reserve pit will be lined/sprayed with bentonite to prevent seepage.
- b. Any fluids produced during drill stem tests or while making production tests will be collected in a test tank. Any spills of oil, gas, salt waters, or other noxious fluids will be cleaned up and removed. If well is productive, produced water will be disposed of on-site for thirty (30) days only, or ninety (90) days with permission of District Engineer. After that time, application will be made for approval of permanent disposal method in compliance with NTL-2b.
- c. Portable chemical facilities will be provided for human waste.
- d. All trash will be handled in a trash container and hauled away to a county facility.
- e. Reserve pit will be fenced on three sides with a four (4) strand barbed wire fence before drilling starts. The fourth side will be fenced upon removal of the rig. The fence will be kept in good repair while the pit is drying.

7. HANDLING OF WASTE MATERIALS AND DISPOSAL (Cont.)

- f. After the rig moves out, all materials and oil will be cleaned up and no adverse materials will be left on location. All open pits will be fenced during drilling and kept closed until such time as the pit is leveled. As soon as the rig is removed, soil berms or ditches will be constructed to prevent run-off from entering the pit.
- g. All brush removed will be stockpiled off of the location on the NW and SW sides.

8. ANCILLARY FACILITIES

No airstrip, camp or other facilities will be built during drilling of this well.

9. WELL SITE LAYOUT

- a. Exhibit G is the Drill Pad Layout as staked, with elevations. Cuts and fills have been drafted to visualize the planned cut across the location. Exhibit G also shows a cross-section diagram of the drilling pad and reserve pit.
- b. Exhibit H is a plan diagram of the proposed rig and equipment, reserve pit, trash pit, access road, parking and turnaround. No permanent living facilities are planned. There will be a trailer onsite. Also shown is the tentative location for production facilities if required.
- c. The bottom and sides of the reserve pit will be sprayed with a bentonite slurry to prevent seepage and will be dug deep enough to allow contents to be buried at least 3 feet below the natural ground level.

10. PLANS FOR RESTORATION

- a. The site is in an open mesa top area and it is planned to restore the site to original condition as nearly as possible. The area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, and all soil erosion associated with the operation has been stabilized. Backfilling, levelling, and contouring are

10. PLANS FOR RESTORATION (Cont.)

- a. (Cont.)
planned as soon as all pits have dried. Waste disposal and spoils materials will be buried as soon as possible after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.
- b. The soil banked material will be spread over the area and recontoured to blend as nearly as possible with the natural topography. The stockpiled topsoil will be evenly distributed over the pad and reserve pit area. All disturbed areas will be contour cultivated 4 to 6 inches deep for seed bed preparation.
- c. Three sides of the reserve pit will be fenced during drilling operations. Prior to rig release, the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from entering. The fencing will be maintained until levelling and cleanup are accomplished.
- d. If any oil is on the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with wire mesh.
- e. The rehabilitation operations will begin immediately after the drilling rig is removed. Removal of oil or other adverse substances will begin immediately or area will be flagged and fenced. Other cleanup will be done as needed.
- f. Reseeding will be done between October 1st and February 28th. Seed mixture will consist of:

<u>Lbs./Acre</u>	<u>Type</u>
4	Crested Wheatgrass
1	Fourwing saltbrush
1	Mormon Tea
1	Cliffrose
2	Oats

Seed will be drilled.

11. OTHER INFORMATION

- a. The proposed wellsite is located on the south-edge of Lake Canyon and consists of a mesa top environment vegetated with pinyon, juniper, Mormon tea, sagebrush, rabbitbrush, prickly pear cactus and native grasses. The entire region is characterized by flat tablelands dissected by numerous southwest trenching canyons.

A cultural resource survey, covering an area of 17 acres was conducted by Alpine Archaeological Consultants, Inc., and a copy of the written report is included with this application as Exhibit I.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Robert C. Arceneaux
Ampolex (Texas), Inc.
1225 17th Street, Suite #3000
Denver, Colorado 80202
(303) 297-1000

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Ampolex (Texas), Inc., and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

1/17/90

DATE

Robert C. Arceneaux

Ampolex (Texas), Inc.
Robert C. Arceneaux
Senior Petroleum Engineer

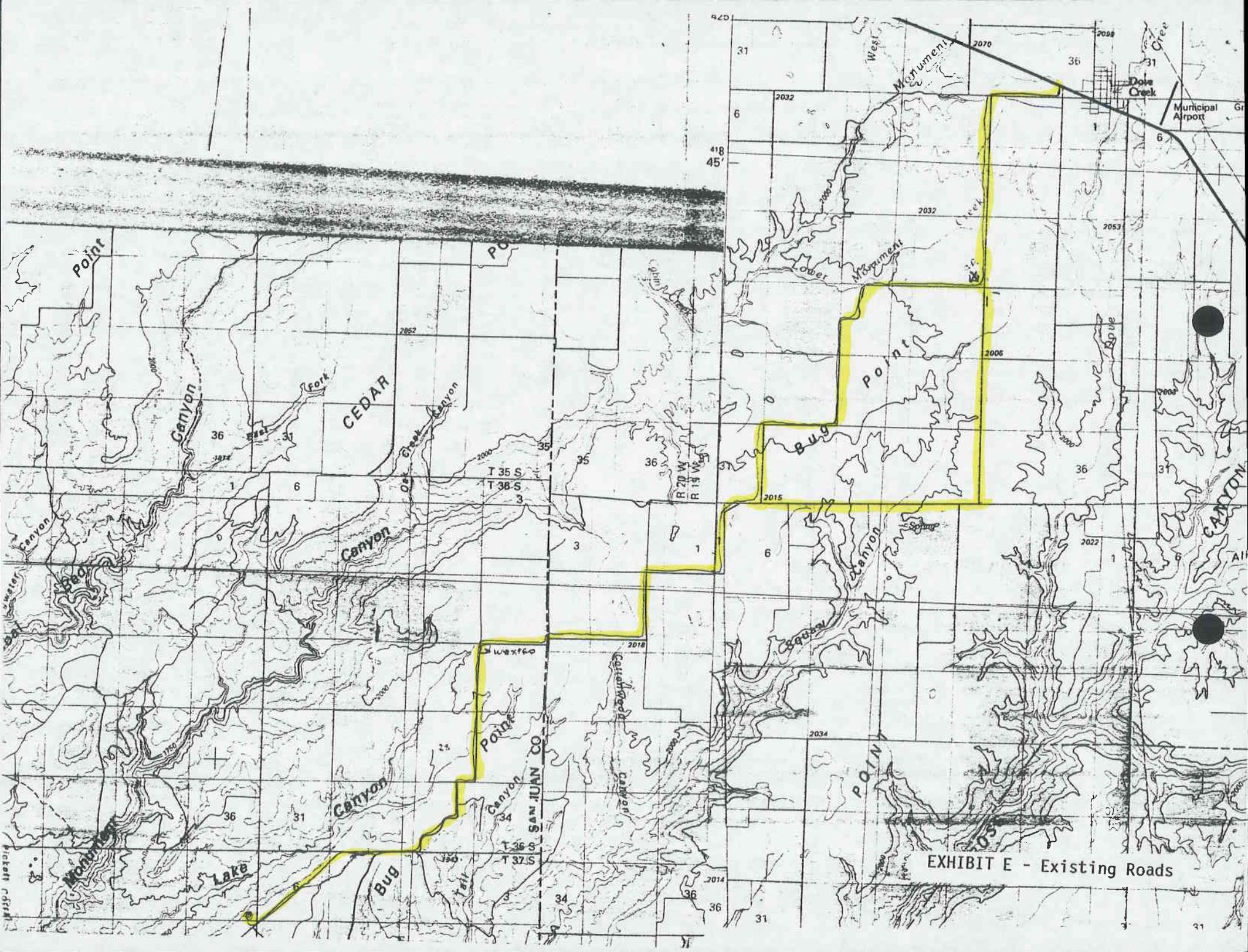
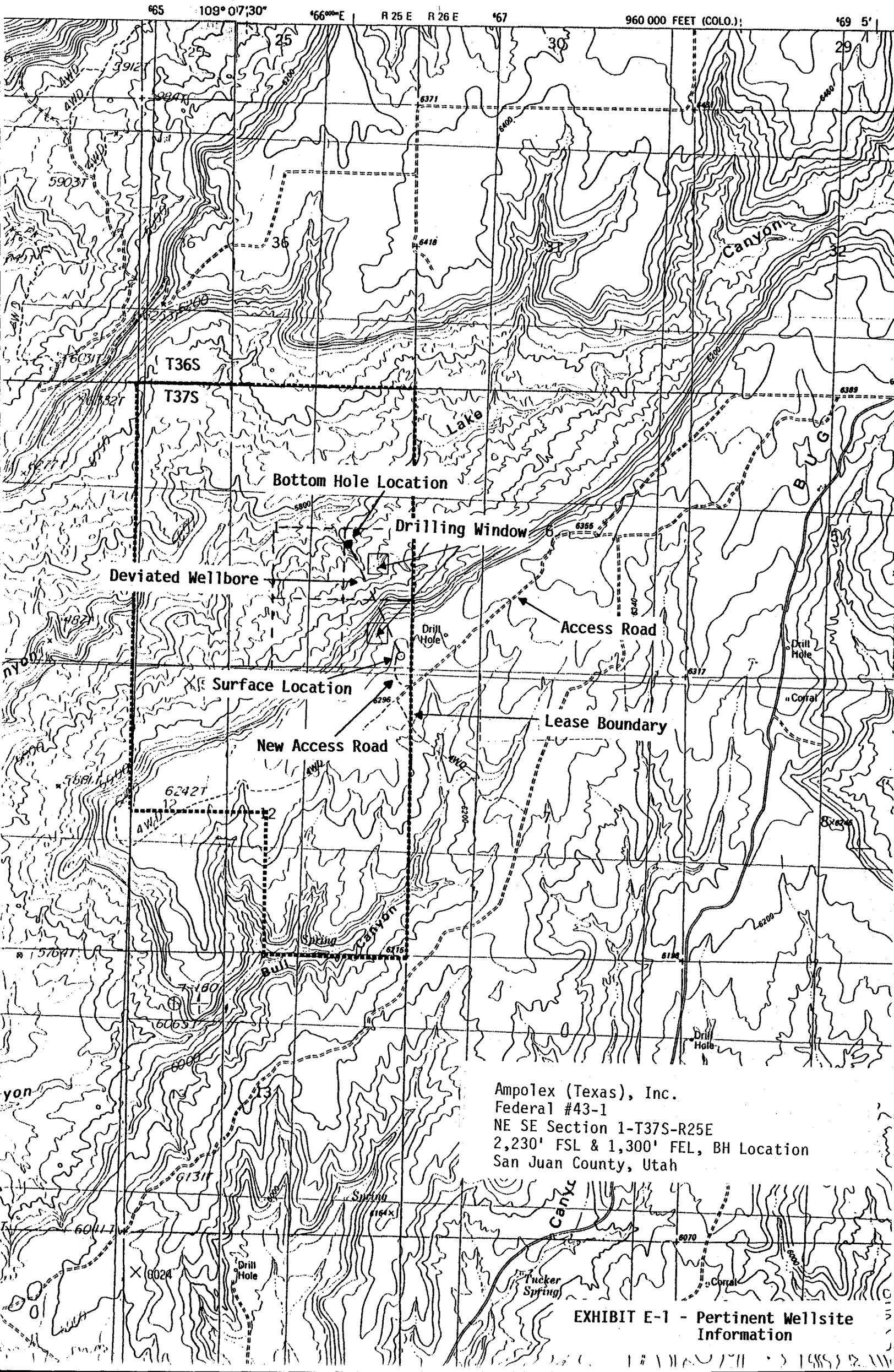


EXHIBIT E - Existing Roads



Amplolex (Texas), Inc.
Federal #43-1
NE SE Section 1-T37S-R25E
2,230' FSL & 1,300' FEL, BH Location
San Juan County, Utah

EXHIBIT E-1 - Pertinent Wellsite Information

28

27

26

T
36
S

33

34

35

4

3

2

Bottom

2 Mile Radius

T
37
S

9

10

11

16

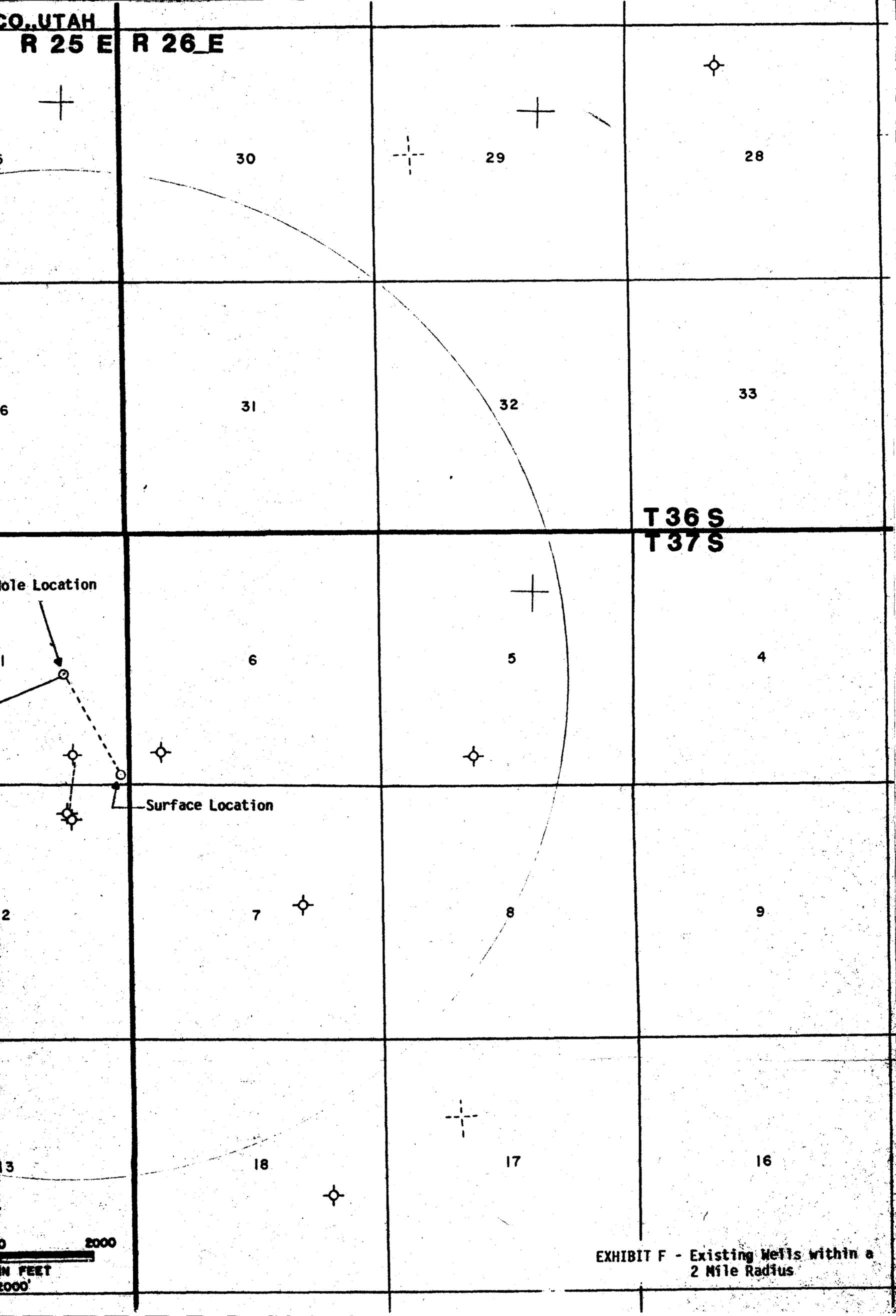
15

14

2000 1000
SCALE
1" = 1 MILE

CO., UTAH

R 25 E R 26 E



T 36 S
T 37 S

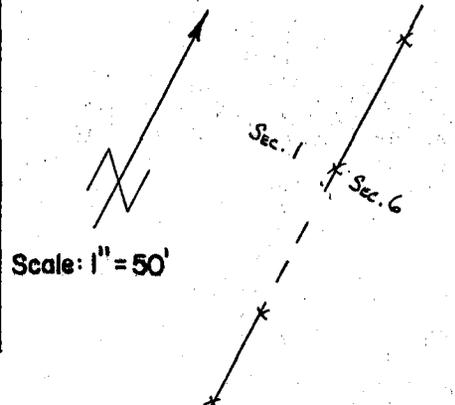
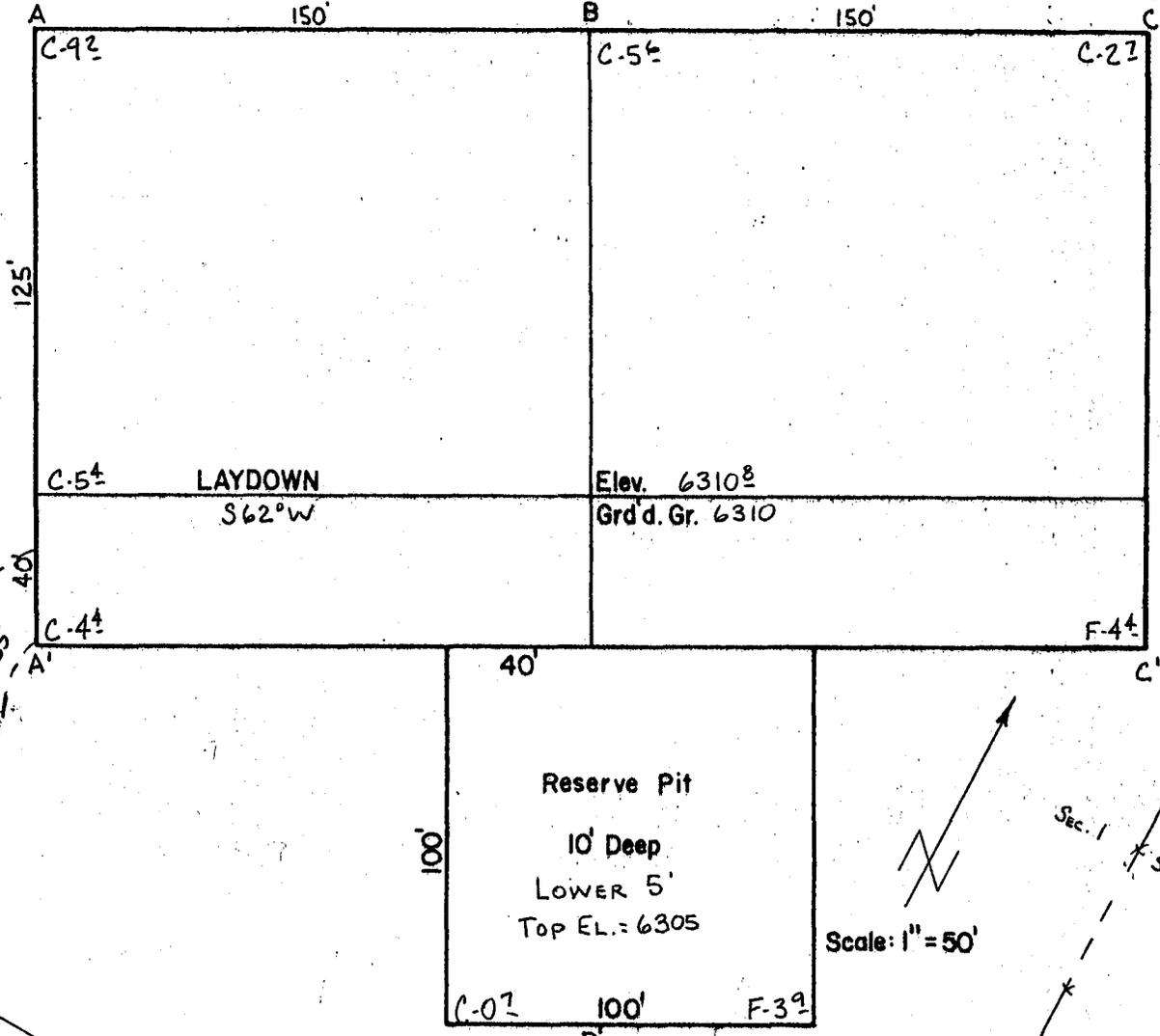
Well Location

Surface Location

EXHIBIT F - Existing Wells within a 2 Mile Radius

0 2000
IN FEET

Ampol Exploration (USA) Inc.
 Federal 43-1
 198'FSL & 176'FEL
 Sec.1, T37S, R25E
 San Juan Co., Utah



A-A' Vert.: 1" = 30' Horiz.: 1" = 100' C/L

6310	[Cross-section diagram showing a slope with a dashed line at 6310 and a solid line at 6300]				
6300	[Cross-section diagram showing a slope with a dashed line at 6300 and a solid line at 6310]				
	[Cross-section diagram showing a slope with a dashed line at 6310 and a solid line at 6300]				

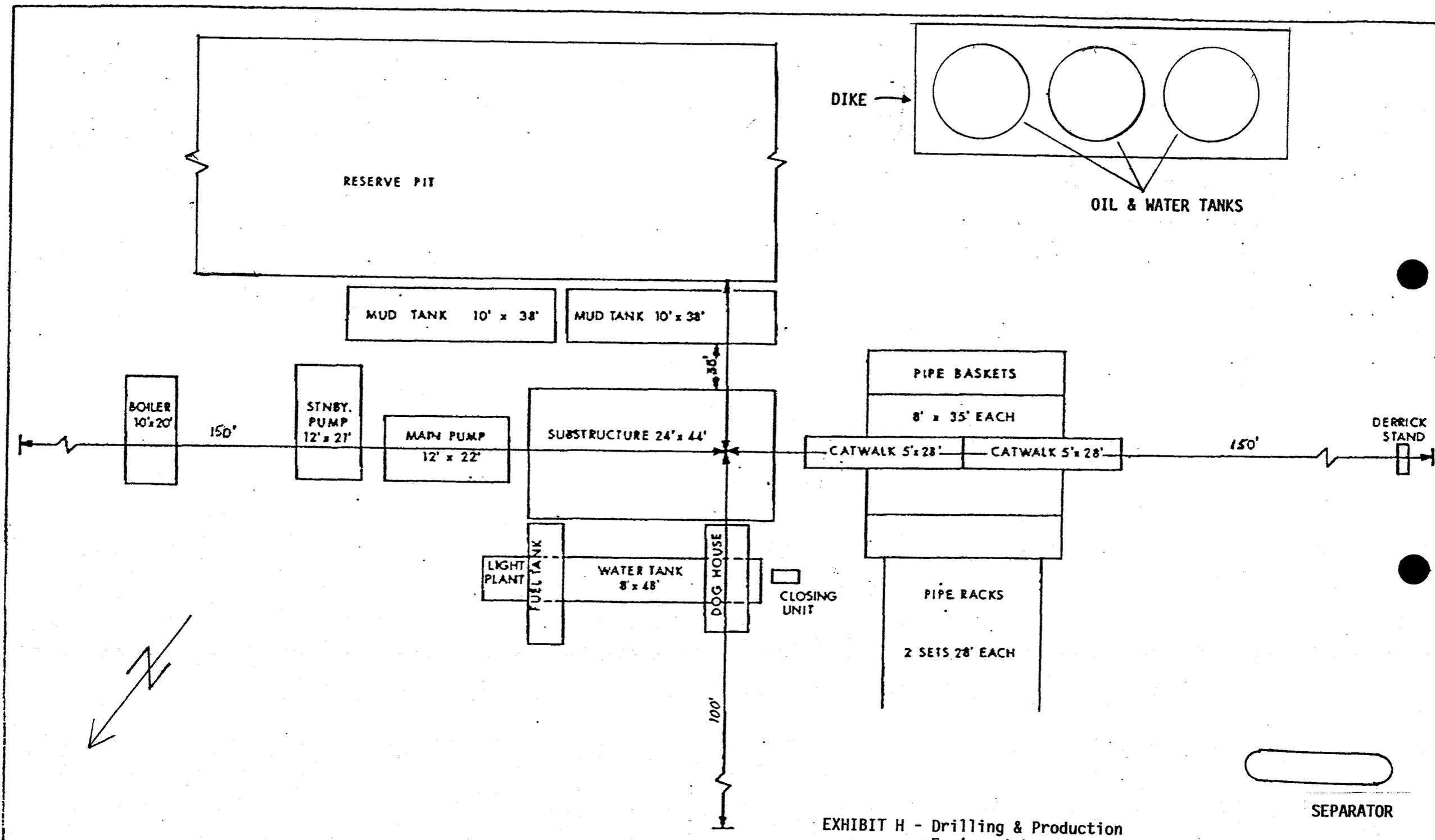
B-B'

6310	[Cross-section diagram showing a slope with a dashed line at 6310 and a solid line at 6300]				
6300	[Cross-section diagram showing a slope with a dashed line at 6300 and a solid line at 6310]				
	[Cross-section diagram showing a slope with a dashed line at 6310 and a solid line at 6300]				

C-C'

6310	[Cross-section diagram showing a slope with a dashed line at 6310 and a solid line at 6300]				
6300	[Cross-section diagram showing a slope with a dashed line at 6300 and a solid line at 6310]				
	[Cross-section diagram showing a slope with a dashed line at 6310 and a solid line at 6300]				

EXHIBIT G
 Cut and Fill Plat with
 Cross Section



RESERVE PIT

MUD TANK 10' x 38'

MUD TANK 10' x 38'

BOILER 10' x 20'

150'

STNBY. PUMP 12' x 21'

MAIN PUMP 12' x 22'

SUBSTRUCTURE 24' x 44'

30'

PIPE BASKETS

8' x 35' EACH

CATWALK 5' x 28'

CATWALK 5' x 28'

150'

DERRICK STAND

LIGHT PLANT

FUEL TANK

WATER TANK 8' x 48'

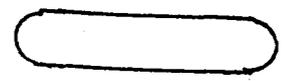
DOG HOUSE

CLOSING UNIT

PIPE RACKS

2 SETS 28' EACH

100'



SEPARATOR

EXHIBIT H - Drilling & Production Equipment Layout

Marker Identification	NO	N/S	E/W
A) KB	0	0 N	0 E
B) KOP BUILD 2.50/100	1650	0 N	0 E
C) END OF 2.50 BUILD	3100	392 N	208 W
D) TARGET	6411	2122 N	1124 W

PLAN VIEW

AMPOLEX
 FEDERAL 43-1
 CLOSURE.....: 2401 ft N 27.91 W
 DECLINATION.: 13.00 E
 SCALE.....: 1 inch = 350 feet
 DRAWN.....: 01/08/90

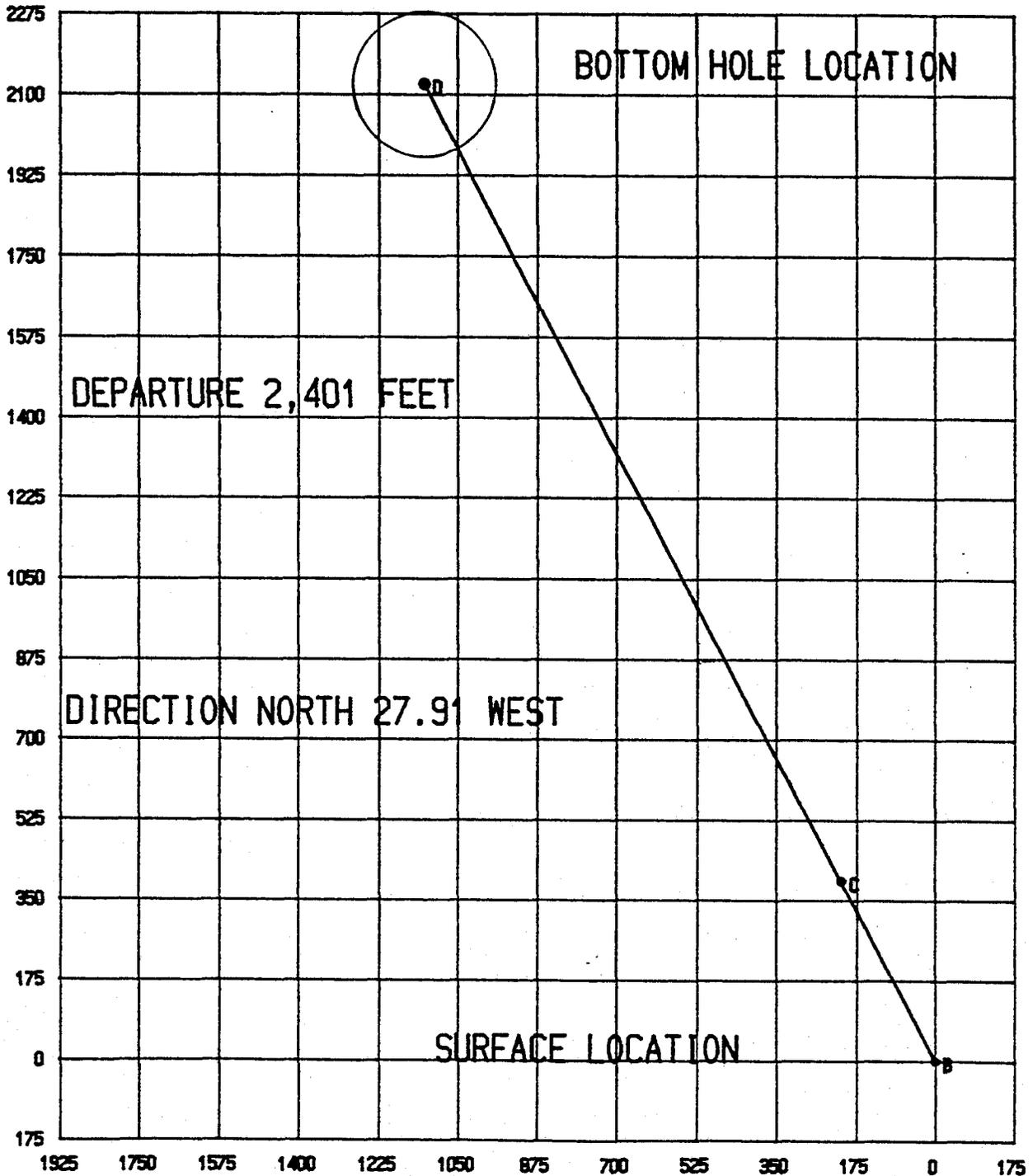


EXHIBIT J - Directional Drilling Plan

VERTICAL SECTION

AMPOLEX

FEDERAL 43-1

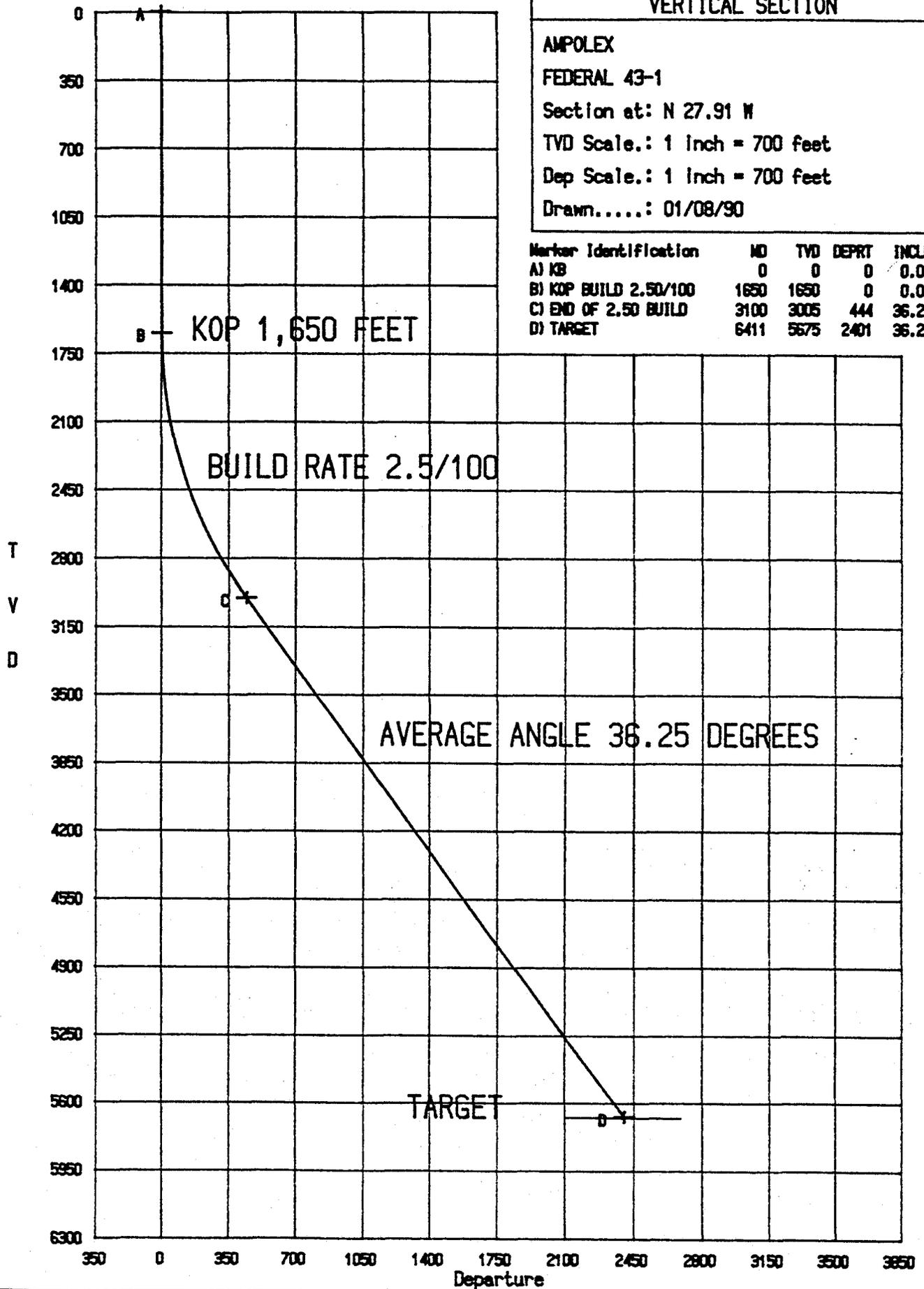
Section at: N 27.91 W

TVD Scale.: 1 Inch = 700 feet

Dep Scale.: 1 Inch = 700 feet

Drawn.....: 01/08/90

Marker Identification	MD	TVD	DEPRT	INCLN
A) KB	0	0	0	0.00
B) KOP BUILD 2.50/100	1650	1650	0	0.00
C) END OF 2.50 BUILD	3100	3005	444	36.25
D) TARGET	6411	5675	2401	36.25



COPY

Corporate Surety Bond

STATE OF UTAH
BOND OF LESSEE

KNOW ALL MEN BY THESE PRESENTS, that we Ampolex (Texas), Inc.
of 1225 17th St., Suite 3000, Denver, CO Address
as principal and Insurance Company of North America, as
surety, are held and firmly bound unto the State of Utah in the sum of Eighty Thousand
Dollars (\$ 80,000.00-) lawful money of the United States to be paid to the Board of
State Lands and Forestry, as agent for the State of Utah, for the use and benefit of the
State of Utah, and of any patentee or purchaser of any portion of the land covered by
the hereinafter described lease heretofore sold or which may hereafter be sold with a
reservation to the State of Utah, on the surface or of other mineral deposits of any
portion of such lands, for which payment, will and truly to be made, we bind ourselves,
and each of us, and each of our heirs, executors, administrators, successors, sub-
lessees, and assignees, jointly and severally by these presents.

Signed with our hands and seals this 3rd day of November in the
year of our Lord, 1989.

The condition of the foregoing obligation is such that,

WHEREAS, The State of Utah, as Lessor, issued a(n) Various
lease, Lease Number _____ and dated November 3, 1989, to _____
as lessee (and said lease has been duly
assigned under date of November 3, 1989 to Ampolex (Texas), Inc.
) to drill for, mine, extract, and remove all of the _____
deposits in and under the following described lands to wit:

All operations on state lands.

NOW, THEREFORE, THE principal shall be obligated to pay all monies, rentals,
royalties, cost of reclamation, damages to the surface and improvements thereon and any
other costs which arise by operation of the above described lease(s) accruing to the
Lessor and shall fully comply with all other terms and conditions of said lease, the
rules, regulations, and policies relating thereto of the Board of State Lands and
Forestry, Division of State Lands and Forestry, the Board of Oil, Gas and Mining, and
the Division of Oil, Gas and Mining as they may now exist or may from time to time be
modified or amended. This obligation is in effect even if the principal has conveyed
part of the purchase agreement interest to a successor in interest. If the principal
fully satisfies the above described obligations, then the surety's obligation to make
payment to the State of Utah is void and of no effect, otherwise, it shall remain in
full force and effect until released by the Division of State Lands and Forestry.

Signed, sealed and delivered
in the presence of

[Signature]
Witness
[Signature]
Witness

AMPOLEX (Texas) Inc.

By: [Signature] (SEAL)
B.D. Emmett, Vice President and General Manager

BONDING COMPANY - Insurance Company of North America

BY [Signature]
Susan Robertson, Attorney-In-Fact

Attest:

APPROVED AS TO FORM:
DAVID L. WILKINSON
ATTORNEY GENERAL

Resident Agent: n/a

Bonding Co. Address: 3050 152nd N.E.
Redmond, WA 98052

[Signature]

Corporate Seal of Bonding Company Must be Affixed.

Know all men by these presents: That INSURANCE COMPANY OF NORTH AMERICA, a corporation of the Commonwealth of Pennsylvania, having its principal office in the City of Philadelphia, Pennsylvania, pursuant to the following Resolution, adopted by the Board of Directors of the said Company on December 5, 1983, to wit:

"RESOLVED, That pursuant to Articles 3.18 and 8.1 of the By-Laws, the following Rules shall govern the execution for the Company of bonds, undertakings, recognizances, contracts and other writings in the nature thereof:

- (1) That the President, any Senior Vice President, any Vice President, any Assistant Vice President, or any Attorney-in-Fact, may execute for and on behalf of the Company any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof, the same to be attested when necessary by the Corporate Secretary, or any Assistant Corporate Secretary, and the seal of the Company affixed thereto, and that the President, any Senior Vice President, any Vice President or any Assistant Vice President may appoint and authorize any other Officer (elected or appointed) of the Company, and Attorneys-in-Fact to so execute or attest to the execution of all such writings on behalf of the Company and to affix the seal of the Company thereto.
- (2) Any such writing executed in accordance with these Rules shall be as binding upon the Company in any case as though signed by the President and attested to by the Corporate Secretary.
- (3) The signature of the President, or a Senior Vice President, or a Vice President, or an Assistant Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted pursuant to this Resolution, and the signature of a certifying Officer and the seal of the Company may be affixed by facsimile to any certificate of any such power, and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company.
- (4) Such other Officers of the Company, and Attorneys-in-Fact shall have authority to certify or verify copies of this Resolution, the By-Laws of the Company, and any affidavit or record of the Company necessary to the discharge of their duties.
- (5) The passage of this Resolution does not revoke any earlier authority granted by Resolutions of the Board of Directors adopted on June 8, 1953, May 28, 1975 and March 23, 1977."

does hereby nominate, constitute and appoint JOHN DEVINE, LOUIS R. WEBB, MARSHA CLESSON, SUSAN J. ROBERTSON, STEVEN R. JARAMILLO, R. H. MacPHERSON, JR., all of the City of Bellevue, State of Washington

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

, each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof. And the execution of such writings in pursuance of these presents, shall be as binding upon said Company, as fully and amply as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office.

IN WITNESS WHEREOF, the said John B. Fitzgerald, Jr., Vice-President, has hereunto subscribed his name and affixed the corporate seal of the said INSURANCE COMPANY OF NORTH AMERICA this 7th day of June 19 89



INSURANCE COMPANY OF NORTH AMERICA
by [Signature]
JOHN B. FITZGERALD, JR., Vice President

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF PHILADELPHIA

ss.
On this 7th day of June, A.D. 19 89, before me, a Notary Public of the Commonwealth of Pennsylvania in and for the County of Philadelphia came John B. Fitzgerald, Jr., Vice-President of the INSURANCE COMPANY OF NORTH AMERICA to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year



[Signature]
Julia Anna Rohana - Notary Public
Philadelphia, Philadelphia County, Pa.
My Commission Expires August 20, 1990

I, the undersigned, Secretary of INSURANCE COMPANY OF NORTH AMERICA, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Secretary, and affixed the corporate seal of the Corporation, this 3rd day of November 19 89



[Signature]
James S. Wylie
Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER June 7, 1991

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

STATE, NATIONWIDE, OR NATIONAL PETROLEUM RESERVE
IN ALASKA OIL AND GAS BOND

Act of February 25, 1920 (30 U.S.C. Sec. 181)

Act of August 7, 1947 (30 U.S.C. Sec. 351)

Department of the Interior Appropriations Act, Fiscal Year 1981 (P.L. 96-514)

Other Oil and Gas Leasing Authorities as Applicable

KNOW ALL MEN BY THESE PRESENTS, That we AMPOL EXPLORATION (U.S.A.) INC. and its subsidiaries
of Ampolex (California), Inc., Ampolex (Texas), Inc. and Ampolex (Wyoming), Inc.
of 1225 17th Street, Denver, Colorado 80202
as principal, and Insurance Company of North America
of Philadelphia, Pennsylvania

as surety, are held and firmly bound unto the United States of America in the sum of One Hundred Fifty Thousand
and no/100***** dollars (\$ 150,000.00*****), in lawful money
of the United States, which sum may be increased or decreased by a rider hereto executed in the same manner as this bond, for
the use and benefit of (1) the United States; (2) the owner of any of the land subject to the coverage of this bond, who has a
statutory right to compensation in connection with a reservation of the oil and gas deposits to the United States; and (3) any
lessee or permittee under a lease or permit issued by the United States prior to the issuance of an oil and gas lease for the
same land subject to this bond, covering the use of the surface or the prospecting for, or development of, other mineral deposits
in any portion of such land, to be paid to the United States. For such payment, well and truly to be made, we bind ourselves,
and each of our heirs, executors, administrators, and successors, jointly and severally.

- The coverage of this bond shall extend to all of the principal's holdings of federal oil and gas leases in the United States, including Alaska, issued or acquired under the Acts cited in Schedule A.
- The coverage of this bond extends only to the principal's holdings of federal oil and gas leases issued or acquired under the Acts cited and in the States named in Schedule A and to any other State or States that may be named in a rider attached hereto by the lessor with the consent of the surety.
- The coverage of this bond extends only to the principal's holdings of federal oil and gas leases within the National Petroleum Reserve in Alaska.

SCHEDULE A

Mineral Leasing Act of February 25, 1920 (30 U.S.C. Sec. 181), Acquired Lands Leasing Act of August 7, 1947 (30 U.S.C. Sec. 351), and other oil and gas leasing authorities as applicable.

NAMES OF STATES

The conditions of the foregoing obligations are such that, whereas the said principal has an interest in oil and gas leases issued under the Acts cited in this bond: (1) as lessee; (2) as the approved holder of operating rights in all or part of the lands covered by such leases under operating agreements with the lessees; or (3) as designated operator or agent under such leases pending approval of an assignment or operating agreement; and

WHEREAS the principal is authorized to drill for, mine, ex-

tract, remove, and dispose of oil and gas deposits in or under the lands covered by the leases, operating agreements or designations and is obligated to comply with certain covenants and agreements set forth in such instruments; and

WHEREAS the principal and surety agree that without notice to the surety the coverage of this bond, in addition to the present holdings of the principal, shall extend to and include:

1. Any oil and gas lease heretofore issued to, or acquired by the principal in the States now named in Schedule A, or later named in a rider, the coverage to be confined to the principal's holdings under the Acts cited and to become effective immediately upon such issuance or upon departmental approval of a transfer in favor of the principal.

2. Any operating agreement hereafter entered into or acquired by the principal affecting oil and gas leases in the States now named in Schedule A, or later named in a rider. The coverage shall become effective immediately upon departmental approval of the agreement or of a transfer of an operating agreement to the principal.

3. Any designation subsequent hereto of the principal as operator or agent of a lessee under a lease issued pursuant to the Acts cited and covering lands in a State named in Schedule A, either presently or by rider. This coverage shall become effective immediately upon the filing of such a designation under a lease.

4. Any extension of a lease covered by this bond, such coverage to continue without any interruption due to the expiration of the term set forth in the lease.

Provided, that the surety may elect to have the additional coverage authorized under this paragraph become inapplicable as to all interests of the principal acquired more than thirty (30) days after the receipt of notice of such election by the Bureau of Land Management.

The surety hereby waives any right to notice of, and agrees that this bond shall remain in full force and effect notwithstanding:

1. A transfer or transfers, either in whole or in part, of any or all of the leases, or of the operating agreements, and further agrees to remain bound under this bond as to the interests either in the leases or in the operating agreements, or in both, retained by the principal when the approval of the transfer or transfers become effective.

2. Any modification of a lease or operating agreement, or obligations thereunder, whether made or effected by commitment of such lease or operating agreement to unit, cooperative, communitization or storage, agreements, or development contracts, suspensions of operations or production, waivers, suspensions or changes in rental, minimum royalty and royalties, compensatory royalty payments, or otherwise; and

WHEREAS principal and surety hereby agree that notwithstanding the termination of any lease or lease operating agreements or designations as operator or agent covered by this bond, whether the termination is by operation of law or otherwise, the bond shall remain in full force and effect as to all remaining leases, operating agreements, designations covered by the bond; and

WHEREAS the principal, as to any lease or part of a lease for lands as to which he has been designated as operator or agent, or approved as operator, in consideration of being permitted to furnish this bond in lieu of the lessees, and by these presents does hereby bind himself to fulfill on behalf of each lessee all obligations of each such lease of the entire leasehold in the same manner and to the same extent as though he were the lessee; and

WHEREAS the principal and surety agree that the neglect or forbearance of said lessor in enforcing, as against the lessees of such lessor, the payment of rentals or royalties or the performance of any other covenant, condition or agreement of the leases, shall not, in any way, release the principal and surety, or either of them, from any liability under this bond; and

WHEREAS the principal and surety agree that in the event of any default under the leases, the lessor may commence and prosecute any claim, suit, action, or other proceeding against the principal and surety, or either of them, without the necessity of joining the lessees.

NOW, THEREFORE, IF said principle shall in all respects faithfully comply with all of the provisions of the lease referred to hereinbefore, then the above obligations are hereby void; otherwise to remain in full force and effect.

Signed on this 1st day of July, 1987, in the presence of:

NAMES AND ADDRESSES OF WITNESSES

ATTEST:

[Signature]
Dante J. Reid, Assistant Secretary
Erin R. Seifers; 1225 - 17th Street, Suite
3000, Denver, CO 80202

[Signature]

[Signature]
AMPOL EXPLORATION (U.S.A.) INC. (L.S.)
B. D. Emmett, Vice President
1225 17th Street
Denver, CO 80202
(Business Address)

[Signature] Attorney-in-fact
Insurance Company of North America (L.S.)
(Surety)
P. O. Box 27706
Houston, TX 77027
(Business Address)

RIDER DESIGNED TO EXTEND STATEWIDE OR NATIONWIDE BONDS TO INCLUDE LEASES WHERE THE PRINCIPAL IS A DESIGNATED OPERATOR

In consideration for the payment of any additional premium charged for this rider and the acceptance of this rider by the Bureau of Land Management on behalf of the United States of America, the undersigned Principal and Surety hereby extend the coverage of Bond No. 69HF3973, to all of the leases where the Principal has been designated as the operator by the lessee(s) or holder(s) of the operating rights and the Principal hereby agrees to be bound by all the terms and conditions of any lease wherein the Principal is designated as operator and files such designation with an appropriate officer of the Bureau, whether or not the designation is subsequently revoked, until all the terms and conditions of the lease have been satisfied, including the payment of any rentals and royalties due and the proper plugging and abandonment of any wells drilled on such lease; providing, however, that this rider shall not act to increase the actual cumulative or potential liability of the Surety above the face amount of the bond, One Hundred Fifty Thousand and no/100**** Dollars (\$150,000.00*); providing, further, however, that any limitation of liability on the part of the Surety shall not apply to the Principal who shall be liable to the same extent as the party or parties designating the Principal as Operator.

Executed this 1st day of July, 19 87.

ATTEST:

[Signature]
Daniel J. Reid, Assistant Secretary

[Signature]
Witness and Address
1224 - 17th Street, Suite 3000, Denver,
CO 80202

[Signature]
Witness and Address

P.O. Box 5748
DENVER, CO 80217

[Signature]
Witness and Address

P.O. Box 5748
DENVER, CO 80217

AMPO- EXPLORATION (U.S.A.) INC.

By [Signature]
Principal B. D. Emmett; Vice President

[Signature]
Surety Attorney-in-fact
Insurance Company of North America

[Signature]
Surety's Agent

RIDER

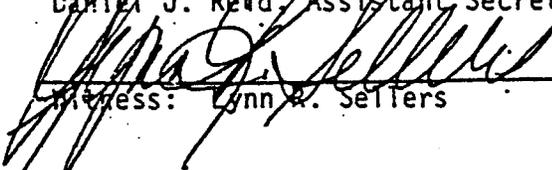
Bond No. 69HF3973

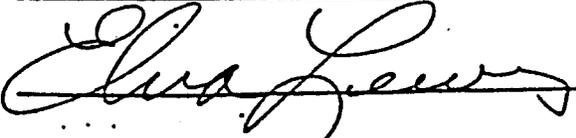
It is hereby agreed by and between the undersigned principal(s) and surety in consideration for the additional premium or consideration paid for this rider, if any, and the consent by the United States to terminate the liability on Bond No. 69HF3564) carrying the same principal(s) and Insurance Company of North America as surety, the undersigned principal(s) and surety hereby assume any and all liabilities that may be outstanding on Bond No. 69HF3564) including, but not limited to, the obligation properly to plug and abandon all wells existing on leases to which Bond No. 69HF3564) applies and any unpaid rentals or royalties heretofore accruing: provided, however, that this rider shall not act to increase the potential or cumulative liability of the surety above the face amount of the bond to which this rider attaches.

Executed this 1st day of July, 1987.

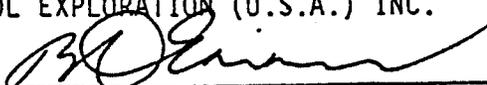
Witnesses: ATTEST:


Daniel J. Reid, Assistant Secretary


Witness: Lynn A. Sellers



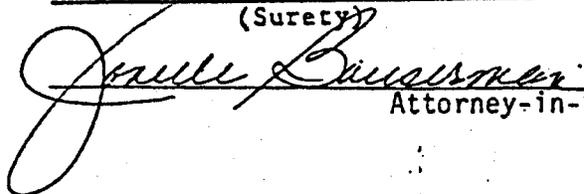
AMPOL EXPLORATION (U.S.A.) INC.

By 
(Principal)
B. D. Emmett, Vice President

(Principal).

(Principal)

Insurance Company of North America
(Surety)


Attorney-in-fact

POWER OF ATTORNEY

574164

INSURANCE COMPANY OF NORTH AMERICA

PHILADELPHIA, PA.

Know all men by these presents: That INSURANCE COMPANY OF NORTH AMERICA, a corporation of the Commonwealth of Pennsylvania, having its principal office in the City of Philadelphia, Pennsylvania, pursuant to the following Resolution adopted by the Board of Directors of the said Company on May 28, 1975, to wit:

"RESOLVED, pursuant to Articles 3.6 and 5.1 of the By-Laws, the following Rules shall govern the execution for the Company of bonds, undertakings, recognizances, contracts and other writings in the nature thereof:

- (1) That the President, or any Vice-President, Assistant Vice-President, Resident Vice-President or Attorney-in-Fact, may execute for and in behalf of the Company any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof, the same to be attested when necessary by the Secretary, an Assistant Secretary or a Resident Assistant Secretary and the seal of the Company affixed thereto; and that the President or any Vice-President may appoint and authorize Resident Vice-Presidents, Resident Assistant Secretaries and Attorneys-in-Fact to so execute or attest to the execution of all such writings on behalf of the Company and to affix the seal of the Company thereto.
(2) Any such writing executed in accordance with these Rules shall be as binding upon the Company in any case as though signed by the President and attested by the Secretary.
(3) The signature of the President or a Vice-President and the seal of the Company may be affixed by facsimile on any power of attorney granted pursuant to this Resolution, and the signature of a certifying officer and the seal of the Company may be affixed by facsimile to any certificate of any such power, and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company.
(4) Such Resident Officers and Attorneys-in-Fact shall have authority to certify or verify copies of this Resolution, the By-Laws of the Company, and any affidavit or record of the Company necessary to the discharge of their duties.
(5) The passage of this Resolution does not revoke any earlier authority granted by Resolution of the Board of Directors on June 9, 1953."

does hereby nominate, constitute and appoint ANTHONY A. JONES, JONELLE BAUSERMAN, and SUE DAVIDSON, all of the City of Denver, State of Colorado -----

each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof. And the execution of such writings in pursuance of these presents, shall be as binding upon said Company, as fully and amply as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office.

IN WITNESS WHEREOF, the said MICHAEL B. FODOR, Vice-President, has hereunto subscribed his name and affixed the corporate seal of the said INSURANCE COMPANY OF NORTH AMERICA this 19th day of January 1983.



INSURANCE COMPANY OF NORTH AMERICA
Michael B. Fodor
MICHAEL B. FODOR Vice-President

STATE OF PENNSYLVANIA
COUNTY OF PHILADELPHIA } ss.

On this 19th day of January, A. D. 1983, before me, a Notary Public of the COMMONWEALTH OF PA. in and for the County of PHILADELPHIA came MICHAEL B. FODOR, Vice-President of the INSURANCE COMPANY OF NORTH AMERICA to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same; that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of PHILADELPHIA the day and year first above written.

LETITIA H. CLARK
Notary Public Phila. Phila. County
My commission expires My Commission Expires August 22, 1983

Letitia H. Clark
LETITIA H. CLARK Notary Public.

I, the undersigned, Assistant Secretary of INSURANCE COMPANY OF NORTH AMERICA, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a full, true and correct copy, is in full force and effect. In witness whereof, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of the Corporation, this 1st day of July 1987.

(SEAL) James A. Miller
Assistant Secretary

094412

POWER OF ATTORNEY

Insurance Company of North America
a CIGNA company



Know all men by these presents: That INSURANCE COMPANY OF NORTH AMERICA, a corporation of the Commonwealth of Pennsylvania, having its principal office in the City of Philadelphia, Pennsylvania, pursuant to the following Resolution, which was adopted by the Board of Directors of the said Company on December 5, 1983, to wit:

RESOLVED, That pursuant to Articles 3.19 and 3.3 of the By-Laws, the following Rules shall govern the execution for the Company of bonds, undertakings, recognizances, contracts and other writings in the nature thereof:

- 1 That the President, any Senior Vice President, any Vice President, any Assistant Vice President, or any Attorney-in-Fact, may execute for and on behalf of the Company any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof, the same to be attested when necessary by the Corporate Secretary, or any Assistant Corporate Secretary, and the seal of the Company affixed thereto; and that the President, any Senior Vice President, any Vice President or any Assistant Vice President may appoint and authorize any other Officer (elected or appointed) of the Company, and Attorneys-in-Fact to so execute or attest to the execution of all such writings on behalf of the Company and to affix the seal of the Company thereon.
- 2 Any such writing executed in accordance with these Rules shall be as binding upon the Company in any case as though signed by the President and attested to by the Corporate Secretary.
- 3 The signatures of the President, or a Senior Vice President, or a Vice President, or an Assistant Vice President and the seal of the Company may be affixed by facsimile or any power of attorney granted pursuant to this Resolution, and the signature of a certifying Officer and the seal of the Company may be affixed by facsimile to any certificate of any such power, and any such power or certificate bearing such facsimile signatures and seal shall be valid and binding on the Company.
- 4 Such other Officers of the Company, and Attorneys-in-Fact shall have authority to certify or verify copies of this Resolution, the By-Laws of the Company, and any affidavit or record of the Company necessary to the discharge of their duties.
- 5 The passage of this Resolution does not revoke any earlier authority granted by Resolutions of the Board of Directors adopted on June 9, 1953, May 26, 1976 and March 21, 1977.

do hereby nominate, constitute and appoint JONELLE BAUSERMAN, and KARLA J. REUTIMAN, both of the City of Denver, State of Colorado

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

each individually if there be more than one named, its true and lawful attorney-in-fact, to make, execute, seal and deliver on its behalf, and as its act and deed any and all bonds, undertakings, recognizances, contracts and other writings in the nature thereof in penalties not exceeding ONE MILLION DOLLARS (\$1,000,000) each, and the execution of such writings in pursuance of these presents, shall be as binding upon said Company, as fully and amply, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its principal office.

IN WITNESS WHEREOF, the said John B. Fitzgerald, Jr., Vice-President, has hereunto subscribed his name and affixed the corporate seal of the said INSURANCE COMPANY OF NORTH AMERICA this 25th day of April 19 89



COMMONWEALTH OF PENNSYLVANIA
COUNTY OF PHILADELPHIA

On this 25th day of April A.D. 19 89

INSURANCE COMPANY OF NORTH AMERICA

by *[Signature]*
JOHN B. FITZGERALD, JR., Vice President

the Commonwealth of Pennsylvania in and for the County of Philadelphia came John B. Fitzgerald, Jr., Vice-President of the INSURANCE COMPANY OF NORTH AMERICA to me personally known to be the individual and officer who executed the preceding instrument, and he acknowledged that he executed the same, and that the seal affixed to the preceding instrument is the corporate seal of said Company; that the said corporate seal and his signature were duly affixed by the authority and direction of the said corporation, and that Resolution, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Philadelphia the day and year



[Signature]
Julia Anna Robana - Notary Public
Philadelphia, Philadelphia County, Pa.
My Commission Expires August 28, 1990

I, the undersigned Secretary of INSURANCE COMPANY OF NORTH AMERICA, do hereby certify that the original POWER OF ATTORNEY, of which the foregoing is a true and correct copy, is in full force and effect.

In witness whereof, I have hereunto subscribed my name as Secretary and affixed the corporate seal of the Corporation, this 13th day of June 1989



[Signature]
James E. Wynn Secretary

THIS POWER OF ATTORNEY MAY NOT BE USED TO EXECUTE ANY BOND WITH AN INCEPTION DATE AFTER APRIL 25, 1991

**CULTURAL RESOURCE INVENTORY
OF AMPOL EXPLORATION (USA) INC.
43-1 FEDERAL WELL PAD
SAN JUAN COUNTY, UTAH**

by

Rand A. Greubel, Staff Archaeologist

**Alpine Archaeological Consultants, Inc.
P.O. Box 2075
Montrose, Colorado 81402
(303) 249-6761**

Prepared for

**Powers Elevation, Inc.
P.O. Box 440889
Aurora, Colorado 80044**

*Prepared under the Provisions of BLM
Cultural Resource Use Permit 89UT62700*

Project Authorization No. U-89-A1-749b

December 1989

EXHIBIT I - Archaeology

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MANAGEMENT SUMMARY

AMPOL Exploration (USA), Inc., plans to construct a well pad and associated access road in San Juan County, Utah. To comply with various historic preservation laws, Powers Elevation, Inc. contracted with Alpine Archaeological Consultants, Inc. to conduct a literature review and intensive pedestrian inventory of the project area. The planned well pad is located on the southern rim of Lake Canyon within a single section. The literature review indicated the presence of one previously recorded site within the project area. In addition, four cultural resource sites and six isolated finds not previously discovered were located and recorded within the 17 acre project area. Three of the four newly recorded sites are evaluated as eligible to the National Register of Historic Places (NRHP).

INTRODUCTION

AMPOL Exploration (USA), Inc. is planning to construct a well pad and associated access road in San Juan County, Utah. The project area is administered by the Bureau of Land Management (BLM). Because federal lands are involved, various historic preservation laws must be addressed, particularly the National Historic Preservation Act (as amended). It is the intent of these laws to identify significant cultural resources and to facilitate their preservation. To comply with these laws, Powers Elevation, Inc. contracted with Alpine Archaeological Consultants, Inc. of Montrose, Colorado to conduct a cultural resource inventory of the lands to be impacted by the planned construction activities.

The archaeological survey was conducted on December 15 and 21, 1989, by Alan D. Reed, Principal Investigator and Field Director, and Rand A. Greubel, Staff Archaeologist, of Alpine Archaeological Consultants, Inc. Notes and photographs produced from this work are on file at Alpine Archaeological Consultants, Inc.

LOCATION AND ENVIRONMENTAL SETTING

The planned well pad and associated access road are located in Section 1, Township 37 South, Range 25 East, Salt Lake City Principal Meridian, in San Juan County, Utah. The project area is within the San Juan Resource Area of the Moab District, Bureau of Land Management. It is located approximately 32 km (20 miles) east of Blanding, Utah (Figure 1).

Geographically, the project area is within the Blanding Basin Section of the Colorado Plateau physiographic province. The region is within the Upper Sonoran life zone, and is characterized by flat tablelands dissected by numerous southwest-trending canyons. The project area is situated on the south edge of Lake Canyon. It consists of a mesa top environment vegetated with pinyon, juniper, Mormon tea, Big sagebrush, rabbitbrush, shadscale, prickly pear cactus and grasses.

CULTURAL SETTING

Four broadly defined cultural stages are recognized for the northern Colorado Plateau, which encompasses southeastern Utah. The first of these is termed the Paleo-Indian Stage (10,000 - 5500 B.C.), which is representative of a series of terminal Pleistocene lifeways focused on big game hunting. Evidence of Paleo-Indian occupation in the region is mostly confined to isolated surface finds of artifacts diagnostic of the stage, though several sites yielding Paleo-Indian artifact assemblages have been reported in eastern Utah (Schroedl 1977; Davis 1985; Davis and Brown 1985). The ensuing Archaic Stage (5500 B.C. - A.D. 1) is representative of an economy embracing the hunting and gathering of a broader variety of modern species of fauna and flora. Sites attributable to this stage are much more common in the region. The advent of horticulture and substantial habitation structures heralds the beginning of the Formative Stage (A.D. 1 - 1300). In this area of southeastern Utah Formative Stage remains are generally affiliated with the Anasazi culture. The Formative Stage lifestyle disappeared from the region by about A.D. 1300. The period of time between the termination of a lifeway based on agriculture and sedentism and the arrival of Europeans is termed the Protohistoric Stage. The stage is characterized by a shift to an economic strategy more similar to the Archaic Stage. Sometime during the Protohistoric Stage the Ute came into the region. They remained the primary inhabitants of southeastern Utah into historic times.

LITERATURE REVIEW

Site file searches were conducted for the project area at the BLM San Juan Resource Area Office in Monticello, Utah and with the State Division of History. The results of the site file search at the Utah State Division of History, conducted by Evie Seelinger on December 14, 1989, indicated a single site, 42SA10768, located within the project area. The site file search at the BLM San Juan Resource Area Office, conducted by Alan D. Reed on December 15, 1989, reaffirmed the results of the state file search. The original site form for site 42SA10768 is included as Appendix B of this report.

STATEMENT OF OBJECTIVES

The primary objective of this project was to minimize the chance that significant cultural resources would be impacted by activities associated with the construction of AMPOL Exploration (USA), Inc. 43-1 Federal well pad and access road. To achieve this objective, it was necessary to conduct a site file search to identify previously recorded cultural resources and to conduct a systematic, pedestrian inspection of all portions of the project area not previously inspected for cultural resources. The criteria employed to assess the significance of recorded cultural resources were those published by the U.S. Government Code of Federal Regulations (36 CFR 60) for determining site eligibility to the National Register of Historic Places. These read as follows:

National Register criteria for evaluation. The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possesses 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 time, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to yield, information important in prehistory or history.

Identification and evaluation of cultural resources in the project area permits formulation of management recommendations. Isolated finds do not meet the criteria for inclusion on the National Register of Historic Places (NRHP) and are not recommended for further archaeological treatment. For significant sites, management options include site avoidance and data recovery.

FIELD METHODS

A cultural resource inventory of a 10-acre parcel surrounding the planned well pad was conducted by two archaeologists on December 15, 1989. The 10-acre parcel was oriented to the cardinal directions and centered on the well pad's center stake. The boundary of the parcel was walked, using a compass for orientation. Parallel sweeps, spaced at 15 m intervals, were conducted across the parcel, again using a compass for orientation. The ground surface was inspected for artifacts and cultural features. Ground visibility was excellent. This survey resulted in the discovery of five cultural resource sites within the impact area of the proposed construction activities. Only one of these sites had been previously recorded. At this time, it was determined by the archaeologists

that the construction of the well pad as originally located would result in adverse effects to significant cultural resources.

Upon the request of Mr. Bob Arceneaux of AMPOL Exploration (USA), Inc., an additional seven acres abutting the project area on the south was surveyed for cultural resources. This work was authorized by Marcia Tate of Powers Elevation, Inc. and, with the permission of Dale Davidson of the San Juan Resource Area Office, BLM, conducted under the same Project Authorization as the original 10-acre parcel, on December 21, 1989. No additional cultural resource sites were located within this 7-acre parcel. Consequently, the center stake for the AMPOL Exploration (USA), Inc. 43-1 Federal well pad was moved to a location within this 7-acre parcel where it was determined by the archaeologists that the planned construction activities would not impact any of the five cultural resource sites recorded for the project.

In addition to the 17 acres described above, a flagged access road corridor of approximately 120 m (400 ft) in length was surveyed to a width of 30 m, leading from a developed gravel road to the south to the edge of the planned well pad. No cultural resources were located.

RESULTS

The field inspection of the 17 acre project area resulted in the discovery and recordation of four prehistoric sites and six prehistoric isolated finds. In addition, a previously recorded site was located and examined. No additional work was conducted at the location of the previously recorded site. The original site form for this site, 42SA10768, is included as Appendix B of this report. Locations of all sites and isolated finds are depicted in Figure 1. All other site forms are included as Appendix A.

Descriptions of Sites

Site 42SA10768

Site 42SA10768, recorded by Diana Christenson during the cultural resource survey for the Sefel Seismic Line, consists of a rubble mound interpreted as the remains of a small room block, with an adjacent depression and midden area. Though the site was originally evaluated as ineligible to the National Register of Historic Places (NRHP) because of impacts from chaining, it appears that much of the site remains intact. This site is located 20 m east of 42SA21139. A projectile point was found about 40 m south of this site; it was field sketched but not collected. An illustration of this artifact is included with the site form for 42SA10768 in Appendix B of this report.

Site 42SA21139

Site 42SA21139 consists of a rubble mound interpreted as the remains of a small masonry room block, surrounded by a midden area and a dispersed scatter of sherds and lithic debitage. The entire site area measures approximately 120 m north-south by 80 m east-west. The rubble mound measures 15 m north-south by 10 m east-west. It is about 50 cm high and consists of cobble and boulder-sized sandstone blocks, not pecked or ground. No wall alignments are evident. From 20 to 100 cm of cultural fill is estimated to be present. Though the site area has been subjected to chaining, the site appears to retain much subsurface integrity. Based on the ceramics, a late Pueblo II affiliation seems likely.

Site 42SA21140

Site 42SA21140 consists of 3 concentrations of rubble, sherds and lithics and 1 concentration of sandstone blocks, burned jacal, sherds, lithics and a single cobble mano, all surrounded by an area of dispersed lithics and pot sherds. The site is located on a small ridge crest about 50 meters from the rim of Lake Canyon. It measures 70 m north-south by 50 m east-west. The smear of burned jacal

and sandstone blocks, interpreted as the remains of a structure, measures approximately 3 m by 3 m. The other rubble concentrations measure approximately 1 m by 1 m, 4 m by 4 m, and 7 m by 7 m. From 20 to 100 cm of cultural fill is estimated to be present. Though the site area has been chained, intact subsurface cultural deposits appear to be present. The ceramics suggest a Pueblo I occupation.

Site 42SA21141

Site 42SA21141 is a rockshelter located beneath the caprock on the southern edge of Lake Canyon, containing a massive, dry-laid masonry wall and a smaller wall. The entire alcove measures 11 m north-south by 7 m east-west. The large wall measures 3 m long by 60 cm high and is comprised of nine courses of cobble and boulder-sized sandstone blocks. The smaller wall or alignment, no higher than 2 courses, incorporates large roof-fall boulders. Neither wall extends beyond the dripline. Artifacts present include a quartzite hammerstone, a quartzite core, an unshaped sandstone milling slab and two unidentified grayware sherds. Charcoal fragments are present on the surface within the alcove and visible in a 10 cm rodent-dug soil profile. Soil deposition is estimated as substantial. Cultural affiliation is unknown.

Site 42SA21142

Site 42SA21142 consists of a rockshelter with masonry (Structure 1) and a masonry room built against an open boulder 20 m eastward (Structure 2). The alcove in which Structure 1 is situated is 13 m across, 4.5 m deep, and a maximum of 1.7 m high. The ceiling is only 50 cm high near the masonry, which is a curving wall, 8 courses high, of dry-laid, unmodified sandstone blocks. It is about 2 m long, resting on a floor of eroded sandstone bedrock and shallow saprolitic soil. No artifacts were observed within or near Structure 1. It probably served as a storage structure. Structure 2 is located about 20 m east of the alcove. It is built against a large, detached boulder, beneath a slight overhang. The room measures 2.5 m by 3 m. The western wall is the best preserved, standing a maximum of 1.2 m high with 10 courses of sandstone blocks. If mortar was originally present, it has since eroded away. Several flakes of chert and quartzite, a chert hammerstone, and a Chapin Gray rim sherd were observed near Structure 2. As with Structure 1, however, soil deposition appears minimal. Based on the architecture, a Pueblo II-III affiliation seems likely.

Descriptions of Isolated Finds

Isolated Find #1

IF #1 consists of one unidentified grayware sherd.

Isolated Find #2

IF #2 consists of one fragment of brown chert debris.

Isolated Find #3

IF #3 consists of one unidentified corrugated jar sherd, one Mesa Verde Black-on-white jar sherd, and one Mancos corrugated jar rim sherd.

Isolated Find #4

IF #4 consists of one quartzite tertiary flake fragment, one quartzite tertiary complete flake, one quartzite primary complete flake, and one chert secondary flake fragment.

Isolated Find #5

IF #5 consists of one quartzite tertiary broken flake and one unidentified grayware sherd.

Isolated Find #6

IF #6 consists of one Mesa Verde Black-on-white bowl rim sherd.

EVALUATION OF CULTURAL RESOURCES

Sites 42SA10768, 42SA21139, 42SA21140, and 42SA21141 are evaluated as eligible to the National Register of Historic Places (NRHP). These sites retain a good deal of integrity and have the potential to contribute additional, significant information concerning the prehistory of the area. Thus, they are eligible to the NRHP under criterion "d" because they may yield important prehistoric information.

Site 42SA21142 is evaluated as ineligible to the National Register of Historic Places. Though the site has suffered little disturbance, the shallow soil depth, presence of large expanses of exposed bedrock, and paucity of observed artifacts suggest that this site lacks the potential to contribute additional, significant prehistoric information.

SUMMARY AND MANAGEMENT RECOMMENDATIONS

The cultural resource inventory of 17 acres and approximately 120 m (400 ft) of access road associated with the planned AMPOL Exploration (USA), Inc. 43-1 Federal well pad resulted in the discovery and recordation of four prehistoric cultural resource sites and six prehistoric isolated finds. In addition, a previously recorded prehistoric site was relocated and examined.

As initially proposed, the center stake for the planned 43-1 Federal well pad was located within site 42SA21139, only 20 m from the remains of a Pueblo II unit pueblo. Upon surveying a 10-acre parcel surrounding the center stake, the archaeologists determined that any location for the well pad within the 10 acres is unsuitable because construction would result in adverse effects to significant cultural resources. Therefore, an additional 7 acres contiguous to the original 10 acres on the south were surveyed for cultural resources at the request of Mr. Bob Arceneaux of AMPOL Exploration (USA), Inc. No cultural resource sites were located on the 7-acre parcel. A new center stake location was selected by Bill Mahnke of Powers Elevation, Inc. on the 7-acre parcel. Since construction activities will impact only 53 m (175 ft) of ground from the center stake to the north, the archaeologists determined that a buffer of 59 m (194 ft) will be present between any ground disturbing activity and the closest site, 42SA21140. Therefore, implementation of the well pad construction program and construction of associated access road will not impact any significant cultural resources; mitigation has been achieved by avoidance. No additional archaeological work is recommended for the project area.

REFERENCES CITED

- Schroedl, Alan R.
1977 The Paleo-Indian Period on the Colorado Plateau. *Southwestern Lore* 43(3): 1-9.
- Davis, Bill
1985 The Montgomery Folsom Site. *The UPAC News* 3(1): 4-5. Utah Professional Archaeological Council.
- Davis, William E. and Gary M. Brown
1985 The Lime Ridge Clovis Site. Ms. on file at Abajo Archaeology, Bluff, UT.

APPENDIX A

Site Forms

IMACS SITE FORM

Part A - Administrative Data

INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM

Form approved for use by

BLM - Utah, Idaho, Wyoming

Division of State History - Utah, Wyoming

USFS - Intermountain Region

NPS - Utah, Wyoming

*1. State No. 42Sa21139

*2. Agency No. _____

3. Temp. No. 1

4. State Utah County San Juan

5. Project Proposed AMPOL Exploration 43-1 Federal well pad

*6. Report No. _____

7. Site Name _____

8. Class Prehistoric Historic Paleontologic Ethnographic

9. Site Type surface pueblo

*10. Elevation 6330 ft.

*11. UTM Grid Zone 12 6,6,6,4,5,0 m E 4,1,6,2,2,6,0 m N

*12. NE of SE of SE of Section 1 T. 37S R. 25E

*13. Meridian Salt Lake

*14. Map Reference Monument Canyon (1957) 15' series

15. Aerial Photo _____

16. Location and Access The site is located 75m southeast of the southern rim of Lake Canyon, 117 m west of a section line fence representing the E section line of section 1, T37S, R25E. A dirt road runs adjacent and parallel to the fence.

*17. Land Owner USDI Bureau of Land Management

*18. Federal Administrative Units Moab District

San Juan Resource Area

*19. Management Unit (USFS only) _____

20. Site Description The site consists of a single rubble mound and a broad scatter of potsherds and lithic debitage. Chaining of the site area is believed to be responsible for much of the dispersal of artifacts, which extend from the rubble mound north to the canyon rim and about 50 m to the south.

*21. Site Condition Excellent (A) Good (B) Fair (C) Poor (D)

*22. Impact Agent(s) The site area has been chained.

*23. National Register Status Significant (C) Non-Significant (D) Unevaluated (Z)

Justify Despite chaining, the rubble mound may retain intact cultural deposits that may provide information important to prehistory.

24. Photos Powers - 89 - 1#1-3

25. Recorded by Alan D. Reed and Rand A. Greubel

26. Survey Organization Alpine Archaeological Consultants, Inc. *28. Survey Date 12-15-89

27. Assisting Crew Members _____

Part B - Prehistoric Sites

Site No.(s) 42SA21139

TS-1

1. Site Type Pueblo

CULTURAL AFFILIATION DATING METHOD CULTURAL AFFILIATION DATING METHOD

2. Culture Anasazi-PII ceramics

3. Site Dimensions 120 m X 80 m *Area 7540 sq. m

4. Surface Collection/Method None (A) Designed Sample (C)
 Grab Sample (B) Complete Collection (D)

Sampling Method _____

5. Estimated Depth of Cultural Fill Surface (A) 20 - 100 cm Fill noted but unknown (E)
 0 - 20 cm (B) 100 cm + Depth Suspected, but not tested (F)

How Estimated inspection of rubble mound
 (If tested, show location on site map)

6. Excavation Status Excavated (A) Tested (B) Unexcavated (C)
 Testing Method _____

7. Summary of Artifacts and Debris (Refer to Guide for additional categories)

Lithic Scatter (LS) Isolated Artifact (IA) Burned Stone (BS) Bone Scatter (WB)
 Ceramic Scatter (CS) Organic Remains (VR) Ground Stone (GS) Charcoal Scatter (CA)
 Basketry/Textiles (BT) Shell (SL) Lithic Source(s): _____

Describe Lithics and ceramic sherds are dense in a narrow zone surrounding the rubble mound. Dispersed sherds and lithics probably associated with the pueblo extend almost to the canyon rim to the north and west as well as approximately 50 m to the south and 20 m to the east.

8. Lithic Tools # TYPE # TYPE

0 _____ _____ _____ _____

Describe _____

9. Lithic Debitage - Estimated Quantity None (A) 10 - 25 (C) 100 - 500 (E)
 1 - 9 (B) 25 - 100 (D) 500 + (F)

Material Type chert and quartzite

Flaking Stages (0) Not Present (1) Rare (2) Common (3) Dominant
 Decortication 1 Secondary 1 Tertiary 3 Shatter 1 Core 0

10. Maximum Density - # / sq m (all lithics) 4



Site 42Sa21139. Overview of site area, edge of rubble mound at left.
Arrow pointing north.

425a 21139

Temp. No. TS-1

12-15-89

KEY

 = Room Block / Rubble Mound

 = Depression

 = Rimrock Edge

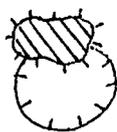
 = Site Boundary

 = Form (Contour) Line

 = Original Location of
Center Stake for AMPOL Exploration
(USA) Inc 43-1 Federal (proposed)

 = Fence / E section line of Sec. 1,
T37S, R25E

425a 10768

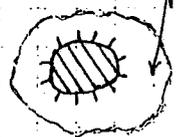



20 meters

TS-4
425a 21142



Zone of
dense artifacts

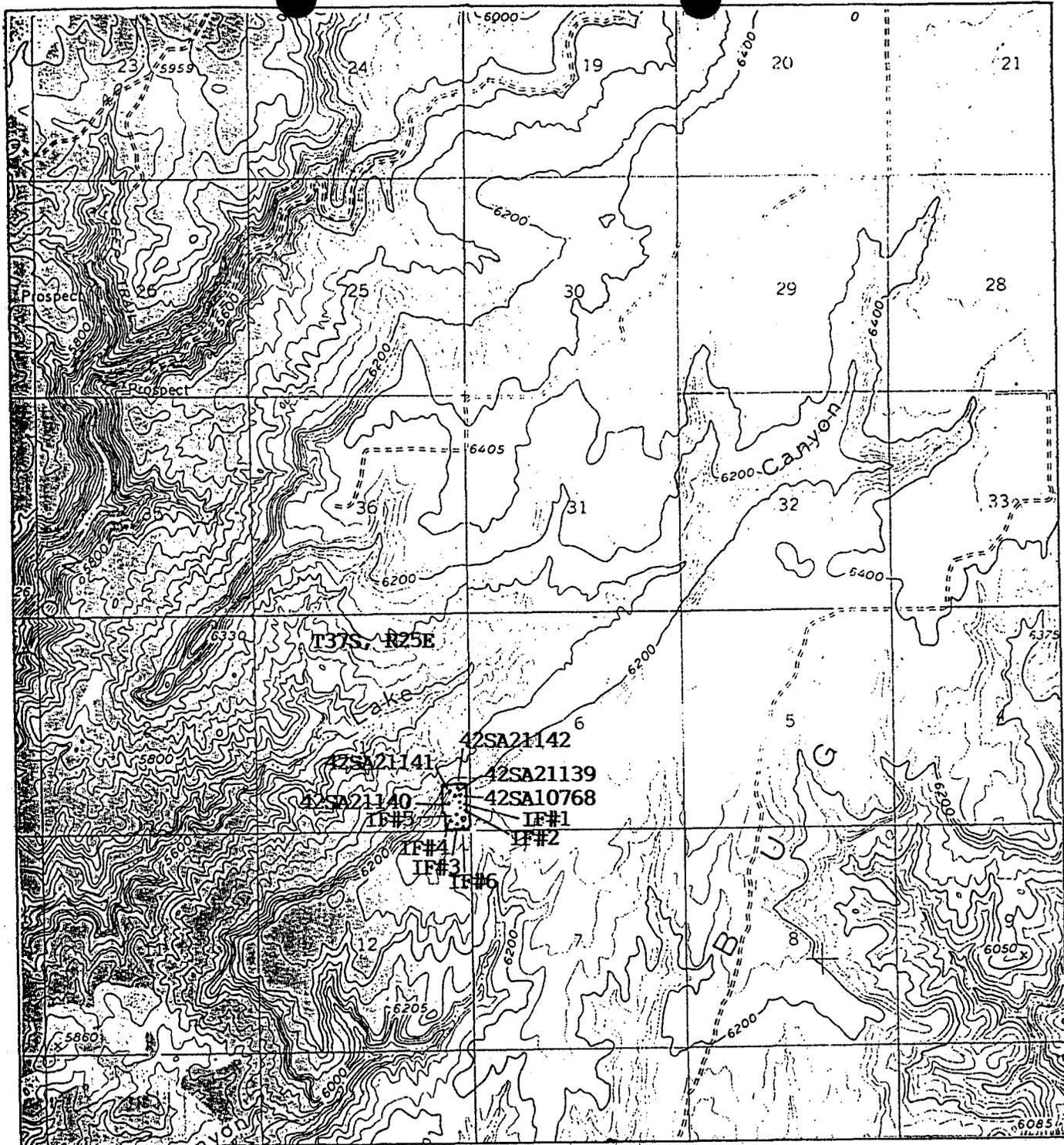


425a 21140

Location of
Rockshelter
(not to scale)

TS-3
425a 21141





Enlargement from U.S.G.S. Monument Canyon, Utah 15' Quadrangle (1957)



 = Area Surveyed

- = AMPOL Exploration (USA), Inc. 43-1 Federal well pad
- = Cultural Resource (Site or Isolated Find)



IMACS SITE FORM

Part A - Administrative Data

INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM

Form approved for use by

BLM - Utah, Idaho, Wyoming

Division of State History - Utah, Wyoming

USFS - Intermountain Region

NPS - Utah, Wyoming

*1. State No. 42SA21140

*2. Agency No. _____

3. Temp. No. 2

4. State Utah

County San Juan

5. Project Cultural Resource Survey proposed AMPOL Exploration 43-1 Federal

*6. Report No. _____

7. Site Name _____

8. Class Prehistoric Historic Paleontologic Ethnographic

9. Site Type surface pueblo

*10. Elevation 6340 ft.

*11. UTM Grid Zone 12 6,6,6,4,4,0 m E 4,1,6,2,2,0,0 m N

*12. NE of SE of SE of Section 1 T. 37 S R. 25 E

*13. Meridian Salt Lake

*14. Map Reference Monument canyon (1957) 15' series

15. Aerial Photo _____

16. Location and Access The site is located about 50 m southeast of the southern rim of Lake Canyon and about 140 m west of the E section line of section 1, T37S, R25E. A fence is on the section line and a dirt road runs adjacent and parallel to the fence.

*17. Land Owner USDI Bureau of Land Management

*18. Federal Administrative Units Moab District

San Juan Resource Area

*19. Management Unit (USFS only) _____

*20. Site Description The site consists of several concentrations of jacal, sandstone cobbles and artifacts (lithics and ceramics), located along the crest of a small ridge set back from and roughly paralleling the canyon rim.

*21. Site Condition Excellent (A) Good (B) Fair (C) Poor (D)

*22. Impact Agent(s) The site area has been chained.

*23. National Register Status Significant (C) Non-Significant (D) Unevaluated (Z)

Justify Intact subsurface cultural deposits are probably still present.

24. Photos Powers-89-1 #4-5

25. Recorded by Alan D. Reed

*26. Survey Organization Alpine Archaeological Consultants

*28. Survey Date 12-15-89

27. Assisting Crew Members Rand A. Greubel

Part B - Prehistoric Sites

Site No.(s) 42SA21140

TS-2

1. Site Type Pueblo

CULTURAL AFFILIATION _____ DATING METHOD _____ CULTURAL AFFILIATION _____ DATING METHOD _____

2. Culture Anasazi Ceramics
Describe _____

3. Site Dimensions 70 m X 50 m *Area 2749 sq. m

4. Surface Collection/Method None (A) Designed Sample (C)
 Grab Sample (B) Complete Collection (D)
Sampling Method _____

5. Estimated Depth of Cultural Fill Surface (A) 20 - 100 cm Fill noted but unknown (E)
 0 - 20 cm (B) 100 cm + Depth Suspected, but not tested (F)
How Estimated inspection of rubble and local soil characteristics
(If tested, show location on site map)

6. Excavation Status Excavated (A) Tested (B) Unexcavated (C)
Testing Method _____

7. Summary of Artifacts and Debris (Refer to Guide for additional categories)

- Lithic Scatter (LS) Isolated Artifact (IA) Burned Stone (BS) Bone Scatter (WB)
- Ceramic Scatter (CS) Organic Remains (VR) Ground Stone (GS) Charcoal Scatter (CA)
- Basketry/Textiles (BT) Shell (SL) Lithic Source(s): _____

Describe Several concentrations of sherds and lithics are present. A single ground stone item was noted.

*8. Lithic Tools

#	TYPE	#	TYPE
<u>1</u>	<u>ground stone</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

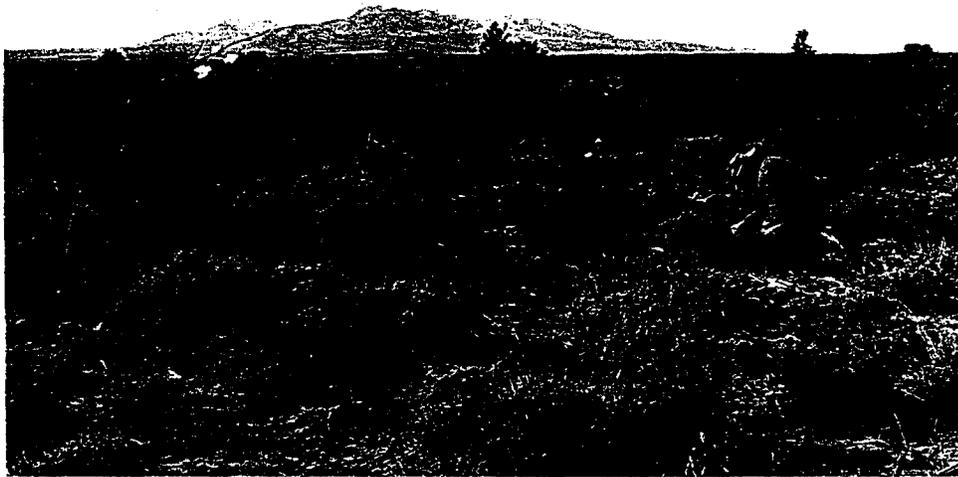
Describe One quartzite river cobble with a ground facet was found.

*9. Lithic Debitage - Estimated Quantity None (A) 10 - 25 (C) 100 - 500 (E)
 1 - 9 (B) 25 - 100 (D) 500 + (F)

Material Type Chert, quartzite, and obsidian (Polvadera Peak)

Flaking Stages (0) Not Present (1) Rare (2) Common (3) Dominant
Decortication 1 Secondary 2 Tertiary 3 Shatter 2 Core 0

10. Maximum Density - # / sq m (all lithics) 6



Site 42Sa21140. Overview of site, arrow pointing north.

425a21141
TS-3

425a 21139
TS-1

425a10768

Temp. No. TS-2

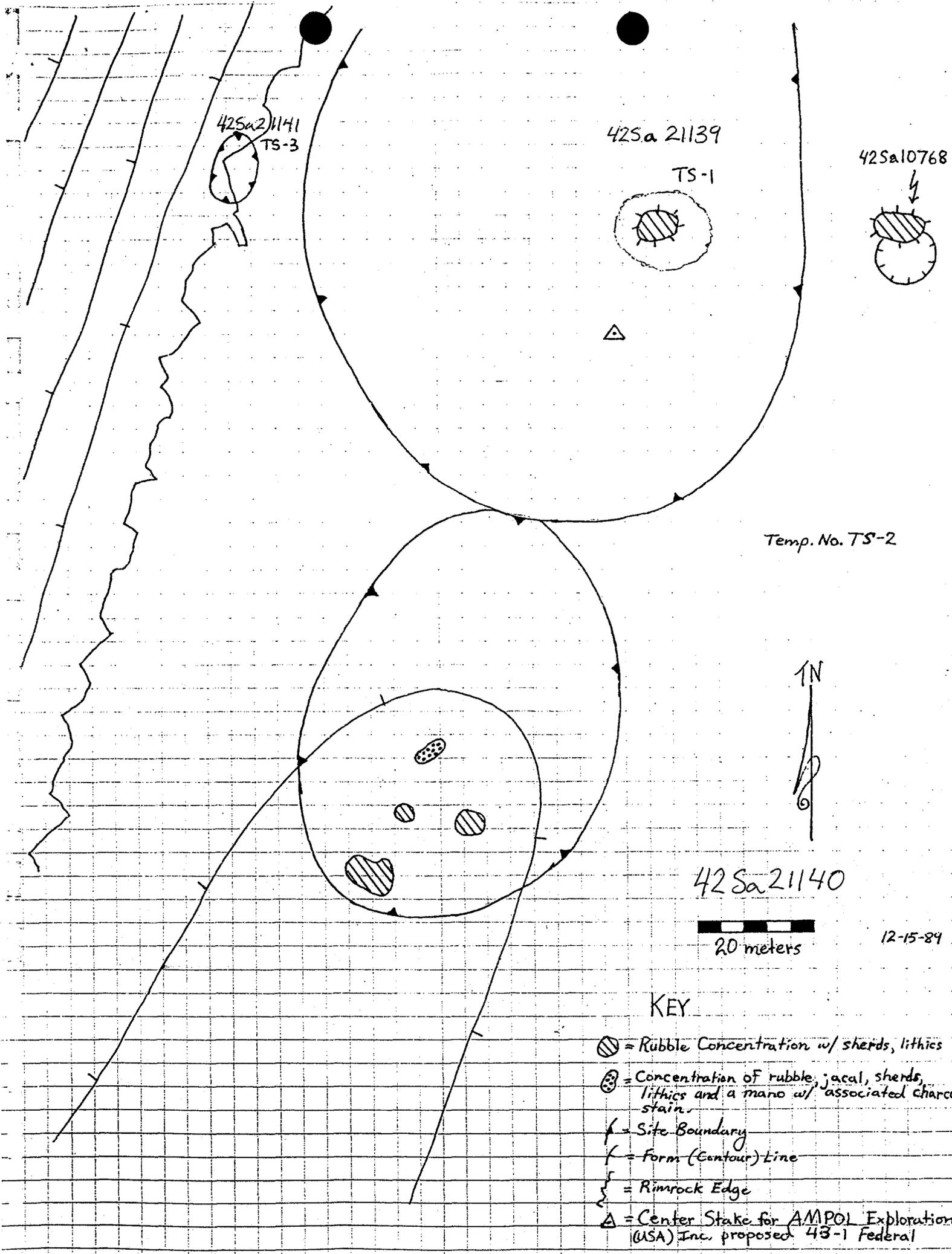
425a21140

20 meters

12-15-84

KEY

- ⊖ = Rubble Concentration w/ sherds, lithics
- ⊕ = Concentration of rubble, jocal, sherds, lithics and a mano w/ associated charcoal stain
- ⌞ = Site Boundary
- ⌞ = Form (Contour) Line
- ⌞ = Rimrock Edge
- △ = Center Stake for AMPOL Exploration (USA) Inc. proposed 43-1 Federal



IMACS SITE FORM

Part A - Administrative Data

INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM

Form approved for use by

BLM - Utah, Idaho, Wyoming

Division of State History - Utah, Wyoming

USFS - Intermountain Region

NPS - Utah, Wyoming

*1. State No. 42SA21141

*2. Agency No. _____

3. Temp. No. TS-3

4. State Utah County San Juan

5. Project proposed AMPOL Exploration 43-1 Federal well pad

*6. Report No. _____

7. Site Name _____

8. Class Prehistoric Historic Paleontologic Ethnographic

9. Site Type Monument Canyon (1957) 15' series

*10. Elevation 6300 ft.

*11. UTM Grid Zone 1,2 6,6,6,4,2,0 m E 4,1,6,2,2,8,0 m N

*12. NE of SE of SE of Section 1 T. 37S R. 25E

*13. Meridian Salt Lake

*14. Map Reference Monument Canyon (1957) 15' series

15. Aerial Photo _____

*16. Location and Access The site is located beneath the rimrock edge of the southern rim of Lake Canyon.

*17. Land Owner USDI Bureau of Land Management

*18. Federal Administrative Units Moab District San Juan Resource Area

*19. Management Unit (USFS only) _____

20. Site Description The site consists of a sheltered alcove beneath an overhang of sandstone caprock on the rim of a large canyon. A massive wall of dry laid masonry is within the shelter. A smaller sandstone cobble alignment seems to form a second wall. Artifacts include a hammerstone, a millingstone, a quartzite core, and 2 grayware sherds. Charcoal fragments are present on the surface within the shelter.

*21. Site Condition Excellent (A) Good (B) Fair (C) Poor (D)

*22. Impact Agent(s) _____

*23. National Register Status Significant (C) Non-Significant (D) Unevaluated (Z)

Justify The site appears unvandalized and retains good integrity. Intact subsurface cultural deposits are probably present.

24. Photos Powers-89-1 #6-10

25. Recorded by Alan D. Reed, Rand A. Greubel

*26. Survey Organization Alpine Archaeological Consultants, Inc. *28. Survey Date 12-15-89

27. Assisting Crew Members _____

Part B - Prehistoric Sites

Site No.(s) 42SA21141

TS-3

1. Site Type Rockshelter with a wall

CULTURAL AFFILIATION _____ DATING METHOD _____ CULTURAL AFFILIATION _____ DATING METHOD _____

2. Culture unknown.
Describe _____

3. Site Dimensions 12 m X 8 m *Area 75 sq. m

4. Surface Collection/Method None (A) Designed Sample (C)
 Grab Sample (B) Complete Collection (D)
Sampling Method _____

5. Estimated Depth of Cultural Fill Surface (A) 20 - 100 cm Fill noted but unknown (E)
 0 - 20 cm (B) 100 cm + Depth Suspected, but not tested (F)
How Estimated _____
(If tested, show location on site map)

6. Excavation Status Excavated (A) Tested (B) Unexcavated (C)
Testing Method _____

7. Summary of Artifacts and Debris (Refer to Guide for additional categories)
 Lithic Scatter (LS) Isolated Artifact (IA) Burned Stone (BS) Bone Scatter (WB)
 Ceramic Scatter (CS) Organic Remains (VR) Ground Stone (GS) Charcoal Scatter (CA)
 Basketry/Textiles (BT) Shell (SL) Lithic Source(s): _____
Describe see items #8, #9, and #11

#	TYPE	#	TYPE
<u>1</u>	<u>hammerstone</u>	_____	_____
<u>1</u>	<u>millingstone</u>	_____	_____

Describe One quartzite core, one quartzite hammerstone and one sandstone slab unmodified except by grinding were found within the rockshelter. The hammerstone and the millingstone were within the area encompassed by the wall.

*9. Lithic Debitage - Estimated Quantity None (A) 10 - 25 (C) 100 - 500 (E)
 1 - 9 (B) 25 - 100 (D) 500 + (F)
Material Type Quartzite
Flaking Stages (0) Not Present (1) Rare (2) Common (3) Dominant
Decortication 0 Secondary 0 Tertiary 0 Shatter 0 Core 3

10. Maximum Density - # / sq m (all lithics) 2

Part B - Prehistoric Sites

Site No.(s) 42SA21141

*11. Ceramic Artifacts	#	TYPE	#	TYPE
	<u>2</u>	<u>Unidentified grayware</u>		

Describe Two eroded unidentified grayware sherds were found just beyond the dripline.

12. Maximum Density - # / sq m (ceramics) 2

*13. Non-Architectural Features (locate on site map) - See Guide for additional categories

- | | | | |
|--|--|---|---|
| <input type="checkbox"/> Hearth/Firepit (HE) | <input type="checkbox"/> Rubble Mound (RM) | <input type="checkbox"/> Earthen Mound (EM) | <input type="checkbox"/> Water Control (WC) |
| <input type="checkbox"/> Midden (MD) | <input type="checkbox"/> Stone Circle (SC) | <input type="checkbox"/> Burial (BU) | <input type="checkbox"/> Petroglyph (PE) |
| <input type="checkbox"/> Depression (DE) | <input type="checkbox"/> Rock Alignment (RA) | <input type="checkbox"/> Talus Pit (TP) | <input type="checkbox"/> Pictograph (PI) |

Describe Charcoal chunks are present on the rockshelter floor and in the 10 cm soil profile resultant from rodent activity.

*14. Architectural Features (locate on site map)

#	MATERIAL	TYPE	#	MATERIAL	TYPE
<u>2</u>	<u>masonry</u>	<u>wall</u>			

Describe A masonry wall, dry laid, 3 m long by 60 cm high, is present within the rockshelter. Block size varies from sandstone cobble to very large boulders that probably represent roof fall. Nine courses are present at the back wall. Wall ends at roof-fall boulders just under dripline. Another 1 course-high alignment, probably representing a wall, is present just inside the dripline in the shelter's southern portion.

15. Comments / Continuations

From the rimrock edge above the shelter, a rubble mound representing a small room block is located approximately 70 m @ 97 degrees TN.



Site 42Sa21141. Overview of rockshelter with masonry wall.
Looking north-northeast.

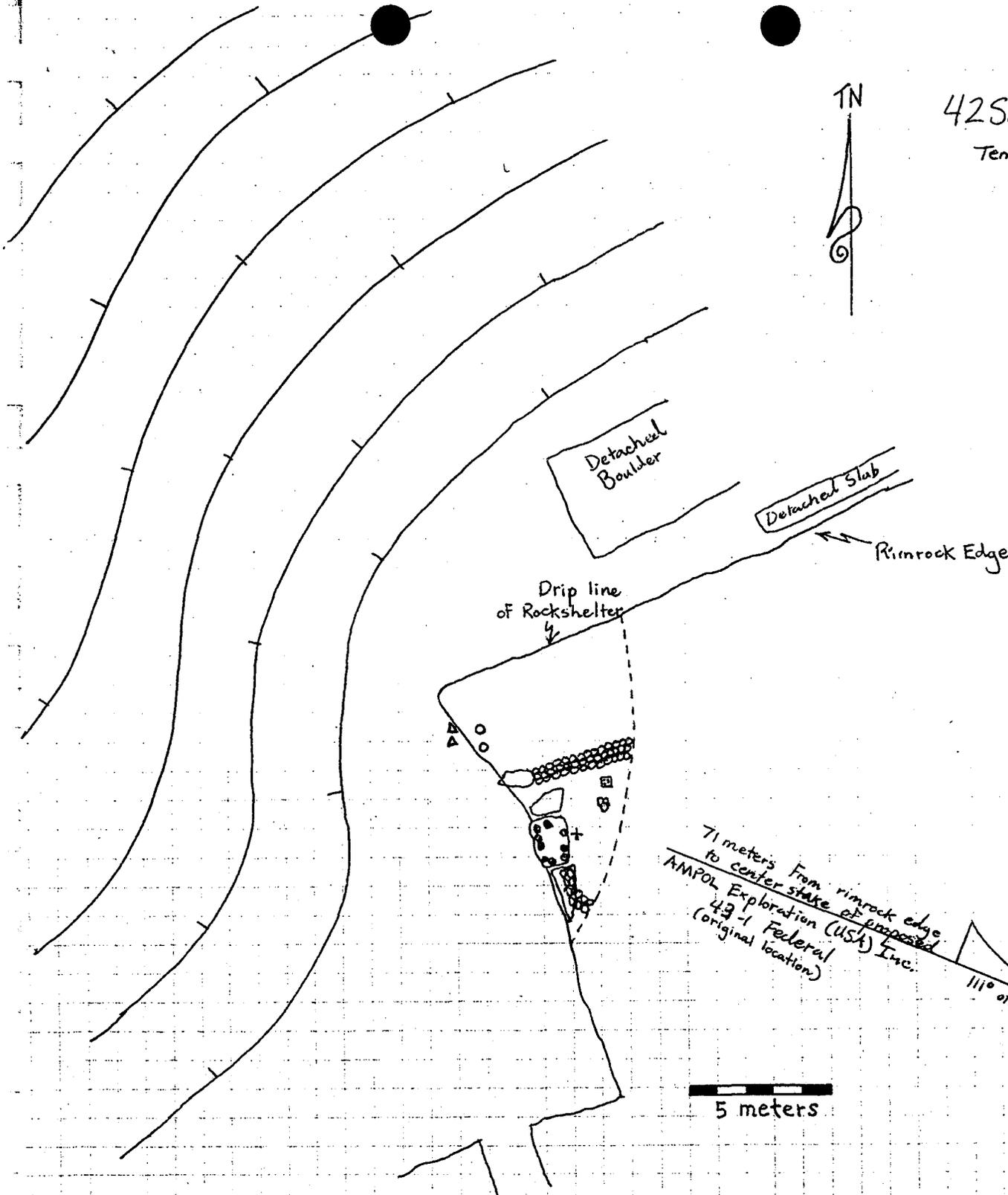


Site 42Sa21141. Rockshelter with masonry wall.
Looking north-northeast.



Site 42Sa21141. Masonry wall beneath overhang. Looking south.

425a 21141
Temp. No. TS-3



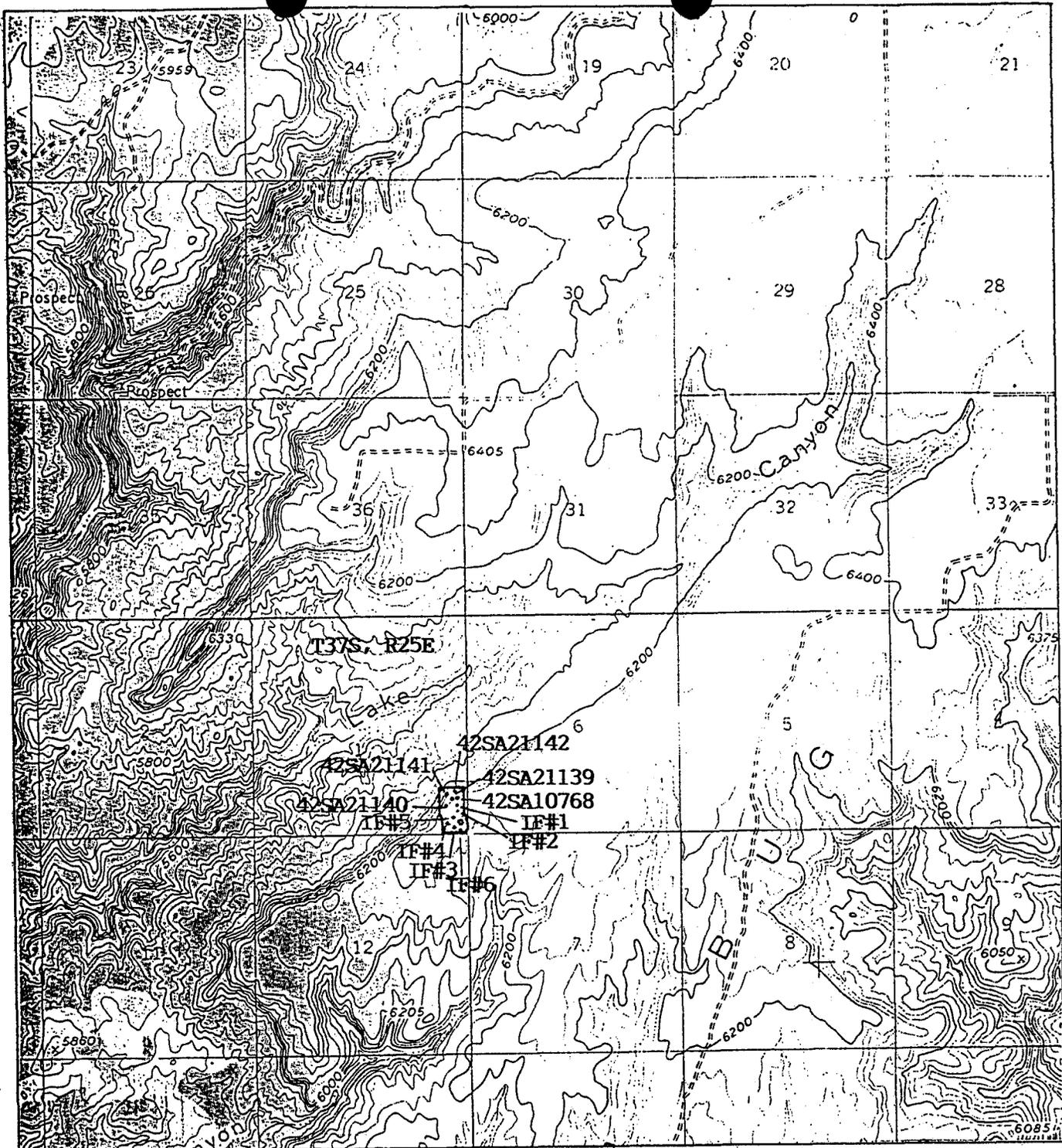
71 meters From rimrock edge
to center stake of proposed
AMPOL Exploration (USA) Inc.
49-1 Federal
(original location)

5 meters

KEY

- ⊞, ⊞⊞ = masonry wall (schematic representation)
- = Large Slab
- + = Hammerstone
- = Lithic Artifact
- △ = Ceramic Sherd
- ⊞ = Sandstone Slab Feature
- = Individual Stones in Rock Alignment
- = Groundstone

12-15-89



Enlargement from U.S.G.S. Monument Canyon, Utah 15' Quadrangle (1957)

0 3000
 FEET

0 1000
 METERS

 = Area Surveyed

• = AMPOL Exploration (USA), Inc.
 43-1 Federal well pad

• = Cultural Resource (Site or Isolated Find)

NORTH



IMACS SITE FORM

Part A - Administrative Data

INTERMOUNTAIN ANTIQUITIES COMPUTER SYSTEM

Form approved for use by

BLM - Utah, Idaho, Wyoming

Division of State History - Utah, Wyoming

USFS - Intermountain Region

NPS - Utah, Wyoming

*1. State No. 42SA21142

*2. Agency No. _____

3. Temp. No. 4

4. State Utah

County San Juan

5. Project proposed AMPOL Exploration 43-1 Federal Well Pad

*6. Report No. _____

7. Site Name _____

8. Class Prehistoric Historic Paleontologic Ethnographic

9. Site Type masonry room and rockshelter with masonry structure

*10. Elevation 6300 ft.

*11. UTM Grid Zone 1, 2 6, 6, 6, 5, 0, 0 m E 4, 1, 6, 2, 3, 2, 0 m N

*12. NE of SE of SE of Section 1 T. 37S R. 25E

*13. Meridian Salt Lake

*14. Map Reference Monument Canyon (1957) 15' series

15. Aerial Photo _____

16. Location and Access The site is located along the caprock of the southern rim of Lake Canyon, 120 m west of the E section line of section 1, T37S, R25E. A dirt road runs adjacent and parallel to the fence.

*17. Land Owner USDI Bureau of Land Management

*18. Federal Administrative Units Moab District

San Juan Resource Area

*19. Management Unit (USFS only) _____

20. Site Description The site consists of a rockshelter with masonry termed Structure 1, and a masonry room built against an open boulder under a slight overhang 20 m eastward, termed Structure 2. A few chipped stone artifacts and sherds are also present. The alcove in which Structure 1 is located is 13 m across, 4.5 m deep, and a maximum of 1.7 m high. The ceiling is only 150 cm near the masonry. Masonry is dry-laid, unmodified sandstone blocks. A maximum of 8 courses remain. The 2 m long wall is slightly curved. The floor is eroded sandstone bedrock on saprolithic soil. A possible wall, consisting of rubble, is 3.5 m east of the definite wall. No artifacts are present in Structure 1. It probably served as a storage structure.

*21. Site Condition Excellent (A) Good (B) Fair (C) Poor (D)

*22. Impact Agent(s) The walls have eroded somewhat.

*23. National Register Status Significant (C) Non-Significant (D) Unevaluated (Z)

Justify Both structures have little subsurface potential. Low research value suggests that the site is ineligible to the National Register of Historic Places.

24. Photos Powers-89-2, #1-4

25. Recorded by Alan D. Reed, Rand A. Greubel

26. Survey Organization Alpine Archaeological Consultants, Inc. *28. Survey Date 12-21-89

27. Assisting Crew Members _____

Part B - Prehistoric Sites

Site No.(s) 42SA21142

TS-4

1. Site Type Masonry room and rockshelter with masonry structure

CULTURAL AFFILIATION Pueblo II-III DATING METHOD Architecture

2. Culture Describe _____

3. Site Dimensions 12 m X 35 m *Area 330 sq. m

4. Surface Collection/Method None (A) Designed Sample (C)
 Grab Sample (B) Complete Collection (D)

Sampling Method _____

5. Estimated Depth of Cultural Fill Surface (A) 20 - 100 cm Fill noted but unknown (E)
 0 - 20 cm (B) 100 cm + Depth Suspected, but not tested (F)

How Estimated inspection of site surface
(If tested, show location on site map)

6. Excavation Status Excavated (A) Tested (B) Unexcavated (C)

Testing Method _____

7. Summary of Artifacts and Debris (Refer to Guide for additional categories)

Lithic Scatter (LS) Isolated Artifact (IA) Burned Stone (BS) Bone Scatter (WB)
 Ceramic Scatter (CS) Organic Remains (VR) Ground Stone (GS) Charcoal Scatter (CA)
 Basketry/Textiles (BT) Shell (SL) Lithic Source(s): _____

Describe A small number of flakes and sherds were found near structure 2.

*8. Lithic Tools

#	TYPE	#	TYPE
<u>1</u>	<u>hammerstone</u>	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Describe One chert hammerstone was found near Structure 2.

*9. Lithic Debitage - Estimated Quantity None (A) 10 - 25 (C) 100 - 500 (E)
 1 - 9 (B) 25 - 100 (D) 500 + (F)

Material Type Quartzite and chert

Flaking Stages (0) Not Present (1) Rare (2) Common (3) Dominant
Decortication 0 Secondary 1 Tertiary 3 Shatter 0 Core 0

10. Maximum Density - # / sq m (all lithics) 3

Part B - Prehistoric Sites

Site No.(s) 42SA21142

TS-4
TYPE

*11. Ceramic Artifacts	#	TYPE	#	TYPE
	<u>1</u>	<u>Chapin Gray</u>		

Describe One Chapin Gray jar rim sherd was found near Structure 2.

12. Maximum Density - # / sq m (ceramics) 1

- *13. Non-Architectural Features (locate on site map) - See Guide for additional categories
- | | | | |
|--|--|---|---|
| <input type="checkbox"/> Hearth/Firepit (HE) | <input type="checkbox"/> Rubble Mound (RM) | <input type="checkbox"/> Earthen Mound (EM) | <input type="checkbox"/> Water Control (WC) |
| <input type="checkbox"/> Midden (MD) | <input type="checkbox"/> Stone Circle (SC) | <input type="checkbox"/> Burial (BU) | <input type="checkbox"/> Petroglyph (PE) |
| <input type="checkbox"/> Depression (DE) | <input type="checkbox"/> Rock Alignment (RA) | <input type="checkbox"/> Talus Pit (TP) | <input type="checkbox"/> Pictograph (PI) |
- Describe None

*14. Architectural Features (locate on site map)

#	MATERIAL	TYPE	#	MATERIAL	TYPE
<u>1</u>	<u>masonry</u>	<u>single room</u>			
<u>1</u>	<u>masonry</u>	<u>storage</u>			

Describe Structure 1 is a dry-laid masonry wall beneath an overhang. Structure 2 may have been a wet-laid wall; it abuts a large boulder.

15. Comments / Continuations

The site, located on a slope, is eroded. Intact cultural deposits are probably not extensive.



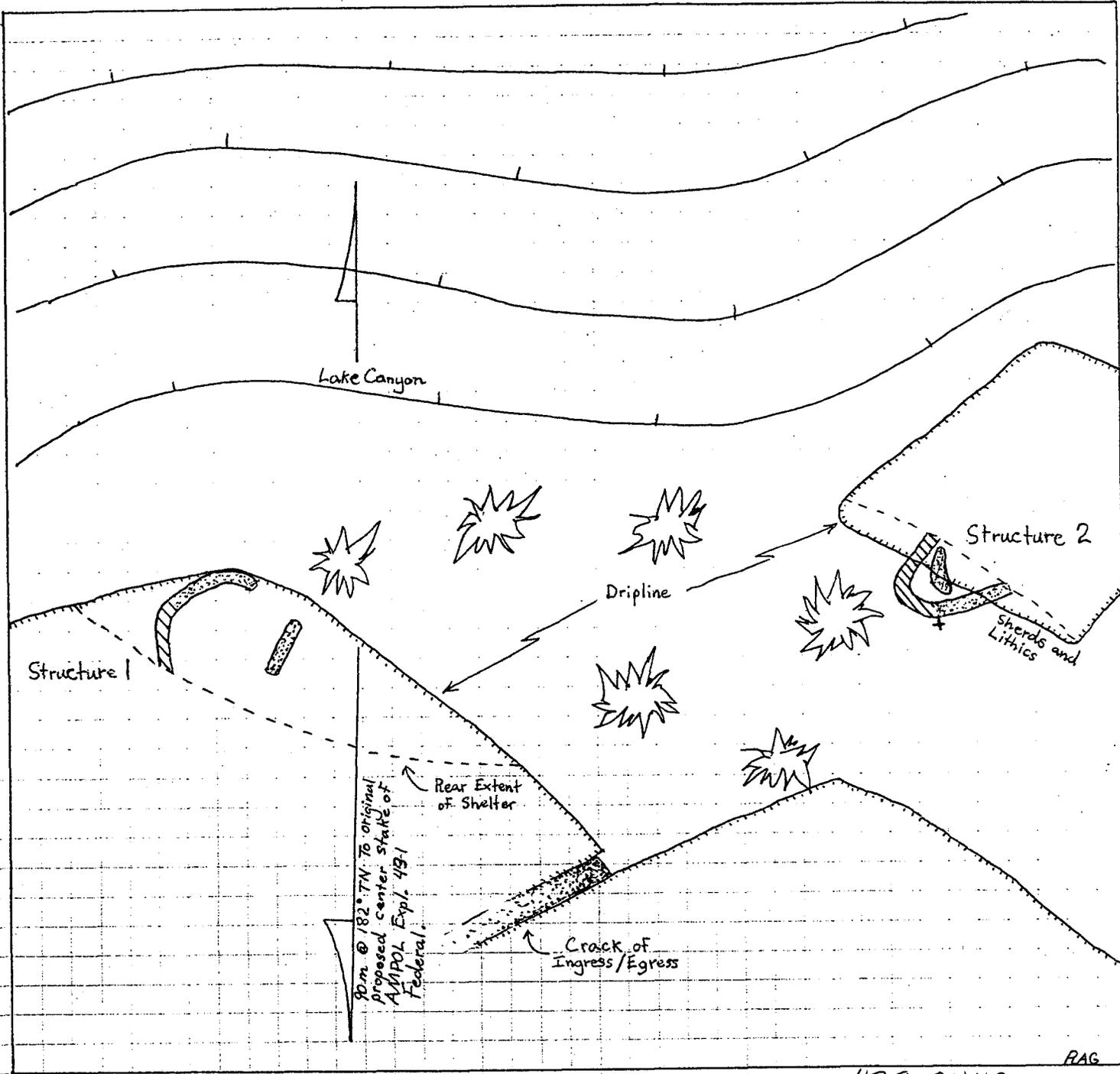
Site 42Sa21142. Structure #1 - masonry structure beneath overhang.
Arrow pointing north.



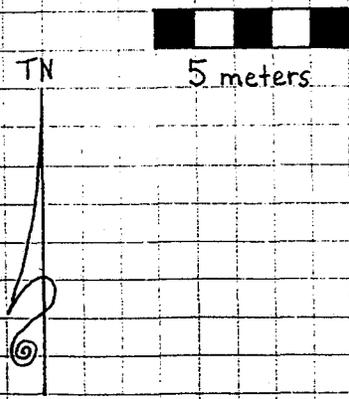
Site 42Sa21142. Structure #1 - masonry structure beneath overhang.
Arrow pointing north.



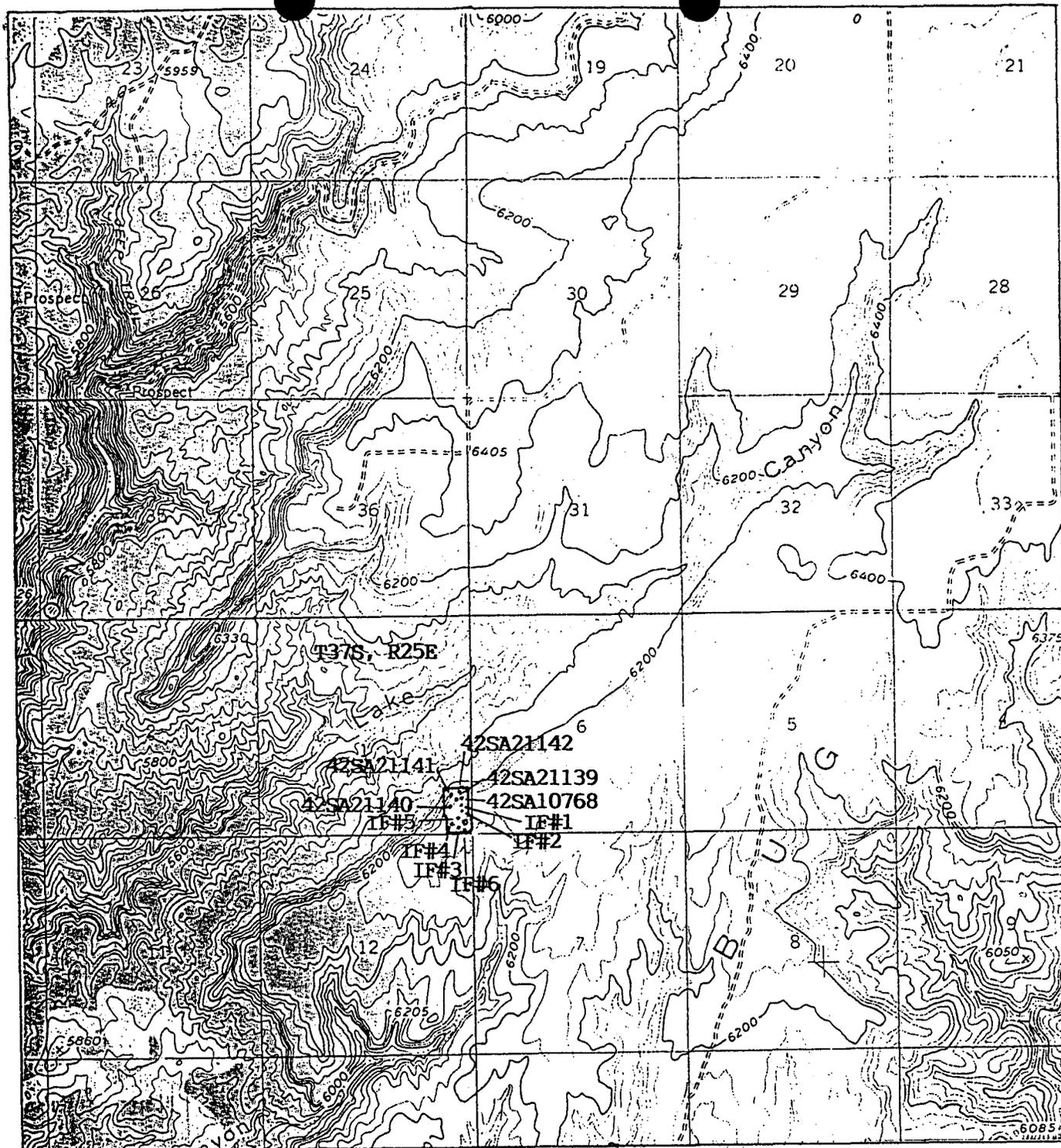
Site 42Sa21142. Structure #2 - masonry structure adjacent to boulder.
Arrow pointing north.



42Sa21142
 TS-4 12-21-89



- KEY
- = Intact Wall
 - = Collapsed or Partially Intact Wall
 - = Pinyon or Juniper
 - = Land Form Line
 - = Rimrock/Boulder Edge
 - = Hammerstone



Enlargement from U.S.G.S. Monument Canyon, Utah 15' Quadrangle (1957)

0 3000
FEET

0 1000
METERS

 = Area Surveyed

- = AMPOL Exploration (USA), Inc. 43-1 Federal well pad
- = Cultural Resource (Site or Isolated Find)

NORTH



APPENDIX B

42SA10768 Site Form

UTAH ANTIQUITIES SITE RM
developed by cooperative agreement by:
Bureau of Land Management
Division of State History
U.S. Forest Service
University of Utah Archeological Center

037-323

1a. State _____
Site No. [I/1-10] 42Sa10768
b. Agency No. _____
2a. County San Juan
b. Temp. No. DC-9

3. Project: Sefel Seismic
4. Site Name/Previous Designations: _____
5. Class: Prehistoric Historic Paleontologic
6. Site Type: Habitation
7. Elevation [I/11-15] 6320 ft. X.3048 = 1926 m.
8. UTM Grid: [I/16-30] zone 12; 666480 m E; 4162200 m N
9. [II/1-16] NE of SE of SE of Section 1 T. 37S, R. 25E
10. Map Reference: Monument Canyon 15', 1957
11. Aerial Photo Data: _____
12. General Location and Access: The site is 4 miles west of the Utah/Colorado border on the northern edge of the mesa top (Bug Point) due south of Lake Canyon. Access is via the dirt road from Bug Point and then walk the final 1 1/4 miles.

Informant/Address: _____

13. Land Owner [II/17-18]: Bureau of Land Management
Federal Administrative Units [II/19-20]: Moab District
14. Description of Site: The site is a fairly typical Pueblo-II unit pueblo. It has a small room block, depression and midden. Few ceramics or other artifacts were observed. The site is in a chained area which is currently used for cattle grazing, so the site is not in pristine condition.

15. Site Condition [II/21]: Excellent; Good; Fair; Poor
Agent of Impact [II/22-27]: erosion, chaining, cattle

16. Nat. Register Potential [II/28]: Significant(C) Non-Significant(D)
Justify: The site is a typical habitation and does not exhibit unique or unusual characteristics that set it apart from many other similar sites in the area.

17. Disposition of Photo Negative [II/29]: Nickens & Associates, Montrose
Photo Numbers: NA-82A-6-14,15

18. Recorded by: Diana Christensen
Survey Org. [II/30-31]: Nickens & Associates Date: 4/1/82
Assisting Crew Members: _____

19. Degree/Aspect of slope [III/1-5] : level
 20. Direction/Distance to Permanent Water [III/6-11] : SW / 11400 m
 Type/Name of Water Source [III/12] : Tin Cup Spring
 Distance to nearest other Water Source: 1/2 mile 800 meters
 Type of other water source: Lake Canyon intermittent
 21. Physiographic Region [III/13-14]: Blanding Basin
 22. Topographic Location (check one under each heading) [III/15-18]:

PRIMARY LANDFORM	POSITION ON LANDFORM	SECONDARY LANDFORM	SECONDARY POSITION
<input type="checkbox"/> mountain spine(A)	<input checked="" type="checkbox"/> top/crest/peak(A)	<input type="checkbox"/> alluvial fan(A)	<input type="checkbox"/> playa(H)
<input type="checkbox"/> hill(B)	<input type="checkbox"/> edge(B)	<input type="checkbox"/> alcove(B)	<input type="checkbox"/> port. geo. feature(U)
<input checked="" type="checkbox"/> tableland/mesa(C)	<input type="checkbox"/> slope(C)	<input type="checkbox"/> arroyo(C)	<input type="checkbox"/> plain(O)
<input type="checkbox"/> ridge(D)	<input type="checkbox"/> toe/foot/bottom/mouth(D)	<input type="checkbox"/> basin(D)	<input type="checkbox"/> ridge/knoll(F)
<input type="checkbox"/> valley(E)	<input type="checkbox"/> saddle/pass(E)	<input type="checkbox"/> cave(E)	<input type="checkbox"/> slope(Q)
<input type="checkbox"/> plain(F)	<input type="checkbox"/> bench/ledge(F)	<input type="checkbox"/> cliff(F)	<input type="checkbox"/> terrace/bench(R)
<input type="checkbox"/> canyon(G)	<input type="checkbox"/> rimrock(G)	<input type="checkbox"/> delta(G)	<input type="checkbox"/> talus slope(S)
	<input type="checkbox"/> interior(H)	<input type="checkbox"/> detached monolith(H)	<input type="checkbox"/> island(T)
		<input type="checkbox"/> dune(I)	<input type="checkbox"/> outcrop(U)
		<input type="checkbox"/> floodplain(J)	<input type="checkbox"/> spring mound/bog(V)
		<input type="checkbox"/> ledge(K)	<input type="checkbox"/> valley(W)
		<input type="checkbox"/> mesa/butte(L)	<input type="checkbox"/> cutbank(X)
			<input type="checkbox"/> riser(Y)
			<input type="checkbox"/> top/crest/peak(A)
			<input checked="" type="checkbox"/> edge(B)
			<input type="checkbox"/> slope(C)
			<input type="checkbox"/> toe/foot/bottom/mouth(D)
			<input type="checkbox"/> interior(G)
			<input type="checkbox"/> step(H)
			<input type="checkbox"/> riser(I)
			<input type="checkbox"/> patterned ground(N)
			<input type="checkbox"/> face(O)

Describe: The site is on a mesa top near the north rim.

23. Depositional Environment [III/19]

<input type="checkbox"/> fan(A)	<input type="checkbox"/> shore features	<input type="checkbox"/> moraine(J)	<input type="checkbox"/> cliff(P)
<input type="checkbox"/> talus(B)	<input type="checkbox"/> extinct lake(F)	<input type="checkbox"/> flood plain(K)	<input type="checkbox"/> outcrop(Q)
<input type="checkbox"/> dune(C)	<input type="checkbox"/> extant lake(G)	<input type="checkbox"/> marsh(L)	<input type="checkbox"/> stream bed(R)
<input type="checkbox"/> stream terrace(D)	<input type="checkbox"/> alluvial plain(H)	<input type="checkbox"/> landslide/slump(M)	<input type="checkbox"/> aeolian(S)
<input type="checkbox"/> playa(E)	<input type="checkbox"/> colluvium(I)	<input type="checkbox"/> delta(N)	<input type="checkbox"/> none(T)
			<input checked="" type="checkbox"/> residual(U)

24. Vegetation Community [III/20-21]:

- Alpine Grassland(AZ) Pinyon/Juniper(EZ) Warm Desert Shrub(HZ)
 Montane Conifer(BZ) Cold Desert Shrub(FZ) Marsh Community(IZ)
 Oak Shrub(DZ) Salt Desert Shrub(GZ) Alkali Flats(KZ)
 List Species in order of dominance:
 On Site: juniper, pinyon, rabbitbrush, Ephedra, snakeweed, June grass, chained area, pinyon-juniper approximately 10' high

Off Site: same

25. Encoding Form: (all entries are right justified)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
I		4	2	S	A			7	6	8		5	3	2	0	1	2	6	6	6	4	8	0	4	1	6	2	2	0	0			
II		N	E	S	E	S	E	0	1	3	7	0	S	2	5	0	E	L	M	B	6	C	E	R	O	T	O	T	D	B	P	R	
III			9	9	8	2	3	5	1	1	4	A	A	J	C	A	L	B	U	E	Z	A	N								J		
IV				9	0	A	D		L	S	C	S	R	S			O	A	A								Z	0	0	1	0		
V		B	E	E	B	E	T	B	E	Z				M	D	D	E	R	M	O	A	A	A										
VI																																	

Form must be accompanied by a site map; photocopy of U.S.G.S. topo map with T., R., scale, and quad name; photographs of the site; and artifact sketches (if applicable).

Site Summary

PH-1. Site Type: Habitation

PH-2. Cultural Affiliation [III/22-29]: Anasazi
How Determined ? [III/30]: ceramic & architecture

PH-3. Site Dimensions : 8 m X 15 m; Area [IV/1-5]: 90 sq m

PH-4. Were surface artifacts collected? Yes; ~~x~~No; [IV/6] If yes, attach a continuation sheet describing sampling method used.

PH-5. Estimated depth of fill [IV/7] : 1-3 meters
Subsurface test? [IV/8] Yes; ~~x~~No (Include location of test on site map)

Describe: The depression near the room block is indicative of a subterranean structure.

PH-6. Summary of Artifacts and Debris [IV/9-16]:

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Lithic Scatter(LS) | <input type="checkbox"/> Burned Bone(CB) | <input type="checkbox"/> Burned Stone(BS) |
| <input type="checkbox"/> Ceramic Scatter(CS) | <input type="checkbox"/> Isolated Artifact(IA) | <input type="checkbox"/> Ground Stone(GS) |
| <input checked="" type="checkbox"/> Basketry/Textiles(BT) | <input type="checkbox"/> Organic Remains(VR) | <input type="checkbox"/> Corn Cobs(CC) |
| <input type="checkbox"/> Source: General(LG) | <input checked="" type="checkbox"/> Rubble/Shaped Stone(RS) | <input type="checkbox"/> Shell(SL) |
| <input type="checkbox"/> Source: Obsidian(LO) | <input type="checkbox"/> Bedrock Mortar, etc.(BG) | <input type="checkbox"/> Trade Beads(TB) |
| <input type="checkbox"/> Source: Ignimbrite(LI) | <input type="checkbox"/> Figurine: non-ceramic(FG) | <input type="checkbox"/> Worked Bone(WB) |
| <input type="checkbox"/> Source: Chert(LC) | <input type="checkbox"/> Jacal Fragments(JA) | <input type="checkbox"/> Other(OT) |

Describe: _____

Specific Artifact Classes

PH-7. Lithic Tools [IV/17-25]:

QUANTITY	TYPE
<u> </u>	<u>none observed</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

Describe: _____

PH-8. Lithic Debitage [IV/26-30]: Estimated Total Quantity ?

Material Type: chert
Stages: rate as - (0)Not present (1)Rare (2)Common, (3)Dominant
I. Decortification: 0 IV. Final Shaping: 0
II. Primary Thinning: 0
III. Secondary Thinning/Shaping: 1

PH-9. Maximum Density/meter sq.(all lithics): 1

PH-10. Ceramic Artifacts [V/1-12]:

QUANTITY	TYPE
2	white ware
2	Chapin gray
2	Mancos corrugated

Describe: _____

PH-11. Maximum Density/meter sq.(ceramics): 6

Features

- PH-12. Non-Architectural Features [V/13-18]: (locate on site map)
- | | | |
|--|--|--|
| <input type="checkbox"/> hearth/firepit(HE) | <input checked="" type="checkbox"/> rubble mound(RH) | <input type="checkbox"/> earthen mound(EM) |
| <input checked="" type="checkbox"/> midden(MD) | <input type="checkbox"/> stone circle(SC) | <input type="checkbox"/> burial(BU) |
| <input checked="" type="checkbox"/> depression(DE) | <input type="checkbox"/> rock alignment(RA) | <input type="checkbox"/> trail/road(TR) |
| <input type="checkbox"/> water control(WC) | <input type="checkbox"/> petroglyph(PE) | <input type="checkbox"/> pictograph(PI) |

Describe: The site is a fairly typical P-II unit pueblo with associated midden, depression and small rubble mound.

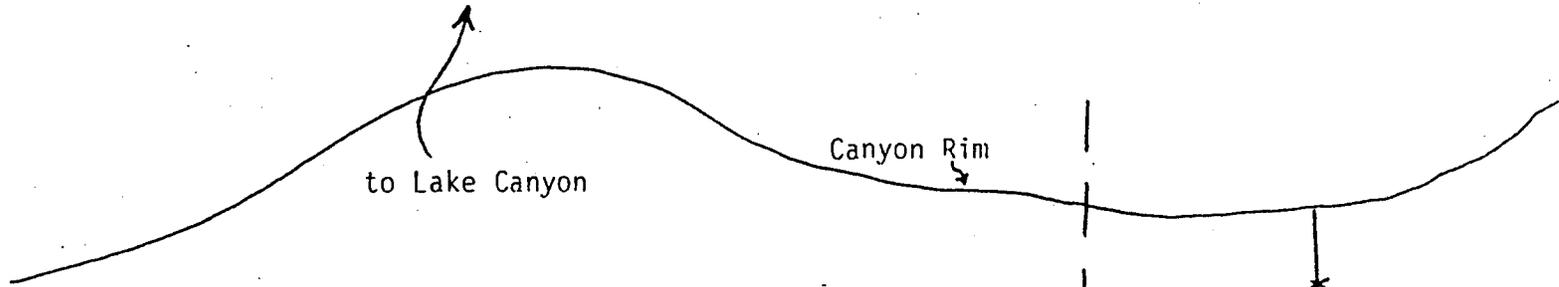
PH-13. Architectural Features [V/19-30]: (locate on site map)

CLASS	QUANTITY	MATERIAL	CLASS	QUANTITY	MATERIAL
Single rm	_____	_____	Tower	_____	_____
Multiple rm	_____	_____	Cairn	_____	_____
Granary	_____	_____	Kiva	_____	_____
Cist	_____	_____	Pithouse	_____	_____

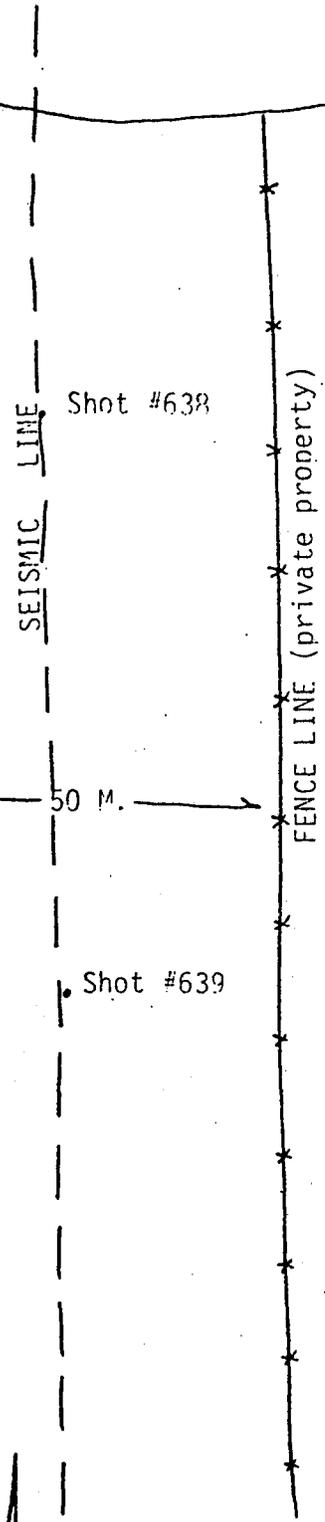
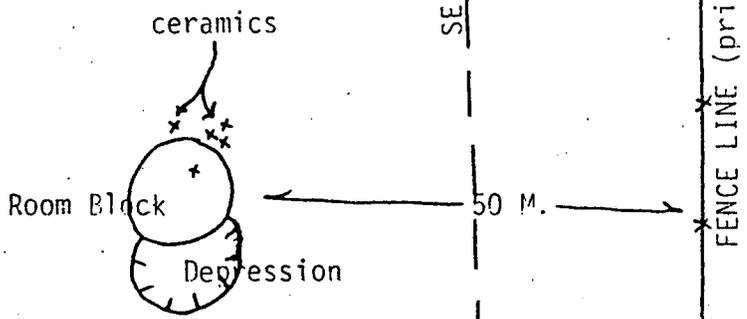
Describe: _____

CONTINUATIONS:

Seismic shots #638 and 639 were offset 100' to the east to avoid impacting the site. The seismic line runs 18 meters east of the site.



CHAINED AREA



42Sa10,768 Sketch Map



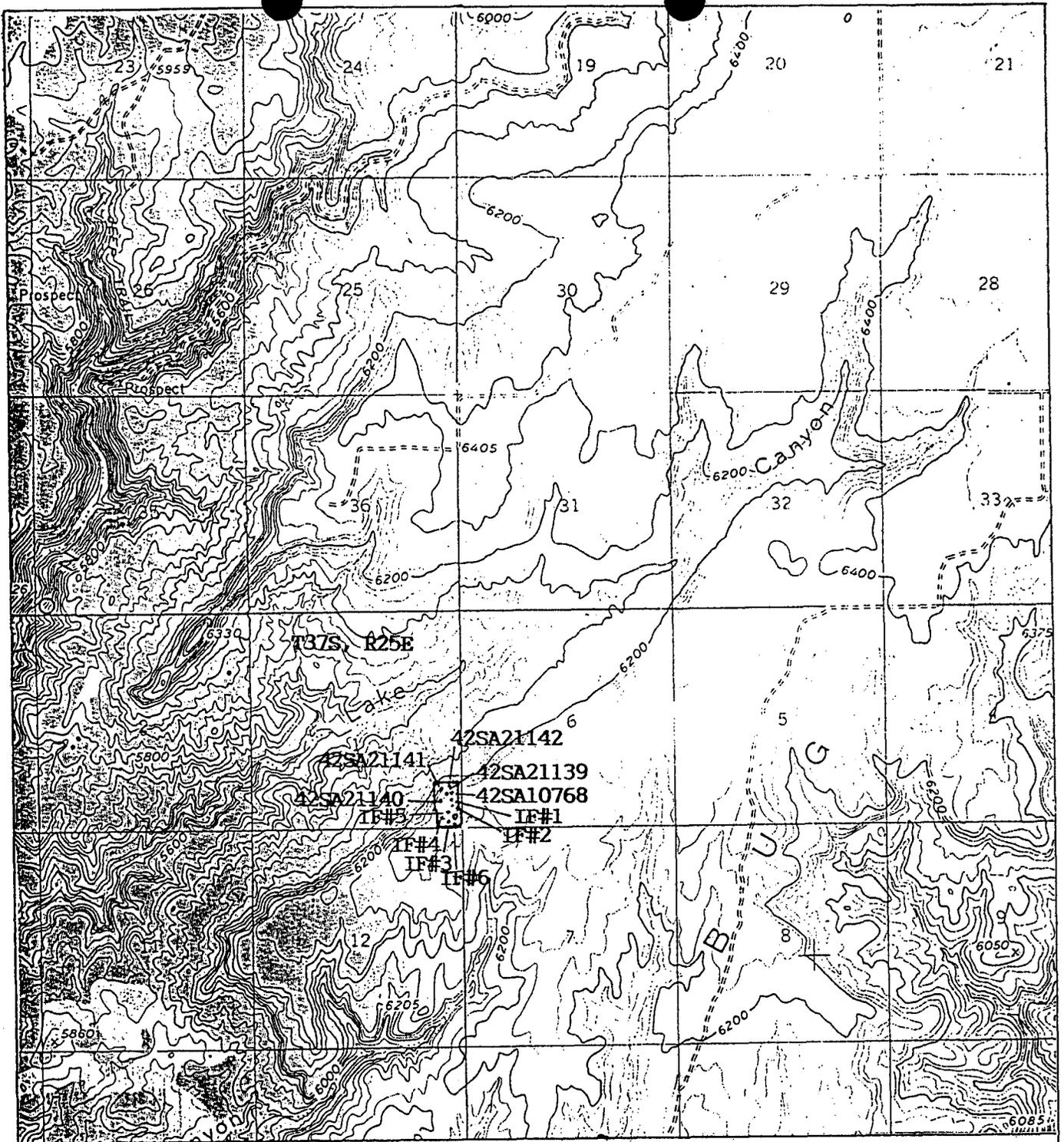
1:1



Quartzite projectile point found 40 m south
of rubble mound on site 42SA10768.



Looking northwest at 42Sa10768.



Enlargement from U.S.G.S. Monument Canyon, Utah 15' Quadrangle (1957)

0 3000
FEET

0 1000
METERS

 = Area Surveyed

• = AMPOL Exploration (USA), Inc.
43-1 Federal well pad

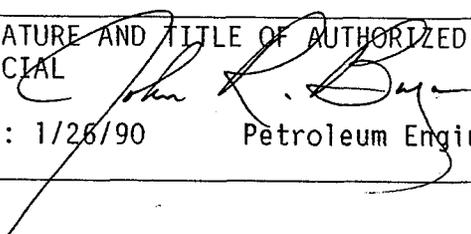
• = Cultural Resource (Site or Isolated Find)

NORTH



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, UT 84180-1203	2. STATE APPLICATION IDENTIFIER NUMBER: (assigned by State Clearinghouse)
3. APPROXIMATE DATE PROJECT WILL START: February 2, 1990	
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS: (to be sent out by agency in block 1) Southeastern Utah Association of Governments	
5. TYPE OF ACTION: <input type="checkbox"/> Lease <input checked="" type="checkbox"/> Permit <input type="checkbox"/> License <input type="checkbox"/> Land Aquisition <input type="checkbox"/> Land Sale <input type="checkbox"/> Land Exchange <input type="checkbox"/> Other _____	
6. TITLE OF PROPOSED ACTION: Application for Permit to Drill	
7. DESCRIPTION: Ampolex (Texas), Inc. proposes to drill a wildcat well, the Federal #43-1, on federal lease number U-64068 in San Juan, County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S. Bureau of Land Management is the primary administrative agency in this case and must issue approval to drill jointly with DOGM before operations can commence.	
8. LAND AFFECTED (site location map required) (indicate county) 198' FSL, 176' FEL, Section 1, Township 37 South, Range 25 East, San Juan County, Utah	
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED? Unknown	
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: Glenn Goodwin, Monticello, 587-2561	
12. FOR FURTHER INFORMATION, CONTACT: John Baza PHONE: 538-5340	13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL  DATE: 1/26/90 Petroleum Engineer

OPERATOR Ampolex (Texas) Inc. (No 385) DATE 1-23-90

WELL NAME Federal #43-1

SEC SURF. SESE 1 T 37S R 25E COUNTY San Juan
BHL NESE

43-037-31494
API NUMBER

Federal
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well within 920'
Water Permit T64317/99-104
Archaeological Survey 12/89.
Request for exception location and directional drill.
RDC - Process / 2-9-90 B7m Approved 1-31-90

APPROVAL LETTER:

SPACING: R615-2-3 N/A R615-3-2
UNIT

N/A R615-3-3
CAUSE NO. & DATE

STIPULATIONS:

SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENTS

HAROLD JACOBS
Chairman
WILLIAM D. HOWELL
Executive Director

P. O. Box 4300 Salt Lake City, Utah 84143 Telephone 637-5444

RECEIVED
JAN 25 1990

DIVISION OF
OIL, GAS & MINING
CLEARINGHOUSE A-95 REVIEW

14 01 07

NOI ___ Preapp ___ App ___ State Plan ___ State Action X Subdivision ___ (ASP # 10-102-1)

Other (indicate) _____ SAI Number _____

Applicant (Address, Phone Number):

Oil, Gas and Mining
355 West N. Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Federal Funds:

Requested: _____

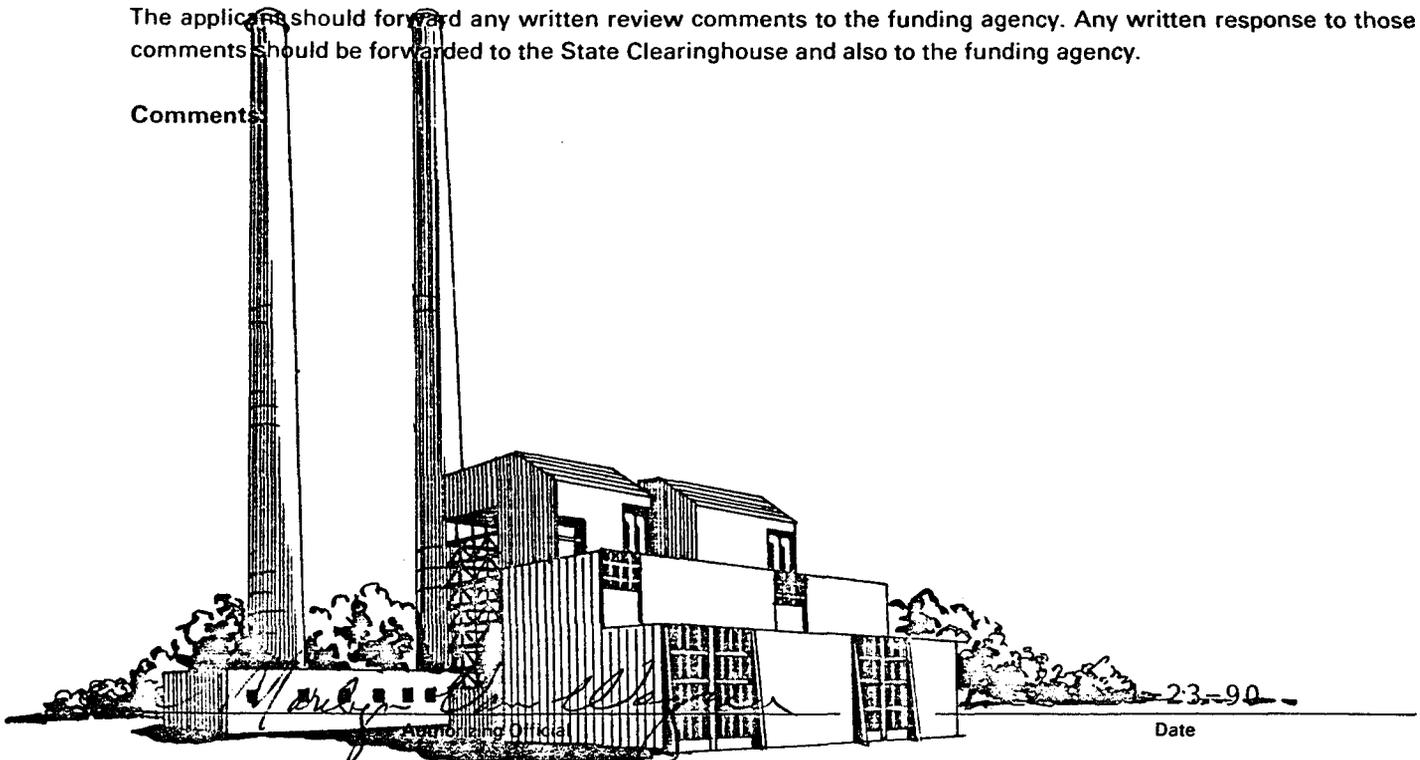
Title:

APPLICATION FOR PERMIT TO DRILL (YATES PETROLEUM CORP.)

- No comment
- See comments below
- No action taken because of insufficient information
- Please send your formal application to us for review. Your attendance is requested

The applicant should forward any written review comments to the funding agency. Any written response to those comments should be forwarded to the State Clearinghouse and also to the funding agency.

Comments:



Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN DUPLICATE*
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Ampolex (Texas), Inc.

3. ADDRESS OF OPERATOR
1225 17th Street, Suite #3000, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
198' FSL, 176' FEL
At proposed prod. zone
2,320' FSL, 1,300' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
± 20 miles SW of Dove Creek, Colorado

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)
1,300' @ T.D.

16. NO. OF ACRES IN LEASE
1116.50

17. NO. OF ACRES ASSIGNED
TO THIS WELL
40.00

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.
N/A

19. PROPOSED DEPTH
MD - 6,600'
TVD - 5,800'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6,310' GR

22. APPROX. DATE WORK WILL START*
02/15/90

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	1,500'	To Surface
8-3/4"	5-1/2"	15.5#	6,600' MD	± 400 sx

24. SIGNED Robert C. Greenaway TITLE Senior Petroleum Engineer DATE 01/17/90

(This space for Federal or State office use)

PERMIT NO. 43-03731494 APPROVAL DATE _____

APPROVED BY /s/A. Lynn Jackson TITLE Asst. District Manager/Min. Acting DATE 1/31/90

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

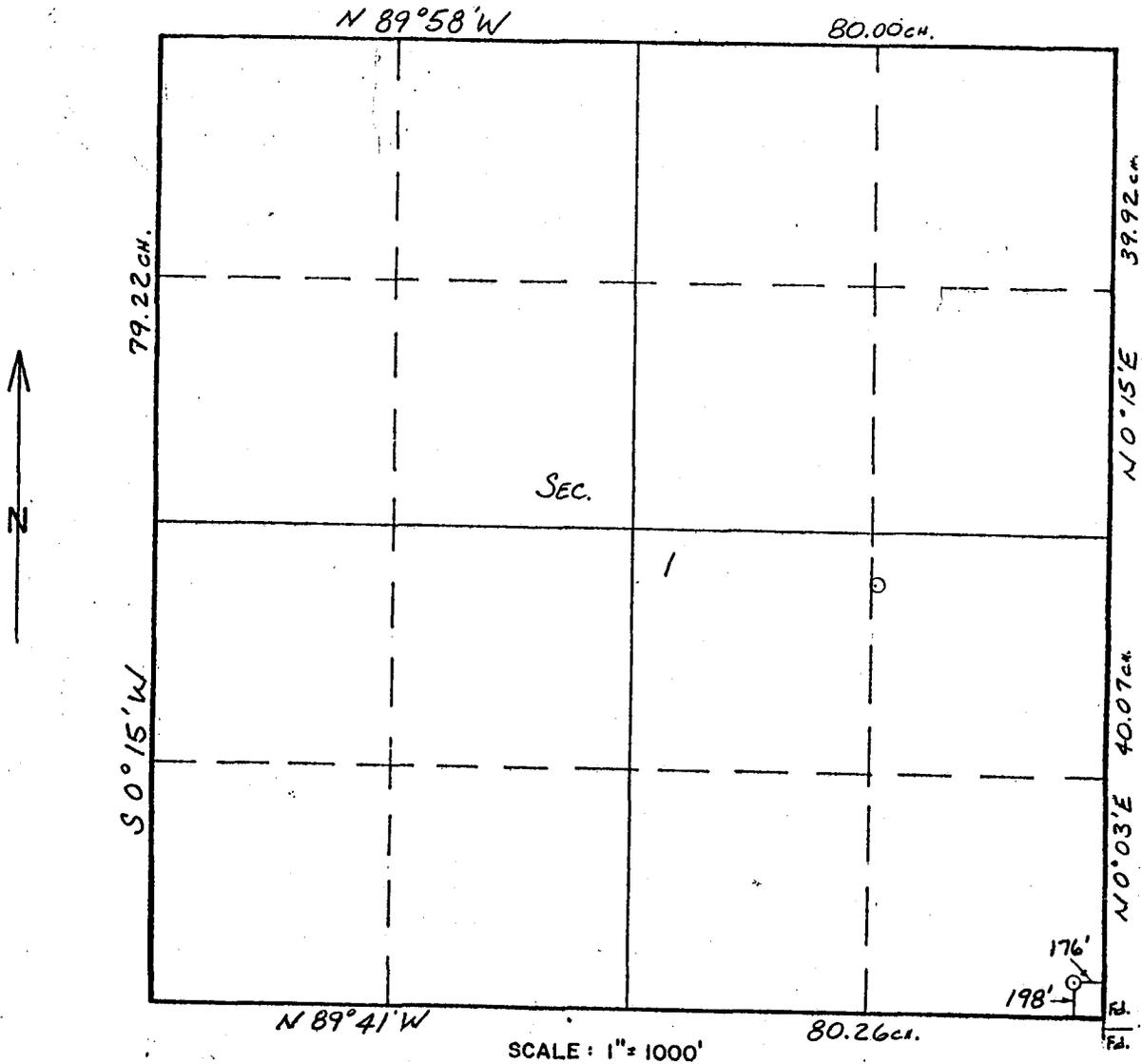
FLARING OR VENTING OF
GAS IS SUBJECT TO NTL 4-A

*See Instructions On Reverse Side

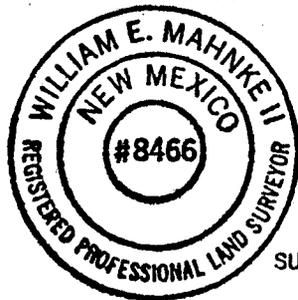
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED
FEB 02 1990
DIVISION OF
OIL, GAS & MINING

COMPANY Ampol Exploration (USA) Inc.
 LEASE Federal WELL NO. 43-1
 SEC. 1, T. 37 S, R. 25 E
 COUNTY San Juan STATE Utah
 LOCATION 198'FSL & 176'FEL
 ELEVATION 6311



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD
 NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION
 AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY
 KNOWLEDGE AND BELIEF.



SEAL:


 WILLIAM E. MAHNKE II
 NEW MEXICO P.L.S. N° 8466

SURVEYED DEC. 21, 1989

EXHIBIT A
 Location Plat

Ampolex (Texas), Inc.
Well No. Federal 43-1
SESE Sec. 1, T. 37 S., R. 25 E.
Grand County, Utah
Lease U-64068

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Ampolex (Texas) Inc., is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by C00701. (Principle - Ampol Exploration USA Inc., Bonded Subsidiary - Ampolex (Texas) Inc.) as provided for in 43 CFR 3104.3.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

A. DRILLING PROGRAM

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, Onshore Oil and Gas Order No. 2 and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to the field representative to insure compliance.

1. If unconsolidated rock is encountered, conductor shall be set ten (10) feet unto underlying bedrock with cement circulated to surface.
2. Surface casing will be set at least 50 feet into the Chinle Formation regardless of the depth the Chinle is encountered.

B. SURFACE USE PLAN

1. If well is a producer, cattleguards will be installed at fence crossings on access road.
 2. As soon as the reserve pit has dried or within 18 months of completion of drilling, whichever is least. All areas not needed for production will be rehabilitated.
 3. If well is a producer, all access roads will be brought to BLM resource class III road standards within 60 days of completion of drilling operations.
 4. An encroachment permit will be obtained from the San Juan County Road Department (801) 587-2231, Ext. 43 for use of county roads:
-
5. All site security guidelines identified in 43 CFR 3162.7-5 and ONSHORE OIL AND GAS ORDER NO. 3; SITE SECURITY will be adhered to.
 6. Gas measurement will be conducted in accordance with the ONSHORE OIL AND GAS ORDER NO. 5; GAS MEASUREMENT and 43 CFR 3162.7-3.
 7. Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the well to the meter and downstream for the remainder of the pad. Meter runs will be housed and/or fenced.
 8. Oil measurement will be conducted in accordance with ONSHORE OIL AND GAS ORDER NO.4; OIL MEASUREMENT as of the effective of August 23, 1989 and 43 CFR 3162.7-2.
 9. No liquid hydrocarbons (i.e. fuels, lubricants, formation) will be discharged to the reserve pit.
 10. No chrome compounds will be on location.
 11. There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned and/or separate facilities, will be identified in accordance with 43 CFR 3162.6.
 12. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.6.
 13. The dirt contractor will be provided with an approved copy of the surface use plan.
 14. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological

sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places:
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
- a timeframe for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

15. This permit will be valid for a period of one (1) year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
16. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162-4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.

C. Anticipated Starting Dates and Notifications of Operations.

Required verbal notifications are summarized in Table 1, attached. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

Should the well be successfully completed for production, the District Manager will be notified when the well is placed in producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.

If a replacement rig is needed for completion operations, a Sundry Notice (Form 3160-5) to that effect will be filed for prior approval from the District Office, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved through the District Office.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Manager within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162-6.

The following minimum information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch:

"Fed" or "Ind", as applicable. "Well number, location by 1/4 1/4 section, township and range". "Lease number".

- 3000 psi BOP & BOPE:

Annular preventer

Pipe ram, blind ram, and if conditions warrant, another pipe ram shall also be required,

A second pipe ram preventer or variable bore pipe ram preventer shall be used with a tapered drill string,

Drilling spool, or blowout preventer with 2 side outlets (choke side shall be a 3-inch minimum diameter, kill side shall be at least 2-inch diameter)

A minimum of 2 choke line valves (3-inch minimum),

Kill line (2-inch minimum)

3 inch diameter choke line,

2 kill line valves, one of which shall be a check valve (2 inch minimum),

2 chokes (refer to diagram in Attachment 1)

Pressure gauge on choke manifold

Upper kelly cock valve with handle available,

Safety valve and subs to fit all drill strings in use,

All BOPE connections subjected to well pressure shall be flanged, welded, or clamped,

Fill-up line above the uppermost preventer,

- If repair or replacement of the BOPE is required after testing, this work shall be performed prior to drilling out the casing shoe, and
- When the BOPE cannot function to secure the hole, the hole shall be secured using cement, retrievable packer or bridge plug packer, bridge plug or other acceptable approved methods to assure safe well conditions.

- Choke Manifold Equipment:

All choke lines shall be straight lines unless turns use tee blocks or are targeted with running tees, and shall be anchored to prevent whip and reduce vibration.

All valves (except chokes) in the kill line, choke manifold and choke line shall be a type that does not restrict the flow (full opening) and that allows a straight through flow.

Pressure gauges in the well control system shall be a type designed for drilling fluid service.

- 3000 psi system - Accumulator Equipment:

Accumulator shall have sufficient capacity to open the hydraulically controlled choke line valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psi above precharge on the closing manifold without the use of the closing unit pumps. This is a minimum requirement. The fluid reservoir capacity shall be double the accumulator capacity and fluid level maintained at manufacturer's recommendations. The 3M system shall have 2 independent power sources to close the preventers. Nitrogen bottles (3 minimum) may be 1 of the independent power sources and, if so, shall maintain a charge equal to the manufacturer's specifications.

Accumulator precharge pressure test: This test shall be conducted prior to connecting the closing unit to the BOP stack and at least once every 6 months. The accumulator pressure shall be corrected if the measured precharge pressure is found to be above or below the maximum limit specified within Onshore Order Number 2.

Power for the closing unit pumps shall be available to the unit at all times so that the pumps shall automatically start when the closing unit manifold pressure has decreased to a pre-set level.

Each BOP closing unit shall be equipped with sufficient number and sizes of pumps so that, with the accumulator system isolated from service, the pumps shall be capable of opening the hydraulically-operated gate valve (if so equipped), plus closing the annular preventer on the smallest size drill pipe to be used within 2 minutes, and obtain a minimum of 200 psi above specified accumulator precharge pressure.

A manual locking device (i.e., hand wheels) or automatic locking devices shall be installed on all systems of 2M or greater. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

Remote controls shall be readily accessible to the driller. Remote controls for all 3M or greater systems shall be capable of closing all preventers.

- BOP Testing:

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing if BOP stack is not isolated from casing. Pressure tests on ram type preventers shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed off of pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular BOP pressure tests shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above tests shall be performed:

**When initially installed;

**Whenever any seal subject to test pressure is broken;

**Following related repairs; and

**At 30 day intervals.

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s), the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly. Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.

- Casing and Cementing:

All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

All casing, except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.

The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.

All of the above described tests shall be recorded in the drilling log.

All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

Surface casing shall have centralizers on at least the bottom three joints depending on severity of hole inclination.

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc., shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

All casing strings below the conductor shall be pressure tested to 0.22 psi/ft of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.

- Mud Program Requirements:

The characteristics, use and testing of drilling mud and the implementation of related drilling procedures shall be designed to prevent the loss of well control. Sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring well control.

-Record slow pump speed on daily drilling report after mudding up.

-Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume.

-A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

-All flare systems shall be designed to gather and burn all gas. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where non-combustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare.

- Drill Stem Testing Requirements:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

-A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions, or displaced into the formation prior to pulling the test tool. This would involve providing some means for reverse circulation.

-Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

-All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- Special Drilling Operations:

In addition to the equipment already specified elsewhere in Onshore Order No. 2 , the following equipment shall be in place and operational during air/gas drilling:

- Properly lubricated and maintained rotating head;
- Spark arresters on engines or water cooled exhaust;
- Blooie line discharge 100 feet from well bore and securely anchored;
- Straight run on blooie line unless otherwise approved;
- Deduster equipment;
- All cuttings and circulating medium shall be directed into a reserve or blooie pit;
- Float valve above bit;
- Automatic igniter or continuous pilot light on the blooie line;
- Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the well bore;
- Mud circulating equipment, water, and mud materials (does not have to be premixed) sufficient to maintain the capacity of the hole and circulating tanks or pits.

TABLE 1

NOTIFICATIONS

Notify Mike Wade of the San Juan Resource Area, at
(801) 587-2141 for the following:

- 2 days prior to commencement of dirt work, construction or reclamation;
- 1 day prior to spudding;
- 1 day prior to running and cementing surface casing;
- 1 day prior to pressure testing of surface casing.

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111
for the following:

No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed:

Dale Manchester, Petroleum Engineer Office Phone: (801) 259-6111

Home Phone: (801) 259-6239

Eric Jones, Petroleum Engineer Office Phone: (801) 259-6111

Home Phone: (801) 259-2214

If unable to reach the above individuals including weekends, holidays, or after hours, please call the following:

Lynn Jackson, Chief, Branch of Fluid Minerals

Office Phone: (801) 259-6111

Home Phone: (801) 259-7990

24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS.



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangertter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

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

February 13, 1990

Ampolex (Texas), Incorporated
1225 17th Street, Suite #3000
Denver, Colorado 80202

Gentlemen:

Re: Federal #43-1 - Sec. 1, T. 37S, R. 25E - San Juan County, Utah
Surf. SE SE - 198' FSL, 176' FEL - BHL NE SE - 2320' FSL, 1300' FEL

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-3, Oil and Gas Conservation General Rules.

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

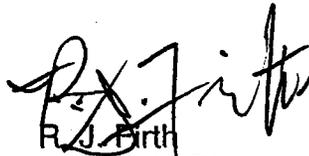
1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.

Page 2
Ampolex (Texas) Incorporated
Federal #43-1
February 13, 1990

7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31494.

Sincerely,



R. J. Birth
Associate Director, Oil & Gas

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



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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

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

UTAH DIVISION OF OIL, GAS AND MINING FACSIMILE TRANSMISSION COVER SHEET

DATE: 2-14-90

FAX # SENT TO: (303) 297-2050

ATTN: Robert Arceneaux

COMPANY: Ampalex (Texas) Inc.

FROM: Lisha Romero

DEPARTMENT: Div. of Oil, Gas & Mining

NUMBER OF PAGES BEING SENT (INCLUDING THIS ONE): ~~3~~ (4)

If you do not receive all, or if they are illegible, please contact us at (801)538-5340.

We are sending from a Murata Facsimile Machine. Our telecopier number is (801)359-3940.

MESSAGES:

Any questions please call!

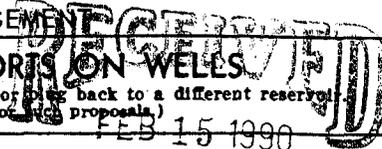
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

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



1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-64068																				
2. NAME OF OPERATOR Ampolplex (Texas), Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A																				
3. ADDRESS OF OPERATOR 1225 17th Street, Suite #3000, Denver, Colorado 80202		7. UNIT AGREEMENT NAME N/A																				
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 198' FSL & 176' FEL		8. FARM OR LEASE NAME Federal																				
14. PERMIT NO. 43-037-31494	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6,310' GR	9. WELL NO. #43-1																				
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Wildcat																				
<table border="0" style="width:100%;"> <tr> <td colspan="2">NOTICE OF INTENTION TO:</td> <td colspan="2">SUBSEQUENT REPORT OF:</td> </tr> <tr> <td>TEST WATER SHUT-OFF <input type="checkbox"/></td> <td>PULL OR ALTER CASING <input type="checkbox"/></td> <td>WATER SHUT-OFF <input type="checkbox"/></td> <td>REPAIRING WELL <input type="checkbox"/></td> </tr> <tr> <td>FRACTURE TREAT <input type="checkbox"/></td> <td>MULTIPLE COMPLETE <input type="checkbox"/></td> <td>FRACTURE TREATMENT <input type="checkbox"/></td> <td>ALTERING CASING <input type="checkbox"/></td> </tr> <tr> <td>SHOOT OR ACIDIZE <input type="checkbox"/></td> <td>ABANDON* <input type="checkbox"/></td> <td>SHOOTING OR ACIDIZING <input type="checkbox"/></td> <td>ABANDONMENT* <input type="checkbox"/></td> </tr> <tr> <td>REPAIR WELL <input type="checkbox"/></td> <td>CHANGE PLANS <input checked="" type="checkbox"/></td> <td>(Other) _____</td> <td></td> </tr> </table>		NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:		TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>	FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>	SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>	REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) _____		11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA Section 1-T37S-R25E
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:																				
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>																			
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>																			
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REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) _____																				
		12. COUNTY OR PARISH San Juan																				
		13. STATE Utah																				

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
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REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) _____	

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

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

The original APD dated 01/17/90 for this well is being revised to reflect a change in surface casing requirements, total depth, and estimated formation tops. These revisions are necessary because of the change in surface elevations from the canyon floor to the canyon rim where the wellsite will be.

1. 9-5/8" surface casing will be run to a depth of 2,000' and cement will be circulated to the surface.
2. Total depth of the well will be 6,310' TVD (7,076' MD estimated).
3. Estimated Formation Tops:

FORMATION	MD, KB	TVD, KB
Dakota	Surface	--
Morrison	210'	210'
Summerville	1,030'	1,030'
Entrada SS	1,060'	1,060'
Carmel	1,220'	1,220'
Navajo SS	1,255'	1,255'
Kayenta	1,565'	1,565'
Wingate SS	1,710'	1,710'
Chinle	1,925'	1,925'

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

SIGNED Robert C. [Signature] Senior Petroleum Engineer DATE 02/12/90

NEXT PAGE

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:
Federal approval of this action is required before commencing operations.

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

DATE: 2-26-90
BY: [Signature]

*See Instructions on Reverse Side

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-64068
2. NAME OF OPERATOR Ampolex (Texas), Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 1225 17th Street, Suite #3000, Denver, Colorado 80202		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 198' FSL & 176' FEL		8. FARM OR LEASE NAME Federal
14. PERMIT NO.		9. WELL NO. #43-1
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6,310' GR		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 1-T37S-R25E
		12. COUNTY OR PARISH San Juan
		13. STATE Utah

RECEIVED
FEB 15 1990
 DIVISION OF
OIL, GAS & MINING

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

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

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

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

3. Estimated Formation Tops: (Cont.)

<u>FORMATION</u>	<u>MD, KB</u>	<u>TVD, KB</u>
Shinarump	2,705'	2,700'
Cutler	2,829'	2,820'
Upper Hermosa	5,104'	4,720'
Upper Ismay	6,559'	5,893'
Hovenweep Sh.	6,683'	5,993'
Lower Ismay	6,774'	6,067'
Gothic Sh.	6,840'	6,117'
Upper Desert Creek	6,867'	6,142'
Lower Desert Creek	6,921'	6,186'
Chimney Rock Sh.	6,986'	6,238'
Akah	7,011'	6,258'
Total Depth	7,076'	6,310'

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

SIGNED Robert C. Arsenault Senior Petroleum Engineer DATE 02/12/90

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: _____

*See Instructions on Reverse Side

DIVISION OF OIL, GAS AND MINING

API NO. 43-037-31494

SPUDDING INFORMATION

NAME OF COMPANY: AMPOLEX (TEXAS) INC.

WELL NAME: FEDERAL 43-1

SECTION NESE 1 TOWNSHIP 37S RANGE 25E COUNTY SAN JUAN

DRILLING CONTRACTOR EXETER

RIG # 68

SPUDDED: DATE 4/14/90

TIME 12:00 midnight

How ROTARY

DRILLING WILL COMMENCE _____

REPORTED BY DEENA

TELEPHONE # 303-297-1000

DATE 4/20/90 SIGNED TAS



AMPOL EXPLORATION (U.S.A.) INC.

SEVENTEENTH STREET PLAZA, SUITE 3000
1225 17TH STREET
DENVER, CO 80202 U.S.A.

Phone: (303) 297-1000

Telecopy: (303) 297-2050

Subsidiaries:

Ampolex (California), Inc.
Ampolex (Orient), Inc.
Ampolex (Texas), Inc.
Ampolex (Wyoming), Inc.

April 18, 1990

RECEIVED
APR 20 1990

DIVISION OF
OIL, GAS & MINING

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

ATTN: Mr. R. J. Firth

RE: Federal #43-1
Surf: SE SE 198' FSL & 176' FEL
BHL: NE SE 2,320' FSL & 1,300' FEL
Section 1-T37S-R25E
San Juan County, Utah

Dear Mr. Firth:

Enclosed herewith is Form 6, "Entity Action Form", for the above referenced well.

If you have any questions, please feel free to contact this office.

Sincerely,

For and on behalf of
AMPOLEX (TEXAS), INC.

Dinah M. Carrasco

Dinah M. Carrasco
Operations Secretary
AMPOL EXPLORATION (U.S.A.) INC.

/dmc
Enclosure

OPERATOR Ampolex (Texas), Inc.
ADDRESS 1225 17th Street, Suite #3000
Denver, Colorado 80202

OPERATOR ACCT. NO. N0385

ENTITY ACTION FORM - FORM 6

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	11076	43-037-31494	Federal #43-1	NE/SE	1	37S	25E	San Juan	04/14/90	
WELL 1 COMMENTS: Federal Lease Proposed Zone - Akah Field - wildcat (New entity 11076 added 4-23-90.) Unit - N/A JCR											
WELL 2 COMMENTS:											
WELL 3 COMMENTS:											
WELL 4 COMMENTS:											
WELL 5 COMMENTS:											

- ACTION CODES** (See instructions on back of form)
- A - Establish new entity for new well (single well only)
 - B - Add new well to existing entity (group or unit well)
 - C - Re-assign well from one existing entity to another existing entity
 - D - Re-assign well from one existing entity to a new entity
 - E - Other (explain in comments section)

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

(3/89)

RECEIVED
APR 20 1990

DIVISION OF
OIL, GAS & MINING

Dinah M. Carrasco
Signature Dinah M. Carrasco
Operations Secretary 04/18/90
Title _____ Date _____

Phone No. (303) 297-1000



GREAT LAND DIRECTIONAL DRILLING, INC.
Rocky Mountain Division

REPORT OF SUB-SURFACE DIRECTIONAL SURVEY

AMPOLEX
COMPANY

FEDERAL WELL #43-1
WELL NAME

SAN JUAN CO., UTAH
LOCATION

<u>RMC-04-90-D10</u>	<u>SINGLE SHOT</u>	<u>MAY 07, 1990</u>
<u>JOB NUMBER</u>	<u>TYPE SURVEY</u>	<u>DATE</u>

THIS IS A RECORD OF A SUB-SURFACE SURVEY
OF YOUR WELL

We have retained a copy of your survey report in our files for your convenience; however, should you so desire, all copies of the survey report will be forwarded to you on written request. All surveys are kept in a locked file and are held in strictest confidence. Additional copies of your survey report can be made from the original by any blueprint company.

Client...: AMPOLEX
 Field.....: SAN JUAN COUNTY, UTAH
 Well.....: FEDERAL 43-1
 Location at: N, 27.91, W
 Mag Decln...: 13.00 E

Computation...: RADIUS OF CURVATURE
 Survey Date...: 04/10/90
 RKB Elevation..: 0.00 ft
 Case ID.....: FED431

RECORD OF SURVEY
 (Well assumed vertical to 2000 MD)

S	MEAS	INCLN	VERT-DEPTHS		SECT	DIRECTION		REL-COORDINATES		CLOSURE		DLA	
C	DEPTH	ANGLE	BKB	SUB-S	DIST	BEARING		FROM-WELLHEAD		DIST	BEARING	100	
3	2000	0.00	2000	2000	0	N	0.00	E	0	N	0	E	0.0
3	2102	2.00	2102	2102	2	N	46.30	W	2	N	1	W	2.0
3	2134	2.00	2134	2134	3	N	43.20	W	2	N	1	W	0.0
3	2165	2.50	2165	2165	4	N	36.30	W	3	N	2	W	1.6
3	2196	3.60	2196	2196	6	N	28.50	W	5	N	3	W	3.5
3	2257	5.80	2257	2257	11	N	27.70	W	9	N	5	W	3.6
3	2288	6.80	2287	2287	14	N	26.10	W	12	N	7	W	3.2
3	2319	7.90	2318	2318	18	N	27.30	W	16	N	9	W	3.5
3	2350	8.50	2349	2349	22	N	28.50	W	20	N	11	W	1.9
3	2381	9.00	2380	2380	27	N	31.70	W	24	N	13	W	1.6
3	2412	9.90	2410	2410	32	N	31.50	W	28	N	16	W	2.9
3	2443	10.80	2441	2441	38	N	28.70	W	33	N	19	W	2.9
3	2474	11.60	2471	2471	44	N	26.90	W	38	N	22	W	2.6
3	2504	12.20	2500	2500	50	N	27.50	W	44	N	24	W	2.0
3	2535	12.90	2531	2531	57	N	27.80	W	50	N	27	W	2.3
3	2566	13.70	2561	2561	64	N	27.70	W	56	N	31	W	2.6
3	2596	14.60	2590	2590	71	N	27.70	W	62	N	34	W	3.0
3	2627	15.30	2620	2620	79	N	28.20	W	70	N	38	W	2.3
3	2658	16.00	2650	2650	88	N	29.70	W	77	N	42	W	2.3
3	2690	16.80	2680	2680	97	N	31.80	W	85	N	47	W	2.6
3	2720	16.80	2709	2709	105	N	31.80	W	92	N	51	W	0.0
3	2751	17.70	2739	2739	114	N	32.30	W	100	N	56	W	2.9
3	2782	18.90	2768	2768	124	N	32.30	W	108	N	61	W	3.9
3	2813	19.60	2797	2797	134	N	32.20	W	117	N	67	W	2.3
3	2882	20.40	2862	2862	158	N	32.50	W	137	N	79	W	1.2
3	2913	20.80	2891	2891	169	N	32.20	W	146	N	85	W	1.3
3	3006	22.00	2978	2978	203	N	31.90	W	175	N	103	W	1.3
3	3098	23.40	3063	3063	238	N	31.70	W	205	N	122	W	1.5
3	3191	25.10	3148	3148	276	N	32.80	W	237	N	142	W	1.8
3	3283	27.30	3230	3230	317	N	32.10	W	271	N	164	W	2.4
3	3375	28.40	3311	3311	359	N	33.40	W	307	N	187	W	1.2
3	3467	30.20	3392	3392	404	N	32.50	W	345	N	212	W	2.0
3	3561	32.20	3472	3472	453	N	31.90	W	386	N	238	W	2.1
3	3653	34.10	3549	3549	503	N	32.50	W	429	N	265	W	2.1
3	3715	35.80	3600	3600	538	N	31.30	W	459	N	283	W	2.8

Survey Codes: 3/MWD

RECORD OF SURVEY
(11 assumed vertical to 20 MD)

S	MEAS DEPTH	INCLN ANGLE	VERT-DEPTHS BKB SUB-S	SECT DIST	DIRECTION BEARING	REL-COORDINATES FROM-WELLHEAD	CLOSURE DIST BEARING	DL/ 100
3	3808	36.50	3675 3675	593	N 30.60 W	506 N 312 W	594 N 31.61 W	0.8
3	3959	36.30	3797 3797	683	N 31.70 W	583 N 358 W	684 N 31.55 W	0.3
3	4113	36.60	3920 3920	774	N 32.00 W	661 N 406 W	775 N 31.59 W	0.2
3	4267	36.40	4044 4044	865	N 31.30 W	739 N 454 W	867 N 31.59 W	0.2
3	4421	36.60	4168 4168	957	N 32.30 W	816 N 502 W	959 N 31.61 W	0.3
1	4571	37.00	4288 4288	1046	N 29.50 W	893 N 549 W	1048 N 31.55 W	0.7
1	4785	36.50	4460 4460	1174	N 30.00 W	1005 N 612 W	1176 N 31.36 W	0.2
1	5000	35.75	4633 4633	1301	N 31.00 W	1114 N 677 W	1303 N 31.27 W	0.4
1	5215	35.00	4809 4809	1425	N 29.50 W	1221 N 739 W	1428 N 31.18 W	0.4
1	5432	35.50	4986 4986	1551	N 29.50 W	1330 N 801 W	1553 N 31.05 W	0.2
1	5647	34.00	5162 5162	1673	N 30.00 W	1437 N 862 W	1675 N 30.95 W	0.7
1	5862	33.50	5341 5341	1792	N 29.00 W	1541 N 921 W	1795 N 30.86 W	0.3
1	6077	34.25	5520 5520	1912	N 28.00 W	1646 N 978 W	1915 N 30.71 W	0.4
1	6291	35.50	5695 5695	2035	N 28.00 W	1754 N 1035 W	2037 N 30.55 W	0.6
1	6597	37.50	5941 5941	2217	N 27.00 W	1916 N 1119 W	2219 N 30.30 W	0.7
1	6872	37.50	6159 6159	2384	N 27.00 W	2065 N 1195 W	2386 N 30.06 W	0.0

^Survey Codes: 1/SINGLE SHOT 3/MWD

DATA INTERPOLATED FOR 100 FT SUBSEA INTERVAL

(All assumed vertical to 20 MD)

SUBSEA DEPTH	MEAS DEPTH	BKB DEPTH	MD-TVD DIFF	VERT CORRECT	RELATIVE COORDINATES FROM WELL HEAD	
2000	2000	2000	0	0	0.00 N	0.00 E
2100	2100	2100	0	0	1.54 N	0.64 W
2200	2200	2200	0	0	4.94 N	3.25 W
2300	2301	2300	1	0	13.54 N	7.70 W
2400	2402	2400	2	1	26.53 N	14.99 W
2500	2504	2500	4	2	43.59 N	24.29 W
2600	2606	2600	6	3	64.78 N	35.42 W
2700	2710	2700	10	4	89.61 N	49.72 W
2800	2816	2800	16	5	117.39 N	67.19 W
2900	2922	2900	22	7	148.57 N	86.94 W
3000	3030	3000	30	8	182.18 N	107.94 W
3100	3139	3100	39	9	218.66 N	130.51 W
3200	3249	3200	49	11	258.32 N	155.99 W
3300	3362	3300	62	13	302.42 N	183.69 W
3400	3477	3400	77	15	349.30 N	214.43 W
3500	3594	3500	94	17	401.57 N	247.11 W
3600	3715	3600	115	21	459.19 N	283.36 W
3700	3839	3700	139	24	522.15 N	320.83 W
3800	3963	3800	163	24	585.03 N	359.22 W
3900	4088	3900	188	24	647.86 N	397.94 W
4000	4212	4000	212	24	710.45 N	437.64 W
4100	4336	4100	236	24	773.97 N	475.30 W
4200	4461	4200	261	25	836.06 N	515.94 W
4300	4586	4300	286	25	901.32 N	553.01 W
4400	4711	4400	311	25	966.60 N	589.66 W
4500	4835	4500	335	24	1030.66 N	626.78 W
4600	4959	4600	359	24	1094.04 N	662.89 W
4700	5082	4700	382	23	1154.40 N	701.87 W
4800	5205	4800	405	22	1214.68 N	738.76 W
4900	5327	4900	427	22	1277.40 N	770.89 W
5000	5449	5000	449	23	1339.27 N	805.79 W
5100	5572	5100	472	22	1400.32 N	839.82 W
5200	5692	5200	492	21	1458.48 N	874.74 W
5300	5813	5300	513	20	1515.93 N	908.88 W
5400	5933	5400	533	20	1574.61 N	940.11 W
5500	6053	5500	553	21	1633.10 N	973.48 W
5600	6175	5600	575	21	1694.88 N	1003.64 W
5700	6297	5700	597	22	1757.08 N	1036.78 W
5800	6420	5800	620	24	1820.61 N	1071.70 W
5900	6545	5900	645	25	1886.26 N	1107.30 W

DATA INTERPOLATED FOR 100 FT SUBSEA INTERVAL

(Well assumed vertical to 200 MD)

SUBSEA DEPTH	MEAS DEPTH	BKB DEPTH	MD-TVD DIFF	VERT CORRECT	RELATIVE COORDINATES FROM WELL HEAD	
6000	6671	6000	671	26	1955.74 N	1139.65 W
6100	6797	6100	697	26	2024.11 N	1174.49 W

DATA INTERPOLATED FOR 1000 FT MEASURED DEPTH INTERVAL
(Well assumed vertical to 2000 MD)

MEAS DEPTH	BKB DEPTH	SUBSEA DEPTH	RELATIVE COORDINATES FROM WELL HEAD	
1000	1000	1000	0.00 N	0.00 E
2000	2000	2000	0.00 N	0.00 E
3000	2972	2972	172.62 N	101.99 W
4000	3830	3830	603.52 N	370.66 W
5000	4633	4633	1113.87 N	676.50 W
6000	5456	5456	1607.99 N	957.29 W

Great Land Directional Drilling

VERTICAL SECTION

AMPOLEX

FEDERAL 43-1

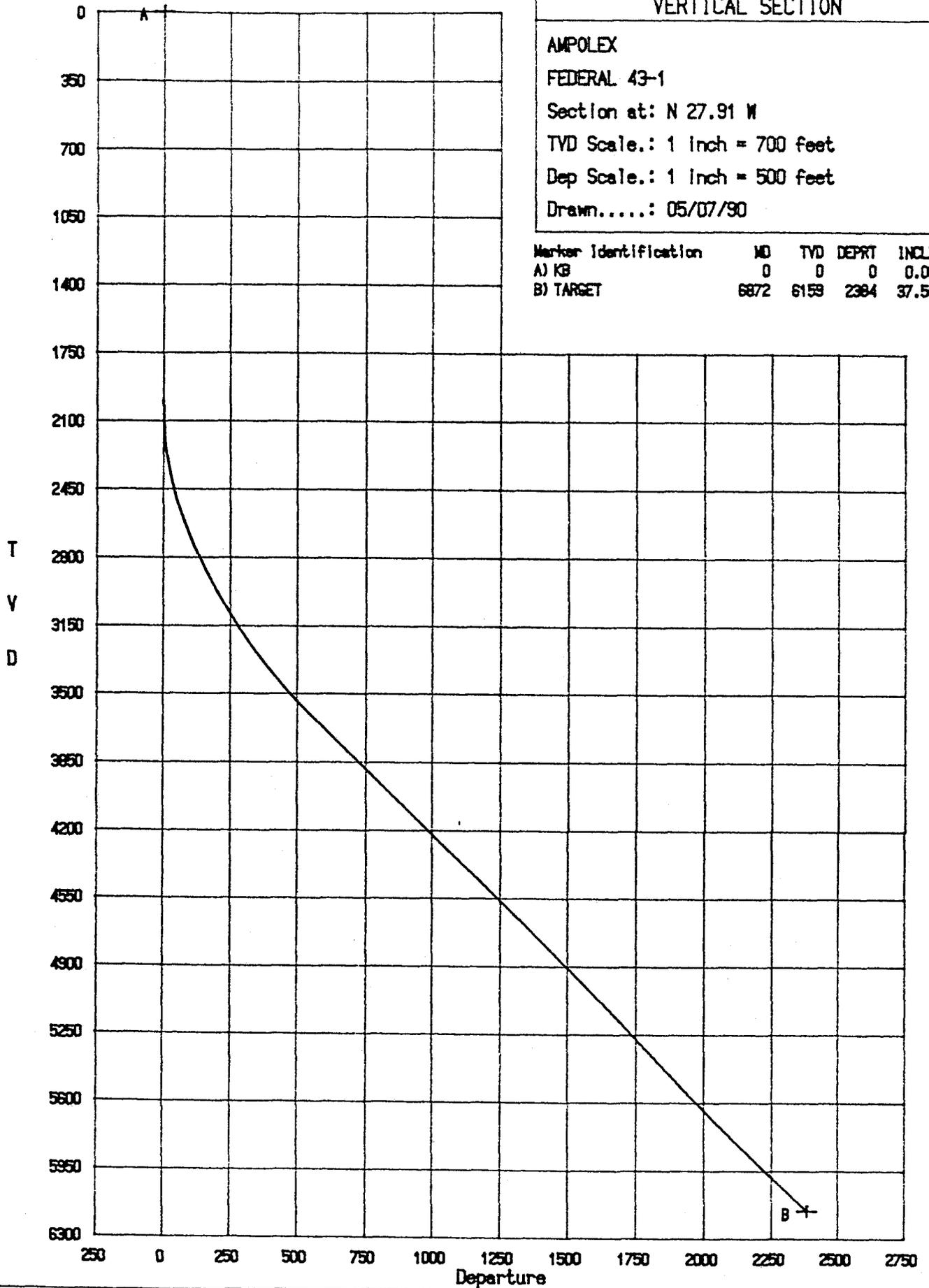
Section at: N 27.91 W

TV D Scale.: 1 inch = 700 feet

Dep Scale.: 1 inch = 500 feet

Drawn.....: 05/07/90

Marker Identification	MD	TV D	DEPRT	INCLN
A) KB	0	0	0	0.00
B) TARGET	6872	6159	2384	37.50



Great Land Directional Drilling

Marker Identification	MD	N/S	E/W
A) KB	0	0 N	0 E
B) TARGET	6672	2065 N	1195 W

PLAN VIEW

AMPOLEX

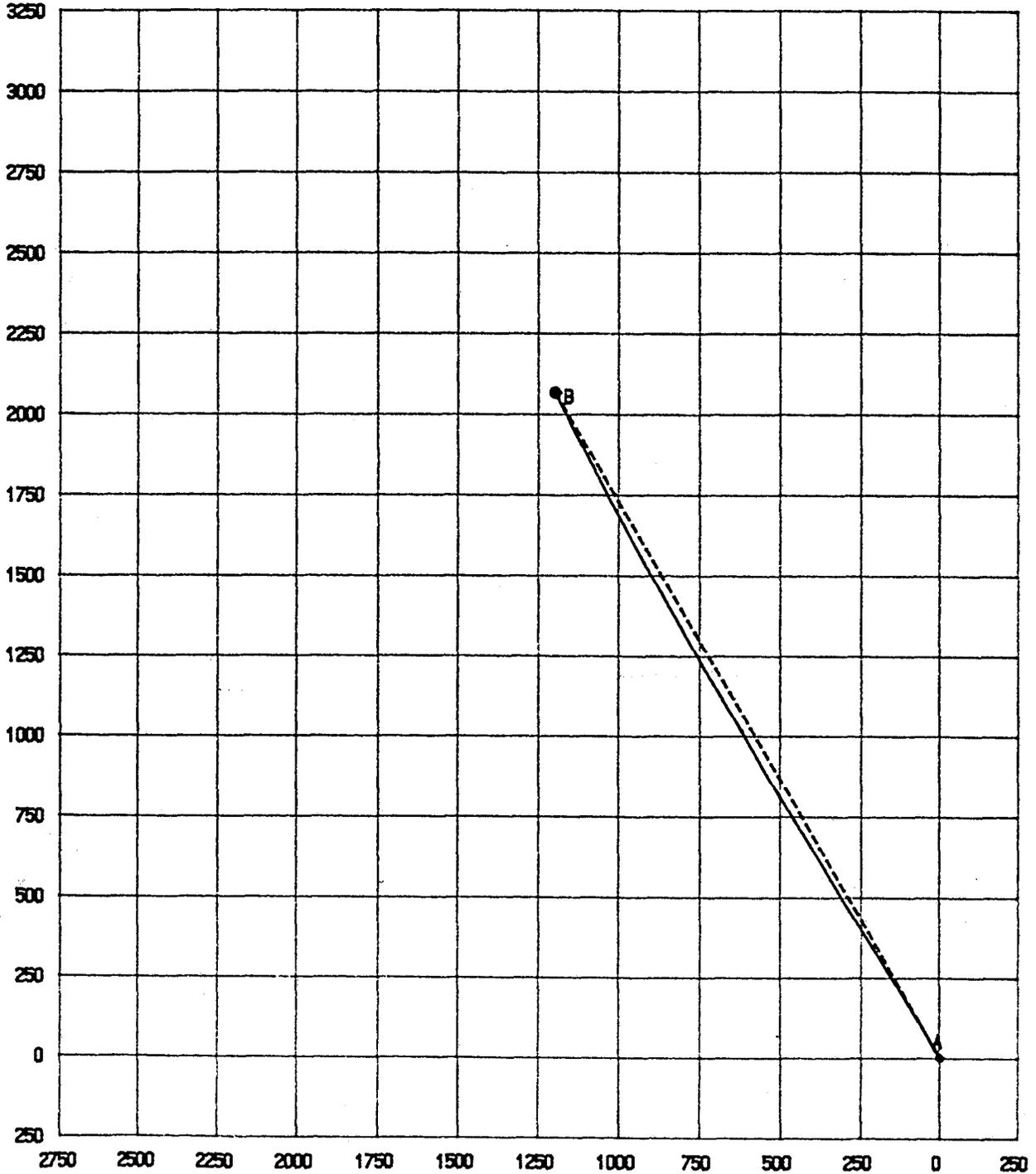
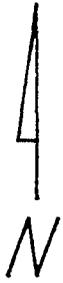
FEDERAL 43-1

CLOSURE.....: 2386 ft N 30.06 W

DECLINATION.: 13.00 E

SCALE.....: 1 inch = 500 feet

DRAWN.....: 05/07/90





AMPOL EXPLORATION (U.S.A.) INC.

SEVENTEENTH STREET PLAZA, SUITE 3000
1225 17TH STREET
DENVER, CO 80202 U.S.A.

Phone: (303) 297-1000

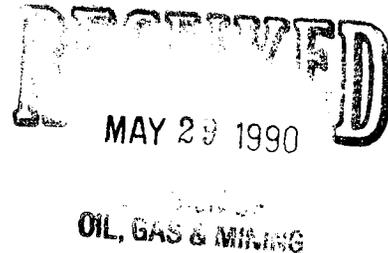
Telecopy: (303) 297-2050

Subsidiaries:

Ampolex (California), Inc.
Ampolex (Orient), Inc.
Ampolex (Texas), Inc.
Ampolex (Wyoming), Inc.

May 24, 1990

State of Utah
Oil & Gas Division
3 Triad Center, Suite #350
Salt Lake City, Utah 84180-1203



RE: Federal 43-1
Section 1-T37S-R25W
San Juan County, Utah
Lease #U-64068

To Whom It May Concern:

Enclosed herewith are three (3) copies of Form 3160-4, "Well Completion or Recompletion Report and Log", Form #3160-5, "Sundry Notices and Reports on Wells", with notice of plug and abandonment for the above referenced well.

If you have any questions, please feel free to contact this office.

Sincerely,

For and on behalf of
AMPOLEX (TEXAS), INC.

Dinah M. Carrasco
Operations Secretary
AMPOL EXPLORATION (U.S.A.) INC.

/dmc
Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

b. TYPE OF COMPLETION:
NEW WELL WORK OVER DEEPEN PLUG BACK DIFF. RESRV. Other _____

2. NAME OF OPERATOR
Ampolex (Texas), Inc.

3. ADDRESS OF OPERATOR
1225 17th Street, Suite #3000, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with instructions on reverse side)
At surface **198' FSL & 176' FEL**

At top prod. interval reported below

At total depth **2,382' FSL & 1,422' FEL**

RECEIVED
MAY 29 1990

14. PERMIT NO. **43-037-31494** DIVISION OF **OIL, GAS & MINING/90**

5. LEASE DESIGNATION AND SERIAL NO.

U-64068

6. IF INDIAN ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

Federal

9. WELL NO.

43-1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Section 1-T37S-R25E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

15. DATE SPUDDED **04/14/90** 16. DATE T.D. REACHED **05/07/90** 17. DATE COMPL. (Ready to prod.) **--** 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* **6,311' GR** 19. ELEV. CASINGHEAD **6,311'**

20. TOTAL DEPTH, MD & TVD **7,030' MD/6,270' TVD** 21. PLUG, BACK T.D., MD & TVD **--** 22. IF MULTIPLE COMPL., HOW MANY* **--** 23. INTERVALS DRILLED BY **ROTARY TOOLS** **X** CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* **--** 25. WAS DIRECTIONAL SURVEY MADE **Yes**

26. TYPE ELECTRIC AND OTHER LOGS RUN **DLL, FDC/CNL, BHC Sonic, Directional** 27. WAS WELL CORED **No**

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	1,990'	12-1/4"	730 SX	-0-

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
OIL AND GAS							

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

PERFORATION RECORD	ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
DHN RJF	
JRB GLH	
DTS SLS	

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
1-7-85	MICROFILMS	
DATE OF TEST	CHOKE SIZE	PROD'N. FOR TEST PERIOD
3-3-90		
FLOW TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE

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

35. LIST OF ATTACHMENTS
Copy of Survey Report - Great Land Directional Drilling, Inc.

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

SIGNED **John A. Brown** TITLE **Petroleum Engineer** DATE **05/22/90**

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

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

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TOP TRUE VERT. DEPTH
Penn Paradox Desert Creek Zone	6,856' MD 6,178' TVD	6,996' MD 6,289' TVD	Contains a 22' porous and permeable Dolomite which log analysis indicated to contain oil & gas and water.	Triassic	1,956'	1,956'
				Chinle Fm.	2,712'	2,710'
				Shinarump	2,840'	2,822'
				Moenkopi Fm.	2,902'	2,880'
				Permian	5,113'	4,710'
				Cutler Fm.	6,550'	5,887'
				Pennsylvanian	6,655'	5,970'
				Honaker Trail	6,748'	6,042'
				Paradox Fm.	6,818'	6,098'
				Upper Ismay	6,856'	6,128'
				Hovenweep	6,900'	6,163'
				Lower Ismay	6,974'	6,222'
				Gothic	6,996'	6,239'
Upper Desert Ck.						
Lower Desert Ck.						
Chimney Rock						
Akah						

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

DEC 29 1992

INDIVIDUAL WELL RECORD

Sec. 1

T. 37 S.

R. 25 E.

SLB & Mer.

DIVISION OF
OIL GAS & MINING

Date June 6, 1991

Ref. No. _____

FEDERAL

State Utah

Lease No. U-64068 County San Juan

Lessee Ampolex (Texas) Inc. 100% Field Wildcat

Operator Ampolex (Texas) Inc. Unit/CA _____

Well Name & No. Federal 43-1 District Moab

A.P.I. Well No. 43-037-31494 Subdivision SESE

Location 198' FSL & 176' FEL (Surf. Loc.); 2320' FSL & 1300' FEL (BH Loc.)

Date Drilling Approved 1/31/90 Well Elevation 6311 GR Feet

Date Drilling Commenced 4/14/90 Total Depth 7030 MD; 6270 TVD Feet

Date Drilling Ceased 5/7/90 Initial Production _____

Date Completed For Production _____ Gravity A.P.I. _____

Date Abandonment Approved (Final) FAN 5/13/92 Initial Reservoir Pressure DRY HOLE

GEOLOGIC FORMATIONS

PRODUCTIVE HORIZONS

SURFACE	LOWEST TESTED	NAME	DEPTHS	CONTENTS
Morrison		Desert Creek	6856' - 6996' MD (selective)	water, oil, gas
SURFACE MANAGEMENT AGENCY	BLM			
MINERAL OWNERSHIP	BLM			
LEASE EXPIRATION	5/31/93			

WELL STATUS

YEAR	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1990				spud	P&A							
1992					FAN							

First Production Memorandum _____ Lease Extension Memorandum _____ Confirmation _____

Remarks _____

